

## **Preliminary Report (Phase 1a) for the John Bishop Elementary School and Columbia Road Speeding Complaint**

### **1. Introduction**

A Working Group was formed in the late spring to consider the issues of safe walking and transport to Bishop School, and concurrently to examine a resident complaint about speeding on Columbia Road adjacent to the school. The Working Group consists of Steve Carne (principal), Mike Rademacher (TAC, DPW and parent), Cindy Starks (parent), Carl Wagner (parent), Carry Aluia (SRTS Coordinator), Ed Starr (TAC), and Lt. Paul Conroy (APD).

The work reported herein is Phase 1a of the broad review of safety around Arlington's elementary schools. Phase 1 addresses items that can be corrected by simple measures such as paint and signs. Phase 2 will address needed capital such as sidewalks and handicap ramps.

The process used followed these steps: 1) Defining the school district and exploring walking routes to schools; 2) conducting a survey of parents; 3) performing traffic measurements; 4) defining preferred routes to schools; 5) inventorying sidewalks and crosswalks along the routes to schools; 6) preparing recommendations based upon the data collected. Future tasks are to educate the parents and neighbors about modified drop-off procedures and the preferred routes to schools, and to implement them.

### **2. Data Collection**

#### **a. Parent Survey**

Response was great - 192 households representing 266 children responded out of a school population of about 350. The survey contained many comments and the survey results are available online at:

[http://www.surveymonkey.com/sr.aspx?sm=ogZPozTH\\_2bghANfLOWZCqVI7viNkOa5e2iNIusbCp\\_2bbM\\_3d](http://www.surveymonkey.com/sr.aspx?sm=ogZPozTH_2bghANfLOWZCqVI7viNkOa5e2iNIusbCp_2bbM_3d)

Password is btwc.

Bishop has an unusual school district in that about 30% of the students are well over the usual 1/2 mile from school. Many respondents (8%) indicated that distance and time were major factors in walking to school, although many do. A school bus is available from the Jason Street area for a fee. Responses indicated that 40% ride, 35% walk, 25% are bused.

Some of the responses are summarized below:

What improvements would lead to safer walking conditions?

Improved safety at intersections 40%

Less traffic 35%

Better sidewalk coverage 30%

Major Issues identified (no. of comments)

Winter snow removal 21

Sidewalks unsafe 16

School too far and too many busy streets to cross 15

Stowecroft – traffic and lack of sidewalk 12

Improve drop off process 12

Mystic Street traffic 10

Police enforcement 9

Ridge St Circle unsafe 8

Need Crossing Guard at Columbia/Stowecroft 6

Make Stowecroft/Columbia one way 6

Bicycles encouraged 5

Crossing Guard at Summer/Mill 5

In summary, the primary negative items appear to be poor sidewalk coverage, poor snow removal, difficulties with Stowecroft Road, and the drop off process. Many students are required to cross major roads including Mystic, Summer, and Mass Ave. and for those who do, the feeling is that the crossing are not safe for young elementary children. The Mystic crossing at Columbia Road has a Traffic Supervisor, and this and the other Traffic Supervisor positions are seen as essential.

### **b. Current Walking Routes to School**

From the survey we were able to estimate the current walking routes to school. From this we determined that:

37 approach the school from Stowecroft south via Edgehill or Ridge;

50 walk up Crosby from the south via Ridge, Cutter Hill, Oak Hill,  
Upland or Pamela;

22 cross Mystic and come up Columbia;

14 approach the school from Crosby north via College or Mystic; and

2 approach from Stowecroft north.

### c. Traffic Measurements

Traffic measurements were made on Columbia Road in the late spring of 2008 and on Crosby Street in the late spring of 2003. A summary of the data measured on Columbia Road is presented below. This data is also useful for establishing potential speeding on Columbia Road.

