



TRAFFIC COMMITTEE AGENDA

November 20, 2024 – 7:30 P.M.

Lower Level Conference Room – Troy City Hall – 500 West Big Beaver

1. Roll Call
2. Approval of Minutes – September 18, 2024 Traffic Committee

PUBLIC HEARINGS

3. Request for Sidewalk Waiver – 2107 Chancery (Sidwell # 88-20-01-107-015)

REGULAR BUSINESS

4. Request for Traffic Control – Hurst at Donaldson
5. Request for No Parking Zone Extension – Capri Dr.
6. 2025 Traffic Committee Meeting Schedule
7. Public Comment
8. Other Business
9. Adjourn

Copy to:

Traffic Committee Members; Sgt. Brian Warzecha, Police Department; , Michael Koehler, Fire Department

TRAFFIC COMMITTEE

MESSAGE TO VISITORS, DELEGATIONS AND CITIZENS

The Traffic Committee is composed of seven Troy citizens who have volunteered their time to the City to be involved in traffic and safety concerns. The stated role of this Committee is:

- a. To give first hearing to citizens' requests and obtain their input.
- b. To make recommendations to the City Council based on technical considerations, traffic surveys, established standards, and evaluation of citizen input.
- c. To identify hazardous locations and recommend improvements to reduce the potential for traffic crashes.

Final decisions on sidewalk waivers will be made by the Committee at this meeting.

The recommendations and conclusions arrived at on regular items this evening will be forwarded to the City Council for their final action. Any citizen can discuss these recommendations before City Council. The items discussed at the Traffic Committee meeting will be placed on the City Council Agenda by the City Manager. The earliest date these items might be considered by City Council would normally be 10 days to 2 weeks from the Traffic Committee meeting. If you are interested, you may wish to contact the City Manager's Office in order to determine when a particular item is on the Agenda.

Persons wishing to speak before this Committee should attempt to hold their remarks to no more than 5 minutes. Please try to keep your remarks relevant to the subject at hand. Please speak only when recognized by the Chair. These comments are made to keep this meeting moving along. Anyone wishing to be heard will be heard; we are here to listen and help in solving or resolving your particular concerns.

2. Approval of Minutes – September 21, 2024 Traffic Committee

PUBLIC HEARING

3. Request for Sidewalk Waiver – 1207 Chancery (Sidwell # 88-20-01-107-015)

Zachary Morey, homeowner requests a sidewalk waiver for the sidewalk at 1207 Chancery (Sidwell # 88-20-01-107-015). The homeowner states:

- a. *There are no other sidewalks in the subdivision. This would be the only sidewalk and property on both sides as well as across the street have no sidewalks. A sidewalk would literally be a sidewalk to nowhere.*

The Department of Public Works (DPW) recommends approving the waiver request and not requiring the installation of sidewalk “*Due to the lack of sidewalk on the surrounding parcels and the open drainage ditches of the area*”, subject to the submission of a cash deposit for future construction to assure consent and participation in any future sidewalk installation.

REGULAR BUSINESS

4. Request for Traffic Control – Hurst St.. at Donaldson Rd.

Bretagne Whitford of 263 Booth Rd. requests that the intersection of Hurst St. and Donaldson Rd. be reviewed for purposes of traffic control on Hurst St at the intersection. She states: At Hurst and Donaldson, there is only a stop sign in one direction and the crossing intersection doesn't stop. All the neighboring intersections have stop signs so this one is an outlier. It causes confusions with drivers, riders and pedestrians. There is also a giant bush that obstructs the view of oncoming traffic and makes it difficult to proceed. Summer weather is just beginning and my children have told me they almost got hit twice in that intersection, so I'd like to request that this intersection be a four way stop like all of the other intersections in the area.

Bretagne had the following to say about the intersection study: I respectfully disagree with your recommendation on several points, particularly regarding the lack of a speed test on the road. The absence of that data doesn't allow justification for my point that my son nearly got hit twice at that intersection by a speeding vehicle, and it is well-known to us in that neighborhood that vehicles often speed down this stretch. The report does suggest that the safest approach would be to install a four-way stop. I'd like to expand on that recommendation, especially in light of recent changes to the traffic patterns in the area. I have included the relevant section of the report below, with my comments following:

"The safe approach speed calculations suggested STOP-control would be appropriate for the Hurst Street approaches. However, the roadway network in this portion of Troy is set up with a more traditional grid system. With the grid system, it is recommended to alternate traffic control at adjacent intersections. At the intersections to the north and south of the study intersection, the eastbound and westbound approaches are under stop control. This means for the study intersection of Hurst Street at Donaldson Road, that the northbound and southbound approaches of Donaldson Road should be under stop control in order to alternate traffic control."

This alternating stop method may have been relevant in the past, but it is no longer true for the neighborhood. In the last four years, several intersections in the area have had stop signs installed, and this intersection at Donaldson is now the only one without a four-way stop. As a result, it has become an outlier. Given these updates and the noted speeding issue, I believe a four-way stop is the safest and most consistent solution for both local residents and drivers unfamiliar with the area. It would prevent the inconsistent traffic control currently in place and greatly enhance safety, especially for all the kids in the neighborhood.

SUGGESTED RESOLUTIONS:

- a. RESOLVED, that the Hurst St. Approach at Donaldson Rd. be modified from UNCONTROLLED, to STOP CONTROLLED.
- b. RESOLVED, that **NO CHANGE** be made to the Hurst St. Approach at Donaldson Rd.

