



SUBJECT: Consideration of a resolution to install speed display boards on Harrison Street

AGENDA ITEM: 11.c

MEETING DATE: March 18, 2008

VILLAGE BOARD REPORT

TO: Village President and Board of Trustees
FROM: Chris Clark, Deputy Village Manager (847/904-4375)
THROUGH: Todd Hileman, Village Manager

Purpose and Action Requested

Staff requests Board consideration of a Resolution to expend approximately \$12,000 to install two speed display boards on Harrison Street, using funds set aside for Harrison Street at the Board's November 15, 2007, Traffic Calming Workshop.

Background

In November 2006, the Traffic Committee received approval from the Village Board to conduct a traffic calming pilot project involving the installation of two temporary speed humps on Harrison Street between Montgomery Lane and Parkview Road.¹ In February 2007, the committee hosted a public meeting with residents from the Harrison Street area to discuss the installation of speed humps in their neighborhood. At the meeting, the committee received strong support from residents to move ahead with the project.

In May 2007, the Traffic Committee held another meeting with Harrison Street residents to review the scope and schedule of the speed hump project. The committee outlined testing and post-project surveying plans and answered questions and concerns posed by residents. Following the meeting, the committee asked Public Works staff to install the temporary speed humps.

The Traffic Committee asked traffic engineering consultant Tom Adomshick of James J. Benes and Associates, Inc., to analyze the impacts of the temporary speed humps on traffic in the Harrison Street neighborhood. The analysis yielded the following results:

¹ Harrison Street was selected for the speed hump project due to its adjacency to Hoffman School.

SPEED HUMP TRIAL HARRISON STREET					
	Dist. To Hump	Daily Traffic	85 th %ile Speed	Avg. Speed	
Before Humps					
Harrison west of Spruce	450'	840	31 mph	26 mph	
Harrison east of Spruce	70'	783	32 mph	26 mph	
Harrison east of Montgomery	285' & 355'	854	32 mph	26 mph	
Colfax Avenue east of Elm	n/a	941	32 mph	27 mph	
McArthur east of Parkview	n/a	495	30 mph	24 mph	Change
After Humps					
Harrison west of Spruce	450'	825	30 mph	25 mph	-1 mph
Harrison east of Spruce	70'	999	24 mph	20 mph	-6 mph
Harrison east of Montgomery	285' & 355'	987	29 mph	24 mph	-3 mph
Colfax Avenue east of Elm		1018	30 mph	25 mph	-2 mph
McArthur east of Parkview		542	30 mph	25 mph	0 mph

The committee also sent letters and surveys to residents from the Harrison Street neighborhood to solicit their perceptions of the temporary speed humps. The surveys contained five statements, listed below, for which residents could mark strongly agree, agree, neutral, disagree, strongly disagree, or not applicable.

1. This traffic calming device slowed traffic in my neighborhood.
2. This traffic calming device made my neighborhood safer for pedestrians.
3. This traffic calming device detracted from the beauty of my neighborhood.
4. I would recommend this traffic calming device for permanent installation in my neighborhood.
5. I would recommend this traffic calming device for other neighborhoods where speeding is a problem.

The survey also asked residents to provide any comments they thought should be considered in an analysis of the projects. In addition to the surveys, the committee held a post-project meeting with Harrison Street residents on November 8, 2007. The results of the surveys and meeting are outlined below:

- A strong majority of residents agreed that these devices slowed traffic in their neighborhood.
- A strong majority agreed that these devices made their neighborhood safer for pedestrians.
- One fifth agreed that these devices detracted from the beauty of their neighborhood.
- A strong majority said they would recommend these devices for permanent installation in their neighborhood and in other neighborhoods where speeding is a problem.
- Written and verbal responses suggest that these devices did slow traffic on Harrison Street, but that speeding increased on adjacent Colfax Avenue as a result—this because drivers would use Colfax Avenue to bypass the humps on Harrison Street.
- Written and verbal responses also suggest that drivers would simply slow down for the humps and speed up after them.