Columbia Road Measurements – at **5 Columbia Road** between Mystic and Stowecroft; 6/2 to 6/8, 2008 noon to noon – Monday to Monday

Average **weekday** volumes – 692 vehicles /day in both directions  
– 52% eastbound, 48% westbound

Average **weekend** volumes = 624 vehicles – 50/50

Speeds eastbound:

50<sup>th</sup> percentile = 18 mph, 85<sup>th</sup> percentile = 23 mph,  
95<sup>th</sup> percentile = 25 mph

Speeds westbound:

50<sup>th</sup> percentile = 19 mph, 85<sup>th</sup> percentile = 24 mph,  
95<sup>th</sup> percentile = 26 mph

Columbia Road Measurements – at **28 Columbia Rd** across from school on 6/2 to 6/8, noon to noon – Monday to Monday

Average **weekday** volumes – 693 vehicles /day in both directions  
– 46% eastbound, 54% westbound

Average **weekend** volumes = 494 vehicles – 50/50

Speeds eastbound:

50<sup>th</sup> percentile = 18 mph, 85<sup>th</sup> percentile = 22 mph,  
95<sup>th</sup> percentile = 27 mph

Speeds westbound:

50<sup>th</sup> percentile = 22 mph, 85<sup>th</sup> percentile = 28 mph,  
95<sup>th</sup> percentile = 30 mph

Crosby Road Measurements – taken for speeding purposes at **8 Crosby Rd** between Friday 5/31/03 to Sunday 6/2/31 noon to noon.

**Weekend** volume – 1685 vehicles in both directions  
 – 49% northbound, 51% southbound

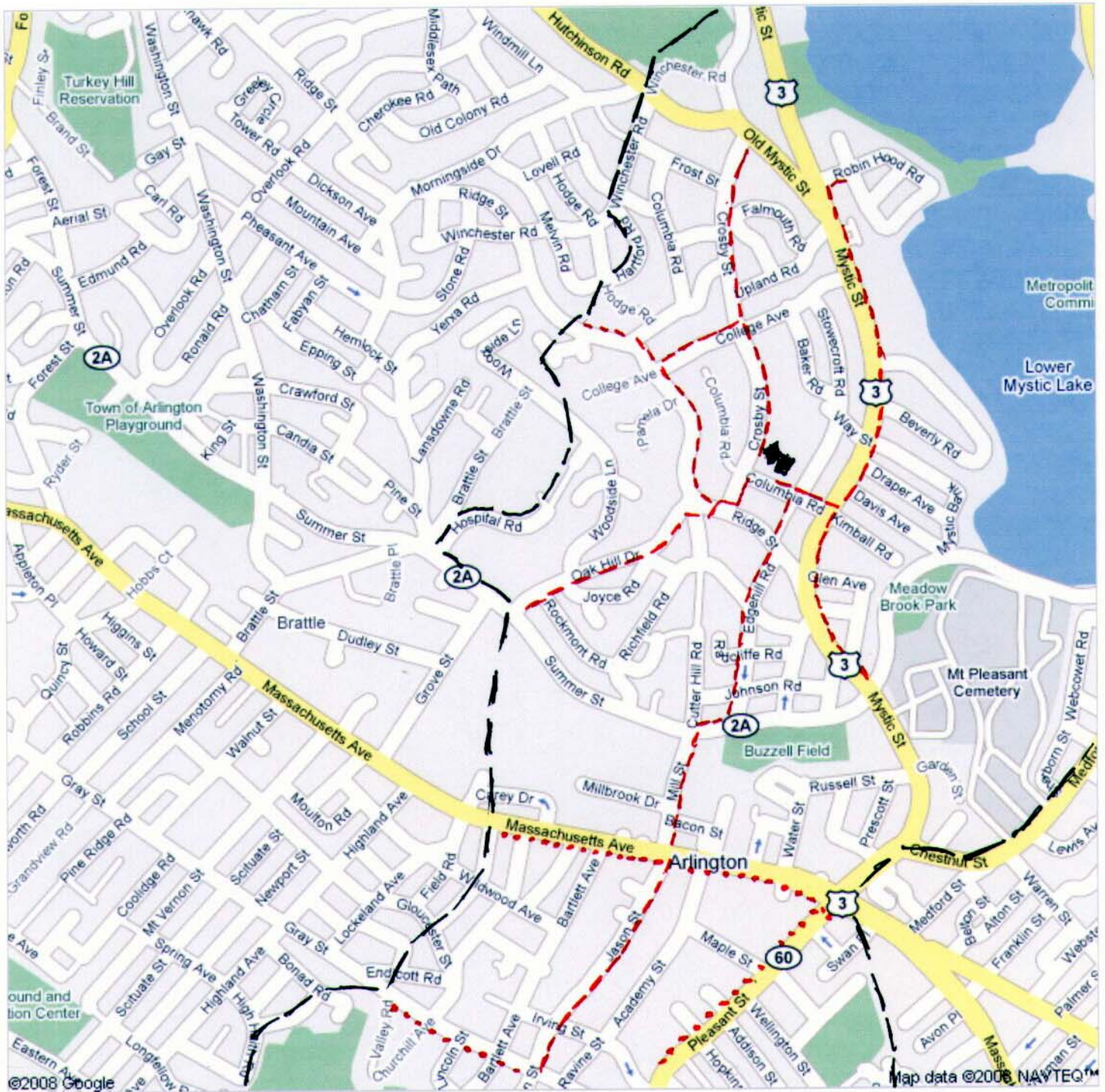
Speeds northbound:  
 50<sup>th</sup> percentile = 22 mph, 85<sup>th</sup> percentile = 25 mph,  
 95<sup>th</sup> percentile = 29 mph  
 Speeds southbound:  
 50<sup>th</sup> percentile = 22 mph, 85<sup>th</sup> percentile = 26 mph,  
 95<sup>th</sup> percentile = 29 mph