5. Request for No Parking Zone Extension – Capri Dr

Roger O'Toole of 5357 Capri Dr requests that the NO PARKING ZONE be extended around the entire circle so emergency vehicles can access without issue.

SUGGESTED RESOLUTIONS:

- a. RESOLVED, that a NO PARKING ZONE EXTENSION be **APPROVED** around the entire circle..
- b. RESOLVED, that **NO CHANGE** be made to the NO PARKING ZONE

6. 2025 Traffic Committee Meeting Schedule

According to the City of Troy Traffic Committee By-Laws, Article IV – Meetings:

“Regular meetings will be held on the third Wednesday of each month at 7:30 p.m. at the Troy City Hall, 500 West Big Beaver Road, Troy, Michigan.”

There are no other by-laws or procedures that establish the actual dates of the meetings, but an annual calendar of meetings is published by the City so meeting dates need to be set for this purpose.

SUGGESTED RESOLUTION:

a. Recommended dates for 2025 Traffic Committee meetings are detailed below:

- Wednesday, January 15
- Wednesday, February 19
- Wednesday, March 19
- Wednesday, April 16
- Wednesday, May 21
- Wednesday, June 18
- Wednesday, July 16
- August – NO MEETING
- Wednesday, September 17
- Wednesday, October 15
- Wednesday, November 19
- December – NO MEETING

6. Public Comment

7. Other Business

8. Adjourn

A regular meeting of the Troy Traffic Committee was held Wednesday, September 18, 2024 in the Lower Level Conference Room at Troy City Hall. Pete Ziegenfelder called the meeting to order at 7:30 p.m.

1. Roll Call

Present: Dale Christiansen
Shama Kenkre (Late for first vote)
Cindy Nurak
Justin Rose
Abi Swaminathan
Pete Ziegenfelder

Absent: Al Petrulis
Deputy Fire Chief, Michael Koehler
Angela Zhou, Student Representative

Also present: G. Scott Finlay, City Engineer
Merissa Clark, Administrative Assistant
Sgt. Brian Warzecha, Police Department

2. Minutes – June 19, 2024 Traffic Committee

Resolution # 2024-09-15
Moved by Rose
Seconded by Swaminathan

RESOLVED, that the Traffic Committee approve the June 19, 2024 minutes as presented.

Yes: Christiansen, Nurak, Rose, Swaminathan, Ziegenfelder
No: None
Absent: Petrulis

MOTION CARRIED

PUBLIC HEARINGS

3. Request for Sidewalk Waiver – 6970 Donaldson (Sidwell # 88-20-03-126-048)

Harsha & Danelle Chandra-Sekhar, homeowners request a sidewalk waiver for the sidewalk at 6970 Donaldson (Sidwell # 88-20-03-126-048). The homeowners state:

a. There are no other sidewalks in the subdivision. This would be the only sidewalk and property on both sides as well as across the street have no sidewalks. A sidewalk would literally be a sidewalk to nowhere.

The Department of Public Works (DPW) recommends approving the waiver request and not requiring the installation of sidewalk “*Due to the lack of sidewalk on the surrounding parcels and the open drainage ditches of the area*”, subject to the submission of a cash deposit for future construction to assure consent and participation in any future sidewalk installation.

Danelle introduced herself and her husband Harsha, they are looking to get the sidewalk waiver because none of the neighboring properties have sidewalk, and most of the street does not have it either.

Pete Ziegenfelder states that he is in favor of sidewalk always, because it will eventually lead somewhere.

Cindy Nurak pointed out that South Blvd also does not have sidewalk, so Donaldson would not be getting sidewalk until further down the road.

Abi Swaminathan agreed.

Just Rose stated that it doesn’t seem like the subdivision will be having a lot of new homes constructed in the near future either.

Resolution # 2024-09-16
Moved by Christiansen
Seconded by Rose

Yes: Christiansen, Kenkre, Nurak, Rose, Swaminathan, Ziegenfelder
No: None
Absent: Petruslis

WHEREAS, City of Troy Ordinances, Chapter 34, allows the Traffic Committee to grant waivers of the City of Troy Design Standards for Sidewalks upon a demonstration of necessity; and

WHEREAS, Harsha & Danelle Chandra-Sekhar, homeowners of 6970 Donaldson has requested a waiver of the requirement to construct sidewalk based on lack of sidewalk on surrounding parcels; and

WHEREAS, the Traffic Committee has determined the following:

- a. A waiver will not impair the public health, safety or general welfare of the inhabitants of the City and will not unreasonably diminish or impair established property values within the surrounding area, and
- b. A strict application of the requirements to construct a sidewalk would result in practical difficulties to, or undue hardship upon, the owners, and
- c. The construction of a new sidewalk would lead nowhere and connect to no other walk, and thus will not serve the purpose of a pedestrian travel-way.

NOW THEREFORE, BE IT RESOLVED, that the Traffic Committee **GRANTS** a waiver of the sidewalk requirement for 6970 Donaldson (Sidwell # 88-20-03-126-048) contingent upon receipt of a cash deposit, commensurate with the cost of sidewalk construction.

