ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY SCHOOL

RALEIGH, NORTH CAROLINA

WAKE COUNTY PUBLIC SCHOOL SYSTEM

RALEIGH, NORTH CAROLINA

SUPER DESIGN NARRATIVE SUBMITTAL

April 15, 2008

GÜREL
ARCHITECTURE

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SUMMARY

This study recommends the replacement of single story Cafeteria building constructed in 1989 with a two story building to house cafeteria as well as five teaching spaces with second floor connection (bridge) to 1923 Main School Building. The major renovations to 1923 Main School Building arranges the classrooms and spaces required to be accessible by kindergarten and first grade students at first and second floors with level egress route to exterior. The second floor bridge connection to Replacement Building further improves the egress conditions. Both the 1923 Main School Building and the Replacement Building are proposed to be equipped with automatic sprinkler system. This would allow the 1923 building to comply with current building codes. This study also recommends the site improvements which include the realignment and widening of parent drop off drives, the rearrangements and addition of parking spaces, the playfield improvements, addition of hard surfaced play area and general site accessibility improvements. In addition, there will be site improvements such as required by storm water management plan for compliance with the City of Raleigh ordinances. All of the design recommendations are indicated on Building 3 Replacement Scheme on "A" series drawings.

The feasibility analysis supports the complete demolition of Cafeteria Building. Nevertheless, a separate design scheme is provided for addition and renovation to 1989 Cafeteria Building for comparison purposes. This scheme is indicated on "B" series drawings. Although it appears to be less expensive to construct, we believe this scheme would not add value to the quality of education in this campus.

The 2000 Master Plan Future Additions Scheme is included for reference on "C" series drawings. This is a single story expansion scheme to 2001 Building and further taxes the site resources. The disadvantages of this scheme are described in the Design Narrative.

The preliminary cost estimates indicate that probable construction cost for Building 3 Replacement Scheme as approximately $8.50M and for Building 3 Addition and Renovation Scheme as $7.85M. Please note that these estimates are construction costs (CCAP) and do not include any costs associated with construction phasing (based upon the decision that the school will be moved to temporary location for the duration of construction) or CM at Risk compensation.

The scope of work can be adjusted if the funds would not be available (for instance the site improvements, replacement building and building addition schemes are somewhat independent of each other for construction purposes). Or if the scope of work is desired to be increased in the form of Building Program additions (e.g. Plant Operations) or additional renovation components (e.g. furring 1923 Building interior walls, terrazzo replacement, etc.) we would incorporate the required changes and provide revised cost estimates.

The proposed schemes, their pros and cons and design decisions are described in the main body of the Design Narrative. Also included are the Building Code Summary for each design scheme, Site and Floor Area Tabulations and Comparison to WCPSS Educations Specification Standards (Rev 2005). Square-foot cost estimates are provided for Scheme A and B, and a preliminary 16 Division Cost Estimate for Scheme A is provided as well as NCDPI Feasibility Analysis Form for Building 3. Also enclosed are the Documents referenced in the Design Narrative and the reduced versions of the Design Narrative Drawings.

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ARCHITECTUREAL DESIGN NARRATIVE

GENERAL

The campus of Wiley Elementary School occupies 5.8-acre site, bounded by St. Mary's Street, Collage Place and Calvin Road. The Campus consists of three-story Main School Building (Building No. 1), two-story Classroom Building (Building No. 2) and a single story Cafeteria Building (Building No. 3). The Buildings No. 1 and No. 2 are interconnected by covered walkways, ramps and elevated walkways constructed in 2004. K-First grade playground is located at North corner of the site and the playground equipment for upper grades are located at the semi wooded Southwest corner of the property. The play field oriented parallel to College Place and a running track composed of screenings

The bus loading and unloading is provided through the bus lane on Calvin Road. Parent drop off area is off of staff parking lot that is located in the center of the property. The access to staff and visitor parking as well as the parent drop off area is through a narrow and sinuous drive off of College Place. The same driveway is utilized for the cafeteria service yard access.

Total current on site parking provides 62 spaces. This is within City of Raleigh ordinance requirements. The required parking calculation is based upon the largest assembly area, which is designated as Media Center and based upon a previous agreement with City of Raleigh the Occupant Content of this space was determined as 300 people. Based upon one parking space for five people, the required parking capacity is determined as 60 spaces by CoR ordinances.

Building 1

Main School Building is a three-story building with partial basement and a footprint of approximately 13,800 gross square feet was constructed in 1923. The construction is mixture of load bearing masonry walls, concrete columns, steel columns (mainly in current Media Center) concrete one way slab system and concrete roof slab system. Typical exterior walls are face brick with concrete masonry block backup and interior plaster. Total area of approximately 40,700 gross square feet houses classrooms, administration, auditorium / media center and multi purpose room (gymnasium) in three floor levels and a basement. The building displays several changes in floor elevation levels to accommodate the topography of the site. Two vertical circulation cores are placed at North and South ends of the double loaded central corridor. An elevator was provided and first floor interior ramps were added in 1989 renovations. The exterior ramps and elevated walks were added in 2004 renovations. The windows of the building were replaced in 2007 renovations.

Building 2

Classroom Building is a two-story building with a footprint of approximately 6,800 gross square feet was constructed in 2001. The construction is steel columns, beams, composite steel deck with concrete floor slab and steel joists and steel deck roof. Typical exterior walls are cavity walls with face brick and steel studs with blanket insulation in stud space. Total area of approximately 13,700 gross square feet houses three Kindergarten Classrooms, Exceptional Children Classroom, three Second Grade Classrooms, storage, staff toilets and group toilets for the students. The building is located on the west side of the Building No.1 (separated by fire wall) and the second floor finish floor elevation matches the second floor (prime floor) of the main building. Two vertical circulation cores are places at North and South ends of single loaded corridor. The stair core at North end is equipped with Area of Rescue Assistance station.

Building 3

Cafeteria Building is a single story building with approximately 7,100 gross square feet of total area was constructed in 1989. The construction is load bearing masonry walls with steel joists and roof deck. Typical exterior walls are cavity walls with face brick and concrete masonry units and rigid insulation in wall cavity. The building houses cafeteria including kitchen, storage spaces, two small classrooms (480 square feet each) and group toilets. The building is located on the south side of the Building No.1 and the finish floor elevation is approximately 6'-10" lower than the second floor (prime floor) of the main building. The building is located on the south side of the Building No.1 and the finish floor elevation is approximately 6'-10" lower than the second floor (prime floor) of the main building. The connection is provided by a covered ramp that aligns with the corridor and south entrance of the main building.

PROGRAM REQUIREMENTS

WCPSS decided that a Building Program prepared during November 2002 shall serve as a basis for this design narrative study. This program includes new construction of three classrooms (assumed to be First Grade Classroom although stated as Kindergarten Classrooms in the program) and Assistant Principals' Office. In addition, a storage room near service area is also included in the program. The renovations include major renovations to the Building 1, Main Classroom Building and the Building 3, Cafeteria Building.

The three-classroom new construction program referenced the master plan dated 2000. Final design drawings of 2001 Classroom Addition Building indicated future three-classroom addition (occupying the current parent drop off area and reserved parking) and future parking lot expansion (to area east of Building 3). The parent drop off area would be provided within the main parking (enclosed with stone wall – old water tower property). However, during the City of Raleigh reviews of this project, Planning Commission took an exception to future parking location and requested that no parking areas to be provided between the campus buildings and St. Mary's Street.

The additional program requirements were introduced during the 1/18/2008 PDPA meeting. The major site items discussed were the need to improve the parent drop off route and the need to provide masonry fence enclosure around the chillers. The major building program issues discussed were to keep the balcony seating (there was prior discussions to convert this area to classroom space), and the decision to remove two small classrooms located at the Basement Level of 1923 Main School Building and expand the Multi Purpose Room.

The logistics of construction and lack of site areas for construction staging were also discussed in the PDPA meeting. It was concluded to relocate the Wiley Elementary School to a temporary location for one school year to achieve the additions and renovations to this campus in a single uninterrupted phase.

The other building program issues discussed during the informal meetings with Ms. Erin Kershner and Mr. Larry Sherrill include the desirability of an enclosed connection between the Main School Building and Cafeteria, possibility of providing Plant Operations spaces (currently there is no space designated for this function on the Campus) and providing demountable partitions (or accordion partitions) to provide flexible spaces on third floor large classroom building. The layout of relocated administration was reviewed and there may be further comments regarding the adjacencies of administration and counselor offices. There was also a requirement for large conference room to accommodate 15 people.

DESIGN CONSIDERATIONS

Site Plan Review

Due to size of the adjacent and the adjacency to residential zoning, we believe this project will require City of Raleigh Planning Commission approval. The site improvements will require compliance with current City ordinances, which include Tree Conservation Area and Stormwater Management Plan.

Site Circulation and Parking

Due to the size and topography of the site and the location of existing buildings the current parent drop off stacking length is substandard according to City of Raleigh ordinances. Furthermore, it does not appear that we have any reasonable option to improve this condition. The current bus drop off area is a parking lane approximately 12 feet wide x 140 feet long adjacent to Calvin Road.

Site Drainage

The current site drainage includes two main subsurface drainage systems collecting runoff from all three existing buildings and the courtyard and discharging storm drainage onto perimeter streets (to St. Mary's Street and Calvin Road). In addition, two subsurface drainage systems are collection runoff from the main parking and parent drop off area. The discharge points for these systems are rip rap lined dissipaters located at north east side of the property approximately 50 feet from Calvin Road. None of the existing drainage systems are equipped with retention device.

There are current site drainage issues to be addressed under the scope of this project. The northwest corner entrance/exit to existing Dining Room is the main concern due to continuous flooding even after the repairs to drainage lines. There are erosion problems observed at the northeast corner of the site partially due to the existing sidewalk (extending to stone stairs no longer used) acting as water damn and interrupting the sheet flow. There are also erosion problems at the area south of the concrete walk extending from 2001 Classroom Building to Bus Drop Off area on Calvin Street. The last two erosion issues are originating from the fact that there was no subsurface drainage system alongside the perimeter roads during the construction of facilities. The City of Raleigh installed subsurface storm drainage lines and structures alongside the St. Mary's Street since then and may be utilized to ease some of the drainage issues as described above.

The site drainage shall be made compliant with the City of Raleigh Stormwater Management ordinances. It is anticipated that some stormwater detention (perhaps underground detention tanks) measures will be installed for subsurface system(s) discharging directly onto Calvin Road. There may be additional detention devices for the subsurface system discharging onto St. Mary's Street, and this system may have to be connected to City Storm Drainage system installed alongside the St. Mary's Street.

Site Utilities

The pad-mounted transformer serving the 1923 Main School Building and the 1989 Cafeteria Building was installed during the construction of the Cafeteria Building. The location of the transformer became undesirable especially after the construction of elevated walkways.

The existing chain link fence around the chiller area was requested to be replaced with masonry enclosure during the last City of Raleigh Planning Commission review. During the design of 2001 Classroom Building, and based upon the project budget reduction the Planning Department allowed the

existing chain link fence enclosure (fitted with vinyl slat inserts) to remain until further renovations on this site.

Tree Conservation Area

This site will be required to comply with the City of Raleigh Tree Conservation ordinance. It is anticipated that approximately 10% of site (most probably the west corner of the site) will be dedicated for Tree Conservation Area.

Historical and Residential Context

The architecture and detailing of the 1923 original school building sets the image of the campus. This building oriented towards East, with a monumental main entrance stairway for pedestrian access from St. Mary's Street. The old oak trees with large canopies in the front lawn complete the formal grand façade. Through the years the neighborhood across from the St. Mary's Street is converted from residential to small business. Across from the College Place, the St. Mary's College is located. The character and architecture of the College buildings is very much in line with the spirit of the 1923 instructional building. The third street that borders the site is residential Calvin Road. The community's interest and involvement with the school and the school grounds through the years created a strong partnership.

The design of 2001 Classroom Building provides references to original school building and subtle transition to community side by arrangement of building massing and setbacks. The schools orientation and identification from Calvin Road are intended to increase the community ties.

The cafeteria building that is constructed in 1989 occupies the Southeast corner of the site. It was placed on a higher ground approximately four feet above and sixty feet away from the south entrance of the main building. The connection between the buildings is provided through a covered ramp / walk which aligns with the major North/South corridor of the main building. Apart from physical separation, the difference in appearance (brick colors, massing, detailing, etc.) of the Cafeteria Buildings undermines the campus image.

BUILDING CODE CONSIDERATIONS

Site

The driveways for the parent drop off area were constructed in 1989 Renovations and the main parking lot within the stone enclosure wall (old water tank area) was added during the 2001 Renovations. The driveway widths and the turning radii do not comply with the North Carolina Fire Code requirements to be used as a Fire Lane.

Building 1

Main School Building that was constructed in 1923 preceded the first North Carolina Building Code that was introduced in 1936. We can classify the construction type of this building as "semi fireproof construction" according to the North Carolina's first Building Code which conservatively corresponds to the construction type II-B of current building code (NC Building Code 2006 Edition). There is a possibility of classifying this building as type II-A which would require further analysis and perhaps testing of the building materials for verification of existing building components' fire resistance rating.

The latest major interior renovations were made during the 1989 which include current HVAC system, suspended acoustical tile ceilings, group toilet upgrade and some minor modifications to floor lay outs such as first floor First Grade Classrooms, second floor Administration and Teachers' Lounge areas.

The Life Safety Improvements project during 2004 corrected the egress issues for the Multi Purpose Room and Media Center and first floor corridor main exit doors.

The building code (regardless of type II-B or type II-A) requires the corridor walls to be fire resistance rated one hour and corridor doors to be minimum 20 minute rated assemblies. The existing wood doors and wood frames do not comply with this requirement.

The existing terrazzo stairs (due to step surface wear) present safety hazard. The riser heights of the stairs, although not compliant with current building code, are allowed to remain under "Existing Building Code" due to lack of practical remedy options and also due to the historical significance of the building. The handrails do not comply with dual handrail requirements of Chapter 32 – Children's Environments of current Building Code.

The ramps installed during 1989 renovations and earlier in the Media Center exceed maximum allowable slope of 1:12.

It is our understanding that the code officials have issues with the occupancy of balcony due to egress problems. The current balcony seating area is accessible by pair of stairs from the third floor main corridor. Neither the stair widths, riser heights, tread depths nor landing clearances are code compliant.

Building 2

Classroom Building that was constructed in 2001 complies with the Construction Type IV, unprotected of NC Building Code 1995 Edition with Amendments through 1999 (building code at the time of construction). This building's construction type can be classified as Type II-B of current Building Code.

The lavatories need to be installed at individual toilets within the Kindergarten Classrooms. During the time of building construction the hand wash sinks were required to be outside of the toilet rooms by State and County Environmental Health Departments. Currently this is changed to a requirement of a lavatory within the toilet.

Building 3

Cafeteria Building that was constructed in 1989 complies with the Construction Type IV, unprotected of NC Building Code 1986 Edition (building code at the time of construction). This building's construction type can be classified as Type II-B of current Building Code.

The student dining room exit separation does not comply with the current Building Code and one of the exits is not accessible. The number of tables (23 eight-seat tables) located in this room does not allow proper egress widths as per current Building Code.

The number of plumbing fixtures provided in the group toilets does not comply with the current Plumbing Code (minimum four flushing fixtures are required for each group toilet).

Toilet located in Kitchen area does not have a lavatory (lavatory located in another room).

PROPOSED SITE DESIGN

The site design proposed with this study includes the realignment and widening of parent drop off loop not only to ease traffic flow and to comply with fire lane requirements of NC Fire Code but also to provide school entrance identification from College Place. A school sign along with some low screening walls and landscaping is intended to enhance the school entrance at this location. Please note that although the proposed design would not increase the stacking length of the parent drop off loop. The stacking length will be based upon calculations as determined by City of Raleigh ordinances. Due to the site restrictions, unless WCPSS would sacrifice playfields for this purpose, we believe we have to apply for a variance regarding the stacking length. Since the capacity of the school will not be drastically increased due to modifications we believe this is the best option for the site.

We believe the wooded north corner of the site, which is already functioning, as a small community park is ideal location to be reserved as the Tree Conservation Area.

The exact requirements for the site storm water management will be based upon storm water calculations. It is anticipated that with the Building Replacement option, due to smaller increase of the impervious area we may be within 10% of pre development storm water quantities which may mean that we do not have to do drastic improvements to site storm drainage. However, we may be required to include storm water retention measures based upon the fact that the last site plan approval (2000) on this site was prior to current City of Raleigh Storm Water ordinance and the fact that the current site drainage is very poorly designed (directly discharging onto St. Mary's Street and Calvin Road). In addition, the areas where drainage or erosion problems reported shall be addressed within the storm drainage plan for the entire site. The proposed site plan includes an underground retention tank to contain runoff from paved areas including parent drop off loop and parking. The tank will be located at west side of the walk from 2001 Classroom Building to bus drop off area. The partial brick retaining wall shall be extended to Calvin Road to provide contained fill area for the retention tank as well as to prevent any cross run off on to the connecting side walk. The run off from buildings were collected by two separate subsurface drainage systems and discharged directly to perimeter roads. This site plan proposes that Calvin Road system which drains 50% of Building 1 and 50% of Building 2 to remain as is (with the exception of possible detention device).

The current chiller area which houses the two condensate units for Building 1 and one chiller for Building 2 is enclosed within chain link fence with vinyl slat inserts. The chiller for Building 2 will remain and the proposed new chiller for Building 1 will to be enclosed within a masonry fence.

The current pad mounted transformer located adjacent to parent drop off area on the courtyard side is serving Building 1 and Building 3. Another pad-mounted transformer located north of chiller yard serves building 2. The Building Replacement Design proposes the relocation of the first transformer to a masonry fence enclosure adjacent to new service yard. The second transformer, serving Building 2 is scheduled to remain.

The concrete sidewalks were proposed to be modified are described under building addition and renovation options. Common to all options is the proposal to remove the sidewalks connecting the buildings to existing stone stairs located at east and west side of the original main entrance stairs from the St. Mary's Street. The reasons for this removal are the stairs are not accessible (locked chain link gates) and the location and elevation of sidewalks are contributing if not causing erosion problems.

Building Replacement Option also proposes a new stairway to courtyard with additional multi level retaining wall arrangements for landscaping. The rock bed is close to the surface of current courtyard and with the exception of lawns it would not allow the growth of plants. Proposed retaining walls intended to provide planting beds for small trees and shrubbery to enhance the courtyard.

PRPOSED BUILDING ADDITIONS

The main challenge for the design is to provide three First Grade Classrooms at ground level (NC Building Code requires direct egress to exterior from First Grade Classrooms). The current three First Grade Classrooms located at the first floor of the 1923 Main School Building do not comply with the code egress requirements (one classroom does not have secondary exit to exterior and the other two classrooms share a hallway with exterior exit, however this exit is not accessible).

Due to the existing site area the building addition should have a compact footprint to minimize the impervious area increase.

Another important challenge is to provide a circulation system to integrate the campus buildings. During the Life Safety Improvements, the installation of elevated walkways provided connection between the 1923 Main School Building and the 2001 Classroom Building on first floor and second floor levels. Current Dining Room is separated from the Campus (for instance the Fifth Grade students need to descend from third to first floor and travel through exterior ramp up to Dining Room).

This study provides the following design schemes for new construction:

Design Scheme A, Replacement Building for Building 3, 1989 Cafeteria Building
Design Scheme B, Addition and Renovation to Existing Building 3, 1989 Cafeteria Building
Design Scheme C, The original three-classroom future addition design that was developed during the 2000 design phase (2000 Master Plan) was also included for reference.

PROPOSED DESIGN SCHEME A
REPLACEMENT BUILDING FOR BUILDING NO. 3

This design scheme proposes total demolition of existing Building 3, single story Cafeteria Building that was constructed in 1989 and providing a new two story Building 3R to house new program requirements as well as replacement of the kitchen and dining room.

The reasons for recommendation for demolition of Building 3 are as follows:

- Current building finish floor elevation is approximately seven feet below 1923 Main School Building Second Floor (Prime Floor) Elevation and it is approximately seven feet above 1923 Main School Building First Floor Elevation. Although the connection between the buildings is provided by a covered ramp the travel distance for the students, especially fourth and fifth graders located on the third floor of the 1923 Main School Building is excessively long.

- Single story building footprint is approximately 7,400 square feet gross, located at the most convenient area of the site for further development and it would be difficult to provide additions to this building at the same floor due to the surrounding grade elevations. Addition of a second floor to this structure is not feasible due to the existing construction being load bearing masonry walls. In addition, due to the siting of this building, the required modifications planned for the driveways will be difficult (i.e. costly) if not impossible.

- Extensive renovations are required to this building to bring the existing building in compliance with the Building Code. Most notable issue is to provide proper exits from the main dining room, which will require additional ramps and retaining walls. Other items to be corrected include dead end corridors, substandard classroom sizes, substandard group toilets and substandard staff toilet in kitchen area. In addition all the current flooding problems need to be addressed.

- The quality of the Dining Room currently can be described as “dark and damp place” may have to be improved by providing addition window openings. However to provide new window openings in existing load bearing walls shall be costly.

- This building does not conform to “Unity of Development” scheme typically required by City of Raleigh Appearance Commission. The face brick color and the precast concrete banding used on this building and the connecting canopy contrast with the colors and detailing of 1923 Main School Building and 2001 Classroom Building. The precast concrete banding, apart from ungainly look due to extensive staining, is believed to be causing wall integrity problems due to the difference between the coefficient of expansion of concrete and brick. In other words, due to the difference in contraction and expansion rates, the joints between the precast concrete banding and face brick are eroding and causing water penetration into wall cavity.

- If we consider the other building program requirements for this building, which include renovation of kitchen area, it appears that we have to replace more building components than we can keep for this building. The Cost Feasibility Analysis as required by NC DPI is included in this study for cost justification of demolition of this building.

- Design Scheme B is intended to provide a probable solution if WCPSS would decide to keep this building (or portion of building) in lieu of total demolition.

Proposed Replacement building design is intended to accomplish the following:

- Provide a two story building on a compact footprint to accommodate the new program requirements as well as improvement to replacement spaces. The replacement building total gross area of 17, 751 square feet occupies approximately 8,759 square feet footprint. Also alignment of footprint with the 1923 Building is intended to reduce the new building mass impact on 1923 Building as observed from the St. Mary’s Street. The main entrance to this building shall be from parent drop off loop with a ramp in a very similar arrangement to 2001 Classroom Building entrance from this level. The detailing of the building including glazed brick trims and cantilevered canopies will reference the 2001 Building for visual integrity. The massing is intended as series of steps increasing in size from human scale at loading dock area to three-story 1923 building.

- The finish floor elevation for the second level is intended to match the second floor (prime floor) elevation of the 1923 Building. The first floor elevation will be 13’-4” below this elevation. These elevations shall match the floor elevations of the 2001 Classroom building as well. This would allow us to reduce the excavation (the existing cafeteria building finish floor is 6’-10” below prime floor elevation and there is also approximately 4’ high crawl space provided at existing kitchen area) and also keep the building height as low as possible (the current building height is approximately 9’-0” above prime floor elevation and the proposed design height – top of parapet - will be 16’-4” above prime floor for the majority of building and 20’-0” above prime floor for higher dining room area).

- The first floor of the building will house three First Grade Classrooms and one Special Education Classroom, all equipped with the integral toilet facilities and direct secondary egress to exterior to be compliant with NC Building Code. The areas alongside the retaining wall, which do not have access to exterior day lighting, are utilized as mechanical room and general storage room. In addition a separate Book Storage Room is provided. The intention is to provide air-handling units at the ample sized mechanical room to serve both the first and the second floors through provided HVAC chases. The air handling units shall be served by the new boiler(s) located at the basement level of 1923 Main School Building and the new chiller located at new enclosed chiller yard.

- The second floor of the building will house Cafeteria, Art Room with its Art Storage Room and Kiln Room and a satellite office that is overlooking onto parent drop off loop. The cafeteria dining room is proposed as cantilevered room with overhangs varying from two feet to seven feet and clad in curtain wall on the north and east sides. New kitchen facilities comply with the WCPSS guidelines and include new 48" high loading dock.

- The dining room curtain wall treatment will be the only element that would not be emulating the 1923 building detailing. The intended system is Kawneer System 2, with structural silicone vertical mullions (mullion hidden behind glass therefore the appearance would be single line between glazing as observed from exterior) and fluoropolymer coated round horizontal mullions for glazing capture. The intention is to match the mullion profile and elevation with the glazed brick banding to provide continuity of design. It is not uncommon to provide totally contrasting additions to historic buildings. Internationally well known examples include Paris Louvre Museum glass pyramid by IM Pei and Partners and Berlin Reichstag glass dome addition by Norman Foster and Partners. In the City of Raleigh we can include renovations to Memorial Auditorium by PCB+L Architects in this category as well. Architect also remembers that during the 2001 Classroom Building design, Mr. Abe Harris (who was the NC State University Architect and Wiley PTA member at that time) recommending all stainless steel and glass structure addition to offset historic 1923 building. Of course compared to the examples given above the proposed design for the dining room for the replacement building will appear as a low key. Nevertheless, we realize that this project has to be approved by NC Department of Cultural Resources, State Historic Preservation Office, City of Raleigh Historic Commission and City of Raleigh Appearance Commission and depending on the comments received we may have to alter the design for permitting.

- The proposed connections to 1923 Main School Building includes the first floor connection (covered walkway under elevated walkway) and bridge (elevated walkway) connection to second floor (prime floor), which is also proposed with a protective cover. The detailing of guardrails and columns of the bridge is conforming to existing elevated walkways located in courtyard. Additional options for bridge is provided for WCPSS review which includes totally enclosed upper level or both level connections clad in curtain wall, partial curtain wall or masonry walls with traditional windows. In the opinion of this architect, the covered elevated walkway connection is the preferred option since it would continue the openness between the courtyard and the front (St. Mary's Street frontage) of the school, would have a less shadowing effect on the Art Room and first floor First Grade Classroom and would provide visual reference between the courtyard elevated walkways (unity of development) and it appears to have a more respectful scale to 1923 historic building. However regardless of which option is selected, the connection of Cafeteria to Main School building at Second Floor level will ease the travel distances for the students and better integrate the campus buildings. Needless to say the appearance of the selected option is still subject to agency approvals as noted above and the design may have to be altered for permitting.

- The Replacement Building design also proposes some courtyard arrangements. A new stair shall enhance the connection from the parent drop off area to the existing courtyard. The formal garden shall be slightly re arranged to provide covered access (under the existing elevated walkway) to bottom of the new stairs and to provide passage to new building first floor from this point. The courtyard will receive additional planting beds for small trees and shrubbery to lessen the impact of high retaining walls on the south side of the courtyard. The stone retaining walls for the new planting beds will be constructed of stone salvaged from the demolition of existing stonewalls. There will be some minor site improvements proposed with this design that will be developed during design development, one of which would be to re use the limestone panel to be removed for the second floor connection from 1923 building in a new school sign to be located at College Place entrance.

- The Replacement Building shall be equipped with the automatic fire suppression system. In the case the enclosed connection is selected this building will be treated as addition to 1923 Building.

Replacement Building Basic Building Components

The design of the new replacement building shall comply with the Wake County Public School System Design Guidelines. The following major building components are proposed for the new building:

- Concrete column and strip footings and slab on grade.
- Concrete retaining walls with bentonite type waterproofing with protective drainage panels at below grade areas.
- Steel columns and beams.
- Exterior steel stud cavity walls – 8" steel studs, R-23 blanket insulation in stud space, 5/8" fiberglass mat gypsum sheathing with weather resistance barrier at cavity face, 2" clear air space and 4" face brick.
- Glazed brick trim– limited use to provide reference to 1923 and 2001 buildings.
- Interior steel studs (6") and GWB partitions with R-19 blanket insulation for sound attenuation. Abuse resistant GWB at corridor walls and dining room, ceramic tile (floor to ceiling) at group toilet walls and FRP panels (floor to ceiling) at all spaces in kitchen area.
- Steel beam floor structure with composite steel deck and concrete floor slab.
- Steel joist roof structure (sloped for roof drainage) with vented steel deck.
- Modified bitumen roofing on lightweight concrete with roof drains, perimeter parapets and overflow scuppers.
- Building and roof insulation values shall be selected to comply with the Thermal Envelope Design – Prescriptive Method of NC Building Code.
- Fluoropolymer coated aluminum thermal break curtain wall system with structural silicone glazed vertical mullions and glass captured horizontal round mullions and storefront entrances with insulating low E glass.
- Fluoropolymer coated aluminum thermal break windows with single hung operation and insulating low E glass.
- Wood doors and painted steel frames for the interior.
- FRP doors and frames for the exterior service areas.

Typical Room Finishes

Room	Floor	Base	Walls	Ceiling	Ht
Classrooms	VCT / CPT	R	P-GWB	ATC	10'-0"
Classroom Toilets	VCT	R	EP-GWB	ATC	9'-4"
Office Areas	CPT	R	P- GWB	ATC	9'-4"
Corridors	VCT	R	P-ARGWB	ATC	9'-4"
Group Toilets	CT	CTB	CT – GWB	P-GWB	9'-4"
Dining Room	RSF	ICB	P-ARGWB	ATC-T	13'-8"
Kitchen	QT	QTB	FRP-GWB	VATC	10'-0"
Custodian	VCT	R	P-GWB	ATC	9'-4"
Mechanical Room	CONC	-	P-GWB	STR	13'-0"

VCT: Vinyl Composition Tile; CPT: Carpet; CT: Ceramic Tile, QT: Quarry Tile, RSF: Resilient Sheet Flooring, CONC: Sealed Concrete
R: Resilient Base; CTB: Ceramic Tile Base, QTB: Quarry Tile Base, ICB: Integral Cove Base
P: Paint; EP: Epoxy Paint; ARGWB: Abuse Resistant Gypsum Wall Board, GWB: Gypsum Wall Board; FRP: Fiberglass Reinforced Plastic Panel
ATC: Acoustical Tile Ceiling; VATC: Vinyl Coated Acoustical Tile Ceiling, STR: Exposed Structure

PROPOSED DESIGN SCHEME B
ADDITIONS AND RENOVATIONS - BUILDING NO. 3

This scheme proposes renovations and additions to existing Building 3, Cafeteria Building in case the total building demolition and building replacement option would not be acceptable to WCPSS.

The selective demolition for renovations and partial demolition of the building for addition are required. Some of the demolition is required just to correct the building egress problems as well as remedy the drainage issues.

The proposed design requires approximately 600 square feet building demolition; approximately 4,745 square feet major building renovation and approximately 8,340 square feet building addition. The completed facility will have approximately 14, 312 square feet housing kitchen, dining room and general storage upper level (6'-10" below primary floor) and three First Grade Classrooms, one Special Education Classroom and one Art Room with Art Storage and Kiln Room at lower level (10'-10" below primary floor) accessible from single loaded corridor. The connection between the levels shall be by an interior ramp (48 foot ramp with intermediate switch back landing). This design scheme assumes that the existing covered ramp shall remain even if it is renovated, therefore the renovation to Building 1 would be slightly altered, and mainly the direct connection from the administration area of Building 1 to Cafeteria would be deleted.

This scheme's shortcomings regarding to target program objectives area as follows:

- This scheme does not contribute to integration of the Campus buildings. The Cafeteria travel distances remain unchanged and by providing yet another level (lower level) it tends to isolate the new classrooms from the rest of the campus.

- Due to the building footprint area the site impervious area will be increased and would require more costly storm water detention measures. This scheme will work with existing parent drop off loop as well as new driveways and parking arrangement. However due to building location the new driveway construction would be more difficult and perhaps more costly due to some underpinning requirements of existing concrete footings. The excavation required, although kept to minimum as much as possible would provide excess soils that may have to be hauled off site which would increase the site development costs.

- The existing building façade will go through extensive alterations. The existing precast concrete banding is proposed to be replaced with glazed brick banding and new egress ramp and new window openings are proposed. It is conceivable to even think about replacement of all face brick on the existing building to match 1923 – 2001 buildings – we believe that the building addition face brick should match Building 1 due to its proximity and it would be awkward to say the least to leave the existing portion of the building 3 with its original face brick. If we follow this logic it would be natural to replace the all face brick and precast concrete banding of the existing covered ramp structure. Of course we might have to modify the wall cavity (record documents indicate 2" rigid insulation in 2" nominal wall cavity which would not leave recommended 1" clear air space) to comply with current best practices. If we decide to strive for the visual integration of this building with the rest of the campus we need to strip this building to its bare bones.

- The building addition had to extend towards the St. Mary's Street and although designed as a single story building, it appears to conflict with the massing of the 1923 Main School Building.

- In summary this design is provided for comparison to Building Replacement scheme. We do not believe it would accomplish program goals other than providing required square feet area.

Building 3 Addition and Renovation Basic Building Components

The design of the addition and renovation shall comply with the Wake County Public School System Design Guidelines. It is also intended for addition to match the existing Cafeteria Building construction with the exception of replacement components, which include face brick, all exterior doors and all exterior windows. Some interior doors and frames are also scheduled to be replaced. The following major building components are proposed for the addition and renovation scheme:

- Concrete column and strip footings and slab on grade.
- Load bearing masonry walls (CMU).
- Exterior masonry cavity walls – 8" CMU, 1 ½" Rigid Insulation at Wall Cavity, Nominal 1" clear air space and 4" face brick to match 1923 Building at Building Addition. Replace face brick at existing exterior walls to match 1923 Building and provide nominal 1" clear air space.
- Glazed brick trim– limited use to provide reference to 1923 and 2001 buildings.
- Interior masonry partitions.
- Steel joist roof structure (sloped for roof drainage) with steel deck.
- Modified bitumen roofing on rigid roof insulation with roof drains, perimeter parapets and overflow scuppers to match existing roof to remain.
- Building and roof insulation values shall be selected to comply with the Thermal Envelope Design – Prescriptive Method of NC Building Code.
- Fluoropolymer coated aluminum thermal break storefront entrances with insulating low E glass.
- Fluoropolymer coated aluminum thermal break windows with single hung operation and insulating low E glass.
- Wood doors and painted steel frames for the interior.
- FRP doors and frames for the exterior service areas.

Typical Room Finishes

Room	Floor	Base	Walls	Ceiling	Ht
Classrooms	VCT / CPT	R	P-CMU	ATC	10'-0"
Classroom Toilets	VCT	R	EP-CMU	ATC	9'-4"
Office Areas	CPT	R	P- CMU	ATC	9'-4"
Corridors	VCT	R	P-CMU	ATC	9'-4"
Group Toilets	CT	CTB	P-CMU	P-GWB	9'-4"
Dining Room	VCT	R	P-CMU	ATC-T	13'-8"
Kitchen	QT	QTB	P-CMU	VATC	10'-0"
Custodian	VCT	R	P-CMU	ATC	9'-4"
Mechanical Room	CONC	-	P-CMU	STR	13'-0"

VCT: Vinyl Composition Tile; CPT: Carpet; CT: Ceramic Tile, QT: Quarry Tile, CONC: Sealed Concrete
R: Resilient Base; CTB: Ceramic Tile Base, QTB: Quarry Tile Base
P: Paint; EP: Epoxy Paint; CMU: Concrete Masonry Unit
ATC: Acoustical Tile Ceiling; VATC: Vinyl Coated Acoustical Tile Ceiling, STR: Exposed Structure

DESIGN SCHEME C
ORIGINAL 2000 MASTER PLAN FOR REFERENCE

This scheme was developed during the 2001 Classroom Building design to accommodate the original building program requirements. Due to the budget reduction, the three First Grade Classrooms were deleted from the final design. However the footprint of these classrooms was designated as future expansion and since this expansion was occupying the north parking lot area, an additional future parking area between the current Cafeteria Building and the St. Mary's street was indicated on the drawings.

The feasibility of this design scheme is very weak at current conditions for the following reasons:

- City of Raleigh Planning Commission ruled that no parking lot area to be provided between the Campus Buildings and the St/ Mary's building then or in the future at the 2000 public hearing.

- 2000 design utilizes the driveways of the parking lot area that is enclosed within the stonewall for the parent drop off area. That would not be comfortable traffic flow as per today's requirements. In addition compliance with the fire lane requirements would drastically reduce the parking capacity of this parking area. Since additional parking would not be allowed at the east side of the site as per above item, the only location for parking area expansion is towards west, which would reduce or replace the playground area at this location. If we consider additional site requirements which would reduce the "usable site areas" such as Tree Conservation Area and Strom Water Management Structures, this would make relocation of playgrounds very difficult.

- The original upper level (second floor plan) calls for an interior ramp to accommodate the site topography. This is in contrast to what we were trying to accomplish with the elevated walks and exterior ramps to bring the Campus together, in other words we are trying to avoid creating another level to already multi leveled Campus buildings.

- This original building design pre dated the design of current elevated walkways (Life Safety Improvements project). The design intention was to create a secondary entrance from Collage Place and to provide elevated walkway connection from second level to Main School Building. However the Life Safety Improvements project created a direct secondary entrance to Main School Building through elevated walkways that are connected to parent drop off area.

- Although there are some provisions for future expansion (e.g. mechanical piping, boiler and chiller capacity), we believe the building expansion onto the current north parking will be very costly due to the fact that considerable parking area has to be replaced.

- It would be physically difficult to add more than three classrooms at this location as indicated on master plan. Therefore there will have to be other additions most probably to the Cafeteria Building to satisfy the program requirements. These separate additions to perimeter of campus further move the "center of gravity" away from the Main School Building.

PROPOSED BUILDING 1 RENOVATIONS

The main challenge for the 1923 Main School Building renovations is to provide required upgrades without altering the character of the historic building.

This study recommends providing automatic fire suppression system for the 1923 Main School Building. This will enable us to have code compliance with the current (2006 Edition) of NC Building Code.

During the Life Safety Improvements project constructed in 2004, some of the exterior doors were replaced and the egress from the Multi Purpose Room and the Media Center was brought into compliance with the current Building Code by the construction of series of ramps and elevated walkways.

During the Miscellaneous Improvements project construction in 2006, remainder of the exterior doors were replaced and/or repaired and all exterior windows and louvers are replaced to comply with the historic look of the building as well as to comply with the current Energy Code. In addition, the Multi Purpose floor system was replaced and a new replacement exterior stair at the northwest corner of Media Center was constructed.

The renovations include complete upgrade to plumbing, mechanical, electrical and special systems (Telephone - Data, Intercom, MATV and Security Systems) and they are described under these headings.

For architectural purposes, the HVAC system upgrade is specifically important due to its impact on space allocations and ceiling heights. The current HVAC system for this building was designed by Douglas Y Perry and Associates and installed during the 1989 renovations. The system includes multiple air-handling units serving the building as follows:

- The two small classrooms in basement are served from AHU#1 located in Mechanical Room at northwest corner.
- The Multi Purpose Room is served from AHU#2 located at First Floor Mechanical Room.
- The First Floor Spaces are served from AHU #3 located at Basement Mechanical Room.
- The Second Floor Spaces are served from AHU #4 located at Basement Mechanical Room.
- The Third Floor Spaces are served from AHU#5 and #6 located at South and North Mechanical Rooms (at each end of the Corridor).
- The Media Center is served from AHU#7 and #8 located at South and North Mechanical Rooms (above media center halls accessible by ladder from Platform).

The proposed HVAC system will make exclusive use of the existing ventilation chases. It is proposed to group most of the air handling units at Basement Mechanical Room and newly arranged two Mechanical Rooms at First Floor (directly above the Basement Mechanical Room and adjacent to vertical HVAC chases. Outside air intake for these air-handling units shall be provided from existing louver opening adjacent to Mechanical Room exterior door. The current Mechanical Rooms located at upper level at each side of the Platform, serving the Media Center shall be re utilized.

The existing vertical ventilation chases shall be used as HVAC chases for duct routing. It is proposed to remove the corridor wall of these chases entirely (at all three floors) and remove interior partitions (for original chimney and dust chute) to have approximately 5’-0” x 15’-0” clear interior area. There will be pair of chases of this size on second and third floors. The first floor chases will be slightly larger size (5’-0” x 20’-0”). Outside air intake for these

It is also proposed that the new condensing boilers to be located at the Basement Mechanical Room serving not only 1923 building but also Replacement Building.

In General the proposed renovations for this building include the following:

- Provide concrete topping and rubber treads and risers and rubber tile at landings at south and north stair towers. Remove existing railings and provide dual height (adult and children) handrails to comply with NC Accessibility Code. Provide ventilation for the stair towers. Provide acoustical tile suspended ceiling (to correct acoustical problems) and new lay in type fluorescent light fixtures for proper lighting.

- Complete renovations of Boys and Girls group toilets located at first, second and third floors are proposed. Based upon required plumbing fixture calculations the current group toilets are arranged to provide space for a staff toilet at each location.

- Complete renovation of ceilings is required. The current ceiling heights shall be maintained if we cannot increase the heights due to above ceiling mechanical and sprinkler system components.

- All existing windows and window treatment (replaced in 2006) shall remain and protected.

- All existing exterior doors (replaced in 2004 and 2006) shall remain and protected. Provide card readers at main exterior doors to comply with current WCPSS Design Guidelines.

- All existing original wood doors (wood frame with wood raised panel doors), wood window trim, and wood chair rail and base shall be abated to remove lead based paint, sanded and repainted. All existing interior doors installed during the renovations shall be replaced with wood frames and doors to match the original doors.

- All existing plaster covered walls shall be repainted. There was a discussion of providing gypsum wall board furring and insulation especially at the exterior walls to improve the energy efficiency of the building. This method would also help us to hide any surface mounted conduits and devices to be located on the walls. However this would require substantial changes to existing wood trim (around windows, doors, chair rails and wood bases) and would alter the original historic look of the building. There is always the option of removing and salvaging the existing wood trim pieces and reinstalling on new gypsum wall board furred walls, but this would be at a substantial cost.

- The existing corridors floor finish is terrazzo flooring with integral cove base which is scheduled to remain and protected during the construction. There are plenty of cracks and deteriorated areas but the flooring is in generally fair shape and it is the original flooring. If the decision made to provide gypsum wall furring we would recommend providing vinyl composition tile, or resilient sheet flooring or synthetic terrazzo overlay (in order of cost) in these areas.

- The group toilets floor finish is ceramic tile (1989 renovations) and shall be replaced with new ceramic tile flooring.

- The Media Center and Classroom flooring is direct glue down carpeting and believed to be replaced during 2004. The Media Center carpet was installed on wood raised platform system (plywood platforms were provided over original sloped auditorium slab in 1998 and partially in 2004). The classroom carpet was installed on original maple flooring (on recessed concrete floor). There was discussion of restoring original maple flooring and exposing portions of it in classrooms. The condition of the maple flooring is difficult to determine (without destructive testing). This study includes replacement of the carpet in Media Center and Classrooms.

- Although not specifically indicated on drawings this study includes replacement of all marker boards, tack boards, projection screens and other specialties in classrooms. The classrooms shall also

receive casework (cubbies, wall and base cabinets, counter and sink) as per current WCPSS guidelines. In addition, the wooden steps located at emergency egress windows in classrooms will be longer required due to new sprinkler system and can be removed.

Basement Floor

- Remove existing two small classrooms (including storage room and mechanical room) located at the west end of the Multi Purpose Room for expansion of this room to comply with WCPSS Educational Specifications recommended area. Provide PE Office and PE Storage Room at west end of this space. The expansion portion of the Multi Purpose Room Floor shall match the existing portion, which is resilient athletic flooring that was installed in 2004 project. The current ceiling in this space is original plaster ceiling cluttered with conduits. The light fixtures that were installed are quarts type deep fixtures suspended from plaster ceiling. Current HVAC ductwork is exposed sheet metal. The proposed ceiling system is tegular acoustical panels (Tectum panels) installed in heavy-duty ceiling grid system. Light fixtures are proposed as lay in type fluorescent light fixture with impact resistant lenses. The proposed air distribution system is fabric ducts (duct sox) running parallel to north and south walls serving from the air handling units located in mechanical rooms 1009 and 1111. The intent is to improve the acoustics in this room and maximize the ceiling height. Current plaster ceiling height is approximately 14'-11". The current light fixtures and ductwork are approximately 2' height reduces the effective ceiling height to 13'-0". The proposed ceiling renovation include the removal of plaster ceiling (to use the above plaster area for routing of sprinkler piping) and install the suspended ceiling at 15'-0" AFF. The location of fabric ducts will be selected to prevent conflicts with the entrance stair and the main play area.

- Basement Mechanical Room: Remove boiler, water heater and air handling units. Remove masonry walls for abandoned dust chute. Provide condensing boilers and water heater. The air-handling units to be located in this room will serve the first and second floor spaces.

First Floor

- Remove and install new ramps at main corridor to comply with NC Accessibility Code.

- Provide new rated walls and new exit doors at west hallways to improve egress from south and north stair towers.

- Remove walls and doors to create two Mechanical Rooms at south and north side of hallway from main corridor to Multi Purpose Room entrance. The air-handling units to be located in these rooms will serve the multi purpose room and third floor spaces.

- Remove walls and doors and rearrange the area currently occupied by two First Grade Classrooms and German Classroom.

- The renovated first floor is designated to house six classrooms (Academically Gifted, Chinese, Japanese, German, Spanish and French Classrooms) and fairly good size Band Room with Band Storage Room.

- Custodial Room with floor sink, mop holder and shelf and stainless steel storage shelving (eight 18"x36" five-tier units) is provided off of main corridor to serve the first and the basement floors.

Second Floor – Prime Floor

- Remove walls and doors and rearrange the area currently occupied by Art Room and Photo Video Room into Administration Offices.

- Remove walls and doors and rearrange the area currently occupied by Administration Offices into Computer (Technology Room) and Teachers' Work Room.

- Remove walls and doors and rearrange the area currently occupied by Teachers Lounge, Storage and Staff Toilet into renovated Teachers' Lounge and Custodial Room. Custodial Room with floor sink, mop holder and shelf and stainless steel storage shelving (five 18"x36" five-tier units) is provided off of main corridor to serve the second and the third floors.

- Remove walls and doors and rearrange the area currently occupied by storage into Office at north end of the main corridor. Provide storefront type entrance to this office to allow daylight into the main corridor.

- Remove selected ramps and stairs and construct new ramps and stairs in Media Center for compliance with NC Accessibility Code. Also proposed to raise the opening header to hallway on north side (opening header to south hallway was raised during 2004 renovations) to match south side and to allow the relocation of stairs close to opening (to free space on main floor of Media Center).

- Repair and repaint existing Media Center coffered ceiling. In addition, provide a paint scheme to accentuate the white window and proscenium opening trims, frieze banding and pilasters in this space (current white on white paint scheme does not add anything to visual quality of the room). Furthermore, if budget permits include replacement of platform curtains and replacement of fixed seating at balcony level to provide color coordination. The current lighting in the Media Center is pendant mounted indirect light fixtures (not believed to be original light fixtures) and there are also couple of chandeliers (although they look old, not believed to be original light fixtures) located at plaster vaulted ceiling of the Media Center Hall (original Auditorium Foyer). The recommended lighting for this area will be indirect light fixtures (perhaps cove lighting located over the top of the higher frieze band) alongside the space perimeter. Due to this room secondary function as auditorium (balcony seating and platform "stage" will remain) suspended light fixtures can not be used. The lighting at the table level has to conform to required lighting levels for RLV room. The light fixtures themselves should be low key to prevent impact on the perception of this room.

- The renovated second floor is designated to house three Third Grade Classrooms and Compute Lab (Technology Classroom).

Third Floor

- Remove walls and doors and rearrange the areas currently occupied by mechanical rooms into Offices at south and north ends of the main corridor. Provide storefront type entrance to these offices to allow daylight into the main corridor.

- Remove walls and doors and rearrange the areas currently occupied by (storage "formerly motion picture equipment room" and pair of stairs to create an entry hall to the balcony seating area.

- Remove partial flooring, structural beams and secondary members, portion of fixed seating and the vaulted ceiling below (Media Center Hall ceiling) and reconstruct this area to have level egress from balcony to main corridor.

- Remove walls and doors and rearrange the area currently occupied by a resource room and two Fifth Grade classrooms into a large Multi Use Room equipped with accordion partitions to subdivide the room into three smaller (360 square feet each) rooms for flexible use.

- The renovated third floor is designated to house three Fourth Grade Classrooms and three Fifth Grade Classrooms.

Building Renovation 1 Typical Room Finishes

Room	Floor	Base	Walls	Ceiling	Ht
Classrooms	CPT-XWD	XWDB	P-XPL	ATC	10'-0"
Group Toilets	CT	CTB	CTB-GWB	GWB	9'-4"
Administration - Offices	CPT	R	P-XPL, P-GWB	ATC	9'-4"
Corridors	XTR	XTRB	P-XPL	ATC	9'-4"
Media Center	CT	XWDB	P-XPL	P-XPLC	12' to 30'
Multi Purpose Room	RAF	R	P-XPL	APC	15'-0"
Custodian Rooms	VCT	R	P-XPL	ATC	9'-4"
Mechanical Room	XCONC	-	P-XPL	STR	13'-0"

VCT: Vinyl Composition Tile; CPT: Carpet; CT: Ceramic Tile, XCONC: Existing Concrete - Sealed, XWD: Existing Wood Flooring, RAF: Resilient Athletic Flooring, XTR: Existing Terrazzo Flooring
R: Resilient Base; CTB: Ceramic Tile Base, XWDB: Existing Wood Base, XTRB: Existing Integral Terrazzo Cove Base
P: Paint; EP: Epoxy Paint; GWB: Gypsum Wall Board, XPL: Existing Plaster on Existing Masonry
ATC: Acoustical Tile Ceiling; APC: Acoustical Panel (Tectum) Ceiling, XPLC: Existing Coffered Plaster Ceiling on Suspended Metal Lath, STR: Exposed Structure

PROPOSED BUILDING 2 RENOVATIONS

Although there are no specific requirements for renovations in this building by program requirement or previous meeting discussions we anticipate the following upgrades that may be required by WCPSS:

- Upgrade HVAC controls for existing mechanical equipment to remain in this building. Note that Building 2 Mechanical system is independent from the rest of the Campus Buildings (i.e. it has its own boiler, chiller, water heater and air-handling units).

- Upgrade individual toilets located in Kindergarten Classrooms to comply with current Wake County Health Department regulations. At the time of the design (2000) regulations allowed to provide water closets in toilet rooms with the lavatory located outside the toilet rooms. Counter sinks were allowed to be equipped with bubblers for drinking purposes. Current regulations require lavatories to be located with water closets inside the toilet rooms and require separate drinking fountains (bubblers are no longer allowed). Compliance with above and also NC Accessibility Code for new toilets may require removal of walls and doors and rearrangement of classroom casework. The classroom casework in this building conforms to old WCPSS Guidelines (e.g. island type counter for sink and cubbies are single tiered). WCPSS would like to consider replacement of casework if decision is made to renovate the toilets.

- Provide card readers at main exterior doors to comply with current WCPSS Design Guidelines.

ARCHITECTURAL SPECIFICATIONS OUTLINE

DIVISION 1 - GENERAL REQUIREMENTS

Section 01010 Summary of Work
General description of the Site improvements and Building Construction.

Section 01031 Alternates
To be determined at the next phase.

Section 01032 Allowances and Unit Prices
To be determined at the next phase.

Section 01200 Progress Documentation and Procedures
Progress meeting procedures.

Section 01300 Submittals
Procedures for product, certificate and report submittals.

Section 01311 Construction Schedules and Reports
Procedures for preparing, updating and enforcement of construction schedules.

Section 01500 Temporary Facilities and Services
Temporary Utilities
Temporary Facilities

Section 01700 Construction Procedures
General construction and installation procedures.
Correction of defective work.
Cleaning during construction.
Project completion procedures.

Section 01800 Project Record Documents
Record Drawings.
Record Project Manual.
Record Submittals.

DIVISION 2 - SITE WORK

Section 02050 Demolition
Pertaining to any surface or subsurface structures.

Section 02055 Building Demolition
Pertaining to existing structures including footings.

Refer to Civil Engineering Specification Outline for the Remainder of Sections in this Division.

DIVISION 3 – CONCRETE

Section 03300 Cast-In-Place Concrete

ACI 301 “Specifications for Structural Concrete for Buildings”
ACI 318 “Building Code Requirements for Reinforced Concrete”
ACA 347 “Recommended Practice for Concrete Formwork”
All concrete shall have a 28-day strength of at least 3000 psi.
Apply 2 coats of water base epoxy seal at exposed concrete surfaces.

DIVISION 4 - MASONRY

Section 04200 Unit Masonry

Exterior Cavity Walls: 4” face brick with 8” concrete masonry unit back-up.
Interior Masonry Partitions: 8” concrete masonry unit. 8”x 8” one side V groove scored at corridor walls.

Section 04230 Reinforced Unit Masonry

Horizontal joint reinforcement at 16” O.C.
Vertical reinforcement as per structural design.

DIVISION 5 - METALS

Section 05120 Structural Steel

Beams, Columns and miscellaneous angles, plates and bracing.
AISC “Manual of Steel Construction” (9th Edition)
AISC “Code of Standard Practice”

Section 05210 Steel Joists and Joist Girders

Roof joists.
SJI Standard Specifications

Section 05300 Steel Decking

Roof deck.

Section 05400 Cold Formed Steel Framing

Exterior wall framing.

Section 05500 Metal Fabrications

AISC “Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings”
AWS “Structural Welding Code”

Section 05511 Pre-Engineered Metal Stairs

Concrete filled metal pan stairs with closed risers.

Section 05810 Expansion Joint Cover Assemblies

Assemblies for floor, wall and ceiling expansion joints.

DIVISION 6 - WOOD AND PLASTICS

Section 06100 Rough Carpentry

Seasoned lumber 19% moisture content.
Preservative treated lumber to comply with AWPA C2 and C9.

Section 06200 Finish Carpentry

PS 20 “American Softwood Lumber Standard”
PS 1 “U.S. Product Standard for Construction and Industrial Plywood”
APA PRP-108

Section 06400 Architectural Woodwork

AWI “Architectural Woodwork Quality Standards
Miscellaneous items not covered by Section 12304.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

Section 07160 Bituminous Dampproofing

Damproofing on concrete block face of exterior wall cavity.

Section 07210 Building Insulation

Maximum U-value for exterior walls: .10
Perimeter slab insulation – minimum R value of 7.

Section 07220 Roof Insulation

Maximum U-value for roof: .05
Uniform thickness polystyrene roof insulation used in conjunction with two-inch lightweight insulating concrete topping system.

