

Office of the Clerk/Treasurer

W240N3065 Pewaukee Road
Pewaukee, WI 53072
(262) 691-0770 Fax 691-1798

**COMMON COUNCIL
MEETING NOTICE AND AGENDA
Monday, November 15, 2021
6:30 PM**

Common Council Chambers ~ Pewaukee City Hall
W240 N3065 Pewaukee Road ~ Pewaukee, Wisconsin

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1. Call to Order and Pledge of Allegiance
 2. Public Comment - Please limit your comments to two (2) minutes, if further time for discussion is needed please contact your District Alderperson prior to the meeting.
 3. Consent Agenda
 - 3.1. Approval of the Accounts Payable Listing Dated November 15th, 2021
 - 3.2. Approve **Ordinance 20-12** Pertaining to Historical Preservation (*Second Reading*)
 - 3.3. Approve **Ordinance 21-13** Repealing and Recreating Section 17.1300 of the Zoning Code Related to Public Hearing Notices (*Second Reading*)
 - 3.4. Approve **Ordinance 21-14** Creating Section 17.0437 Establishing a Historic Preservation Overlay District in Chapter 17 Zoning Code (*Second Reading*)
 - 3.5. Approve Humane Animal Welfare Service Contract for 2022, 2023 and 2024 at the Annual Cost of \$6,699
 4. **PUBLIC HEARING**, Discussion and Possible Action Regarding the 2022 Budget and Setting the Tax Rate [Mayor Bierce]
 5. Introduction of the Pewaukee Sustainability Group [Grosch]
 6. Discussion and Possible Action for the Glen at Parkway Ridge Development [Wagner]
 - 6.1 Approve the second reduction of the letter of credit from \$380,504.85 to \$68,304.00 (Reduction of \$312,200.85).
 - 6.2 Approve **Resolution 21-11-42** Accepting Public Improvements.
 7. Discussion and Possible Action for the Northmound Industrial Development [Wagner]
 - 7.1 Approve the first reduction of the letter of credit from \$128,422.00 to \$15,000.00 (Reduction of \$113,422.00).
 - 7.2 Approve the Accepting **Resolution 21-11-43**.
 - 7.3 Approve the release of the letter of credit (\$12,843.00) for the Dynamic Compaction Developer's Agreement.
 8. Discussion and Possible Action to Approve the Release of the Cash Deposit for Klein Dickert Glass [Wagner]

- 8.1 Approve Accepting **Resolution 21-11-44**
- 8.2 Approve the Release of the Cash Deposit
- 9. Discussion and Possible Action Regarding the Intersection of Green Road and Duplainville Road [Wagner]
- 10. Public Comment - Please limit your comments to two (2) minutes, if further time for discussion is needed please contact your district Alderperson prior to the meeting.
- 11. Adjournment

Kelly Tarczewski
Clerk/Treasurer

November 11, 2021

NOTICE

It is possible that members of other governmental bodies of the municipality may be in attendance to gather information that may form a quorum. At the above stated meeting, no action will be taken by any governmental body other than the governmental body specifically referred to above in this notice.

Any person who has a qualifying disability under the Americans with Disabilities Act that requires the meeting or materials at the meeting to be in an accessible format must contact the Clerk/Treasurer, Kelly Tarczewski, at (262) 691-0770 three business days prior to the meeting so that arrangements may be made to accommodate your request.

**CITY OF PEWAUKEE
COMMON COUNCIL AGENDA ITEM 3.1.**

DATE: November 15, 2021

DEPARTMENT: Clerk/Treasurer

PROVIDED BY:

SUBJECT:

Approval of the Accounts Payable Listing Dated November 15th, 2021

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

**CITY OF PEWAUKEE
COMMON COUNCIL AGENDA ITEM 3.2.**

DATE: November 15, 2021

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Approve **Ordinance 20-12** Pertaining to Historical Preservation (*Second Reading*)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Ordinance 21-12

**AN ORDINANCE CREATING CHAPTER 27 HISTORIC PRESERVATION OF THE MUNICIPAL CODE OF
THE CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN**

BE IT ORDAINED by the Common Council of the City of Pewaukee, Waukesha County, Wisconsin, that Chapter 27 of the Municipal Code of the City of Pewaukee is hereby created to read as follows:

SECTION 1:**27.00 HISTORIC PRESERVATION****(1) Purpose**

- a. Protect, enhance and perpetuate sites, structures and districts which represent or reflect elements of the city's, state's or nation's cultural, social, economic, political or architectural history.
- b. Stabilize and improve property values around and in historic districts.
- c. Foster civic pride in the beauty and accomplishments of the past.
- d. Promote historic sites, structures and districts for the education, pleasure and welfare of the people of the city.

(2) Definitions

- a. **ALTERATION** - Any act or process which changes one or more of the exterior features of a structure, including but not limited to the erection, construction, reconstruction, demolition or moving of any improvement.
- b. **ARCHITECTURAL SIGNIFICANCE** – the importance of a particular structure based on its design, materials, form, style or workmanship.
- c. **CERTIFICATE OF APPROPRIATENESS** - A statement verifying that the Commission has reviewed an application to allow the alteration, rehabilitation, construction, reconstruction or demolition of any improvement or historic structure upon a historic site or within an historic district; that the Commission has found the requested action to be appropriate to the general character of the historic site or historic district; and that the requested action may be taken subject to applicable building and zoning codes.
- d. **COMMISSION** - The Historic Preservation Commission created under this section. The Historic Preservation Commission shall serve as the City's review authority for historic districts, historic sites, and historic structures.
- e. **DEMOLITION** - Any act or process which destroys in part or in whole an improvement.
- f. **DEMOLITION BY NEGLECT** – Means the failure of property owner to maintain a structure or improvement.

- g. **HISTORIC DISTRICT** – An area designated by the Common Council, following the procedures set forth in this Chapter, that contains two or more historic improvements or sites.
- h. **HISTORIC SITE** – Any parcel of land of historic significance due to a substantial value in tracing the history or prehistory of humanity, or upon which a historic event has occurred, and which has been designated as a historic site under this section, or an improvement, parcel, or part thereof, on which is situated a historic structure and any abutting improvement, parcel, or part thereof, used as and constituting part of the premises on which the historic structure is situated.
- i. **HISTORIC STRUCTURE** – Any improvement which has a special character or special historic interest of value as part of the development, heritage or cultural characteristics of the City, state, or nation and which has been designated as a historic structure pursuant to the provisions of the chapter.
- j. **IMPROVEMENT** - Any building, structure, wall, fence, steps, paving, gate, sign, light, general arrangement of place or area, the kind, texture or quality of building material, landscaping or landscape architecture or work of art (not including painted murals) which may be erected upon or proposed to be erected upon any specific real estate.
- k. **NATIONAL HISTORIC DISTRICT** – A district that is listed on the National Register of Historic Places, as maintained by the National Park Service in the U.S. Department of the Interior.
- l. **PARCEL** – A portion of land having its own tax parcel identification number.
- m. **PRESERVATION RESTRICTION** - A right, whether or not stated in the form of a restriction, easement, covenant or condition in any deed, will or other instrument executed by or on behalf of the owner of the land or in any order of taking, appropriate to the preservation of areas, places, buildings or structures to forbid or limit acts of demolition, alteration, use or other acts detrimental to the preservation of the buildings, places or areas designated as a historic structure, historic site or within an historic district.
- n. **REHABILITATION** – means improving property through repair or alteration, making possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural and cultural values.
- o. **STATE HISTORIC DISTRICT** – A district that is listed on the State Register of Historic Places, as maintained by the Division of Historic Preservation at the Wisconsin Historical Society.

(3) Commission Membership

- a. **COMPOSITION.** The Historic Preservation Commission is hereby created, consisting of seven (7) regular members, who shall be the members of the City Plan Commission. Each member shall have, to the highest extent practical, a known interest in historic preservation. Four members are needed to establish a quorum.
- b. **STAFF.** The Zoning Administrator shall provide professional support to the Commission. The City Clerk's office shall provide administrative support to the Commission.

(4) Powers, Duties and Responsibilities of Commission.

The Historic Preservation Commission shall have and exercise the following powers, duties and responsibilities:

- a. Recommend to the Common Council that the city accept such gifts, grants and money as may be appropriate for the purposes of this chapter.
- b. Conduct a survey of city buildings, places or areas for the purpose of identifying those of historic, architectural and cultural significance and prepare an inventory of those buildings, places or areas identified.
- c. Recommend that the Common Council designate by ordinance certain places and areas as historic sites, historic structures, or historic districts.
- d. Determine an appropriate system of markers for designated historic sites, historic structures or historic districts.
- e. Prepare and publish maps and other descriptive material about the city's historic sites, historic structures and historic districts.
- f. Cooperate with and enlist the assistance of persons, organizations, corporations, foundations, public agencies, City Historical Society and the State Historic Preservation Officer in matters involving historic preservation, renovation, rehabilitation and reuse.
- g. Advise owners of historic sites or historic structures on physical and financial aspects of preservation, renovation, rehabilitation and reuse.
- h. Review and make decisions on applications for certificates of appropriateness and require the presentation of such plans, drawings, elevations and other information as may be necessary to make decisions.
- i. Make recommendations to the Common Council about the acquisition of preservation restrictions or conservation easements.
- j. Evaluate and comment on decisions by the Plan Commission, Public Works Committee and Zoning Board of Appeals affecting sites, structures or areas of historic significance.
- k. Seek and maintain certification of this chapter by the state and federal governments under 36 CFR 67; 16 USC 470a(c); § 44.44, Wis. Stats.; and the Wisconsin Administrative Code so that property owners are eligible for federal income tax credits for rehabilitation expenses, property owners are eligible to use the State Historic Building Code, the city can participate in decision making for inclusion in the State and Federal Registers of Historic Places and the Certified Landmark Program and so that the city can be eligible to apply for grants.
- l. Promulgate standards for architectural and site review for certificates of appropriateness.

(5) Commission meetings, records, notices and hearings.

- a. The Commission shall meet as needed. Notice and conduct of meetings shall comply with § 19.81 et seq., Wis. Stats.
- b. Records shall be kept and made available to the public pursuant to § 19.31 et seq., Wis. Stats.
- c. Commission decisions shall be by majority vote of those Commissioners present and voting. No action shall be taken by the Commission which directs a private owner to do or refrain

from doing any specific thing or which refuses to permit a private owner to do some specific thing, unless written notice is given to such owner and unless such owner shall have the opportunity to be heard at a public hearing.

(6) Standards for Designation.

A site, structure, or district may be designated for preservation as a historic site, historic structure or historic district if it:

- a. Has significant character, interest or value as part of the community's development or heritage;
- b. Is the site of an historic event with a significant effect upon society;
- c. Exemplifies the cultural, political, economic, social or historic heritage of the community;
- d. Portrays the environment in an era of history characterized by a distinctive architectural style;
- e. Embodies distinguishing characteristics of an architectural type or engineering specimen;
- f. Is the type of a designer whose individual work has significantly influenced the community's development;
- g. Contains elements of design, detail, materials, or craftsmanship which represents a significant innovation;
- h. By being part of or related to a square, park or other distinctive area, should be developed or preserved according to a plan based on an historic, cultural, or architectural character;
- i. Owing to its unique location or singular physical characteristic, represents an established and familiar visual feature of the neighborhood or community; or
- j. Archaeological importance. Has yielded or may be likely to yield information important in prehistory or history.

(7) Process for Designation.

- a. Application.
 - i. HISTORIC SITE OR HISTORIC STRUCTURE. The owner of a property may nominate that property for designation at any time by submitting a completed nomination form and any appropriate documentation. The application shall contain such information, plans and photos as requested by the Commission.
 - ii. HISTORIC DISTRICT. The nomination process for designation of a historic district shall be considered by the Commission upon receipt of a written petition signed by the owners of a majority of the parcels within the proposed district. Each parcel included in the proposed district shall be allowed one (1) vote, and all of the owners of the parcel must sign the petition for the parcel to be counted as a vote in favor. The geographic area shall be definable by natural or existing improved boundaries and shall constitute a visual sense of history within the boundaries. The petition shall be accompanied by an application containing such information, plans and photos as requested by the Commission.
- b. The Commission may itself initiate the designation of a historic site, historic structure, or historic district.
- c. Public Hearing.

- i. The Commission shall hold a public hearing upon each petition, and shall give notice to owners of property within 600 feet of the subject property in accordance with Section 17.1300 of the City's Zoning Code.
 - ii. At the public hearing the Commission shall view and hear all information presented to it pertaining to whether the proposed designation is appropriate. The Commission shall afford all persons the opportunity to present their views orally and in writing pertinent to the proposed designation. The Commission may make reasonable rules regulating the length and materiality of comments.
- d. Designation.
 - i. The Commission shall review all information presented to it pertinent to designation and shall provide its findings and conclusions, in the form of a motion and meeting minutes, indicating whether the proposal meets the criteria set forth in § 27(4) of this chapter. A copy said minutes shall be sent to the Common Council.
 - ii. If the Commission recommends designation, the City Clerk or Zoning Administrator shall forward said recommendation from the Commission requesting designation to the Common Council. Upon designation by ordinance of the Council, such structure, place or area shall be afforded the protection of this chapter as administered by the Commission.
- e. Pending Designation. After the date of submission of the petition to create a historic site, historic structure or an historic district or initiation of designation by the Commission, no permits shall be issued for property within the area of contemplated designation, and no person shall alter or demolish any building or site until the Council determines whether to designate the area as an historic district.
- a. Notice of Designation and Recording.
 - i. After designation, the office of the City Clerk shall notify all property owners within the boundaries of the historic district that the area has been designated as such and that an owner must possess a certificate of appropriateness before obtaining a building permit or otherwise materially affecting the exterior appearance by structural changes, changes of exterior surfaces or any exterior change requiring a building permit.
 - ii. A certified copy of the ordinance designating the district as historic shall be recorded in the office of the Register of Deeds.

(8) Certificate of Appropriateness.

- a. Prohibition. No alteration or improvement which is visible on the outside or demolition shall be done or allowed within a designated historic district or upon a historic site or historic structure unless a certificate of appropriateness has been issued by the Historic Preservation Commission. Further, no building permit or demolition permit shall be issued for any historic site or any historic structure until the Building Inspector is satisfied that a certificate of appropriateness has been issued.
- b. Criteria in granting a certificate of appropriateness. In reviewing an application for a certificate of appropriateness, the Commission shall consider the following factors:

- i. The appropriateness to the Historic District or to the historic site or historic structure of the proposed alteration or demolition.
 - ii. Whether such proposed alteration or demolition will further the purposes of this chapter.
 - iii. Proposed alteration or demolition for any historic site or historic structure from the visual perspective of the street, public way or public buildings.
 - iv. Reference to The Secretary of the Interior's Standards for Rehabilitation, as published in § 36 of the Code of Federal Regulations, Part 67, and as revised from time to time.
 - v. By further reference to such specific design standards as the Commission may require for the designation of the historic site, historic structure or historic district. Such specific standards shall relate to the historical significance; the architectural value; the unique design, arrangement, texture, material or color of the building, place or area in question; the relation of such improvement to similar improvements in the immediate surroundings; and the position of such improvement in relation to the street or public way and to other improvements.
 - vi. The Commission shall not deny a certificate of appropriateness whenever the applicant shows that the alteration or demolition will enhance or is consistent with the inherent historic value of the historic site, historic structure or of the historic district.
- c. Application. Certificate of appropriateness may be applied for from the office of the Building Inspector. The application shall contain such information as requested by the Commission and shall be accompanied by plans and renderings.
- d. Issuance of Certificate of Appropriateness.
- i. The Commission shall review completed applications presented to it for certificates of appropriateness at its regular monthly meetings and shall grant or deny the certificate. Upon granting a certificate, the office of the Building Inspector shall issue to the applicant a certificate of appropriateness.
 - ii. A certificate of appropriateness shall expire six months after the date of issuance, unless a Building Permit has been issued. Building, demolition or sign permits are separate from the certificate, and the applicant shall also secure such permits prior to commencing the work.
- e. Hardship.
- i. Even if a proposed alteration or demolition may be inappropriate owing to conditions especially affecting the structure involved, but not affecting the historic district generally, failure to issue a certificate of appropriateness will involve a substantial hardship which is not self-created, financial or otherwise to the applicant, and such certificate may be issued without substantial detriment to the public welfare and without substantial derogation from the purposes of this chapter, then the Commission may grant a certificate of appropriateness.

- ii. If, however, a proposed alteration or demolition is inappropriate and issuance of a certificate of appropriateness would cause substantial detriment to the public welfare or substantial derogation from the purposes of this chapter, but failure to issue would nonetheless involve a substantial hardship which is not self-created, financial or otherwise to the applicant, then the Commission may order a postponement of any alteration or demolition while it investigates alternatives to granting a certificate.
- iii. If after a reasonable period of time, not to exceed one year from the date of first denial of the certificate of appropriateness, no alternative agreement has been reached with the applicant, the Commission may issue a certificate of appropriateness for alteration or demolition of the building, place or area in question.
- iv. In granting a certificate of appropriateness in such circumstances, the Commission may prescribe any conditions or limitations that may minimize the adverse impact of the requested alteration or demolition.

(9) Regulation of Demolition.

- a. No person in charge of a historic structure, historic site, or improvement within a historic district shall be granted a permit to demolish such property without the written approval of the Common Council.
- b. Any application to the Building Inspector for a permit to demolish a historic structure, improvement on a historic site or improvement within a historic district shall contemporaneously be filed with the Commission. The Commission shall review the application and shall, within 90 days of the filing of that application, make a recommendation to the Common Council with respect to that demolition.
- c. Upon receipt of the recommendation of the Commission or if no recommendation is made, 90 days after the filing of the original application, the request for demolition shall be submitted for review and consideration by the Common Council. The Council shall make its decision respecting demolition within 120 days of the Council's receipt of the recommendation from the Commission or the expiration of the time period allowed for the Commission's review.
- d. In evaluating the petition for demolition, the Common Council shall consider the following:
 - i. The age and physical condition of the historic structure, improvement on the historic site, or improvement within a historic district.
 - ii. The cost of repairs of the historic structure, improvement on the historic site, or improvement within a historic district as compared to the fair market value of that improvement.
 - iii. Whether the denial of the demolition permit would result in the loss of all reasonable and beneficial use of or return from the property.
 - iv. Whether any hardship or difficulty claimed by the owner is self-created or is the result of any failure to maintain the property in good repair.
 - v. The historic significance of the historic structure, improvement on a historic site, or improvement within a historic district.
- e. Upon approval of the petition for demolition by the Common Council, the Building Inspector shall issue the permit to demolish the property provided all other codes and City ordinances are complied with.

(10) Demolition by Neglect.

In order to promote the purposes of historic preservation, this subsection requires that owners of historic properties maintain their properties and not allow them to fall into disrepair. The

requirements of this subsection are applicable only to properties in designated Historic Districts.

Owners or others having legal possession, custody or control of a property in Historic Districts shall maintain or cause to be maintained the exterior and structural features of their properties and not allow conditions of neglect to occur on such properties. It is a violation of the City's Ordinance to not remedy a condition of neglect within the period of time set by a final administrative determination, as described in Subsection b. below.

- a. Conditions of neglect include, but are not limited to, the following: 1. Deterioration of exterior walls, foundations, or other vertical support that causes leaning, sagging, splitting, listing, or buckling or deterioration of flooring or floor supports, roofs, or other horizontal members that causes leaning, sagging, splitting, listing, or buckling; 2. Deterioration of external chimneys that causes leaning, sagging, splitting, listing, or buckling; 3. Deterioration or crumbling of exterior plasters or mortars or ineffective waterproofing of exterior walls, roofs, and foundations, including broken windows or doors; 4. Defective protection or lack of weather protection for exterior wall and roof coverings, including lack of paint, or weathering due to lack of paint or other protective covering; 5. Rotting, holes, and other forms of decay; 6. Deterioration of exterior stairs, porches, handrails, window and door frames, cornices, entablatures, wall facings, and architectural details that causes delamination, instability, loss of shape and form, or crumbling; 7. Deterioration that has a detrimental effect on the surrounding historic district or deterioration that contributes to a hazardous or unsafe condition; 8. Deterioration of fences, gates, and accessory structures.
- b. Procedure for Enforcement. Upon receipt of a complaint or upon observation, if the Zoning Administrator makes a preliminary determination that a property in a Historic District is being neglected, the Zoning Administrator shall inform the property owner of the preliminary determination and notify the Historic District Commission of the preliminary determination. The Zoning Administrator will seek remedial action by the property owner. If remedial action has not commenced within 30 days of initial notification, the City Planner, after consultation with the Historic District Commission, shall make a finding of violation.

In the event of a finding of violation and the corrective action specified in the notice is not instituted within the time allotted, the City may institute, perform and complete the necessary remedial work to prevent deterioration. Labor and materials shall be a lien against the property, and draw interest at the highest legal rate, the amount to be amortized over a period of 10 years subject to a public sale if there is a default in payment.

(11) When Building or Demolition Permit is Not Required.

When neither a building or demolition permit is required, if a proposed alteration or demolition constitutes a material change in the exterior appearance of a historic site or historic structure or of property within an historic district, then a certificate of appropriateness shall be required. Failure to receive a certificate prior to effecting such material change shall constitute a violation of this chapter.

(12) Ordinary Maintenance and Repairs; Public Safety Ex Post Facto.

Nothing in this chapter shall prevent the ordinary maintenance or repair of any exterior architectural feature in the historic district, historic site or historic structure which does not involve a change in design, material, color or outward appearance as determined by the Zoning Administrator; prevent any alteration or demolition which the Zoning Administrator shall certify is required by public safety because of an unsafe or dangerous condition; nor prevent any alteration or demolition under a

permit issued by the Zoning Administrator prior to the date of petitioning for the creation of an historic district or prior to the date of designation of a historic site or historic structure.

(13) Voluntary Restrictive Covenants

The owner of any historic structure or site may, at any time following such designation of the property, enter into a restrictive covenant on the subject property after negotiation with the Commission. The Commission may assist the owner in preparing such covenant in the interest of preserving the structure or site. The owner shall record such covenant in the office of the Waukesha County Register of Deeds and shall notify the City Assessor of such covenant and the conditions thereof.

(14) Amendments

A property owner or the City may seek an amendment of the designation of a property as a historic site, historic structure, or its inclusion in a historic district. Consideration of an amendment shall be commenced by written request filed with the Historic Preservation Commission. The notice and public hearing requirements for the establishment of a historic site, historic structure or historic district shall be followed with respect to consideration of the amendment. Following the public hearing, the Historic Preservation Commission shall make a recommendation to the Common Council regarding the amendment of the designation. The Common Council will then take final action on the amendment.

(15) Appeals

Should the Commission fail to recommend issuing a Certificate of Appropriateness or demolition permit due to the failure of the proposal to conform to the guidelines in this article, the applicant may appeal such decision to the Common Council within 45 days of the Commission's final decision. In addition, if the commission fails to recommend issuing a Certificate of Appropriateness or demolition permit, the commission shall work with the applicant for a period of 45 days following the date of denial in an attempt to obtain a certificate of appropriateness within the guidelines of this article. Nothing contained in this subsection shall be deemed to prevent the appeal of an earlier denial by the Commission, whether such appeal might occur during or after the 45-day period where the parties are required to cooperate as described immediately above.

(16) Violations and penalties.

No person who owns a structure or site proposed to be designated or designated as a historic structure or historic site or within an historic district shall personally or by another alter, demolish or construct a structure or site without complying with this chapter. All persons who violate this chapter shall be required to restore the structure or site to its condition prior to the violation and, in addition, be subject to the penalties contained in Chapter 25 of the City's Municipal Code.

SECTION 2: SEVERABILITY.

The several sections of this ordinance are declared severable. If any section or portion thereof shall be declared by a court of competent jurisdiction to be invalid, unlawful or unenforceable, such decision shall apply only to the specific section or portion thereof directly specified in the decision, and shall not affect the validity of any other provisions, sections or portions thereof of the ordinance. The remainder of the ordinance shall remain in full force and effect. Any other ordinances whose terms are in conflict with the provisions of this ordinance are hereby repealed as to those terms that conflict.

SECTION 3: EFFECTIVE DATE.

This Ordinance shall take effect upon passage and posting.

Dated this ____ day of _____, 2021.

CITY OF PEWAUKEE

Steve Bierce, Mayor

ATTEST:

Kelly Tarczewski, City Clerk

Published this ____ day of _____, 2020.

**CITY OF PEWAUKEE
COMMON COUNCIL AGENDA ITEM 3.3.**

DATE: November 15, 2021

DEPARTMENT: Parks and Recreation

PROVIDED BY:

SUBJECT:

Approve **Ordinance 21-13** Repealing and Recreating Section 17.1300 of the Zoning Code Related to Public Hearing Notices (*Second Reading*)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Ordinance 21-13

ORDINANCE NO. 21-13**AN ORDINANCE REPEALING AND RE-CREATING SECTION 17.1300 OF THE CITY OF PEWAUKEE ZONING CODE RELATED TO PUBLIC HEARINGS NOTICES**

WHEREAS, The Common Council of the City of Pewaukee approved Ordinance 21-12 on November 15, 2021 creating Chapter 27 Historic Preservation of the Municipal Code; and,

WHEREAS, Ordinance 21-12 effects Chapter 17 – Zoning certain updates are required;

NOW, THEREFORE, The Common Council of the City of Pewaukee does hereby ordain that Section 17,1300 Public Hearings, of Chapter 17 - Zoning be repealed and re-created as follows:

SECTION 17.1300 PUBLIC HEARINGS

Notice of any public hearing which the Common Council, Plan Commission, Zoning Board of Appeals or Historic Preservation Commission is required to hold under the terms of this Ordinance, shall specify the date, time and place of said hearing, the legal and common property description, and shall state the matter to be considered at said hearing. Notice shall be published in a newspaper of general circulation at least once each week for two (2) consecutive weeks and the hearing shall not be held until at least seven (7) days following the last publication. The City Clerk shall also give at least ten (10) days prior written notice of such hearing to the Clerk of any municipality within 1,000 feet of any land to be affected by the proposed action, and in the event the appeal affects any lands in the F-1 Floodplain District, the City Clerk Office shall also give at least 10 days prior written notice of such hearing to the Wisconsin Department of Natural Resources.

SECTION 1: Severability

The several sections and portions of this ordinance are declared to be severable. If any section or portion thereof shall be declared by a decision of a court of competent jurisdiction to be invalid, unlawful, or unenforceable, such decision shall apply only to the specific section or portion thereof directly specified in the decision and shall not affect the validity of all other provisions, sections, or portions thereof of the ordinance. The remainder of the ordinance shall remain in full force and effect. Any other ordinances whose terms are in conflict with the provisions of this ordinance are hereby repealed as to those terms that conflict.

SECTION 2: Effective Date

This ordinance shall take effect immediately upon passage and posting or publication as provided by law.

Passed and adopted this 15th day of November, 2021.

CITY OF PEWAUKEE

Steve Bierce, Mayor

Attest:

Kelly Tarczewski, City Clerk

**CITY OF PEWAUKEE
COMMON COUNCIL AGENDA ITEM 3.4.**

DATE: November 15, 2021

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Approve **Ordinance 21-14** Creating Section 17.0437 Establishing a Historic Preservation Overlay District in Chapter 17 Zoning Code (*Second Reading*)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Ordinance 21-14

ORDINANCE NO. 21-14

AN ORDINANCE CREATING SECTION 17.0437 ESTABLISHING A HISTORIC PRESERVATION OVERLAY DISTRICT IN CHAPTER 17 ZONING CODE

WHEREAS, The Common Council of the City of Pewaukee approved Ordinance 21-12 on November 15, 2021 creating Chapter 27 Historic Preservation of the Municipal Code; and,

WHEREAS, Ordinance 21-12 effects Chapter 17 – Zoning certain updates are required;

NOW, THEREFORE, The Common Council of the City of Pewaukee does hereby ordain that Section 17.0437 HPO, Historic Preservation Overlay District, of Chapter 17 - Zoning be created as follows:

17.0437 HPO, Historic Preservation Overlay District

The purpose of the HPO District is to designate historic sites, historic structures or an area as an historic district and to effect and accomplish the provisions of Chapter 27 of the City's Municipal Code to: protect, enhance and perpetuate sites, structures and districts which represent or reflect elements of the city's, state's or nation's cultural, social, economic, political or architectural history; stabilize and improve property values around and in historic districts; foster civic pride in the beauty and accomplishments of the past; and promote historic sites, structures and districts for the education, pleasure and welfare of the people of the city.

- a. Permitted Principal and Accessory Uses
All permitted principal or accessory uses allowed within the underlying zoning districts are permitted.
- b. Conditional Uses
All conditional uses allowed within the underlying zoning districts and Section 17.0209c. are permitted as conditional uses.
- c. Lot Area and Width
Lot area and width shall conform to the requirements of the underlying zoning districts.
- d. Building Height and Size
Building height and area shall conform to the requirements of the underlying zoning districts.
- e. Setbacks and Yards
Setbacks and yards shall conform to the requirements of the underlying zoning districts.
- f. Off-street Parking and Loading Space

Off-street parking and loading spaces shall conform to the requirements of the underlying zoning districts or Section 17.0600d., whichever may be applicable.

g. Minimum Utility Service

Utility services shall be provided in conformance with the requirements of the underlying zoning districts.

h. Historic Preservation Commission review and approval

No permit to develop, construct, reconstruct, enlarge, or alter property in an HPO Overlay District shall be issued until the Historic Preservation Commission has reviewed the application or petition in accordance with the provisions of Chapter 27.

i. Designation of historic structures, historic sites, and historic districts

The Historic Preservation Commission may designate landmarks, landmark sites, and establish historic districts within the City in accordance with the provisions Chapter 27.

SECTION 1: Severability

The several sections and portions of this ordinance are declared to be severable. If any section or portion thereof shall be declared by a decision of a court of competent jurisdiction to be invalid, unlawful, or unenforceable, such decision shall apply only to the specific section or portion thereof directly specified in the decision and shall not affect the validity of all other provisions, sections, or portions thereof of the ordinance. The remainder of the ordinance shall remain in full force and effect. Any other ordinances whose terms are in conflict with the provisions of this ordinance are hereby repealed as to those terms that conflict.

SECTION 2: Effective Date

This ordinance shall take effect immediately upon passage and posting or publication as provided by law.

Passed and adopted this 15th day of November, 2021.

CITY OF PEWAUKEE

Steve Bierce, Mayor

Attest:

Kelly Tarczewski, City Clerk

**CITY OF PEWAUKEE
COMMON COUNCIL AGENDA ITEM 3.5.**

DATE: November 15, 2021

DEPARTMENT: Clerk/Treasurer

PROVIDED BY:

SUBJECT:

Approve Humane Animal Welfare Service Contract for 2022, 2023 and 2024 at the Annual Cost of \$6,699

BACKGROUND:

HAWS has been providing service to the City of Pewaukee for several years. There is no increase to the contract.

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

HAWS Contract

Humane Animal Welfare Society

Service Agreement

This agreement is entered into the 1st day of January, 2022 (hereinafter "Effective Date") by and between the **City of Pewaukee**, existing under the laws of the State of Wisconsin, with principal offices located at W240 N3065 Pewaukee Rd., Pewaukee, WI 53072 (hereinafter "Municipality"), and the Humane Animal Welfare Society of Waukesha County, Inc. a Wisconsin corporation, with principal offices located at 701 Northview Road, Waukesha, WI 53188 (hereinafter "HAWS").

WHEREAS, the Municipality is seeking impounding services related to the care, management, sterilization and placement of stray, abandoned, neglected, abused or injured animals, hereinafter "Services".

WHEREAS, HAWS is an organization offering such Services and is willing to provide such Services to the Municipality.

NOW THEREFORE BE IT RESOLVED, the following document sets forth the terms and conditions for the provision of such SERVICES and related consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

1. SERVICES

ANIMAL DROP OFF SERVICES: HAWS agrees to accept animals as they are delivered to HAWS by the officials of the Municipality and/or citizens, during normal operating hours. Municipal law enforcement personnel may have access to the stray drop off area 24 hours per day.

HAWS ANIMAL TRANSPORTATION: HAWS agrees to pick up stray, abandoned or injured domestic and sick or injured wildlife (which pose a health hazard to the public) and transport said animals. Animal transportation shall be provided 24 hours a day, seven days a week including holidays.

HUMANE CARE: All animals received by HAWS from the Municipality shall be provided with shelter, food, water and necessary health care services, in accordance with state laws.

SPECIAL ANIMAL SERVICES: HAWS will maintain a quarantine facility for any animal delivered to HAWS for having bitten a person. Quarantine will be for a period of ten days in accordance with State of Wisconsin (hereinafter "State") law. In cases of animal abuse or neglect, HAWS shall provide Humane Care to the animal for a period of seven days. The Municipality may request HAWS to continue to board an animal beyond these standard periods. Requests for an extended time period jointly agreed upon should be made in advance in writing.

RECLAIM: In the event an owner reclaims a lost animal, HAWS will collect and receive any and all fees associated with boarding, pick up and transportation charges from the owner. These fees shall be the property of HAWS. HAWS will collect and transfer municipal fines as requested. At such time, HAWS shall require the citizen to provide proof of animal licensure and proof of vaccination(s) as required under State law. No animal shall be released from HAWS without this proof.

DISPOSITION: Domestic animals may be placed up for adoption after evaluation. HAWS shall have sole right to determine an animal's suitability for placement. To control the population of animals in the Municipality, and to provide for the health of the animals, animals will be sterilized, microchipped, and vaccinated. Any animals HAWS determines unsuitable for adoption shall be humanely euthanized.

EMERGENCY RESCUE: HAWS shall provide Emergency Rescue services to animals in the Municipality. In an emergency, HAWS shall remove the animal from the situation and provide immediate medical care to relieve pain and sustain the animal's life. Animals requiring veterinary services will be transported to an emergency veterinary facility when possible. Following rescue, HAWS shall also provide Rehabilitative Services for said animal, where possible. HAWS will employ staff trained in emergency animal capture procedures and provide equipment for such Services.

EUTHANASIA SERVICES: HAWS shall provide Humane Animal Euthanasia and Cremation services for citizens of the Municipality, upon request of citizens for personally owned animals. Any fees associated with this process shall be paid by the citizen requesting euthanasia.

FACILITY ACCESS: HAWS shall maintain a clean and accessible facility for citizens to seek Services described herein. Facility shall be open to the public on a regular posted schedule, which may be revised by HAWS as needed.

RECORDS: HAWS shall maintain records of all Services described herein, which shall be made available to the Municipality upon written request.

STATE LAW: HAWS shall comply with all State and Federal laws concerning its operations, services, and facilities.

2. FEES

- 2.1 HAWS agrees to provide Services to the **City of Pewaukee** for an annual fee of **\$6,699.00** . No additional fees will be charged to the municipality for Services.
- 2.2 Fees shall be paid by the Municipality to HAWS on an annual basis. The Municipality shall remit such fees to HAWS within 45 days of Effective Date of this Agreement or from the date of invoice, or in accordance with prior arrangements made with HAWS.

3. TERM AND TERMINATION

- 3.1 This Agreement shall be in full force and effect until **December 31, 2024**, (hereinafter "Renewal Date") before which time a new Agreement will be sent to the Municipality for the next three-year term.
- 3.2 This Agreement may be terminated by either party upon providing 60 days written notice to the other party prior to Renewal Date.
- 3.3 This Agreement may be immediately terminated by either party should the other party become insolvent, files a petition for bankruptcy, makes an assignment for the benefit of creditors, or someone files a petition of involuntary bankruptcy on behalf of the party.

This Agreement with the City of Pewaukee is for the three calendar years of **2022, 2023 and 2024**, for which HAWS' annual fees will remain the same.

Dated this 1st day of November, 2021.

Please return this signed Agreement with full payment for 2022 Services (see invoice). Keep a copy for your records.

Humane Animal Welfare Society of Waukesha County, Inc.

Andrés García

By: Andrés García, Field and Facilities Manager

City of Pewaukee, Pewaukee, Wis.

By: Municipal Official



701 Northview Road
P.O. Box 834
Waukesha, WI 53187
Phone: 262-542-8851
Fax: 262-542-8853
www.hawspets.org

November 15, 2021

City of Pewaukee
W240 N3065 Pewaukee Rd
Pewaukee, WI 53072

INVOICE

Date	Quantity	Description	Fee/Each	Total
11/15/2021	1	2022 Bill for Service Contract	\$6,699	\$6,699

Total Due: \$6,699.00

Payment is **due by January 31, 2022** for
continued service.

Please **remit full payment** to:

HAWS
Attn: Andrés Garcia
701 Northview Road
Waukesha, WI 53188

Thank you for your prompt response.
Please call 262-542-8851 ext. 108 with questions.

**CITY OF PEWAUKEE
COMMON COUNCIL AGENDA ITEM 4.**

DATE: November 15, 2021

DEPARTMENT: Clerk/Treasurer

PROVIDED BY:

SUBJECT:

PUBLIC HEARING, Discussion and Possible Action Regarding the 2022 Budget and Setting the Tax Rate [Mayor Bierce]

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

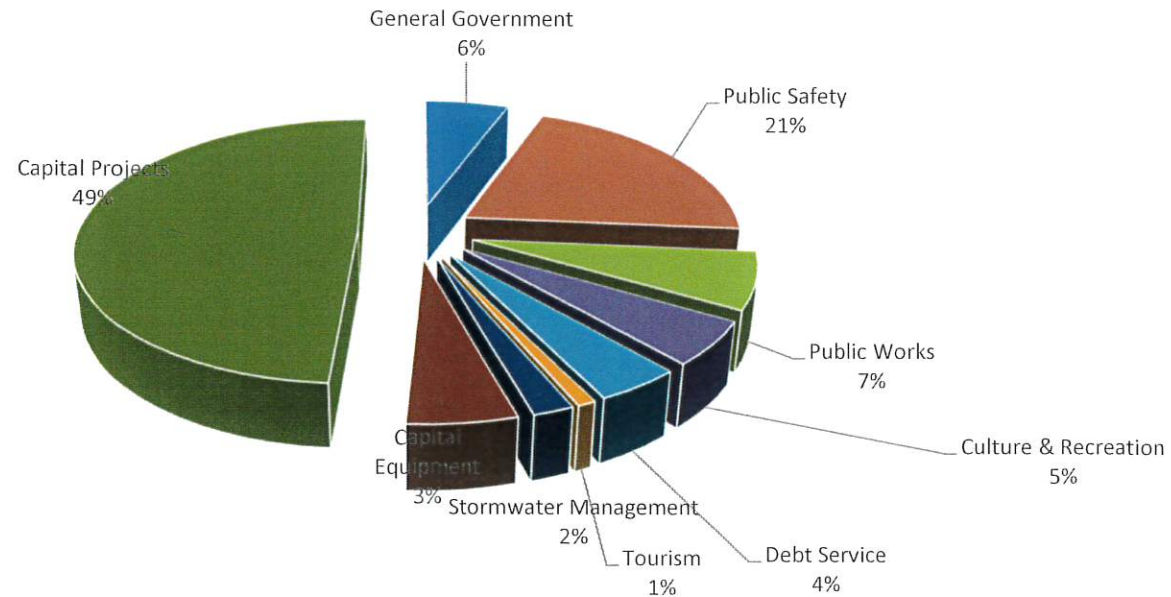
Description

Proposed 2022 Budget Final

CITY OF PEWAUKEE

2022 Proposed Budget

CITY OF PEWAUKEE
Expenditures - Governmental Funds



CITY OF PEWAUKEE

2022 BUDGET

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**2022 Budget
Historical Tax Rate Comparison**

	2022 Budget	Budget Years									
		<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
Assessed Value (in millions) Actual	3,668.733	2,959.251	2,921.125	2,882.927	2,849.308	2,788.058	2,714.451	2,668.253	2,650.084	2,620.790	2,609.135
Tax Levy \$ 10,331,629 Max	10,331,629	9,928,842	9,788,617	9,445,830	9,085,486	8,620,305	8,294,351	8,159,363	7,962,137	7,896,915	7,550,766
Tax Rate per \$1,000 of Assessed Value -16.1%	\$2.816	\$3.355	\$3.351	\$3.276	\$3.189	\$3.092	\$3.056	\$3.058	\$3.004	\$3.013	\$2.894
Dollar Increase (Decrease) over Prior Year	(\$0.539)	\$0.004	\$0.075	\$0.088	\$0.097	\$0.034	(\$0.002)	\$0.045	(\$0.009)	\$0.119	\$0.001
Increase (Decrease) on \$250k Assessment 4.06% levy increase	\$ (134.75)	\$ 1.00	\$ 18.74	\$ 21.95	\$ 24.17	\$ 8.47	\$ (0.59)	\$ 11.19	\$ (2.17)	\$ 29.80	\$ 0.23

Property Tax Components	2022 Budget	Historical Tax Levys									
		<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
General Operations	8,492,105	9,207,573	7,897,815	7,585,830	6,972,986	6,123,597	6,069,073	5,704,363	5,688,637	5,561,915	5,430,911
Debt Service	1,754,524	636,269	930,802	1,000,000	1,100,000	1,081,708	1,200,000	1,100,000	1,300,000	1,500,000	1,350,000
Road Projects			400,000	400,000	300,000	200,000	200,000	200,000	200,000	200,000	34,855
Capital Equipment	50,000	50,000	525,000	425,000	677,500	1,200,000	810,278	1,140,000	758,500	635,000	735,000
Storm Water Management						0	0	0	0	0	0
Cemetery	35,000	35,000	35,000	35,000	35,000	15,000	15,000	15,000	15,000	0	0
Tax Levy	10,331,629	9,928,842	9,788,617	9,445,830	9,085,486	8,620,305	8,294,351	8,159,363	7,962,137	7,896,915	7,550,766

CITY OF PEWAUKEE
2022 Consolidated Budget
All Governmental Fund Types

	2020 Actual	2021			2022 Budget	Change Over 2021 Budget	
		6 Month Actual	Year End Forecast	2021 Budget		Amount	%
REVENUES							
Property Taxes	\$ 9,788,617	\$ 9,928,843	\$ 9,928,843	\$ 9,928,842	\$ 10,331,629	402,787	4%
Non-Property Taxes	1,016,796	243,554	1,261,884	894,310	1,313,190	418,880	47%
Special Assessments	1,571,533	1,041,356	1,172,479	1,007,790	1,184,588	176,798	18%
Intergovernmental	1,783,342	1,221,367	2,479,590	1,576,177	2,238,948	662,771	42%
Licenses and Permits	840,965	788,274	1,289,061	863,952	1,094,150	230,198	27%
Fines, Forfeitures and Penalties	324,529	410,453	516,035	451,000	516,035	65,035	14%
Public Charges for Services	1,224,120	834,003	1,244,450	1,122,386	1,004,798	(117,588)	-10%
Intergov'l Charges for Services	3,552,324	2,598,400	3,536,512	3,512,320	3,585,294	72,974	2%
Impact Fees	39,951	106,153	168,000	39,720	59,520	19,800	50%
Interest	369,627	3,570	51,582	300,120	47,050	(253,070)	-84%
Miscellaneous	205,414	200,406	211,860	76,140	77,140	-	1%
Total Revenues	20,717,218	17,376,379	21,860,296	19,772,757	21,452,342	1,678,585	8%
EXPENDITURES							
General Government	2,236,956	1,187,639	2,574,419	2,639,122	2,632,512	(6,610)	0%
Public Safety	8,067,664	4,242,347	8,829,965	9,123,736	9,444,598	320,862	4%
Public Works	2,789,777	1,305,496	2,824,851	2,942,273	3,166,240	223,967	8%
Culture and Recreation	2,085,060	983,904	2,108,430	2,345,113	2,416,017	70,904	3%
Tourism	240,812	120,000	229,830	230,000	406,000	176,000	77%
Storm Water Management	703,370	314,461	784,865	844,785	911,135	66,350	8%
Capital Projects	3,077,484	3,657,743	9,802,004	6,974,500	22,561,500	15,587,000	223%
Capital Equipment	1,048,723	704,264	1,541,797	2,210,984	2,447,634	236,650	11%
Debt Service	1,377,460	56,573	840,921	840,921	1,955,326	1,114,405	133%
Total Expenditures	21,627,306	12,572,427	29,537,082	28,151,434	45,940,962	17,789,528	63%
Excess of revenues over (under) expenditures	(910,088)	4,803,952	(7,676,786)	(8,378,677)	(24,488,620)	(16,110,943)	
OTHER FIN. SOURCES (USES)							
Proceeds of Long-Term Debt	-	-	7,830,000	5,209,000	26,545,000	21,336,000	
Interfund Transfers	-	-	-	-	-	-	
Change in Fund Balance	(910,088)	4,803,952	153,214	(3,169,677)	2,056,380	5,225,057	
FUND BALANCES							
Beginning of Period	17,362,689	16,750,414	16,472,600	13,661,679	16,625,814		
End of Period	16,452,601	21,554,366	16,625,814	10,492,002	18,682,194		
TAXES LEVIED FOR CITY	\$ 9,788,617	9,928,843	9,928,843	9,928,842	10,331,629	402,787	4%

**CITY OF PEWAUKEE
2022 BUDGET
GENERAL FUND SUMMARY**

REVENUES	2020 Actual	2021				Change Over		% OF
		6 Month Actual	Year End Forecast	2021 Budget	2022 Budget	2021 Budget		TOTAL CHANGE
						Amount	%	
Taxes	8,679,440	9,286,829	10,089,458	9,959,083	9,380,295	(578,788)	-6%	87.6%
Special Charges	758,989	821,572	825,000	818,390	849,588	31,198	4%	-4.7%
Intergovernmental	1,783,342	289,123	1,547,346	1,576,177	1,473,245	(102,932)	-7%	15.6%
Licenses and Permits	840,665	788,074	1,288,861	863,752	1,093,950	230,198	27%	-34.8%
Fines, Forfeitures and Penalties	324,529	410,453	516,035	451,000	516,035	65,035	14%	-9.8%
Public Charges for Services	1,084,042	743,600	1,113,290	1,045,578	926,550	(119,028)	-11%	18.0%
Intergovernmental Charges for Services	1,952,441	984,208	1,922,320	1,917,320	1,979,940	62,620	3%	-9.5%
Interest	229,420	3,295	47,500	293,500	44,500	(249,000)	-85%	37.7%
Miscellaneous	189,670	165,826	177,280	76,140	76,140	-	0%	0.0%
Total revenues and other sources	15,842,538	13,492,980	17,527,090	17,000,940	16,340,243	(660,697)	-4%	100.0%

EXPENDITURES

GENERAL GOVERNMENT

Mayor	12,942	5,702	12,774	12,757	12,757	-	0%	0.0%
Common Council	54,800	29,703	55,003	55,105	55,548	443	1%	0.1%
Boards, Commissions, Committees	1,017	421	5,878	7,796	6,312	(1,484)	-19%	-0.2%
Administration	124,914	57,727	129,540	131,754	135,155	3,401	3%	0.5%
Insurance	128,709	124,367	156,500	159,000	160,016	1,016	1%	0.2%
Professional Services	108,353	65,601	123,600	130,600	136,600	6,000	5%	0.9%
Unclassified	19,400	777	140,513	113,000	113,000	-	0%	0.0%
Court	125,982	60,390	148,673	150,136	142,684	(7,452)	-5%	-1.2%
Finance	356,733	159,373	391,358	410,264	417,071	6,807	2%	1.1%
Elections	51,717	14,058	19,790	21,789	60,995	39,206	180%	6.2%
Facilities	302,141	113,439	291,048	312,848	352,736	39,888	13%	6.3%
Human Resources	229,852	122,635	282,034	283,095	274,461	(8,634)	-3%	-1.4%
Property Assessment	281,392	219,063	402,732	413,767	314,728	(99,039)	-24%	-15.6%
Information Technology	378,143	214,245	414,476	412,211	440,449	28,238	7%	4.5%
COVID 19 Virus	60,861	138	500	25,000	10,000	(15,000)	-60%	-2.4%
Total	2,236,956	1,187,639	2,574,419	2,639,122	2,632,512	8,390	0%	1.3%

