



TRAFFIC COMMITTEE AGENDA

October 20, 2021 – 7:30 P.M.

Council Boardroom – Troy City Hall – 500 West Big Beaver

1. Roll Call
2. Approval of Minutes – September 15, 2021 Traffic Committee

PUBLIC HEARINGS

3. No Public Hearings

REGULAR BUSINESS

4. Request for No Parking – West Side of Ellenboro Avenue, Trombley Avenue to Colebrook Avenue
5. Request for Traffic Control – Finch Road at Huntsford Drive
6. Public Comment
7. Other Business
8. Adjourn

Copy to:

Item 4: Mandy Kostrzewski, 3325 Mirage; Properties within 300'

Item 5: Dongmei Gao, 916 Huntsford; Properties within 300'

Traffic Committee Members; Sgt. Justin Novak, Police Department; Lt. Paul Firth, 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 – July 21, 2021 Traffic Committee

PUBLIC HEARING

3. No Public Hearings

REGULAR BUSINESS

4. Request for No Parking – West Side of Ellenboro Avenue, Trombley Avenue to Colebrook Avenue

Mandy Kostrzewski of 3325 Mirage requests that the west side of Ellenboro Avenue, between Trombley Avenue and Colebrook Avenue be posted as a No Parking zone. The east side of Trombley Avenue is already posted as a No Parking zone.

SUGGESTED RESOLUTIONS:

- a. RESOLVED, that a NO PARKING ZONE be **APPROVED** for the west side of Ellenboro Avenue, between Trombley Avenue and Colebrook Avenue.
- b. RESOLVED, that **NO CHANGE** be made to the west side of Ellenboro Avenue, between Trombley Avenue and Colebrook Avenue.

5. Request for Traffic Control – Finch Road at Huntsford Drive

Dongmei Gao of 916 Huntsford Drive requests that Stop signs be installed at the intersection of Finch Road and Huntsford Drive. She states that the existing Yield signs don't do anything and no one yields at the intersection. She had a recent experience where she was almost hit by a vehicle and would like Stop signs installed.

SUGGESTED RESOLUTIONS:

- a. RESOLVED, that the intersection of Finch Road at Huntsford Drive be **MODIFIED** from Yield signs on the Finch Road approaches to STOP signs on the Finch Road approaches to the intersection.
- b. RESOLVED, that **NO CHANGE** be made to the intersection of Finch Road at Huntsford Drive.

6. Public Comment

7. Other Business

8. Adjourn

A regular meeting of the Troy Traffic Committee was held Wednesday, September 15, 2021 in the Council Boardroom at Troy City Hall. Pete Ziegenfelder called the meeting to order at 7:30 p.m.

1. Roll Call

Present: Richard Kilmer
Cindy Nurak
Al Petrulis
Abi Swaminathan
Cynthia Wilsher
Pete Ziegenfelder

Absent: Sunil Sivaraman
Alankar Shende, Student Representative

Also present: Debbie Villneff, 5280 Houghton
Sgt. Justin Novak, Police Department
Bill Huotari, City Engineer/Traffic Engineer

2. Minutes – July 21, 2021

Resolution # 2021-09-16
Moved by Kilmer
Seconded by Petrulis

To approve the July 21, 2021 minutes as printed.

Yes: Kilmer, Nurak, Swaminathan, Petrulis, Wilsher, Ziegenfelder
No: None
Absent: Sivaraman

MOTION CARRIED**PUBLIC HEARINGS****3. No Public Hearings****REGULAR BUSINESS****4. Request for Traffic Control – Daniels Drive at McKinley Drive**

Debbie Villneff of 5820 Houghton states that the lack of traffic control signs at the intersection of Daniels Drive at McKinley Drive creates a hazardous condition.

Ms. Villneff was in attendance at the meeting. She discussed the necessity for a Yield or a Stop sign at the intersection. She lives on Houghton in her parents' house that has been in the family since 1964. Ms. Villneff stated that she has been cut-off many times at the intersection

by drivers turning left on McKinley. There is a large pine tree and large maple tree at the intersection that reduces visibility of other vehicles approaching the intersection. Drivers need to stop and look before proceeding. She also discussed the cut-through traffic. Ms. Villneff discussed who is at fault at an intersection with no signs [Sgt. Novak discussed that at an uncontrolled intersection, whoever gets their first has right-of-way]. She discussed further that there are cars that park near the intersection from the new house that was built on the north side of the intersection. Ms. Villneff prefers Stop signs.