4. Request for Sidewalk Waiver – 934 Marengo (Sidwell # 88-20-03-279-034)

Bahaa Kizy, Builder, homeowner request a sidewalk waiver for the sidewalk at 934 Marengo (Sidwell # 88-20-03-279-034). The homeowners state:

a. There are no other sidewalks in the subdivision. This would be the only sidewalk and property on both sides as well as across the street have no sidewalks. A sidewalk would literally be a sidewalk to nowhere.

The Department of Public Works (DPW) recommends approving the waiver request and not requiring the installation of sidewalk “*Due to the lack of sidewalk on the surrounding parcels and the open drainage ditches of the area*”, subject to the submission of a cash deposit for future construction to assure consent and participation in any future sidewalk installation.

Adriane Kizy introduced herself, and her husband Bahaa Kizy, they own the property, she is the real estate agent and he is the builder. She pointed out that there is no sidewalk in the subdivision and it would like very out of place if they were to install it. Bahaa had a few different neighbors approach them stating that they did not want the sidewalk installed either. Adriane mentioned if the city were to try and pave it, most of the residents in the area would not vote to approve it/have sidewalk installed. Bahaa explained that it is cheaper to install the sidewalk at his cost, then the deposit is, but thinks it will look better without sidewalk as well.

Cindy Nurak commented that she sees how having sidewalk might make it harder to sell.

Dale Christiansen wanted clarify the applicant can change their mind if they wanted.

Scott Finlay said that is an option.

Justin Rose asked if permits and/or a Certificate of Insurance is required for the work.

Scott Finlay explained the Engineering Departments requirements for Right of Way permit, and Sidewalk/Approach permits.

Bahaa Kizy asked if the site plan would need to be revised to show the sidewalk being installed, currently no sidewalk is shown.

Scott Finlay said yes.

Resolution # 2024-09-17

Moved by Nurak

Seconded by Rose

Yes: Christiansen, Kenkre, Nurak, Rose, Swaminathan, Ziegenfelder
No: None
Absent: Petrulis

WHEREAS, City of Troy Ordinances, Chapter 34, allows the Traffic Committee to grant waivers of the City of Troy Design Standards for Sidewalks upon a demonstration of necessity; and

WHEREAS, Bahaa Kizy, Builder, homeowner of 934 Marengo has requested a waiver of the requirement to construct sidewalk based on lack of sidewalk on surrounding parcels; and

WHEREAS, the Traffic Committee has determined the following:

- a. A waiver will not impair the public health, safety or general welfare of the inhabitants of the City and will not unreasonably diminish or impair established property values within the surrounding area, and
- b. A strict application of the requirements to construct a sidewalk would result in practical difficulties to, or undue hardship upon, the owners, and
- c. The construction of a new sidewalk would lead nowhere and connect to no other walk, and thus will not serve the purpose of a pedestrian travel-way.

NOW THEREFORE, BE IT RESOLVED, that the Traffic Committee **GRANTS** a waiver of the sidewalk requirement for 934 Marengo (Sidwell # 88-20-03-279-034) contingent upon receipt of a cash deposit, commensurate with the cost of sidewalk construction.

REGULAR BUSINESS

5. No Regular Business

7. Public Comment

No public comment.

8. Other Business

Scott Finlay let the Committee know we will not be having an October meeting.

Sgt. Warzecha & Scott Finlay discussed that the signs on Northfield Parkway have been installed near Troy High School.

9. Adjourn

The meeting adjourned at 7:50 PM.

Pete Ziegenfelder -Chairperson

G. Scott Finlay, City Engineer/Traffic Engineer



G:\Traffic\aaa Traffic Committee\2024\18_September_2024\0918_Minutes_Traffic Committee DRAFT



DEPARTMENT OF PUBLIC WORKS
4693 Rochester Road
Troy, MI 48085
troymi.gov

October 14, 2024

TO: The City of Troy Traffic Committee

FROM: Kurt Bovensiepe, Public Works Director 
Mike Verstraete, Streets and Drains Operations Manager 

SUBJECT: Request for Waiver of Sidewalk Requirement
Sidwell Number 88-20-01-107-015

Per the attached waiver form, Homeowner Zachary Morey is requesting a waiver for the sidewalk on the property located at 2107 Chancery, Sidwell Number 88-20-01-107-015, part of Supervisor's of John Arbor Subdivision.

Chapter 34 City of Troy Sidewalks and Driveway Approaches Ordinance # 34-07 requires, all owners of lots and premises abutting dedicated streets open to the public shall be required to construct sidewalks and driveway approaches at the time of construction of any new buildings or structures, or additions to buildings or structures, or at the time a nonconforming use changes to a permitted use in the Zoning District. No occupancy permit shall be issued until such time as the owners of said property have complied with the requirements of this provision provided only that the Director of Building and Zoning may extend the time for completion of the required sidewalks and driveway approaches in accordance with established procedure.

City of Troy Sidewalks and Driveway Approaches Ordinance # 34.07.01 also requires that a sidewalk be installed in conjunction with the development of a parcel due to a recent lot split, combination of parcels or a re-platting.

Please be advised that there is currently no sidewalk to the East or West of 2107 Chancery, or North and South along the Westside of the property.

Due to the lack of sidewalk on the surrounding parcels and the open drainage ditches of the area, we recommend that the sidewalk not be installed at 2107 Chancery, as per ordinance #34.07. If the sidewalk requirements were to be waived, we recommend the approval be subject to the submission of a cash deposit for future construction to assure consent and participation in any future sidewalk installation.