At a traffic calming workshop held on November 15, 2007, the Board reviewed Adomshick's analysis and the results of the resident survey. The Board asked the Traffic Committee to further

discuss the installation of install permanent speed humps on Harrison Street with residents who live on the roadway and adjacent roadways.

The Traffic Committee asked Adomshick to determine the number of permanent speed humps that would be needed to successfully calm traffic on Harrison Street between Harlem Avenue and Shermer Road. The committee also asked Adomshick to determine where such humps should be placed on the roadway using all relevant engineering standards.²

Adomshick created an engineering plan that included four permanent speed humps. He prepared a memo on the installation of permanent speed humps that included discussion of the plan and visual representation of where proposed humps could and would be installed (**Appendix A**).

On February 1, 2008, the Traffic Committee mailed Adomshick's memo to area residents along with an invitation to meet and discuss the proposed humps at Hoffman School (2000 Harrison Street) on February 13, 2008. At the meeting, attended by 13 residents, Adomshick discussed the proposed plan for installation of permanent speed humps and listed the pros and cons that are associated with installation of these devices. Residents were then given an opportunity to share their opinions about the plan. Some residents suggested that they desired the humps to slow traffic on their roadway and to make the roadway safer for pedestrians, especially children traveling to and from Hoffman School. Others suggested that they did not desire the humps because they might lower property values, because they would be inconvenient to traverse, and because they would generate noise from motorists traversing them and accelerating away. Some residents inquired about the possibility of installing speed display boards on the street rather than speed humps—this because speed display boards seem less obtrusive to them than speed humps. Before the meeting was adjourned, the committee informed the attendees that a ballot on the proposed plan would go out to neighborhood residents before the end of the month. The neighbors were told that the Traffic Committee was seeking a 2/3 vote in support of the proposed humps to move the project forward to construction.

On February 20, 2008, the Traffic Committee visited 16 residences on Harrison Street—those immediately adjacent to the locations of the proposed humps—to discuss the proposed plan for installation. During the visits, the committee heard both support for and concern about the installation of the humps. The committee informed the residents that a ballot on the proposed plan would go out to neighborhood residents before the end of the month.

On February 22, 2008, the Public Works Department hand delivered the attached ballot (**Appendix B**) to 116 residences in the Harrison Street neighborhood. The ballot asked residents if they favored or opposed installation of permanent speed humps according to the proposed plan. The Traffic Committee received completed ballots from 63 residences, 54 percent of the total distribution. 31 residences favored installation of the humps and 30 opposed it. The remaining 2 residences indicated no preference.

² The standards that apply are offered in a text titled Guidelines for the Design and Application of Speed Humps (August 2007) adopted by the Institute of Transportation Engineers as recommended practice. This text provides recommendations for spacing, layout, and design of speed humps. The text specifies how far humps should be spaced from intersections, driveways, and other humps. Adomshick used the standards offered in the text to determine where humps could not be placed on Harrison Street.

Discussion

Given the split between Harrison Street neighborhood residents on this issue, the Traffic Committee does not recommend installing permanent speed humps on the roadway. Instead, it is recommended that speed display boards be installed on the roadway.

As stated previously, some residents from the Harrison Street neighborhood requested the installation of speed display boards at their February 13, 2008, meeting with the Traffic Committee. At this meeting, the Traffic Committee informed residents that it would consider recommending this option to the Board after reviewing the results of the balloting on the proposed plan for installation of permanent speed humps.

With the results of the balloting showing a significant number of residents opposed to the installation of speed humps on Harrison Street, the Traffic Committee recommends Board consideration of the installation of two speed display boards on the roadway. These display boards would be solar powered and mounted on concrete bases. They would look very similar to those that were installed on Laramie Avenue during the summer 2007 pilot project (pictured below).



Such boards were shown to decrease traffic speeds on Laramie Avenue in an analysis conducted by traffic engineering consultant Tom Adomshick of James J. Benes and Associates, Inc. The results of this analysis are shown on the table below.

