CITY of NOVI CITY COUNCIL



Agenda Item H November 25, 2013

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SUBJECT: Approval of traffic control orders 13-39 through 13-46 for traffic control signs within Cedarsprings Estates subdivision.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division

CITY MANAGER APPROVAL:

BACKGROUND INFORMATION:

The existing signage within Cedarsprings Estates Subdivision has been reviewed as part of a multi-year plan to replace all traffic control signs throughout the City to meet new federal requirements, which pertain to the visibility of traffic signs and more specifically the color, size, and retroreflectivity of the sign. Retroreflectivity is the ability of a surface to return light back from its sources (i.e., signs and pavement markings reflecting light from the headlights back to the driver's eye). The FY13-14 budget included \$20,000 for the purchase of sign material for the annual sign replacement program.

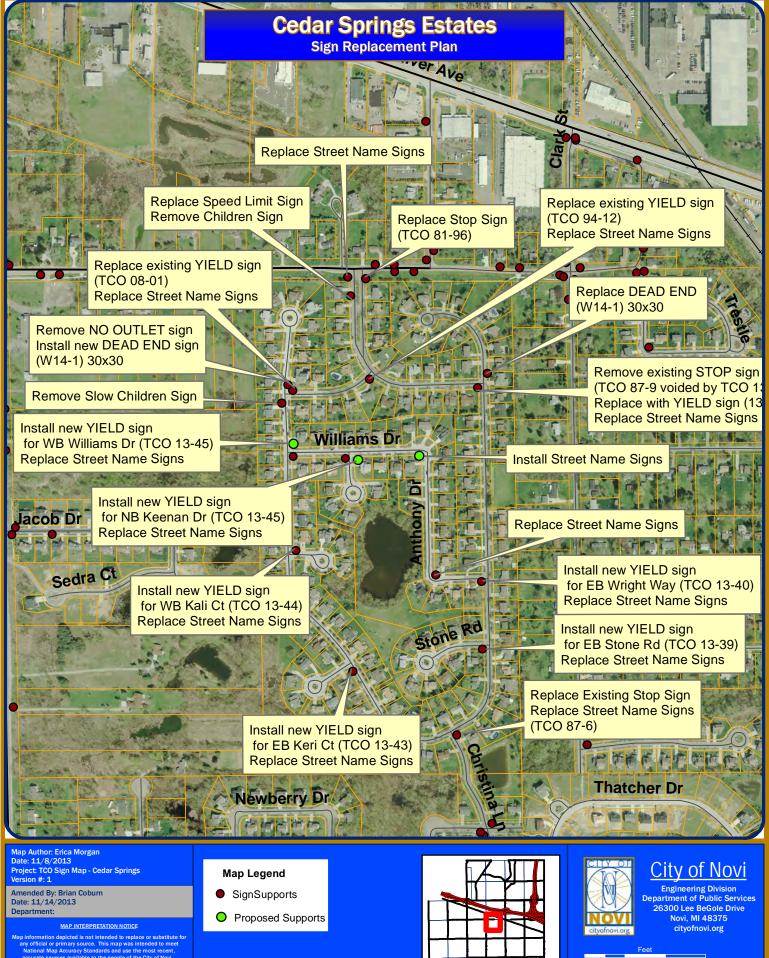
An inspection by City staff noted that many of the traffic signs in Cedarsprings Estates have very low retroreflectivity and that several intersections lack any stop or yield signs to assign the right-of-way at the intersections. The following table summarizes the traffic control orders (TCO) for the new stop and yield signs that are to be installed based on the intersection study completed by the City's traffic consultant, Clearzoning (see attached report):

TCO	
No.	Description
13-39	Eastbound Stone Road to yield at Buckminster Drive
13-40	Eastbound Wright Way to yield at Buckminster Drive
13-41	Rescind TCO 87-9 requiring eastbound Petros to stop at Buckminster
13-42	Eastbound Petros Boulevard to yield at Buckminster Drive
13-43	Eastbound Kerri Court to yield at Sullivan Lane
13-44	Westbound Kali Court to yield at Sullivan Lane
13-45	Westbound Williams Drive to yield at Sullivan Lane
13-46	Northbound Keenan Court to yield at Williams Drive

The Homeowners Association has been notified of the pending sign replacement work. The installation of the new traffic control signs will be scheduled and completed using DPS Field Operations staff in the next several months.