PUBLIC SAFETY

Law Enforcement	2,914,211	1,800,333	3,153,796	3,153,796	3,222,061	68,265	2%	10.8%
Fire Services	4,724,067	2,244,447	5,222,760	5,485,292	5,723,670	238,378	4%	37.6%
Community Services	429,386	197,567	453,409	484,648	498,867	14,219	3%	2.2%
Total	8,067,664	4,242,347	8,829,965	9,123,736	9,444,598	320,862	4%	50.6%

**CITY OF PEWAUKEE
2022 BUDGET
GENERAL FUND SUMMARY**

	2020 Actual	2021				Change Over		% OF TOTAL CHANGE
		6 Month Actual	Year End Forecast	2021 Budget	2022 Budget	2021 Budget		
						Amount	%	
PUBLIC WORKS								
Engineering	533,974	191,195	454,711	472,909	506,870	33,961	7%	5.4%
Highways	1,151,464	558,314	1,221,582	1,321,356	1,471,953	150,597	11%	23.7%
Solid Waste & Recycling	883,996	334,038	897,459	897,459	919,818	22,359	2%	3.5%
Weed, Lake & Wetlands Control	192,000	198,000	198,000	198,000	203,500	5,500	3%	0.9%
Animal & Deer Control	7,849	23,074	27,699	21,199	22,699	1,500	7%	0.2%
Forestry	20,494.00	875	25,400	31,350	41,400	10,050	32%	1.6%
Total	2,789,777	1,305,496	2,824,851	2,942,273	3,166,240	213,917	7%	33.7%
CULTURE & RECREATION								
Boat Ramp	-	-	5,600	50,600	10,600	(40,000)	-79%	-6.3%
Fireworks	-	10,000	10,000	10,000	10,000	-	100%	0.0%
Library	834,012	487,010	834,875	834,875	840,591	5,716	1%	0.9%
Parks	565,114	203,640	628,059	642,295	660,637	18,342	3%	2.9%
Recreation Programs	525,967	198,017	466,952	610,220	666,756	56,536	9%	8.9%
Planning	128,052	60,004	136,272	149,823	200,283	50,460	34%	8.0%
Total	2,053,145	958,671	2,081,758	2,297,813	2,388,867	91,054	4.0%	14.4%
Total Expenditures	15,147,542	7,694,153	16,310,993	17,002,944	17,632,217	634,223	4%	100.0%
Excess of revenues and other sources over (under) expenditures	694,996	5,798,827	1,216,097	(2,004)	(1,291,974)			
OTHER FINANCING SOURCES (USES)								
Proceeds of Long-Term Debt	-	-	-	-	-			
Transfer From Tourism - Director	20,000	20,000	20,000	20,000	20,000			
Transfer (To) Storm Water Projects Funds	(17,520)	(17,568)	(17,568)	(17,496)	(19,152)			
Transfer (To) Road Projects Funds	-	-	-	-	-			
Transfer (To) Sports Complex	(165,950)	-	-	-	-			
Transfer (To) Bike & Pedestrian	(9,340)	-	(246,000)	(246,000)	-			
Transfer to Capital Equipment Fund	(800,000)	(615,000)	(615,000)	(615,000)	-			
Change in Fund Balance	(277,814)	5,186,259.00	357,529	(860,500)	(1,291,126)			
FUND BALANCE								
Beginning of Year	6,187,985	5,910,171.00	5,910,171	5,353,958	6,267,700			
End of Year	5,910,171	11,096,430.00	6,267,700	4,493,458	4,976,574			
Fund Balance as % of Revenues	37.3%		35.8%	26.4%	30.5%			

**CITY OF PEWAUKEE
2022 BUDGET
GENERAL FUND REVENUES**

CONSOLIDATED

		2020 Actual	2021			2022 Budget	COMMENTS
			6 Month Actual	Year End Forecast	2021 Budget		
Taxes							
General Tax Levy		7,897,815	9,207,574	9,207,574	9,207,573	8,492,105	
Omitted Taxes		-	-	-	-	15,928	
Other		313	198	198	120	120	
Public Accomodation Tax		99,026	79,057	162,857	61,200	182,142	30% of Tourism Fund
Tax Equivalent on Water Utility		570,155	-	580,000	580,000	580,000	
Taxes from Exempt Organization		112,131	-	110,190	110,190	110,000	
Ag Use Conv Penalties		-	-	28,639	-	-	
	Total Taxes	8,679,440	9,286,829	10,089,458	9,959,083	9,380,295	

Special Charges

Garbage Collection	758,989	821,572	825,000	818,390	849,588	
Total Special	758,989	821,572	825,000	818,390	849,588	

Intergovernmental

COVID 19 Grants & Reimb	246,736	-	-	-	-	
State Shared Revenues	597,022	-	616,975	588,074	598,963	
MFG PP Tax Aid	150,106	150,106	150,106	150,106	150,106	
State Video	22,474	-	43,992	43,992	43,992	
Exempt Computer Aids	64,400	-	64,400	64,400	64,400	
State Fire Dues	124,788	-	135,000	135,000	137,000	
Tank Inspection Fees	4,109	6,632	6,632	10,000	-	
State Transportation Aids	560,240	129,286	517,142	574,605	468,784	
State Fire Aids - DNR Fire Grant	-	3,097	3,097	-	-	
Other State Grants and Aids	-	2	2	-	-	
Lake Patrol DNR Water Safety Aids	13,467	-	10,000	10,000	10,000	
Total Intergovernmental	1,783,342	289,123	1,547,346	1,576,177	1,473,245	

Licenses and Permits

Alcohol, Entertainment, & Dog Licenses	28,868	37,714	37,157	38,430	31,750	
Cable TV & Video	111,398	20,515	90,000	103,322	80,000	
Building/Elec/Plumb/Erosion/Sign/Fire Insp	693,999	727,045	1,156,704	712,000	977,200	
Plan/Zone/Appeals Hearings	6,400	2,800	5,000	10,000	5,000	
Total Licenses and Permits	840,665	788,074	1,288,861	863,752	1,093,950	

Fines, Forfeitures and Penalties

Court Penalties & Lake Patrol Fines	316,529	402,453	500,035	451,000	500,035	
Deposits Forfeited	8,000	8,000	16,000	-	16,000	
Total Fines, Forfeitures and Penalties	324,529	410,453	516,035	451,000	516,035	

**CITY OF PEWAUKEE
2022 BUDGET
GENERAL FUND REVENUES**

CONSOLIDATED

2020 Actual	2021			2022 Budget	COMMENTS
	6 Month Actual	Year End Forecast	2021 Budget		

Public Charges for Services

Administrative Charges	19,156	10,751	20,260	15,230	17,550	2% on Outside & Inhouse Eng bill backs & Attny
Plat and CSM Review Fees	7,650	4,745	8,000	7,500	7,500	
Outside Eng/Legal Fees Reimbursed	199,940	161,586	183,000	65,000	55,000	
Boat Launch Fees	15,382	2,762	9,000	11,000	10,000	
Ambulance Runs	514,064	213,055	450,000	575,000	450,000	
Private Fire Prot. Plan Review Fees	8,825	5,488	7,000	10,000	7,000	
Fire/Ambo Special Event Charges	-	-	-	-	-	
Highway Services	-	5,182	5,182	-	-	
Recycling Revenues	2,662	2,528	4,500	-	3,000	
Park Reservation Fees	34,485	37,424	41,000	30,000	35,000	
Recreation Programs/Field Trips	233,597	290,989	329,599	282,500	341,500	
Park Field Usage & Concession-Not Shared	48,281	9,090	55,749	49,348	-	
Total Public Charges for Service	1,084,042	743,600	1,113,290	1,045,578	926,550	

Intergovernmental Charges for Services

Admin Services for W&S Utility	80,000	80,000	80,000	80,000	80,000	
Contracted Fire Services	1,487,323	765,971	1,487,320	1,487,320	1,531,940	
Shared Park & Recreation Programs	255,893	98,393	275,000	275,000	288,000	
Contracted Building Inspection	129,225	39,844	80,000	75,000	80,000	
Total Intgv'tl Charges for Service	1,952,441	984,208	1,922,320	1,917,320	1,979,940	

Interest

Interest on Investments	226,039	(139)	41,000	290,000	42,000	
Interest on A/R & Delq PP Taxes	3,381	3,434	6,500	3,500	2,500	
Total Interest	229,420	3,295	47,500	293,500	44,500	

Miscellaneous

Rent - Utility Division	36,000	36,000	36,000	36,000	36,000	
Rent - SBC	14,391	6,099	14,390	14,390	14,390	
Sale Assets	91,000	91,040	91,040	-	-	
Insurance Recovery	15,504	-	-	-	-	
Gifts & Donations	500	1,500	1,650	150	150	
Miscellaneous Revenues	32,275	31,187	34,200	25,600	25,600	
Total Miscellaneous	189,670	165,826	177,280	76,140	76,140	
Total Revenues	15,842,538	13,492,980	17,527,090	17,000,940	16,340,243	

**CITY OF PEWAUKEE
2022 BUDGET
GENERAL FUND EXPENDITURES**

CONSOLIDATED

2020	2021			2022	COMMENTS
	6 Month	Year End	2021		

ADMINISTRATION

Mayor

Wages	10,500	4,846	10,500	10,500	10,500	
Benefits	2,442	856	2,274	2,257	2,257	
Total Mayor	12,942	5,702	12,774	12,757	12,757	

Common Council

Wages	39,000	18,000	39,000	39,000	39,000	
Benefits	7,967	3,946	8,046	8,148	8,148	
Training/Conferences/Membership	7,833	7,757	7,957	7,957	8,400	
Total Common Council	54,800	29,703	55,003	55,105	55,548	

Boards, Commissions, and Committies

Fire Commission	65	65	194	931	931	
Public Works Committee	-	-	605	581	605	
Board of Appeals	489	86	344	3,077	1,699	
Board of Review	463	270	4,735	3,207	3,077	
Total Boards and Commis	1,017	421	5,878	7,796	6,312	

Administrator

Wages	108,506	49,743	111,994	111,994	116,122	
Benefits	16,252	7,884	17,171	17,610	18,033	
Training/Conferences/Membership	135	125	325	1,150	650	
Supplies & Equipment	21	(25)	50	1,000	350	
Total Administrator	124,914	57,727	129,540	131,754	135,155	

Insurance

Insurance Consultant	14,067	8,974	15,000	16,000	16,000	
Workers Compensation	51,952	52,206	66,500	65,000	61,516	
Property and Liability	62,690	63,187	75,000	78,000	82,500	
Total Insurance	128,709	124,367	156,500	159,000	160,016	

Outside Services

General Affairs Attorney	42,878	21,830	50,000	55,000	55,000	
Audit and Accounting	42,865	33,497	45,000	45,000	52,000	
Investment Expense	21,010	8,674	21,000	19,000	22,000	
Other Professional Services	-	-	6,000	10,000	6,000	
Weights Measures	1,600	1,600	1,600	1,600	1,600	
Total Outside Services	108,353	65,601	123,600	130,600	136,600	

**CITY OF PEWAUKEE
2022 BUDGET
GENERAL FUND EXPENDITURES**

CONSOLIDATED

		2020	2021		2022	COMMENTS
			6 Month	Year End	2021	
Unclassified						
Delinq PP & Rescinded Taxes		3,900	777	40,513	13,000	13,000
Contingency Appropriation		15,500	-	100,000	100,000	100,000
	Total Unclassified	19,400	777	140,513	113,000	113,000
	Total Administration	450,135	284,298	623,808	610,012	619,388
Municipal Court						
Wages		101,103	47,707	116,539	116,179	110,516
Benefits		21,553	10,506	25,154	25,807	25,503
Training/Conferences/Membership		1,595	910	2,750	3,250	2,165
Supplies & Equipment		1,522	1,174	3,230	3,900	3,500
Prisoner Housing		209	93	1,000	1,000	1,000
	Total Municipal Court	125,982	60,390	148,673	150,136	142,684
Clerk/Treasurer						
Wages		242,631	107,820	251,501	258,401	262,879
Benefits		91,535	42,276	109,007	109,663	115,242
Conferences/Memberships/Dues		2,328	2,792	4,650	9,900	7,600
Supplies & Equipment		16,064	5,852	21,200	26,300	25,350
Notices & Publications		4,175	633	5,000	6,000	6,000
	Total Clerk/Treasurer	356,733	159,373	391,358	410,264	417,071
Elections						
Wages		32,006	10,550	12,300	13,564	42,823
Benefits		51	18	100	25	3,272
Attorney Fees		65	263	300	500	500
Training/Conferences/Membership		-	40	40	-	-
Supplies & Equipment		19,331	3,018	6,400	7,400	13,900
Notices & Publications		264	169	650	300	500
	Total Elections	51,717	14,058	19,790	21,789	60,995
City Hall Operations						
Wages		10,492	1,580	17,479	12,979	33,704
Benefits		716	102	1,869	1,869	4,132
Data Processing		32,994	19,561	39,000	33,000	45,000
Utilities		103,180	41,264	90,800	96,600	100,900
Bldg & Grounds Maint		122,402	44,841	110,400	123,400	120,000
Supplies & Equipment		32,357	6,091	31,500	45,000	49,000
	Total City Hall Operations	302,141	113,439	291,048	312,848	352,736

**CITY OF PEWAUKEE
2022 BUDGET
GENERAL FUND EXPENDITURES**

CONSOLIDATED

		2020	2021			2022	COMMENTS
			6 Month	Year End	2021		
People & Culture (HR)							
Wages		132,034	59,232	135,070	135,070	140,800	
Benefits		40,271	18,936	46,630	47,075	49,411	
Attorney Fees		12,948	240	18,000	18,000	18,000	
Employee Wellness Program		15,892	2,198	13,000	13,000	13,000	
Other Professional Services		-	12,800	17,500	17,500	-	
Training/Conferences/Membership		13,550	19,934	30,500	32,000	32,000	
Supplies & Equipment		15,157	9,295	21,334	20,450	21,250	
Total Human Resources		229,852	122,635	282,034	283,095	274,461	
Assessor							
Wages		224,382	143,207	278,100	276,475	222,005	Includes FT Appraiser
Benefits		40,723	28,524	56,228	61,392	67,523	
Attorney Fees		1,284	629	2,000	4,000	2,000	
WI Mfg Chgs		9,112	-	10,000	10,000	10,000	
Contract for Services		-	39,484	39,484	44,500	-	
Training/Conferences/Membership		1,036	4,740	6,700	7,200	8,300	
Supplies & Equipment		4,855	2,479	10,220	10,200	4,900	
Total Assessor		281,392	219,063	402,732	413,767	314,728	
Information Technology							
Wages		88,050	40,222	90,532	90,212	92,919	
Benefits		30,135	14,370	31,969	34,999	36,780	
Other Professional Services		46,989	24,923	55,000	55,000	55,000	
Training/Conferences/Membership		70	85	700	1,250	1,350	
Supplies & Equipment		212,899	134,645	236,275	230,750	254,400	
Total Information Technology		378,143	214,245	414,476	412,211	440,449	
Law Enforcement							
Police Services							
Wages		21,179	7,198	18,549	18,549	20,190	
Benefits		3,128	1,242	3,387	3,387	3,609	
Attorney Fees		40,555	11,498	50,000	50,000	50,000	
Contract for Services		2,819,590	1,764,566	3,035,335	3,035,335	3,101,512	
Community Service Program		2,639	2,334	18,000	18,000	18,000	
Contract for Lake Patrol		25,114	12,762	25,525	25,525	25,750	
Training/Conferences/Membership		-	-	500	500	500	
Supplies & Equipment		2,006	733	2,500	2,500	2,500	
Total Police Services		2,914,211	1,800,333	3,153,796	3,153,796	3,222,061	

**CITY OF PEWAUKEE
2022 BUDGET
GENERAL FUND EXPENDITURES**

CONSOLIDATED

2020	2021			2022	COMMENTS
	6 Month	Year End	2021		

Fire & Ambulance Services

Fire Administration

Wages	367,478	172,009	387,017	435,445	447,370	
Benefits	142,355	71,063	170,046	184,523	196,998	
Attorney	514	628	3,500	5,000	7,500	
Contract for Services	89,701	46,469	91,500	89,000	94,000	
Utilities	71,480	30,573	71,100	82,100	79,500	
Training/Conferences/Membership	5,357	371	5,500	9,500	7,000	
Supplies, Equipment, Grounds Ma	50,039	22,930	76,500	66,500	73,000	
Total Fire Administration	726,924	344,043	805,163	872,068	905,368	

Fire Protective Services

Wages	2,577,834	1,159,604	2,715,787	2,795,787	2,950,906	
Benefits	986,363	477,384	1,154,244	1,272,437	1,305,934	
Conferences/Memberships/Dues	12,602	4,278	13,000	25,000	25,000	
Supplies & Equipment	254,286	139,431	376,000	345,000	363,000	
Liability & Workers Comp	166,058	119,707	158,566	175,000	173,462	
Total Fire Ambo/Suppressi	3,997,143	1,900,404	4,417,597	4,613,224	4,818,302	
Total Fire Services	4,724,067	2,244,447	5,222,760	5,485,292	5,723,670	

Community Services (Bldg Insp)

Wages	284,421	126,667	281,285	288,354	299,182	
Benefits	124,443	60,649	146,834	146,794	155,485	
Attorney Fees	3,998	822	2,000	4,500	4,000	
Contract for Services	-	-	4,530	15,000	10,000	
Training/Conferences/Membership	1,994	2,401	3,460	6,000	6,200	
Supplies & Equipment	14,530	7,028	15,300	24,000	24,000	
Total Community Services	429,386	197,567	453,409	484,648	498,867	

Public Works

Engineering

Wages	210,192	72,477	224,735	305,353	319,691	
Benefits	76,921	31,998	57,826	107,156	113,779	
Outside Engineering	238,633	83,093	150,000	35,000	35,000	
Training/Conferences/Membership	1,955	705	3,200	5,400	5,400	
Supplies & Equipment	6,273	2,922	18,950	20,000	33,000	\$12k Radar speed signs, \$3k newsletter (50/50 Storm)
Total Engineering Services	533,974	191,195	454,711	472,909	506,870	

**CITY OF PEWAUKEE
2022 BUDGET
GENERAL FUND EXPENDITURES**

CONSOLIDATED

2020	2021			2022	COMMENTS
	6 Month	Year End	2021		

Highway Administration

Wages	484,901	241,396	465,339	522,056	551,792	Add FT Laborer September (33%)
Benefits	199,217	104,111	192,610	232,500	267,411	
Training/Conferences/Membership	330	70	50	3,500	3,500	
Utilities	11,109	5,902	13,800	13,800	54,100	\$12k expense; \$20k LED Conversion \$10k new DPW Facility
Building & Ground Maint	-	-	-	-	6,000	New DPW Facility - Occupancy Oct 2022
Sand & Salt	144,615	145,783	225,000	225,000	225,000	
Road Signs & Repairs	101,896	13,135	128,500	128,500	129,400	
Supplies & Equipment	208,023	47,917	196,283	196,000	234,750	New DPW Facility, Spider Lift
Quiet Zone	1,373	-	-	-	-	
Total Highway Administration	1,151,464	558,314	1,221,582	1,321,356	1,471,953	

Refuse Collection and Recycling

Wages	8,090	3,190	9,251	9,251	9,503	
Benefits	619	1,505	2,208	708	727	
Garbage Collection	814,972	315,416	826,000	826,000	849,588	
Hauling Recyclables	60,197	13,927	60,000	60,000	60,000	
Supplies & Equipment	118	-	-	1,500	-	
Total Garbage Collection and Recycling	883,996	334,038	897,459	897,459	919,818	

Environmental Management

COVID 19	60,861	138	500	25,000	10,000	
Lake Management	192,000	198,000	198,000	198,000	203,500	
HAWS Contracted Services	6,699	6,699	6,699	6,699	6,699	
Deer Control	1,150	16,375	21,000	14,500	16,000	
Forestry	20,494	875	25,400	31,350	41,400	
Total Environmental	281,204	222,087	251,599	275,549	277,599	

**CITY OF PEWAUKEE
2022 BUDGET
GENERAL FUND EXPENDITURES**

CONSOLIDATED

2020	2021			2022	COMMENTS
	6 Month	Year End	2021		

Culture & Recreation

Boat Ramp	-	-	5,600	50,600	10,600	
Joint Library	834,012	487,010	834,875	834,875	840,591	
Fireworks	-	10,000	10,000	10,000	10,000	

Parks

Wages	277,989	96,725	279,551	292,701	302,943	
Benefits	93,340	35,439	137,104	132,104	139,904	
Attorney	643	614	914	500	500	
Utilities	43,459	25,753	54,140	57,140	57,140	
Training/Conferences/Membership	851	525	1,000	1,000	1,000	
Supplies & Equipment	148,832	44,584	155,350	158,850	159,150	
Total Parks	565,114	203,640	628,059	642,295	660,637	

Recreation Programs

Wages	341,234	100,183	228,790	371,279	382,789	
Benefits	54,347	22,524	64,646	64,646	99,224	
Contracted Services	15,338	13,454	30,000	29,345	33,200	
Training/Conferences/Membership	2,921	558	5,000	5,500	5,500	
Supplies & Equipment	83,015	29,095	106,313	110,550	109,650	
Liability & Workers Comp	29,112	32,203	32,203	28,900	36,393	
Shared Recreation Program	525,967	198,017	466,952	610,220	666,756	
Total Parks & Recreation	1,091,081	401,657	1,095,011	1,252,515	1,327,393	

Planning

Wages	82,161	36,269	83,746	84,373	131,873	
Benefits	34,544	17,385	41,926	43,850	49,810	
Attorney	4,656	6,105	8,000	5,000	7,000	
Training/Conferences/Membership	1,863	-	1,600	5,600	5,600	
Supplies & Equipment	451	96	500	1,000	1,000	
Notices & Publications	4,377	149	500	10,000	5,000	
Total Planning	128,052	60,004	136,272	149,823	200,283	

Total General Fund	15,147,542	7,694,153	16,310,993	17,002,944	17,632,217	
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CITY OF PEWAUKEE
2022 BUDGET
SPECIAL REVENUE - IMPACT FEE FUND

		2020 Actual	2021			2022 Budget
			6 Month Actual	Year End Forecast	Budget	
Revenues						
220-00000-46900	Impact Fees -	-	5,740	-	-	-
220-00000-46901	Impact Fees - Parks	21,915	39,216	65,000	24,040	36,000
220-00000-46902	Impact Fees - Fire	2,496	8,084	13,000	1,200	1,800
220-00000-46903	Impact Fees - Bike-Hike	15,540	53,113	90,000	14,480	21,720
220-00000-48100	Interest on Investments	414	59		500	
Total Revenues		40,365	106,212	168,000	40,220	59,520
Transfers to Other Funds						
220-59210-59000	Transfer to General Fund	-	-	-	-	-
220-59247-59000	Transfer to Sports Complex Fund	32,700	-		-	-
220-59244-59000	Transfer to Bike & Pedestrian		-	20,000	84,000	64,000
220-59249-59000	Transfer to Capital - Fire Station Bay	108,000	-		-	-
Total Expenditures and Other Uses		140,700	-	20,000	84,000	64,000
Change in Fund Balance		(100,335)	106,212	148,000	(43,780)	(4,480)
Fund Balance:						
Beginning of Period		299,433	199,098	199,098	171,904	347,098
End of Period		199,098	305,310	347,098	128,124	342,618

CITY OF PEWAUKEE

2022 BUDGET

SPECIAL REVENUE - STORM WATER MANAGEMENT

CONSOLIDATED

		2020	2021			2022	COMMENTS
		Actual	6 Month Actual	Year End Forecast	2021 Budget	Budget	
Revenues and Other Sources							
Engineering Fees Reimb		126,217	82,604	120,000	70,000	70,000	
Miscellaneous		2,826	37,219	38,380	700	3,700	
Storm Water Management Fee		1,599,883	1,614,192	1,614,192	1,595,000	1,605,354	
Interest on Investments		33,371	216	2,432	-	2,400	
Proceeds of Long-term Debt		-	-	-	2,600,000	3,150,000	
Transfer from General Fund		17,520	17,568	17,568	17,496	19,152	
Transfer from Cemetery Fund		420	420	420	420	420	
Total Revenue and Other Sources		1,780,237	1,752,219	1,792,992	4,283,616	4,851,026	
ADMINISTRATION							
Wages		106,002	55,222	108,506	103,506	112,078	
Benefits		37,233	20,794	43,774	41,915	45,592	
Attorney & Accounting Fees		5,734	3,706	13,771	13,000	13,000	
Outside Engineering		89,113	47,590	95,000	60,000	60,000	
Supplies & Equipment		27,748	9,596	34,900	35,800	46,600	
Training/Conferences/Memberships		582	679	2,400	5,400	5,400	
Worker's Compensation		5,735	1,991	6,500	6,500	6,500	
Property & Liability Insurance		3,925	3,498	5,000	5,000	5,000	
TOTAL		276,072	143,076	309,851	271,121	294,170	
STORM SEWER MAINTENANCE							
Wages		25,511	12,518	26,033	27,033	27,976	
Benefits		575	-	450	1,000	900	
Maintenance of Storm Sewers		35,558	15,946	48,185	110,485	127,983	
TOTAL		61,644	28,464	74,668	138,518	156,859	
DITCH & CULVERT MAINTENANCE							
Wages		122,230	49,320	119,859	119,859	120,588	
Benefits		53,636	21,484	53,437	58,437	53,837	
Maintenance of Ditch & Culvert		69,762	21,788	101,500	94,500	119,500	
TOTAL		245,628	92,592	274,796	272,796	293,925	
STREET SWEEPING							
Wages		9,416	6,426	12,000	13,000	13,000	
Benefits		3,907	2,311	5,400	6,500	5,850	
Sediment Diposal/Sweeping		3,966	-	4,000	1,500	4,000	
TOTAL		17,289	8,737	21,400	21,000	22,850	
CATCH BASIN CLEANING & MAINTENANCE							
Wages		20,791	437	10,000	20,000	20,000	
Benefits		7,864	232	4,500	10,000	9,000	
Catch Basin Cleaning/Maintenance/Repairs		476	749	8,000	15,000	15,000	
TOTAL		29,131	1,418	22,500	45,000	44,000	

CITY OF PEWAUKEE

2022 BUDGET

SPECIAL REVENUE - STORM WATER MANAGEMENT

CONSOLIDATED

		2020 Actual	2021			2022 Budget	COMMENTS
			6 Month Actual	Year End Forecast	2021 Budget		
PERMIT COMPLIANCE							
Wages		50,998	26,078	52,158	52,158	54,163	
Benefits		17,677	10,496	20,992	20,992	21,968	
Inspections, Education & Permits		4,931	3,600	8,500	23,200	23,200	
	TOTAL	73,606	40,174	81,650	96,350	99,331	

PROJECTS

230-57301-58210	Hill 'n Dale Subdivision	3,824	14,398	450,000	950,000	550,000	Flood
230-57305-58210	Emerald Acres/Green Road	1,169,747	(7,146)	10,000	10,000	-	Flood
230-57320-58210	Public Works Yard Bio-Infiltration Swale	-	-	-	25,000	25,000	Water Quality
230-57322-58210	Tacoma Storm Sewer	-	-	5,000	50,000	50,000	Road project
230-57329-58210	Lexington Drive Ditch Enclosure	-	-	5,000	50,000	50,000	Flood-Design
230-57330-58210	Woodside Drive Ditch Enclosure	-	-	-	50,000	15,000	Maintenance-coordinate with road project 2023
230-57333-58210	Shady Lane/Shady Nook	-	-	50,000	250,000	250,000	Road
230-57334-58210	Hillside Grove Storm Sewer	-	-	-	50,000	10,000	Maintenance-Wetland Mapping
230-57335-58210	TMDL Reduction Projects	-	-	50	2,500	2,500	Water Quality
230-57338-58210	Storm Inlets & Catch Basins	192,955	5,926	670,000	250,000	75,000	Maintenance / Glenwood Lane Inlets/pipe \$36,000
230-57340-58210	City Storm Water Study	-	6,883	50,000	350,000	350,000	Operations/Study
230-57341-58210	Rocky Point Oak/Peninsula #3	-	-	-	20,000	-	Road/Flood
230-57347-58210	Duplainville Bridge (50R/50S)	6,733	1,667	5,000	95,000	150,000	Replacement 100,000 design '19 350,000 const. '21
230-57348-58210	Busse Rd. Bridge Culvert Repl. (50R/50S)	3,809	17,355	45,000	350,000	350,000	Maintenance-Road
230-57351-58210	Roundys Park II	12,663	-	230,000	75,000	20,000	-
230-57353-58210	Steeplechase #1	18,547	-	18,547	-	-	closeout 1/2021
230-57354-58210	Valley Brook Sub. Ditch enclosure	636	1,803	25,000	350,000	350,000	Replace Failed Ditch Enclosure Pipe
230-57355-58210	Yench Road Culvert Replacement	-	-	30,000	30,000	400,000	permit for culvert replacement on Coco Creek
230-57356-58210	Five Fields Pond Drainage	939	-	40,000	5,000	-	Maintenance - replace pipe to pond from inlet in easement
230-57357-58210	Facilities Plan (Storm portion)	-	-	1,000	10,000	10,000	Study
230-57358-58210	Foxwood/Kathrine Court	32,505	-	100,000	500,000	500,000	Ponding
230-57359-58210	Joseph Rd Reconstruction	-	-	40,000	350,000	275,000	Road - delayed from 2021
230-57360-58210	Meadowbrook Farms Ph 1	-	-	80,000	98,000	10,000	Road - retainage
230-57361-58210	Duplainville Road	-	-	50,000	15,000	1,000,000	Road reconstruction project
230-57364-58210	Steeplechase #2	25,826	-	4,500	-	-	Retainage - Closeout in 2021
230-57365-58210	Fox View Court	21,225	-	4,500	-	-	Retainage - Closeout in 2021
230-XXXX-58210	Wagner Park POND Dredge/Rehab					45,000	Design / Construction 2022
230-XXXX-58210	Kopmeier Road					250,000	Replace sanitary sewer so add road/drainage project in 2022
230-XXXX-58210	Lasko Drainage Issue					150,000	Per PWC, add as project in 2022 to address drainage from fire station
230-57366-58210	Oak/Peninsula	171,371	-	-	-	10,000	Retainage - closeout in 2022
TOTAL	1,660,780	40,886	1,913,597	3,935,500	4,897,500		

CAPITAL EXPENDITURES

Capital Equipment Expenditures	49,325	2,500	-	360,000	350,000	
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OTHER EXPENDITURES

Debt Issue Costs	-	-	-	-	-	
Transfer to Debt Service Fund	257,577	24,326	198,652	198,652	200,652	
TOTAL EXPENDITURES	2,671,052	382,173	2,897,114	5,338,937	6,359,287	

Change in Fund Balance	(890,815)	1,370,046	(1,104,122)	(1,055,321)	(1,508,261)
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Fund Balance:

Beginning of Year	3,616,102	2,725,287	2,725,287	1,117,883	1,621,165
End of Year	2,725,287	4,095,333	1,621,165	62,562	112,904

CITY OF PEWAUKEE
2022 BUDGET
SPECIAL REVENUE - AMERICAN RESCUE PLAN (ARPA)

		2020 Actual	2021			2022 Budget
			6 Month Actual	Year End Forecast	Budget	
Revenues						
240-00000-43350	American Rescue Plan	-	765,703	765,703	-	765,703
Total Revenues		-	765,703	765,703	-	765,703
		-			-	
		-	-	-	-	-
Total Expenditures and Other Uses		-	-	-	-	-
Change in Fund Balance		-	765,703	765,703	-	765,703
Fund Balance:						
Beginning of Period			-			765,703
End of Period			765,703	765,703	-	1,531,406

CITY OF PEWAUKEE
2022 BUDGET
SPECIAL REVENUE - TOURISM & CONVENTION

		2020 Actual	2021			2022 Budget
			6 Month Actual	Year End Forecast	2021 Budget	
Revenues						
250-412100-0000	Public Accomodation Tax (70% Tourism)	235,171	164,299	380,000	142,800	425,000
250-481000-0000	Interest on Investments	2,391	-	-	-	-
Total Revenues		237,562	164,299	380,000	142,800	425,000

Expenditures						
250-567000-9000	Tourism	240,812	120,000	229,830	230,000	406,000
	Positively Pewaukee - General Marketing & Website	18,000	5,000	8,000	8,000	20,000
	Positively Pewaukee - Taste of Lake Country	14,344	15,000	15,000	15,000	30,000
	Positively Pewaukee - Hot Air Ballon Rally					35,000
	Positively Pewaukee - Website	4,000		2,000	2,000	3,000
	Kiwanis Club - Beach Party	1,968		4,830	5,000	9,200
	Kiwanis Club - River Run					800
	W&P Convention Bureau	182,500	100,000	200,000	200,000	248,000
	W&P Convention Bureau - Contingency	-				60,000
250-592100-9000	Transfer to General Fund for Tourism Director	20,000	20,000	20,000	20,000	20,000

Total Expenditures and Other Uses	240,812	140,000	249,830	250,000	426,000
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Change in Fund Balance	(3,250)	24,299	130,170	(107,200)	(1,000)
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Fund Balance:

Beginning of Period	232,690	229,440	229,440	156,685	359,610
End of Period	229,440	253,739	359,610	49,485	358,610

**CITY OF PEWAUKEE
2022 BUDGET
DEBT SERVICE FUND**

2020 Actual	2021			2022 Budget
	6 Month Actual	Year End Forecast	Budget	

Revenues and Other Sources

300-00000-41110	General Tax Levy	930,802	636,269	636,269	636,269	1,754,524
300-00000-42300	Special Assessments	812,544	197,305	325,000	160,000	300,000
300-00000-43271	Federal Grant - BAB (not guaranteed from	-	-	-	-	-
300-00000-48100	Interest on Investments	15,534	-	150	6,000	150
300-00000-48102	Interest on Special Assessments	31,762	22,479	22,479	29,400	35,000
300-00000-49110	Proceeds of Long-Term Debt	-	-	-	-	-
300-00000-49120	Bond Premium	-	-	-	-	-
300-00000-49222	Transfer from Impact Fees	-	-	-	-	-
300-00000-49223	Transfer from Storm Water Management	257,577	24,326	198,652	198,652	200,652

Total Revenues & Other Sources	2,048,219	880,379	1,182,550	1,030,321	2,290,326
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300-58100-56100	Principal Retirement	1,244,040	-	727,775	727,775	1,805,245
300-58200-56200	Interest Expense	133,420	56,573	113,146	113,146	150,081
300-59210-59000	Transfer to General Fund	-	-	-	-	-
300-59249-59000	Transfer to Capital Equip Fund	-	339,400	339,400	339,400	1,035,000
300-59242-59000	Transfer to Road Project Fund	-	150,000	150,000	150,000	-

Total Expenditures	1,377,460	545,973	1,330,321	1,330,321	2,990,326
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Change in Fund Balance	670,759	334,406	(147,771)	(300,000)	(700,000)
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Fund Balance:

Beginning of Period	1,166,003	1,836,762	1,836,762	1,323,484	1,688,991
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End of Period	1,836,762	2,171,168	1,688,991	1,023,484	988,991
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CITY OF PEWAUKEE

2022 BUDGET

CAPITAL PROJECT FUND - Road Projects

		2020 Actual	2021			2022 Budget	Comments
			6 Month Actual	Year End Forecast	2021 Budget		
Revenues and Other Sources							
420-00000-41110	General Tax Levy	400,000	-	-	-	-	
420-00000-48100	Interest Investments	1,725	-	-	-	-	
420-00000-49110	Proceeds of Long-Term Debt	-	-	2,105,000	2,609,000	12,260,000	
420-00000-49230	Transfer From Debt Service Fund	-	150,000	150,000	150,000	-	
420-00000-49120	Bond Premium	-	-	-	-	-	
	Total Revenue and Other Sources	401,725	150,000	2,255,000	2,759,000	12,260,000	

Expenditures and Other Uses

420-57XXX--58210	Street Reconstruction	1,316,715	391,089	2,454,000	2,609,000	9,044,000	
420-56000-58200	Street Paving Maintenance	90,649	-	100,000	100,000	100,000	
420-57332-58200	Traffic Signal Pre-emption	-	-	-	-	-	
	Quiet Zone	-	-	-	-	-	
420-58200-56990	Debt Issue Costs	-	-	49,000	-	210,000	
	Total Expenditures	1,407,364	391,089	2,603,000	2,709,000	9,354,000	

Change in Fund Balance	(1,005,639)	(241,089)	(348,000)	50,000	2,906,000	
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Fund Balance:

Beginning of Period	1,009,155	3,516	3,516	97,658	(344,484)
End of Period	3,516	(237,573)	(344,484)	147,658	2,561,516

FB per GL	3,517	(237,572)
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2022 PROJECTS

2022 PROJECTS		Project Costs	Budgeted Costs	% Assessable	Assessable Cost	City Borrowing	Tax levy
420-57420-58210	Duplainville (Tracks to Weyer) (construction)	6,700,000		30%	1,800,000	4,900,000	(0)
420-57553-58210	Joseph Road	400,000		100%	400,000		(0)
420-57407-58210	Shady Lane & Shady Nook	375,000		10%	37,500	337,500	(0)
420-57554-58210	Spice Creek/Meadowbrook Farms Ph.2	400,000		20%	80,000	320,000	(0)
420-57419-58210	Busse Road Bridge Replacement	350,000		0%	-	350,000	(0)
420-57426-58210	Lexington/Takoma (design)	84,000		20%	16,800	67,200	(0)
420-57418-58210	Duplainville Bridge Repl.	300,000		0%	-	300,000	(0)
420-57430-58210	Lindsay/Redford Intersection Improvements	20,000		0%	-	20,000	(0)
420-57555-58210	Kopmeier Road	400,000		20%	80,000	320,000	(0)
420-57556-58210	Spice Creek/Meadowbrook Farms Ph.3	15,000		20%	3,000	12,000	(0)
TOTALS		9,044,000			2,417,300	6,626,700	

CITY OF PEWAUKEE
2022 BUDGET
CAPITAL PROJECTS FUND - BIKE & PEDESTRIAN

2020 Actual	2021		2021 Budget	2022 Budget
	6 Month Actual	Year End Forecast		

Revenues

440-00000-49222	Transfer from Impact Fees	-	-	20,000	84,000	64,000
440-00000-49210	Transfer from General Fund	9,340	-	246,000	246,000	-
440-00000-49110	Proceeds of Long-Term Debt			-		960,000
Total Revenues		9,340	-	266,000	330,000	1,024,000

Projects

440-53550-53430	Maintenance of Trails	-	-	-	-	10,000
440-53550-58220	Fieldhack	527	-	20,000	150,000	150,000
440-53550-58230	Northview Road Sidewalk	8,813	12,232	30,000	150,000	200,000
440-53550-58240	Duplainville Road			30,000	30,000	450,000
440-53550-58250	Lindsay Road Trail			75,000		325,000

Total Expenditures and Other Uses	9,340	12,232	155,000	330,000	1,135,000
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Change in Fund Balance	-	(12,232)	111,000	-	(111,000)
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Fund Balance:

Beginning of Period	-	-	-	1,178	111,000
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End of Period	-	(12,232)	111,000	1,178	-
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CITY OF PEWAUKEE
2022 BUDGET
CAPITAL PROJECTS - DPW BUILDING

		2020 Actual	2021			2022 Budget
			6 Month Actual	Year End Forecast	Budget	
Revenues						
480-00000-49110	Proceeds of Long Term Debt	-	-	5,725,000	-	10,175,000
480-00000-49210	Transfer from General Fund	-	-	-	-	-
Total Revenues		-	-	5,725,000	-	10,175,000
480-57700-58100	DPW Building	-	3,213,536	5,000,000	-	7,000,000
480-58200-56990	Debt Issue Costs	-	-	130,407	-	175,000
Total Expenditures and Other Uses		-	3,213,536	5,130,407	-	7,175,000
Change in Fund Balance		-	(3,213,536)	594,593	-	3,000,000
Fund Balance:						
Beginning of Period			-			594,593
End of Period			(3,213,536)	594,593	-	3,594,593

CITY OF PEWAUKEE
2022 BUDGET
CAPITAL EQUIPMENT & FACILITIES FUND

		2020 Actual	2021			2022 Budget
			6 Month Actual	Year End Forecast	2021 Budget	
Revenues and Other Sources						
490-00000-41110	General Tax Levy	525,000	50,000	50,000	50,000	50,000
490-432170-0000	Grants Received	-				
490-00000-49110	Proceeds of Long-Term Debt	-			-	
490-00000-43217	Federal Grant	-	166,541	166,541	-	-
490-00000-48100	Interest on Investments	53,989	-	1,500	-	-
490-00000-49210	Transfer from General Fund	800,000	615,000	615,000	615,000	-
490-00000-49230	Tansf from Debt Service	-	339,400	339,400	339,400	1,035,000
490-00000-49222	Transfer from Impact Fees	108,000	-		-	-
	Total Revenue and Other Sources	1,486,989	1,170,941	1,172,441	1,004,400	1,085,000

Expenditures and Other Uses

	Capital Equipment Assignments					
490-57xxxx-5810	Capital Equipment Expenditures	999,398	701,764	1,541,797	1,850,984	2,097,634
	Capital Equipment- Prior Year Assignments					

Total Expenditures	999,398	701,764	1,541,797	1,850,984	2,097,634
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Change in Fund Balance	487,591	469,177	(369,356)	(846,584)	(1,012,634)
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Fund Balance:

Beginning of Period	4,974,403	5,461,994	5,461,994	4,502,090	5,092,638
End of Period	5,461,994	5,931,171	5,092,638	3,655,506	4,080,004

Less Assignments for Future Purchases	5,382,113		4,650,904	3,649,530	4,005,922
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Unassigned Fund Balance	79,881	5,931,171	441,734	5,976	74,082
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**CITY OF PEWAUKEE
2022 BUDGET
CEMETERY FUND**

		2020 Actual	2021			2022 Budget	Comments
			6 Month Actual	Year End Forecast	2021 Budget		
Revenues							
800-00000-41110	Property Tax Levy	35,000	35,000	35,000	35,000	35,000	
800-00000-46542	Internment Fees	9,375	4,800	7,000	4,000	4,000	
800-00000-46546	Lot Sales	1,584	-	-	1,188	1,188	
800-00000-46547	Columbarium Nitches	1,120	560	560	1,120	560	
850-00000-48100	Interest on Investments	1,021	-	-	120	-	
800-00000-49210	Transfer from General Fund	-	-	-	-	-	
	Total Revenues	48,100	40,360	42,560	41,428	40,748	

800-54910-52180	Grave Opening & Closing	-	-	-	-	-	
800-54910-52420	Grounds Maintenance & Projects	31,363	25,211	25,500	46,000	26,000	
800-54910-58200	Columbarium	610	-	650	700		
800-54910-52480	Software/Maintenance/Updates	-	-	500	500	500	
800-54910-53400	Operating Supplies	(58)	22	22	100	650	
800-54910-58200	Capital Equipment Purchases	-	-	-	-	-	
800-59223-59000	Storm Water Utility Charge (Transfer)	420	420	420	420	420	
Total Expenditures and Other Uses		32,335	25,653	27,092	47,720	27,570	

Change in Fund Balance	15,765	14,707	15,468	(6,292)	13,178	
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Fund Balance:

Beginning of Period	90,568	106,332	106,332	103,990	121,800	
End of Period	106,332	121,039	121,800	97,698	134,978	

CITY OF PEWAUKEE
TEN YEAR CAPITAL BUDGET
2022 BUDGET
CAPITAL ASSETS COSTING \$5,000 OR MORE

Purchase Replacement in Highlighted Year

ITEM DESCRIPTION	Dept	Est Life	Replace Year	Cost	Assign Bal 12/31/20	2021 Adds	2021 Estimated Purchases/ Adjustments	2021 Estimated Balance	2022 Proposed Adds	2022 Budgeted Purchases	2022 Budgeted Balance	2023
Replace Park Lots at City Hall - 3 levels	ADMIN				140,000			-			-	
Replace Stairs to Upper Parking Lot	ADMIN	30			50,000			-			-	
Salt Shed Building	ADMIN	25			346,511	(346,511)		-			-	
TOTAL CAPITAL OUTLAYS				-	536,511	(346,511)	-	-	-	-	-	
DS200 Election Equipment	ELE	10	2029	6,500	-			-				
TOTAL CAPITAL OUTLAYS				6,500	-	-	-	-				
Assessment CAMA Software	IT	10	2022	55,000	21,250	5,625		26,875	5,625	15,000	17,500	5,625
AV Conferencing between stations	IT	10	2027	25,000	9,444	2,222		11,666	2,222		13,888	2,222
Accounting Software/Cashiering & all equip/Sp	IT	10	2030	90,000	-			-	10,000		10,000	10,000
Building Software	IT	10	2021	80,000	80,210		80,210	-	5,000		5,000	5,000
Common Council AV Upgrade	IT	10	2027	50,000	15,000	5,000		20,000	5,000		25,000	5,000
Firewalls -Replace Internet Appliance (Sophos	IT	5	2026	20,000	10,000	5,000		15,000			15,000	5,000
Replace Backup System	IT	4	2025	25,000	18,400	5,000		23,400	5,000		28,400	5,000
Security (Cameras, door locks)	IT	10	2026	50,000	24,524	4,246		28,770	4,246		33,016	4,246
Server Replacements	IT	5	2024	45,000	12,502	9,000		21,502	9,000		30,502	9,000
Special Assessment Software	IT	10	2028	31,500	3,500	3,500		7,000	3,500		10,500	3,500
Upgrade Computer Infrastructure- \$5k/yr, max	IT	10	2022	45,000	5,000	5,000		10,000	15,000	25,000	-	5,000
TOTAL CAPITAL OUTLAYS				516,500	199,830	44,593	80,210	164,213	64,593	40,000	188,806	59,593
#1 Staff Car -carried over from 2019	FIRE	5	2020	63,000	14,108	(14,108)		-			-	
#1 Staff Car - new assignment	FIRE	5	2024	65,000	13,000	13,000		26,000	13,000		39,000	13,000
#2 Staff Car	FIRE	5	2023	63,000	26,000	13,000		39,000	13,000		52,000	11,000
#3 Staff Car	FIRE	5	2025	65,000	63,000	13,000	63,000	13,000	13,000		26,000	13,000
#4 Staff Car	FIRE	5	2025	65,000	63,000	13,000	63,000	13,000	13,000		26,000	13,000
#2851 Ambulance (2016)	FIRE	7	2023	375,000	207,960	55,680		263,640	55,680		319,320	55,680
#2852 Ambulance (2014)	FIRE	7	2022	325,000	249,849	30,000		279,849	45,151	325,000	-	46,500
#2853 Ambulance (2015)	FIRE	7	2022	350,000	223,300	63,350		286,650	63,350	350,000	-	53,571
#2861 Front Line Engine (2010)	FIRE	10	2029	675,000	67,500	67,500		135,000	67,500		202,500	67,500
#2862 Front Line Engine (2010)	FIRE	10	2030	695,000	675,000	(355,808)	319,192	-	-		-	
#2862 Front Line Engine new	FIRE	10				69,500		69,500	69,500		139,000	69,500
#2863 Front Line Engine (2018) carry over	FIRE	10	2022	900,908	545,000	355,808		900,808	-	900,808	-	
#2863 Front Line Engine (2028) new	FIRE	10	2028	700,000	-	70,000		70,000	70,000		140,000	70,000
#2871 Ladder Truck (2016)	FIRE	15	2031	1,200,000	286,175	83,075		369,250	83,075		452,325	83,075
#2883 Grass Truck	FIRE	15	2027	75,400	34,800	5,800		40,600	5,800		46,400	5,800
#2885 Utility/Tow Vehicle-Trailer/hovercraft (20	FIRE	7	2023	25,000	14,300	3,575		17,875	3,575		21,450	3,550
#2887 Inspection Vehicle (2016)	FIRE	7	2023	40,000	22,900	5,700		28,600	5,700		34,300	5,700
#2896 Gator Utility (2012-new)	FIRE	10	2022	25,000	18,750	3,125		21,875	3,125		25,000	
#2896 Gator Utility-new	FIRE	10										3,125
#2899 Hovercraft (2011-new)	FIRE	15	2023	67,500	45,000	7,500		52,500	7,500		60,000	7,500
Hand held radios	FIRE		2021	120,000		121,101	121,101	-	10,000		10,000	10,000
Replace Fitness Equipment	FIRE		2020	15,000					15,000	15,000		2,000
Advance Airways (40k in 2025)	FIRE	5	2025	50,000	17,950	10,000		27,950	10,000		37,950	10,000
Defib 12 lead wires (160k in 2029)	FIRE	8	2021	200,000	110,000	90,000	200,000	-	25,000		25,000	25,000