Section 07270 Firestopping

As required by UL Design applicable to penetration.

Section 07410 Manufactured Metal Fascia and Soffit Panels

Metal panels with exposed fasteners and fluoropolymer finish to match existing metal fascia and soffit panels.

Section 07525 Modified Bitumen Roofing

Two-ply Modified Bitumen system with granule embedded top ply.
FM I-90 and Class 1A and UL Class A.

Section 07600 Flashing and Sheet Metal

Through wall flashing, counter flashing, etc.
NRCA Roofing Manual
SMACNA Architectural Sheet Metal Manual

Section 07700 Roof Specialties and Accessories

Pre-manufactured components compatible with the modified bitumen roofing.

Section 07900 Joint Sealers

Colors to match surrounding surfaces.

DIVISION 8 - DOORS AND WINDOWS

Section 08110 Steel Doors and Frames

All exterior doors and interior A label doors and all frames shall be HM.
Exterior HM doors and frames: SDI Grade III, extra heavy duty, Model 2A, 14 GA.
Interior HM doors and frames: SDI Grade III, extra heavy duty, Model 2, 16 GA.
HM glazing frames to be fabricated from 16 GA cold rolled steel.
All exterior HM doors and frames shall be of galvanized steel.
All exterior HM doors shall be insulated.

Section 08211 Flush Wood Doors

All interior doors shall be wood doors. AWI "Architectural Woodwork Quality Standards", Section 1300. Solid core construction with rotary cut birch veneer faces.
Pre-finished with transparent finish AWI premium grade.
Pre-fitted and pre-machined for finish hardware.

Section 08220 Fiberglass Reinforced Plastic (FRP) Doors and Frames

Heavy-duty pultruded fiberglass frames.
Heavy-duty pultruded fiberglass doors with vertical fiberglass stiffeners 6 inches on center and extruded polystyrene solid foam core.

Section 08305 Access Doors

Pre-manufactured units with integral frame.

Section 08410 Aluminum Entrances And Storefronts

AAMA 101, P-HC40, 0.062" thickness for storefront members.
Equal to Kawneer 451T, thermal brake system storefront.
Equal to Kawneer 500 entrances.
Fluoropolymer finish (70% Kynar). Match existing window finish.

Section 08420 Aluminum Curtain Wall System

Equal to Kawneer 1600 Series Wall System 2.
Structural silicone vertical mullions and optional round covers for glazing capture on horizontal mullions.
Fluoropolymer finish (70% Kynar). Match existing window finish.

Section 08520 Aluminum Windows

AAMA 101, P-HC40, 0.062" thickness for main frame and sash.
Thermal break, single hung operation.
Fluoropolymer finish (70% Kynar). Match existing window finish.

Section 08710 Finish Hardware

Heavy duty mortise lock and latch sets. Classroom, passage, privacy functions.
Panic devices. Dogged-in for push-pull operation, 02 lock set operation at after hours "exit only" doors.
Parallel arm type and hold open type (non-rated doors) closers. Concealed closers at exterior doors.
Full mortise, five knuckle hinges. Use ball bearing hinges at doors with closers. Stainless steel hinges with NRP at exterior doors.
Flush bolts at inactive leaf of non-rated double doors.
Floor and Wall stops. Kick and Push plates. Hardware finish US26D - Dull Chrome.

Section 08800 Glass and Glazing

Insulating, low E glazing at exterior aluminum windows.
Insulating glass at exterior storefront entrances. Tempered glass at interior doors.

DIVISION 9 - FINISHES

Section 09250 Gypsum Wallboard

ANSI/ASTM C 840 for application and finishing of Gypsum Board.
ASTM C754 for installation of steel studs.
Typical construction: 3-5/8" x 25 GA studs 16" O.C. with 5/8" GWB each face, provide sound attenuation blankets to minimize sound transmission.
Typical Ceiling Construction 5/8" GWB attached to 7/8" metal channels 16" O.C. tied to 1 ½" metal channels 48" O.C. suspended from structure.

Section 09300 Tile Work

ANSI A13.1 Standard Specifications for Ceramic Tile ANSI 108 Series. TCA "Handbook for Ceramic Tile Installation"
Ceramic Tile 2" x 2", thick set in group toilets with cove base.
Quarry Tile 8" x 8", with 1" x 1" accent dots in dining room, service and instructional kitchen areas with cove base.

Section 09400 Acoustical Lay-In Ceilings

ASTM E 1264 Acoustical Ceiling Units
ASTM C 635 Acoustical Suspension System.
24" x 24" grid size panels, with white finish.
Shadow mold wall angles for the suspension system.

Section 09401 Acoustical Panel Ceilings

ASTM C 635 Acoustical Suspension System.
24" x 24" grid size acoustical panels (Tectum), with white finish.

Section 09600 Interior Stonework

Bluestone or Solid Formed Plastic windowsills.

Section 09622 Resilient Athletic Flooring

Resilient Athletic Flooring to match existing in Multi Purpose Room.

Section 09660 Resilient Tile Flooring

VCT: FS SS-T-312, Type IV, 12" x 12", 1/8" GA
Resilient Base: FS SS-W-40, Type I, 4" height
Resilient Accessories for floor transitions.

Section 09680 Carpet

28 oz, type 6.6 nylon fiber, non repeating pattern carpet with vinyl cushion.

Section 09900 Painting

Primers and undercoats shall be by the same manufacturer as the finish coats.
60-80% reflective value, semi-gloss at wall surfaces.
Epoxy paint in all toilet areas, instructional kitchen and service areas.
Block filler shall be applied to all exposed masonry.

Section 09950 Vinyl Wall Coverings

Medium duty, Type II.

DIVISION 10 - SPECIALTIES

Section 10100 Visual Display Boards

Dry erase Marker boards: 7/16" particle board core backed by foil or aluminum for moisture seal with 28 gage steel face sheet to provide matte writing surface for use with dry erase marker pens. Provide extruded aluminum frame with chalk tray and map rail with flag holders.

Tackboards and tackstrips: 1/4" thick composition cork mounted to 1/4" hardboard in extruded aluminum frame.

Section 10160 Toilet Partitions

Floor mounted overhead braced, solid plastic toilet partitions.

Heavy-duty stainless steel hardware.

Section 10200 Louvers and Vents

Pre-finished baked enamel or fluoropolymer coated louvers.

Section 10350 Flagpoles

30' tapered cone, aluminum pole with internal halyard.

Section 10425 Signs

Interior Signs: 1/16" clear matte acrylic sub surface painted with a background color laminated to 1/16" opaque black acrylic base with 1/16" raised acrylic letter interior panel signs with vandal proof attachment method.

All signs shall comply with ADA requirements.

Section 10522 Fire Extinguishers, Cabinets and Accessories

Shall comply with NFPA 10. Maximum distance 75 feet.

12" x 27" x 8" semi-recessed cabinets with Plexiglas breakable light, mounted 48" to top. Provide fire rated cabinets at rated walls.

10 pound ABC fire extinguisher canisters.

Section 10650 Operable Partitions

Manually operated, continuously hinged operable partition in Resource Rooms. Minimum STC Rating: 51. Hufcor 7900M or equal.

Section 10670 Storage Shelving

Pre manufactured wood shelving for storage areas.

Section 10800 Toilet and Bath Accessories

Surface mounted stainless steel accessories.

Comply with ADA requirements.

Section 10505 Metal Lockers

Single tier steel lockers for cafeteria staff.

DIVISION 11 - EQUIPMENT

Section 11000 Miscellaneous Equipment

Battery operated wall clocks.

Section 11131 Manually Operated Projection Screens

Wall mounted Projection Screens.

Section 11400 Food Service Equipment

New food service equipment in Kitchen area.

Section 11452 Residential Appliances

Refrigerator, range, microwave oven, washer and dryer, for probable instructional kitchen, Refrigerator and microwave oven for teachers lounge.
Refrigerator for health room.

Section 11457 TV Brackets

Ceiling mounted, suspended TV brackets and VCR trays.

Section 11480 Athletic Equipment

Wall mounted, side fold basketball backboards for multi purpose room. Wall Padding.
Outdoor basketball backboards for hard surface play area.

DIVISION 12 - FURNISHINGS

Section 12304 Laminated Clad Casework

Pre-manufactured plastic laminate casework includes cubicles, shelving, countertops, base and wall cabinets in all; classrooms and teachers' work room.

Section 12495 Cubicle Tracks and Curtains

Cubicle track and curtain in Health Room.

Section 12510 Blinds

1" mini blinds for exterior windows in Building 3.

Section 12627 Media Center Furniture

Pre-manufactured Media Center Furniture (Brodart or equal) including modular check out desk components, shelving, computer tables, reading tables, chairs, etc. in RLV room.

DIVISION 13 - SPECIAL CONSTRUCTION

Not Used

DIVISION 14 - CONVEYING SYSTEMS

Section 14240 Hydraulic Elevators

2500 LB Capacity, Holeless, Hydraulic elevator with adjacent machine room and remote oil spill storage tank.

CIVIL DESIGN NARRATIVE

Stormwater Management

There exist several polices related to management of stormwater runoff quantity and quality in City of Raleigh Stormwater Design Manual such as Stormwater runoff control, Neuse River Nutrient Management Strategy, Water Supply Watershed Protection etc.

A proposed project (new development, additions and renovations) for a site requires a stormwater runoff control plan according to the guidelines established by City of Raleigh. The post development runoff peak for a site should be equal to the pre-development runoff peak for 2-yr/24-hr and 10-yr/24-hr storm event. The goal is achieved by designing stormwater design facilities such as detention ponds, wetlands etc.

However, there are exemptions applied to the above rule. If the increase in the stormwater runoff between pre-development and post development conditions at each point of discharge for 2-yr/24-hr storm is less than 10% then the site is exempted from the stormwater runoff control plan. (Under Ordinance No. 2001-991-TC-2006, Sec. 10-9023 and Section 1.2.6.5 from City of Raleigh Stormwater Design Manual)

Another important regulation enforced by City of Raleigh is Neuse River Nutrient Management Strategy. The goal of the strategy is to achieve a 30 percent nitrogen reduction from each controllable and quantifiable source of nitrogen in the basin. Since the site is a public school, it's exempted from the Neuse River Nutrient Management Strategy Rule. (Section 1.2.6 from City of Raleigh Stormwater Design Manual)

Finally, Water Supply Watershed Protection rule applies to a water supply watersheds in the area. The site is located within the Crabtree Creek Watershed. Since the Crabtree Creek Watershed is not a Water Supply Watershed this rule is not applicable to the site.

Site Setback Requirements

The majority of St. Mary's Street is classified as a Major Thoroughfare. Based on a discussion with City of Raleigh, the site zoning determines the setbacks for the site since the site is zoned R-10. The setback for a site zoned R-10 is a maximum of 40 feet along the front of the site which faces St. Mary's Street. The setback along the sides of the property is 20 feet. All setbacks are measured from the right-of-way.

City of Raleigh may require roadway improvements along St. Mary's Street and/or College Place.

Vehicular Stacking Requirements

Vehicular stacking length was calculated using the NCDOT MSTA School Traffic Calculator. The student population was assumed to be 410. The staff population was assumed to be 65. The number of buses was assumed to be 8. Based on the above input, the stacking length required is approximately 676 feet.

CIVIL SPECIFICATIONS OUTLINE

Section 0220 – Site Demolition

This section will address demolished items becoming property; of the Contractor and how adjacent improvements can not be disturbed.

Section 02231 – Clearing and Grubbing

This section will address the Contractor's responsibility for clearing and grubbing the project site.

Section 02270 – Erosion Control

This section will address erosion control measures that will be needed on site during construction

Section 02300 - Earthwork

This section will address all contractor requirements for backfilling and preparation of subgrades.

Section 02315 – Excavation and Fill

This specification will be used for the installation of structures.

Section 02630 – Storm Drainage

This specification will discuss the components of the storm drainage system. Storm drainage will be various sized RCP.

Section 02731 – Aggregate Base Course

This section will be used for the installation of all gravel, asphalt and concrete drives.

Section 02741 – Hot Mix Asphalt

This section will be used for the installation of all asphalt drives and parking lots.

Section 02751 – Cement Concrete Pavement

This section will be used for the installation of all sidewalks and concrete slabs.

Section 02821 – Chain Link Fence

This section will be used for the installation of the construction fence.

PLUMBING DESIGN NARRATIVE

Existing System Description

ORIGINAL 1923 SCHOOL BUILDING
The existing 3" domestic water service enters the building in the south end of Basement Mechanical Room. A cold water manifold is provided and cold water piping is routed throughout the building to plumbing fixtures. No backflow preventor appears to be installed on domestic water service. Mechanical make-up water is connected to the HVAC system at the boiler located in the Basement Mechanical Room. No backflow preventor appears to be installed on the mechanical make-up water piping. A 50 gallon electric water heater is located at the north end of the Basement Mechanical Room and provides hot water to janitor's sinks and other fixtures. No hot water is provided in gang toilet areas. All waste piping is routed down to below First Floor and is routed out of the building in the east direction. All floor drains in the Basement Mechanical Room are routed to a sump and then pumped up to the upper floors. A natural gas meter is located at the north end of the building, at the entrance to the Basement Mechanical Room, and gas piping is routed to the existing boiler.

1989 CAFETERIA BUILDING
The existing 2" domestic water service enters the building in Boiler Room and is routed throughout the building to plumbing fixtures. No backflow preventor appears to be installed on domestic water service. Mechanical make-up water is connected to the HVAC system at the boiler located in the Boiler Room. A reduced pressure zone backflow preventor is located on the mechanical make-up water piping. A 300 MBH natural gas fired, copper fin water heater with a separate 120 gallon vertical storage tank provides hot water to the Kitchen area. A small 10 gallon water heater provides hot water to the gang toilet area. Waste piping exits the building in the east direction. A 1,000 gallon grease trap is installed on the Kitchen waste piping. A natural gas meter is located on the south end of the building and gas piping is routed to the existing boiler and water heater.

Replacement Building Plumbing System Description

ORIGINAL 1923 SCHOOL BUILDING
The existing 3" domestic water service will remain. A new reduced pressure zone backflow preventor will be added to the existing service. All existing domestic water piping will be removed, replaced, and routed to new plumbing fixtures. Hot water will be provided by a new electric water heater located in the Basement Mechanical Room and hot water piping will be routed to all new plumbing fixtures, including gang toilet areas. Existing waste and vent piping will be reused as much as possible. A new sump pump will be provided in the Basement Mechanical Room.

2-STORY CAFETERIA BUILDING
A new domestic water service with reduced pressure zone backflow preventor will be provided to the new 2-Story Cafeteria Building and cold water piping routed to all new fixtures. Hot water will be provided by a new natural gas fired, sealed combustion, copper fin water heater with separate storage tank sized appropriately for new fixtures and hot water piping will be routed to all new fixtures. New waste and vent piping will be provided from all plumbing fixtures. A new 1,500 gallon grease trap will be provided to serve the Kitchen Area. The waste piping will exit the building in the east direction. A new natural gas service will be provided to serve the new boilers and water heater.

PLUMBING SPECIFICATIONS OUTLINE

Section 15010P - Basic Plumbing Requirements

This section includes general requirements for plumbing installations that expand the requirements of division 1 including submittals, coordination drawings, record drawings, and maintenance manuals. Roughing in of plumbing installations and cutting and patching are also covered.

Section 15050P - Basic Plumbing Materials and Methods

This section includes requirements for concrete equipment bases, plumbing demolition, touch up painting, connection of dissimilar metals, and joining materials.

Section 15100P - Plumbing Valves

All isolation valves for plumbing system shall be ball valves. All ball valves 1" and smaller shall be two piece construction with bronze body, chrome plated brass ball, blowout proof stem, vinyl covered, steel lever handle, and soldered ends. All ball valves 1 1/4" and larger shall be three piece construction with bronze body, chrome plated brass ball, blowout proof stem, vinyl covered steel handle, and soldered ends for valves 2" and smaller, threaded ends for valves 2 1/2" and larger. All swing check valves shall have cast bronze body and cap with horizontal swing. Check valves shall be installed in hot and cold water supply piping to all mop sinks. All balancing valves shall be precision machined, ball type, triple purpose, balancing instrument.

Section 15135P - Plumbing Gages

All thermometers shall be liquid in glass with die-cast, aluminum finished, baked epoxy enameled case with glass front. All pressure gages shall be 4 1/2" round, Grade A, phosphor -bronze, Bourdon-tube gages.

Section 15145P - Plumbing Hangers and Supports

All individual runs of piping shall be supported with heavy duty, steel clevis hangers attached to building structure with threaded rods. All parallel runs of piping shall be supported with heavy duty steel trapeze hangers.

Section 15190P - Plumbing Identification

All plumbing valves and piping shall be identified. Utilize snap-on plastic markers with pre-printed letters and colors as specified for plumbing piping. Cold water piping shall be dark blue in color, hot water and hot water return shall be dark red in color, and gas piping shall be yellow in color. Install valve tags on all valves in plumbing system. Tags shall be 2" round brass with printed piping system and number corresponding to valve chart. Install color coded markers on grid of ceiling where valves are located.

Section 15250P - Plumbing Insulation

All cold water, hot water, hot water return, and storm drainage piping shall be insulated with 1" thick fiberglass piping insulation with factory applied all service jacket and vapor barrier. Provide canvas jacket on all piping in mechanical rooms.

Section 15410P - Plumbing Piping

All sanitary waste and vent piping, above and below grade, shall be Schedule 40 PVC-DWV piping and fittings with solvent cemented joints. All storm drainage piping above grade shall be CISPI 301 hubless cast iron piping and fittings. All kitchen waste piping below grade shall be heavy duty hub and spigot cast iron piping and fittings. All storm drainage piping below grade shall be Schedule 40 PVC-DWV piping and fittings with solvent cemented joints. All potable water piping below grade shall be Type “K” soft copper piping and fittings with brazed joints. All potable water piping above grade shall be Type “L” hard copper and fittings with soldered joints.

Section 15430P - Plumbing Specialties

All backflow preventors shall be reduced pressure zone double check valves. All wall hydrants shall be non-freeze, automatic draining, chrome plated, with loose tee key and integral vacuum breaker. All hose bibbs shall be bronze bodied with integral vacuum breaker. All water hammer arresters shall be piston type with pressure cushioning chamber. All firestop assemblies and caulking shall be U.L. listed. All floor drains shall be cast iron with seepage flange, clamping device, and nickel plated bronze strainer. Strainers shall be square in areas where tile is used, round elsewhere. All roof drains shall be cast iron with combination flashing ring and gravel stop, cast iron dome, underdeck clamp, and sump receiver. Roof drains shall be furnished by plumbing contractor, installed by general contractor, and final connection to drain shall be by plumbing contractor. Cleanouts shall be provided where needed.

Section 15440P - Plumbing Fixtures

All water closets shall be vitreous china, wall hung or floor mounted, top spud, water saver, color white with chrome plated exposed flush valves and open front plastic seats. All urinals shall be wall hung, waterless, color white. All lavatories shall be wall hung, cast iron, color white with chrome-plated p-trap, chrome-plated supplies, and chrome-plated single lever faucet. All electric wall coolers shall be wall hung, wheelchair accessible, color gray beige, and 8 gallons per hour capacity. All countertop sinks shall be stainless steel with p-trap, supplies, chrome plated strainer, and chrome plated single lever kitchen faucet. All mop sinks shall be floor mounted, precast terrazzo with cast brass faucet with pail hook, 36" long hose and hose bracket, and mop hanger. Water Heater shall be commercial, gas-fired, copper fin water heater with glass-lined storage tank.

Section 15488P - Natural Gas Piping

All natural gas piping shall be Schedule 40 black steel piping and fittings. All gas piping 2" and smaller shall have threaded joints. All gas piping 2 1/2" and larger shall have welded joints. All gas valves shall be lubricated plug valves with square heads.

HVAC DESIGN NARRATIVE

Existing System Description

ORIGINAL 1923 SCHOOL BUILDING

Heating System
The original 1923 School Building is currently heated by hot water. Hot water is generated by a gas-fired Weil McClain Boiler, located at the north end of the basement mechanical room. The Weil McClain Boiler has a Power Flame burner with a minimum 750 MBH output and a 3,103 MBH maximum output. The boiler appears to be fairly new. The system currently operates with a 180 deg. F. hot water supply temperature and a 160 deg. F. hot water return temperature. An in-line hot water pump is located at the south end of the basement mechanical room and circulates hot water throughout the building. Three-way valves are located on all air handling unit heating coils; therefore, there is currently no variable frequency drive on the hot water pump.

Cooling System
The original 1923 School Building is currently air conditioned by chilled water. Chilled water is generated by a 145 ton split system chiller. The chiller evaporator is located at the north end of the basement mechanical room and the two condensers are located outside the building on the north end of the site adjacent to Calvin Road and the school playground. The system currently operates with a 44 deg. F. chilled water supply temperature and a 54 deg. F. chilled water return temperature. An in-line chilled water pump is located at the south end of the basement mechanical room and circulates chilled water throughout the building. Three way valves are located on all air handling unit cooling coils; therefore, there is currently no variable frequency drives on the chilled water pump.

Air Distribution System
The original 1923 School Building is currently conditioned by multiple constant volume air handling units, with hot water heating and chilled water cooling coils, located throughout the building in mechanical rooms.

Classroom 1005 and Classroom 1006, located on the Basement Floor, are conditioned by a 1,250 cfm air handling unit, designated as AHU-1, located in Mechanical Room 1007. Supply ductwork is routed to classroom spaces for air distribution and return air is ducted back to the unit. Minimal outside air is provided to the air handling unit through an exterior wall louver.

Multi-Purpose 1001, located on the Basement Floor, is currently conditioned by a 2,600 cfm air handling unit, designated as AHU-2, located in Mechanical Room 1115 on First Floor. Supply ductwork is routed exposed at ceiling for air distribution and return air is provided through a sidewall return grille located on the wall separating Multi-Purpose 1001 and Storage 1114. Outside air is provided to the air handling unit through an exterior wall louver.

The First Floor and Second Floor are currently conditioned by two large air handling units located in the Basement Mechanical Room. One air handling unit, designated as AHU-3, is 11,900 cfm and serves spaces at the south end of the building. The other air handling unit, designated as AHU-4, is 12,440 cfm and serves spaces at the north end of the building. Supply air is routed up through chases from the Basement Mechanical Room to the First Floor and Second Floor and then to Classrooms and Support Spaces for air distribution. Return air is currently provided through a return air plenum located above the Corridor ceiling on the First Floor and Second Floor. Return air is routed from each space through sidewall grilles and to above the Corridor ceiling. Return air ductwork is routed from the First Floor and Second Floor down through chases and back to AHU-3 and AHU-4. Outside air is provided to the air handling units through an exterior wall louver.

The Third Floor is currently conditioned by two air handling units located at each end of the Corridor. One air handling unit, designated as AHU-5 and located in Mechanical Room 1304, is 5,840 cfm and serves spaces at the south end of the building. The other air handling unit, designated as AHU-6 and located in Mechanical Room 1311, is 6,335 cfm and serves spaces at the north end of the building. Supply ductwork is routed to the Classroom and Support spaces for air distribution. Return air is provided through a return air plenum located above the Corridor ceiling on the Third Floor. Return air is routed from each space through sidewall grilles and to above the Corridor ceiling. Return air ductwork is routed from AHU-5 and AHU-6 and is stubbed into the Corridor ceiling. Outside air is provided to the air handling units through exterior wall louvers.

Media Center RLV 1214 is currently conditioned by two air handling units located in elevated Mechanical Rooms at the Stage Area. One air handling unit, designated as AHU-7 and located in Mechanical Room 1315A, is 4,590 cfm and serves the south end of the space. The other air handling unit, designated as AHU-8 and located in Mechanical Room 1315B, is 4,590 cfm and serves the north end of the space. Return air is provided through return air grilles from each unit mounted at the Stage floor level and ducted up to the units. Outside air is provided to the air handling units through exterior wall louvers.

Exhaust air is provided by ceiling mounted or in-line exhaust fans discharging through exterior wall louvers.

Combustion air is provided to the natural gas fired boiler through a louvered door.

Controls
HVAC Building Automation Controls currently consist of a combination of pneumatic and digital controls. The controls are the Network 8000 proprietary system.

1987 CAFETERIA BUILDING

Heating System
The 1987 Cafeteria Building is currently heated by hot water. Hot water is generated by a gas-fired Weil McClain Boiler, located in Boiler 3111. The Weil McClain Boiler has a Power Flame burner with a minimum 300 MBH output and a 700 MBH maximum output. The boiler appears to be fairly new. The system currently operates with a 180 deg. F. hot water supply temperature and a 160 deg. F. hot water return temperature. An in-line hot water pump is located in Boiler 3111 and circulates hot water throughout the building. Three-way valves are located on all air handling unit heating coils; therefore, there is currently no variable frequency drive on the hot water pump.

Cooling System
The 1987 Cafeteria Building is currently air conditioned by direct expansion (Dx) cooling coil mounted in the three air handling units serving the building. Three condensing units are mounted at grade on the exterior of the building. Two are located on the west side of the building and one is located on the east side of the building.

Air Distribution System
The 1987 Cafeteria Building is currently conditioned by three constant volume air handling units, with hot water heating and DX cooling.

Classroom 3101, Classroom 3105, Lobby 3100, and toilet areas are conditioned by a 1,900 cfm air handling unit designated as AHU-9, located in Mechanical Room 3103. Supply ductwork is routed to spaces for air distribution and return air is ducted back to the unit. Outside air is provided to the air handling unit through a roof mounted exterior intake hood.

Dining 3107 and Classroom 3106 are conditioned by a 3,800 cfm air handling unit designated as AHU-10, located in Mechanical Room 3112. Supply ductwork is routed to spaces for air distribution and return air is ducted back to the unit. Outside air is provided to the air handling unit through an exterior wall louver.

Kitchen 3110 and supporting spaces are conditioned by a 2,850 cfm air handling unit designated as AHU-11, located in Mechanical Room 3112. Supply ductwork is routed to spaces for air distribution and return air is ducted back to unit. Outside air is provided to the air handling unit through an exterior wall louver.

Exhaust air is provided by roof mounted exhaust fans.

Combustion air is provided to natural gas fired boiler through a louvered door.

A compensating, fully stainless steel kitchen hood is located over kitchen equipment.

REPLACEMENT BUILDING HVAC SYSTEM DESCRIPTION

Heating System

The existing force draft boilers will be removed and return to owner. Hot water will be generated by two (2) 1.5 million BTUH input, seal combustion, high efficiency, natural gas fired boilers enclosed in a separate Boiler Room located in the area of Mechanical – Electrical Room 3111 of the new Cafeteria Building. The boilers will serve the new 2-story Cafeteria Building and the existing 1923 Classroom Building, approximately 58,000 sq. ft. Intake air for boilers will be taken from the east wall over door into Mechanical – Electrical Room 3111. Exhaust air will be routed from boilers up through Can Wash 3203H and terminate through south wall. Flues will be of a type designed for use with selected boiler. Hot water system will be primary-secondary with variable flow on the secondary system. Hot water will be circulated through the air handling units and VAV terminal units by end suction centrifugal pumps. All coils will be designed for a hot water supply temperature of 140 deg. F. Underground pre-insulated hot water piping will be routed in between buildings for hot water distribution.

Cooling System

The existing split system chiller has reached its life expectancy and will be replaced. Chilled water will be generated by two (2) 120 ton air cooled chillers. The chillers will be located on site where the existing split system chiller condensers are located currently. The enclosure will be modified as required to enclose the new chillers. Due to the City of Raleigh noise ordinances, it is anticipated the new enclosure will be solid construction to dampen the noise of the new chillers. Chilled water will be routed from chillers on site to the Basement Mechanical Room 1002. Chilled water will be circulated through the air handling units by end suction centrifugal pumps. The chilled water system will be primary-secondary with variable flow on the secondary system. Underground pre-insulated chilled water piping will be routed in between buildings for chilled water distribution.

Water Distribution System

Hot water will be routed to each air handling unit and VAV terminal unit. Chilled water will be routed to each air handling unit. Where units are located in dedicated mechanical room spaces, piping may be exposed with field applied jacket on insulation. Shut-off valves will be provided for each branch. Flow control valves will be spring loaded cartridge automatic type valves. Coil connections will use two-way and three-way valves.

Air Distribution System

1923 Classroom Building

The existing air handling units have reached their life expectancy and will be replaced. Due to the location of the Basement Mechanical room and the 1923 Classroom Building being a historic building, economizer cycle will not be provided on the air handling units in the existing building.

Two (2) variable air volume air handling units will be located in the Basement Mechanical Room 1002. One air handling unit will serve the south end of the First and Second Floors and one air handling unit will serve the north end of the First and Second Floors. Each unit will be approximately 11,000 cfm and consist of mixing box, angled filter section, pre-heat coil, access section, cooling coil, and vertical fan section with front discharge. Two air handling units will be utilized to allow unit components to fit into existing building. The air handling units will be approximately 6'-2" wide x 3'-8" tall and 11'-0" long. The largest unit component, the fan section, will be approximately 3'-8" tall x 6'-2" wide x 3'-8" long and will fit through the 4'-0" wide door entering the Basement Mechanical Room 1002. Supply ductwork will be routed from the air handling units up through the large chases to the First and Second Floors. Variable air volume boxes, with hot water reheat coils, will be located above ceiling for each space or group of spaces. Return air ductwork will be routed around the perimeters of the First and Second Floors, in an attempt to prevent crossing of supply and return ductwork, and back down to air handling units located in Basement Mechanical Room 1002. Outside air will be provided from the existing 2'-8" x 9'-4" exterior wall louver at the basement level.

One variable air volume air handling unit will be located in Mech 1111, located on the First Floor, to serve the Third Floor. The unit will be approximately 11,000 cfm and consist of mixing box, angled filter section, pre-heat coil, access section, cooling coil, and vertical fan section with front discharge. The air handling unit will be approximately 6'-2" wide x 3'-8" tall x 11'-0" long. The largest unit component, the fan section, will be approximately 3'-8" tall x 6'-2" wide x 3'-8" tall and will fit through the First Floor Corridor and through the double doors of Mech 1111. Supply ductwork will be routed from the air handling unit up through the large chase to the Third Floor. Variable air volume boxes, with hot water reheat, will be located above ceiling for each space. Return air will be routed around the perimeter of the Third Floor, in an attempt to prevent crossing of supply and return ductwork, and back down to the air handling unit on the First Floor. Outside air will be provided from the existing exterior wall louver in Boys 1117.

One single variable air volume unit will be located in Mech 1109 to serve Multi-Purpose 1001. The unit will be approximately 3,000 cfm and consist of mixing box, angled filter section, pre-heat coil, access section, cooling coil, access section, re-heat coil, and vertical fan section with front discharge. The air handling unit will be approximately 4'-2" wide x 2'-5" tall x 11'-0" long. The largest unit component, the fan section, will be approximately 4'-2" wide x 2'-5" tall x 3'-5" long and will fit through the First Floor Corridor and through the double doors of Mech 1109. Supply air ductwork will be routed at ceiling from unit to space for air distribution. A sidewall return air grille will be provided and return air will be ducted back to unit. Outside air will be provided from the existing exterior wall louver located in Girls 1107.

Two (2) single zone variable air volume units will be provided to serve Media Center RLV 1209. The units will be located in Mech 1307A and Mech 1307B. These are elevated mechanical rooms and accessed by ship ladders located on Stage. Access to these units will not be in compliance with current WCPSS Guidelines, but the existing ceiling in this room is remaining therefore, the new units will have to be installed in the existing locations. Each unit will be approximately 5'-0" wide x 2'-10" tall x 11'-0" long. The existing mechanical room walls will be removed and reinstalled to replace the air handling units. Existing supply and return air ductwork will be reused. Outside air will be provided from the existing exterior wall louvers.

2-Story Cafeteria Building

One (1) variable air volume unit will be located in Mechanical – Electrical Room 3111 to serve the 2-Story Cafeteria Building. The unit will be approximately 18,000 cfm and consist of return fan, economizer section, mixing box, angled filter section, pre-heat coil, access section, cooling coil, and vertical fan section with front discharge. The unit will be approximately 7'-7" wide by 4'-9" tall x 20'-0" long. Supply air ductwork will be routed from unit to First and Second Floors. Variable air volume boxes will be located above ceiling for each space or group of spaces. Return air will be ducted back to unit. Outside air and relief air for economizer cycle will be provided through exterior wall louvers mounted in window wells outside Mechanical – Electrical Room 3111.

A new fully stainless steel compensating kitchen hood will be provided over kitchen equipment. A new fully stainless steel utility distribution system will be provided under kitchen hood.

Ductwork

Supply, return, and outside air ductwork will be galvanized sheet metal with wrap insulation. Toilet exhaust ductwork will be galvanized sheet metal. Where ductwork crosses fire or smoke rated partitions, dampers will be provided to maintain the rating of the partition.

Grilles, Registers, and Diffusers

Typical supply diffusers will be architectural face type suitable for use in lay-in ceilings. Return grilles will be similar to the supply diffusers, and exhaust grilles will be louvered type.

Controls

DDC controls will be designed to the current WCPSS Design Guidelines. The existing HVAC controls in the 2001 Classroom Addition will be replaced to match current WPSS Design Guidelines.

HVAC SPECIFICATIONS OUTLINE

Section 15010 - Basic Mechanical Requirements

This section includes general requirements for mechanical installations that expand the requirements of Division 1 including submittals, coordination drawings, record drawings, and maintenance manuals. Roughing in of mechanical installations and cutting and patching are also covered.

Section 15050 - Basic Mechanical Materials and Methods

This section includes requirements for concrete equipment bases, mechanical demolition, touch up painting, connection of dissimilar metals, and joining materials.

Section 15055 - Motors

All motors for HVAC equipment shall be high-efficiency type, of the voltage, phase, and frequency rating identified on the electrical drawings.

Section 15060 - Hangers and Supports

All individual runs of piping shall be supported with heavy duty, steel clevis hangers attached to building structure with threaded rods. All parallel runs of piping shall be supported with heavy duty steel trapeze hangers. All hot water piping shall be supported on roller supports.

Section 15081-15083 - Mechanical Insulation

Pipe insulation shall be ASTM C547 preformed fiberglass pipe insulation, minimum 2" thick, with canvas jacketing where exposed. Equipment insulation shall be glass fiber ASTM C612 semi-rigid board insulation, minimum 1" thick for cold equipment, minimum 2" thick for hot equipment. Duct insulation shall be glass fiber, blanket duct insulation, minimum 2" thick for supply air, minimum 1" thick for other applications.

Section 15110 - Valves

Isolation and balancing valves 3" and smaller shall be ball valves. Isolation and balancing valves 4" and larger shall be butterfly valves. Flow control valves shall be automatic spring-loaded cartridge type. Valves shall be bronze or iron body. Valves 2" and larger shall have threaded ends.

Section 15122 - Meters and Gauges

Thermometers shall be liquid in glass type with swivel mounting. Pressure gauges shall have 4 1/2" dial with glass lens, phosphor-bronze Bourdon-tube. Test plugs shall be nickel-plated brass body. Scale of thermometers and pressure gauges shall be selected to match the conditions of the substance being measured.

Section 15181 - Hydronic Piping

Hot Water and Chilled Water piping shall be Schedule 40 steel and Type L copper. Fittings shall be screwed cast iron for 2" and smaller steel, soldered for copper, flanged type for 2 1/2" and larger.

Section 15185 - HVAC Pumps

Pumps shall be base-mounted, end-suction centrifugal pumps or in-line, centrifugal pumps.

Section 15514 - Boilers

Gas Boiler shall be condensing, factory-assembled, packaged, natural gas-fired units, complete with all required safeties and controls. Gas burner shall be modulating forced draft type with pressure regulator, manual shut-off, flame-sensing device, and automatic 100% shut-off. Burner shall have FM approved controls.

Section 15626 - Air-Cooled Chillers

Chillers shall be air-cooled, rotary or screw type, with multiple compressors and refrigerant circuits. Chillers shall be factory-tested and certified.

Section 15725 - Central Station Air Handling Units

Units shall be variable volume, double-wall, insulated, modular type. Fan shall be centrifugal, forward curved or backward inclined as scheduled. Casing shall be steel with factory applied finish. Drain pan shall be sloped to prevent standing water.

Section 15725 - Unit Heaters

Unit heaters shall be electric, horizontal discharge type with line voltage thermostat.

Section 15815 - Ductwork

Ductwork shall be galvanized sheet metal, with joints, seals, and bracing per SMACNA guidelines.

Section 15820 -Ductwork Accessories

Fire dampers shall be UL labeled. Balancing dampers shall be multi-blade type. Automatic dampers shall be multi-blade type with edge seals.

Section 15837 - Fans

Exhaust fans shall be roof-mounted or in-line centrifugal type.

Section 15855 - Air Inlets and Outlets

Diffusers, registers, and grilles shall be aluminum, painted to match the adjacent surfaces.

Section 15900 - Automatic Temperature Controls

A complete functioning system of automatic controls will be provided, including central control panel, distributed control panels, and unit controllers. Each unit controller shall be capable of stand-alone operation if communication with the system is lost. All components shall be standard products of the manufacturer. System shall be web based in accordance with WCPSS Guidelines.

Section 15990 - Testing, Adjusting, and Balancing

Test and balance agent shall be a member of AABC or NEBB. All instrumentation used shall have been calibrated within the last six months.

ELECTRICAL DESIGN NARRATIVE

General

Wiley Elementary School consists of three buildings constructed at various times since its inception. The original building was constructed in 1923, the cafeteria building constructed in 1987 and a classroom addition constructed in 2001.

There are no major electrical changes proposed for the 2001 classroom addition. Changes will be limited to the Special Systems (Fire Alarm, Intercom, etc.) because the head end equipment serving this building is located in the 1923 building and these systems are being removed.

ORIGINAL 1923 BUILDING

Existing Electric Power System:

The Electrical service is120/208v, 3-phase, 1200 amp and is located in the basement mechanical room. The main distribution panel uses the six disconnect rule and does not have a main breaker. Breakers are provided for two chillers, one computer power panel, one HVAC and elevator equipment panel, and two wiring gutters. Disconnect switches are installed on the wiring gutters to serve lighting and branch circuit panels on each floor of the building.

A technology electrical power upgrade was installed in 2002. Two 120v, 20amp branch circuits were installed in each typical classroom to serve computers. A branch circuit panel was added on each floor to accommodate these new circuits.

Branch circuits to the HVAC system are served mostly from the HVAC equipment panel in the basement mechanical room.

The original building branch circuit panel locations are recessed in the corridors. Branch circuit panels that were added during renovations are surface mounted in various locations.

The utility transformer serving this building is located adjacent to the public entrance of the elevated ramp to the main building. The transformer will be relocated under the ‘Cafeteria Replacement’ option and will remain in under the ‘Cafeteria Addition’ option.

Proposed Electric Power System:

A new 120/208v, 3-phase, 4-wire electrical service will be provided. How the service is fed will depend on which Architectural option WCPSS accepts.

Option #1- If WCPSS accepts the ‘Cafeteria Replacement’ option for the cafeteria building, a new electrical switchboard will be provided in the new mechanical - electrical room sized to serve the replacement building and the 1923 building. The switchboard will be served from a new pad mounted transformer located on the south side of the new building.

A feeder will be routed to the basement of the 1923 building and connect to a new distribution panel. The distribution panel will have a main breaker and will serve branch circuit panels on each floor of the building along with HVAC equipment.

The air-cooled chiller will be located adjacent to the existing air-cooled chiller serving the 2001 addition. (The existing chiller serving the building will be removed from the basement area.) Electrical service to the air-cooled chiller will be provided from the existing 277/480volt pad mounted transformer serving the existing chiller.

Option #2- If WCPSS accepts the 'Cafeteria Addition' option for the cafeteria building the existing pad mounted transformer serving the 1923 building will not be relocated. The existing main distribution panel and service conductors will remain.

A distribution panel will be provided to serve branch circuit panels on each floor of the building. (The existing chillers will be removed from the basement area.)

The chiller will be located adjacent to the existing chiller serving the 2001 addition. Electrical service to the air cooled chiller will be provided from the existing 277/480 volt pad mounted transformer serving the existing air cooled chiller.

A generator will not be provided for the school. All emergency loads such as exit and egress lighting, fire alarm systems, etc; will be served by individual battery packs.

All branch circuits will be sized for a maximum voltage drop under a full load from the furthest device on the circuit to the panel of 3%. All branch circuits will be run in conduit. Conduit will be EMT in concealed locations and will be galvanized rigid steel or intermediate metal conduit in exposed locations within eight (8) feet of the floor. All feeders will be sized for a maximum voltage drop from the main panel to any panel of 2%. All panels will be specification grade with copper busses and lugs. All feeders will be copper. All underground conduits will be schedule 40 PVC.

Existing Lighting System:

Lights in the administrative support spaces are a combination of 2x4 lay-in 2 or 4 lamps fixtures. These rooms are controlled with a single wall switch. The lights in the classrooms are 2x4 lay-in 4 lamp fixtures with dual level switching.

Lights in the corridors are 2x4 lay-in 2 lamp fixtures. Emergency egress lighting is provided by emergency battery packs installed in the 2x4 fixtures. Exit lights are installed at each exit way and in corridor intersections.

All mechanical spaces have industrial general-purpose fluorescent lighting.

All existing lighting, switching and branch circuit wiring shall be removed.

Proposed Lighting System:

Lights in administrative support spaces and classrooms will be provided with 2x4 lay-in 4 lamp fixtures. Each space will be provided with dual level switching and an occupancy sensor. The occupancy sensor will shut off the lights if no one is in the room after a predetermined amount of time.

Lighting in corridors will be 2-lamp fluorescent troffers with acrylic prismatic lenses. All mechanical spaces will be provided with industrial general-purpose fluorescent lighting.

Exterior lighting shall be high-pressure sodium and will be provided, if required, along the perimeter of the new addition for security purposes. All ballasts will be electronic type.

The lighting system will comply with the NC Energy Code for efficiency and sustainability.

Existing Fire Alarm System:

The existing fire alarm system (Pyrotronics System 3) is not currently an addressable system. Manual pull stations are installed at all exit doors. Duct mounted smoke detectors are installed in AHU's. Audio Visual devices are installed throughout the building, but the spacing and coverage does not appear to meet the current building code requirements.

The devices in the 2001 classroom addition are connected to the 1923 building.

Proposed Fire Alarm System:

A new fire alarm system shall be provided throughout the facility, including the1923 building, the cafeteria building and the 2001 addition. The facility will have an addressable type fire alarm system that complies with the North Carolina State Building Code.

Limited automatic detection will be provided in storage areas, electrical rooms, mechanical rooms, and other areas of high risk and where specifically required by code. Each air handling unit equipped with a duct type smoke detector will be connected to the fire alarm system. Each air handling unit control circuit will contain a relay that will shut down the unit whenever the FACP goes into alarm condition.

Ceiling mounted horn/strobes combinations will be provided in all classrooms. The FACP will provide local evacuation alarm via horns, strobes, and horn/strobe combinations in order to comply with NFPA 72.

The system will incorporate a digital alarm communicator to provide offsite monitoring. The fire alarm control panel will be located in the main telecommunications room.

Remote annunciator panels will be located as required by the Fire Marshall.

Existing Intrusion Detection and CCTV Systems:

The existing CCTV system currently has two cameras and a 'VHS' style recorder. The recorder is located in the administration area.

Motion sensors are located in corridor and other instruction spaces.

The devices in the 2001 addition are connected to the 1923 building.

Proposed Intrusion Detection and CCTV Systems:

Due to the change in head end equipment location, space reconfigurations, removal of the ceiling and removal of the HVAC ductwork, the system will be replaced.

CCTV cameras (total of 16) will be provided through out all of the buildings. The exact locations of the cameras will be coordinated with WCPSS during design. Digital video recorders will be provided per WCPSS guidelines. The head end equipment rack will be located in the main telecommunications room.

Motion sensors will be provided in all corridors and grade level instructional spaces of all building. Entry keypads will be located per WCPSS during design. The head end equipment cabinet will be located in the main telecommunications room.

A card reader system complying with WCPSS's current standards, independent of the security system, will be provided in all buildings. The system will be designed to allow the kitchen/cafeteria area to be secured independently from the remaining areas of the school. The main card reader panel will be located in the main telecommunications room.

Existing Public Address/Integrated Communications System:

The existing intercom system equipment (Bogen Multicom 2000) is in compliance with WCPSS's current standards. The system consists of head end console in the administrative area, handset in each classroom, speakers in the classrooms, speakers in the corridors and administrative handsets in selected offices.

Proposed Public Address/Integrated Communications System:

Due to the change in head end equipment location, space reconfigurations, removal of the ceiling and removal of the HVAC ductwork, the system will be replaced.

The existing head end equipment cabinet will be located in the new main telecommunications room.

New handsets and speakers will be provided in all classrooms, workrooms and other common work areas. Administrative handsets will be provided in designated offices.

Ceiling mounted speakers will be provided in corridors and administrative support areas.

Devices located in the 2001 addition will be reconnected to the existing head end equipment cabinet.

Existing Telephone/Data System:

The existing network is not in compliance with WCPSS's current standards.
Hub cabinets (2'x2') are located in each classroom. A two-strand fiber is routed to each hub cabinet from a Fiber Distribution Enclosure (FDE) on each floor. A multi-stand backbone feeder is routed from each FDE to the MDF cabinet on the First Floor.

A ten foot section of multi-compartment raceway is attached to each hub cabinet with seven data outlets for students. One data outlet is located on primary wall for teacher. All data cables within room are routed to hub cabinet within the room.

Telephone voice lines are not installed in classrooms.

Administrative area's have two data outlets and one voice outlet.

Proposed Telephone/Data System:

Due to the change in head end equipment location, space reconfigurations, removal of the ceiling and removal of the HVAC ductwork, the system will be removed.

Classrooms will be provided with a new 2'x2' hub cabinet, eight data outlets and one voice outlet. Administrative spaces will be provided with two voice/data outlets in each office. Voice/data outlets will be provided in other administrative support spaces per WCPSS guideline and equipment lay-outs.

Computer rooms will be provided with 32 data outlets. The data cables in computer rooms will be routed to a 'Re-box' located within the computer room.

The media center will be provided with data outlets to accommodate the number of computers shown on the furniture plans. The media center in this school is smaller than new schools and does not have the space for all the outlets required by the WCPSS design guidelines.

The head end equipment cabinets will be located in the new main telecommunications room.

A new telephone demarc location will be provided in the new main telecommunications room.

The Fiber distribution enclosure located in the 2001 addition will be reconnected to the head end equipment cabinets.

Existing MATV System:

The existing MATV Head end is located in the Media Center. The head end equipment will be reused where possible.

Coax cabling is routed through out the building with taps to televisions in each classroom and other instructional areas.

Proposed MATV System:

Due to the head end equipment location, space reconfigurations, removal of the ceiling and removal of the HVAC ductwork, the system will be removed.

The head end equipment cabinets will be relocated to the new main telecommunications room. The individual media sources will be located in the media center AV storage room.

Coax cable will be provided through out the building with taps to televisions in each classroom and other instructional area.

The television trunk cable serving the 2001 addition will be reconnected to the head end equipment cabinets.

CAFETERIA ADDITION 1989

Existing Electric Power System:

The Electrical service is120/208v, 3-phase, 600 amp and is located in the electrical room. The main distribution panel has a 500 amp main breaker. Breakers are provided for two-branch circuit/HVAC panel, one kitchen equipment panel and HVAC equipment.

The branch circuit panel locations are recessed in the kitchen and commons area.

The utility transformer serving this building is located adjacent to the public entrance of the elevated ramp to the main building. The transformer will be relocated under the 'Cafeteria Replacement' option and will remain in under the 'Cafeteria Addition' option

Proposed Electric Power System:

A new 120/208, 3-phase, 4-wire electrical service will be provided. How the service is fed will depend on which Architectural option WCPSS accepts.

Option #1- If WCPSS accepts the 'Cafeteria Replacement' option for the cafeteria building, a new electrical switchboard will be provided in the new mechanical - electrical room sized to serve the replacement building and the 1923 building. The switchboard will be served from a new pad mounted transformer located on the south side of the new building.

Branch circuit panels will be located in the electrical room to serve the additional classrooms and support spaces.

Dedicated branch circuit panels will be located in the kitchen area to serve the kitchen equipment.

A feeder will be routed to the basement of the 1923 building and connect to a new distribution panel.

The air-cooled chiller will be located adjacent to the existing air-cooled chiller serving the 2001 addition. (The existing chiller will be removed from the basement area.) Electrical service to the air-cooled chiller will be provided from the existing 277/480volt pad mounted transformer serving the existing air cooled chiller.

Option #2- If WCPSS accepts the 'Cafeteria Addition' option for the cafeteria building the existing pad mounted transformer serving the 1923 building will not be relocated. The existing main distribution panel and service conductors will be replaced.

Branch circuit panels will be provided to serve kitchen equipment, classrooms and support spaces.

The air-cooled chiller will be located adjacent to the existing air-cooled chiller serving the 2001 addition. (The existing chillers will be removed from the basement area.) Electrical service to the air-cooled chiller will be provided from the existing 277/480volt pad mounted transformer serving the existing air cooled chiller.

A generator will not be provided for the school. All emergency loads such as exit and egress lighting, fire alarm systems, etc; will be served by individual battery packs.

All branch circuits will be sized for a maximum voltage drop under a full load from the furthest device on the circuit to the panel of 3%. All branch circuits will be run in conduits. Conduits will be EMT in concealed locations and will be galvanized rigid steel or intermediate metal conduit in exposed locations within eight (8) feet of the floor. All feeders will be sized for a maximum voltage drop from the main panel to any panel of 2%. All panels will be specification grade with copper busses and lugs. All feeders will be copper. All underground conduits will be schedule 40 PVC.

Existing Lighting System:

Lights in the spaces are a combination of 2x4 lay-in 2 or 4 lamp fixtures. These rooms are controlled with a single wall switch. The lights in the classrooms are 2x4 lay-in 4 lamp fixtures with dual level switching.

Lights in the corridors are 2x4 lay-in 2 lamp fixtures. Emergency egress lighting is provided by emergency battery packs installed in the 2x4 fixtures. Exit lights are installed at each exit way and in corridor intersections.

All mechanical spaces have industrial general-purpose fluorescent lighting.

All existing lighting, switching and branch circuit wiring shall be removed.

Proposed Lighting System:

Lights in administrative support spaces and classrooms will be provided with 2x4 lay-in 4 lamp fixtures. Each space will be provided with dual level switching and an occupancy sensor. The occupancy sensor will shut off the lights if no one is in the room after a predetermined amount of time.

Lighting in corridors will be 2-lamp fluorescent troffers with acrylic prismatic lenses. All mechanical spaces will be provided with industrial general-purpose fluorescent lighting.

Exterior lighting shall be high-pressure sodium and will be provided, if required, along the perimeter of the new addition for security purposes. All ballasts will be electronic type.

The lighting system will comply with the NC Energy Code for efficiency and sustainability.

Existing Fire Alarm System:

The existing fire alarm system (Pyrotronics System 3) is located in the 1923 building and is not currently an addressable system. Manual pull stations are installed at all exit doors. Duct mounted smoke detectors are installed in AHU's. Audio Visual devices are installed throughout the building, but the spacing and coverage does not appear to meet the current building code requirements.

Proposed Fire Alarm System:

A new fire alarm system shall be provided throughout the building. The facility will have an addressable type fire alarm system that complies with the North Carolina State Building Code.

Limited automatic detection will be provided in storage areas, electrical rooms, mechanical rooms, and other areas of high risk and where specifically required by code. Each air handling unit equipped with a

duct type smoke detector will be connected to the fire alarm system. Each air handling unit control circuit will contain a relay that will shut down the unit whenever the FACP goes into alarm condition.

Ceiling mounted horn/strobes combinations will be provided in all classrooms. The FACP will provide local evacuation alarm via horns, strobes, and horn/strobe combinations in order to comply with NFPA 72.

All devices will be connected to the fire alarm control panel located in the new main telecommunications room of the 1923 building.

Existing Intrusion Detection and CCTV Systems:

The existing CCTV system currently has two cameras and a 'VHS' style recorder. The recorder is located in the administration area of the 1923 building.

Motion sensors are located in corridor and other instruction spaces.

Proposed Intrusion Detection and CCTV Systems:

Due to the changes in head end equipment location, space reconfigurations, removal of the ceiling and removal of the HVAC ductwork, the system will be replaced.

CCTV camera's (total of 16) will be provided through out all of the buildings. The exact locations of the cameras will be coordinated with WCPSS during design. Digital video recorders will be provided per WCPSS guidelines. The head end equipment rack will be located in the main telecommunications room.

Motion sensors will be provided in all corridors and grade level instructional spaces of all building. Entry keypads will be located per WCPSS during design. The head end equipment cabinet will be located in the main telecommunications room.

A card reader system complying with WCPSS's current standards, independent of the security system, will be provided in all buildings. The system will be designed to allow the kitchen/cafeteria area to be secured independently from the remaining areas of the school.

Existing Public Address/Integrated Communications System:

The existing intercom system equipment (Bogen Multicom 2000) is in compliance with WCPSS's current standards. The equipment is located in the 1923 building. The system consists of a handset in each classroom, speakers in the classrooms, speakers in the corridors and administrative handsets in selected offices.

Proposed Public Address/Integrated Communications System:

Due to the change in head end equipment location, space reconfigurations, removal of the ceiling and removal of the HVAC ductwork, the system will be replaced.

The existing head end equipment cabinet will be relocated to the new main telecommunications room of the 1923 building.

New handset and speakers will be provided in all classrooms, workrooms and other common work areas. Administrative handsets will be provided in designated offices.

Ceiling mounted speakers will be provided in corridors and administrative support areas.

Existing Telephone/Data System:

The existing network is not in compliance with WCPSS's current standards.
Hub cabinets (2'x2') are located in each classroom. A two-strand fiber is routed to each hub cabinet from a Fiber Distribution Enclosure (FDE) in this building. A multi-stand backbone feeder is routed to the MDF room in the 1923 building.

A ten foot section of multi-compartment raceway is attached to each hub cabinet with seven data outlets for students. One data outlet is located on primary wall for teacher. All data cables within room are routed to hub cabinet within the room.

Telephone voice lines are not installed in classrooms.

Administrative areas have two data outlets and one voice outlet.