Mr. Ziegenfelder asked for clarification on the parked vehicles.

Sgt. Novak added that he and his officers have spent time in this area dealing with cut-through traffic. He prefers a Stop sign on Daniels.

Ms. Swaminathan asked about creating a No Parking zone. There was no public notice regarding creation of a No Parking zone, so if desired it would need to be on the agenda at a future meeting.

Sgt. Novak discussed that they can review the area to see if there are vehicles parked illegally.

Ms. Wilsher added that it is difficult to see around parked cars if they park too close to a sign or near/within an intersection.

Sgt. Novak added that a single Stop sign on Daniels would help control traffic in this area without creating undue congestion as a 3-Way Stop might create.

Resolution # 2021-09-17

Moved by Wilsher

Seconded by Kilmer

RESOLVED, that the intersection of Daniels Drive at McKinley Drive be **MODIFIED** from no traffic control to **ADD** a STOP sign on the Daniels Drive approach to the intersection.

Yes: Kilmer, Nurak, Swaminathan, Petrulis, Wilsher, Ziegenfelder

No: None

Absent: Sivaraman

MOTION CARRIED

5. Public Comment

There was no further public comment at the meeting.

6. Other Business

Ms. Wilsher asked about Troy Police reviewing parking in the Kenyon and Jamaica area. She reports that there are three (3) houses at the end of Kenyon which have recently been sold and cars are parked very close to where Kenyon meets Jamaica creating some issues for vehicles

traveling in this area.

Sgt. Novak discussed legal parking and would have an officer review the area.

Mr. Ziegenfelder discussed what he perceives as an abandoned vehicle on the east end of Forge near Wattles. A car has been parked on the road with a flat tire for a few months.

Sgt. Novak took down the location and will have an officer review the area.

Mr. Ziegenfelder also asked about how long an RV can be parked in a driveway. There was further discussion about restrictions on RV parking in the driveway and long-term storage on the side or in the rear of a house.

Traffic Engineering will refer the concern to Code Enforcement.

13. Adjourn

The meeting adjourned at 8:04 p.m.

Pete Ziegenfelder, Chairperson

William J. Huotari, City Engineer/Traffic Engineer

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TRAFFIC COMMITTEE REPORT

September 28, 2021

TO: Traffic Committee

FROM: Bill Huotari, City Engineer/Traffic Engineer

SUBJECT: Request for No Parking – West Side of Ellenboro Avenue, Trombley Avenue to Colebrook Avenue

Background:

Mandy Kostrzewski of 3325 Mirage requests that the west side of Ellenboro Avenue, between Trombley Avenue and Colebrook Avenue be posted as a No Parking zone. The east side of Ellenboro Avenue is already posted as a No Parking zone.

Ms. Kostrzewski states that this section of Ellenboro Avenue is dangerous to families and also very inconvenient to families and school bus drivers. Ellenboro Avenue is narrow and extremely busy during the school year. When cars are parked on this street (usually it is only 1 car/truck), it can back up traffic significantly. Buses are trying to leave Wattles [Elementary] and cars are trying to get to Wattles [Elementary] and the road is not wide enough to accommodate both plus a parked vehicle. Kids end up being driven to very closely or having to walk in the grass. Plus, we have many children riding bikes to school and that can be very scary with all the traffic.

Dr. Joyce Brasington, Wattles Elementary Principal, supports this request and shares the same concerns about cars being parked on Ellenboro Avenue while buses, walkers and cars of parents are picking up or dropping off students are attempting to exit and enter our [Wattles Elementary] parking lot.

Troy Police Officer and School Resource Officer, John Julian, supports No Parking during the school ingress and egress times. This would help alleviate the congestion, particularly closest to the intersection.