CITY OF PEWAUKEE
TEN YEAR CAPITAL BUDGET
2022 BUDGET
CAPITAL ASSETS COSTING \$5,000 OR MORE

Purchase Replacement in Highlighted Year

ITEM DESCRIPTION	Dept	Est Life	Replace Year	Cost	Assign Bal 12/31/20	2021 Adds	2021 Estimated Purchases/ Adjustments	2021 Estimated Balance	2022 Proposed Adds	2022 Budgeted Purchases	2022 Budgeted Balance	2023
Mobile Data Communication Systems (9)	FIRE	3	2023	30,000	48,313	10,000		58,313	10,000		68,313	10,000
Replacement Hose/Large Diameter	FIRE	3	2022	5,000	1,667	1,666		3,333	1,667	5,000	-	1,667
SCBA Upgrades	FIRE	10	2021	205,507	262,500	(56,993)	205,507	-	-		-	
SCBA Upgrades new	FIRE	10	2030	370,000	-	37,000		37,000	37,000		74,000	37,000
Thermal Imaging Cameras -2029 #1	FIRE	10	2030	52,700	2,700	5,000		7,700	5,000		12,700	5,000
Thermal Imaging Cameras -2012 #2	FIRE	10	2031	55,000	25,000	(25,000)		-	5,000		5,000	5,000
Thermal Imaging Cameras -2021 #3	FIRE	10	2021	25,000		move 25K budget to radios		-	5,000		5,000	5,000
TOTAL CAPITAL OUTLAYS				6,903,015	3,037,772	695,471	971,800	2,761,443	655,623	1,595,808	1,821,258	632,168
Inspection Vehicle	Bldg Insp	10	2030	30,000	-	3,000		3,000	3,000		6,000	3,000
Inspection Vehicle	Bldg Insp	10	2030	30,000	-	3,000		3,000	3,000		6,000	3,000
TOTAL CAPITAL OUTLAYS					-	6,000	-	6,000	6,000	-	12,000	6,000
01- 1-Ton Dump Truck 2026 (75k) 2037 (88K)	HWY	8	2026	75,000			moved to #53	-	15,000		15,000	15,000
53- 1 Ton Dump Truck - fleet addition (80k) 20	HWY	8	2029	80,000	66,000	7,000	73,000		10,000		10,000	10,000
02- 1-Ton Dump Truck 2028 (80K) 2036 (84K)	HWY	8	2028	80,000	-	10,000		10,000	10,000		20,000	10,000
03- Boom Mower 2038 (127K)	HWY	12	2026	113,000 W/Trade	43,500	11,600		55,100	11,600		66,700	11,600
04- Road Grader 2039	HWY	20	2039	170,000 W/Trade	8,750	8,100		16,850	8,500		25,350	8,500
05- Back Hoe 2033 (55k)	HWY	10	2023	50,000 W/Trade	46,666	1,000		47,666	1,000		48,666	1,334
06- Plow Truck 2036 (222k)	HWY	10	2026	201,000	82,500	19,750		102,250	19,750		122,000	19,750
07- Plow truck 2036 (222k)	HWY	10	2026	200,000			moved to #15		40,000		40,000	40,000
15-Plow Truck - fleet addition	HWY	10	2031	216,000	166,667	25,333	192,000		21,600		21,600	21,600
08- Plow Truck 2038 (227K)	HWY	10	2028	205,000	42,000	20,375		62,375	20,375		82,750	20,375
09- Plow Truck 2033 (216k)	HWY	10	2023	195,000	130,680	21,500		152,180	21,500		173,680	21,320
10- Plow Truck 2035 (221k)	HWY	10	2025	200,000	104,286	20,000		124,286	20,000		144,286	20,000
11- Plow Truck 2035 (223k)	HWY	10	2024	200,000	117,144	21,000		138,144	21,000		159,144	21,000
12- Replace Plow Truck 2030 (212k) 2040(235	HWY	10	2020	192,000	-	21,200		21,200	21,200		42,400	21,200
13- Pavement Roller 2038 (14k)	HWY	10	2028	12,000 W/Trade	3,600	1,050		4,650	1,050		5,700	1,050
14- Broom 2038(15k)	HWY	10	2028	14,000	3,000	1,400		4,400	1,400		5,800	1,400
16- Plow Truck 2037 (225k)	HWY	10	2027	203,000	62,000	20,000		82,000	20,000		102,000	20,000
17- Tandem Plow Truck 2039 (243k)	HWY	10	2029	220,000	22,500	22,000		44,500	22,000		66,500	22,000
18-Front End Loader 2036 (125k)	HWY	8	2026	116,000 W/Trade	31,250	14,125		45,375	14,125		59,500	14,125
19- Plow Truck 2032 (216K)	HWY	10	2022	195,000	149,000	23,000		172,000	48,000	220,000	-	21,600
20- Asphalt Hot Box 2033 (35K)	HWY	10	2023	31,000	20,800	3,400		24,200	3,400		27,600	3,400
24- Air Compressor	HWY	20	2021	TBD	13,777	1,000		14,777	1,000		15,777	1,000
25- 4x4 Pickup Truck 2028 (52K) 2038 (60k)	HWY	8	2020	45,000	-	6,500		6,500	6,500		13,000	6,500
27 - Pre-storm Pre-Wet Unit 2035 (14k)	HWY	15	2025	12,000		2,400		2,400	2,400		4,800	2,400
28- Highway Mower 2042 (91k)	HWY	12	2030	80,000 W/Trade	17,500	6,250		23,750	6,250		30,000	6,250
29- Chipper 2034 (35K)	HWY	10	2024	32,000 W/Trade	22,334	2,400		24,734	2,400		27,134	2,400
35- Shop Compressor 2042 (9.8k)	HWY	15	2032	8,400	2,400	500		2,900	500		3,400	500
39-Walk Behind Concrete Saw 2037 (7.5k)	HWY	10	2027	7,000		1,000		1,000	1,000		2,000	1,000
52- Shop Pressure Washer 2028 (9K) 2040 (1	HWY	12	2028	9,000 W/Trade	3,584	677		4,261	677		4,938	677
54- Fork lift 2025 (25K) 2040 (30K)	HWY	15	2025	25,000	14,284	2,144		16,428	2,144		18,572	2,144
55- 1-Ton Dump Truck 2023 (75K) 2031 (82K)	HWY	8	2023	75,000	46,875	9,375		56,250	9,375		65,625	9,375
56- Sign Truck 2025 (94K) 2033 (102K)	HWY	8	2025	94,000	31,430	12,515		43,945	12,515		56,460	12,515
58- Skidsteer 2029 (34K)trade 2039 (37k)	HWY	10	2029	34,000	4,500	3,280		7,780	3,280		11,060	3,280

CITY OF PEWAUKEE
TEN YEAR CAPITAL BUDGET
2022 BUDGET
CAPITAL ASSETS COSTING \$5,000 OR MORE

Purchase Replacement in Highlighted Year

ITEM DESCRIPTION	Dept	Est Life	Replace Year	Cost	Assign Bal 12/31/20	2021 Adds	2021 Estimated Purchases/ Adjustments	2021 Estimated Balance	2022 Proposed Adds	2022 Budgeted Purchases	2022 Budgeted Balance	2023
301- Compact Tractor/Multi-Unit (1/2 with SWN HWY	HWY	10	2029	28,000	2,550	2,830		5,380	2,830		8,210	2,830
302- Spider Lift (1/2 Storm 1/2 Hwy) 2036 (85.4	HWY	15	2021	67,000		72,721	72,721	-	5,700		5,700	5,700
303 Trailer for Spider Lift (1/2 Storm 1/2 Hwy)	HWY	10	2021	7,300		7,279	7,279	-	800		800	800
TOTAL CAPITAL OUTLAYS				2,909,700	1,259,577	402,704	345,000	1,317,281	408,871	220,000	1,506,152	382,625
GIS system/asset management-split w/Storm	ENG		2022	100,000					100,000	100,000		
Total Station Survey-split eng, storm, w/s	ENG	10	2027	13,000					2,200		2,200	2,200
Pickup/SUV (1/2 Storm Water)- cost \$35k	ENG	5	2023	17,500	7,000	3,500		10,500	3,500		14,000	3,500
TOTAL CAPITAL OUTLAYS				130,500	7,000	3,500	-	10,500	105,700	100,000	16,200	5,700
Tennis Court/BB Court Resurfacing *	PRCOP			20k per park/ye	60,000	20,000	18,000	62,000	20,000	20,000	62,000	
Dog park conversion	PRCOP			16,000	-			-			-	30,000
Kitchen Update at Wagner Park	PRCOP			6,000	6,000		-	6,000	-		6,000	
4 Permanent Pickleball Courts (tennis convers	PRCOP		2022	45,500	-			-	45,500	45,500	-	
Wagner Playground Resurface	PRCOP			26,000	-	6,500		6,500	6,500		13,000	6,500
Scoreboards (2) Nettesheim Park (\$8,500)	PRCOP			sponsorship?	-			-			-	
#155 2016 Kifco Sprinkler-was #152	PRCOP	10	2026	9,500	-	1,583		1,583	1,583		3,166	1,583
#153 2016 Kifco Sprinkler	PRCOP	10	2026	9,500	-	1,583		1,583	950		2,533	1,583
Sports Complex Driveway Asphalt top coat	PRCOP					21,862	21,862	-			-	
Sports Complex Bleacher Pads & ADA paths	PRCOP					27,896	27,896	-			-	
TOTAL CAPITAL OUTLAYS					66,000	79,424	67,758	77,666	74,533	65,500	86,699	39,666
PLAYGROUND EQUIPMENT	PRPLAY							-				
Add to Assigned Balance						17,571			17,916			15,411
Current Year to be Expensed							38,494		-			25,000
Assigned Balance					139,799			118,876	17,916	-	136,792	8,327
TOTAL CAPITAL OUTLAYS					-							
#72 GMC 2020 3500	PRSHARE	10	2030	37,000	-	900		900	1,500		2,400	4,000
#73 GMC 2019 1/2 ton 4x4	PRSHARE	10	2029	45,000	-	1,000		1,000	4,000		5,000	5,000
#74 GMC 1/2 ton 4x4	PRSHARE	10	2028	33,000	3,000	3,375		6,375	3,375		9,750	3,375
#75 2012 4x4 Pick-Up (net of 15k trade)	PRSHARE	10	2022	40,000	22,300	2,700		25,000	-	25,000	-	4,000
#76 2013 Utility Truck/Diamond Trailer	PRSHARE	10	2023	41,500	23,750	5,950		29,700	5,950		35,650	5,850
Diamond Trailer (break out from #76)	PRSHARE	10	2023	8,500	-	2,800		2,800	2,800		5,600	2,900
#77 2014 1-Ton Dump	PRSHARE	10	2024	51,000	13,000	8,000		21,000	10,000		31,000	10,000
#78 2014 Pickup Salter and Plow	PRSHARE	10	2024	48,500	11,164	9,310		20,474	9,310		29,784	9,310
#79 2016 Utility Van	PRSHARE	10	2026	32,000	3,500	2,084		5,584	2,084		7,668	6,084
#80 2018 One Ton Pickup	PRSHARE	10	2028	46,000	1,500	2,500		4,000	6,000		10,000	6,000
#81 2010 4x4 Pick-Up and Plow	PRSHARE	10	2030	45,000	-	5,000		5,000	4,500		9,500	4,500
#82 2016 1-Ton Dump	PRSHARE	10	2026	51,000	-	8,500		8,500	8,500		17,000	8,500
#83 2017 Wing Mower	PRSHARE	3	2023	42,000	-	14,000		14,000	14,000		28,000	14,000
#85 2013 Utility Dump	PRSHARE	10	2023	14,000	4,200	-		4,200	-		4,200	9,800
#86 2018 Wing Mower	PRSHARE	3	2021	42,000	28,000	14,000	42,000	-	14,000		14,000	14,000
#87 2008 Tractor/Loader	PRSHARE	10	2023	45,000	21,000	8,000		29,000	8,000		37,000	8,000
#88 2017 60" 2-Turn Mower	PRSHARE	3	2023	8,000	-	-		-	-		-	8,000
#89 2012 Trailer	PRSHARE	10	2022	15,000	1,750	6,626		8,376	6,626	15,002	-	1,650

CITY OF PEWAUKEE
TEN YEAR CAPITAL BUDGET
2022 BUDGET
CAPITAL ASSETS COSTING \$5,000 OR MORE

Purchase Replacement in Highlighted Year

ITEM DESCRIPTION	Dept	Est Life	Replace Year	Cost	Assign Bal 12/31/20	2021 Adds	2021 Estimated Purchases/ Adjustments	2021 Estimated Balance	2022 Proposed Adds	2022 Budgeted Purchases	2022 Budgeted Balance	2023
#91 2018 Sand pro	PRSHARE	3	2021	13,050	8,700	4,350	13,050	-	4,500		4,500	4,500
#96 2013 Wing Mower (net of trade in)	PRSHARE	6	2026	61,000	-	3,750		3,750	6,750		10,500	12,550
#99 2017 Zero Turn Mower	PRSHARE	3	2023	8,000	-	2,667		2,667	2,667		5,334	2,667
#100 2016 Trailer	PRSHARE	10	2026	10,000	2,100	1,317		3,417	1,317		4,734	1,317
#101 2014 Trailer	PRSHARE	10	2024	8,000	3,500	1,800		5,300	900		6,200	900
#102 2010 Pressure Washer	PRSHARE	8	2021	6,000	3,000	(3,000)		-				
#110 Preseeder 2017	PRSHARE	10	2027	10,500	2,100	900		3,000	1,250		4,250	1,250
#114 2017 Trailer	PRSHARE	10	2027	10,000	834	2,292		3,126	1,146		4,272	1,146
#130 Top Dresser (smaller)* 2015	PRSHARE	10	2025	11,000	4,400	1,200		5,600	1,350		6,950	1,350
#133 2018 Trailer Mounted Water Tank	PRSHARE	10	2028	7,000	-	788		788	788		1,576	908
#149 Aerator 687 - 2015	PRSHARE	10	2025	22,000	1,200	4,161		5,361	4,161		9,522	4,161
#151 2017 5900 Wing Mower	PRSHARE	6	2028	75,000	26,250	13,125		39,375	28,125	67,500	-	12,500
#154 2017 Slit Seeder	PRSHARE	10	2027	8,200	-	1,171		1,171	1,171		2,342	1,171
#156 Toro Dingo	PRSHARE	10	2023	34,000	8,500	8,500		17,000	8,500		25,500	8,500
Joint Park/Open Space Plan Update	PRSHARE	6	2019	5,000	-	2,000		2,000	1,000		3,000	1,000
TOTAL CAPITAL OUTLAYS				933,250	193,748	139,766	55,050	278,464	164,270	107,502	335,232	178,889
Village	30%	29%			(58,124)	(41,930)	(16,515)	(83,539)	(47,638)	(31,176)	(97,217)	(51,878)
City	70%	71%			135,624	97,836	38,535	194,925	116,632	76,326	238,015	127,011
TOTAL PARK OUTLAYS					341,423	194,831	144,787	391,467	209,081	141,826	461,506	207,088
TOTAL CITY CAPITAL OUTLAYS (ALL DEPTS)					\$ 5,382,113	\$ 1,000,588	\$ 1,541,797	\$ 4,650,904	\$ 1,449,868	\$ 2,097,634	\$ 4,005,922	\$ 1,293,174
					5,382,113	1,000,588	1,541,797	4,650,904	1,449,868	2,097,634	4,005,922	

STORM WATER FUND

#201 Sweeper 2031 (275k)	SWM	10	2021	260,000	133,334	126,666	260,000	-	27,500		27,500	27,500
#202 Rubber Tire Excavator 2026 (180k) trade	SWM	15	2026	180k W/Trade	35,000	24,200		59,200	24,200		83,400	24,200
#204 Hydro Seeder (Storm Water) 2029 (16k)	SWM	15	2029	16,000	2,544	1,496		4,040	1,496		5,536	1,496
#205 Tandem Truck (Storm Water) 2025 (206k)	SWM	10	2025	206,000	64,286	28,343		92,629	28,343		120,972	28,343
#207 Mini Excavator 2029(82k)2039(91k)	SWM	10	2029	82k W/Trade	8,000	8,225		16,225	8,225		24,450	8,225
#208 Excavator Trailer 2029(20k) 2039 (23k)	SWM	10	2029	20,000	2,300	1,980		4,280	1,965		6,245	1,965
#209 Portable Traffic Control Devices 2035 (5)	SWM	15	2035	50,000	-	3,870		3,870	3,870		7,740	3,870
#211-Equip. Trailer 2021 (20k) 2031 (22k) 204	SWM	10	2021	20,000	-	20,000	20,000	-	2,200		2,200	2,200
212 - Catch Basin Trailer 2031 (11k) 2041 (14	SWM	10	2021	11,000	-	9,863	9,863	-	1,100		1,100	1,100
301- Compact Tractor/Multi-Unit (1/2 with SWN	HWY	10	2029	28,000	2,550	2,830		5,380	2,830		8,210	2,830
302- Spider Lift (1/2 Storm 1/2 Hwy) 2036 (85.4	HWY	15	2021	67,000		72,721	72,721	-	5,700		5,700	5,700
303 Trallier for Spider Lift (1/2 Storm 1/2 Hwy)	HWY	10	2021	7,300		7,279	7,279	-	800		800	800
Pickup/SUV (1/2 Engineering)- cost \$35k 2023	SWM	5	2023	17,500	7,000	3,500		10,500	3,500		14,000	3,500
Televising Equipment - share with Sewer	SWM	10	2028	25,000	5,000	2,500		7,500	2,500		10,000	2,500
Total Station Survey-split eng,storm,w/s	SWM	10	2027	13,000	22,500	(9,500)		13,000			13,000	
Sewer Jetter (1/2 Sewer)	SWM		2022						250,000	250,000		
GIS system/asset management-split w/Eng	SWM		2022	100,000					100,000	100,000	-	
TOTAL CAPITAL OUTLAYS				840,800	282,514	303,973	369,863	216,624	464,229	350,000	330,853	114,229

CITY OF PEWAUKEE
2022 BUDGET
ASSIGNED FUNDS FOR CAPITAL EQUIPMENT & FACILITIES

	2020 Balance	2021 Proposed Adds	2021 Proposed Expenditures	2021 Est Balance	2022 Proposed Adds	2022 Proposed Expenditures	2022 Est Balance
Capital Equip Fund							
City Hall							
Replace Salt Shed at City Hall	346,511	(346,511)	-	-			-
Replace Stairs to Upper Pkg Lot City Hall	140,000			-			-
Replace Parking Lot City Hall	50,000			-			-
	536,511	(346,511)	-	-		-	-
Election							
DS200 Election Equipment	-		-	-			
IT							
Assessment CAMA Software(less deposit)	21,250	5,625		26,875	5,625	(15,000)	17,500
AV Conferencing between stations	9,444	2,222		11,666	2,222		13,888
Cashiering System/2020 balance to Bldg	-			-	10,000		10,000
Building Software/BSA	80,210		(80,210)	-	5,000		5,000
Common Council AV Upgrade	15,000	5,000		20,000	5,000		25,000
Firewalls -Replace Internet Appliance (Sor	10,000	5,000		15,000	-	-	15,000
Replace Backup System	18,400	5,000		23,400	5,000		28,400
Security (Cameras, Door locks)	24,524	4,246		28,770	4,246		33,016
Server Replacements	12,502	9,000		21,502	9,000		30,502
Special Assessment Software	3,500	3,500		7,000	3,500		10,500
Upgrade Computer Infrastructure	5,000	5,000		10,000	15,000	(25,000)	-
	199,830	44,593	(80,210)	164,213	64,593	(40,000)	188,806

Fire Dept

	2020	2021	2021	2021	2022	2022	2022
	Balance	Proposed Adds	Proposed Expenditures	Est Balance	Proposed Adds	Proposed Expenditures	Est Balance
Staff Car #1	14,108	(14,108)		-			-
Staff Car #1 new 2026	13,000	13,000		26,000	13,000		39,000
Staff Car #2	26,000	13,000		39,000	13,000		52,000
Staff Car #3	63,000		(63,000)	-			-
Staff Car #3-2026	-	13,000		13,000	13,000		26,000
Staff Car #4	63,000		(63,000)	-			-
Staff Car #4-new	-	13,000		13,000	13,000		26,000
Ambo #2851	207,960	55,680		263,640	55,680		319,320
Ambo #2852	249,849	30,000		279,849	45,151	(325,000)	0
#2853 Ambulance	223,300	63,350		286,650	63,350	(350,000)	-
#2861 Engine	67,500	67,500		135,000	67,500		202,500
#2862 Engine	675,000	(355,808)	(319,192)	-			-
#2862 Engine -new	-	69,500		69,500	69,500		139,000
#2863 Engine	545,000	355,808		900,808		(900,808)	-
#2863 Engine-2038 purchase	-	70,000		70,000	70,000		140,000
Ladder Truck #2871	286,175	83,075		369,250	83,075		452,325
#2883 Grass Truck	34,800	5,800		40,600	5,800		46,400
#2885 Utility/Plow Truck (2001)	14,300	3,575		17,875	3,575		21,450
#2887 Inspection Vehlice (2005)	22,900	5,700		28,600	5,700		34,300
#2896 Gator Utility	18,750	3,125		21,875	3,125		25,000
#2899 Hovercraft	45,000	7,500		52,500	7,500		60,000
Hand Held Radios		121,101	(121,101)	-	10,000		10,000
Replace Fitness Equipment					15,000	(15,000)	-
Advanced Airways	17,950	10,000		27,950	10,000		37,950
Defib 12 lead Wires	110,000	90,000	(200,000)	-	25,000		25,000
Mobile Data Communication Systems (9)	48,313	10,000		58,313	10,000		68,313
Ambo Gurney	-			-			-
Replacement Hose/Large Diameter	1,667	1,666		3,333	1,667	(5,000)	-
SCBA Upgrades	262,500	(56,993)	(205,507)	-			-
SCBA Upgrades-new 2030	-	37,000		37,000	37,000		74,000
Station Alerting System	-			-			-
Thermal Imaging Cameras # 1	2,700	5,000		7,700	5,000		12,700
Thermal Imaging Cameras # 2	25,000	(25,000)		-	5,000		5,000
Thermal Imaging Cameras # 3	-			-	5,000		5,000
	3,037,772	695,471	(971,800)	2,761,443	655,623	(1,595,808)	1,821,258

2020	2021	2021	2021	2022	2022	2022
Balance	Proposed Adds	Proposed Expenditures	Est Balance	Proposed Adds	Proposed Expenditures	Est Balance

BLDG INSP

Inspection Vehicle #1	-	3,000	-	3,000	3,000	6,000
Inspection Vehicle #1	-	3,000	-	3,000	3,000	6,000
		6,000	-	6,000	-	12,000

HWY

#1 One-Ton Dump Truck			-	15,000		15,000
#53 One-Ton Dump Truck-new addition to	66,000	7,000	(73,000)	-	10,000	10,000
#2 1-Ton Dump Truck	-	10,000		10,000	10,000	20,000
#3 Boom Mower	43,500	11,600		55,100	11,600	66,700
#4 Road Grader	8,750	8,100		16,850	8,500	25,350
#5 Backhoe	46,666	1,000		47,666	1,000	48,666
#6 Plow Truck	82,500	19,750		102,250	19,750	122,000
#7 Plow Truck				-	40,000	40,000
#15 Plow Truck-new addition to fleet	166,667	25,333	(192,000)	-	21,600	21,600
#8 Plow Truck	42,000	20,375		62,375	20,375	82,750
#9 Plow Truck	130,680	21,500		152,180	21,500	173,680
#10 Plow Truck	104,286	20,000		124,286	20,000	144,286
#11 Plow Truck	117,144	21,000		138,144	21,000	159,144
#12 Plow Truck	-	21,200		21,200	21,200	42,400
13- Pavement Roller 2018	3,600	1,050		4,650	1,050	5,700
14- Boom 2018	3,000	1,400		4,400	1,400	5,800
#16 Plow Truck	62,000	20,000		82,000	20,000	102,000
#17 Tandem Plow Truck	22,500	22,000		44,500	22,000	66,500
#18 Front End Loader	31,250	14,125		45,375	14,125	59,500
#19 Plow Truck	149,000	23,000		172,000	48,000	(220,000)
#20 Asphalt Hot Box	20,800	3,400		24,200	3,400	27,600
#24 Air Compressor	13,777	1,000		14,777	1,000	15,777
#25 4x4 Pickup Truck	-	6,500		6,500	6,500	13,000
#27 Pre-storm Pre-Wet Unit 2035 (14k)	-	2,400		2,400	2,400	4,800
#28 Highway Mower	17,500	6,250		23,750	6,250	30,000

	2020 Balance	2021 Proposed Adds	2021 Proposed Expenditures	2021 Est Balance	2022 Proposed Adds	2022 Proposed Expenditures	2022 Est Balance
#29 Chipper	22,334	2,400		24,734	2,400		27,134
#35 Shop Compressor	2,400	500		2,900	500		3,400
#39 Walk Behind Concrete Saw 2037 (7.5I	-	1,000		1,000	1,000		2,000
#52 Shop Pressure Washer	3,584	677		4,261	677		4,938
#54 Fork Lift	14,284	2,144		16,428	2,144		18,572
#55 1-Ton Dump Truck	46,875	9,375		56,250	9,375		65,625
#56 Sign Truck	31,430	12,515		43,945	12,515		56,460
#58 Skidsteer	4,500	3,280		7,780	3,280		11,060
#301- Compact Tractor/Multi-Unit (1/2 wi	2,550	2,830		5,380	2,830		8,210
302- Spider Lift (1/2 Storm 1/2 Hwy)		72,721	(72,721)	-	5,700		5,700
303 Trailer for Spider Lift (1/2 Storm 1/2 Hwy)		7,279	(7,279)	-	800		800
	1,259,577.00	402,704.00	(345,000.00)	1,317,281.00	408,871.00	(220,000.00)	1,506,152.00

Eng

GIS system/asset management					100,000	(100,000)	-
Total Station Survey-split eng,storm,w/s					2,200		2,200
Pickup/SUV (1/2 Storm Water)- cost \$35k	7,000	3,500		10,500	3,500		14,000
	7,000	3,500	-	10,500	105,700	(100,000)	16,200

2020	2021	2021	2021	2022	2022	2022
Balance	Proposed Adds	Proposed Expenditures	Est Balance	Proposed Adds	Proposed Expenditures	Est Balance

Parks City Only

Tennis Court/BB Court Resurfacing	60,000	20,000	(18,000)	62,000	20,000	(20,000)	62,000
Dog park conversion							
Kitchen Update at Wagner Park	6,000		-	6,000			6,000
4 Permanent Pickleball Courts (tennis conversion)					45,500	(45,500)	
Wagner Playground Resurface	-	6,500		6,500	6,500		13,000
#155 2016 Kifco Sprinkler-was #152	-	1,583		1,583	1,583		3,166
#153 2016 Kifco Sprinkler	-	1,583		1,583	950		2,533
Sports Complex Driveway Asphalt top coa	-	21,862	(21,862)	-			
Sports Complex Bleacher Pads & ADA patl	-	27,896	(27,896)				
Parks Playground Equip	139,799	17,571	(38,494)	118,876	17,916		136,792
Total City only Parks	205,799	96,995	(106,252)	196,542	92,449	(65,500)	223,491

Parks Shared Equipment

#72 GMC Truck	-	900		900	1,500		2,400
#73 GMC Truck	-	1,000		1,000	4,000		5,000
#74 GMC 1/2 ton 4x4	3,000	3,375		6,375	3,375		9,750
#75 2012 4x4 Pick-Up (net of 15k trade)	22,300	2,700		25,000		(25,000)	-
#76 2013 Utility Truck/Pickup & Trailer	23,750	5,950		29,700	5,950		35,650
Diamond Trailer (break out from #76)	-	2,800		2,800	2,800		5,600
#77 2014 1-Ton Dump	13,000	8,000		21,000	10,000		31,000
#78 2014 Pickup Salter and Plow	11,164	9,310		20,474	9,310		29,784
#79 2016 Utility Van	3,500	2,084		5,584	2,084		7,668
#80 2018 One Ton Pickup	1,500	2,500		4,000	6,000		10,000
#81 2010 4x4 Pick-Up	-	5,000		5,000	4,500		9,500
#82 2016 1-Ton Dump	-	8,500		8,500	8,500		17,000
#83 2017 Wing Mower	-	14,000		14,000	14,000		28,000
#85 2013 Utility Dump	4,200			4,200			4,200
#86 2018 Wing Mower	28,000	14,000	(42,000)	-	14,000		14,000
#87 2008 Tractor/Loader	21,000	8,000		29,000	8,000		37,000
#89 2012 Trailer	1,750	6,626		8,376	6,626	(15,002)	-
#91 2018 Sand pro	8,700	4,350	(13,050)	-	4,500		4,500
#96 2013 Wing Mower	-	3,750		3,750	6,750		10,500

	2020 Balance	2021 Proposed Adds	2021 Proposed Expenditures	2021 Est Balance	2022 Proposed Adds	2022 Proposed Expenditures	2022 Est Balance
#99 2017 Zero Turn Mower	-	2,667		2,667	2,667		5,334
#100 2016 Trailer	2,100	1,317		3,417	1,317		4,734
#101 2014 Trailer	3,500	1,800		5,300	900		6,200
#102 2010 Pressure Washer	3,000	(3,000)	-	-	-		-
#110 Preseeder	2,100	900		3,000	1,250		4,250
#114 2017 Trailer	834	2,292		3,126	1,146		4,272
#130 Top Dresser (smaller)	4,400	1,200		5,600	1,350		6,950
#133 2018 Trailer Mounted Water Tank	-	788		788	788		1,576
#149 Aerator 687	1,200	4,161		5,361	4,161		9,522
#151 2017 5900 Wing Mower	26,250	13,125		39,375	28,125	(67,500)	-
#154 2017 Slit Seeder	-	1,171		1,171	1,171		2,342
#156 Dingo (material handler)	8,500	8,500		17,000	8,500		25,500
Joint Park/Open Space Plan Update	-	2,000		2,000	1,000		3,000

	Total Shared	193,748	139,766	(55,050)	278,464	164,270	(107,502)	335,232
30%	Less Village Share of Commitments	(58,124)	(41,930)	16,515	(83,539)	(47,638)	31,176	(97,217)
29%	Net Shared Parks	135,624	97,836	(38,535)	194,925	116,632	(76,326)	238,015
	Total Parks	341,423	194,831	(144,787)	391,467	209,081	(141,826)	461,506

	grand total assignments	5,382,113	1,000,588	(1,541,797)	4,650,904	1,449,868	(2,097,634)	4,005,922
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**** Parks split with Village is 29% in 2022

2020	2021	2021	2021	2022	2022	2022
Balance	Proposed Adds	Proposed Expenditures	Est Balance	Proposed Adds	Proposed Expenditures	Est Balance

SUMMARY

	City Hall	536,511	(346,511)	-	-	-	-	-
	Elections	-	-	-	-	-	-	-
	IT	199,830	44,593	(80,210)	164,213	64,593	(40,000)	188,806
	Fire Dept	3,037,772	695,471	(971,800)	2,761,443	655,623	(1,595,808)	1,821,258
	Bldg	-	6,000	-	6,000	6,000	-	12,000
	HWY	1,259,577	402,704	(345,000)	1,317,281	408,871	(220,000)	1,506,152
	Eng	7,000	3,500	-	10,500	105,700	(100,000)	16,200
	Parks City Only	205,799	96,995	(106,252)	196,542	92,449	(65,500)	223,491
	Parks Shared Equipment	193,748	139,766	(55,050)	278,464	164,270	(107,502)	335,232
30%	Less Village Share of Assignments	(58,124)	(41,930)	16,515	(83,539)	(47,638)	31,176	(97,217)
29%	Grand total Assignments	5,382,113	1,000,588	(1,541,797)	4,650,904	1,449,868	(2,097,634)	4,005,922

Storm

#201 Sweeper (Utility-2011)	133,334	126,666	(260,000)	-	27,500	27,500
#202 Rubber Tire Excavator(Utility-2011)	35,000	24,200		59,200	24,200	83,400
#204 Hydro Seeder (Storm Water) (2014)	2,544	1,496		4,040	1,496	5,536
#205 Tandem Truck (Storm Water) (2015)	64,286	28,343		92,629	28,343	120,972
#207 Mini Excavator (2019)	8,000	8,225		16,225	8,225	24,450
#208 Trailer (Culvert/Equip Hauling)	2,300	1,980		4,280	1,965	6,245
#209 Portable Traffic Control Devices - 2	-	3,870		3,870	3,870	7,740
#211-Equip. Trailer (2021)	-	20,000	(20,000)	-	2,200	2,200
#212 - Catch Basin Trailer (2022)	-	9,863	(9,863)	-	1,100	1,100
#301- Compact Tractor/Multi-Unit (1/2 with	2,550	2,830		5,380	2,830	8,210
302- Spider Lift (1/2 Storm 1/2 Hwy)		72,721	(72,721)	-	5,700	5,700
303 Trailer for Spider Lift (1/2 Storm 1/2 Hwy)		7,279	(7,279)	-	800	800
Pickup/SUV (1/2 Engineering)- cost \$35k	7,000	3,500		10,500	3,500	14,000
Televising Equipment - share with Sewer	5,000	2,500		7,500	2,500	10,000
Total Station Survey-split eng,storm,w/s	22,500	(9,500)		13,000	-	13,000
Sewer Jetter (1/2 Sewer)					250,000	(250,000)
GIS system/asset management					100,000	(100,000)
	282,514	303,973	(369,863)	216,624	464,229	330,853

CITY OF PEWAUKEE
2022 BUDGET
SCHEDULE OF LONG-TERM OBLIGATIONS

	<u>Date of Issue</u>	<u>Final Maturity</u>	<u>Interest Rates</u>	<u>Original Indebtedness</u>	<u>Balance 12/31/21</u>	<u>2022 Repayments</u>	<u>Balance 2022</u>	<u>2022 Interest</u>
Governmental Long-Term Obligations:								
2012 G.O. Note	6/12/12	12/1/24	.6-2.15%	3,040,788	758,205	250,245	507,960	15,545
2013 G.O. Note	5/30/13	9/1/32	2.0-3.0%	3,060,000	1,875,000	155,000	1,720,000	45,652
2016 G.O. Note ⁽¹⁾	10/12/16	9/1/36	2.0-2.25%	2,995,000	1,900,000	310,000	1,590,000	38,000
					<u>4,533,205</u>	<u>715,245</u>	<u>3,817,960</u>	<u>99,197</u>
Water and Sewer Utility Long- Term Obligations:								
2010 G.O. Note	5/1/10	5/1/29	2.91%	222,618	109,225	12,322	96,903	2,999
2011 G.O. Note	7/13/11	5/1/31	2.4%	174,403	93,869	8,417	85,452	2,152
2012 G.O. Note	6/12/12	12/1/24	.6-2.15%	834,212	256,795	84,755	172,040	5,265
2013 G.O. Note	5/30/13	9/1/32	2.0-3.0%	5,915,000	3,635,000	295,000	3,340,000	88,533
2016 G.O. Note ⁽¹⁾	10/12/16	9/1/36	2.0-2.25%	2,550,000	1,965,000	115,000	1,850,000	40,680
2018 G.O. Note	11/1/18	9/1/38	3-4%	1,425,000	1,245,000	60,000	1,185,000	44,150
2021 Clean Water Loan - as of 4/30/21					478,559			
					<u>7,783,448</u>	<u>575,494</u>	<u>6,729,395</u>	<u>183,779</u>
Total Long-Term Obligations					<u>12,316,653</u>	<u>1,290,739</u>	<u>10,547,355</u>	<u>282,976</u>

⁽¹⁾ Interest costs to be offset by reoffering premium.

**CITY OF PEWAUKEE
WATER UTILITY
2022 OPERATING BUDGET SUMMARY**

	2020 Actual	2021			2022 Budget
		6 Month Actual	Year End Forecast	2021 Budget	
Operating Revenues	2,271,457	1,192,451	2,525,455	2,539,160	2,653,200
Operating Expenses					
Wages Not Charged to Projects	207,280	105,594	258,391	265,667	241,073
Fringe Benefits	168,141	64,119	243,306	249,195	249,852
Source of Supply Expenses	31,509	43,130	97,625	106,275	106,275
Pumping Expenses	290,199	154,468	368,300	349,600	349,750
Water Treatment Expenses	155,607	61,627	158,900	163,500	168,500
Transmission & Distribution	196,211	39,399	206,850	213,200	283,800
Consultants & Studies	17,845	3,901	-	20,000	35,000
Shared Transportation & Maintenance	40,088	24,377	50,650	73,550	54,365
Shared Administrative Expenses	179,100	115,175	159,439	188,214	195,960
PSC Remainder Tax	2,230	-	2,500	2,500	2,500
Property Tax Equivalent	570,155	-	585,000	620,000	620,000
Total Operating Expenses	1,858,365	611,790	2,130,961	2,251,701	2,307,075
Operating Profit before Depreciation	413,092	580,661	394,494	287,459	346,125
Depreciation Expense	1,307,869	650,000	1,300,000	1,300,000	1,325,000
Net (Loss) from Operations	(894,777)	(69,339)	(905,506)	(1,012,541)	(978,875)
Non-Operating Revenue					
Interest on Investments/AR	1,729	24	1,815	2,600	2,050
Long Term Debt Premium	11,649	-	11,649	11,649	11,649
Interest on Special Assessments	4,153	-	4,200	5,500	4,300
Water Construction	481,186	736,413	550,000	450,000	395,000
Gain/Loss on Fixed Asset Disposal	8,425	12,000	12,000	3,000	5,000
Total Non-Operating Revenues	507,142	748,437	579,664	472,749	417,999
Non-Operating Expenses					
Interest on Long Term Debt and Debt Ex	250,663	82,984	244,112	304,881	309,112
Net Profit (Loss)	(638,298)	596,114	(569,954)	(844,673)	(869,988)

**CITY OF PEWAUKEE
WATER UTILITY
2022 OPERATING BUDGET**

		2020 Actual	2021			2022 Budget
			6 Month Actual	Year End Forecast	2021 Budget	
Operating Revenues						
600-00432-46241	Private Fire Protection	75,229	37,795	75,500	75,500	76,000
600-00461-46450	Metered Sales-Residential	1,040,330	523,164	1,067,000	1,067,000	1,150,000
600-00461-46451	Metered Sales-Industrial	85,532	50,350	95,000	112,000	112,000
600-00461-46452	Metered Sales-Commercial	396,688	183,110	500,000	515,000	517,000
600-00461-46453	Metered Sales-Public	5,080	3,337	4,955	4,955	5,200
600-00461-46454	Metered Sales-Multi Family	179,663	103,065	205,000	205,000	208,000
600-00463-46242	Public Fire Protection	471,542	279,436	559,000	538,705	566,000
Total Operating Revenues		2,254,064	1,180,257	2,506,455	2,518,160	2,634,200
Other Revenues						
600-00470-45111	Late Payment Penalty	4,056	4,224	8,000	8,000	8,000
600-00474-48901	Other Water Revenues	4,838	5,170	6,000	8,000	6,000
600-00474-46191	Other Revenue-Spec Assmt Ltr	8,499	2,800	5,000	5,000	5,000
Total Other Revenues		17,393	12,194	19,000	21,000	19,000
Total Revenues		2,271,457	1,192,451	2,525,455	2,539,160	2,653,200
Expenses						
Wages Not Charged to Projects						
600-00600-51100	Wages	19,201	10,280	22,450	22,450	23,500
600-00620-51100	Wages	42,268	24,588	65,410	65,410	51,700
600-00630-51100	Wages	12,909	5,449	20,277	20,277	15,780
600-00640-51100	Wages	21,181	7,802	29,890	29,890	26,000
600-00902-51220	Meter Reading Wages	4,622	1,639	5,894	5,894	5,650
600-00920-51200	Salaries - Administrative	89,003	41,380	92,970	92,970	95,000
600-00920-51220	Internal Engineering Wages	18,096	14,456	21,500	28,776	23,443
Total Wages		207,280	105,594	258,391	265,667	241,073

**CITY OF PEWAUKEE
WATER UTILITY
2022 OPERATING BUDGET**

2020 Actual	2021			2022 Budget
	6 Month Actual	Year End Forecast	2021 Budget	

Fringe Benefits

600-00408-51300	Fica Expense	25,677	11,634	31,027	31,027	30,120
600-00926-51310	Benefits - Health Insurance	44,995	20,293	73,841	73,841	79,285
600-00926-51320	Benefits - Dental Insurance	3,462	1,472	4,860	4,860	5,347
600-00926-51330	Benefits - Optical Insurance	641	233	697	697	697
600-00926-51360	Benefits - Pension	22,295	11,536	26,627	26,627	25,593
600-00926-51340	Benefits - Life Insurance	779	469	873	873	921
600-00926-51350	Benefits - Disability Insurance	1,173	711	1,381	1,381	1,394
600-00926-51390	Vac/Sick Liability Expense	57,894	10,897	65,000	48,100	71,500
600-00926-51950	Benefits - Charged To/From Other Depts	7,701	6,874	22,750	32,539	18,745
600-00926-51361	Pension Expenses GASB 68	3,524	-	16,250	29,250	16,250
Total Fringe Benefits		168,141	64,119	243,306	249,195	249,852

Plant Operation & Maintenance

Source of Supply Expenses

600-00600-53400	Source of Supply- Repairs	1,744	39,999	75,000	75,000	75,000
600-00601-53200	Purchased Water	-	-	-	300	300
600-00602-53400	Operating Supplies & Expenses	269	105	500	850	850
600-00602-52310	Building and Grounds	29,371	2,901	22,000	30,000	30,000
600-00603-52200	Water Withdrawal Fee - DNR	125	125	125	125	125
Total Source of Supply Expenses		31,509	43,130	97,625	106,275	106,275

Pumping Expenses

600-00622-52210	Power Purchased/Pumping	235,433	98,177	245,000	248,000	248,000
600-00623-53400	Operating Supplies & Expense	164	52	300	400	400
600-00623-52310	Building and Grounds	7,057	190	11,000	11,000	11,000
600-00623-52200	Utilities	3,941	4,042	52,000	5,200	5,350
600-00625-52400	Repairs-Pumping Equipment	43,604	52,007	60,000	85,000	85,000
Total Pumping Expenses		290,199	154,468	368,300	349,600	349,750

**CITY OF PEWAUKEE
WATER UTILITY
2022 OPERATING BUDGET**

2020 Actual	2021			2022 Budget
	6 Month Actual	Year End Forecast	2021 Budget	

Water Treatment Expenses

600-00631-53200	Chemicals	85,876	30,001	87,000	80,000	90,000
600-00631-52210	Radium Treatment	43,665	21,541	44,400	46,000	46,000
600-00632-53400	Operating Supplies & Expenses	231	-	1,000	1,000	1,000
600-00632-52310	Water Testing	10,852	3,651	10,000	20,000	15,000
600-00635-52400	Repairs and Maintenance	14,983	6,434	16,500	16,500	16,500
Total Water Treatment Expenses		155,607	61,627	158,900	163,500	168,500

Transmission & Distribution

600-00641-53400	Operating Supplies and Expense	1,316	544	3,500	3,500	3,500
600-00641-53320	Meter Supplies	69	345	800	800	800
600-00641-52381	Cross Connection Inspection	13,008	5,420	14,400	14,400	15,000
600-00650-52400	Repairs - Reservr & Standpipes	11,504	564	25,000	30,000	40,000
600-00651-52400	Repairs - Transmission Lines	68,507	863	75,000	45,000	80,000
600-00651-52410	Repairs - Leak Detection	375	-	400	2,000	2,000
600-00652-52400	Repairs - Maintenance of Services	41,913	2,166	15,000	35,000	35,000
600-00653-52400	Repairs - Meters	13,497	21,379	22,000	20,000	20,000
600-00654-52400	Repairs - Hydrants	44,179	8,118	50,000	60,000	85,000
600-00655-52400	Repairs - Miscellaneous	1,843	-	750	2,500	2,500
Total Transmission & Distribution		196,211	39,399	206,850	213,200	283,800

Consultants & Studies

600-00900-52100	Water Facilities Plan	17,845	3,901	20,000	20,000	35,000
Total Consultants & Studies		17,845	3,901	20,000	20,000	35,000

Shared Transportation and Maintenance Expenses

600-00933-53340	Transporation Expense - Vehicle Fuel	5,132	3,765	5,500	7,000	5,500
600-00933-55370	Transportation Expense - Vehicle Insurance	1,970	2,150	2,150	2,050	2,365
600-00933-52400	Transportation Expense - Repair & Maintenan	5,366	4,693	7,000	7,000	6,500
600-00950-52100	Scada/Telemetry	7,471	3,051	10,000	15,000	12,500
600-00950-52200	Safety	533	32	1,750	2,000	2,000
600-00950-52440	Diggers Hotline	19,616	10,686	24,250	40,000	25,000
600-00950-52445	GIS Software Maintenance	-	-	-	500	500
Total Shared Transportation and Maintenance		40,088	24,377	50,650	73,550	54,365

**CITY OF PEWAUKEE
WATER UTILITY
2022 OPERATING BUDGET**

2020 Actual	2021			2022 Budget
	6 Month Actual	Year End Forecast	2021 Budget	

Shared Administrative Expenses

600-00901-52200	Meter Reading Expenses	10,383	5,159	3,394	3,394	4,000
600-00903-53300	Billing	20,143	7,759	18,500	18,500	20,000
600-00904-57420	Water Utility Uncollectible	-		45	25	25
600-00906-53300	Conservation/Public Relations	-		-	250	1,000
600-00921-53100	Office Supplies & Expenses	2,736	1,048	2,250	3,000	2,500
600-00921-52301	Office Equipement Maintenance	9,607	1,235	6,000	6,000	6,000
600-00921-53305	Books & Periodicals	-		50	50	50
600-00921-53306	Postage	129	23	200	375	375
600-00921-53307	Notices & Publications	339	-	200	300	300
600-00921-52330	Telephone	3,572	1,035	3,500	2,400	3,500
600-00921-52331	Answering Service	416	189	500	500	500
600-00921-53300	Mileage	76	34	350	350	350
600-00921-53210	Meals & Incidentals	-	40	100	250	250
600-00923-52380	OPS - Engineer	5,291	-	1,500	4,250	4,250
600-00923-52100	OPS - Attorney	1,623	-	1,750	2,250	2,500
600-00923-52120	OPS - Auditor/Accountant	28,016	22,825	37,500	37,500	37,500
600-00923-52160	General Management	40,000	40,000	40,000	40,000	40,000
600-00924-55120	Insurance - Property & Liability	11,224	11,581	12,500	14,000	14,000
600-00924-55110	Insurance - Workers Compensation	4,485	3,825	4,500	8,820	7,760
600-00924-55121	Insurance - Boiler & Machinery	889	-	1,100	1,100	1,200
600-00928-52381	Regulatory & Commission Expense	7,501	183	3,000	15,000	5,000
600-00928-52382	PSC Water RCA Study	10,130	-	1,500	5,000	20,000
600-00930-53200	Uitlity Memberships & Continuing Education	1,274	621	1,500	4,250	4,250
600-00930-55391	Rent	18,000	18,000	18,000	18,000	18,000
600-00930-53399	Miscellaneous General Expense	3,266	1,618	1,500	2,650	2,650
Total Shared Administrative Expenses		179,100	115,175	159,439	188,214	195,960