Proposed Telephone/Data System:

Due to the change in head end equipment location, space reconfigurations, removal of the ceiling and removal of the HVAC ductwork, the system will be replaced.

Classrooms will be provided with a 2'x2' hub cabinet, eight data outlets and one voice outlet. Administrative spaces will be provided with two voice/data outlets in each office. Voice/data outlets will be provided in other administrative support spaces per WCPSS guideline and equipment lay-outs.

Computer rooms will be provided with 32 data outlets. The data cables in computer rooms will be routed to a 'Re-box' located within the computer room.

The head end equipment cabinets will be located in the new main telecommunications room of the 1923 building.

Existing MATV System:

The existing MATV Head end is located in the Media Center of the 1923 building.

Coax cabling is routed through out the building with taps to televisions in each classroom and other instructional areas.

Proposed MATV System:

Due to the change in head end equipment location, space reconfigurations, removal of the ceiling and removal of the HVAC ductwork, the system will be replaced.

Coax cable will be provided through out the building with taps to televisions in each classroom and other instructional area.

ELECTRICAL SPECIFICATIONS OUTLINE

Section 16010 – Basic Electrical Requirements

Section 16010 includes general requirements for electrical installations that expand on the requirements of Division 01 including submittals, coordination drawings, record drawings, and maintenance manuals. Also included are coordination requirements for electrical installations.

Section 16050 – Basic Electrical Materials and Methods

Section 16050 includes requirements for basic electrical materials and their installation. Requirements are included for concrete bases, touch-up paint, fire stopping, and cutting/patching.

Section 16060 – Grounding and Bonding

Section 16060 includes requirements for the products used and the installation of the electrical grounding system. All metal structures, enclosures, raceways, junction boxes, machine frames, and other conductive items shall be bonded such that they operate continuously at ground potential and provide a low impedance path for possible ground fault currents. A grounding conductor shall be included in all feeders and branch circuits.

Section 16075 – Electrical Identification

Section 16075 includes requirements for the application of labels and signs to electrical equipment. All major items of electrical equipment shall be labeled with engraved plastic labels with contrasting core and attached using machine screws. All special system raceways shall be color coded. All junction box covers shall be labeled with circuit numbers. All panelboards shall have typewritten directories.

Section 16120 – Conductors and Cable

Section 16120 includes requirements for building wires and cables and associated connectors, splices, and terminations for power and control wiring systems rated 600V and less. All wires shall be sized per the NEC for the design load. Minimum size for both power and lighting branch circuits shall be #12 AWG. For 120V circuits exceeding 50’ in length #10 AWG is required. Generally, all building power and control wires shall be dual rated THHN/THWN. All lighting, power, and fire alarm conductors shall be installed in conduit.

Section 16130 – Raceway and Boxes

Section 16130 includes requirements for the materials and installation practices used for raceway construction. All conduits shall be of new and full length materials. Couplings and fittings for EMT shall be steel compression type with insulated throat. Boxes shall be steel, hot-dipped galvanized after fabrication. Outlet boxes shall be a minimum of 4” square. Exposed/surface mounted boxes in mechanical spaces shall be cast type. All floor boxes shall be of the recessed activation type.

Section 16137 – Supporting Devices

Section 16137 contains requirements for conduit and cable supporting measures. It also specifies the requirements for sleeves and seals.

Section 16140 – Wiring Devices

Section 16140 includes the requirements for switches, receptacles, and other wiring devices. All devices shall be specification grade with terminals accommodating up to #10 solid conductors. Switches shall be heavy duty, quiet type 20A grounding type AC snap switches. Receptacles shall be heavy duty straight-blade 20A, 125V grounding type with green hex-head grounding screw. Receptacles near sinks and other water sources shall be GFI type.

Section 16145 – Lighting Control Devices

Section 16145 includes the requirements for time switches, photoelectric relays, and lighting contactors.

Section 16410 – Enclosed Switches and Circuit Breakers

Section 16410 includes the requirements for individually mounted enclosed switches and circuit breakers used for feeder protection and motor and equipment disconnecting means. All enclosures shall have proper NEMA rating for installation location. All disconnect switches shall be heavy duty and provided with Class R rejection kits where fused.

Section 16442 – Panelboards

Section 16442 includes requirements for construction, arrangement, and installation of distribution and branch circuit panelboards rated 600V and less. All panelboards shall have copper busses with 100% neutral and ground busses. Panel cans shall be code gauge galvanized sheet steel with hinged front covers and master-keyed locks on doors. All panels shall have conventional molded case circuit breakers. Breakers shall be bolted, trip indicating, and ambient compensated. Most panels will be provided with main circuit breakers.

Section 16491 – Fuses

Section 16491 includes requirements for cartridge fuses, rated 600V and less, for use in switches and controllers. Fuses shall be Class RK5 current limiting time delay for motor and motor controller branch circuits. Fuses for other individual equipment branch circuits shall be Class RK5 non-time delay.

Section 16511 – Interior Lighting

Section 16511 includes requirements for interior and building mounted lighting fixtures, lamps, ballasts, and accessories. Ballasts shall be UL listed Class P, Sound Rated A, high power factor, and with less than 15% flicker. All linear fluorescent ballasts shall be T-8 rapid start. Exit fixtures shall be LED type with maintenance-free nickel cadmium batteries and solid state charger. Emergency lighting will be provided by individual wall mounted emergency lighting units.

Section 16741 – Telecommunication Distribution System

Section 16741 contains requirements for voice and data telecommunications infrastructure. Specifications follow WCPSS Design Guidelines Section 16741-A. System shall comply with EIA/TIA wiring standards.

Section 16770 – Integrated Communications System

Section 16770 includes requirements for a school intercom/public address system. Includes specifications for administrative handsets, staff/classroom handsets, speakers, and intercom/switching system. System shall adhere to WCPSS Design Guidelines.

Section 16851 – Fire Alarm

Section 16851 includes requirements for the furnishing, installation, and connection of a microprocessor controlled, addressable/intelligent reporting fire alarm system. System equipment shall comply with NFPA 72. Application and installation of system shall comply with North Carolina Department of Insurance's *Fire Detection and Alarm Systems* and WCPSS Design Guidelines.

END OF DESIGN NARRATIVE

BUILDING CODE SUMMARY

2006 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: **Additions and Renovations, Wiley Elementary School**
Address: **201 St. Mary's Street, Raleigh, NC** Zip Code **27610**
Proposed Use: **Educational**
Owner/Authorized Agent: **Lalonna Griffin, PM** Phone # **(919) 856-3722** E-Mail **LGriffin@wcpss.net**
Owned By: ☒ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City_____ ☒ County_____ ☐ State

LEAD DESIGN PROFESSIONAL: Mete Gurel, AIA

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	**Gurel Architecture**				
Civil	**Dewberry & Davis**				
Electrical	**Dewberry & Davis**				
Fire Alarm	**Dewberry & Davis**				
Plumbing	**Dewberry & Davis**				
Mechanical	**Dewberry & Davis**				
Sprinkler	**GNP FP Design**				
Structural	**Dewberry & Davis**				
Retaining Walls	**Dewberry & Davis**				
Other	**Lappas + Havener**				
Other	**Roof Engineering**				

2006 EDITION OF NC CODE FOR: ☐ New Construction ☐ Addition ☐ Upfit
EXISTING: ☐ Reconstruction ☒ Alteration ☐ Repair
CONSTRUCTED: 1923 **ORIGINAL USE:** Educational **RENOVATED:** Educational **CURRENT USE:** Educational

BUILDING DATA
Construction Type: ☐ I-A ☐ I-B ☐ II-A ☒ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ☐ V-B
Mixed construction: ☐ No ☐ Yes Types _____
Sprinklers: ☐ No ☐ Partial ☒ Yes ☒ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☒ No ☐ Yes **Flood Hazard Area:** ☒ No ☐ Yes
Building Height: Feet **52** Number of Stories **3**
Mezzanine: ☒ No ☐ Yes
Gross Building Area:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor	**11,207**	**0**	**11,207**
2nd Floor	**13,804**	**0**	**13,804**
1st Floor	**13,819**	**0**	**13,819**
Basement	**1,869**	**0**	**1,869**
TOTAL	**40,699**	**0**	**40,699**

ALLOWABLE AREA

Primary Occupancy: Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
☐ Business ☒ Educational Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ Mercantile Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Utility and Miscellaneous ☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage

Secondary Occupancy: **N/A**

Special Uses: ☐ 402 ☐ 403 ☐ 404 ☐ 405 ☐ 406 ☐ 407 ☐ 408 ☐ 409 ☐ 410 ☐ 411 ☐ 412
☐ 413 ☐ 414 ☐ 415 ☐ 416 ☐ 417 ☐ 418 ☐ 419 ☐ 420 ☐ 421

Special Provisions: ☐ 508.2 ☐ 508.3 ☐ 508.4 ☐ 508.5 ☐ 508.6 ☐ 508.7 ☐ 508.8

Mixed Occupancy: ☒ No ☐ Yes Separation: _____ Hr. Exception: _____

☐ Incidental Use Separation (302.1.1)

This separation is not exempt as a Non-Separated Use (see exceptions).

☐ Non-Separated Use (302.3.1)

The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

☐ Separated Use (302.3.2) - See below for area calculations

For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\textit{Actual Area of Occupancy A}}{\textit{Allowable Area of Occupancy A}} + \frac{\textit{Actual Area of Occupancy B}}{\textit{Allowable Area of Occupancy B}} \leq 1$$

$$\frac{\qquad}{\qquad} + \frac{\qquad}{\qquad} + \ldots\ldots = \qquad \leq 1.00$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 503[5] AREA	(C) AREA FOR FRONTAGE INCREASE[1]	(D) AREA FOR SPRINKLER INCREASE[2]	(E) ALLOWABLE AREA OR UNLIMITED[3]	(F) MAXIMUM BUILDING AREA[4]
3rd Floor	**Educational**	**11,207**	**14,500**	**6,380**	**29,000**	**49,880**	**149,640**
2nd Floor	**Educational**	**13,804**	**14,500**	**6,380**	**29,000**	**49,880**	
1st Floor	**Educational**	**13,819**	**14,500**	**6,380**	**29,000**	**49,880**	
Basement	**Educational**	**1,868**	**Exempt**	**0**	**0**	**Exempt**	

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
b. Total Building Perimeter = _____ (P)
c. Ratio (F/P) = _____ (F/P)
d. W = Minimum width of public way = _____ (W)
e. Percent of frontage increase $I_f = 100 [F/P - 0.25] \times W/30$ = _____ (%)

100 (536/590 –0.25) x 20/30 X 14,500 = 0.44 X 14,500 = 6,380

[2] The sprinkler increase per Section 506.3 is as follows:
a. Multi-story building I_s = 200 percent

14,500 x 200% = 29,000

b. Single story building I_s = 300 percent

[3] Unlimited area applicable under conditions of Sections Group B, F, M, S, A-4 (507); Group A motion picture (507.9); Malls (402.6); and H-2 aircraft paint hangers (507.7).

[4] Maximum Building Area = total number of stories in the building x E (506.4).

[5] The maximum area of parking garages must comply with 406.3.5. The maximum area of air traffic control towers must comply with 412.1.2.

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	**Type II-B**		**Type II-B**	
Building Height in Feet	Feet **55**	Feet = H + 20' = **75**	**52 feet**	
Building Height in Stories	Stories **2**	Stories + 1 = **3**	Stories **3**	

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/_____* REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses		**0**					
Bearing Walls							
Exterior	**>10'**	**0**					
North							
East							
West							
South							
Interior		**0**					
Nonbearing Walls and Partitions Exterior walls	**>10'**	**0**					
North							
East							
West							
South							
Interior walls and partitions		**0**					
Floor Construction Including supporting beams and joists		**0**					
Roof Construction Including supporting beams and joists		**0**					
Shaft Enclosures - Exit		**1**	**Elevator and Stair Towers**				
Shaft Enclosures - Other		**1**	**HVAC Chase**				
Corridor Separation		**0**					
Occupancy Separation		**N/A**					
Party/Fire Wall Separation		**4**	**EXISTING**				
Smoke Barrier Separation		**N/A**					
Tenant Separation		**N/A**					
Incidental Use Separation		**2**	**Boiler Room**				
Incidental Use Separation		**0**	**Per Sprk Sys**				

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	☐ No	☒ Yes
Exit Signs:	☐ No	☒ Yes
Fire Alarm:	☐ No	☒ Yes
Smoke Detection Systems:	☐ No	☒ Yes
Panic Hardware:	☐ No	☒ Yes

EXIT REQUIREMENTS

NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM[2] NUMBER OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS[1,3] (SECTION 1014.2)	
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1015.1)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
3RD FLOOR	2	2	250	125’	80’	160’
2ND FLOOR	2	4	250	125’	80’	160’
1ST FLOOR	2	4	250	125’	80’	160’
BASEMENT	2	2	250	50’	40’	48’

[1] Corridor dead ends (Section 1016.3)
[2] Single exits (Table 1018.2)
[3] Common Path of Travel (Section 1013.3)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA[1] sq. ft.	(b) AREA[1] PER OCCUPANT (TABLE 1003.2.2.2)	CALCULATED OCCUPANT LOAD	(c) EGRESS WIDTH PER OCCUPANT (TABLE 1005.1)		EXIT WIDTH (in)[2,3,4,5,6] REQUIRED WIDTH (SECTION 1005.1) (a÷b) x c		ACTUAL WIDTH SHOWN ON PLANS	
				STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
3RD FLOOR			258	0.2	0.15	52	39	96	N/A
2ND FLOOR			369	0.2	0.15	74	55	96	64
1ST FLOOR			223	0.2	0.15	45	33	N/A	96
BASEMENT			210	0.2	0.15	42	32	N/A	64

[1] See Table 1004.1.2 to determine whether net or gross area is applicable.
See definition "Area, Gross" and "Area, Net" (Section 1002)
[2] Minimum stairway width (Section 1005.1); min. corridor width (Section 1016.2); min. door width (Section 1018.1)
[3] Minimum width of exit passageway (Section 1020.2)
[4] See Section 1004.5 for converging exits.
[5] The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.1)
[6] Assembly occupancies (Section 1024)

2006 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: **Additions and Renovations, Wiley Elementary School**
Address: **201 St. Mary's Street, Raleigh, NC** Zip Code **27610**
Proposed Use: **Educational**
Owner/Authorized Agent: **Lalonna Griffin, PM** Phone # **(919) 856-3722** E-Mail **LGriffin@wcpss.net**
Owned By: ☒ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City_____ ☒ County_____ ☐ State

LEAD DESIGN PROFESSIONAL: Mete Gurel, AIA

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	**Gurel Architecture**			(____)_____	
Civil	**Dewberry & Davis**			(____)_____	
Electrical	**Dewberry & Davis**			(____)_____	
Fire Alarm	**Dewberry & Davis**			(____)_____	
Plumbing	**Dewberry & Davis**			(____)_____	
Mechanical	**Dewberry & Davis**			(____)_____	
Sprinkler	**GNP FP Design**			(____)_____	
Structural	**Dewberry & Davis**			(____)_____	
Retaining Walls	**Dewberry & Davis**			(____)_____	
Other	**Lappas + Havener**			(____)_____	
Other	**Roof Engineering**			(____)_____	

2006 EDITION OF NC CODE FOR: ☐ New Construction ☐ Addition ☐ Upfit
EXISTING: ☐ Reconstruction ☐ Alteration ☒ Repair
CONSTRUCTED: 2001 **ORIGINAL USE:** Educational **RENOVATED:** N/A **CURRENT USE:** Educational

BUILDING DATA
Construction Type: ☐ I-A ☐ I-B ☐ II-A ☒ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ☐ V-B
Mixed construction: ☐ No ☐ Yes Types _____
Sprinklers: ☒ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☒ No ☐ Yes **Flood Hazard Area:** ☒ No ☐ Yes
Building Height: Feet **32** Number of Stories **2**
Mezzanine: ☒ No ☐ Yes
Gross Building Area:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
2nd Floor	**6,889**	**0**	**6,889**
1st Floor	**6,812**	**0**	**6,812**
Basement	**0**	**0**	**0**
TOTAL	**13,701**	**0**	**13,701**

ALLOWABLE AREA

Primary Occupancy: Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
☐ Business ☒ Educational Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ Mercantile Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Utility and Miscellaneous ☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage

Secondary Occupancy: **N/A**

Special Uses: ☐ 402 ☐ 403 ☐ 404 ☐ 405 ☐ 406 ☐ 407 ☐ 408 ☐ 409 ☐ 410 ☐ 411 ☐ 412
☐ 413 ☐ 414 ☐ 415 ☐ 416 ☐ 417 ☐ 418 ☐ 419 ☐ 420 ☐ 421

Special Provisions: ☐ 508.2 ☐ 508.3 ☐ 508.4 ☐ 508.5 ☐ 508.6 ☐ 508.7 ☐ 508.8

Mixed Occupancy: ☒ No ☐ Yes Separation: _____ Hr. Exception: _____

☐ Incidental Use Separation (302.1.1)

This separation is not exempt as a Non-Separated Use (see exceptions).

☐ Non-Separated Use (302.3.1)

The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

☐ Separated Use (302.3.2) - See below for area calculations

For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\textit{Actual Area of Occupancy A}}{\textit{Allowable Area of Occupancy A}} + \frac{\textit{Actual Area of Occupancy B}}{\textit{Allowable Area of Occupancy B}} \leq 1$$

_____ + _____ + ... = _____ ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 503[5] AREA	(C) AREA FOR FRONTAGE INCREASE[1]	(D) AREA FOR SPRINKLER INCREASE[2]	(E) ALLOWABLE AREA OR UNLIMITED[3]	(F) MAXIMUM BUILDING AREA[4]
2nd Floor	**Educational**	**6,889**	**14,500**	**5,800**	**0**	**20,300**	**40,600**
1st Floor	**Educational**	**6,812**	**14,500**	**5,800**	**0**	**20,300**	
Basement	**Educational**	**0**	**Exempt**	**0**	**0**	**Exempt**	

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
b. Total Building Perimeter = _____ (P)
c. Ratio (F/P) = _____ (F/P)
d. W = Minimum width of public way = _____ (W)
e. Percent of frontage increase $I_f = 100 [F/P - 0.25] \times W/30$ = _____ (%)

100 (340/396 –0.25) x 20/30 X 14,500 = 0.40 X 14,500 = 5,800

[2] The sprinkler increase per Section 506.3 is as follows:
a. Multi-story building I_s = 200 percent
b. Single story building I_s = 300 percent

[3] Unlimited area applicable under conditions of Sections Group B, F, M, S, A-4 (507); Group A motion picture (507.9); Malls (402.6); and H-2 aircraft paint hangers (507.7).

[4] Maximum Building Area = total number of stories in the building x E (506.4).

[5] The maximum area of parking garages must comply with 406.3.5. The maximum area of air traffic control towers must comply with 412.1.2.

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	**Type II-B**		**Type II-B**	
Building Height in Feet	Feet **55**	Feet = H + 20' = **N/A**	**32 feet**	
Building Height in Stories	Stories **2**	Stories + 1 = **N/A**	Stories **2**	

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/_____* REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses		**0**					
Bearing Walls							
Exterior	**>10'**	**0**					
North							
East							
West							
South							
Interior		**0**					
Nonbearing Walls and Partitions Exterior walls	**>10'**	**0**					
North							
East							
West							
South							
Interior walls and partitions		**0**					
Floor Construction Including supporting beams and joists		**0**					
Roof Construction Including supporting beams and joists		**0**					
Shaft Enclosures - Exit		**1**	**Stair Towers**				
Shaft Enclosures - Other		**1**	**HVAC Chase**				
Corridor Separation		**1**					
Occupancy Separation		**N/A**					
Party/Fire Wall Separation		**4**	**EXISTING**				
Smoke Barrier Separation		**N/A**					
Tenant Separation		**N/A**					
Incidental Use Separation		**2**	**Boiler Room**				
Incidental Use Separation		**1**	**Storage Rms**				

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	☐ No	☒ Yes
Exit Signs:	☐ No	☒ Yes
Fire Alarm:	☐ No	☒ Yes
Smoke Detection Systems:	☐ No	☒ Yes
Panic Hardware:	☐ No	☒ Yes

EXIT REQUIREMENTS

NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM[2] NUMBER OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS[1,3] (SECTION 1014.2)	
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1015.1)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
2ND FLOOR	2	3	200	100’	65’	120’
1ST FLOOR	2	4	200	100’	65’	120’

[1] Corridor dead ends (Section 1016.3)
[2] Single exits (Table 1018.2)
[3] Common Path of Travel (Section 1013.3)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA[1] sq. ft.	(b) AREA[1] PER OCCUPANT (TABLE 1003.2.2.2)	CALCULATED OCCUPANT LOAD	(c) EGRESS WIDTH PER OCCUPANT (TABLE 1005.1)		EXIT WIDTH (in)[2,3,4,5,6] REQUIRED WIDTH (SECTION 1005.1) (a÷b) x c		ACTUAL WIDTH SHOWN ON PLANS	
				STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
2ND FLOOR			193	0.3	0.2	58	39	96	128
1ST FLOOR			167	0.3	0.2	50	33	N/A	288

[1] See Table 1004.1.2 to determine whether net or gross area is applicable.
See definition "Area, Gross" and "Area, Net" (Section 1002)
[2] Minimum stairway width (Section 1005.1); min. corridor width (Section 1016.2); min. door width (Section 1018.1)
[3] Minimum width of exit passageway (Section 1020.2)
[4] See Section 1004.5 for converging exits.
[5] The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.1)
[6] Assembly occupancies (Section 1024)

2006 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: **Additions and Renovations, Wiley Elementary School**
Address: **201 St. Mary's Street, Raleigh, NC** Zip Code **27610**
Proposed Use: **Educational**
Owner/Authorized Agent: **Lalonna Griffin, PM** Phone # **(919) 856-3722** E-Mail **LGriffin@wcpss.net**
Owned By: ☒ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City_____ ☒ County_____ ☐ State

LEAD DESIGN PROFESSIONAL: Mete Gurel, AIA

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	**Gurel Architecture**			(____)_____	
Civil	**Dewberry & Davis**			(____)_____	
Electrical	**Dewberry & Davis**			(____)_____	
Fire Alarm	**Dewberry & Davis**			(____)_____	
Plumbing	**Dewberry & Davis**			(____)_____	
Mechanical	**Dewberry & Davis**			(____)_____	
Sprinkler	**GNP FP Design**			(____)_____	
Structural	**Dewberry & Davis**			(____)_____	
Retaining Walls	**Dewberry & Davis**			(____)_____	
Other	**Lappas + Havener**			(____)_____	
Other	**Roof Engineering**			(____)_____	

2006 EDITION OF NC CODE FOR: ☒ New Construction ☐ Addition ☐ Upfit
EXISTING: ☐ Reconstruction ☐ Alteration ☐ Repair
CONSTRUCTED: N/A **ORIGINAL USE:** Educational **RENOVATED:** N/A **CURRENT USE:** N/A

BUILDING DATA
Construction Type: ☐ I-A ☐ I-B ☐ II-A ☒ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ☐ V-B
Mixed construction: ☐ No ☐ Yes Types _____
Sprinklers: ☐ No ☐ Partial ☒ Yes ☒ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☒ No ☐ Yes **Flood Hazard Area:** ☒ No ☐ Yes
Building Height: Feet **34** Number of Stories **1**
Mezzanine: ☒ No ☐ Yes
Gross Building Area:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
2nd Floor	**0**	**8,991**	**8,991**
1st Floor	**0**	**8.759**	**8.759**
Basement	**0**	**0**	**0**
TOTAL	**0**	**17,750**	**17,750**

ALLOWABLE AREA

Primary Occupancy: Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
☐ Business ☒ Educational Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ Mercantile Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Utility and Miscellaneous ☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage

Secondary Occupancy: **N/A**

Special Uses: ☐ 402 ☐ 403 ☐ 404 ☐ 405 ☐ 406 ☐ 407 ☐ 408 ☐ 409 ☐ 410 ☐ 411 ☐ 412
☐ 413 ☐ 414 ☐ 415 ☐ 416 ☐ 417 ☐ 418 ☐ 419 ☐ 420 ☐ 421

Special Provisions: ☐ 508.2 ☐ 508.3 ☐ 508.4 ☐ 508.5 ☐ 508.6 ☐ 508.7 ☐ 508.8

Mixed Occupancy: ☒ No ☐ Yes Separation: _____ Hr. Exception: _____

☐ Incidental Use Separation (302.1.1)
This separation is not exempt as a Non-Separated Use (see exceptions).

☐ Non-Separated Use (302.3.1)
The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

☐ Separated Use (302.3.2) - See below for area calculations
For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\textit{Actual Area of Occupancy A}}{\textit{Allowable Area of Occupancy A}} + \frac{\textit{Actual Area of Occupancy B}}{\textit{Allowable Area of Occupancy B}} \leq 1$$

$$\frac{\quad}{\quad} + \frac{\quad}{\quad} + \ldots\ldots = \frac{\quad}{\quad} \leq 1.00$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 503[5] AREA	(C) AREA FOR FRONTAGE INCREASE[1]	(D) AREA FOR SPRINKLER INCREASE[2]	(E) ALLOWABLE AREA OR UNLIMITED[3]	(F) MAXIMUM BUILDING AREA[4]
2nd Floor	**Educational**	**8,991**	**14,500**	**7,250**	**29,000**	**50,750**	**101,500**
1st Floor	**Educational**	**8.759**	**14,500**	**7,250**	**29,000**	**50,750**	
Basement		**0**	**Exempt**	**0**	**0**	**Exempt**	

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
b. Total Building Perimeter = _____ (P)
c. Ratio (F/P) = _____ (F/P)
d. W = Minimum width of public way = _____ (W)
e. Percent of frontage increase $I_f = 100 [F/P - 0.25] \times W/30$ = _____ (%)

100 (396/396 –0.25) x 20/30 X 14,500 = 0.50 X 14,500 = 7,250

[2] The sprinkler increase per Section 506.3 is as follows:
a. Multi-story building I_s = 200 percent

14,500 x 200% = 29,000

b. Single story building I_s = 300 percent

[3] Unlimited area applicable under conditions of Sections Group B, F, M, S, A-4 (507); Group A motion picture (507.9); Malls (402.6); and H-2 aircraft paint hangers (507.7).

[4] Maximum Building Area = total number of stories in the building x E (506.4).

[5] The maximum area of parking garages must comply with 406.3.5. The maximum area of air traffic control towers must comply with 412.1.2.

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	**Type II-B**		**Type II-B**	
Building Height in Feet	Feet **55**	Feet = H + 20' = **75**	**34 feet**	
Building Height in Stories	Stories **2**	Stories + 1 = **3**	Stories **2**	

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/_____* REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses		**0**					
Bearing Walls							
Exterior	**>10'**	**0**					
North							
East							
West							
South							
Interior		**0**					
Nonbearing Walls and Partitions Exterior walls	**>10'**	**0**					
North							
East							
West							
South							
Interior walls and partitions		**0**					
Floor Construction Including supporting beams and joists		**0**					
Roof Construction Including supporting beams and joists		**0**					
Shaft Enclosures - Exit		**1**	**Elevator and Stair Tower**				
Shaft Enclosures - Other		**1**	**HVAC Chase**				
Corridor Separation		**0**					
Occupancy Separation		**N/A**					
Party/Fire Wall Separation							
Smoke Barrier Separation		**N/A**					
Tenant Separation		**N/A**					
Incidental Use Separation		**0**	**Per Sprk Sys**				

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	☐ No	☒ Yes
Exit Signs:	☐ No	☒ Yes
Fire Alarm:	☐ No	☒ Yes
Smoke Detection Systems:	☐ No	☒ Yes
Panic Hardware:	☐ No	☒ Yes

EXIT REQUIREMENTS

NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM[2] NUMBER OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS[1,3] (SECTION 1014.2)	
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1015.1)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
2ND FLOOR	2	2	250	100’	70’	110’
1ST FLOOR	2	2	250	100’	70’	110’

[1] Corridor dead ends (Section 1016.3)
[2] Single exits (Table 1018.2)
[3] Common Path of Travel (Section 1013.3)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA[1] sq. ft.	(b) AREA[1] PER OCCUPANT (TABLE 1003.2.2.2)	CALCULATED OCCUPANT LOAD	(c) EGRESS WIDTH PER OCCUPANT (TABLE 1005.1)		EXIT WIDTH (in)[2,3,4,5,6] REQUIRED WIDTH (SECTION 1005.1) (a÷b) x c		ACTUAL WIDTH SHOWN ON PLANS	
				STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
2ND FLOOR			229	0.2	0.15	34	46	N/A	128
1ST FLOOR			201	0.2	0.15	30	40	N/A	128

[1] See Table 1004.1.2 to determine whether net or gross area is applicable.
See definition "Area, Gross" and "Area, Net" (Section 1002)
[2] Minimum stairway width (Section 1005.1); min. corridor width (Section 1016.2); min. door width (Section 1018.1)
[3] Minimum width of exit passageway (Section 1020.2)
[4] See Section 1004.5 for converging exits.
[5] The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.1)
[6] Assembly occupancies (Section 1024)

2006 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: **Additions and Renovations, Wiley Elementary School**
Address: **201 St. Mary's Street, Raleigh, NC** Zip Code **27610**
Proposed Use: **Educational**
Owner/Authorized Agent: **Lalonna Griffin, PM** Phone # **(919) 856-3722** E-Mail **LGriffin@wcpss.net**
Owned By: ☒ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City_____ ☒ County_____ ☐ State

LEAD DESIGN PROFESSIONAL: Mete Gurel, AIA

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	**Gurel Architecture**			(____)_____	
Civil	**Dewberry & Davis**			(____)_____	
Electrical	**Dewberry & Davis**			(____)_____	
Fire Alarm	**Dewberry & Davis**			(____)_____	
Plumbing	**Dewberry & Davis**			(____)_____	
Mechanical	**Dewberry & Davis**			(____)_____	
Sprinkler	**GNP FP Design**			(____)_____	
Structural	**Dewberry & Davis**			(____)_____	
Retaining Walls	**Dewberry & Davis**			(____)_____	
Other	**Lappas + Havener**			(____)_____	
Other	**Roof Engineering**			(____)_____	

2006 EDITION OF NC CODE FOR: ☐ New Construction ☒ Addition ☐ Upfit
EXISTING: ☐ Reconstruction ☒ Alteration ☐ Repair
CONSTRUCTED: 1989 **ORIGINAL USE:** Educational **RENOVATED:** Educational **CURRENT USE:** Educational

BUILDING DATA
Construction Type: ☐ I-A ☐ I-B ☐ II-A ☒ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ☐ V-B
Mixed construction: ☐ No ☐ Yes Types _____
Sprinklers: ☒ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☒ No ☐ Yes **Flood Hazard Area:** ☒ No ☐ Yes
Building Height: Feet **20** Number of Stories **1**
Mezzanine: ☒ No ☐ Yes
Gross Building Area:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
1st Floor	**7,108**	**8,516**	**15,624**
Basement	**0**	**0**	**0**
TOTAL	**7,108**	**8,516**	**15,624**

ALLOWABLE AREA

Primary Occupancy: Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
☐ Business ☒ Educational Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ Mercantile Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Utility and Miscellaneous ☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage

Secondary Occupancy: **N/A**

Special Uses: ☐ 402 ☐ 403 ☐ 404 ☐ 405 ☐ 406 ☐ 407 ☐ 408 ☐ 409 ☐ 410 ☐ 411 ☐ 412
☐ 413 ☐ 414 ☐ 415 ☐ 416 ☐ 417 ☐ 418 ☐ 419 ☐ 420 ☐ 421

Special Provisions: ☐ 508.2 ☐ 508.3 ☐ 508.4 ☐ 508.5 ☐ 508.6 ☐ 508.7 ☐ 508.8

Mixed Occupancy: ☒ No ☐ Yes Separation: _____ Hr. Exception: _____

☐ Incidental Use Separation (302.1.1)
This separation is not exempt as a Non-Separated Use (see exceptions).

☐ Non-Separated Use (302.3.1)
The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

☐ Separated Use (302.3.2) - See below for area calculations
For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\textit{Actual Area of Occupancy A}}{\textit{Allowable Area of Occupancy A}} + \frac{\textit{Actual Area of Occupancy B}}{\textit{Allowable Area of Occupancy B}} \leq 1$$

$$\frac{\quad}{\quad} + \frac{\quad}{\quad} + \ldots\ldots = \quad \leq 1.00$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 503[5] AREA	(C) AREA FOR FRONTAGE INCREASE[1]	(D) AREA FOR SPRINKLER INCREASE[2]	(E) ALLOWABLE AREA OR UNLIMITED[3]	(F) MAXIMUM BUILDING AREA[4]
1st Floor	**Educational**	**15,624**	**14,500**	**7,250**	**0**	**21,750**	**21,750**
Basement	**Educational**	**0**	**Exempt**	**0**	**0**	**Exempt**	

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
b. Total Building Perimeter = _____ (P)
c. Ratio (F/P) = _____ (F/P)
d. W = Minimum width of public way = _____ (W)
e. Percent of frontage increase $I_f = 100 [F/P - 0.25] \times W/30$ = _____ (%)

100 (394/394 –0.25) x 20/30 X 14,500 = 0.50 X 14,500 = 7,250

[2] The sprinkler increase per Section 506.3 is as follows:
a. Multi-story building $I_s = 200$ percent
b. Single story building $I_s = 300$ percent

[3] Unlimited area applicable under conditions of Sections Group B, F, M, S, A-4 (507); Group A motion picture (507.9); Malls (402.6); and H-2 aircraft paint hangers (507.7).

[4] Maximum Building Area = total number of stories in the building x E (506.4).

[5] The maximum area of parking garages must comply with 406.3.5. The maximum area of air traffic control towers must comply with 412.1.2.

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	**Type II-B**		**Type II-B**	
Building Height in Feet	Feet **55**	Feet = H + 20' = **N/A**	**20 feet**	
Building Height in Stories	Stories **2**	Stories + 1 = **N/A**	Stories **1**	

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/_____* REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses		**0**					
Bearing Walls							
Exterior	**>10'**	**0**					
North							
East							
West							
South							
Interior		**0**					
Nonbearing Walls and Partitions Exterior walls	**>10'**	**0**					
North							
East							
West							
South							
Interior walls and partitions		**0**					
Floor Construction Including supporting beams and joists		**0**					
Roof Construction Including supporting beams and joists		**0**					
Shaft Enclosures - Exit		**N/A**					
Shaft Enclosures - Other		**N/A**					
Corridor Separation		**1**					
Occupancy Separation		**N/A**					
Party/Fire Wall Separation							
Smoke Barrier Separation		**N/A**					
Tenant Separation		**N/A**					
Incidental Use Separation		**2**	**Boiler Room**				
Incidental Use Separation		**1**	**Storage Rms**				

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	☐ No	☒ Yes
Exit Signs:	☐ No	☒ Yes
Fire Alarm:	☐ No	☒ Yes
Smoke Detection Systems:	☐ No	☒ Yes
Panic Hardware:	☐ No	☒ Yes

EXIT REQUIREMENTS

NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM[2] NUMBER OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS[1,3] (SECTION 1014.2)	
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1015.1)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
1ST FLOOR			200	125’	90’	140’

[1] Corridor dead ends (Section 1016.3)
[2] Single exits (Table 1018.2)
[3] Common Path of Travel (Section 1013.3)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA[1] sq. ft.	(b) AREA[1] PER OCCUPANT (TABLE 1003.2.2.2)	CALCULATED OCCUPANT LOAD	(c) EGRESS WIDTH PER OCCUPANT (TABLE 1005.1)		EXIT WIDTH (in)[2,3,4,5,6] REQUIRED WIDTH (SECTION 1005.1) (a÷b) x c		ACTUAL WIDTH SHOWN ON PLANS	
				STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
1ST FLOOR			373	0.3	0.2	112	75	N/A	224

[1] See Table 1004.1.2 to determine whether net or gross area is applicable.
See definition "Area, Gross" and "Area, Net" (Section 1002)
[2] Minimum stairway width (Section 1005.1); min. corridor width (Section 1016.2); min. door width (Section 1018.1)
[3] Minimum width of exit passageway (Section 1020.2)
[4] See Section 1004.5 for converging exits.
[5] The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.1)
[6] Assembly occupancies (Section 1024)

OCCUPANT CONTENT TABULATION - BUILDING 3 REPLACEMENT SCHEME

BUILDING NO	BUILDING DESCRIPTION	BASEMENT OC	FIRST FL OC	SECOND FL OC	THIRD FL OC	TOTAL OC
1	1923 SCHOOL BUILDING	210	223	369	258	1,061
2	2001 CLASSROOM BUILDING	0	167	193	0	360
3R	REPLACEMENT BUILDING	0	201	229	0	430
TOTAL OCCUPANT CONTENT		210	591	791	258	1,851

OCCUPANT CONTENT TABULATION - BUILDING 3 ADDITION-RENOVATION SCHEME

BUILDING NO	BUILDING DESCRIPTION	BASEMENT OC	FIRST FL OC	SECOND FL OC	THIRD FL OC	TOTAL OC
1	1923 SCHOOL BUILDING	210	223	369	258	1,061
2	2001 CLASSROOM BUILDING	0	167	193	0	360
3	1989 CAFETERIA ADD+REN	0	370	0	0	373
TOTAL OCCUPANT CONTENT		210	760	563	258	1,794

ASSEMBLY AREAS	OCCUPANT CONTENT	EGRESS WIDTH	PROVIDED EXITS	PROVIDED WIDTH	REQ EXIT SEPARATION	PROVIDED SEPARATION
BUILDING 1 MEDIA CENTER	158	24	2	64	24'	50'
BUILDING 1 MEDIA CENTER	190	29	1	64	24'	0
BUILDING 1 MULTI PURPOSE ROOM	203	30	2	64	40'	50'
REPLACEMENT BUILDING 3R DINING ROOM	195	29	2	128	45'	60'
BUILDING 3 DINING ROOM	191	38	2	96	40'	58'

LARGEST ASSEMBLY ROOM	MAIN FL	BALCONY	TOTAL
BUILIDNG 1 MEDIA CENTER	158	190	348

OCCUPANT CONTENT TABULATION

ROOM NO	ROOM DESCRIPTION	AREA NET-GROSS	PERSON PER SF	OCCUPANT CONTENT	LEVEL EGRESS WIDTH	STAIR EGRESS WIDTH	NUMBER OF EXITS
					0.15	0.2	
1003	HALL	46	N/A				
1001	MULTI PURPOSE ROOM	3051	15	203.40			
1001A	PE STORAGE	48	300	0.16			
1001B	PE OFFICE	121	100	1.21			
1001C	PE STORAGE	121	300	0.40			
1002	MECHANICAL ROOM	1450	300	4.83			
1002A	ELEVATOR EQUIPMENT	47	300	0.16			
1003	EQUIPMENT ROOM	72	300	0.24			
BASEMENT OCCUPANT CONTENT				**210**	32	42	**2**
1100	CORRIDOR	1171	N/A				
1100A	HALL	158	N/A				
1100B	CORRIDOR	162	N/A				
1100C	HALL	158	N/A				
1100D	CORRIDOR	162	N/A				
1100E	HALL	153	N/A				
1101	UTILITY ROOM	42	300	0.14			
1102	CLASSROOM AG	651	20	32.55			
1103	HALL	34	N/A				
1104	CLASSROOM CHINESE	696	20	34.80			
1105	STAFF TOILET	48	N/A				
1106	CLASSROOM JAPANESE	659	20	32.95			
1107	GIRLS GROUP TOILET	139	NA				
1108	BAND ROOM	992	50	19.84			
1108A	BAND STORAGE	108	300	0.36			
1109	MECHANICAL ROOM	269	300	0.90			
1110	CUSTODIAL ROOM	108	N/A				
1111	MECHANICAL ROOM	269	300	0.90			
1112	CLASSROOM GERMAN	659	20	32.95			
1113	HALL	34	N/A				
1114	CLASSROOM SPANISH	696	20	34.80			

OCCUPANT CONTENT TABULATION

ROOM NO	ROOM DESCRIPTION	AREA NET-GROSS	PERSON PER SF	OCCUPANT CONTENT	LEVEL EGRESS WIDTH	STAIR EGRESS WIDTH	NUMBER OF EXITS
					0.15	0.2	
1115	STAFF TOILET	48	N/A				
1116	CLASSROOM FRENCH	651	20	32.55			
1117	BOYS GROUP TOILET	139	N/A				
1118	EXTERIOR STORAGE	116	300	0.39			
1119	UTILITY ROOM	42	300	0.14			
FIRST FLOOR OCCUPANT CONTENT				**223**	33	45	**2**
1200	CORRIDOR	972	N/A				
1200A	HALL	152	N/A				
1200B	CORRIDOR	162	N/A				
1200C	HALL	152	N/A				
1200D	CORRIDOR	162	N/A				
1200E	LOBBY	205	N/A				
1201	HALL	34	N/A				
1202	ADMINISTRATION RECEPTION	286	100	2.86			
1202A	SIMS + RECORDS	187	100	1.87			
1202B	HEALTH ROOM	96	100	0.96			
1202C	HEALTH ROOM TOILET	58	100	0.58			
1203	STAFF TOILET	48	100	0.48			
1204	ADMINISTRATION SECRETARY	210	100	2.10			
1204A	ASSISTANT PRINCIPAL	150	100	1.50			
1204B	PRINCIPAL	187	100	1.87			
1204C	CONFERENCE	122	100	1.22			
1204D	CLOSET	6	100	0.06			
1205	GIRLS GROUP TOILET	139	N/A				
1206	COMPUTER ROOM	659	50	13.18			
1207	MEDIA CENTER HALL	481	15	32.07			
1207A	LIBRARIAN	192	100	1.92			
1207B	A/V STORAGE	192	300	0.64			
1208	TEACHERS WORK ROOM	452	100	4.52			
1209	MEDIA CENTER	2377	15	158.47			

OCCUPANT CONTENT TABULATION

ROOM NO	ROOM DESCRIPTION	AREA NET-GROSS	PERSON PER SF	OCCUPANT CONTENT	LEVEL EGRESS WIDTH	STAIR EGRESS WIDTH	NUMBER OF EXITS
					0.15	0.2	
1209A	HALL	59	N/A				
1209B	HALL	59	N/A				
1210	CUSTODIAL ROOM	68	N/A				
1211	PLATFORM	561	15	37.40			
1211A	OFFICE	116	100	1.16			
1211B	OFFICE	116	100	1.16			
1212	TEACHERS LOUNGE	383	100	3.83			
1213	HALL	34	N/A				
1214	CLASSROOM 3	659	20	32.95			
1215	STAFF TOILET	48	N/A				
1216	CLASSROOM 3	696	20	34.80			
1217	BOYS GROUP TOILET	139	N/A				
1218	OFFICE	124	100	1.24			
1219	NOT USED	0	-				
1220	CLASSROOM 3	651	20	32.55			
SECOND FLOOR OCCUPANT CONTENT				**369**	55	74	**2**
1300	CORRIDOR	1185	N/A				
1300A	HALL	152	N/A				
1300B	CORRIDOR	162	N/A				
1300C	HALL	152	N/A				
1300D	CORRIDOR	162	N/A				
1301	HALL	34	N/A				
1302	CLASSROOM 4	651	20	32.55			
1303	STAFF TOILET	48	N/A				
1304	OFFICE	124	100	1.24			
1305	GIRLS GROUP TOILETS	139	N/A				
1306	CLASSROOM 4	696	20	34.80			
1307	BALCONY	1184	FIXED	190			
1307A	MECHANICAL ROOM	155	300	0.52			
1307B	MECHANICAL ROOM	155	300	0.52			

OCCUPANT CONTENT TABULATION

ROOM NO	ROOM DESCRIPTION	AREA NET-GROSS	PERSON PER SF	OCCUPANT CONTENT	LEVEL EGRESS WIDTH	STAIR EGRESS WIDTH	NUMBER OF EXITS
					0.15	0.2	
1308	CLASSROOM 4	659	20	32.95			
1309	HALL	34	N/A				
1310A	RESOURCE	360	20	18.00			
1310B	RESOURCE	360	20	18.00			
1310C	RESOURCE	360	20	18.00			
1311	STAFF TOILET	48	N/A				
1312	CLASSROOM 5	659	20	32.95			
1313	BOYS GROUP TOILET	139	N/A				
1314	CLASSROOM 5	696	20	34.80			
1315	NOT USED	0	-				
1316	OFFICE	124	100	1.24			
1317	GIRLS GROUP TOILETS	230	N/A				
1318	CLASSROOM 5	651	20	32.55			
THIRD FLOOR OCCUPANT CONTENT				**258**	**39**	**52**	**2**
1S1	STAIR	162	N/A				
1S2	STAIR	162	N/A				
EL	ELEVATOR	50	N/A				
BUILDING 1 OCCUPANT CONTENT		**34,407**		**1,061**			

OCCUPANT CONTENT TABULATION

ROOM NO	ROOM DESCRIPTION	AREA NET-GROSS	PERSON PER SF	OCCUPANT CONTENT	LEVEL EGRESS WIDTH	STAIR EGRESS WIDTH	NUMBER OF EXITS
					0.2	0.3	
2100	LOWER LOBBY	336	N/A				
2101	CORRIDOR	1096	N/A				
2102	CLASSROOM K	1130	20	56.50			
2102A	TOILET	79	N/A				
2103	CUSTODIAN	22	N/A				
2104	CLASSROOM K	1075	20	53.75			
2104A	TOILET	30	N/A				
2105	STAFF TOILET	62	N/A				
2106	CLASSROOM K	1075	20	53.75			
2106A	TOILET	30	N/A				
2107	MECHANICAL ROOM	454	300	1.51			
2108	EXTERIOR STORAGE	45	300	0.15			
2109	BOILER - ELECTRICAL	264	300	0.88			
FIRST FLOOR OCCUPANT CONTENT				**167**	**33**	**50**	**2**
2200	HALL	178	N/A				
2201	CORRIDOR	912	N/A				
2201	CORRIDOR	85	N/A				
2202	CLASSROOM EC	1131	20	56.55			
2202A	TOILET	81	N/A				
2203	GIRLS GROUP TOILETS	224	N/A				
2204	CLASSROOM 2	907	20	45.35			
2205	BOYS GROUP TOILETS	216	N/A				
2206	CLASSROOM 2	907	20	45.35			
2207	STAFF TOILET	40	N/A				
2208	CLASSROOM 2	907	20	45.35			
2209	STORAGE	162	300	0.54			
SECOND FLOOR OCCUPANT CONTENT				**193**	**39**	**58**	**2**
2S1	STAIR	168	N/A				
2S2	STAIR	193	N/A				
BUILDING 2 OCCUPANT CONTENT		**11,809**		**360**			

OCCUPANT CONTENT TABULATION

ROOM NO	ROOM DESCRIPTION	AREA NET-GROSS	PERSON PER SF	OCCUPANT CONTENT	LEVEL EGRESS WIDTH	STAIR EGRESS WIDTH	NUMBER OF EXITS
					0.15	0.2	
3100	CORRIDOR	443	N/A				
3100A	CORRIDOR	555	N/A				
3101	CLASSROOM 1	954	20	47.70			
3101A	TOILET	50	N/A				
3102	CLASSROOM 1	954	20	47.70			
3102A	TOILET	50	N/A				
3103	CLASSROOM 1	954	20	47.70			
3103A	TOILET	50	N/A				
3104	STAFF TOILET	64	N/A				
3105	CLASSROOM SP ED	993	20	49.65			
3105A	TOILET	50	N/A				
3105B	STORAGE	123	300	0.41			
3106	CUSTODIAN	64	N/A				
3108	BOOK STORAGE	133	300	0.44			
3110	GENERAL STORAGE	938	300	3.13			
3111	MECHANICAL ELECTRICAL ROOM	1310	300	4.37			
3111A	ELEVATOR EQUIPMENT ROOM	49	300	0.16			
FIRST FLOOR OCCUPANT CONTENT				**201**	**30**	**40**	**2**
3200	CORRIDOR	383	N/A				
3200A	CORRIDOR	572	N/A				
3201	DINING ROOM	2920	15	194.67			
3202	ART ROOM	1009	50	20.18			
3202A	KILN ROOM	102	300	0.34			
3202B	ART STORAGE	187	300	0.62			
3203	FOOD PREPARATION	1048	200	5.24			
3203A	CORRIDOR	208	200	1.04			
3203B	HALL	60	200	0.30			
3203C	KITCHEN MANAGER	89	200	0.45			
3203D	STAFF TOILET	89	200	0.45			
3203E	DRY STORAGE	213	200	1.07			

OCCUPANT CONTENT TABULATION

ROOM NO	ROOM DESCRIPTION	AREA NET-GROSS	PERSON PER SF	OCCUPANT CONTENT	LEVEL EGRESS WIDTH	STAIR EGRESS WIDTH	NUMBER OF EXITS
					0.15	0.2	
3203F	WASHER DRYER ROOM	112	200	0.56			
3203G	TOILET	58	200	0.29			
3203H	CAN WASH	66	200	0.33			
CLR	WALK IN COOLER	91	200	0.46			
FRZ	WALK IN FREEZER	91	200	0.46			
3204	STAFF TOILET	53	200	0.27			
3205	NOT USED	0	-				
3206	BOYS GROUP TOILET	174	N/A				
3207	NOT USED	0	-				
3208	GIRLS GROUP TOILET	174	N/A				
3209	NOT USED	0	-				
3210	OFFICE	207	100	2.07			
SECOND FLOOR OCCUPANT CONTENT				**229**	**34**	**46**	**2**
3S1	STAIR	155					
EL	ELEVATOR	53					
BUILDING 3R OCCUPANT CONTENT		**15,848**		**430**			

OCCUPANT CONTENT TABULATION

ROOM NO	ROOM DESCRIPTION	AREA NET-GROSS	PERSON PER SF	OCCUPANT CONTENT	LEVEL EGRESS WIDTH	STAIR EGRESS WIDTH	NUMBER OF EXITS
					0.2	0.3	
3000	CORRIDOR	1131	N/A				
3000A	CORRIDOR AND INTERIOR RAMP	538	N/A				
3001	OFFICE	293	100	2.93			
3002	ART ROOM	942	50	18.84			
3002A	ART STORAGE	145	300	0.48			
3002B	KILN ROOM	76	300	0.25			
3003	STAF TOILET	49	N/A				
3004	CLASSROOM 1	936	20	46.80			
3004A	TOILET	49	N/A				
3006	CLASSROOM 1	2.93	20	0.1465			
3006A	TOILET	49	N/A				
3008	CLASSROOM 1	936	20	46.80			
3008A	TOILET	49	N/A				
3010	CLASSROOM SP ED	936	20	46.80			
3010A	TOILET	49	N/A				
3100	DINING ROOM	2867	15	191.13			
3100A	STAFF TOILET	74	N/A				
3101	FOOD PREPARATION	999	200	5.00			
3101A	WALK IN REFRIGERATOR	102	200	0.51			
3101B	WALK IN FREEZER	151	200	0.76			
3101C	KITCHEN MANAGER	101	200	0.51			
3101D	HALL	88	200	0.44			
3101E	LOCKERS	80	200	0.40			
3101F	STAFF TOILET	71	200	0.36			
3101G	DRY STORAGE	284	200	1.42			
3101H	CUSTODIAN	117	200	0.59			
3101J	CAN WASH	30	200	0.15			
3102	BOILER	140	300	0.47			
3103	MECHANICAL ROOM	289	300	0.96			
3104	ELECTRICAL ROOM	64	300	0.21			

OCCUPANT CONTENT TABULATION

ROOM NO	ROOM DESCRIPTION	AREA NET-GROSS	PERSON PER SF	OCCUPANT CONTENT	LEVEL EGRESS WIDTH	STAIR EGRESS WIDTH	NUMBER OF EXITS
					0.2	0.3	
3105	GENERAL STORAGE	957	300	3.19			
3106	MECHANICAL ROOM	387	300	1.29			
3107	GIRLS GROUP TOILETS	174	N/A				
3108	BOYS GROUP TOILETS	174	N/A				
BUILDING 3 OCCUPANT CONTENT				**370**	**75**	**112**	**2**

PLUMBING FIXTURES REQUIRED - NCBC 2006, TABLE 2902.1

CLASSROOM DISTRIBUTION	NO. OF CLASSROOMS	LEGAL MAXIMUM CLASSROOM SIZE	STUDENT CAPACITY
GRADES 2-5	22	29	638
TOTAL STUDENT CAPACITY			**638**

STUDENT DISTRIBUTION	MALE STUDENTS	FEMALE STUDENTS
50% MALE, 50% FEMALE	**319**	**319**

PLUMBING FIXTURES REQUIRED

	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS
Water Closets + Urinals	25	**13**	**325**	25	**13**	**325**
Urinals - Max 67% WC	67%	**9**				
Lavatories	60	**6**	**360**	60	**6**	**360**
Drinking Fountains				100	**7**	**700**

PLUMBING FIXTURES PROVIDED

	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS
Water Closets + Urinals	25	**20**	**500**	25	**20**	**500**
Urinals	50%	**10**				
Lavatories	60	**10**	**600**	60	**10**	**600**
Drinking Fountains				100	**10**	**1000**

Note: Three Kindergarten, three First Grade and two Exceptional Children Classrooms with integral toilets are excluded from the plumbing fixture calculations as allowed by NC Building Code.

PLUMBING FIXTURES REQUIRED - NCBC 2006, TABLE 2902.1

	CLASSROOMS	MULTIPLIER	STAFF
TOTAL STAFF	**30**	**1.75**	**53**

DISTRIBUTION	MALE STAFF	FEMALE STAFF	
K-5: 20% M, 80% F	**11**	**43**	**54**

PLUMBING FIXTURES REQUIRED

	STAFF PER FIXTURE	NUMBER OF FIXTURES	SERVING STAFF	STAFF PER FIXTURE	NUMBER OF FIXTURES	SERVING STAFF
Water Closets	30	**1**	**30**	30	**2**	**60**
Urinals						
Lavatories	100	**1**	**100**	100	**1**	**100**
Drinking Fountains				100	**1**	**100**

PLUMBING FIXTURES PROVIDED

	UNISEX FACILILITES
	NUMBER OF FIXTURES
Water Closets	**10**
Urinals	**0**
Lavatories	**10**
Drinking Fountains	**10**

PER NCSBC 2006, 2902.9.5.1 Unisex Facilities

Unisex facilities may be provided for teacher/staff if their total occupant load within 200 feet is 15 or less.

