

Massachusetts School Building Authority

School District Dudley-Charlton Reg

District Contact Sean Gilrein TEL: (508) 943-6888

Name of School Shepherd Hill Reg High

Submission Date 12/29/2006

The following Priorities have been included in the Statement of Interest:

1. Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of school children, where no alternative exists.
2. Elimination of existing severe overcrowding.
3. Prevention of the loss of accreditation.
4. Prevention of severe overcrowding expected to result from increased enrollments.
5. Replacement, renovation or modernization of the heating system in a schoolhouse to increase energy conservation and decrease energy related costs in the schoolhouse.
6. Short term enrollment growth.
7. Replacement of or addition to obsolete buildings in order to provide for a full range of programs consistent with state and approved local requirements.
8. Transition from court-ordered and approved racial balance school districts to walk-to, so-called, or other school districts.

Note

Priority 1

Please provide a detailed description of the perceived health and safety problems below. Attach copies of orders or citations from state and/or local building and/or health officials.

- The building is equipped with a very limited fire protection system. There are no smoke detectors, only fire detectors in the building. There are only six fire zones in the nearly 200,000 square foot building. Sprinkler heads are located in only a very limited area of the building. The vast majority of the building which includes the entire academic wing is not equipped with a fire protection sprinkler system. Further, the fire alarm system does not fully comply with present MAAB/ADA or fire alarm codes (e.g., pull station location and height audio visual devices, addressable systems, etc.).
- The existing electrical distribution system is in need of replacement due to age and condition; it cannot support the requirements of the technology age. There is evidence of aluminum feeders that have failed. GFI plug sockets are lacking next to sink areas. Federal Pacific electric panels are obsolete.
- The existing emergency power/egress lighting system requires substantial upgrades to meet current Life Safety requirements for egress lighting.
- Inadequate storage space throughout the building does not allow safe and appropriate chemical storage in both the science department and the maintenance department.
- Intercom/paging system needs repairs and upgrades to comply with safety codes for public address and emergency announcements to allow communication with central office and outside emergency agencies.
- The main gymnasium is equipped with 35-year-old non-mechanical bleachers which are wooden and aluminum. There are concerns for the safety of those students sitting in the stands and for the safety of staff members opening and closing the bleachers. The district's liability carrier has noted the dangers to employees.
- The kitchen cooking hoods do not meet the U.L. Listing for fire suppression.
- Many classrooms lack appropriate screens and shades. There is an increasing concern for the safety of students and staff especially regarding bee sting allergies.
- The boiler/furnace stack shows considerable deterioration and there are concerns that boiler exhaust does not safely disperse from the building.
- Due to a lack of appropriate storage area, two school buses, two box trucks, two tractors and three driver education cars are stored in a fenced area in between the academic wing. Exhaust fumes from the vehicles are a constant concern.
- Floor tiles show wear and lifting in a number of the high traffic areas in the building which includes the practice gym, several stairways and landings, and the east end of the main corridors.
- Copper piping is original with lead joints and a growing number of leaks occurring behind the cinder block walls; wedge shutoffs are impractical and inadequate; i.e., a single shutoff controls an entire wing.
- Science labs are outmoded and inadequate; lack of safe storage, instructional and preparation space.
- The family & consumer science rooms, art classrooms, and photography labs are outmoded and inadequate. Improper ventilation is a concern.

- A number of the exterior doors do not properly latch or in some cases do not open easily raising serious safety concerns regarding undetected unauthorized entry or delayed emergency exiting from the building. A number of doors must be chained from the inside for security in off hours which poses a safety and security concern.
- The width of the existing service road on the north side and the easterly back of the building is not safely accessible to fire trucks, ambulances or safety vehicles in the event of an emergency.
- Sidewalks, accessible routes to the building and parking facilities are not compliant with MACMR and Federal ADA requirements. The driveway and both parking lots are in poor, unsafe condition with the growing challenges of pot holes.
- The poor traffic pattern was cited by the Department of Transportation several years ago which resulted in modified routes. The present pattern has resulted in congestion and a process which is difficult to monitor and ensure safety.
- The auditorium does not comply with MAAB/ADA requirements, as it lacks adequate and proper wheelchair seating, and stage access via stair lift or ramp.
- The single elevator which services the academic building is nearing the end of its expected life. It has no emergency phone and no audible floor signals.
- Gym locker rooms are out of compliance with Title IX as well as MAAB/ADA. Lockers are too small for equipment; dangerous, worn hinges and sharp edges pose a constant safety concern and are in need of constant repair.
- Seismic (earthquake) concerns exist for the present multi-story building as it does not comply with current building code requirements.
- Main gym floor shows signs of wear which has resulted in the hardwood buckling and cupping which may create a dangerous situation.