Mary Thumm, Wattles Elementary School Crossing Guard, supports No Parking on the west side of Ellenboro Avenue. Ms. Thumm adds that both in the mornings and afternoons when school is starting and letting out, there is a severe back up of traffic on Ellenboro Avenue, primarily due to vehicles being parked on the side of the road, which allows parking. The road is not wide enough to fit cars/trucks/buses, let alone children and families trying to walk on that section of street due to a lack of sidewalks when there is a vehicle or more parked along that section. It's a tight squeeze even without any vehicles being parked there. And as a crossing guard, I feel that it can be unsafe at times for children trying to walk amidst all of that....especially when a vehicle is parked there, it makes it so much worse.



GIS Online

Legend:

Road Centerline Text



Notes:

Map Scale: 1=204

Created: September 28, 2021



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.

William J Huotari

Subject: FW: Parking on Ellenboro between Colebrook and Trombley

From: Mandy L. [<mailto:mandynicole94@yahoo.com>]
Sent: Wednesday, September 22, 2021 8:53 AM
To: Clara E Reid
Subject: Parking on Ellenboro between Colebrook and Trombley

CAUTION: This email did not originate from within the City of Troy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Clara, please forward this email to the correct department and let me know what the proper email address is, as I believe several other parents will want to email as well.

Hello,

I live within walking distance to Wattles Elementary. For years we have hoped to get sidewalks installed on the roads leading up to Wattles, but we understand that this would be a large expensive undertaking and probably isn't feasible. However, the stretch of road of Ellenboro between Colebrook and Trombley is dangerous to families and also very inconvenient to families and I would assume the school bus drivers. That small stretch of street narrows and is extremely busy during the school year. I would like to request that this stretch of Ellenboro be changed to no parking at any time, or even during the school year between 8am and 4pm. When cars are parked on this street (usually it is only 1 car/truck), it can back up traffic significantly. Buses are trying to leave Wattles, and cars are trying to get to Wattles, and the road is not wide enough to accommodate both plus a parked vehicle. Kids end up being driven to very closely, or having to walk in the grass, which on days like today is very wet. Plus, we have many children riding bikes to school and that can be very scary with all the traffic.

I understand that not being able to park on the street near your house might be inconvenient, but if you look at that stretch, only 2 houses actually have driveways on that stretch, and none of the houses actually face the street. All face the perpendicular streets. I do not think it would be a burden on any of the houses, to not have parking on that stretch. There would be very close parking on Colebrook or Trombley since they are wider streets. Ideally, someone would park on the west side of Colebrook, as it is a dead end street and thus does not have much thru traffic.

For the safety of our students, and the convenience of parents and bus drivers, please consider marking this small stretch of Ellenboro as no parking.

Thank you for your consideration.

Mandy Kostrzewski
Wattles Parent and PTO Board Member
3325 Mirage Dr.
248-421-3168

William J Huotari

Subject: FW: Parking - Ellenboro

From: Julian, John [mailto:JJulian@troy.k12.mi.us]
Sent: Thursday, September 23, 2021 11:48 AM
To: Justin A Novak <novakja@troymi.gov>
Cc: William J Huotari <HuotariWJ@troymi.gov>; Jason J Clark <clarkjj@troymi.gov>
Subject: Re: Parking - Ellenboro

CAUTION: This email did not originate from within the City of Troy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi all,

The pictures actually show the inflow of traffic heading toward the school on the east side of Ellenboro. The buses were going past the traffic toward the school.

But, yes I am in agreement with Sgt. Novak, regarding “no parking during the school ingress and egress times”. This would help alleviate the congestion, particularly closest to the intersection.

The Ford Truck pictured by the school bus belongs to the blue house on the corner. So, with the kids/parents walking to school, the drop off traffic, school buses, and regular neighborhood traffic it is a very tight fit there.

Our crossing guard posted there also mentioned the cramped conditions.

Please let me know if I can be of further assistance.

Thank you,

John Julian
School Resource Officer
248-497-1395

From: [Brasington, Joyce](#)
To: [William J Huotari](#)
Cc: [Carson, Robert](#)
Subject: Parking
Date: Wednesday, September 22, 2021 11:15:08 PM

CAUTION: This email did not originate from within the City of Troy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

My name is Joyce Brasington and I am the principal of Wattles Elementary.

I share the concerns about cars being parked on Ellenborro while buses, walkers, and cars of parents picking up or dropping off students are attempting to exit and enter our parking lot.

I took the pictures below today. You can see with the parked car and a moving bus, there is no room on the road for another car or student.