In addition to above fixtures one unisex toilet is provided for kitchen staff.

PLUMBING FIXTURES REQUIRED - NCBC 2006, TABLE 2902.1

CLASSROOM DISTRIBUTION	NO. OF CLASSROOMS	LEGAL MAXIMUM CLASSROOM SIZE	STUDENT CAPACITY
GRADES 3-5	18	29	522
TOTAL STUDENT CAPACITY			**522**

STUDENT DISTRIBUTION	MALE STUDENTS	FEMALE STUDENTS
50% MALE, 50% FEMALE	**261**	**261**

PLUMBING FIXTURES REQUIRED

	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS
Water Closets + Urinals	25	**11**	**275**	25	**11**	**275**
Urinals - Max 67% WC	67%	**7**				
Lavatories	60	**5**	**300**	60	**5**	**300**
Drinking Fountains				100	**6**	**600**

PLUMBING FIXTURES PROVIDED

	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS
Water Closets + Urinals	25	**12**	**300**	25	**12**	**300**
Urinals	50%	**6**				
Lavatories	60	**6**	**360**	60	**6**	**360**
Drinking Fountains				100	**6**	**600**

PLUMBING FIXTURES REQUIRED - NCBC 2006, TABLE 2902.1

CLASSROOM DISTRIBUTION	NO. OF CLASSROOMS	LEGAL MAXIMUM CLASSROOM SIZE	STUDENT CAPACITY
GRADES 2	3	29	87
TOTAL STUDENT CAPACITY			**87**

STUDENT DISTRIBUTION	MALE STUDENTS	FEMALE STUDENTS
50% MALE, 50% FEMALE	**44**	**44**

PLUMBING FIXTURES REQUIRED

	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS
Water Closets + Urinals	25	**2**	**50**	25	**2**	**50**
Urinals - Max 67% WC	67%	**1**				
Lavatories	60	**1**	**60**	60	**1**	**60**
Drinking Fountains				100	**1**	**100**

PLUMBING FIXTURES PROVIDED

	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS
Water Closets + Urinals	25	**4**	**100**	25	**4**	**100**
Urinals		**2**				
Lavatories	60	**2**	**120**	60	**2**	**120**
Drinking Fountains				100	**1**	**100**

Note: Three Kindergarten and one Exceptional Children Classrooms with integral toilets are excluded from the plumbing fixture calculations as allowed by NC Building Code.

PLUMBING FIXTURES REQUIRED - NCBC 2006, TABLE 2902.1

CLASSROOM DISTRIBUTION	NO. OF CLASSROOMS	LEGAL MAXIMUM CLASSROOM SIZE	STUDENT CAPACITY
Art Room	1	29	29
TOTAL STUDENT CAPACITY			**29**

STUDENT DISTRIBUTION	MALE STUDENTS	FEMALE STUDENTS
50% MALE, 50% FEMALE	**15**	**15**

PLUMBING FIXTURES REQUIRED

	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS
Water Closets + Urinals	25	**1**	**25**	25	**1**	**25**
Urinals - Max 67% WC	67%	**1**				
Lavatories	60	**1**	**60**	60	**1**	**60**
Drinking Fountains				100	**1**	**100**

PLUMBING FIXTURES PROVIDED

	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS	STUDENTS PER FIXTURE	NUMBER OF FIXTURES	SERVING STUDENTS
Water Closets + Urinals	25	**4**	**100**	25	**4**	**100**
Urinals		**2**				
Lavatories	60	**2**	**120**	60	**2**	**120**
Drinking Fountains				100	**1**	**100**

Note: Three First Grade and one Exceptional Children Classrooms with integral toilets are excluded from the plumbing fixture calculations as allowed by NC Building Code.

THERMAL ENVELOPE CALCULATIONS

ROOF - EXISTING

BUILDING MATERIAL	R - WINTER	R - SUMMER	U VALUE
Outside Surface Air Film	0.17	0.25	
Roofing Membrane	0.12	0.12	
1/2" Overlayment Board	0.56	0.56	
3" Polyisocyanurate Insulation	20	20	
5/8" GWB Thermal Barrier	0.56	0.56	
Steel Deck	0	0	
5/8" Acoustical Ceiling Tile	1.79	1.79	
Inside Surface Air Film	0.61	0.92	
TOTAL R VALUE	23.81	24.2	
ROOF SYTEM U VALUE			**0.042**

WALLS - EXISTING

BUILDING MATERIAL	R - WINTER	R - SUMMER	U VALUE
Outside Surface Air Film	0.17	0.25	
4" Nominal Brick	0.44	0.44	
12" Masonry Back up	1.8	1.8	
1" Plaster	0.56	0.56	
Inside Surface Air Film	0.68	0.68	
TOTAL R VALUE	3.65	3.73	
MASONRY WALL SYTEM U VALUE			**0.274**

THERMAL ENVELOPE CALCULATIONS

EXISTING ROOF - REQUIRED U VALUE FOR THERMAL ZONE III - MAXIMUM **0.066**

BUILDING MATERIAL	R - WINTER	R - SUMMER	U VALUE
Outside Surface Air Film	0.17	0.25	
Roofing Membrane	0.12	0.12	
1/2" Overlayment Board	0.56	0.56	
3" Polyisocyanurate Insulation	20	20	
5/8" GWB Thermal Barrier	0.56	0.56	
Steel Deck	0	0	
5/8" Acoustical Ceiling Tile	1.79	1.79	
Inside Surface Air Film	0.61	0.92	
TOTAL R VALUE	23.81	24.2	

ROOF SYTEM U VALUE **0.042**

EXISTING WALLS - REQUIRED U VALUE FOR THERMAL ZONE III - MAXIMUM **0.127**

BUILDING MATERIAL	R - WINTER	R - SUMMER	U VALUE
Outside Surface Air Film	0.17	0.25	
4" Nominal Brick	0.44	0.44	
2" Cavity	0.9	0.9	
Air Infltration Barrier	0	0	
1" Polystyrene Insulation	5	5	
6" Batt Insulation	19	19	
5/8" GWB	0.56	0.56	
Inside Surface Air Film	0.68	0.68	
TOTAL R VALUE	26.75	26.83	

STEEL STUD CAVITY WALL SYTEM U VALUE **0.037**

BUILDING MATERIAL	R - WINTER	R - SUMMER	U VALUE
Outside Surface Air Film	0.17	0.25	
4" Nominal Brick	0.44	0.44	
1/2" Cavity	0.9	0.9	
Air Infltration Barrier	0	0	
1 1/2" Polystyrene Insulation	7.5	7.5	
8" CMU Hollow Core	1.11	1.11	
Inside Surface Air Film	0.68	0.68	
TOTAL R VALUE	10.8	10.88	

MASONRY CAVITY WALL SYTEM U VALUE **0.093**

THERMAL ENVELOPE CALCULATIONS

IECC - NC THERMAL ZONE 7a

WINDOW AND GLAZED DOOR AREA GREATER THAN 10 PERCENT BUT NOT GREATER THAN 25 PERCENT OF ABOVE-GRADE WALL AREA

	Insulation btwn framing	Continuous insulation
Roof Assemblies (R-value) for Metal Joist / Truss	**R-25**	**R-20**

ROOF - NEW CONSTRUCTION	R - WINTER	R - SUMMER	U VALUE
Outside Surface Air Film	0.17	0.25	
Roofing Membrane - Two Ply Modified Bitumen	0.24	0.24	
1/2" Fiberglass Mat Gypsum Overlayment Board	0.56	0.56	
3" Polyisocyanurate Insulation	20	20	
1/2" GWB Thermal Barrier	0.45	0.45	
Steel Deck	0	0	
5/8" Acoustical Ceiling Tile	1.79	1.79	
Inside Surface Air Film	0.61	0.92	
TOTAL R VALUE	23.82	24.21	
TOTAL U VALUE	0.042	0.041	
ROOF SYTEM U VALUE			**0.042**

IECC - NC THERMAL ZONE 7a

WINDOW AND GLAZED DOOR AREA GREATER THAN 10 PERCENT BUT NOT GREATER THAN 25 PERCENT OF ABOVE-GRADE WALL AREA

	R-value cavity	R-value continuous
Above Grade Walls (R-value) - Metal Framed Walls	**R-11**	**R-0**
Above Grade Walls (R-value) - Masonry Walls	**N/A**	**R-5**

WALLS TYPE 1 NEW CONSTRUCTION	R - WINTER	R - SUMMER	U VALUE
Outside Surface Air Film	0.17	0.25	
4" Nominal Brick	0.44	0.44	
1/2" Cavity	0.9	0.9	
1 1/2" Polystyrene Insulation	7.5	7.5	
8" CMU Hollow Core	1.11	1.11	
Inside Surface Air Film	0.68	0.68	
TOTAL R VALUE	10.8	10.88	
TOTAL U VALUE	0.093	0.092	
MASONRY CAVITY WALL SYTEM U VALUE			**0.093**

WALLS TYPE 2 NEW CONSTRUCTION	R - WINTER	R - SUMMER	U VALUE
Outside Surface Air Film	0.17	0.25	
4" Nominal Brick	0.44	0.44	
2" Cavity	0.9	0.9	
15# Felt	0.12	0.12	
5/8" Gypsum Sheathing	0.56	0.56	
6" Batt insulation	19	19	
5/8" GWB	0.56	0.56	
Inside Surface Air Film	0.68	0.68	
TOTAL R VALUE	22.43	22.51	
TOTAL U VALUE	0.045	0.044	
STEEL STUD + BRICK VENEER WALL SYTEM U VALUE			**0.045**

IECC - NC THERMAL ZONE 7a

THERMAL ENVELOPE CALCULATIONS

WINDOW AND GLAZED DOOR AREA GREATER THAN 10 PERCENT BUT NOT GREATER THAN 25 PERCENT OF ABOVE-GRADE WALL AREA

Slab on Grade or Below Grade Walls (R-value) **R-0**

Concrete Slab Floors over Unconditioned Space (R-value) **R-8**

FLOOR - NEW CONSTRUCTION	R - WINTER	R - SUMMER	U VALUE
Outside Surface Air Film	0.17	0.25	
4" Nominal Brick	0.44	0.44	
2" Polystyrene Insulation	10	10	
8" CMU Reinforced and Concrete Filled	0.64	0.64	
Inside Surface Air Film	0.68	0.68	
TOTAL R VALUE	11.93	12.01	
TOTAL U VALUE	0.084	0.083	
WALL SYTEM U VALUE			**0.084**

IECC - NC THERMAL ZONE 7a

WINDOW AND GLAZED DOOR AREA GREATER THAN 10 PERCENT BUT NOT GREATER THAN 25 PERCENT OF ABOVE-GRADE WALL AREA

Windows and Glass Doors	SHGC	U Factor
PF < 0.25	0.5	0.7
0.25 ≤ PF < 0.50	0.6	0.7
PF ≥ 0.50	0.7	0.7

WINDOWS NEW CONSTRUCTION	SHGC	U VALUE	R VALUE
GLAZING: PPG SOLARBAN 60 AZURIA	0.31	0.29	3.45
FRAMING: ALUMINUM THERMAL BREAK	0	0.20	5.00
TOTAL FOR ASSEMBLY	**0.31**	**0.24**	**4.17**

PPG SOLARBAN 60 AZURIA

Insulating Vision Unit Performance 1-inch (25mm) units with 1/2-inch (13mm) airspace and two 1/4-inch (6mm) lites; interior lite clear

Transmittance	
Ultraviolet %	10
Visible Light %	54
Total Solar Energy %	21
Reflectance	
Visible Light %	9
Total Solar Energy %	7
U Values	
Winter Nighttime	0.29
Summer Daytime	0.28
Shading Coefficient (SC)	**0.36**
Solar Heat Gain Coefficient (SHGC)	**0.31**
Light to Solar Gain (LSG)	**1.74**

AREA TABULATIONS

EXISTING CONDITIONS

SITE AREA TABULATIONS

DESCRIPTION	ACRES	SQUARE FEET
TOTAL SITE AREA	6.47	281,833
TOTAL SITE AREA WITHIN ROW	6.26	272,985
BUILDING 1 FOOTPRINT		13,910
BUILDING 2 FOOTPRINT		6,918
BUILDING 3 FOOTPRINT		7,398
TOTL BUILDINGS FOOTPRINT		28,226
COURTYARD WALKS		1,405
COURTYARD RAMPS		1,440
CAFETERIA RAMPS		833
CAMPUS WALKS		14,194
ASPHALT PAVEMENT		34,444
CONC PLAY 1		591
CONC PLAY 2		253
CHILLER SLAB		1,100
SIDEWALK PARKING		1,448
SIDEWALK ST MARY'S		8,350
SIDEWALK COLLEGE		3,006
EXISTING IMPERVIOUS AREA		95,290
IMPERVIOUS AREA %		**33.81%**
BUILDING 1 GROSS AREA		40,699
BUILDING 2 GROSS AREA		13,701
BUILDING 3 GROSS AREA		7,108
TOTAL BUILDING GROSS AREA		**61,508**
BUILDING LOT COVERAGE %		**10.02%**
FLOOR AREA RATIO %		**21.82%**

BUILDING 3 REPLACEMENT SCHEME WITH NEW SITE IMPROVEMENTS

SITE AREA TABULATIONS

DESCRIPTION	ACRES	SQUARE FEET
TOTAL SITE AREA	6.47	281,833
TOTAL SITE AREA WITHIN ROW	6.26	272,985
BUILDING 1 FOOTPRINT		13,910
BUILDING 2 FOOTPRINT		6,918
BUILDING 3R FOOTPRINT		8,759
TOTL BUILDINGS FOOTPRINT		29,587
COURTYARD WALKS		1,405
COURTYARD RAMPS		1,440
CAFETERIA RAMPS		833
CAMPUS WALKS EXISTING		14,194
CAMPUS WALKS REMOVAL		-1,098
CAMPUS WALKS ADDED		3,314
EXISTING PAVEMENT AREA		34,444
NET PAVEMENT ADDITION		4,376
NEW CONC PLAY COURT		2,400
CHILLER YARD		1,056
SIDEWALK PARKING		1,448
SIDEWALK ST MARY'S		8,350
SIDEWALK COLLEGE		3,006
PRE DEV IMPERVIOUS AREA		95,290
POST DEV IMPERVIOUS AREA		104,755
IMPERVIOUS AREA INCREASE		**9,465**
IMPERVIOUS AREA %		**37.17%**
BUILDING 1 GROSS AREA		40,699
BUILDING 2 GROSS AREA		13,701
BUILDING 3R GROSS AREA		17,750
TOTAL BUILDING GROSS AREA		**72,150**
BUILDING LOT COVERAGE %		**10.50%**
FLOOR AREA RATIO %		**25.60%**

BUILDING 3 ADDITION AND RENOVATION SCHEME WITH NO SITE IMPROVEMENTS

SITE AREA TABULATIONS

DESCRIPTION	ACRES	SQUARE FEET
TOTAL SITE AREA	6.47	281,833
TOTAL SITE AREA WITHIN ROW	6.26	272,985
BUILDING 1 FOOTPRINT		13,910
BUILDING 2 FOOTPRINT		6,918
BUILDING 3 FOOTPRINT		15,624
TOTL BUILDINGS FOOTPRINT		36,452
COURTYARD WALKS		1,405
COURTYARD RAMPS		1,440
CAFETERIA RAMPS		833
CAFETERIA RAMP ADDITION		500
CAMPUS WALKS		14,194
CAMPUS WALKS REMOVAL		-1,098
CAMPUS WALKS ADDED		5,000
ASPHALT PAVEMENT		34,444
CONC PLAY 1		591
CONC PLAY 2		253
CHILLER SLAB		1,100
SIDEWALK PARKING		1,448
SIDEWALK ST MARY'S		8,350
SIDEWALK COLLEGE		3,006
PRE DEV IMPERVIOUS AREA		95,290
POST DEV IMPERVIOUS AREA		104,912
IMPERVIOUS AREA INCREASE		**9,622**
IMPERVIOUS AREA %		**37.22%**
BUILDING 1 GROSS AREA		40,699
BUILDING 2 GROSS AREA		13,701
BUILDING 3 GROSS AREA		15,624
TOTAL BUILDING GROSS AREA		**70,024**
BUILDING LOT COVERAGE %		**12.93%**
FLOOR AREA RATIO %		**24.85%**

BUILDING 3 ADDITION AND RENOVATION SCHEME WITH NEW SITE IMPROVEMENTS

SITE AREA TABULATIONS

DESCRIPTION	ACRES	SQUARE FEET
TOTAL SITE AREA	6.47	281,833
TOTAL SITE AREA WITHIN ROW	6.26	272,985
BUILDING 1 FOOTPRINT		13,910
BUILDING 2 FOOTPRINT		6,918
BUILDING 3 FOOTPRINT		15,624
TOTL BUILDINGS FOOTPRINT		36,452
COURTYARD WALKS		1,405
COURTYARD RAMPS		1,440
CAFETERIA RAMPS		833
CAMPUS WALKS EXISTING		14,194
CAMPUS WALKS REMOVAL		-1,098
CAMPUS WALKS ADDED		3,314
EXISTING PAVEMENT AREA		34,444
NET PAVEMENT ADDITION		4,376
NEW CONC PLAY COURT		2,400
CHILLER YARD		1,056
SIDEWALK PARKING		1,448
SIDEWALK ST MARY'S		8,350
SIDEWALK COLLEGE		3,006
PRE DEV IMPERVIOUS AREA		95,290
POST DEV IMPERVIOUS AREA		111,620
IMPERVIOUS AREA INCREASE		**16,330**
IMPERVIOUS AREA %		**39.61%**
BUILDING 1 GROSS AREA		40,699
BUILDING 2 GROSS AREA		13,701
BUILDING 3 GROSS AREA		15,624
TOTAL BUILDING AREA		**70,024**
BUILDING LOT COVERAGE %		**12.93%**
FLOOR AREA RATIO %		**24.85%**

AREA TABULATION - GROSS SQUARE FEET

BUILDING NO	BUILDING DESCRIPTION	CURRENT AREA	DEMOLITION AREA	RENOVATION AREA	ADDITION AREA	TOTAL AREA
1	1923 SCHOOL BUILDING	40,699	0	40,699	0	40,699
2	2001 CLASSROOM BUILDING	13,701	0	0	0	13,701
3	1987 CAFETERIA BUILDING	7,108	(7,108)	0	0	0
3R	REPLACEMENT BUILDING	0	0	0	17,750	17,750
TOTAL GROSS SQUARE FEET		61,508	(7,108)	40,699	17,750	72,150

AREA TABULATION - GROSS SQUARE FEET PER STORY

BUILDING NO	BUILDING DESCRIPTION	BASEMENT AREA	FIRST AREA	SECOND AREA	THIRD AREA	TOTAL AREA
1	1923 SCHOOL BUILDING	1,869	13,819	13,804	11,207	40,699
2	2001 CLASSROOM BUILDING	0	6,812	6,889	0	13,701
3R	REPLACEMENT BUILDING	0	8,759	8,991	0	17,750
TOTAL GROSS SQUARE FEET		1,869	29,390	29,684	11,207	72,150

AREA TABULATION - NET SQUARE FEET

BUILDING NO	BUILDING DESCRIPTION	CURRENT AREA	DEMOLITION AREA	RENOVATION AREA	ADDITION AREA	TOTAL AREA
1	1923 SCHOOL BUILDING	34,406	0	34,358	0	34,358
2	2001 CLASSROOM BUILDING	11,809	0	0	0	11,809
3	1987 CAFETERIA BUILDING	6,291	(6,291)	0	0	0
3R	REPLACEMENT BUILDING	0	0	0	15,848	15,848
TOTAL NET SQUARE FEET		52,506	(6,291)	34,358	15,848	62,015

NET GAIN SF - DEMOLITION AND NEW CONSTRUCTION	10,642 GROSS	9,557 NET

PARKING SPACES TABULATION

PARKING AREA	PARKING AREA DESCRIPTION	CURRENT REG SPACES	CURRENT H/C SPACES	PROPOSED REG SPACES	PROPOSED H/C SPACES
1	MAIN PARKING	34	0	33	2
2	NORTH + EAST PARKING	23	3	27	4
3	SERVICE AREA PARKING	2	0	7	0
	TOTAL	59	3	67	6
TOTAL PARKING SPACES		62		73	

AREA TABULATION - NET SQUARE FEET

ROOM NO	ROOM DESCRIPTION	CURRENT AREA	DEMOLITION AREA	RENOVATION AREA	ADDITION AREA	TOTAL AREA	SUB AREA
1003	HALL			46			
1001	MULTI PURPOSE ROOM			3051			
1001A	PE STORAGE			48			
1001B	PE OFFICE			121			
1001C	PE STORAGE			121			
1002	MECHANICAL ROOM			1450			
1002A	ELEVATOR EQUIPMENT			47			
1003	EQUIPMENT ROOM			72			**4,956**
1100	CORRIDOR			1171			
1100A	HALL			158			
1100B	CORRIDOR			162			
1100C	HALL			158			
1100D	CORRIDOR			162			
1100E	HALL			153			
1101	UTILITY ROOM			42			
1102	CLASSROOM AG			651			
1103	HALL			34			
1104	CLASSROOM CHINESE			696			
1105	STAFF TOILET			48			
1106	CLASSROOM JAPANESE			659			
1107	GIRLS GROUP TOILET			139			
1108	BAND ROOM			992			
1108A	BAND STORAGE			108			
1109	MECHANICAL ROOM			269			
1110	CUSTODIAL ROOM			108			
1111	MECHANICAL ROOM			269			
1112	CLASSROOM GERMAN			659			
1113	HALL			34			
1114	CLASSROOM SPANISH			696			
1115	STAFF TOILET			`			

AREA TABULATION - NET SQUARE FEET

ROOM NO	ROOM DESCRIPTION	CURRENT AREA	DEMOLITION AREA	RENOVATION AREA	ADDITION AREA	TOTAL AREA	SUB AREA
1116	CLASSROOM FRENCH			651			
1117	BOYS GROUP TOILET			139			
1118	EXTERIOR STORAGE			116			
1119	UTILITY ROOM			42			**8,316**
1200	CORRIDOR			972			
1200A	HALL			152			
1200B	CORRIDOR			162			
1200C	HALL			152			
1200D	CORRIDOR			162			
1200E	LOBBY			205			
1201	HALL			34			
1202	ADMINISTRATION RECEPTION			286			
1202A	SIMS + RECORDS			187			
1202B	HEALTH ROOM			96			
1202C	HEALTH ROOM TOILET			58			
1203	STAFF TOILET			48			
1204	ADMINISTRATION SECRETARY			210			
1204A	ASSISTANT PRINCIPAL			150			
1204B	PRINCIPAL			187			
1204C	CONFERENCE			122			
1204D	CLOSET			6			
1205	GIRLS GROUP TOILET			139			
1206	COMPUTER ROOM			659			
1207	MEDIA CENTER HALL			481			
1207A	LIBRARIAN			192			
1207B	A/V STORAGE			192			
1208	TEACHERS WORK ROOM			383			
1208	MDF			68			
1209	MEDIA CENTER			2377			
1209A	HALL			59			

AREA TABULATION - NET SQUARE FEET

ROOM NO	ROOM DESCRIPTION	CURRENT AREA	DEMOLITION AREA	RENOVATION AREA	ADDITION AREA	TOTAL AREA	SUB AREA
1209B	HALL			59			
1210	CUSTODIAL ROOM			68			
1211	PLATFORM			561			
1211A	OFFICE			116			
1211B	OFFICE			116			
1212	TEACHERS LOUNGE			383			
1213	HALL			34			
1214	CLASSROOM 3			659			
1215	STAFF TOILET			48			
1216	CLASSROOM 3			696			
1217	BOYS GROUP TOILET			139			
1218	OFFICE			124			
1219	NOT USED			0			
1220	CLASSROOM 3			651			**11,393**
1300	CORRIDOR			1185			
1300A	HALL			152			
1300B	CORRIDOR			162			
1300C	HALL			152			
1300D	CORRIDOR			162			
1301	HALL			34			
1302	CLASSROOM 4			651			
1303	STAFF TOILET			48			
1304	OFFICE			124			
1305	GIRLS GROUP TOILETS			139			
1306	CLASSROOM 4			696			
1307	BALCONY			1184			
1307A	MECHANICAL ROOM			155			
1307B	MECHANICAL ROOM			155			
1308	CLASSROOM 4			659			
1309	HALL			34			

AREA TABULATION - NET SQUARE FEET

ROOM NO	ROOM DESCRIPTION	CURRENT AREA	DEMOLITION AREA	RENOVATION AREA	ADDITION AREA	TOTAL AREA	SUB AREA
1310A	RESOURCE			360			
1310B	RESOURCE			360			
1310C	RESOURCE			360			
1311	STAFF TOILET			48			
1312	CLASSROOM 5			659			
1313	BOYS GROUP TOILET			139			
1314	CLASSROOM 5			696			
1315	NOT USED			0			
1316	OFFICE			124			
1317	GIRLS GROUP TOILETS			230			
1318	CLASSROOM 5			651			**9,319**
1S1	STAIR			162			
1S2	STAIR			162			
EL	ELEVATOR			50			**374**
TOTAL NET SQUARE FEET			**0**	**34,358**	**0**	**0**	**34,358**

AREA TABULATION - NET SQUARE FEET

ROOM NO	ROOM DESCRIPTION	CURRENT AREA	DEMOLITION AREA	RENOVATION AREA	ADDITION AREA	TOTAL AREA	SUB AREA
2100	LOWER LOBBY	336					
2101	CORRIDOR	1096					
2102	CLASSROOM K	1130					
2102A	TOILET	79					
2103	CUSTODIAN	22					
2104	CLASSROOM K	1075					
2104A	TOILET	30					
2105	STAFF TOILET	62					
2106	CLASSROOM K	1075					
2106A	TOILET	30					
2107	MECHANICAL ROOM	454					
2108	EXTERIOR STORAGE	45					
2109	BOILER - ELECTRICAL	264					**5,698**
2200	HALL	178					
2201	CORRIDOR	912					
2201	CORRIDOR	85					
2202	CLASSROOM SP ED	1131					
2202A	TOILET	81					
2203	GIRLS GROUP TOILETS	224					
2204	CLASSROOM 2	907					
2205	BOYS GROUP TOILETS	216					
2206	CLASSROOM 2	907					
2207	STAFF TOILET	40					
2208	CLASSROOM 2	907					
2209	STORAGE	162					**5,750**
2S1	STAIR	168					
2S2	STAIR	193					**361**
TOTAL NET SQUARE FEET		**11,809**	**0**	`	**0**	**0**	**11,809**

AREA TABULATION - NET SQUARE FEET

ROOM NO	ROOM DESCRIPTION	CURRENT AREA	DEMOLITION AREA	RENOVATION AREA	ADDITION AREA	TOTAL AREA	SUB AREA
3100	CORRIDOR				443		
3100A	CORRIDOR				555		
3101	CLASSROOM 1				954		
3101A	TOILET				50		
3102	CLASSROOM 1				954		
3102A	TOILET				50		
3103	CLASSROOM 1				954		
3103A	TOILET				50		
3104	STAFF TOILET				64		
3105	CLASSROOM SP ED				993		
3105A	TOILET				50		
3105B	STORAGE (INS KITCHEN?)				123		
3106	CUSTODIAN				64		
3108	BOOK STORAGE				133		
3110	GENERAL STORAGE				938		
3111	MECHANICAL ELECTRICAL ROOM				1310		
3111A	ELEVATOR EQUIPMENT ROOM				49		**7,734**
3200	CORRIDOR				383		
3200A	CORRIDOR				572		
3201	DINING ROOM				2920		
3202	ART ROOM				1009		
3202A	KILN ROOM				102		
3202B	ART STORAGE				187		
3203	FOOD PREPARATION				1048		
3203A	CORRIDOR				208		
3203B	HALL				60		
3203C	KITCHEN MANAGER				89		
3203D	CUSTODIAN				89		
3203E	DRY STORAGE				213		
3203F	WASHER DRYER ROOM			`	112		

AREA TABULATION - NET SQUARE FEET

ROOM NO	ROOM DESCRIPTION	CURRENT AREA	DEMOLITION AREA	RENOVATION AREA	ADDITION AREA	TOTAL AREA	SUB AREA
3203G	TOILET				58		
3203H	CAN WASH				66		
CLR	WALK IN COOLER				91		
FRZ	WALK IN FREEZER				91		
3204	STAFF TOILET				53		
3205	NOT USED				0		
3206	BOYS GROUP TOILET				174		
3207	NOT USED				0		
3208	GIRLS GROUP TOILET				174		
3209	NOT USED				0		
3210	OFFICE				207		**7,906**
3S1	STAIR				155		
EL	ELEVATOR				53		**208**
TOTAL NET SQUARE FEET		**0**	**0**	**0**	**15,848**	**0**	**15,848**

AREA TABULATION - GROSS SQUARE FEET

BUILDING NO	BUILDING DESCRIPTION	CURRENT AREA	DEMOLITION AREA	RENOVATION AREA	ADDITION AREA	TOTAL AREA
1	1923 SCHOOL BUILDING	40,699	0	40,699	0	40,699
2	2001 CLASSROOM BUILDING	13,701	0	0	0	13,701
3	1987 CAFETERIA BUILDING	7,108	(600)	6,508	9,116	15,624
TOTAL GROSS SQUARE FEET		61,508	(600)	47,207	9,116	70,024

AREA TABULATION - GROSS SQUARE FEET PER STORY

BUILDING NO	BUILDING DESCRIPTION	BASEMENT AREA	FIRST AREA	SECOND AREA	THIRD AREA	TOTAL AREA
1	1923 SCHOOL BUILDING	1,869	13,819	13,804	11,207	40,699
2	2001 CLASSROOM BUILDING	0	6,812	6,889	0	13,701
3	1987 CAFETERIA BUILDING	0	15,624	0	0	15,624
TOTAL GROSS SQUARE FEET		1,869	36,255	20,693	11,207	70,024

AREA TABULATION - NET SQUARE FEET

BUILDING NO	BUILDING DESCRIPTION	CURRENT AREA	DEMOLITION AREA	RENOVATION AREA	ADDITION AREA	TOTAL AREA
1	1923 SCHOOL BUILDING	34,406	0	34,406	0	34,406
2	2001 CLASSROOM BUILDING	11,809	0	0	0	11,809
3	1987 CAFETERIA BUILDING	6,291	(600)	5,683	8,340	14,023
TOTAL NET SQUARE FEET		52,506	(600)	40,089	8,340	60,238

NET GAIN SF - DEMOLITION AND NEW CONSTRUCTION	8,516 GROSS	8,021 NET

PARKING SPACES TABULATION

PARKING AREA	PARKING AREA DESCRIPTION	CURRENT REG SPACES	CURRENT H/C SPACES		PROPOSED REG SPACES	PROPOSED H/C SPACES
1	MAIN PARKING	34	0		33	2
2	NORTH + EAST PARKING	23	3		27	4
3	SERVICE AREA PARKING	2	0		7	0
	TOTAL	59	3	`	67	6
TOTAL PARKING SPACES		62			73	

AREA TABULATION - NET SQUARE FEET

ROOM NO	ROOM DESCRIPTION	CURRENT AREA	DEMOLITION AREA	RENOVATION AREA	ADDITION AREA	TOTAL AREA	SUB AREA
3000	CORRIDOR				1131	1131	
3000A	CORRIDOR AND INTERIOR RAMP				538	538	
3001	OFFICE				293	293	
3002	ART ROOM				942	942	
3002A	ART STORAGE				145	145	
3002B	KILN ROOM				76	76	
3003	STAF TOILET				98	98	
3004	CLASSROOM 1				936	936	
3004A	TOILET				49	49	
3006	CLASSROOM 1				936	936	
3006A	TOILET				49	49	
3008	CLASSROOM 1				936	936	
3008A	TOILET				49	49	
3010	CLASSROOM SP ED				936	936	
3010A	TOILET				49	49	**7,163**
X	EXISTING CLASSROOMS		600				
3100	DINING ROOM			2647	220	2867	
3100A	STAFF TOILET			74		74	
3101	FOOD PREPARATION			999		999	
3101A	WALK IN REFRIGERATOR			102		102	
3101B	WALK IN FREEZER			151		151	
3101C	KITCHEN MANAGER			101		101	
3101D	HALL			88		88	
3101E	LOCKERS			80		80	
3101F	STAFF TOILET			71		71	
3101G	DRY STORAGE			284		284	
3101H	CUSTODIAN			117		117	
3101J	CAN WASH			30		30	
3102	BOILER			140		140	
3103	MECHANICAL ROOM			`		0	

AREA TABULATION - NET SQUARE FEET

ROOM NO	ROOM DESCRIPTION	CURRENT AREA	DEMOLITION AREA	RENOVATION AREA	ADDITION AREA	TOTAL AREA	SUB AREA
3104	ELECTRICAL ROOM			64		64	
3105	GENERAL STORAGE				957	957	
3106	MECHANICAL ROOM			387		387	
3107	GIRLS GROUP TOILETS			174		174	
3108	BOYS GROUP TOILETS			174		174	**6,860**
TOTAL NET SQUARE FEET		**0**	**600**	**5,683**	**8,340**	**14,023**	**14,023**

AREA TABULATION COMPARISON - NET SQUARE FEET

DESCRIPTION	WILEY ELEMENTARY 2 + 3 STORY	ELEMENTARY ED SPEC REV 2005	WILEY ES TO ED SPEC STD
STUDENT CAPACITY	**361**	800	45%
TEACHING SPACES	**30**	51	59%
TOTAL AREA GROSS	**72,150**	100,820	72%
GROSS AREA PER STUDENT	**200**	126	159%
GROSS AREA PER TEACHING SPACE	**2,405**	1,977	122%
CORE AREAS			
DINING ROOM AREA	**2,920**	3,640	80%
DINING ROOM CAPACITY	**513**	900	57%
MEDIA CENTER RLV AREA	**2,859**	4,140	69%
MEDIA CENTER CAPACITY	**628**	900	70%
MULTI PURPOSE ROOM	**3,051**	2,900	105%
GENERAL CLASROOMS			
Pre-K Classroom with Toilet	**0**	1,100	0%
K Classroom with Toilet	**1,105**	1,050	105%
First Grade Classroom with Toilet	**1,004**	950	106%
Second Grade Classroom	**907**	900	101%
Third - Fifth Grade Classroom	**660**	900	73%
Computer Lab	**660**	950	69%
SPECIAL PROGRAMS			
Self-Contained Classroom	**993**	900	110%
Instructional Kitchen/toilets	**173**	600	29%
CCR Classroom	**1212**	900	135%
VISUAL ARTS	**1,298**	1,150	113%
Art Room	**1,009**	950	106%
Art Storage	**187**	130	144%
Kiln Room	**102**	70	146%

AREA TABULATION COMPARISON - NET SQUARE FEET

DESCRIPTION	WILEY ELEMENTARY 2 + 3 STORY	ELEMENTARY ED SPEC REV 2005	WILEY ES TO ED SPEC STD
MUSIC	**1,100**	1,000	110%
Music (Band) Room	**992**	850	117%
Music (Band) Storage	**108**	150	72%
MEDIA CENTER	**3,243**	4,930	66%
RLV area (Reading, Listening & Viewing)	**2,859**	4,140	69%
AV Equipment/Periodical Storage	**192**	250	77%
Toilet	**0**	40	0%
Media Office/Workroom/Librarian	**192**	500	38%
PHYSICAL EDUCATION	**3,340**	4,710	71%
Play Area	**3,051**	2,900	105%
Stage/Platform	**0**	850	0%
Office	**120**	80	150%
Chair Storage/Dressing	**0**	200	0%
PE Equip. Storage/Dressing	**169**	200	85%
Outdoor PE Storage	**0**	180	0%
Ramp	**0**	300	0%
STAFF REQUIREMENTS	**1,266**	1,910	66%
Lounge/Kitchen/toilet	**383**	700	55%
Teachers' Workroom	**383**	300	128%
Teachers' Storage/Office	**0**	750	0%
Satellite Toilets	**500**	160	313%
ADMINISTRATION	**3,691**	5,390	68%
Reception Area	**286**	400	72%
Principal's Office	**187**	225	83%
Asst. Principal's Office	**207**	150	138%
Secretary's Office	**210**	150	140%
Locked Storage	**0**	10	0%
Student Information Data Manager Office	**187**	150	125%
Examination Suite/Health Room/Toilet	**154**	200	77%
Records Room	**0**	130	0%
Conference Room	**122**	225	54%
PTA Office/Storage	**116**	180	64%
Lead Teacher Office	**115**	150	77%
Office Work Room	**150**	250	60%
Toilet	**0**	40	0%
Supply/Storage	**0**	80	0%
Book Storage	**133**	350	38%

AREA TABULATION COMPARISON - NET SQUARE FEET

DESCRIPTION	WILEY ELEMENTARY 2 + 3 STORY	ELEMENTARY ED SPEC REV 2005	WILEY ES TO ED SPEC STD
STUDENT SUPPORT SERVICES	**372**	1,350	28%
Guidance Room	**124**	300	41%
Exam Room	**124**	120	103%
Human Services Room (Testing, O.S.S.)	**124**	120	103%
Psychologist, Social Worker Office	**0**	360	0%
Speech/Audiology Room	**0**	120	0%
OT/PT Room	**0**	150	0%
Supply/Storage	**0**	140	0%
Toilet	**0**	40	0%
ADMINISTRATION AND/OR STUDENT SUPPORT SERVICES			
Building 1 - 3rd Floor "Resource" Rooms	**1080**	0	
CHILD NUTRITION SERVICES	**4,711**	6,630	71%
Dining Area (Not Including Circulation)	**2,920**	3,640	80%
Food Preparation	**1,048**	1,020	103%
Serving Line	**0**	800	0%
Office	**89**	80	111%
Storage (recyclables)	**0**	200	0%
Dry Storage	**213**	350	61%
Cooler/Freezer	**182**	350	52%
Staff Locker Rm/Toilet/WD	**170**	150	113%
Custodial	**89**	40	223%
PLANT OPERATIONS	**1,488**	1,420	105%
Custodial Closets	**550**	200	275%
General Stor./Receiving/Custodial Lockers	**938**	900	104%
Building Manager's Office	**0**	80	0%
Toilet/Lockers	**0**	40	0%
Lawn Equipment Storage	**0**	200	0%
TECHNOLOGY	**268**	400	67%
Head End Room	**68**	200	34%
Network Closets	**200**	200	100%
OTHER	**364**	190	192%
Can wash	**66**	40	165%
Loading Dock	**298**	150	199%

PRELIMINARY COST ESTIMATES

BUILDING 3 REPLACEMENT SCHEME

WORK DESCRIPTION	SF	%	$/SF	TOTAL COST
BUILDING NO. 1 RENOVATIONS	40700		100	$4,070,000
BUILDING NO. 2 RENOVATIONS	13700		10	$137,000
BUILDING NO. 3 COMPLETE DEMOLITION	7110		15	$106,650
BUILDING NO. 3R REPLACEMENT BUILDING	17750		150	$2,662,500
BUILDING COST				$6,976,150
SITE DEVELOPMENT COST				$750,000
CONSTRUCTION COST				$7,726,150
DESIGN CONTINGENCY		10%		$772,615
CONSTRUCTION COST W/ DESIGN CONTINGENCY				$8,498,765

BUILDING 3 ADDITION AND RENOVATION SCHEME

WORK DESCRIPTION	SF	%	$/SF	TOTAL COST
BUILDING NO. 1 RENOVATIONS	40700		100	$4,070,000
BUILDING NO. 2 RENOVATIONS	13700		10	$137,000
BUILDING NO. 3 SELECTIVE DEMOLITION	600		50	$30,000
BUILDING NO. 3 RENOVATION	6510		120	$781,200
BUILDING NO. 3 ADDITION	9115		150	$1,367,250
BUILDING COST				$6,385,450
SITE DEVELOPMENT COST				$750,000
CONSTRUCTION COST				$7,135,450
DESIGN CONTINGENCY		10%		$713,545
CONSTRUCTION COST W/ DESIGN CONTINGENCY				$7,848,995

WORK DESCRIPTION	%OF TOTAL	TOTAL
Division 1 - GENERAL REQUIREMENTS	17.32%	1,338,000.00
Division 2 - DEMOLITION	3.33%	257,320.00
Division 2 - SITE WORK	7.77%	600,000.00
Division 3 - CONCRETE	2.19%	169,000.00
Division 4 - MASONRY	4.05%	313,100.00
Division 5 - METALS	4.38%	338,750.00
Division 6 - WOOD AND PLASTICS	0.47%	36,500.00
Division 7 - THERMAL AND MOISTURE PROTECTION	3.59%	277,200.00
Division 8 - DOORS AND WINDOWS	4.37%	337,850.00
Division 9 - FINISHES	7.72%	596,230.00
Division 10 - SPECIALTIES	1.40%	108,420.00
Division 11 - EQUIPMENT	1.84%	142,550.00
Division 12 - FURNISHINGS	3.16%	244,500.00
Division 13 - SPECIAL CONSTRUCTION	0.00%	-
Division 14 - CONVEYING SYSTEMS	0.65%	50,000.00
Division 15FP - FIRE PROTECTION	3.88%	299,750.00
Division 15P - PLUMBING	4.47%	345,500.00
Division 15M - HVAC	15.66%	1,210,100.00
Division 16 - ELECTRICAL	13.75%	1,062,150.00
TOTAL BASE BID	100.00%	7,726,920.00
Alternate G1 - Preferred Hardware		-
Alternate G2 - Preferred Kitchen Equipment		-
Alternate E1 - Preferred Security System		-
TOTAL BASE BID + ALTERNATES		7,726,920.00
CONTINGENCY 10%		772,692.00
TOTAL ESTIMATED COST		8,499,612.00

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
STAFF	1	EA	15,000.00	15,000
OFFICE SUPPLIES	1	EA	5,000.00	5,000
OFFICE EQUIPMENT	1	EA	10,000.00	10,000
SURVEYOR / ENGINEER SERVICES	1	EA	20,000.00	20,000
TEMPORARY FACILITIES	1	EA	10,000.00	10,000
TEMPORARY UTILITIES	1	EA	10,000.00	10,000
SAFETY / OSHA REQUIREMENTS	1	EA	10,000.00	10,000
SITE MAINTENANCE / CLEAN UP	1	EA	30,000.00	30,000
INSPECTION FEES	1	EA	10,000.00	10,000
UTILITY FEES	1	EA	3,000.00	3,000
				-
LIABILITY INSURANCE	1	EA	20,000.00	20,000
PERFORMANCE BOND	1	EA	40,000.00	40,000
PAYMENT OF MATERIAL AND LABOR BOND	1	EA	40,000.00	40,000
				-
				-
CONTRACTOR PROFIT	1	EA	1,000,000.00	1,000,000
				-
				-
				-
				-
				-
				-
				-
ALLOWANCES INCLUDED IN CONSTRUCTION COST	**$115,000.00**			-
OPEN ROCK EXCAVATION	500	CY	80.00	40,000
TRENCH ROCK EXCAVATION	500	CY	100.00	50,000
SOIL REMOVAL / REPLACEMENT W/ ON SITE SOIL	0	CY	15.00	-
SOIL REMOVAL / REPLACEMENT W/ OFF SITE SOIL	0	CY	30.00	-
SOIL REMOVAL / REPLACEMENT W/ GRAVEL	500	CY	50.00	25,000
				-
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				-
DIVISION TOTAL				**1,338,000**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
BUILDING 3 REMOVAL	7108	SF	15.00	106,620
				-
CONCRETE SLAB SELECTIVE DEMOLITION	1500	SF	4.00	6,000
				-
				-
				-
				-
				-
				-
				-
				-
				-
				-
STEEL STUD PARTITION REMOVAL	600	SF	6.00	3,600
				-
CERAMIC TILE REMOVAL	1500	SF	3.00	4,500
VCT REMOVAL	2000	SF	2.00	4,000
CARPET REMOVAL	30000	SF	0.50	15,000
BASE AND ACCESSORIES REMOVAL	1	LS	5,000.00	5,000
				-
CEILING REMOVAL - NONASB PLASTER	10000	SF	3.00	30,000
CEILING REMOVAL - GWB	5000	SF	1.00	5,000
CEILING REMOVAL - ATC SYSTEM	45000	SF	1.00	45,000
				-
CASEWORK DEMOLITION	23	EA	750.00	17,250
				-
CR SPECIALTIES REMOVAL	23	EA	200.00	4,600
				-
MULTIVISUAL BOARD REMOVAL	23	EA	250.00	5,750
				-
KITCHEN EQUIPMENT REMOVAL	1	LS	5,000.00	5,000
				-
				-
				-
				-
				-
DIVISION TOTAL				**257,320**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
CIVIL	1	LS	500,000.00	500,000
				-
LANDSCAPING	1	LS	100,000.00	100,000
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DIVISION TOTAL				**600,000**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
CONCRETE SPREAD COLUMN FOOTINGS	20	CY	250.00	5,000
CONCRETE WALL FOOTINGS	60	CY	275.00	16,500
				-
CONCRETE SOG ON 4" GRANULAR FILL	8000	SF	6.00	48,000
				-
CONCRETE FLOOR ON STEEL DECK	9500	SF	5.00	47,500
				-
ELEVATED WALKWAY WITH CANOPY	460	SF	75.00	34,500
				-
FOUNDATION DRAINS	500	LF	25.00	12,500
				-
PATCH CONCRETE BALCONY FLOOR	1	LS	5,000.00	5,000
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DIVISION TOTAL				**169,000**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
CONCRETE RETAINING WALL - 14"	2850	SF	30.00	85,500
				-
MASONRY SCREEN WALLS - 4" BRICK + 8" CMU	2500	SF	20.00	50,000
MASONRY SCREEN WALLS -2 x 4" BR + 8" CMU	500	SF	25.00	12,500
				-
FACE BRICK- EXTERIOR STEEL STUD WALLS	7000	SF	10.00	70,000
				-
				-
CAVITY WALL FLASHING	7000	SF	0.50	3,500
CAVITY WALL TIES	10000	SF	1.00	10,000
				-
BRICK ROWLOCK SILL	200	LF	8.00	1,600
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				-
BRICK CLEAN UP	10000	SF	0.50	5,000
				-
GLAZED BRICK TRIM	1500	LF	12.00	18,000
				-
				-
MASONRY WALLS - 6" CMU	2500	SF	8.00	20,000
PLASTER WORK MATCHING EXISTINS	5000	SF	2.00	10,000
				-
PLASTER CEILING REPAIR	3000	SF	6.00	18,000
PLASTER VAULTED CEILING REPAIR	900	SF	10.00	9,000
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DIVISION TOTAL				**313,100**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
STEEL ROOF DECK	8500	SF	2.00	17,000
				-
STEEL BEAMS	20	TON	2,500.00	50,000
STEEL JOISTS	5	TON	2,000.00	10,000
STEEL COLUMNS	10	TON	2,750.00	27,500
				-
EXTERIOR WALL STEEL STUD FRAMING	10000	SF	5.00	50,000
				-
				-
SLICONIZED GWB SHEATHING - 5/8"	7000	1600	2.50	17,500
15# FELT AIR INFILTRATION BARRIER	7000	1600	0.25	1,750
				-
GUARDRAILS	2500	LF	50.00	125,000
HANDRAILS	1000	LF	25.00	25,000
				-
MISCELLANEOUS STEEL FABRICATIONS	1	LS	5,000.00	5,000
				-
STEEL MODIFICATION BALCONY	1	LS	10,000.00	10,000
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DIVISION TOTAL				**338,750**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
MISC WOOD BLOCKING	1	LS	4,000.00	4,000
MISC WOOD TRIM	1	LS	10,000.00	10,000
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FRP PANELS - IN KITCHEN AREA	7500	SF	3.00	22,500
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DIVISION TOTAL				**36,500**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
BUILDING 3R ROOFING SYSTEM	9500	LS	16.00	152,000
				-
METAL COPING CAP	300	LF	25.00	7,500
METAL FASCIA ROOF EDGE	300	LF	40.00	12,000
				-
BITUMINOUS DAMPPROOFING	13500	SF	1.00	13,500
RET WALL WATERPROOFING SYSTEM	1	LS	10,000.00	10,000
				-
R-10 RIGID INSULATION	1050	SF	4.00	4,200
R-19 BLANKET INSULATION	15000	SF	3.00	45,000
R-23 BLANKET INSULATION	7000	SF	4.00	28,000
				-
FIRESTOPPING	1	LS	5,000.00	5,000
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DIVISION TOTAL				**277,200**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
ALUMINUM STOREFRONT ENTRANCES	10	EA	1,500.00	15,000
STEEL DOOR FRAMES	30	EA	200.00	6,000
STEEL DOORS	0	EA	200.00	-
WOOD DOORS	30	EA	200.00	6,000
FRP DOORS AND FRAMES	3	EA	500.00	1,500
				-
HARDWARE - INTERIOR DOORS	30	EA	750.00	22,500
HARDWARE - EXIT DOORS WITH CARD READER	11	EA	1,500.00	16,500
HARDWARE - EXIT DOORS	4	EA	1,000.00	4,000
AUTOMATIC DOOR OPERATOR	1	EA	2,500.00	2,500
				-
ALUM WINDOWS - HI PERFORMANCE IG	950	SF	50.00	47,500
GLAZED CURTAIN WALL	2635	SF	60.00	158,100
				-
REFINISH WOOD DOORS	75	EA	150.00	11,250
ALUM STOREFRONT ENTRANCE - RENOVATION	6	EA	1,500.00	9,000
ALUM STOREFRONT - RENOVATION	300	SF	50.00	15,000
STEEL DOOR FRAMES - RENOVATION	20	EA	200.00	4,000
WOOD DOORS - RENOVATION	20	EA	200.00	4,000
HARDWARE - INTERIOR DOORS	20	EA	750.00	15,000
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DIVISION TOTAL				**337,850**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
5/8 ABUSE RESISTANT GWB	5000	SF	2.00	10,000
5/8 GWB	20000	SF	1.50	30,000
3.62 x 25 GA STUD PARTITIONS	2500	SF	3.50	8,750
6.00 x 25 GA STUD PARTITIONS	10000	SF	5.00	50,000
				-
1.50 x 25 GA FURRING CHANNELS	0	SF	1.50	-
3.62 x 25 GA FURRING STUDS	0	SF	3.00	-
				-
5/8 GWB CEILINGS ON SUSP SYSTEM	1500	SF	5.00	7,500
				-
HORIZONTAL SHAFTWALL CEILING 2HR RATED	0	SF	12.00	-
				-
VCT	19550	SF	2.00	39,100
RESILIENT SHEET FLOORING	2750	SF	5.00	13,750
CARPET	3500	SY	28.00	98,000
CERAMIC TILE	1800	SF	8.00	14,400
QUARRY TILE	1660	SF	8.00	13,280
				-
RUBBER BASE	10000	LF	1.50	15,000
CERAMIC TILE BASE	350	LF	9.00	3,150
QUARRY TILE BASE	600	LF	12.00	7,200
				-
ACOUSTICAL TILE CEILING SYTEM	50000	SF	2.25	112,500
ACOUSTICAL PANEL CEILING SYTEM	3400	SF	3.00	10,200
VINYL COATED ACOUSTICAL TILE CEILING SYSTEM	1500	SF	2.50	3,750
				-
MARBLE THRESHOLDS	50	LF	5.00	250
METAL TRANSITION STRIPS	750	LF	3.00	2,250
BLUESTONE SILLS	1000	LF	20.00	20,000
		SF	2.00	-
PAINTING GWB	25000	SF	0.75	18,750
PAINTING PLASTER	100000	SF	1.00	100,000
				-
MISCELLANEOUS PAINTING	1	LS	10,000.00	10,000
				-
PREP TERRAZZO STAIR RUBBER SURFACE	1050	SF	8.00	8,400
				-
DIVISION TOTAL				**596,230**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
TOILET PARTITIONS	22	EA	800.00	17,600
URINAL SCREEN	8	EA	300.00	2,400
				-
MARKER BOARD 4X16	23	EA	650.00	14,950
MARKER BOARD 4X8	23	EA	350.00	8,050
				-
TACK BOARD 4X8	23	EA	325.00	7,475
TACK STRIP	600	LF	4.00	2,400
				-
				-
SOAP DISPENSER	32	EA	50.00	1,600
PAPER TOWEL DISPENSER	26	EA	50.00	1,300
TOILET PAPER DISPENSERS	32	EA	35.00	1,120
SANITARY NAPKIN DISPOSAL	10	EA	50.00	500
GRAB BARS	34	EA	75.00	2,550
MIRROR	9	EA	125.00	1,125
MIRROR - GT	8	EA	250.00	2,000
MOP HOLDER	4	EA	75.00	300
				-
WOOD STORAGE SHELVING	44	EA	300.00	13,200
METAL STORAGE SHELVING	20	EA	400.00	8,000
				-
METAL LOCKERS	10	EA	150.00	1,500
				-
				-
PANEL SIGNS	120	EA	50.00	6,000
CAST METAL LETTER SIGNS	1	LS	5,000.00	5,000
				-
FIRE EXTINGUISHER AND CABINET	25	EA	250.00	6,250
				-
METAL LOCKERS	4	EA	150.00	600
FLAG POLE - 30'	1	EA	4,500.00	4,500
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DIVISION TOTAL				**108,420**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
BATTERY OPERATED CLOCKS	30	EA	50.00	1,500
				-
THEATRICAL CURTAINS	1	LS	10,000.00	10,000
				-
PROJECTION SCREENS	23	EA	350.00	8,050
PROJECTION SCREEN - MOTOR OPERATED	1	EA	2,500.00	2,500
				1,000
				-
FOOD SERVICE EQUIPMENT	1	LS	60,000.00	60,000
WALK IN COOLER AND FREEZER	1	LS	30,000.00	30,000
				-
RESIDENTIAL APPLIANCES	1	LS	3,000.00	3,000
				-
ATHLETIC EQUIPMENT	1	LS	15,000.00	15,000
				-
DOCK BUMPERS	4	EA	250.00	1,000
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TV BRACKETS	30	EA	350.00	10,500
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DIVISION TOTAL				**142,550**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
LAMINATED CASEWORK - CLASSROOMS	19	EA	9,000.00	171,000
LAMINATED CASEWORK - COMPUTER LAB	1	EA	7,500.00	7,500
LAMINATED CASEWORK - ART ROOM	1	EA	15,000.00	15,000
LAMINATED CASEWORK - BLDG2 REWORK	3	EA	4,000.00	12,000
				-
				-
MEDIA CENTER SHELVING - NEW	1	LS	30,000.00	30,000
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FIXED SEATING REWORK	1	LS	1,500.00	1,500
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1" MINI BLINDS	2000	SF	3.50	7,000
CUBICLE TRACK AND CURTAIN	1	LS	500.00	500
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DIVISION TOTAL				**244,500**

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DIVISION TOTAL				**-**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
HYDRAULIC ELEVATOR	1	EA	50,000.00	50,000
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DIVISION TOTAL				**50,000**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
SPRINKLER SYSTEM BUILDING 1	40700	SF	5.00	203,500
				-
SPRINKLER SYSTEM BUILDING 3R	17750	SF	5.00	88,750
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SPRINKLER RISER ACCESSORIES	1	LS	7,500.00	7,500
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DIVISION TOTAL				**299,750**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
PLUMBING RENOVATION - BUILDING 1	40700	SF	5.00	203,500
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PLUMBING BUILDING 3R	17750	SF	8.00	142,000
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DIVISION TOTAL				**345,500**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
MECHANICAL SYSTEM REPLACMENT - BUILDING 1	40700	SF	20.00	814,000
				-
HVAC CONTROLS REPLACEMENT - BUILDING 2	13700	SF	3.00	41,100
				-
MECHANICAL SYSTEM - BUILDING 3R	17750	SF	20.00	355,000
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DIVISION TOTAL				**1,210,100**

WORK DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
ELEC + SP SYSTEMS REPLACEMENT - BUILDING 1	40700	SF	17.00	691,900
				-
SP SYSTEMS REPLACEMENT - BUILDING 2	13700	SF	5.00	68,500
				-
ELEC + SP SYSTEMS - BUILDING 3R	17750	SF	17.00	301,750
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DIVISION TOTAL				**1,062,150**

FEASIBILITY AND COST ANALYSIS

(Rev. 4/9/98)

A comparison of the feasibility and cost of constructing a new school building with that of renovating the old school building(s) that it would replace (in accordance with G.S. 115C-521, amended by H.B.1001, 1993).