**3. Recommended Walking Routes and Drop Off locations (see map)**

The Bishop School District includes the old Parmenter School area along Jason Street and Pleasant, far from Bishop School. Because of this busing is available. The walking routes from this area cross some of Arlington’s busiest streets (Mass Ave and Summer).

The recommended routes are listed below. Each starts at the school as a primary route and goes to a neighborhood. As the route branches out into sub-neighborhoods it becomes secondary.

- NW Primary**  
 Crosby to Old Mystic
- N Primary**  
 Columbia to Mystic  
 Mystic to Robin Hood
- E Primary**  
 Columbia to Mystic  
 Mystic to Beverly; Mystic to Mystic Parkway
- S Primary**  
 Stowcroft to Edgehill to Summer (not Cutter Hill)  
 Summer to Mill  
 Mill to Mass  
 Jason to Brantwood  
     Secondary 1  
         Gray to Valley  
         Hillsdale to Venner  
     Secondary 2  
         Jason to Spring



- SCHOOL DISTRICT
- - - - PRIMARY ROUTES
- ..... SECONDARY ROUTES

Secondary 3  
 Mass to Pleasant  
 Pleasant to Venner  
 Secondary 4  
 Mass to Churchill

**SW Primary**

Ridge to Oak Hill  
 Oak Hill to Summer  
 Secondary to Woodside

**W Primary**

Ridge to Twin Circle or Pamela

**W Alternate**

Crosby to College  
 College to Ridge  
 Ridge to Twin Circle or Upland

**4. Speeding on Columbia Road**

The data in section 2c does not find an unusual speeding problem on Columbia Road. The average speeds are around 20 mph and 95<sup>th</sup> percentile only 30 mph. A memo from the Arlington Police Department is included in Appendix A.

There was also a recommendation for stop control at Columbia and Crosby. We agree with this suggestion and have adopted it for the Bishop School recommendations.