Priority 1

Please describe the measures the School District has taken to mitigate the problem(s) described above.

The Dudley-Charlton Regional School District has provided both in-house and third party services in both a proactive and preventative maintenance and general upkeep efforts on the aging base building systems and facilities. Unfortunately, deficiencies listed are becoming more frequent and more serious with concerns for the 35-year-old building.

A partial list of repairs/improvements:

1. Replacement of lighting throughout the building (1990 and 2004)
2. Energy savings with the replacement of the kitchen's walk-in freezer and refrigerator. (2006)
3. Air exchange enhancement monitor in the gymnasium partially funded by energy grant was replaced. (2004)
4. Replacement of 15,000 gallon underground fuel storage tanks. (2006)
5. ADA upgrades throughout the building resulting in partial compliance. (2004)
6. Asbestos management plan in place which includes proper notification. (ongoing)
7. Elevator inspected bi-monthly with continued licensing.
8. Patching driveway and parking lot to alleviate recurring pot holes.
9. Substantial expenditure to repair the outdoor tennis and basketball courts as well as fencing on the east and south ends of courts/field. (2000)
10. Roof replacement and insulation. (1994)
11. Upgrade three science labs to address natural gas emergency shutoff concerns and equipment deficiencies. (1998)
12. Retubing of both boilers. (2005)
13. Replaced 1,200 gallon PVI hot water tank with four stainless steel indirect hot water tanks. (2002)
14. Two exhaust fans installed in kitchen. (2003)

Priority 2***Please describe the existing conditions that constitute severe overcrowding.***

Shepherd Hill Regional High School was designed in the early 1970s using criteria established for the education requirements of that time. Since that time educational needs have been established that have replaced original configurations of classrooms.

Instructional and non-instructional space has been reapportioned for the following uses: Special needs instruction and services, computer laboratories, administrative technology needs, ELL services. The Library and Media Center has facilitated directed study halls for as many as 35 students in a single period and 200 students per day.

- Lack of space is a significant issue facing Shepherd Hill. Most classrooms are too small by today's educational standards; some as much as 30% to 40% smaller.
- The present school enrollment of just over 1,200 students warrants total gross square footage for students of approximately 223,000 sq. ft. per MSBA standards; the conservative, projected enrollment in two years will exceed 1,300 students bringing the needs according to the space standards contained in 963 CMR 2.00 and in the MSBA Educational Program Space Standards and guidelines to approximately 240,500 sq. ft., or a full 25% beyond our present 192,247 gross square feet. The recommended gross square feet per student of 185 will be compromised to 148.
- The school was built with 77 classrooms. With the inclusion of special education, computer labs, etc., the number of classrooms for regular education classes have been reduced to 68. The average core classroom contains between 590-775 sq. ft. Today's standards demand 950 sq. ft.). Science laboratories contain between 900-1,055 sq. ft., far below the current standard of 1,200 sq. ft.
- Innovative special education programs have been difficult to implement due to unavailable classrooms and inadequate space.
- Physical education classes are too large for gyms and available lockers. There are not enough fields or gyms for athletics. Off campus facilities within the district are used which necessitate the busing of student athletes.
- The class schedule was modified to accommodate four lunches.
- Population and Enrollment – 10-year History: Shepherd Hill Regional High School based on October 1st enrollment grades 9-12: The 1996-2006, grades 9-12 historic growth increased by 404 pupils, or 5.04% per year. The projected growth over the next two years shows 122 additional students (1,327) or a continued annual growth rate of 5.06%.
- The above projected figures represent students presently enrolled in the system and do not account for any new growth. The towns of Dudley and Charlton have issued over 750 building permits during the past five years with additional single-family home subdivision projects in the preliminary or definitive design and application stage.

Priority 2

Please describe the measures the School District has taken to mitigate the problem(s) described above.