**CITY OF PEWAUKEE
WATER UTILITY
2022 OPERATING BUDGET**

		2020 Actual	2021			2022 Budget
			6 Month Actual	Year End Forecast	2021 Budget	
600-00408-55200	PSC Remainder Tax	2,230	-	2,500	2,500	2,500
600-00408-55300	Property Tax Equivlent	570,155	-	585,000	620,000	620,000
Total Operating Expenses		1,858,365	611,790	2,150,961	2,251,701	2,307,075
Operating Profit (Loss) before Depreciation		413,092	580,661	374,494	287,459	346,125
600-00403-55000	Depreciation Exp.	1,307,869	650,000	1,300,000	1,300,000	1,325,000
Net Operating Profit (Loss) - Water		(894,777)	(69,339)	(925,506)	(1,012,541)	(978,875)
Non-Operating Revenue						
600-00419-48100	Interest Income	1,778	15	1,780	2,500	2,000
600-00419-48102	Interest/Special Assmts.	4,153		4,200	5,500	4,300
600-00429-49120	Long Term Debt Premium	11,649		11,649	11,649	11,649
600-00432-46161	Accounts Receivable Finance Charges	(49)	9	35	100	50
600-00464-46313	Water Construction	481,186	736,413	550,000	450,000	395,000
600-00475-48300	Gain/Loss on Fixed Asset Disposal	8,425	12,000	12,000	3,000	5,000
Total Non-Operating Revenues		507,142	748,437	579,664	472,749	417,999
Non-Operating Expenses						
600-00407-55100	Amort Property Loss	-	-		60,769	
600-00427-56100	Interest/Long Term Debt	172,551	82,984	166,000	166,000	156,000
600-00428-56200	Bond Issue Costs	-	-		-	75,000
600-00430-55400	Amort/Debt Expense Still River	78,112	-	78,112	78,112	78,112
Total Non-Operating Expenses		250,663	82,984	244,112	304,881	309,112
Net Profit (Loss) - Water		(638,298)	596,114	(589,954)	(844,673)	(869,988)

**CITY OF PEWAUKEE
SEWER UTILITY
2022 OPERATING BUDGET SUMMARY**

	2020 Actual	2021			2022 Budget
		6 Month Actual	Year End Forecast	2021 Budget	
Operating Revenues	3,453,508	2,036,634	24,003,470	3,565,334	4,134,648
Operating Expenses					
Wages	159,864	84,227	188,970	196,246	182,944
Fringe Benefits	88,988	37,699	131,010	134,181	134,535
Plant Operation & Maintenance	2,536,348	327,956	2,075,200	2,187,900	2,442,730
Consultants & Studies	36,847	5,468	57,500	127,000	92,500
Shared Transportation & Maint	39,261	23,630	50,650	73,550	54,365
Shared Administrative Expense	117,438	101,813	155,424	168,214	170,960
Total Operating Expenses	2,978,746	580,793	2,658,754	2,887,091	3,078,034
Operating Profit before Depreciation	474,762	1,455,841	21,344,716	678,243	1,056,614
Depreciation Expense	787,184	475,000	950,000	950,000	800,000
Net Profit (Loss) from Operation	(312,422)	980,841	20,394,716	(271,757)	256,614
Non-Operating Revenue					
Interest on Investments/AR	24,512	2,273	10,000	36,050	10,050
Interest on Special Assessmen	23,629	58	21,500	30,000	20,000
Sewer Service Connection Fee	268,102	411,186	1,297,000	722,637	419,973
Other Non-Operating Revenue	8,425	12,000	12,000	3,500	5,000
Total Non-Operating Revenue	324,668	425,517	1,340,500	792,187	455,023
Non-Operating Expenses					
Interest on Long Term Debt an	28,561	15,730	29,000	29,603	27,500
Bond Discount					
Amortization of Premium	(2,514)	-	-	-	-
Net Profit (Loss) - Sewer	(16,315)	1,390,628	21,706,216	490,827	684,137

**CITY OF PEWAUKEE
SEWER UTILITY
2022 OPERATING BUDGET**

2020 Actual	2021			2022 Budget
	Actual	Year End Forecast	2021 Budget	

Sewer

Revenues

Operating Revenues - Sewer

650-01621-46410	Residential Revenue Sewer	2,055,655	1,251,718	22,431,070	2,127,302	2,481,000
650-01621-46411	Industrial Revenue - Sewer	175,887	91,382	184,000	189,545	180,510
650-01621-46412	Commerical Revenue - Sewer	785,483	444,096	897,000	796,328	967,173
650-01621-46413	Public Revenue - Sewer	7,794	4,676	9,352	7,825	9,365
650-01621-46414	Multi Family Revenue - Sewer	417,849	235,050	462,948	424,234	476,000
Total Operating Revenues		3,442,668	2,026,922	23,984,370	3,545,234	4,114,048

Other Revenues - Sewer

650-01631-45112	Late Payment Penalty - Sewer	5,755	6,912	14,000	14,000	15,500
650-01635-48902	Other Sewer Revenues	247		100	100	100
650-01635-46191	Other Revenue - Special Assessment Letters	4,838	2,800	5,000	6,000	5,000
Total Other Revenues		10,840	9,712	19,100	20,100	20,600

Total Revenues

3,453,508	2,036,634	24,003,470	3,565,334	4,134,648
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Expenses

Wages

650-01820-51100	Wages	52,771	28,391	74,500	74,500	64,501
650-00920-51200	Salaries - Administrative	88,997	41,380	92,970	92,970	95,000
650-00920-51220	Internal Engineering Wages	18,096	14,456	21,500	28,776	23,443
Total Wages		159,864	84,227	188,970	196,246	182,944

**CITY OF PEWAUKEE
SEWER UTILITY
2022 OPERATING BUDGET**

		2020 Actual	2021			2022 Budget
			Actual	Year End Forecast	2021 Budget	
Fringe Benefits						
650-01820-51300	Fica Expense	13,944	6,265	16,707	16,707	16,219
650-00926-51310	Benefits - Health Insurance	24,224	10,927	39,761	39,761	42,692
650-00926-51320	Benefits - Dental Insurance	1,864	793	2,617	2,617	2,879
650-00926-51330	Benefits - Optical Insurance	345	125	375	375	375
650-00926-51360	Benefits - Pension	12,116	6,212	14,337	14,337	13,781
650-00926-51340	Benefits - Life Insurance	419	252	470	470	496
650-00926-51350	Benefits - Disability Insurance	631	383	743	743	750
650-00926-51390	Vac/Sick Liability Expense	31,173	5,868	35,000	25,900	38,500
650-00926-51950	Benefits - Charged To/From Other Depts	6,623	6,874	12,250	17,521	10,093
650-00926-51361	Pension Expense GASB 68	(2,351)		8,750	15,750	8,750
Total Fringe Benefits		88,988	37,699	131,010	134,181	134,535
Plant Operation & Maintenance						
650-01821-52200	Power/Electricity	39,498	17,825	40,000	53,000	45,000
650-01821-52210	Power/Natural Gas	1,526	199	2,000	2,200	2,200
650-01821-53215	Power/Other Fuel	-	239	400	400	300
650-01827-53400	Supplies and Expenses	263,513	499	2,000	2,800	2,800
650-01827-52340	Sewer Service Charge - Brookfield	1,314,595	20,344	850,000	950,000	1,080,130
650-01827-52341	Sewer Service Charge - LPSD	500,057	127,620	511,000	517,000	526,000
650-01827-52342	Sewer Service Charge - Village of Pewaukee	128,073	22,571	132,000	125,000	136,000
650-01827-52343	Sewer Service Charge - SD #4	7,874	987	8,300	8,600	8,300
650-01827-52344	Sewer Service Charge - WCC	219,697	120,627	265,000	240,400	292,000
650-01831-52400	Maintenance of Collection System	31,320	5,434	150,000	150,000	200,000
650-01831-52410	Maintenance SCS Sewer Cleaning	-		75,000	75,000	85,000
650-01831-52420	Maintenance/SCS - Flowmeter	9,417	1,980	8,500	8,500	10,000
650-01831-52430	Maintenance/SCS - Control Panel	-	134	3,500	5,000	5,000
650-01832-52400	Maintenance of Pumping Equipment	3,497	10	5,500	20,000	20,000
650-01834-52400	Maintenance of General Plant Structure	17,281	9,487	22,000	30,000	30,000
Total Plant Operation & Maintenance		2,536,348	327,956	2,075,200	2,187,900	2,442,730

**CITY OF PEWAUKEE
SEWER UTILITY
2022 OPERATING BUDGET**

2020 Actual	2021			2022 Budget
	Actual	Year End Forecast	2021 Budget	

Consultants & Studies

650-01850-52100	OPS - Sewer Studies	28,802	5,278	15,000	25,000	10,000
650-01850-52100	Sewer Rate Study	-		500	18,000	3,500
650-01850-52100	Sewer Facility System Plan/Study	-		40,000	65,000	65,000
650-01850-52100	Fox River Water Pollution Control Center Capa	-		-	1,000	1,000
650-01852-52380	OPS - Engineer - Sewer	3,795	190	1,000	10,000	5,000
650-01852-52382	OPS - Attorney - Sewer	-		1,000	5,500	5,500
650-01852-52383	OPS - Auditor/Accountant - Sewer	4,250	-	-	2,500	2,500
Total Consultants & Studies		36,847	5,468	57,500	127,000	92,500

Shared Transportation and Maintenance Expenses

650-00933-53340	Transporation Expense - Vehicle Fuel	4,767	3,765	5,500	7,000	5,500
650-00933-55370	Transportation Expense - Vehicle Insurance	1,970	2,150	2,150	2,050	2,365
650-00933-52400	Transportation Expense - Repair & Maintenance	5,066	4,679	7,000	7,000	6,500
650-00950-52100	Scada/Telemetry	7,309	2,292	10,000	15,000	12,500
650-00950-52200	Safety	533	58	1,750	2,000	2,000
650-00950-52440	Diggers Hotline	19,616	10,686	24,250	40,000	25,000
650-00950-52445	GIS Software Maintenance	-			500	500
Total Shared Transportation and Maintenance Exp		39,261	23,630	50,650	73,550	54,365

**CITY OF PEWAUKEE
SEWER UTILITY
2022 OPERATING BUDGET**

		2020 Actual	2021			2022 Budget
			Actual	Year End Forecast	2021 Budget	
Shared Administrative Expenses						
650-00901-52200	Meter Reading Expenses	2,000	-	3,394	3,394	4,000
650-00903-53300	Billing	14,187	5,559	18,500	18,500	20,000
650-00904-46419	Sewer Utility Uncollectible	-		530	25	25
650-00906-53300	Conservation/Public Relations	-		-	250	1,000
650-00921-53100	Office Supplies & Expenses	1,441	901	2,250	3,000	2,500
650-00921-52301	Office Equipement Maintenance	7,932	1,235	6,000	6,000	6,000
650-00921-53305	Books & Periodicals	-		50	50	50
650-00921-53306	Postage	129	23	200	375	375
650-00921-53307	Notices & Publications	339	215	200	300	300
650-00921-52330	Telephone	2,677	871	3,500	2,400	3,500
650-00921-52331	Answering Service	366	189	500	500	500
650-00921-53300	Mileage	-		350	350	350
650-00921-53210	Meals & Incidentals	-	40	100	250	250
650-00923-52380	OPS - Engineer	183	-	1,500	4,250	4,250
650-00923-52100	OPS - Attorney	4,509	160	1,750	2,250	2,500
650-00923-52120	OPS - Auditor/Accountant	8,594	18,257	37,500	37,500	37,500
650-00923-52160	General Management	40,000	40,000	40,000	40,000	40,000
650-00924-55120	Insurance - Property & Liability	11,224	11,582	12,500	14,000	14,000
650-00924-55110	Insurance - Workers Compensation	4,482	3,825	4,500	8,820	7,760
650-00924-55121	Insurance - Boiler & Machinery	889		1,100	1,100	1,200
650-00930-53200	Uitlity Memberships & Continuing Education	459	23	1,500	4,250	4,250
650-00930-55391	Rent	18,000	18,000	18,000	18,000	18,000
650-00930-53399	Miscellaneous General Expense	27	933	1,500	2,650	2,650
Total Shared Administrative Expenses		117,438	101,813	155,424	168,214	170,960
Total Operating Expenses		2,978,746	580,793	2,658,754	2,887,091	3,078,034
Operating Profit (Loss) before Depreciation		474,762	1,455,841	21,344,716	678,243	1,056,614

**CITY OF PEWAUKEE
SEWER UTILITY
2022 OPERATING BUDGET**

	2020 Actual	2021			2022 Budget
		Actual	Year End Forecast	2021 Budget	
650-01403-55410 Depreciation Exp. - Sewer	787,184	475,000	950,000	950,000	800,000

Net Operating Profit (Loss) - Sewer

(312,422) 980,841 20,394,716 (271,757) 256,614

Non-Operating Revenue

650-01623-46314 Sewer Construction	129,869	171,536	1,020,000	555,387	220,000
650-01622-46315 ICA-Bluemound Road	-	5,425	7,000	17,000	13,573
650-01622-46316 ICA - Green Road	-		-	15,250	25,600
650-01622-46317 ICA - West Side	1,170	-			-
650-01622-46318 ICA Capitol Drive North	137,063	234,225	270,000	135,000	160,800
650-01660-48100 Interest Income	24,615	2,273	10,000	36,000	10,000
650-01660-48102 Interest/Special Assmts.	23,629	58	21,500	30,000	20,000
650-01660-46161 Accounts Receivable Finance Charges	(103)	-	-	50	50
650-01660-48300 Gain or Loss on Sale of Assets	8,425	12,000	12,000	3,500	5,000
650-01660-48900 Other Revenues	-			-	-
Total Non-Operating Revenues	324,668	425,517	1,340,500	792,187	455,023

Non-Operating Expenses

650-01880-56100 Interest/Long Term Debt	31,075	15,730	29,000	29,603	27,500
650-01900-56981 Bond Discount					
650-01690-55400 Amortization of Premium	(2,514)				
Total Non-Operating Expenses	28,561	15,730	29,000	29,603	27,500

Net Profit (Loss) - Sewer

(16,315) 1,390,628 21,706,216 490,827 684,137

**CITY OF PEWAUKEE
COMMON COUNCIL AGENDA ITEM 5.**

DATE: November 15, 2021

DEPARTMENT: Clerk/Treasurer

PROVIDED BY:

SUBJECT:

Introduction of the Pewaukee Sustainability Group [Grosch]

BACKGROUND:

The item will be an introduction of the sustainability group that has formed in the Pewaukee area.

The goal of the sustainability group is to assist the City of Pewaukee staff in working toward sustainability as expressed in the City of Pewaukee Strategic Plan and the propelling the Pewaukee Sustainability Plan.

This introductory presentation will include:

- A. A brief review of the Propelling Pewaukee Sustainability Plan that was prepared by the Urban Planning Graduate Student at UWM for the City last year. (3 minutes)
- B. Introduction of the Pewaukee sustainability citizens group members which formed as a result of the study. (5 minutes)
- C. A brief explanation of several issues the group has been working on with City staff. (5 minutes)
- D. Questions or comments from the Council members.

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Summary of Group

Sustainability Examples

Sustainability Brochure

City of Pewaukee Common Council Meeting

November 15, 2021

Agenda Item - Introduction to City of Pewaukee Sustainability Working Group

1. Brief Review of Propelling Pewaukee Sustainability Plan (Ray Grosch, City Alderperson)
 - a. Plan presented to the Common Council in 2020
 - b. Collaboration with the City, UW-Milwaukee Urban Planning graduate student program, and Waukesha County Green Team (WCGT)
2. Introduction to Pewaukee Sustainability Working Group (Jonathan Sopha, Pewaukee Resident)
 - a. Ray Grosch - City Alderperson | Retired Automation Consultant and Volunteer
 - b. Phil Vetterkind - City Alderperson | Director of Sustainability
 - c. Nick Fuchs - City of Pewaukee Planner
 - d. Jonathan Sopha - Pewaukee Resident | Attorney
 - e. Kate Burke - Pewaukee Resident | WCGT and Pewaukee Schools Volunteer
 - f. Justin Kowalski - Pewaukee Resident | Sr. Environmental Consultant
 - g. Courtney Long - Pewaukee Resident | WCGT Member & Volunteer
 - h. Debra Schneider - President | WCGT
 - i. Joanna Salinas - Outreach Coordinator | WCGT
3. Discussion of Sustainability
 - a. Three Pillars: Economic | Social | Environmental
 - b. ABCD: Awareness | Baseline Assessment | Creative Solutions | Devise a Plan
 - c. Area sustainability activities (Waukesha County | City of Oconomowoc | Others)
4. Working Group Goals
 - a. Introduction of Working Group to the Common Council
 - b. Determine sustainability interests of City residents
 - c. Achieve sustainability objectives contained in the City of Pewaukee Strategic Plan
 - d. Build beneficial connections among the City, residents, businesses, and neighboring communities
 - e. Establish baseline metrics for City energy use - "measure to manage"
 - f. Establish a top-down approach by the City for addressing sustainability issues
5. Questions from the Board

Sustainability Working Group Member Contact Info:

- Nick Fuchs | fuchs@pewaukee.wi.us
- Ray Grosch | ray.grosch@gmail.com
- Phil Vetterkind | PVetterkind@hunzinger.com
- Jonathan Sopha | sophalaw1@gmail.com
- Justin Kowalski | Justin_M_Kowalski@hotmail.com
- Debra Schneider | djschneider86@gmail.com
- Joanna Salinas | josalinas2014@gmail.com
- Kate Burke | burkekly@gmail.com
- Courtney Long | cklong212@gmail.com

Examples of Sustainability - Justin Kowalski

Wisconsin is on its way to making it a more sustainable state along with several prominent communities, cities, and counties already implementing numerous measures. These include the city of Green Bay, La Crosse, Sheboygan, De Pere, Janesville, Wausau, Bayfield, Waukesha and many others throughout the state.

Besides implementing measures to conserve natural resources, improve citizen health, and decrease energy consumption, economic savings have also been seen and projected. Examples of this include:

[La Crosse](#) - Efficiency upgrades or replacements of several major facilities have contributed to energy usage estimated at \$1.2 million from 2008-2019.

[Sheboygan](#)- By icing prior to snow events salt usage was cut by 30%.

[Sheboygan](#) - Conversion to LED Lights within the Facilities and Traffic Division of the Department of Public Works led to an annual energy savings of \$5,158.

[Wauwatosa](#)- By implementing energy saving measures the City annual energy expense decreased 5.8%

[Bayside](#), village-In 2019, the Village undertook a thorough assessment and began renovations of all of its HVAC equipment to achieve greater energy efficiency and is expected to reduce consumption by a minimum 15%.

Lastly, In 2018, the City of La Crosse published their own [economic impact study](#) and predicted that completing an additional 40 miles of bike and pedestrian projects could result in nearly \$300 million of economic benefits to the local economy. This equated to approximately \$7.5 million per mile.

As stated in [Forbes magazine](#) "Sustainability can no longer be considered a niche. In fact, consumers demand and expect it from most aspects of their lives."

Lastly, communities that encompass sustainable objectives into transportation, economic development, housing, parks and open space, municipal operations, community, and natural resources will be thriving, highly sought after, and well positioned for the future.

The City of Pewaukee has the opportunity to be a leader in sustainability and continue to position itself amongst the best cities and suburbs in the state.

THREE PILLARS OF SUSTAINABILITY

This plan relies on a relatively simple model of sustainability consisting of three pillars: environmental sustainability, economic sustainability, and social sustainability. Any thriving community must address all three interrelated pillars.



Foster a resilient community that maintains and protects existing resources and can adapt to changing environmental conditions over time.



Strengthen the City of Pewaukee's economic outlook and encourage the private sector in the City of Pewaukee to adopt sustainable business practices.



Improve the health and wellness of Pewaukeeans and bring them together around the shared values of sustainability and environmental protection.

UWM Planning Team

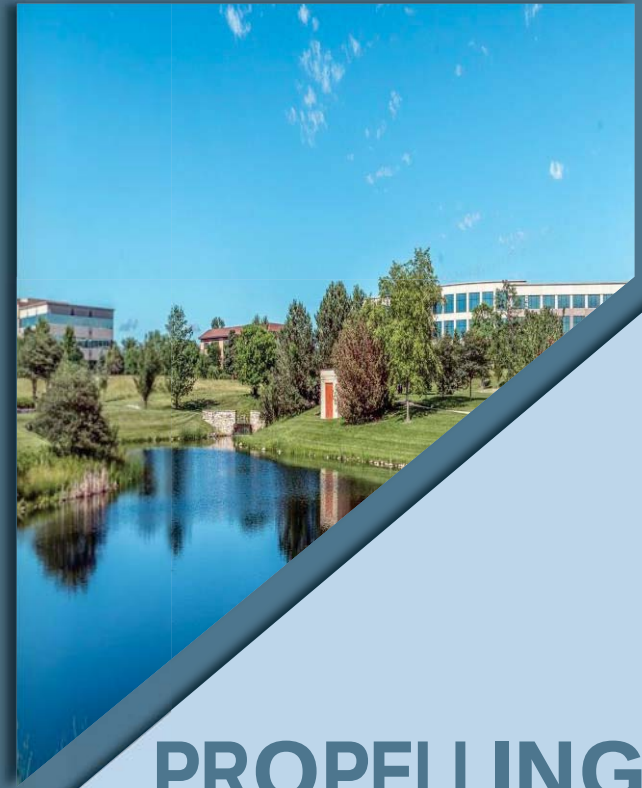
Jessica Pittner MUP
Forrest Elliott MUP
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Kong Pheng Thao MUP

City of Pewaukee

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Pewaukee, WI 



PROPELLING PEWAUKEE

A Sustainability Plan For the City of Pewaukee

The UWM Student Planning Team has put together recommendations for how the City can maintain its sustainability and prepare for future changing needs. This brochure highlights only a few of the recommendations in the full report.

Sustainable Transportation

Goal: Increase connectivity and safety for pedestrians and cyclists through engineering, education, and policy.



Sustainable Municipal Operations

Goal: Improve the sustainability of City facilities and adopt departmental policies which reduce the adverse environmental impacts of City operations.



Sustainable Housing

Goal: Increase the availability of affordable housing in the City of Pewaukee and maintain its legacy of safe, attractive, and sustainable neighborhoods.

Recommendation: Create a Mixed-Use Zoning District

Although the City already allows for a diversity of housing options and densities, this omission means the City has a zoning code that puts it at a relative disadvantage compared to neighboring communities.

Sustainable Economic Development

Goal: Create the conditions necessary for a thriving, environmentally conscious, diversified local economy.

Sustainable Natural Resources

Goal: Protect and improve the natural resource base of the City of Pewaukee through innovations in energy, waste, and water policies.

Recommendation: Exclude Solar Panels from Building Height Calculations

Rather than force developers and property owners to abandon solar panel systems or seek a variance, the City of Pewaukee should relax height requirements when it is for the installations of a solar energy system.

Sustainable Community

Goal: Strengthen social cohesion and community resilience in the City of Pewaukee through advances in education and advocacy for healthy food consumption.

Recommendation: Community Gardens

The City should ensure that their ordinances or code is not a barrier to organizations or individuals who want to pursue urban agriculture and community gardens.



**CITY OF PEWAUKEE
COMMON COUNCIL AGENDA ITEM 6.**

DATE: November 15, 2021

DEPARTMENT: Public Works

PROVIDED BY:

SUBJECT:

Discussion and Possible Action for the Glen at Parkway Ridge Development [Wagner]

BACKGROUND:

The Glen at Parkway Ridge development construction began this past Spring and to date the work has involved extensive grading, pond installation, public utility (storm, sewer and water), and road construction. The only remaining work is the private sidewalk work. We recommend the requested reduction. The remaining letter of credit value of \$68,304.00 is sufficient to complete the sidewalk and the one year guarantee of the pavement.

The accepting resolution accepts the public improvements for the development and establishes the 1 year guarantee period for the improvements.

FINANCIAL IMPACT:

RECOMMENDED MOTION:

Common Council approve the second reduction of the Glen at Parkway Ridge letter of credit from \$380,504.85 to \$68,304.00 (Reduction of \$312,200.85).

Common Council approve the accepting resolution.

ATTACHMENTS:

Description

LOC Reduction Request

LOC Verification

Resolution 21-11-42



November 2nd, 2021

Maggie Wagner

Director of Public Works / City of Pewaukee Engineer

W240 N3065 Pewaukee Road

Pewaukee, WI 53072

Maggie,

Attached is request #2 for reduction of the Letter of Credit posted for Parkway Ridge, City of Pewaukee, WI. The current balance is \$380,504.85. We are requesting a reduction in the amount of \$324,200.85 leaving a balance of \$56,304. This amount represents work completed on site to date. The remaining incomplete work is only the interior sidewalk. The attached Stark billing shows a value of \$46,920 to complete this work. The remaining balance is calculated as this cost plus 20%. The sidewalks will be completed by Halen Homes as they complete condominium buildings. Please let me know if you have any question or would like to discuss.

Thank you,

Eric Obarski

Parkway Ridge, LLC.

Contractor's Application for Payment No. 2

	Application Date: 10/20/2021	Application Period: Ending 10.15.2021
To (Owner): Neumann Companies	From (Contractor): Stark Pavement Corporation	Via (Engineer):
Contact: Eric Obarski	Contact: Greg Howell	Contact:
Project: The Glen at Parkway Ridge	Address: 12845 W Burleigh Road Brookfield, WI	Address:
Owner's Contract No.:	Contractor's Project No.: 209106	Engineer's Project No.:

Change Order Summary

Approved Change Orders			
Number	Additions	Deductions (Enter as Positive Number)	
CCO #1	\$2,500.00		1. ORIGINAL CONTRACT PRICE \$ 365,907.75
CCO #1	\$5,208.00		2. Net change by Change Orders \$ 13,243.00
CCO #2	\$5,535.00		3. CURRENT CONTRACT PRICE (Line 1 + Line 2) \$ 379,150.75
			4. TOTAL COMPLETED TO DATE
			(Column L Total on Progress Estimates) \$ 338,084.80
			5. RETAINAGE:
			a. 10% X Work Completed \$ 18,680.79
			6. RETAINAGE REDUCTION TO DATE (Enter as Positive Number) \$
			7. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5a. + Line 7) \$ 319,404.01
			8. LESS PREVIOUS PAYMENTS (Line 6 from Prior Application) \$ 247,622.56
			9. AMOUNT DUE THIS APPLICATION \$ 71,781.45
TOTALS	\$13,243.00		
NET CHANGE BY			
CHANGE ORDERS	\$13,243.00		

Contractor's Certification The undersigned Contractor certifies that to the best of its knowledge: (1) all previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior Applications for Payment; (2) title to all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to Owner per Article 15 of the General Conditions; and (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.	Payment of: \$ 71,781.45 (Line 8 or other - attach explanation of the other amount) Recommended by: _____ (Engineer) _____ (Date) Payment of: \$ _____ (Line 8 or other - attach explanation of the other amount) Approved by: _____ (Owner) _____ (Date)
By: <i>Gregory S. Howell</i> Gregory S. Howell, Agent / Project Manager Date: 10.20.2021	

Progress Estimate - Unit Price Work							Contractor's Application for Payment No.					2
For (Project):		The Glen at Parkway Ridge			Stark Job #		209106		Application Date:		10/20/2021	
Application Period:		Ending 10.15.2021										
A	B	B	C	D	E	F	G	H	I	J	K	L
GASB	Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Item Value (\$)	Work Completed Previously		Work Completed This Period		Total Work Completed to Date	
							Estimated Quantity Installed	Value of Work Installed (\$)	Estimated Quantity Installed	Value of Work Installed (\$)	Estimated Quantity Installed	Value of Work Installed (\$)
	200	Stone Base - 12-inch (CTH JJ Widening)Sawing By OthersTraffic Control By	TON	970	\$22.00	21,340.00	970.00	\$21,340.00			970.00	\$21,340.00
	210	4.00" Binder 4 MT 58-28 S In 2020Includes Flagging	TON	190	\$93.50	17,765.00	190.00	\$17,765.00			190.00	\$17,765.00
	220	2.00" Surface 4 MT 58-28 S In 2020Placed Same Day As BinderIncludes Flag	TON	100	\$105.00	10,500.00	129.07	\$13,552.35			129.07	\$13,552.35
	230	5" Conc. Walk Along CTH "JJ"	SF	2,450	\$4.75	11,637.50			2,450.00	\$11,637.50	2,450.00	\$11,637.50
	235	4" Concrete Sidewalk - Non Reinf.Per Detail Plan Page C 1.02 5' Width4" Th	SF	7,820	\$6.00	46,920.00						
	240	Detectable Warning Fields @ H.c. Ramps	EACH	3	\$375.00	1,125.00			2.00	\$750.00	2.00	\$750.00
						-						
	260	New Epoxy Markings Based On Plan Sheets C 3.00 Through C 3.06 Dated 0	LS	1	\$22,060.00	22,060.00	0.90	\$19,854.00	0.10	\$2,206.00	1.00	\$22,060.00
						-						
						-						
	280	Shoulder On CTH JJ9' Wide Shoulder3" Wide ShoulderTransition	LF	710	\$14.50	10,295.00	710.00	\$10,295.00			710.00	\$10,295.00
	300	Rough In Stone Base - Madeline & Parkway5-inches 1.25" Limestone	TON	1,500	\$17.65	26,475.00	1,500.00	\$26,475.00			1,500.00	\$26,475.00
	310	30" Mount. Curb & Gutter (Stringless)	LF	2,800	\$15.60	43,680.00	2,800.00	\$43,680.00			2,800.00	\$43,680.00
	320	30" Vf C&g (Stringless)	LF	560	\$20.15	11,284.00	560.00	\$11,284.00			560.00	\$11,284.00
	330	Fine Grade Madeline & Parkway5-inches 0.75" Limestone	TON	1,500	\$18.50	27,750.00	1,500.00	\$27,750.00			1,500.00	\$27,750.00
	340	3.25" Binder 3LT 58-28SMadeline & Parkway	TON	950	\$60.00	57,000.00	950.00	\$57,000.00			950.00	\$57,000.00
	350	1.75" Surface 5LT 58-28SMadeline & Parkway	TON	475	\$72.75	34,556.25			489.80	\$35,632.95	489.80	\$35,632.95
	360	Interim Inlets @ All Inlets - Year 2021	EACH	12	\$960.00	11,520.00			12.00	\$11,520.00	12.00	\$11,520.00
	370	Concrete QMP Testing	LS	1	\$2,100.00	2,100.00	1.00	\$2,100.00	1.00	\$2,100.00	2.00	\$4,200.00
	380	Wedging In 2020/ Milling In 2021	LS	1	\$7,500.00	7,500.00	1.00				1.00	\$7,500.00

Progress Estimate - Unit Price Work							Contractor's Application for Payment No.				2	
For (Project):		The Glen at Parkway Ridge			Stark Job #		209106		Application Date:		10/20/2021	
Application Period:		Ending 10.15.2021										
A	B	B	C	D	E	F	G	H	I	J	K	L
GASB	Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Item Value (\$)	Work Completed Previously		Work Completed This Period		Total Work Completed to Date	
							Estimated Quantity Installed	Value of Work Installed (\$)	Estimated Quantity Installed	Value of Work Installed (\$)	Estimated Quantity Installed	Value of Work Installed (\$)
	390	Year 2021 Surface - Add	LS	1	\$2,400.00	2,400.00			1.00	\$2,400.00	1.00	\$2,400.00
						-						
TOTAL BASE BID ITEMS						\$365,907.75		\$251,095.35		\$66,246.45		\$324,841.80
ADDITIONAL ITEMS												
	CCO#1	Mill exisiting roadway edge - CTH JJ	LS	1.00	\$2,500.00	\$2,500.00	1.00	\$2,500.00			1	\$2,500.00
	CCO#1	Plastic Covering	LF	3360.00	\$1.55	\$5,208.00	3,360.00	\$5,208.00			3360	\$5,208.00
	CCO#2	R&R Curb & Gutter as Marked by City (Inlcudes Binder Patching)	LF	41.00	\$135.00	\$5,535.00			41.00	\$5,535.00	41	\$5,535.00
TOTAL ADDITIONAL ITEMS						\$13,243.00		\$7,708.00		\$5,535.00		\$13,243.00
TOTAL ALL ITEMS						\$379,150.75		\$258,803.35		\$71,781.45		\$338,084.80

RESOLUTION NO. 21-11-42**A RESOLUTION ACCEPTING PUBLIC IMPROVEMENTS
PARKWAY RIDGE DEVELOPMENT**

WHEREAS, Parkway Ridge, LLC, a partnership, and the City of Pewaukee, entered into a Developer's Agreement dated June 29, 2020 on file in the City Clerk's office, to govern the development of a parcel of real property owned by Parkway Ridge, LLC, containing approximately 19.66 acres for residential use more particularly described in Exhibit B (Legal Description and Map) on file in the City Clerk's office and incorporated herein, referred to in said Agreement and herein as the "Property;" and

WHEREAS, the Agreement provides that Parkway Ridge, LLC would construct and install the necessary sanitary sewer facilities, water distribution facilities, public streets, surface and storm water drainage, and street signs and traffic control within the Property; and,

WHEREAS, the public improvements have been completed and dedicated by Parkway Ridge, LLC to the City; and,

WHEREAS, the public improvements have been inspected by the City Engineer who has approved the same;

NOW THEREFORE IT IS HEREBY RESOLVED that the City of Pewaukee Common Council accepts the public improvements referred to above on behalf of and for the benefit of the public and citizens of the City of Pewaukee.

This resolution shall be effective upon publication or posting as provided by law.

Dated this 15th day of November 2021

City of Pewaukee

Steve Bierce, Mayor

Attest:

Kelly Tarczewski, Clerk

**CITY OF PEWAUKEE
COMMON COUNCIL AGENDA ITEM 7.**

DATE: November 15, 2021

DEPARTMENT: Public Works

PROVIDED BY: Magdelene Wagner

SUBJECT:

Discussion and Possible Action for the Northmound Industrial Development [Wagner]

BACKGROUND:

BBC Northmound LLC Development has completed the public improvements as required in the Developers Agreement. As such, we are requesting the Council approve the accepting resolution. The Accepting Resolution begins the one year guarantee period for the improvements. Since the improvements are completed, the letter of credit can be reduced.

The Dynamic Compaction for the development is complete and the guarantee can be released.

FINANCIAL IMPACT:

RECOMMENDED MOTION:

Common Council approve the first reduction of the letter of credit from \$128,422.00 to \$15,000.00 (Reduction of \$113,422.00).

Common Council approve the accepting resolution.

Common Council approve the release of the letter of credit (\$12,843.00) for the Dynamic Compaction Developer's Agreement.

ATTACHMENTS:

Description

Resolution 21-11-43

RESOLUTION NO. 21-11-43**A RESOLUTION ACCEPTING PUBLIC IMPROVEMENTS
BBC NORTHMOUND DEVELOPMENT**

WHEREAS, BBC Northmound, LLC, a partnership, and the City of Pewaukee, entered into a Developer's Agreement dated April 26, 2019 and amended on May 4, 2020, both on file in the City Clerk's office, to govern the development of a parcel of real property owned by BBC Northmound, LLC, containing approximately 10.66 acres for manufacturing use more particularly described in Exhibit B (Legal Description and Map) on file in the City Clerk's office and incorporated herein, referred to in said Agreement and herein as the "Property;" and

WHEREAS, the Agreement provides that BBC Northmound, LLC would construct and install the necessary sanitary sewer facilities, water distribution facilities, public streets, surface and storm water drainage, and street signs and traffic control within the Property; and,

WHEREAS, the public improvements have been completed and dedicated by BBC Northmound, LLC to the City; and,

WHEREAS, the public improvements have been inspected by the City Engineer who has approved the same;

NOW THEREFORE IT IS HEREBY RESOLVED that the City of Pewaukee Common Council accepts the public improvements referred to above on behalf of and for the benefit of the public and citizens of the City of Pewaukee.

This resolution shall be effective upon publication or posting as provided by law.

Dated this 15th day of November 2021

City of Pewaukee

Steve Bierce, Mayor

Attest:

Kelly Tarczewski, Clerk

**CITY OF PEWAUKEE
COMMON COUNCIL AGENDA ITEM 8.**

DATE: November 15, 2021

DEPARTMENT: Public Works

PROVIDED BY: Magdelene Wagner

SUBJECT:

Discussion and Possible Action to Approve the Release of the Cash Deposit for Klein Dickert Glass [Wagner]

BACKGROUND:

Klein Dickert (KD) Glass extended municipal sanitary sewer to their parcel when they developed two years ago. On December 1, 2020, the City executed a cash guarantee in lieu of the letter of credit for the one year warranty, but failed to bring the accepting resolution for adoption. Since the one year guarantee is set to expire, Staff reviewed all work and concluded it is acceptable and no additional work is needed. Therefore, the cash deposit guaranteeing this work can be released after December 1, 2021.

FINANCIAL IMPACT:

RECOMMENDED MOTION:

Common Council approve the Accepting **Resolution 21-11-44** and approve the Release of the Cash Deposit after December 1, 2021.

ATTACHMENTS:

Description

KD Glass Cash Escrow Agreement

**ESCROW AGREEMENT
GUARANTEEING TO THE CITY OF PEWAUKEE
CERTAIN PUBLIC IMPROVEMENTS IN
KLEIN-DICKERT GLASS COMPANY**

THIS AGREEMENT is made and entered into this 2nd day of November, 2020 by and between Klein-Dickert Glass Company, hereinafter referred to as "Developer" and the City of Pewaukee.

WITNESSETH:

WHEREAS, Developer has entered into an agreement for the development of the Developer's Property in the City of Pewaukee, including public improvements as required by the City Code and the Developer's Agreement entered into on August 20, 2019, by the City and Developer; and,

WHEREAS, the public improvements required by the Developer's Agreement have been completed; and

WHEREAS, the Developer's Agreement requires that upon completion and dedication of the public improvements to the City and the acceptance by the City of the public improvements, the Developer must provide a letter of credit to guaranty the public improvements for one (1) year from date of acceptance, and

WHEREAS, Developer is willing to provide cash escrow and the City is willing to accept cash in lieu of the letter of credit required by the Developer's Agreement to guaranty the public improvements for one (1) year from date of acceptance.

NOW THEREFORE, the parties agree as follows:

1. Developer shall deposit the sum of twenty six thousand four hundred Dollars (\$26,400.00) ("Deposit") with the City to provide the necessary funds to make repairs should the public improvements completed in the Klein-Dickert Glass Company project need them during the warranty period as required by the Developer's Agreement.
2. Except in the case of an emergency, the City shall not draw any portion of the Deposit until five (5) business days after written notice of the reason for withdrawal has been provided to Developer. In the case of an emergency, the City shall use its best efforts to contact Developer and allow Developer a reasonable time under the circumstances presented to address the emergency before taking action. Upon withdrawal of all or any portion of the Deposit by the City, the City shall provide Developer with a written statement regarding the amount withdrawn.

3. The escrow account shall remain open during the one (1) year guaranty period, which shall expire on October 20, 2021, following which all remaining Deposits shall be returned to Developer, without interest.

5. Addresses to which written notices shall be sent:

City of Pewaukee
City Clerk
W240N3065 Pewaukee Road
Pewaukee, WI 53072

Klein-Dickert Glass Company
P.O. Box 259410
Madison, WI 53725-9410
Attention: Amy E. Olson

IN WITNESS WHEREOF, the parties have signed this Agreement effective as of the date first written above.

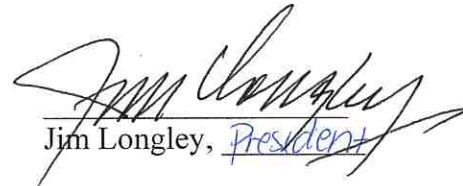
City of Pewaukee

Klein-Dickert Glass Company

Date 12/1/2020

Date 11-4-2020


Steve Bierce, Mayor


Jim Longley, President

**CITY OF PEWAUKEE
COMMON COUNCIL AGENDA ITEM 9.**

DATE: November 15, 2021

DEPARTMENT: PW - Engineering

PROVIDED BY: Magdelene Wagner

SUBJECT:

Discussion and Possible Action Regarding the Intersection of Green Road and Duplainville Road [Wagner]

BACKGROUND:

As part of the Duplainville Road Reconstruction project, Staff had the intersection of Green Road studied to determine if any changes are warranted. Please find the attached intersection study completed by Traffic Analysis & Design, Incorporated (TADI).

The study has a two-part recommendation.

The first recommendation is to keep the intersection as a 2-way stop, assuming the conditions within the report can be met. The most important condition is improving the sight distance by trimming trees on private property. When reviewing these trees with Wachtel Tree Science, the trees are in great condition and were recommended to limit the impact of the road improvements to avoid damaging the trees. Since these trees are on private property, the City does not control these trees.

The second recommendation is to install a 4-way stop at this intersection with some conditions outlined in the report. Most of these are the same as the first recommendation and include adding stop ahead signs, adding a stop sign to the left side of the road, and moving the stop signs to align with the stop line.

Given that 1) the City does not control the trees and they are very healthy trees and therefore the sight distance can't be rectified, 2) the trail will likely increase pedestrian traffic in the area, and 3) the traffic accidents that occur here are typically pretty severe, we are commending a 4-way stop be installed at this intersection.

The Public Works Committee recommended the 4-way stop.

FINANCIAL IMPACT:

RECOMMENDED MOTION:

Common Council concur with the Public Works Committee recommendation of a 4-way stop at the intersection of Duplainville Road and Green Road intersection as part of the Duplainville Road Reconstruction project.

ATTACHMENTS:

Description

Date: September 3, 2021

Technical Memorandum

To: Maggie Wagner, P.E.
City of Pewaukee Department of Public Works

From: Michael May, P.E. PTOE

cc List:

Subject: Duplainville Road & Green Road – Traffic Operations
City of Pewaukee, Wisconsin

PART A – INTRODUCTION

This technical memorandum has been prepared to provide recommendations to the City on the operation of Duplainville Road & Green Road based on the layout of the existing intersection, intersection turning movement traffic counts, intersection crash analysis, intersection capacity analysis, and warrants for traffic signal and all-way stop control. The location of the study area intersection is shown in [Exhibit 1](#).

PART B – EXISTING INTERSECTION LAYOUT

A transportation detail illustrating existing intersection lane configurations and speed limits is shown in [Exhibit 2](#).

Duplainville Road is a two-lane north/south road with a posted speed limit of 35 mph. According to WisDOT, the Year 2009 annual average daily traffic (AADT) volumes on Duplainville Road were approximately 2,100 vehicles per day (vpd) north of Green Road and 4,400 vpd south of Green Road. Based on the Year 2021 turning movement counts and using WisDOT expansion factors, the estimated Year 2021 AADTs were approximately 3,190 vpd north of Green Road and 3,020 vpd south of Green Road. Exclusive right-turn lanes exist on the Duplainville Road approaches to Green Road. No pedestrian or bicycle accommodations currently exist. A trail is planned by the City of Pewaukee along the west side of Duplainville Road from south of Green Road to north of the study area with a connection to the Pewaukee Sports Complex.

Green Road is a two-lane undivided east/west road with a posted speed limit of 35 mph west of Duplainville Road and 30 mph east of Duplainville Road. The WisDOT Year 2009 AADT volumes were approximately 1,200 vpd west of Duplainville Road and 1,900 vpd east of Duplainville Road. Based on the Year 2021 turning movement counts and using WisDOT expansion factors, the estimated Year 2021 AADTs were approximately 1,620 vpd east of Duplainville Road and 2,340 vpd east of Duplainville Road. Exclusive right-turn lanes and stop signs exist on the Green Road approaches to Duplainville Road. Paved shoulders along Green Road serve as a bicycle accommodation. No pedestrian accommodations exist.

TADI

Two railroad tracks cross Duplainville Road approximately 705-feet south of Green Road (center-to-center). A railroad track also crosses Green Road approximately 455-feet east of Duplainville Road (center-to-center). The two sets of tracks cross southeast of the study intersection.

PART C – TRAFFIC VOLUMES

C1. Year 2021 Existing Traffic Volumes

An intersection turning movement traffic count was performed at Duplainville Road & Green Road from 6:00am to 7:00pm on Thursday, July 8, 2021. The weekday morning, midday, and evening peak hours were identified as being 7:00 to 8:00am, 11:30-12:30pm, and 4:30 to 5:30pm. Weather conditions were favorable for walking and bicycling for the time of year with temperatures in the mid-60s-F and partly cloudy to mostly cloudy skies. The Year 2021 existing traffic volumes are shown in [Exhibit 3](#).

C2. Year 2022 Forecast & Year 2042 Forecast Traffic Volumes

TADI plotted the historical traffic counts from Year 1994 through Year 2021 to estimate the annual linear growth rate within the study area. The only site location with historical data was Duplainville Road north of Green Road. The historical trends show that along Duplainville Road have trended downward.

For the purpose of this study, rather than show a negative annual linear growth, TADI assumed a 1.0% annual linear growth rate to estimate Year 2022 forecast and Year 2042 forecast traffic volumes. The Year 2022 forecast and Year 2042 forecast traffic volumes are shown in [Exhibit 4](#) and [Exhibit 5](#), respectively.

C3. Year 2022 Opening & Year 2042 Design Traffic Volumes

To address any potential future traffic impacts at the study area intersection, it is necessary to identify the hourly volume of traffic generated by anticipated development. The traffic volumes expected to be generated by anticipated development are based on the size and type of the proposed uses and on trip rates and fitted curve equations as published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition, 2017. The following development is anticipated.

- The Interstate Partners Development is an anticipated 164,800-sf general light industrial development to be located along the south side of Green Road, east of Duplainville Road.
- The DPW Development is an anticipated 51,600-sf public works facility to be located along the north side of Green Road, west of Duplainville Road. Per discussions with the DPW director, the site will include 12 full time, 2 part time, and 2 seasonal employees. Parts and deliveries will also occur here, as will public recycling access on Wednesdays from 1:00 to 6:00pm April through November and Saturdays year-round from 9:00am to 3:00pm.
- Trinity Academy is a private K-12 school located in the northwest corner of Duplainville Road & Green Road. The academy services 40 students and was on summer break at the time turning movement counts were collected.

The Interstate Partners, DPW, and Trinity Academy trip generation tables are shown in [Exhibits 6A, 6B, and 6C](#), respectively. The new trips generated by these developments are shown in [Exhibits 7A, 7B, and 7C](#), respectively.

The Year 2022 opening year traffic volumes, shown in [Exhibit 8](#), were determined by summing the Year 2022 forecast traffic volumes ([Exhibit 4](#)) and the development new trips ([Exhibits 7A, 7B, & 7C](#)).

The Year 2042 design year traffic volumes, shown in [Exhibit 9](#), were determined by summing the Year 2042 forecast traffic volumes ([Exhibit 5](#)) and the development new trips ([Exhibits 7A, 7B, & 7C](#)).

PART D – CRASH ANALYSIS

TADI collected crash statistics and crash reports for the Duplainville Road & Green Road intersection for January 1, 2015 through December 31, 2019. This represents five years of data. Year 2020 was excluded due to lower travel that year due to the pandemic.