Date: _____

Administrative Unit: Wake County

School Name: Wiley Elementary School

School Address 301 St. Mary's Street
Raleigh, NC 27601

School Code: _____

DSP School Number: _____

Grades Served: K-5

Approx. Capacity: 361
(when renovated)

Building Number: Building 3
(from Property Accounting)

Year Constructed: 1989

Building Area:(sq.ft.) 7,108 Gross SF

No. of Stories: 1
(including occupied basement/ground floor)

No. of Regular Classrooms: 2

Other Program and Support Spaces in Building(list and indicate number of each): Cafeteria

Site will be reused • **sold/transferred** •

"RENOVATION" IS DEFINED AS FULL RENOVATION TO BRING THE BUILDING(S) INTO GENERAL COMPLIANCE WITH CURRENT BUILDING AND HANDICAPPED CODES: BUILDING ENVELOPE (windows, roofing, interior finishes, exterior walls, etc.); PLUMBING, MECHANICAL, AND ELECTRICAL SYSTEMS WILL BE IMPROVED (or replaced) TO CURRENT STANDARDS; AND PROGRAM AND FUNCTIONAL SPACES WILL BE MADE TO APPROXIMATE CURRENT SPACE STANDARDS.

I. BUILDING DESCRIPTION

Using a School Planning report or a local evaluation of the building(s) based on the example comparative descriptions on page 2. Fair

Describe in general the reason for the proposed action concerning the existing school building(s). Replacement building is proposed for housing First Grade Classrooms and providing accessible Cafeteria facilities. Due to site area restrictions two story building is proposed to minimize building foot print and provide two level connections to Main School Building.

Replacement of major buildings evaluated as very good to excellent long-range facilities requires a more detailed justification.

Proceed with **Feasibility Analysis** and/or **Cost Analysis** on following pages.

II. FEASIBILITY ANALYSIS

II-A. FEASIBILITY ANALYSIS - BUILDING

A. Educational Program Adequacy - Typical size of classrooms and other functional spaces compared to the N.C. Public School Facility Guidelines.
- o 85% to 100% of current guidelines = **6**
- o 75% to 85% of current guidelines = **3**
- o Less than 75% of guidelines or classrooms less than 600 sq.ft. = **0**

0

B. Historical or Architectural Significance -
- o Listed on the National Historic Register or of significant regional architectural interest = **2**
- o Strong local historic interest or sentiment or an example of good school design = **1**
- o No particular historical value or architectural interest = **0**

0

C. Safety and Code Compliance
- o Generally meets building code requirements (1978 or 1991 code) = **4**
- o Needs some modifications in order to meet current bldg. code requirements = **2**
- o Needs substantial modifications to meet current building code requirements = **0**

0

D. Relationship to Other Buildings on Site (including proposed additions)
- o Single building or buildings connected with enclosed corridors = **2**
- o Well organized campus plan, buildings connected with covered walks, interior corridors = **1**
- o Multiple buildings, not connected, some exterior corridors = **0**

0

E. Handicapped Accessibility
- o Generally meets state or ADA handicapped code requirements and is suitable for use by physically handicapped persons = **2**
- o Needs some modifications to meet handicapped code requirements and to be used satisfactorily by physically handicapped persons = **1**
- o Needs substantial modifications to be used satisfactorily by physically handicapped persons (e.g. elevators, lifts, new toilet rooms, etc.) = **0**

0

F. Physical Condition of Building - (structural, roof, exterior walls, windows, doors, interior partitions , ceilings , flooring)
- o Very good condition, only minor repairs required = **4**
- o Moderate repairs required, some replacements (e.g.. new windows or roof) =**2**
- o Structural problems or extensive repairs required, replacement of several systems required (new ceilings, roof, windows, exterior wall repair, moving interior partitions, etc) = **0**

2

G. Mechanical and Electrical Systems - (plumbing, heating, air conditioning, electrical service, lighting, telecommunications, fire alarm, computer)

- o Good plumbing, central heating and air conditioning; safe, efficient electrical service and lighting; operable fire alarm and telecommunications = **4**
- o Moderate repairs and some replacements required (example: may need new air conditioning or lighting, but plumbing, heating and main electrical service in good condition) = **2**
- o Extensive repairs and/or replacement of several systems required = **0**

0

H. Hazardous Materials - (asbestos, lead, radon, indoor air quality)

- o Asbestos and other hazardous materials either not present or stabilized = **2**
- o Minor problems with hazardous materials, management program in progress = **1**
- o Asbestos or other hazardous materials present in building requiring removal = **0**

2

Total score (A through H) for building 4

A TOTAL SCORE OF 18 OR MORE INDICATES GOOD FEASIBILITY FOR RENOVATION. A TOTAL SCORE OF 12 OR LESS INDICATES POOR FEASIBILITY FOR RENOVATION. PROCEED WITH SITE ANALYSIS.

II-B. FEASIBILITY ANALYSIS - SITE

A. Site Adequacy - Size of site compared to the N. C. Public School Facility Guidelines.

- o 80% to 100% of current guidelines (or additional land available) = **2**
- o 65% to 80% of current guidelines = **1**
- o Less than 65% of current guidelines = **0**

0

B. Location

- o Near the center of the student population served = **2**
- o Important focus of an older neighborhood, 50% or more students live in the neighborhood = **1**
- o Not centrally located, most students would be bussed from other areas = **0**

1

C. Sewer and Water Systems

- o Municipal or county sewer and water system = **2**
- o On-site sewer, adequate for number of students, county water or good well with pressure tank = **1**
- o Inadequate on-site sewer system or well = **0**

2

D. Parking and Traffic Control

- o Paved drives with auto and bus traffic separated, adequate parking = **2**
- o Some paved drives or minor traffic conflicts, not enough parking = **1**
- o Bus and autos use same drive or children must cross drives to reach playfields or some buildings or bus and/or auto drop-off on street, limited parking = **0**

2

E. Playgrounds and Playfields

- o Ample, well developed playfields, gently sloping, handicapped accessible = **2**
- o Limited playfields, well developed, can be made handicapped accessible = **1**
- o Very small playfields or located across a street from the school or near a busy street or on a steeply sloping site = **0**

1

F. Drainage

- o Good site drainage, no problems = **2**
- 0 Some minor drainage problems, can be corrected economically = **1**
- o Drainage problems, standing water on site, would be costly to correct, or in flood plain = **0**

2

G. Environmental Problems

- o No environmental problems = **2**
- o Minor problems or possibility of minor leaks = **1**
- o Leaking fuel tank or contaminated well or problems with sewer system discharge or standing water under building or other major problem = **0**

2

Total score (A through G) for site 10

A TOTAL SCORE OF 10 OR MORE INDICATES GOOD SITE FEASIBILITY. A TOTAL SCORE OF 7 OR LESS INDICATES POOR SITE FEASIBILITY .

IF BUILDING FEASIBILITY SCORE IS 18 OR MORE AND SITE FEASIBILITY SCORE IS 10 OR MORE, NO FURTHER ANALYSIS IS REQUIRED (UNLESS YOU CHOOSE TO DO SO). **REPLACEMENT OF THESE BUILDINGS SHOULD NOT NORMALLY BE CONSIDERED.**

IF BUILDING FEASIBILITY SCORE IS 12 OR LESS AND/OR SITE FEASIBILITY SCORE IS 7 OR LESS, NO FURTHER ANALYSIS IS REQUIRED (UNLESS YOU CHOOSE TO DO SO). **REPLACEMENT OF THESE BUILDINGS SHOULD BE CONSIDERED.**

PROCEED WITH COST ANALYSIS FOR BUILDINGS WHERE RENOVATION OR REPLACEMENT IS NOT CLEARLY INDICATED BY THE FEASIBILITY STUDY.

REFERENCES

BUILDING PROGRAM 2002

PDPA MEETING MINUTES

PLANNING COMMISSION APPROVAL – 2000

CITY OF RALEIGH SWR AWARD 2001

CONGRESSIONAL RECORD 1999

NATIONAL HISTORIC REGISTRY

WAKE COUNTY REAL ESTATE DATA

PLAN 2004 SCHOOL BUILDING PROGRAM
PRELIMINARY PROGRAM

SCHOOL: WILEY ELEM.
CURRENT ENROLLMENT: 381
ACREAGE: 5.83

	PRESENT	PROPOSED
CAPACITY:	361	361
TEACHING SPCS:	30	30
DINING CAPACITY	444	513
MEDIA CAPACITY:	628	628

WAKE CO. PUBLIC SCHOOLS
FACILITY PLANNING
DATE: April, 2002
REVISED: November 2002

11/20/02 14:39

PROGRAM:
Provide 3 new classrooms per Master Plan. Renovate existing older buildings. Provide covered walkway to new classroom wing. Provide K and 1 access to Media Center and Gym.

PROGRAM/AREA	NUM. TEACHING SPACES	SPACE REQ. (SQ. FT.)	TOTAL SQUARE FT.	MIN MOD MAJ	COMMENTS
NEW CONSTRUCTION					
I. GENERAL CLASSROOMS					
Kindergarten Classrooms with Toilets	3	1,150	3,450		per Gurel's Master Plan
SUBTOTAL (TS AND SF)	**3**		**3,450**		
XIII. ADMINISTRATION					
Assistant Principal's office			150		
SUBTOTAL (TS AND SF)			**150**		
NEW TEACHING SPACES	**3**	**SUBTOTAL**	**3,600**		
			1,332		NTG (37%)
TOTAL NEW CONSTRUCTION		**TOTAL**	**4,932**		
RENOVATION					
I. GENERAL CLASSROOMS					
Classrooms			14,399	**MAJ**	Upgrade older classrooms
Classrooms			946	**MAJ**	Upgrade classrooms in Cafeteria building
SUBTOTAL (TS AND SF)			**15,345**		
II. EXCEPTIONAL CHILDREN					
Resource Classroom					Included above
SUBTOTAL (TS AND SF)			**0**		
VII. BUSINESS & OFFICE ED.					
Computer Lab					Included above
SUBTOTAL (TS AND SF)			**0**		
VIII. MEDIA CENTER					
All areas			3,810	**MAJ**	Renovate existing RLV, office area
SUBTOTAL (TS AND SF)			**3,810**		
X. PHYSICAL EDUCATION					
Multi-Purpose Room	-2		3,096		Expand gym into classroom area.
Office			80		
P.E. Equipment Storage			200		
SUBTOTAL (TS AND SF)	**-2**		**3,096**	**MAJ**	
XII. STAFF REQUIREMENTS					
Staff Lounge			**397**	**MAJ**	
SUBTOTAL (TS AND SF)			**397**		
XIII. ADMINISTRATION					
Administration suite	-1		1,050	**MAJ**	
SUBTOTAL (TS AND SF)	**-1**		**1,050**		
XV. CHILD NUTRITION SERVICES					
Dining Room			2,169		Upgrade finishes and expand into teacher area
Food Preparation			1,120		
Office			76		
Dry Storage			286		
Cooler			101		
Freezer			172		
Staff Locker Room/Toilet/WD			80		
Custodial			26		
SUBTOTAL (TS AND SF)			**4,030**	**MAJ**	
XVI. PLANT OPERATIONS					
Gen. Storage			613		
SUBTOTAL (TS AND SF)			**613**	**MAJ**	
RENOVATED TEACHING SPACES	**3**	**SUBTOTAL**	**38,485**		
			8,723	**MAJ**	NTG - Upgrade corridors, stairs
			2,556	**MAJ**	NTG - Upgrade Mech/Elec Rooms
			1,664	**MAJ**	NTG - Upgrade toilets
			1,238	**MAJ**	NTG - DR bldg.
		TOTAL	**52,666**		

FURNITURE AND EQUIPMENT FOR RENOVATED SPACES	38,485

DEMOLITION OF RENOVATED SPACES	52,666

PROGRAM ALSO TO INCLUDE:
1 Provide covered walkway to new classroom building.
2 Provide K & 1 accessibility for Media Center and Gym
3 Masonry - repair and waterproof
4 Total Abatement and replacement
5 Provide storage building near service entry.
6 Roof Replacement (2005-06)
7 Provide new parking per Master Plan.
8 Address erosion problems.

ACCOMMODATIONS DURING CONSTRUCTION
1 Phased construction; temporary mobile classrooms (which will be difficult to locate on this site).

GÜREL
ARCHITECTURE

■ 1145B EXECUTIVE CIRCLE ■ CARY, NC 27511 ■ TEL: 919.468.1717 ■ FAX: 919.468.1716 ■

M E E T I N G M I N U T E S

Date: January 23, 2008

Re: January 18, 2008 Pre Design Project Analysis Meeting
Additions and Renovations, Wiley Elementary School

By: Mete Gürel, AIA, Gürel Architecture, Architect
These meeting notes are my understanding of the issues discussed. If there are any discrepancies or questions concerning the following notes, please address them to the author.

Attendance:

Ms. Erin Kershner, Principal, Wiley Elementary School
Ms. Sarah Otis, Assistant Principal, Wiley Elementary School
Ms. Jyoti Sharma, Sr. Director, WCPSS - FD&C
Mr. William Hartley, Project Director, WCPSS - FD&C
Mr. Larry Sherrill, FP, WCPSS - FD&C
Ms. Lalonna Griffin, PM, WCPSS - FD&C
Mr. Don Knepper, Supervisor QC, WCPSS - FD&C
Mr. Bob Bittner, Director, WCPSS - EAPP
Mr. Mike Wiltzius, PM, WCPSS - EHAS
Mr. Johnny Wood, PE, Dewberry & Davis
Mr. Gary Wood, ED, Dewberry & Davis

1. Mr. Sherrill summarized the planned additions and renovations for Wiley Elementary School. The 2002 Building Program shall serve as basis for the Super Design Narrative.
2. Architect indicated that due to approximately 5,000 square feet additions this project might have to go through the City of Raleigh Planning Commission approval. In addition, according to the City ordinances a Tree Conservation Area to be designated and plat recordation is required. Ms. Sharma stated that there might be a Transit Easement requirement from the City of Raleigh as well.
3. Three Kindergarten Classroom additions may not be located as was originally indicated in 2001 Classroom Addition Project, Schematic Design Phase (referred to as master plan in the Building Program) due to site constraints for relocation of current parent drop off loop and parking lot in this area.
4. Architect indicated that the last City of Raleigh Planning Commission Approval on this site included a condition not to locate any future parking between the building(s) and St. Mary's Street. The above-mentioned previous Schematic Plan had originally proposed a parking lot between the Cafeteria Building and St. Mary's Street and this theme was included in final submittal to City of Raleigh as "Future Parking".
5. The capacity of the existing parking (60 Spaces) is adequate regarding the City of Raleigh Parking Ordinance. The increase in the capacity of the school would not require increase in parking since the parking calculations are based upon the occupant content of the largest assembly area, which is designated as Media Center (with occupant content of 300 people).

6. The current site access is discussed. The consensus is that the current parent drop off loop is awkward and confusing. Entrance through the service yard is not desirable. Mr. Sherrill provided a sketch for probable parent drop off entrance and exit drive realignments and creating a sinuous route to increase the stacking length of the parent drop off loop.

7. The site drainage issues are discussed. The erosion and silt accumulation can be observed at the northeast corner of the site and alongside the low chain link fence fronting the Calvin Street. The earth berm was located at south side of the sidewalk from bus drop off area to 2001 Classroom Addition entrance channeling the sheet flow to Calvin Street. Architect indicated that during the 2001 Addition project, there was not any subsurface drainage system available at perimeter roadways. The current site subsurface drainage is discharging directly on to the streets. Since then, the City installed subsurface drainage system alongside the St. Mary's Street. It may be possible to connect some of the site drainage to this subsurface system on the east side. It is also probable to install a buried storm water retainage tank on the west side for compliance with City of Raleigh Storm Water Management ordinances.

8. Some other miscellaneous site issues discussed are possible masonry enclosure wall for chillers for better acoustics and possible relocation of pad-mounted transformer serving the Main School Building.

9. Mr. Sherrill stated that the renovations for 1923 Main School Building would include complete upgrade of Plumbing, Mechanical, Electrical and Special System. Renovations shall include the expansion of Multi Purpose Room into current two classrooms that were partitioned off from this space and the relocation of the current Administration. The group toilets shall be renovated with possible addition of Custodial spaces. Architect will check minimum required facilities and accessibility for current Building Code Compliance.

10. The life safety improvements for the 1923 Main School Building shall include automatic fire suppression system and upgrading of main exit stair enclosures (stair surface finishes, handrails and ventilation).

11. The re use of Media Center (original Auditorium) balcony for additional classrooms is discussed. The school staff would like to keep the balcony functioning as is. Architect will also look into slight modifications to bring Balcony into code compliance.

12. The exterior envelope of the 1923 Main School Building Main School Building shall be evaluated. The roof of the building was replaced in 2002. The exterior wall system appears to be sound although there is evidence that the limestone trim pieces are deteriorating especially at the window heads (most probably behind existing steel lintel locations). Re pointing of existing face brick is also discussed to remedy possible envelope leakage problems.

13. The renovations for 1987 Cafeteria Building shall include the Dining Room expansion into partitioned off adjacent area (original Teachers' Dining Area, current Chinese Language Classroom). The drainage problem at Dining Room west entrance shall be corrected. Architect will check minimum required facilities and accessibility for current Building Code Compliance.

14. Design Team will develop alternatives for the location of building additions. Few of the options are discussed. One location considered is expansion of 2001 Addition towards Calvin Street to avoid conflict with current parent loop and parking. Architect indicated that another location for new building additions would be the 1987 Cafeteria Building to concentrate all new construction along with major renovation in this area. Another option would be the replacement of the single story Cafeteria Building with a two-story building that would house Cafeteria and Classrooms within the same footprint. Ms. Sharma indicated that any building demolition option should provide financial justification.

15. Construction Phasing is discussed. WCPSS is planning to temporarily relocate Wiley Elementary School to an existing Modular Elementary School (located at East Millbrook MS Campus) during the additions and renovations project. Currently, the construction time for the planned Additions and Renovations is estimated as 12 months. Construction start time shall be coordinated with the availability of Swing Space Modular Elementary School Campus.

End of Minutes

Encl: 2002 Building Program for reference (2 Pages)
Current Site Plan and Floor Plans for reference (5 Pages)

City of Raleigh, NC
Development Plans Review Center
P. O. Box 590, Raleigh, N. C. 27602
Telephone: (919) 890-3642 FAX: 890-3690
www.raleigh-nc.org/planning/plandprc.htm

OFFICIAL NOTICE
OF DEVELOPMENT PLAN DECISION

TO: Lappas and Havener/Wake County Schools
PROJECT: Wiley Elementary School Additions
FILE NUMBER : SP-39-2000
PLANNING COMMISSION: Approved
DATE OF ACTION : 4/11/2000
COORDINATING PLANNER : Darges

ACTION OF THE PLANNING COMMISSION:

The Planning Commission has found that this plan, with the following conditions being met, conforms to Code requirements of Chapter 2, Part 10, Sections 10-2132.2, 10-2035; Chapter 3, Part 10, Sections 10-3001-3059.

This request was approved according to a map drawn by Lappas and Havener, dated March 23, 2000, owned by Wake County Schools, in accordance with the administrative conditions outlined in the Staff Report attached to the Certified Action.

See attached sheets (CA-740) for conditions of approval.

SUNSET DATES:

If significant construction has not taken place on a project after preliminary approval, that approval may "sunset" and be declared void, requiring re-approval by City Council before permits may be issued. To avoid allowing this preliminary approval to "sunset", the following must take place by the following dates:

2-Year Sunset Date: 4/11/2002
Submit a final site plan and valid building permit application for the total area of the project, or a phase of the project.

5-Year Sunset Date: 4/11/2005
Complete construction of entire development.

WHAT TO DO NEXT:

- MEET ALL CONDITIONS OF APPROVAL.
- COMPLETE CONSTRUCTION DRAWINGS FOR ANY PUBLIC IMPROVEMENTS (Streets, Utility lines to be owned and maintained by the City) and submit them to the Development Plans Review Center for approval.
- COMPLETE THE TECHNICAL REVIEW IN THE INSPECTIONS DEPARTMENT FOR SITE AND BUILDING CONSTRUCTION PLANS.
- MEET THE REQUIREMENTS OF THE SUNSET THRESHOLDS AS NOTED ABOVE.

OFFICIAL MINUTES:

Minutes of the Planning Commission meeting approving this plan generally are available approximately two weeks after the meeting date and can be obtained by contacting the Planning Commission secretary at 890-3125.

This letter represents the official notification of the action of the Planning Commission.

FACILITY FEES REIMBURSEMENT:

If oversized street construction takes place, or greenway or oversized public street right-of-way is conveyed to the public, the owner is responsible for application to the City for reimbursement allowed by Code. Reimbursement takes place twice a year in January and July; a written request must be filed with the Planning Department for greenway and street right-of-way; and in the Engineering Department for street construction; by the first working day in November and May each year.

Please do not hesitate to call me or the planner coordinating the review of your project if you are unsure of how to satisfy conditions, or if you have any other questions about this preliminary plan.

Sincerely,

Daniel A. Howe, ASLA, AICP
Development Plans Administrator

Subject: SP-39-00
CA Number: 740

CERTIFIED ACTION OF THE CITY OF RALEIGH PLANNING COMMISSION

SUBJECT: SP-39-2000 Wiley Elementary school addition

LOCATION: This site is located on the west side of St. Mary's Street with College Place to the south and Calvin Road to the north. This site is south of St. Mary's Street intersection with Peace Street and inside the City Limits. This site plan exceeds the standards for residential institutions in residential zoning district listed in 10-2072(b) and requires approval by the Planning Commission in accordance with 10-2132.2

REQUEST: This request is to approve a 13,845 square foot 2 story addition for additional classroom space. The site is 6.47 acres zoned R-10. The existing school is 2 story and 50,178 square feet. The total square footage will be 64,023 square feet. The percentage of expansion is 27.59 %. A 34 space parking lot is proposed on College Place.

RECOMMENDATION: That this request be approved, according to a map drawn by Lappas and Havener, dated March 23, 2000, owned by Wake County Schools, in accordance with the administrative conditions outlined in the Staff Report attached to the Certified Action and with the following additional condition:

Planning Commission Actions:

(1) That a variance be granted for the required sidewalk construction on Calvin Road in accordance with Section 3.4 of the Street, Sidewalk and Driveway Access Handbook of the Raleigh Department of Transportation;

(2) That no future parking be installed in the area at the corner of St. Mary's Street and College Place, and between the building on the site.

FINDINGS AND REASONS UPON WHICH THIS RECOMMENDATION IS BASED: The Planning Commission finds that this request, with the above conditions being met, conforms to Code requirements of Chapter 2, Part 10, §10-2132.2 and §10-2021; Chapter 3, Part 10, §§10-3001-3059.

(1) A 5' sidewalk exists on the other side of Calvin Road. Mature shrubs and trees that currently exist in the right of way would need to be removed for the installation of a sidewalk. A 5' sidewalk exists on the other side of Calvin Road and recent upgrades for 2 cross walks have been constructed.

(2) Existing mature vegetation exists on the corner of St. Mary's Street and College Place. Proposed parking on the preliminary plan meets the required amounts for elementary schools.

CA Number: 740

Motion: Walker
Second: Hunt
In Favor: Hunt, Brandle, Crowder, Jurgensen, Kekas, Reed, Taliaferro, Thompson, Trotter, Walker
Opposed:
Excused:

This document is a true and accurate statement of the findings and recommendations of the Planning Commission. Approval of this document incorporates all of the findings of the staff report attached.

Signed: G.B. Chapman RT 4/13/00
Planning Director date

Signed: 4/13/00
Chair date

To Planning Commission: 4/11/2000

Certified Action Number: 740

Staff Coordinator: Christine Darges

Subject: SP-39-00
CA Number: 740

STAFF REPORT - NON-RESIDENTIAL SITE PLANS

RECOMMENDATION:

That this plan conforms to Code requirements of Chapter 2, Part 10, §10-2132.2 and §10-2021; Chapter 3, Part 10, §§10-3001-3059, and that this plan be approved in accordance with the following actions:

Administrative Actions:

Conditions that are to be met prior to issuance of grading permits in the Inspections Department:

(1) That a tree protection plan be approved and fencing field verified by the Zoning specialist for those existing trees around the proposed parking lot on College Place, tree areas around the existing playground on Calvin Road as well as the 5 noted trees on Calvin Road as shown on the preliminary plan. An existing 12" maple will be saved that is currently shown to be removed. The tree is located on sheet D.1.1 on Calvin Road, noted as D4. Tree protection measures shall be installed for the preservation of this tree;

Conditions that are to be met prior to issuance of building permits in the Inspections Department:

(2) That the site plan show a private connection from the proposed public sidewalk on College Place to the building to provide for safe pedestrian access to the buildings;

(3) That a final utility plan be approved by the Public Utilities Department;

(4) That a tree removal permit is obtained from the Urban Forester in the Parks and Recreation Department if trees are removed because of the installation of a 5' sidewalk on College Place;

(5) That the site plan show a sub surface drainage detail where stormwater is released into the street on Calvin Road. A trench drain is proposed; however, the sub surface detail is safer and has not grate on the surface;

Conditions to be met prior to issuance of an occupancy permit in the Inspections Department:

(6) That 5' public sidewalk is installed along College Place and accepted by the Central Engineering Department, or a letter of credit approved by Central Engineering is posted.

Subject: SP-39-00
CA Number: 740

STAFF FINDINGS

ZONING

ZONING DISTRICT: This site is located in the R-10 zoning district.

SETBACKS / HEIGHT: Conforms to all minimum setback standards. Front yard = 30', rear yard = 20', front/rear aggregate = 50', side yard = 20', side yard aggregate = 40', corner side yard = 20'. Both side yards are corner side yards due to the shape of the parcel.

UNITY / DEVELOPMENT INTENSITY: The building foot print will be 27,795 square feet. Proposed Floor Area Ratio (FAR) .23 and lot coverage of 10% conform to the limits indicated in 10-2072. In accordance with 10-2072, there are standards that are to reviewed. Related to the need for a traffic study, the RDOT determined that with this expansion the level of service for the existing streets would not be increased to a level of service D. Stormwater calculations have been provided to meet or exceed the release rate of R-4 development. Stormwater calculations apply to the entire site because the expansion exceeds 10,000 square feet.

OFF-STREET PARKING: Conforms to minimum Code requirements: 60 spaces required; 60 spaces provided. The basis for this determination is 1 space for every 5 seats in the main assembly, which holds 300 seats.

LANDSCAPING: Street yard landscaping in conformity with Section 10-2082.5 is shown. Vehicular surface area landscaping in conformity with Section 10-2082.6 is shown.

COMPREHENSIVE PLAN

GREENWAY: There is no designated greenway on this site.

THOROUGHFARE / COLLECTOR STREET PLAN: Sufficient right-of-way exists on St. Mary's Street.

URBAN FORM: This site is located in the University Planning District, and bordered by the Boylan Neighborhood Plan area, Hillsborough/Morgan Small area, and Glenwood south. The site is located on the western edge of the Downtown Regional Intensity Area encouraging the highest concentrations of intense development within the city and within 1/2 mile of both the proposed TTA Boylan and the Capital Boulevard Regional rail station locations.

APPEARANCE COMMISSION COMMENTS:

LANDSCAPING: Tree preservation along Calvin Road was raised and the trees are noted to be saved. The request was made to include a continuous tree preservation area for trees on Calvin Road. Individual fencing is proposed.

Subject: SP-39-00
CA Number: 740

BUILDING AND SITE DESIGN: A specific sub surface drain design is desired instead of the proposed trench drain. Retention of stone wall is proposed and trees adjacent to it shall be saved. The chillers will be screened by brick wall. An alternative to the proposed rip-rap at the outlet for stormwater near the playground area is requested, such as geo-textile sod or smoother stone. The plan proposes rip-rap with evergreen shrubs around it.

PEDESTRIAN ACCESSIBILITY: Sidewalks are proposed all around the site with private connections from all 3 streets.

SUBDIVISION STANDARDS

PUBLIC UTILITIES: City water is available to this site and all lines necessary to serve this project shall be installed by the developer in conformance with City standards and policies. City sewer is available to this site and all lines necessary to serve this project shall be installed by the developer in conformance with City standards and policies.

REFUSE DISPOSAL: Refuse is collected by private contractor.

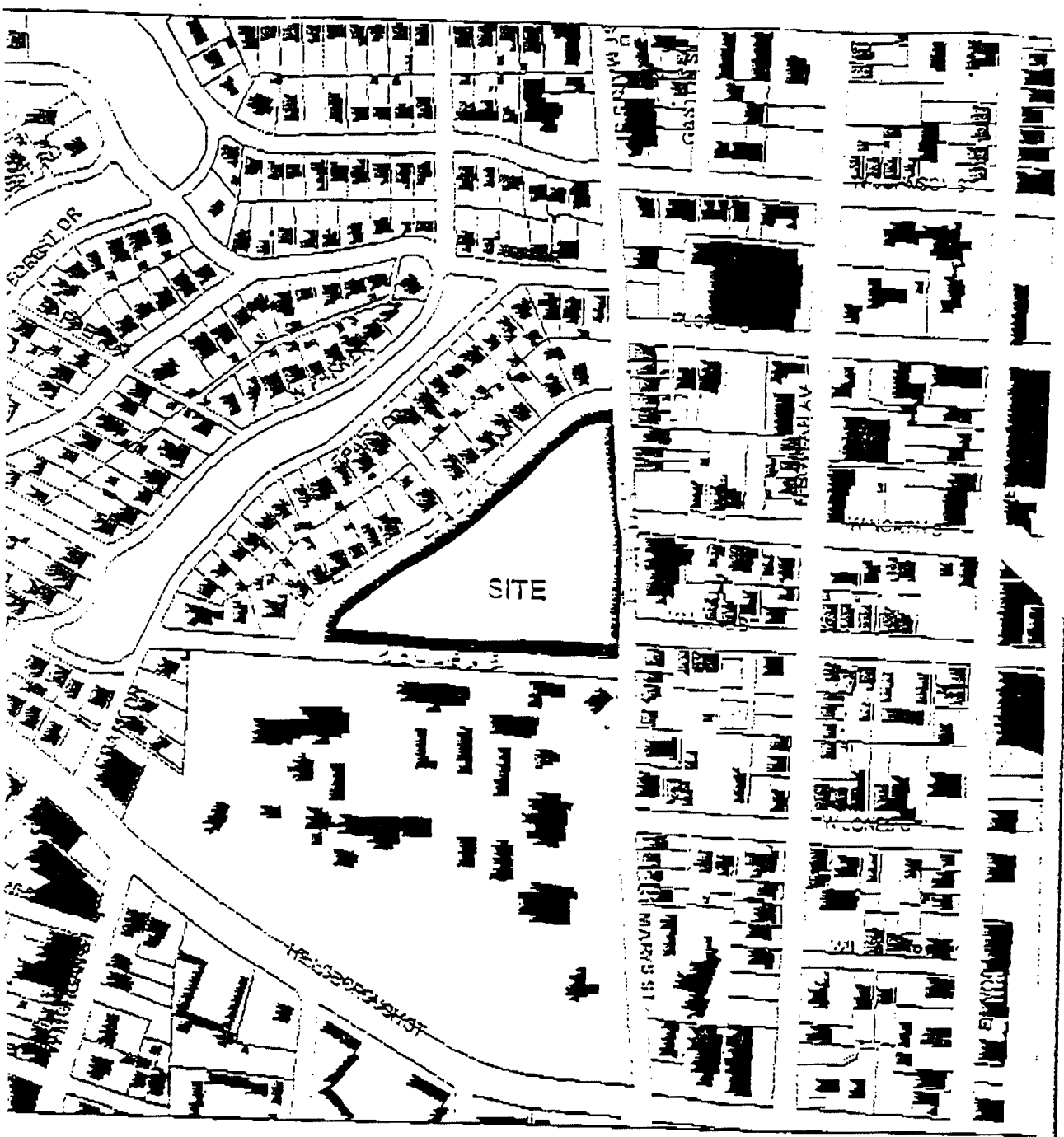
CIRCULATION: The following improvements are required to the adjacent public streets: Existing streets meet City standards.

PEDESTRIAN: Proposed sidewalk location conforms to City standards on College Place. The revised site plan adequately provides for safe pedestrian access from the public sidewalk system to the primary entrance of the facility.

FLOOD HAZARD / STORM WATER MANAGEMENT: There are no flood hazard areas on this site. This facility will meet R-4 runoff rates.

NATURAL SYSTEMS: Not applicable to this plan.

OTHER REGULATIONS: Developer shall meet all City requirements, including underground utility service (§10-3059), flood protection measures (Part 10, Chapter 4), and the soil erosion ordinance (Part 10, Chapter 5), unless specifically varied by this approval.

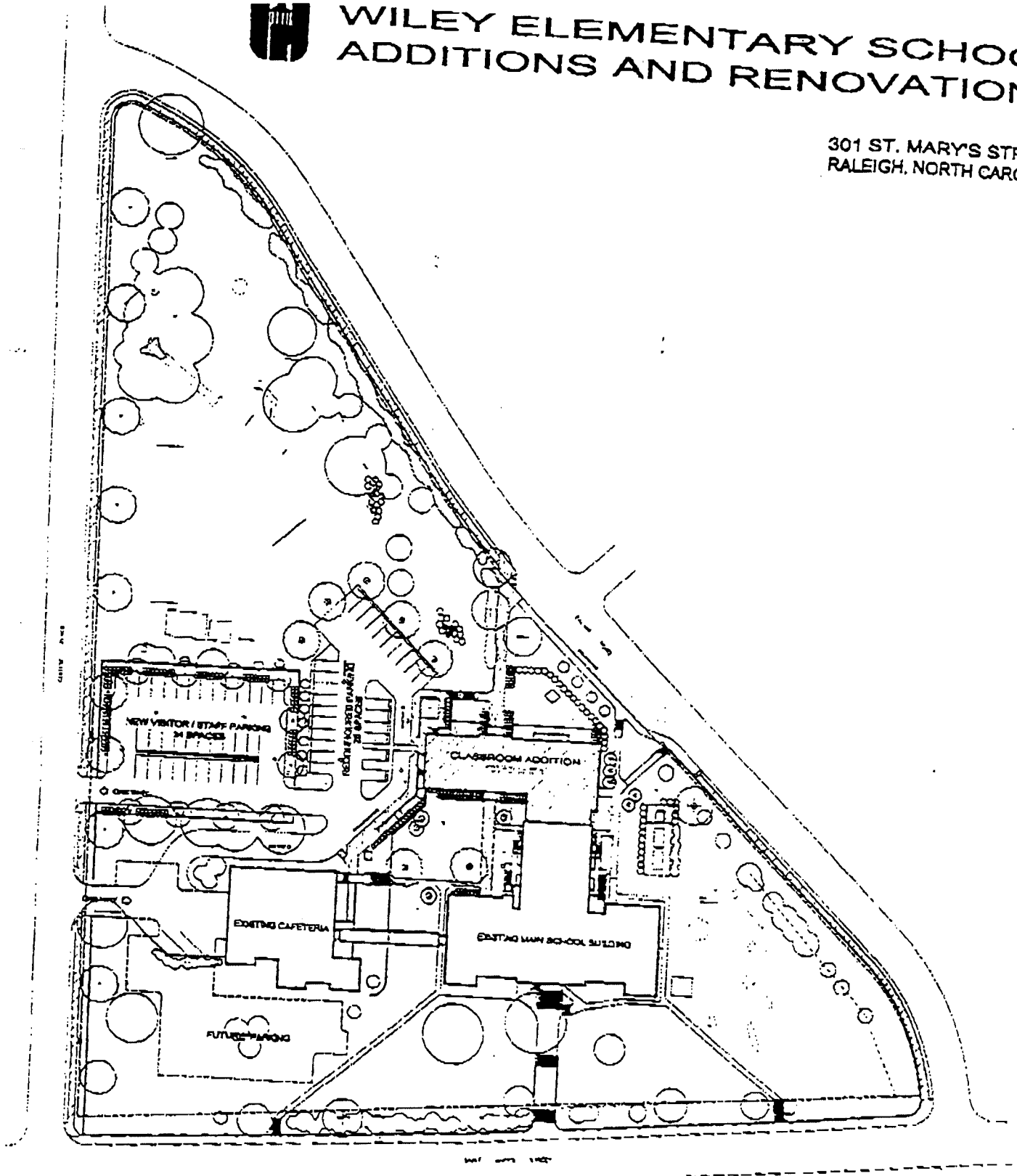


SP-39-2000
WILEY ELEMENTARY SCHOOL ADDITIONS

WILEY ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

301 ST. MARY'S STREET
RALEIGH, NORTH CAROLINA

SP-39-2000



PROPOSED SITE PLAN

NORTH

WAKE COUNTY PUBLIC SCHOOL SYSTEM

A P P E A R A N C E
C O M M I S S I O N

Planning Department 222 West Hargett Street
P.O. Box 590 Raleigh, North Carolina 27602

TO: Planning Commission

FROM: Appearance Commission

DATE: 4/10/2000

SUBJECT: Wiley Elementary School Site Plan (SP-39-00)

MESSAGE: The Appearance Commission's Landscape and Design Committee has reviewed this plan on three different occasions. The first review focused mainly on site issues related to tree conservation and pedestrian access. The Committee requested that a drainline be moved slightly to retain a 12 inch diameter maple on the north side of the site. We also recommended extending sidewalk along College Place from St. Mary's to Calvin Rd., with a handicapped accessible walk along the east side of the new parking area.

The second review dealt mainly with the architectural elevations and how the addition fits the site. The Committee was pleased with the proposed building.

The site plan came back for a third review to see if changes had been made related to our first comments. We understand that the applicant had agreed to protect trees along the Calvin Rd frontage, including the 12 inche maple. However the revised plan still shows the tree to be removed and the trench drain through the 12 inch maple. The site plan should be corrected to show the tree preserved and drain relocated.

Also, sidewalk had been added along College Place as requested, however no pedestrian access was added from College Place to the entrance. This needs to be added to the plans. In addition, a new sidewalk has been added along the south side of Calvin Rd. It extends from near the corner of College and Calvin to the bus pick up area. This newly proposed sidewalk will require the removal of a mature holly hedge about 500 ft in length. Also, the extension of the sidewalk to St Mary's St will also require the removal or damage to 6 Red Maples, planted about 8 years ago by the City Forester. Neither the hedge nor the maples are shown on the school's plans.

There is already a very adequate sidewalk along Calvin with 2 new curb cuts and cross walk at the handicapped accessible entrance to that side of the building. Because this sidewalk is not needed and destroys 500 ft of holly hedge and 6 promising Maple trees, we recommend that you wave this requirement of an additional sidewalk along Calvin.

Institutional

Project:
Wiley International Magnet School Addition

Owner/Developer:
Wake County Public School System

Architect:
Gurel Architecture

Engineer/Landscape Designer: **Lappas & Havener**

The compact setting of this landmark school and its classic architecture provided considerable design challenges to facility expansion. This new addition excels in meeting them, carefully complementing existing building materials and details, while contributing its own stylistic legacy. New parking and related features worked with existing trees and site elements to maximize both the attractiveness and practical use of the property.

JURY COMMENTS:

It is obvious that a sensitive awareness of the neighborhood was at work in the planning and design of this addition. Represents a good job in saving trees on a very small site, and fusing the addition with the historic original building. Construction was implemented with minimum impact on the neighborhood.

record in support of fee relief. In a recent hearing in the Senate Banking Securities Subcommittee, he testified that ''[t]he SEC shares the Subcommittee's concern that fee collections are currently well in excess of initial projections.'' Chairman Levitt stated that he is willing to work with Congress to address this issue, and indicated that a flexible cap on fees is the most workable solution. I commend Chairman Levitt for these comments and for his continued leadership on issues of great importance to American investors.

Mr. Speaker, I pledge to work hard to ensure that the goal of providing investors with relief from these excessive fees is accomplished in the 106th Congress. I look forward to working in a bipartisan fashion to achieve this result, and I urge my colleagues to cosponsor H.R. 1256.

CENTENNIAL CELEBRATION OF WILEY ELEMENTARY SCHOOL IN RALEIGH, NORTH CAROLINA

HON. BOB ETHERIDGE

OF NORTH CAROLINA

IN THE HOUSE OF REPRESENTATIVES

Wednesday, April 21, 1999

Mr. ETHERIDGE. Mr. Speaker, as the former North Carolina Superintendent of Schools and as the Second District's Congressman, I rise today to call the attention of the Congress to the centennial anniversary of Wiley Elementary School in Raleigh, North Carolina.

Last year, Wiley Elementary School was preparing to celebrate its 75th Anniversary when student researchers discovered an earlier Wiley School, making the school 100 years old this year. Wiley Principal Cecilia Rawlins describes the institution and this occasion best by saying. ''Wiley School has a rich history. There are so many people in this community who played a part in our school, and we need to celebrate our history. There are many people who were a part of the school in the past. We want to celebrate the past so we can continue on that tradition toward the future.'' I am pleased to say that two members of my staff, Zeke Creech and Mark Hilpert, attended Wiley.

Over the past year, the students, parents, teachers, and the community have been preparing for this celebration. Students have researched the ''old'' Wiley and ''new'' Wiley, reviewed old PTA scrapbooks, and visited the state Archives and History division. Some students who were graduating to junior high school even devoted part of their summer working on a video and ''memory book'' to record the history of Wiley. As a part of this effort, students have recorded Wiley's rich history, architecture and alumni memories.

The current school was built in 1923 by C.V. York Construction Co. Its beautiful three story Jacobean Revival brick building was designed by architect Gadsen Sayre. The school was named for attorney, author, and educator Calvin H. Wiley, who also served as one of my predecessors as the first North Carolina Superintendent of Public Instruction, then referred to as Common Schools, form 1852 to 1865.

Today, Wiley is an ''International Magnet'' Elementary School and is one of the oldest continuously operating schools in North Carolina. As it has for so long, Wiley serves as a model for all our public schools in America to follow now and in the future.

Mr. Speaker, I commend the long history of educational achievement and parental and community involvement at Wiley Elementary School and join students, teachers, alumni, and the community in this centennial celebration.

I encourage my colleagues to join me in this celebration and to read the following articles from the News and Observer in Raleigh, North Carolina making Wiley's 100th anniversary.

[From the Raleigh News and Observer, Aug. 26, 1998]

TENACIOUS YOUTHS DETAIL SCHOOL'S PAST

(By Treva Jones)

RALEIGH—Wiley Elementary School was preparing to celebrate its 75th anniversary when planners realized they were off the mark.

Actually, there was an earlier Wiley School in downtown Raleigh—a fact discovered by student researchers—meaning the institution will be 100 years old next spring.

The school is collecting stories and information about Wiley from former students who learned their ABCs, and more, in the big red brick school house on St. Mary's Street.

''Wiley School has a rich history,'' Principal Cecila Rawlins said. ''There are many people in this community that played a part in our school, and we need to celebrate our history. There are many people who were a part of the school in the past. We want to celebrate the past so we can continue on that tradition toward the future.''

The official celebration will be in April. Planning is under way for a school pageant as well as a get-together for all alumni and friends.

''We want to make it a fund—but educational—experience,'' Rawlins said.

Becky Leousis, a Wiley video and photography teacher, got a small grant last year and used it to buy a piece of equipment that adds titles and credits to videotape. One of her video classes, launched specifically to look into Wiley history, interviewed and videotaped Raleigh residents who attended Wiley in its early years.

Severally Wiley students spent some of their summer break finishing the tape. Among them were Tom Martin, Chelsea Nicolas and Sam Shaber, all of whom started sixth grade in other schools this month. The three said they were so interested in digging up Wiley history that they wanted to finish what their class has started.

''It's one of the [city's] older schools. It has wonderful architecture. It's just real interesting.'' Tom said.

Students combed old school PTA scrapbooks and took a field trip to the state Archives and History division to look up pictures. They researched ''old'' Wiley, ''new'' Wiley, the school architect and Calvin Wiley, for whom it was named. They recorded their findings in a scrapbook and the video, which will be shown during the celebratory activities next spring.

The current school was built in 1923 by C.V. York Construction Co., by authority of the Raleigh Township School Committee. The architect, Gadsen Sayre, designed the three-story Jacobean Revival brick building, one of several Raleigh schools he designed during the 1920s.

It was named for Calvin H. Wiley, a lawyer, author, educator and the first state superintendent of public instruction—his actual title was State Superintendent of Common Schools—from 1852 to 1865. The first Wiley school was a two-story building at West Morgan and South West streets.

As part of a school course this fall, students will produce a booklet about Wiley history and architecture and alumni memories.

Anne Bullard, co-chairman of the Wiley Anniversary Committee, appealed to anyone connected with Wiley to write his or her recollection of an event that happened there or write about their most vivid memory of Wiley and send it to the school. Accounts should be limited to 250 to 500 words, Bullard said, and they should be sent before Christmas.

''We do hope to collect quite a lot of them,'' she said. The committee also is seeking photographs of people who had a connection to Wiley and photos of the building.

Former students, teachers and parents with memories of and memorabilia from Wiley school are asked to call the school office at 857–7723; to write to Anne Bullard, 208 Forest Road, Raleigh, N.C. 27605; or send e-mail to ajbullard@mindspring.com

[From the Raleigh News and Observer, Feb. 25, 1999]

THOSE OLD BRICK WALLS ARE ABOUT TO TALK

(By Jim Jenkins)

Raleigh's Wiley Elementary School looks every inch the sturdy old schoolhouse—the steep steps headed up from St. Mary's Street, the deep-red edifice, the tall doors. It's easy to imagine the generations of kids from Cameron Park, Boylan Heights and surrounding neighborhoods tripping up the steps, parents in tow, for the first day—75 years of first days, in fact, at the present location, another 25 before that at other locales.

Yes, it adds up to a century, which means a centennial celebration is in order, and in fact, in progress now. They're doing it up right at Wiley, which is Raleigh's second-oldest continuously operating school. (Washington Elementary is the oldest.) Students have produced a documentary film on the place, a ''memory book'' is off to the publisher and a celebratory pageant is slated for April 23. The current generation of students at what is now an ''international magnet'' elementary school, along with alums, teachers and revered former principal Pearle Poole, will play roles in tracing its history.

And Wiley wants you alums out yonder, wherever yonder might be, to know that you are cordially invited to join the festivities at 7 p.m. on that day. Finding as many of the alumni as possible remains, really, the only string yet to be tied. Those who have been found already have enriched the memory book considerably, and there is no shortage of what schools call ''distinguished'' alums on Wiley's old rolls, among them a former editor of the Wall Street Journal, the late Vermont Royster, and still-active local pillars like attorneys Bill Joslin and Robert McMillan.

If few of us living and breathing types make it to a personal centennial, it's certainly true that not many schools light 100 candles either. What with the need to ''upgrade'' for the computer age, or to replace structures that wear and fray, or to honor some illustrious personage from a more modern era with the naming of a school, this sort of thing just doesn't happen that often.

(Wiley, in fact, has through the years survived a push by some officials to sell it or to demolish it and replace it. Among those who argued for saving it was former Mayor Smedes York, whose father, Raleigh developer Willie York, carried water to construction workers when the present school was being built in the early '20s.)

If the vivid memories of Wiley's legions of long ago are any indication, we might be better off preserving the old structures whenever possible and thus nurturing the loyalties of those who learned therein. For their recollections are part of a city's heritage.

North Carolina Department of Cultural Resources
State Historic Preservation Office
David L. S. Brook, Administrator

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary
Jeffrey J. Crow, Deputy Secretary

Division of Historical Resources
David J. Olson, Director

FAX COVER

Date: 7.17.03

TO: Mr Gaiel (Name/Agency/City State) Fax. No. 468-1716

FROM: Mitch Wilds (Fax. No. 919/715-4801)

___ Restoration Branch--telephone 919/733-6547

___ Survey and Planning Branch--telephone 919/733-6545

NUMBER OF PAGES TRANSMITTED INCLUDING FAX COVER _____

Original to follow by mail ___yes ___no Acknowledge receipt of fax by telephone ___yes ___no

Comments:

THE CAMERON PARK HISTORIC DISTRICT, WHICH INCLUDES WILEY SCHOOL, WAS PLACED ON THE NATIONAL REGISTER ON 7-29-85. IF THE PRINCIPAL WOULD LIKE A CERTIFICATE STATING THAT WILEY SCHOOL IS ON THE REGISTER, PLEASE CALL LINDA MCRAE AT 733-6545. MITCH

Form 10-900
OMB No. 1024-0018
Exp. 10-31-84

United States Department of the Interior
National Park Service

National Register of Historic Places Inventory—Nomination Form

For NPS use only
received
date entered

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic Cameron Park

and/or common

2. Location

street & number See continuation sheet, Item #10 ___ not for publication

city, town Raleigh ___ vicinity of

state N.C. code 037 county Wake code 183

3. Classification

Category	Ownership	Status	Present Use	
X district	___ public	X occupied	___ agriculture	___ museum
___ building(s)	___ private	___ unoccupied	___ commercial	X park
___ structure	X both	___ work in progress	___ educational	X private residence
___ site	**Public Acquisition**	**Accessible**	___ entertainment	___ religious
___ object	___ in process	X yes: restricted	___ government	___ scientific
	___ being considered	___ yes: unrestricted	___ industrial	___ transportation
		X no	___ military	___ other:

4. Owner of Property

name See continuation sheet

street & number

city, town ___ vicinity of state

5. Location of Legal Description

courthouse, registry of deeds, etc. Wake County Register of Deeds

street & number Fayetteville Street

city, town Raleigh state N.C.

6. Representation in Existing Surveys

title has this property been determined eligible? ___ yes ___ no

date ___ federal ___ state ___ county ___ local

depository for survey records

city, town state

traditional version of this type. The Box is also found with more of an academic, Georgian Revival flavor. Many of these are brick: 204 and 206 East Park Drive (#s 18 and 19), 1400 Park Drive (#100), 311 Forest (#192) and 222 Hawthorne (#244) are all good examples which also represent the variety that this treatment could produce. 1208 College Place (#15), 304 East Park Drive (#30), 221 West Park Drive (#110) and 212 Groveland Avenue (#291) represent the weatherboarded variety. 1618 Ambleside Drive (#226) is a careful remodeling of a three-bayed plain box into a very skilled "Colonial Revival" mansion.

The two-bayed, two-story Colonial Box, like its larger relative, exists in a variety of forms of which two, the plain and the bungalized, predominate. Examples of the former are 116 and 228 East Park Drive (#s 308 and 26), 117 West Park (#119), 203 and 304 Forest (#s 206 and 185) and 1611 Ambleside (#119). Bungalow versions are 305 Calvin Road (#13), 216 and 307 Hillcrest (#s 143 and 159), 303 Forest (#195) and 1700 Park (#240).

The bungalow in all forms is also present. 1205 (#38), 1609 (#231), 1811 (#292), 117 Woodburn (#284), 221 Hawthorne (254), 309 (#158) Hillcrest and 1615 Ambleside Drive (#197) represent the most pervasive form. 232 East Park (#28), 305 West Park (#107) and 302 Forest (#184) are examples of the very large, gambrel-roofed bungalow.

Departures from the predominant house types are scattered in Cameron Park. A good Mission/Spanish influenced house is the otherwise familiar box at 200 Hawthorne. The large two-story duplex at 224 Hillcrest shows some California influence. The most resplendent example of Tudor-Revival is the row houses, 130 - 136 Woodburn Road (#s 267-268). 1605 Park Drive (#232), a large rambling brick house with a thatched-effect roof, is somewhat of a local landmark for its picturesque quality.

The development along the reserved portions of Cameron Park is a typically story, story and one-half, or two-story box, but on a smaller scale than that of the original platted portion. The fact that the lots are flatter and have no service alleys behind them also decreases the psychological scale of the area.

Georgian Revival, Tudor Revival and some Spanish influenced stuccoed houses reflect the greater eclecticism of later development. The predominance of brick veneer, however, exemplifies the prosperity that had come to Raleigh before the depression and that returned to the area quickly in the mid-thirties.

The major properties in the proposed Cameron Park District which are not residential are the Wiley School and Needham Broughton High School.

