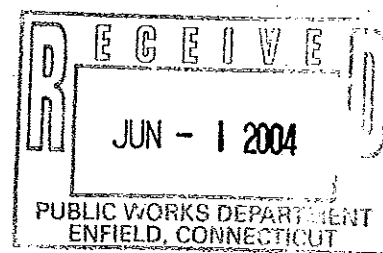


**Preiss
Breismeister
P.C.**



26 May 2004

Via Facsimile
(860) 763-7401

Mr. Geoffrey R. McAlmond
Deputy Director of Public Works
Town of Enfield
40 Moody Road
Enfield, CT 06082

Re: A.D. Higgins School Roof Inspection

Dear Geof,

At your request, we made a roof inspection of the A.D. Higgins School in Enfield. The building appears to be structurally sound (letter from structural engineer enclosed) and has damage created only recently. We found the building unoccupied and apparently has not been heated during the past winter.

Roof Inspection

- The roof system (approximately 10,000 s.f.) appears to be a two or three ply asphalt built up, with gravel.
- The roof over the area where there was the most interior water damage had sizeable cracks in the asphalt and roofing layers on the south third of the building
- There were also cracks in the depressed area on the west third of the roof near and around the drain.

Interior Damage

- The interior paint and other materials showed water damage to the plaster and suspended ceilings.
- "Daylight" could be seen through the roof and roof sheathing on the 2nd floor.
- Indication of slight water damage high on exterior wall under parapet.

35 Chestnut Hill Terrace
Glastonbury, CT 06033
TEL 860 657-4646
FAX 860 657-4645
E-Mail pbarchts@pbarchts.com

**Preiss
Breismeister
P.C.**

Mr. Geoffrey R. McAlmond
26 May 2004

Page 2

Recommendations

- Repair the roofing system cracks immediately and inspect the low roof drain area. This should be a minimal expense and would temporarily stop interior damage.
- Begin a preventative maintenance program to address the perimeter wall flashing and coping stone deficiencies.
- If it were decided that a new built-up roof is required, the magnitude of cost for removing the existing and replacing with new would be in the \$10 - \$13 per square foot range, or \$100,000 - \$130,000.

The Architectural/Engineering Fees for this work would be an additional 6% - 8% of the roofing cost. This Fee includes an asbestos consultant and structural engineer.

If you have questions, or need further information, please call me.

Very truly yours,

PREISS/BREISMEISTER P.C.



Frederick A. Preiss, AIA
Principal

Enclosure



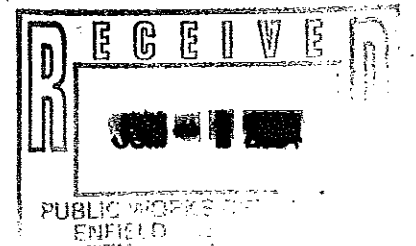


SZEWCAK ASSOCIATES
CONSULTING ENGINEERS

Richard M. Szewczak, P.E.
Alan R. Chandler, P.E.
Peter G. Celella, P.E.
John C. Thomas, P.E.

May 26, 2004

Preiss/Breismeister, P.C.
65 Broad Street
Stamford, CT 06901



Attn: Mr. Frederick Preiss

Re: Structural Review - Roof Leaks
A.D. Higgins School
Enfield, Connecticut

Dear Fred:

In response to your review, a visit was made to the A.D. Higgins School in Enfield, Connecticut to review the structural integrity of the roof and floor framing system in the vicinity of the existing roof leaks.

From our review of exposed and accessible areas of construction, we have the following comments:

1. The existing roof framing system consists of the following:
 - a. The membrane roof waterproofing system is supported on 3/4" tongue-and-groove wood decking supported on wood roof joists spanning from the exterior building walls to the interior corridor walls.
 - b. The roof joists are sloped to a center drainage system consisting of two roof drains at interior points adjacent to the central corridor area.
 - c. A relatively pronounced trough is provided in the roof pitch at the north drain location.
 - d. There is a lower ceiling joist framing system (situated below the roof rafters) which also spans from the exterior load-bearing masonry walls to the interior masonry corridor walls.
2. The floor framing system at the school is comprised of the following:
 - a. The classroom sides of the building construction consists of wood floor joists supported on the exterior masonry load-bearing wall and the interior masonry corridor walls.
 - b. The central corridor is constructed of a concrete slab supported on steel joists/beams between load-bearing corridor wall construction.

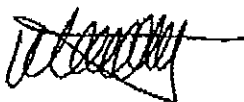
3. There are two main areas where significant water infiltration into the building is occurring as well as a series of minor water infiltration areas.
 - a. The first significant roof leak occurs within the depressed trough area adjacent to the north building drain location.
 - b. The second significant roof leak occurs south of the south drain area and appears to be caused by a rip/breach in the existing roof membrane system.
 - c. There are also minor areas of water infiltration adjacent to the perimeter wall locations associated with the poor conditions of the counter flashing at the parapets as well as the lack of proper watertight caulking/sealant at the parapet coping stones.
4. The present roof leaks have caused considerable damage to the ceiling construction in the vicinity of the leaks. The plaster ceiling construction as well as a secondary lay-in ceiling has failed in the location of the main roof leaks and roofing membrane breach. It does not appear that the structural framing system has significantly deteriorated in the vicinity of the water infiltration as the roof leaks appear to be fairly recent (not more than one year in duration).
 - a. There were observed some minor deterioration and bacteria growth on the wood decking. It should be anticipated that this deterioration will begin to accelerate if the water infiltration is not rectified in the near future.
5. We recommend that the present roof leaks and membrane breaches in the main roof leak areas be rectified to prevent any further water infiltration at these locations.
 - a. A long range preventative maintenance program should be established to address the perimeter wall flashing and coping stone deficiencies as well as minor, potential, additional areas of roof membrane distress that will eventually lead to additional large scale water infiltration as that which presently exists in the roof membrane construction.

Based upon the above review, we believe, to the best of our knowledge, that the existing building structural framing system is sound and little deterioration exists in the system at the present time. Should the existing condition be allowed to continue without any remedial attention, it should be anticipated that future deterioration of the structural framing system will accelerate relatively quickly.

If you have any questions or require any additional information, please call.

Very truly yours,

SZEWCAK ASSOCIATES
CONSULTING ENGINEERS



Richard M. Szewczak, P.E.

RMS:rr