RECOMMENDED ACTION: Approval of traffic control orders 13-39 through 13-46 for traffic control signs within Cedarsprings Estates subdivision.

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Mayor Gatt					Council Member Markham		
Mayor Pro Tem Staudt					Council Member Mutch		
Council Member Casey					Council Member Wrobel		
Council Member Fischer							







1 inch = 50<u>0 feet</u>

SPEED	DATE OF ORDER:	11/15/2013
PARKING		
X OTHER	CONTROL NUMBER:	13-39
<u></u>		

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOV!, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

STONE ROAD

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE YIELD SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

EASTBOUND STONE ROAD TO YIELD AT BUCKMINSTER DRIVE

Brian Coburn, P.E. - Traffic Engineer Dated: <u>11/15/2013</u>

APPROVED BY CITY COUNCIL

TRAFFIC CONTROL ORDER NUMBER <u>13-39</u> HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

EASTBOUND STONE ROAD TO YIELD AT BUCKMINSTER DRIVE

ADOPTED AT THE REGULAR MEETING OF CITY COUNCIL ON <u>11/25/2013</u>.

By: _

Robert J. Gatt, Mayor

By: .

SPEED	DATE OF ORDER:	11/15/2013
PARKING		
X OTHER	CONTROL NUMBER:	13-40

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

WRIGHT WAY

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE YIELD SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

EASTBOUND WRIGHT WAY TO YIELD AT BUCKMINSTER DRIVE

Brian Coburn, P.E. - Traffic Engineer Dated: <u>11/15/2013</u>

APPROVED BY CITY COUNCIL

TRAFFIC CONTROL ORDER NUMBER <u>13-40</u> HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

EASTBOUND WRIGHT WAY TO YIELD AT BUCKMINSTER DRIVE

ADOPTED AT THE REGULAR MEETING OF CITY COUNCIL ON <u>11/25/2013.</u>

By: ____

Robert J. Gatt, Mayor

By:

SPEED	DATE OF ORDER:	11/15/2013
XOTHER	CONTROL NUMBER:	13-41

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

PETROS

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

RESCIND TCO 87-9 REQUIRING EASTBOUND PETROS TO STOP AT BUCKMINSTER

Brian Coburn, P.E. - Traffic Engineer Dated: <u>11/15/2013</u>

APPROVED BY CITY COUNCIL

TRAFFIC CONTROL ORDER NUMBER <u>13-41</u> HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

RESCIND TCO 87-9 REQUIRING EASTBOUND PETROS TO STOP AT BUCKMINSTER

ADOPTED AT THE REGULAR MEETING OF CITY COUNCIL ON <u>11/25/2013.</u>

By: _

Robert J. Gatt, Mayor

By: _

SPEED	DATE OF ORDER:	11/15/2013
PARKING		
XOTHER	CONTROL NUMBER:	13-42

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER,

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

PETROS BOULEVARD

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE YIELD SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

EASTBOUND PETROS BOULEVARD TO YIELD AT BUCKMINSTER DRIVE

Brien Coburn, P.E. - Troffic Engineer Dated: <u>11/15/2013</u>

APPROVED BY CITY COUNCIL

TRAFFIC CONTROL ORDER NUMBER <u>13-42</u> HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