Shepherd Hill opened its doors in 1973 to students in grades 7-12, and remained as an unofficial junior-senior high school through the 1999-2000 school year. In the fall of 2000, the district opened two middle schools for grades 5-8 in Dudley and Charlton. In 1999, Shepherd Hill's enrollment exceeded 1,600 students. With the opening of the middle schools, Shepherd Hill became a grades 9-12 high school, and reduced its enrollment by 623 students. As of October 1, 2006, Dudley Middle School has an enrollment of 579 students, and the Charlton Middle School houses 802 students.

Approximately 10 acres on the Shepherd Hill/Dudley Middle School campus have been identified for possible outdoor expansion.

Priority 3

Please provide a detailed description of the "facility-related" issues that are threatening accreditation.

- “Develop a plan and provide funding to update technology and communications systems, including the general technological infrastructure of the facility, telephone, messaging, and communications systems and provide current, adequate technology resources, including hardware and software to support the implementation of the curriculum.”
- “Report the school’s plan and timeline to address the identified needs including: age, size, and conditions of the facility in relation to the projection for enrollment increases and associated staff, gym and locker room areas which are outdated and being used as storage, inadequate drainage on the athletic fields, bleachers which do not meet safety codes, traffic flow issues, and lack of storage.”
- The report of the Visiting Committee during its October 23-26, 2005, visit identified under the standard of Community Resources for Learning Recommendations:
 1. Develop solutions to physical space limitations, particularly storage, office area, and future classroom needs.
 2. Repair and refurbish athletic locker room facilities.
 3. Thoroughly upgrade and modernize technology, phone and messaging systems.
 4. Upgrade existing athletic facilities, particularly spectator accommodations.
 5. Provide adequate drainage for athletic fields.
 6. Analyze traffic flow in and out of the school site and implement changes necessary to alleviate congestion at high traffic times.
 7. Continue to secure reliable revenue sources for maintenance or replacement of rapidly aging infrastructure and equipment.
 8. Enhance public perception of school budget needs to garner a greater level of financial support from the Charlton and Dudley Communities to allow for likely increases in student population and associated staffing increases and facilities improvement

Priority 3

Please describe the measures the School District has taken to mitigate the problem(s) described above.

Principal Timothy M. Schur will submit a Special Progress Report by April 1, 2007 to the New England Association of Schools and Colleges and the Commission of Public Secondary Schools addressing each facility-related issue.

Priority 4

Please describe the conditions within the community and School District that are expected to result in increased enrollment.

- There are six single-family home subdivision projects in the design and application stage resulting in 186 lots in the Town of Charlton. Presently, there are approximately 100 lots in four single family home subdivisions in the Town of Dudley. Additionally, 130 condo units in the Steven's Linen property in Dudley are being reviewed.
- There have been eight building permits issued as of September 26, 2006 in eight additional, approved subdivisions in Charlton with a total of 158 vacant lots in these subdivisions waiting for building permits. Additional vacant lots in Dudley total approximately 10.

Priority 4

Please describe the measures the School District has taken or is planning to take in the immediate future to mitigate the problem(s) described above.

- The Superintendent of Schools has been authorized by the Dudley-Charlton Regional School Committee to form a Building Needs Assessment Committee which is comprised of 15 members representing the district and the two communities charged with providing a comprehensive Building Needs Report to the School Committee.
- The Dudley-Charlton Regional School Committee has budgeted additional staff to accommodate increased enrollments through the years.

Priority 5

Please provide a detailed description of the energy conservation measures that are needed and include an estimation of resultant energy savings as compared to the historic consumption.

- The current system is 35 years old and relies on two inefficient furnaces which must be manually monitored.
- There is known asbestos in the building which is encapsulated and monitored under an appropriately posted asbestos management plan.
- The ventilation and air conditioning is generally inadequate and contributes to uneven temperatures throughout the school causing the manual adjustment of thermostats to compensate for underheated areas resulting in other areas being overheated and in significant energy inefficiency.
- The school has the original single glazed, thermally inefficient, drafty windows throughout the building.
- The building is constructed with an uninsulated block design and a partially insulated flat roof.
- Pneumatic thermostats are used throughout the building; many of these lines have failed. The pneumatic system, along with uni-vent components are inefficient. There is no energy management system to monitor/adjust the heating system.

Priority 5

Please describe the measures the School District has already taken to reduce energy consumption.

