



PLANCON

PART E: DESIGN DEVELOPMENT

COMMONWEALTH OF PENNSYLVANIA
Department of Education
Bureau of Budget and Fiscal Management
Division of School Facilities
333 Market Street
Harrisburg, PA 17126-0333

PART E - DESIGN DEVELOPMENT

If there are any questions regarding the completion of these materials, contact the Division of School Facilities at (717) 787-5480.

CHANGES AND CLARIFICATIONS

Non-Reimbursable Work: Due to legislative changes in the reimbursement formula, building or site construction related to other schools or structures (athletic stadium, maintenance building, bus garage, fitness center, daycare center, etc.) on the project site may not be bid with the PlanCon project unless an exception is granted.

Qualified School Construction Bond (QSCB) and Qualified Zone Academy Bond (QZAB) Program: QSCB and QZAB were authorized under the American Recovery and Reinvestment Tax Act (ARRA). If a project is funded in whole or in part with QSCB or QZAB, the project is subject to all corresponding administrative requirements related to the Davis-Bacon Act and the U.S. Department of Labor Prevailing Wage. Refer to Part F "Construction Documents" instructions for bid document requirements.

Comprehensive Energy Modeling: Questions have been added to page E05 form to document comprehensive energy modeling.

GENERAL INSTRUCTIONS

Part E consists of the conference for review of the Design Development plans and emphasizes the following general design considerations:

- Resolution of issues discussed during review of the schematic plans
- Proposed use of facilities and adaptability to future change
- Design simplicity and flexibility
- Design compatibility with current building standards
- Elimination of excess or wasted space
- Energy conservation
- Sustainable school design (high performance/green design)
- Accessibility for persons with disabilities
- Opportunities for student supervision
- Building and site security
- Construction and life cycle costs
- Access for cables, etc., for educational technology

PlanCon Part E must be approved by the board prior to the date of the scheduled architectural review. If the board has not yet approved this PlanCon submission, the review will not be held.

The PlanCon Part E architectural review may be held in person or telephonically. "Partial" telephonic reviews, however, can not be scheduled; all parties must either be on the phone or attend in person. Consult with the PDE staff architect assigned to this project before scheduling the Part E review.

A school district administrator who is knowledgeable about the project and the educational program must be present at the PlanCon Part E architectural review conference. School board members may also attend.

The architect of record or an architect contracted with the architect of record for this project must attend the PlanCon Part E architectural review conference. The architect attending the architectural review conference must be registered in Pennsylvania and must be knowledgeable about the project.

If the drawings and specifications for any work that's part of this PlanCon project will be prepared by a consultant directly contracted with the school

district/CTC and not contracted with the Architect of Record, the consultant responsible for preparing the construction documents for this work will be required to attend the PlanCon Part F "Construction Documents" review and complete a separate F17 form if the construction documents for this work are not included in the documents prepared by the architect of record.

Submit one copy of all applicable forms and plans. The scale of site and floor plans must permit reasonable understanding and discussion of the design. Each space should be clearly labeled within, rather than by number and legend or arrow.

All Design Development plans and outline specifications must identify the architectural firm preparing the documents as well as the PDE project number, the project building name, the name of the school district or career and technology center (CTC), and the county in which the school district or CTC is located.

School building projects must conform to applicable construction codes or professional guidelines.

Fully Functioning Building and Site: The **base bid** must include all work required for the complete operation of the project building and site unless an exception is requested and granted. Required work includes the following at a minimum:

- Components for the operation and use of the project building and its site minimally required by PDE - building envelope (roof, windows, doors, foundation, floor slab, structure); electrical system; lighting (general and emergency); plumbing; access to water (for drinking and sanitation); sanitary sewage disposal; heating and ventilation system; automatic temperature controls; door hardware and locking systems; public address system; site access for vehicular traffic;
- Applicable local, state and regional codes, permits and other approvals such as but not limited to the fire alarm system, sprinkler system, stormwater management, traffic signaling and highway access, sanitary sewage disposal, and access to water; and
- District/CTC Requirements (educational/operational/administrative) such as but not limited to televisions, telephone systems, building security system, data networking and computer technology.

