

CONNECTICUT STATE DEPARTMENT OF EDUCATION (SDE)
BUREAU OF SCHOOL FACILITIES (BSF)

OVERVIEW
SCHOOL CONSTRUCTION PROCESS

INTRODUCTION

The purpose of this manual is to provide a guide to the process to be followed by design professionals and Local Education Agencies (LEAs) in order to successfully and expeditiously move through the plan development, review, and approval process. It is designed to highlight the steps where attention to detail must be paid in order to avoid common errors that result in costly delays.

CHECK WITH THE (BSF) PLAN REVIEW UNIT on any item in this document if unclear. Investigate issue thoroughly before calling.

REFER TO THE SCHOOL CONSTRUCTION GRANT PROCESS located at www.ct.gov/sde for information concerning the reimbursement process (click on "Grants Management").

SITE APPROVAL

As stipulated in CGS Sec. 10-291 (a), No school building project for which state assistance is sought shall be undertaken except according to a plan and on a site approved by the Department of Education, the town or regional board of education and by the building committee...Even if the town owns the site, it does not mean that environmental, traffic access, and radon determination can be ignored.

BSF REVIEW OF SCHOOL CONSTRUCTION DOCUMENTS

The BSF plan review is separate from that which is required of the local officials prior to them issuing a building permit. The BSF is an impartial organization processing grant application requests as required by the Connecticut General Statutes (CGS) and agency regulations. The CGS Section 10-292(a) requires the BSF to verify that the school construction documents comply with all state and federal codes and laws. Another important BSF responsibility is to review all construction documents to determine which items are eligible for state grant assistance.

Incomplete submissions will not be accepted or processed for review by SDE. Any deviation from BSF standards **must be discussed** with and approved by BSF **prior** to document preparation and submission.

LOCAL PLAN REVIEW ALTERNATIVE (C.G.S Sec. 10-292(b))

Stand-alone projects for oil tank replacement, roof replacement, and town-funded projects (no statutory cost cap for local plan review purposes), as well as projects for network wiring, asbestos abatement, code correction, and energy conservation (with costs not exceeding one million dollars) may have plans reviewed for all state and federal codes by local code officials, in lieu of the SDE review. Use Form **ED042** (pages 1 and 2 obtainable on our website) and submit all materials required to obtain SDE plan approval. Be aware, however, that the local code officials are not mandated to conduct a review for the SDE. Also, be aware that local code officials are not required to review for compliance with Section 504 of the Rehabilitation Act of 1973 or the ADA. However, the **SDE is required to ensure that project documents are in compliance with federal accessibility requirements.** If this option is chosen (for the types of projects listed above only), the local officials must perform the same review procedure as would be performed by the SDE. Also, local official(s) responsible for Federal 504/ADA compliance must be willing to review the construction documents and certify compliance with federal accessibility requirements. Review guidelines will be provided to the school district when this option is exercised. This local review option cannot be utilized for a phase of a project. **The LEA must submit the ED042 to the BSF and receive a written plan approval from the SDE prior to going out to bid.**

PRE-REVIEW EVALUATION PROCESS (PREP) MEETING

Just prior to the start of the construction documents development process a PREP meeting will be held at the BSF. This meeting must be scheduled **by the school district** with the SDE as soon as possible after the architect has been selected. The **registered design professionals** responsible for the project are required to attend the meeting (Architects/Engineer "hands-on" personnel), as well as the school district "hands-on" personnel. Those representing the district's interest may include the Superintendent of Schools (or designated representative), members of the School Building Committee and/or the Board of Education, and local officials. Any other interested parties may also attend. At this time a review of the **code conformity process** to be conducted by the design professionals and the **plan review process** to be conducted by the Bureau of School Facilities will be discussed. Absence of any project design professional has historically resulted in delays due to errors and omissions at the Plan Completion Test (PCT) meeting. The purpose of the PREP meeting is to reduce to an absolute minimum any delays in the review and approval process, and for all parties to commit to a set of submission standards and a submission date(s). Public school projects are high profile and deal with public safety and accessibility. The design professionals assigned to the projects should be the most experienced available and have prior school/code experience. The BSF may waive the PREP meeting, conduct the meeting by telephone, or otherwise determine the scope and nature of such a conference. PREP meetings are conducted on Monday and Tuesdays only.

PLAN COMPLETION TEST (PCT) MEETING

A PCT meeting is held for each phase when **all** stages of the plan development process for each phase have been completed (including the code conformity and final coordination stage). This meeting must be scheduled **by the district** with the SDE in advance, preferably at the PREP meeting. In order to minimize delays and maximize continuity, it is necessary that the same design professionals, and at least one of the school district representatives who attended the PREP meeting, be present at this meeting. It is the design professional's responsibility to ensure that the documents submitted are complete, indicate compliance to all applicable codes, are the **final contract documents**, and are prepared in accordance with BSF guidelines and standards.

A statistical sampling is performed to ensure that the Masterlist and Checklists (downloadable from our website) have been used completely. The documents will not be accepted for full review until they have passed this test. If the documents appear to be incomplete, the meeting may be terminated and another PCT will need to be scheduled as the BSF schedule will allow. PCT meetings are conducted on **Mondays and Tuesdays only**. If the documents are accepted for full review, and are discovered to be substantially deficient, the SDE reserves the right to terminate the review and return the documents as incomplete.

LOCAL PLAN REVIEW ALTERNATIVE (> 30 DAY PROJECTS, C.G.S Sec. 10-292(c))

If, upon acceptance of the final plans, the BSF determines it cannot complete its review within 30 days, the school district has the option to ask their local officials to conduct the review in lieu of the SDE. Be aware, however, that the local code officials are not mandated to conduct a review for the SDE. Also, be aware that local code officials are not required to review for compliance with Section 504 of the Rehabilitation Act of 1973 or the ADA. If this option is available and chosen, the local officials/consultants must perform the same review procedure as would be performed by the SDE. Also, local official(s) responsible for Federal 504/ADA compliance must be willing to review the construction documents and certify compliance with federal accessibility requirements. Note that state codes or waivers do not take precedence over federal accessibility requirements. Review guidelines will be provided to the district when this option is chosen.

BSF REVIEW OF CONTRACT DOCUMENTS

BSF reviews usually result in code citations and comments. These items are documented in the "Plan Review Record" (PRR). Copies of the PRR are sent to the LEA, the lead design professional, and local and state building and fire officials. The design professional must retrieve the submitted contract documents, review them for marks/comments in conjunction with the Plan Review Record (PRR) and make all necessary revisions to the documents. These items can then be certified to be in compliance by the BSF, using one of the two choices listed below for each item on the PRR.

BSF REVIEW OF CONTRACT DOCUMENTS (cont.)

Documents Revised: Revised construction documents from the design professional(s) which implement the corrective action exactly as described in the citation/comment as listed in the PRR have been received, **or**

State Modification Received: A signed and approved modification from the appropriate State Authority Having Jurisdiction has been received. If additional work is required as a condition of the modification approval, then all revisions required to satisfy those conditions shall be incorporated into the plans (also see Section 3).