EASTBOUND PETROS BOULEVARD TO YIELD AT BUCKMINSTER DRIVE

ADOPTED AT THE REGULAR MEETING OF CITY COUNCIL ON <u>11/25/2013.</u>

By: _

Robert J. Gatt, Mayar

By: _

SPEED	DATE OF ORDER:	11/15/2013
PARKING		
X OTHER	CONTROL NUMBER:	13-43

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

KERRI COURT

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE YIELD SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

EASTBOUND KERRI COURT TO YIELD AT SULLIVAN LANE

Brian Coburn, P.E. - Traffic Engineer Dated: <u>11/15/2013</u>

APPROVED BY CITY COUNCIL

TRAFFIC CONTROL ORDER NUMBER <u>13-43</u> HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

EASTBOUND KERRI COURT TO YIELD AT SULLIVAN LANE

ADOPTED AT THE REGULAR MEETING OF CITY COUNCIL ON <u>11/25/2013.</u>

Ву: _

Robert J. Gatt, Mayor

By: .

SPEED PARKING	DATE OF ORDER:	11/15/2013
	CONTROL NUMBER:	13-44

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

KALI COURT

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE YIELD SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

WESTBOUND KALI COURT TO YIELD AT SULLIVAN LANE

Brian Coburn, P.E. - Traffic Engineer Dated: <u>11/15/2013</u>

APPROVED BY CITY COUNCIL

TRAFFIC CONTROL ORDER NUMBER <u>13-44</u> HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

WESTBOUND KALL COURT TO YIELD AT SULLIVAN LANE

ADOPTED AT THE REGULAR MEETING OF CITY COUNCIL ON <u>11/25/2013.</u>

Ву: _

Rabert J. Gatt, Mayor

By: _

SPEED	DATE OF ORDER;	11/15/2013
PARKING		
X OTHER	CONTROL NUMBER:	13-45

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

WILLIAMS DRIVE

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE YIELD SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

WESTBOUND WILLIAMS DRIVE TO YIELD AT SULLIVAN LANE

Brian Coburn, P.E. - Traffic Engineer Dated: <u>11/15/2013</u>

APPROVED BY CITY COUNCIL

TRAFFIC CONTROL ORDER NUMBER <u>13-45</u> HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID.

WESTBOUND WILLIAMS DRIVE TO YIELD AT SULLIVAN LANE

ADOPTED AT THE REGULAR MEETING OF CITY COUNCIL ON <u>11/25/2013</u>.

By: _

Robert J. Gatt, Mayar

By:

SPEED	DATE OF ORDER:	11/15/2013
PARKING		
X OTHER	CONTROL NUMBER:	13-46

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

KEENAN COURT

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE YIELD SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

NORTHBOUND KEENAN COURT TO YIELD AT WILLIAMS DRIVE

Brian Coburn, P.E. - Traffic Engineer Dated: <u>11/15/2013</u>

APPROVED BY CITY COUNCIL

TRAFFIC CONTROL ORDER NUMBER <u>13-46</u> HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

NORTHBOUND KEENAN COURT TO YIELD AT WILLIAMS DRIVE

ADOPTED AT THE REGULAR MEETING OF CITY COUNCIL ON <u>11/25/2013.</u>

Ву: _

Robert J. Gatt, Mayor

By: _

clearzoning

MEMORANDUM

DATE:October 28, 2013TO:Brian T. Coburn, P.E.
Engineering Manager, City of NoviFROM:Rodney L. Arroyo, AICP, President
William A. Stimpson, P.E., Director of Traffic EngineeringSUBJECT:Traffic Sign Review for Cedar Springs Estates

Per your request of October 10, 2013, we have evaluated the ten internal intersections in this subdivision (Figures 1-2) to determine the appropriate form of right-of-way control sign (YIELD or STOP) based on existing conditions, RCOC methodology, and engineering judgment. Our recommendations are listed below and further summarized in Table 1, followed by a discussion of the methodology followed, location-specific results, and photos.