1. T-5 lights installed in both gyms with sensors for energy savings.
2. T-8 bulbs installed with new ballasts in every light throughout the building.
3. Energy efficient LED exit lights were recently installed.
4. Floor to ceiling curtain installed between main gym and practice gym
5. Exterior doors installed in café.
6. New boiler tubes installed in both boilers.
7. Light sensors installed in every room.
8. New compressor has been installed for the air conditioner.
9. New air handler in the superintendent's area.
10. Installed rug in Room 319, teacher's room, library, front offices, district offices.
11. Installed new window in business office which was a storage space.
12. Replaced 1000 ft of return hot water pipe.
13. Recalibrated all uni-vents in the summer.
14. New electric panel for both gyms.
15. New electric panel and energy efficient lighting installed in the auditorium

Priority 7

Please provide a detailed description of the programs not currently available due to facility constraints, the state or local requirement for such programs and the facility limitations precluding the programs from being offered.

- Special needs services include occupational therapy, physical therapy, speech, tutoring, individual remediation, etc. have increased substantially.
- Lack of adequate conference area; no conference area within 150 feet of administration or guidance offices.
- Lack of space limits the school's ability to create additional special education programs as needed. DCRSD's philosophy is to keep special education students in our school district, whenever possible.
- The science rooms are restricted by inadequate equipment and inadequate area.
- There are numerous grandfathered ADA issues that limit full access to programs by handicapped students.
- Regular Education classrooms once numbered 77 and presently number 68 due to modifications needed for special education, computer labs, etc.
- The average core classroom contains between 590-775 square feet (today's standards demand 950 square feet.)
- Science laboratories contain between 900-1,055 square feet (today's standards requires 1,200 square feet.)

Priority 7

Please describe the measures the School District has taken or is planning to take in the immediate future to mitigate the problem(s) described above.

- Several of the former industrial arts classrooms have been reassigned and renovated as multi purpose visual/performing arts and computer labs.
- Unused, shelved storage area renovated as a high school/central office conference room.
- Lecture halls have been renovated for computer labs and science classroom.
- Modifications to a cardio vascular/weight room.
- Portable computer lab utilized to allow continued classroom useage.
- Replacement of light board and lighting in the auditorium due to hazardous light board determination.

Vote

Vote of Municipal Governing Body YES: NO: Date:

Vote of School Committee YES: NO: Date:

Vote of Regional School Committee YES: 5 NO: 0 Date: Dec 13 2006

Form of Vote

The following form of vote should be used by both the City Council/Board of Aldermen, Board of Selectmen/equivalent governing body AND the School Committee in voting to approve this Statement of Interest.

If a regional school district, the regional school district should use the following form of vote.

Resolved: Having convened in an open meeting on _____, the _____ *[City Council/Board of Aldermen, Board of Selectmen/Equivalent Governing Body, School Committee]* of _____ *[City/Town/School District]*,

in accordance with its charter, by-laws, and ordinances, has voted to authorize the Superintendent to submit to the Massachusetts School Building Authority the Statement of Interest dated _____ for the _____ *[Name of School]* located at

_____ *[Address]* which describes and explains the following deficiencies and the priority category(s) for which

_____ *[Name of City/Town/District]* may be invited to apply to the Massachusetts School Building Authority in the future

_____ *[Insert a description of the priority(s) checked off on the Statement of Interest and a brief description of the deficiency described therein for each priority];* and hereby further specifically

acknowledges that by submitting this Statement of Interest, the Massachusetts School Building Authority in no way guarantees the acceptance or the approval of an application, the awarding of a grant or any other funding commitment from the Massachusetts School Building Authority, or commits the

_____ *[Name of City/Town/District]* to filing an application for funding with the Massachusetts School Building Authority.

CERTIFICATIONS

The undersigned hereby certifies that, to the best of his/her knowledge, information and belief, the statements and information contained in this statement of Interest and attached hereto are true and accurate and that this Statement of Interest has been prepared under the direction of the district school committee and the undersigned is duly authorized to submit this Statement of Interest to the Massachusetts School Building Authority. The undersigned also hereby acknowledges and agrees to provide the Massachusetts School Building Authority, upon request by the Authority, any additional information relating to this Statement of Interest that may be required by the Authority.

**LOCAL CHIEF EXECUTIVE OFFICER/DISTRICT SUPERINTENDENT/SCHOOL COMMITTEE CHAIR
(E.g., Mayor, Town Manager, Board of Selectmen)**

Chief Executive Officer

School Committee Chair

Superintendent of Schools

(print name)

(print name)

(print name)

(signature)

(signature)

(signature)

Date

Date

Date