The district may request that the local official(s) certify compliance on certain items on the PRR in lieu of the BSF (where the PRR allows this option). Be aware that local code officials are not required to determine compliance with the federal accessibility requirements of Section 504 of the Rehabilitation Act of 1973 or the Americans with Disabilities Act. Also, local code officials are not required to conduct compliance certification for the SDE. However, **the SDE is required by law to ensure that project documents are in compliance with federal accessibility requirements.** If local code officials choose to sign-off for "Federal 504" or "ADA items listed in the PRR (only for items where they are given that option) they must be willing to review the construction documents and certify compliance with federal accessibility requirements. Note that state codes or waivers do not take precedence over federal accessibility requirements. If the local officials(s) certify compliance, they must follow the above procedures.

When the BSF verifies code compliance from the design professional (by appointment), and/or when the BSF receives the local code officials' certification on the official plan review record indicating code compliance, if there are no incomplete or in-progress items then our goal is to issue approval to go to bid within 24 hours.

LOCAL OFFICIAL REVIEW FOR BUILDING PERMIT

This is a reminder that the local officials are required to conduct a review of the plans and specifications prior to issuing a building permit. This review is separate from that which is required by the BSF. This **review** (for building permit) **is required even if** the local officials conduct the plan review in lieu of the SDE (as described elsewhere in this section).

BIDDING AND CONTRACT AWARD

Pursuant to C.G.S. 10-287(b), no bidding/construction or entering into contracts with vendors on state contracts available from the Department of Administrative Services or the Department of Public Works, may begin prior to written approval of final plans and specifications by the SDE. Violation of this results in project grant ineligibility. Contractors must be prequalified by DAS for projects over \$ 500,000 (total project costs). Upon written plan approval by the BSF, the district may commence the bidding procedure and secure the agreement or contract for construction. For Priority List projects, construction must commence within two years of the General Assembly grant commitment. Refer to the **SCHOOL CONSTRUCTION GRANT PROCESS** located at www.ct.gov/sde for requirements.

CHANGES TO CONTRACT DOCUMENTS

Any changes (including "value engineering" changes) to construction documents after SDE review/approval must be submitted to the SDE for review/approval otherwise the work associated with those changes will be ineligible for reimbursement.

ADDENDA AND CHANGE ORDERS

Addenda (changes to contract documents prior to bidding) issued after BSF approval must be submitted for BSF review. Change orders provide an orderly procedure to amend construction contracts (after bids are accepted) but should be used **only** for unforeseen or emergency conditions. Overhead and profit percentages on change orders for both prime contractor and subcontractors must be identified at the bidding stage in the Special/Supplemental Conditions in the contract. The total mark-up on change orders should be limited by contractual language and be on a "sliding scale" depending on the change order amount. Form ED042 CO (obtainable at www.ct.gov/sde), with original signatures, must be submitted for all change orders issued to publicly bid contracts. CM fees and reimbursables are to be reported on form ED046. Change orders and addenda must be submitted in **sequential order** for each project number **regardless of phasing. Submit complete change order packages.** Send change orders as they occur, do not compile large numbers of change orders. Incomplete change order submissions create delays for both the BSF and the LEA's reimbursement. Thoroughly explain the reason for issuing the change order. Give information concerning the location of work and other relevant building information. Always provide information, documents, sketches, etc. that show impact on codes, when applicable. Also, provide information relating to eligibility (see Ineligible/Limited Eligible Costs Worksheet obtainable on our website). Change orders should not total more than five percent of the total construction cost. Change orders exceeding this amount shall be reimbursed at half of the districts reimbursement rate. To be deemed eligible for reimbursement, change orders issued after July 1, 2008 must be submitted within 6 months of issuance, if these change orders are issued after 6 months they shall not be eligible for state grant assistance.

PROJECT CONTACT PERSON

In order to enhance efficiency and create a uniform flow of data and communications, each LEA is requested to designate **one person** in addition to the Superintendent to act as a school construction contact person. Provide name, address, telephone, fax, and E-mail for this contact person.

The BSF will not review meeting minutes to verify accuracy. All information discussed at BSF meetings can be located either in this manual or in supplemental hand-outs.

DIRECTORY

Mailing Address:

State Department of Education
Bureau of School Facilities, Room 258
P.O. Box 2219
Hartford, Connecticut 06145

Location:

State Department of Education
Bureau of School Facilities
165 Capitol Avenue, Room 258
Hartford, Connecticut 06106

Limited on-site parking may be available. It is recommended that you contact our office one week prior to a meeting to request parking spaces for meeting attendees (provide one name per vehicle); however, be advised that parking is not guaranteed due to space limitations.

Telephone:

(860) 713-6480 Grants Unit (Grant Information)
(860) 713-6490 Plan Review Unit (Construction Document Information)

Fax: (860) 713-7020

Internet website: www.ct.gov/sde

CONNECTICUT STATE DEPARTMENT OF EDUCATION (SDE)
BUREAU OF SCHOOL FACILITIES (BFU)

GENERAL CODE OVERVIEW

CURRENT FIRE SAFETY CODE

Section 29-292-10e;

(a) The provisions of Part I, Part II and Part V of this code shall apply to all occupancies and uses located within a building or structure.

(b) The provisions of Part III of this code shall apply to: (1) The design and construction of new buildings and structures, and (2) Buildings undergoing repairs, alterations and additions, and (3) Buildings and structures undergoing a change of occupancy or use as specified in section 29-292-11e of the regulations of Connecticut State Agencies. (4) For existing occupancies subject to an abatement order for violations of Part IV of this code, only new fire protection, electrical and mechanical system work shall be subject to the requirements of Part III.

(c) The provisions of Part IV of this code shall only apply to existing occupancies and uses located within existing buildings and structures.

CURRENT BUILDING CODE

Section 101.2. The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures. (see exception for existing buildings option).

Note that under Section 102.2, the provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

FEDERAL ACCESSIBILITY LAWS

Program accessibility is required in an existing designated school (an existing building is one where the groundbreaking was before June 3, 1977). The district may comply through such means as redesign of equipment, reassignment of classes or other services to accessible buildings, assignment of aides to beneficiaries, home visits, delivery of health, welfare, or other social services at alternate accessible sites, alteration of existing facilities and construction of new facilities in conformance with the requirements of 34 C.F.R. Section 104.23, or any other methods that result in making its programs or activities accessible to handicapped persons.

If the groundbreaking was after June 3, 1977, federal law defines it as a new building and it should have been constructed to the appropriate code at the time. The current state building code and federal accessibility regulations require that all new work be accessible to persons with disabilities. **Note that state codes or waivers do not take precedence over federal requirements.**

Federal law required districts to complete a **self-evaluation** and **transition plan**. Included in this plan is a derived percentage of designated buildings. If this has not been done, SDE recommends that a minimum of 50 percent of an LEA's schools of each type be designated accessible for persons with disabilities, i.e., complete accessible routes and programs per Section 504 of Rehabilitation Act of 1973.

The **deadline for compliance** with Section 504, Rehabilitation Act of 1973 was **June 3, 1980**.

The **deadline for compliance** with the Americans with Disabilities Act was **January 26, 1995**.