**5. Phase 1a Recommendations**

**a. Improvements Around School**

- 1) Place two-way stop control on Columbia at Crosby.
- 2) Place necessary signs and markings for School Zones on Crosby, on Columbia, and at entrance to Stowcroft from Ridge.
- 3) Place “No parking here to corner” signs on Columbia/Crosby intersection (all corners), and Columbia/Stowcroft intersection on all public ways.
- 4) Designate Three Drop Off Areas:
  - a) Columbia on school side
    - i) Post “Drop Off Only – No Parking,” on school side of Columbia Avenue from Stowcroft to Crosby.
    - ii) Post “Drop Off Only – No Parking” on school side of Crosby from Columbia to 80’ from corner.
  - b) In parking lot
    - i) Indicate “One Way” to the right at entrance with sign properly placed.
    - ii) Place pavement markings indicating one-way travel counter-clockwise

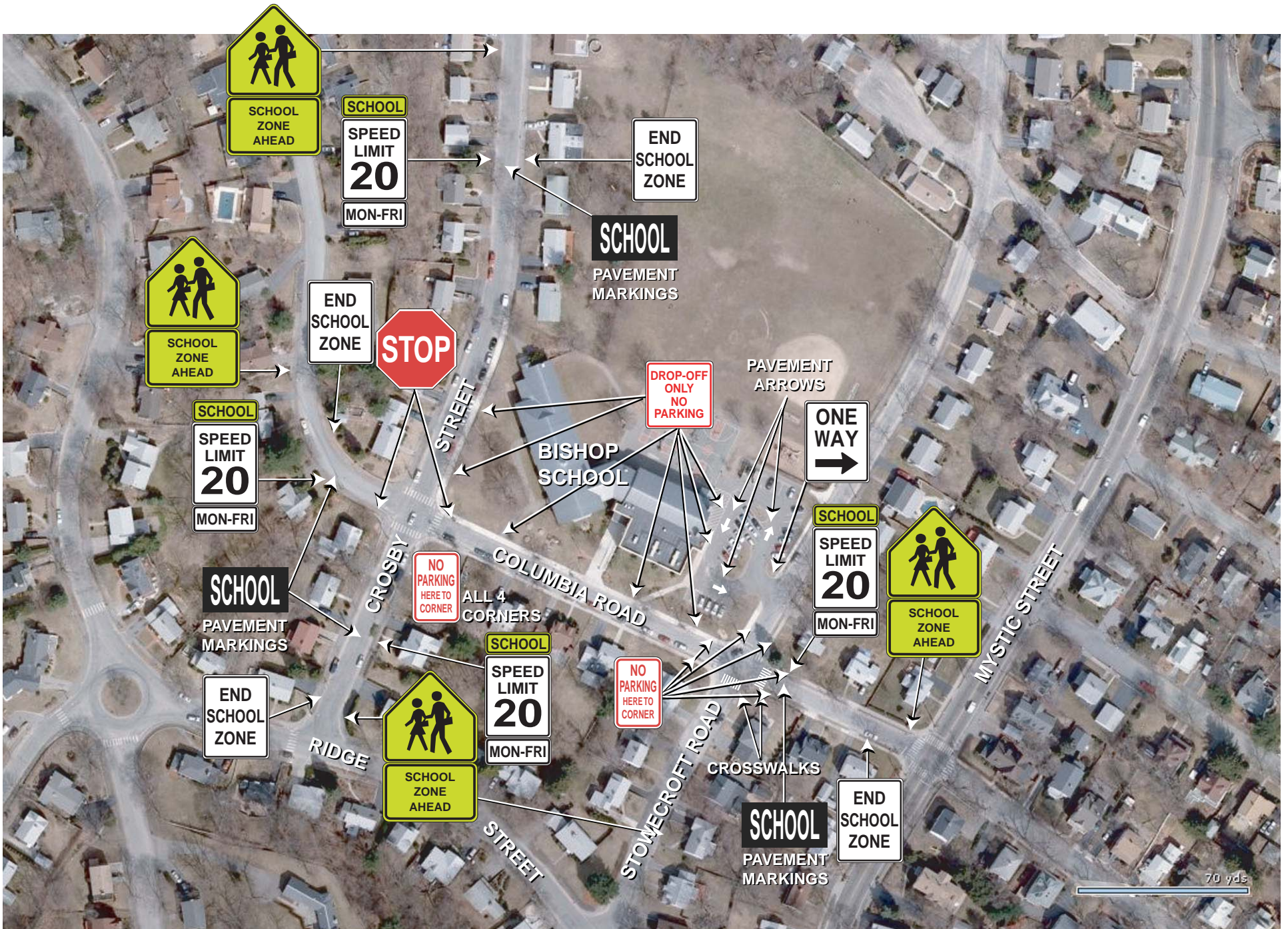
- on the parking lot.
- iii) Place “Drop Off Only – No Parking” at location of bus drop off.
- 5) Drop Off Management
- a) School Administration to organize and communicate drop off management and preferred routes to schools to parents and students
  - b) School Administration arrange for parent volunteers to help during drop off wearing green vests.
- 6) Crosswalks at Stowecroft and Columbia – place crosswalks on the remaining two sides of intersection (two currently have crosswalks)