Combined Bids: The Department recognizes that school districts may be able to achieve savings on school construction projects using "combined" bids. The potential for savings arises from the ability of a contractor to offer a discount if awarded a contract on two or more projects. Accordingly, the Department will accept "combined" bids. The term "combined" bids pertains to the preparation of one bid proposal by a prime contractor for two or more school construction projects bid at the same time. Acceptance of "combined" bids does not, however, preclude the requirement for multiple contracts (e.g., general, plumbing, electrical, or any other specified work) as required by 24 P.S. § 7-751. Refer to PlanCon Part F instructions for additional information.

Draft "combined" bid specifications must be submitted to the Department prior to the submission of PlanCon Part F "Construction Documents" and the advertisement for bids for all applicable projects. This will provide ample time for review of the "combined" bid specifications to ensure their compliance with Departmental requirements. Failure to comply with this requirement may impact on the eligibility of a project for reimbursement.

Phased Bidding: The term "phased bidding" for these purposes means dividing the construction work into separate bid packages and then bidding the separate bid packages, such as asbestos abatement and demolition of structures unrelated to the project building, or the pre-purchase of construction

materials and equipment, such as boilers, unit ventilators and structural steel, on different dates separated in time by several months. This differs from construction phasing where the entire construction project is bid at one time, but the work itself is phased over the construction period to accommodate contractor schedules and construction material delivery. Refer to the instructions for page E06 for additional information on phased bidding.

Construction Related to Technology Improvements: School districts must provide educational programs and facilities that meet the needs of students both for today and tomorrow, but must also operate within legal and administrative requirements adopted in the past. However, technology, whether it is for communications or computer networks, is rapidly changing, but current Departmental procedures clearly limit school districts' ability to incorporate the latest technology into reimbursable school construction projects at the optimal time in the construction process.

Accordingly, the Department is adopting the following procedures for construction work related to technology improvements:

1. A school district may advertise and receive bids for technology improvements during the building construction period; the work to be bid after construction on a building starts must be limited to technology improvements only and shall not include structural, mechanical or electrical work critical to a building's operation or security;
2. If a school district elects to receive bids on the technology contract(s) after the general construction on a building starts, the Department will employ the same procedures used for reporting estimated movable fixtures and equipment costs at PlanCon Part G "Project Accounting Based on Bids" i.e., cost estimates reported for the technology contract(s) at PlanCon Part G must be equal to or greater than the estimated costs first reported at PlanCon Part D "Project Accounting Based on Estimates;"
3. If a school district plans to advertise and receive bids on the technology contract(s) after PlanCon Part G has been approved, that work must be bid as a supplemental contract and not as a change order to an existing contract; refer to PlanCon Part I "Interim Reporting" for the reporting requirements for change orders and supplemental contracts;
4. If cost estimates for technology improvements to be bid during the building construction period are reported at PlanCon Part G, the Department will grant an exception to the $\pm 3\%$ or $\pm \$300,000$ threshold for change orders and supplemental contracts if the bids for the technology contract(s) are opened within two years of the bid opening date for the general construction contract;
5. Estimated costs for the technology contract(s) will be excluded from the calculation of the 20% Rule for Alteration Costs at PlanCon Part G; and
6. Estimated costs for technology improvements will be included in the calculation of the Act 34 Maximum Building Construction Cost at PlanCon Part G.

With these procedures, the reimbursement status of a project will continue to be determined when PlanCon Part G for a project is approved. These procedures will apply to both Act 34 and non-Act 34 projects.

Act 34 of 1973 established public notification and referendum requirements for new buildings or substantial additions. Under Act 34's provisions, an Act 34 project is subject to the referendum and second hearing requirements until all construction is completed. In fact, an Act 34 referendum or second hearing may be required even during construction if a project's accumulated costs, including any planned equipment purchases or future construction work, exceed a project's Act 34 referendum or second hearing limit. When the Act 34 referendum limit or second hearing limit for a project is exceeded, the only

options available are: (1) to hold a referendum or second hearing; or (2) to reduce the scope of the proposed work.

However, reducing the scope of technology improvements on a building during construction may be far more problematic than prior to the start of construction. Bidding an entire project at one time gives a school district a complete picture of a project's costs. This then enables the school district to determine if any alternate bids should be accepted or if the entire project needs to be redesigned and rebid.

If the technology work is bid after construction starts on a project, the school district's options are limited to changing the scope of that one component as opposed to changing the project overall. Thus, providing this option on Act 34 projects should not be viewed necessarily as risk-free. School districts must therefore determine if the benefits outweigh the risks.