Recommendations

- 1. The existing STOP sign on the northbound Christina Lane approach to Buckminster Drive/ Sullivan Lane should be retained.
- 2. The eastbound Stone Road approach to Buckminster Drive should be equipped with a YIELD sign.
- 3. The eastbound Wright Way approach to Buckminster Drive should be equipped with a YIELD sign.
- 4. Consideration should be given to replacing the existing STOP sign on the eastbound Petros Boulevard approach to Buckminster Drive with a YIELD sign.
- 5. The northeast-bound Kerri Court approach to Sullivan Lane should be equipped with a YIELD sign.
- 6. The westbound Kali Court approach to Sullivan Lane should be equipped with a YIELD sign.
- 7. The westbound Williams Drive approach to Sullivan Lane should be equipped with a YIELD sign.
- 8. The northbound Keenan Court approach to Williams Drive should be equipped with a YIELD sign.

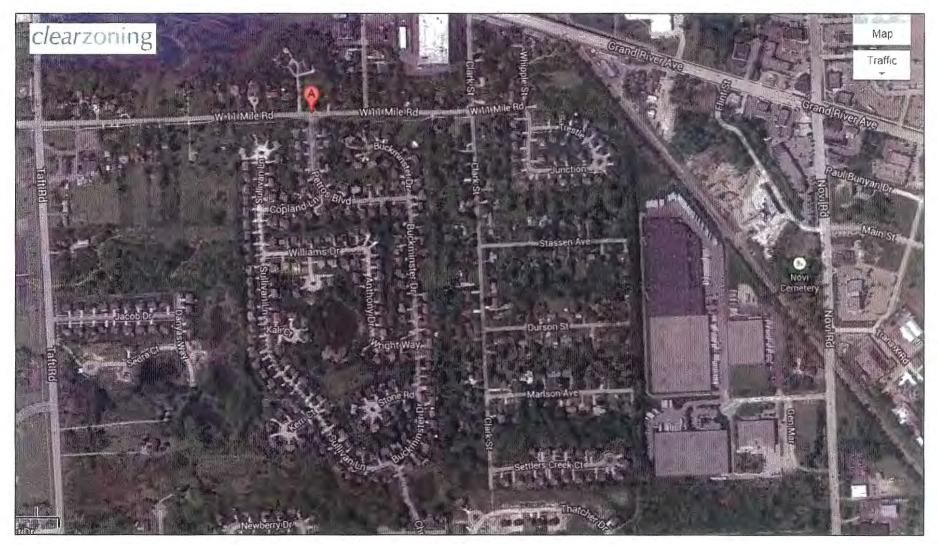


Figure 1. Vicinity Aerial – Cedar Springs Estates

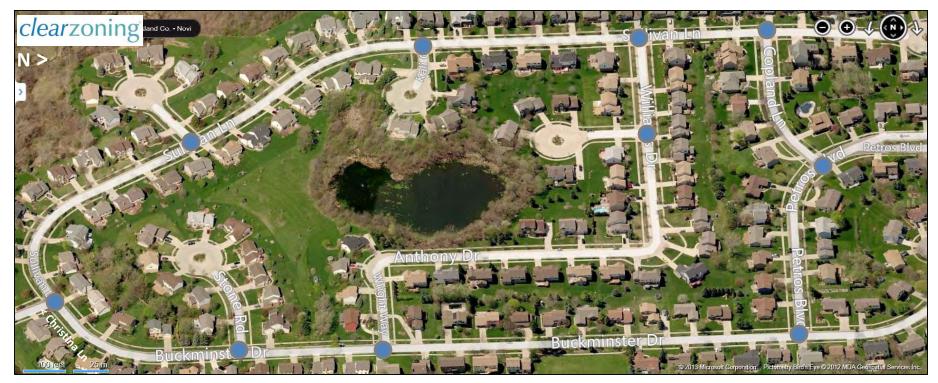


Figure 2. Site Aerial – Cedar Springs Estates

	Figure	Existing	Con-	Critical Speed (mph)	Wa	rranted S	igns	Commente
Intersection	Figure	Sign	trolling Corner		None	YIELD	STOP	Comments
Christina Ln & Buckminster Dr /Sullivan Ln	3	STOP	SW	11			х	Large cluster of shrubs on lot corner controls.
Buckminster Dr & Stone Rd	4	None	NW	> 30		х		Small shrub at corner of house controls.
Buckminster Dr & Wright Way	5	None	NW	19		х		Shrub in middle of yard, plus other landscaping toward house.
Buckminster Dr & Petros Blvd	6	STOP	NW	17		х		Closest extent of landscaping to corner still provides 17 mph.
Sullivan Ln & Kerri Ct	7	None	NW	15		х		Low evergreen trees and shrubs nearest corner.
Sullivan Ln & Kali Ct	8	None	SE	18		х		Large spruce tree, shrubs, and large rock.
Sullivan Ln & Williams Dr	9	None	NE	21		х		Ring of small rocks around tree on sharply rising yard.
Williams Dr & Keenan Ct	10	None	SW	21		х		Cluster of dense shrubs closer to house than intersection.
Sullivan Ln & Copland Ln	11	YIELD	NE	> 30		х		Visibility across SE corner is comparable.
Petros Blvd & Copland Ln	12	YIELD	NW	23		х		Point on ground of rising yard controls.

Table 1. Cedar Springs Estates Right-of-Way Control Signs: Summary of Findings (10-28-13)¹

¹ Shaded row indicates that the existing sign (or lack thereof) should be changed.

- 9. The existing YIELD sign on the westbound Copland Lane approach to Sullivan Lane should be retained.
- 10. The existing YIELD sign on the northeast-bound Copland Lane approach to Petros Boulevard should be retained.

Criteria and Methodoloy