A crash diagram is included in [Exhibit 10](#) and crash statistics are summarized in the report [appendix](#). As shown:

- 17 crashes occurred in the five-year period. Of these crashes, 12 were property damage only crashes, 2 were possible injury crashes, 2 were non-incapacitating injury crashes, and 1 was an incapacitating crash. No fatal crashes occurred. The estimate crash rate is 1.94 crashes per million entering vehicles (MEV).
- 13 of the 17 crashes were angle crashes, 3 crashes were westbound rear-end crashes, and 1 crash occurred west of the intersection and involved an exiting motorist from Trinity Academy.
- Year 2017 experienced 11 of the 17 crashes. 7 of the 11 crashes in Year 2017 were angle crashes and 3 involved westbound rear-end crashes. There were 3 or fewer crashes in the other four years analyzed.
- The most frequent times when crashes occurred was weekdays during the morning and afternoon rush hours. Failure to yield right-of-way for eastbound and westbound traffic from Green Road was the most reported explanation for a crash (9 crashes).

The following outlines potential factors that may have contributed to crashes.

- TADI noticed trees with low growing or low hanging branches along Duplainville Road. These branches obstruct the view of motorists on Green Road who require adequate sight distance down Duplainville Road to see oncoming vehicles and make proper judgements about gaps in traffic to safely cross.
- Inability of drivers to see the stop signs eastbound and westbound on the Green Road approaches to Duplainville Road.

Mitigation measures to address safety and operations are discussed later in this technical memorandum.

PART E – WARRANT ANALYSIS

The 13-hour Year 2021 turning movement counts were forecast to Year 2022 and Year 2042 using the same growth rate identified in *Part C – Traffic Volumes*. In addition, WisDOT hourly estimates for development were used to estimate 13-hour volumes for the three identified developments. The sum of these volumes provided 13-hour volume estimates for Year 2022 opening and Year 2042 design traffic.

E1. Traffic Signal Warrant Analysis

TADI analyzed the Year 2042 design 13-hour volumes against traffic signal warrants as outlined in the Manual on Uniform Traffic Control Devices (MUTCD). Based on the warrant analysis, traffic signals are not expected to be warranted through Year 2042. Traffic volumes would need to more than double for traffic signal warrants to be met.

E2. All-Way Stop Control Warrant Analysis

TADI analyzed the Year 2042 design 13-hour volumes against traffic signal warrants as outlined in the Manual on Uniform Traffic Control Devices (MUTCD). The Federal Highway Administration's *Manual on Uniform Traffic Control Devices (MUTCD)* provides the following guidance for the installation of all-way stop control:

- All-way stop control should be considered if five or more reported crashes within a 12-month period are susceptible to correction by an all-way stop (left-turn and angle crashes). *This criterion is met. There were seven (7) such crashes within the 12-month period between January 1, 2017 and December 31, 2017.*
- All-way stop control should be considered when for each of the same eight-hours the volumes on the major street approaches (Duplainville Road) is greater than 300 vehicles per hour and the side street approaches (Green Road) is greater than 200 vehicles per hour. *This criterion is not met, as only four of the required eight hours meet this criterion.*
- All-way stop control may be considered at locations that generate high pedestrian volumes. *This criterion is not met. Ten pedestrians were observed to cross the intersection over the duration of the 13-hour count.*
- All-way stop control may be considered at locations where a road user cannot see conflicting traffic unless conflicting traffic does not also stop. *This criterion is met. Sight lines at the intersection were observed to be poor due to low growing or low hanging tree branches outside of City right-of-way. This criterion is not met if adequate sight distance can be obtained by the trimming of trees on existing private property.*
- All-way stop control may be considered where two neighborhood collector streets of similar design/operating characteristics intersect and the installation of all-way stop control would improve operations. *This criterion is not met. The two roads are indeed collector streets, but do not operate as neighborhood collector streets.*

Based on the warrant analysis, all-way stop control may be warranted considering the angle crash history in Year 2017 and the existing sight distance issues created by low growing or low hanging tree branches outside of City right-of-way. However, meeting warrants does not

translate to a legal requirement for all-way stop control. With crashes down considerably since Year 2017, and with proper trimming of trees that otherwise block adequate sight distance, warrants for all-way stop control may no longer be met.

PART F – INTERSECTION CAPACITY ANALYSIS

The intersection was analyzed based on the procedures set forth in the *Highway Capacity Manual, 6th Edition*. Intersection operation is defined by “Level of Service”. Level of Service (LOS) is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good, represented by LOS ‘A’, to very poor, represented by LOS ‘F’. For the purpose of this study, and as is standard for use in urban communities, LOS D (35-seconds or less of average vehicle delay) or better was used to define desirable peak hour operating conditions.

F1. Traffic Operations with Two-Way Stop Control

[Exhibit 11](#) shows the Year 2022 opening and Year 2042 design traffic operations and traffic queues at Duplainville Road & Green Road under existing two-way stop control.

As shown, the intersection is expected to operate desirably at LOS C or better operations through Year 2042 under its existing layout with two-way stop control.

F2. Traffic Operations with All-Way Stop Control

[Exhibit 12](#) shows the Year 2022 opening and Year 2042 design traffic operations and traffic queues at Duplainville Road & Green Road under potential all-way stop control.

As shown, the intersection is expected to operate desirably at LOS C or better operations through Year 2042 under its existing layout with all-way stop control.

PART G – RECOMMENDATION & CONCLUSION

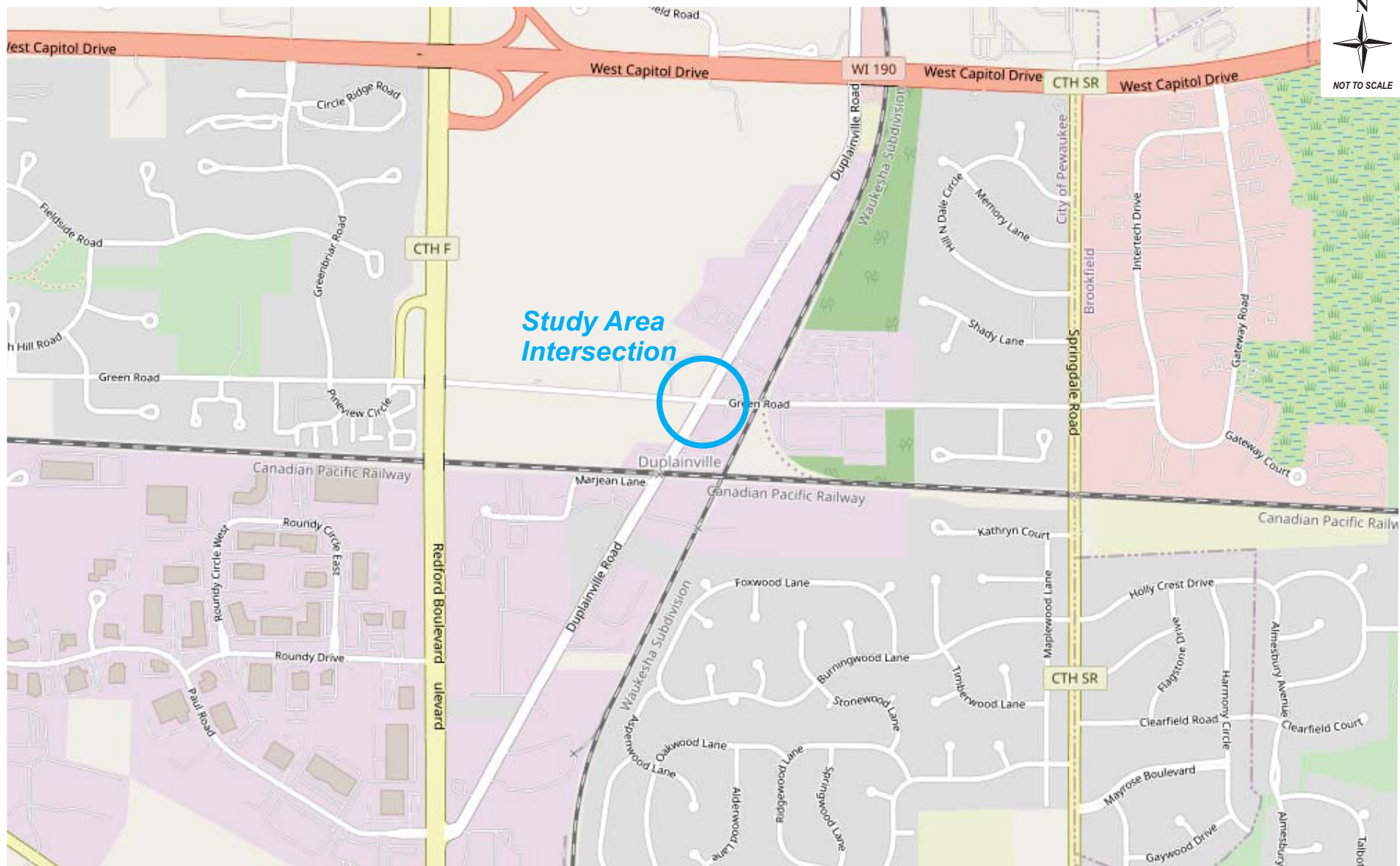
Two alternatives exist for the City of Pewaukee to consider: retain two-way stop control or install all-way stop control. The following outlines the recommendations for each alternative.

- *Two-Way Stop Control Alternative*
 - Trim the low growing and low hanging tree branches on public and private property along Duplainville Road to improve lines of sight for motorists entering the intersection from Green Road.
 - The existing stop signs are installed upstream of the Green Road approach stop lines. Move the stop signs to the stop lines.
 - Install “Cross Traffic Does Not Stop” plaques under the stop signs on the right side of the Green Road approaches.
 - Consider adding stop signs on the left side the Green Road approaches to further draw attention to the traffic control of the intersection.
 - Consider installing “Stop Ahead” signs on the left and right sides of Green Road in advance of the intersection.

- *All-Way Stop Control Alternative*
 - All-way stop control may be considered if the low growing and low hanging tree branches on public and private property along Duplainville Road cannot be trimmed to improve lines of sight.
 - If all-way stop control is installed, move the stop signs to the stop lines. Install “All-Way” plaques under the stop signs on the right side of each approach.
 - Consider adding stop signs on the left side of the intersection approaches to further draw attention to the traffic control of the intersection.
 - Consider installing “Stop Ahead” signs on the left and right sides of Duplainville Road and Green Road in advance of the intersection.

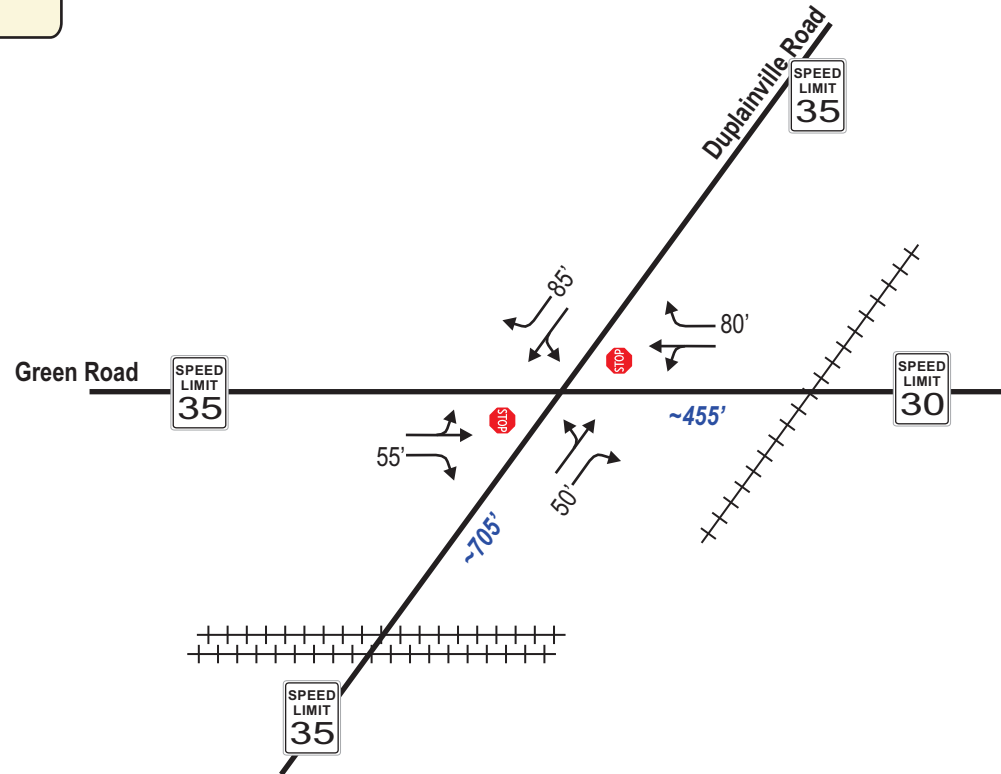
Lastly, a trail is planned by the City of Pewaukee along the west side of Duplainville Road from south of Green Road to north of the study area with a connection to the Pewaukee Sports Complex. It is recommended that the crossing of Green Road is constructed following ADA design standards and include a striped crosswalk. Ample capacity exists at the Duplainville Road & Green Road intersection to accommodate all users.

Should any questions or comments arise, please feel free to contact Michael May, P.E. PTOE of TADI at 414-807-1912 or mmay@tadi-us.com.



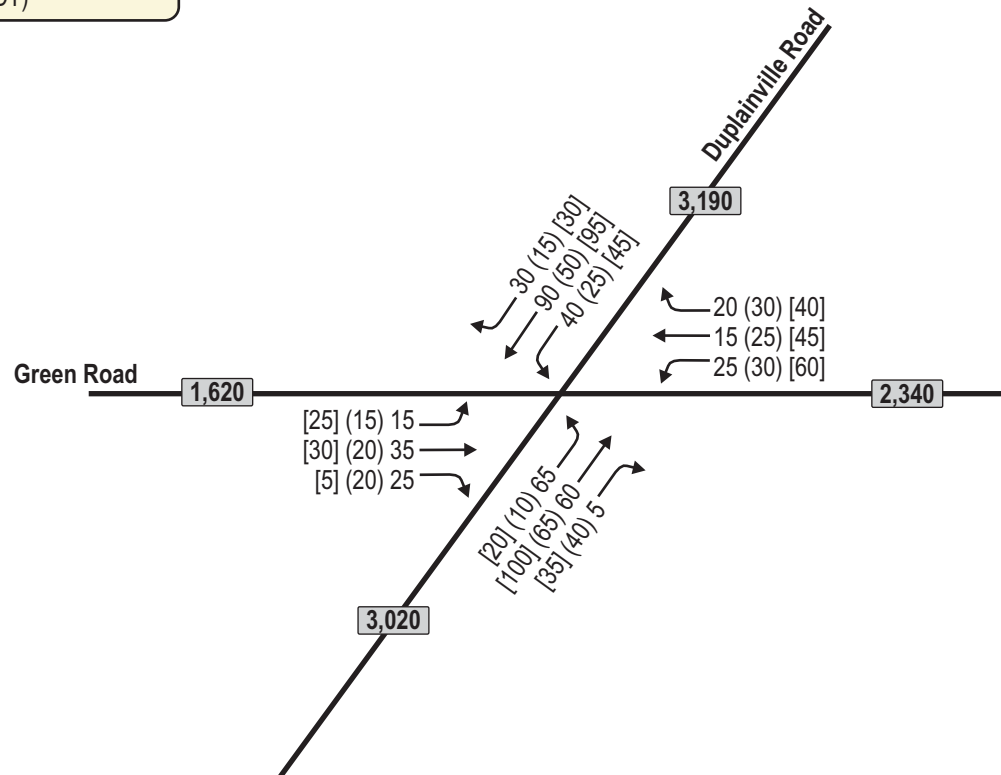
LEGEND

-  Stop Sign
-  Lane Configuration
- XX Turn Lane Storage (Feet)
- +++ Railroad
- XX' Approximate Centerline-to-Centerline Intersection Spacing (Feet)



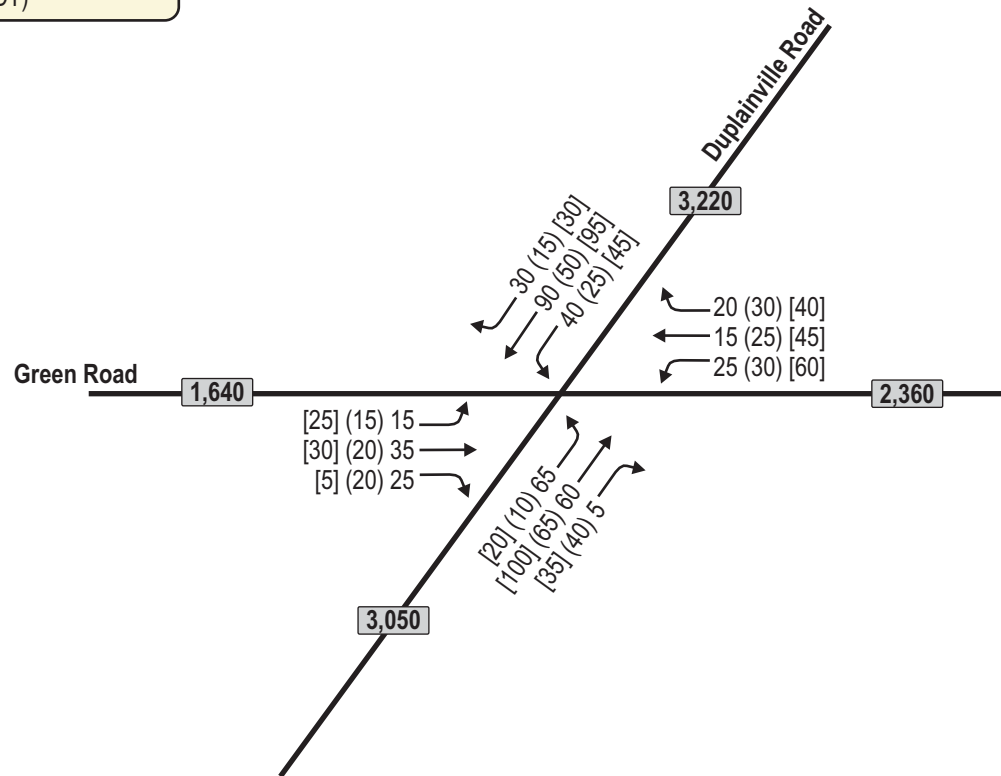
LEGEND

- XX AM Peak Hour Volumes (7:00-8:00 AM)
- (XX) Midday Peak Hour Volumes (11:30AM-12:30 PM)
- [XX] PM Peak Hour Volumes (4:30-5:30 PM)
- Negligible Traffic Volumes (Fewer than 3 vph)
- X,XXX** Annual Average Daily Traffic (AADT)



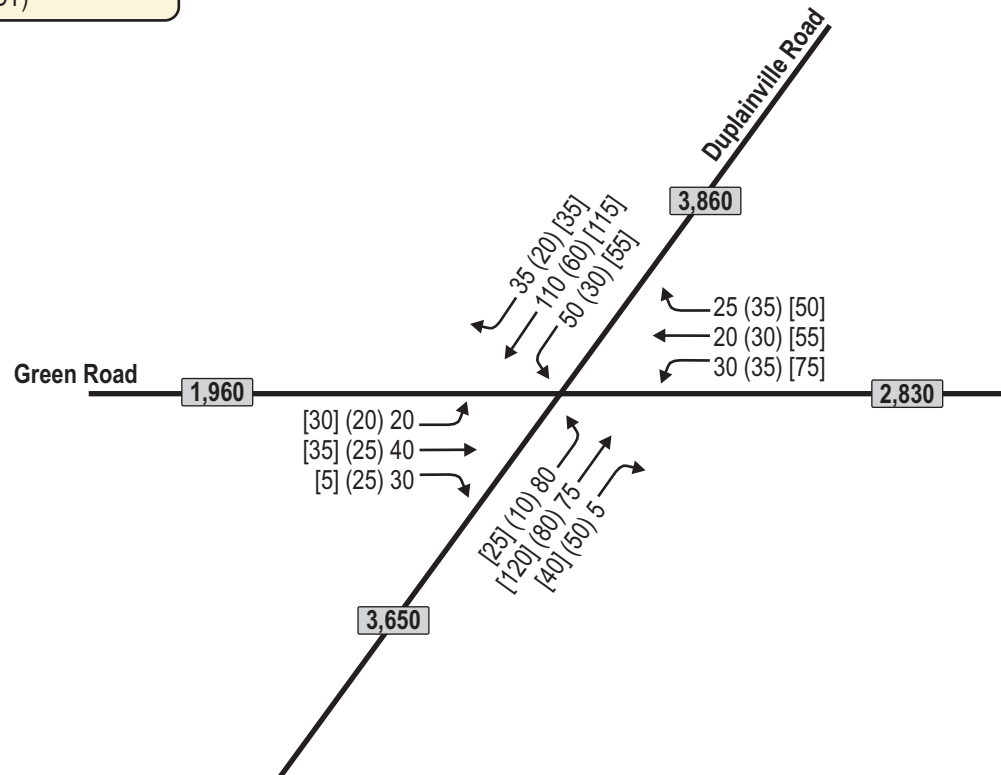
LEGEND

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- Negligible Traffic Volumes (Fewer than 3 vph)
- X,XXX** Annual Average Daily Traffic (AADT)



LEGEND

- XX AM Peak Hour Volumes (7:00-8:00 AM)
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- [XX] PM Peak Hour Volumes (4:30-5:30 PM)
- Negligible Traffic Volumes (Fewer than 3 vph)
- X,XXX** Annual Average Daily Traffic (AADT)



Interstate Partners Development Trip Generation Table

Land Use	ITE Code	Proposed Size	Weekday Daily	AM Peak			MID Peak			PM Peak		
				In	Out	Total	In	Out	Total	In	Out	Total
General Light Industrial	110	164.8 x 1,000 SF	680	55	10	65	35	35	70	5	45	50
			FCE	(88%)	(12%)	FCE	(50%)	(50%)	*	(13%)	(87%)	FCE
Total New Trips			680	55	10	65	35	35	70	5	45	50

FCE = Fitted Curve Equation

Daily FCE: $T = 3.79(X) + 57.96$. AM FCE: $\ln(T) = 0.74 \ln(X) + 0.39$. PM FCE: $\ln(T) = 0.69 \ln(X) + 0.43$

*Per ITE, the midday peak hour generates approximately 10.3% of the daily trip generation.

TRIP DISTRIBUTION

North on Duplainville	20%	140	10	0	5	5	0	10
South on Duplainville	40%	270	20	5	15	15	5	20
West on Green	15%	100	10	0	5	5	0	5
East on Green	25%	170	15	5	10	10	0	10
	100%	680	55	10	35	35	5	45

DPW Trip Generation Table

Land Use	ITE Code	Proposed Size	Weekday Daily	AM Peak			MID Peak			PM Peak		
				In	Out	Total	In	Out	Total	In	Out	Total
Pewaukee DPW	110/ TADI	51.6 x 1,000 SF	250 FCE	15 (51%)	10 (49%)	25 FCE	15 (50%)	10 (50%)	25 *	10 (49%)	15 (51%)	25 FCE
Total New Trips			250	15	10	25	15	10	25	10	15	25

FCE = Fitted Curve Equation

Daily FCE: $T = 3.79(X) + 57.96$. AM FCE: $\ln(T) = 0.74 \ln(X) + 0.39$. PM FCE: $\ln(T) = 0.69 \ln(X) + 0.43$

*Per ITE, the midday peak hour generates approximately 10.3% of the daily trip generation.

Based on discussions with City Engineering, the DPW Yard will include 12 full time, 2 part time, and 2 seasonal employees. Parts & deliveries will also occur here, as will public recycling access on Wednesdays 3-9pm. The ITE 110 trip generation rates and FCE are reasonable based on this description. The in/out splits were adjusted to more closely reflect more in/out turn-over the course of each hour.

TRIP DISTRIBUTION

North on Duplainville	5%	10	0	0	0	0	0	0	0
South on Duplainville	50%	120	10	5	10	5	5	10	10
West on Green	35%	90	5	5	5	5	5	5	5
East on Green	10%	30	0	0	0	0	0	0	0
	100%	250	15	10	15	10	10	10	15

Trinity Academy Trip Generation Table

Land Use	ITE Code	Proposed Size	Weekday Daily	AM Peak			MID Peak			PM Peak		
				In	Out	Total	In	Out	Total	In	Out	Total
Private School (K-12)	536	40 Students	100 (2.48)	20 (61%)	10 (39%)	30 (0.80)	5 (50%)	5 (50%)	10 *	0 (43%)	5 (57%)	5 (0.17)
Total New Trips			100	20	10	30	5	5	10	0	5	5

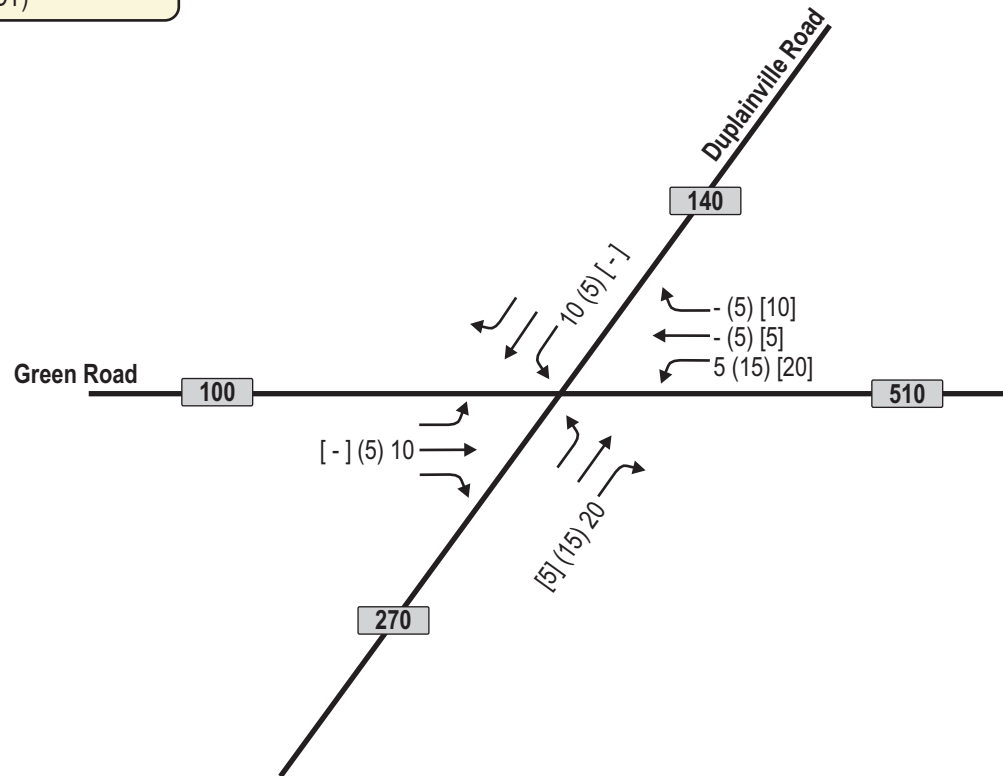
*Per ITE, the MID peak hour generates approximately 2% of the daily trip generation. This rounds to zero. Assumed 5 in/5 out during MID Peak.
Based on discussions with the City, Trinity Academy services approximately 40 students and 10-12 staff.

TRIP DISTRIBUTION

North on Duplainville	15%	10	0	0	0	0	0	0	0
South on Duplainville	40%	40	10	5	5	5	5	0	5
West on Green	25%	30	5	5	0	0	0	0	0
East on Green	20%	20	5	0	0	0	0	0	0
	100%	100	20	10	5	5	0	5	

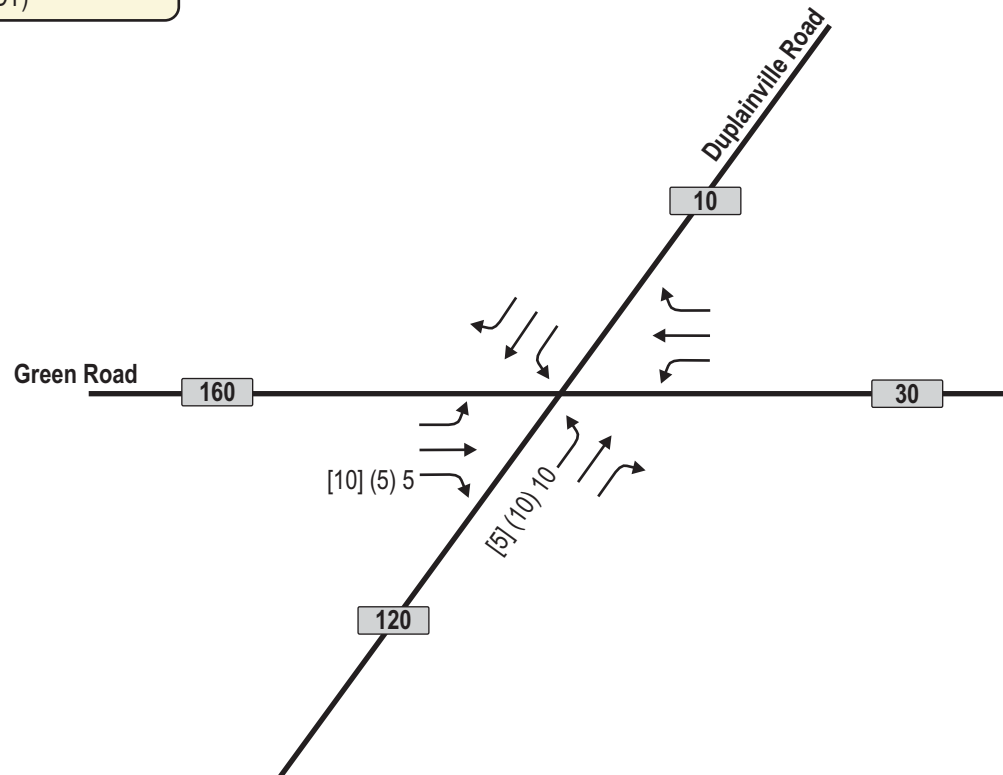
LEGEND

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- (XX) Midday Peak Hour Volumes (11:30AM-12:30 PM)
- [XX] PM Peak Hour Volumes (4:30-5:30 PM)
- Negligible Traffic Volumes (Fewer than 3 vph)
- X,XXX** Annual Average Daily Traffic (AADT)



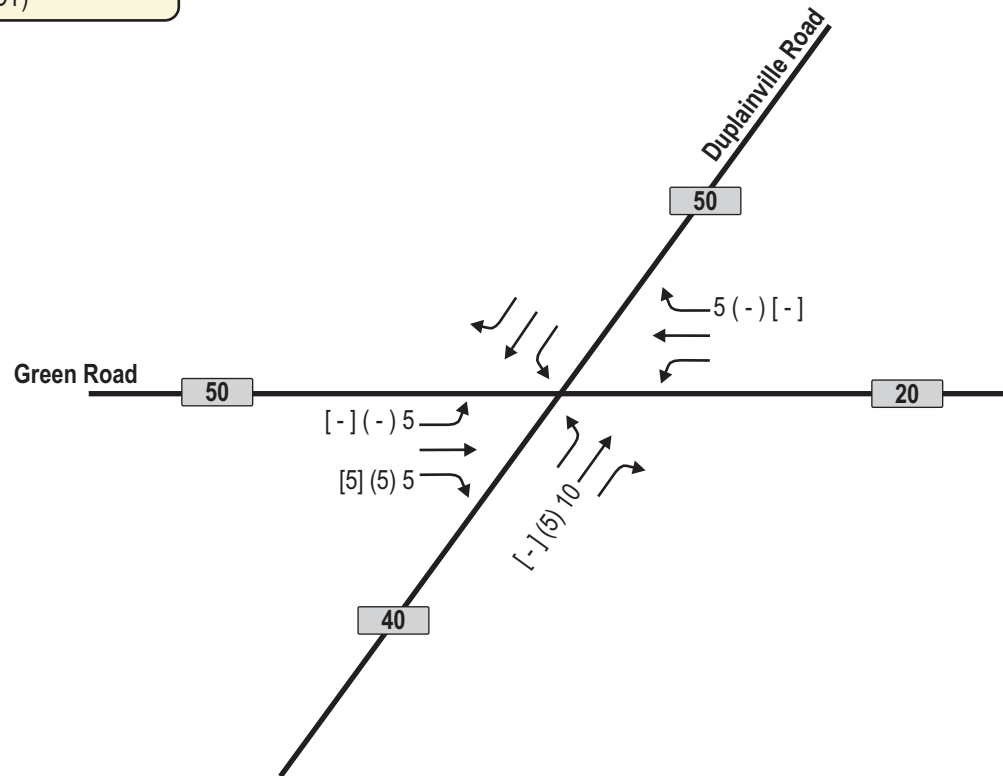
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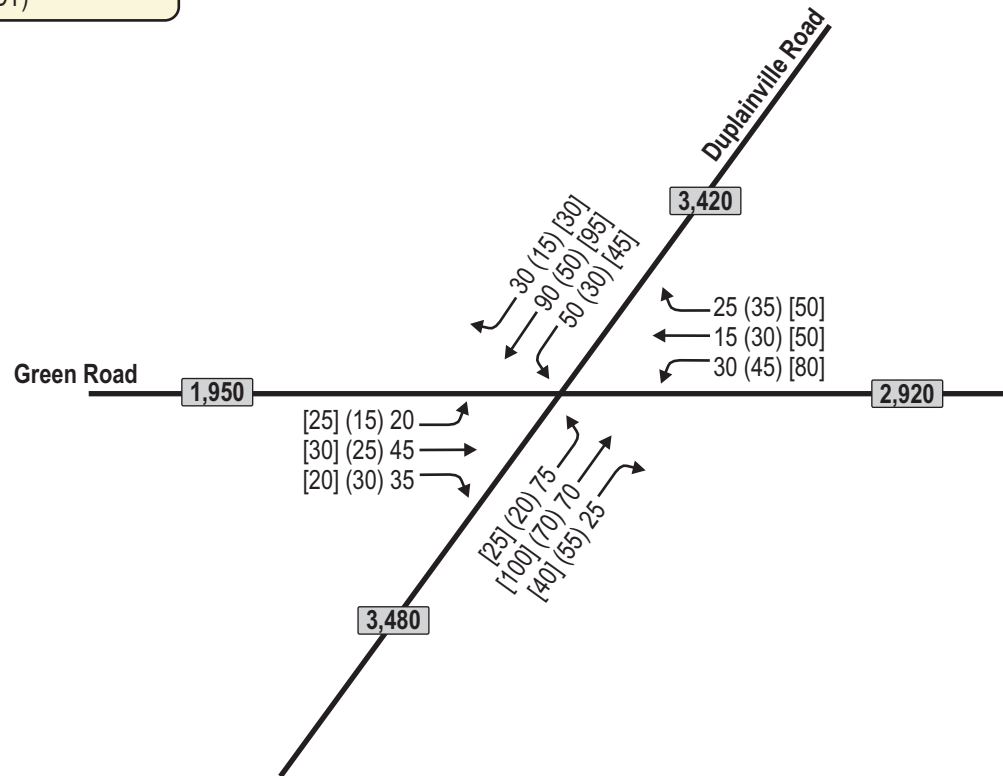
LEGEND

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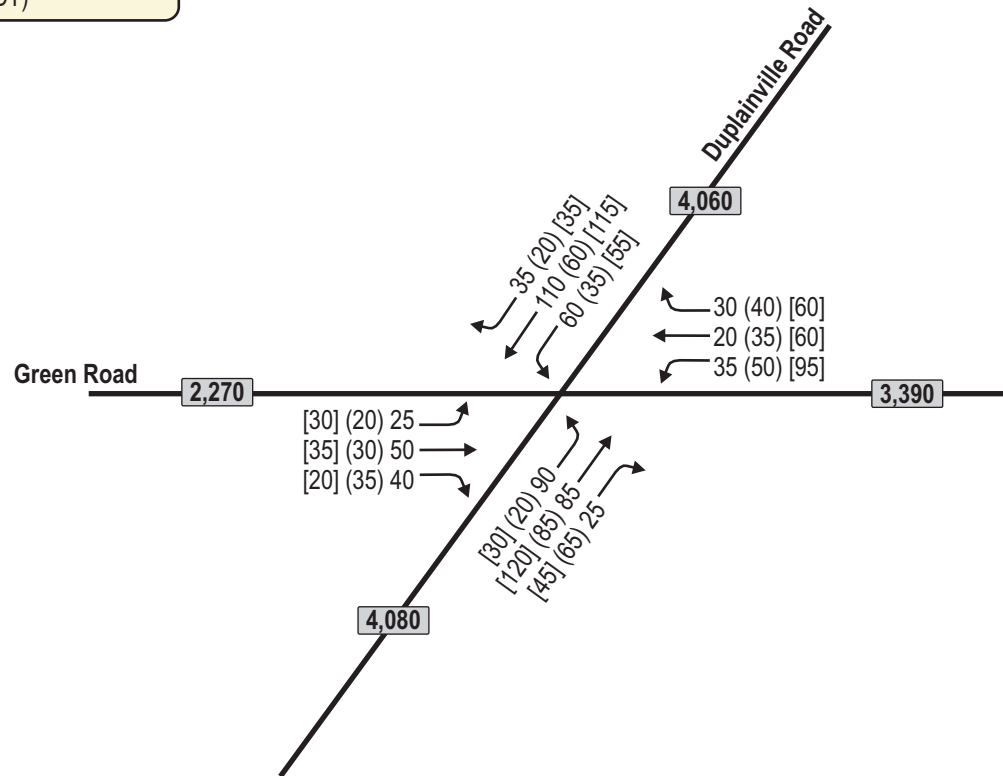
LEGEND

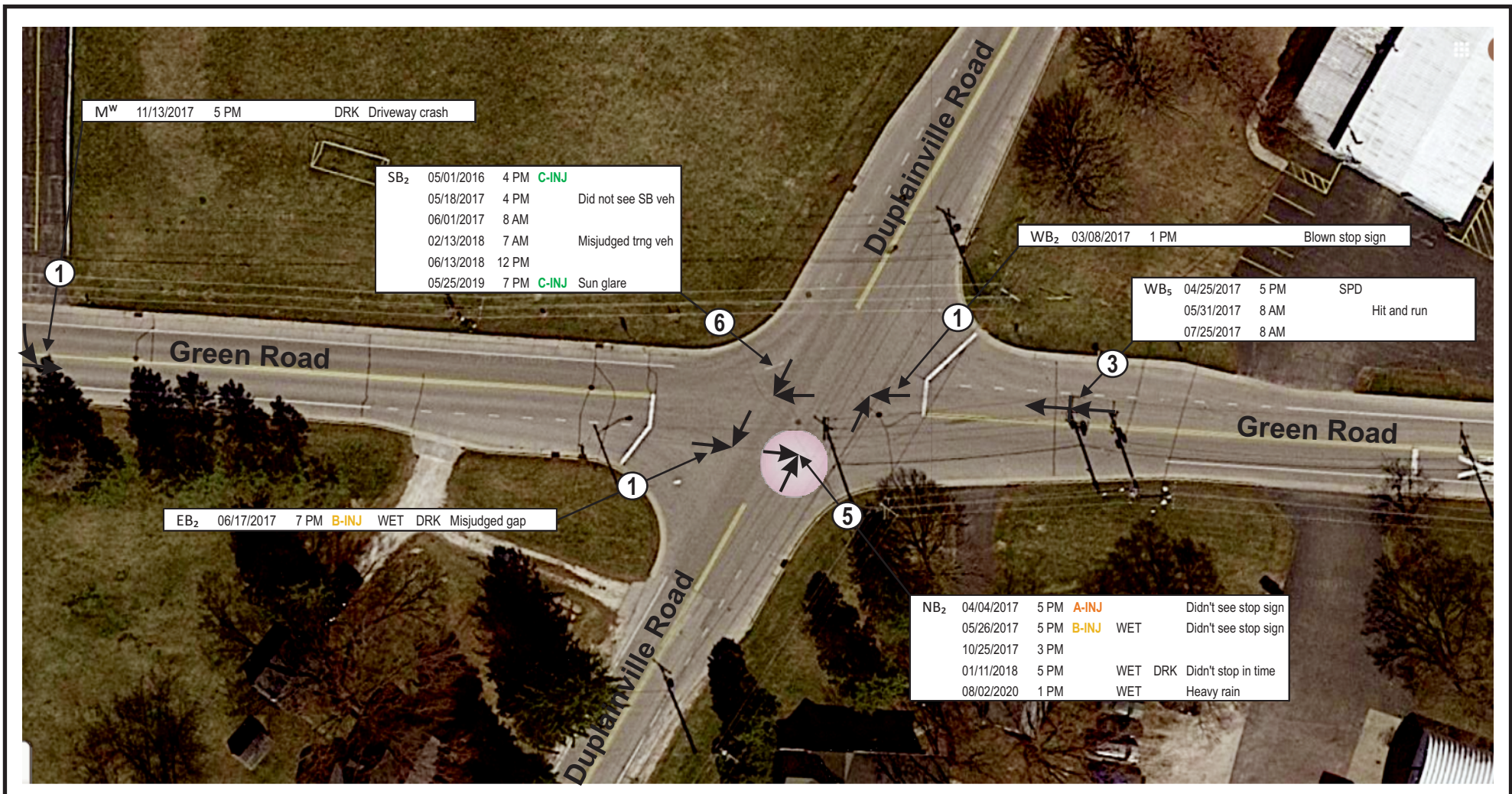
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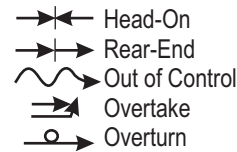
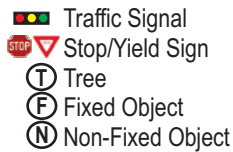
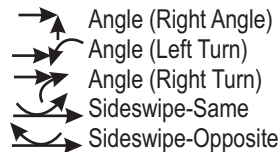
LEGEND

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- [XX] PM Peak Hour Volumes (4:30-5:30 PM)
- Negligible Traffic Volumes (Fewer than 3 vph)
- X,XXX** Annual Average Daily Traffic (AADT)





LEGEND



= CRASH FREQUENCY (if > 1 NON-PED/BIKE)

LABEL, DATE OF CRASH, TIME, SEVERITY, ROAD CONDITIONS, LIGHT, ALCOHOL, DRUGS, SPEED-RELATED, NOTES ABOUT CRASH

Note: Deer Crashes Not Included

*Economic Loss = \$85k (KAB), \$25k (C), \$4k (PDO)



CRASH STATISTICS

17
Crashes

1.94 Crashes Per Million Entering Vehicles

0 Fatal Crash (K)
1 Incapacitating (Type A)
2 Non-Incapacitating (Type B)
2 Possible (Type C)
12 Property Damage Only

CRASH SEVERITY DEFINITIONS

K-Inj = Fatal Crash
A-Inj = Incapacitating Injury Crash
B-Inj = Non-Incapacitating Injury Crash
C-Inj = Possible Injury Crash
= Property Damage Only Crash

HIGHLIGHTED CRASHES

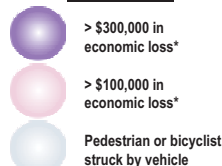


EXHIBIT 10 CRASH HISTORY (2016-2020) DUPLAINVILLE ROAD & GREEN ROAD

PEWAUKEE, WISCONSIN

**Year 2022 Opening Traffic Peak Hour Operating Conditions
With Two-Way Stop Control**

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S
			Eastbound			Westbound			Northbound			Southbound			LOS & Delay
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
Duplainville Road & Green Road Stop Sign Control (EB/WB)		Lanes->	1	1	1	1	1	1	1	1	1	1	1		
	AM	LOS	C	A	C	A	A	*	A	*				A	
		Delay	17	9	18	9	7	*	7	*				6	
		Queue	20'	20'	20'	20'	20'	*	20'	*					
	MID	LOS	B	A	B	A	A	*	A	*				A	
		Delay	11	8	11	8	7	*	7	*				5	
		Queue	20'	20'	20'	20'	20'	*	20'	*					
	PM	LOS	B	A	C	A	A	*	A	*				A	
		Delay	13	8	15	9	7	*	7	*				6	
Queue		20'	20'	30'	20'	20'	*	20'	*						

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.

**Year 2042 Design Traffic Peak Hour Operating Conditions
With Two-Way Stop Control**

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S
			Eastbound			Westbound			Northbound			Southbound			LOS & Delay
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
Duplainville Road & Green Road Stop Sign Control (EB/WB)		Lanes->	1	1	1	1	1	1	1	1	1	1	1		
	AM	LOS	C	A	C	A	A	*	A	*				A	
		Delay	21	9	24	9	7	*	7	*				7	
		Queue	35'	20'	30'	20'	20'	*	20'	*					
	MID	LOS	B	A	B	A	A	*	A	*				A	
		Delay	12	8	12	8	7	*	7	*				5	
		Queue	20'	20'	20'	20'	20'	*	20'	*					
	PM	LOS	C	A	C	A	A	*	A	*				A	
		Delay	15	9	18	9	7	*	7	*				7	
		Queue	20'	20'	45'	20'	20'	*	20'	*					

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.

Year 2022 Opening Traffic Peak Hour Operating Conditions
With All-Way Stop Control

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S
			Eastbound			Westbound			Northbound		Southbound				LOS & Delay
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
Duplainville Road & Green Road <i>All-Way Stop Control</i>		Lanes->	1	1	1	1	1	1	1	1	1	1	1		
	AM	LOS	A	A	A	A	B	A	B	A		A			
		Delay	9	8	9	8	10	7	10	7					
		Queue	20'	20'	20'	20'	30'	20'	30'	20'					
	MID	LOS	A	A	A	A	A	A	A	A		A			
		Delay	8	7	9	7	9	7	9	7					
		Queue	20'	20'	20'	20'	20'	20'	20'	20'					
	PM	LOS	A	A	B	A	B	A	B	A		A			
		Delay	9	8	10	8	10	7	10	7					
		Queue	20'	20'	20'	20'	20'	20'	20'	20'					

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
 Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.

Year 2042 Design Traffic Peak Hour Operating Conditions
With All-Way Stop Control

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S
			Eastbound			Westbound			Northbound		Southbound				LOS & Delay
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
Duplainville Road & Green Road <i>All-Way Stop Control</i>		Lanes->	1	1	1	1	1	1	1	1	1	1			
	AM	LOS	B	A	B	A	B	A	B	A	B	A		B	
		Delay	10	8	10	8	12	8	11	8	11	8		11	
		Queue	20'	20'	20'	20'	45'	20'	40'	20'	40'	20'			
	MID	LOS	A	A	A	A	A	A	A	A	A	A		A	
		Delay	9	7	9	7	9	8	9	8	9	7		8	
		Queue	20'	20'	20'	20'	20'	20'	20'	20'	20'	20'			
	PM	LOS	B	A	B	A	B	A	B	A	B	A		B	
		Delay	10	8	11	8	10	8	11	8	11	8		10	
		Queue	20'	20'	30'	20'	30'	20'	35'	20'	35'	20'			

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
 Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.