Installation of technology equipment - 24 P.S. § 7-751 requires any construction related to the installation of technology equipment to be competitively bid by a school district. Bid prices which include equipment and its installation may only be used for projects properly bid by the school district itself as required by law. This means that a school district can only contract with an IU vendor if and only if the IU vendor's price for equipment installation meets the bid specifications for a school construction project and is also the lowest responsible bid for that work.

PART E TRANSMITTAL, PAGE E01

Complete this page to formally submit PlanCon Part E. **Enter an "X" or "N/A" for each of the items listed on this page.** Although this page lists the attachments normally required, additions may be added to the list.

ROUGH GRADING TO RECEIVE THE BUILDING, PAGE E02

Page E02 provides instructions for reporting costs for rough grading to receive a building. Note that information on this page is used to estimate reimbursable site costs.

SANITARY SEWAGE DISPOSAL, PAGE E03

Page E03 provides instructions for reporting costs for sanitary sewage disposal. Note that information on this page is used to estimate reimbursable sanitary sewage costs.

GENERAL SITE DESCRIPTION/ENERGY MODELING, PAGES E04 - E05

Provide information on the project site and the surrounding areas, and any characteristics which may impact on the project building's location and design, as well as the safety and welfare of occupants.

Using the EPA/DOE Target Finder tool, provide information on the project's comprehensive (8,760 hour) energy modeling.

REQUEST FOR PHASED BIDDING, PAGE E06

The term "phased bidding" for these purposes means dividing the construction work into separate bid packages and then bidding the separate bid packages, such as asbestos abatement and demolition of structures unrelated to the project building, or the pre-purchase of construction materials and equipment, such as boilers, unit ventilators and structural steel, on different dates separated in time by several months. This differs from construction phasing where the entire construction project is bid at one time, but the work itself is phased over the construction period to accommodate contractor schedules and construction material delivery.

The final construction phase must include the general construction contract unless there are extenuating circumstances. Exceptions will be considered on a case-by-case basis. Unless an exception is granted, any construction, including but not limited to asbestos abatement, bid after the general construction contract will be treated as a supplemental contract, thereby possibly requiring an exception to the $\pm 3\%$ or $\pm \$300,000$ threshold for change orders and supplemental contracts.

The Department recognizes that phased bidding may be essential to the timely completion of a school construction project. However, legal and regulatory requirements applicable to school construction projects must take precedence in determining whether phased bidding on a project can be approved.

Act 34 of 1973 precludes the approval of work that commits a school district to a project before meeting all the requirements of the Act. For projects subject to the requirements of Act 34 of 1973, the following apply:

1. Approval of phased bidding will only be considered for work on the existing building that would be completed even if the new construction or substantial addition would not go forward. In general, work directly related to any new construction or an addition will not be considered for phased bidding;
2. PlanCon Part A "Project Justification" through PlanCon Part E "Design Development," must be approved by PDE for the entire construction project before any phased bidding can be approved by the PDE;
3. Approval of phased bidding must be issued by the Department no later than PlanCon Part F "Construction Documents" - no requests for phased bidding will be considered after the approval of PlanCon Part F;
4. Work determined by PDE to be necessary for the full functioning of the project building and site must be bid before the school district enters into the general prime construction contract for the project;
5. Work related to a building's structure and systems, determined by PDE to be necessary for the full functioning of the project building and site, may not be deleted from the project, i.e., bid as a non-reimbursable project, if this work will still be performed before a project's completion;
6. The costs reported at PlanCon Part G "Project Accounting Based on Bids" for movable fixtures and equipment, and technology work to be bid after construction starts must be equal to or greater than the amounts reported at PlanCon Part D "Project Accounting Based on Estimates;" and
7. All permits and approvals required by local, state and regional agencies related to a bid phase must be obtained prior to entering into contracts for each phase. Submit page F20 for each bid phase.

For projects not subject to Act 34, the following apply:

1. Approval for phased bidding will be considered for work related to the project so long as work critical to a building's operation, such as sanitary sewage disposal, is bid before or at the same time as the work on the structure itself;
2. PlanCon Part A "Project Justification" through PlanCon Part E "Design Development," must be approved for the entire construction project before any phased bidding can be approved by PDE;
3. Approval of phased bidding must be issued by the Department no later than PlanCon Part F "Construction Documents" - no requests for phased bidding will be considered after the approval of PlanCon Part F;

4. The scope of work related to the building's structure and systems may change up to the approval of PlanCon Part F; and
5. All permits and approvals required by local, state and regional agencies related to a bid phase must be obtained prior to entering into contracts for each phase. Submit page F20 for each bid phase.

