

CITY of NOVI CITY COUNCIL

Agenda Item G December 15, 2008

SUBJECT: Approval of Traffic Control Order ⁰⁸⁻⁰⁹ for the installation of a Stop sign for northbound and southbound Foxton Drive to stop at Huntingcross Drive.

SUBMITTING DEPARTMENT: Public Works

CITY MANAGER APPROVAL

BACKGROUND INFORMATION:

On September 23, 2008, the Dunbarton Pines Homeowners' Association submitted a written request to the DPW to classify this intersection as a four-way stop. There is currently an east / west two-way stop at this intersection. The DPW conducted traffic counts and Birchler/Arroyo performed a traffic study. The results of the study confirm that a four-way stop is warranted at this intersection.

RECOMMENDED ACTION: Approval of Traffic Control Order 08-09 for the installation of a Stop sign for northbound and southbound Foxton Drive to stop at Huntingcross Drive.

	1	2	Y	N
Council Member Margolis				
Council Member Mutch				
Council Member Staudt				

CITY OF NOVI TRAFFIC CONTROL ORDER

SPEED	DATE OF ORDER: November 24, 2008
PARKING	CONTROL NUMBER: 08-09
X OTHER	
BEING THE UNIFORM TRAFFIC CODE FOR CI INTEREST OF PUBLIC SAFETY AND CONVENIE	DE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME TIES, TOWNSHIPS, AND VILLAGES OF MICHIGAN, AND IN THE ENCE, THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY OF PUBLIC WORKS, DULY AUTHORIZED AS TRAFFIC ENGINEER, IR.
	RDER WAS PRECEDED BY STUDY AND INVESTIGATION OF PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.
Foxton Drive	
PUBLIC WORKS ERECT AND MAINTAIN THE S	EBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF STOP SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL AS REQUIRED BY SEC. 33.217 OF THE AFORESAID CHAPTER, WING DETERMINATION:
Northbound & Southbound Foxton Drive to St	op at Huntingcross Drive
	TRAFFIC ENGINEER CUSKER
APPROVED BY CITY COUNCIL	DATED: November 24, 2008
NOVI, MICHIGAN FOR STUDY AND APPROVA	HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF L, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND IE OFFICE OF THE CITY CLERK AND A COPY THEREOF IN THE ITY.
	T THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF
Northbound & Southbound Foxton Drive to St	op at Huntingcross Drive
ADOPTED AT THE REGULAR MEETING OF COUNCIL ON	BY: MAYOR – David Landry

CITY CLERK - Maryanne Cornelius

Northbound & Southbound Foxton Drive to Stop at Huntingcross Drive December 8, 2008





Dunbarton Pines Homeowners' Association P.O. Box 470, Novi, MI 48376

September 23, 2008

To: Mr. Benny McCusker

City of Novi, Department of Public Works

Subject: Safety Concerns of the Foxton Dr. / Huntingcross Dr. Intersection

Dear Mr. McCusker:

As President of the Dunbarton Pines Homeowners' Association (DPHA), I am writing this letter on behalf of the many residents that have expressed safety concerns regarding the Foxton / Huntingcross intersection.

The intersection of concern is a main thoroughfare for residents and visitors of the neighborhood that utilize the Foxton Drive entrance from Nine Mile Road. Currently, the Foxton Drive motorists have the right of way, while Huntingcross Drive motorists must stop and yield to the Foxton Drive motorists. Often drivers with destinations in the interior portion of the neighborhood speed through this intersection at a fairly high rate of speed.

The high rate of speed of the motorists, along with the deteriorating conditions of the streets and the numerous children living near the intersection (approximately 20 children live within two houses of this intersection), combine for the potential of a serious accident in our near future.

Through our quarterly newsletter, the DPHA Board has repeatedly reminded residents to monitor speeds within the neighborhood. The DPHA Board has also documented and requested improvements to our streets through the DPW, with the goal of safe walking and biking surfaces. As well as, I am sure that each household councils their children on pedestrian responsibility and safety.