Regardless of the effective dates, all programs shall be accessible to, and usable by persons with disabilities.

FEDERAL ACCESSIBILITY LAWS (cont.)

Refer to the Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities: Building Elements Designed for children's use; Final Rule (Federal Register January 13, 1998) for **children's dimensions and anthropometrics** (concentrating on the "Primary User Group" of the element).

Title IX prohibits discrimination on the basis of sex in any educational program or activity receiving federal financial assistance.

STATE DEPARTMENT OF CONSUMER PROTECTION

Miscellaneous equipment

Furnishings

Professional licensing.

Public playground regulations

U.S. CONSUMER PRODUCT SAFETY COMMISSION

Playground equipment (refer to Section 9 of this manual).

Guidelines and recommendations for retrofitting bleachers.

FIRE EVACUATION PLAN

A fire evacuation plan for each floor (posted in the corridors) of each school shall be established for all students, staff, and general public in conjunction with and approved by the local fire marshal. The fire evacuation plan must include provisions for persons with disabilities and be in concert with the required "Public Entities' Policies and Procedures to Evacuate" (persons with disabilities). Review your plan with the local authorities.

SEE SECTIONS 3 and 6 for specific requirements for the:

Department of Public Safety (Fire Code and Building Code)

Department of Environmental Protection

Department of Public Health

Department of Transportation (State Traffic Commission)

Department of Labor

Federal Accessibility Laws

CONNECTICUT STATE DEPARTMENT OF EDUCATION (SDE)
BUREAU OF SCHOOL FACILITIES (BSF)

DOCUMENT SUBMISSION

PROCEDURES

1. To ensure proper completion and filing of the required forms and documents please reference the "**School Construction Grant Process**" (www.ct.gov/sde for all forms/worksheets/letters).
2. Although the SDE prefers that project submissions not be phased, plan reviews may be conducted in phases if pre-approved by the BSF. **Phasing must be requested in writing by the superintendent of schools with projected submission dates prior to the first phase submission.** The following are examples of acceptable phasing components:
 - Demolition
 - Site Work
 - Structural
 - Architectural
 - Mechanical/Electrical/Plumbing
 - Hazardous Material Abatement
 - Reroofing
 - Fuel Storage Tanks
 - F.F.&E.
 - Play Equipment
3. Submit to the BSF only **ONE** set of **FINAL construction plans (bound together** as a single set, bolt-through with hard backer strips recommended) and project manual (with specifications) with the completion date and the appropriate design professional's seal and signature (in addition to corporate seal when applicable) on each drawing sheet and cover of the project manual (required by the State Building Code). It is very important that you align right and bottom edges of the prints (**black line on nontranslucent bond paper only**) before binding. The submission shall be complete, fully detailed (with detail references) and dimensioned in accordance with accepted professional practice and the standards outlined herein. Keep all drawing information to the right side of the sheet. Plans and specifications marked "Not for Construction" will not be accepted. A completed original **ED-042 Form must be submitted** along with the plans and project manual **for each submission (and each phase). The plans submitted must be final, and no phase may be bid until BSF approval of that phase.** Submit previous phase plans and future phase progress drawings for reference.
4. BSF does not reimburse for costs incurred during routine building repair, maintenance, and replacement work. Submit the "**Ineligible And Limited Eligible Costs Worksheet**" for the **entire project** (all phases) at Phase 1, PCT 1. Refer to the School Construction Grant Process for information.
5. Professional project **cost estimates for each phase (itemized with soft costs pertinent to the phase)** must be submitted for each phase. The date of the construction documents shall be provided on the cost estimate ("Estimate for Plans Dated_____"). It is quite possible that revisions to the cost estimate will be required due to PCT or Review Comments. **Provide separate columns for Eligible Costs and Ineligible Costs.**
6. More than one project **in the same facility** may be combined into a single set of plans. However, projects at different facilities require different sets of plans, submitted at different meeting dates.
7. Submit **all current** BSF Checklists for each phase. Before submission **visit** the BSF Internet **website** (www.ct.gov/sde) to insure that **you have, and are using the most current version of this manual (the "Guidelines for School Districts and Design Professionals")**. Address each entry in the "Checklists" and look up code sections referenced in the corresponding "Master List." **Do not use "NA"** for entries on the checklists. Use "none" (condition not present) or "nps" (not in project scope). Explain conditions if not applicable, (i.e., no stairs, no labs, rating not required building sprinklered, etc.). Be **very** specific as to where code compliance can be found. **Hazardous materials** including asbestos, lead, pcb's, etc. should be planned for in almost every project involving demolition.

PROCEDURES (cont.)

8. The architect must provide a detailed **project scope letter** relative to the phase being submitted at the PCT meeting. If the project scope is not for a code update of the entire existing building then the letter shall **start with** that statement and then give a **detailed description** of the scope.
9. All contract **allowances** and **alternates** must be **identified at the time of submission** and (upon receipt of SDE approval to go to bid) must be publicly bid. Allowances must be reconciled with actual costs by a change order. Any accepted "Voluntary Alternates" requested by the bid documents must be reviewed by BSF as Addenda or Change Orders or may not be eligible for reimbursement.
10. When applicable, the following **approvals or waivers** (from other state agencies) are required prior to SDE issuing approval to go to bid (**all may require extensive lead time**). **Provide** to the other agencies the district name, school name, and **state project number**.
 - **Life Cycle Cost Analysis** - State Department of Public Works (DPW). Submit Determination Form.
 - **Water wells and septic systems** - State Department of Public Health (DPH) and/or the State Department of Environmental Protection (DEP).
 - **Water management** (flood plain) - State Department of Environmental Protection (DEP). Completed application requires signature of BSF Chief prior to submission by project engineer.
 - **Traffic impact study and encroachment permits** - Department of Transportation (DOT) and State Traffic Commission (STC).
 - **Approvals for wheelchair lifts and modifications (waivers)** when applicable- State Department of Public Safety (DPS).
 - **Asbestos alternative work practice** - State Department of Public Health.
11. **Modifications** (waivers) in progress with the State DPS must be submitted to BSF and include the local official's signature. Submit all **approved** state building code and state fire safety code modifications with signatures and a copy of the waiver request. Provide modification number, date approved, and code section being relieved on the Code Reference Sheet and on the BSF checklist. Also, clearly indicate on the Code Reference Sheet or in the modification request, the area(s) to which the waiver applies. If the State Authority Having Jurisdiction (AHJ) denies the request, the corrective action described in the BSF Plan Review Record shall be implemented (See Section 1). Delays will result if any of the items listed above are not submitted to the AHJ early in the plan development process. **The BSF does not require or direct anyone to seek a modification. However, be informed that the code modification process is an option under state law.** Note that waivers or modifications to state codes do not waive the requirements of federal laws.
12. **The superintendent of schools shall submit a letter (copied to the local B.O.E.) that provides a complete list of all school buildings (with grade ranges) within the district. Indicate whether the building is "Designated" (to be accessible to persons with disabilities) or "Nondesignated".**
13. Provide a project team **list** on an 8 ½" x 11" sheet (with name, address, telephone and extension, fax, E-mail, and role in project) including district contact person, architect, consultants, CM, and local code officials (including fire marshal, building official, 504/ADA official, and health official) for BSF files. Provide this separate from project manual.
14. **Do not alter or change the wording of any SDE form** or letter submitted without prior authorization from the SDE.
15. All documentation and correspondence shall have the **state project numbers and phase numbers** and be to the attention of the Chief of the BSF. After the PREP and or PCT meetings, send all plan review documentation and correspondence to the Architectural Design Reviewer assigned to the PCT. Formal correspondence from A/E firms must be by a licensed professional.

