

TOWN OF ENFIELD

HIGH SCHOOL CONSOLIDATION STUDY ENRICO FERMI HIGH SCHOOL AND ENFIELD HIGH SCHOOL

October 1, 2010

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I. EXECUTIVE SUMMARY

This Consolidation Study prepared for the Town of Enfield evaluated the existing building and site at Enfield High School and Fermi High Schools, developed a base line program that would be needed for a one high school facility to service the Town, adapted the base line program to each of the school sites and then compared each school against a list of elements with the benefits or disadvantages each school offers.

The base line program proposes a total building area of 248,022 SF, which includes 77 large classrooms, 18 small classrooms, 30 offices, 13 studio/lab rooms, 32 miscellaneous spaces and 102 plumbing fixtures. This is based on a student enrollment of 1,981 and faculty of 154. Common spaces for each of the schools (auditorium, kitchen, library, gymnasium(s)) would generally remain the same with the exception of a 4,100 SF addition to the Enfield High School cafeteria. The remaining program areas that could not be accommodated in the existing building envelope would be handled by a new addition or series of additions.

Parking would be increased on both sites to accommodate the increased staff and student population. Zoning requirements were checked and these criteria would govern. To meet zoning requirements 800 spaces are needed to comply with the baseline program.

Elements that were evaluated include:

- Site
- Traffic
- Mechanical, Electrical and Plumbing
- Structural
- Architectural
- Cost

Based on early discussion with Town staff, the Enfield Street Elementary School facility was being considered as a possible location for the 9th grade wing for the Enfield High School option. This site was considered but due to the desired teaming program, which would enable the 9th grade students to participate in upper class curriculum and use of the common areas (library, cafeteria, gymnasium, auditorium), the long distance between the high school and elementary school, approximately 1,400 feet makes this option not practical. Based on 3 mph walking speed, it would require over 5 minutes just to walk outside between the schools. Requiring students to walk outside during the cold months, snow and inclement weather is also not practical or safe. Due to the above this option was not considered further.

This study provides a description of the existing buildings, site conditions, a list of design elements and a discussion of the elements for each school site to assist the Town in their selection of the most desirable site for the High School.

II. PROJECT PURPOSE

The purpose of this study is to develop a program for a consolidated high school, apply that program to the Enfield High School and Enrico Fermi High School and evaluate a list of design elements so the Town select the most desirable site, Enrico Fermi High School or Enfield High School to serve as the Town's high school. School enrollment over the past few years and long-term projections have been in a downward trend. To best manage Town resources in the long term, restructuring of the school infrastructure is planned, beginning with expanding the building and parking at the recommended high school site for the one high school to serve the Town. Other long range planning measures would be to move the existing Middle School to the high school site to be abandoned and consolidate the existing elementary schools into the current middle school facility.

This study focuses only on the Enrico Fermi and Enfield High School facilities to determine what site would best serve the Town as the one high school. To have one high school, whatever site is found to be most appropriate, a new addition and additional parking would be needed to support the projected enrollment, staff and parking needs. The new high school would serve grades 9 through 12 with a separate 9th grade wing envisioned. This study focused on factors that would be most affected by the consolidation and not regular maintenance items that would need to be addressed with or without the consolidation. Factors considered include:

- Site advantage if any to support the new addition space and parking.
- Pedestrian access.
- Access to and from available field areas.
- Traffic operations, considering bus drop off and pick up, parent drop off and pick up and student parking.
- Traffic access from the surrounding roadways.
- Existing school layout and its compatibility to programming needs.
- Existing size of shared space areas (cafeteria, media, library) to support additional student size.
- Ability of the building to support a ninth grade wing and interact with other shared use space.
- Structural advantage if any to accommodate addition space and renovations.
- Mechanical, Electrical and Plumbing (MEP) considerations.
- ADA Compliance

II. EXISTING OBSERVATIONS

Enrico Fermi High School

Site Description

Located in central Enfield, the current school of 202,400 square feet services a population of 1,158 students, 89 faculty and 21 support staff. The existing site consists of approximately 42 acres with approximately half of the box shaped site consisting of the building and parking over the western half and the eastern half consisting of the athletic fields. Tennis court facilities are located in the southwestern end of the lot.

The school is in a R-33 (Residential 33) zone, which requires front yard setback of 40 feet, side yard setback of 25 feet and rear yard setback of 50 feet with 20% maximum building coverage and maximum height of 35 feet to meet the requirements. The existing school use in the R-33 zone is by special permit.

The main access into the school is from the west by North Maple Street (State Route 192), a primary north south route in the Town. Secondary access is provided from Moody Road, an east west collector street. The site is generally flat with a maximum grade difference of approximately 5 feet over the entire site.

Parking

The existing parking space total is 369. Based on current zoning requirements the parking lot total should be 617 spaces based on the required 4 spaces per classroom, 1 space per faculty and staff and 1 space per 4 seats in the auditorium.

The current parking on the site is broken down between faculty and staff parking, public parking and student parking as follows.

1. Number of faculty/staff/public parking spaces – 160 spaces

Currently the majority of the school faculty uses the parking lot that faces North Maple Street on the west side adjacent to the building and the lot that faces Moody Road on the north side of the building. There are 56 parking spaces in the North Maple Street lot and there are 60 spaces in the Moody Road lot. In addition there are 3 spaces around the circle at the rear, north side of the building. Staff parking is also available in the “upper” lot near the circle on the south side of the building. There are 25 spaces for faculty in that lot bringing the total number of faculty parking spaces to 144. In addition to these, 6 parking spaces are adjacent to the Automotive Repair Shop on the north side of the building however these spaces have been traditionally reserved for vehicles awaiting repair. During school hours none of these spaces are considered to be “public” spaces or spaces open for the public. 6 visitor spaces are located in the “upper” parking lot adjacent to the tennis courts on the south side of the building with 4 handicapped spaces available in that same “upper parking lot”.

2. Number of student parking spaces – 209 spaces.

The students use two different parking lots during the school day. The “upper” lot near the circle on the south side of the building has 83 available spaces. The “lower” lot also on the south side of the building closer to North Maple Street has 126 available parking spaces for students. This brings the total number of student parking spaces to 209.

Traffic

Onsite Operations

Based on discussion with school staff the existing bus and private vehicle pick up and drop off system is acceptable with little delay or inconvenience. In the morning drop off, busses utilize the main entrance from North Maple Street and the entrance from Moody Road. Busses from North Maple Street enter from North Main Street and take the left into the loop driveway in front of the school. They then stack in a double row around the loop drive and exit left and right onto North Maple Street. Busses utilizing the Moody Road entrance enter from Moody Road and single stack around the loop driveway and exit right onto Moody Road. Pick up in the afternoon uses the same process.

Staff and students use the same entrances. From North Main Street vehicles take a right or remain straight to gain access to the parking lots on the south side of the site. From Moody Road the staff takes a right from the loop drive for access to the staff parking lot in the northwest corner of the site. This keeps the drop off area for the bus traffic and private vehicles segregated to best eliminate any conflict with the bus traffic.

Offsite Operations

There are 2 existing driveways on Moody Road and two existing driveways on North Main Street. Sightlines from all of the driveways exceed minimums required. There are also access driveways from Moody Road to the athletic fields.

North Main Street is 36 feet wide, with one lane in each direction and paved shoulders; Moody Road is 40 feet wide with one lane in each direction and paved shoulders. Both roads are on tangent alignment with level grades. There is a traffic signal at the intersection of Moody Road and North Main Street.

The average daily traffic volume on North Main Street south of Moody Road is 4600 vehicles. The average daily traffic volume on Moody Road west of North Main Street is 7400 vehicles.

Fermi High School has the larger existing student body (1158 verses 823 at Enfield H.S.) and staff (110 verses 85 at Enfield H.S.). Projected faculty and staff would add an additional 54 vehicles at Fermi High School, students would add an additional 102 vehicles. Only seven additional busses would be required to bring the total to twenty-seven (based on the total number of busses currently serving the Middle School). Currently Faculty and staff parking are served by the two driveways on Moody Road and one driveway on North Main Street. Students and busses have access from two driveways on North Main Street. This is expected to remain the same with the consolodated

Athletics

Outdoor fields and courts.

- Two baseball field
- Two softball fields
- Combination track and football /soccer field
- Six tennis courts
- Paddle ball court

(Note the grass outfield area used for the varsity and junior varsity baseball fields is also used for field hockey, soccer and practice area for other off season sports. Based on review of the site, there is little to no available room on the existing site to provide additional field space and outfield areas of the baseball and softball field appear to overlap into other field space.)

Inside the building

- One gymnasium
- One pool

Building

Enrico Fermi High School is a 3 story, 215,833 SF building originally designed in 1968. The school has 83 teaching spaces including classrooms and labs. The school also has approximately 8,400 SF of library space distributed among 3 floors and 1,692 student lockers. Additional spaces include a 9,200 SF auditorium seating 586 people, a 10,262 SF cafeteria seating 482 people, a 5,900 SF kitchen, an 11,600 SF gymnasium, a 40FT x 80FT indoor swimming pool and a planetarium.

The plan is relatively compact with 4 wings (Units "A", "B", "C", and "D") off a central core. Unit "A" is 3 stories and contains the library, 3 lecture rooms and classrooms. The single student use elevator is located in Unit "A". Unit "B" is 2 stories and contains vocational areas on the lower level and science labs on the upper (ground floor) level. Unit "B" also contains the defunct planetarium and an unused greenhouse. Unit "C" contains the swimming pool, gymnasium and locker rooms to serve them. The central core of Unit "C" is 3 stories with locker rooms on all 3 levels. Only the locker rooms on the middle (ground floor) level of Unit "C" are accessible to individuals with mobility impairments. Unit "D" is single story and contains the administrative offices along with regular classrooms and the home economics areas. Unit "E" is the central core of the school and contains the auditorium and music functions on the upper (ground floor) level and the cafeteria and kitchen on the lower level. The lower level of Unit "E" does not align with the lower level of Unit "A" and there are 2 ramps that accommodate the change in elevation.

The building is generally in fair condition and adequately maintained. There have been a few minor modifications to the plans to accommodate accessibility in the bathrooms but other than those changes the majority of the building dates back to its original construction. The school is typical of pre-ADA buildings and the majority of spaces and entrances are not accessible. The cafeteria space is bisected by a dishwashing area that limits seating and divides the cafeteria into two distinct and almost separate spaces. The typical classroom sizes are generally adequate by current standards but the labs and related spaces are too small and the spaces are poorly utilized. The library is split up vertically over 3 floors and is inherently inefficient.

Structural

Structural System

Existing structural construction documents prepared by the structural engineer of record for this building were not available. The original architectural drawings for this building were available and are dated June, 1968. Also, a limited number of structural steel, reinforcing steel, metal deck and roof joist shop drawings were found. The shop drawings were dated from 1968 to 1971. We assume the building was constructed in 1968 - 1971.

From these shop drawings, the architectural drawings and limited field investigations it can be discerned that the building is framed with structural steel and steel roof joists supported by concrete spread footings. Unit A is a three-stories. Unit B is two-stories. Unit C housing the gymnasium and pool is mostly

one-story. The center portion housing the locker rooms is three-stories. Unit D is one-story. And Unit E housing the cafeteria and auditorium is two-stories.

As was typical for low-rise buildings of the time there does not appear to be a defined lateral load (wind and seismic loads) resisting system in the building. It appears that lateral loads are resisted by a combination of rigid frame action and masonry shear walls.

Other than the gymnasium, the roof of the building appears to be framed with steel roof deck supported by steel roof joist and rolled steel beam girders. The gymnasium roof is comprised of metal roof deck, rolled steel beams and rigid steel frames spanning in the north/south direction. The elevated floors appear to be concrete slabs on metal supported rolled steel beams and girders. The columns appear to be either tube steel sections or steel wide flange sections.

The existing architectural drawings do not indicate that there is vertical reinforcement in the masonry walls. This is a current seismic code requirement. Also, the existing drawings do not indicate that there is a insulation or damp-proofing between the exterior brick veneer and the block backup in the walls.

Existing Conditions

Most of the structure is enclosed within the building envelope and thereby protected from weather deterioration. Vertical cracks were observed in various masonry walls in the building. This is likely due to the lack of vertical control joints when these walls were originally constructed.

The existing roof joists and rigid frames over the gymnasium likely will not likely have the capacity to support new large roof top mounted mechanical equipment. Generally it is not practical to reinforce roof joists for additional loads. Therefore, if new mechanical equipment is required for the renovations it likely will not be able to be mounted on the long span roof joists. New steel beams and dunnage framing maybe required.

Previously there were been problems with the precast concrete facia panels at Unit D rotating into the building. Corrective was taken in 1994 to address this problem by adding new masonry pilasters under each end of these panels and extending the foundations at the new pilasters.

Two rows of bolts with plate washers were added thru the upper portion of the gymnasium west wall. It is not clear why these bolts were added. Possibly there may have been a concern about the brick veneer separating from the block backup.

Mechanical Electrical Plumbing

Mechanical

A. Equipment:

Aside from the boiler and hot water generation equipment being replaced 10-12 years ago, the mechanical equipment is largely original and nearing the end of its useful life. A complete refurbishment or replacement is recommended.

B. Distribution:

Mechanical Distribution is generally comprised of hot water piping serving unit ventilators, cabinet unit heaters, radiation and coils in various heating and ventilating units throughout the school. The systems are aging and replacement is recommended.

C. Controls:

Controls are pneumatic type fed by a large air compressor with pneumatic tubing throughout the school to various dampers, valves and actuators. Although functional, an upgrade to a central digital control system is recommended for increased energy savings and less maintenance.

D. Code Compliance:

A full investigation of ventilation air, exhaust systems, combustion air, building heating and cooling loads, and energy efficiency is recommended.

E. Compatibility:

The boiler room is adequately sized and is centrally located pipe routing to perimeter units as well as various rooftop and penthouse mechanical rooms. New or extended piping routed to feed new coils in refurbished or replaced air handling units throughout the building would be recommended. New packages rooftop units can also be considered for the various wings of the building

F. Miscellaneous:

Kitchen HVAC equipment is in decent condition, verification of adequate exhaust, make-up air and controls is recommended. Industrial Arts and Science HVAC equipment is antiquated and replacement is recommended as well. Natatorium HVAC equipment is nearing the end of its useful life and is recommended for replacement.

Electrical

A. Electrical Distribution:

Distribution is original and has little or no room for expansion. Our recommendation is that the distribution be replaced with new.

B. Lighting:

Lighting meets or exceeds IES recommended light levels for most areas, although not the latest technology it is operational as intended. Our recommendation is to replace existing lighting and controls with new more energy efficient lighting and controls.

C. Fire Alarm System:

The existing fire alarm does not meet present ADA requirement and the ability of the expansion is limited. Our recommendation is to replace existing system with new ADA compliant and more expandable system.

D. Clock/Paging/Intercom System:

The system is at least 10 years old and in fair operating condition. Our recommendation is to replace the existing system with a new state of the art system.

E. Central Emergency Lighting System:

Although the system is operational, it is 40+ years old and replacement parts are getting difficult to find. Therefore our recommendation is to remove the existing system and provide newer technology for emergency lighting.

Plumbing

A. Equipment

Aside from the domestic hot water generation systems replaced in the last 10-12 years, the plumbing equipment is largely original and upgrading is recommended.

B. Distribution

Plumbing distribution is fed from separate gas-fired boilers with hot water storage tanks. One boiler is for the pool and a redundant pair of boilers feed the remainder of the building. Pumping systems have been maintained/replaced over the years and a full investigation of piping and insulation systems is recommended.

C. Code Compliance

Efforts have been made over the years to upgrade for ADA Code requirements but the system and fixtures are still in need of additional/replacement work for compliance. Fixtures, faucets and flush valves are recommended for upgrade to current energy and water conservation standards.

D. Expansion Compatibility

Plumbing fixture count and handicap accessibility requirements are discussed in the Architectural sections of this study. The boiler room appears to be adequately sized for additional piping and equipment as required. The existing 6" and 4" water services appear to be sufficient. An accurate determination of total building loads (existing and additional) would be recommended.

E. Miscellaneous

Roof drainage systems are in need of upgrade for compliance with current overflow (emergency) roof drainage standards. Kitchen plumbing is in decent condition, verification of adequate drainage, domestic hot water distribution, and grease separation is recommended. Industrial Arts and Science plumbing equipment is antiquated and replacement is recommended as well as verification of adequate emergency protection, contaminant discharge and acid waste disposal.

Fire Protection

A. Equipment

A new fire protection service was installed approximately 8-10 years ago, including a new 50 hp fire pump and emergency generator with automatic transfer switch. Sprinkler coverage is provided throughout the building. Equipment is in good condition for reuse.

B. Distribution

Ductile iron sprinkler piping is routed through the ceiling spaces to the areas covered and is in good condition for reuse.

C. Code Compliance

Backflow prevention and fire alarm monitoring are currently code compliant. The fire pump, generator and transfer switch appear in good condition. A full investigation of volume, pressure and load requirements based on available water service is recommended.

D. Expansion Compatibility

Existing service size and pressure will need to be analyzed based on programming decision. Ceiling space for additional piping seems limited and additional distribution to each wing will need to be coordinated with architectural and structural.

E. Miscellaneous

The fire pump and emergency generator at the school are a benefit

Enfield High School

Site Description

Located in western Enfield, the current school of 186,026 square feet services a population of 823 students, 71 faculty and 14 support staff. The existing site consists of approximately 47 acres with approximately a third of the long narrow shaped site consisting of the building and parking on the eastern end and the western two thirds consisting of the athletic fields. Tennis court facilities are located in the southeastern end of the lot.

The school is in a R-33 (Residential 33) zone, which requires front yard setback of 40 feet, side yard setback of 25 feet and rear yard setback of 50 feet with 20% maximum building coverage and maximum height of 35 feet to meet the requirements. The existing school use in a R-33 zone is by special permit.

The main access into the school is from the east by an entrance drive through a residential area from Enfield Street (Route 5). A secondary access drive connects to Pearl Street, a local residential roadway on the north side of the site, which connects to a series of residential streets for access to Enfield Street. The site drops in grade from east to west with a sharp drop at the rear of the building of approximately 40 feet. The field areas are flat in grade dropping only 5± feet in 1,000 feet to the east boundary, which is bounded by railroad tracks and the Connecticut River.

Parking

The existing parking space total is 393. Based on current zoning requirements the parking lot total should be 526 spaces based on 4 spaces per classroom, 1 space per faculty and staff and 1 per 4 seats in the auditorium. The current parking is broken down between faculty and staff parking, public parking and student parking as follows.

1. Number of faculty/staff/public parking spaces – 153 spaces.

Currently faculty parking is provided in the east main lot with approximately 55 spaces, in a small lot east of the D Wing with 9 spaces for the Tech Education staff, a 66 space lot at the northwest corner and a 13 space lot at the rear of the building. Custodial staff generally uses a 10 space lot on the north side of the building, this brings the total to approximately 153 spaces.

2. Number of student parking spaces – 240 spaces.

The students use two different parking lots. The south end of the main lot has approximately 145 for students. A second lot located at the base of the hill adjacent to the athletic field area has approximately 95 spaces for the students. Total student parking total approximately 240 spaces.

Traffic

Onsite Operations

Based on discussion with school staff the existing bus and private vehicle pick up and drop off system is acceptable with little delay or inconvenience. In the morning drop off, busses and vehicles enter the main driveway from Enfield Street with

busses going right and around the parking lot perimeter road dropping off adjacent to the sidewalk area. The available length for bus storage is approximately 600 feet. Buses leaving the site and taking a right onto Enfield Street would leave by the main driveway; those taking a left would leave from the secondary access from Pearl Street eliminating delay and possible backup due to the left turns. Student drivers and or parent drop off would use the Pearl Street access for parking in the lower student lot or by entering the main driveway and taking a left into the designated student spaces located at the south end of the main parking lot eliminating any conflict with the bus traffic.

Offsite Operations

Enfield High School is located on the west side of Enfield with its driveway creating an intersection with Enfield Street (U.S. Route 5). There is one main driveway with Enfield Street and one driveway off of Pearl Street. Sightlines from both driveways meet or exceed minimums required.

Enfield Street is 40 feet wide, with one lane in each direction and paved shoulders at the driveway. Pearl Street is 24 feet wide with no shoulders and has one lane in each direction.

The average daily traffic on Enfield Street north of South Road is 11,700 vehicles; and south of South Road is 14,600 vehicles.

Enfield High School has the lesser student body (823 verses 1158 at Fermi) and staff (85 verses 110 at Fermi). Projected faculty and staff would add an additional 79 vehicles at Enfield High School, students would add an additional 160 vehicles. Twelve additional busses would be required to bring the total to twenty-seven (based on the total number of busses currently serving the Middle School). Currently Faculty and staff parking, students and busses are served by the two driveways; one on Enfield Street and one on Pearl Street. The driveways also provide access to the Head Start building and 49 parking spaces.

Currently busses are required to make right turns only to the south out of the Enfield Street Driveway. Busses heading north exit the site via Pearl Street. The additional vehicles and busses would gain access to the site via Enfield Street.

Athletics

Outdoor fields and courts.

- Two baseball fields
- Two softball fields
- Combination track and football /soccer field
- Six tennis courts

(Note the grass outfield area used for the four baseball fields is also used for field hockey, soccer and practice area for other off season sports. Based on review of the site, there is little to no available room on the existing site to provide additional field space. Sufficient room is provided in the baseball and outfield areas to)

Inside the building

- One gymnasium
- One practice gymnasium

Building

Enfield High School is a sprawling multi-story, 188,665 SF building originally designed in 1960. The school underwent a significant expansion and renovation in 2003 to add a library. The school has 73 teaching spaces including classrooms and labs. The school also has approximately 8,000 SF of library space in the new addition and 1,550 student lockers. Additional spaces include an 8,400 SF auditorium seating 597 people, a 9,500 SF cafeteria seating 362 people, a 2,900 SF kitchen, and a 12,400 SF gymnasium. Enfield High School does not have a swimming pool.