I am sure you could contact Officer Julian, our police liaison officer, for his insight.

Dr. Brasington





Sent from my iPhone

From: [Mary Thumm](#)
To: [William J Huotari](#)
Cc: [mandynicole94@yahoo.com](#)
Subject: Regarding parking on Ellenborough St
Date: Wednesday, September 22, 2021 2:35:56 PM
Attachments: [No parking.rtf](#)

CAUTION: This email did not originate from within the City of Troy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon Mr. Huotari, I have attached a letter in regards to the concerns of traffic flow on Ellenborough St, primarily the section between Tromley & Colebrook. Please read the letter and take in consideration the changes that would be beneficial by adding a no parking sign. Thanks so much, Mary Thumm

9/22/21

To whom it may concern,

I am the crossing guard at Wattles Elementary School and for quite some time now, there has been a lot of issues with traffic during school hours on Ellenborough (between Trombley & Colebrook).

Both in the mornings and afternoons when school is starting and letting out, there is a severe back up of traffic on Ellenborough, primarily due to vehicles being parked on the side of the road, which allows parking. The road is not wide enough to fit cars/trucks/buses, let alone children and families trying to walk on that section of street due to a lack of sidewalks when there is a vehicle or more parked along that section. Its a tight squeeze even without any vehicles being parked there. And as a crossing guard, I feel that it can be unsafe at times for children trying to walk amidst all of that....especially when a vehicle is parked there, it makes it so much worse.

My suggestion would be to put up a no parking sign on the side of the road that allows parking currently. Even if it was a no parking sign only during school hours, that would be great and may eliminate some of this heavy congestion.

Please consider my suggestion and help keep that area a bit safer and allow for a smoother flow of traffic.

Sincerely, Mary Thumm

Contact info:

Mary Thumm

248-225-5568

matijow@yahoo.com

169 Olympia Dr., Troy, MI 48084

TRAFFIC CONTROL ORDER
75-7-P

92

LOCATION: Ellenboro, north of Colebrook (both sides)

Requirement of Order:

RESOLVED, that Traffic Control Order No. 75-7-P for the installation of no parking signs on both sides of Ellenboro, north of Colebrook is hereby approved.

DONE

Date of Commission Approval: September 8, 1975

Work Order Sent to D.P.W.: September 10, 1975

(2) copies to D.P.W. (this form shall also be work order)

Install signs ASAP

Note installation date on both copies as soon as complete and return (1) copy to Manager's Office.

Frank Gusterker (ag)
City Manager

Manager's office will forward copies to Police Department and City Clerk after installation.

Date Installed: 9-12-75 Alison
Public Works Supt.

Signs installed 9/12/75

Copies to:

☐ Police Department
(Date)

☒ City Clerk 9-25-75
(Date)

Location Ellenboro Street

Requirement of Order:

Move "No Parking" signs to the fire hydrant (east) side of Ellenboro Street (between Vanderpool Street and Colebrook Street) as recommended by the Traffic Committee.

Date of Council Approval 10/13/80

Work Order Sent to DPW 10/20/80

2 copies to DPW (this form shall also be work order)

Install signs _____

Note installation date on both copies as soon as complete and return (1) copy to Manager's Office.

J. Gortenecker
City Manager

Manager's Office will forward copies to Police Department and City Clerk after installation.

Date Installed 10-20-80

Mark D. Williams
Public Works Superintendent

Copies to:

☐ Police Department _____
Date

☒ City Clerk 10/31/80
Date



Troy School District

2021-2022 Building Schedules

Bemis, Hill, Martell, Troy Union, Wass and Wattles Elementary Schools (Early Start)

Full Day	8:39 AM – 3:37 PM	
AM/Half Day	8:39 AM – 12:29 PM	8/31, 9/1 (Kdg only), 9/2 (Kdg only), 9/29, 10/27, 10/28, 3/17, 4/28, 6/14, 6/15, 6/16
Late Start Day	10:09 AM – 3:37 PM	11/10, 12/1, 1/12, 3/9, 4/20, 5/4

Barnard, Costello, Hamilton, Leonard, Morse and Schroeder Elementary Schools (Late Start)