**DEPARTMENT OF CONSTRUCTION SERVICES (DCS)
BUREAU OF SCHOOL FACILITIES (BSF)
PLAN COMPLETION TEST (PCT) SHEET**

District _____ Facility _____

Project No. _____ Phase No. ____ of ____ Test # ____ Date _____

Reviewer _____ Reno Req. _____ Auth. Date _____ ED049 Site \$ _____

ED049 or Waiver Max. Area _____ ED049 H.P.E. _____ % of Normal Reimb. _____

STATUS INFORMATION

	Yes	No
Designated Accessible Facility	<input type="checkbox"/>	<input type="checkbox"/>
Entire Facility Sprinklered	<input type="checkbox"/>	<input type="checkbox"/>
Site Approval (New school, Increasing Acreage, Purchase Fac., etc.)	<input type="checkbox"/>	<input type="checkbox"/>
Review as Renovation Status Project and/or All Codes, All Floors	<input type="checkbox"/>	<input type="checkbox"/>
Roof Pitch Waiver Requested	<input type="checkbox"/>	<input type="checkbox"/>

ADMINISTRATIVE

	Complete	Incomplete
ED042 w/ Original Signatures and Date of Documents	<input type="checkbox"/>	<input type="checkbox"/>
Natural Light/Wireless Connectivity Technology Letter	<input type="checkbox"/>	<input type="checkbox"/>
Space Standards Letter (if exceeded)	<input type="checkbox"/>	<input type="checkbox"/>
Duplicate Final List of Bid Alternates, Allowances & Unit Prices	<input type="checkbox"/>	<input type="checkbox"/>
Cost Estimate (per phase w/Inelig. costs, Alternates & Allowances)	<input type="checkbox"/>	<input type="checkbox"/>
Ineligible Costs Worksheet (for entire project w/Alternates & Allowances)	<input type="checkbox"/>	<input type="checkbox"/>
S/S Misc. Letters: AOR, Stone Dust, Courtyard Occupancy/Load	<input type="checkbox"/>	<input type="checkbox"/>
S/S Misc. Letters: Toilet Room Availability, Non-conforming Floors/Ramp	<input type="checkbox"/>	<input type="checkbox"/>

CONTRACT DOCUMENTS

	Complete	Incomplete
Detailed Project Scope Letter (which codes/floors or limited scope)	<input type="checkbox"/>	<input type="checkbox"/>
B.I.M. - Conflicts Resolved – Design Professional Statement	<input type="checkbox"/>	<input type="checkbox"/>
Duplicate Overall Site Plan and Code Reference Sheet(s)	<input type="checkbox"/>	<input type="checkbox"/>
Plans Bound, Project No., Signed/Sealed, Key Plans w/References	<input type="checkbox"/>	<input type="checkbox"/>
1/8" Scale Plans or Larger (except overalls)	<input type="checkbox"/>	<input type="checkbox"/>
All Spaces Labeled on All Sheets (including demolition)	<input type="checkbox"/>	<input type="checkbox"/>
Graphics/Legibility, Detail References	<input type="checkbox"/>	<input type="checkbox"/>
Preliminary Drawings - All Other Phases	<input type="checkbox"/>	<input type="checkbox"/>
Project Manuals 3-Ring Bound, 2½" Max. ea. w/T.O.C., Signed/Sealed	<input type="checkbox"/>	<input type="checkbox"/>

STATISTICAL CODE SAMPLING

	Complete	Incomplete
All Required Checklists	<input type="checkbox"/>	<input type="checkbox"/>
Sheet Numbers & Specification Pages	<input type="checkbox"/>	<input type="checkbox"/>
All Required Forms/Ltrs. (Seismic, IAQ, Acoustics, Roof Plan)	<input type="checkbox"/>	<input type="checkbox"/>
Other Agency Approvals (Flood, LCCA, Water, Septic, Traffic, PCB'S)	<input type="checkbox"/>	<input type="checkbox"/>
Approved Modifications	<input type="checkbox"/>	<input type="checkbox"/>
Code & Submission Requirements	<input type="checkbox"/>	<input type="checkbox"/>

CONNECTICUT STATE DEPARTMENT OF EDUCATION (SDE)
BUREAU OF SCHOOL FACILITIES (BSF)

DOCUMENT PREPARATION

GENERAL

1. Please have **all personnel** involved in the preparation of final plans and specifications **read each item** in each section of this entire manual and **adhere** to the instructions and/or requirements of each item.
2. **ALLOW AND USE ENOUGH TIME TO DO FINAL IN-HOUSE CHECK/COORDINATION OF CHECKLIST AND CONTRACT DOCUMENTS BEFORE PRINTING AND SUBMISSION TO THE BSF.**
3. The BSF reserves the right to perform a **final inspection** of the facility at completion of each phase of construction.

DRAWING STANDARDS

1. Develop documents using **formats** as indicated in **Section 5**. Page layout may vary from samples in Section 5 of this manual as long as all information can be found on each sheet. Locate the "Cover Sheet" as the first sheet in the set, the "Information Sheet" as the second, and Code Reference Sheets next.
2. Submit **clear, readable** and **coordinated** drawings.
3. All drawing sheets must have the responsible architect's or engineer's registration **stamp with signature**. Corporate seals (by themselves) are not acceptable.
4. Show all required information on the **appropriate sheets** for that trade per industry standards. Coordinate and reference between disciplines when applicable. **Sheet** numbering, order, layouts, room names, and match lines shall be the **same between disciplines**.
5. All drawings shall be on **sheets** no larger than **30" x 42"**. Sheet size shall remain consistent throughout the entire submitted set.
6. Minimum **scale** shall be **1/8" = 1'-0"** for architectural/mechanical/electrical floor plans (exception on page 3, # 7 of this section). All **plan drawings** shall be **oriented in the same direction** including key plans and North arrows for all trades. Key plans shall be appropriately shaded or otherwise marked to indicate which part(s) of the building or site is (are) applicable to that drawing sheet.
7. **Clarity** and **variation of line weights** is critical to identify material changes and to interpret the intent of documents for review **and** construction.
8. **Lettering** shall be single-stroke and a **minimum height of 9 pt.** but always must be legible. Documents that are mechanically reduced or information electronically imported from other sources shall maintain the minimum lettering size noted above.
9. Provide **complete symbols legends and general notes** for site, architectural, mechanical, and electrical plans. Symbols shall be as indicated in the *Architectural Graphic Standards* and the current applicable industry standards including those listed in Section 5 of this manual. **Provide a note** on the Information Sheet and on each sheet where symbols are used, indicating where the symbols legend(s) are located. **Always** keep legends to the **right** side of the sheet.