LARAMIE AVENUE SPEED BOARD TRIAL				
	Daily Traffic	85 th %ile Speed	Avg. Speed	
Before Speed Boards				
North of Beverly	1,663	36 mph	30 mph	Change
South of Beverly	1,723	36 mph	30 mph	
After Speed Boards				
North of Beverly	1,985	30 mph	25 mph	-6 mph
South of Beverly	2,023	30 mph	25 mph	-6 mph

Although 85th percentile speeds on Harrison Street are four to six MPH lower than those that were examined on Laramie Avenue, the Traffic Committee feels that the Harrison Street neighborhood may experience reduced vehicular speeds as a result of the installation. The boards would direct motorists' attention to their rate of speed while they are traveling on a roadway adjacent to an elementary school that produces heavy pedestrian traffic. To determine whether the boards have a lasting effect on vehicular speeds, the Traffic Committee will conduct recurring traffic speed analyses on Harrison Street at intervals of 6 months.

Budget

Funding Source	Organization	Account No.	Fiscal Budget	Remaining Balance	Amount Requested	Within Budget
PW – Maintenance of Roadways	10005001	520105	\$479,405	\$371,437	\$12,000	Yes

Recommendation

Staff recommends Board approval of the attached Resolution (**Appendix C**) to expend approximately \$12,000 to install two speed display boards on Harrison Street, using funds set aside for Harrison Street at the Board's November 15, 2007, Traffic Calming Workshop.

Appendixes

Appendix A: Memo on the installation of permanent speed humps

Appendix B: Ballot on proposed speed hump plan

Appendix C: Draft Resolution on the installation of speed display boards on Harrison Street

Appendix A



JAMES J. BENES AND ASSOCIATES, INC.

950 Warrenville Road ■ Suite 101 ■ Lisle, Illinois ■ 60532

Tel. (630) 719-7570 ■ Fax (630) 719-7589

MEMORANDUM

Date: January 22, 2008

To: Christopher Clark
Deputy Village Manager
Village of Glenview

From: Thomas Adomshick, P.E., PTOE
Vice President

Re: Harrison Street Speed Humps
Glenview, Illinois
Job No. 1208

Following the primarily positive response to the trial speed hump installation along Harrison Street in 2007, the Village of Glenview elected to develop a plan for implementation of permanent speed humps along Harrison Street. James J. Benes and Associates were retained to identify possible locations for speed humps, and to prepare a proposed design for the speed hump installation. The following is a summary of the proposed speed hump layout.

Layout Design

The design of the layout of the proposed speed humps was developed based on guidelines contained in Guidelines for the Design and Application of Speed Humps, August 2007, an Institute of Transportation Engineers (ITE) proposed recommended practice. This publication provides recommendations for the spacing, location and design of the size and shape of speed humps.

Using the ITE criteria, Harrison Street was reviewed and locations were identified where speed humps are not recommended due to proximity to intersections and driveways. The attached exhibit, Potential Speed Hump Locations, shows specific areas where installations of speed humps are not recommended.

The ITE recommended spacing range for humps was then used to develop the proposed speed hump locations shown on the attached exhibit, Recommended Speed Hump Locations.

Implementation

Speed humps are a means of addressing excessive vehicular speeds. The physical characteristics of the hump are such that a motorist must reduce his/her speed in order to comfortably traverse the hump. Speed humps can have both positive and negative impacts.

Some of the positive aspects of humps are:

- Speed humps can be effective in reducing vehicular speeds to ± 25 mph; improving safety for pedestrians crossing the street.
- Speed humps essentially are self enforcing; freeing Police to focus on other areas or tasks instead of speed enforcement on the subject street.

- Speed humps have been found to reduce the total number of crashes as well as the number of injury crashes.
- Traffic volume counts on Harrison Street, Colfax Avenue and McArthur Drive prior to and during use of temporary speed humps on Harrison Street showed no discernable diversion of traffic onto the adjoining parallel neighborhood streets.
- The Police and Fire Departments and the bus service provider for Hoffman School reported no problems with the speed humps during the temporary hump trial period.