Projects approved for phased bidding will not be eligible for reimbursement until the bids for all construction phases have been received and PlanCon Part G "Project Accounting Based on Bids" for all construction phases has been approved by the Department. If phased bidding approval is being requested, the board transmittal page (E01) for PlanCon Part E requires the board to acknowledge that the work on any phased bidding will not receive reimbursement until the bids are opened for the final phase and PlanCon Parts G and H are approved by PDE.

To request approval for phased bidding, PlanCon Page E06 must be completed. On this page, briefly describe how the bidding is to be phased, the bidding schedule, and why the project needs to be phased. Note that the maximum time permitted for opening bids on a phased project should not exceed two (2) years from the bid opening date of the first phase to the bid opening date of the final phase.

**PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MINE SUBSIDENCE EVALUATION REPORT, PAGE E07**

Act 17 of 1972 requires that all proposed school sites which are located in an area certified by the Department of Environmental Protection (DEP) as subject to mine subsidence be subjected to extensive sub-strata evaluation by DEP prior to any construction thereon. This evaluation must be submitted with Part E. Refer to Attachment A for designated areas.

The risk categories of mine subsidence and DEP's recommended actions are:

No Risk	no additional action necessary
Low Risk	no additional action necessary
Medium Risk	conduct risk study & implement mitigating engineering practices
High Risk	conduct risk study & evaluate selecting another site

Request a report of the evaluation early in the planning phases. The information should be used by the school district in determining the future or continuation of the project.

Contact the appropriate DEP regional office to determine if the proposed school site is in an area of mine subsidence. Those project locations that are questionable should be submitted for evaluation. Projects that involve an existing site and an existing school building should also be submitted.

OUTLINE SPECIFICATIONS FOR BUILDING MATERIALS, EQUIPMENT AND SYSTEMS

Provide a copy of the outline specifications for the building materials, equipment and systems, prepared by the architect in non-technical language. The outline specification must provide a list of the prime contracts, and describe the materials, finishes, construction procedures, structural, mechanical and electrical systems, sanitary sewage disposal, water, and alternate bids which affect the size or number of scheduled spaces proposed by the architect. Refer to Attachment B for an example of outline specifications for a project building with additions and alterations.

GENERAL FLOOR PLAN DRAWING

Provide a separate drawing of the project building's floor plan that identifies the scheduled spaces listed on the Part A room schedule(s).

Scheduled area is measured from the inside surface of all walls. Scheduled space includes instructional spaces such as classrooms, laboratories, planetaria, observatories, student project rooms, student activity rooms, seminar rooms, shops, band and chorus rooms, physical education stations and other areas which accommodate direct student instruction. It also includes general use areas such as libraries, instructional materials centers, locker and shower rooms, team rooms, instructors' offices, multi-purpose rooms, cafeterias including kitchen and storage, auditoriums including stage, health and first aid rooms, and faculty rooms; and administrative office suites including conference rooms. Not included are service areas, such as general storage, toilet rooms, custodian rooms, maintenance areas, utility areas, and circulation areas such as hallways and stairways. GUIDELINES FOR CALCULATING SCHEDULED AREAS ARE INCLUDED IN THE PART A INSTRUCTIONS, ATTACHMENT E.

Provide a drawing(s) of the building's scheduled area floor plan with the perimeters of the calculated scheduled areas highlighted in a contrasting color on the building floor plan. Use a different color to differentiate existing spaces from newly constructed spaces. Label the name of each space inside the outlined areas.

