NEIGHBORS UNITED TRUST
4911 Ashby Street, NW
Washington, DC 20007

May 21, 2004

Mr. Geoffrey Griffis, Chairman
D.C. Board of Zoning Adjustment
441 Fourth St., NW, Suite 210
Washington, DC 20001

RE: BZA Case No. 17164 (Special Exception-St. Patrick's School)

Dear Chairman Griffis and Members of the Board:

During the Public Hearing before the Board May 18, 2004, the record was left open for Neighbors United Trust to supply additional information regarding the basement at the St. Patrick's School building at 4925 MacArthur Blvd. In specific, Neighbors United Trust was to address the difference in space conditioning needs between the use of the basement for storage/utility space as compared to use as a music room/classroom.

The attached letter from the engineering firm of Petrossian and Associates of McLean Virginia, dated May 20, 2004 provides an analysis of the differing requirements and loads for use as a storage/utility space compared with use as a music room/classroom.

Their conclusion is that a number of code requirements and design differences will necessitate increased space conditioning for the basement space when it is used for a music room/classroom compared with use as a storage/utility space.

This refutes the school's assertion that the specification requirements are the same and that there would be no difference in space conditioning needs.

Sincerely.

NEIGHBORS UNITED TRUST

BY: Katherine M Vorlich DeMallie

Katherine V. S. DeMallie, Trustee

Nancy Feldman

Nancy Feldman, Trustee

BZA
Case No. 17164
Exhibit No. 35

Board of Zoning Adjustment
District of Columbia
CASE NO. 17164
EXHIBIT NO. 35

BZA Case 17164

PETROSSIAN & ASSOCIATES
ENGINEERS
CONSULTANTS
PLANNERS

May 20, 2004

MS KATHERINE VANSICKLE
NEIGHBORS UNITED
4923 ASHBY STREET
WASHINGTON DC 20007

Reference: St. Patricks Episcopal Day School

Dear Ms. VanSickle,

At your request we have reviewed the architectural basement floor plans on the referenced project, prepared by GTM Architects dated 04/01/2002 for existing conditions and proposed plan dated 04/07/2003 for conversion of approximately 320 sq.ft. of storage area to a Music Room, and offer the following:

1. Based on the 1996 International Mechanical Code (IMC) the classroom may have 16 students each requiring 15 CFM of outdoor air, therefore the classroom will require 240 cfm of tempered outside air for ventilation. The same space used as a storage (utility) room will require a minimum of 0.15 CFM per square foot of outside air which translates to 48 cfm. Therefore the heating/cooling and ventilating unit serving the Music Room should be resized and set to provide continuous 240 cfm of outside air during the occupancy period of the space.

   If the space is being air conditioned, the air conditioning unit will require higher capacity than for storage room due to higher outside air quantity and additional lighting and occupancy loads.

2. 1996 IMC paragraph 403.2.1 does not allow recirculation of return air between dissimilar occupancies therefore if the air handling unit which provides conditioned air to the Music Room is also providing conditioned air to the remaining areas of the basement and the air for those areas are being returned back to the unit and is then is supplied to the Music Room then the system is in violation of code.

3. The proposed plan does not indicate any toilet facilities in the basement. The code allows the use of toilet facilities one level above the occupied space, therefore the toilet facilities on the 1st floor should be checked to confirm proper number of plumbing fixtures to served the basement as well as existing occupants.

4. The Music Room as compared with storage room requires a higher level and an a more uniform distribution of lighting thus the need to increase the number of light fixtures.

1340 OLD CHAIN BRIDGE ROAD, McLEAN VIRGINIA 22101 (703) 556-0388 FAX: (703) 790-9656

5. The possible increase in electrical demand due to air handling unit and additional lights and receptacles we recommend that the overall building electrical system be evaluated to ensure the proper service size and distribution.

Please note that we have not received the drawings for mechanical, plumbing and electrical systems for the facility nor have visited the site for visual evaluation.

The opinions expressed above are of a general nature and relates mainly to code issues and issues which we have experienced during the design of similar facilities in the past.

If you have any questions or concerns regarding the foregoing please do not hesitate to contact me.

Sincerely,

R. Petrossian, P.E.
RP/aks