APPENDIX

Traffic Counts

Intersection Traffic Volume Report

Count Basics		Version 2013.14.1	Page 1 of 13
Start Date:	Thursday, July 8, 2021	Weekday	Schools Not in Session
Total Number of Hours Counted:	13	Non-Holiday	No Special Events

Base Information, Observed (13) Hour and Estimated (24) Hour Volume Summaries

Intersection of: Duplainville Road and Green Road

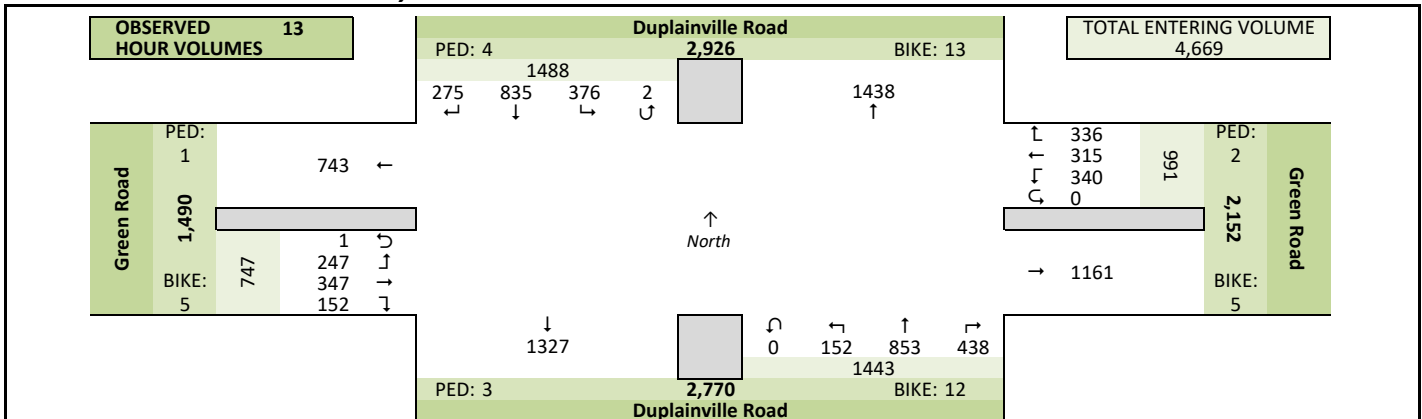
Site Information

Municipality	City of Pewaukee		
County	Waukesha	WisDOT Region	SE
Traffic Control	Partial Stop Control		
Roadway Names	North Direction		↑
North Leg	Duplainville Road		
East Leg	Green Road		
South Leg	Duplainville Road		
West Leg	Green Road		
Special Considerations			
Schools	Not in Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
	Pre-school children	None	
	Elementry school age children	None	
	Visually impaired (white cane/helper dog)	None	
	Elderly/disabled (except wheelchairs)	None	
	Wheelchairs/electric scooters	None	
	Other (describe)	None	

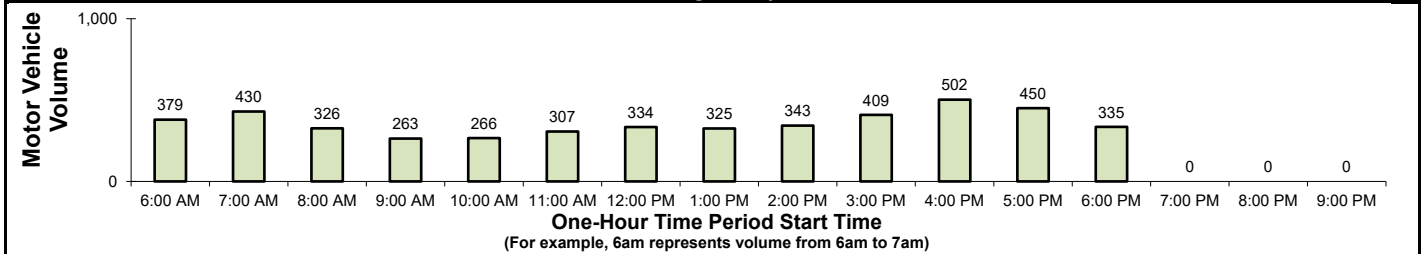
Count Information

Hrs Counted: 6:00 AM-7:00 PM						
1st Day of Count		Thursday, July 8, 2021		Weather		
AM Peak Period		Thursday, July 8, 2021		Clear & Dry		
Midday Peak Period		Thursday, July 8, 2021		Clear & Dry		
PM Peak Period		Thursday, July 8, 2021		Clear & Dry		
Calculated Peak Hours						
	AM	7:00-8:00am	MD	11:30-12:30am	PM	4:30-5:30pm
Peak Hours Selected for Analysis						
	AM	7:00-8:00am	MD	11:30-12:30am	PM	4:30-5:30pm
Daily/Seasonal Adjustment Group			(2) Urban Arterials & Collectors			
Count Expansion Group			(2) Urban Arterials & Collectors			
Daily/Seasonal Adjustment Factor			0.925	Count Expansion Factor		1.178
Company Name			TADI, Inc.		Manual Adj.	1.000
Observers	AM Peak Period		Amy Scheuerlein			
	Midday Peak Period		Lee Oestreich			
	PM Peak Period		Larry Numerich			
Comments	2019 DOT Seasonal Factors					

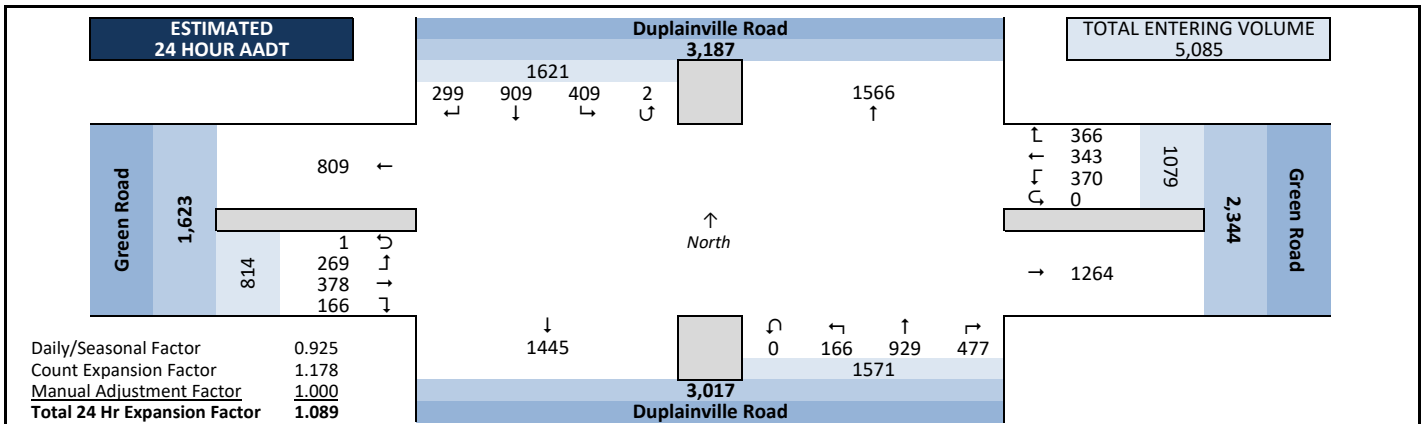
Observed 13 Hour Volume Summary



Total Entering Hourly Volume



Estimated 24 Hour AADT



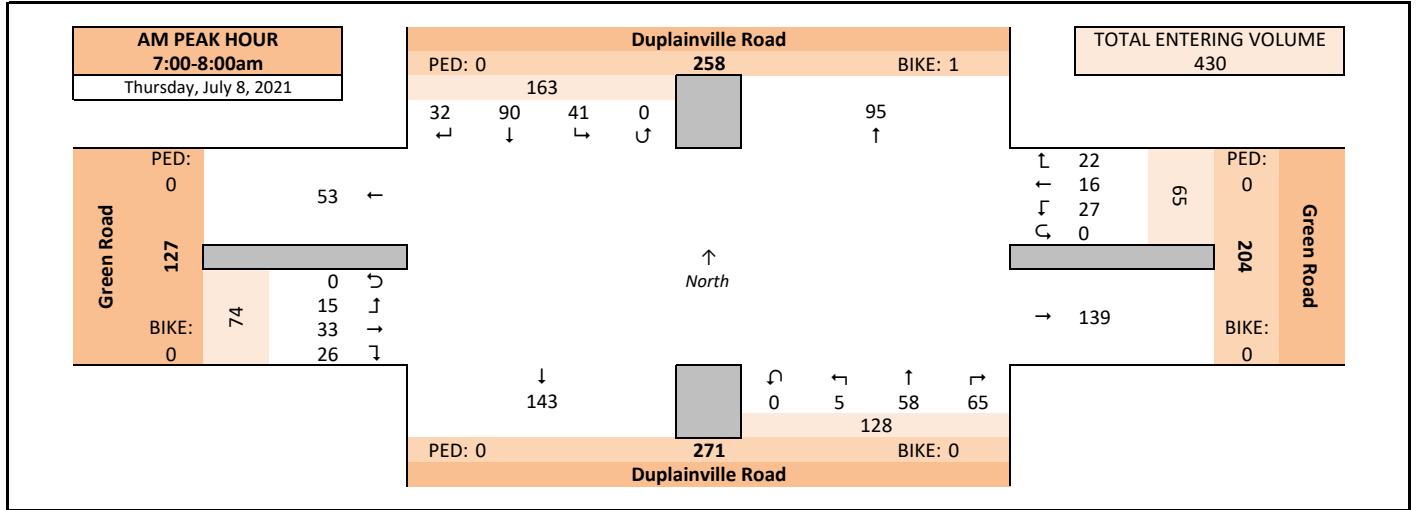
Intersection Traffic Volume Report

Count Basics		Page 2 of 13	
Start Date:	Thursday, July 8, 2021	Weekday	Schools Not in Session
Total Number of Hours Counted:	13	Non-Holiday	No Special Events

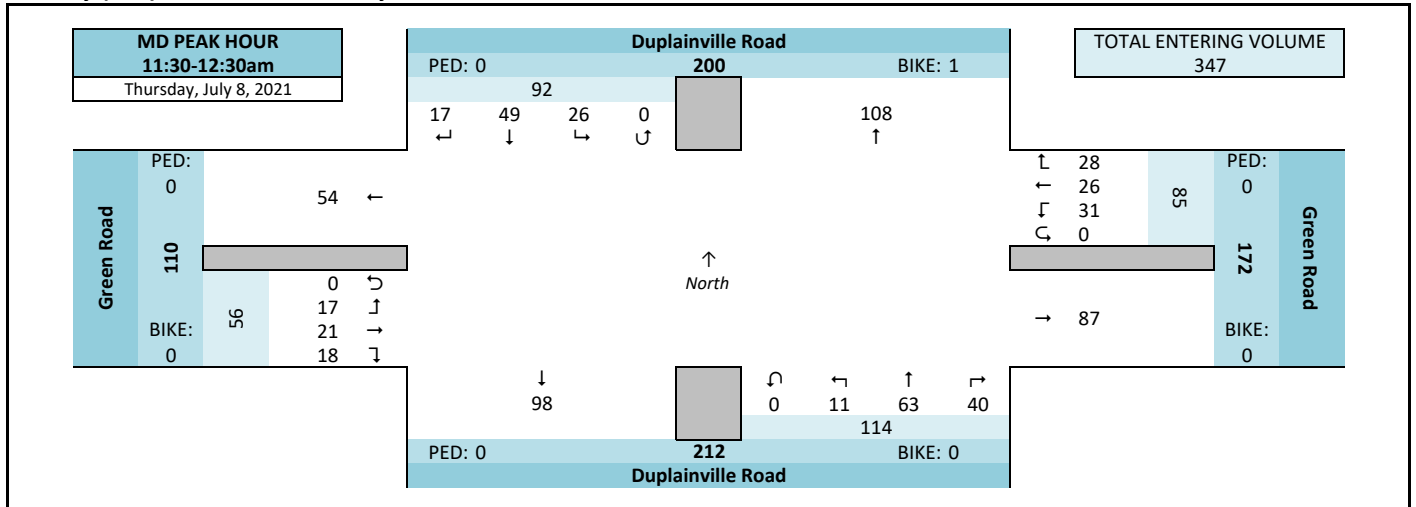
Peak Hour Volume Graphical Summary

Duplainville Road and Green Road

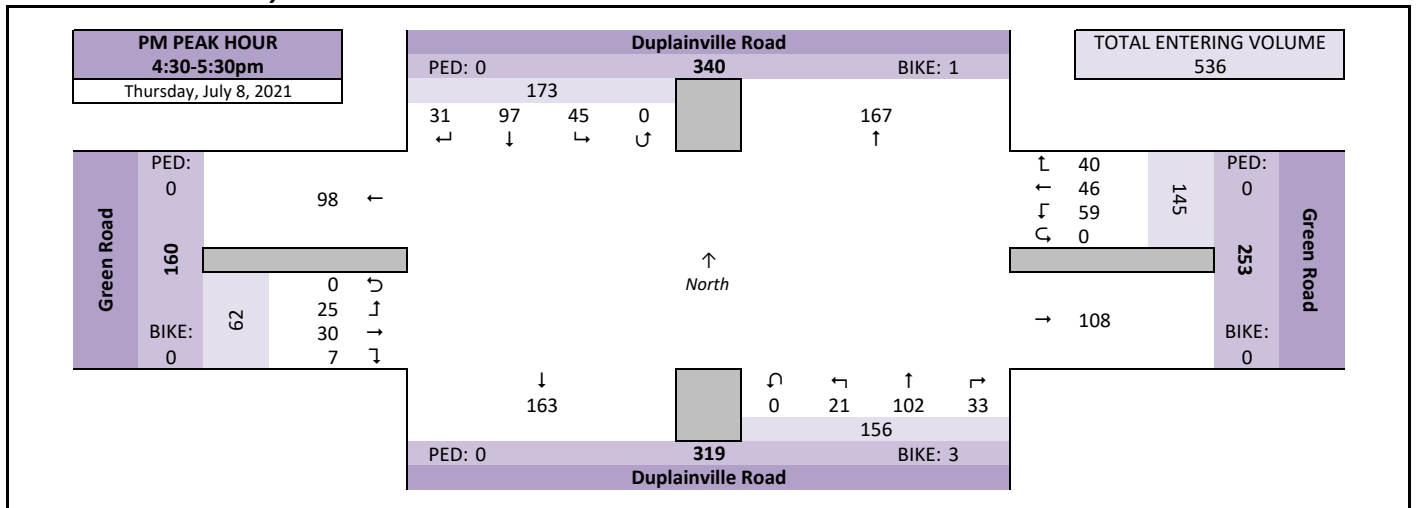
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics			Page 3 of 13
Start Date:	Thursday, July 8, 2021	Weekday	Schools Not in Session
Total Number of Hours Counted:	13	Non-Holiday	No Special Events

Peak Hour Volume Summary

Duplainville Road and Green Road

Peak Hour Volumes, Truck Percentages, and PHFs

Thursday, July 8, 2021		↙					←					↗					→					
AM Peak Hour	AM Peak Hour	From North					From East					From South					From West					
	Start Time	Duplainville Road					Green Road					Duplainville Road					Green Road					
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
	7:00 AM	9	26	13	0	48	3	1	6	0	10	11	19	1	0	31	5	5	3	0	13	102
	7:15 AM	7	17	5	0	29	2	3	6	0	11	18	13	1	0	32	3	5	3	0	11	83
	7:30 AM	7	20	10	0	37	7	5	11	0	23	15	10	2	0	27	8	11	2	0	21	108
	7:45 AM	9	27	13	0	49	10	7	4	0	21	21	16	1	0	38	10	12	7	0	29	137
	Peak Hour Volume	32	90	41	0	163	22	16	27	0	65	65	58	5	0	128	26	33	15	0	74	430
	Rounded Hourly Volume	30	90	40	0	160	20	15	25	0	60	65	60	5	0	130	25	35	15	0	75	425
	% Single Unit Trucks	0.0	10.0	2.4	0.0	6.1	0.0	12.5	25.9	0.0	13.8	3.1	6.9	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	5.8
% Heavy Trucks	0.0	2.2	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.9	
% Trucks (Total)	0.0	12.2	2.4	0.0	7.4	0.0	12.5	25.9	0.0	13.8	3.1	10.3	0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0	6.7	
Peak Hour Factor (PHF)	0.89	0.83	0.79	0.00	0.83	0.55	0.57	0.61	0.00	0.71	0.77	0.76	0.62	0.00	0.84	0.65	0.69	0.54	0.00	0.64	0.78	

Thursday, July 8, 2021		↓ From North					← From East					↑ From South					→ From West					Totals
Midday (MD) Peak Hour	MD Peak Hour	Duplainville Road					Green Road					Duplainville Road					Green Road					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
	11:30 AM	9	9	4	0	22	2	5	8	0	15	13	12	1	0	26	3	5	5	0	13	76
	11:45 AM	4	12	8	0	24	14	6	9	0	29	8	16	4	0	28	5	6	3	0	14	95
	12:00 PM	3	11	6	0	20	8	6	7	0	21	12	17	5	0	34	8	3	5	0	16	91
	12:15 PM	1	17	8	0	26	4	9	7	0	20	7	18	1	0	26	2	7	4	0	13	85
	Peak Hour Volume	17	49	26	0	92	28	26	31	0	85	40	63	11	0	114	18	21	17	0	56	347
	Rounded Hourly Volume	15	50	25	0	90	30	25	30	0	85	40	65	10	0	115	20	20	15	0	55	345
	% Single Unit Trucks	0.0	14.3	7.7	0.0	9.8	0.0	3.8	3.2	0.0	2.4	12.5	9.5	0.0	0.0	9.6	5.6	0.0	0.0	0.0	1.8	6.6
	% Heavy Trucks	0.0	6.1	0.0	0.0	3.3	3.6	0.0	3.2	0.0	2.4	5.0	3.2	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	2.6
% Trucks (Total)	0.0	20.4	7.7	0.0	13.0	3.6	3.8	6.5	0.0	4.7	17.5	12.7	0.0	0.0	13.2	5.6	0.0	0.0	0.0	1.8	9.2	
Peak Hour Factor (PHF)	0.47	0.72	0.81	0.00	0.88	0.50	0.72	0.86	0.00	0.73	0.77	0.87	0.55	0.00	0.84	0.56	0.75	0.85	0.00	0.87	0.91	

Thursday, July 8, 2021		↓					←					↑					→					
		From North					From East					From South					From West					
PM Peak Hour	PM Peak Hour	Duplainville Road					Green Road					Duplainville Road					Green Road					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
	4:30 PM	8	21	15	0	44	11	19	20	0	50	6	24	6	0	36	2	6	7	0	15	145
	4:45 PM	10	28	16	0	54	8	6	11	0	25	9	24	6	0	39	3	9	4	0	16	134
	5:00 PM	8	20	4	0	32	5	10	13	0	28	12	37	6	0	55	1	6	7	0	14	129
	5:15 PM	5	28	10	0	43	16	11	15	0	42	6	17	3	0	26	1	9	7	0	17	128
	Peak Hour Volume	31	97	45	0	173	40	46	59	0	145	33	102	21	0	156	7	30	25	0	62	536
	Rounded Hourly Volume	30	95	45	0	170	40	45	60	0	145	35	100	20	0	155	5	30	25	0	60	530
	% Single Unit Trucks	0.0	7.2	0.0	0.0	4.0	0.0	0.0	1.7	0.0	0.7	3.0	6.9	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	3.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.7	0.0	1.0	0.0	0.0	0.6	0.0	3.3	0.0	0.0	1.6	0.6
% Trucks (Total)	0.0	7.2	0.0	0.0	4.0	0.0	0.0	3.4	0.0	1.4	3.0	7.8	0.0	0.0	5.8	0.0	3.3	0.0	0.0	1.6	3.5	
Peak Hour Factor (PHF)	0.77	0.87	0.70	0.00	0.80	0.62	0.61	0.74	0.00	0.72	0.69	0.69	0.87	0.00	0.71	0.58	0.83	0.89	0.00	0.91	0.92	

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing 			Crossing 			Crossing 			Crossing 			Total Ped & Bike Volume
		North Approach			East Approach			South Approach			West Approach			
		Duplainville Road			Green Road			Duplainville Road			Green Road			
15-Minute Start Time		Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	
AM	7:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	
	Total	0	1	1	0	0	0	0	0	0	0	0	1	
MD	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	
	12:00 PM	0	1	1	0	0	0	0	0	0	0	0	1	
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	Total	0	1	1	0	0	0	0	0	0	0	0	1	
PM	4:30 PM	0	0	0	0	0	0	0	1	1	0	0	1	
	4:45 PM	0	0	0	0	0	0	0	1	1	0	0	1	
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 PM	0	1	1	0	0	0	0	1	1	0	0	2	
	Total	0	1	1	0	0	0	0	3	3	0	0	4	

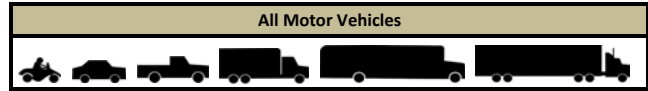
Intersection Traffic Volume Report

Count Basics			Page 4 of 13	
Start Date:	Thursday, July 8, 2021	Weekday	Schools Not in Session	
Total Number of Hours Counted:	13	Non-Holiday	No Special Events	

Hourly Volume Summary - Motor Vehicle Data

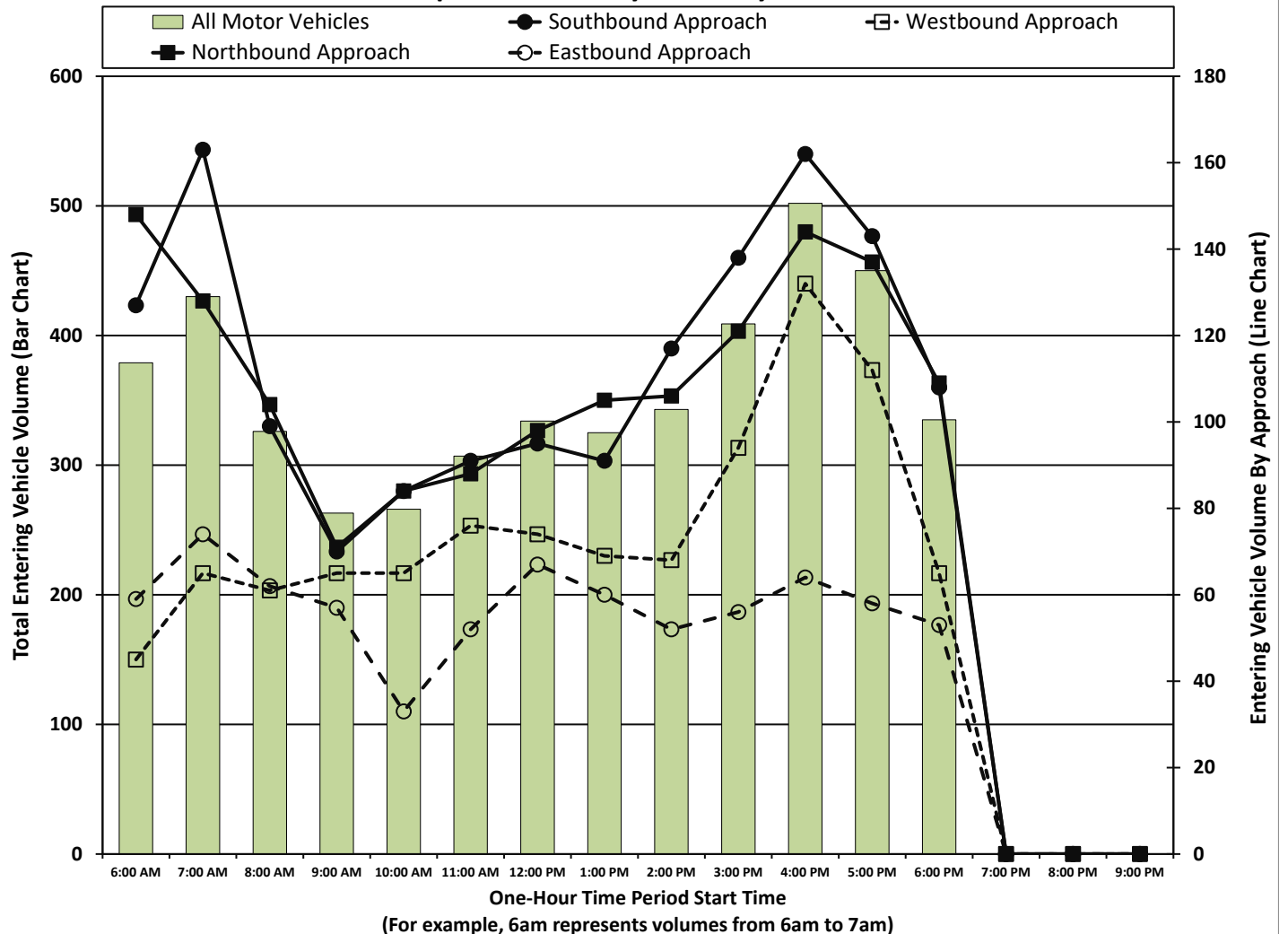
Duplainville Road and Green Road

One-Hour Motor Vehicle Data



One-Hour Time Period	Start Time	From North Duplainville Road					From East Green Road					From South Duplainville Road					From West Green Road					Total Vehicle Volume	Directional Volume Totals	
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total			
																							E/W	N/S
AM	6:00 AM	10	93	24	0	127	27	9	9	0	45	35	105	8	0	148	15	18	26	0	59	379	104	275
	7:00 AM	32	90	41	0	163	22	16	27	0	65	65	58	5	0	128	26	33	15	0	74	430	139	291
	8:00 AM	19	47	33	0	99	20	12	29	0	61	45	50	9	0	104	11	32	19	0	62	326	123	203
	9:00 AM	19	27	24	0	70	24	25	16	0	65	32	33	6	0	71	12	31	14	0	57	263	122	141
MD	10:00 AM	15	42	27	0	84	16	23	26	0	65	23	50	11	0	84	6	16	11	0	33	266	98	168
	11:00 AM	24	45	22	0	91	23	21	32	0	76	26	48	14	0	88	10	23	19	0	52	307	128	179
	12:00 PM	13	51	31	0	95	22	31	21	0	74	30	59	9	0	98	18	34	15	0	67	334	141	193
	1:00 PM	16	49	25	1	91	25	26	18	0	69	35	55	15	0	105	20	26	13	1	60	325	129	196
PM	2:00 PM	22	66	29	0	117	26	19	23	0	68	29	67	10	0	106	7	28	17	0	52	343	120	223
	3:00 PM	24	83	31	0	138	24	34	36	0	94	29	74	18	0	121	6	24	26	0	56	409	150	259
	4:00 PM	34	78	50	0	162	40	42	50	0	132	33	82	29	0	144	9	29	26	0	64	502	196	306
	5:00 PM	24	93	26	0	143	34	41	37	0	112	32	93	12	0	137	4	26	28	0	58	450	170	280
	6:00 PM	23	71	13	1	108	33	16	16	0	65	24	79	6	0	109	8	27	18	0	53	335	118	217
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Totals	275	835	376	2	1488	336	315	340	0	991	438	853	152	0	1443	152	347	247	1	747	4669	1738	2931

Graphical Summary of Hourly Volumes



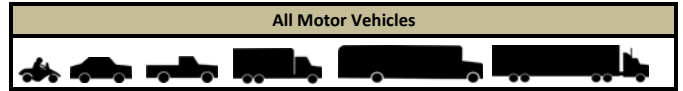
Intersection Traffic Volume Report

15-Minute Motor Vehicle Data

Duplainville Road and Green Road

15-Minute Motor Vehicle Data

Count Basics			Page 5 of 13	
Start Date:	Thursday, July 8, 2021	Weekday	Schools Not in Session	
Total Number of Hours Counted:	13	Non-Holiday	No Special Events	



15-Minute Time Period Start Time	From North					From East					From South					From West					15-Min Totals	Hourly Sum	PHF	
	Duplainville Road					Green Road					Duplainville Road					Green Road								
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total				
AM Peak Period	6:00 AM	2	17	7	0	26	4	1	1	0	6	5	14	2	0	21	3	2	3	0	8	61	379	0.71
	6:15 AM	2	25	4	0	31	7	1	3	0	11	6	28	2	0	36	2	2	4	0	8	86	420	0.78
	6:30 AM	2	23	5	0	30	7	2	1	0	10	11	29	1	0	41	3	6	8	0	17	98	417	0.78
	6:45 AM	4	28	8	0	40	9	5	4	0	18	13	34	3	0	50	7	8	11	0	26	134	427	0.80
	7:00 AM	9	26	13	0	48	3	1	6	0	10	11	19	1	0	31	5	5	3	0	13	102	430	0.78
	7:15 AM	7	17	5	0	29	2	3	6	0	11	18	13	1	0	32	3	5	3	0	11	83	413	0.75
	7:30 AM	7	20	10	0	37	7	5	11	0	23	15	10	2	0	27	8	11	2	0	21	108	412	0.75
	7:45 AM	9	27	13	0	49	10	7	4	0	21	21	16	1	0	38	10	12	7	0	29	137	377	0.69
	8:00 AM	6	14	9	0	29	3	3	4	0	10	13	14	2	0	29	3	10	4	0	17	85	326	0.95
	8:15 AM	5	8	5	0	18	3	1	10	0	14	11	18	2	0	31	2	9	8	0	19	82	311	0.90
	8:30 AM	4	14	7	0	25	7	3	5	0	15	11	9	1	0	21	5	4	3	0	12	73	299	0.87
	8:45 AM	4	11	12	0	27	7	5	10	0	22	10	9	4	0	23	1	9	4	0	14	86	301	0.88
Midday Peak Period	9:00 AM	4	8	6	0	18	6	5	3	0	14	6	10	2	0	18	3	12	5	0	20	70	263	0.88
	9:15 AM	5	7	5	0	17	11	4	6	0	21	6	11	1	0	18	2	6	6	0	14	70	238	0.79
	9:30 AM	4	11	7	0	22	5	7	7	0	19	14	8	3	0	25	4	4	1	0	9	75	233	0.78
	9:45 AM	6	1	6	0	13	2	9	0	0	11	6	4	0	0	10	3	9	2	0	14	48	248	0.69
	10:00 AM	2	9	5	0	16	4	4	5	0	13	2	7	2	0	11	0	4	1	0	5	45	266	0.74
	10:15 AM	2	7	9	0	18	3	6	8	0	17	4	14	3	0	21	3	2	4	0	9	65	282	0.78
	10:30 AM	2	19	8	0	29	4	5	7	0	16	11	19	3	0	33	2	7	3	0	12	90	292	0.81
	10:45 AM	9	7	5	0	21	5	8	6	0	19	6	10	3	0	19	1	3	3	0	7	66	278	0.91
	11:00 AM	4	12	2	0	18	1	7	10	0	18	1	10	3	0	14	1	6	4	0	11	61	307	0.81
	11:15 AM	7	12	8	0	27	6	3	5	0	14	4	10	6	0	20	1	6	7	0	14	75	337	0.89
	11:30 AM	9	9	4	0	22	2	5	8	0	15	13	12	1	0	26	3	5	5	0	13	76	347	0.91
	11:45 AM	4	12	8	0	24	14	6	9	0	29	8	16	4	0	28	5	6	3	0	14	95	343	0.90
PM Peak Period	12:00 PM	3	11	6	0	20	8	6	7	0	21	12	17	5	0	34	8	3	5	0	16	91	334	0.92
	12:15 PM	1	17	8	0	26	4	9	7	0	20	7	18	1	0	26	2	7	4	0	13	85	311	0.90
	12:30 PM	3	9	8	0	20	4	5	2	0	11	5	13	2	0	20	5	12	4	0	21	72	323	0.83
	12:45 PM	6	14	9	0	29	6	11	5	0	22	6	11	1	0	18	3	12	2	0	17	86	337	0.87
	1:00 PM	5	7	5	0	17	3	7	2	0	12	7	16	3	0	26	5	6	2	0	13	68	325	0.84
	1:15 PM	5	14	5	0	24	10	5	5	0	20	11	18	3	0	32	6	10	4	1	21	97	360	0.87
	1:30 PM	3	15	7	0	25	3	6	10	0	19	13	12	5	0	30	4	4	4	0	12	86	354	0.86
	1:45 PM	3	13	8	1	25	9	8	1	0	18	4	9	4	0	17	5	6	3	0	14	74	345	0.84
	2:00 PM	6	21	10	0	37	7	8	8	0	23	7	18	3	0	28	1	8	6	0	15	103	343	0.83
	2:15 PM	7	18	8	0	33	4	4	4	0	12	7	24	1	0	32	2	7	5	0	14	91	341	0.84
	2:30 PM	3	10	6	0	19	13	4	6	0	23	12	12	3	0	27	2	4	2	0	8	77	356	0.84
	2:45 PM	6	17	5	0	28	2	3	5	0	10	3	13	3	0	19	2	9	4	0	15	72	369	0.87
3:00 PM	6	21	4	0	31	7	12	8	0	27	8	15	3	0	26	0	11	6	0	17	101	409	0.91	
3:15 PM	8	18	7	0	33	8	8	10	0	26	9	21	3	0	33	3	3	8	0	14	106	428	0.89	
3:30 PM	6	24	6	0	36	6	9	10	0	25	4	7	4	0	15	3	5	6	0	14	90	425	0.89	
3:45 PM	4	20	14	0	38	3	5	8	0	16	8	31	8	0	47	0	5	6	0	11	112	480	0.83	
4:00 PM	11	15	8	0	34	9	9	10	0	28	11	18	11	0	40	4	6	8	0	18	120	502	0.87	
4:15 PM	5	14	11	0	30	12	8	9	0	29	7	16	6	0	29	0	8	7	0	15	103	511	0.88	
4:30 PM	8	21	15	0	44	11	19	20	0	50	6	24	6	0	36	2	6	7	0	15	145	536	0.92	
4:45 PM	10	28	16	0	54	8	6	11	0	25	9	24	6	0	39	3	9	4	0	16	134	496	0.93	
5:00 PM	8	20	4	0	32	5	10	13	0	28	12	37	6	0	55	1	6	7	0	14	129	450	0.87	
5:15 PM	5	28	10	0	43	16	11	15	0	42	6	17	3	0	26	1	9	7	0	17	128	406	0.79	
5:30 PM	6	30	5	0	41	8	10	4	0	22	8	19	2	0	29	2	9	2	0	13	105	370	0.88	
5:45 PM	5	15	7	0	27	5	10	5	0	20	6	20	1	0	27	0	2	12	0	14	88	336	0.91	
6:00 PM	4	16	2	0	22	3	2	6	0	11	6	25	1	0	32	2	16	2	0	20	85	335	0.91	
6:15 PM	6	20	6	0	32	13	4	3	0	20	9	19	2	0	30	2	3	5	0	10	92			
6:30 PM	7	14	1	1	23	9	9	2	0	20	4	16	1	0	21	0	3	4	0	7	71			
6:45 PM	6	21	4	0	31	8	1	5	0	14	5	19	2	0	26	4	5	7	0	16	87			
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Totals		275	835	376	2	1488	336	315	340	0	991	438	853	152	0	1443	152	347	247	1	747	4669		

Intersection Traffic Volume Report

15-Minute Automobile Data

Duplainville Road and Green Road

Count Basics			Page 6 of 13
Start Date:	Thursday, July 8, 2021	Weekday	Schools Not in Session
Total Number of Hours Counted:	13	Non-Holiday	No Special Events

Automobiles (Cars, Light Trucks, & Motorcycles)		
		

15-Minute Automobile Data

15-Minute Time Period Start Time	From North						From East					From South					From West					15-Min Totals	Hourly Sum
	Duplainville Road						Green Road					Duplainville Road					Green Road						
	Right	Thru	Left	U-Tn	Total		Right	Thru	Left	U-Tn	Total		Right	Thru	Left	U-Tn	Total		Right	Thru	Left		
AM Peak Period	6:00 AM	2	12	7	0	21	4	1	1	0	6	5	14	2	0	21	3	2	3	0	8	56	339
	6:15 AM	2	14	3	0	19	7	1	3	0	11	6	26	2	0	34	2	2	4	0	8	72	374
	6:30 AM	2	15	5	0	22	7	2	1	0	10	11	26	1	0	38	3	6	8	0	17	87	382
	6:45 AM	4	22	8	0	34	9	5	3	0	17	13	31	3	0	47	7	8	11	0	26	124	396
	7:00 AM	9	22	13	0	44	3	1	2	0	6	11	16	1	0	28	5	5	3	0	13	91	401
	7:15 AM	7	15	5	0	27	2	3	5	0	10	18	13	1	0	32	3	5	3	0	11	80	388
	7:30 AM	7	18	10	0	35	7	4	10	0	21	14	8	2	0	24	8	11	2	0	21	101	374
	7:45 AM	9	24	12	0	45	10	6	3	0	19	20	15	1	0	36	10	12	7	0	29	129	339
	8:00 AM	6	12	9	0	27	3	3	4	0	10	12	10	2	0	24	3	10	4	0	17	78	287
	8:15 AM	5	6	4	0	15	3	1	7	0	11	11	10	2	0	23	2	9	6	0	17	66	270
	8:30 AM	4	13	6	0	23	6	3	5	0	14	9	7	1	0	17	5	4	3	0	12	66	263
	8:45 AM	4	9	11	0	24	4	5	10	0	19	9	8	4	0	21	1	8	4	0	13	77	257
9:00 AM	3	6	6	0	15	6	4	3	0	13	5	7	2	0	14	3	12	4	0	19	61	220	
9:15 AM	5	4	4	0	13	9	3	6	0	18	6	9	1	0	16	1	6	5	0	12	59	196	
9:30 AM	3	8	6	0	17	3	7	6	0	16	10	6	3	0	19	3	4	1	0	8	60	194	
9:45 AM	6	1	5	0	12	1	8	0	0	9	5	2	0	0	7	2	8	2	0	12	40	205	
Midday Peak Period	10:00 AM	2	5	5	0	12	3	4	5	0	12	2	4	2	0	8	0	4	1	0	5	37	224
	10:15 AM	2	7	9	0	18	3	6	8	0	17	4	9	2	0	15	1	2	4	0	7	57	240
	10:30 AM	2	11	6	0	19	4	5	6	0	15	7	15	3	0	25	2	7	3	0	12	71	251
	10:45 AM	9	6	2	0	17	5	6	6	0	17	6	9	3	0	18	1	3	3	0	7	59	246
	11:00 AM	4	10	2	0	16	1	7	8	0	16	1	8	2	0	11	1	6	3	0	10	53	272
	11:15 AM	6	10	8	0	24	5	3	3	0	11	4	9	6	0	19	1	6	7	0	14	68	305
	11:30 AM	9	5	4	0	18	2	5	7	0	14	8	12	1	0	21	3	5	5	0	13	66	315
	11:45 AM	4	8	7	0	19	13	5	9	0	27	7	14	4	0	25	5	6	3	0	14	85	314
	12:00 PM	3	10	6	0	19	8	6	6	0	20	12	15	5	0	32	7	3	5	0	15	86	305
	12:15 PM	1	16	7	0	24	4	9	7	0	20	6	14	1	0	21	2	7	4	0	13	78	282
	12:30 PM	3	8	8	0	19	4	5	2	0	11	5	8	2	0	15	5	12	3	0	20	65	284
	12:45 PM	6	11	8	0	25	5	11	4	0	20	6	8	1	0	15	2	12	2	0	16	76	294
1:00 PM	5	7	5	0	17	3	7	2	0	12	6	14	2	0	22	4	6	2	0	12	63	286	
1:15 PM	5	9	5	0	19	6	4	5	0	15	10	14	3	0	27	4	10	4	1	19	80	310	
1:30 PM	3	10	5	0	18	3	6	9	0	18	12	11	4	0	27	4	4	4	0	12	75	308	
1:45 PM	3	12	8	1	24	9	8	1	0	18	3	5	4	0	12	5	6	3	0	14	68	306	
PM Peak Period	2:00 PM	6	16	9	0	31	7	7	7	0	21	4	15	3	0	22	1	7	5	0	13	87	303
	2:15 PM	7	12	8	0	27	4	3	2	0	9	7	21	1	0	29	2	6	5	0	13	78	308
	2:30 PM	3	10	6	0	19	12	3	6	0	21	10	12	3	0	25	2	4	2	0	8	73	326
	2:45 PM	6	14	4	0	24	1	3	4	0	8	3	12	3	0	18	2	9	4	0	15	65	337
	3:00 PM	6	19	4	0	29	7	12	6	0	25	7	14	3	0	24	0	9	5	0	14	92	379
	3:15 PM	8	14	7	0	29	7	8	9	0	24	9	18	3	0	30	3	3	7	0	13	96	401
	3:30 PM	6	22	5	0	33	6	9	8	0	23	4	6	4	0	14	3	5	6	0	14	84	402
	3:45 PM	4	20	14	0	38	3	5	8	0	16	7	29	7	0	43	0	5	5	0	10	107	458
	4:00 PM	11	14	8	0	33	8	9	9	0	26	10	16	11	0	37	4	6	8	0	18	114	482
	4:15 PM	5	12	10	0	27	12	8	9	0	29	6	15	6	0	27	0	7	7	0	14	97	492
	4:30 PM	8	20	15	0	43	11	19	19	0	49	6	22	6	0	34	2	5	7	0	14	140	517
	4:45 PM	10	26	16	0	52	8	6	10	0	24	9	24	6	0	39	3	9	4	0	16	131	480
	5:00 PM	8	19	4	0	31	5	10	13	0	28	11	34	6	0	51	1	6	7	0	14	124	432
	5:15 PM	5	25	10	0	40	16	11	15	0	42	6	14	3	0	23	1	9	7	0	17	122	384
	5:30 PM	6	29	5	0	40	8	10	4	0	22	7	19	2	0	28	2	9	2	0	13	103	348
	5:45 PM	4	14	7	0	25	5	10	5	0	20	6	17	1	0	24	0	2	12	0	14	83	313
	6:00 PM	4	15	2	0	21	3	2	6	0	11	6	19	1	0	26	2	14	2	0	18	76	316
	6:15 PM	6	19	6	0	31	11	2	3	0	16	9	18	2	0	29	2	3	5	0	10	86	
	6:30 PM	7	13	1	1	22	9	8	2	0	19	4	15	1	0	20	0	3	4	0	7	68	
	6:45 PM	6	20	4	0	30	8	1	5	0	14	5	19	2	0	26	4	5	7	0	16	86	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		271	699	354	2	1326	313	300	307	0	920	400	736	147	0	1283	142	337	237	1	717	4246	

Peak Hour Automobile Volume Summary

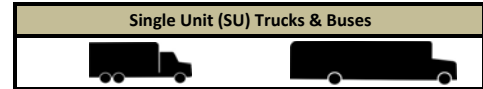
Hourly Time Period Start Time	↓ From North					← From East					↑ From South					→ From West					Total Hourly Volume
	Duplainville Road					Green Road					Duplainville Road					Green Road					
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM 7:00 AM	32	79	40	0	151	22	14	20	0	56	63	52	5	0	120	26	33	15	0	74	401
AM 11:30 AM	17	39	24	0	80	27	25	29	0	81	33	55	11	0	99	17	21	17	0	55	315
PM 4:30 PM	31	90	45	0	166	40	46	57	0	143	32	94	21	0	147	7	29	25	0	61	517

Intersection Traffic Volume Report

15-Minute Single Unit (SU) Truck & Bus Data

Count Basics			Page 7 of 13
Start Date:	Thursday, July 8, 2021	Weekday	Schools Not in Session
Total Number of Hours Counted:	13	Non-Holiday	No Special Events

Duplainville Road and Green Road



15-Minute Single Unit (SU) Truck & Bus Data

15-Minute Time Period Start Time		From North					From East					From South					From West					15-Min Totals	Hourly Sum
		Duplainville Road					Green Road					Duplainville Road					Green Road						
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	38
	6:15 AM	0	10	1	0	11	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	13	41
	6:30 AM	0	8	0	0	8	0	0	0	0	0	3	0	0	3	0	0	0	0	0	11	31	
	6:45 AM	0	5	0	0	5	0	0	1	0	1	3	0	0	3	0	0	0	0	0	9	27	
	7:00 AM	0	2	0	0	2	0	0	4	0	4	2	0	0	2	0	0	0	0	0	8	25	
	7:15 AM	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3	22	
	7:30 AM	0	2	0	0	2	0	1	1	0	2	1	2	0	0	3	0	0	0	0	7	33	
	7:45 AM	0	3	1	0	4	0	1	1	0	2	1	0	0	0	1	0	0	0	0	7	33	
	8:00 AM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	5	32	
	8:15 AM	0	2	1	0	3	0	0	1	0	1	0	8	0	0	8	0	0	2	0	14	34	
Midday Peak Period	8:30 AM	0	1	1	0	2	1	0	0	0	1	2	2	0	0	4	0	0	0	0	7	30	
	8:45 AM	0	1	1	0	2	2	0	0	0	2	0	1	0	0	1	0	1	0	0	6	36	
	9:00 AM	1	1	0	0	2	0	1	0	0	1	1	2	0	0	3	0	0	1	0	7	38	
	9:15 AM	0	2	1	0	3	2	1	0	0	3	0	2	0	0	2	1	0	1	0	10	37	
	9:30 AM	1	2	1	0	4	2	0	1	0	3	4	2	0	0	6	0	0	0	0	13	35	
	9:45 AM	0	0	1	0	1	1	1	0	0	2	1	2	0	0	3	1	1	0	0	8	39	
	10:00 AM	0	4	0	0	4	1	0	0	0	1	0	1	0	0	1	0	0	0	0	6	38	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	5	1	0	0	6	2	0	0	0	8	38	
	10:30 AM	0	7	2	0	9	0	0	1	0	1	4	3	0	0	7	0	0	0	0	17	36	
	10:45 AM	0	1	3	0	4	0	2	0	0	2	0	1	0	0	1	0	0	0	0	7	27	
PM Peak Period	11:00 AM	0	1	0	0	1	0	0	2	0	2	0	1	1	0	2	0	0	1	0	6	25	
	11:15 AM	1	2	0	0	3	1	0	2	0	3	0	0	0	0	0	0	0	0	0	6	22	
	11:30 AM	0	3	0	0	3	0	0	1	0	1	4	0	0	0	4	0	0	0	0	8	23	
	11:45 AM	0	2	1	0	3	0	1	0	0	1	0	1	0	0	1	0	0	0	0	5	20	
	12:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	3	21	
	12:15 PM	0	1	1	0	2	0	0	0	0	0	1	4	0	0	5	0	0	0	0	7	23	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	1	0	5	32	
	12:45 PM	0	1	1	0	2	1	0	1	0	2	0	1	0	0	1	1	0	0	0	6	35	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	1	2	1	0	4	1	0	0	0	1	34	
	1:15 PM	0	5	0	0	5	4	1	0	0	5	1	3	0	0	4	2	0	0	0	2	41	
2:00 PM	0	2	2	0	4	0	0	1	0	1	1	1	1	0	3	0	0	0	0	8	37		
2:15 PM	0	1	0	0	1	0	0	0	0	0	1	3	0	0	4	0	0	0	0	5	32		
2:30 PM	0	5	1	0	6	0	1	0	0	1	2	1	0	0	3	0	1	1	0	2	33		
2:45 PM	0	5	0	0	5	0	1	2	0	3	0	3	0	0	3	0	1	0	0	1	29		
3:00 PM	0	0	0	0	0	1	1	0	0	2	1	0	0	0	1	0	0	0	0	3	25		
3:15 PM	0	3	1	0	4	1	0	0	0	1	0	1	0	0	1	0	0	0	0	6	25		
3:30 PM	0	2	0	0	2	0	0	2	0	2	0	1	0	0	1	0	2	1	0	3	22		
3:45 PM	0	4	0	0	4	1	0	1	0	2	0	1	0	0	1	0	0	1	0	1	8	17	
4:00 PM	0	1	0	0	1	0	0	2	0	2	0	0	0	0	0	0	0	0	0	3	13		
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	1	0	1	3	13	
4:30 PM	0	0	0	0	0	1	0	0	0	1	1	1	0	0	2	0	0	1	0	0	3	14	
4:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	16		
5:00 PM	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3	15		
5:15 PM	0	1	0	0	1	0	0	0	0	0	1	2	0	0	3	0	0	0	0	4	16		
5:30 PM	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	6	21		
5:45 PM	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	20		
6:00 PM	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	4	20		
6:15 PM	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	0	2	0	0	2	9	17	
6:30 PM	0	1	0	0	1	1	2	0	0	3	0	1	0	0	1	0	0	0	0	5			
6:45 PM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	2			
7:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Totals		4	111	20	0	135	20	15	26	0	61	30	93	5	0	128	9	9	10	0	28	352	