The plan is an "L" shaped campus type layout with four wings, "A", "B", "C", and "D". "A" wing is a 3-1/2 story building containing the majority of the school's classrooms and administrative offices. A portion of "A" wing was renovated when the library was added including minor alterations to improve the accessibility of the bathrooms on the second floor. "B" wing was substantially modified in 2003 and is currently a 2 story building with two distinct function areas. The original portion of "B" wing contains the gymnasium and locker rooms and is set a flight of stairs down from the ground floor level of "A" wing. The new portion of "B" wing is a 2 story addition that replaced a former walkway. The library is on the upper floor of "B" wing and the lower (ground floor) level contains 4 technology based rooms, 2 larger classrooms and a pair of accessible bathrooms. "B" wing also contains 2 elevators, one new one and one outdated unit. "C" wing is a 2 story building containing the cafeteria, kitchen and auditorium on the upper (ground floor) level and mechanical spaces in the lower level. "C" wing contains an elevator that serves the gymnasium. "D" wing is a single story wing containing art classrooms, science labs and vocational classrooms. "D" wing is elevated from the ground level of the balance of the school and is accessed via a set of stairs or a switchback ramp that was added to the building separately from the 2003 Library addition.

The building is generally in fair condition and adequately maintained. Other than the addition of the ramp to "D" wing and the Library addition and its related interior renovations the majority of the building dates back to its original construction. The school is typical of pre-ADA buildings and the majority of un-renovated spaces and entrances are not fully accessible. However, an accessible route does exist to all student areas of the building. The cafeteria space is very small for the size of the student body and the kitchen is also smaller than typical. The serving lines are split between the two sides of the kitchen. The typical classroom sizes are generally adequate by current standards but the labs and related spaces are too small, the spaces are poorly utilized and there aren't enough labs. The library is very new and one of the highlights of the building.

Structural

Structural System

Existing structural drawings of the original building and the additions were available for our use. From these documents we were able to gain a great deal of information about the structural system.

The southern four-story classroom wing of Enfield High School is constructed from reinforced concrete. The superstructure of the remaining portions of the building including the gymnasium, cafeteria, auditorium, and the industrial arts & science wing are framed with structural steel. Structural drawings for the original portion of the building were available and are dated January, 1960. We assume the building was constructed in 1960 - 1961.

As was typical for low-rise buildings of the time there is no defined lateral load (wind and seismic loads) resisting system in the building. It appears that lateral loads are resisted by a combination of rigid frame action and masonry shear walls.

The existing drawings indicate that of the four-story classroom wing constructed with cast-in-place concrete and mild reinforcing. The floor and roof slabs are shown as being 12" thick flat slabs with 8" diameter longitudinal voids spaced at 10" on center. The existing drawings also indicate that the slabs span in one direction (north-south). The longitudinal voids in the slab also run in the north-south direction. The roof slab thickness was verified at the roof hatch location. Weep holes on the underside of the roof slab for longitudinal voids described above were observed in the janitors closet adjacent to the roof hatch. These weeps are in accordance with the "Tube Slab Construction Detail" shown on drawing S-5 for building B.

The one-way tube slabs are supported by reinforced concrete girders spanning in the east-west direction. These girders are each supported by four reinforced concrete columns, two exterior and two interior adjacent to the corridor. The exterior columns are part of the façade and exposed to the weather.

The roof of the gymnasium, locker rooms, cafeteria, band room and the auditorium is primary framed with long-span steel roof joists with some rolled steel beams and girders. The roof deck over the gymnasium is a 3" fibrous "Insulrock" roof deck with steel bulb tees. The remainder of the roof deck is 1½" metal roof deck. The walls in the gymnasium, cafeteria, auditorium and band room are load-bearing masonry, a combination of concrete block and brick. The existing structural drawings do not indicate that there is vertical reinforcement in the masonry walls. This is a current seismic code requirement. Also, the existing drawings do not indicate that there is a insulation, damp-proofing or cavity between the exterior brick veneer and the block backup in the walls.

The industrial arts and science wing is a single story steel-framed building. The exterior tube steel columns are closely spaced, 8'-0" on center, on the east and west sides. The interior columns on either side of the corridor are spaced at 16'-0" on center. The roof is framed with rolled steel roof beams spanning in the east/west direction. The roof deck is a 3" fibrous "Insulrock" roof deck with steel bulb tees.

Per the existing structural drawings the building is founded on spread footings.

A new one and two-story steel framed addition for the library administrative space and the library was constructed in 2003 – 2004. The addition is located on the east

side of the four-story classroom wing and the gymnasium. The existing drawings for this addition indicate that it is founded on spread footings.

Existing Conditions

There is some limited deterioration of the exterior concrete structure of the four-story classroom wing. Limited spalling and cracking was observed on the exposed surfaces of the exterior columns. Horizontal cracks were observed at the cold joint locations at the level of the bottom of the girder concrete girders. Vertical cracks and spalls were observed on east elevation exterior columns. The surfaces of some of the columns appear to have been patched previously. The amounts of spalls and cracks in these exterior columns can be expected to increase as the depth of carbonation increases and columns are exposed to additional freeze-thaw cycles. There is also a full height vertical crack thru the middle of the exterior column supporting the entrance canopy at the southern classroom wing. Most of the remaining columns, beams and roof joists are enclosed within the building envelope. No other deteriorated structural members were observed.

Some efflorescence was observed on the masonry walls of the gymnasium. Vertical cracks were observed in various masonry walls in the building. This is likely due to the lack of vertical control joints when these walls were originally constructed.

There is a cast-in-place site retaining wall adjacent to the loading dock on the northeast corner of the cafeteria that is leaning to the north. It appears that the tallest section of this wall has rotated after it was constructed. It also appears that concrete buttress walls were added in front of this wall to stabilize it from moving further.

The long span roof joist over the gymnasium, locker rooms, cafeteria, band room and the auditorium likely will not have the capacity to support new large roof top mounted mechanical equipment. Generally it is not practical to reinforce roof joists for additional loads. Therefore, if new mechanical equipment is required for the renovations it likely will not be able to be mounted on the long span roof joists.

We have concerns about the lateral load resisting system of the 2003-2004 addition. The lateral load resisting system is a steel moment frame. We have not performed a structural analysis of the addition. However, the moment connections are detailed as is typically seen in flexible wind-type moment connections with bolted to the beam/girder & column flanges. Typically for rigid seismic moment connections typically needed to resist design forces and limit story drift welded connections are utilized. These types of moment connections have the beam/girder flanges welded to the column with web stiffeners, if required. Also, at the roof level and interior second floor level column connections observed the moment connections are made only the bottom flange was attached to column with a bolted angle. On some frame lines the interior columns are not in line with remainder for the beams and columns in that line making the frame in effective. Lastly, for moment frames the beams/girders are usually larger than the typical floor beams to resist the additional wind/seismic forces that the frame is subject. Once again, we have not performed

an analysis of the structure but we have questions about the additions ability to resist the forces required by the building code in effect at that time.

There was the water main break that occurred in January of 2009 at the northern end of the 2003-2004 addition under the first floor slab on grade. It is our understanding that this caused considerable damage, heaving and undermining the first floor slab on grade, undermining the foundations of the concrete masonry walls and heaving the slab on grade of the pipe tunnel immediately to the north. It is our understanding that other than the heaving of the slab in the pipe tunnel, corrective action has been taken to address the damage caused by this event.

Mechanical Electrical Plumbing

Mechanical

A. Equipment:

Aside from the mechanical systems included as a part of the 2003 Building A addition and the boilers replaced at approximately the same time, the mechanical equipment is largely original and nearing the end of its useful life. A complete refurbishment or replacement is recommended.

B. Distribution:

Mechanical Distribution is generally comprised of steam piping to heat exchangers which convert to hot water for radiation and coils in various heating and ventilating units throughout the school. The systems are aging and replacement is recommended.

C. Controls:

Controls are pneumatic type fed by a large air compressor with pneumatic tubing throughout the school to various dampers, valves and actuators. Although functional, an upgrade to a central digital control system is recommended for increased energy savings and less maintenance.

D. Code Compliance:

A full investigation of ventilation air, exhaust systems, combustion air, building heating and cooling loads, and energy efficiency is recommended.

E. Compatibility:

The boiler room is adequately sized and is centrally located with an accessible service tunnel running underneath the building for nearly the entire length of all wings. New or extended piping routed to feed new coils in refurbished or replaced air handling units throughout the building would be recommended.

F. Miscellaneous:

Kitchen HVAC equipment is in decent condition, verification of adequate exhaust, make-up air and controls is recommended. Industrial Arts and Science HVAC equipment is antiquated and replacement is recommended as well as verification of adequate exhaust, make-up air and controls.

Electrical

A. Electrical Distribution:

Distribution is original and has little or no room for expansion. Our recommendation is that the distribution be replaced with new.

B. Lighting:

Lighting meets or exceeds IES recommended light levels for most areas, although not the latest technology it is operational as intended. Our recommendation is to

replace existing lighting and controls with new more energy efficient lighting and controls.

C. Fire Alarm System:

The existing fire alarm does not meet present ADA requirement and the ability of the expansion is limited. Our recommendation is to replace existing system with a new ADA compliant and more expandable system.

D. Clock/Paging/Intercom System:

The system is at least 10 years old and in fair operating condition. Our recommendation is to replace the existing system with a new state of the art system.

Plumbing

A. Equipment

Aside from the plumbing systems included as a part of the 2003 Building A addition and the domestic hot water generation systems replaced in the last 10-12 years, the plumbing equipment is largely original and upgrading is recommended.

B. Distribution

Plumbing distribution formerly fed from hot water storage tanks with steam heating coils is now fed from separate gas-fired water heaters with one zone for the Gymnasium, Lockers, and Cafeteria and one zone for the remainder of the building. Pumping systems have been maintained/replaced over the years and a full investigation of piping and insulation systems is recommended.

C. Code Compliance

Efforts have been made over the years to upgrade for ADA Code requirements but the system and fixtures are still in need of additional/replacement work for compliance. Fixtures, faucets and flush valves are recommended for upgrade to current energy and water conservation standards.

D. Expansion Compatibility

Plumbing fixture count and handicap accessibility requirements are discussed in the Architectural sections of this study. The boiler room and service tunnel are adequately sized for additional piping and equipment as required. The existing for 4" gas and water services appear to be sufficient. An accurate determination of total building loads (existing and additional) would be recommended.

E. Miscellaneous

Except for the recent Building A addition, roof drainage systems are in need of upgrade for compliance with current overflow (emergency) roof drainage standards. Kitchen plumbing is in decent condition, verification of adequate drainage, domestic hot water distribution, and grease separation is recommended. Industrial Arts and Science plumbing equipment is antiquated and replacement is recommended as well as verification of adequate emergency protection, contaminant discharge and acid waste disposal.

Fire Protection

A. Equipment

A new fire protection service was installed at the time of the 2003 Building A addition which provides coverage for the addition spaces as well as the stage area of the auditorium and assorted janitor closets throughout the building. Equipment is in good condition for reuse.

- B. Distribution
Ductile iron sprinkler piping is routed through the service tunnel to the areas covered and is in good condition for reuse.
- C. Code Compliance
Backflow prevention and fire alarm monitoring are currently code compliant. However, a fully sprinklered building will be required and all necessary expansion installation completed. A full investigation of volume, pressure and load requirements based on available water service is recommended.
- D. Expansion Compatibility
Existing service size and pressure will need to be analyzed based on final programming decision. Existing service tunnel adequately sized for additional piping but distribution to each wing will need to be coordinated with architectural and structural.
- E. Miscellaneous
Currently no fire pump and emergency generator at the school.

III. PROPOSED CONSOLIDATED HIGH SCHOOL

Program

The consolidated school require the following:

Student population – 1,981

Faculty - 154

Classrooms – 124 (Large 106, Small 18)

Common areas would need to be increased or replaced to accommodate the increased number of students and faculty and would include the cafeteria, kitchen, library, gymnasium, and auditorium.

The “Baseline Program” for the Consolidation Study at Enfield High School and Enrico Fermi High School was designed as a best case scenario to meet the needs of the school after consolidation. The demographics provided by the Town of Enfield shows a decrease in the number of students in the town over the next 10 years. The numbers indicate that the high school population will decrease from 1,929 students in 2010 to 1,561 students in 2019. This decrease in enrollment supports the supposition that it is no longer necessary to have two high schools.

We used the projected certified staff numbers provided by the Superintendent of Schools to determine the number of classrooms necessary to accommodate the number of enrolled students assuming an average class size of 22 students. We determined that 900 SF would be ideal for a classroom and a 25% larger room (1,125 SF) would be necessary for labs. The course electives were determined to be a mixture of classroom and lab spaces to accommodate the different required uses. We also met with the principals of each school to clarify the uses and expectations of the spaces in the program and to get a better determination of how each facility is currently used.

Each area of the program was broken down to get a better sense of the spaces needed within each area of department. Storage, circulation and loss (a factor to account for the inherent inefficiency of the block plan in an existing space) were also included so that those areas are considered when determining the total square footage required for

the project. A fixture count was also included to determine the number of toilet fixtures, determined by code, which is needed to support the amount of occupants in the facility.

The "Scheme One" programs and blocking plans designed for Enfield High School and Enrico Fermi High School reuse the existing built spaces in the existing school with minimal renovations. A new addition is shown to include the spaces in the program that exceed each existing building's capacity. The program reflects the limitations of the existing space in the square footage totals.

The "Scheme Two" programs and blocking plans designed for Enfield High School and Enrico Fermi High School employ a "renovate as new" concept where we concentrate on reusing the existing footprint and major program spaces (such as the auditorium and cafeteria) only and the interior of each building is comprehensively renovated to best fit the program requirements. The new addition(s) to the existing schools are necessary to incorporate the remaining program that does not fit into the existing footprint. The core academic classrooms were increased to better reflect the larger classrooms desired.

Following is the "Baseline Program" for each school and the floor layouts. Two concept schemes were developed for both Enfield High School and Enrico Fermi High School.

Base Line Program

Enfield Consolidated High School - Baseline Program
 Revised 10/1/2010

UNIT	Total Area	Large Classroom	Small Classroom	Offices	Studio / Lab	Misc Spaces	Fixture Count
9th Grade - Core Academics	22,205	17	0	0	0	1	15.38
10th Grade - Core Academics	20,245	13	0	0	2	1	12.67
11th Grade - Core Academics	20,245	13	0	0	2	1	12.67
12th Grade - Core Academics	20,245	13	0	0	2	1	12.67
Course Electives	51,592	20	0	6	7	1	0.24
Student Support	20,683	0	18	14	0	2	11.91
Administration	3,076	0	0	10	0	1	0.45
Auxiliary Areas	89,731	1	0	0	0	24	36.11
TOTALS	248,022	77	18	30	13	32	102.10

FULL DAY

Enfield Consolidated High School - Baseline Program
 Revised 10/1/2010

9th Grade - Core Academics	
Total Adjusted Area	22,205
Number Large Classrooms	17
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	0
Number Misc Spaces	1
Number Fixtures	15.38

Breakdown	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Item						
English (Max 25-28/classroom)	CR	4	900	3,600	Class	3.6
Mathematics (Max 25-28/classroom)	CR	4	900	3,600	Class	3.6
Social Studies (Max 25-28/classroom)	CR	3	900	2,700	Class	2.7
Sciences (Max 25-28/classroom)	CR	4	900	3,600	Class	3.6
Science Labs	LAB	0	1,125	0	Lab	0
World Language (Max 25-28/classroom)	CR	2	900	1,800	Class	1.8
Storage	STOR	1	1,148	1,148	Storage	0.08

Program Raw Total	16,448
Storage	1645
Circulation	2467
Loss	1645
Total	22,205

Notes:

Enfield Consolidated High School - Baseline Program

Revised 10/1/2010

10th Grade - Core Academics

Total Adjusted Area	20,245
Number Large Classrooms	13
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	2
Number Misc Spaces	1
Number Fixtures	12.67

Breakdown

<i>Item</i>	<i>Tag</i>	<i>Quantity</i>	<i>SF</i>	<i>Total SF</i>	<i>Comments</i>	<i>Fixture Count</i>
English (Max 25-28/classroom)	CR	4	900	3,600	Class	3.6
Mathematics (Max 25-28/classroom)	CR	3	900	2,700	Class	2.7
Social Studies (Max 25-28/classroom)	CR	2	900	1,800	Class	1.8
Sciences (Max 25-28/classroom)	CR	2	900	1,800	Class	1.8
Science Labs	LAB	2	1,125	2,250	Lab	0.9
World Language (Max 25-28/classroom)	CR	2	900	1,800	Class	1.8
Storage	STOR	1	1,046	1,046	Storage	0.07

Program Raw Total	14,996
Storage	1500
Circulation	2249
Loss	1500
Total	20,245

Notes:

Enfield Consolidated High School - Baseline Program
 Revised 10/1/2010

11th Grade - Core Academics

Total Adjusted Area	20,245
Number Large Classrooms	13
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	2
Number Misc Spaces	1
Number Fixtures	12.67

Breakdown

<i>Item</i>	<i>Tag</i>	<i>Quantity</i>	<i>SF</i>	<i>Total SF</i>	<i>Comments</i>	<i>Fixture Count</i>
English (Max 25-28/classroom)	CR	4	900	3,600	Class	3.6
Mathematics (Max 25-28/classroom)	CR	3	900	2,700	Class	2.7
Social Studies (Max 25-28/classroom)	CR	2	900	1,800	Class	1.8
Sciences (Max 25-28/classroom)	CR	2	900	1,800	Class	1.8
Science Labs	LAB	2	1,125	2,250	Lab	0.9
World Language (Max 25-28/classroom)	CR	2	900	1,800	Class	1.8
Storage	STOR	1	1,046	1,046	Storage	0.07

Program Raw Total	14,996
Storage	1500
Circulation	2249
Loss	1500
Total	20,245

Notes:

Enfield Consolidated High School - Baseline Program
 Revised 10/11/2010

12th Grade - Core Academics

Total Adjusted Area	20,245
Number Large Classrooms	13
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	2
Number Misc Spaces	1
Number Fixtures	12.67

Breakdown

Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English (Max 25-28/classroom)	CR	3	900	2,700	Class	2.7
Mathematics (Max 25-28/classroom)	CR	3	900	2,700	Class	2.7
Social Studies (Max 25-28/classroom)	CR	3	900	2,700	Class	2.7
Sciences (Max 25-28/classroom)	CR	2	900	1,800	Class	1.8
Science Labs	LAB	2	1,125	2,250	Lab	0.9
World Language (Max 25-28/classroom)	CR	2	900	1,800	Class	1.8
Storage	STOR	1	1,046	1,046	Storage	0.07

Program Raw Total	14,996
Storage	1500
Circulation	2249
Loss	1500
Total	20,245

Notes:

Enfield Consolidated High School - Baseline Program
 Revised 10/11/2010

Course Electives	
Total Adjusted Area	51,592
Number Large Classrooms	20
Number Small Classrooms	0
Number Offices	6
Number Studio/Labs	7
Number Misc Spaces	1
Number Fixtures	25.50

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Art	LAB	3	1,350	4,050	Lab	1.62
Family & Consumer Science	CR	4	900	3,600	Class	3.6
Business	CR	3	900	2,700	Class	2.7
Technology Education (14-15/class)	CR	3	900	2,700	Class	2.7
Physical Education	OFF	6	200	1,200	Office	0.24
Health	CR	3	900	2,700	Class	2.7
Music	CR	3	900	2,700	Class	2.7
Computer Technology	LAB	4	1,350	5,400	Lab	2.16
Reading	CR	4	900	3,600	Class	3.6
Woodworking	LAB	1	2,000	2,000	Lab	0.8
Automotive	LAB	1	2,000	2,000	Lab	0.8
Metal Shop	LAB	1	2,000	2,000	Lab	0.8
Driver's Education	CR	1	900	900	Class	0.9
Storage	STOR	1	2,666	2,666	Storage	0.18

Program Raw Total	38,216
Storage	3822
Circulation	5732
Loss	3822
Total	51,592

Notes:
 Physical Education- See Gymnasium in Auxiliary Areas

Enfield Consolidated High School - Baseline Program

Revised 10/1/2010

Student Support

Total Adjusted Area	20,683
Number Large Classrooms	0
Number Small Classrooms	18
Number Offices	14
Number Studio/Labs	0
Number Misc Spaces	2
Number Fixtures	11.91

Breakdown

Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Career Center	CR	1	600	600	Class	0.6
Pupil Services	OFF	6	200	1,200	Business	0.24
Special Education	CR	16	600	9,600	Class	9.6
Guidance Counselors	OFF	8	200	1,600	Business	0.32
Nurse	NURSE	1	900	900	Outpatient	0.18
In-School Suspension	CR	1	900	900	Class	0.9
Storage	STOR	1	1,110	1,110	Storage	0.07

Program Raw Total	15,910
Storage	1591
Circulation	1591
Loss	1591
Total	20,683

Notes:

Nurse's suite to have 3 staff, 5 cots and 2 accessible bathrooms (60SF each)
 In-School Suspension to include 1 accessible bathroom

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Enfield Consolidated High School - Baseline Program
 Revised 10/1/2010

Administration	
Total Adjusted Area	3,076
Number Large Classrooms	0
Number Small Classrooms	0
Number Offices	10
Number Studio/Labs	0
Number Misc Spaces	1
Number Fixtures	0.45

Breakdown	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Principal	ADM	1	400	400	Business	0.08
Vice Principal 10-12	ADM	3	200	600	Business	0.12
Vice Principal 9	ADM	2	200	400	Business	0.08
Assistants	ADM	3	100	300	Business	0.06
Main Office	ADM	1	500	500	Business	0.1
Storage	STOR	1	165	165	Storage	0.01

Program Raw Total	2,365
Storage	237
Circulation	237
Loss	237
Total	3,076

Notes:
 Main Office includes 4 secretaries for all grades in open office plan.
 Principal's Office to include 8-person table

Enfield Consolidated High School - Baseline Program

Revised 10/1/2010

Auxiliary Areas

Total Adjusted Area	89,731
Number Large Classrooms	1
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	0
Number Misc Spaces	24
Number Fixtures	36.11

Breakdown

Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Cafeteria	CAFÉ	1	9,500	9,500	Assembly, 600ppl	8.44
Kitchen	KIT	1	3,167	3,167	Prep,Serving & Storage	0.32
Teacher's Lounge	TL	1	600	600	Assembly	0.8
Pool	POOL	1	8,500	8,500	Exercise	3.40
Auditorium	AU	1	9,300	9,300	Assembly, 2,000ppl	9.79
Library	LIB	1	8,000	8,000	Assembly	5.61
Band Room	BAND	1	3,000	3,000	150 students	2.11
Chorus Room	CHORUS	1	560	560	80 students	0.39
Locker Rooms	LR	2	1,500	3,000	1/gender	N/A
Gymnasium	GYM	1	7,000	7,000	Vocational	2.8
Fitness Room	GYM	1	1,500	1,500	Vocational	0.6
Bathrooms	BR	4	1,000	4,000	1/gender	N/A
Mechanical	MECH	1	6,200	6,200	Accessory	0.41
Custodial Storage	CUST	2	400	800	Accessory	0.05
Conference Room	CONF	2	150	300	Business (10 people)	0.06
Conference Room	CONF	1	450	450	Business(20-30 people)	0.09
US First Program	CR	1	900	900	Class	0.9
Storage	STOR	1	5,008	5,008	Storage	0.33

