

BUILDING ASSESSMENT STUDY

AT

MONTAGUE TOWNSHIP SCHOOL

475 Route 206
Montague, NJ 07827

FOR

MONTAGUE TOWNSHIP SCHOOL DISTRICT



Prepared By:



ARCHITECTS

Heights Plaza, 6th Floor
777 Terrace Avenue
Hasbrouck Heights
New Jersey 07604

DMR Project No. 5217

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INTRODUCTION

The Montague Board of Education has hired DMR Architects to assist with planning and development of a facility plan which focuses on the facility needs and potential growth within the next 5 years. The Montague Township School building is situated on 9-acre site located at 475 Route 206, Montague, New Jersey 07827. The school building sits elevated above route 206 and has a main driveway entrance and 2 exits off Route 206. The existing building serves grades Pre-K – 8 and is approximately 41,000 square feet.

The purpose of this report is to perform an architectural and engineering assessment of the existing building at the Montague Township School and make recommendations of corrective actions. The assessment includes the evaluation of the roofs, building structure, interior finishes, parking lots, drainage, as well as mechanical, electrical, plumbing, emergency lighting, fire alarm, etc. in order to bring the building to operate and function safely and efficiently. The report will highlight existing conditions requiring immediate remediation, repair and/or renovation as well as, the estimated construction cost of the project. Included in the report are the accessibility upgrades necessary to bring the structures to comply with current ADA requirements and code.

As per the District, there are approximately 305 students enrolled in the school. The administration has proposed a 4-classroom addition to house approximately 60 Pre-K Students. In order to facilitate that potential growth and upgrade HVAC Systems, the school district should contemplate an electrical service upgrade.

The result of this study will be a documentation of the existing conditions, recommended upgrades and associated order of magnitude cost. This constitutes the Phase 1 portion of the Plan. It is anticipated that upon review and acceptance of the recommended upgrades by the School District, the Phase 2 portion of the Plan which includes development of construction documents and provision of construction administration services will be undertaken as a separate agreement between DMR and the Montague Board of Education.

BUILDING SYSTEMS AND PROPOSED IMPROVEMENTS

Below is an overview of school district's proposed site improvements:

SITework/INFRA-STRUCTURE IMPROVEMENTS:

- The school district proposed to widen the driveway entering the school property off of Route 206. This will enable the ease of traffic flow to the building and provide improved maneuverability for bus drop offs and traffic queuing during morning and afternoon drop-offs and pick-ups.
- The school district has proposed to expand the parking capacity on site to allow for future growth and traffic management. The school district has proposed to expand the exit driveway to provide parking for school buses and a space provision for a mobile trailer for the bus drivers.
- The school district has proposed to construct a turf field for youth sports including soccer and baseball on the property. In order to facilitate and support the school and township programs, the school district has proposed to expand the amount of parking spaces on site. The number of spaces will depend on the site topography and traffic pattern integration.

- The school district proposed to demolish an existing maintenance facility and construct a new pre-fabricated maintenance building which will house maintenance equipment and provide an office for the facility manager.
- The school district proposes to construct a 4-classroom addition for an expansion of their Pre-K Program. The building will be connected to the existing building and extend the building into the existing parking area. As part of that building addition expansion, parking, sidewalks and paved entry to the newly renovated lot will have be considered to maintain the current parking situation. Parking Lot Lighting will also be considered.
- Based on the above building expansion, DMR and their consulting engineers will have to assess the capacity of the Sanitary and Storm water management system. All other utilities to the building will require evaluation as part of the building expansion improvements.
- The school district proposes to construct a new Turf field for school and township youth sports programs. Field Lighting will be a consideration for evening sporting events. The Electrical Upgrades to the building will provide the additional power capacity to facilitate lighting.

ARCHITECTURAL IMPROVEMENTS

- The school district proposed a one story 4-classroom addition to the building to facilitate and addition 60 students for their Pre-K program.
- Main Entrance/Security Improvements need to be addressed. The current main entrance into the building does not have an overhead canopy and the existing sidewalk surface appears to pitch into the building thereby, causing water to pitch into the building. It has been reported that the water actually freezes due to no heating provision in the entry foyer. We would also propose to construct a bullet proof inner air lock entrance to secure the building entry. To meet the new Barrier-Free Codes, Power Operated Doors will be required at the main entrance as well.
- The building envelope including the older roof systems and windows should be monitored for replacement in the next 3-5 years.
- The school has proposed to renovate the gymnasium and adding a Stage for performing Arts presentations. They also have proposed to renovate the storage spaces adjacent to the Gym into locker rooms.
- ADA Bathroom facilities appear to be adequate to the building.

Below is a system overview of the HVAC, Electrical and Plumbing systems at the Montague Elementary School:

HVAC

- The building is heated by three (3) condensing type hot water boilers. Hot water circulating pumps provide circulation through the building. Stand-alone boiler controls are present.
- Each classroom is provided with a unit ventilator which provides for heating and ventilation only. Window type air conditioning units are installed for cooling. Only local controls are provided.
- The gymnasium is provided with a heating and ventilating unit located above the boiler room and is ducted to ceiling mounted diffusers. The unit is provided with a hot water coil. Only local controls are provided. No air conditioning is currently provided for this space.

- The cafeteria is provided with unit ventilators which provide heating and ventilation only. Only local controls are provided. No air conditioning is currently provided for this space.
- The office area is provided with fan coil units which provide heating and ventilation only. Only local controls are provided. It appears that a packaged rooftop unit is installed along with supplemental ductless split systems to provide air conditioning to the spaces.
- Currently there is no building management system installed.

Electrical

- The building is served by a 208/120V, 3 phase, 60 Hz, 600A electrical service which is located in the southwest corner of the building and located in a closet in the principal's office. The service is fed from pole mounted transformers adjacent to the building across the parking lot.
- Distribution panels are located in the corridors throughout the building.
- An addressable fire alarm system is presently installed including pull stations, smoke detectors, strobes and horn/strobes.
- Existing lighting consists of fluorescent T8 or T12 fixtures throughout the building. The school district is currently working on this program with an independent Energy Improvement Vendor.
- Electrical billings indicate that there are additional electrical services/meters for outdoor lighting, street lighting and the modular building. These meter locations have not yet been determined.

Plumbing

- Domestic water service is located in the maintenance office adjacent to the gymnasium and appears to be fed from a well.
- Domestic hot water is provided by propane fueled, storage type water heaters.
- Fuel service to the building is by underground propane tanks located to the southeast corner of the building adjacent to the gymnasium.
- Sewer service for the building is provided with a septic system and fields to the northeast of the building. It appears an additional septic pump was installed to handle the classroom addition (construction year unknown).
- It appears that the modular building is connected to the septic system serving the classroom addition (construction year unknown).

This preliminary report is intended to provide the Montague School District with a Long-Range Facilities Planning Guide for Maintenance, Improvements and Expansion of its current School Facility. The items noted are based on limited observations and discussions with the Administrators. As the projects are authorized, more extensive engineering investigations may affect the timing and the Order of Magnitude Preliminary Costs outlined in the attached in the Report.

If there are any questions, please do not hesitate to contact our office.

Sincerely,



Henry B. Ossi, CPE, ICS, LEED AP
Firm Associate