Peak Hour Single Unit (SU) Truck & Buses Volume Summary

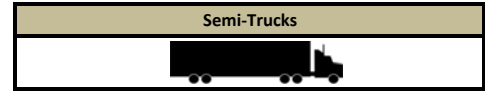
Hourly Time Period Start Time	↓ From North					← From East					↑ From South					→ From West					Total Hourly Volume
	Duplainville Road					Green Road					Duplainville Road					Green Road					
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM 7:00 AM	0	9	1	0	10	0	2	7	0	9	2	4	0	0	6	0	0	0	0	0	25
MD 11:30 AM	0	7	2	0	9	0	1	1	0	2	5	6	0	0	11	1	0	0	0	1	23
PM 4:30 PM	0	7	0	0	7	0	0	1	0	1	1	7	0	0	8	0	0	0	0	0	16

Intersection Traffic Volume Report

15-Minute Semi-Truck Data

Duplainville Road and Green Road

Count Basics			Page 8 of 13
Start Date:	Thursday, July 8, 2021	Weekday	Schools Not in Session
Total Number of Hours Counted:	13	Non-Holiday	No Special Events



15-Minute Semi-Truck Data

15-Minute Time Period Start Time	From North						From East					From South					From West					15-Min Totals	Hourly Sum
	Duplainville Road						Green Road					Duplainville Road					Green Road						
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total			
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	6:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	6:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
	7:00 AM	0	2	0	0	2	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	4
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	5
	8:00 AM	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	7
	8:15 AM	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	2	7
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	8:45 AM	0	1	0	0	1	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	3	8
	9:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	5
	9:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5
	9:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	4
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	4
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	10:30 AM	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	5
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	11:00 AM	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	10
	11:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	10
	11:30 AM	0	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	9
	11:45 AM	0	2	0	0	2	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	5	9
	12:00 PM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2	8
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	12:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	7
	12:45 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4	8
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	9
	1:30 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	9
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	7
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	4	7
	2:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
	2:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	5
	2:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	7
	3:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	8
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2	10
	3:30 PM	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3	10
	3:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2	9
	4:00 PM	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	3	7
	4:15 PM	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5
	4:30 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	2	3
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	2
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	3
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	6:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
	6:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		0	25	2	0	27	3	0	7	0	10	8	24	0	0	32	1	1	0	0	2	71	

Peak Hour Semi-Truck Volume Summary

Hourly Time Period Start Time	From North					From East					From South					From West					Total Hourly Volume
	Duplainville Road					Green Road					Duplainville Road					Green Road					
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM 7:00 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
MD 11:30 AM	0	3	0	0	3	1	0	1	0	2	2	2	0	0	4	0	0	0	0	0	9
PM 4:30 PM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	3

Intersection Traffic Volume Report

Count Basics			Page 9 of 13
Start Date:	Thursday, July 8, 2021	Weekday	Schools Not in Session
Total Number of Hours Counted:	13	Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Duplainville Road and Green Road



15-Minute Heavy Vehicle Data

15-Minute Time Period Start Time		From North					From East					From South					From West					15-Min Totals	Hourly Sum
		Duplainville Road					Green Road					Duplainville Road					Green Road						
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	40
	6:15 AM	0	11	1	0	12	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	14	46
	6:30 AM	0	8	0	0	8	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	11	35
	6:45 AM	0	6	0	0	6	0	0	1	0	1	3	0	0	3	0	0	0	0	0	0	10	31
	7:00 AM	0	4	0	0	4	0	0	4	0	4	3	0	0	3	0	0	0	0	0	0	11	29
	7:15 AM	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3	25
	7:30 AM	0	2	0	0	2	0	1	1	0	2	1	2	0	0	3	0	0	0	0	0	7	38
	7:45 AM	0	3	1	0	4	0	1	1	0	2	1	1	0	0	2	0	0	0	0	0	8	38
	8:00 AM	0	2	0	0	2	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	7	39
	8:15 AM	0	2	1	0	3	0	0	3	0	3	0	8	0	0	8	0	0	2	0	2	16	41
8:30 AM	0	1	1	0	2	1	0	0	0	1	2	2	0	0	4	0	0	0	0	0	7	36	
8:45 AM	0	2	1	0	3	3	0	0	0	3	1	1	0	0	2	0	1	0	0	1	9	44	
9:00 AM	1	2	0	0	3	0	1	0	0	1	1	3	0	0	4	0	0	1	0	1	9	43	
9:15 AM	0	3	1	0	4	2	1	0	0	3	0	2	0	0	2	1	0	1	0	2	11	42	
9:30 AM	1	3	1	0	5	2	0	1	0	3	4	2	0	0	6	1	0	0	0	1	15	39	
9:45 AM	0	0	1	0	1	1	1	0	0	2	1	2	0	0	3	1	1	0	0	2	8	43	
Midday Peak Period	10:00 AM	0	4	0	0	4	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	8	42
	10:15 AM	0	0	0	0	0	0	0	0	0	0	5	1	0	6	2	0	0	0	2	8	42	
	10:30 AM	0	8	2	0	10	0	0	1	0	1	4	4	0	0	8	0	0	0	0	0	19	41
	10:45 AM	0	1	3	0	4	0	2	0	2	0	1	0	0	1	0	0	0	0	0	7	32	
	11:00 AM	0	2	0	0	2	0	2	0	2	0	2	1	0	3	0	0	1	0	1	8	35	
	11:15 AM	1	2	0	0	3	1	0	2	0	3	0	1	0	0	1	0	0	0	0	0	7	32
	11:30 AM	0	4	0	0	4	0	0	1	0	1	5	0	0	0	5	0	0	0	0	0	10	32
	11:45 AM	0	4	1	0	5	1	1	0	0	2	1	2	0	0	3	0	0	0	0	0	10	29
	12:00 PM	0	1	0	0	1	0	0	1	0	1	0	2	0	0	2	1	0	0	0	1	5	29
	12:15 PM	0	1	1	0	2	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	7	29
12:30 PM	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	7	39	
12:45 PM	0	3	1	0	4	1	0	1	0	2	0	3	0	0	3	1	0	0	0	1	10	43	
1:00 PM	0	0	0	0	0	0	0	0	0	0	1	2	1	0	4	1	0	0	0	1	5	39	
1:15 PM	0	5	0	0	5	4	1	0	0	5	1	4	0	0	5	2	0	0	0	2	17	50	
1:30 PM	0	5	2	0	7	0	0	1	0	1	1	1	1	0	3	0	0	0	0	0	11	46	
1:45 PM	0	1	0	0	1	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	6	39	
PM Peak Period	2:00 PM	0	5	1	0	6	0	1	1	0	2	3	3	0	0	6	0	1	1	0	2	16	40
	2:15 PM	0	6	0	0	6	0	1	2	0	3	0	3	0	0	3	0	1	0	0	1	13	33
	2:30 PM	0	0	0	0	0	1	1	0	0	2	2	0	0	0	2	0	0	0	0	0	4	30
	2:45 PM	0	3	1	0	4	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	7	32
	3:00 PM	0	2	0	0	2	0	0	2	0	2	1	1	0	0	2	0	2	1	0	3	9	30
	3:15 PM	0	4	0	0	4	1	0	1	0	2	0	3	0	0	3	0	0	1	0	1	10	27
	3:30 PM	0	2	1	0	3	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	6	23
	3:45 PM	0	0	0	0	0	0	0	0	0	0	1	2	1	0	4	0	0	1	0	1	5	22
	4:00 PM	0	1	0	0	1	1	0	1	0	2	1	2	0	0	3	0	0	0	0	0	6	20
	4:15 PM	0	2	1	0	3	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	6	19
	4:30 PM	0	1	0	0	1	0	0	1	0	1	0	2	0	0	2	0	1	0	0	1	5	19
	4:45 PM	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3	16
	5:00 PM	0	1	0	0	1	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	5	18
	5:15 PM	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6	22
	5:30 PM	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2	22
	5:45 PM	1	1	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5	23
	6:00 PM	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	0	2	0	0	2	9	19
	6:15 PM	0	1	0	0	1	2	2	0	0	4	0	1	0	0	1	0	0	0	0	0	6	
	6:30 PM	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	3	
	6:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		4	136	22	0	162	23	15	33	0	71	38	117	5	0	160	10	10	10	0	30	423	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period Start Time	From North					From East					From South					From West					Total Hourly Volume
	Duplainville Road					Green Road					Duplainville Road					Green Road					
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM 7:00 AM	0	11	1	0	12	0	2	7	0	9	2	6	0	0	8	0	0	0	0	0	29
MD 11:30 AM	0	10	2	0	12	1	1	2	0	4	7	8	0	0	15	1	0	0	0	1	32
PM 4:30 PM	0	7	0	0	7	0	0	2	0	2	1	8	0	0	9	0	1	0	0	1	19

15-Minute Heavy Vehicle Percentages

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)	
%	  

15-Minute Heavy Vehicle Percentages

15-Minute Time Period Start Time		From North					From East					From South					From West					Total Heavy Vehicle Percent
		Duplainville Road					Green Road					Duplainville Road					Green Road					
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM Peak Period	6:00 AM	0.0	29.4	0.0	0.0	19.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
	6:15 AM	0.0	44.0	25.0	0.0	38.7	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0	16.3
	6:30 AM	0.0	34.8	0.0	0.0	26.7	0.0	0.0	0.0	0.0	0.0	0.0	10.3	0.0	0.0	7.3	0.0	0.0	0.0	0.0	0.0	11.2
	6:45 AM	0.0	21.4	0.0	0.0	15.0	0.0	0.0	25.0	0.0	5.6	0.0	8.8	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	7.5
	7:00 AM	0.0	15.4	0.0	0.0	8.3	0.0	0.0	66.7	0.0	40.0	0.0	15.8	0.0	0.0	9.7	0.0	0.0	0.0	0.0	0.0	10.8
	7:15 AM	0.0	11.8	0.0	0.0	6.9	0.0	0.0	16.7	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
	7:30 AM	0.0	10.0	0.0	0.0	5.4	0.0	20.0	9.1	0.0	8.7	6.7	20.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	6.5
	7:45 AM	0.0	11.1	7.7	0.0	8.2	0.0	14.3	25.0	0.0	9.5	4.8	6.2	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	5.8
	8:00 AM	0.0	14.3	0.0	0.0	6.9	0.0	0.0	0.0	0.0	0.0	7.7	28.6	0.0	0.0	17.2	0.0	0.0	0.0	0.0	0.0	8.2
	8:15 AM	0.0	25.0	20.0	0.0	16.7	0.0	0.0	30.0	0.0	21.4	0.0	44.4	0.0	0.0	25.8	0.0	0.0	25.0	0.0	10.5	19.5
	8:30 AM	0.0	7.1	14.3	0.0	8.0	14.3	0.0	0.0	0.0	6.7	18.2	22.2	0.0	0.0	19.0	0.0	0.0	0.0	0.0	0.0	9.6
	8:45 AM	0.0	18.2	8.3	0.0	11.1	42.9	0.0	0.0	0.0	13.6	10.0	11.1	0.0	0.0	8.7	0.0	11.1	0.0	0.0	7.1	10.5
Midday Peak Period	9:00 AM	25.0	25.0	0.0	0.0	16.7	0.0	20.0	0.0	0.0	7.1	16.7	30.0	0.0	0.0	22.2	0.0	0.0	20.0	0.0	5.0	12.9
	9:15 AM	0.0	42.9	20.0	0.0	23.5	18.2	25.0	0.0	0.0	14.3	0.0	18.2	0.0	0.0	11.1	50.0	0.0	16.7	0.0	14.3	15.7
	9:30 AM	25.0	27.3	14.3	0.0	22.7	40.0	0.0	14.3	0.0	15.8	28.6	25.0	0.0	0.0	24.0	25.0	0.0	0.0	0.0	11.1	20.0
	9:45 AM	0.0	0.0	16.7	0.0	7.7	50.0	11.1	0.0	0.0	18.2	16.7	50.0	0.0	0.0	30.0	33.3	11.1	0.0	0.0	14.3	16.7
	10:00 AM	0.0	44.4	0.0	0.0	25.0	25.0	0.0	0.0	0.0	7.7	0.0	42.9	0.0	0.0	27.3	0.0	0.0	0.0	0.0	0.0	17.8
	10:15 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.7	33.3	0.0	28.6	66.7	0.0	0.0	0.0	22.2	12.3
	10:30 AM	0.0	42.1	25.0	0.0	34.5	0.0	0.0	14.3	0.0	6.2	36.4	21.1	0.0	0.0	24.2	0.0	0.0	0.0	0.0	0.0	21.1
	10:45 AM	0.0	14.3	60.0	0.0	19.0	0.0	25.0	0.0	0.0	10.5	0.0	10.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	10.6
	11:00 AM	0.0	16.7	0.0	0.0	11.1	0.0	0.0	20.0	0.0	11.1	0.0	20.0	33.3	0.0	21.4	0.0	0.0	25.0	0.0	9.1	13.1
	11:15 AM	14.3	16.7	0.0	0.0	11.1	16.7	0.0	40.0	0.0	21.4	0.0	10.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	9.3
	11:30 AM	0.0	44.4	0.0	0.0	18.2	0.0	0.0	12.5	0.0	6.7	38.5	0.0	0.0	0.0	19.2	0.0	0.0	0.0	0.0	0.0	13.2
	11:45 AM	0.0	33.3	12.5	0.0	20.8	7.1	16.7	0.0	0.0	6.9	12.5	12.5	0.0	0.0	10.7	0.0	0.0	0.0	0.0	0.0	10.5
12:00 PM	0.0	9.1	0.0	0.0	5.0	0.0	0.0	14.3	0.0	4.8	0.0	11.8	0.0	0.0	5.9	12.5	0.0	0.0	0.0	6.2	5.5	
12:15 PM	0.0	5.9	12.5	0.0	7.7	0.0	0.0	0.0	0.0	0.0	14.3	22.2	0.0	0.0	19.2	0.0	0.0	0.0	0.0	0.0	8.2	
12:30 PM	0.0	11.1	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	38.5	0.0	0.0	25.0	0.0	0.0	25.0	0.0	4.8	9.7	
12:45 PM	0.0	21.4	11.1	0.0	13.8	16.7	0.0	20.0	0.0	9.1	0.0	27.3	0.0	0.0	16.7	33.3	0.0	0.0	0.0	5.9	11.6	
PM Peak Period	1:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3	12.5	33.3	0.0	15.4	20.0	0.0	0.0	0.0	7.7	7.4	
	1:15 PM	0.0	35.7	0.0	0.0	20.8	40.0	20.0	0.0	25.0	9.1	22.2	0.0	0.0	15.6	33.3	0.0	0.0	0.0	9.5	17.5	
	1:30 PM	0.0	33.3	28.6	0.0	28.0	0.0	0.0	10.0	0.0	5.3	7.7	8.3	20.0	0.0	10.0	0.0	0.0	0.0	0.0	12.8	
	1:45 PM	0.0	7.7	0.0	0.0	4.0	0.0	0.0	0.0	0.0	25.0	44.4	0.0	0.0	29.4	0.0	0.0	0.0	0.0	0.0	8.1	
	2:00 PM	0.0	23.8	10.0	0.0	16.2	0.0	12.5	12.5	0.0	8.7	42.9	16.7	0.0	0.0	21.4	0.0	12.5	16.7	0.0	13.3	15.5
	2:15 PM	0.0	33.3	0.0	0.0	18.2	0.0	25.0	50.0	0.0	25.0	0.0	12.5	0.0	0.0	9.4	0.0	14.3	0.0	0.0	7.1	14.3
	2:30 PM	0.0	0.0	0.0	0.0	0.0	7.7	25.0	0.0	0.0	8.7	16.7	0.0	0.0	0.0	7.4	0.0	0.0	0.0	0.0	5.2	
	2:45 PM	0.0	17.6	20.0	0.0	14.3	50.0	0.0	20.0	0.0	20.0	0.0	7.7	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	9.7
	3:00 PM	0.0	9.5	0.0	0.0	6.5	0.0	0.0	25.0	0.0	7.4	12.5	6.7	0.0	0.0	7.7	0.0	18.2	16.7	0.0	17.6	8.9
	3:15 PM	0.0	22.2	0.0	0.0	12.1	12.5	0.0	10.0	0.0	7.7	0.0	14.3	0.0	0.0	9.1	0.0	0.0	12.5	0.0	7.1	9.4
	3:30 PM	0.0	8.3	16.7	0.0	8.3	0.0	0.0	20.0	0.0	8.0	0.0	14.3	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	6.7
	3:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	6.5	12.5	0.0	8.5	0.0	0.0	16.7	0.0	9.1	4.5
4:00 PM	0.0	6.7	0.0	0.0	2.9	11.1	0.0	10.0	0.0	7.1	9.1	11.1	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0	5.0	
4:15 PM	0.0	14.3	9.1	0.0	10.0	0.0	0.0	0.0	0.0	0.0	14.3	6.2	0.0	0.0	6.9	0.0	12.5	0.0	0.0	6.7	5.8	
4:30 PM	0.0	4.8	0.0	0.0	2.3	0.0	0.0	5.0	0.0	2.0	0.0	8.3	0.0	0.0	5.6	0.0	16.7	0.0	0.0	6.7	3.4	
4:45 PM	0.0	7.1	0.0	0.0	3.7	0.0	0.0	9.1	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	
5:00 PM	0.0	5.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	8.3	8.1	0.0	0.0	7.3	0.0	0.0	0.0	0.0	0.0	3.9	
5:15 PM	0.0	10.7	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	17.6	0.0	0.0	11.5	0.0	0.0	0.0	0.0	0.0	4.7	
5:30 PM	0.0	3.3	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	1.9	
5:45 PM	20.0	6.7	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	5.7	
6:00 PM	0.0	6.2	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	18.7	0.0	12.5	0.0	0.0	10.0	10.6	
6:15 PM	0.0	5.0	0.0	0.0	3.1	15.4	50.0	0.0	0.0	20.0	0.0	5.3	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	6.5	
6:30 PM	0.0	7.1	0.0	0.0	4.3	0.0	11.1	0.0	0.0	5.0	0.0	6.2	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	4.2	
6:45 PM	0.0	4.8	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	
7:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Totals		1.5	16.3	5.9	0.0	10.9	6.8	4.8	9.7	0.0	7.2	8.7	13.7	3.3	0.0	11.1	6.6	2.9	4.0	0.0	4.0	9.1

Hourly Heavy Vehicle Percentages Summary																					
Hourly Time Period	From North					From East					From South					From West					Hourly Heavy Vehicle Percent
	Duplinville Road					Green Road					Duplinville Road					Green Road					
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM 7:00 AM	0.0	12.2	2.4	0.0	7.4	0.0	12.5	25.9	0.0	13.8	3.1	10.3	0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0	6.3
MD 11:30 AM	0.0	20.4	7.7	0.0	13.0	3.6	3.8	6.5	0.0	4.7	17.5	12.7	0.0	0.0	13.2	5.6	0.0	0.0	0.0	1.8	9.1
PM 4:30 PM	0.0	7.2	0.0	0.0	4.0	0.0	0.0	3.4	0.0	1.4	3.0	7.8	0.0	0.0	5.8	0.0	3.3	0.0	0.0	1.6	3.9

Intersection Traffic Volume Report

Count Basics			Page 11 of 13
Start Date:	Thursday, July 8, 2021	Weekday	Schools Not in Session
Total Number of Hours Counted:	13	Non-Holiday	No Special Events

15-Minute Pedestrian and Bicyclist Data

Duplainville Road and Green Road



15-Minute Pedestrian and Bicyclist Data

15-Minute Time Period Start Time		Crossing 			Crossing 			Crossing 			Crossing 			15-Min Totals	Hourly Sum
		North Approach			East Approach			South Approach			West Approach				
		Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total		
AM Peak Period															
6:00 AM	0	0	0	0	0	0	1	0	1	0	0	0	1	14	
6:15 AM	0	0	0	0	0	0	1	5	6	0	5	5	11	14	
6:30 AM	0	0	0	0	2	2	0	0	0	0	0	0	2	3	
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	1	1	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
8:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	1	9	
9:00 AM	0	0	0	2	0	2	0	0	0	0	0	0	2	11	
9:15 AM	1	0	1	0	1	1	0	1	1	1	0	1	4	9	
9:30 AM	0	2	2	0	0	0	0	0	0	0	0	0	2	5	
9:45 AM	0	1	1	0	1	1	0	1	1	0	0	0	3	3	
Midday Peak Period															
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
12:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	1	3	
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
12:30 PM	0	1	1	0	0	0	0	0	0	0	0	0	1	4	
12:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	1	4	
1:00 PM	1	0	1	0	0	0	0	0	0	0	0	0	1	4	
1:15 PM	0	0	0	0	0	0	0	1	1	0	0	0	1	3	
1:30 PM	0	1	1	0	0	0	0	0	0	0	0	0	1	2	
1:45 PM	0	0	0	0	0	0	0	1	1	0	0	0	1	1	
PM Peak Period															
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
2:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	1	2	
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
3:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	1	2	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
4:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	1	3	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
4:30 PM	0	0	0	0	0	0	0	1	1	0	0	0	1	4	
4:45 PM	0	0	0	0	0	0	0	1	1	0	0	0	1	3	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
5:15 PM	0	1	1	0	0	0	0	1	1	0	0	0	2	3	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
5:45 PM	0	0	0	0	0	0	1	0	1	0	0	0	1	3	
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
6:15 PM	1	1	2	0	0	0	0	0	0	0	0	0	2		
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
6:45 PM	1	0	1	0	0	0	0	0	0	0	0	0	1		
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals	4	13	17	2	5	7	3	12	15	1	5	6	45		

Special Pedestrians

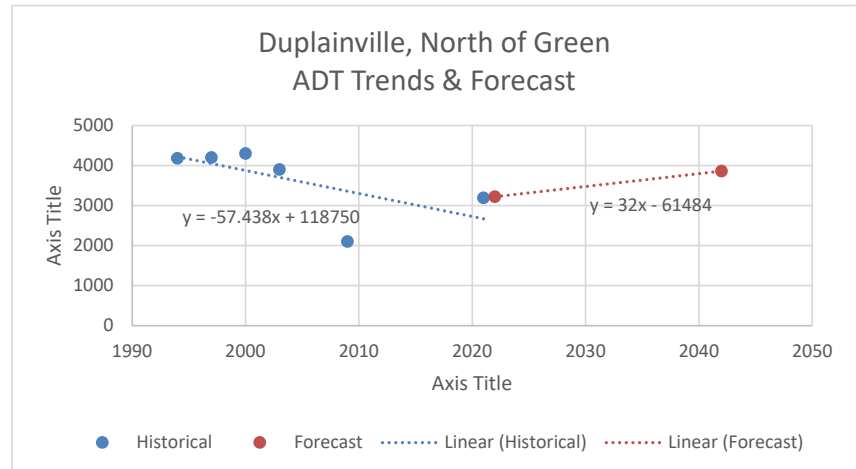
Pedestrian Type	None	1 or 2	A Few	Several	Many	Unknown
Pre-school Children	x					
Elementary School Age Children	x					
Visually Impaired (white cane/helper dog)	x					
Elderly/Disabled (except wheelchairs)	x					
Wheelchairs/Electric Scooters	x					
Other (None)	x					

Historical Traffic Trend

671142 (Duplainville, North of Green)

Year ADT

1994	4180	
1997	4200	
2000	4300	
2003	3900	
2009	2100	
2021	3190	<--Est. from TMC
2022	3220	0.94%
2042	3860	0.99%



Crash Statistics

Intersection Collision Diagram

Location: Duplainville Road & Green Road
Municipality: City of Pewaukee
County: Waukesha County
Traffic Control: Minor Street Stop

From: 1/1/2016 **5 Years**
To: 12/31/2020 **0 Months**
AADT: 4,800
Area Type: Urban
GPS Coordinates: 43.000000, -88.000000

TOTAL CRASHES: 17
AVG. CRASHES/YEAR: 3.4
CRASH RATE: 1.94 per MEV
KAB CRASH RATE: 0.34 per MEV
ECONOMIC LOSS*: \$ 353,000

*KAB = \$85K, C=\$25K, PDO=\$4K

YEAR	K	A	B	C	PDO	TOT.	ECON. LOSS
2016	0	0	0	1	0	1	\$ 25,000
2017	0	1	2	0	8	11	\$ 287,000
2018	0	0	0	0	3	3	\$ 12,000
2019	0	0	0	1	0	1	\$ 25,000
2020	0	0	0	0	1	1	\$ 4,000

TOTAL 0 1 2 2 12 17 \$ 353,000

K = Fatal, A = Incapacitating Injury, B = Non-Incapacitating Injury,
C = Possible Injury, PDO = Property Damage Only



Misc. Crashes West Leg 1

SB₂ 6

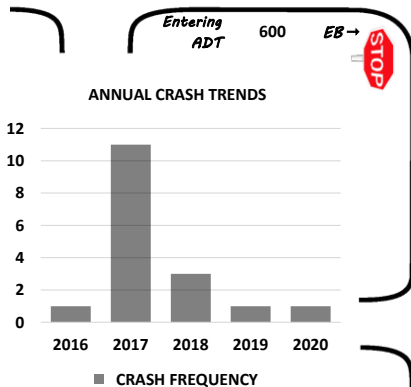
WB₂ 1

WB₅ 3

EB₂ 1

NB₂ 5

ECON. LOSS COLOR SCALE
> \$300 K
> \$100 K
Ped/Bike



CRASH TYPE	K	A	B	C	PDO	TOT.	ECON. LOSS
LT-ANGLE	0	0	0	0	0	0	\$ -
RT-ANGLE	0	1	2	2	8	13	\$ 337,000
PEDESTRIAN	0	0	0	0	0	0	\$ -
RT-TURN REAR-END	0	0	0	0	0	0	\$ -
REAR-END	0	0	0	0	3	3	\$ 12,000
SIDE-SWIPE-SAME	0	0	0	0	0	0	\$ -
BICYCLE-RELATED	0	0	0	0	0	0	\$ -
PARKED-VEHICLE	0	0	0	0	0	0	\$ -
FIXED-OBJECT	0	0	0	0	0	0	\$ -
DRIVEWAY-RELATED	0	0	0	0	0	0	\$ -
HEAD-ON	0	0	0	0	0	0	\$ -
MISC. OTHER	0	0	0	0	1	1	\$ 4,000
TOTAL	0	1	2	2	12	17	\$ 353,000

ROAD CONDITIONS		
DRY	13	76%
WET	4	24%
SNOW	0	0%
ICE	0	0%
OTH.	0	0%
TOT.	17	

LIGHT CONDITIONS		
DAY	14	82%
DARK	3	18%
TOT.	17	

DRIVER BEHAVIOR		
ALCOHOL	0	0%
DRUGS	0	0%
SPEED	1	6%

SEASON		
SPRING	8	47%
SUMMER	5	29%
FALL	2	12%
WINTER	2	12%
TOT.	17	

FAILURE TO YIELD		
NB	0	0%
SB	0	0%
EB	4	24%
WB	5	29%
TBD	0	0%
TOT.	9	53%

DISRGRD. CONTROL		
NB	0	0%
SB	0	0%
EB	2	12%
WB	1	6%
TBD	0	0%
TOT.	3	18%

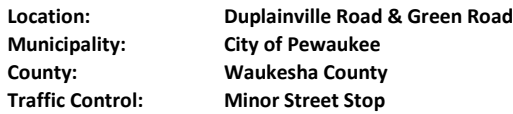
VEHICLE DAMAGE		
OTHER/UNK.	1	3%
NONE	1	3%
VERY MINOR	0	0%
MINOR	8	24%
MODERATE	8	24%
SEVERE	16	47%
VERY SEVERE	0	0%
TOTAL VEHICLES	34	

TBD = verification from crash report needed for direction

DAY/TIME TRENDS

	12 AM	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	UNK		TOT.
MON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	MON	1
TUE	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	TUE	4
WED	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	WED	4
THU	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	THU	3
FRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	FRI	1
SAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	SAT	2
SUN	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	SUN	2
	12 AM	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	UNK		TOT.
TOT.	0	0	0	0	0	0	0	1	3	0	0	0	1	2	0	1	2	5	0	2	0	0	0	0	0	TOT.	17

Corresponds to Collision Diagram



From: 1/1/2016
To: 12/31/2020
AADT: 4,800
Area Type: Urban

Duration
5 Years
0 Months

[illegible]

Traffic Signal Warrant Worksheet

Wisconsin Department of Transportation Traffic Signal Warrant Summary Worksheet

100%

The Worksheet(s) attached are provided as an attachment to the Engineering Investigation Study for:

Intersection: Duplainville Road & Green Road

County: Waukesha

City: Pewaukee

Major Street: Duplainville Road

Minor Street: Green Road

Critical Approach Speed: 35 mph

Critical Approach Speed: 35 mph

Lanes: 1 lane

Lanes: 1 lane

% Right Turns Included

In built-up area of isolated community of < 10,000 population? No

From North (SB) 100%

Total number of approaches at intersection? 4 or more

From East (WB) 0%

If it is a "T" intersection, inflate minor threshold to 150%?

From South (NB) 100%

Manually set volume level?

From West (EB) 0%

Analysis based on PROJECTED volume data.

Forecast Year	Within 5 Years of Construction?	Time (HH:MM)			
		From	AM / PM	To	AM / PM
Year 2042	No	6:00	AM	19:00	PM

Warrant Evaluation Summary	Warrant Met:
Warrant 1: Eight - Hour Vehicular Volume	No
Condition A: Minimum Vehicular Volume	No
Condition B: Interruption of Continuous Traffic	No
Condition C: Combination: 80% of A and B	No
Warrant 2: Four-Hour Volume	No
Warrant 3: Peak Hour Volume	N/A
Warrant 4: Pedestrian Volume	N/A
Criterion A: Four-Hour	
Criterion B: Peak-Hour	
Warrant 5: School Crossing	N/A
Warrant 6: Coordinated Signal System	N/A
Warrant 7: Crash Experience	N/A
Warrant 8: Roadway Network	N/A
Warrant 9: Intersection Near a Grade Crossing	No

Warrant Analysis Conducted By:

Name: Michael May, PE PTOE

Agency: TADI

Date: 7/13/2021

Warrant 1: Eight - Hour Vehicular Volume

100%

Warrant Evaluated? Yes

Condition A : Min. Veh. Volume		
Volume Level	100%	80%
Major Rd. Req	500	400
Minor Rd. Req	150	120
Number of Hours	0	0

Satisfied? No

Condition B: Interruption of Continuous Traffic		
Volume Level	100%	80%
Major Rd. Req	750	600
Minor Rd. Req	75	60
Number of Hours	0	0

Satisfied? No

Condition C: Combination of A & B at 80%		
---	--	--

Satisfied? No

Warrant Satisfied? No

Manually Set To:

6:00 AM		Enter Start Time (Military Time) (HH:MM)			Total
Time Period	From	To	Major Road: Both App. (VPH)	Minor Road: High App. (VPH)	
1	6:00	7:00	370	65	435
2	7:00	8:00	395	85	480
3	8:00	9:00	265	70	335
4	9:00	10:00	190	55	245
5	10:00	11:00	220	65	285
6	11:00	12:00	230	80	310
7	12:00	13:00	250	80	330
8	13:00	14:00	255	55	310
9	14:00	15:00	290	75	365
10	15:00	16:00	340	115	455
11	16:00	17:00	385	130	515
12	17:00	18:00	355	110	465
13	18:00	19:00	265	55	320
14	19:00	20:00	0	0	0
15	20:00	21:00	0	0	0
16	21:00	22:00	0	0	0

Warrant 2: Four-Hour Volume

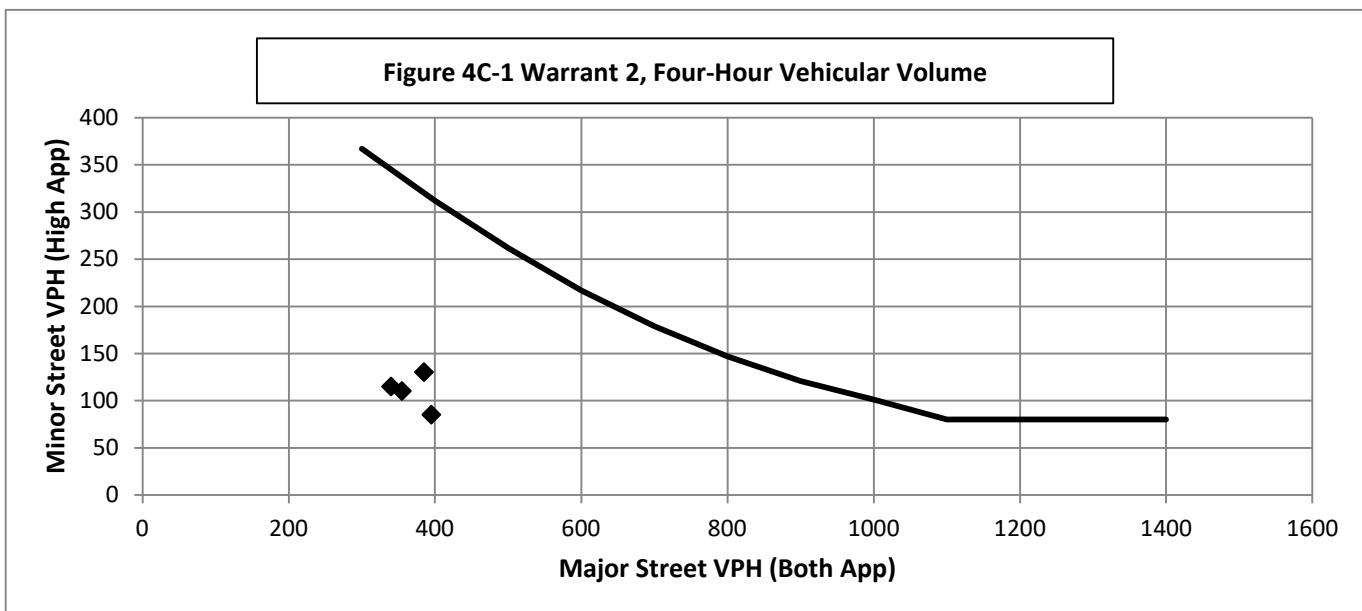
100%

Warrant Evaluated? Yes

Warrant Satisfied? No

Manually Set To:

Hour Start	16:00	15:00	17:00	7:00
Major Road Vol.	385	340	355	395
Minor Road Vol.	130	115	110	85



Warrant 3: Peak Hour Volume

100%

Warrant Evaluated? No

Warrant Satisfied? N/A

Manually Set To:

Condition justifying use of warrant:

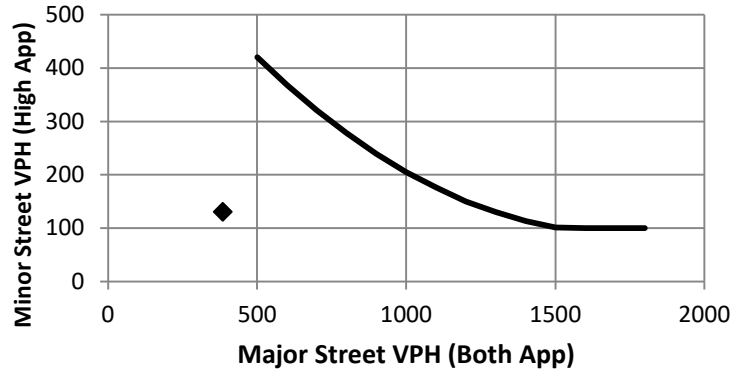
None

Criteria		Met?
Delay on Minor Approach	4	
Volume on Minor Approach	100	
Total Entering Volume (veh/h)	800	

Manually Set Peak Hour?

Peak Hour	Major Road Vol. (Both App.)	Minor Road Vol. (High App.)
16:00	385	130

Figure 4C-3 Warrant 3, Peak Hour



Warrant 4: Pedestrian Volume

100%

Warrant Evaluated? No

Warrant Satisfied? N/A

Manually Set To:

Criterion A: Four Hour

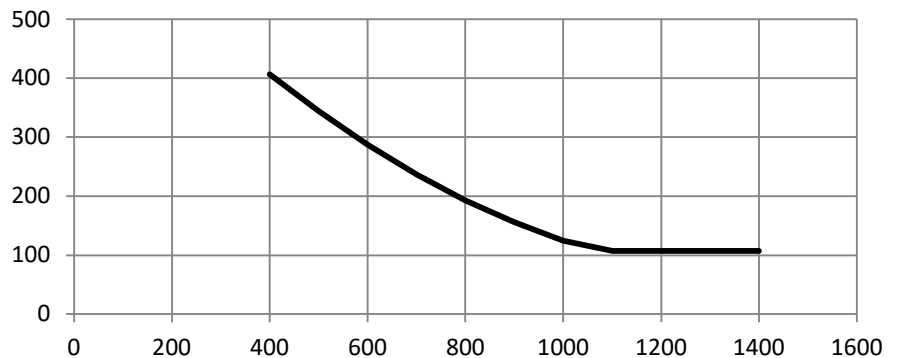
Hour (Start)	Pedestrian Volume	Major Road Vol.
		0
		0
		0
		0

Manually Set Major Rd Vol?

Avg. walk speed less than 3.5 ft/s?

Criterion A Satisfied?

Figure 4C-5 Warrant 4, Pedestrian Four-Hour Volume

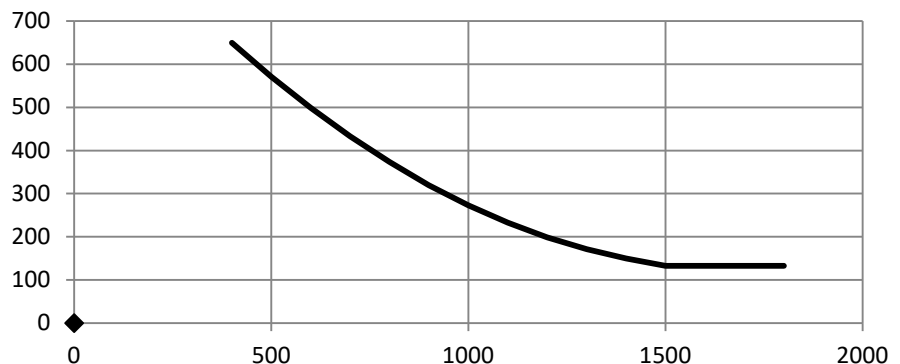


Criterion B: Peak Hour

Peak Hour	Pedestrian Vol.	Major Road Vol.
0:00	0	0

Criterion B Satisfied?

Figure 4C-7 Warrant 4, Pedestrian Peak Hour



Warrant 5: School Crossing

100%

Warrant Evaluated? No

Warrant Satisfied? N/A

Manually Set To:

Criteria

Fulfilled?

1	There are a MINIMUM of 20 school children during the highest crossing hour.	
2	There are fewer adequate gaps in the major road traffic stream during the period when the school children are using the crossing than the number of minutes in the same period.	
3	The nearest traffic signal along the major road is located more than 300 ft away. Or, the nearest traffic signal is within 300 ft but the proposed traffic signal will not restrict the progressive movement of traffic.	

Warrant 6: Coordinated Signal System

100%

Warrant Evaluated? No

Warrant Satisfied? N/A

Manually Set To:

Criteria

Fulfilled?

1	Signal spacing > 1000 ft	
2	On a one-way road or a road that has traffic predominantly in one direction, the adjacent signals are so far apart that they do not provide the necessary degree of vehicle platooning.	
3	On a two-way road, adjacent signals do not provide the necessary degree of platooning and the proposed and the adjacent signals will collectively provide a progressive operation.	

Warrant 7: Crash Experience

100%

Warrant Evaluated? No

Warrant Satisfied? N/A

Manually Set To:

Criteria

Met?

Fulfilled?

1	Adequate trial of other remedial measures has failed to reduce crash frequency.			No
	Measures Tried:			
2	Five or more reported crashes, of types susceptible to correction by signal, have occurred within a 12 month period.		# of crashes per 12 months	No
3	Warrant 1, Condition A (80%)		No	Yes
	Warrant 1, Condition B (80%)		No	
	Warrant 4, Criterion A (80%)		No	
	Warrant 4, Criterion B (80%)		Yes	

Warrant 8: Roadway Network

100%

Warrant Evaluated? No

Warrant Satisfied? N/A

Manually Set To:

Criteria

Met?

Fulfilled?

1	Total entering volume of at least 1,000 veh/h during typical weekday peak hour		515	No	No
	Five-year projected volumes that satisfy one or more of Warrants 1, 2, or 3.			No	
2	Total entering vol. of at least 1,000 veh/h for each of any 5 hrs of non-normal business day (Sat. or Sun.)				
	Hour				
	Volume				

Characteristics of Major Routes - Select yes if all intersecting routes have characteristic

Fulfilled?

1	Part of the road or highway system that serves as the principal roadway network for through traffic flow	
2	Rural or suburban highway outside of, entering, or traversing a city	
3	Appears as a major route on an official plan	

Warrant 9: Intersection Near a Grade Crossing

100%

Warrant Evaluated? Yes

Warrant Satisfied? Yes

Manually Set To: No

Adjustment Factors			Manually Set Peak Hour?				
Rail Traffic per Day	% High Occupancy Buses on Minor Road	% Tractor-Trailer Trucks on Minor Road	D	Peak Hour	Major Road Vol.	Minor Road Vol.	Adjusted Minor Vol.
1	0	2.6% to 7.5%	390	16:00	385	130	65.325

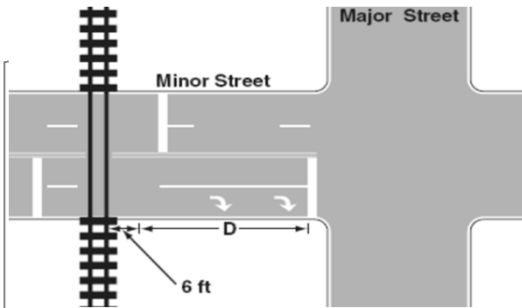
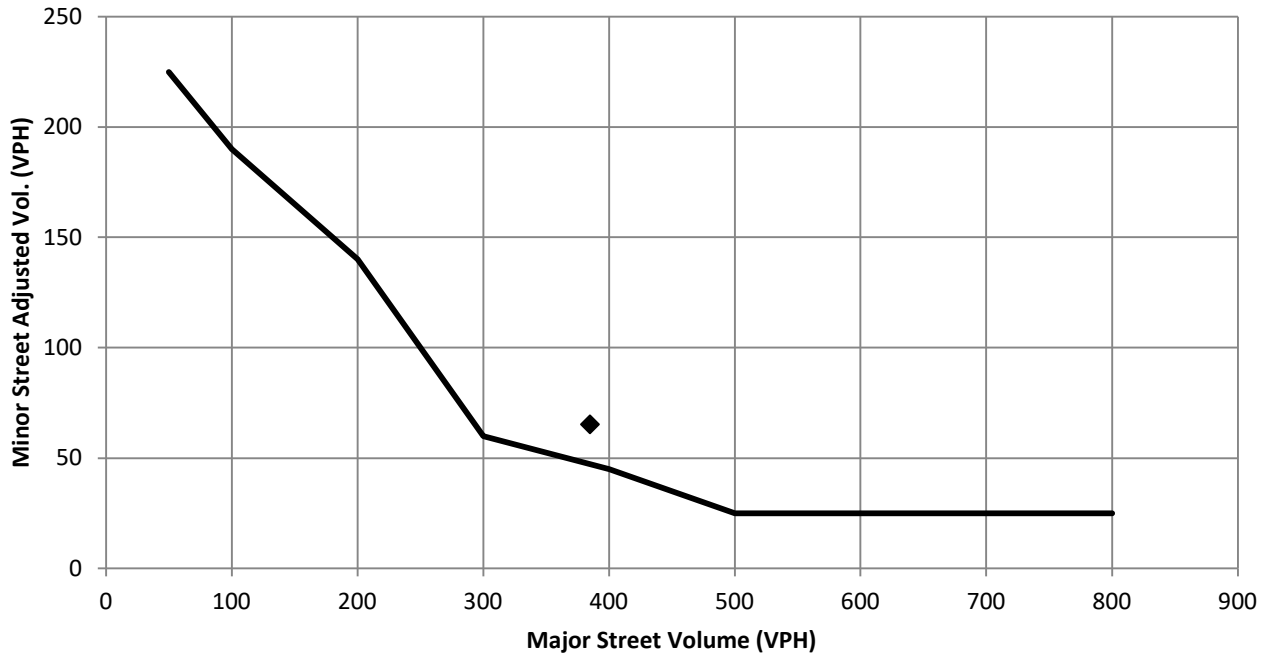


Figure 4C-9 Warrant9, Intersection Near a grade Crossing (One Approach Lane at the Track Crossing)



Conclusions/Comments:

Traffic signal warrants are not expected to be met through Year 2042 design year.

Note that Warrant 9 was manually set to "no" because, per the MUTCD, the distance "D" in the diagram must be 140-feet or less. The distance D on Green Road is 390-feet.