Some potential negative aspects of humps are:

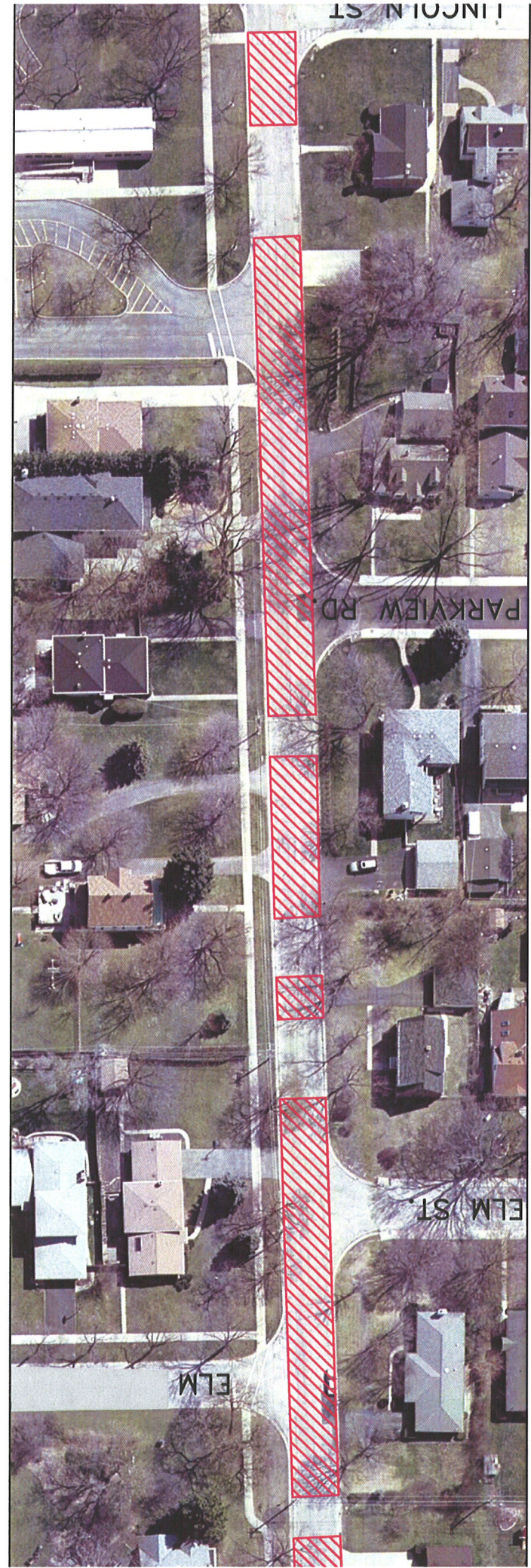
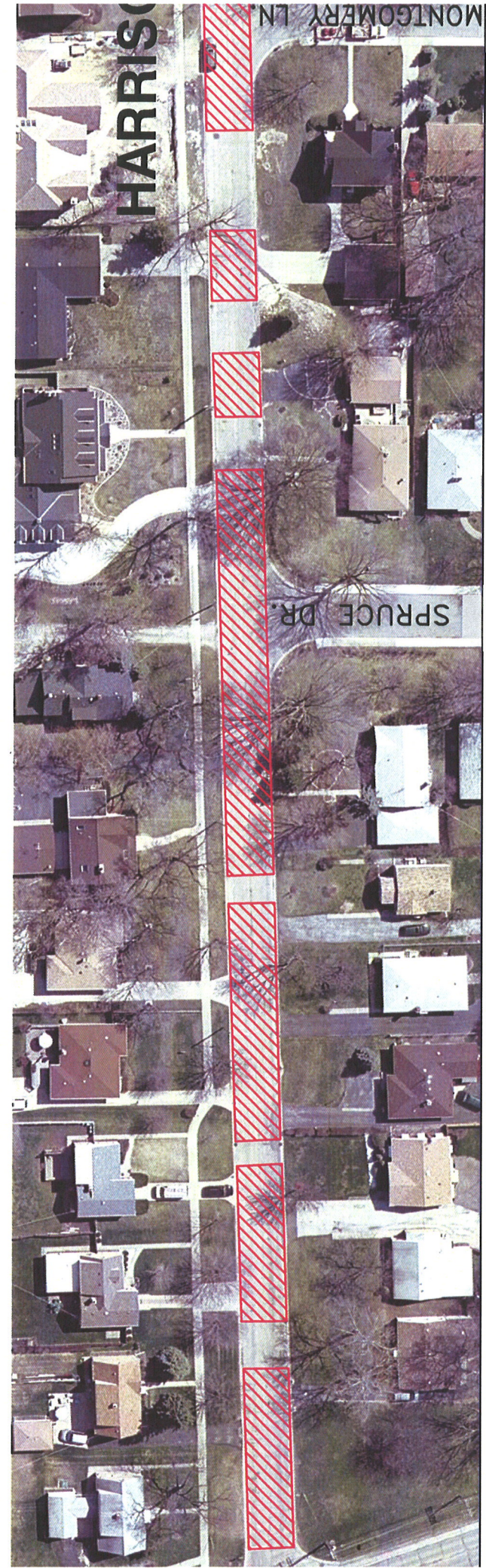
- Inconvenience to neighborhood residents who drive on Harrison Street every day.
- Although reduced vehicle speed generally result in lower traffic noise levels, noise may be increased at the speed humps due to breaking, acceleration and sound generated as a vehicle passes over a hump. Some concerns about noise at the temporary humps have been raised by adjoining residents.
- Although on-street parking need not be prohibited at or on a speed hump, drivers may feel uncomfortable parking on a hump, and available on-street parking may effectively be reduced. (Warning signage at speed humps should be installed at the appropriate height for an urban environment in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) so that sign visibility is not impeded by parked vehicles).
- Speed humps are expensive to install, and expensive to remove if it is later determined that adverse impacts outweigh the benefits of the humps.
- Speed humps may be considered unsightly.
- Maintenance of speed humps, pavement markings and signage will be necessary for the humps to function effectively and safely.