The Wiley School, a grammar school, opened in 1926. It replaced the first Wiley School which was located on East Morgan Street. Designed by C. Gadsen Sayre, it is a red brick, three-story block characterized by banks of huge sash windows set in cream stone surrounds. Between the second and third floors, decorated panels run between the banks of windows and tie down together in a flattened bay

United States Department of the Interior
National Park Service

National Register of Historic Places
Inventory—Nomination Form

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received
date entered

effect. The arched and folded carvings of the panels, the color scheme and scale of windows recall Jacobethan and Tudor-Revival forms. The carved bas-reliefs above the entry and centered in the ends of the parapet recall the same sources that influenced the other decoration.

Needham Broughton High School, named for a prominent Raleigh personage, was opened in 1929. Designed by William H. Deitrick, it is a splendid example of the Romanesque Revival adapted to an educational institution. The three-story central block is flanked by wings which advance to create a forecourt. This focuses attention on the fine central tower which reaches another story above and is crowned with a fairly steep hip roof. The single center entry door is placed in a heavy, round arched and molded opening while a tripartite arched opening creates a loggia-like effect for the entries on the ground floor of the two wings. Built of creamy orange, yellow and brown local stone, rough finished, fine patterns of fenestration and corbelling under eaves and gables give the building a vitality and sense of appropriate, human scale. A low wing on the east side houses the cafeteria. Additions, not all sympathetic, have, however, been confined to the rear of the school. In 1930, Deitrick was awarded the Outstanding School Prize for his design of the school.

The presence of the two schools solidified the essentially upper-middle class fabric of Cameron Park. For several generations the high school was widely recognized as among the premier high schools of the State. The growth which produced the neighborhood, however, could not be contained.

North Carolina State College beyond Cameron Park on Hillsborough Street expanded enormously after the end of World War II. The opening of new suburbs west and north of Cameron Park precipitated non-residential development around the neighborhood. This has been most significant along Hillsborough Street, but the creation of Office and Institutional Zoning by the City in the fifties prevented the worst kind of strip development along this major thoroughfare. To the west of Cameron Park, the opening of Cameron Park Shopping Center in 1949 on the property that was once Cameron's Wood produced a new row of offices and apartments along a newly widened Clark Avenue. These, however, have acted as both a buffer and transition for the older portions of the neighborhood along Park Drive.

The real danger to the neighborhood came when older residents died and others moved to newer suburbs. Houses were broken up into multiple rental units and boarding houses or were used by fraternities at nearby N. C. State. The very pressures, however, that seemed to spell decline conspired to spell rehabilitation. Pressure on the market for good housing brought particularly by the dynamic growth of the University in the late 1950s and early 1960s brought the kind of inhabitants to Raleigh who could see the visual and architectural value of the neighborhood. Many families had never left, although there were unpleasant pockets. The initial low cost of the old houses encouraged young people to buy and restore.

Home

Wake County Real Estate Data
Account Summary

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Real Estate ID **0103468** PIN # **1704302723**

Location Address
301 ST MARYS ST

Property Description
RCMB WILLEY ELEMENTARY SCHOOL BM1999-160

Account Search

Pin/Parcel History Search Results New Search

Account | Buildings | Land | Deeds | Notes | Sales | Photos | Tax Bill | Map

GO!

Property Owner	Owner's Mailing Address	Property Location Address
WAKE CNTY **C/O SCOTT W WARREN**	**C/O SCOTT W WARREN** **PO BOX 550** **RALEIGH NC 27602-0550**	**301 ST MARYS ST** **RALEIGH NC 27605-1731**

Administratve Data

Old Map #	**D016--**
Map/Scale	**1704 18**
VCS	**NCRA001**
City	**RALEIGH**
Fire District	
Township	**RALEIGH**
Land Class	**EXEMPT**
ETJ	**RA**
Spec Dist(s)	
Zoning	**R-10**
History ID 1	
History ID 2	
Acreage	**6.47**
Permit Date	**12/4/2006**
Permit #	**0000061443**

Transfer Information

Deed Date	**11/15/2007**
Book & Page	**12835 2649**
Revenue Stamps	
Pkg Sale Date	
Pkg Sale Price	
Land Sale Date	
Land Sale Price	

Improvement Summary

Total Units	**0**
Recycle Units	**0**
Apt/SC Sqft	**36,101**
Heated Area	**51,923**

Assessed Value

Land Value Assessed	**$64,822**
Bldg. Value Assessed	**$5,054,285**
Tax Relief	
Land Use Value	
Use Value Deferment	
Historic Deferment	
Total Deferred Value	
Use/Hist/Tax Relief	
Total Value Assessed	**$5,119,107**

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Real Estate ID **0103468** PIN # **1704302723**

WAKE COUNTY NORTH CAROLINA

Location Address
301 ST MARYS ST

Property Description
RCMB WILLEY ELEMENTARY SCHOOL BM1999-160

Pin/Parcel History Search Results New Search

Account Search

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GO!

Building Location Address	Building Description	Select Card	Card 01 Of 03
301 ST MARYS ST	**WILEY ELEMENTARY SCHOOL**	1 GO	Card 2>

Bldg Type	**44 Cafeteria**	Year Blt	**1923**	Eff Year	**1965**
Units		Addns		Remod	**1988**
Heated Area	**28,790**				
Story Height	**3 Story**	Int. Adjust.			
Style	**Conventional**				
Basement	**Crawl Space**	Other Features	**1 Passenger Ele**		
Exterior	**Brick**				
Const Type	**Timber**				
Heating	**Central**				
Air Cond	**Central**				
Plumbing	**Adequate**				

Base Bldg Value	**$2,903,404**
Grade	**46.75 144%**
Cond %	**B 42%**
Market Adj.	
Market Adj.	
Accrued %	**42%**
Incomplete Code	
Card 01 Value	**$1,816,818**
All Other Cards	**$3,237,467**
Land Value Assessed	**$64,822**
Total Value Assessed	**$5,119,107**

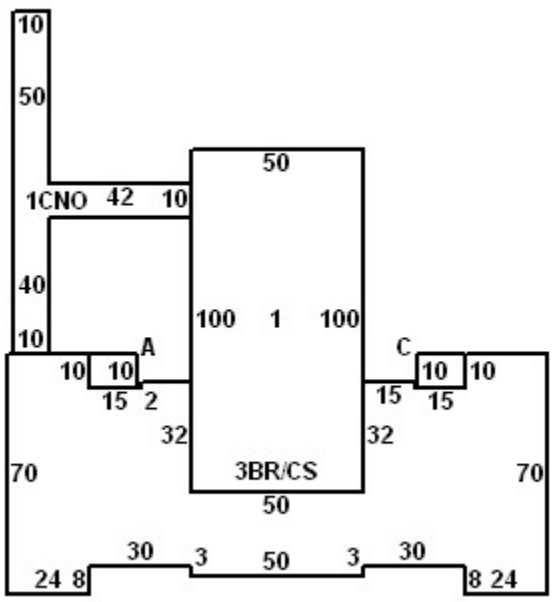
Main and Addition Summary

	Story	Type	Code	Area	Inc
M	**3**	**BR/CS**		**7790**	
A	**3**	**S BR**	**BPM**	**140**	
B	**1**		**BPM**	**5000**	
C	**3**	**OP**	**0310**	**140**	
D	**1**	**CN O**	**0310**	**1420**	
E					
F					
G					
H					

Other Improvements

Units	DesItem	Code	Year	% ADJ	Inc	Value
540	**UN FENCE6**	**0178**	**1992**	**55**		**5280**
28860	**SF PAVASPH**	**0028**	**1999**	**70**		**55560**

Building Sketch



Photograph
1/13/2008

0103468 01/13/2008

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Real Estate ID **0103468** PIN # **1704302723**

Location Address
301 ST MARYS ST

Property Description
RCMB WILLEY ELEMENTARY SCHOOL BM1999-160

Account Search

Pin/Parcel History | Search Results | New Search

Account | Buildings | Land | Deeds | Notes | Sales | Photos | Tax Bill | Map

GO!

Building Location Address	Building Description	Select Card	Card 02 Of 03
301 ST MARYS ST	**WILEY ELEMENTARY SCHOOL**	1 GO	<Card 1 Card 3>

Bldg Type	**44 Cafeteria**	Year Blt	**1988**	Eff Year	**1988**
Units		Addns		Remod	
Heated Area	**7,311**				
Story Height	**1 Story**	Int. Adjust.			
Style	**Conventional**				
Basement	**Crawl Space**	Other Features			
Exterior	**Brick**				
Const Type	**Exposed Steel**				
Heating	**Central**				
Air Cond	**Central**				
Plumbing	**Adequate**				

Base Bldg Value	**$772,537**
Grade	**46.67 125%**
Cond %	**B 75%**
Market Adj.	
Market Adj.	
Accrued %	**75%**
Incomplete Code	
Card 02 Value	**$724,253**
All Other Cards	**$4,330,032**
Land Value Assessed	**$64,822**
Total Value Assessed	**$5,119,107**

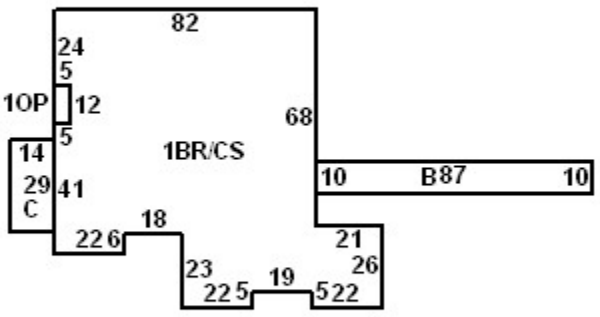
Main and Addition Summary

	Story	Type	Code	Area	Inc
M	**1**	**BR/CS**		**7311**	
A	**1**	**OP**	**0310**	**60**	
B	**1**	**OP**	**0310**	**870**	
C		**STG**	**0414**	**406**	
D					
E					
F					
G					
H					

Other Improvements

Units	DesItem	Code	Year	% ADJ	Inc	Value

Building Sketch



Photograph
1/13/2008

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Wake County Real Estate Data
Building Detail

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Real Estate ID **0103468** PIN # **1704302723**

WAKE COUNTY NORTH CAROLINA

Location Address
301 ST MARYS ST

Property Description
RCMB WILLEY ELEMENTARY SCHOOL BM1999-160

Account Search

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GO!

Building Location Address	Building Description	Select Card	Card 03 Of 03
301 ST MARYS ST	**WILEY ELEMENTARY SCHOOL**	1 GO	<Card 2

Bldg Type	**77 School**	Year Blt **2000**	Eff Year **2000**	Base Bldg Value	**$2,138,905**
Units		Addns	Remod	Grade	**25.67 125%**
Heated Area	**15,822**			Cond %	**B 94%**
Story Height	**2 Story**	Int. Adjust.		Market Adj.	
Style	**Conventional**			Market Adj.	
Basement	**Crawl Space**	Other Features	**1 Passenger Ele**	Accrued %	**94%**
Exterior	**Brick**			Incomplete Code	
Const Type	**Exposed Steel**			**Card 03 Value**	**$2,513,214**
Heating	**Central**			All Other Cards	**$2,541,071**
Air Cond	**Central**			Land Value Assessed	**$64,822**
Plumbing	**Adequate**			Total Value Assessed	**$5,119,107**

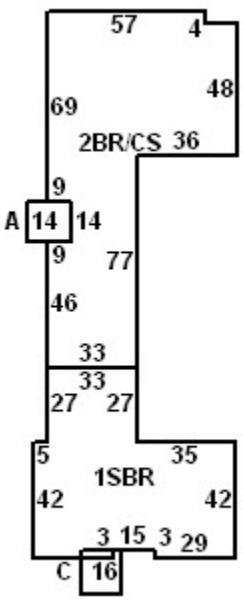
Main and Addition Summary

	Story	Type	Code	Area	Inc
M	**2**	**BR/CS**		**5955**	
A	**1**	**CN O**	**0310**	**224**	
B	**1**	**S BR**	**BPM**	**3912**	
C	**1**	**CN O**	**0310**	**240**	
D					
E					
F					
G					
H					

Other Improvements

Units	DesItem	Code	Year	% ADJ	Inc	Value

Building Sketch



Photograph
1/13/2008

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Wake County Real Estate Data
Assessment Notes

Real Estate ID **0103468** PIN # **1704302723**

Location Address
301 ST MARYS ST

Property Description
RCMB WILLEY ELEMENTARY SCHOOL BM1999-160

Card **01** Of **03** Card 2>

Date	Line	Notes
11-21-2007	**1**	**Full Exmp application approved for 2008**
11-21-2007	**1**	**Full Exmp removed for 2008**
06-30-2004	**1**	**BLDG PERMIT #36410 ISSUE DATE 5-19-04 TYPE B COST $599,000**
06-30-2004	**2**	**BLDG PERMIT #36671 ISSUE DATE 5-19-04 TYPE F COST $4,000**
11-30-2000	**1**	**10-3-00/ABS/PRICE ADDNS & ADD PAVING F2000**
11-30-2000	**1**	**10-3-00/ABS/PRICE & ADD ADDNS & PAVING(CD#1)&PRICE ADDNS&CORR**
11-30-2000	**2**	**GRADE (CD#2) & ADD NEW BLDG (CD#3) INC F2000**
09-06-2000	**1**	**BLDG PERMIT #53433 B ISSUE DATE 07-06-00 CNST TYPE B $1,900,000**
04-23-1999	**1**	**4-21-99/DS(5AC)COMBINED ID0121340 (.42AC), ID0250949 (.41AC) &**
04-23-1999	**2**	**AC CORR BY BM99-160 F2000/FWP**
11-17-1989	**1**	**REMOD-ALTERED & ADDED ELEV - 100% COMP FOR 89/DCO**
11-17-1989	**1**	**REMOD-ALTERED & ADDED ELEV & ADD NEW BLDG F89/DCO**

Wake County Real Estate Data
Assessment Notes

Real Estate ID **0103468** PIN # **1704302723**

Location Address
301 ST MARYS ST

Property Description
RCMB WILLEY ELEMENTARY SCHOOL BM1999-160

Card **02** Of **03**

<Card 1 Card 3>

Date	Line	Notes
11-30-2000	**1**	**10-3-00/ABS/PRICE ADDNS & CORRECT GRADE F2000**
11-17-1989	**1**	**CAFETERIA-BLDG 100% COMP FOR 89/DCO**

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Location Address
301 ST MARYS ST

Property Description
RCMB WILLEY ELEMENTARY SCHOOL BM1999-160

Account Search

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Owner Name	Type	% Own	Stamps	Book	Page	Date
Current **WAKE CNTY**		**ALL**		**12835**	**2649**	**11-15-2007**
1 Back **WAKE COUNTY BOARD OF EDUCATION**		**ALL**		**00408**	**0184**	**12-31-1983**
2 Back **WILEY PUBLIC SCH CITY WATER TANK**		**ALL**		**00398**	**0473**	

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and the saidAnnie F. Wilkerson, wife of Charles B. Wilkerson, being by me privately examined, separate and apart from her said husband, touching her voluntary execution of the same, doth state that she signed the same freely and voluntarily, with out compulsion of her said husband, or any other person, and that she doth still voluntarily assent thereto.

Witness my hand and notarial seal this 9th day of October, 1922.

(NOTARIAL SEAL) C. B. ATWATER, Notary Public.
My com. exp. June 24th, 1923.

NORTH CAROLINA,
Wake County:

The foregoing certificate of C. B. Atwater, a notary Public of Wake County State of North Carolina, is adjudged to be in due form and correct., and the foregoing warranty deed is adjudged to have been duly acknowledged and proven. Let the instrument, with certificates, be registered.

Witness my hand this 16th day of December, 1922.

VITRUVIUS ROYSTER,
Clerk Superior Court.

Filed for registration at 4.45 P.M. Dec. 16, 1922, and recorded in office of Register of Deeds forWake County in book 408, page 183, JAny 15, 1923.

W. H. Kemp,
Register of Deeds.

"D E E D."

SOUTHERN INSURANCE & REALTY COMPANY,ET AL,
TO
RALEIGH TOWNSHIP SCHOOL COMMITTEE.

NORTH CAROLINA, Wake Co.,

THIS DEED, made this 25 day of November, 1922, by the Southern Insurance and Realty Company, a corporation duly created, organized and existing under the laws of the stateof North Carolina, with its principal place of business at Raleigh, N.C., the North Carolina Trust Company and the Southern Real Estate Company, each of said Companies being a corporation duly created, organized and existing under the laws of North Carolina, with its principal place of business at Greensboro, N.C., all parties of the first part, to the Raleigh Township School Committee of Wake County, North Carolina, party of the second part.

WITNESSETH: That the parties of the first part, for and in consideration of the sum of Twenty Five Thousand ($25,000.00) dollars to them in hand paid by the party of the second part, the receipt of which is hereby acknowledged, have given, granted, bargained, and sold, and by these presents do give, grant, bargain, sell and convey unto the said party of the second part, its successors and assigns, a certain lot or parcel of land, lying and being in the county of Wake, State of North CArolina, and being lots No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 19, 20, & 21, Block No. 17 and lots No. 1, 2, 3, 4, 5, 6, 7 and 8, Block 19, and also that street lying between Block 17 and 19, which was ordered closed by the Commissioners of the city of Raleigh by order dated_____day of November, 1922, all of which is described and contained in a certain map of Cameron Park made by R. I. Poole, August, 1915, and recorded in book fo maps 1915, page 19, in the office of the Register of Deeds of Wake county, and more particularly described as follows:

Beginning at the northwest intersection of St. Marys Street and college Place running thence west 130 feet with the line of College Place to the corner of the land now owned by the city of Raleigh, thence north 150 feet along the line of said city Property to a stake; thence west 240 feet along the line of said city Property to the northwestern corner of said city Property; thence southwith the western line of said city Property 150 feet to the northern line of College Place, thence west along said College Place 423.8 feet to a stake in the circle at the corner of College Place and Ridgecrest road, thence around said corner, and along

the southeastern boundry line of Ridgecrest road northeast 491.6 feet to southern line of the intersection of VAlley View Place and Ridgecrest Road, thence across VAlley View Place, from the line of lot No. 5, Block 17, to the line of lot No. 1, Block 19, about 125 feet making the southeastern line of Ridgecrest road striaght across to Vallie View Place, thence northeast with said Ridgecrest Road 442 feet to thenorthern corner of Block #19 at the intersection of Ridgecrest Road, and St. Marys Street, thence south with the western line of St. Marys street across the end of Valley View Place which was closed to the intersection of Valley View Place and St. Marys St., to the point of beginning.

Being all of Block 17 and 19 and the street which was showned in the map between these 2 blocks except lots No. 15, 16, 17 and 18 on block 17 which was owned by the city of Raleigh.

TO HAVE AND TO HOLD the aforesaid tract or parcel of land with all privileges and appurtenances thereunto belonging or appertaining, to the said party of the second part, its successors and assigns forever. And the said Southern Insurance & Realty Company, the said North Carolina Trust Company and the said Southern Real Estate company, hereby covenants to and with the said party of the second part, and its successors and assigns, that they are seized of the said premises in fee and have the right to convey the same in fee simple, that the same are free and clear from all encumbrances, and that they do hereby forever warrant and will forever defend the title to the same against the lawful claims of all persons whomsoever.

IN TESTIMONY WHEREOF, the said Southern Insurance & Realty Company the said North Carolina, Trust Company and the said southern Real Estate Company has each for itself caused these presence to be signed in the name of its president, attested by its secretary and has caused its corporate seal to be hereto affixed, all by order of its Board of Directors, all on the day and year first above written.

(CORPORATE SEAL)
Attest: C. E. HORNADAY, Secretary.

SOUTHERN INSURANCE AND REALTY COMPANY,
By W. E. SHARPE, President

(CORPORATE SEAL)
Attest: T. D. DUPUY, Secretary.

NORTH CAROLINA TRUST COMPANY,
By A. W. MCALISTER, President.

(CORPORATE SEAL)
Attest: H. L. COBLE, Secretary.

SOUTHERN REAL ESTATE COMPANY,
By A. W. MCALISTER, President.

Int. Rev. $25.00

NORTH CAROLINA,
Wake county.

I, J. E. Bobbitt, a notary Public in and for the above named state and county, do hereby certify that personally came before me C. E. Hornaday, who being by me duly sworn, says, that he knows the common seal of the Southern Insurance & Realty Company, one of the corporation named, and which executed the foregoing instrument, and that he is acquainted with W. E. Sharpe, who is president of the said corporation, and that he, the said C. E. Hornaday is secretary of the said corporation, and saw the said president sign the foregoing instrument, and that he, the said C. E. Hornaday, secretary as aforesaid, has affixed, the said seal to the said instrument, and signed its Name in attestation of the execution of the said instrument in the presence of the said president of the said Corporation.

Witness my hand and notarial seal, this 25th day of Nov. 1922.

(NOTARIAL SEAL)
My com. exp.July 23, 1923.

J. E. BOBBITT, Notary Public.

NORTH CAROLINA,
Guilford County.

This the 24th day of November, 1922, personally came before me Ruby Preddy, a notary Public in and for the said County and State, H. L. Coble, who being by me duly sworn, says that he knows the common seal of the southern Real Estate Company, and is acquainted with A. W. McAlister, who is president of the said corporation, and that he the said H. L. Coble, is the secretary of the said corporation and saw the president sign the foregoing instrument, and saw the common seal of the said corporation affixed, to the said instrument by the president, and that he, the said H. L. Coble, signed his name in attestation of the said instrument in the presence of the said president of the said corporation.

Witness my hand and official seal, this the 24th day of November, 1922,

(NOTARIAL SEAL)
My com. exp. March 8, 1924.

RUBY PREDDY, Notary Public.

NORTH CAROLINA,
Guilford County.

This the 24th day of November, 1922, personally came before me Ruby Preddy, a notary Public in and for the said county and state, T. D. Dupuy, who says the he knows the common seal of the

North Carolina Trust Company, and is acquainted with A. W. McAlister, who is the president of the said corporation, and that he, the said T. D. Dupuy, is secretary of the said corporation and saw the president sign the foregoing instrument, and saw the common seal of the said corporation affixed to said instrument, by the said president, and that he the said T. D. Dupuy, signed his name in attestation of said instrument in the presence of the said president of said corporation.

Witness my hand and official seal, this the 24th day of Nov. 1922.

(NOTARIAL SEAL) RUBY PREDDY, Notary Public.
My com. exp. MArch 8, 1924.

NORTH CAROLINA,
Wake County.

The foregoing certificates of J. E. Bobbitt, a notary Public of Wake County, state of North Carolina, and Ruby Preddy, a notary Public of Guilford County, state of north Carolina, is adjudged to be in due form and correct, and the foregoing instrument, is adjudged to have been duly acknowledged and proven. Let the instrument with certificates, be registered.

Witness my hand this 18th day of Dec. 1922.

C. H. BETTS,
Deputy Clerk Superior Court.

Filed for registration at 12.30 P.M. Dec. 18, 1923, and recorded in office of Register of Deeds for Wake county in book 408, page 184, Jany 15, 1923.

W. H. Kennon,
Register of Deeds.

"D E E D."

LEE PERRY FRANKS & WIFE,

TO

JAMES T. MESSER.

NORTH CAROLINA, Wake County.

THIS DEED, Made and executed this 18th day of december, 1922, by Lee Perry Franks and Lennar Hilliard Franks his wife of Wake county State of North Carolina, parties of the first part, to James T. Messer of said county and State, parties of of the second part,

WITNESSETH: That whereas, the parties of the first part on the 27th day of February 1920, made and executed unto the said party of the the second part a deed of conveyance for the land hereinafter described which is recorded in book 358, at page 1, in the office of the Register of Deeds of Wake county; and whereas, at the time of the execution of the said deed the said lennar Hilliard Franks was a minor, and whereas she has now reached the age of twenty one years and now desires to ratify and confirm the said deed above referred to and thereby carry out the provisions of a contract which is recorded inbook 355, at page 138, in the office of the Register of Deeds of Wake county:

NOW, THEREFORE, in consideration of the premises and in further consideration of the sum of One hundred and twenty five ($125.00) dollars, this day paid to the parties of the first part, by the said party of the second part, and in further consideration of the cancellation which has this day been made of a chattel mortgage executed by Lee Perry Franks to the said party of the second part herein named which said chattel mortgage is recorded in book 357, at page 13, in the office of the Register of Deeds of Wake county; and in further consideration of the sum of Ten ($10.00) dollars, and other valuable considerations by the party of the second part to the parties of the first part in hand paid, said parties of the first part have bargained, and sold and do hereby grant, bargain, sell and convey unto said James T. Messer and his heirs and assigns forever the following described tract or parcel of land lying and situ te about one mile south of the village of McCullers in PAnther Branch township, Wake County, North Carolina, and more particularly described as follows, to wit:

Bounded by a line beginning at an iron take, said stake being the north

DESIGN NARRATIVE DRAWINGS

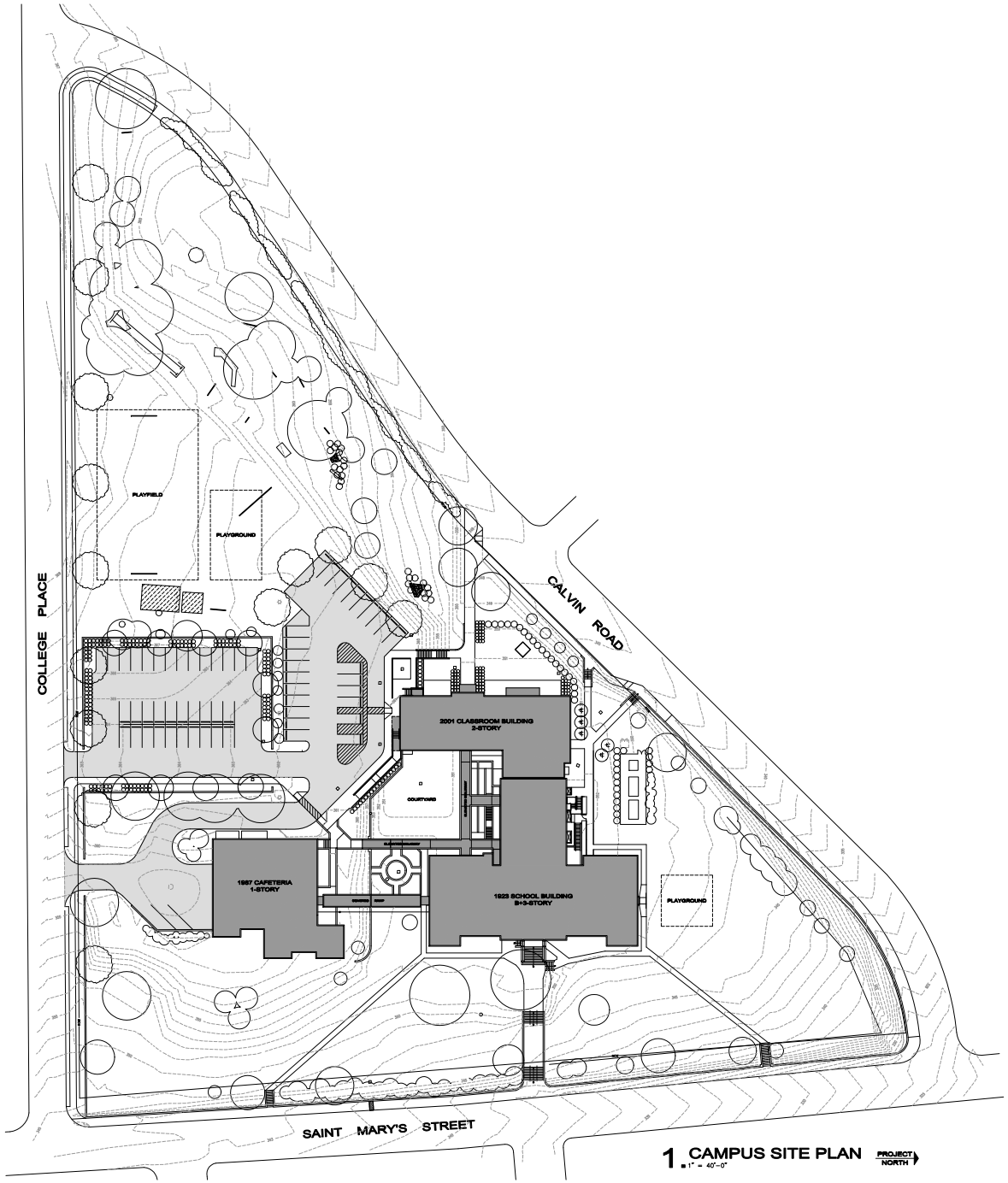
EXISTING CONDITIONS	X SERIES DRAWINGS
BUILDING 3 REPLACEMENT BUILDING SCHEME	A SERIES DRAWINGS
BUILDING 3 ADDITION AND RENOVATION SCHEME	B SERIES DRAWINGS
2000 MASTER PLAN FUTURE ADDITION SCHEME	C SERIES DRAWINGS

SCHEDULE OF DRAWINGS

Drawings in 24" x 36" format submitted separately. Reduced drawings included in this report for reference purposes.

DRAWING	DESCRIPTION
EXISTING CONDITIONS	
X001	Site Plan
X100	Campus Basement Floor Plan
X101	Campus First Floor Plan
X102	Campus Second Floor Plan
X103	Campus Third Floor Plan
X201	Campus Building Elevations
X202	Campus Building Elevations
X203	Campus Building Elevations
X204	Campus Building Elevations
A - BUILDING REPLACEMENT SCHEME	
A001	Site Plan
A100	Campus Basement Floor Plan
A101	Campus First Floor Plan
A102	Campus Second Floor Plan
A103	Campus Third Floor Plan
A200	Campus Building Elevations
A300	Campus Building Sections
A400	Campus Building Elevations and Section
A500	Replacement Building Sections
A600	Connecting Bridge Options
B - BUILDING ADDITION AND RENOVATION SCHEME	
B001	Site Plan
B101	Campus First Floor Plan
B201	Campus Building Elevations
C – 2000 MASTER PLAN SCHEME FOR REFERENCE	
C001	Site Plan
C101	Campus First Floor Plan
C102	Campus Second Floor Plan
C201	Campus Building Elevations

END OF SCHEDULE OF DRAWINGS



1. CAMPUS SITE PLAN
1" = 40'-0"

PROJECT NORTH

GÜREL
ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1777 F:919.468.1716

SALIH METE GÜREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GÜREL ARCHITECTURE, INC.
CERT. NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

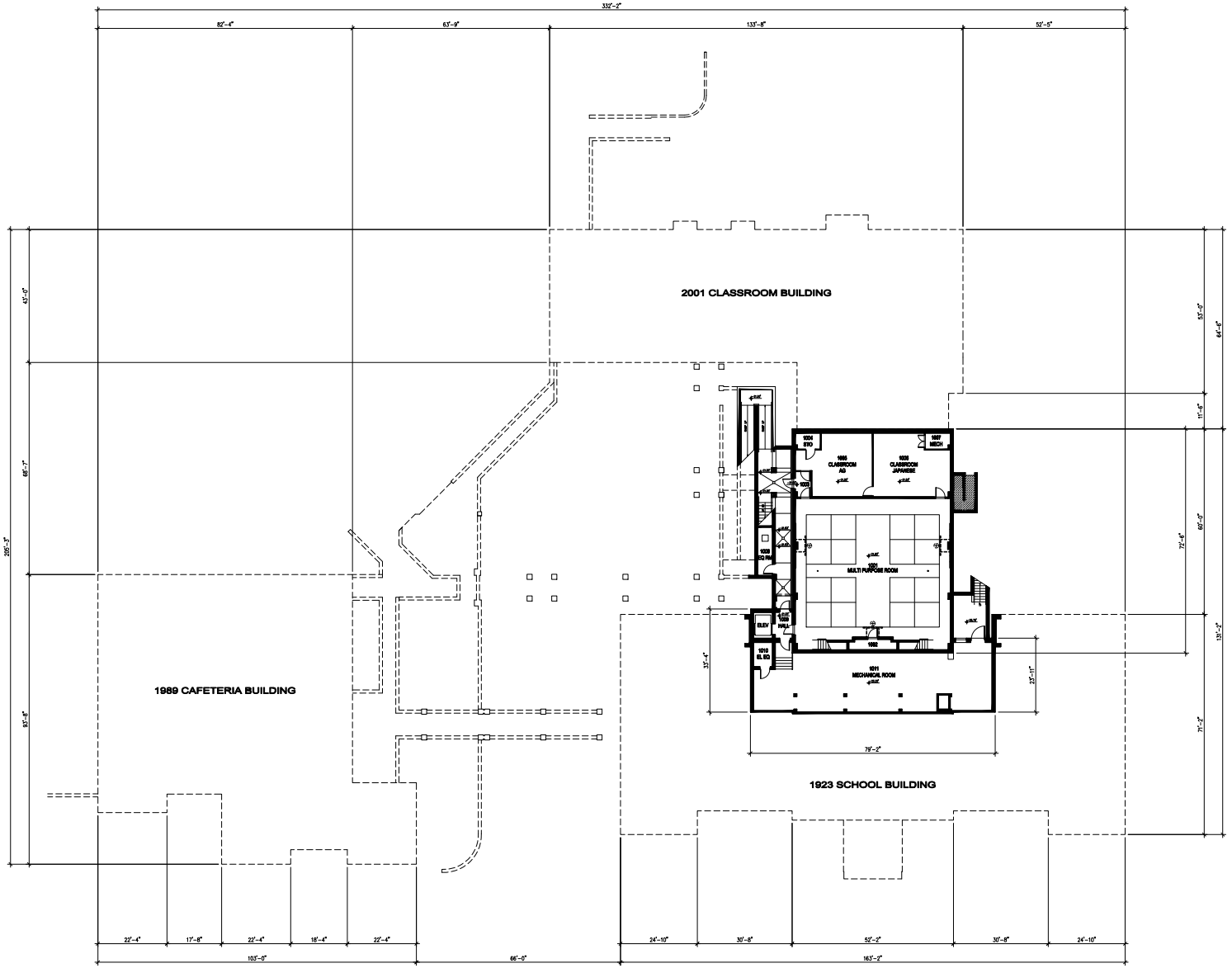
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

EXISTING CONDITIONS
CAMPUS SITE PLAN

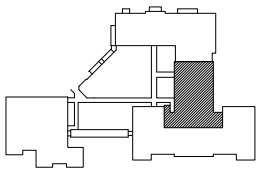
DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: X001



1. CAMPUS BASEMENT FLOOR PLAN
1/16" = 1'-0"

PROJECT NORTH



CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1717 F:919.468.1716

SALIH METE GÜREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GÜREL ARCHITECTURE, INC.
CERT NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

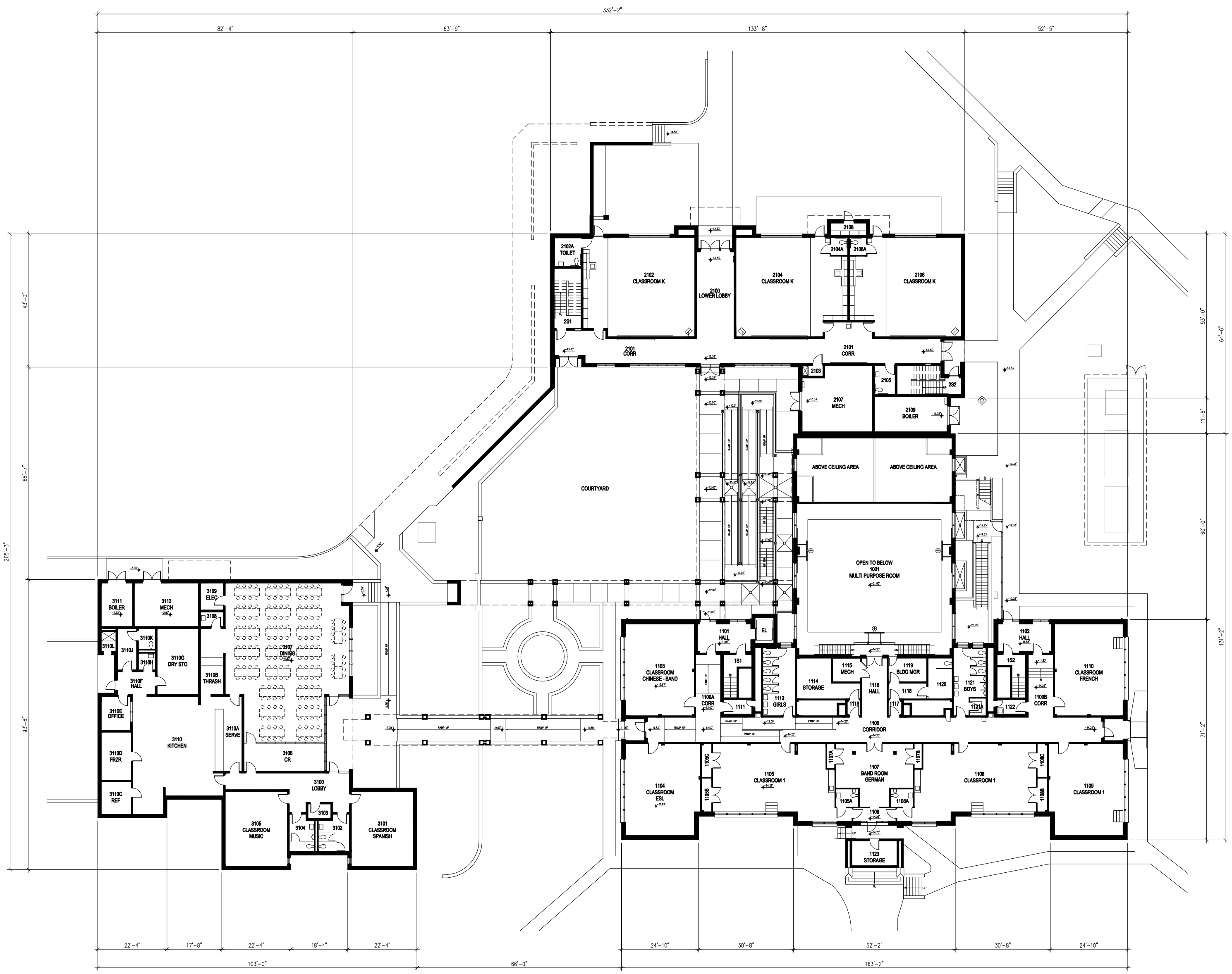
201 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

EXISTING CONDITIONS
BASEMENT FLOOR PLAN

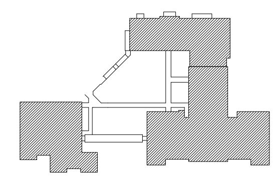
DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: X100



1. CAMPUS FIRST FLOOR PLAN 1/16" = 1'-0"

PROJECT NORTH



PROJECT NORTH

CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
1145B EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1717 F:919.468.1716

SALIH METE GUREL REGISTERED ARCHITECT 5430 NORTH CAROLINA CARY, NC

GUREL ARCHITECTURE, INC. REGISTERED ARCHITECTURAL CORPORATION CERT NO. 50987 NORTH CAROLINA CARY, NC

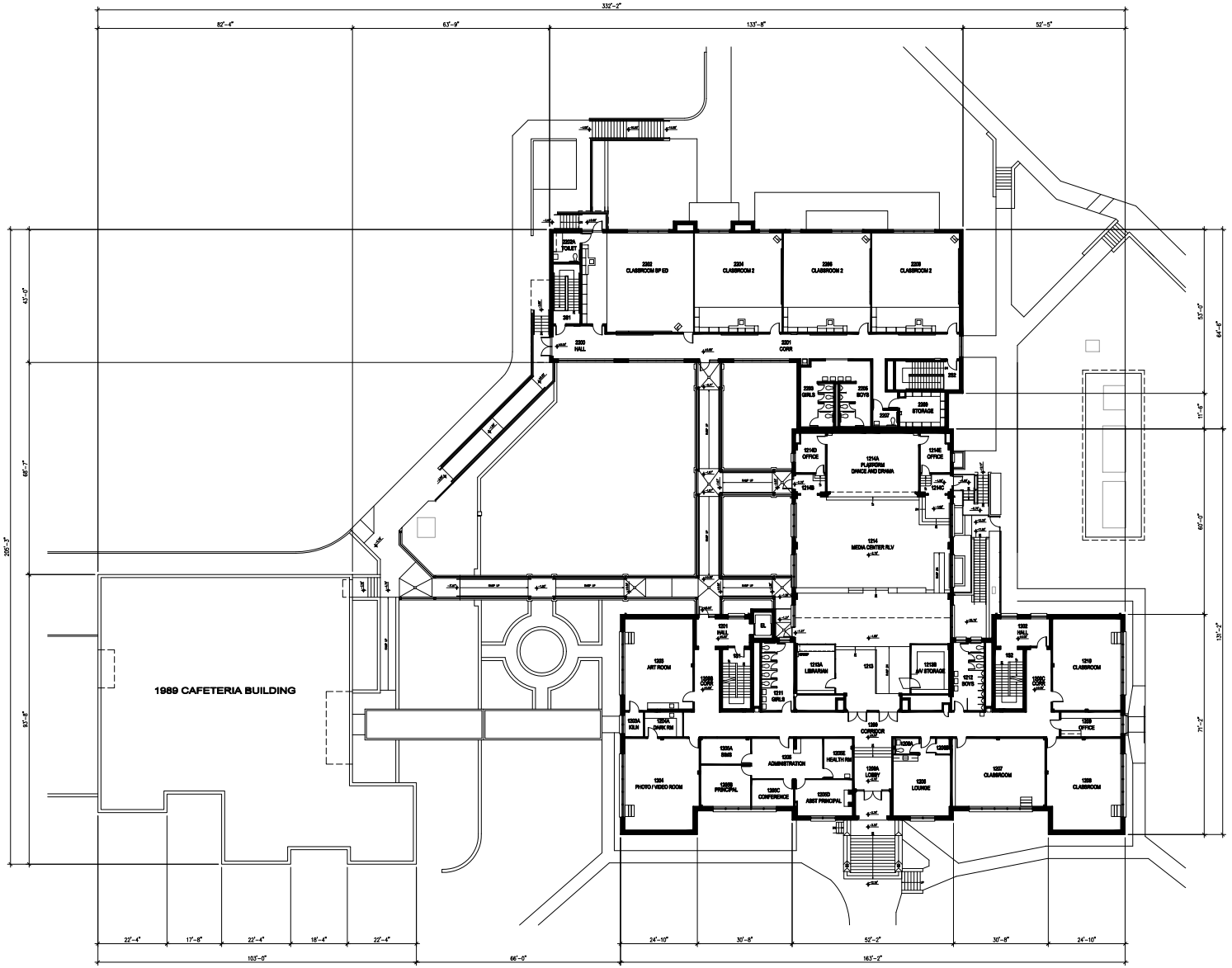
ADDITIONS AND RENOVATIONS
WILEY ELEMENTARY
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

EXISTING CONDITIONS
FIRST FLOOR PLAN

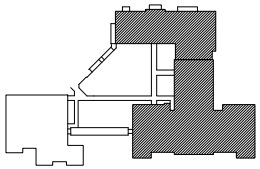
DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: X101



1. CAMPUS SECOND FLOOR PLAN
1/16" = 1'-0"

PROJECT NORTH



CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1717 F:919.468.1716

SALIH METE GÜREL REGISTERED ARCHITECT 5430 NORTH CAROLINA CARY, NC

GÜREL ARCHITECTURE, INC. CERT NO. C-2987 50987 NORTH CAROLINA CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

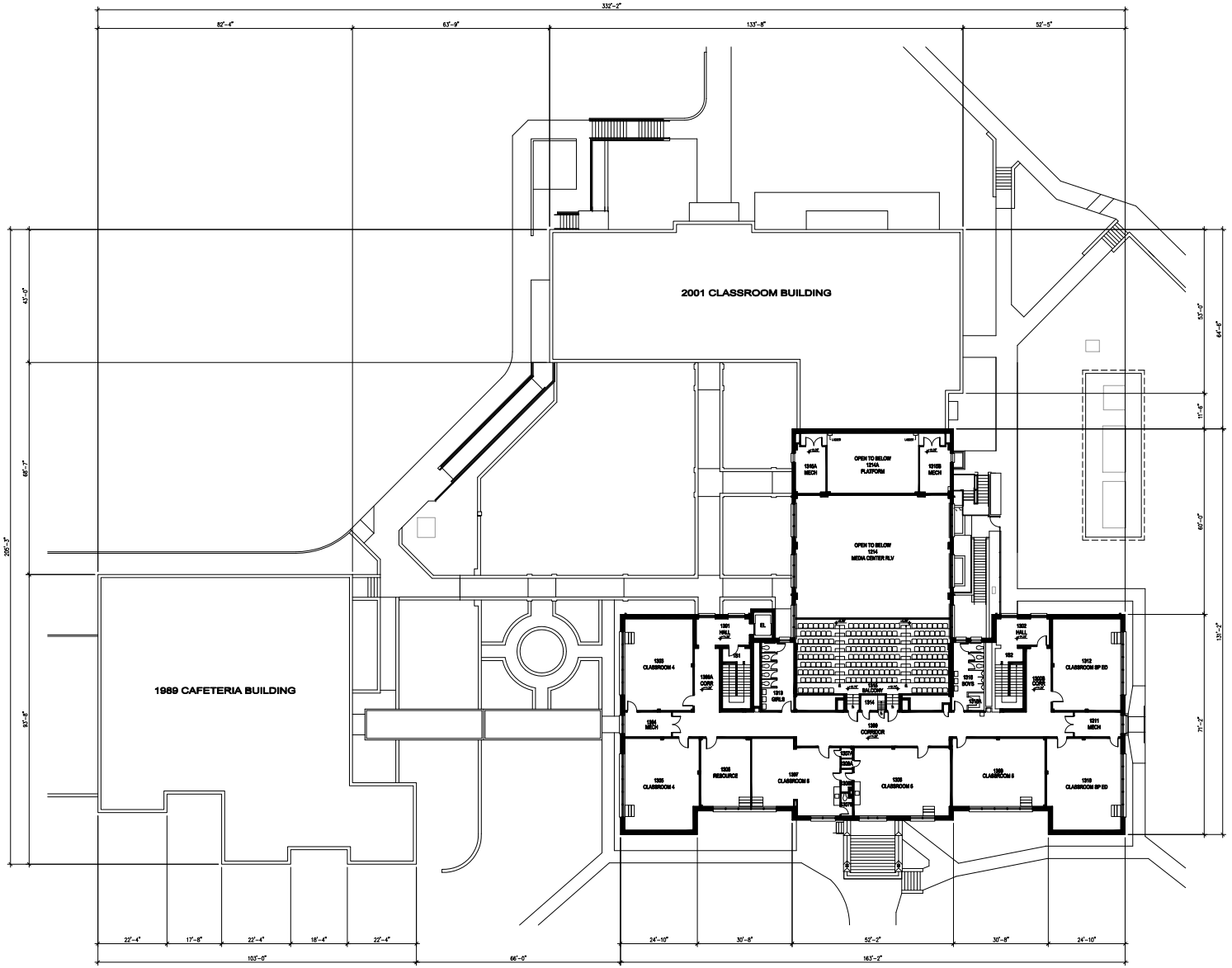
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

EXISTING CONDITIONS SECOND FLOOR PLAN

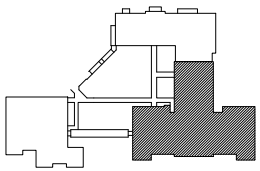
DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: X102



1. CAMPUS THIRD FLOOR PLAN
1/16" = 1'-0"

PROJECT NORTH



CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1717 F:919.468.1718

SALIH METE GUREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GUREL ARCHITECTURE, INC.
CERT NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

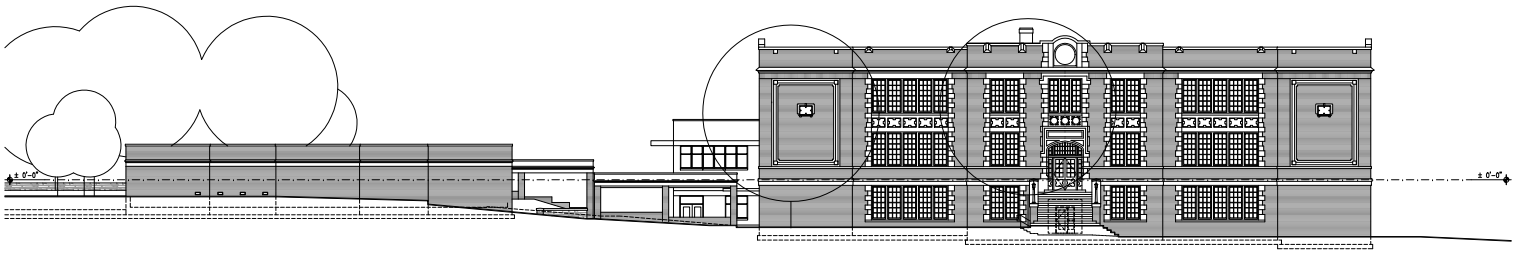
201 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

EXISTING CONDITIONS
THIRD FLOOR PLAN

DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

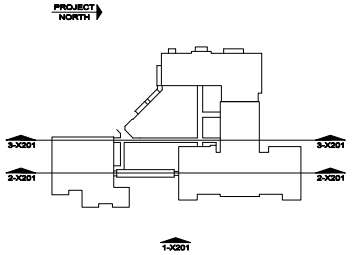
NO: X103



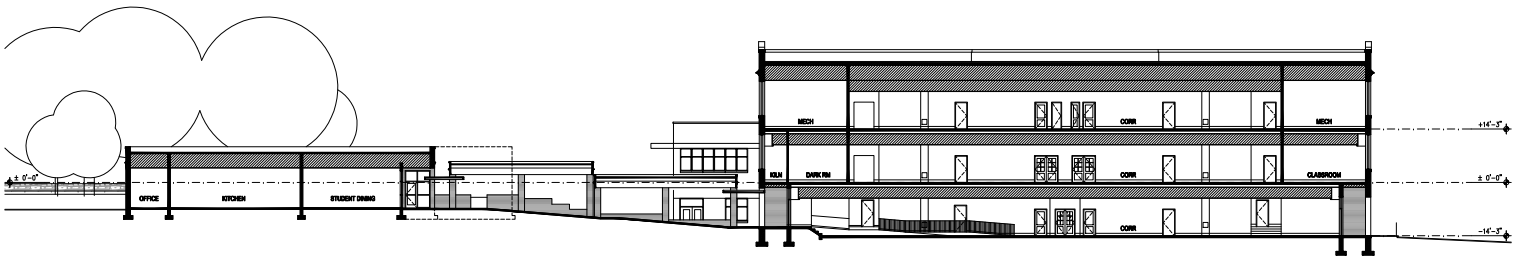
1989 CAFETERIA BUILDING

1923 SCHOOL BUILDING

1. CAMPUS EAST ELEVATION
1/16" = 1'-0"



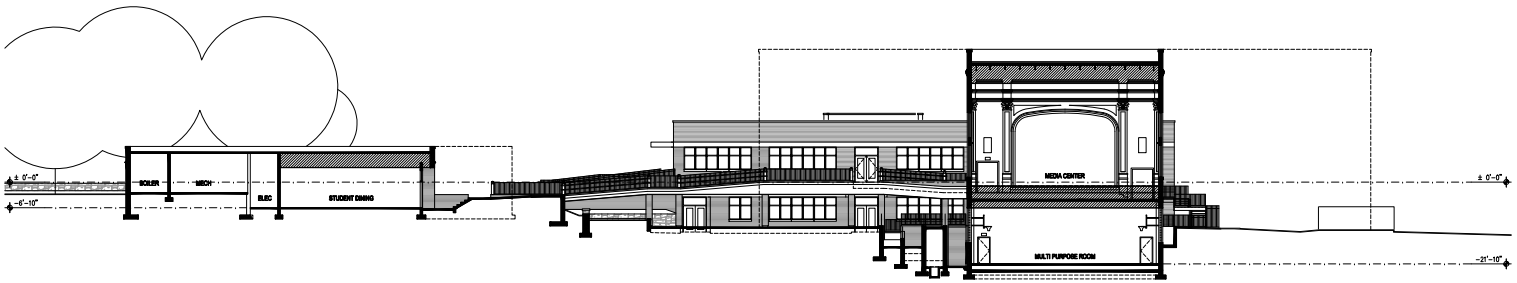
CAMPUS KEY PLAN
1" = 80'-0"



1989 CAFETERIA BUILDING

1923 SCHOOL BUILDING

2. LONGITIDUNAL BUILDING SECTIONS
1/16" = 1'-0"



1989 CAFETERIA BUILDING

2001 CLASSROOM BUILDING

1923 SCHOOL BUILDING

3. COURTYARD EAST ELEVATION
1/16" = 1'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1777 F:919.468.1716

SALIH METE GUREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GUREL ARCHITECTURE, INC.
CERT NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

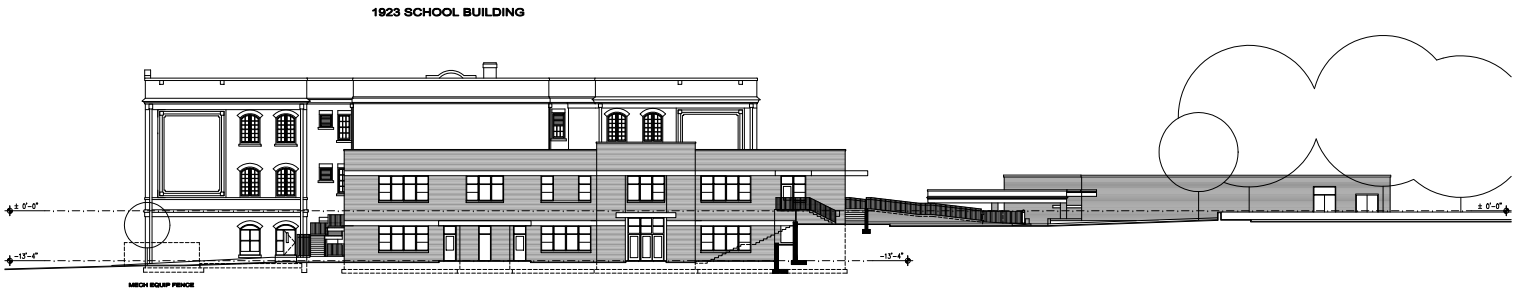
201 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

