

GREENWICH PUBLIC SCHOOLS
Greenwich, Connecticut

Date of Meeting___March 13, 2008_____

Title of Item___Action on Hamilton Avenue School Relocation Plan_____

Policy Reference_____Agenda No __3_____

REQUEST FOR BOARD ACTION OR PRESENTATION OF INFORMATIONAL ITEM

____X____Action Requested

_____Informational Only

Submitted By: _____Dr. Betty J. Sternbery/Dr. Susan Wallerstein_
Position: _____Superintendent/Assistant Superintendent_____

I will be present at Board meeting to explain if called upon:

____X____
Yes

No

Synopsis of Proposal

Recommended Action (if appropriate):

GREENWICH PUBLIC SCHOOLS

Hamilton Avenue School Relocation Plan
Effective March 10, 2008

| HAS Grade | # Sections | Receiving School |
|------------------------------|-------------------|-------------------------|
| PreK (Ingham & Daniels) | 2 | Old Greenwich |
| PreK (Wilkinson & Mackey) | 2 | North Street |
| Kindergarten | 4 | Glenville |
| Grade 1 & Grade 1/2 | 4 | Parkway |
| Grade 2, Grade 3 & Grade 3/4 | 5 | Cos Cob |
| Grade 4 & Grade 5 | 4 | Western Middle School |

The Relocation Plan

- provides for all students to remain with their current classroom teacher
- keeps grade levels together except for split classes
- maintains current class size at HAS and across the district
- minimizes time out of school for HAS students

Greenwich Public Schools
Hamilton Avenue Modular Relocation Cost Estimate Tally
As of 3/13/08

| Vendor | Purpose | Projected Cost | Contact | Funding Source/Acc't. to be charged | Notes |
|--------------------------------------|----------------------------|----------------|-----------------------|-------------------------------------|---|
| E.A.S. | Environmental consult/test | \$50,475.00 | Byrne / Wallerstein | | To Date |
| E.A.S. | Additional Remediation | TBD | Byrne / Wallerstein | | |
| AWAY (Environmental Services) | Environmental remediation | \$58,000.00 | Byrne / Wallerstein | | To Date |
| Geddis & CES Association | | \$15,000.00 | Byrne / Wallerstein | | To Date |
| Turner Construction | GLV Option Estimates | \$6,000.00 | Byrne / Wallerstein | | To Date |
| TBD | Ozone Remediation | TBD | | | |
| | | | | | |
| BOE Facility Committee - Consultants | | | | | |
| Hoffman | Architects / Structural | \$13,000.00 | Moriarity | | |
| Hygenix | Environmental | \$2,000.00 | Moriarity | | |
| | | | | | |
| Custodial OT at HA | 24x7 access 2/29 to date | TBD | Byrne / Hohl | A6400292 51100 | |
| Custodial OT at Havemeyer | Access 3/2 | TBD | Byrne / Hohl | A6401792 51100 | |
| Custodial OT at GLV | Plan and prep rooms | TBD | Byrne / Hohl | A6400392 51100 | |
| Custodial OT at Cos Cob | | TBD | Byrne / Hohl | A6401705 51100 | |
| Custodial OT at WMS | | TBD | Byrne / Hohl | A6401752 51100 | |
| Custodial OT at Pky | | TBD | Byrne / Hohl | A6401708 51100 | |
| | | | | | |
| GHS custodial OT | 3/3 BOE mtg. coverage | TBD | Byrne | A6401792 51100 | |
| GHS Security OT | 3/3 BOE mtg. coverage | TBD | Bobkowski | A6001780 51100 | |
| | | | | | |
| Boys & Girls Club | 3/4-3/7 Child Care | \$6,368.00 | Calcavecchio/Flanagan | A6001784 52150 / A6001793 51490 | Prog. 84 line 215 (\$500); line 149 (\$5868); poss. ltd. offset from alt. PE program funding? |
| Family Centers | Child Care 2-Days | \$696.42 | Flanagan | A600179351490 | |
| Instructional Aide (2) | Child Care 2-Days | \$498.15 | Flanagan | | |
| Children's Day Care | Child Care 3-Days | \$0.00 | Flanagan | A600179351490 | |
| Instructional Aide (1) | Child Care 3-Days | \$415.62 | Flanagan | | |
| | | | | | |
| Substitute Teachers | 3/4 - 3/5 (1) per Building | \$1,200.00 | Flanagan | A620179351310 | |
| Substitute Teachers | Cover PPT's 12 Fridays | \$1,200.00 | Flanagan | A620179351310 | |
| Add (1.0) Special Education Teacher | Prorated | \$17,587.00 | Flanagan | A620025351020 | |
| Staff Mileage Reimbursement | (15) x.495 x | TBD | | | |
| | | | | | |