Program Raw Total	71,785
Storage	0
Circulation	10768
Loss	7178
Total	89,731

Notes:

Basketball Court= 94' x 50' with 10' boundry around entire court
 Wrestling= Circle 32'-42' diameter with 5' minimum apron

Enfield Consolidated High School - Baseline Program

Revised 10/1/2010

Department	Current Staffing	Projected Staffing	Notes
CORE ACADEMICS			
English	22	19	22 Students/Class
Mathematics	21	17	22 Students/Class
Social Studies	19	16	22 Students/Class
Sciences	20	17	22 Students/Class
World Languages	15	11	22 Students/Class
COURSE ELECTIVES			
Art	5	4	
Family & Consumer Science	4	4	
Business	7	6	
Technology Education	8	7	14-15 Students/Class
Physical Education	6	6	
Health	4	3	
Music	3	2	Includes: Piano, Chrous, Music Theory
Computer Technology	2	1	
Reading	4	4	
STUDENT SUPPORT			
Career Center	2	1	
Pupil Services	6	6	Social Worker, School Psychologist
Special Education	17	16	
Guidance Counselors	9	8	
ADMIN			
Principal	2	1	
Vice Principal (Grades 10-12)	5	3	
Vice Principal (Grade 9)	0	2	
TOTALS	181	154	

Enfield High School Program

Enfield Consolidated High School - Enfield High School Scheme 1
 Revised 10/1/2010

UNIT	Total Area	Large Classroom	Small Classroom	Offices	Studio / Lab	Misc Spaces	Fixture Count
9th Grade - Core Academics	18,765	18	0	0	0	0	13.90
10th Grade - Core Academics	18,630	13	0	0	2	0	12.36
11th Grade - Core Academics	18,630	13	0	0	2	0	12.36
12th Grade - Core Academics	19,305	15	0	0	2	0	12.86
Course Electives	47,412	23	0	6	10	0	0.08
Student Support	18,200	0	11	2	0	1	11.04
Administration	3,240	0	0	10	0	1	0.49
Auxiliary Areas	88,594	1	0	0	1	57	36.83
TOTALS	232,776	83	11	18	17	59	99.91

FULL DAY

Enfield Consolidated High School - Enfield High School Scheme 1
 Revised 10/11/2010

9th Grade - Core Academics

Total Adjusted Area	18,765
Number Large Classrooms	18
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	0
Number Misc Spaces	0
Number Fixtures	13.90

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	1	500	500	Class	0.5
English	CR	4	800	3,200	Class	3.2
Mathematics	CR	4	800	3,200	Class	3.2
Social Studies	CR	1	700	700	Class	0.7
Social Studies	CR	2	800	1,600	Class	1.6
Sciences	CR	1	700	700	Class	0.7
Sciences	CR	3	800	2,400	Class	2.4
Science Labs	LAB	0	1,125	0	Lab	0
World Language	CR	2	800	1,600	Class	1.6
Storage	STOR	0	400	0	Storage	0.00

Program Raw Total	13,900
Storage	1390
Circulation	2085
Loss	1390
Total	18,765

Notes:

Enfield Consolidated High School - Enfield High School Scheme 1
 Revised 10/1/2010

10th Grade - Core Academics

Total Adjusted Area	18,630
Number Large Classrooms	13
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	2
Number Misc Spaces	0
Number Fixtures	12.36

Breakdown	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	4	900	3,600	Class	3.6
Mathematics	CR	3	900	2,700	Class	2.7
Social Studies	CR	1	800	800	Class	0.8
Social Studies	CR	1	900	900	Class	0.9
Sciences	CR	2	900	1,800	Class	1.8
Science Labs	LAB	2	1,200	2,400	Lab	0.96
World Language	CR	2	800	1,600	Class	1.6
Storage	STOR	0	400	0	Storage	0.00

Program Raw Total	13,800
Storage	1380
Circulation	2070
Loss	1380
Total	18,630

Notes:

Enfield Consolidated High School - Enfield High School Scheme 1
 Revised 10/1/2010

11th Grade - Core Academics

Total Adjusted Area	18,630
Number Large Classrooms	13
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	2
Number Misc Spaces	0
Number Fixtures	12.36

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	4	900	3,600	Class	3.6
Mathematics	CR	3	900	2,700	Class	2.7
Social Studies	CR	1	800	800	Class	0.8
Social Studies	CR	1	900	900	Class	0.9
Sciences	CR	2	900	1,800	Class	1.8
Science Labs	LAB	2	1,200	2,400	Lab	0.96
World Language	CR	2	800	1,600	Class	1.6
Storage	STOR	0	400	0	Storage	0.00

Program Raw Total	13,800
Storage	1380
Circulation	2070
Loss	1380
Total	18,630

Notes:

Enfield Consolidated High School - Enfield High School Scheme 1
 Revised 10/1/2010

12th Grade - Core Academics

Total Adjusted Area	19,305
Number Large Classrooms	15
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	2
Number Misc Spaces	0
Number Fixtures	12.86

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	3	900	2,700	Class	2.7
Mathematics	CR	3	900	2,700	Class	2.7
Social Studies	CR	2	600	1,200	Class	1.2
Social Studies	CR	1	700	700	Class	0.7
Social Studies	CR	1	800	800	Class	0.8
Sciences	CR	2	900	1,800	Class	1.8
Science Labs	LAB	2	1,200	2,400	Lab	0.96
World Language	CR	1	800	800	Class	0.8
World Language	CR	2	600	1,200	Class	1.2
Storage	STOR	0	400	0	Storage	0.00

Program Raw Total	14,300
Storage	1430
Circulation	2145
Loss	1430
Total	19,305

Notes:

Enfield Consolidated High School - Enfield High School Scheme 1
 Revised 10/1/2010

Course Electives	
Total Adjusted Area	47,412
Number Large Classrooms	23
Number Small Classrooms	0
Number Offices	6
Number Studio/Labs	10
Number Misc Spaces	0
Number Fixtures	25.48

Breakdown	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Item	LAB	2	1,200	2,400	Lab	0.96
Art	LAB	1	1,300	1,300	Lab	0.52
Family & Consumer Science	CR	1	1,100	1,100	Class	1.1
Family & Consumer Science	CR	2	1,000	2,000	Class	2
Family & Consumer Science	CR	1	320	320	Class	0.32
Business	CR	3	900	2,700	Class	2.7
Technology Education (14-15/class)	CR	1	900	900	Class	0.9
Technology Education (14-15/class)	CR	2	800	1,600	Class	1.6
Physical Education	OFF	1	100	100	Office	0.02
Physical Education	OFF	3	300	900	Office	0.18
Physical Education	OFF	2	200	400	Office	0.08
Health	CR	3	900	2,700	Class	2.7
Music	CR	1	1,400	1,400	Class	1.4
Music	CR	1	1,500	1,500	Class	1.5
Music	CR	2	800	1,600	Class	1.6
Computer Technology	LAB	4	1,200	4,800	Lab	1.92
Reading	CR	2	500	1,000	Class	1
Reading	CR	3	600	1,800	Class	1.8
Woodworking	LAB	1	2,000	2,000	Lab	0.8
Automotive	LAB	1	1,900	1,900	Lab	0.76
Metal Shop	LAB	1	1,800	1,800	Lab	0.72
Driver's Education	CR	1	900	900	Class	0.9

Program Raw Total	35,120
Storage	3512
Circulation	5268



Enfield Consolidated High School - Enfield High School Scheme 1
Revised 10/1/2010

Loss	3512
Total	47,412

Notes:
Physical Education- See Gymnasium in Auxiliary Areas

Enfield Consolidated High School - Enfield High School Scheme 1

Revised 10/1/2010

Student Support

Total Adjusted Area	18,200
Number Large Classrooms	0
Number Small Classrooms	11
Number Offices	2
Number Studio/Labs	0
Number Misc Spaces	1
Number Fixtures	11.04

Breakdown

Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Career Center	CR	1	800	800	Class	0.8
Pupil Services	OFF	1	900	900	Business-open office	0.18
Special Education	CR	6	500	3,000	Class	3
Special Education	CR	8	600	4,800	Class	4.8
Special Education	CR	1	700	700	Class	0.7
Guidance Counselors	OFF	1	1,900	1,900	Business-open office	0.38
Nurse	NURSE	1	900	900	Outpatient	0.18
In-School Suspension	CR	1	1,000	1,000	Class	1

Program Raw Total

Storage	14,000
Circulation	1400
Loss	1400
Total	18,200

Notes:

Nurse's suite to have 3 staff, 5 cots and 2 accessible bathrooms (60SF each)
 In-School Suspension to include 1 accessible bathroom

Enfield Consolidated High School - Enfield High School Scheme 1
 Revised 10/1/2010

Administration	
Total Adjusted Area	3,240
Number Large Classrooms	0
Number Small Classrooms	0
Number Offices	10
Number Studio/Labs	0
Number Misc Spaces	1
Number Fixtures	0.49

Breakdown	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Principal	ADM	1	400	400	Main Office	0.08
Vice Principal 10-12	ADM	3	200	600	Dispersed offices	0.12
Vice Principal 9	ADM	2	200	400	Dispersed offices	0.08
Assistants	ADM	3	100	300	Dispersed offices	0.06
Main Office	ADM	1	600	600	Main Office	0.12
Storage	STOR	1	400	400	Storage Main Office	0.03

Program Raw Total	2,700
Storage	0
Circulation	270
Loss	270
Total	3,240

Notes:

Enfield Consolidated High School - Enfield High School Scheme 1
 Revised 10/1/2010

Auxiliary Areas	
Total Adjusted Area	88,594
Number Large Classrooms	1
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	1
Number Misc Spaces	57
Number Fixtures	36.83

Breakdown	Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
	Cafeteria	CAFÉ	1	9,500	9,500	Assembly, 600pppl	8.44
	Kitchen	KIT	1	2,900	2,900	Prep,Serving & Storage	0.29
	Teacher's Lounge	TL	1	1,000	1,000	Assembly	1.33
	Teacher's Lounge- small	TL	1	400	400	Assembly	0.53
	Pool	POOL	0	8,500	0	Exercise	0.00
	Auditorium	AU	1	8,400	8,400	Assembly	8.84
	Library	LIB	1	8,000	8,000	Assembly	5.61
	Band Room	BAND	1	3,200	3,200	150 students	2.25
	Chorus Room	CHORUS	1	2,700	2,700	80 students	1.89
	Locker Rooms	LR	1	3,800	3,800		N/A
	Locker Rooms	LR	1	2,400	2,400		N/A
	Gymnasium	GYM	1	8,300	8,300	Vocational	3.32
	Practice Gymnasium	GYM	1	4,100	4,100	Vocational	1.64
	Fitness Room	GYM	1	2,000	2,000	Vocational	0.8
	Bathrooms	BR	4	1,000	4,000	1/gender	N/A
	Mechanical	MECH	1	250	250	Accessory	0.02
	Custodial Storage	CUST	1	50	50	Accessory	0.00
	Custodial Storage	CUST	3	100	300	Accessory	0.02
	Custodial Storage	CUST	1	200	200	Accessory	0.01
	Conference Room	CONF	1	150	150	Business (10 people)	0.03
	Conference Room	CONF	2	400	800	Business(20-30 people)	0.16
	US First Program	CR	1	900	900	Class	0.9
	Bank	BANK	1	175	175	Business	0.035
	Computer Lab	LAB	1	600	600	Lab	0.24
	Storage Gymnasium	STOR	8	310	2,480	Storage Mean	0.17
	Storage Art/Music	STOR	7	160	1,120	Storage Mean	0.07
	Storage Cafeteria	STOR	5	80	400	Storage Mean	0.03
	Storage General	STOR	10	275	2,750	Storage Mean	0.18

Enfield Consolidated High School - Enfield High School Scheme 1
Revised 10/1/2010

Program Raw Total	70,875
Storage	0
Circulation	10631
Loss	7088
Total	88,594

Enfield Consolidated High School - Enfield High School Scheme 1
 Revised 10/1/2010

Department	Current Staffing	Projected Staffing	Notes
CORE ACADEMICS			
English	22	19	22 Students/Class
Mathematics	21	17	22 Students/Class
Social Studies	19	16	22 Students/Class
Sciences	20	17	22 Students/Class
World Languages	15	11	22 Students/Class
ART			
Art	5	4	
COURSE ELECTIVES			
Family & Consumer Science	4	4	
Business	7	6	
Technology Education	8	7	14-15 Students/Class
Physical Education	6	6	
Health	4	3	
Music	3	2	Includes: Piano, Chrous, Music Theory
Computer Technology	2	1	
Reading	4	4	
STUDENT SUPPORT			
Career Center	2	1	
Pupil Services	6	6	Social Worker, School Psychologist
Special Education	17	16	
Guidance Counselors	9	8	
ADMIN			
Principal	2	1	
Vice Principal (Grades 10-12)	5	3	
Vice Principal (Grade 9)	0	2	
TOTALS	181	154	

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Enfield Consolidated High School - Enfield High School Scheme 2
 Revised 10/1/2010

UNIT	Total Area	Large Classroom	Small Classroom	Offices	Studio / Lab	Misc Spaces	Fixture Count
9th Grade - Core Academics	20,115	17	0	0	0	0	14.90
10th Grade - Core Academics	19,035	13	0	0	2	0	12.66
11th Grade - Core Academics	19,035	13	0	0	2	0	12.66
12th Grade - Core Academics	19,035	13	0	0	2	0	12.66
Course Electives	46,062	21	0	6	10	0	0.04
Student Support	17,810	0	16	2	0	0	10.42
Administration	3,120	0	0	10	0	1	0.47
Auxiliary Areas	84,307	1	0	0	0	56	36.22
TOTALS	228,519	78	16	18	16	57	100.03

FULL DAY

Enfield Consolidated High School - Enfield High School Scheme 2

Revised 10/1/2010

9th Grade - Core Academics

Total Adjusted Area	20,115
Number Large Classrooms	17
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	0
Number Misc Spaces	0
Number Fixtures	14.90

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	4	900	3,600	Class	3.6
Mathematics	CR	4	900	3,600	Class	3.6
Social Studies	CR	3	900	2,700	Class	2.7
Sciences	CR	1	700	700	Class	0.7
Sciences	CR	2	800	1,600	Class	1.6
Sciences	CR	1	900	900	Class	0.9
Science Labs	LAB	0	1,125	0	Lab	0
World Language	CR	2	900	1,800	Class	1.8
Storage	STOR	0	400	0	Storage	0.00

Program Raw Total	14,900
Storage	1490
Circulation	2235
Loss	1490
Total	20,115

Notes:

Enfield Consolidated High School - Enfield High School Scheme 2
 Revised 10/1/2010

10th Grade - Core Academics

Total Adjusted Area	19,035
Number Large Classrooms	13
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	2
Number Misc Spaces	0
Number Fixtures	12.66

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	4	900	3,600	Class	3.6
Mathematics	CR	3	900	2,700	Class	2.7
Social Studies	CR	2	900	1,800	Class	1.8
Sciences	CR	2	900	1,800	Class	1.8
Science Labs	LAB	2	1,200	2,400	Lab	0.96
World Language	CR	2	900	1,800	Class	1.8
Storage	STOR	0	400	0	Storage	0.00

Program Raw Total	14,100
Storage	1410
Circulation	2115
Loss	1410
Total	19,035

Notes:

Enfield Consolidated High School - Enfield High School Scheme 2
 Revised 10/1/2010

11th Grade - Core Academics

Total Adjusted Area	19,035
Number Large Classrooms	13
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	2
Number Misc Spaces	0
Number Fixtures	12.66

<i>Breakdown Item</i>	<i>Tag</i>	<i>Quantity</i>	<i>SF</i>	<i>Total SF</i>	<i>Comments</i>	<i>Fixture Count</i>
English	CR	4	900	3,600	Class	3.6
Mathematics	CR	3	900	2,700	Class	2.7
Social Studies	CR	2	900	1,800	Class	1.8
Sciences	CR	2	900	1,800	Class	1.8
Science Labs	LAB	2	1,200	2,400	Lab	0.96
World Language	CR	2	900	1,800	Class	1.8
Storage	STOR	0	400	0	Storage	0.00

Program Raw Total	14,100
Storage	1410
Circulation	2115
Loss	1410
Total	19,035

Notes:

Enfield Consolidated High School - Enfield High School Scheme 2

Revised 10/1/2010

12th Grade - Core Academics

Total Adjusted Area	19,035
Number Large Classrooms	13
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	2
Number Misc Spaces	0
Number Fixtures	12.66

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	3	900	2,700	Class	2.7
Mathematics	CR	3	900	2,700	Class	2.7
Social Studies	CR	3	900	2,700	Class	2.7
Sciences	CR	2	900	1,800	Class	1.8
Science Labs	LAB	2	1,200	2,400	Lab	0.96
World Language	CR	2	900	1,800	Class	1.8
Storage	STOR	0	400	0	Storage	0.00

Program Raw Total	14,100
Storage	1410
Circulation	2115
Loss	1410
Total	19,035

Notes:

Enfield Consolidated High School - Enfield High School Scheme 2

Revised 10/1/2010

Course Electives

Total Adjusted Area	46,062
Number Large Classrooms	21
Number Small Classrooms	0
Number Offices	6
Number Studio/Labs	10
Number Misc Spaces	0
Number Fixtures	24.72

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Art	LAB	1	1,300	1,300	Lab	0.52
Art	LAB	2	1,200	2,400	Lab	0.96
Family & Consumer Science	CR	2	1,000	2,000	Class	2
Family & Consumer Science	CR	1	1,100	1,100	Class	1.1
Family & Consumer Science	CR	1	320	320	Class	0.32
Business	CR	3	900	2,700	Class	2.7
Technology Education (14-15/class)	CR	2	800	1,600	Class	1.6
Technology Education (14-15/class)	CR	1	900	900	Class	0.9
Physical Education	OFF	1	300	300	Office	0.06
Physical Education	OFF	3	200	600	Office	0.12
Physical Education	OFF	2	100	200	Office	0.04
Health	CR	3	900	2,700	Class	2.7
Music	CR	1	1,400	1,400	Class	1.4
Music	CR	2	800	1,600	Class	1.6
Computer Technology	LAB	4	1,200	4,800	Lab	1.92
Reading	CR	4	900	3,600	Class	3.6
Woodworking	LAB	1	2,000	2,000	Lab	0.8
Automotive	LAB	1	1,900	1,900	Lab	0.76
Metal Shop	LAB	1	1,800	1,800	Lab	0.72
Driver's Education	CR	1	900	900	Class	0.9

Program Raw Total	34,120
Storage	3412
Circulation	5118
Loss	3412
Total	46,062

Enfield Consolidated High School - Enfield High School Scheme 2
Revised 10/1/2010

Notes:
Physical Education- See Gymnasium in Auxiliary Areas

Enfield Consolidated High School - Enfield High School Scheme 2
 Revised 10/1/2010

Student Support	
Total Adjusted Area	17,810
Number Large Classrooms	0
Number Small Classrooms	16
Number Offices	2
Number Studio/Labs	0
Number Misc Spaces	0
Number Fixtures	10.42

Breakdown	Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
	Career Center	CR	1	800	800	Class	0.8
	Pupil Services	OFF	1	1,300	1,300	Business-open office	0.26
	Special Education	CR	6	500	3,000	Class	3
	Special Education	CR	8	600	4,800	Class	4.8
	Guidance Counselors	OFF	1	1,900	1,900	Business-open office	0.38
	Nurse	NURSE	1	900	900	Outpatient	0.18
	In-School Suspension	CR	1	1,000	1,000	Class	1

Program Raw Total	13,700
Storage	1370
Circulation	1370
Loss	1370
Total	17,810

Notes:
 Nurse's suite to have 3 staff, 5 cots and 2 accessible bathrooms (60SF each)
 In-School Suspension to include 1 accessible bathroom

Enfield Consolidated High School - Enfield High School Scheme 2
 Revised 10/11/2010

Administration	
Total Adjusted Area	3,120
Number Large Classrooms	0
Number Small Classrooms	0
Number Offices	10
Number Studio/Labs	0
Number Misc Spaces	1
Number Fixtures	0.47

Breakdown	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Principal	ADM	1	300	300	Main Office	0.06
Vice Principal 10-12	ADM	3	200	600	Dispersed offices	0.12
Vice Principal 9	ADM	2	200	400	Dispersed offices	0.08
Assistants	ADM	3	100	300	Dispersed offices	0.06
Main Office	ADM	1	600	600	Total admin w/offices	0.12
Storage	STOR	1	400	400	Main Office	0.03

Program Raw Total	2,600
Storage	0
Circulation	260
Loss	260
Total	3,120

Notes:

Enfield Consolidated High School - Enfield High School Scheme 2
 Revised 10/1/2010

Auxiliary Areas	
Total Adjusted Area	84,307
Number Large Classrooms	1
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	0
Number Misc Spaces	56
Number Fixtures	36.22

Breakdown	Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Cafeteria	Café	CAFE	1	9,500	9,500	Assembly, 600 ppl	8.44
Kitchen	KIT	KIT	1	2,700	2,700	Prep,Serving	0.27
Teacher's Lounge	TL	TL	1	1,000	1,000	Assembly	1.33
Pool	POOL	POOL	0	8,500	0	Exercise	0.00
Auditorium	AU	AU	1	8,400	8,400	Assembly	8.84
Library	LIB	LIB	1	8,000	8,000	Assembly	5.61
Band Room	BAND	BAND	1	3,200	3,200	150 students	2.25
Chorus Room	CHORUS	CHORUS	1	2,700	2,700	80 students	1.89
Locker Rooms	LR	LR	1	3,800	3,800	1/gender	N/A
Locker Rooms	LR	LR	1	2,400	2,400	1/gender	N/A
Gymnasium	GYM	GYM	1	8,300	8,300	Vocational	3.32
Practice Gymnasium	GYM	GYM	1	4,100	4,100	Vocational	1.64
Fitness Room	GYM	GYM	1	2,000	2,000	Vocational	0.8
Bathrooms	BR	BR	6	350	2,100	1/gender New Wing	N/A
Mechanical	MECH	MECH	1	400	400	Accessory	0.03
Custodial Storage	CUST	CUST	2	60	120	Accessory	0.01
Custodial Storage	CUST	CUST	1	200	200	Accessory	0.03
Custodial Storage	CUST	CUST	4	100	400	Accessory	0.06
Conference Room	CONF	CONF	1	300	300	Business (10 people)	0.16
Conference Room	CONF	CONF	2	400	800	Business(20-30 people)	0.9
US First Program	CR	CR	1	900	900	Class	0.035
Bank	BANK	BANK	1	175	175	Business	0.24
Computer Lab	LAB	LAB	1	600	600	Lab	0.17
Storage Gym	STOR	STOR	8	310	2,480	Storage Mean	0.07
Storage Art/Music	STOR	STOR	7	160	1,120	Storage Mean	0.03
Storage Cafeteria	STOR	STOR	5	80	400	Storage Mean	0.09
Storage General	STOR	STOR	5	270	1,350	Storage Mean	