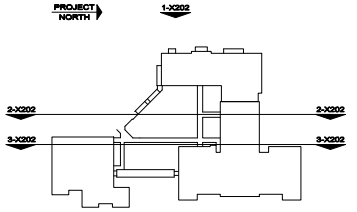
EXISTING CONDITIONS
ELEVATIONS SECTIONS

DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

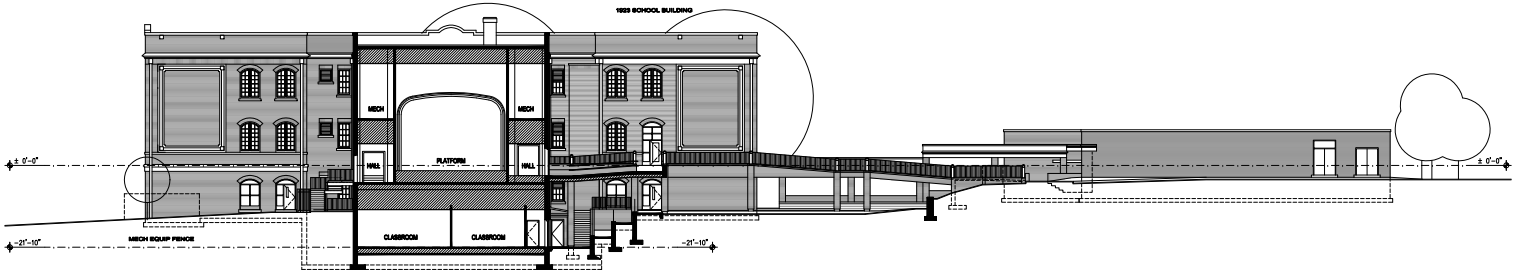
NO: X201



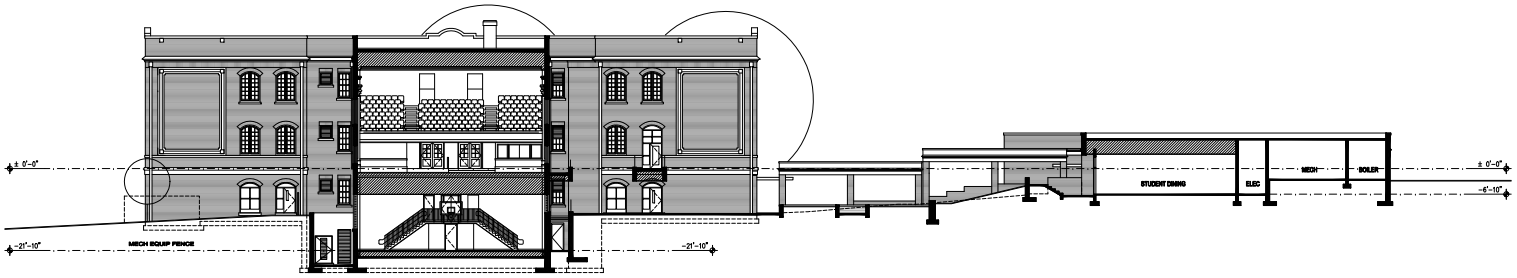
1 CAMPUS WEST ELEVATION
1/16" = 1'-0"



CAMPUS KEY PLAN
1" = 80'-0"



2 COURTYARD WEST ELEVATION
1/16" = 1'-0"



3 COURTYARD WEST ELEVATION
1/16" = 1'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1777 F:919.468.1716

SALIH METE GÜREL REGISTERED ARCHITECT 5430 NORTH CAROLINA CARY, NC

GÜREL ARCHITECTURE, INC. CERT NO. C-50987 REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

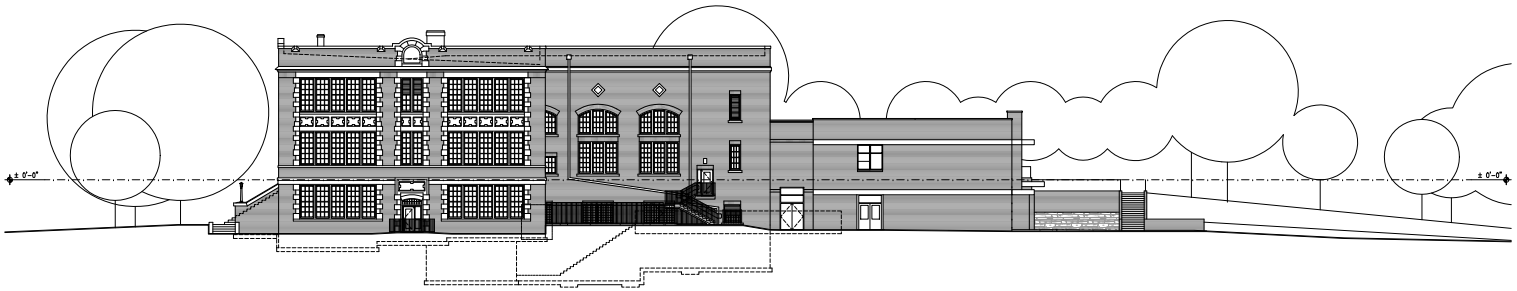
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

EXISTING CONDITIONS ELEVATIONS SECTIONS

DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

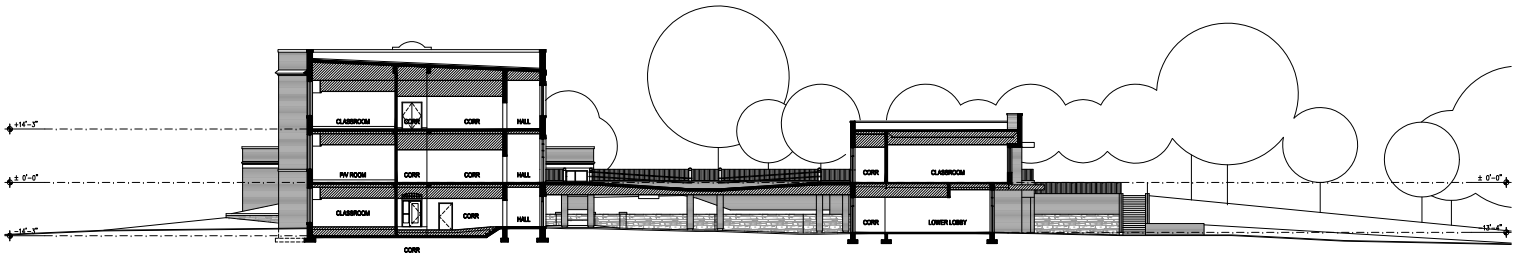
NO: X202



1923 SCHOOL BUILDING

2001 CLASSROOM BUILDING

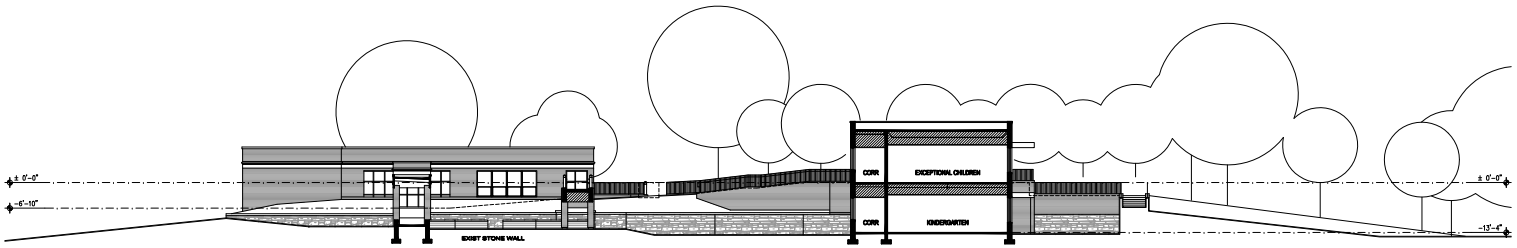
1. CAMPUS NORTH ELEVATION
1/16" = 1'-0"



1923 SCHOOL BUILDING

2001 CLASSROOM BUILDING

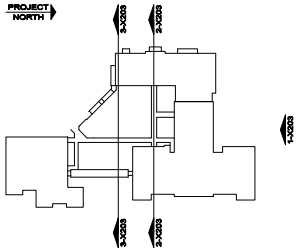
2. COURTYARD NORTH ELEVATION
1/16" = 1'-0"



1969 CAFETERIA BUILDING

2001 CLASSROOM BUILDING

3. COURTYARD NORTH ELEVATION
1/16" = 1'-0"



CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1777 F:919.468.1716

SALIH METE GUREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GUREL ARCHITECTURE, INC.
CERT NO.
50987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

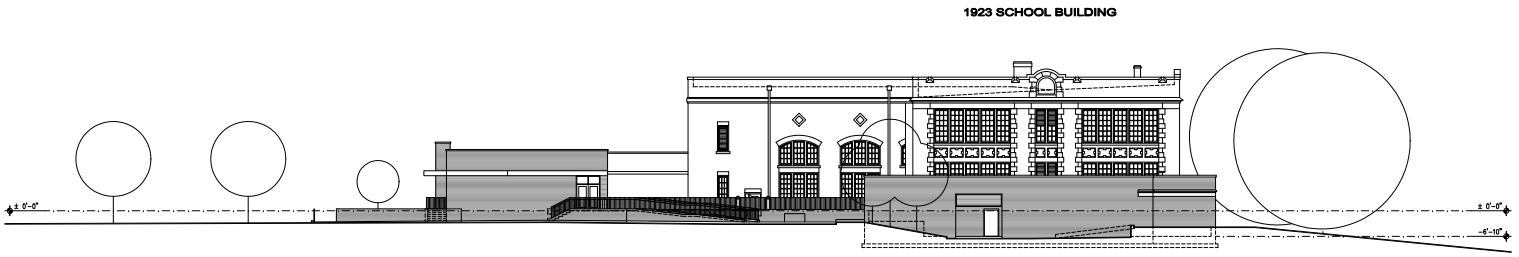
201 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

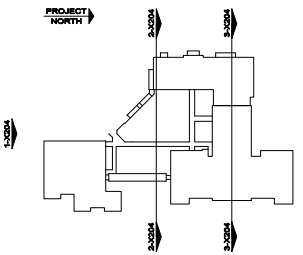
EXISTING CONDITIONS
ELEVATIONS SECTIONS

DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

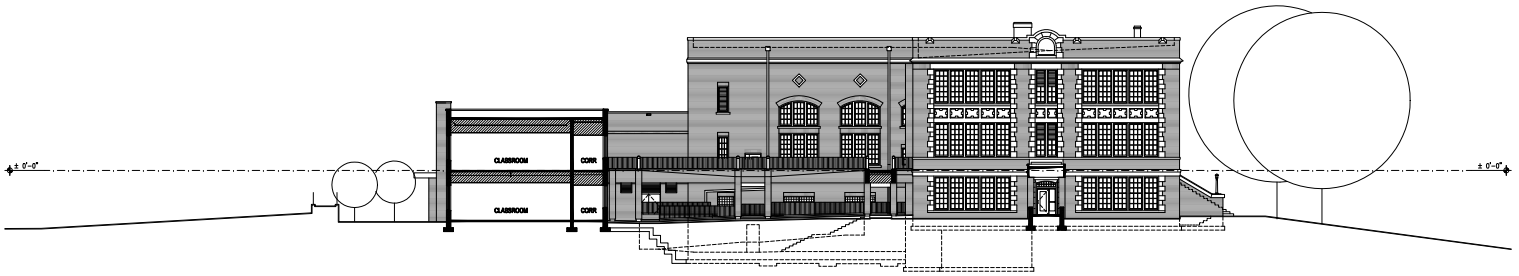
NO: X203



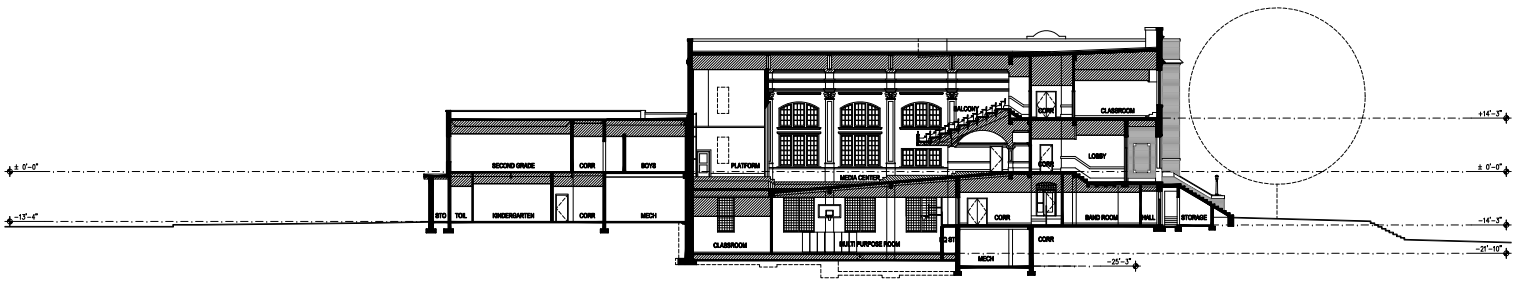
1. CAMPUS SOUTH ELEVATION
1/16" = 1'-0"



CAMPUS KEY PLAN
1" = 80'-0"



2. COURTYARD SOUTH ELEVATION
1/16" = 1'-0"



3. BUILDING CROSS SECTION
1/16" = 1'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1717 F:919.468.1716

SALIH METE GÜREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GÜREL ARCHITECTURE, INC.
CERT NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

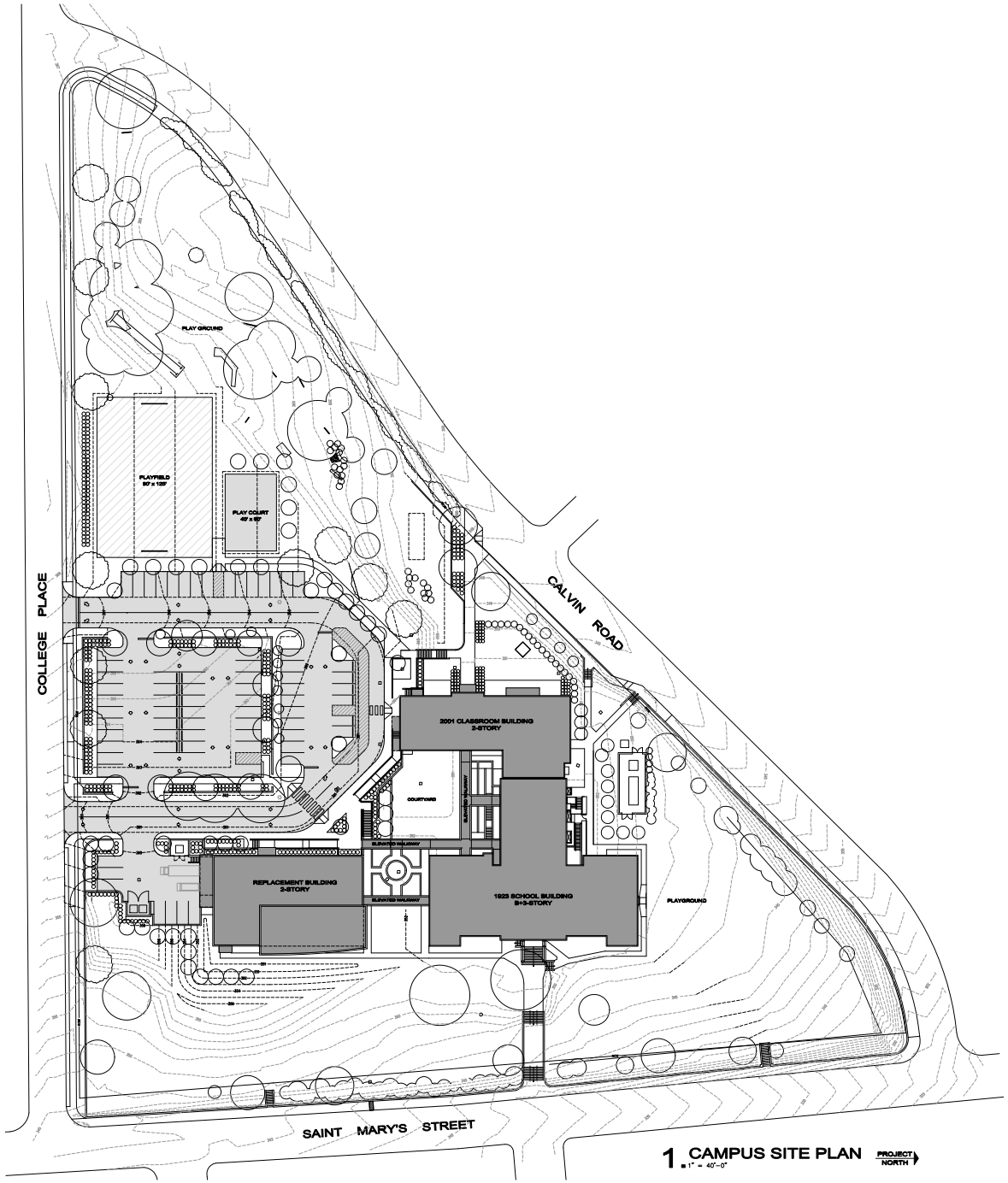
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

EXISTING CONDITIONS
ELEVATIONS SECTIONS

DATE:	04.15.2009
JOB NO:	WAK2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: X204



1. CAMPUS SITE PLAN
1" = 40'-0"

PROJECT NORTH

GÜREL
ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1777 F:919.468.1716

SALIH METE GÜREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GÜREL ARCHITECTURE, INC.
CERT NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

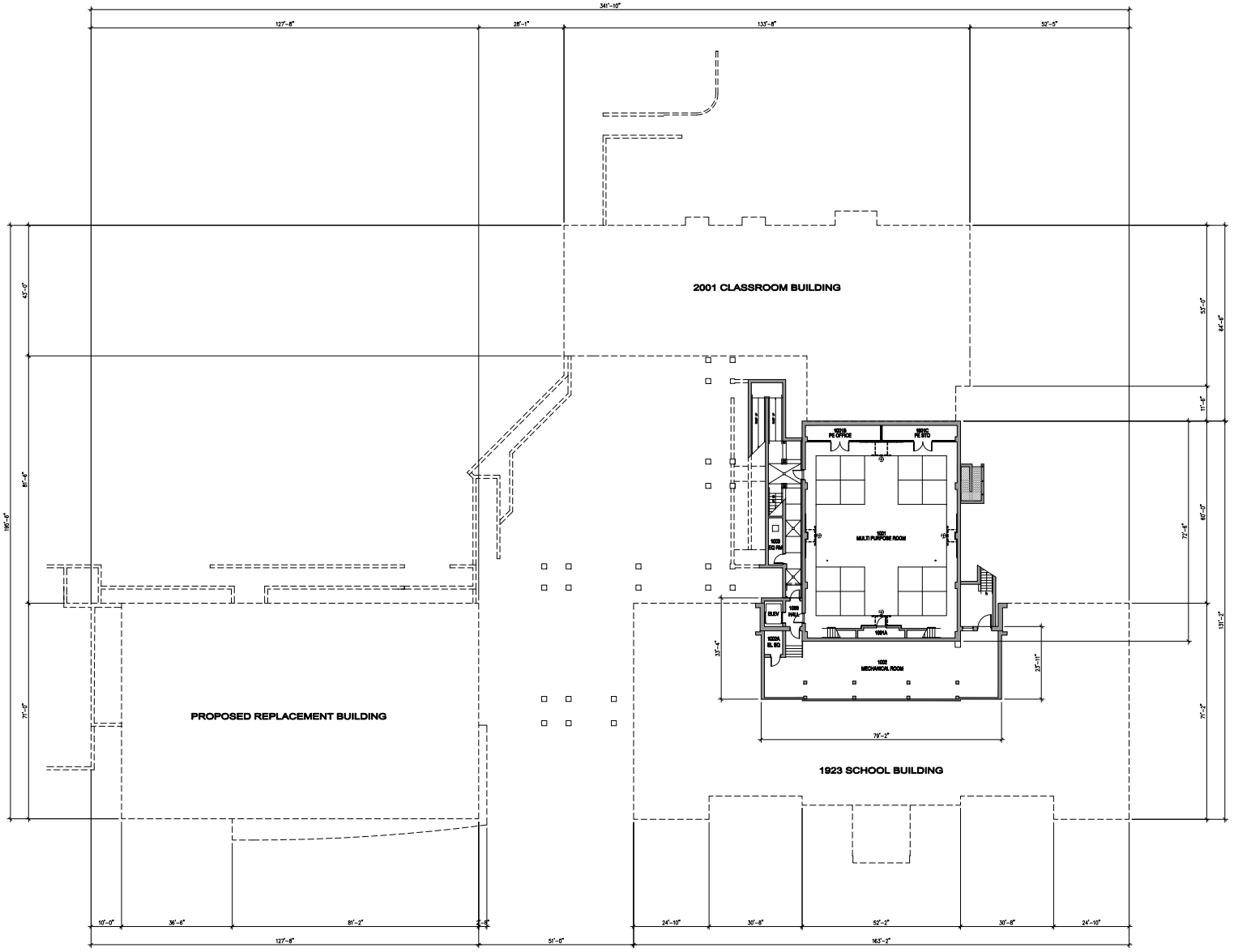
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

CAMPUS SITE PLAN

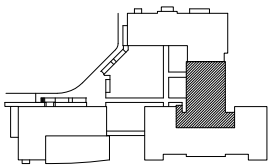
DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: A001



1. CAMPUS BASEMENT FLOOR PLAN
1/16" = 1'-0"

PROJECT NORTH



CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1717 F:919.468.1718

SALIH METE GÜREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GÜREL ARCHITECTURE, INC.
CERT NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

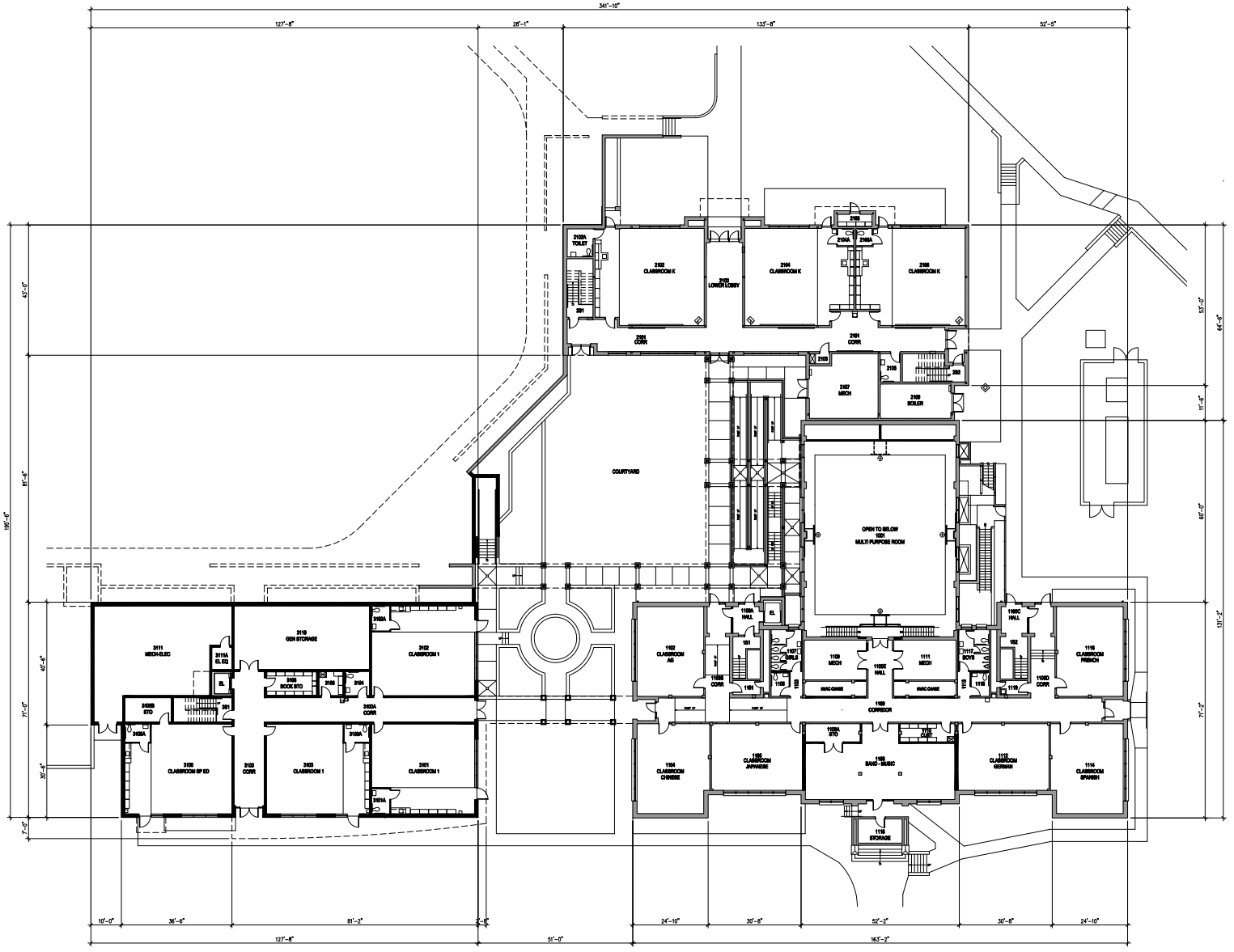
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

BASEMENT FLOOR PLAN

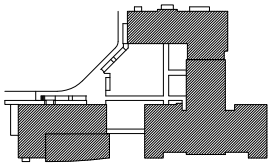
DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: A100



1. CAMPUS FIRST FLOOR PLAN
1/16" = 1'-0"

PROJECT NORTH



CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1717 F:919.468.1716

SALIH METE GÜREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GÜREL ARCHITECTURE, INC.
CERT NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

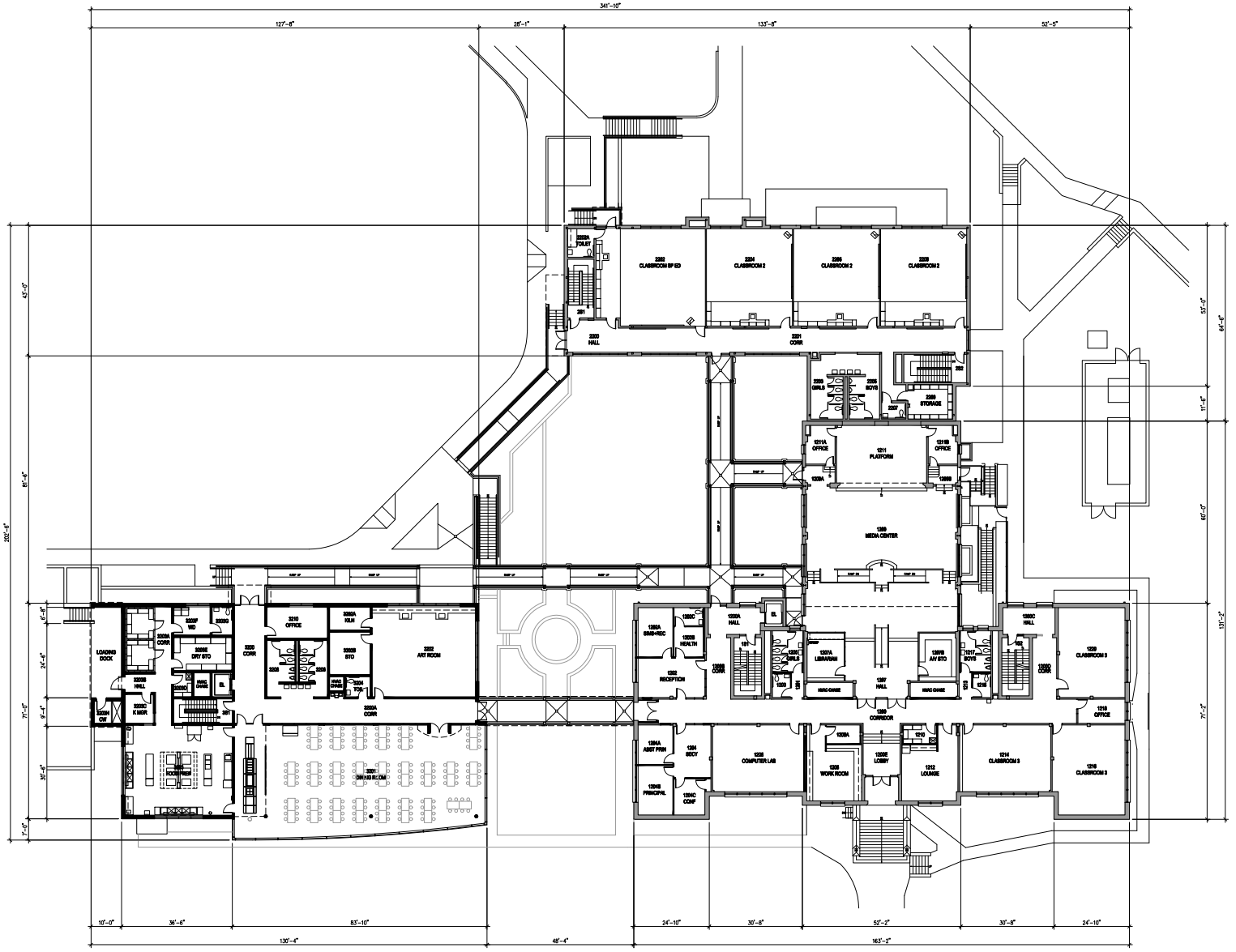
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

FIRST FLOOR PLAN

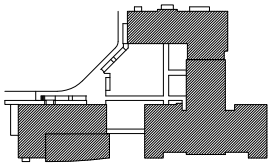
DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: A101



1. CAMPUS SECOND FLOOR PLAN
1/16" = 1'-0"

PROJECT NORTH



CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1717 F:919.468.1716

SALIH METE GÜREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GÜREL ARCHITECTURE, INC.
CERT NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

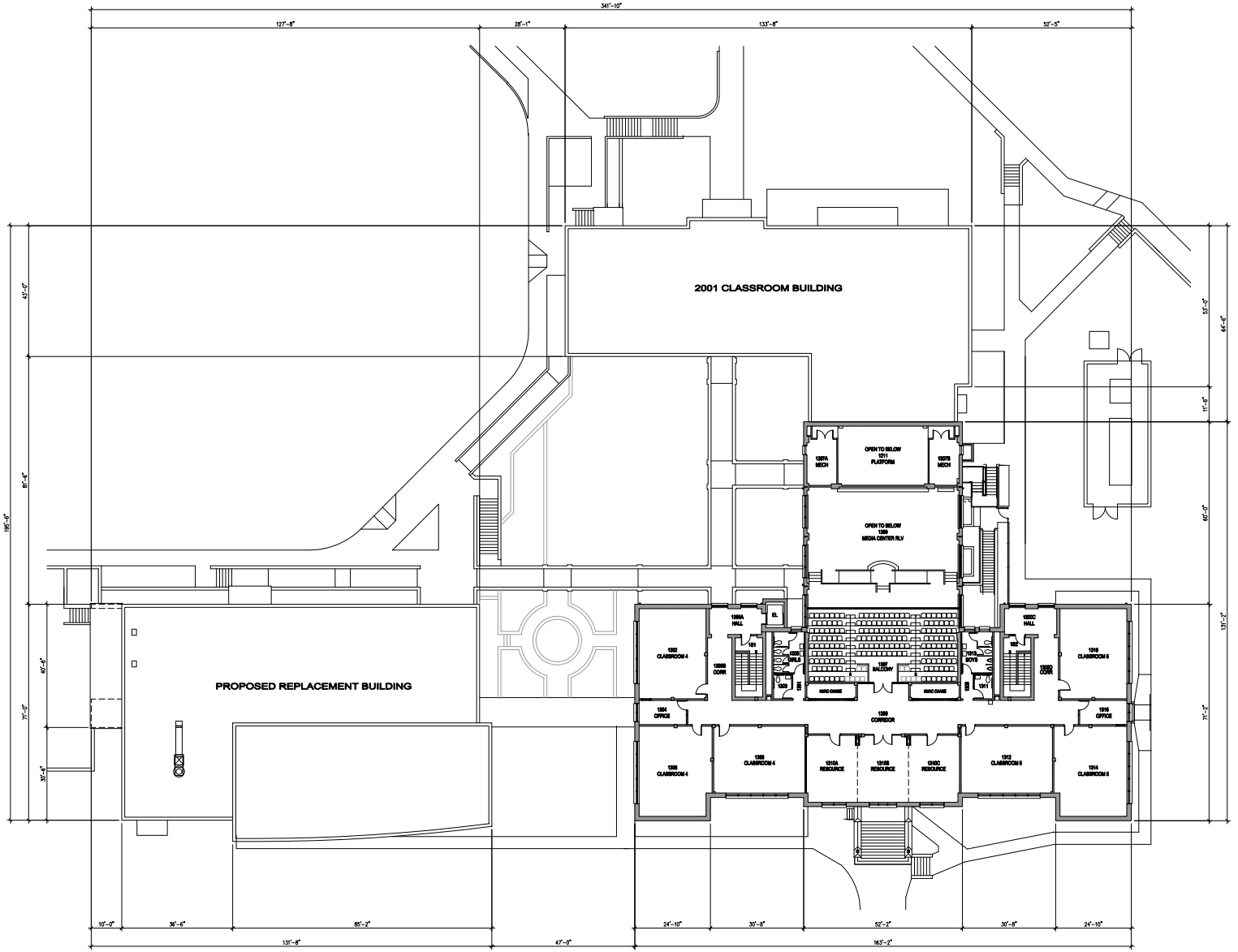
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

SECOND FLOOR PLAN

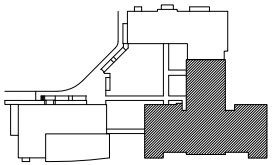
DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: A102

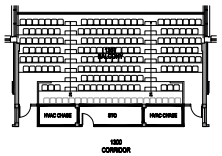


1. CAMPUS THIRD FLOOR PLAN
1/16" = 1'-0"

PROJECT NORTH



CAMPUS KEY PLAN
1" = 80'-0"



2. BALCONY ALTERNATIVE
1/16" = 1'-0"

PROJECT NORTH

GÜREL
ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1717 F:919.468.1716

SALIH METE GÜREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GÜREL ARCHITECTURE, INC.
CERT NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

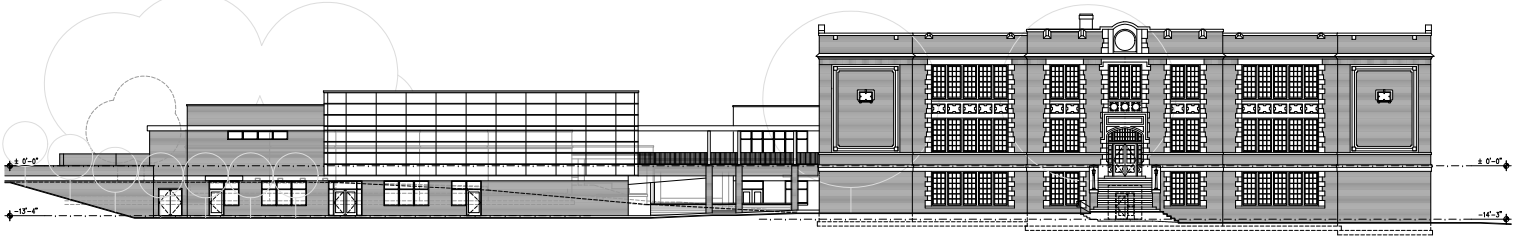
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

THIRD FLOOR PLAN

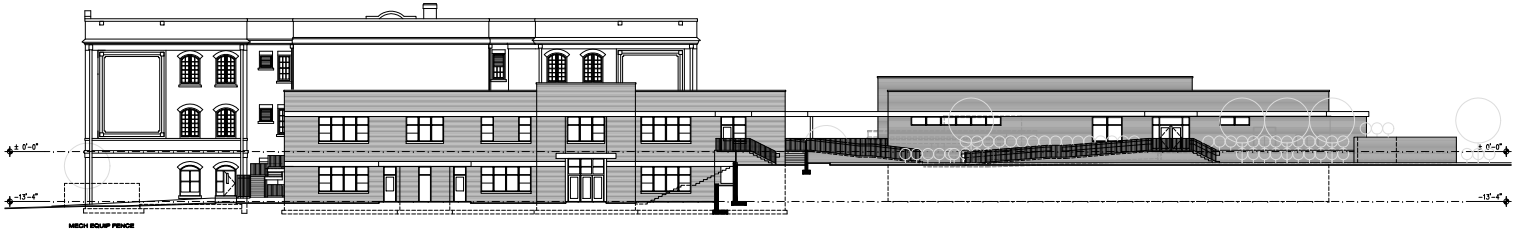
DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: A103



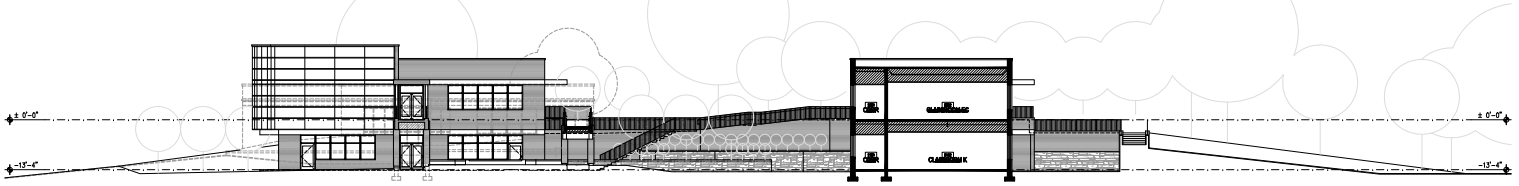
REPLACEMENT BUILDING CONNECTING BRIDGE 1923 SCHOOL BUILDING

1 CAMPUS EAST ELEVATION
1/16" = 1'-0"



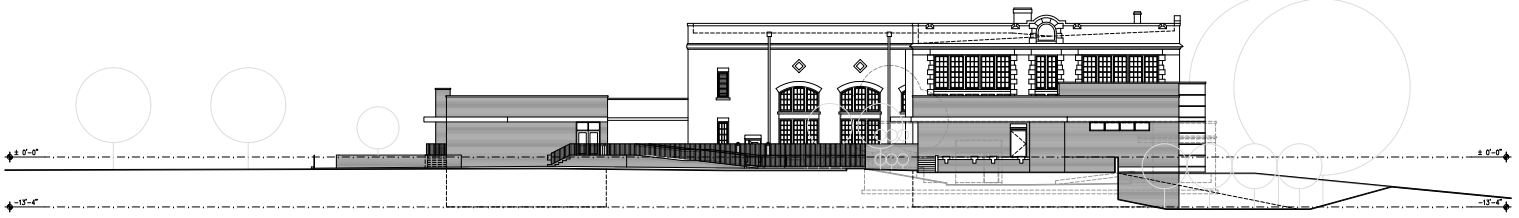
1923 SCHOOL BUILDING 2001 CLASSROOM BUILDING REPLACEMENT BUILDING

2 CAMPUS WEST ELEVATION
1/16" = 1'-0"



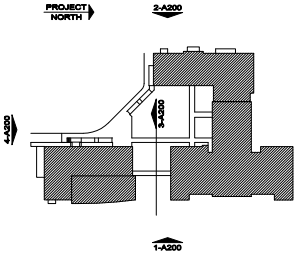
REPLACEMENT BUILDING 2001 CLASSROOM BUILDING

3 COURTYARD NORTH ELEVATION
1/16" = 1'-0"



2001 CLASSROOM BUILDING 1923 SCHOOL BUILDING REPLACEMENT BUILDING

4 CAMPUS SOUTH ELEVATION
1/16" = 1'-0"



CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1777 F:919.468.1716

SALIH METE GÜREL REGISTERED ARCHITECT 5430 NORTH CAROLINA CARY, NC

GÜREL ARCHITECTURE, INC. CERT NO. 50987 NORTH CAROLINA CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

201 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

BUILDING ELEVATIONS

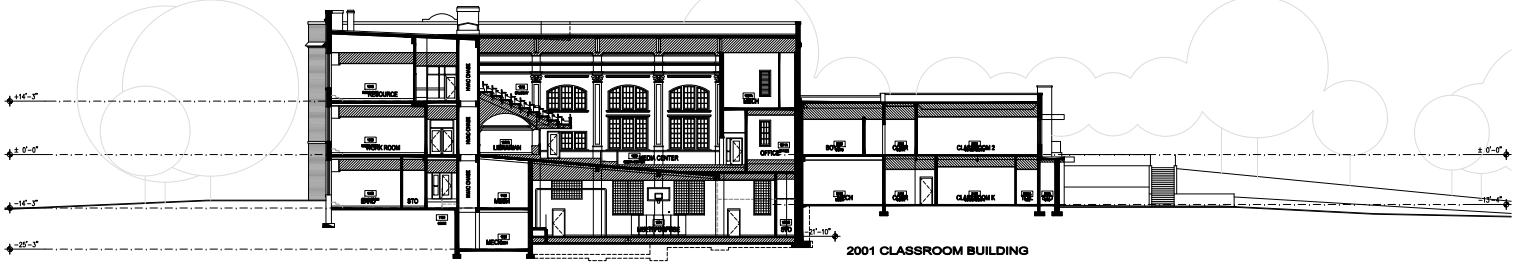
DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: A200

1923 SCHOOL BUILDING

2001 CLASSROOM BUILDING

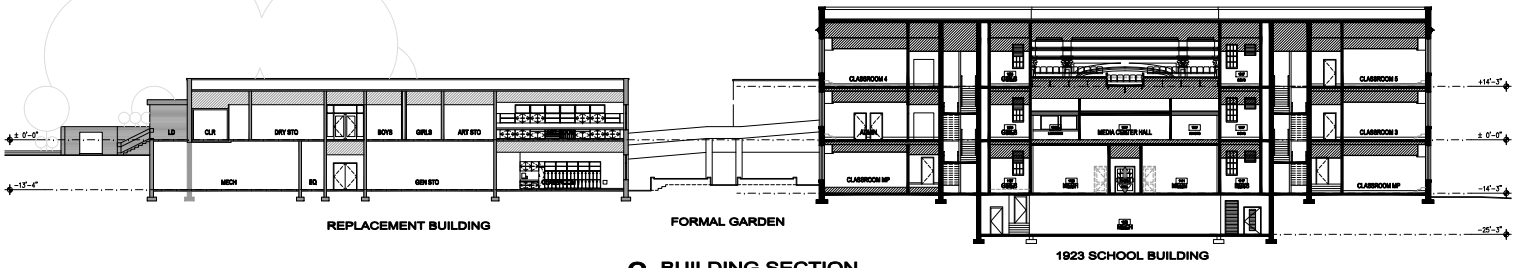
1. BUILDING SECTION
1/16" = 1'-0"



1923 SCHOOL BUILDING

2001 CLASSROOM BUILDING

2. BUILDING SECTION
1/16" = 1'-0"

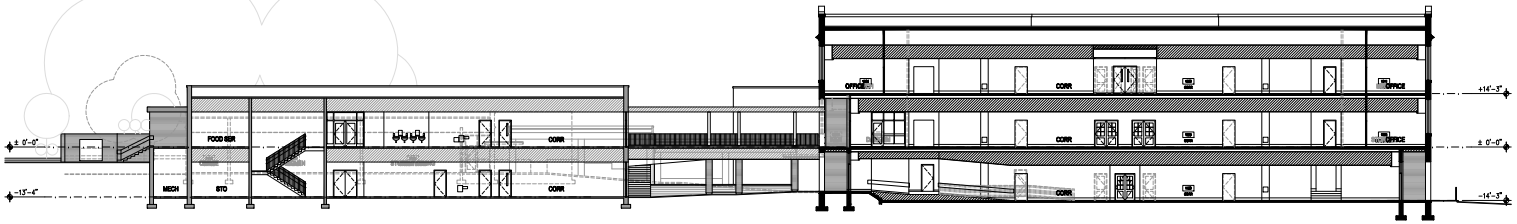


REPLACEMENT BUILDING

FORMAL GARDEN

1923 SCHOOL BUILDING

3. BUILDING SECTION
1/16" = 1'-0"

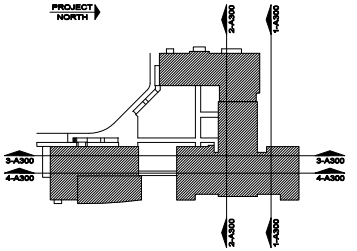


REPLACEMENT BUILDING

CONNECTING BRIDGE

1923 SCHOOL BUILDING

4. BUILDING SECTION
1/16" = 1'-0"



CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1777 F:919.468.1716

SALIH METE GUREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GUREL ARCHITECTURE, INC.
CERT NO.
C-50987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

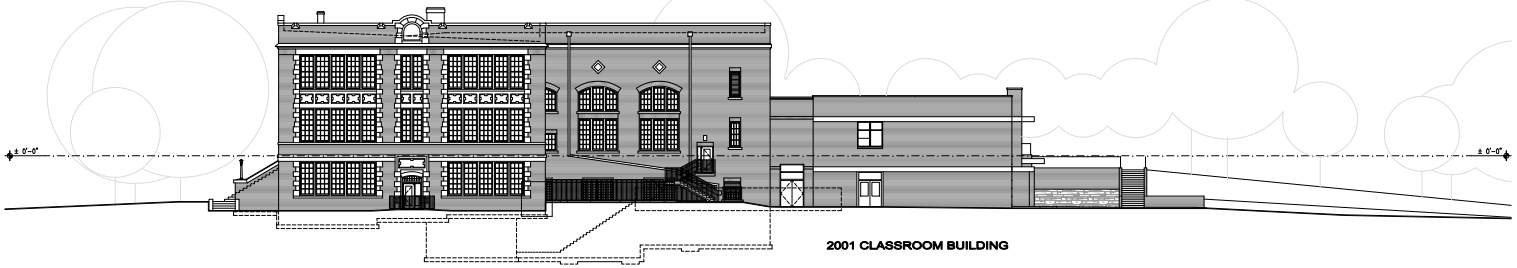
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

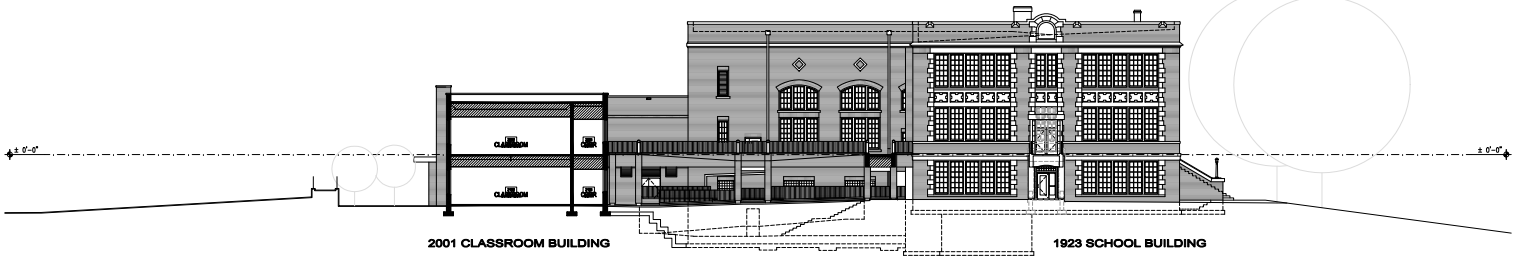
BUILDING SECTIONS

DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

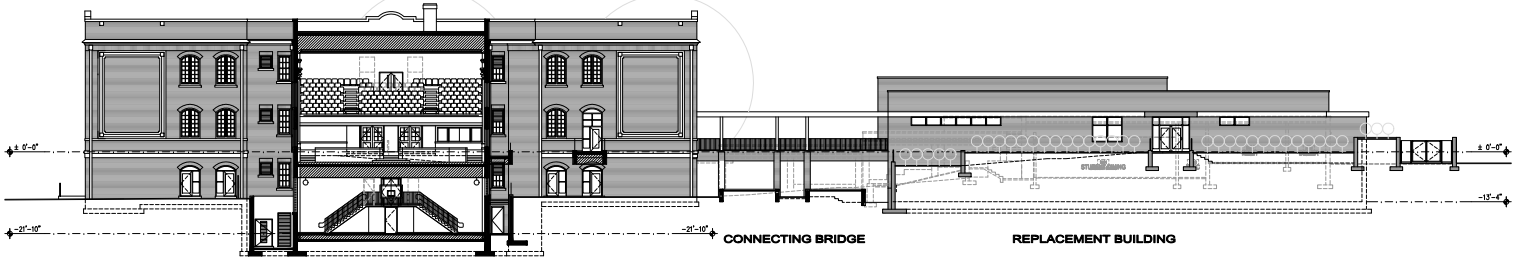
NO: A300



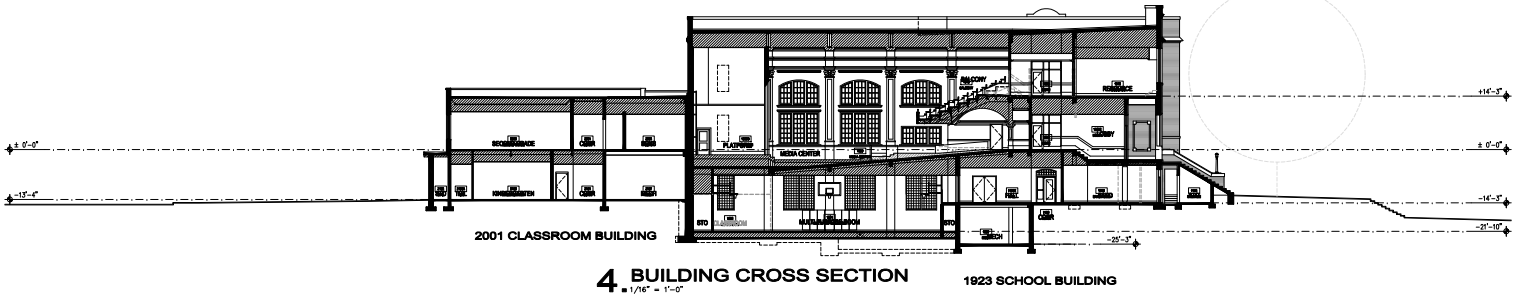
1. CAMPUS NORTH ELEVATION
1/16" = 1'-0"



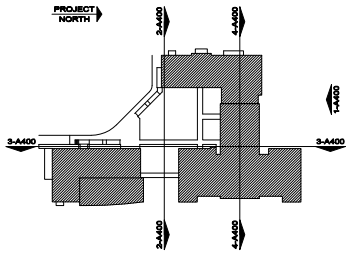
2. COURTYARD SOUTH ELEVATION



3. COURTYARD WEST ELEVATION
1/16" = 1'-0"



4. BUILDING CROSS SECTION
1/16" = 1'-0"



CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T-919.468.1777 F-919.468.1716

SALIH METE GUREL REGISTERED ARCHITECT 5430 NORTH CAROLINA CARY, NC

GUREL ARCHITECTURE, INC. CERT NO. 50987 REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

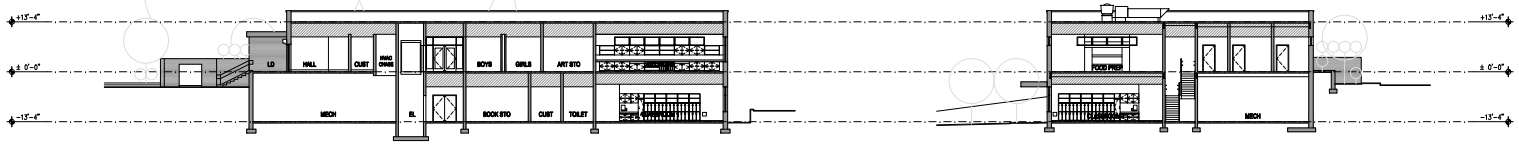
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

BUILDING ELEVATIONS
BUILDING SECTIONS

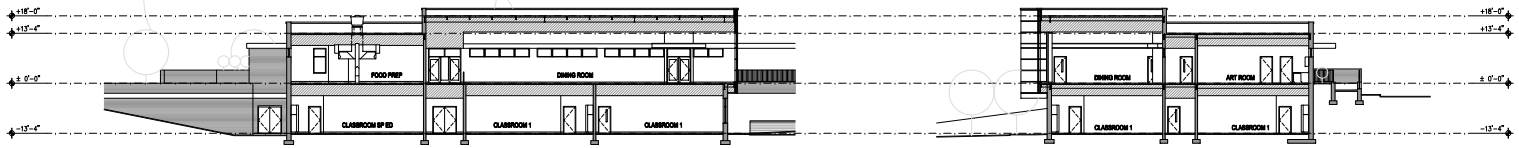
DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: A400

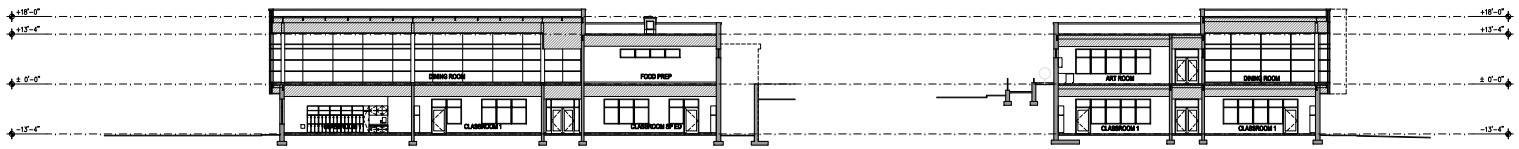


1. BUILDING SECTION
1/16" = 1'-0"

2. BUILDING SECTION
1/16" = 1'-0"

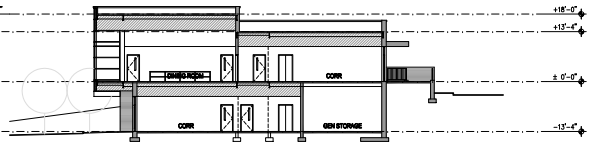


3. BUILDING SECTION
1/16" = 1'-0"



4. BUILDING SECTION
1/16" = 1'-0"

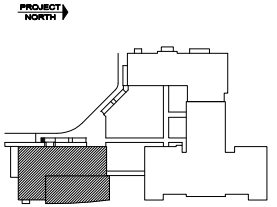
5. BUILDING SECTION
1/16" = 1'-0"