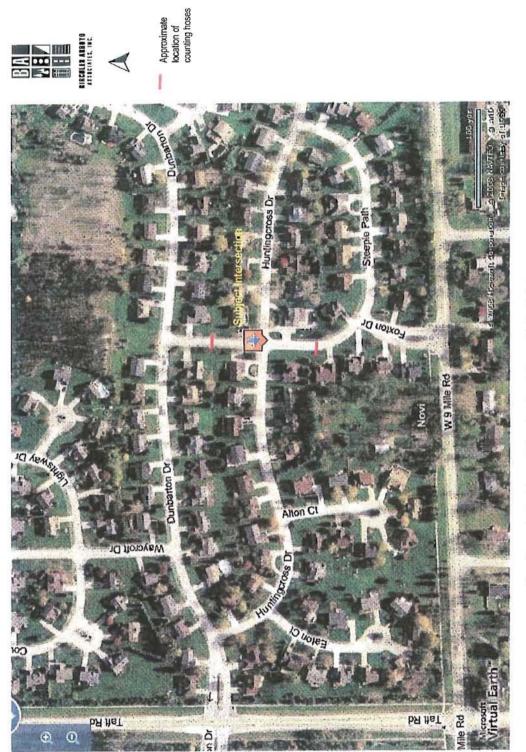
However, the DPHA Board believes that action is required by City of Novi's Department of Public Works in order to avert a near certain accident in our future. The DPHA Board is requesting the DPW classify this intersection as a four way stop and post accordingly.

Please give serious consideration to this request, as the residents of Dunbarton Pines' primary desire is to ensure the safety of the children, walkers, bikers and others that use the surface streets. We anxiously await a favorable response, detailing a solution to our safety concerns.

Sincerely,

Chris Carlstien, President DPHA

CC: Clay Pearson, Robert Hayes, Tim Wright, Cindy Uglow



Southwest Portion of Dunbarton Pines Subdivision





Birds Eye View of Foxton-Huntingcross Area



Looking North at Foxton from Eastbound Huntingcross



Looking South at Huntingcross from Southbound Foxton

MEMORANDUM

DATE:

October 15, 2008

TO:

William McCusker, Director of Public Works, City of Novi

FROM:

Rodney L. Arroyo, AICP, Vice President

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

SUBJECT:

Intersection of Foxton Drive and Huntingcross Drive

Dunbarton Pines Subdivision

At the request of the DPW, we have reviewed this intersection for the possible installation of four-way stop-sign control. Currently, only drivers on Huntingcross must stop for the intersection.

Findings Related to Speeds

Prior to our getting involved in this matter, City personnel placed automated traffic monitoring equipment on Foxton 150 ft north and south of the intersection (see attached photos). Table 1 summarizes the results of the 72-hour data collection (Tuesday-Thursday, October 7-9, 2008).

Direction Average Daily Average Speed Exceeding 85th Percentile Location Traffic Volume Speed Limit Speed (mph) (mph) Northbound 214 20.7 1.9% 24.0 South of 24.6 Huntingcross Southbound 241 11.0% 20.8 Northbound 22.0 19.4% 151 26.2 North of 16.6% 21.7 Huntingcross 157 25.6 Southbound

Table 1. Results of Traffic Monitoring on Foxton Drive

In recent years, the 85th percentile speed (the speed exceeded by 15% of the drivers sampled) has often been found to exceed the speed limit. National research has found compliance with the 25-mph residential-street speed limit to average only about 17%. Based on these standards, the speeds measured on Foxton Drive are typical or lower than typical.

Other Findings

On October 14, 2008, we checked the corner sight distances afforded at the subject intersection. The most sight-restricted corners are the northwest (see attached photos) and the northeast. In the

hypothetical absence of the existing east-west STOP signs, we found (using Road Commission guidelines) that the critical approach speed is 22 mph on both streets. Since meeting this criterion on any given street ordinarily warrants a YIELD sign, and since it is inappropriate to install YIELD signs on two conflicting approaches, this intersection should be converted to all-way-stop control.

The Michigan Manual of Uniform Traffic Control Devices (MMUTCD), which limits what the City can legally do with respect to signage, states (in Section 2B.05) that "STOP signs shall not be used for speed control." Installing STOP signs for the sole purpose of reducing speeds has been found to increase the incidence of rolling stops and can give crossing pedestrians a false sense of security. Before-and-after studies have shown that speed reductions near such STOP signs are often offset by speed increases between signs, as drivers attempt to "make up for lost time." Hence, it is important to note for the record that the all-way stop signs in this case are justified by limited sight distance, not solely a desire to limit speeds in the vicinity.

Conclusions and Recommendations

Traffic volumes at this intersection fall far below the volume thresholds for multi-way stop control outlined in the *Michigan Manual of Uniform Traffic Control Devices (MMUTCD*), and the sampled speeds were typical or lower than typical for a local residential street. However, our field inspection found that sight distance limitations across the northwest and northeast corners limit the critical approach speed to 22 mph on both streets in the hypothetical absence of the existing east-west STOP signs. Since meeting this criterion on any given street ordinarily warrants a YIELD sign, and since it is inappropriate to install YIELD signs on two conflicting approaches, we recommend that this intersection be converted to all-way-stop control. All four stop signs should be supplemented with ALL WAY (R1-4) signs below. A corresponding Traffic Control Order should be obtained from City Council.