Enfield Consolidated High School - Enfield High School Scheme 2

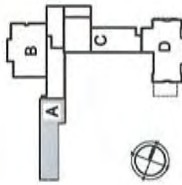
Revised 10/1/2010

Program Raw Total	67,445
Storage	0
Circulation	10117
Loss	6745
Total	84,307

Enfield Consolidated High School - Enfield High School Scheme 2
 Revised 10/1/2010

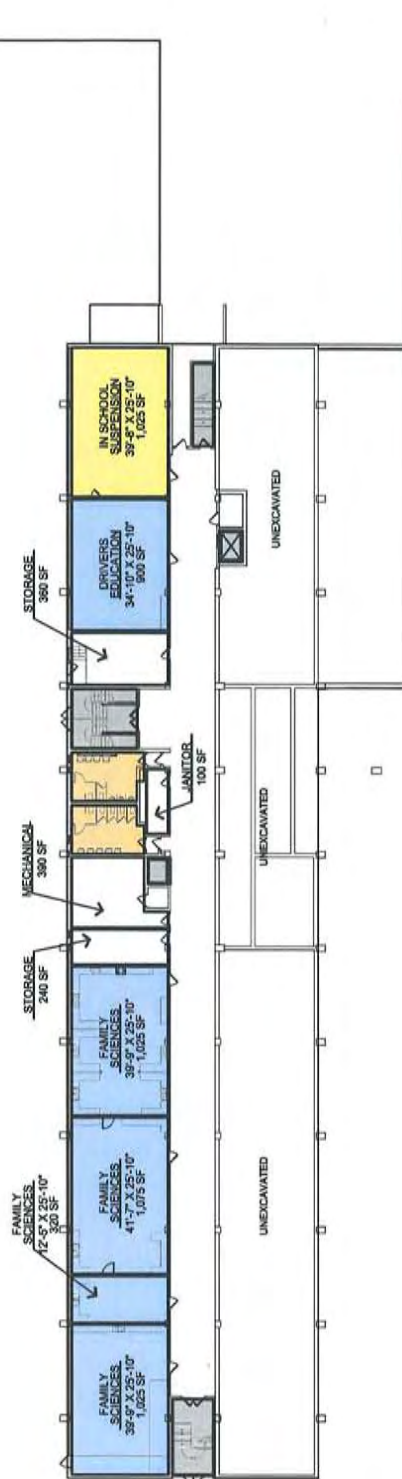
Department	Current Staffing	Projected Staffing	Notes
CORE ACADEMICS			
English	22	19	22 Students/Class
Mathematics	21	17	22 Students/Class
Social Studies	19	16	22 Students/Class
Sciences	20	17	22 Students/Class
World Languages	15	11	22 Students/Class
COURSE ELECTIVES			
Art	5	4	
Family & Consumer Science	4	4	
Business	7	6	
Technology Education	8	7	14-15 Students/Class
Physical Education	6	6	
Health	4	3	
Music	3	2	Includes: Piano, Chrous, Music Theory
Computer Technology	2	1	
Reading	4	4	
STUDENT SUPPORT			
Career Center	2	1	
Pupil Services	6	6	Social Worker, School Psychologist
Special Education	17	16	
Guidance Counselors	9	8	
ADMIN			
Principal	2	1	
Vice Principal (Grades 10-12)	5	3	
Vice Principal (Grade 9)	0	2	
TOTALS	181	154	

Key Plan



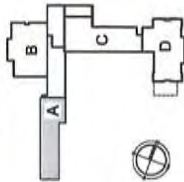
Color Key

- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms



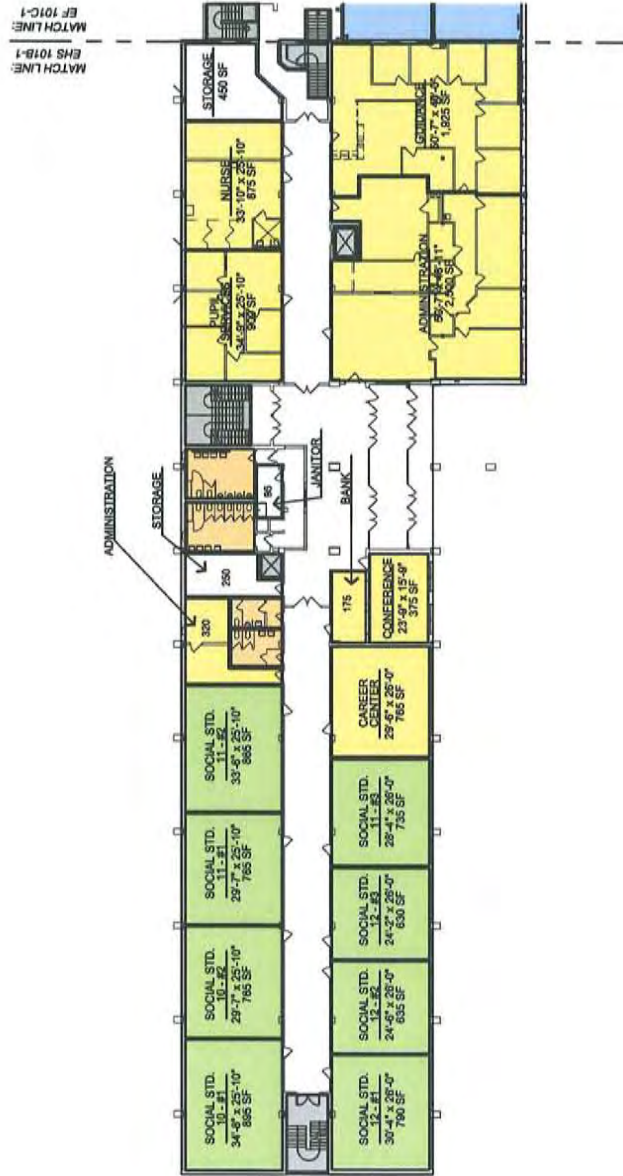
ENFIELD HIGH SCHOOL - LOWER LEVEL SCHEME 1	2010.038 10/1/2010
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY	EHS 100A-1

Key Plan



Color Key

- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms



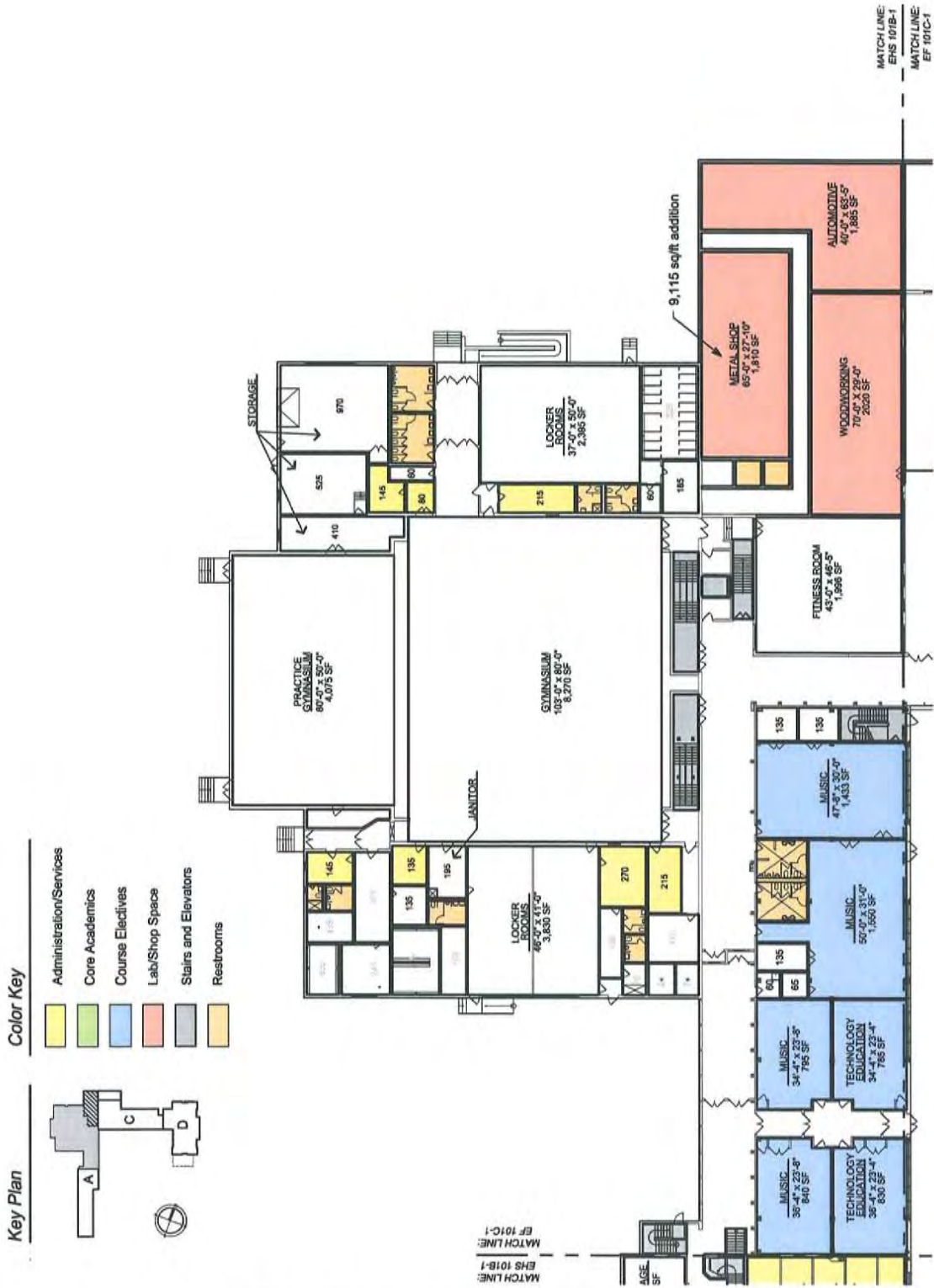
ENFIELD HIGH SCHOOL - FIRST FLOOR SCHEME 1

TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY

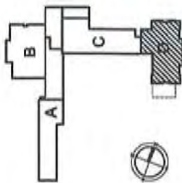
2010.038
10/1/2010

EHS 101A-1

ENFIELD HIGH SCHOOL - FIRST FLOOR SCHEME 1	2010.038 10/1/2010
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY	EHS 101B-1

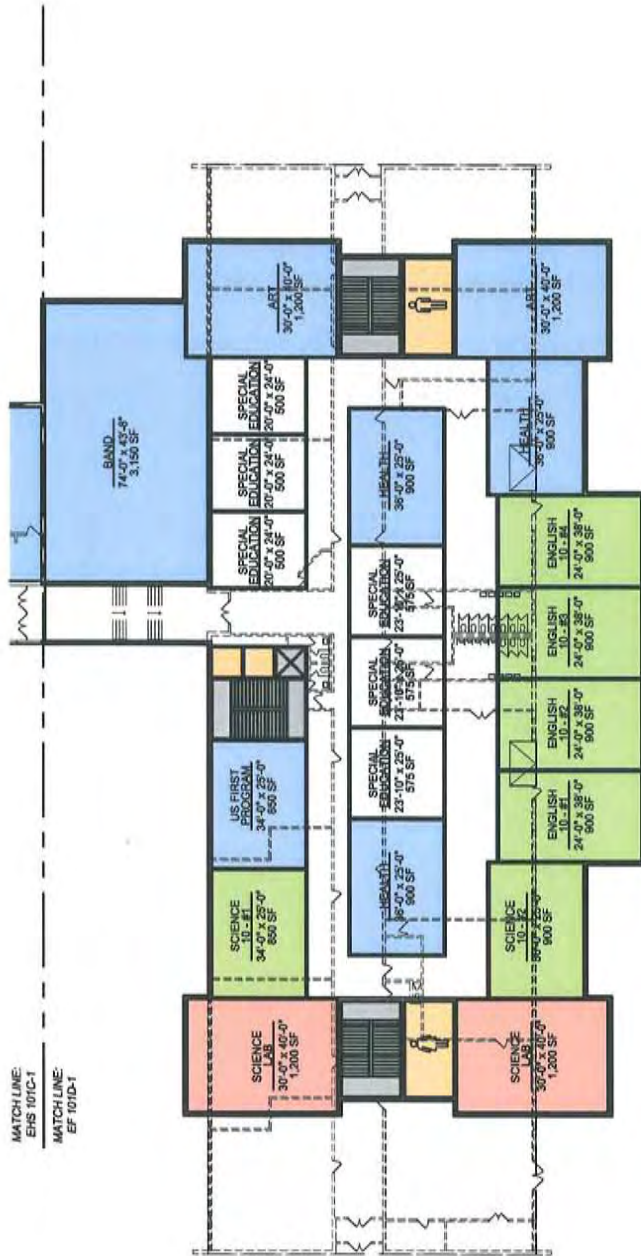


Key Plan



Color Key

- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms



ENFIELD HIGH SCHOOL - FIRST FLOOR SCHEME 1	2010.038 10/1/2010
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY	EHS 101D-1

Key Plan



Color Key

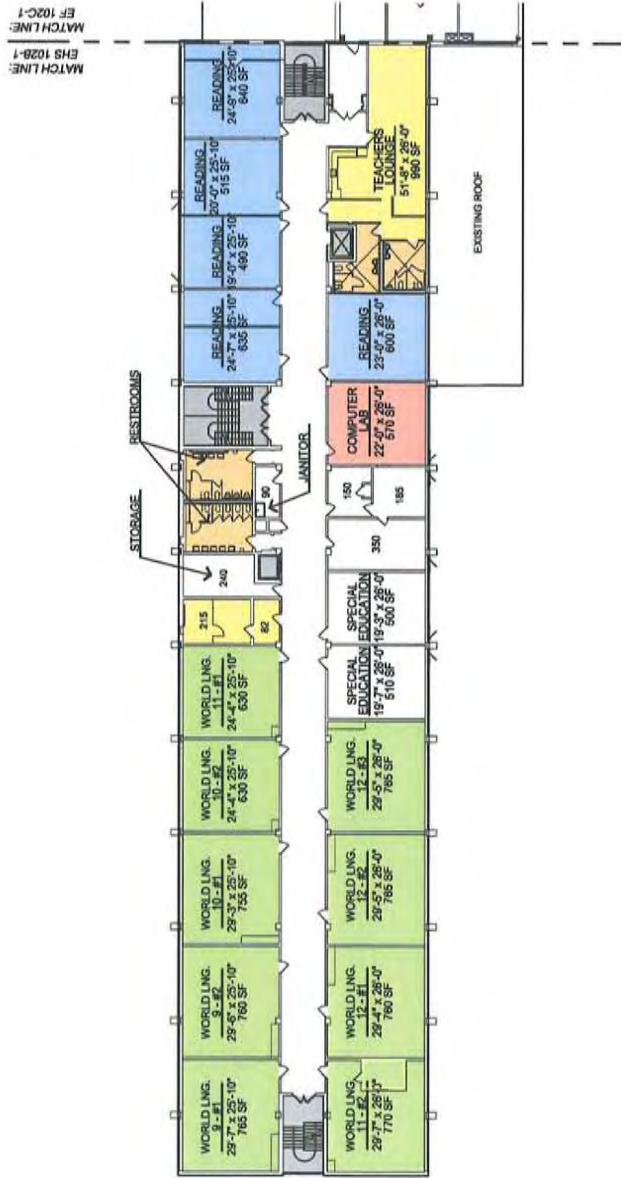
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- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms

ENFIELD HIGH SCHOOL - SECOND FLOOR SCHEME 1

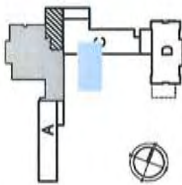
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY

2010.038
10/1/2010

EHS 102A-1

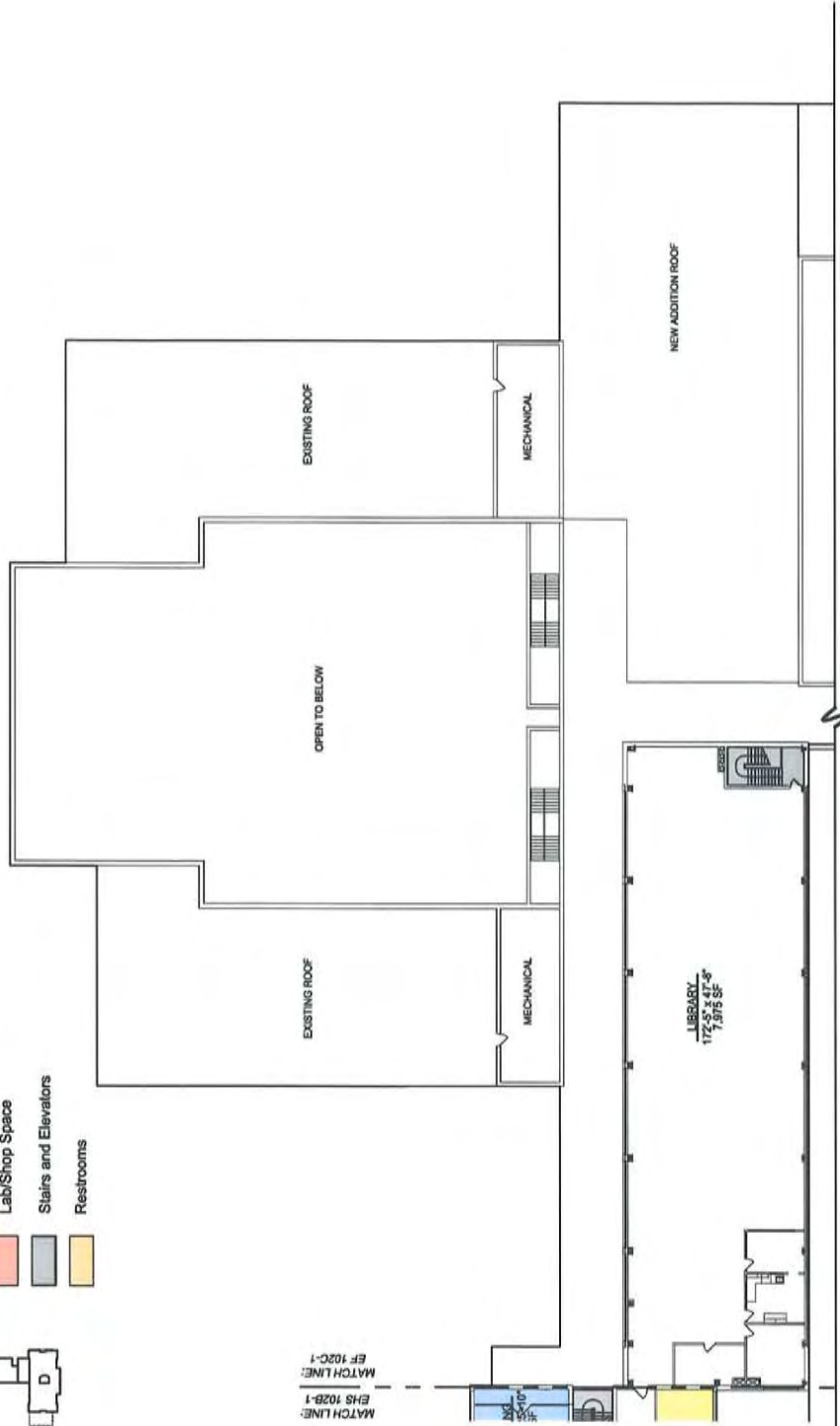


Key Plan



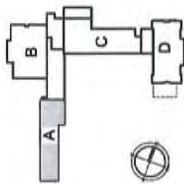
Color Key

- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms



ENFIELD HIGH SCHOOL - SECOND FLOOR SCHEME 1	2010.038 10/1/2010
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY	EHS 102B-1

Key Plan



Color Key

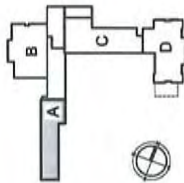
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- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms



ENFIELD HIGH SCHOOL - THIRD FLOOR SCHEME 1	2010.038 10/1/2010
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY	EHS 103A-1