City of Troy
Mr. Kurt Bovensiep
Public Works Director
4693 Rochester Road
Troy, MI 48098

Mr. Bovensiep,

I am/we are the owner(s) of the property at 2107 Chancery,

Lot number _____,

Subdivision Name _____,

Sidewell Number 88-20-01-107-015,

I/we would like to request a sidewalk variance for the following reasons:

No one in our subdivision has sidewalks and it has been that way for a while.

See attached plan/sketch.

I/We can be contacted at 248-804-6593
Phone Number

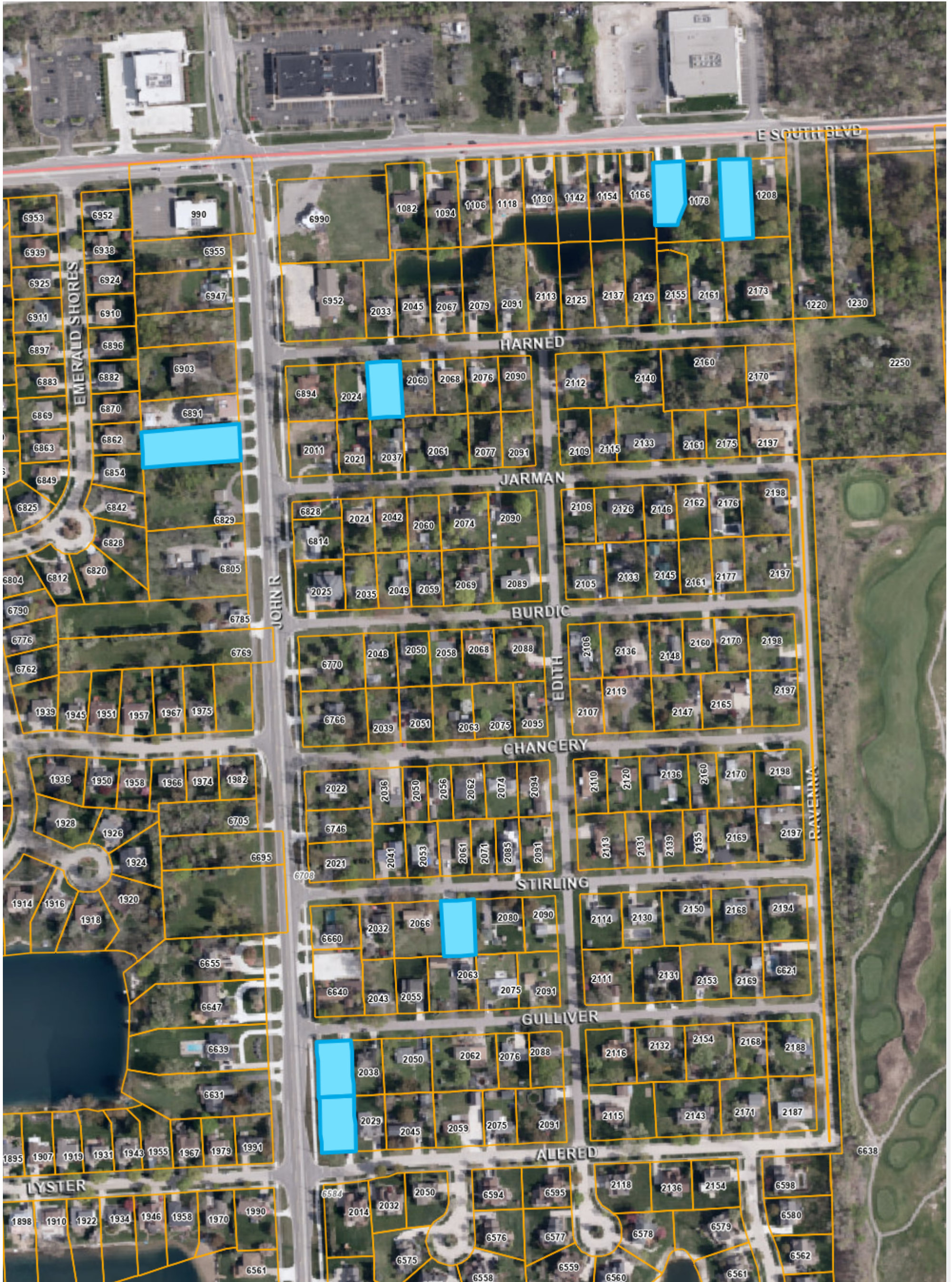
Zachary.morey@yahoo.com
Email Address

Zachary Morey
Name

2107 Chancery
Address

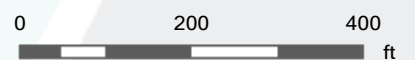
Troy, MI 48085
City, State, Zip

[Handwritten Signature]
Signature



Legend

- Engineering
- Sidewalk Waiver
- Tax Parcels
- Tax Parcel



Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.