Updated: 12/6/2017

SIGNAL WARRANT: Duplainville Road & Green Road**EXISTING TRAFFIC VOLUMES (2021 Hourly Volumes)**

Start Time	EB					WB					Total	NB					SB					Total
	Rt	Th	Lt	Lt + Th	ALL	Rt	Th	Lt	Lt + Th	ALL		Rt	Th	Lt	Lt + Th	ALL	Rt	Th	Lt	Lt + Th	ALL	
6-7a	15	18	26	44	59	27	9	9	18	45	104	35	105	8	113	148	10	93	24	117	127	275
7-8a	26	33	15	48	74	22	16	27	43	65	139	65	58	5	63	128	32	90	41	131	163	291
8-9a	11	32	19	51	62	20	12	29	41	61	123	45	50	9	59	104	19	47	33	80	99	203
9-10a	12	31	14	45	57	24	25	16	41	65	122	32	33	6	39	71	19	27	24	51	70	141
10-11a	6	16	11	27	33	16	23	26	49	65	98	23	50	11	61	84	15	42	27	69	84	168
11-12p	10	23	19	42	52	23	21	32	53	76	128	26	48	14	62	88	24	45	22	67	91	179
12-1p	18	34	15	49	67	22	31	21	52	74	141	30	59	9	68	98	13	51	31	82	95	193
1-2p	20	26	13	39	59	25	26	18	44	69	128	35	55	15	70	105	16	49	25	74	90	195
2-3p	7	28	17	45	52	26	19	23	42	68	120	29	67	10	77	106	22	66	29	95	117	223
3-4p	6	24	26	50	56	24	34	36	70	94	150	29	74	18	92	121	24	83	31	114	138	259
4-5p	9	29	26	55	64	40	42	50	92	132	196	33	82	29	111	144	34	78	50	128	162	306
5-6p	4	26	28	54	58	34	41	37	78	112	170	32	93	12	105	137	24	93	26	119	143	280
6-7p	8	27	18	45	53	33	16	16	32	65	118	24	79	6	85	109	23	71	13	84	107	216

2042 FORECAST TRAFFIC VOLUMES (Assumes 1.0% growth)

Start Time	EB					WB					Total	NB					SB					Total
	Rt	Th	Lt	Lt + Th	ALL	Rt	Th	Lt	Lt + Th	ALL		Rt	Th	Lt	Lt + Th	ALL	Rt	Th	Lt	Lt + Th	ALL	
6-7a	20	20	30	50	70	35	10	10	20	55	125	40	125	10	135	175	10	115	30	145	155	330
7-8a	30	40	20	60	90	25	20	35	55	80	170	80	70	5	75	155	40	110	50	160	200	355
8-9a	15	40	25	65	80	25	15	35	50	75	155	55	60	10	70	125	25	55	40	95	120	245
9-10a	15	40	15	55	70	30	30	20	50	80	150	40	40	5	45	85	25	35	30	65	90	175
10-11a	5	20	15	35	40	20	30	30	60	80	120	30	60	15	75	105	20	50	35	85	105	210
11-12p	10	30	25	55	65	30	25	40	65	95	160	30	60	15	75	105	30	55	25	80	110	215
12-1p	20	40	20	60	80	25	40	25	65	90	170	35	70	10	80	115	15	60	40	100	115	230
1-2p	25	30	15	45	70	30	30	20	50	80	150	40	65	20	85	125	20	60	30	90	110	235
2-3p	10	35	20	55	65	30	25	30	55	85	150	35	80	10	90	125	25	80	35	115	140	265
3-4p	5	30	30	60	65	30	40	45	85	115	180	35	90	20	110	145	30	100	40	140	170	315
4-5p	10	35	30	65	75	50	50	60	110	160	235	40	100	35	135	175	40	95	60	155	195	370
5-6p	5	30	35	65	70	40	50	45	95	135	205	40	115	15	130	170	30	115	30	145	175	345
6-7p	10	35	20	55	65	40	20	20	40	80	145	30	95	5	100	130	30	85	15	100	130	260

Interstate Partners Industrial Off-Site

Start Time	EB					WB					Total	NB					SB					Total		
	Rt	Th	Lt	Lt + Th	ALL	Rt	Th	Lt	Lt + Th	ALL		Rt	Th	Lt	Lt + Th	ALL	Rt	Th	Lt	Lt + Th	ALL			
6-7a	0	10	0	10	10	0	0	5	5	5	15	20	0	0	0	20	0	0	10	10	10	30		
7-8a	0	5	0	5	5	5	0	5	5	10	15	15	0	0	0	15	0	0	5	5	5	20		
8-9a	0	5	0	5	5	0	0	5	5	5	10	10	0	0	0	10	0	0	5	5	5	15		
9-10a	0	0	0	0	0	0	0	5	5	5	5	5	0	0	0	5	0	0	5	5	5	10		
10-11a	0	0	0	0	0	5	0	5	5	10	10	5	0	0	0	5	0	0	0	0	0	5		
11-12p	0	0	0	0	0	5	5	10	15	20	20	5	0	0	0	5	0	0	5	5	5	10		
12-1p	0	5	0	5	5	5	5	10	15	20	25	10	0	0	0	10	0	0	5	5	5	15		
1-2p	0	5	0	5	5	5	0	5	5	10	15	10	0	0	0	10	0	0	5	5	5	15		
2-3p	0	5	0	5	5	5	5	10	15	20	25	10	0	0	0	10	0	0	5	5	5	15		
3-4p	0	5	0	5	5	10	10	20	30	40	45	10	0	0	0	10	0	0	5	5	5	15		
4-5p	0	0	0	0	0	10	5	15	20	30	30	5	0	0	0	5	0	0	5	5	5	10		
5-6p	0	0	0	0	0	5	5	10	15	20	20	5	0	0	0	5	0	0	0	0	0	5		
6-7p	0	0	0	0	0	5	0	5	5	10	10	0	0	0	0	0	0	0	0	0	0	0		
15% In					20% Out					15% Out					40% Out					40% In				

DPW Off-Site

Start Time	EB					WB					Total	NB					SB					Total							
	Rt	Th	Lt	Lt + Th	ALL	Rt	Th	Lt	Lt + Th	ALL		Rt	Th	Lt	Lt + Th	ALL	Rt	Th	Lt	Lt + Th	ALL								
6-7a	5	0	0	0	5	0	0	0	0	0	5	0	0	5	5	5	0	0	0	0	0	5							
7-8a	5	0	0	0	5	0	0	0	0	0	5	0	0	5	5	5	0	0	0	0	0	5							
8-9a	5	0	0	0	5	0	0	0	0	0	5	0	0	5	5	5	0	0	0	0	0	5							
9-10a	5	0	0	0	5	0	0	0	0	0	5	0	0	5	5	5	0	0	0	0	0	5							
10-11a	5	0	0	0	5	0	0	0	0	0	5	0	0	5	5	5	0	0	0	0	0	5							
11-12p	5	0	0	0	5	0	0	0	0	0	5	0	0	5	5	5	0	0	0	0	0	5							
12-1p	5	0	0	0	5	0	0	0	0	0	5	0	0	5	5	5	0	0	0	0	0	5							
1-2p	5	0	0	0	5	0	0	0	0	0	5	0	0	5	5	5	0	0	0	0	0	5							
2-3p	5	0	0	0	5	0	0	0	0	0	5	0	0	5	5	5	0	0	0	0	0	5							
3-4p	10	0	0	0	10	0	0	0	0	0	10	0	0	10	10	10	0	0	0	0	0	10							
4-5p	5	0	0	0	5	0	0	0	0	0	5	0	0	5	5	5	0	0	0	0	0	5							
5-6p	5	0	0	0	5	0	0	0	0	0	5	0	0	5	5	5	0	0	0	0	0	5							
6-7p	5	0	0	0	5	0	0	0	0	0	5	0	0	5	5	5	0	0	0	0	0	5							
50% Out					10% Out					5% Out					10% In					50% In					5% In				

Daily In	Daily Out
340	340
0%	0%
340	340

<--% Reduction (Test)

IN	OUT
50	10
35	15
25	10
15	10
10	15
10	15
25	25
20	15
25	25
20	50
15	40
10	30
5	15

14.5%	2.6%	<WisDOT Light Industr
10.8%	4.1%	<WisDOT Light Industr
6.9%	3.0%	<WisDOT Light Industr
3.7%	3.1%	<WisDOT Light Industr
3.5%	3.9%	<WisDOT Light Industr
4.7%	5.9%	<WisDOT Light Industr
7.0%	7.0%	<WisDOT Light Industr
5.5%	3.9%	<WisDOT Light Industr
6.7%	7.9%	<WisDOT Light Industr
6.3%	15.1%	<WisDOT Light Industr
3.7%	11.2%	<WisDOT Light Industr
2.8%	8.4%	<WisDOT Light Industr
1.4%	4.2%	<TADI Estimate

Daily In	Daily Out
125	125
0%	0%
125	125

<--% Reduction (Test)

IN	OUT
10	10
10	10
5	5
5	5
5	5
5	5
10	10
5	5
10	10
15	15
10	10
5	5
5	5

Trinity Off-Site

	EB					WB						NB					SB							
Start Time	Rt	Th	Lt	Lt + Th	ALL	Rt	Th	Lt	Lt + Th	ALL	Total	Rt	Th	Lt	Lt + Th	ALL	Rt	Th	Lt	Lt + Th	ALL	Total		
6-7a	5	0	5	5	10	0	0	0	0	0	10	0	5	0	5	5	0	0	0	0	0	5		
7-8a	15	5	15	20	35	10	0	0	0	10	45	0	15	0	15	15	0	0	0	0	0	15		
8-9a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9-10a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
10-11a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
11-12p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
12-1p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1-2p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2-3p	5	5	10	15	20	5	0	0	0	5	25	0	5	0	5	5	0	0	0	0	0	5		
3-4p	0	0	5	5	5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0		
4-5p	0	0	5	5	5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0		
5-6p	0	0	5	5	5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0		
6-7p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
40% Out					20% Out					25% In					20% In					40% In				

Daily In 50	Daily Out 50
0%	0%
50	50

<--% Reduction (Test)

IN	OUT
10	5
40	20
5	5
5	5
0	5
0	5
5	5
5	5
15	30
5	10
5	10
5	10
5	10
5	5

8.0%	3.5%	<WisDOT 'ITE 530"
32.6%	15.1%	<WisDOT 'ITE 530"
2.0%	2.8%	<WisDOT 'ITE 530"
2.3%	2.1%	<WisDOT 'ITE 530"
1.8%	2.1%	<WisDOT 'ITE 530"
1.9%	3.0%	<WisDOT 'ITE 530"
3.2%	3.1%	<WisDOT 'ITE 530"
2.2%	3.3%	<WisDOT 'ITE 530"
10.0%	22.0%	<WisDOT 'ITE 530"
4.2%	9.0%	<WisDOT 'ITE 530"
4.7%	6.2%	<WisDOT 'ITE 530"
6.0%	7.0%	<WisDOT 'ITE 530"
3.0%	3.5%	<TADI Estimate

Daily In | Daily Out

Year 2042 Design Year Traffic Estimate

Start Time	EB					WB					Total	NB					SB					Total
	Rt	Th	Lt	Lt + Th	ALL	Rt	Th	Lt	Lt + Th	ALL		Rt	Th	Lt	Lt + Th	ALL	Rt	Th	Lt	Lt + Th	ALL	
6-7a	30	30	35	65	95	35	10	15	25	60	155	60	130	15	145	205	10	115	40	155	165	370
7-8a	50	50	35	85	135	40	20	40	60	100	235	95	85	10	95	190	40	110	55	165	205	395
8-9a	20	45	25	70	90	25	15	40	55	80	170	65	60	15	75	140	25	55	45	100	125	265
9-10a	20	40	15	55	75	30	30	25	55	85	160	45	40	10	50	95	25	35	35	70	95	190
10-11a	10	20	15	35	45	25	30	35	65	90	135	35	60	20	80	115	20	50	35	85	105	220
11-12p	15	30	25	55	70	35	30	50	80	115	185	35	60	20	80	115	30	55	30	85	115	230
12-1p	25	45	20	65	90	30	45	35	80	110	200	45	70	15	85	130	15	60	45	105	120	250
1-2p	30	35	15	50	80	35	30	25	55	90	170	50	65	25	90	140	20	60	35	95	115	255
2-3p	20	45	30	75	95	40	30	40	70	110	205	45	85	15	100	145	25	80	40	120	145	290
3-4p	15	35	35	70	85	40	50	65	115	155	240	45	90	30	120	165	30	100	45	145	175	340
4-5p	15	35	35	70	85	60	55	75	130	190	275	45	100	40	140	185	40	95	65	160	200	385
5-6p	10	30	40	70	80	45	55	55	110	155	235	45	115	20	135	180	30	115	30	145	175	355
6-7p	15	35	20	55	70	45	20	25	45	90	160	30	95	10	105	135	30	85	15	100	130	265

All-Way Stop Warrant Worksheet

ASWC Warrant Criteria

MUTCD Yes WisDOT Yes
B, 3,

MUTCD

Met? Criteria

- | | | | |
|-----|---|----|---|
| No | A. Is a signal justified? | No | |
| Yes | B. # of crashes in a 12 month period that can be corrected by multi-way stop control: | | 7 |
| No | C. Minimum Volumes | | |
1. Major road approach volume (total of both) at least 300 vph for min 8 hours?
 2. Combined ped, bike, and veh volume on minor approach (total of both) at least 200 units per hour for the same 8 hours as criteria C-1?
 3. If the 85th percentile speed on the major road exceeds 40 mph, may use 70% of the values in C-1 and C-2

Major Street 85th percentile mph:

Time Period	From	To	Major Road: Both App.	Minor Road: Both App. (VPH)	C-1	C-2	Both Met?	D (80%)		Both Met?
1	6:00	7:00	370	155	Yes	No	No	No	No	No
2	7:00	8:00	395	235	Yes	Yes	Yes	No	No	No
3	8:00	9:00	265	170	No	No	No	No	No	No
4	9:00	10:00	190	160	No	No	No	No	No	No
5	10:00	11:00	220	135	No	No	No	No	No	No
6	11:00	12:00	230	185	No	No	No	No	No	No
7	12:00	13:00	250	200	No	Yes	No	No	No	No
8	13:00	14:00	255	170	No	No	No	No	No	No
9	14:00	15:00	290	205	No	Yes	No	No	No	No
10	15:00	16:00	340	240	Yes	Yes	Yes	No	No	No
11	16:00	17:00	385	275	Yes	Yes	Yes	No	No	No
12	17:00	18:00	355	235	Yes	Yes	Yes	No	No	No
13	18:00	19:00	265	160	No	No	No	No	No	No
14	19:00	20:00								
15	20:00	21:00								
16	21:00	22:00								

No

 D. Use when previous criteria have not been met:

If 80% minimum values of Criteria B, C-1, and C-2 (C-3 excluded) are satisfied, warrant is met.

Traffic Analysis Outputs

Two-Way Stop Control

Lanes, Volumes, Timings
100: Duplainville Road & Green Road

07/13/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	45	35	30	15	25	75	70	25	50	90	30
Future Volume (vph)	20	45	35	30	15	25	75	70	25	50	90	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	0%		0%					0%		0%		
Storage Length (ft)	0	60		0	90		0	50		0	75	
Storage Lanes	0	1		0	1		0	1		0	1	
Taper Length (ft)	25	25			25			25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt	0.850			0.850			0.850			0.850		
Flt Protected	0.985		0.968			0.975		0.982				
Satd. Flow (prot)	0	1853	1599	0	1613	1417	0	1748	1524	0	1744	1509
Flt Permitted	0.985		0.968			0.975		0.982				
Satd. Flow (perm)	0	1853	1599	0	1613	1417	0	1748	1524	0	1744	1509
Link Speed (mph)	35			30			35			35		
Link Distance (ft)	709			451			709			467		
Travel Time (s)	13.8			10.3			13.8			9.1		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	14%	14%	14%	6%	6%	6%	7%	7%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%		0%			0%		0%				
Adj. Flow (vph)	26	58	45	38	19	32	96	90	32	64	115	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	84	45	0	57	32	0	186	32	0	179	38
Sign Control	Stop			Stop			Free			Free		

Intersection Summary

Area Type: Other

Control Type: Unsignalized

AM Peak 7:00 am 07/12/2021 Baseline

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Synchro 11 Report

HCM 6th TWSC
100: Duplainville Road & Green Road

07/13/2021

Intersection

Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↖		↖	↖		↖	↖		↖	↖
Traffic Vol, veh/h	20	45	35	30	15	25	75	70	25	50	90	30
Future Vol, veh/h	20	45	35	30	15	25	75	70	25	50	90	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	90	-	-	50	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	1	1	1	14	14	14	6	6	6	7	7	7
Mvmt Flow	26	58	45	38	19	32	96	90	32	64	115	38

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	567	557	115	596	563	90	153	0	0	122	0	0
Stage 1	243	243	-	282	282	-	-	-	-	-	-	-
Stage 2	324	314	-	314	281	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.24	6.64	6.34	4.16	-	-	4.17	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.24	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.24	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.626	4.126	3.426	2.254	-	-	2.263	-	-
Pot Cap-1 Maneuver	436	440	940	398	419	936	1403	-	-	1435	-	-
Stage 1	763	707	-	700	656	-	-	-	-	-	-	-
Stage 2	690	658	-	672	657	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	368	388	940	306	369	936	1403	-	-	1435	-	-
Mov Cap-2 Maneuver	368	388	-	306	369	-	-	-	-	-	-	-
Stage 1	707	672	-	648	607	-	-	-	-	-	-	-
Stage 2	598	609	-	556	625	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.2	15.1	3.4	2.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1403	-	-	382	940	324	936	1435	-	-
HCM Lane V/C Ratio	0.069	-	-	0.218	0.048	0.178	0.034	0.045	-	-
HCM Control Delay (s)	7.8	0	-	17	9	18.5	9	7.6	0	-
HCM Lane LOS	A	A	-	C	A	C	A	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.8	0.1	0.6	0.1	0.1	-	-

AM Peak 7:00 am 07/12/2021 Baseline

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Synchro 11 Report

Lanes, Volumes, Timings
100: Duplainville Road & Green Road

07/13/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	25	30	45	30	35	20	70	55	30	50	15
Future Volume (vph)	15	25	30	45	30	35	20	70	55	30	50	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	0%		0%					0%		0%		
Storage Length (ft)	0	60		0	90		0	50		0	75	
Storage Lanes	0	1		0	1		0	1		0	1	
Taper Length (ft)	25	25			25			25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt	0.850			0.850			0.850			0.850		
Flt Protected	0.982				0.971		0.989				0.982	
Satd. Flow (prot)	0	1829	1583	0	1757	1538	0	1663	1429	0	1651	1429
Flt Permitted	0.982				0.971		0.989				0.982	
Satd. Flow (perm)	0	1829	1583	0	1757	1538	0	1663	1429	0	1651	1429
Link Speed (mph)	35			30			35			35		
Link Distance (ft)	709			451			709			467		
Travel Time (s)	13.8			10.3			13.8			9.1		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	13%	13%	13%	13%	13%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%			0%			0%			0%		
Adj. Flow (vph)	16	27	33	49	33	38	22	77	60	33	55	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	33	0	82	38	0	99	60	0	88	16
Sign Control	Stop			Stop			Free			Free		

Intersection Summary

Area Type: Other
Control Type: Unsignalized

MID Peak 11:30 am 07/12/2021

Synchro 11 Report

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HCM 6th TWSC
100: Duplainville Road & Green Road

07/13/2021

Intersection

Int Delay, s/veh	5.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔		↔	↔		↔	↔
Traffic Vol, veh/h	15	25	30	45	30	35	20	70	55	30	50	15
Future Vol, veh/h	15	25	30	45	30	35	20	70	55	30	50	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	90	-	-	50	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	5	5	5	13	13	13	13	13	13
Mvmt Flow	16	27	33	49	33	38	22	77	60	33	55	16

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	308	302	55	280	258	77	71	0	0	137	0	0
Stage 1	121	121	-	121	121	-	-	-	-	-	-	-
Stage 2	187	181	-	159	137	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.15	6.55	6.25	4.23	-	-	4.23	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.545	4.045	3.345	2.317	-	-	2.317	-	-
Pot Cap-1 Maneuver	644	611	1012	666	641	976	1462	-	-	1382	-	-
Stage 1	883	796	-	876	790	-	-	-	-	-	-	-
Stage 2	815	750	-	836	777	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	575	586	1012	602	615	976	1462	-	-	1382	-	-
Mov Cap-2 Maneuver	575	586	-	602	615	-	-	-	-	-	-	-
Stage 1	869	776	-	862	777	-	-	-	-	-	-	-
Stage 2	738	738	-	761	758	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.4		10.9		1		2.4	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1462	-	-	582	1012	607	976	1382	-	-
HCM Lane V/C Ratio	0.015	-	-	0.076	0.033	0.136	0.039	0.024	-	-
HCM Control Delay (s)	7.5	0	-	11.7	8.7	11.9	8.8	7.7	0	-
HCM Lane LOS	A	A	-	B	A	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0.5	0.1	0.1	-	-

MID Peak 11:30 am 07/12/2021

Synchro 11 Report

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Lanes, Volumes, Timings
100: Duplainville Road & Green Road

07/13/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	30	20	80	50	50	25	100	40	45	95	30
Future Volume (vph)	25	30	20	80	50	50	25	100	40	45	95	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	0%				0%				0%			
Storage Length (ft)	0	60		0			90	0	50		0	75
Storage Lanes	0	1		0			1	0	1		0	1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt	0.850						0.850					
Flt Protected	0.978						0.970					
Satd. Flow (prot)	0	1822	1583	0	1825	1599	0	1775	1524	0	1798	1553
Flt Permitted	0.978						0.970					
Satd. Flow (perm)	0	1822	1583	0	1825	1599	0	1775	1524	0	1798	1553
Link Speed (mph)	35						30					
Link Distance (ft)	709						451					
Travel Time (s)	13.8						709					
Confl. Peds. (#/hr)	13.8											
Confl. Bikes (#/hr)	9.1											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	6%	6%	6%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%						0%					
Adj. Flow (vph)	27	33	22	87	54	54	27	109	43	49	103	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	60	22	0	141	54	0	136	43	0	152	33
Sign Control	Stop			Stop			Free			Free		

Intersection Summary

Area Type: Other

Control Type: Unsignalized

PM Peak 4:30 pm 07/12/2021

Synchro 11 Report

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HCM 6th TWSC
100: Duplainville Road & Green Road

07/13/2021

Intersection

Int Delay, s/veh	6.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↖		↖	↖		↖	↖		↖	↖
Traffic Vol, veh/h	25	30	20	80	50	50	25	100	40	45	95	30
Future Vol, veh/h	25	30	20	80	50	50	25	100	40	45	95	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	90	-	-	50	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	1	1	1	6	6	6	4	4	4
Mvmt Flow	27	33	22	87	54	54	27	109	43	49	103	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	440	407	103	408	397	109	136	0	0	152	0	0
Stage 1	201	201	-	163	163	-	-	-	-	-	-	-
Stage 2	239	206	-	245	234	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.11	6.51	6.21	4.16	-	-	4.14	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.509	4.009	3.309	2.254	-	-	2.236	-	-
Pot Cap-1 Maneuver	527	533	952	555	542	947	1424	-	-	1417	-	-
Stage 1	801	735	-	841	765	-	-	-	-	-	-	-
Stage 2	764	731	-	761	713	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	436	502	952	493	511	947	1424	-	-	1417	-	-
Mov Cap-2 Maneuver	436	502	-	493	511	-	-	-	-	-	-	-
Stage 1	784	707	-	823	749	-	-	-	-	-	-	-
Stage 2	654	716	-	682	686	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.5		13.3		1.1		2	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1424	-	-	470	952	500	947	1417	-	-
HCM Lane V/C Ratio	0.019	-	-	0.127	0.023	0.283	0.057	0.035	-	-
HCM Control Delay (s)	7.6	0	-	13.8	8.9	15	9	7.6	0	-
HCM Lane LOS	A	A	-	B	A	C	A	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	1.2	0.2	0.1	-	-

PM Peak 4:30 pm 07/12/2021

Synchro 11 Report

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Lanes, Volumes, Timings
100: Duplainville Road & Green Road

07/13/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	50	40	35	20	30	90	85	25	60	110	35
Future Volume (vph)	25	50	40	35	20	30	90	85	25	60	110	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		60	0		90	0		50	0		75
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt	0.850			0.850			0.850			0.850		
Flt Protected	0.984			0.969			0.975			0.983		
Satd. Flow (prot)	0	1851	1599	0	1615	1417	0	1748	1524	0	1746	1509
Flt Permitted	0.984			0.969			0.975			0.983		
Satd. Flow (perm)	0	1851	1599	0	1615	1417	0	1748	1524	0	1746	1509
Link Speed (mph)	35			30			35			35		
Link Distance (ft)	709			451			709			467		
Travel Time (s)	13.8			10.3			13.8			9.1		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	14%	14%	14%	6%	6%	6%	7%	7%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%			0%			0%			0%		
Adj. Flow (vph)	32	64	51	45	26	38	115	109	32	77	141	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	96	51	0	71	38	0	224	32	0	218	45
Sign Control	Stop			Stop			Free			Free		
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											

AM Peak 7:00 am 07/12/2021 Baseline
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Synchro 11 Report

HCM 6th TWSC
100: Duplainville Road & Green Road

07/13/2021

Intersection												
Int Delay, s/veh	7.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔		↔	↔		↔	↔
Traffic Vol, veh/h	25	50	40	35	20	30	90	85	25	60	110	35
Future Vol, veh/h	25	50	40	35	20	30	90	85	25	60	110	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	90	-	-	50	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	1	1	1	14	14	14	6	6	6	7	7	7
Mvmt Flow	32	64	51	45	26	38	115	109	32	77	141	45

Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	682	666	141	714	679	109	186	0	0	141	0	0
Stage 1	295	295	-	339	339	-	-	-	-	-	-	-
Stage 2	387	371	-	375	340	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.24	6.64	6.34	4.16	-	-	4.17	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.24	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.24	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.626	4.126	3.426	2.254	-	-	2.263	-	-
Pot Cap-1 Maneuver	365	381	910	331	359	913	1365	-	-	1412	-	-
Stage 1	716	671	-	651	619	-	-	-	-	-	-	-
Stage 2	639	621	-	622	618	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	291	325	910	236	306	913	1365	-	-	1412	-	-
Mov Cap-2 Maneuver	291	325	-	236	306	-	-	-	-	-	-	-
Stage 1	650	630	-	591	562	-	-	-	-	-	-	-
Stage 2	530	564	-	495	580	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.2	18.9	3.5	2.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1365	-	-	313	910	257	913	1412	-	-
HCM Lane V/C Ratio	0.085	-	-	0.307	0.056	0.274	0.042	0.054	-	-
HCM Control Delay (s)	7.9	0	-	21.5	9.2	24.2	9.1	7.7	0	-
HCM Lane LOS	A	A	-	C	A	C	A	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	1.3	0.2	1.1	0.1	0.2	-	-

AM Peak 7:00 am 07/12/2021 Baseline
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Synchro 11 Report

Lanes, Volumes, Timings
100: Duplainville Road & Green Road

07/13/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	30	35	50	35	40	20	85	65	35	60	20
Future Volume (vph)	20	30	35	50	35	40	20	85	65	35	60	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	0%		0%					0%		0%		
Storage Length (ft)	0	60		0	90		0	50		0	75	
Storage Lanes	0	1		0	1		0	1		0	1	
Taper Length (ft)	25	25			25			25		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt	0.850			0.850			0.850			0.850		
Flt Protected	0.980			0.971			0.991			0.982		
Satd. Flow (prot)	0	1825	1583	0	1757	1538	0	1666	1429	0	1651	1429
Flt Permitted	0.980			0.971			0.991			0.982		
Satd. Flow (perm)	0	1825	1583	0	1757	1538	0	1666	1429	0	1651	1429
Link Speed (mph)	35			30			35			35		
Link Distance (ft)	709			451			709			467		
Travel Time (s)	13.8			10.3			13.8			9.1		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	13%	13%	13%	13%	13%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%			0%			0%			0%		
Adj. Flow (vph)	22	33	38	55	38	44	22	93	71	38	66	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	38	0	93	44	0	115	71	0	104	22
Sign Control	Stop			Stop			Free			Free		

Intersection Summary

Area Type: Other
Control Type: Unsignalized

MID Peak 11:30 am 07/12/2021

Synchro 11 Report

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HCM 6th TWSC
100: Duplainville Road & Green Road

07/13/2021

Intersection												
Int Delay, s/veh	5.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗		↖	↗		↖	↗
Traffic Vol, veh/h	20	30	35	50	35	40	20	85	65	35	60	20
Future Vol, veh/h	20	30	35	50	35	40	20	85	65	35	60	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	90	-	-	50	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	5	5	5	13	13	13	13	13	13
Mvmt Flow	22	33	38	55	38	44	22	93	71	38	66	22

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	356	350	66	326	301	93	88	0	0	164	0	0
Stage 1	142	142	-	137	137	-	-	-	-	-	-	-
Stage 2	214	208	-	189	164	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.15	6.55	6.25	4.23	-	-	4.23	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.545	4.045	3.345	2.317	-	-	2.317	-	-
Pot Cap-1 Maneuver	599	574	998	621	607	956	1441	-	-	1350	-	-
Stage 1	861	779	-	859	777	-	-	-	-	-	-	-
Stage 2	788	730	-	806	757	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	524	548	998	550	579	956	1441	-	-	1350	-	-
Mov Cap-2 Maneuver	524	548	-	550	579	-	-	-	-	-	-	-
Stage 1	846	756	-	844	764	-	-	-	-	-	-	-
Stage 2	702	718	-	719	734	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11		11.5		0.9		2.4	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1441	-	-	538	998	562	956	1350	-	-
HCM Lane V/C Ratio	0.015	-	-	0.102	0.039	0.166	0.046	0.028	-	-
HCM Control Delay (s)	7.5	0	-	12.5	8.8	12.7	8.9	7.7	0	-
HCM Lane LOS	A	A	-	B	A	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0.6	0.1	0.1	-	-

MID Peak 11:30 am 07/12/2021

Synchro 11 Report

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Lanes, Volumes, Timings
100: Duplainville Road & Green Road

07/13/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	35	20	95	60	60	30	120	45	55	115	35
Future Volume (vph)	30	35	20	95	60	60	30	120	45	55	115	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		60	0		90	0		50	0		75
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.977			0.970			0.990			0.984	
Satd. Flow (prot)	0	1820	1583	0	1825	1599	0	1775	1524	0	1798	1553
Flt Permitted		0.977			0.970			0.990			0.984	
Satd. Flow (perm)	0	1820	1583	0	1825	1599	0	1775	1524	0	1798	1553
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		709			451			709			467	
Travel Time (s)		13.8			10.3			13.8			9.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	6%	6%	6%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	33	38	22	103	65	65	33	130	49	60	125	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	22	0	168	65	0	163	49	0	185	38
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											

PM Peak 4:30 pm 07/12/2021

Synchro 11 Report

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HCM 6th TWSC
100: Duplainville Road & Green Road

07/13/2021

Intersection												
Int Delay, s/veh	7.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	35	20	95	60	60	30	120	45	55	115	35
Future Vol, veh/h	30	35	20	95	60	60	30	120	45	55	115	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	90	-	-	50	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	1	1	1	6	6	6	4	4	4
Mvmt Flow	33	38	22	103	65	65	33	130	49	60	125	38
Major/Minor												
	Minor2	Minor1		Major1		Major2						
Conflicting Flow All	531	490	125	490	479	130	163	0	0	179	0	0
Stage 1	245	245	-	196	196	-	-	-	-	-	-	-
Stage 2	286	245	-	294	283	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.11	6.51	6.21	4.16	-	-	4.14	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.509	4.009	3.309	2.254	-	-	2.236	-	-
Pot Cap-1 Maneuver	459	479	926	490	487	922	1392	-	-	1385	-	-
Stage 1	759	703	-	808	740	-	-	-	-	-	-	-
Stage 2	721	703	-	716	679	-	-	-	-	-	-	-
Platoon blocked, %									-	-	-	-
Mov Cap-1 Maneuver	358	444	926	422	451	922	1392	-	-	1385	-	-
Mov Cap-2 Maneuver	358	444	-	422	451	-	-	-	-	-	-	-
Stage 1	739	669	-	787	721	-	-	-	-	-	-	-
Stage 2	594	685	-	628	646	-	-	-	-	-	-	-
Approach												
	EB	WB		NB		SB						
HCM Control Delay, s	14.3	15.9		1.2		2.1						
HCM LOS	B	C										
Minor Lane/Major Mvmt												
	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	1392	-	-	400	926	433	922	1385	-	-		
HCM Lane V/C Ratio	0.023	-	-	0.177	0.023	0.389	0.071	0.043	-	-		
HCM Control Delay (s)	7.6	0	-	15.9	9	18.5	9.2	7.7	0	-		
HCM Lane LOS	A	A	-	C	A	C	A	A	A	-		
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.1	1.8	0.2	0.1	-	-		

PM Peak 4:30 pm 07/12/2021

Synchro 11 Report

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Traffic Analysis Outputs

All-Way Stop Control

Lanes, Volumes, Timings
100: Duplainville Road & Green Road

07/13/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	45	35	30	15	25	75	70	25	50	90	30
Future Volume (vph)	20	45	35	30	15	25	75	70	25	50	90	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	0%		0%					0%		0%		
Storage Length (ft)	0	60		0	90		0	50		0	75	
Storage Lanes	0	1		0	1		0	1		0	1	
Taper Length (ft)	25	25			25			25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt	0.850			0.850			0.850			0.850		
Flt Protected	0.985			0.968			0.975			0.982		
Satd. Flow (prot)	0	1853	1599	0	1613	1417	0	1748	1524	0	1744	1509
Flt Permitted	0.985			0.968			0.975			0.982		
Satd. Flow (perm)	0	1853	1599	0	1613	1417	0	1748	1524	0	1744	1509
Link Speed (mph)	35			30			35			35		
Link Distance (ft)	709			451			709			467		
Travel Time (s)	13.8			10.3			13.8			9.1		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	14%	14%	14%	6%	6%	6%	7%	7%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%			0%			0%			0%		
Adj. Flow (vph)	26	58	45	38	19	32	96	90	32	64	115	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	84	45	0	57	32	0	186	32	0	179	38
Sign Control	Stop			Stop			Stop			Stop		

Intersection Summary

Area Type: Other

Control Type: Unsignalized

AM Peak 7:00 am 07/12/2021 Baseline

Synchro 11 Report

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HCM 6th AWSC
100: Duplainville Road & Green Road

07/13/2021

Intersection

Intersection Delay, s/veh 9.9

Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔		↔	↔		↔	↔
Traffic Vol, veh/h	20	45	35	30	15	25	75	70	25	50	90	30
Future Vol, veh/h	20	45	35	30	15	25	75	70	25	50	90	30
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	1	1	1	14	14	14	6	6	6	7	7	7
Mvmt Flow	26	58	45	38	19	32	96	90	32	64	115	38
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	9.2	9.4	10.3	10.1
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	52%	0%	31%	0%	67%	0%	36%	0%
Vol Thru, %	48%	0%	69%	0%	33%	0%	64%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	145	25	65	35	45	25	140	30
LT Vol	75	0	20	0	30	0	50	0
Through Vol	70	0	45	0	15	0	90	0
RT Vol	0	25	0	35	0	25	0	30
Lane Flow Rate	186	32	83	45	58	32	179	38
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.294	0.042	0.137	0.063	0.102	0.047	0.281	0.051
Departure Headway (Hd)	5.689	4.724	5.928	5.066	6.377	5.333	5.629	4.745
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	628	751	600	700	558	664	634	748
Service Time	3.462	2.497	3.711	2.848	4.166	3.122	3.402	2.517
HCM Lane V/C Ratio	0.296	0.043	0.138	0.064	0.104	0.048	0.282	0.051
HCM Control Delay	10.8	7.7	9.7	8.2	9.9	8.4	10.6	7.8
HCM Lane LOS	B	A	A	A	A	A	B	A
HCM 95th-tile Q	1.2	0.1	0.5	0.2	0.3	0.1	1.1	0.2

AM Peak 7:00 am 07/12/2021 Baseline

Synchro 11 Report

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Lanes, Volumes, Timings
100: Duplainville Road & Green Road

07/13/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	25	30	45	30	35	20	70	55	30	50	15
Future Volume (vph)	15	25	30	45	30	35	20	70	55	30	50	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	0%		0%					0%		0%		
Storage Length (ft)	0	60		0	90		0	50		0	75	
Storage Lanes	0	1		0	1		0	1		0	1	
Taper Length (ft)	25	25			25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt	0.850			0.850			0.850			0.850		
Flt Protected	0.982			0.971			0.989			0.982		
Satd. Flow (prot)	0	1829	1583	0	1757	1538	0	1663	1429	0	1651	1429
Flt Permitted	0.982			0.971			0.989			0.982		
Satd. Flow (perm)	0	1829	1583	0	1757	1538	0	1663	1429	0	1651	1429
Link Speed (mph)	35			30			35			35		
Link Distance (ft)	709			451			709			467		
Travel Time (s)	13.8			10.3			13.8			9.1		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	13%	13%	13%	13%	13%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%			0%			0%			0%		
Adj. Flow (vph)	16	27	33	49	33	38	22	77	60	33	55	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	33	0	82	38	0	99	60	0	88	16
Sign Control	Stop			Stop			Stop			Stop		

Intersection Summary

Area Type: Other

Control Type: Unsignalized

MID Peak 11:30 am 07/12/2021

Synchro 11 Report

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HCM 6th AWSC
100: Duplainville Road & Green Road

07/13/2021

Intersection

Intersection Delay, s/veh 8.6

Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔		↔	↔		↔	↔
Traffic Vol, veh/h	15	25	30	45	30	35	20	70	55	30	50	15
Future Vol, veh/h	15	25	30	45	30	35	20	70	55	30	50	15
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	5	5	5	13	13	13	13	13	13
Mvmt Flow	16	27	33	49	33	38	22	77	60	33	55	16
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	8.2	8.7	8.6	8.9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	22%	0%	38%	0%	60%	0%	38%	0%
Vol Thru, %	78%	0%	62%	0%	40%	0%	62%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	55	40	30	75	35	80	15
LT Vol	20	0	15	0	45	0	30	0
Through Vol	70	0	25	0	30	0	50	0
RT Vol	0	55	0	30	0	35	0	15
Lane Flow Rate	99	60	44	33	82	38	88	16
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.15	0.078	0.068	0.042	0.129	0.05	0.136	0.021
Departure Headway (Hd)	5.451	4.636	5.53	4.637	5.642	4.636	5.578	4.686
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	658	772	647	770	635	771	643	763
Service Time	3.184	2.369	3.271	2.378	3.379	2.374	3.315	2.423
HCM Lane V/C Ratio	0.15	0.078	0.068	0.043	0.129	0.049	0.137	0.021
HCM Control Delay	9.1	7.8	8.7	7.6	9.2	7.6	9.2	7.5
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.5	0.3	0.2	0.1	0.4	0.2	0.5	0.1

MID Peak 11:30 am 07/12/2021

Synchro 11 Report

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Lanes, Volumes, Timings
100: Duplainville Road & Green Road

07/13/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	30	20	80	50	50	25	100	40	45	95	30
Future Volume (vph)	25	30	20	80	50	50	25	100	40	45	95	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	0%		0%					0%		0%		
Storage Length (ft)	0	60		0	90		0	50		0	75	
Storage Lanes	0	1		0	1		0	1		0	1	
Taper Length (ft)	25	25			25			25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt	0.850			0.850			0.850			0.850		
Flt Protected	0.978				0.970		0.990				0.984	
Satd. Flow (prot)	0	1822	1583	0	1825	1599	0	1775	1524	0	1798	1553
Flt Permitted	0.978				0.970		0.990				0.984	
Satd. Flow (perm)	0	1822	1583	0	1825	1599	0	1775	1524	0	1798	1553
Link Speed (mph)	35			30			35			35		
Link Distance (ft)	709			451			709			467		
Travel Time (s)	13.8			10.3			13.8			9.1		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	6%	6%	6%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%			0%			0%			0%		
Adj. Flow (vph)	27	33	22	87	54	54	27	109	43	49	103	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	60	22	0	141	54	0	136	43	0	152	33
Sign Control	Stop			Stop			Stop			Stop		

Intersection Summary

Area Type: Other

Control Type: Unsignalized

PM Peak 4:30 pm 07/12/2021

Synchro 11 Report

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HCM 6th AWSC
100: Duplainville Road & Green Road

07/13/2021

Intersection

Intersection Delay, s/veh 9.6

Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	30	20	80	50	50	25	100	40	45	95	30
Future Vol, veh/h	25	30	20	80	50	50	25	100	40	45	95	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	1	1	1	6	6	6	4	4	4
Mvmt Flow	27	33	22	87	54	54	27	109	43	49	103	33
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	9	9.7	9.5	9.8
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	20%	0%	45%	0%	62%	0%	32%	0%
Vol Thru, %	80%	0%	55%	0%	38%	0%	68%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	125	40	55	20	130	50	140	30
LT Vol	25	0	25	0	80	0	45	0
Through Vol	100	0	30	0	50	0	95	0
RT Vol	0	40	0	20	0	50	0	30
Lane Flow Rate	136	43	60	22	141	54	152	33
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.213	0.059	0.099	0.03	0.23	0.073	0.24	0.044
Departure Headway (Hd)	5.652	4.846	5.95	5.014	5.867	4.852	5.67	4.803
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	630	732	597	706	608	732	628	739
Service Time	3.427	2.62	3.741	2.804	3.644	2.628	3.444	2.576
HCM Lane V/C Ratio	0.216	0.059	0.101	0.031	0.232	0.074	0.242	0.045
HCM Control Delay	10	7.9	9.4	8	10.4	8	10.2	7.8
HCM Lane LOS	A	A	A	A	B	A	B	A
HCM 95th-tile Q	0.8	0.2	0.3	0.1	0.9	0.2	0.9	0.1

PM Peak 4:30 pm 07/12/2021

Synchro 11 Report

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Lanes, Volumes, Timings
100: Duplainville Road & Green Road

07/13/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔		↔	↔		↔	↔
Traffic Volume (vph)	25	50	40	35	20	30	90	85	25	60	110	35
Future Volume (vph)	25	50	40	35	20	30	90	85	25	60	110	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	0%			0%			0%			0%		
Storage Length (ft)	0		60	0		90	0		50	0		75
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt	0.850			0.850			0.850			0.850		
Flt Protected	0.984			0.969			0.975			0.983		
Satd. Flow (prot)	0	1851	1599	0	1615	1417	0	1748	1524	0	1746	1509
Flt Permitted	0.984			0.969			0.975			0.983		
Satd. Flow (perm)	0	1851	1599	0	1615	1417	0	1748	1524	0	1746	1509
Link Speed (mph)	35			30			35			35		
Link Distance (ft)	709			451			709			467		
Travel Time (s)	13.8			10.3			13.8			9.1		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	14%	14%	14%	6%	6%	6%	7%	7%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%			0%			0%			0%		
Adj. Flow (vph)	32	64	51	45	26	38	115	109	32	77	141	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	96	51	0	71	38	0	224	32	0	218	45
Sign Control	Stop			Stop			Stop			Stop		

Intersection Summary

Area Type: Other

Control Type: Unsignalized

AM Peak 7:00 am 07/12/2021 Baseline
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Synchro 11 Report

HCM 6th AWSC
100: Duplainville Road & Green Road

07/13/2021

Intersection

Intersection Delay, s/veh 11

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔		↔	↔		↔	↔
Traffic Vol, veh/h	25	50	40	35	20	30	90	85	25	60	110	35
Future Vol, veh/h	25	50	40	35	20	30	90	85	25	60	110	35
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	1	1	1	14	14	14	6	6	6	7	7	7
Mvmt Flow	32	64	51	45	26	38	115	109	32	77	141	45
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	9.8	9.9	11.7	11.3
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	51%	0%	33%	0%	64%	0%	35%	0%
Vol Thru, %	49%	0%	67%	0%	36%	0%	65%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	175	25	75	40	55	30	170	35
LT Vol	90	0	25	0	35	0	60	0
Through Vol	85	0	50	0	20	0	110	0
RT Vol	0	25	0	40	0	30	0	35
Lane Flow Rate	224	32	96	51	71	38	218	45
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.373	0.045	0.169	0.078	0.133	0.061	0.359	0.063
Departure Headway (Hd)	5.989	5.023	6.336	5.457	6.77	5.737	5.922	5.037
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	601	714	566	656	530	624	608	712
Service Time	3.714	2.747	4.068	3.19	4.504	3.472	3.646	2.761
HCM Lane V/C Ratio	0.373	0.045	0.17	0.078	0.134	0.061	0.359	0.063
HCM Control Delay	12.2	8	10.4	8.7	10.5	8.8	11.9	8.1
HCM Lane LOS	B	A	B	A	B	A	B	A
HCM 95th-tile Q	1.7	0.1	0.6	0.3	0.5	0.2	1.6	0.2

AM Peak 7:00 am 07/12/2021 Baseline
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Synchro 11 Report

Lanes, Volumes, Timings
100: Duplainville Road & Green Road

07/13/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	30	35	50	35	40	20	85	65	35	60	20
Future Volume (vph)	20	30	35	50	35	40	20	85	65	35	60	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	0%		0%					0%		0%		
Storage Length (ft)	0	60		0	90		0	50		0	75	
Storage Lanes	0	1		0	1		0	1		0	1	
Taper Length (ft)	25	25			25			25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt	0.850			0.850			0.850			0.850		
Flt Protected	0.980			0.971			0.991			0.982		
Satd. Flow (prot)	0	1825	1583	0	1757	1538	0	1666	1429	0	1651	1429
Flt Permitted	0.980			0.971			0.991			0.982		
Satd. Flow (perm)	0	1825	1583	0	1757	1538	0	1666	1429	0	1651	1429
Link Speed (mph)	35			30			35			35		
Link Distance (ft)	709			451			709			467		
Travel Time (s)	13.8			10.3			13.8			9.1		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	13%	13%	13%	13%	13%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%			0%			0%			0%		
Adj. Flow (vph)	22	33	38	55	38	44	22	93	71	38	66	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	38	0	93	44	0	115	71	0	104	22
Sign Control	Stop			Stop			Stop			Stop		

Intersection Summary

Area Type: Other

Control Type: Unsignalized

MID Peak 11:30 am 07/12/2021

Synchro 11 Report

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HCM 6th AWSC
100: Duplainville Road & Green Road

07/13/2021

Intersection

Intersection Delay, s/veh 8.9

Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔		↔	↔		↔	↔
Traffic Vol, veh/h	20	30	35	50	35	40	20	85	65	35	60	20
Future Vol, veh/h	20	30	35	50	35	40	20	85	65	35	60	20
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	5	5	5	13	13	13	13	13	13
Mvmt Flow	22	33	38	55	38	44	22	93	71	38	66	22
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	8.5	9	8.9	9.3
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	19%	0%	40%	0%	59%	0%	37%	0%
Vol Thru, %	81%	0%	60%	0%	41%	0%	63%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	105	65	50	35	85	40	95	20
LT Vol	20	0	20	0	50	0	35	0
Through Vol	85	0	30	0	35	0	60	0
RT Vol	0	65	0	35	0	40	0	20
Lane Flow Rate	115	71	55	38	93	44	104	22
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.178	0.094	0.087	0.051	0.15	0.059	0.165	0.029
Departure Headway (Hd)	5.557	4.757	5.703	4.797	5.793	4.792	5.704	4.814
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	644	750	626	743	617	745	626	740
Service Time	3.305	2.505	3.456	2.549	3.541	2.54	3.457	2.567
HCM Lane V/C Ratio	0.179	0.095	0.088	0.051	0.151	0.059	0.166	0.03
HCM Control Delay	9.5	8	9	7.8	9.6	7.8	9.6	7.7
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.6	0.3	0.3	0.2	0.5	0.2	0.6	0.1

MID Peak 11:30 am 07/12/2021

Synchro 11 Report

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Lanes, Volumes, Timings
100: Duplainville Road & Green Road

07/13/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	35	20	95	60	60	30	120	45	55	115	35
Future Volume (vph)	30	35	20	95	60	60	30	120	45	55	115	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	0%		0%					0%		0%		
Storage Length (ft)	0	60		0	90		0	50		0	75	
Storage Lanes	0	1		0	1		0	1		0	1	
Taper Length (ft)	25	25			25			25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt	0.850			0.850			0.850			0.850		
Flt Protected	0.977				0.970		0.990				0.984	
Satd. Flow (prot)	0	1820	1583	0	1825	1599	0	1775	1524	0	1798	1553
Flt Permitted	0.977				0.970		0.990				0.984	
Satd. Flow (perm)	0	1820	1583	0	1825	1599	0	1775	1524	0	1798	1553
Link Speed (mph)	35			30			35			35		
Link Distance (ft)	709			451			709			467		
Travel Time (s)	13.8			10.3			13.8			9.1		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	6%	6%	6%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%			0%			0%			0%		
Adj. Flow (vph)	33	38	22	103	65	65	33	130	49	60	125	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	22	0	168	65	0	163	49	0	185	38
Sign Control	Stop			Stop			Stop			Stop		

Intersection Summary

Area Type: Other

Control Type: Unsignalized

PM Peak 4:30 pm 07/12/2021

Synchro 11 Report

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HCM 6th AWSC
100: Duplainville Road & Green Road

07/13/2021

Intersection

Intersection Delay, s/veh 10.5

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	35	20	95	60	60	30	120	45	55	115	35
Future Vol, veh/h	30	35	20	95	60	60	30	120	45	55	115	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	1	1	1	6	6	6	4	4	4
Mvmt Flow	33	38	22	103	65	65	33	130	49	60	125	38
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	9.6	10.6	10.3	10.8
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	20%	0%	46%	0%	61%	0%	32%	0%
Vol Thru, %	80%	0%	54%	0%	39%	0%	68%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	150	45	65	20	155	60	170	35
LT Vol	30	0	30	0	95	0	55	0
Through Vol	120	0	35	0	60	0	115	0
RT Vol	0	45	0	20	0	60	0	35
Lane Flow Rate	163	49	71	22	168	65	185	38
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.271	0.07	0.125	0.033	0.29	0.094	0.307	0.054
Departure Headway (Hd)	5.974	5.166	6.36	5.416	6.197	5.18	5.984	5.113
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	602	694	565	661	581	692	602	701
Service Time	3.701	2.893	4.092	3.149	3.925	2.908	3.711	2.84
HCM Lane V/C Ratio	0.271	0.071	0.126	0.033	0.289	0.094	0.307	0.054
HCM Control Delay	10.9	8.3	10	8.3	11.4	8.4	11.4	8.1
HCM Lane LOS	B	A	A	A	B	A	B	A
HCM 95th-tile Q	1.1	0.2	0.4	0.1	1.2	0.3	1.3	0.2

PM Peak 4:30 pm 07/12/2021

Synchro 11 Report

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