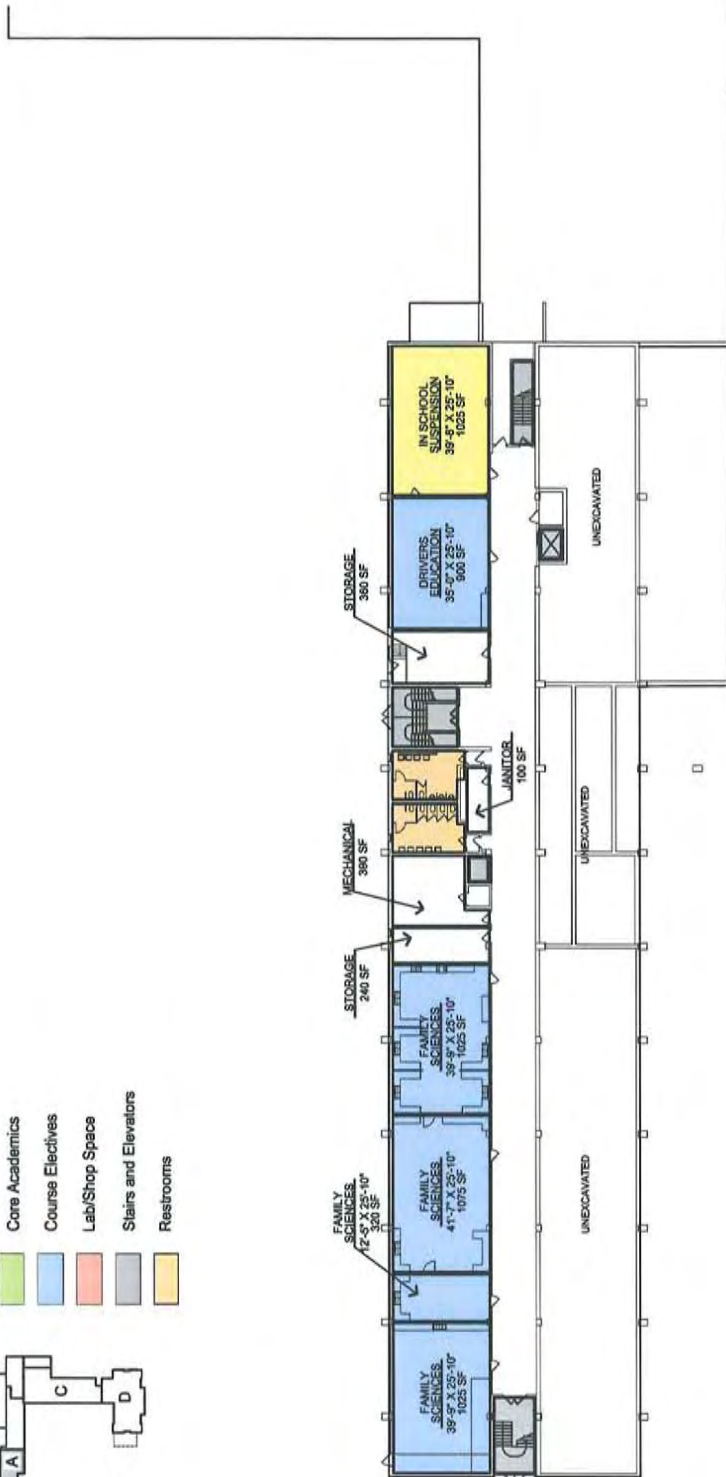
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Key Plan



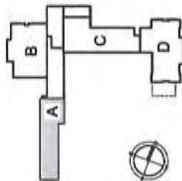
Color Key

- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms



ENFIELD HIGH SCHOOL - LOWER LEVEL SCHEME 2	2010.038 10/1/2010
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY	EHS 100A-2

Key Plan

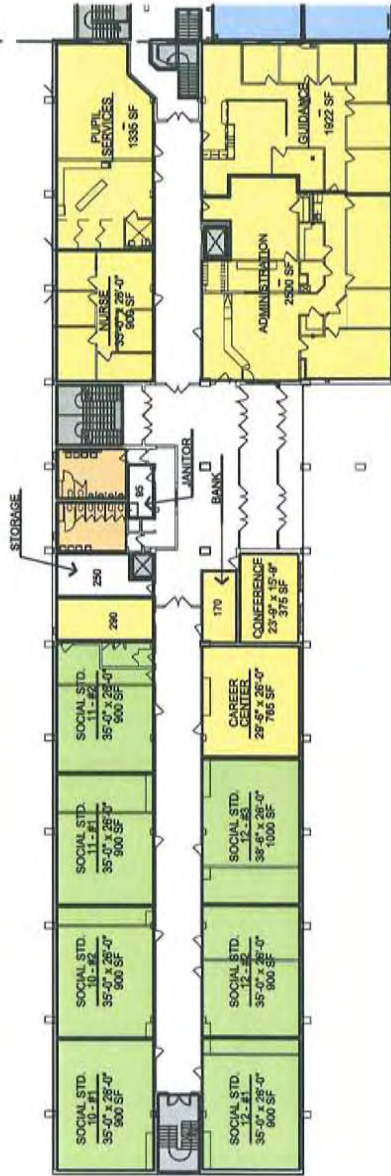


Color Key

- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms

MATCH LINE:
EHS 101A-2

MATCH LINE:
EF 101C-2



ENFIELD HIGH SCHOOL - FIRST FLOOR SCHEME 2

TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY

2010.038
10/1/2010

EHS 101A-2

MATCH LINE:
EHS 101B-2

MATCH LINE:
EF 101C-2



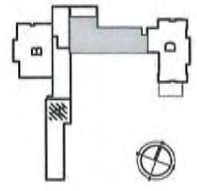
MATCH LINE:
EF 101C-2

MATCH LINE:
EF 101D-2

Color Key

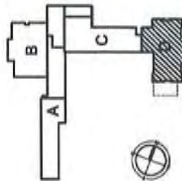
- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms

Key Plan



ENFIELD HIGH SCHOOL - FIRST FLOOR SCHEME 2	2010.038 10/1/2010
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY	EHS 101C-2

Key Plan



Color Key

- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms



NEW ADDITION FIRST FLOOR 29,650 SF

ENFIELD HIGH SCHOOL - FIRST FLOOR SCHEME 2	2010.038 10/1/2010
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY	EHS 101D-2

ENFIELD HIGH SCHOOL - SECOND FLOOR SCHEME 2

2010.038
10/1/2010

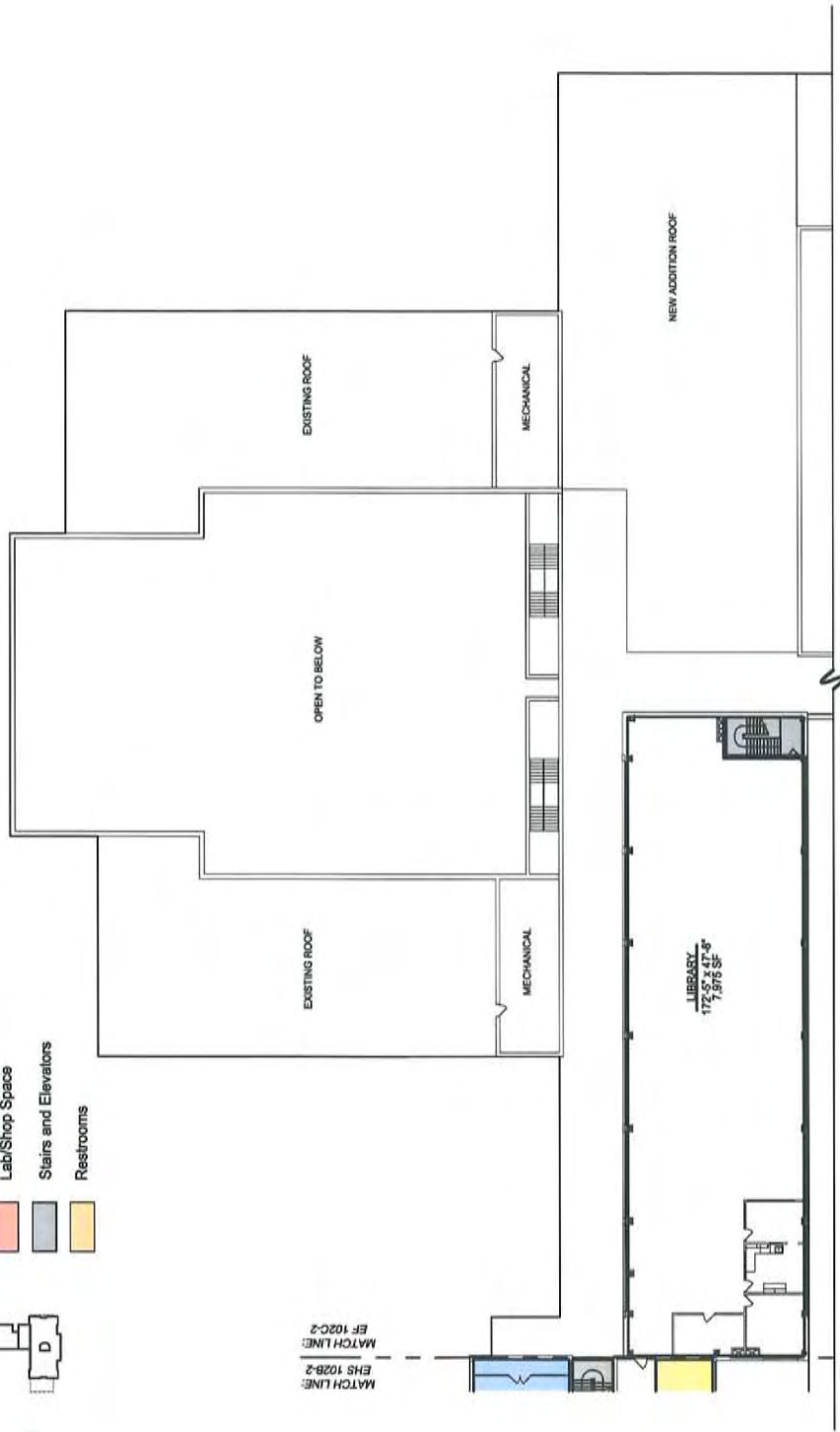
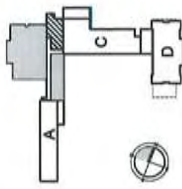
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY

EHS 102B-2

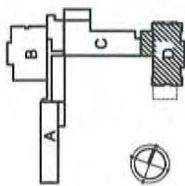
Color Key

- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms

Key Plan

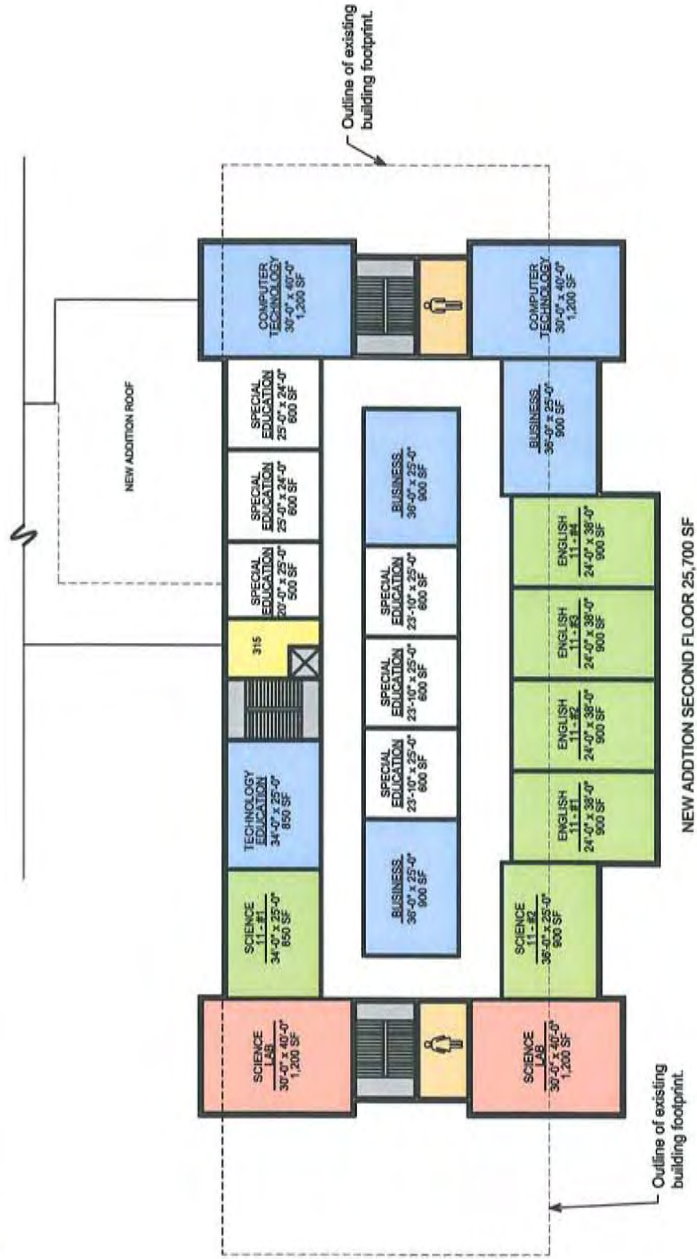


Key Plan



Color Key

- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms

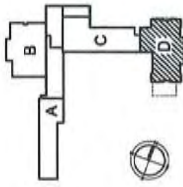


ENFIELD HIGH SCHOOL - SECOND FLOOR SCHEME 2

TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY

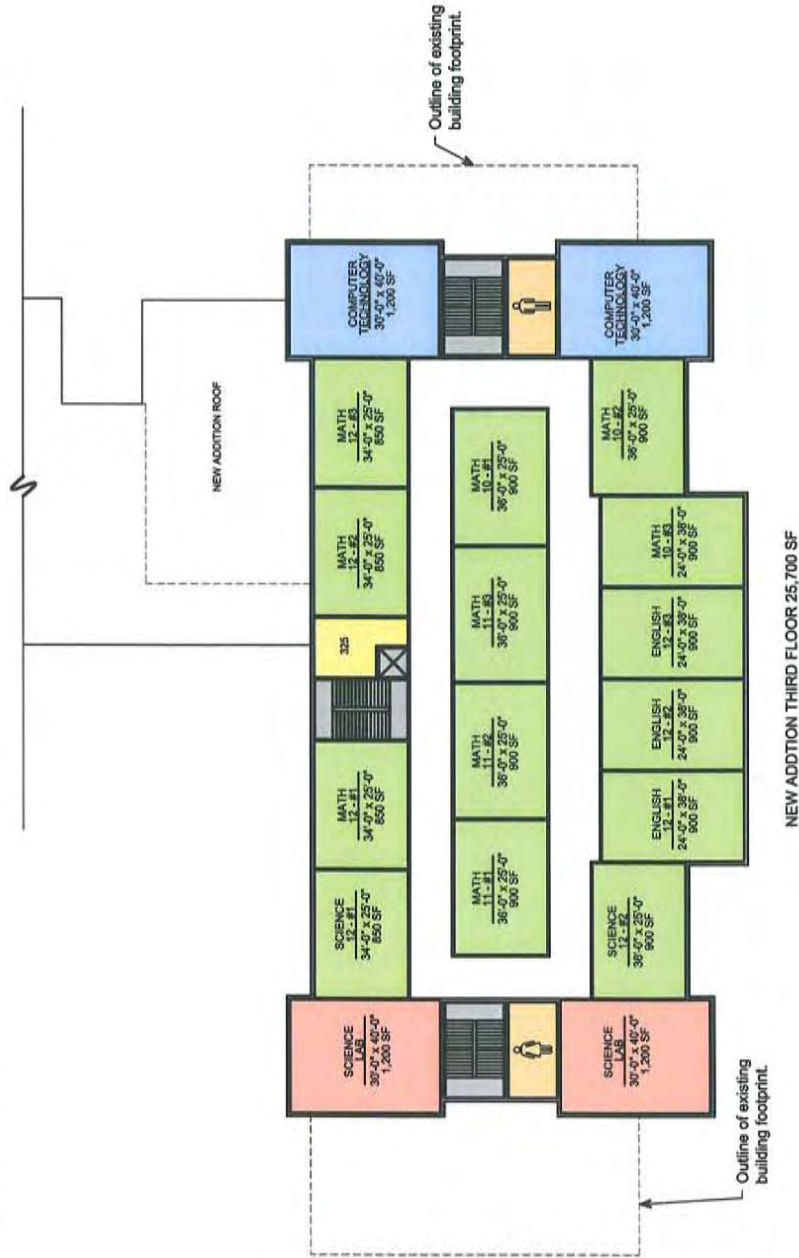
2010.038
10/1/2010
EHS 102D-2

Key Plan



Color Key

- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms



ENFIELD HIGH SCHOOL - THIRD FLOOR SCHEME 2

TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY

2010.038
10/1/2010

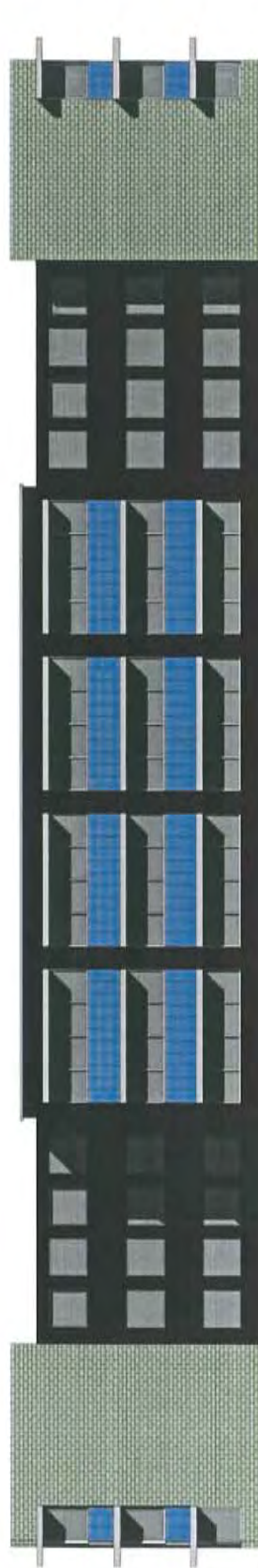
EHS 103D-2



ENFIELD HIGH SCHOOL - PERSPECTIVE	2010.038 10/1/2010
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY	EHS 200



SOUTHERN ELEVATION



WESTERN ELEVATION

Enrico Fermi High School Program

Enfield Consolidated High School - Enrico Fermi High School - Scheme 1
 Revised 10/1/2010

UNIT	Total Area		Small Classroom		Offices	Studio / Lab	Misc Spaces	Fixture Count
	Large Classroom	Small Classroom	Large Classroom	Small Classroom				
9th Grade - Core Academics	17	20,655	0	0	0	0	0	15.30
10th Grade - Core Academics	17	19,130	0	0	0	2	0	12.97
11th Grade - Core Academics	18	20,669	0	0	0	3	0	13.57
12th Grade - Core Academics	17	21,803	0	0	0	3	1	13.33
Course Electives	23	53,609	0	0	1	12	0	0.14
Student Support	0	19,487	13	4	4	0	1	11.61
Administration	0	4,719	0	4	4	0	0	0.73
Auxiliary Areas	1	121,503	0	0	0	0	41	43.37
TOTALS	93	281,575	13	9	20	43	111.01	

FULL DAY

Enfield Consolidated High School - Enrico Fermi High School - Scheme 1

Revised 10/1/2010

9th Grade - Core Academics

Total Adjusted Area	20,655
Number Large Classrooms	17
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	0
Number Misc Spaces	0
Number Fixtures	15.30

Breakdown

<i>Item</i>	<i>Tag</i>	<i>Quantity</i>	<i>SF</i>	<i>Total SF</i>	<i>Comments</i>	<i>Fixture Count</i>
English	CR	4	900	3,600	Class	3.6
Mathematics	CR	4	900	3,600	Class	3.6
Social Studies	CR	3	900	2,700	Class	2.7
Sciences	CR	4	900	3,600	Class	3.6
Science Labs	LAB	0	0	0	Lab	0
World Language	CR	2	900	1,800	Class	1.8
Storage	STOR	0	900	0	Storage	0.00

Program Raw Total	15,300
Storage	1530
Circulation	2295
Loss	1530
Total	20,655

Notes:

Enfield Consolidated High School - Enrico Fermi High School - Scheme 1
 Revised 10/1/2010

10th Grade - Core Academics

Total Adjusted Area	19,130
Number Large Classrooms	17
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	2
Number Misc Spaces	0
Number Fixtures	12.97

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	6	650	3,900	Class	3.9
Mathematics	CR	4	680	2,720	Class	2.72
Social Studies	CR	3	650	1,950	Class	1.95
Sciences	CR	2	900	1,800	Class	1.8
Science Labs	LAB	2	1,000	2,000	Lab	0.8
World Language	CR	2	900	1,800	Class	1.8
Storage	STOR	0	900	0	Storage	0.00

Program Raw Total	14,170
Storage	1417
Circulation	2126
Loss	1417
Total	19,130

Notes:

Enfield Consolidated High School - Enrico Fermi High School - Scheme 1

Revised 10/1/2010

11th Grade - Core Academics

Total Adjusted Area	20,669
Number Large Classrooms	18
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	3
Number Misc Spaces	0
Number Fixtures	13.57

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	6	650	3,900	Class	3.9
Mathematics	CR	4	680	2,720	Class	2.72
Social Studies	CR	3	650	1,950	Class	1.95
Sciences	CR	3	680	2,040	Class	2.04
Science Labs	LAB	2	1,000	2,000	Lab	0.8
Science Labs	LAB	1	900	900	Lab	0.36
World Language	CR	2	900	1,800	Class	1.8
Storage	STOR	0	900	0	Storage	0.00

Program Raw Total	15,310
Storage	1531
Circulation	2297
Loss	1531
Total	20,669

Notes:

Enfield Consolidated High School - Enrico Fermi High School - Scheme 1
 Revised 10/1/2010

12th Grade - Core Academics

Total Adjusted Area	21,803
Number Large Classrooms	17
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	3
Number Misc Spaces	1
Number Fixtures	13.33

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	4	650	2,600	Class	2.6
Mathematics	CR	4	650	2,600	Class	2.6
Social Studies	CR	4	650	2,600	Class	2.6
Sciences	CR	3	650	1,950	Class	1.95
Science Labs	LAB	2	1,200	2,400	Lab	0.96
Science Labs	LAB	1	900	900	Lab	0.36
World Language	CR	1	900	900	Class	0.9
World Language	CR	1	1,300	1,300	Class	1.3
Storage	STOR	1	900	900	Storage	0.06

Program Raw Total	16,150
Storage	1615
Circulation	2423
Loss	1615
Total	21,803

Notes:

Enfield Consolidated High School - Enrico Fermi High School - Scheme 1
 Revised 10/1/2010

Course Electives	
Total Adjusted Area	53,609
Number Large Classrooms	23
Number Small Classrooms	0
Number Offices	1
Number Studio/Labs	12
Number Misc Spaces	0
Number Fixtures	28.26

<i>Breakdown</i>	<i>Tag</i>	<i>Quantity</i>	<i>SF</i>	<i>Total SF</i>	<i>Comments</i>	<i>Fixture Count</i>
Item	LAB	1	870	870	Lab	0.348
Art	LAB	1	1,500	1,500	Lab	0.6
Art	LAB	1	1,800	1,800	Lab	0.72
Art	CR	2	700	1,400	Class	1.4
Family & Consumer Science	CR	1	1,000	1,000	Class	1
Family & Consumer Science	CR	1	1,500	1,500	Class	1.5
Family & Consumer Science	CR	4	680	2,720	Class	2.72
Business	CR	2	900	1,800	Class	1.8
Technology Education (14-15/class)	CR	1	2,200	2,200	Class	2.2
Technology Education (14-15/class)	OFF	1	600	600	Office	0.12
Physical Education	OFF	1	700	700	Office	0.14
Health	CR	4	675	2,700	Class	2.7
Music	CR	2	900	1,800	Class	1.8
Music	CR	1	1,300	1,300	Class	1.3
Computer Technology	LAB	2	1,000	2,000	Lab	0.8
Computer Technology	LAB	3	1,300	3,900	Lab	1.56
Computer Technology	LAB	1	1,400	1,400	Lab	0.56
Reading	CR	4	900	3,600	Class	3.6
Woodworking	LAB	1	1,960	1,960	Lab	0.784
Automotive	LAB	1	1,960	1,960	Lab	0.784
Metal Shop	LAB	1	1,960	1,960	Lab	0.784
Driver's Education	CR	1	1,040	1,040	Class	1.04
Storage	STOR	0	2,978	0	Storage	0.00