**b. Improvements Walking to School**

- 1) Place standard crosswalk signs for three crosswalks at the Oakhill/Cutter Hill/Ridge rotary.
- 2) Place standard crosswalk signs at crosswalk on Crosby at College.
- 3) Paint crosswalks on Jason at Norfolk, Gray, and Irving.
- 4) Trim bushes at Hillsdale and Brunswick, on Mass Ave between Newman and Churchill, on Gray St at Endicott, and on Oak Knoll.
- 5) Add crosswalks on side streets on Mass Ave that do not now have them: Bartlett, Newman, Churchill

**6. Preliminary Phase 2 Recommendations**

1. Fix the Stowecroft problem
2. Provide waiting area and access at Spring Street Bus Stop
3. Provide handicap ramps for all crosswalks
4. Repair Sidewalks
  - a. N side of Columbia between Mystic and Stowecroft
  - b. Edgehill Rd from Ridge to Richfield
  - c. Gray from Jason to Valley (maybe beyond)
  - d. Jason from Irving to Woodland
  - e. Bus Stop at Brantwood and Jason
5. New Sidewalks
  - a. Ridge street one side from Pamela to Sleepy Hollow (or to Morningside would be better)
  - b. Complete Gray Street east of Highland
6. Examine pathway to College from upper Columbia. Is it town right-of-away?



Phase 1A Safety Recommendations for the Bishop School



DEPARTMENT OF COMMUNITY SAFETY  
Police Services Division

CHIEF OF POLICE  
Frederick Ryan



*Town of Arlington*  
MASSACHUSETTS 02474

POLICE HEADQUARTERS  
112 Mystic Street  
Telephone 781-316-3900  
Facsimile 781-316-3919

MEMORANDUM

TO: Frederick Ryan  
Chief of Police

FROM: Officer Karen V. Kelley  
Traffic and Parking Unit

DATE: June 19, 2008

Re: Columbia Road Traffic Concerns

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Per your request I looked into a traffic safety concern on Columbia Road. Sinan Akdag of 28 Columbia Road had concerns with regard to the speed on the street and was also requesting additional stop signs. A traffic speed count was done on the street on June 2, 2008 to June 9, 2008. Two traffic speed counts were placed on the road: (1) 5 Columbia and (2) 28 Columbia. Those results are shown in the table below.

LOCATION	DIRECTION	SPEED – 85 <sup>TH</sup> PERCENTICLE
5 Columbia	East	23 mph
5 Columbia	West	24 mph
28 Columbia	East	27 mph
28 Columbia	West	28 mph

Columbia Road is an unposted 30 MPH. As seen in the table above there does not appear to be excessive speeding.

With regards to the stop sign request for Columbia at Crosby, I do recommend that a stop sign be placed on Columbia Road at the intersection of Crosby. Crosby Street is a heavily traveled road and the placement of a stop sign for motorist's exiting Columbia would add to the safety of the intersection.

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DEPARTMENT OF COMMUNITY SAFETY  
Police Services Division

Therefore an addition to the Traffic Rules and Orders, Schedule IV: Isolated Stop Signs should be as follows:

<b>LOCATION</b>	<b>TRAFFIC DIRECTION</b>
Columbia Rd.	For west bound traffic at Crosby St.

KVK

Cc: Marie Krepelka, Board Administrator  
Brian Sullivan, Town Manager  
Robert Jefferson, Fire Chief