EX. CATCH BASIN
RIM 704.68

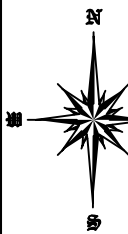
PLOT PLAN

LEGEND

LEGAL DESCRIPTION:

LOT 221, ALSO WEST 37.5 FEET OF
LOT 222, SUPERVISOR'S PLAT OF JOHN
ARBOR SUBDIVISION, CITY OF TROY,
OAKLAND COUNTY, MICHIGAN

- EX. GRADE x 870.00
- EX. INDEX CONTOUR 880
- EX. CONTOUR 881
- EX. WATER MAIN
- EX. STORM SEWER
- EX. SANITARY SEWER
- EX. OVERHEAD
- EX. GAS
- PROPOSED GRADE x 888.88
- DRAINAGE DIRECTION →



RE-GRADE DITCH
@ 1.50%

APPROVED
AS NOTED:
CITY OF TROY LAND SURVEYOR
DATE: 02/28/2023

**Note: New sewer
lead needs to be
installed prior to
issuance of Bldg.
Permit.**

**REMOVE:
40 LF OF EX. SAN.
LEAD TO HSE #2119**

**INSTALL:
45 LF 6" SDR 23.5
@ 1% MIN
(R/W PERMIT REQ.)**

**INSTALL:
2' DIA. 4 FT DEEP
DRY WELL
RIM-705.30**

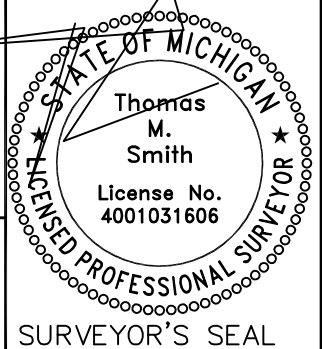
**EX. ASPHALT DRIVEWAY
(TO BE REMOVED)**

**BENCHMARK
ARROW ON HYDRANT
ELEV=708.44
NAVD88 DATUM**

CHANCERY (60 FT WD)

ISSUED FOR: 02-18-23: CITY COMMENTS REV'D BY: ISSUED FOR: REV'D BY:

THOMAS M. SMITH P.S.
PROFESSIONAL LAND SURVEYOR
7559 OLDE STURBRIDGE TRAIL tsmith7559@yahoo.com
CLARKSTON, MICHIGAN 48348 PHONE: (248) 625-3276



DRAWN BY TMS JOB No. 22-210
DATE 01-06-23 SHEET No. 1 OF 1 SCALE 1"=20'

DESCRIPTION
20-01-107-015
2107 CHANCERY





TRAFFIC COMMITTEE REPORT

November 20, 2024

TO: Traffic Committee

FROM: G. Scott Finlay, City Engineer/Traffic Engineer

SUBJECT: Request for Traffic Control – Hurst St. at Donaldson Rd.

Background:

Bretagne Whitford of 263 Booth Rd. requests that the intersection of Hurst St. and Donaldson Rd. be reviewed for purposes of traffic control on Hurst St at the intersection. She states: At Hurst and Donaldson, there is only a stop sign in one direction and the crossing intersection doesn't stop. All the neighboring intersections have stop signs so this one is an outlier. It causes confusions with drivers, riders and pedestrians. There is also a giant bush that obstructs the view of oncoming traffic and makes it difficult to proceed. Summer weather is just beginning and my children have told me they almost got hit twice in that intersection, so I'd like to request that this intersection be a four way stop like all of the other intersections in the area.

The posted speed limit on both streets is 25 mph.

There are stop signs on Donaldson Rd. at this 4-way intersection.

Both Donaldson Rd. and Hurst St. are considered local roads.

There were no crashes recorded in the past full five (5) years within a 250' radius of the intersection.

The major potential sight distance obstruction at the intersection is for a motorist traveling westbound on Hurst Rd. The safe approach speed for westbound vehicles on Hurst St. is 5.1 mph due to the sight distance obstruction from the vegetation on the northeast quadrant.

OHM recommends that Donaldson Rd. remain STOP controlled and no change to Hurst St.

The city requested that OHM review the intersection and provide their findings and recommendations (copy attached).

June 25, 2024

Mr. Scott G Finlay, PE
City Engineer
City of Troy
500 W. Big Beaver Rd
Troy, MI 48084

RE: Traffic Control Recommendation for
Donaldson Road at Hurst Street

Dear Mr. Finlay:

As requested, we have reviewed the intersection of Donaldson Road at Hurst Street to determine the proper traffic control. Donaldson Road at Hurst Street is a 4-legged intersection located in the City of Troy. The speed limit on both streets under investigation is 25 mph. Both the northbound and southbound approaches of Donaldson Road are under stop control, while traffic on Hurst Street remains uncontrolled. Attached are aerial and intersection photos.

Types of Roadways

Both Donaldson Road and Hurst Street are considered local streets. Donaldson Road runs north to south providing direct access to the neighborhood from W South Boulevard. Hurst Street runs east to west offering access to the neighborhood from Livernois Road.

The surrounding land use is entirely single-family residential. On-street parking is permitted on the east and west sides of Donaldson Road and on the north and south sides of Hurst Street. There is no clear major versus minor street. However, for the purpose of analysis Hurst Street is presumed to be the major road, while Donaldson Road is considered the minor road. Both Donaldson Road and Hurst Street serve as key routes throughout the neighborhood.

Traffic Control Analyses

Traffic control analyses described herein adheres to the requirements presented in the Michigan Manual on Uniform Traffic Control Devices (MMUTCD) that are considered mandates of state law. A reference document explaining the background behind the analyses is attached to this memo.