DRAWING STANDARDS (cont.)

10. **Abbreviations** shall be industry standard and located on the "Information Sheet" (See Section 5). Provide a note on each sheet where abbreviations are used, indicating where the legend can be found. **List all abbreviations used.**
11. **Dimensions** must be provided for all new construction (floor plans) and overall size of existing buildings on Code Reference Plans.
12. **Poche** all new construction (clearly differentiate existing from new, including on code sheets). Show all symbols used in a symbols legend.
13. Do **not** use **loose appliqué**s or free-hand notes on the prints. All information must be on the original document prior to printing.
14. For limited scope projects use **screened backgrounds** for areas not included in the project(s) scope (when applicable). Maintain clarity and legibility.
15. The SDE requests that keynote systems not be used and work scope information be incorporated in the specifications or spelled out on the plans. If keynote systems (for work identification) cannot be avoided, the legend shall be on each sheet. Limit one number per note, see Section 5 of this document for symbols (work scope notes). Notify BSF **in advance** if use of a keynote system is **unavoidable**.
16. **Name all classrooms, areas, academic grade levels, and room numbers** at each room, on all architectural and engineering drawings (such as shops, labs, art rooms, home economics, storage, custodian, and all other specialty rooms). DO NOT use room numbers keyed to a legend. Provide plumbing fixture locations on electrical power plans.
17. Provide **separate demolition** plans with original room names.
18. Doors shall be numbered **sequentially** on door schedule. Also, sizes on the top of the door schedule shall be arranged sequentially by width (refer to Section 5 of this document). The BSF strongly recommends that the **door numbers follow the room/space number**, and the first door numbered for a space has the sub letter "A" even when the space only has one door.
19. **Reference windows**, glazed openings, and fenestrations on the Architectural floor plans.
20. Label **stairs** with the same number at all floors, i.e. Stair #1 First Floor, Stair #1 Second Floor, Stair #1 Third Floor, etc.
21. **Shade** new plumbing **fixtures** on plumbing drawings and **ducts** that penetrate floors on mechanical drawings. Clearly **show locations** of water sources (sinks, drinking fountains, etc.) on electrical power plans.
22. Provide specific and accurate **references** to details from origin drawings (plans).
23. **Check** all required **structural loads** for compliance with Chapter 16 of the State Building Code.

DRAWING REQUIREMENTS

1. Utilize previous **plan review records** from previous projects to avoid repeating errors and omissions.
2. The **state project number, phase number**, and facility **address** are required on **all** drawing sheets, on the specifications (cover page, Table of Contents, and bid forms), and on **all** forms and correspondence. The drawing sheet number shall be located at the lower right hand corner.
3. Show **all items** (new and existing when applicable) identified **on BSF Checklists**.

DRAWING REQUIREMENTS (cont.)

4. Please provide a **duplicate set** of Code Reference Sheets with code information and Overall Site Plan (separate from the submitted set of review documents and not required to be stamped/signed).
5. Clearly show compliance with **code** requirements, function, operation, features, and information pertinent to items **on** the contract **documents**. Avoid submission of catalog cuts. The code(s) shall not be cited, or the terms "Legal" or its equivalent used as a substitute for specific information (i.e. do not only state an item is in compliance with a code without actually diagramming compliance).
6. Code compliance issues **within the project scope** cannot be addressed as an "**alternate**" to the base bid. **Compliance** must be part of the **base bid** work. Also, **all** alternates (including "Voluntary Alternates" requested by the bid documents) must be included for review prior to bidding (or as an addenda or change order) for the appropriate phase (see Section 3).
7. The **Code Reference Sheets** (see Section 5 of this manual) shall show each entire floor, each on a **single sheet** (with overall dimensions) with a minimum scale of 1" = 20'-0" (a smaller scale requires prior BSF approval). This sheet shall also include the information outlined in Section 5. Most educational facilities are "Mixed Use" occupancies and many are comprised of multiple buildings separated by fire walls or rated exterior walls. Therefore, more than one set of height and area calculations may be required to be submitted. This information must appear on the Code Reference Sheet(s) and be referenced on the BSF checklist. **Provide "Code Information"** (shown in Section 5) **for all projects**.
8. Fixtures, furnishings, and equipment (FF&E) which are part of the project scope (provided by either contractor or owner) shall be clearly **described** within the submitted documentation. Detail, dimension, or describe **accessibility** requirements for new, existing, or relocated FF&E. **Show** all wheelchair footprints and required clear floor spaces (see Section 10).
9. In a case where an **existing building** is receiving an addition that is separated from the existing by a fire wall or creates two separate buildings with rated exterior walls, the existing building may be **losing accessible street frontage**. The State Building Code height and area must be checked to verify that the existing building is still in compliance.
10. Label all firewalls, all fire rated assemblies, all smoke barriers where required by code (on code reference plans, architectural floor plans and structural plans), and provide details (architectural and structural). Show lot lines (actual and "imaginary"), exterior wall ratings, and percentage of rated and nonrated openings (allowed by code and provided) when required by code. Provide **Fire Test Design numbers with hourly ratings** for all rated walls and assemblies (including existing when required by the project scope).
11. Assembly areas shall have **seating** locations for persons with disabilities that are integral, dispersed, and have fixed companion seating. **Show** all wheelchair **footprints** and required clear floor spaces. "Listening systems" for the hearing impaired are frequently required. "Removable fixed seating" or "removable bleacher seating" is not permitted at required accessible locations. If within the project scope **auditoriums** with fixed seating shall show all fixed seating, aisle dimensions, and catchment areas. **Gymnasiums** in the project scope shall show floor striping, bleachers (length and number of seating tiers), dimensions, etc. One assembly space is required to be calculated at 7 square feet per person or a posted load (not more than 15 square feet per person without a modification). Occupant loads for new assembly spaces with bleachers are calculated at the bleacher count plus 7 square feet per person (15 square feet for existing) for the remainder of the open space (minus aisles). Indicate the occupant load of courtyards based on the intended use of the space. If the occupant load of courtyards is zero, then provide a letter from the Superintendent of Schools (copied to the local B.O.E) stating that the courtyard will never be occupied except for maintenance reasons.
12. Refer to Chapter 16 of NFPA 1 Uniform Fire Code and NFPA 241 for the required protection, escape facilities, safeguards, etc. in buildings undergoing construction, demolition, additions, and alterations. Also C.G.S. Section 29-408 requires an 8-foot high fence or barricade along the street line for the duration of building or structure demolition operations.

DRAWING REQUIREMENTS (cont.)