During the temporary speed hump pilot project testing, a question was raised on whether speed boards could be used on a street with speed humps as a supplemental traffic calming measure. Since speed humps are essentially self enforcing if properly designed and constructed with appropriate signing and pavement markings, there should be no need for additional calming measures such as speed boards. It is our opinion that cost of speed boards supplementing speed humps would not likely be justified by the minimal additional benefit. We do not recommend installation of speed boards in addition to speed humps.

Conclusion

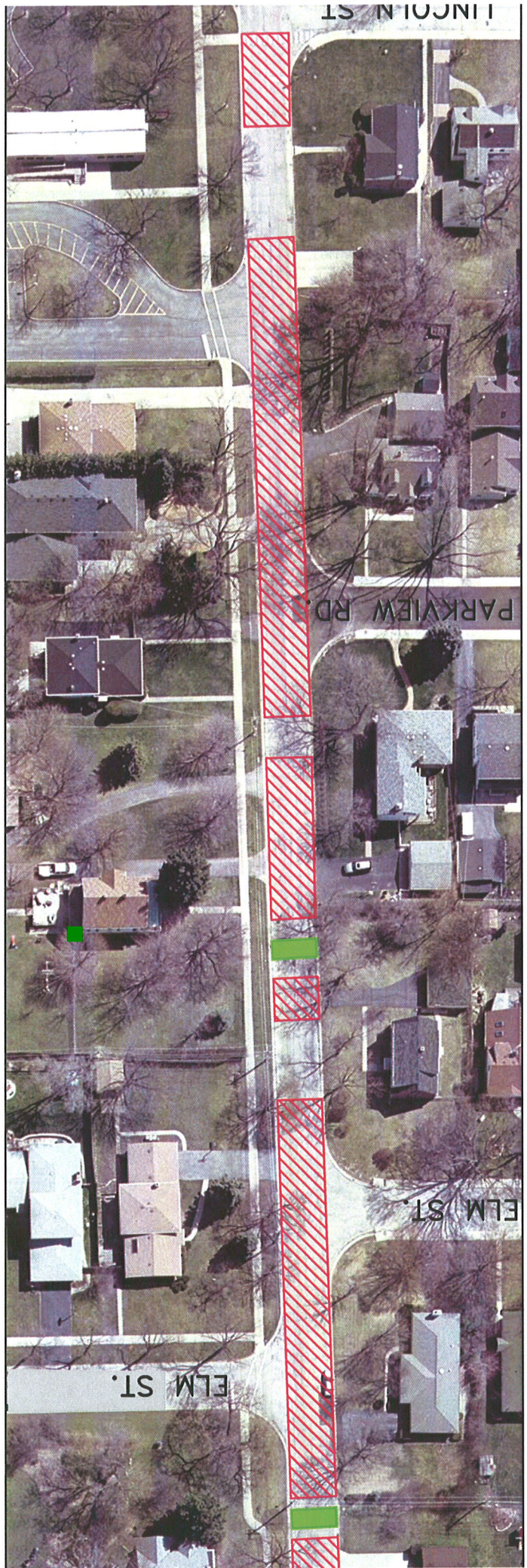
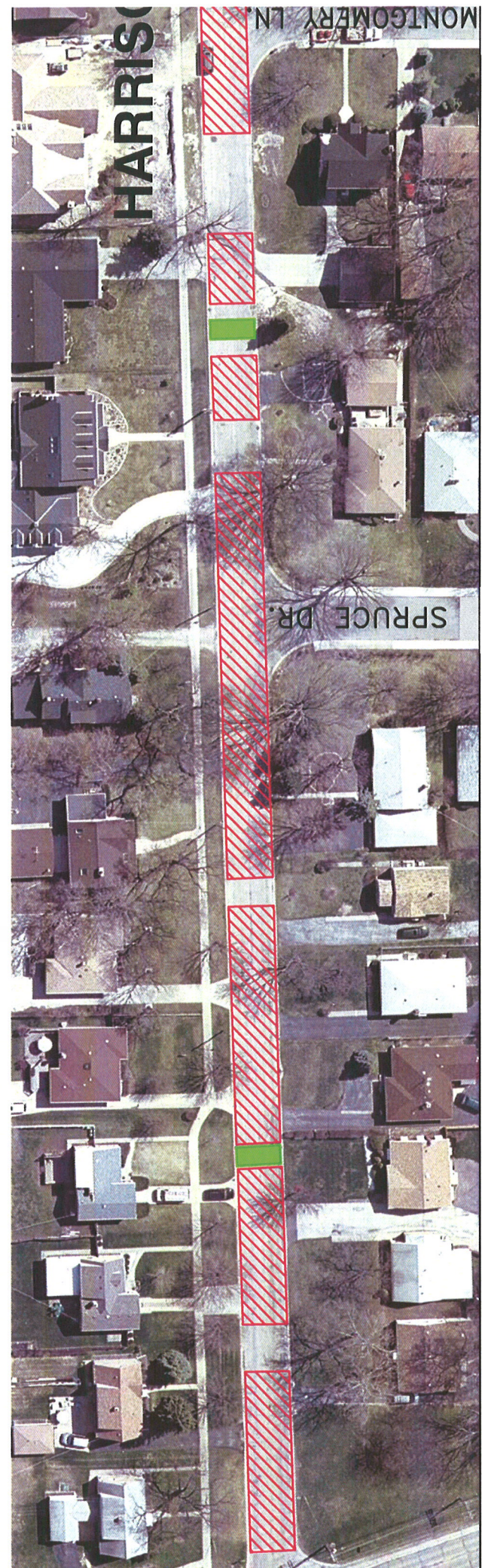
The Village should consider the pros and cons of speed humps as well as the level of neighborhood support before proceeding with installation. Should the Village elect to proceed with implementation, we recommend that the physical design (size and shape) of the speed humps and signing and pavement marking follow the ITE recommended guidelines and the latest edition of the Manual on Uniform Traffic Control Devices.