Greenwich Public Schools
Hamilton Avenue Modular Relocation Cost Estimate Tally
As of 3/13/08

[illegible]

1. *What environmental testing has been done at the modulars, for what purposes and with what results?*

Attached is a chronological summary of test data from the Hamilton Ave. modular facilities prepared by the school system's environmental consultant, Environmental Assessments & Solutions, Inc.

2. *What other testing does the school system routinely conduct?*

The districtwide environmental testing program includes the following elements:

- *Asbestos* – Tri-annual inspection by licensed environmental consultant with six month periodic surveillance by district staff (state requirement). Parents and staff notified annually of any asbestos work undertaken in the district. All asbestos abatement projects done as part of capital projects or regular maintenance include a battery of tests with reports on file in the District facilities department and school office.
- *Radon* - A new state initiative which requires school systems to perform Radon testing every five years. Radon testing has just been completed in all school buildings per state requirements (rooms that are on the first floor or come in contact with the earth due to topography).
- *Tools for Schools* – A pro active school community program developed by the Environmental Protection Agency with training provided through the State Department of Health with cooperation from the Town of Greenwich Health Department.

3. *What is the warranty on the modulars?*

Section 8 of the contract provides for a one year guarantee. With assistance from the Town Attorney's office the warranty on the roof was extended an additional year through June 13, 2007.

4. *How much has the school system spent for environmental consulting services related to the modular?*

Preliminary estimates for the services of Charles Schwartz (Environmental Assessment Solutions) which includes all testing and lab services are estimated to exceed \$50,000. In addition, the services of the environmental remediation contractor engaged to clean the classroom furniture before its relocation to receiving schools is expected to exceed \$50,000.

5. *Has the Town Attorney been consulted and involved in this issue?*

Yes, the Town Attorney's office has been consulted many times since the acquisition of the modulars (2004-05) and is very familiar with the provisions of the contract and the performance of the vendor.

6. *Didn't the Fire Marshall find code violations during a recent visit?*

The Fire Inspector's report in December 2007 identified two issues, both of which were noted as abated: a) storage in egress corridors, and b) multi-purpose room posted for capacity of 50. This information, including copies of the report, was shared with the Hamilton Ave. and the Glenville principals. Based on informal follow-up discussions, the administration agreed to touch base in early 2008 to revisit

what might be done to increase the capacity of the multi-purpose room while ensuring the safety of students and staff and complying with all relevant codes.

7. *What consultants have been involved with this project?*

| Name | Title/Position | Role/Responsibility |
|------------------------------|--|--|
| Charles Schwartz | Environmental Assessment Solutions (EAS) | School system's environmental consultant responsible for routine and construction-related testing (radon, asbestos abatement); currently responsible for testing at the modular facility |
| Bob Brown | Hygenix | Engaged by the Board of Education's Special Committee on Facilities to review environmental testing protocols and results |
| Doug LaJoie & Hassan Emamian | Consulting Engineering Services (CES) | Engaged by the school administration to assess the feasibility, cost and time required to remediate the modular facility for future use; and to identify structural deficiencies which led to the problems; to determine whether the deficiencies were the result of flawed design and/or flawed construction. |
| Luke Hughes | Architect specializing in building envelopes | Engaged by CES to assist with the scope of work outlined above. |
| John Brice | Architect, The Geddis Partners | Consulted by the school administration regarding issues outlined above. |
| Steven Susca | Sr. Engineer, Hoffman Arch. | Engaged by the Board of Education's Special Committee on Facilities to provide an independent evaluation of the modular's structural deficiencies as described previously. |
| Ty Tregellas | Turner Construction | Construction manager for the Glenville School capital project; engaged by the school administration to provide cost estimates and a timeline for Glenville School relocation options which involve the use of modulars (other than the existing facility) on one or more sites including the current foundation/piers, assuming the current structure would be demolished or repurposed after remediation. |