Program Raw Total	39,710
Storage	3971

Enfield Consolidated High School - Enrico Fermi High School - Scheme 1

Revised 10/1/2010

Circulation	5957
Loss	3971
Total	53,609

Notes:

Physical Education- See Gymnasium in Auxiliary Areas

Enfield Consolidated High School - Enrico Fermi High School - Scheme 1

Revised 10/1/2010

Student Support

Total Adjusted Area	19,487
Number Large Classrooms	0
Number Small Classrooms	13
Number Offices	4
Number Studio/Labs	0
Number Misc Spaces	1
Number Fixtures	11.61

Breakdown

<i>Item</i>	<i>Tag</i>	<i>Quantity</i>	<i>SF</i>	<i>Total SF</i>	<i>Comments</i>	<i>Fixture Count</i>
Career Center	CR	1	680	680	Class	0.68
Pupil Services	OFF	1	1,200	1,200	Business	0.24
Special Education	CR	1	1,100	1,100	Class	1.1
Special Education	CR	1	600	600	Class	0.6
Special Education	CR	3	700	2,100	Class	2.1
Special Education	CR	6	900	5,400	Class	5.4
Guidance Counselors	OFF	1	900	900	Business	0.18
Guidance Counselors	OFF	1	700	700	Business	0.14
Nurse	NURSE	1	880	880	Outpatient	0.176
In-School Suspension	CR	1	880	880	Class	0.88
Science Office	OFF	1	550	550	Business	0.11
Storage	STOR	0	1,083	0	Storage	0.00

Program Raw Total	14,990
Storage	1499
Circulation	1499
Loss	1499
Total	19,487

Notes:

Nurse's suite to have 3 staff, 5 cots and 2 accessible bathrooms (60SF each)
 In-School Suspension to include 1 accessible bathroom

Enfield Consolidated High School - Enrico Fermi High School - Scheme 1

Revised 10/1/2010

Administration

Total Adjusted Area	4,719
Number Large Classrooms	0
Number Small Classrooms	0
Number Offices	4
Number Studio/Labs	0
Number Misc Spaces	0
Number Fixtures	0.73

Breakdown

Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Principal	ADM	0	400	0	Business	0
Vice Principal 10-12	ADM	0	200	0	Business	0
Vice Principal 9	ADM	0	200	0	Business	0
Assistants	ADM	3	300	900	Business	0.18
Main Office	ADM	1	2,730	2,730	Business	0.546
Storage	STOR	0	272	0	Storage	0.00

Program Raw Total	3,630
Storage	363
Circulation	363
Loss	363
Total	4,719

Notes:

Main Office includes 4 secretaries for all grades in open office plan.
Principal's Office to include 8-person table

Enfield Consolidated High School - Enrico Fermi High School - Scheme 1

Revised 10/1/2010

Auxiliary Areas

Total Adjusted Area	121,503
Number Large Classrooms	1
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	0
Number Misc Spaces	41
Number Fixtures	43.37

Breakdown

<i>Item</i>	<i>Tag</i>	<i>Quantity</i>	<i>SF</i>	<i>Total SF</i>	<i>Comments</i>	<i>Fixture Count</i>
Cafeteria	CAFÉ	1	10,262	10,262	Assembly, 600pppl	9.12
Kitchen	KIT	1	5,900	5,900	Prep, Serving & Storage	0.59
Teacher's Lounge	TL	1	690	690	Assembly	0.92
Pool	POOL	1	7,900	7,900	Exercise	3.16
Auditorium	AU	1	9,231	9,231	Assembly, 2,000pppl	9.72
Library	LIB	1	10,800	10,800	Assembly (3 floors)	7.58
Band Room	BAND	1	2,500	2,500	150 students	1.75
Chorus Room	CHORUS	1	1,800	1,800	80 students	1.26
Locker Rooms	LR	1	900	900	1/gender	N/A
Locker Rooms	LR	1	1,100	1,100	1/gender	N/A
Locker Rooms	LR	1	4,600	4,600	1/gender	N/A
Locker Rooms	LR	1	2,700	2,700	1/gender	N/A
Gymnasium	GYM	1	11,600	11,600	Vocational	4.64
Fitness Room	GYM	1	4,600	4,600	Vocational	1.84
Bathrooms	BR	4	1,000	4,000	1/gender	N/A
Mechanical	MECH	1	2,000	2,000	Accessory	0.13
Mechanical	MECH	1	8,400	8,400	Accessory	0.56
Custodial Storage	CUST	7	50	350	Accessory	0.02
Custodial Storage	CUST	1	100	100	Accessory	0.01
Custodial Storage	CUST	2	200	400	Accessory	0.03
Conference Room	CONF	1	400	400	Business	0.08
Conference Room	CONF	1	700	700	Business	0.14
Conference Room	CONF	1	900	900	Business	0.18
US First Program	CR	1	1,190	1,190	Class	1.19
School Store	SS	1	180	180	Class	0.18
Band Storage	STOR	1	900	900	Storage	0.06
Storage	STOR	2	300	600	Storage	0.04

Enfield Consolidated High School - Enrico Fermi High School - Scheme 1

Revised 10/1/2010

Storage	STOR	3	600	1,800	Storage	0.12
Storage	STOR	1	700	700	Storage	0.05

Program Raw Total	97,203
Storage	0
Circulation	14,580
Loss	9,720
Total	121,503

Notes:

Basketball Court= 94'x 50' with 10' boundry around entire court
 Wrestling= Circle 32'-42' diameter with 5' minimum apron

Enfield Consolidated High School - Enrico Fermi High School - Scheme 1
 Revised 10/1/2010

Department	Current Staffing	Projected Staffing	Notes
CORE ACADEMICS			
English	22	19	22 Students/Class
Mathematics	21	17	22 Students/Class
Social Studies	19	16	22 Students/Class
Sciences	20	17	22 Students/Class
World Languages	15	11	22 Students/Class
COURSE ELECTIVES			
Art	5	4	
Family & Consumer Science	4	4	
Business	7	6	
Technology Education	8	7	14-15 Students/Class
Physical Education	6	6	
Health	4	3	
Music	3	2	Includes: Piano, Chrous, Music Theory
Computer Technology	2	1	
Reading	4	4	
STUDENT SUPPORT			
Career Center	2	1	
Pupil Services	6	6	Social Worker, School Psychologist
Special Education	17	16	
Guidance Counselors	9	8	
ADMIN			
Principal	2	1	
Vice Principal (Grades 10-12)	5	3	
Vice Principal (Grade 9)	0	2	
TOTALS	181	154	

Enfield Consolidated High School - Enrico Fermi High School - Scheme 2
 Revised 10/1/2010

UNIT	Total Area	Large Classroom	Small Classroom	Offices	Studio / Lab	Misc Spaces	Fixture Count
9th Grade - Core Academics	21,330	17	0	0	0	1	15.33
10th Grade - Core Academics	19,508	13	0	0	2	1	12.63
11th Grade - Core Academics	19,440	13	0	0	2	1	12.61
12th Grade - Core Academics	19,440	13	0	0	2	1	12.61
Course Electives	50,895	22	0	2	10	0	0.28
Student Support	15,379	0	10	2	0	1	8.81
Administration	5,125	0	0	4	0	1	0.73
Auxiliary Areas	111,099	1	0	0	0	29	42.52
TOTALS	262,216	79	10	8	16	35	105.53

FULL DAY

Enfield Consolidated High School - Enrico Fermi High School - Scheme 2
 Revised 10/1/2010

9th Grade - Core Academics

Total Adjusted Area	21,330
Number Large Classrooms	17
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	0
Number Misc Spaces	1
Number Fixtures	15.33

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	4	900	3,600	Class	3.6
Mathematics	CR	4	900	3,600	Class	3.6
Social Studies	CR	3	900	2,700	Class	2.7
Sciences	CR	4	900	3,600	Class	3.6
Science Labs	LAB	0	1,125	0	Lab	0
World Language	CR	2	900	1,800	Class	1.8
Storage	STOR	1	500	500	Storage	0.03

Program Raw Total	15,800
Storage	1580
Circulation	2370
Loss	1580
Total	21,330

Notes:

Enfield Consolidated High School - Enrico Fermi High School - Scheme 2

Revised 10/1/2010

10th Grade - Core Academics

Total Adjusted Area	19,508
Number Large Classrooms	13
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	2
Number Misc Spaces	1
Number Fixtures	12.63

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	4	900	3,600	Class	3.6
Mathematics	CR	3	900	2,700	Class	2.7
Social Studies	CR	2	900	1,800	Class	1.8
Sciences	CR	2	900	1,800	Class	1.8
Science Labs	LAB	2	1,125	2,250	Lab	0.9
World Language	CR	2	900	1,800	Class	1.8
Storage	STOR	1	500	500	Storage	0.03

Program Raw Total	14,450
Storage	1445
Circulation	2168
Loss	1445
Total	19,508

Notes:

Enfield Consolidated High School - Enrico Fermi High School - Scheme 2
 Revised 10/1/2010

11th Grade - Core Academics

Total Adjusted Area	19,440
Number Large Classrooms	13
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	2
Number Misc Spaces	1
Number Fixtures	12.61

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	4	900	3,600	Class	3.6
Mathematics	CR	3	900	2,700	Class	2.7
Social Studies	CR	2	900	1,800	Class	1.8
Sciences	CR	2	900	1,800	Class	1.8
Science Labs	LAB	2	1,100	2,200	Lab	0.88
World Language	CR	2	900	1,800	Class	1.8
Storage	STOR	1	500	500	Storage	0.03

Program Raw Total	14,400
Storage	1440
Circulation	2160
Loss	1440
Total	19,440

Notes:

Enfield Consolidated High School - Enrico Fermi High School - Scheme 2

Revised 10/1/2010

12th Grade - Core Academics

Total Adjusted Area	19,440
Number Large Classrooms	13
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	2
Number Misc Spaces	1
Number Fixtures	12.61

Breakdown Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
English	CR	3	900	2,700	Class	2.7
Mathematics	CR	3	900	2,700	Class	2.7
Social Studies	CR	3	900	2,700	Class	2.7
Sciences	CR	2	900	1,800	Class	1.8
Science Labs	LAB	2	1,100	2,200	Lab	0.88
World Language	CR	2	900	1,800	Class	1.8
Storage	STOR	1	500	500	Storage	0.03

Program Raw Total	14,400
Storage	1440
Circulation	2160
Loss	1440
Total	19,440

Notes:

Enfield Consolidated High School - Enrico Fermi High School - Scheme 2

Revised 10/1/2010

Course Electives	
Total Adjusted Area	50,895
Number Large Classrooms	22
Number Small Classrooms	0
Number Offices	2
Number Studio/Labs	10
Number Misc Spaces	0
Number Fixtures	28.42

Breakdown	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Item	LAB	1	1,300	1,300	Lab	0.52
Art	LAB	1	1,350	1,350	Lab	0.54
Art	LAB	1	1,500	1,500	Lab	0.6
Family & Consumer Science	CR	1	1,100	1,100	Class	1.1
Family & Consumer Science	CR	3	900	2,700	Class	2.7
Business	CR	2	900	1,800	Class	1.8
Business	CR	1	1,100	1,100	Class	1.1
Technology Education (14-15/class)	CR	3	1,000	3,000	Class	3
Physical Education	OFF	2	700	1,400	Office	0.28
Health	CR	3	900	2,700	Class	2.7
Music	CR	1	1,100	1,100	Class	1.1
Music	CR	1	1,500	1,500	Class	1.5
Music	CR	2	1,600	3,200	Class	3.2
Computer Technology	LAB	2	1,350	2,700	Lab	1.08
Computer Technology	LAB	1	1,400	1,400	Lab	0.56
Computer Technology	LAB	1	1,700	1,700	Lab	0.68
Reading	CR	4	900	3,600	Class	3.6
Woodworking	LAB	1	2,100	2,100	Lab	0.84
Automotive	LAB	1	2,100	2,100	Lab	0.84
Metal Shop	LAB	1	2,100	2,100	Lab	0.84
Driver's Education	CR	1	900	900	Class	0.9
Storage	STOR	0	2,828	0	Storage	0.00
Program Raw Total						
Storage			37,700			
Circulation			3770			
Loss			5655			
			3770			

Enfield Consolidated High School - Enrico Fermi High School - Scheme 2
Revised 10/1/2010

Total 50,895

Notes:
Physical Education- See Gymnasium in Auxiliary Areas

Enfield Consolidated High School - Enrico Fermi High School - Scheme 2
 Revised 10/1/2010

Student Support	
Total Adjusted Area	15,379
Number Large Classrooms	0
Number Small Classrooms	10
Number Offices	2
Number Studio/Labs	0
Number Misc Spaces	1
Number Fixtures	8.81

Breakdown	Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
	Career Center	CR	1	600	600	Class	0.6
	Pupil Services	OFF	1	1,180	1,180	Business	0.236
	Special Education	CR	2	400	800	Class	0.8
	Special Education	CR	3	500	1,500	Class	1.5
	Special Education	CR	1	750	750	Class	0.75
	Special Education	CR	1	800	800	Class	0.8
	Special Education	CR	1	2,700	2,700	Class	2.7
	Guidance Counselors	OFF	1	1,700	1,700	Business	0.34
	Nurse	NURSE	1	900	900	Outpatient	0.18
	In-School Suspension	CR	1	900	900	Class	0.9
	Storage	STOR	0	887	0	Storage	0.00

Program Raw Total	11,830
Storage	1183
Circulation	1183
Loss	1183
Total	15,379

Notes:
 Nurse's suite to have 3 staff, 5 cots and 2 accessible bathrooms (60SF each)
 In-School Suspension to include 1 accessible bathroom

Enfield Consolidated High School - Enrico Fermi High School - Scheme 2

Revised 10/1/2010

Administration

Total Adjusted Area	5,125
Number Large Classrooms	0
Number Small Classrooms	0
Number Offices	4
Number Studio/Labs	0
Number Misc Spaces	1
Number Fixtures	0.73

Breakdown

Item	Tag	Quantity	SF	Total SF	Comments	Fixture Count
Principal	ADM	0	400	0	Business	0
Vice Principal 10-12	ADM	0	200	0	Business	0
Vice Principal 9	ADM	0	200	0	Business	0
Assistants	ADM	3	250	750	Business	0.15
Main Office	ADM	1	2,893	2,893	Business	0.5786
Storage	STOR	0	273	0	Storage	0.00
School Store	ADM	1	300	300	Business	

Program Raw Total	3,943
Storage	394
Circulation	394
Loss	394
Total	5,125

Notes:

Main Office includes 4 secretaries for all grades in open office plan.
Principal's Office to include 8-person table

Enfield Consolidated High School - Enrico Fermi High School - Scheme 2

Revised 10/1/2010

Auxiliary Areas

Total Adjusted Area	111,099
Number Large Classrooms	1
Number Small Classrooms	0
Number Offices	0
Number Studio/Labs	0
Number Misc Spaces	29
Number Fixtures	42.52

Breakdown

<i>Item</i>	<i>Tag</i>	<i>Quantity</i>	<i>SF</i>	<i>Total SF</i>	<i>Comments</i>	<i>Fixture Count</i>
Cafeteria	CAFÉ	1	10,262	10,262	Assembly, 600ppl	9.12
Kitchen	KIT	1	5,900	5,900	Prep,Serving & Storage	0.59
Teacher's Lounge	TL	1	770	770	Assembly	1.03
Pool	POOL	1	7,926	7,926	Exercise	3.17
Auditorium	AU	1	9,231	9,231	Assembly, 2,000ppl	9.72
Library	LIB	1	8,440	8,440	Assembly	5.92
Band Room/Storage	BAND	1	3,900	3,900	150 students	2.74
Chorus Room	CHORUS	1	1,800	1,800	80 students	1.26
Locker Rooms	LR	2	900	1,800	1/gender	N/A
Locker Rooms	LR	1	2,700	2,700	1/gender	N/A
Locker Rooms	LR	1	4,600	4,600	1/gender	N/A
Gymnasium	GYM	1	11,600	11,600	Vocational	4.64
Fitness Room	GYM	1	6,250	6,250	Vocational	2.5
Bathrooms	BR	4	1,000	4,000	1/gender	N/A
Mechanical	MECH	1	2,000	2,000	Accessory	0.13
Mechanical	MECH	1	2,700	2,700	Accessory	0.18
Custodial Storage	CUST	1	600	600	Accessory	0.04
Conference Room	CONF	1	300	300	Business (10 people)	0.06
Conference Room	CONF	1	900	900	Business(20-30 people)	0.18
US First Program	CR	1	1,100	1,100	Class	1.1
Science Lab Storage	STOR	2	350	700	Storage	0.05
Storage	STOR	1	900	900	Storage	0.06
Storage	STOR	1	400	400	Storage	0.03
Storage	STOR	1	100	100	Storage	0.01
Program Raw Total						
Storage						

88,879
0

98

Enfield Consolidated High School - Enrico Fermi High School - Scheme 2

Revised 10/1/2010

Circulation	13332
Loss	8888
Total	111,099

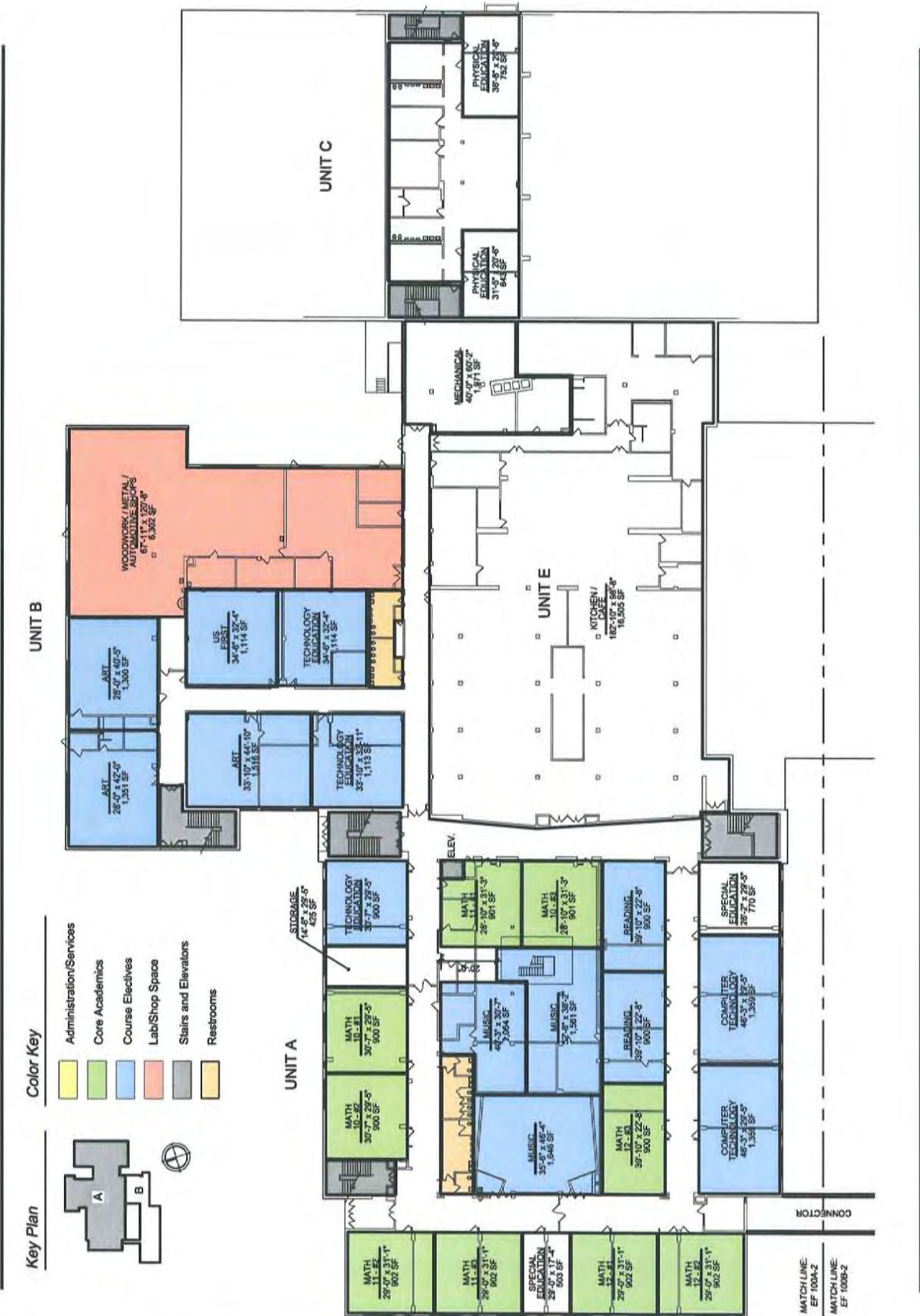
Notes:

Basketball Court= 94'x 50' with 10' boundry around entire court
Wrestling= Circle 32'-42' diameter with 5' minimum apron

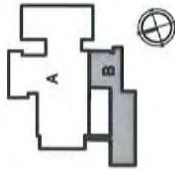
Enfield Consolidated High School - Enrico Fermi High School - Scheme 2

Revised 10/1/2010

Department	Current Staffing	Projected Staffing	Notes
CORE ACADEMICS			
English	22	19	22 Students/Class
Mathematics	21	17	22 Students/Class
Social Studies	19	16	22 Students/Class
Sciences	20	17	22 Students/Class
World Languages	15	11	22 Students/Class
COURSE ELECTIVES			
Art	5	4	
Family & Consumer Science	4	4	
Business	7	6	
Technology Education	8	7	14-15 Students/Class
Physical Education	6	6	
Health	4	3	
Music	3	2	Includes: Piano, Chrous, Music Theory
Computer Technology	2	1	
Reading	4	4	
STUDENT SUPPORT			
Career Center	2	1	
Pupil Services	6	6	Social Worker, School Psychologist
Special Education	17	16	
Guidance Counselors	9	8	
ADMIN			
Principal	2	1	
Vice Principal (Grades 10-12)	5	3	
Vice Principal (Grade 9)	0	2	
TOTALS	181	154	