Crash Analysis

Based on information obtained through the Traffic Improvement Association of Michigan, there were no crashes recorded in the past full five (5) years within a 250' radius of the intersection. The crash history does not constitute a compelling case for modifying the existing controls.



Traffic Volumes

Traffic counts were not collected in the vicinity of the intersection. Traffic volumes in residential areas are predominantly driven by the number of single-family residential homes in the neighborhood. Based on the residential nature and the number of homes in the surrounding area it is highly improbable that this location would satisfy any of the minimum volume warrants for an all-way STOP (see attached Reference Guide).

It is therefore extremely unlikely that Hurst Street meets and sustains the 300 vehicles per hour threshold for a minimum of 8 hours. The combined vehicular, pedestrian, and bicycle volumes entering from Donaldson Road is similarly unlikely to average at least 200 units for any 8 hours. Additionally, since the posted speed limit is only 25 mph, it is reasonable to assume that the 85th percentile approach speed does not exceed 40mph on either road; thus, the minimum vehicular volume warrants cannot be discounted to 70 percent of the values described previously. Finally, the study intersection is likely to fall significantly shy even of the reduced 80 percent volumes, based on expected trip generation for this neighborhood. Therefore, the minimum volume criteria for an all-way STOP has not likely been met.

Approach Speed Limits

The approach speed limit on all study streets is 25 mph. Speed limits alone cannot be used in this case to determine which direction of traffic should be assigned the right-of-way.

Sight Distance

The major potential sight distance obstructions at the intersection of Donaldson Road at Hurst Street for a motorist traveling westbound on Hurst Street would be the vegetation on the southeast quadrant and the house corner on the northeast quadrant of the intersection. These obstructions impact the calculated safe approach speeds for the intersection. The safe approach speed is the speed at which a vehicle can approach an intersection and still stop in time to avoid a collision with a vehicle seen on the cross street.

When the safe approach speed is found to be 10 mph or less, a STOP sign is recommended. When the safe approach speed is found to be more than 10 mph, a YIELD sign is recommended. In this case, the safe approach speed for westbound vehicles on Hurst Street is 5.1 mph due to the sight distance obstruction from the vegetation on the southeast quadrant and the permanent sight distance obstruction from the house corner on the northeast quadrant of the intersection. Thus, based on the safe approach speed calculations, STOP-control is the computed right-of-way control for the Hurst Street approaches. The safe approach speed calculation spreadsheet for the intersection is attached for reference.

Recommendation

The safe approach speed calculations suggested STOP-control would be appropriate for the Hurst Street approaches. However, the roadway network in this portion of Troy is set up with a more traditional grid system. With the grid system, it is recommended to alternate traffic control at adjacent intersections. At the intersections to the north and south of the study intersection, the eastbound and westbound approaches are under stop control. This means for the study intersection of Hurst Street at Donaldson Road, that the northbound and southbound approaches of Donaldson Road should be under stop control in order to alternate traffic control.

The vegetation, specifically in the southeast quadrant of the intersection, could be trimmed to provide better sight lines; however, this modification would not alter which street is under stop control, but rather, likely change the control from stop control to yield control.



OHM recommends retaining STOP signs on the Donaldson Road approaches. The intersection should be reevaluated if traffic volumes increase or crashes begin to occur.

Sincerely,
OHM Advisors

Lauren Hull, EIT
Traffic Engineer

Attachments:

- Aerial Photo
- Safe Approach Speed Calculation Spreadsheet
- Intersection Photos
- Traffic Control Determination Reference Guide



Donaldson Rd

265

289

223

E Hurst St

E Hurst St

E Hurst St

E Hurst St

Donaldson Rd

250

2

240

Donaldson Rd

16

Safe Approach Speed Calculation

Donaldson Rd and Hurst St
City of Troy

Date: 6/18/2024
Analyst: Lauren & Hussain

Measured:

Width of Roads
Road 1 = 22 (ft)
Road 2 = 22 (ft)

Distance to Obstructions
a = 13 (ft) e = 50.5 (ft)
b = 11 (ft) f = 89 (ft)
c = 88.5 (ft) g = 67.5 (ft)
d = 45.5 (ft) h = 28 (ft)

Angle of Intersection
Delta = 90 (degrees, measure counterclockwise)

Road 1 Posted
Speed Limit = 25 (mph)

Assumed:

Speed of Vehicle A = Speed of Vehicle C
= Posted Speed Limit on Road 1
+ 5 (mph)
V₁ = 30 (mph)

Perception / Reaction Time (AASHTO)
t = 2.5 (sec)

Deceleration rate (AASHTO)
A = 11.20

Clearance distance in excess of safe stopping distance (AAA)
EC = 0 (ft)

