## RECORDING NOT REQUIRED

#### **Return to:**

City Clerk 116 E. Market Street Troy, Illinois 62294



#### **ORDINANCE 2024 - 39**

### An Ordinance Providing for the Installation of Stop Signs at Chamberlain Drive and McClelland Drive in the City of Troy Illinois

ADOPTED BY THE CITY COUNCIL

OF THE CITY OF TROY, ILLINOIS

This 17th Day of June 2024

WHEREAS, the City Council of the City of Troy, Madison County, Illinois, wishes to provide a safe opportunity for traffic to navigate the Homes at Liberty Place Subdivision; and

WHEREAS, the anticipated vehicle volume, pedestrian volume, potential sight obstruction, and future function as an unusual intersection of three major streets and one minor street are warranted cause for an all-way stop; and WHEREAS, upon request of the neighbors in the Homes at Liberty Place Subdivision, the Chief of Police has investigated the need for additional traffic measures within the Subdivision; and

WHEREAS, upon order of the City Council of the City of Troy, Illinois and the evidence herein established, the Chief of Police and City Engineer have determined the need to improve safety at certain locations within the corporate limits of the City of Troy, Madison County, Illinois; and

**WHEREAS,** the City Council of the City of Troy, Illinois has determined that the public safety will be promoted by establishing Stop signs at the locations set forth by the Chief of Police.

## NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TROY, MADISON COUNTY, ILLINOIS AS FOLLOWS:

<u>Section 1.</u> That the City Council hereby determines that the preambles hereto are true and correct and are incorporated herein by reference as if fully set forth at this point.

<u>Section 2.</u> Stop signs are hereby required and shall be installed as follows:

- Four-way stop at the Intersection of Chamberlain Drive and McClelland Drive

<u>Section 3.</u> Stop signs conforming to the Illinois Department of Transportation's standards and specifications, if applicable, shall be erected at the intersection described in Section 2 above, such intersection being within the City of Troy, Illinois. The location of these signs shall conform to the requirements of the Illinois Department of Transportation's standards and specifications, if applicable.

<u>Section 4.</u> Any person who disobeys the Stop signs to be placed pursuant to this Ordinance shall be in violation of Chapters 71.05, 71.06 and 71.99 of the Codified Ordinances of the City of Troy, and shall be in violation of our Codified Ordinances, and shall be fined not less than \$25.00 nor more than \$500.00 for each such offense.

<u>Section 5.</u> The Code of Ordinances of the City of Troy, Illinois, Chapter 73, Schedule VI, is hereby amended to reflect the above described Stop signs' placement.

<u>Section 6.</u> If any section or provision of this Ordinance is declared invalid for any reason, such invalidity shall not affect or impair any of the remaining sections or provisions of this Ordinance which can be given effect without the invalid section or provision, and to this end, the sections and provisions of this Ordinance are declared to be severable.

<u>Section 7.</u> This Ordinance shall be in full force and affect from and after its passage and approval and publication in pamphlet, according to the law.

**PASSED** by the City Council of the City of Troy, Madison County, Illinois, approved by the Mayor, and deposited in the office of the City Clerk this <u>17th day of June</u>, <u>2024</u>.

#### <u>Aldermen Vote</u>:

Dawson <u>A4E</u> Flint <u>A4E</u> Hellrung <u>A4E</u> Henderson <u>A4E</u> Italiano <u>Ave</u> Knoll <u>A65554</u>T Manley <u>A65564</u>T Turner <u>Ave</u>

Total: \_\_\_\_\_Ayes \_\_\_\_\_Nays



APPROVED: David Manu

David Nonn, Mayor, City of Troy, Illinois

**ATTEST:** 

m

Kimberly Thomas, City Clerk



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St Charles

May 22, 2024

Jay Keeven City of Troy 116 East Market Troy, IL 62294-1518

Re: Homes at Liberty Subdivision All-Way Stop Sign Study at Chamberlain Dr & McClellan Dr

Mr. Keeven:

We have received a request to review stop sign warrants at the intersection of Chamberlain Dr and George Bush Dr, and Chamberlain Dr and McClellan Dr. After consideration, we recommend installing all-way stop control at the intersection of Chamberlain Dr and McClellan Dr.