13. If the project contains a **vertical opening** (other than exit enclosures and small shafts) please **call to discuss** situation. Also, **list the code sections** (on the drawings) that apply to each vertical opening.
14. Indicate **total number** of existing and proposed **parking spaces** on site. If project is part of a campus setting, show a **breakdown** for **each building**.
15. If at the time of project submission, **the existing building** is not being shown for code review (not in project scope), and **the project contains** an addition, a relocatable, or substantial alteration, the following must be addressed (show existing conditions if applicable). "Temporary" construction is permitted to be without an accessible route, however, "temporary" is defined in code with a 6 month maximum time limit.
 - A. Accessible parking and passenger loading zone (with dimensions and signage).
 - B. An accessible route from the parking **either to** the new construction/substantial alteration, **or to and through** the existing building to the new construction/substantial alteration.
 - C. An accessible route from the new construction/substantial alteration **to** the existing building.
 - D. Compliant **exits** on each floor receiving new construction/substantial alteration.
 - E. Accessible toilet facilities (show layouts with dimensions) **either** in the new construction/substantial alteration **or** in the existing building **and** an accessible route to these facilities.
 - F. Compliance with state and federal codes and laws for all new construction/alteration and impacted areas of the existing building.
 - G. If the school is a designated accessible facility, program accessibility status shall be addressed in one of the following methods:
 1. The documents will **show complete program accessibility** throughout the entire school, **or**
 2. The district will be notified in writing by SDE that according to Section 504 of the Rehabilitation Act of 1973, all school districts were required to have completed a **self-evaluation** prior to June 3, 1978. Also, the Americans with Disabilities Act (ADA) required a **self-evaluation** to be conducted prior to January 26, 1993. The purpose of these evaluations was to identify needs, outline solutions and indicate proposed timelines for meeting the accessibility needs of the specific community.
16. Incorporate **requirements for persons with disabilities**, including 36 inch clear accessible routes throughout (32 inch clearance for doorways), door hardware, accessible plumbing fixtures, signage, accessibility to all programs, accessible workstations for students and staff, accessories, controls, and mounting heights (including child heights for ages 12 and below). Identify all designated accessible spaces with the international symbol of accessibility on **all** architectural, mechanical, and electrical plans. Show **all dimensions** (including actual lavatory and sink dimensions including child heights when applicable). Be aware of and incorporate requirements for **playground equipment accessibility** (see Section 9 and PREP meeting handouts).
17. All performing areas (tiers, risers, stages, etc.) shall be accessible to persons with disabilities. In new construction, stages/platforms shall be directly accessible from the viewing area.
18. Accessible routes shall connect buildings, facilities, elements, spaces, parking, passenger loading zones, public streets, and sidewalks. Please provide the following note on the site plans describing the construction requirements for the accessible routes: "**Accessible routes' slopes shall be 1:20 (5%) or less and the cross slopes shall not exceed 1:50 (2%). Changes in levels shall not be greater than 1/2 inch, and slopes shall not be greater than 1:20 unless ramps or lifts are provided**". Accessible exits must be clearly identified on the floor plans and the site plans (note if lines are not changes in elevation greater than 1/2"). Site plans shall clearly identify **all exits** for persons with disabilities with the international symbol of accessibility. Also, use spot grades, "flush" condition notes, or show sections through areas at these exits as well as along the exterior accessible route (and at any materials change, e.g. concrete to bituminous, etc.).

DRAWING REQUIREMENTS (cont.)

19. If the project scope includes a new, an altered, or an addition to a Gymnasium, and sports fields are on site (or off-site and used by school students), then **viewing areas** for persons with disabilities are required (including **accessible routes** to/from all site elements).
20. Projects with **data technology** shall include **information** concerning equipment room ventilation as required, no exit enclosure penetrations, and proper sealing of penetrations through floors and walls; etc.

SPECIFICATION REQUIREMENTS

1. The Project Manual (specifications) shall include but not be limited to the following “front end” sections:
 - a) Invitation to Bidders (without specific dates and times).
 - b) AIA forms and/or other acceptable bid forms, including General and Supplemental Conditions, etc. (**do not submit “DRAFT” versions**). Electronic license date must be current.
 - c) A statement that current wage rates will be inserted at time of release for bids, when applicable (referencing **Sections 31-53 through 31-55 of the Connecticut General Statutes**).
2. The specification section **format** shall be consistent with the structure recommended by the Construction Specification Institute (CSI) for construction projects.
3. Each volume of the project manual shall include a Table of Contents. Locate the entire Table of Contents in the front (beginning on the first or second page) of each volume. The Table of Contents shall list the number of pages for each section (see Table of Contents in this manual for example).
4. Each page (**including “front end” sections**) shall have the specification section number and page number **at the bottom opposite the binder edge or at the center of the page**.
5. The page format shall be the same for all trades within the same manual.
6. Provide applicable professional seals and signatures on covers of specifications (with State Project Number and phase number).
7. The BSF recommends that the project manual (volumes), submitted for review, be bound in 3-ring binders for convenience of handling during the review process.
8. The BSF prefers the Door Schedule to be in the project manual.

PROJECT TITLE
AND
LOCATION

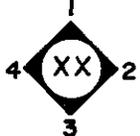
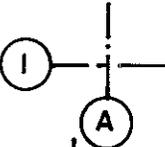
SDE PROJECT NUMBER
DATE

ARCHITECT
NAME AND ADDRESS

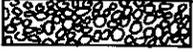
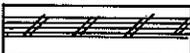
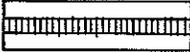
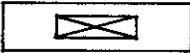
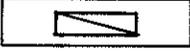
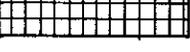
CONSULTANTS
NAME AND ADDRESS

<p>ARCHITECT'S</p> <p>TITLE BLOCK</p>		<p>INFORMATION SHEET</p>	<p>PROJECT NO.</p>
<p>ABBREVIATIONS</p> <p>LIST ONLY THOSE USED WITHIN THE SET.</p> <p>NOTE: IDENTIFY WHERE MECHANICAL AND ELECTRICAL ABBREVIATIONS, LEGENDS AND NOTES ARE LOCATED.</p>	<p>GRAPHIC LEGEND</p> <p>REFER TO PAGE 3 AND THE "ARCHITECTURAL GRAPHIC STANDARDS"</p>	<p>SYMBOLS LEGEND</p> <p>REFER TO PAGE 3, THE "ARCHITECTURAL GRAPHIC STANDARDS", AND THE APPLICABLE ANSI STANDARDS FOR MECHANICAL, PLUMBING, AND ELECTRICAL SYMBOLS</p>	<p>LIST OF DRAWINGS</p> <p>REFER TO THE "UNIFORM GUIDELINES AND RECOMMENDATIONS FOR PROCEDURES" FOR NUMBERING AND SEQUENCE.</p> <p>LIST ALL SHEETS</p>
<p>MOUNTING HEIGHTS</p> <p>NOTE: IF THESE ARE THE MOUNTING HEIGHTS TO BE USED FOR THE ENTIRE SET OF CONSTRUCTION DOCUMENTS, THEN MAKE SURE THAT ALL OF THE APPROPRIATE SHEETS OF ALL DISCIPLINES REFERENCE THIS SHEET.</p>		<p>GENERAL NOTES</p>	

GRAPHIC LEGEND

<p> ROOM NUMBER</p> <p> DOOR NUMBER</p> <p> INTERIOR ELEVATIONS</p> <p> WINDOW TYPE</p> <p> DETAIL NUMBER</p> <p> WORK SCOPE NOTE</p>	<p> EXTERIOR ELEVATIONS</p> <p> BUILDING SECTION</p> <p> WALL SECTION</p> <p> COLUMN GRID LINES</p> <p> REFERENCE POINT</p> <p> WALL TYPE</p> <p> REVISION MARK</p>
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MATERIALS LEGEND

<p> CONCRETE</p> <p> CONCRETE MASONRY UNITS</p> <p> BRICK</p> <p> STONE</p> <p> METALS</p> <p> COMPACTED GRAVEL</p> <p> CRUSHED STONE</p> <p> UNDISTURBED SOIL</p>	<p> PLYWOOD</p> <p> ACOUSTICAL TILE</p> <p> WOOD FRAMING - THROUGH MEMBER</p> <p> WOOD FRAMING - INTERRUPTED MEMBER</p> <p> FINISHED WOOD</p> <p> BATT INSULATION</p> <p> ACOUSTICAL INSULATION</p> <p> RIGID INSULATION</p>
--	--

NOTE :

REFER TO THE "ARCHITECTURAL GRAPHIC STANDARDS" FOR ADDITIONAL MATERIAL SYMBOLS.