PROJECT SITE PLAN DRAWING

Provide a drawing of the project site which clearly shows site features that could include the following:

- Proposed location of project building, as well as other school buildings and structures planned in the future on this site
- Floor elevations for project building
- Existing and proposed site contours
- Connections for water, gas and sewage disposal
- Location of on-site sewage disposal plant, wells and underground storage tanks
- Location of flood plains, wetlands and other potential environmental problems
- Adjacent residential, commercial and industrial developments
- Rights-of-way, easements and utilities crossing the site
- Access to public roads
- Access roads, driveways, sidewalks
- Location of athletic fields and play areas
- Bus unloading and loading areas
- Locations of student drop off and pick up by automobile
- Pedestrian access
- Parking and access for persons with disabilities
- Service delivery access
- Location, access and parking for community use areas, such as athletic fields, gymnasiums, multi-purpose rooms, cafeterias and auditoriums
- Future building expansion opportunities
- Off-site work necessary for the full functioning of the project building and site (separate drawing may be necessary)

PROJECT BUILDING FLOOR PLAN DRAWINGS

Provide drawings of the building's floor plans which clearly provide the following:

- Key plan, floor elevations and scale on each page;
- All spaces identified by name or abbreviation to match the Part A room schedule; swing of all doors; restroom and locker room layouts; location of skylights; building entrances; access to the building and educational spaces for persons with disabilities;

- Special Education Classrooms and Resource Rooms - spaces identified by name; and
- Building Operations and Storage - location and delivery access; recycling and waste removal.

OTHER DRAWINGS

Provide the following drawings if they are part of the project building:

- Composite floor plan drawings showing structural, mechanical, plumbing, electrical and lighting systems;
- Building elevation drawings;
- Room and equipment layout for the administrative, guidance and health suite;
- Room and equipment layout for the library;
- Room and equipment layout for the kitchen and cafeteria;
- Room and equipment layout for a typical classroom;
- Room and equipment layout for home economics suite;
- Room and equipment layout for technology education labs and industrial arts shops;
- Room and equipment layout for locker rooms; and
- Room and equipment layout for other spaces.

AREAS SUBJECT TO MINE SUBSIDENCE

Act 17 of the General Assembly, Session of 1972, requires school districts or authorities planning to construct school buildings in areas subject to mine subsidence to obtain evaluations from the Department of Environmental Protection of the substrata of land on which the buildings will be situated. The following areas of the Commonwealth are hereby certified to be subject to mine subsidence:

ANTHRACITE COAL FIELDS - Counties and urban areas are provided for general guidance. School districts are advised to contact the Department of Environmental Protection to determine if a project site is located in an area subject to mine subsidence.

<u>COUNTY</u>	<u>URBAN AREAS</u>
Carbon	Beaver Meadow Lansford Summit Hill
Columbia	Centralia
Dauphin	Lykens
Lackawanna	Archbald Carbondale Jermyn Scranton Metropolitan Area
Luzerne	Freeland Glen Lyon Hazleton Jeddo Nanticoke Pittston Sugar Notch Wanamie White Haven Wilkes-Barre Metropolitan Area
Northumberland	Kulpmont Mt. Carmel Shamokin Trevorton
Schuylkill	Ashland Coaldale Frackville Girardville Mahanoy City McAdoo Minersville Port Carbon Pottsville Shenandoah Sheppton St. Clair Tamaqua Tremont Tuscarora Tower City
Susquehanna	Forest City

AREAS SUBJECT TO MINE SUBSIDENCE

BITUMINOUS COAL FIELDS:

- Allegheny County - entire county
- Armstrong County - entire county
- Beaver County - entire county
- Bedford County - Townships of Broad Top, Juniata, Londonderry
- Blair County - Townships of Allegheny, Antis, Juniata, Logan, Snyder
- Bradford County - Townships of Armeria, Barclay, Canton, Franklin, Leroy, Overton
- Butler County - entire county
- Cambria County - entire county
- Cameron County - entire county
- Centre County - Townships of Boggs, Burnside, Curtin, Liberty, Rush, Snowshoe, Union
- Clarion County - entire county
- Clearfield County - entire county
- Clinton County - entire county except Townships of Allison, Amar, Castanea, Crawford, Dunnstable, Greene, Logan, Pine Creek, Porter, Wayne
- Crawford County - Townships of E. Fairfield, E. Fallowfield, E. Mead, Fairfield, Greenwood, Oilcreek, Randolph, Richmond, Rome, S. Shenango, Troy, Union, Vernon, Wayne, W. Mead
- Elk County - entire county
- Fayette County - entire county
- Forest County - entire county
- Fulton County - Township of Wells
- Greene County - entire county
- Huntingdon County - Townships of Carbon, Cass, Tod, Wood
- Indiana County - entire county
- Jefferson County - entire county
- Lawrence County - entire county
- Lycoming County - Townships of Brown, Cogan House, Cummings, Jackson, McHenry, McIntyre, Pine Plunketts, Watson
- McKean County - entire county except Township of Ceres
- Mercer County - entire county except Township of Sugar Grove
- Potter County - entire county except Townships of Bingham, Genesee, Harrison, Oswayo, Sharon
- Somerset County - entire county
- Sullivan County - Townships of Cherry, Colley, Forks, LaPorte
- Tioga County - Townships of Bloss, Charleston, Covington, Delmar, Duncan, Elk, Gaines, Hamilton, Morris, Sullivan, Union, Ward
- Venango County - entire county
- Warren County - entire county except Townships of Columbus, Conewango, Farmington, Pine Grove, Sugar Grove
- Washington County - entire county
- Westmoreland County - entire county
- Wyoming County - Townships of Forkston, North Branch, Noxen