Based on the Manual of Uniform Traffic Control Devices (MUTCD), all-way stop control is warranted if at least one of the following criteria is met:

- The vehicle volume entering the intersection from the major street approaches averages at least 300 vehicles per hour for any 8 hours of an average day, AND the combined volumes entering the intersection from the minor street approaches averages at least 200 vehicles per hour for the same 8 hours.
- Locations where a minor road user, after stopping, cannot see conflicting traffic and is therefore not able to safely navigate the intersection unless conflicting cross traffic is also required to stop.
- Five or more reported crashes have occurred in a 12-month period that are considered preventable by a multi-way stop installation.
- An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where all-way stop control would improve traffic operational characteristics of the intersection.

Since a new phase in the subdivision is under development, the current crash data and traffic volume counts for this intersection are not applicable – as the new phase will greatly increase the amount of traffic that will be utilizing the intersection. However, we did an approximation of what the volume of traffic will likely be based on the number and type of housing within the area. Anticipated volumes at the intersection of Chamberlain Dr and McClellan Dr would be about 2,000 vehicles/day, or around 200 vehicles per hour, during the peak hour. Though these volume rates do not meet the MUTCD criteria mandating an all-way stop control, there are other considerations such as pedestrian volumes, sight distance, and function to consider.

There are no sight obstructions present at either intersection as shown on the attached Exhibits, but parking is allowed on McClellan Dr and Chamberlain Dr. Parked cars along these roads will create a sight obstruction to cars entering the intersection from. This type of site obstruction is not unusual for residential intersections, and they can be found



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throughout the City where multi-way stop signs are not present or required. For typical residential intersections, a two-way stop control has been proven sufficient.

However, the intersections are unusual given that traffic on Chamberlain Dr and McClellan Dr will be fairly balanced after future phases are built. Both Chamberlian Dr and McClellan Dr are the main roads to the subdivision entrances Chamberlain Dr, which is currently a "minor street", will eventually carry even more traffic and become a "major street" in its own right. This would classify Chamberlain Dr as a residential neighborhood collector and its intersection of McClellan Dr would satisfy at least one of the MUTCD requirements. In addition, there is approximately 800 feet between Chamberlain Dr and Eisenhower Blvd along McClellan Dr. This amount of roadway length between intersections encourages higher travel speeds and can lead to an increase in crashes. It is worth noting that while conducting a field visit at the intersection of Chamberlain Dr and McClellan Dr, vehicles were seen reducing speed when traveling east/west through the intersection due to a "hump" in the pavement, shown in the attached Exhibits. An additional stop here would protect against vehicle damage due to this bump. Ultimately, two-way traffic controls would not be sufficiently effective under these types of conditions.

Therefore, in our judgement, the all-way stop at the intersection of Chamberlain Dr and McClellan Dr is warranted for safety because of the anticipated intersection of two residential collectors, there are sight obstructions present, and the overall traffic levels are higher than 2,000 entering veh/day. For higher visibility, we also further recommend that pedestrian crosswalks be installed for pedestrian safety.

Respectfully,

OATES ASSOCIATES, INC.

Thomas & Casal II

Tom Cissell, PE **City Engineer** 

## Attachment A Photo Exhibits





Photo 1: Sight-triangle looking west along McClellan from northern approach of intersection.



Photo 2: Sight-triangle looking east along McClellan from northern approach of intersection.





Photo 2: Sight-triangle looking west along McClellan from southern approach of intersection.



Photo 2: Sight-triangle looking east along McClellan from southern approach of intersection.



15062.002 HOMES OF LIBERTY PLACE

# **Attachment B**