Full Day	9:09 AM – 4:07 PM	
AM/Half Day	9:09 AM – 12:59 PM	8/31, 9/1 (Kdg only), 9/2 (Kdg only), 9/29, 10/27, 10/28, 3/17, 4/28, 6/14, 6/15, 6/16
Late Start Day	10:39 AM – 4:07 PM	11/10, 12/1, 1/12, 3/9, 4/20, 5/4

Boulton Park/Larson (Early Start)	Middle Schools	Baker/Smith (Late Start)
7:54 AM – 2:38 PM	Full Day	8:19 AM – 3:03 PM
7:54 AM – 11:29 AM	AM/Half Day 8/31, 9/29, 10/21, 10/22, 1/20, 4/28, 6/14, 6/15, 6/16	8:19 AM – 11:54 AM
9:24 AM – 2:38 PM	Late Start Day 11/10, 12/1, 1/12, 3/9, 4/20, 5/4	9:59 AM – 3:03 PM

Troy and Athens High School

Full Day	7:20 AM – 2:10 PM	
AM/Half Day	7:20 AM – 10:55 AM	8/31, 9/29, 10/14, 1/18, 1/19, 1/20, 4/28, 6/14, 6/15, 6/16
Late Start Day	8:50 AM – 2:10 PM	11/10, 12/1, 1/12, 3/9, 4/20, 5/4

Troy College and Career High School-*waiting for reduced days and hours approval from State*

Full Day	May Change	7:50 AM – 2:10 PM
AM/Half Day	May Change	8:00 AM – 10:55 AM

International Academy East

Full Day	7:45 AM – 2:35 PM	
Early Release	7:45 AM – 11:00 AM	10/22, 10/28, 12/16, 12/17
Early Release	7:45 AM – 12:00 PM	9/29, 1/21, 1/26, 3/16, 4/12, 4/13, 5/11, 6/16, 6/17, 6/20, 6/21

Troy Center for Transition

Full Day	7:50 AM – 2:10 PM
AM/Half Day 8/31, 9/1, 9/29, 10/15, 12/17, 1/14, 1/31, 2/11, 3/4, 3/24, 4/28, 5/27, 6/13, 6/14	7:50 AM – 11:00 AM



TRAFFIC COMMITTEE REPORT

S

October 1, 2021

TO: Traffic Committee

FROM: Bill Huotari, City Engineer/Traffic Engineer

SUBJECT: Request for Traffic Control – Finch Road at Huntsford Drive

Background:

Dongmei Gao of 916 Huntsford Drive requests that Stop signs be installed at the intersection of Finch Road and Huntsford Drive. She states that the existing Yield signs don't do anything and no one yields at the intersection. She had a recent experience where she almost hit by a vehicle and would like Stop signs installed.

The posted speed limit on both streets is 25 mph.

The intersection is currently controlled by existing Yield signs on the Finch Road approaches to the intersection.

Finch Road is presumed to be the minor road, while Huntsford Drive is considered the major road.

There were two (2) 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 for a motorist traveling northbound on Finch Road would be the house corners on the southeast and southwest quadrants of the intersection. For a motorist traveling southbound on Finch drive, the obstruction would be the house corners on the northwest and northeast corners.

The safe approach speed for southbound vehicles on Finch Road is 17.4 mph due to the permanent sight distance obstruction from the house corner on the northeast quadrant.

OHM recommends maintaining YIELD signs on the Finch Road approaches to the intersection.

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

September 30, 2021

Mr. William Huotari, PE
City Engineer
City of Troy
500 W. Big Beaver Rd
Troy, MI 48084

RE: Traffic Control Recommendation for Huntsford Drive at Finch Drive

Dear Mr. Huotari:

As requested, we have reviewed the intersection of Huntsford Drive at Finch Drive to determine the proper traffic control. Huntsford Drive at Finch Drive is a 4-legged intersection located in the City of Troy. The speed limit on both streets under investigation is 25 mph. The intersection does not have any stop controlled approaches. Attached are aerial and intersection photos.

Types of Roadways

Both Huntsford Drive and Finch Drive are considered local streets. Finch Drive runs north to south providing direct access to the neighborhood from W Wattles Road. Huntsford Drive runs east to west offering access to the neighborhood off of Crooks Road.