ARCHITECT'S TITLE BLOCK

CODE
REFERENCE
SHEET

PROJECT NO.

CODE INFORMATION
INCLUDE FORMAT AND INFORMATION FROM THE "BUILDING INFORMATION FORM" IN THIS AREA.
REFER TO PAGES 5, 6, AND 7

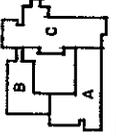
SYMBOLS LEGEND

GENERAL NOTES

NORTH

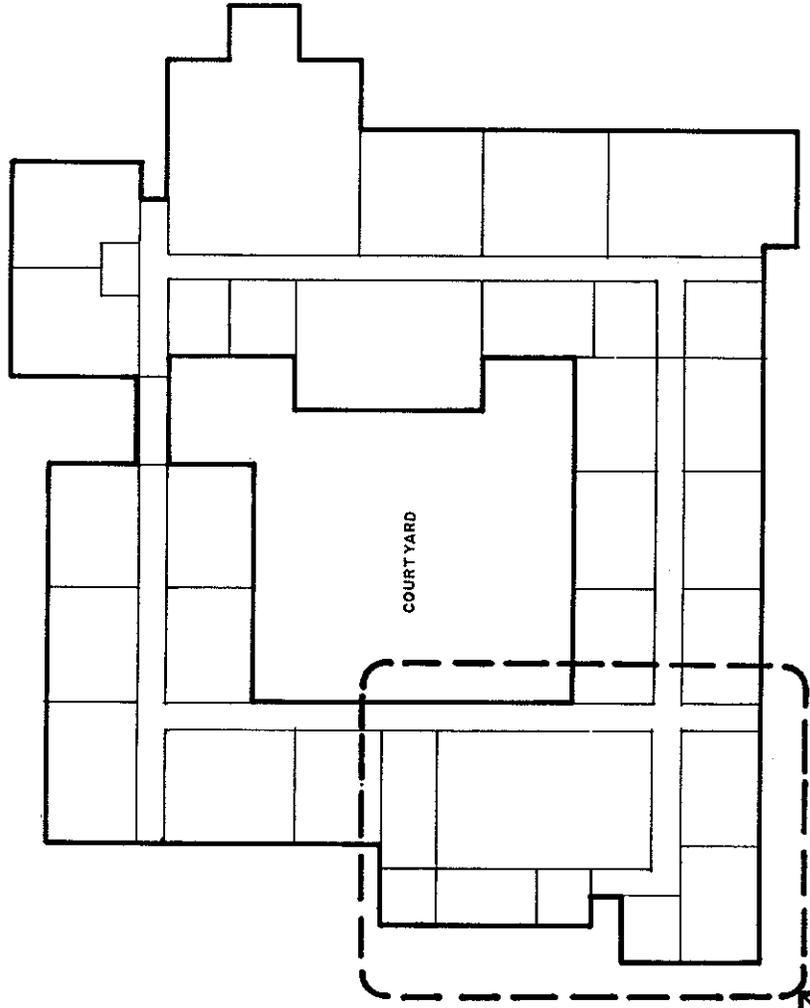


KEY PLAN



REFER TO PAGE 8 FOR EXAMPLE.

BUILDING AREAS



EXITING DIAGRAM

SCALE 1" = 20'-0" (MINIMUM)

FOR SAMPLE EXITING DIAGRAM AND GENERAL PLAN CONTENT REFER TO PAGE 10

CODE INFORMATION

Note: 1-8 apply to each separate building. 9-16 apply to the entire school (with occasional exceptions).

Date of Original Construction Dates of Additions

1. GROUP CLASSIFICATION (Chapter 3)

(Primary) _____
 (Incidental) _____

2. CONSTRUCTION TYPE (Chapter 6)

Minimum Type Required _____
 Actual Type Provided: (existing) _____
 (new) _____

3. BUILDING HEIGHT (Chapter 5)

Allowable Height (story/feet) _____
 Actual Height (story/feet) _____
 (Stories Above Grade) _____

4. BUILDING AREA (Chapter 5)

Building Area: (each floor)
 Existing construction _____ sq.ft.
 New construction _____ sq.ft.
 Total floor _____ sq.ft.

5. AREA MODIFICATIONS TO TABLE 503 (for each separate building as defined by fire walls and/or exterior walls)

Total Perimeter =	_____ ft.	_____ ft.	_____ ft.	_____ ft.
Open Perimeter =	_____ ft.	_____ ft.	_____ ft.	_____ ft.
	N	E	W	S
Total Frontage (<i>F</i>) _____ ft. (building perimeter which fronts on a public way or open space having 20 feet open min. width)		Perimeter (<i>P</i>) _____ ft. (perimeter of entire building)		
Width of open space (<i>W</i>) = _____				
$If = 100[F/P - 0.25] W/30$				
% Frontage increase (<i>If</i>) = _____ (506.2)				
Note: Provide a key plan to show total and open perimeter.				
% of Allowable Tabular Area, <i>A_t</i> (Table 503) _____				100%
% Increase for frontage, <i>If</i> (506.2) _____				+ _____ %
% Increase for automatic sprinklers, <i>I_s</i> (506.3) _____				+ _____ %
Total percentage factor _____				= _____ %
Conversion factor _____ (Total percentage factor ÷ 100%)				

CODE INFORMATION (cont.)