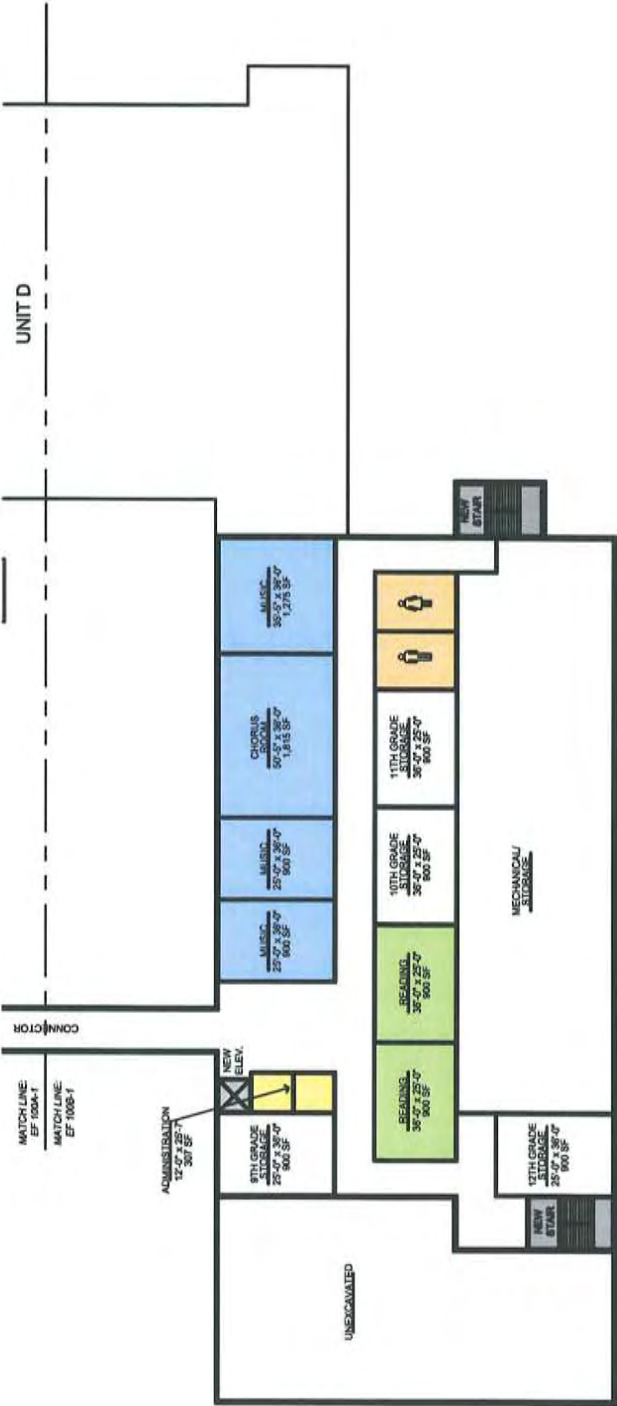


Key Plan



Color Key

- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms



NEW ADDITION LOWER LEVEL - 27,734 SF

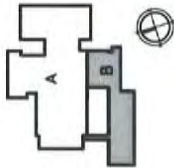
ENRICO FERMI HIGH SCHOOL - LOWER LEVEL SCHEME 1

2010.038
10/1/2010

TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY

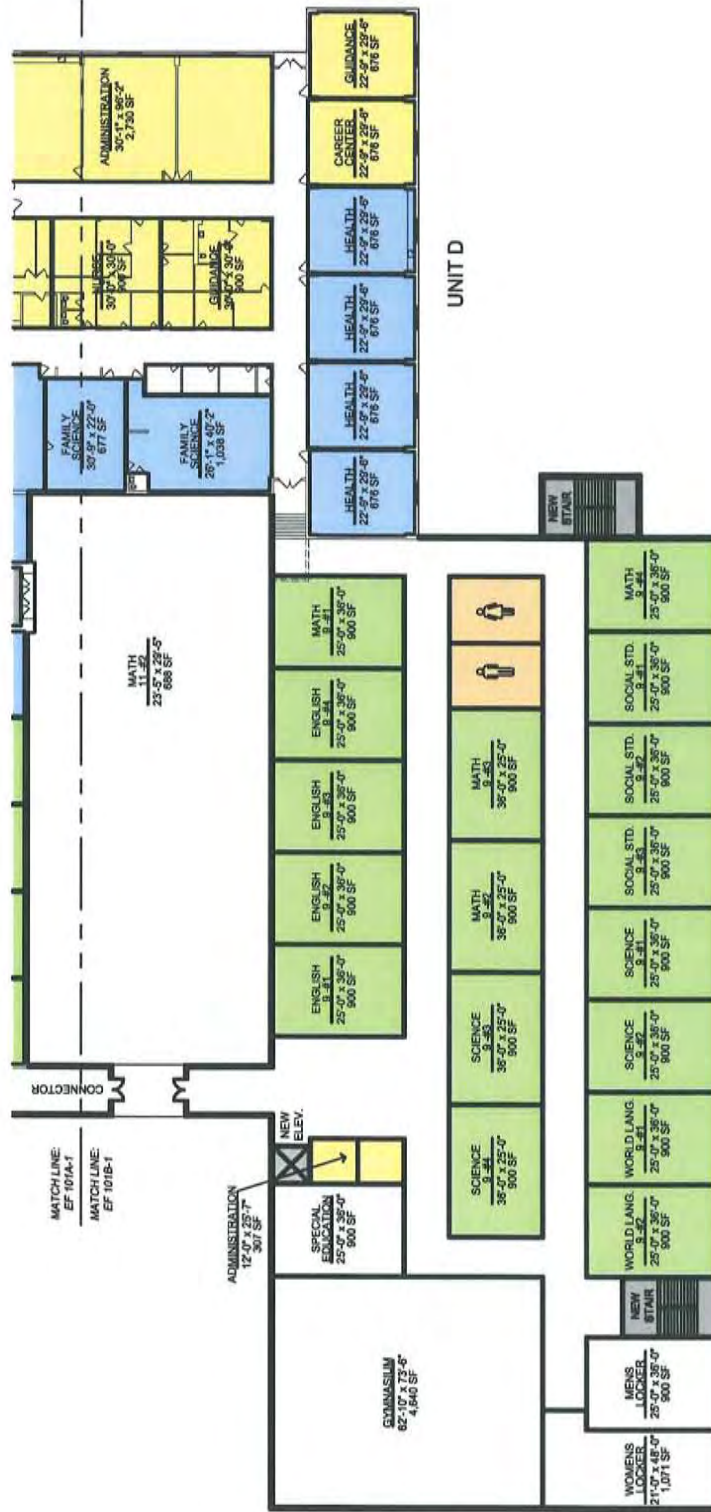
EF 100B-1

Key Plan



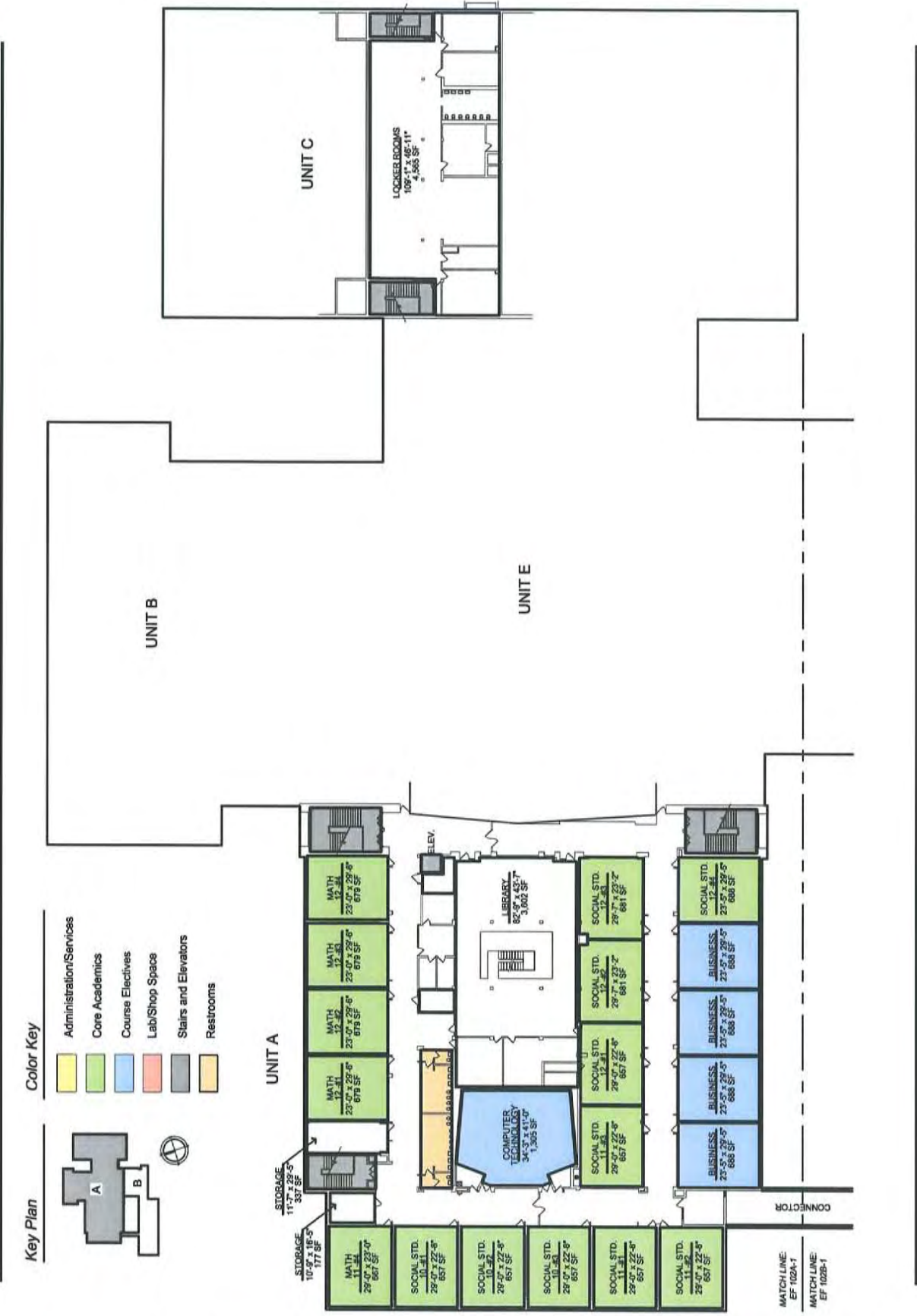
Color Key

- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms



NEW ADDITION FIRST FLOOR 16,370 SF

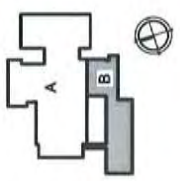
ENRICO FERMI HIGH SCHOOL - FIRST FLOOR SCHEME 1	2010.038 10/1/2010
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY	EF 101B-1





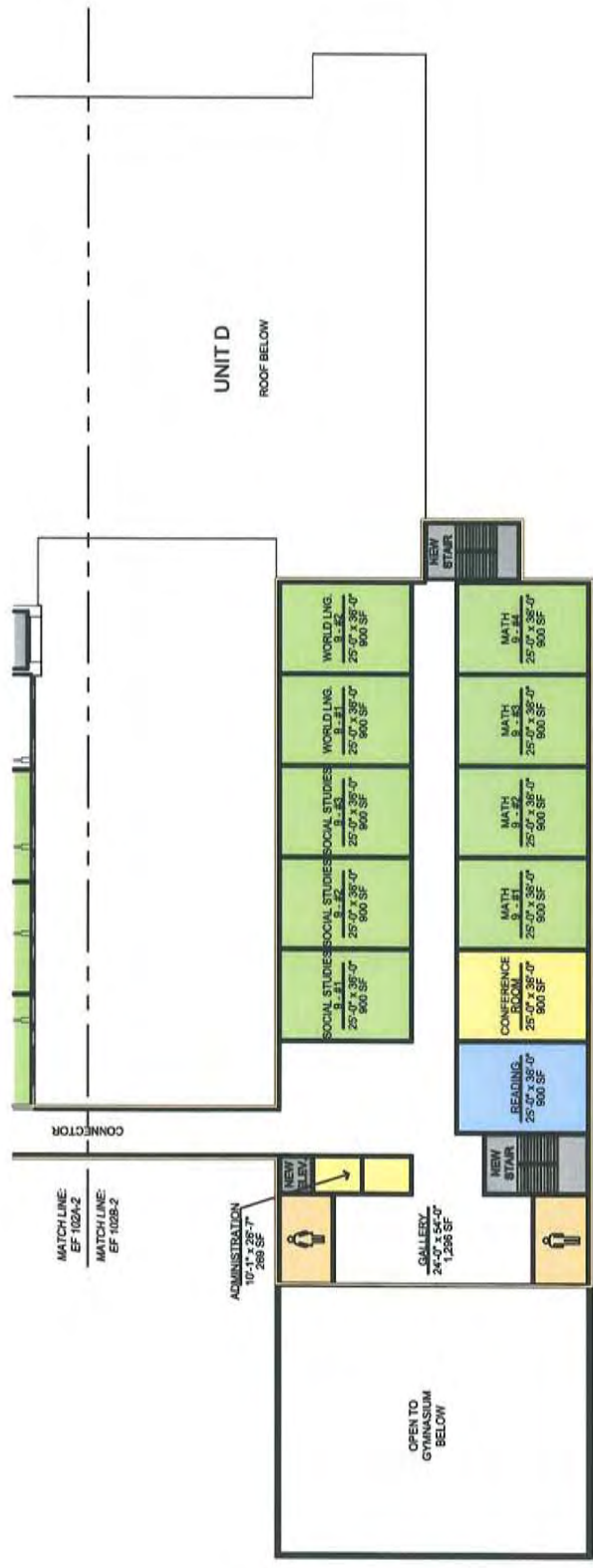
ENRICO FERMI HIGH SCHOOL - SECOND FLOOR SCHEME 2	2010.038 10/1/2010
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY	EF 102B-2

Key Plan



Color Key

- Administration/Services
- Core Academics
- Course Electives
- Lab/Shop Space
- Stairs and Elevators
- Restrooms



NEW ADDITION SECOND FLOOR 18,550 SF



ENRICO FERMI HIGH SCHOOL - PERSPECTIVE	2010.038 10/1/2010
TOWN OF ENFIELD - HIGH SCHOOL CONSOLIDATION STUDY	EF 200



NORTHERN ELEVATION



WESTERN ELEVATION

TRAFFIC

Fermi is more centrally located in Enfield, it is located on a major arterial, North Main Street and on a collector road, Moody Road that can better accommodate the increased traffic volumes, the traffic volumes on the individual roadways are lower, and proportionally it is less of a percentage increase in traffic volume required for the consolidation and would not burden the residential areas with additional traffic volumes and parking.

Enfield Traffic Study Data

	Enfield H.S.	Fermi H.S.	New High School Projected Totals
Students	823	1158	1981
Faculty	71	89	
Staff	<u>14</u>	<u>21</u>	
Total	85	110 (grand total 195)	179*
Busses	15	20	27 **
Available	140 staff + visitor	160 staff + visitor	179
Parking	<u>240 student</u> 380 total	<u>209 student</u> 369 total	<u>350</u> 529
Utilized			
Parking	187***	256***	412***
Parking Required By Zoning	526	617	800
Access	1 main driveway 1 back driveway	4 main driveways	

*Current professional staff = 160
 Current non-professional staff = 35
 Projected total = 154 professional staff + 25 non-professional (estimated)

** Current number of busses serving the Middle school and servicing the whole town

*** Actual parked vehicles were counted between 9:00 and 10:00 am on September 7, 2010.

Traffic Notes:

The driveway to Enfield High School also provides access to 49 vehicles parked near the Head Start building and was not included in the totals.

Student parkers will increase as Juniors obtain drivers licenses and cars but are controlled by permit to a maximum of 350.

Projected vehicles used in the evaluation include the vehicles counted minus the reduction in staff.

Traffic Volumes (Average Daily Traffic) from CTDOT data:

Route 5 (Enfield Street): 14,600 south of South Road, 11,700 North of South Road
Route 192 (North Main Street) : 4600 south of Moody Road
Moody Road: 7400 West of Route 192

SITE

The following plans show the proposed site improvements needed to accommodate the consolidated use for both the Enfield High School and Enrico Fermi High School sites. Improvements are summarized as follows.

Enfield High School

Building improvements –

New 4,000 square foot addition to the C Wing to provided added cafeteria space
Demolish the existing D Wing and construct a new 3-story 85,000 square foot building.

Parking

Maintain existing 393 parking spaces. This includes the 95-space lot at the base of the hill on Pearl Street adjacent to the athletic fields.

Provide an additional 450 spaces. New spaces are proposed in the east side and southeast side of the site to provide a total space count on the high side of the site adjacent to the school of 667 spaces. A supplemental 137 space lot is proposed at the base of the hill to provide the additional spaces needed to meet zoning requirements of 800 spaces needed for the consolidated school use.

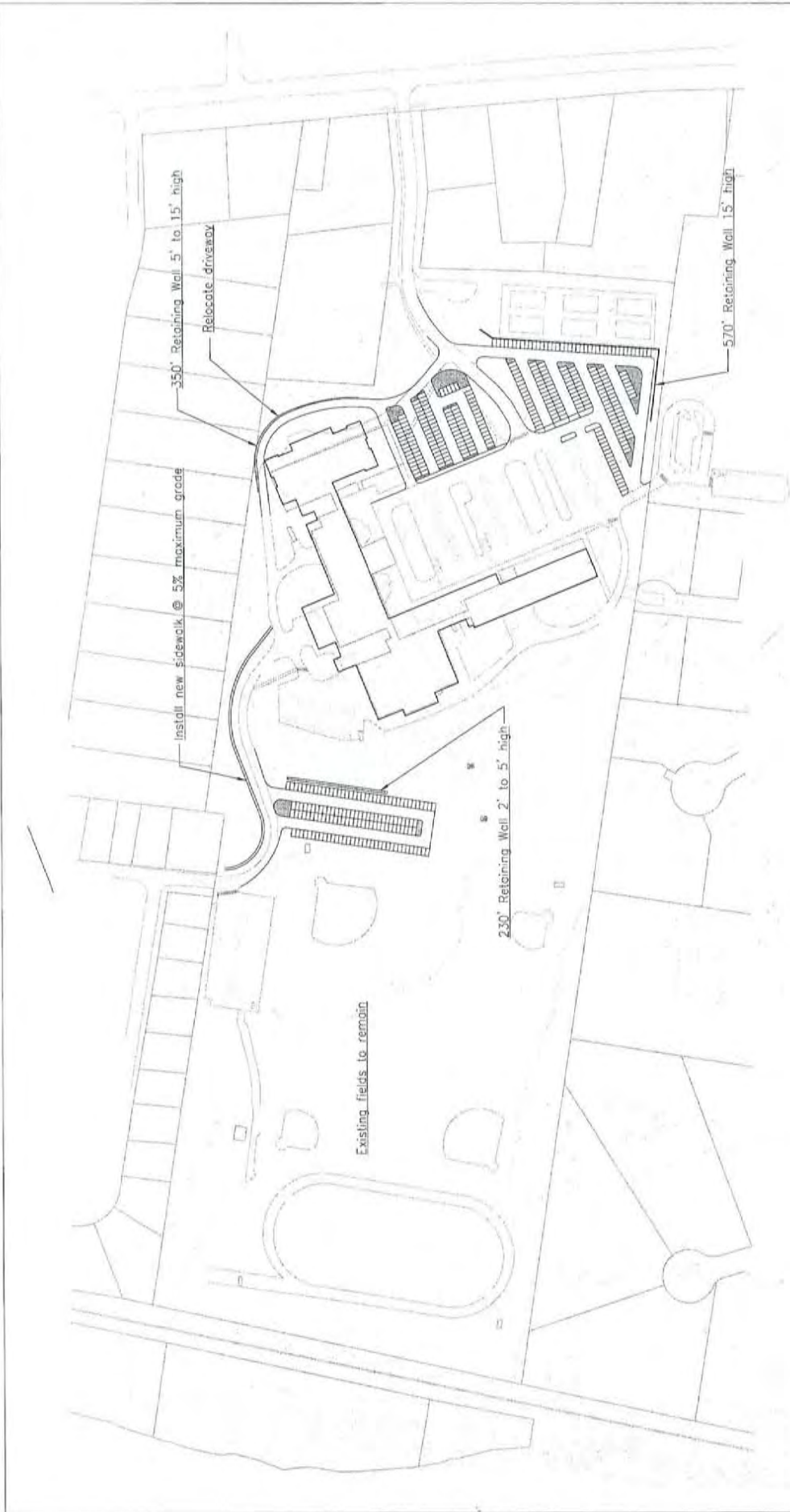
Additional site needs

To accommodate the new D Wing building addition the existing driveway for access to the rear of the school and athletic field area and Pearl Street the roadway will need to be relocated eastward and cut into the existing hillside. Due the steep hill and proximity to the property line and residential properties a wall will be required. The wall will be approximately 350 feet long and vary in height from 5 to 15 feet.

To construct the new parking lot adjacent to the tennis courts to remain a retaining wall of approximately 50 feet long and height of approximately 15 feet would be needed to accommodate the grade difference.

To construct the lower 137-space parking lot and provide separation to the ball fields a retaining wall will be needed due to the steep hill. A wall approximately 200 feet long ranging in height fro 2 to 5 feet will be required.

To meet ADA access needs from the lower lot area to the school at the top of Enfield High School



Parking Space Summary
 Existing spaces east side to remain - 193
 Existing spaces NW corner to remain - 65
 Existing spaces back center to remain - 12
 Existing spaces at Pearl Street to remain - 95
 New spaces SE corner - 179
 New spaces east side - 128
 New spaces in rear at bottom of hill - 135
Total = 807

DRAWING TITLE: ENFIELD HIGH SCHOOL CONSOLIDATION STUDY	
PROJECT NO.: DATE: 09/07/2010	SCALE: 1/100
SHEET: OF	CHECKED BY: J.E.
DESIGN BY: Y.M.	
 GMP Associates, Inc. 115 Columbia Street Danbury, CT 06810	
(SEAL)	

108-A

Enrico Fermi High School

Building improvements –

New addition proposed on the west side of the existing school building. For scheme 1 the addition would be 55,000 square feet. For scheme 2 the addition would be reduced to 35,000 square feet by reorienting the existing school layout.