The surrounding land use is entirely single-family residential. On-street parking is permitted on the west side of Finch Drive and on the north side of Huntsford Drive. There is no clear major versus minor street. However, for the purpose of analysis Finch Drive is presumed to be the minor road, while Huntsford Drive is considered the major road. Both Finch Drive and Huntsford Drive 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 two injury level O (property damaged only) crashes recorded in the past full five (5) years within a 250' radius of the intersection. The first crash occurred when the driver lost control on the road and struck a tree at the south side of Huntsford Drive, the second crash was a result of a driver making a wide right turn which struck the other vehicle on Huntsford Drive. 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 Finch Drive meets and sustains the 300 vehicles per hour threshold for a minimum of 8 hours. The combined vehicular, pedestrian, and bicycle volumes entering from Huntsford Drive is similarly unlikely to average at least 200 units for any 8 hours. Additionally, since the posted speed limit is only 25mph, it is reasonable to assume that the 85th percentile approach speed does not exceed 40 mph 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 25mph. 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 obstruction at the intersection of Huntsford Drive at Finch Drive for a motorist traveling northbound on Finch Drive would be the house corners on the southeast and southwest quadrants of the intersection. For a motorist traveling southbound on Finch Drive, the obstruction would be the house corners on the northwest and northeast corners. 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 less than 10 mph, a STOP sign is recommended. When the safe approach speed is found to be more than 10 mph, a YIELD sign is recommended. The safe approach speed for southbound vehicles on Finch Drive is 17.4 mph due to the permanent sight distance obstruction from the house corner on the northeast quadrant. Safe approach speeds for the remaining quadrants range from 18.6 mph to 20.1 mph. Thus, based on the safe approach speed calculations, YIELD-control is the computed right-of-way control for Finch Drive approach. The safe approach speed calculation spreadsheet for the intersection is attached for reference.

Recommendation

The preceding analysis did not determine that any criteria were met for all-way STOP-control. The safe approach speed calculations suggested YIELD-control would be appropriate for the minor street (Finch Drive) approach.

OHM recommends maintaining a YIELD sign on the Finch Drive approaches. The intersection should be reevaluated if traffic volumes increase or crashes begin to occur.



Sincerely,
OHM Advisors

Ife Ogundeji
Traffic Engineer

Attachments:

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



GIS Online

Legend:

Road Centerline Text



Notes:

Map Scale: 1=252

Created: September 8, 2021



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.

Safe Approach Speed Calculation

Huntsford Dr and Finch Dr
City of Troy

Date: 9/14/2021
Analyst: Ife Ogundeji

Measured:

Width of Roads
Road 1 = 26 (ft)
Road 2 = 26 (ft)

Distance to Obstructions
a = 55 (ft) e = 62 (ft)
b = 51 (ft) f = 52 (ft)
c = 57 (ft) g = 62 (ft)
d = 58 (ft) h = 62 (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 = 17.2 (mph) [Based on Veh. A]
or V₂ = 18.3 (mph) [Based on Veh. C]