Right-of-Way Control Signs – The *Michigan Manual of Uniform Traffic Control Devices* (*MMUTCD*) establishes guidelines and standards applicable (by law) to all public roads and streets in the State. The current (2011) edition of the manual has language relative to right-of-way control signs, summarized below.

<u>Section 2B.04 – Right-of-Way at Intersections</u> – first defines the general rule-of-the-road regarding vehicles approaching an intersection from different streets at "approximately the same time": the driver of the vehicle on the left must yield to the driver of the vehicle on the right. The Manual then goes on to state that "the right-of-way can be modified at through streets or highways by placing YIELD signs or STOP signs on one or more approaches." The following guidance is provided relative to such sign installations:

"Engineering judgment should be used to establish intersection control. The following factors should be considered:

- A. Vehicular, bicycle, and pedestrian traffic volumes on all approaches;
- B. Number and angle of approaches;
- C. Approach speeds;
- D. Sight distance available on each approach; and
- E. Reported crash experience."

A standard unique to the Michigan Manual, also appearing in this section, is that:

"YIELD or STOP signs shall not be used for speed control."

<u>Section 2B.06 – STOP Sign Applications</u> – presents additional pertinent guidance, similar to that previously appearing in Section 2B.05:

"At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs...

Lastly relative to the MMUTCD, "the use of STOP signs ... should be considered if engineering judgment indicates that a stop is always required because... a restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street..."

National experience has found that drivers tend to disregard clearly unwarranted STOP signs and roll through them as if they were YIELD signs. Mid-block speeds have been found to actually increase with STOP sign installation, as drivers attempt to "make up for lost time." Unwarranted STOP signs may also provide pedestrians (especially children) a false sense of security, in that they assume drivers will stop for a STOP sign when, in fact, they often do not.

Relative to the above criteria, the City of Novi has long applied the Road Commission for Oakland County's recommended procedure for evaluating the issue of "restricted view." Measurements to corner sight obstructions are made, and a nomograph is applied to determine the Critical Approach Speed on the minor approach (typically, the "stem" of a tee intersection). A STOP sign is required for Critical Speeds below 10 mph and often considered for Critical Speeds in the range of 10-15 mph. Ordinarily, a YIELD sign is more appropriate for Critical Speeds above 15 mph.