Parking

Maintain existing 369 parking spaces.

New parking spaces in the open area between the existing lots on the south side north of the tennis courts. These spaces will require removal of the existing paddleball court.

New parking in the southwest corner.

New parking in the west side to supplement the existing spaces. Due to the new addition and spaces reorientation of the internal roadways will be needed.

New spaces on the northwest corner of the site.

New spaces in the existing infield of the turnaround area on the north side of the site. This lot will require removal of the existing knoll, which could be contaminated materials. The new spaces would provide the additional spaces needed to meet the 800 required by zoning regulations for the consolidated use.

Additional site needs

Relocation of the paddleball court would be needed and if desired. A possible location on the west side of the tennis courts is shown on the attached plan. Tree clearing would be required.

Structural

It is anticipated that the addition would be framed with structural steel. This is generally considered to be the most economical system for schools in the northeast. Conventional concrete spread footings should be suitable to support the additions. The existing drawings indicate that both Enfield and Fermi are supported on concrete spread footings. This foundation type appears to be performing adequately. Some renovations are anticipated to the existing structural systems, at least to accommodate new HVAC systems.

IV. Design Elements and Discussion

Design elements were considered to implement the consolidated school. The elements are listed and discussed for compatibility below.

Site, Structural, Traffic and MEP

Accommodate Traffic – This element was looked at based on the access routes to and from the schools in the proposed consolidated use. As noted in the traffic section, Enfield High School was not considered the preferred site due to the proximity of residential neighborhoods and the local streets through those neighborhoods used as access routes to and from the school. With Enrico Fermi High School access directly from a state route and collector street, the Enrico Fermi High School access would be preferred.

Ability to accommodate school session during construction

This element considered the disturbance to school operations during construction of the new addition. It is expected that the school would be in session during certain phases of the construction, particularly new construction outside the existing building footprint. Because Enrico Fermi High School has a new addition separate from the existing building it is expected the addition could be constructed with minimal disturbance to current school operations. The addition at Enfield High School will require demolition of the existing D Wing and therefore more disruption and loss of space. This would be a negative when considering the Enfield High School site.

Usable space in existing building

This item considered the existing space to remain from the existing school for use in the consolidated use. Areas would include the common areas, e.g. gymnasium, auditorium, library and classrooms to remain. Due to the larger enrollment larger common areas would be an advantage. Based on a review of the areas in Enrico Fermi High School and Enfield High School, both have comparable facilities (auditorium 586 seats at Fermi vs. 597 seats at Enfield, total gymnasium space at 11,595 SF at Fermi (one gym) vs. Enfield of 12,345 SF (two gyms), library space 3,602 SF (3 floors) at Fermi vs. 7,975 SF (1 floor) at Enfield)). For this evaluation Enfield High School was considered to have a slight advantage due to the one story library under the scheme 1 option. Under the scheme 2 option the library at Enrico Fermi High School is proposed as a one story use.

Least impact to residential neighborhoods

Based on its location on a state hwy and collector road and with bus and vehicle operations that have access directly on these roadways, Fermi High School has least impact to residential areas. Current and proposed bus and vehicle access at Enfield High School is through residential neighborhoods, which would increase with the added bus, staff and student with the consolidated school.

Ability of the site to accommodate parking needs

The study was evaluated based on the sites ability to accommodate parking based on zoning requirements. Zoning would require 800 spaces based on the base line program developed for the consolidated high school (1 per faculty and staff = 154, 1 per 4 seats of auditorium seating = 149, 4 per classroom = 496). The parking lot

layout for both schools is shown on the site plans in Section IV. Enrico Fermi High School can accommodate the parking immediately around and convenient to the building. Based on discussion with Town staff, an additional driveway from North Maple Street could be considered at the southwest corner of student lot located on the south side of the site to enhance improve traffic operations. Enfield High School requires two lots at the base of the hill with a total of 232 spaces, not convenient to the school. A sidewalk would also need to be added that would provide safe access to the parking lots and meet ADA grade requirements. Distance between the school and the two lots is 400 and 650 feet.

Convenience to Town residents

Fermi High School is centrally located in the Town and therefore more convenient to the whole of Town residents. Enfield although located in a higher density area is located on the west side of Town and not convenient to residents outside that area.

Structural compatibility to new expansion work

Enfield High School's four story reinforced concrete classroom wing and the long span roof trusses over the gymnasium, locker rooms, cafeteria, auditorium and band rooms make it difficult to renovate and support new mechanical equipment. Fermi High School is framed with structural steel. Fermi too has steel roof joists though the spans are typically less. Adding in additional members, if needed, is more feasible. Structural steel buildings are much easier to retrofit and reinforce compared to reinforced concrete frame buildings. Based on the above, Enrico Fermi High School has a constructability advantage over Enfield to accommodate new work.

Condition of existing structure

The exposed exterior columns at the four-story classroom wing of Enfield High School are in need of repairs. They will continue to require patching, repairs and surface coating on a periodic basis. At Enfield High School the existing 2003 – 2004 addition was reviewed and we have some concerns with the lateral force resisting system.

Almost all of the structure at Fermi High School is enclosed within the building envelope, providing protection from deterioration with no structural concerns noted.

View

Enfield High School has a very scenic view from the west side of the building toward the athletic fields and distant trees. It was noted to be an important feature of the by school staff.

Flood Zone (not in a 100 flood zone – 2008 mapping)

Neither school is affected by the 100 year flood therefore neither school has an advantage over the other.

Program compatibility

The schools were compared to the base line developed for the consolidated high school. Enfield High School has less square foot in the final configuration and

therefore falls slightly short of the program but both schools could accommodate the classroom and space needs.

Environmental

It is known that Fermi High School has site contamination due to its past history as a tobacco field. It can be expected that any excavation would require cleanup measures, particularly in the knoll area on the north side infield area proposed as new parking lot. No site related environmental issues are known at Enfield High School. Both schools could have internal environmental issues with asbestos and or lead paint.

Building addition requirement

Enfield High School is proposed with a 93,000 SF over the existing school square foot and requires demolition of the existing D Wing. Fermi High School is proposed with 94,000 SF over the existing building size for scheme 1 and 55,000 SF with scheme 2. Enrico Fermi High School has an advantage as no building demolition is needed and the smaller addition in Scheme 2.

Athletic fields – outdoor / indoor

Enrico Fermi High School fields were recently improved, including the baseball, softball track and football fields. The fields at Fermi High School are also convenient to the school and gymnasium. Enfield High School has a updated track and football field but the fields are far down the hill in the rear of the school and not convenient to the gymnasium area. Indoor gymnasium space is comparable (11,595 SF at Fermi (one gym) vs. Enfield of 12,345 SF (two gyms). Enrico Fermi High School has an indoor pool with no pool at Enfield High School.

Site accessibility

Enfield High School has a very hilly terrain with the total grade difference from the far west side to east side having an approximate 85-foot grade change. Enrico Fermi High School is flat with the grade difference no more than 10 feet over the entire site. Although it appears Enfield High School can be made to meet ADA with new construction such as the sidewalk along the roadway to Pearl Street, the flatter site would favor ADA and therefore be considered advantageous.

Mechanical Electrical Plumbing

Mechanical systems in both buildings are dated and should be replaced. Electrical systems in both schools are dated and fire alarm systems do not meet ADA compliance and should be replaced. Plumbing systems in both buildings should be evaluated and areas dating to the original building replaced. Fixtures, faucets and flush valves should be upgraded for energy and water conservation standards and full compliance to ADA. Fire protection system in Enrico Fermi High School was installed 8-10 years ago with a 50 hp fire pump. Enfield High School has partial coverage with no fire pump and would require installation in the existing building.

Architectural Elements

Three categories were considered; Envelope, Interior Elements and Auxiliary Areas.

Roofing

The roofing on both buildings is in similar condition and requires ongoing maintenance and eventual replacement. Neither roof meets current code requirements for low-slope (flat) roofing. Enfield High School rates slightly higher in this category because of its smaller area and thus lower replacement cost. Enfield High School also benefits from the planned demolition of "D" wing which further reduces the area of existing roofing.

Walls (exterior)

The exterior wall construction for both buildings is similar and both buildings are in similar condition. There is no drainage cavity at Enfield High School but the information we have indicates a 2 inch cavity at Enrico Fermi. Neither building has any insulation in the wall construction.

Doors

Exterior doors are included in the comparison matrix to account for age, hardware, thermal resistance and accessibility. Even though Enrico Fermi High School has more exterior doors than Enfield High School, it scores higher in this category because there are fewer grade issues at Enrico Fermi than at Enfield High School.

Windows

Generally, each building's windows are outdated single pane type with non-thermally broken frames and should be replaced as part of any modernizing project. Enfield High School scored higher because there are fewer windows that require replacement.

Flashing and Trim

Flashing and trim refers to the detailing of the exterior envelope and how the dissimilar materials are treated where they connect. Neither building had a distinct advantage in this category.

Perimeter

This comparison item reflects the total linear footage of building perimeter. This comparison is important in terms of overall energy efficiency of the building and maintenance and upkeep of the exterior shell. A larger perimeter decreases the inherent efficiency of the envelope. Enfield High School was discounted in this category since the building has almost 20% more building perimeter than Enrico Fermi, yet has a smaller overall footprint.

Area

This comparison item reflects the gross floor area of each building. Enrico Fermi is about 27,000 SF larger than Enfield High School and scores higher in this category since the required area of the addition necessary to meet the program requirements is smaller.

Ceilings

The ceilings in both buildings are mixture of suspended acoustic, adhered acoustic and hard type ceilings. The ceilings are generally in fair condition with some area including bathrooms, locker rooms, kitchens and the pool (at Enrico Fermi) in need of repair or replacement. The ceiling layouts and heights in "A" Wing at Enfield High School limit the installation of new mechanical systems. Neither school had a clear advantage in this category.

Walls (Interior)

The interior wall construction for the classrooms at both buildings is similar and both buildings are in similar condition. Neither school had a clear advantage in this category.

Doors and Hardware

Interior doors are included in the comparison matrix to account for age, hardware, and accessibility. Neither school had a clear advantage in this category.

Flooring

The flooring in both buildings is generally a mixture of vinyl composition tile, vinyl asbestos tile and ceramic tile. The floors are generally in fair condition with some area in need of repair or replacement. Both schools have flood damaged floors, some that have been poorly repaired (Enrico Fermi Unit "B") and some that have not been addressed (Enfield High School "C" Wing). Neither school had a clear advantage in this category.

Circulation Paths

Circulation Paths reflects the perceived efficiency of the corridors in each building. Enfield High School has about 15% less circulation area than Fermi and thus scores higher in this category.

Elevators

This topic item compares the overall quality of the elevator(s) installed for student use in each building. Enfield High School rated higher in this category because it has two newer, code compliant elevators serving the building.

Accessibility

Accessibility reflects the ADA and ANSI A117.1 Code Compliance of each building. Each building has observable deficiencies in overall accessibility that need to be addressed regardless of which building is selected as the Consolidated High School. Enfield High School scores higher in this category for two reasons; (1) the recent renovations addressed accessibility in a significant portion of the building and (2) the non-compliant areas of the school are more readily adaptable than comparable areas at Enrico Fermi.

Egress

Egress refers to the various paths out of the buildings and reflects the paths' length, capacity, and total count. Neither school had a clear advantage over the other in this category.

Plumbing Fixture Count

This comparison item reflects the total number of toilets in the school that exceed the code minimum requirements. Excess capacity in this category is desirable because as accessibility adaptations are made (which invariably reduce fixture count) there is less impact on the ability of the building to serve the occupants at peak usage times. Enfield High School has a significant number of additional fixtures.

Lockers

This comparison item reflects the total number of lockers in the school excluding gymnasium locker rooms. Enrico Fermi has approximately 140 more lockers than Enfield High School but a number of those will be lost to accommodate required ADA compliance changes. Neither school has an adequate number of lockers for the consolidated program.

Adaptability to Program

This topic area reflects the ability of the existing buildings' layout and structure to accept the new program requirements established elsewhere in this report. We looked at efficiency of the plan, flexibility of the plan, ease of construction, and potential phasing of a construction project. Enrico Fermi scores higher in this category for three main reasons, the building interior layout lends itself to reorganization in a neat and efficient manner, the building structural system more readily lends itself to changes and phasing of the construction is considerably simpler because no major demolition needs to occur to accommodate the new program. Enfield High School scores lower primarily because of the need to demolish "D" Wing to accept the new program and the influence of the reinforced concrete structure in "A" Wing on new mechanical systems.

Cafeteria

This category compares the relative sizes of the existing cafeterias. The cafeteria at Enrico Fermi scores higher because it is considerably larger than the cafeteria at Enfield High School and has a greater potential occupant load without an addition.

Kitchen

This category compares the relative sizes of the existing kitchens and serving lines and their ability to provide food service to other facilities as well as the building they are located in. The kitchen at Enrico Fermi scores higher because it is considerably larger than the cafeteria at Enfield High School and better equipped to prepare food for off-campus buildings. The single serving area at Enrico Fermi is more efficient than the split serving line at Enfield High School.

Pool

Enfield High School does not have a swimming pool and scores a zero in this category.

Auditorium

Both schools auditoriums seat similar numbers of people (586 at Enrico Fermi, 597 at Enfield High School) however, the stage and back stage areas are more

flexible at Enrico Fermi resulting in a higher score in this category. Neither auditorium is adequate for school-wide or even class-wide functions in the consolidated program.

Library

Enfield High School has a modern, newly constructed library that is reflective of current standards and scored well in this category. Enrico Fermi's library layout is split up among 3 separate floors which is an inherently inefficient layout.

Band Room

This category compares the relative sizes and locations of the existing band rooms. The band room at Enrico Fermi is smaller than the band room at Enfield High School but it is more readily enlarged to accommodate the new program and its relationship and easy connection to the auditorium stage is a benefit.

Chorus Room

This category compares the relative sizes and locations of the existing chorus rooms. Enfield High School has a significantly larger chorus room than Enrico Fermi and scores higher in this category.

Locker Rooms

This topic compares the relative sizes of each school's locker room facilities.

Gymnasium

This topic compares the relative size, flexibility and location of each school's gymnasium. Enfield High School scores lower in this category because of the awkward "T" shape layout of the gymnasium and the placement of the Gym floor elevation one flight of stairs down from the main elevation of the building.

Bathrooms

This comparison item reflects the total number of bathrooms in the school. Widely distributed bathrooms cores are considered beneficial as they reduce travel time to facilities and help to reduce crowding. Enfield has a significantly higher number of bathrooms.

Credit Union

Enrico Fermi does not have a credit union.

School Store

Enfield High School does not have a swimming pool.

V. Cost

A cost estimate for each of the schemes developed for the schools was prepared on a cost per square foot basis for comparison between the schemes. The cost estimates follow.

High School Consolidation Study
 Enfield CT
 Oct 1, 2010

Parametric Cost Study - Enfield High School Option 1

New Building Area 94,500 sf
 Existing Building Area 186,026 sf

Construction Costs

New Construction Costs:

-Site Cost		\$2,346,456
-Building Demolition (27,750sf)		\$291,375
-Misc Bldg Reconfig to interface with new		\$175,380
-Install New Data/Tech Raceway/Conduits/Wiring		\$558,079
-Renovation of Existing School		\$2,968,992
-New Construction Trade Cost		\$22,680,000
		<u>\$29,020,282</u>

Contingencies

Design Contingency	8.0%	\$2,321,623
Escalation (Assume Const Start 4th qtr 2013)	8.5%	\$2,466,724
		<u>\$4,788,347</u>

CM

General Conditions/Insurance/Fee/Permits		\$3,076,585
		<u>\$3,076,585</u>

Construction Contingency	3.0%	\$962,906
		<u>\$962,906</u>

Sub Total Construction Costs \$37,848,120

Other Costs:

Architectural/Engineering		
-PreReferendum		\$78,415
-Arch & Engineering Fees		\$1,514,578
A/E Reimbursables		\$58,085
Technology Design		\$50,825
FFE Design		\$50,825
HazMat Survey and Design		\$10,891
HazMat Monitoring		\$79,867
.Add'l HazMat Survey		\$29,043
Enhanced Commissioning		\$113,702
Special Inspections/Testing		\$59,538
Demographics Study		\$11,617
Property Survey		\$29,043
Traffic Study		\$4,500
Fixtures, Furnishings, Equipment		\$771,142
Technology Equipment		\$259,064
Legal, Admin, & Financing Costs		
-Legal		\$36,303
-Notices		\$2,178
-Bonding Expense		\$582,581
Builders Risk		\$101,650
Bid Document Printing / Advertising		\$17,426
Owners Contingency	5%	\$1,451,014
		<u>\$5,312,287</u>

Sub Total Other Project Costs \$5,312,287

Total Costs \$43,160,407

High School Consolidation Study
 Enfield CT
 Oct 1, 2010

Parametric Cost Study - Enfield High School Option 2

New Building Area 94,500 sf
 Existing Building Area 186,026 sf

Construction Costs

New Construction Costs:		
-Site Cost		\$2,346,456
-Building Demolition (27,750sf)		\$291,375
-Misc Bldg Reconfig to interface with new		\$175,380
-Renovation of Existing School - Includes Tel/Data		\$28,917,376
-New Construction Trade Cost		\$22,680,000
		\$54,410,587
Contingencies		
Design Contingency	8.0%	\$4,352,847
Escalation (Assume Const Start 4th qtr 2013)	8.5%	\$4,624,900
		\$8,977,747
CM		
General Conditions/Insurance/Fee/Permits		\$5,768,338
		\$5,768,338
Construction Contingency	3.0%	\$1,805,368
		\$1,805,368
Sub Total Construction Costs		\$70,962,040

Other Costs:

Architectural/Engineering		
-PreReferendum		\$146,610
-Arch & Engineering Fees		\$2,831,746
A/E Reimbursables		\$108,600
Technology Design		\$95,025
FFE Design		\$95,025
HazMat Survey and Design		\$20,363
HazMat Monitoring		\$149,325
.Add'l HazMat Survey		\$54,300
Enhanced Commissioning		\$212,585
Special Inspections/Testing		\$111,315
Demographics Study		\$21,720
Property Survey		\$54,300
Traffic Study		\$4,500
Fixtures, Furnishings, Equipment		\$1,441,774
Technology Equipment		\$484,362
Legal, Admin, & Financing Costs		
-Legal		\$67,875
-Notices		\$4,073
-Bonding Expense		\$1,089,228
Builders Risk		\$190,050
Bid Document Printing / Advertising		\$32,580
Owners Contingency	5%	\$2,720,529
Sub Total Other Project Costs		\$9,935,884

Total Costs **\$80,897,924**

High School Consolidation Study
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Parametric Cost Study - Enrico Fermi High School Option 1

New Building Area 94,000 sf
 Existing Building Area 202,400 sf

Construction Costs

New Construction Costs:		
-Site Cost		\$1,660,534
-Building Demolition (0sf)		\$0
-Misc Bldg Reconfig to interface with new		\$59,460
-Install New Data/Tech Raceway/Conduits/Wiring		\$607,201
-Renovation of Existing School		\$1,748,635
-New Construction Trade Cost		\$22,560,000
		<u>\$26,635,830</u>
Contingencies		
Design Contingency	8.0%	\$2,130,866
Escalation (Assume Const Start 4th qtr 2013)	8.5%	\$2,264,046
		<u>\$4,394,912</u>
CM		
General Conditions/Insurance/Fee/Permits		\$2,823,798
		<u>\$2,823,798</u>
Construction Contingency	3.0%	\$883,789
		<u>\$883,789</u>
Sub Total Construction Costs		\$34,738,329

Other Costs:

Architectural/Engineering		
-PreReferendum		\$71,700
-Arch & Engineering Fees		\$1,384,866
A/E Reimbursables		\$53,111
Technology Design		\$46,472
FFE Design		\$46,472
HazMat Survey and Design		\$9,958
HazMat Monitoring		\$73,027
.Add'l HazMat Survey		\$26,555
Enhanced Commissioning		\$103,965
Special Inspections/Testing		\$54,439
Demographics Study		\$10,622
Property Survey		\$26,555
Traffic Study		\$4,500
Fixtures, Furnishings, Equipment		\$705,100
Technology Equipment		\$236,877
Legal, Admin, & Financing Costs		
-Legal		\$33,194
-Notices		\$1,992
-Bonding Expense		\$532,688
Builders Risk		\$92,944
Bid Document Printing / Advertising		\$15,933
Owners Contingency	5%	\$1,331,792
Sub Total Other Project Costs		\$4,862,763

Total Costs **\$39,601,092**

High School Consolidation Study
 Enfield CT
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Parametric Cost Study - Enrico Fermi High School Option 2

New Building Area 55,000 sf
 Existing Building Area 202,400 sf

Construction Costs

New Construction Costs:

-Site Cost		\$1,660,534
-Building Demolition (0sf)		\$0
-Misc Bldg Reconfig to interface with new		\$59,460
-Renovation of Existing School - Includes Tel/Data		\$33,994,444
-New Construction Trade Cost		\$13,200,000
		<u>\$48,914,438</u>

Contingencies

Design Contingency	8.0%	\$3,913,155
Escalation (Assume Const Start 4th qtr 2013)	8.5%	\$4,157,727
		<u>\$8,070,882</u>

CM

General Conditions/Insurance/Fee/Permits		\$5,185,664
		<u>\$5,185,664</u>

Construction Contingency	3.0%	\$1,623,003
		<u>\$1,623,003</u>

Sub Total Construction Costs \$63,793,987

Other Costs:

Architectural/Engineering		
-PreReferendum		\$131,537
-Arch & Engineering Fees		\$2,540,610
A/E Reimbursables		\$97,435
Technology Design		\$85,255
FFE Design		\$85,255
HazMat Survey and Design		\$18,269
HazMat Monitoring		\$133,973
.Add'l HazMat Survey		\$48,717
Enhanced Commissioning		\$190,728
Special Inspections/Testing		\$99,871
Demographics Study		\$19,487
Property Survey		\$48,717
Traffic Study		\$4,500
Fixtures, Furnishings, Equipment		\$1,293,543
Technology Equipment		\$434,564
Legal, Admin, & Financing Costs		
-Legal		\$60,897
-Notices		\$3,654
-Bonding Expense		\$977,243
Builders Risk		\$170,511
Bid Document Printing / Advertising		\$29,230
Owners Contingency	5%	\$2,445,722
		<u>\$8,919,717</u>

Sub Total Other Project Costs \$8,919,717

Total Costs \$72,713,705