SAMPLE OUTLINE SPECIFICATIONS

This page gives an example of outline specifications which use non-technical language to convey technical information to those who are not familiar with building industry terms for a project building with additions and alterations.

LIST OF PRIME CONTRACTS

ROOFING AND SHEET METAL WORK

Roof system for non-sloping areas shall be adhered rubber membrane, .060" thick, bonded for the insulation. Existing roofing and insulation shall be removed on those portions of the existing building to be re-roofed.

STEEL DOOR FRAMES AND HOLLOW STEEL DOORS

All exterior door frames shall be formed from fourteen (14) gauge cold rolled galvanized steel. All interior door frames shall be formed from sixteen (16) gauge cold rolled, pickled and annealed steel. Exterior doors shall be fiberglass reinforced polyester metal doors. Doors shall be 1-3/4" thick with aluminum alloy rails and stiles. Door face shall be .120" fiberglass reinforced polyester with pebble-like embossed finish.

ALUMINUM DOORS AND FRAMES

All aluminum entrance doors shall be medium stile doors. All sections shall be not less than 1/8" thick. All aluminum frames shall be 1-3/4" x 4-1/2" with aluminite finish. Section thickness not less than 1/8".

WINDOWS

All new windows shall be aluminum clad wood window with double glazing and integral shades.

FINISH HARDWARE

All finished hardware shall be furnished and installed by the General Contractor. These shall include but not be limited to lock and latch sets, butts, panic bolts, door closers, wall bumpers, floor stops, rubber door silencers, interior door pulls, interior push plates, kick plates, thresholds, astragals, name plates, pad locks and key cabinets.

CAULKING

Caulking for interior use shall be an elastic waterproof adhesive. Caulking for exterior use shall be one (1) part polystyrene sealant. Completely seal around door and window frames, ventilators, grilles, all exposed masonry joints, indoor stone sills, coping, expansion joints and other changes in materials.

TILE WORK

Mosaic tile shall be approximately 1/4" thick, unglazed natural clay. Mosaic tile used in pool area shall be A137.1 and certified by manufacturer for use in pools.

ACOUSTICAL WORK

Lay-in acoustical panels shall be mineral fiber construction in 2' x 2' exposed grid.

RESILIENT FLOOR COVERING AND CARPET

Rubber flooring and stair treads shall be rubber tile with raised discs. Vinyl composition tile shall be 12" x 12" x 1/8" thick. Carpet shall be anti-static nylon carpet cemented to concrete floors.

HEATING AND AIR CONDITIONING

New hot water boilers to be used as prime source of heat. Gas is the source of fuel. Hot water unit ventilators to be installed in classroom areas of the school building. The administration and computer areas shall be air-conditioned. Existing roof top cooling units located on the roof will be removed and replaced with similar type equipment. Heating and ventilating installation shall conform with all basic requirements of state and local agencies.

PLUMBING

Water service is existing and no changes in service are required. Upgrade plumbing fixtures and piping systems for sewage disposal throughout building and provide handicapped toilet facilities as required to meet code.

ELECTRICAL

Add convenience outlets to classrooms. New emergency generator and related emergency lighting to meet present code. Provide for equipment wiring and other miscellaneous work. All electrical work shall be in accordance with National Electrical Code provisions. The following systems shall be extended to areas that are updated to meet current local and state codes: coded fire alarm system; public address system; television conduit system; and telephone conduit system.

CONSIDERATIONS FOR ALTERNATE BIDS

- Floor materials
- Ceramic tile substitute
- Windows