Findings by Location

Christina / Buckminster / Sullivan – The yard in the southwest corner of this intersection contains several sight obstructions. The most critical is the cluster of large shrubs at the lot corner (Figure 3), which results in a Critical Approach Speed (CAS) of only 11 mph. Also present (although not appearing in the photo) are a low deciduous tree near the Christina sidewalk and the corner of the occupying house. While limited sight lines across the yard are available earlier on the approach, the cited shrub cluster blocks the driver's view during a critical period of travel and therefore supports the more conservative form of intersection control (i.e., STOP).

Buckminster and Stone – As can be seen in Figure 4, there is minimal landscaping on the more controlling northwest corner. The small shrub at the house corner limits the sight distance, but viewing conditions are adequate for a CAS in excess of 30 mph.

Buckminster and Wright – In contrast to the preceding intersection, the sight lines across the northwest corner of Buckminster and Wright are limited by a rising yard as well as various forms of landscaping. The "turning point" for the critical corner sight line is the red shrub shown in Figure 5 (CAS of 19 mph).

Buckminster and Petros – The controlling northwest corner is generally similar in appearance to the corresponding corner at the preceding intersection. In this case, the large rock closest to the intersection (Figure 6) results in the most restricted corner sight distance. However, the CAS based on this rock is still 17 mph, which by RCOC guidelines should be reasonably safe with YIELD sign control. The City therefore has the option here of replacing the existing STOP sign on Petros with a YIELD sign.

Sullivan and Kerri – As can be seen in Figure 7, the northwest corner has both low-hanging evergreen tree limbs and several deciduous shrubs complicating if not literally blocking clear viewing conditions. Being most conservative, the shrub nearest the intersection would be

considered critical; however, even this obstruction provides a CAS of 15 mph, which is generally considered marginally adequate for YIELD sign control.

Sullivan and Kali – In Figure 8, the shrub to the right of the large rock is most sight-limiting, but the resulting CAS was found to be 18 mph, again safe with YIELD sign control on the minor approach.

Sullivan and Williams – As can be seen in Figure 9, the yard in the northeast corner rises sharply. At typical car driver eye height, the rocks rimming the tree near the top of the rise dictates the most restricted sight line. The CAS of 21 mph supports the use of a YIELD sign.

Williams and Keenan – While there is fairly extensive landscaping on the southwest corner (Figure 10), most of it is relatively near the house. The CAS here is also 21 mph.

Sullivan and Copland – Corner sight distance is limited by the rising yard on the northeast corner, not landscaping per se. The CAS exceeds 30 mph and justifies retention of the existing YIELD sign on Copland.

Petros and Copland – Similar to the preceding intersection, corner sight distance is limited by the rising yard. At a typical car driver eye height, a sight-line "turning point" in the grass was approximated and found to yield a CAS of 23 mph. The existing YIELD sign on Copland should therefore be retained.



Figure 3. Looking WNW Across SW Corner of Christina and Sullivan/Buckminster



Figure 4. Looking NE Across Northwest Corner of Buckminster and Stone



Figure 5. Looking NE Across NW Corner of Buckminster and Wright



Figure 6. Looking NE Across NW Corner of Buckminster and Petros



Figure 7. Looking North Across NW Corner of Sullivan and Kerri Court



Figure 8. Looking SW Across Southeast Corner of Sullivan and Kali Court



Figure 9. Looking NW Across Northeast Corner of Sullivan and Williams



Figure 10. Looking NW Across SW Corner of Williams and Keenan Court



Figure 11. Looking NW Across NE Corner of Sullivan and Copland



Figure 12. Looking North Across NW Corner of Petros and Copland