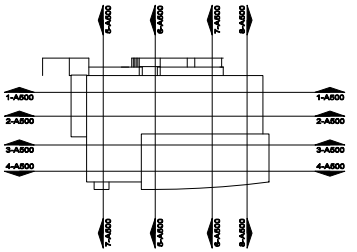
6. BUILDING SECTION
1/16" = 1'-0"

7. BUILDING SECTION
1/16" = 1'-0"

8. BUILDING SECTION
1/16" = 1'-0"



CAMPUS KEY PLAN
1" = 80'-0"



SECTIONS KEY PLAN
1" =40'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T-919.468.1777 F-919.468.1716

SALIH METE GUREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GUREL ARCHITECTURE, INC.
CERT NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

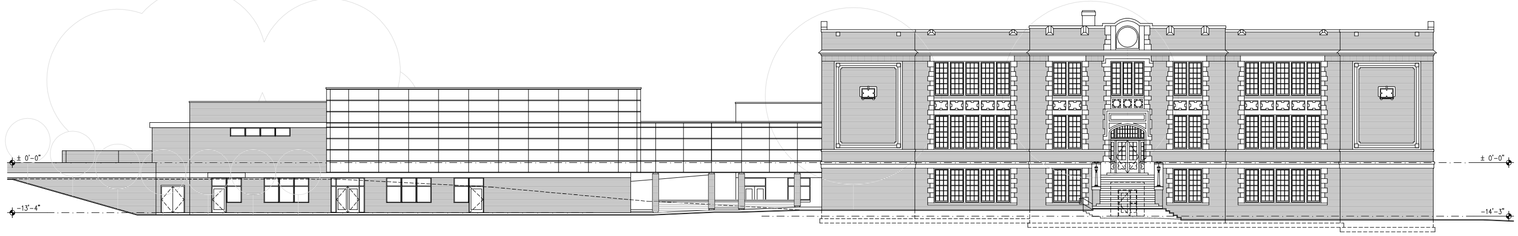
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

REPLACEMENT BUILDING
BUILDING SECTIONS

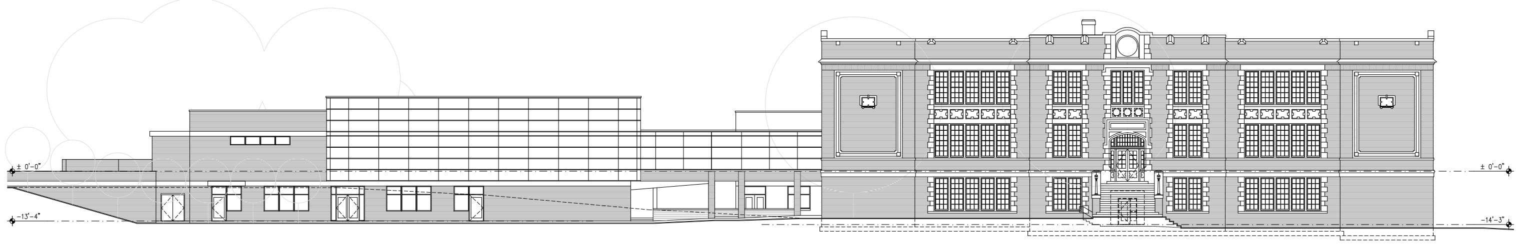
DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: A500



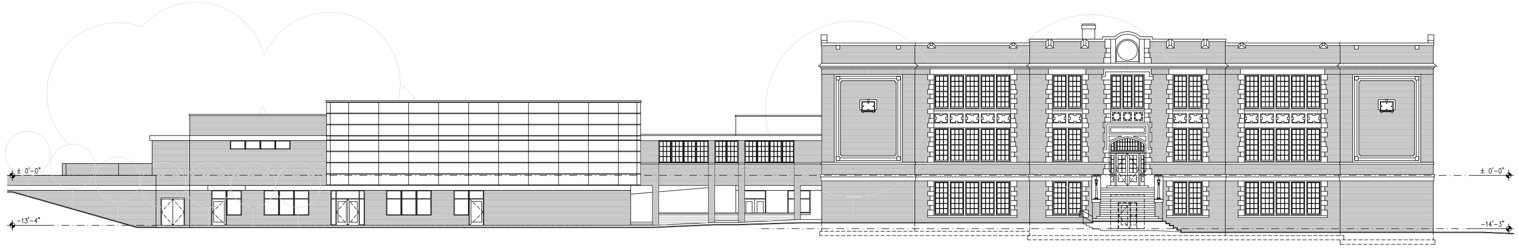
REPLACEMENT BUILDING | ENCLOSED BRIDGE | 1923 SCHOOL BUILDING

1. CAMPUS EAST ELEVATION
1/16" = 1'-0"



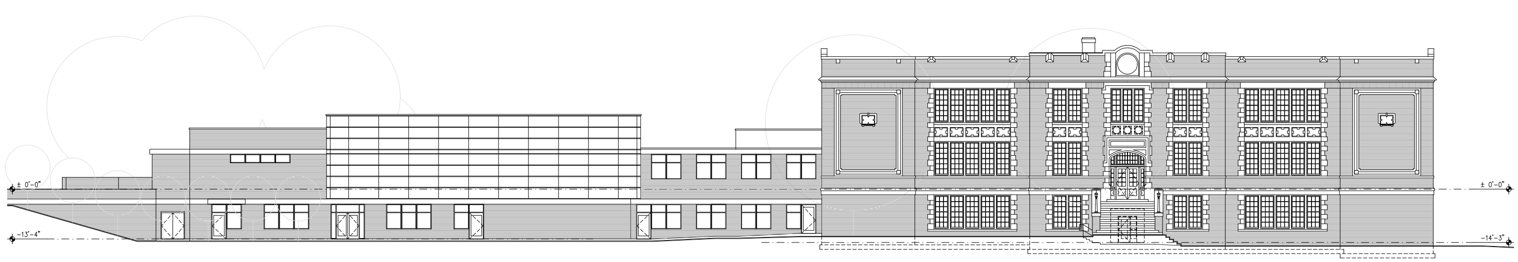
REPLACEMENT BUILDING | ENCLOSED BRIDGE | 1923 SCHOOL BUILDING

1. CAMPUS EAST ELEVATION
1/16" = 1'-0"



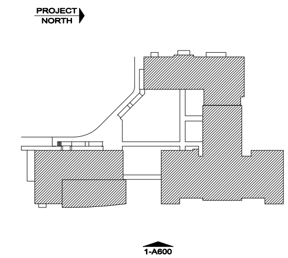
REPLACEMENT BUILDING | ENCLOSED BRIDGE | 1923 SCHOOL BUILDING

1. CAMPUS EAST ELEVATION
1/16" = 1'-0"



REPLACEMENT BUILDING | TWO STORY CONNECTOR | 1923 SCHOOL BUILDING

1. CAMPUS EAST ELEVATION
1/16" = 1'-0"



CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
1145B EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1717 F:919.468.1716

SALIH METE GUREL · REGISTERED ARCHITECT · 5430 · NORTH CAROLINA · CARY, NC

GÜREL ARCHITECTURE, INC. · REGISTERED ARCHITECTURAL CORPORATION · CERT NO. 50987 · NORTH CAROLINA · CARY, NC

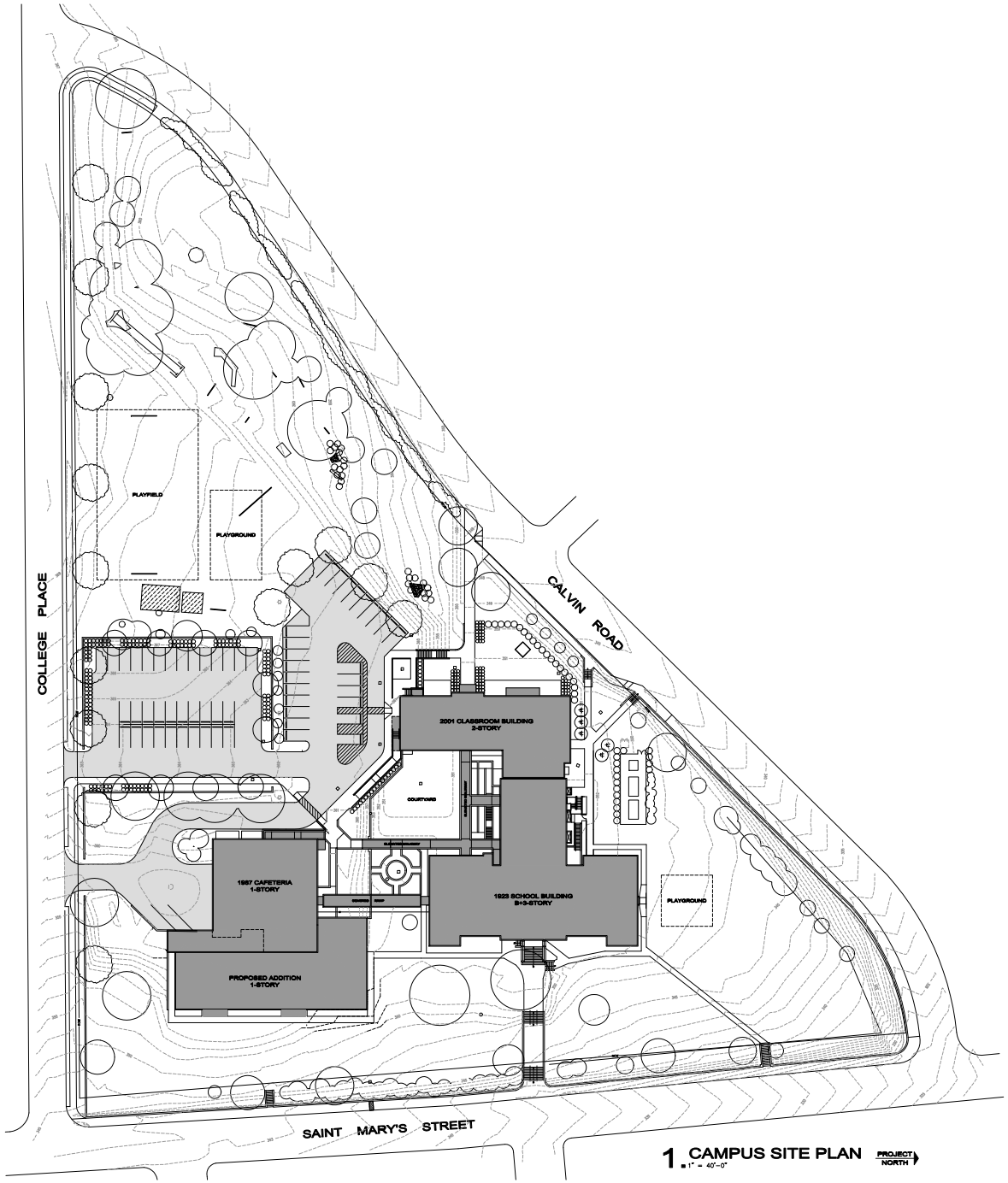
ADDITIONS AND RENOVATIONS
WILEY ELEMENTARY
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

BRIDGE OPTIONS

DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	–

NO. A600



1. CAMPUS SITE PLAN
1" = 40'-0"

PROJECT NORTH

GÜREL
ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1777 F:919.468.1716

SALIH METE GUREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GUREL ARCHITECTURE, INC.
CERT NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY
ELEMENTARY

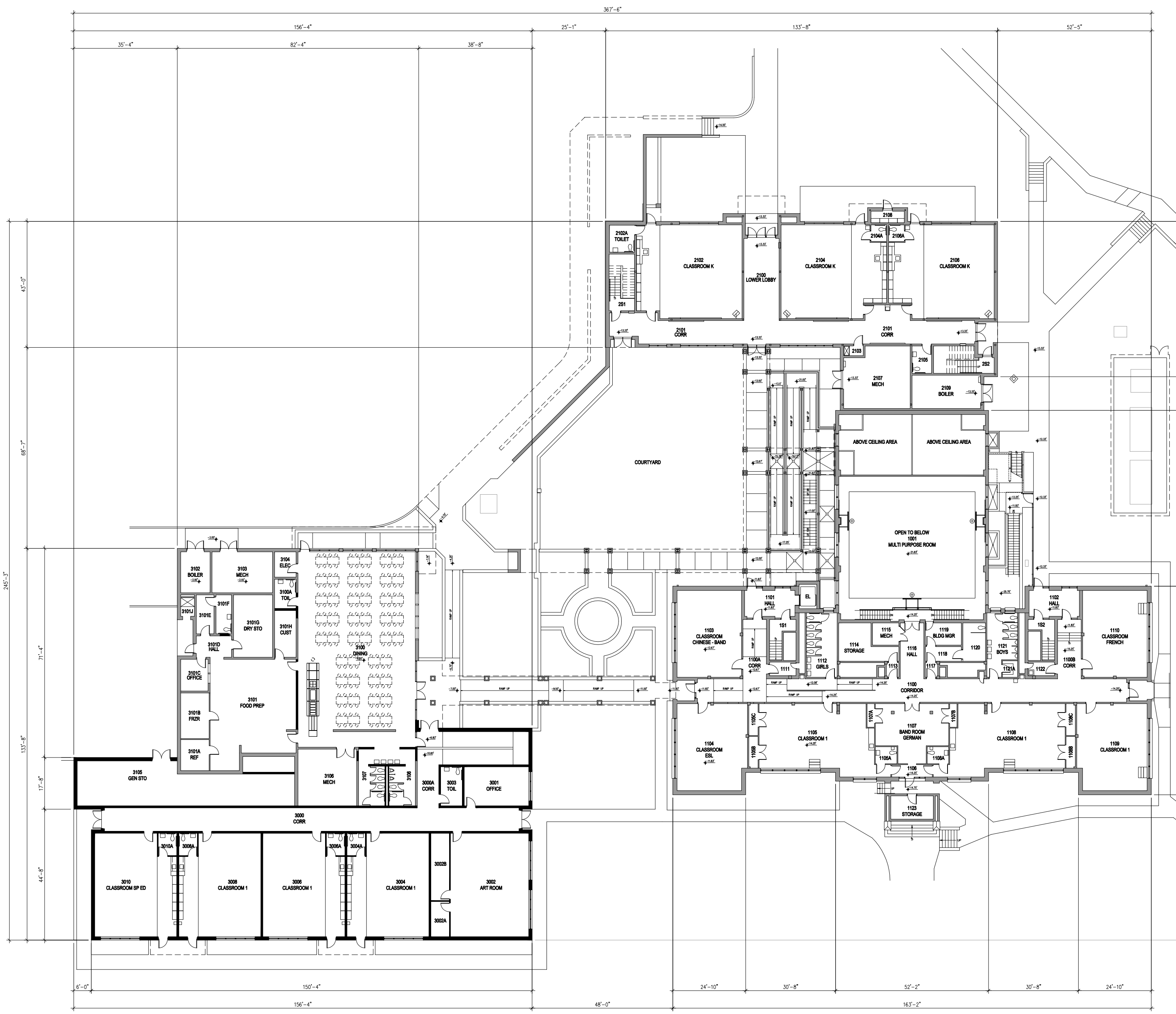
201 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

BUILDING ADDITION
CAMPUS SITE PLAN

DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

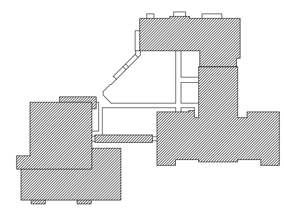
NO: B001



1. CAMPUS FIRST FLOOR PLAN

1/16" = 1'-0"

PROJECT NORTH



CAMPUS KEY PLAN

1" = 80'-0"

PROJECT NORTH

GÜREL ARCHITECTURE

1145B EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1717 F:919.468.1716

SALIH METE GUREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GUREL ARCHITECTURE, INC.
REGISTERED ARCHITECTURAL CORPORATION
CERT NO. 50987
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

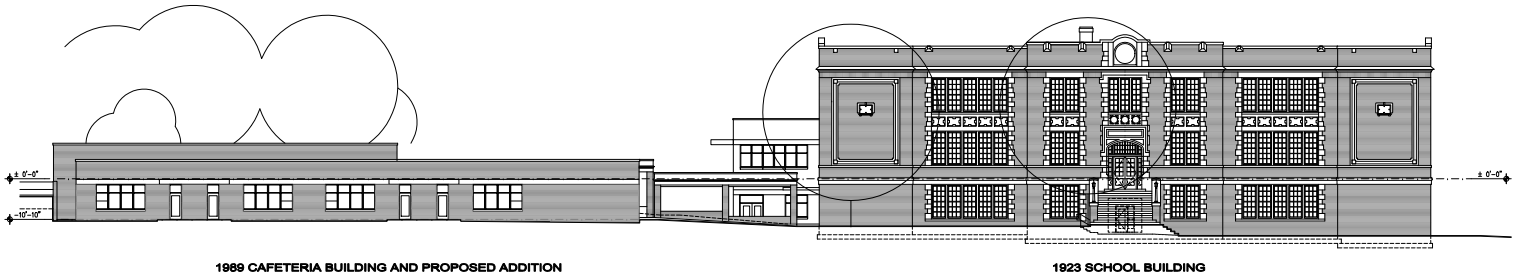
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

BUILDING ADDITION
FIRST FLOOR PLAN

DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

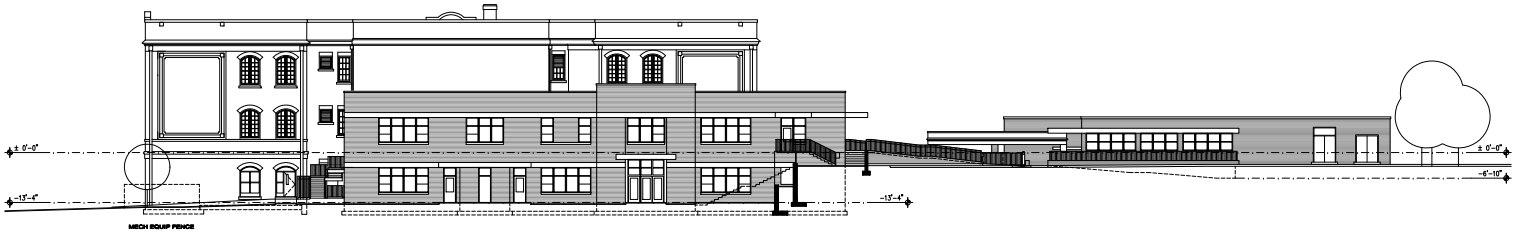
NO: **B101**



1989 CAFETERIA BUILDING AND PROPOSED ADDITION

1923 SCHOOL BUILDING

1. CAMPUS EAST ELEVATION
1/16" = 1'-0"

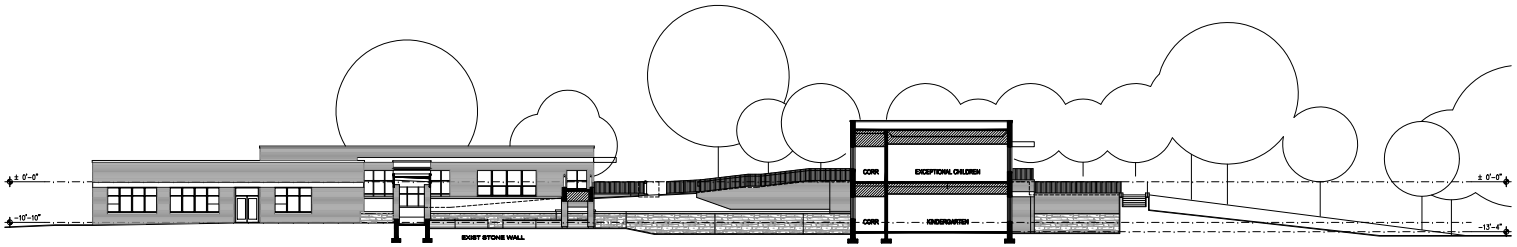


1923 SCHOOL BUILDING

2001 CLASSROOM BUILDING

1989 CAFETERIA BUILDING

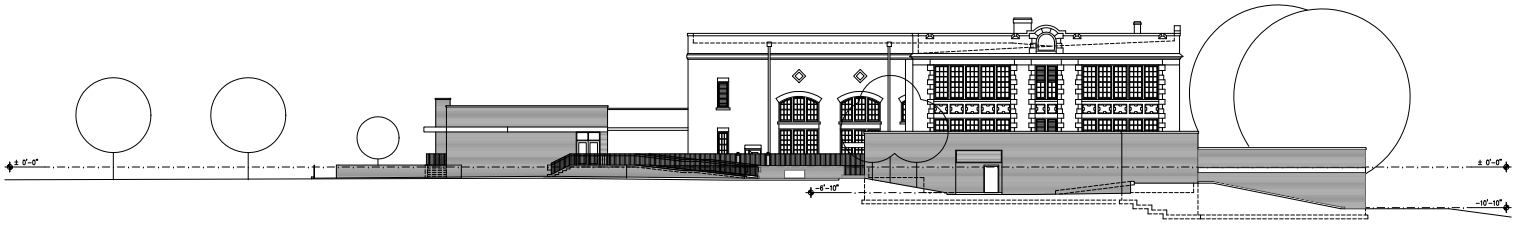
2. CAMPUS WEST ELEVATION
1/16" = 1'-0"



1989 CAFETERIA BUILDING

2001 CLASSROOM BUILDING

3. COURTYARD NORTH ELEVATION
1/16" = 1'-0"

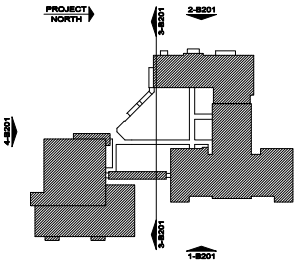


2001 CLASSROOM BUILDING

1923 SCHOOL BUILDING

1989 CAFETERIA BUILDING

4. CAMPUS SOUTH ELEVATION
1/16" = 1'-0"



CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1777 F:919.468.1716

SALIH METE GÜREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GÜREL ARCHITECTURE, INC.
CERT NO.
C-0987
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

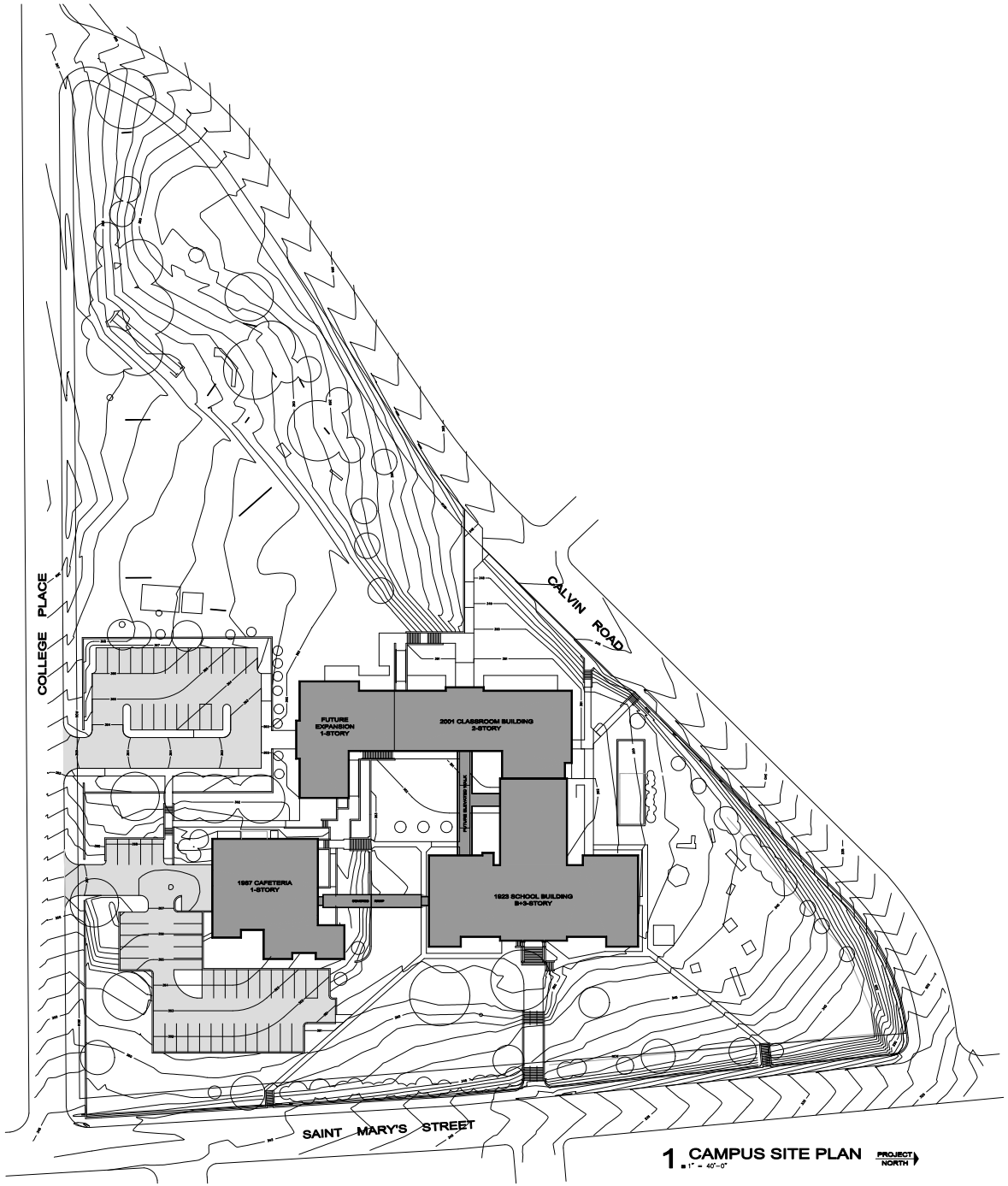
201 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

EXISTING CONDITIONS
ELEVATIONS SECTIONS

DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: B201



1. CAMPUS SITE PLAN
1" = 40'-0"

PROJECT NORTH

GÜREL
ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1777 F:919.468.1716

SALIH METE GÜREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GÜREL ARCHITECTURE, INC.
CERT. NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

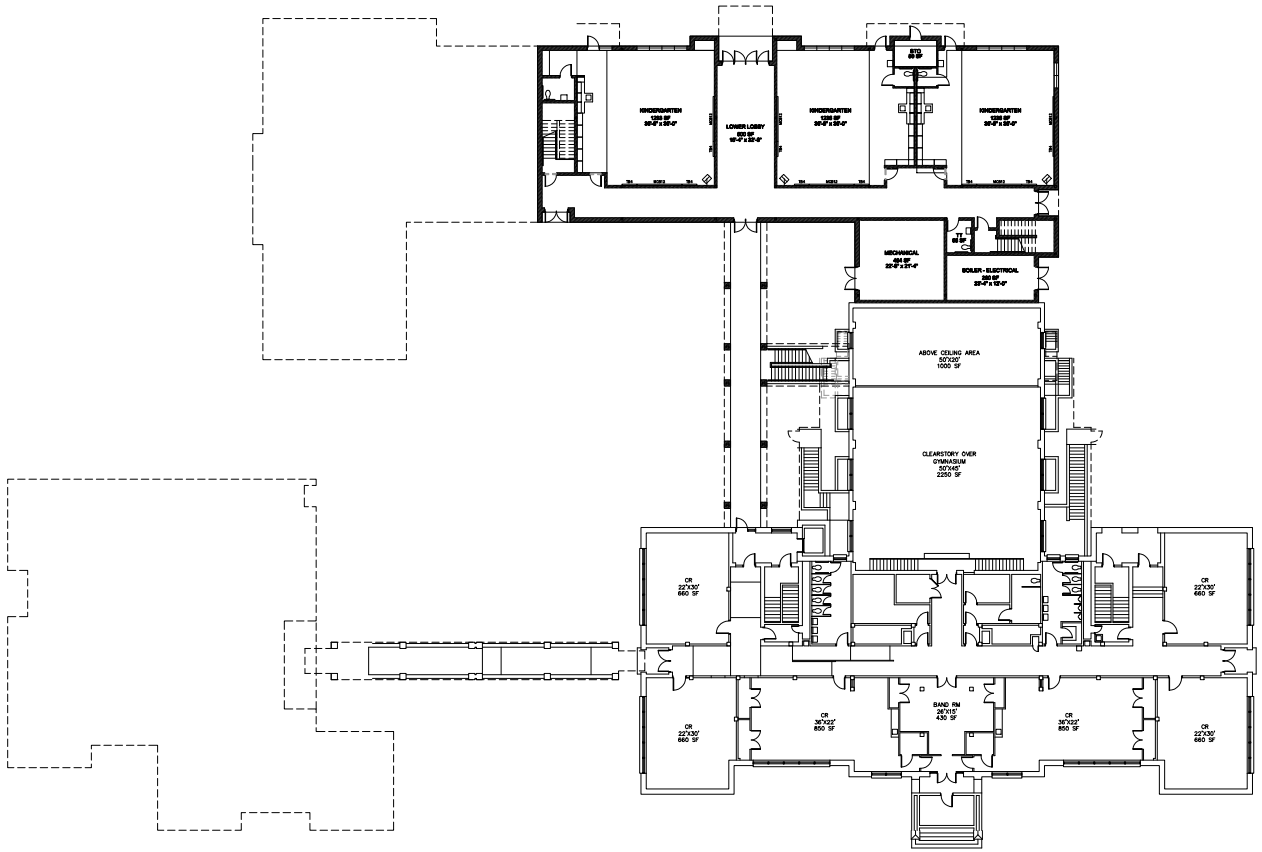
201 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

2000 MASTER PLAN

DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: C001



1. CAMPUS FIRST FLOOR PLAN
1/16" = 1'-0"

PROJECT NORTH

GÜREL
ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1717 F:919.468.1716

SALIH METE GÜREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GÜREL ARCHITECTURE, INC.
CERT NO.
C-0987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

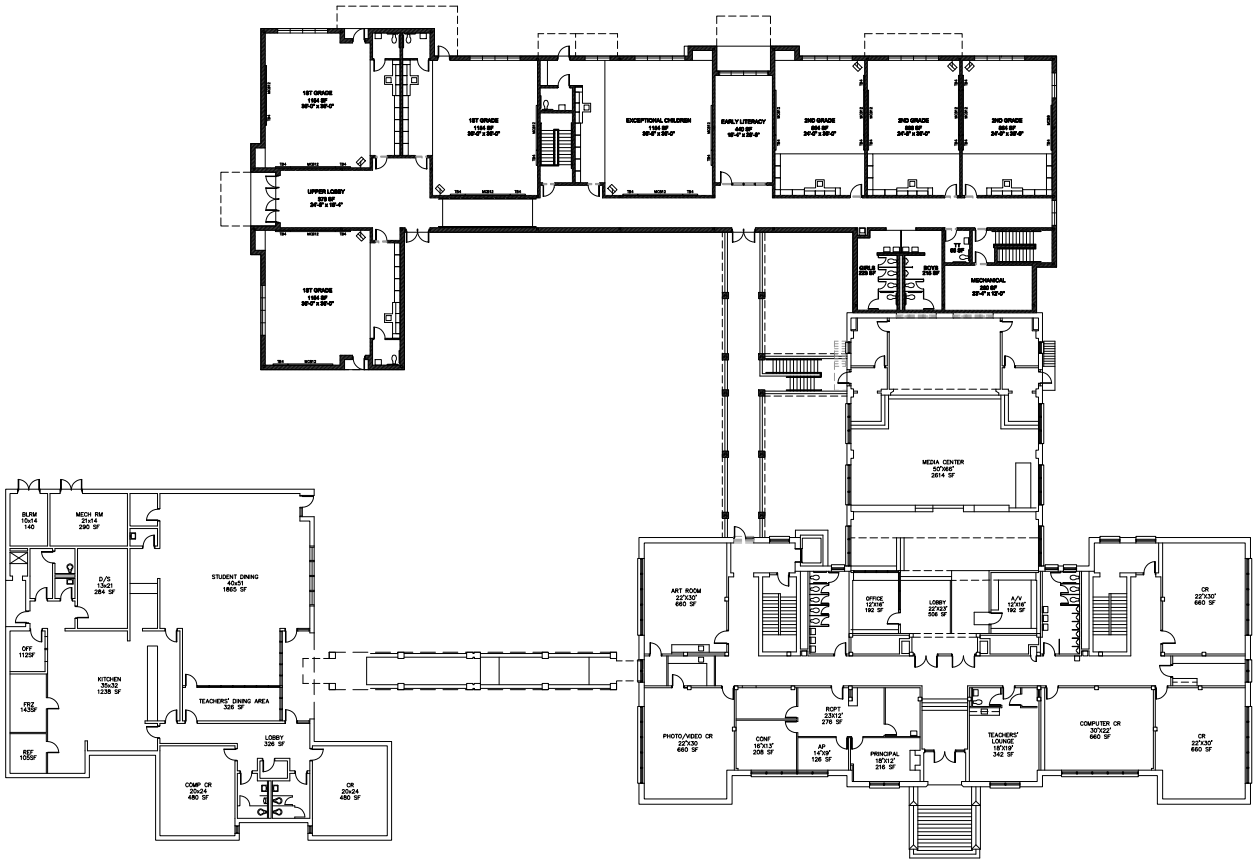
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

2000 MASTER PLAN
FIRST FLOOR PLAN

DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: C101



1. CAMPUS SECOND FLOOR PLAN
1/16" = 1'-0"

PROJECT NORTH

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T:919.468.1717 F:919.468.1716

SALIH METE GUREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GUREL ARCHITECTURE, INC.
CERT NO.
C-2987
50987
REGISTERED ARCHITECTURAL CORPORATION
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

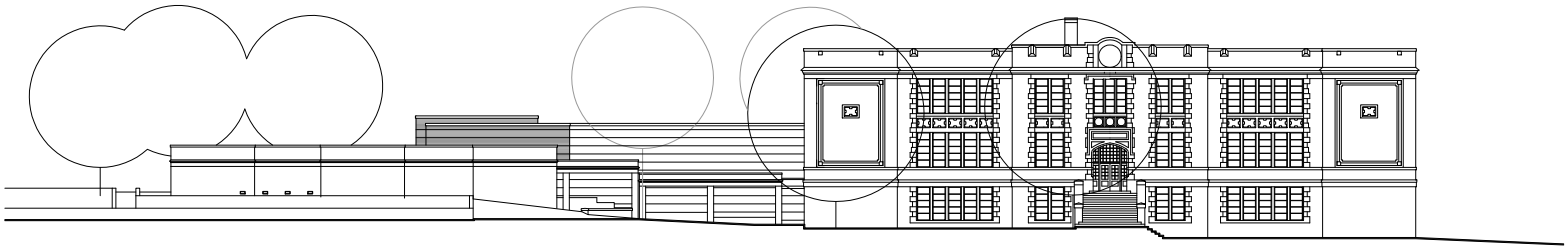
301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

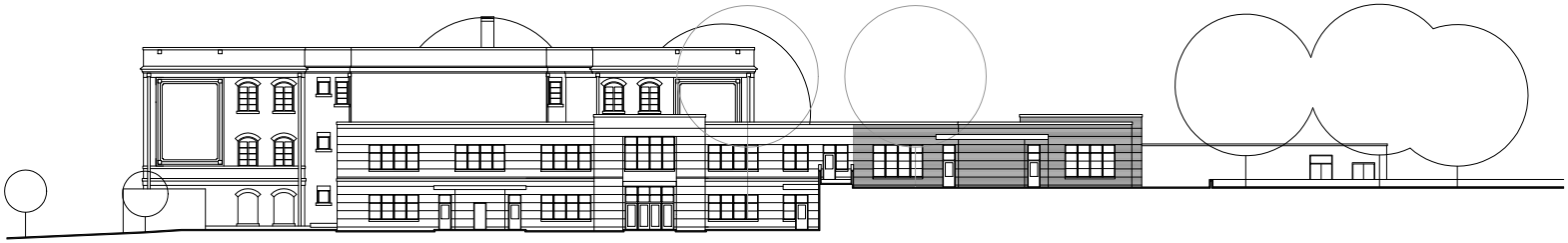
2000 MASTER PLAN
SECOND FLOOR PLAN

DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

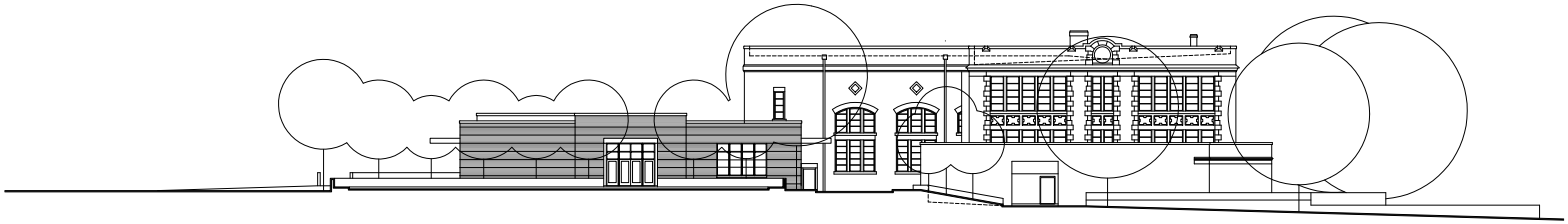
NO: C102



1. CAMPUS EAST ELEVATION
1/16" = 1'-0"

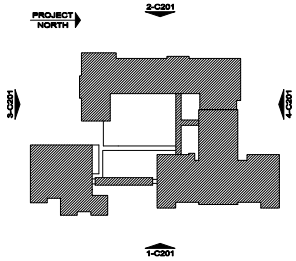


2. CAMPUS WEST ELEVATION
1/16" = 1'-0"



3. CAMPUS SOUTH ELEVATION
1/16" = 1'-0"

4. CAMPUS NORTH ELEVATION
1/16" = 1'-0"



CAMPUS KEY PLAN
1" = 80'-0"

GÜREL ARCHITECTURE
11459 EXECUTIVE CIRCLE
CARY, NORTH CAROLINA 27511
T-919.468.1777 F-919.468.1716

SALIH METE GUREL
REGISTERED ARCHITECT
5430
NORTH CAROLINA
CARY, NC

GUREL ARCHITECTURE, INC.
CERT NO.
C-2987
50987
NORTH CAROLINA
CARY, NC

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY

301 ST. MARY'S STREET
RALEIGH, NC 27603

WAKE COUNTY
PUBLIC SCHOOL SYSTEM
RALEIGH, NORTH CAROLINA

2000 MASTER PLAN
BUILDING ELEVATIONS

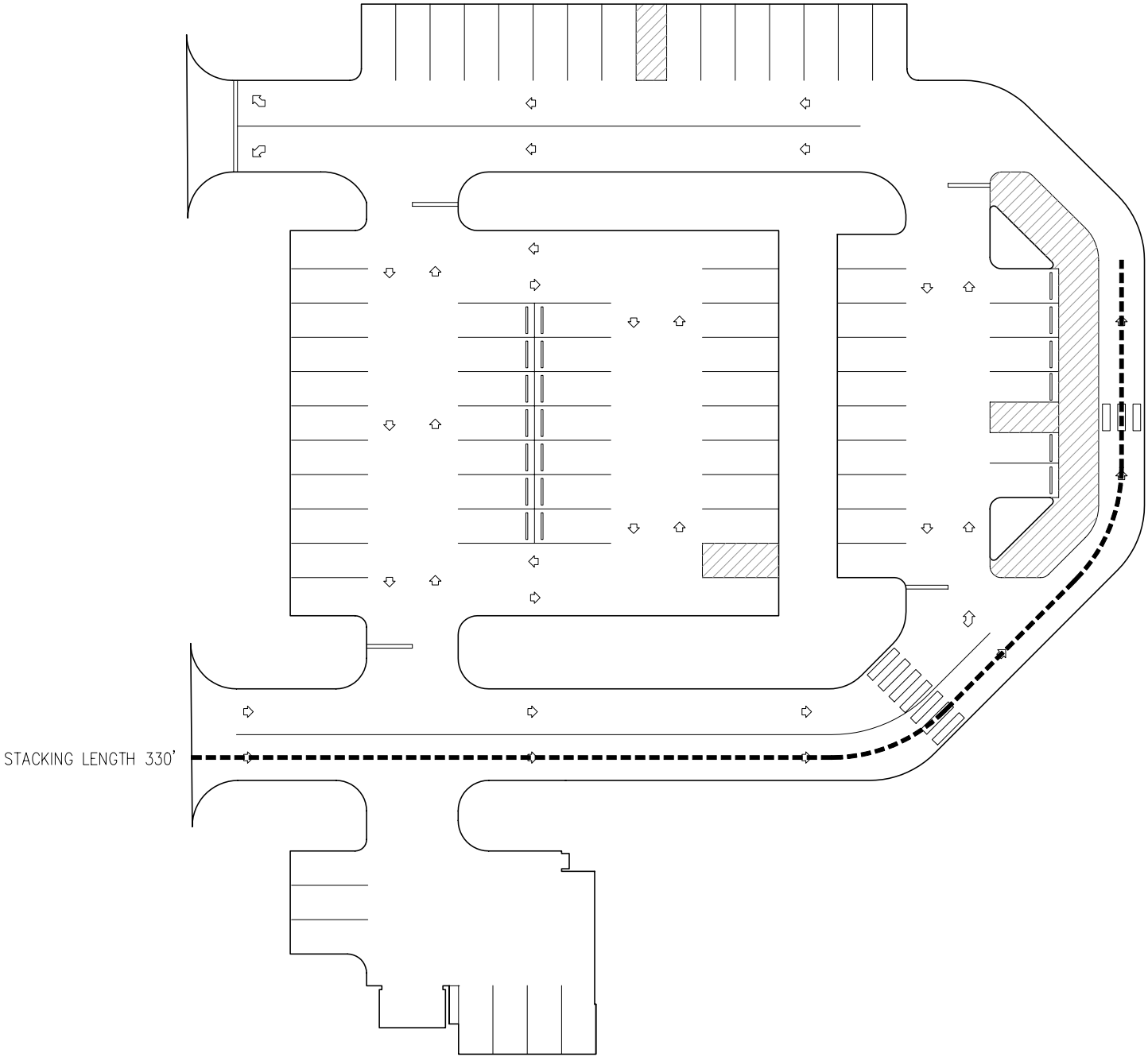
DATE:	04.15.2008
JOB NO:	WAR2
DRAWN BY:	M. GUREL
CHECKED BY:	M. GUREL
APPROVED:	-

NO: C201

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY SCHOOL

WAKE COUNTY PUBLIC SCHOOL SYSTEM



STACKING SCHEME A

1" = 40'-0"

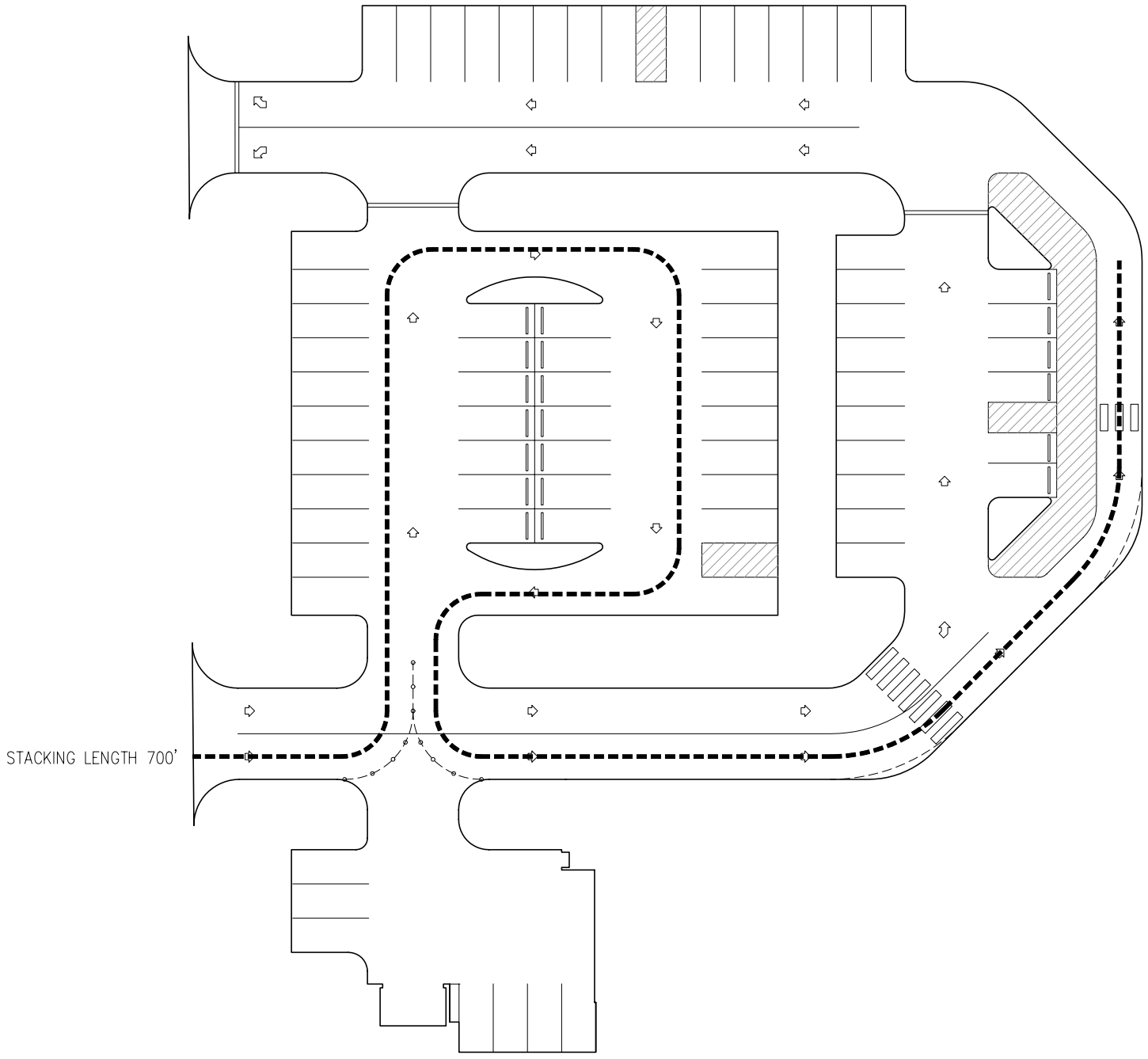
PROJECT NORTH

GÜREL ARCHITECTURE

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY SCHOOL

WAKE COUNTY PUBLIC SCHOOL SYSTEM



STACKING SCHEME B

1" = 40'-0"

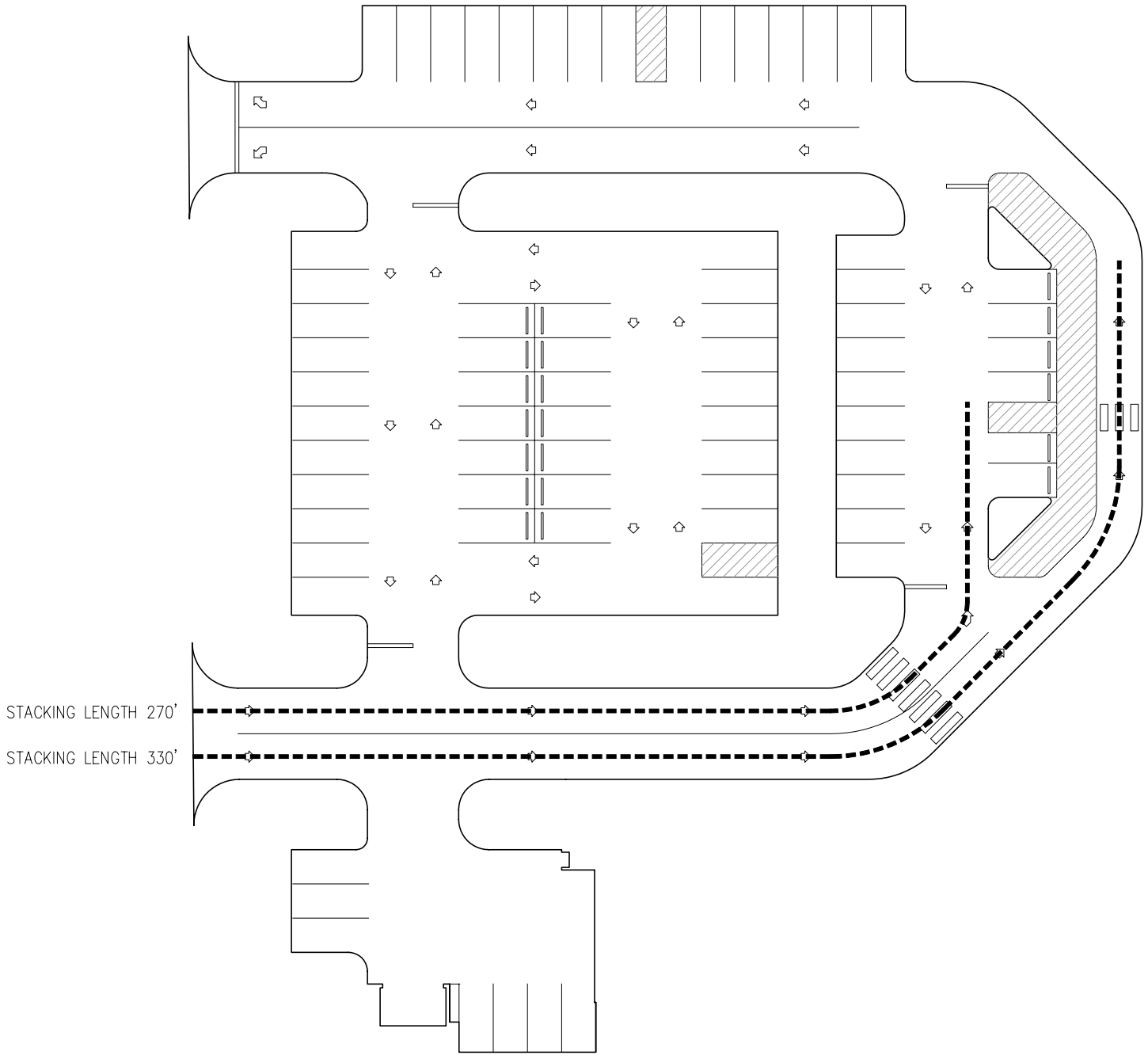
PROJECT NORTH

GÜREL ARCHITECTURE

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY SCHOOL

WAKE COUNTY PUBLIC SCHOOL SYSTEM



STACKING SCHEME C

1" = 40'-0"

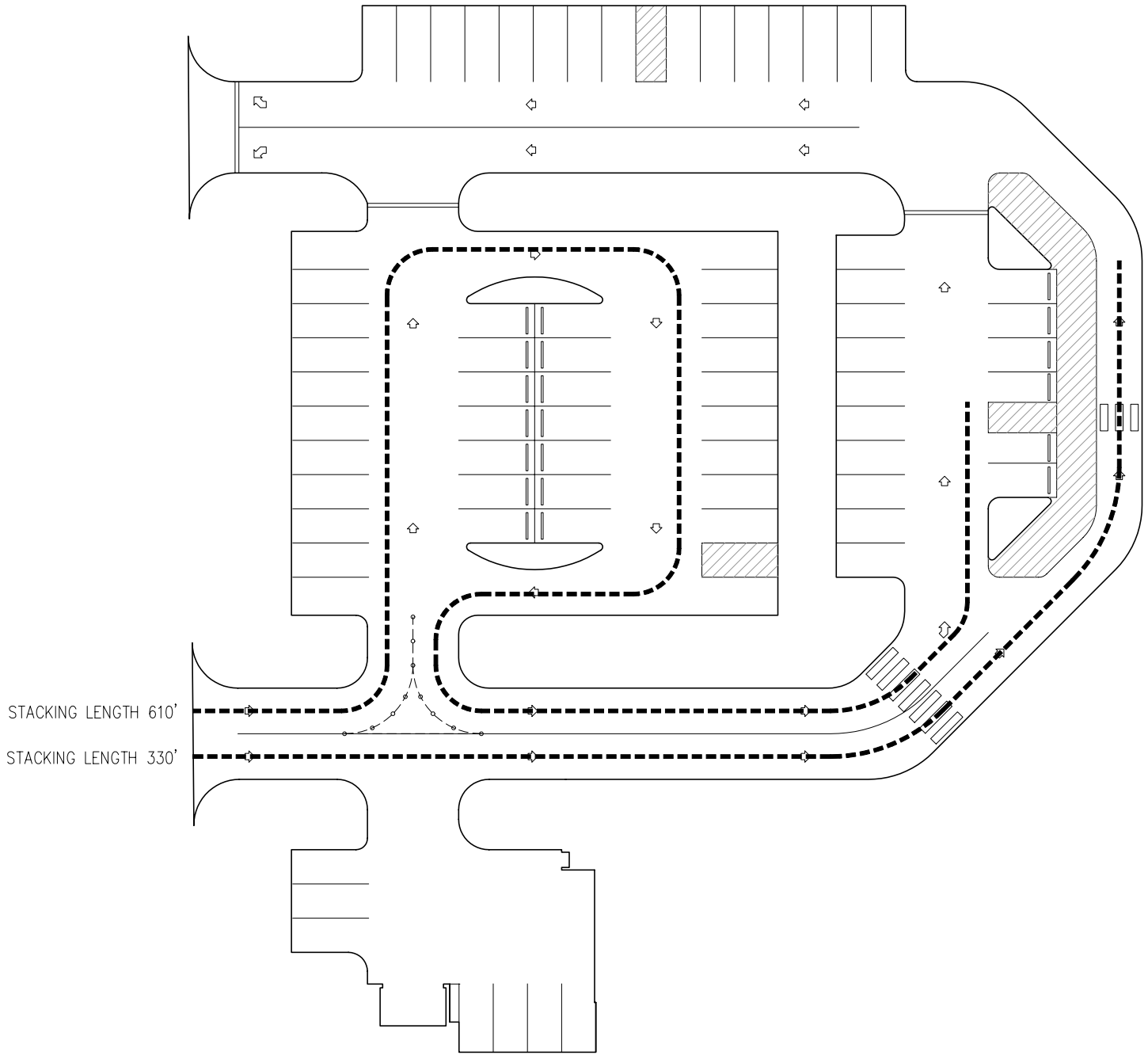
PROJECT NORTH

GÜREL ARCHITECTURE

ADDITIONS AND RENOVATIONS

WILEY ELEMENTARY SCHOOL

WAKE COUNTY PUBLIC SCHOOL SYSTEM



STACKING SCHEME D

1" = 40'-0"

PROJECT NORTH

GÜREL ARCHITECTURE