8. *What steps if any has the Town and/or school system taken to apply lessons learned at the modular facility to the new construction of Hamilton Ave.?*

The building committee is considering engaging an independent environmental consultant. The Town Building Department has recommended that architects and engineers involved with the project evaluate and submit a detailed report containing findings and/or recommendations regarding the "weather tightness" of the building, the condition/integrity of ice and water barrier material after prolonged exposure to the elements, the ventilation of the roof, and the thermal envelope.

ENVIRONMENTAL ASSESSMENTS & SOLUTIONS, INC.

41 Boulder Ridge Road

Scarsdale, N.Y. 10583

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E.A.S@ATT.NET

March 10, 2008

Project #: 22/08IAQ
Site: Hamilton Modular School at Western Middle School
Scope: Mold Testing
Period: 2/27 - 3/10/08

Enclosed is a chronological summary of test data from the Hamilton Modular School related to the mold condition we identified:

Date: 2/27 (Wednesday)
Test: Pre-renovation building material testing for asbestos
Location: Classroom 7
Method: Polarizing Light Microscopy
of Samples: 7 samples
Time Due: 12 hours after receipt by lab
Purpose: To verify that regulated asbestos would not be disturbed during any invasive inspection work
Findings: No regulated asbestos identified.
Conditions: Testing conducted after hours
Pending: No results pending

Date: 2/28 (Thursday)
Test: Air testing for mold (round I)
Location: Conducted in classroom 7 and 13, 7/13 hall, comparison CR, outdoors (1) with a quality control sample
Method: Optical microscopy (spore trap - fungi)
of Samples: 6 samples
Time Due: 3 hours after receipt by lab on weekend
Purpose: To determine ambient air quality for bioaerosols in complaint locations compared to non-complaint and outdoors
Findings: Air quality acceptable at time and location of tests (results received 3/01)
Conditions: Conducted after school hours prior to building being vacated
Pending: No results pending

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Date: 3/01 (Saturday)
Test: Air testing for mold (round II)
Location: Conducted in 11 rooms, 2 halls, outdoors (3) with a quality control sample
Method: Optical microscopy (spore trap - fungi) and culture (plates - bacteria and fungi)
of Samples: 17 samples
Time Due: 3 hours after receipt by lab
Purpose: To determine ambient air quality for bioaerosols after invasive inspection
Findings: Air quality acceptable at time and location of culture bacteria (results received 3/05) and optical microscopy tests (results received 3/03).
For culture fungi results, Basidiomycetes sp. (mushroom spores) was dominant in several indoor samples but not outdoors and was highest in classroom 21 and hall between classroom 7 / 13 (results received 3/11)
Conditions: Conducted after invasive inspection of classrooms 7, 8 and 13
Pending: No results pending

Date: 3/04 (Tuesday)
Test: Surface mold testing of cleaned and disinfected furniture (round I)
Location: Conducted in three (3) classrooms (4, 21 & 19) with three (3) pieces of furniture tested in each room
Method: Optical microscopy (tape lift - fungi) and culture (swab - bacteria and fungi)
of Samples: 10 samples
Time Due: Same day as receipt by lab (optical microscopy only)
Purpose: To verify that furniture was adequately cleaned and disinfected
Findings: No mold or normal background levels of mold identified by optical microscopy (results received 3/06)
Conditions: Conducted after furniture was cleaned and disinfected with a biocide by Away Env.
Pending: Culture bacteria and fungi results are pending