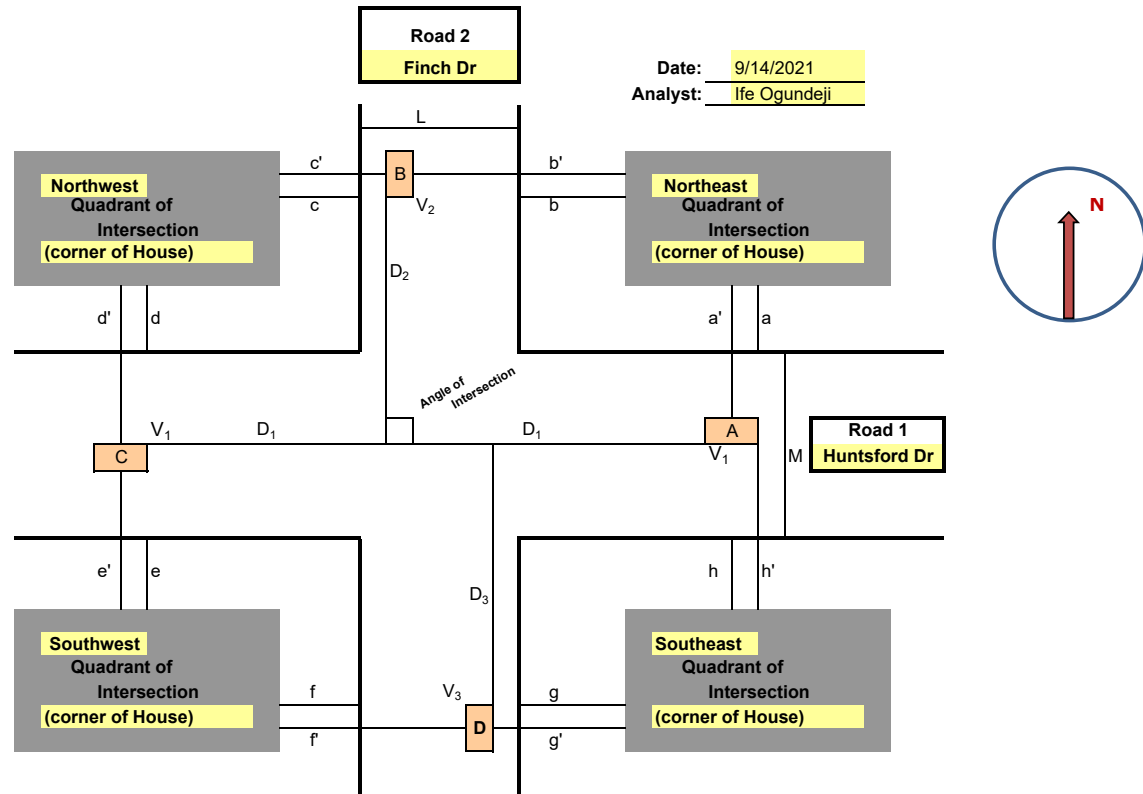
Calculated Safe Approach Speed for Vehicle D

Approaching on Road 2

V₃ = 19.9 (mph) [Based on Veh. A]
or V₃ = 18.7 (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' = 61 e' = 68
D_{2A} = 91.2 b' = 65 f' = 66
D_{2C} = 99.5 c' = 63 g' = 68
D_{3A} = 110.9 d' = 72 h' = 76
D_{3C} = 102

Based On $D_1 = (1.075 V_1^2 / A) + 1.4667 V_1 t + EC$
 $D_{2A} = \frac{a' \cdot D_1}{(D_1 - b')}$ or $D_{2C} = \frac{c' \cdot D_1}{(D_1 - d')}$ or $D_{3A} = \frac{g' \cdot D_1}{(D_1 - h')}$ or $D_{3C} = \frac{e' \cdot D_1}{(D_1 - f')}$

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 :

YIELD SIGN



Photograph No. 1: Finch Drive- Heading North
Date: 09/16/2021 **Photographer:** Ife Ogundeji



Photograph No. 2: Finch Drive- Heading North looking left
Date: 09/16/2021 **Photographer:** Ife Ogundeji



Photograph No. 3: Finch Drive- Heading North looking right
Date: 09/16/2021 **Photographer:** Ife Ogundeji



Photograph No. 4: Huntsford Drive- Heading West
Date: 09/16/2021 **Photographer:** Ife Ogundeji



Photograph No. 5: Huntsford Drive - Heading West and looking left
Date: 09/16/2021 **Photographer:** Ife Ogundeji



Photograph No. 6: Huntsford Drive - Heading West and looking right
Date: 09/16/2021 **Photographer:** Ife Ogundeji



Photograph No. 7: Finch Drive- Heading South
Date: 09/16/2021 **Photographer:** Ife Ogundeji



Photograph No. 8: Finch Drive - Heading South and looking left
Date: 09/16/2021 **Photographer:** Ife Ogundeji



Photograph No. 9: Finch Drive- Heading South and looking right
Date: 09/16/2021 **Photographer:** Ife Ogundeji



Photograph No. 10: Huntsford Drive - Heading East
Date: 09/16/2021 **Photographer:** Ife Ogundeji



Photograph No. 11: Huntsford Drive- Heading East and looking left
Date: 09/16/2021 **Photographer:** Ife Ogundeji



Photograph No. 12: Huntsford Drive - Heading East and looking right
Date: 09/16/2021 **Photographer:** Ife Ogundeji

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.*