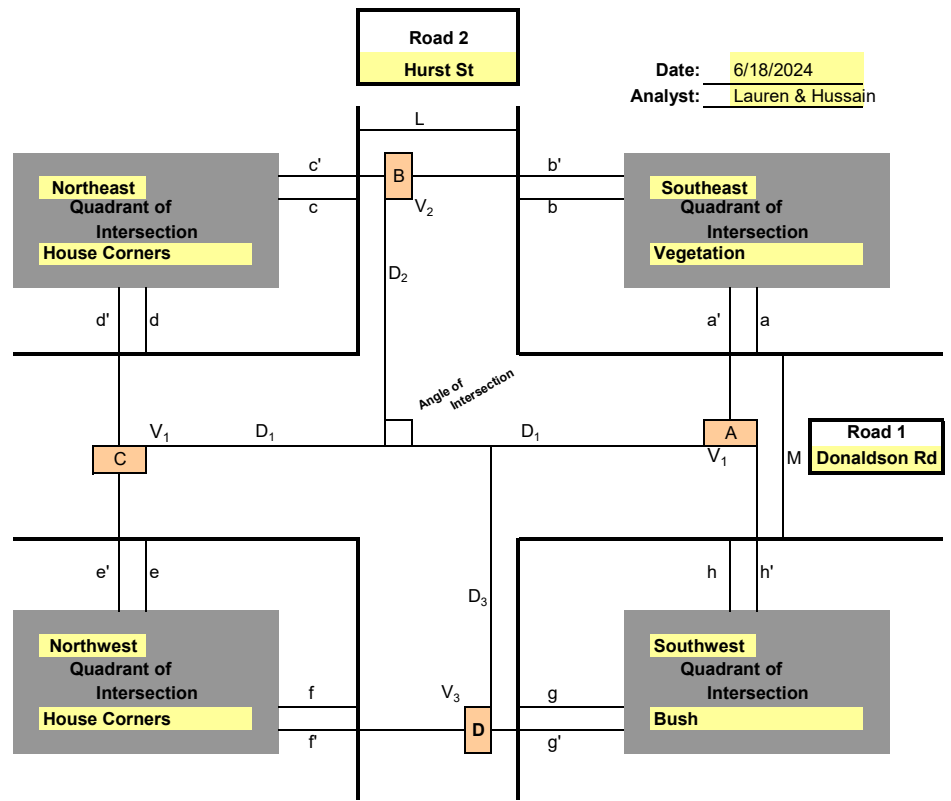
Calculated Safe Approach Speed for Vehicle B
Approaching on Road 2

V₂ = 5.1 (mph) [Based on Veh. A]
or V₂ = 22.6 (mph) [Based on Veh. C]

Calculated Safe Approach Speed for Vehicle D
Approaching on Road 2

V₃ = 17.2 (mph) [Based on Veh. A]
or V₃ = 20.3 (mph) [Based on Veh. C]

Threshold of Safe Approach Speed (AAA, FHWA & NSC)
to Recommend STOP Control 10.0 (mph),
to Recommend YIELD Control 25.0 (mph),
Otherwise Recommends NO CONTROL.



Intermediate Calculations:

D₁ = 196 a' = 19 e' = 56.5
D_{2A} = 21.3 b' = 21 f = 99
D_{2C} = 131.7 c' = 94.5 g' = 73.5
D_{3A} = 91.1 d' = 55.5 h' = 38
D_{3C} = 114

Based On $D_1 = (1.075 V_1^2 / A) + 1.4667 V_1 t + EC$

$D_{2A} = \frac{a' * D_1}{(D_1 - b')}$ or $D_{2C} = \frac{c' * D_1}{(D_1 - d')}$ or $D_{3A} = \frac{g' * D_1}{(D_1 - h')}$ or $D_{3C} = \frac{e' * D_1}{(D_1 - f')}$

Notes: Enter field measurements in yellow highlighted area.
Blue fields are std. default values; change only for cause.
Calculated by spreadsheet

Recommended ROW control for Road 2
based on safe approach speed : **STOP Sign**



Photograph No. 1: Donaldson Road - Heading North Looking Left
Date: 06/18/2024 **Photographer:** Lauren Hull



Photograph No. 2: Donaldson Road - Heading North
Date: 06/18/2024 **Photographer:** Lauren Hull



Photograph No. 3: Donaldson Road - Heading North Looking Right
Date: 06/18/2024 Photographer: Lauren Hull



Photograph No. 4: Hurst Street - Heading West Looking Left
Date: 06/18/2024 Photographer: Lauren Hull



Photograph No. 5: Hurst Street - Heading West
Date: 06/18/2024 **Photographer:** Lauren Hull



Photograph No. 6: Hurst Street - Heading West Looking Right
Date: 06/18/2024 **Photographer:** Lauren Hull



Photograph No. 7: Donaldson Road - Heading South Looking Left
Date: 06/18/2024 **Photographer:** Lauren Hull



Photograph No. 8: Donaldson Road - Heading South
Date: 06/18/2024 **Photographer:** Lauren Hull



Photograph No. 9: Donaldson Road - Heading South Looking Right
Date: 06/18/2024 **Photographer:** Lauren Hull



Photograph No. 10: Hurst Street - Heading East Looking Left
Date: 06/18/2024 **Photographer:** Lauren Hull



Photograph No. 11: Hurst Street - Heading East
Date: 06/18/2024 **Photographer:** Lauren Hull



Photograph No. 12: Hurst Street - Heading East Looking Right
Date: 06/18/2024 **Photographer:** Lauren Hull

Reference Guide on Traffic Control Determination in the State of Michigan

Background

This document is intended to be used as a reference guide for performing intersection traffic control studies of intersections on public roadways in Michigan. The document explains the procedure and requirements necessary to implement traffic control at an intersection as stipulated by the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). Act 300 of Public Acts of 1949 (as amended) requires the adoption of this Manual, and further requires conformance to the manual for all state highways, county roads and local streets open to public travel.