Date: 3/04 (Tuesday)
Test: Air testing for mold (round III)
Location: Conducted in nearly all rooms with outdoors (3) and a quality control sample
Method: Optical microscopy (spore trap - fungi)
of Samples: 30 samples
Time Due: 3 hours after receipt by lab
Purpose: To determine ambient air quality for bioaerosols after invasive inspection
Findings: Elevated levels of Aspergillus / Penicillium like spores in 4 classrooms (9, 10, 15 and 16) and marginally elevated levels of Aspergillus / Penicillium in 2 classrooms (11 and 13)
Conditions: Conducted after invasive inspection of soffit with school unoccupied, chairs and desks being cleaned and disinfected and with possessions protected.
Pending: No results pending

ENVIRONMENTAL ASSESSMENTS & SOLUTIONS, INC.

Date: 3/04 (Tuesday)
Test: Surface mold testing of cleaned and disinfected furniture for mold (round II)
Location: Conducted in two (2) classrooms (12 & 7) with three (3) pieces of furniture tested in each room with a quality control sample
Method: Optical microscopy (tape lift - fungi) and culture (swab - bacteria and fungi)
of Samples: 7 samples
Time Due: 3 hours after receipt by lab (microscopy only)
Purpose: To verify that furniture was adequately cleaned and disinfected
Findings: No mold or normal background levels of mold identified by optical microscopy (results received 3/06)
Conditions: Conducted after furniture was cleaned and disinfected with a biocide by Away Env.
Pending: Culture bacteria and fungi results are pending

Date: 3/05 (Wednesday)
Test: Surface mold testing within the earth crawlspace under school building
Location: The ceiling fiberboard foil and wood ceiling above the fiberboard & fiberglass batt insulation as well as the interior skirt wood wall and skirt wood framing were tested with a quality control sample. Testing was conducted under classroom 6, under classroom 7 and under the main office
Method: Optical microscopy (tape lift - fungi) and culture (swab - bacteria and fungi)
of Samples: 9 samples
Time Due: 1 day after receipt by lab (microscopy only)
Purpose: To evaluate the extent of the moisture and mold problem identified in the soffit and exterior wall
Findings: At each interior crawlspace location inspected the skirt wood was wet and visibly mold stained with condensation dripping off of the ceiling fiberboard. Skirt wood wall and framing within the crawlspace were heavily contaminated with *Aspergillus* / *Penicillium* like spores and *Chaetomium* by optical microscopy. The wood ceiling above the fiberboard and fiberglass batt insulation was visibly clean and dry and had normal background levels of mold by optical microscopy (results received 3/07)
Conditions: Access into the crawlspace was provided by GSD who cut access ports through the exterior skirt
Pending: Culture bacteria and fungi results are pending

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Date: 3/05 (Wednesday)
Test: Surface mold testing within soffit and above classroom sheetrock ceiling outside of soffit
Location: Classroom 8, 15, 21, multipurpose room, classroom 6 and 2. The interior soffit wall and framing were tested within the soffit and the wood underside of the roof deck and deck wood framing outside the soffit above the classroom sheetrock ceiling were tested with a quality control sample
Method: Optical microscopy (tape lift - fungi) and culture (swab - bacteria and fungi)
of Samples: 25 samples
Time Due: Same day as receipt by lab (microscopy only)
Purpose: To evaluate the extent of the moisture / mold problem identified in the soffit and to determine whether the condition is spreading to the classroom ceiling above the sheetrock
Findings: In most soffits, the wood was wet and visibly mold stained with condensation dripping off of the soffit interior. In all rooms outside of the soffit, except classroom 7, the wood was dry. In all rooms outside of the soffit, the wood did not have visible mold staining or moisture build-up. In classroom 7 the wet underside of the wood roof deck was in the are of the roof down-spout and likely due to this condition. In the soffit, high levels of Aspergillus / Penicillium like spores, Cladosporium sp., Acremonium sp. and Doratomyces was identified at specific sample locations. In the classrooms outside the soffits, no mold or normal background levels of mold identified by optical microscopy (results received 3/07)
Pending: Culture bacteria and fungi results are pending