--END--



AREAS WHERE SPEED HUMPS CANNOT BE PLACED





PROPOSED SPEED HUMP



Appendix B



The Village of
Glenview

Village Manager's Office

February 22, 2008

Harrison Street Area Residents
Glenview, IL 60025

Re: Ballot on permanent speed humps on Harrison Street

Dear Resident,

As you are likely aware, the Village held a meeting on February 13, 2008, to discuss the installation of permanent speed humps on Harrison Street. At the meeting, neighborhood residents viewed a map showing where permanent speed humps would be installed on Harrison Street and discussed the pros and cons associated with the installation of permanent speed humps. The map that residents viewed has been included in this mailing along with a ballot that asks whether your household supports or opposes placing permanent speed humps on Harrison Street as the map illustrates. I would truly appreciate your completing the ballot and returning it in the self-addressed stamped envelope by Friday, February 29, 2008.

Please note, the results of this balloting will be offered to the Village Board at its March 18, 2008, meeting so that it may consider whether to install permanent speed humps on Harrison Street. If installation of permanent speed humps on Harrison Street is voted down by the balloted residences, the Village may consider an alternative traffic calming measure for the roadway.

If you have any questions, please feel free to contact me.

Thank you very much.

Respectfully,

Brett Barganz

Management Analyst
Village Manager's Office
1225 Waukegan Rd.
Glenview, IL 60025
(847) 904-4472 (office)



The Village of •
Glenview

**Harrison Street
Speed Hump Ballot**

Please indicate your preference with an "X".

_____ Yes, I favor installing permanent speed humps on Harrison Street as shown on the attached map.

_____ No, I do not favor installing permanent speed humps on Harrison Street as shown on the attached map.

Name (Please Print)

