

Memorandum

To: Bryan Healy, Village Manager; Village of Croton-on-Hudson
From: Michael Beattie, PE, PTOE
Date: July 9, 2026
Re: Old Post Road Traffic Study – Michaels Lane Intersections
cc: Control Aaron Werner, AICP and Michael Borst, PE; AKRF, Inc.

INTRODUCTION

This memorandum assesses intersection control at the Old Post Road/Michaels Lane intersection in the village of Croton-On-Hudson. This memorandum is a follow-up to the recommendations presented in the *Old Post Road Traffic Study (October 9, 2025)* memorandum.

DATA COLLECTION

Turning movement counts (TMCs) and pedestrian counts were collected during the AM (7 AM – 9 AM) and PM (4 PM – 6 PM) peak periods on a weekday in September 2025. Traffic volumes and speeds along Old Post Road were collected using an Automated Traffic Recorder (ATR) for a seven-day period concurrent with the TMCs.

Crash data was retrieved from the NYSDOT CLEAR Crash Data Viewer. There were no reported crashes in the past 5 years.

EXISTING CONDITIONS

ROADWAY DESCRIPTION

Old Post Road is a Village-owned collector road that provides one travel lane in each direction with a 25 miles per hour (mph) speed limit. The annual average daily traffic (AADT) is estimated to be 1,900 vehicles. In the vicinity of the study intersections, Old Post Road has a sidewalk along the east side of the roadway. Along the west side of the road in the vicinity of the intersection with Michaels Lane there are retaining walls directly abutting the roadway.

The Old Post Road and Michaels Lane intersection is a three-leg side-street stop controlled intersection. The eastbound minor approach of Michaels Lane has a stop sign and the north- and southbound approaches are free movements. The northwest corner of the intersection has a large turn radius, causing Michaels Lane to widen from 24 feet to approximately 75 feet at the intersection. This corner is occupied by a retaining wall with significant vegetation that reduce visibility. The visibility of the southbound approach from the eastbound stop line is also impeded by the grade and curvature of the road.

SPEED SURVEYS

Vehicle travel speeds were collected on Old Post Road between Lounsbury Road and Michaels Lane. Of the 15,000 vehicles captured over a 7-day period, 94 percent of the vehicles traveled at or below 25 mph and 99 percent of the vehicles traveled at or below 30 mph.

Over the 7-day period there were 24 vehicles that were recorded traveling above 40 mph, all of which were traveling southbound (downhill).

PEDESTRIAN DATA

At the Old Post Road and Michaels Lane intersection, there were seven (7) pedestrians counted during the AM peak period and nine (9) pedestrians during the PM peak period. The majority of those crossed the south leg of the intersection (Old Post Road). There are no crosswalks provided at this location.

PROPOSED IMPROVEMENTS

The proposed improvements at Old Post Road and Michaels Lane is presented in the attached conceptual design.

MICHAELS LANE STOP SIGN ASSESSMENT

The Old Post Road and Michaels Lane intersection is a three-leg side-street stop controlled intersection. The eastbound minor approach of Michaels Lane has a stop sign and the north- and southbound approaches are free movements. Potentially installing stop signs on Old Post Road approaches were assessed based guidance and criteria presented in Section 2B.07 Multiway Stop Applications of the *Manual on Uniform Traffic Control Devices (MUTCD)*.