Date: 3/06 (Thursday)
Test: Air testing for Formaldehyde
Location: Eight (8) classrooms, hallway (1), outdoors (2) and a quality control sample
Method: Absorption badge by Assay Technology with HPLC / UV analysis
of Samples: 11 samples
Time Due: Three (3) days from receipt of samples by lab
Purpose: To determine whether school construction materials are off-gassing HCHO.
Findings: Pending
Pending: Formaldehyde results are pending

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Date: 3/06 (Thursday)
Test: Air testing for mold (round IV)
Location: Conducted in each room with an elevated bioaerosol result in round III as well as adjoining classrooms, hallway (2) in this wing, outdoors (2) and a quality control sample
Method: Optical microscopy (spore trap - fungi)
of Samples: 16 samples
Time Due: 3 hours after receipt by lab on weekend
Purpose: To verify the effectiveness of cleaning possessions in rooms which previously had elevated or marginally elevated levels of bioaerosols
Findings: Marginally elevated levels of Aspergillus / Penicillium like spores in the hallway between classroom 12 / 18 and 7 / 13. Classrooms 9, 10, 15, 16, 11 and 13 which were previously elevated during phase III were no longer elevated after room possessions were cleaned and disinfected.
Conditions: Conducted after possessions in classrooms 7, 9, 10, 11, 13, 15 and 16 were cleaned and disinfected
Pending: No results pending

Date: 3/07 (Friday)
Test: Surface mold testing of possessions which were cleaned and disinfected
Location: Conducted in three (3) classrooms (15 & 16 and 9) with three (3) possessions / pieces of furniture tested in each room with a quality control sample
Method: Optical microscopy (tape lift - fungi) and culture (swab - bacteria and fungi)
of Samples: 10 samples
Time Due: 3 hours after receipt by lab (microscopy only)
Purpose: To verify the effectiveness of cleaning rooms which were previously
Findings: No mold or normal background levels of mold identified by optical microscopy (results received 3/08)
Conditions: Conducted after possessions in classrooms 7, 9, 10, 11, 13, 15 and 16 were cleaned and disinfected
Pending: Culture bacteria and fungi results are pending

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Date: 3/10 (Monday)
Test: Surface mold testing of possessions and furniture which were not cleaned and disinfected
Location: Conducted in five (5) classrooms with three (3) possessions / pieces of furniture tested in each room with a quality control sample
Method: Optical microscopy (tape lift - fungi) and culture (swab - bacteria and fungi)
of Samples: 16 samples
Time Due: Standard turn-around time
Purpose: To determine whether possessions and furniture need to be cleaned before being moved off-site as a follow up to the 3/01 round II air sample culture fungi results
Findings: Pending
Conditions: Possessions and furniture which were not cleaned or disinfected.
Pending: Culture bacteria and fungi as well as microscopy results are pending

Date: 3/10 (Monday)
Test: Surface mold testing within the earth crawlspace under school building
Location: Testing was conducted under classroom 6, under classroom 7 and under the main office
Method: Optical microscopy (tape lift - fungi) and culture (swab - bacteria and fungi)
of Samples: 3 samples
Time Due: Standard turn-around time
Purpose: To evaluate the extent of the mold problem in the crawlspace
Findings: At each location inspected the earth was damp and visibly mold stained with condensation dripping off of the ceiling fiberboard. Skirt wood within the crawlspace was heavily contaminated with Aspergillus / Penicillium like spores and Chaetomium by optical microscopy. The wood ceiling above the fiberboard and fiberglass batt insulation was visibly clean and dry and had normal background levels of mold by optical microscopy
Conditions: Access into the crawlspace was provided by GSD who cut access ports through the exterior skirt
Pending: Culture bacteria and fungi as well as optical microscopy results are pending

RECOMMENDATION: Further decisions regarding release of possessions should be made after pending laboratory results are received and reviewed.