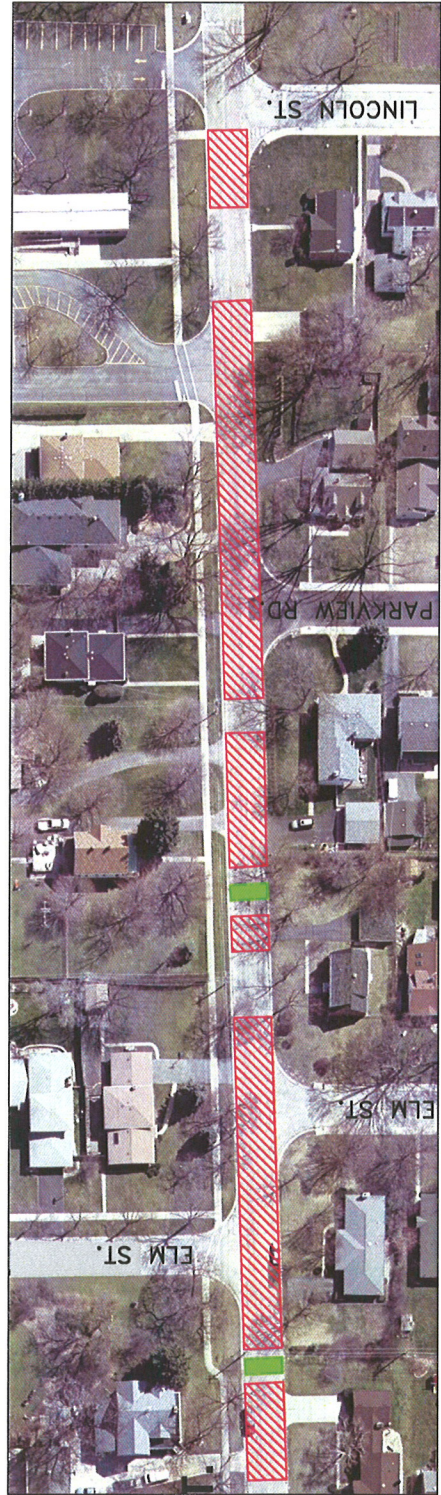
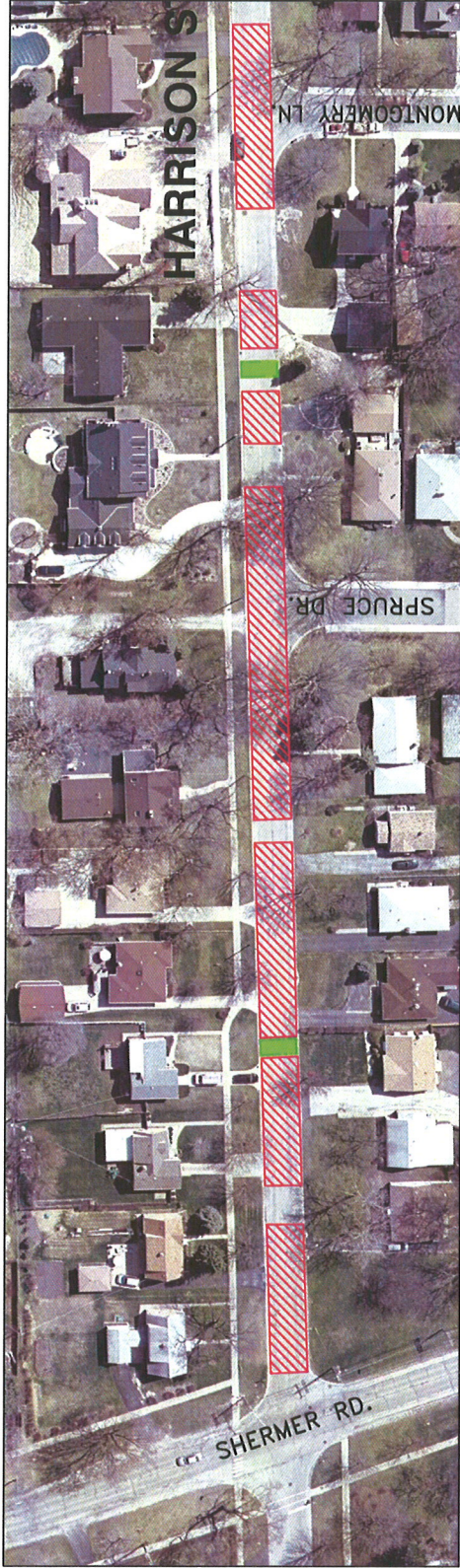
Address (ONE BALLOT PER RESIDENCE)

Daytime Phone Number

Signature

**Please return this ballot in the provided self-addressed stamped envelope by Friday,
February 29, 2008.**

Thank you.



- PROPOSED SPEED HUMP
- AREAS WHERE SPEED HUMPS CANNOT BE PLACED

HARRISON STREET
RECOMMENDED SPEED HUMP LOCATIONS

JAMES J. BENES & ASSOCIATES, INC.
950 Warrenville Road, Suite 101, Lisle, Illinois 60532
Tel. (630) 719-7570 • Fax (630) 719-7589



Appendix C

RESOLUTION NO. _____

WHEREAS, the Village of Glenview is a home-rule municipality located in Cook County, Illinois;

WHEREAS, the corporate authorities have discussed and considered the costs and benefits of installing speed display boards on Harrison Street;

WHEREAS, the corporate authorities have determined that it is in the public interest to install speed boards on Harrison Street.

NOW, THEREFORE, BE IT RESOLVED, by the President and Board of Trustees of the Village of Glenview, as follows:

The Traffic Committee is authorized to purchase and install two speed display boards, including solar panels and all necessary mounting components, at locations on Harrison Street for a cost not to exceed \$12,000.

PASSED this _____ day of _____, 2008.

AYES: _____

NAYS: _____

ABSENT: _____

APPROVED by me this _____ day of _____, 2008.

Kerry D. Cummings, President
Village of Glenview, Cook County, Illinois

ATTESTED and FILED in my office
this _____ day of _____ 2008.

Todd Hileman, Village Clerk
Village of Glenview, Cook County, Illinois