Generally, the starting premise is an uncontrolled intersection. The first step would then be to verify if the intersection should remain uncontrolled or if YIELD or STOP controls on the minor street approach(es) should be provided. For locations with higher traffic volumes and /or crash issues, then an evaluation of the location for all-way STOP warrants would be performed. The appropriate analysis for each level of control described below.

YIELD Traffic Control Guidance

The use of a YIELD sign is intended to assign the right-of-way at intersections where it is not usually necessary to stop before proceeding into the intersection. Conversely, the STOP sign is intended for use where it is usually necessary to stop before proceeding into the intersection.

The following conditions should be fully evaluated to determine how the right-of-way should be assigned:

- Traffic Volumes: Normally, the heavier volume of traffic should be given the right-of-way.
- Approach Speeds: The higher speed traffic should normally be given the right-of-way.
- Types of Highways: When a minor highway intersects a major highway, it is usually desirable to control the minor highway.
- Sight Distance: Sight distance across the corners of the intersection is the most important factor and is critical in determining safe approach speeds.

STOP Traffic Control Guidance

Based on the MMUTCD there are four conditions where STOP signs may be warranted:

- At the intersection of a less important road with a main road where application of the normal right-of-way rule is unduly hazardous.
- On a street entering a through highway or street.
- At an unsignalized intersection in a signalized area.
- At other intersections where a combination of high speed, restricted view, or crash records indicate a need for control by the STOP sign.

In many cases STOP signs are installed where they may not be warranted. Traffic experts agree that unnecessary STOP signs:

- Cause accidents they are designed to prevent.
- Breed contempt for other necessary STOP signs.
- Waste millions of gallons of gasoline annually.
- Create added noise and air pollution.
- Increase, rather than decrease, speeds between intersections.

There is also an explicit restriction in the MMUTCD that STOP signs are not to be used for speed control, in Section 2B.04.

Evaluation of All-Way STOP Traffic Control

Based on the MMUTCD there are four conditions where **all-way** STOP signs may be warranted:

- A. *Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*
- B. *Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.*
- C. *Minimum volumes:*
 - 1. *The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and*
 - 2. *The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but*
 - 3. *If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.*
- D. *Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.*



TRAFFIC COMMITTEE REPORT

November 20, 2024

TO: Traffic Committee

FROM: G. Scott Finlay, City Engineer/ Traffic Engineer

SUBJECT: Request for No Parking Zone Extension
5357 Capri Dr

Background:

Roger O'Toole of 5357 Capri Dr. requests that the NO PARKING ZONE be extended around the entire Capri circle.

Mr. O'Toole reports that by way of background, I have lived this address (5357 Capri Dr.) since 1980. I have a swimming pool (35 years), as does my neighbor to the south and my neighbor to the southeast.

I am not positive, but I believe people started parking on the cul-de-sac, past my driveway 2-3 years ago. The problem is exacerbated by several of my neighbors having 3 or 4 vehicles, boats, and the swimming pool traffic. The cul-de-sac has become a substitute for their respective garages. I also have 3 vehicles, but **I do not park on the cul-de-sac.**

Recently, my physician being concerned for my health called the Troy Police and the Troy Fire Department and requested that I be taken to University of Michigan Hospital. Due to the number of vehicles parked on the cul-de-sac, both the Fire Department and the Police Department had to remain standing on Capri Dr. instead of having access from the cul-de-sac.

More recently, the cul-de-sac has been used as "storage space" and as parking facilities. In fact, one vehicle has not been moved for many weeks.

I would like to have the no parking sign returned to the status that existed in prior years.

I have attached the photos we discussed which were taken today. As more and more vehicles are parked on the cul-de-sac, and they most certainly will, I will forward them to you.



Legend:

Fire Hydrant

- Private - On Line
- Private - Out of Service
- Troy - On Line
- Troy - Out of Service

Water Valve

- P Pressure Reducing Valve
- A Air Release Valve
- I Isolation Valve
- G Gate Valve
- B Butterfly Valve
- T Tapping Sleeve and Valve
- BO Blow Off Valve
- ◇ Post Indicator Valve
- ⊗ Service Valve

Vault

Water Main

- Transmission Main
- Proposed, Out of Service or Standby
- Distribution Main

Water Service Lead

- Commerical
- Private Leads
- Fire Line
- Hydrant
- Residential

- Water Pressure Isolation Zone
- P Water Pressure Reducing Valve

Notes:





TRAFFIC COMMITTEE REPORT

November 20, 2024

TO: Traffic Committee
FROM: Scott Finlay, City Engineer/ Traffic Engineer
SUBJECT: 2025 Traffic Committee Meeting Schedule

According to the City of Troy Traffic Committee By-Laws, Article IV – Meetings:

“Regular meetings will be held on the third Wednesday of each month at 7:30 p.m. at the Troy City Hall, 500 West Big Beaver Road, Troy, Michigan.”

There are no other by-laws or procedures that establish the actual dates of the meetings, but an annual calendar of meetings is published by the City so meeting dates need to be set for this purpose.

Recommended dates for 2025 Traffic Committee meetings are detailed below:

- Wednesday, January 15
- Wednesday, February 19
- Wednesday, March 19
- Wednesday, April 16
- Wednesday, May 21
- Wednesday, June 18
- Wednesday, July 16
- August – NO MEETING
- Wednesday, September 17
- Wednesday, October 15
- Wednesday, November 19
- December – NO MEETING