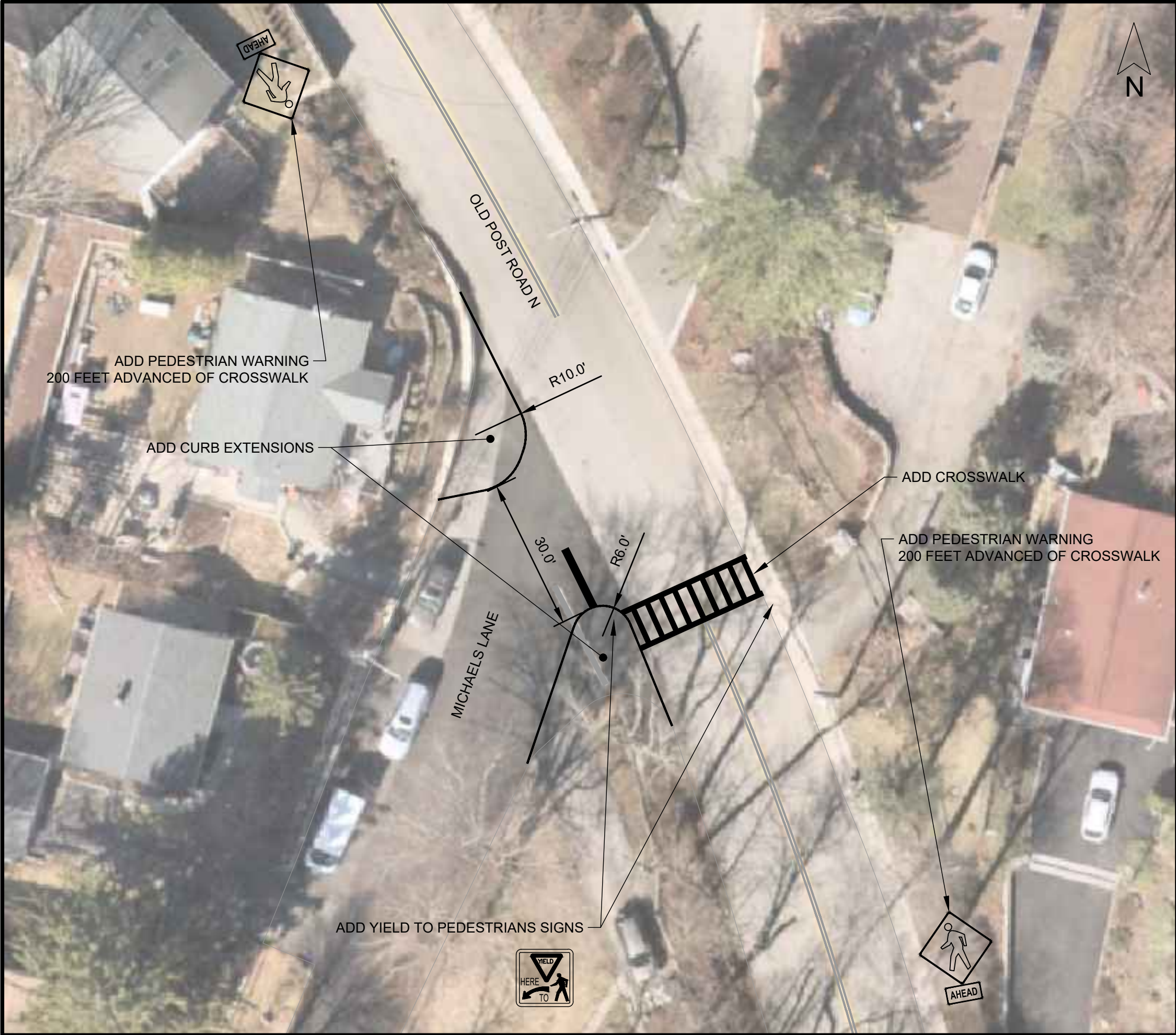
- Crashes – the MUTCD classifies a crash problem as 5 or more crashes in a 12 month period that are susceptible to correction by implementing an all-way stop. As presented above, there were no reported crashes in the past 5 years. Therefore, this criterion is not met.
- Traffic volumes – the average volumes on the major street (Old Post Road) averages 300 vehicles per hour for any 8 hours of the day and during those 8 hours the minor street (Michaels Lane) averages at least 200 vehicles per hour. Reviewing the daily traffic, there were no hours where Old Post Road experience 300 vehicles in an hour. In addition, during the peak hour Michaels Lane experience less than 10 vehicles. Therefore, this criterion is not met.
- Sight distance – where a road user after stopping cannot see conflicting traffic and not able to reasonably safely negotiate the intersection unless conflicting cross traffic is required to stop. With the proposed improvements, sight distance is improved with the relocation of the stop bar. In addition, since there have been no crashes at this location vehicles can be considered able to safely negotiate the intersection. Therefore, this criterion is not met.
- Operations – if two similar streets would experience improved operations with an all-way stop. Based on peak analysis conducted, the Michaels Lane intersection operates with minimal delay, thus operations would not need to be improved. Therefore, this criterion is not met.

In addition, based on the speed data collection, 99 percent of the weekly vehicles were traveling at or below 30 mph, indicated speeding is not an issue at this intersection. However, it should be noted that per Section 2B.06 STOP Sign Applications, guidance is provided stating “STOP signs should not be used for speed control.”

Based on the above assessment, placing stop signs on Old Post Road is not recommended.

Attachments

- Conceptual Improvement Plan



FOR SCHEMATIC
PURPOSES ONLY

NOT FOR
CONSTRUCTION

REVISIONS	
DESCRIPTION	DATE
ORIGIN	2025-10-01
LAST REVISED	2025-10-07
SUBMISSION	

PREPARED BY:

akrf

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PROJECT:
VILLAGE OF
CROTON-ON-HUDSON
OLD POST ROAD
TRAFFIC STUDY

SHEET TITLE:

OLD POST ROAD AND
MICHAELS LANE
PROPOSED
IMPROVEMENTS

DRAWN BY: JM	ORIG. DATE: 2025-10-01
CHECKED BY: MB	PROJECT No. 240820
	SHEET No.

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