6. CASE 1 – SINGLE OCCUPANCY OR NONSEPARATED USES (302.3.1) (Allowable Area 506.4)

- a) ADJUSTED BUILDING AREA

$$\frac{\text{_____}}{\text{(actual building area)}} \div \frac{\text{_____}}{\text{(conversion factor)}} = \boxed{\text{_____}} \text{ sq.ft.}$$
- b) ALLOWABLE AREA per floor (Aa)

$$\frac{\text{_____}}{\text{(conversion factor)}} \times \frac{\text{_____}}{\text{(tabular area, Table 503)}} = \boxed{\text{_____}} \text{ sq.ft.}$$
- c) ACTUAL BUILDING AREA _____ sq.ft.
 (each floor of each building)
- d) TOTAL FLOOR AREA (all stories) _____ sq.ft.
- e) ALLOWABLE FLOOR AREA (all stories)

$$\frac{\text{Allowable area per floor (Aa)}}{\text{(Aa)}} \times \frac{\text{number of stories}}{\text{(maximum 3)}} = \boxed{\text{_____}} \text{ sq.ft.}$$

7. CASE 2 – MIXED OCCUPANCY SEPARATED USES (302.3.2) (Allowable Area 506.4)

(Use Group____) (Use Group____) (Use Group____)

$$\sum \frac{\text{Actual Area}}{\text{Allowable Area}} + \frac{\text{Actual Area}}{\text{Allowable Area}} + \frac{\text{Actual Area}}{\text{Allowable Area}} = \leq 1$$

$$\sum \text{_____} + \text{_____} + \text{_____} =$$

- a) ALLOWABLE AREA per floor (Aa)

$$\frac{\text{_____}}{\text{(conversion factor)}} \times \frac{\text{_____}}{\text{(tabular area, Table 503)}} = \boxed{\text{_____}} \text{ sq.ft.}$$
- b) TOTAL FLOOR AREA (all stories) _____ sq.ft.
- c) ALLOWABLE FLOOR AREA (all stories)

(Refer to State Building Code Interpretation No. 1-15-05).

(Use Group____) (Use Group____) (Use Group____) (Use Group____) (Use Group____)

$$\sum \frac{\text{Actual Area}}{\text{Allowable Area}} + \frac{\text{Actual Area}}{\text{Allowable Area}} + \frac{\text{Actual Area}}{\text{Allowable Area}} + \frac{\text{Actual Area}}{\text{Allowable Area}} + \frac{\text{Actual Area}}{\text{Allowable Area}} = \leq 3$$

$$\sum \text{_____} + \text{_____} + \text{_____} + \text{_____} + \text{_____} =$$

8. FIRE-RESISTANCE RATED REQUIREMENTS FOR BUILDING ELEMENTS (Table 601)

1	Structural frame: including columns, girders, trusses_____	<input type="text"/>	Hr(s)
2	Bearing walls: (Exterior)_____	<input type="text"/>	Hr(s)
	(Interior)_____	<input type="text"/>	Hr(s)
3	Nonbearing walls and partitions (Exterior)_____	see Table 602	
4	Nonbearing walls and partitions (Interior) _____	<input type="text"/>	Hr(s)
5	Floor const. (including supporting beams and joists)_____	<input type="text"/>	Hr(s)
6	Roof const. (including supporting beams and joists)_____	<input type="text"/>	Hr(s)

CODE INFORMATION (cont.)

9. OCCUPANCY LOAD

Design Total for Each Floor (list all floors) _____	<input type="text"/>
Total Exit Capacity for Each Floor (list all floors) _____	<input type="text"/>
Design Total for School _____	<input type="text"/>
Total Exit Capacity for School _____	<input type="text"/>

NOTE: If a wing or portion of school is subject to locking or sectioning-off, then each entire side shall be considered separately for occupant load, means of egress, number of exits, and balanced exit capacity - in addition to diagramming the exiting with the entire facility "open".

10. MODIFICATIONS.

Provide Modification Number and Code Section Number being modified. Note if approved or not

11. ACCESSIBLE BUILDING Designated Non-designated

12. MINIMUM PLUMBING FIXTURE COUNT (IPC Chapter 4) for each type of occupancy in each separate building or entire facility.

Group A Occupancy: (Design Load = _____)		Required	Provided
	W/C male	<input type="text"/>	<input type="text"/>
	W/C female	<input type="text"/>	<input type="text"/>
	Lav	<input type="text"/>	<input type="text"/>
	D/F	<input type="text"/>	<input type="text"/>
Group E Occupancy: (Design Load = _____)			
	W/C	<input type="text"/>	<input type="text"/>
	Lav	<input type="text"/>	<input type="text"/>
	D/F	<input type="text"/>	<input type="text"/>

13. ENTIRE BUILDING SPRINKLERED Yes No

14. THRESHOLD BUILDING CONDITIONS Yes No

15. CODES TO WHICH THIS PROJECT WAS DESIGNED

	Dated
State Building Code w/Supplement _____	<input type="text"/>
State Fire Code w/Supplement _____	<input type="text"/>
State Health Code _____	<input type="text"/>
OSHA _____	<input type="text"/>
Section 504 _____	<input type="text"/>
ADA _____	<input type="text"/>

16. BUILDING AREAS FOR GRANT CALCULATION (ENTIRE FACILITY)

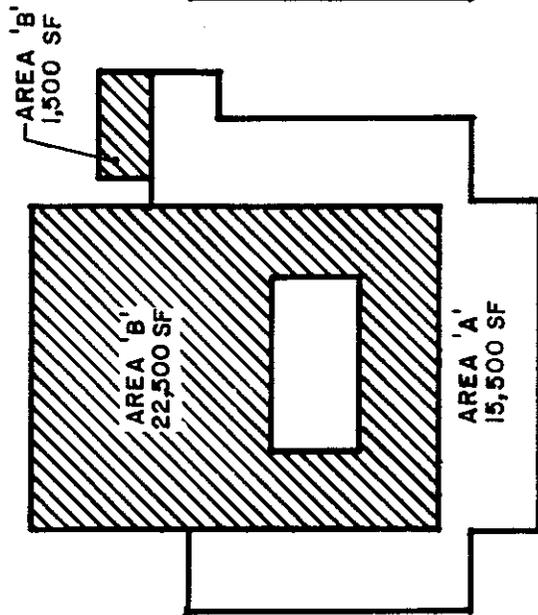
Per State Building Code Definition "Area, Building" (to interior face of exterior walls)

Existing construction prior to this project _____	<input type="text"/>	sq.ft.
Existing being demolished and removed _____	(- <input type="text"/>)	sq.ft.
Total new construction for this project _____	<input type="text"/>	sq.ft.
Total building area _____	<input type="text"/>	sq.ft.

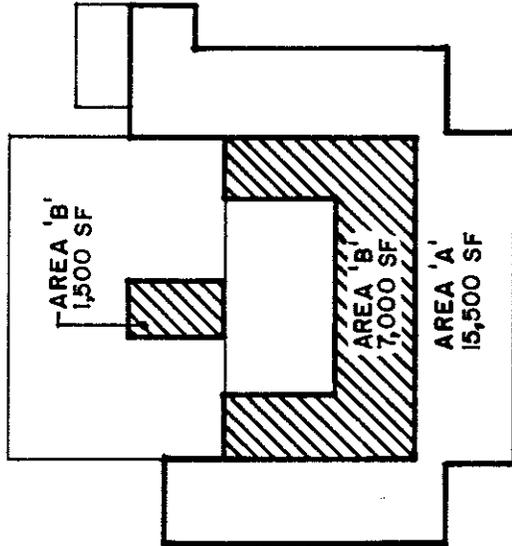
Open areas; floor openings and areas under projections (list separately, must reconcile with areas shown on code plan).

Building space _____	<input type="text"/>	sq.ft.
Building space _____	<input type="text"/>	sq.ft.

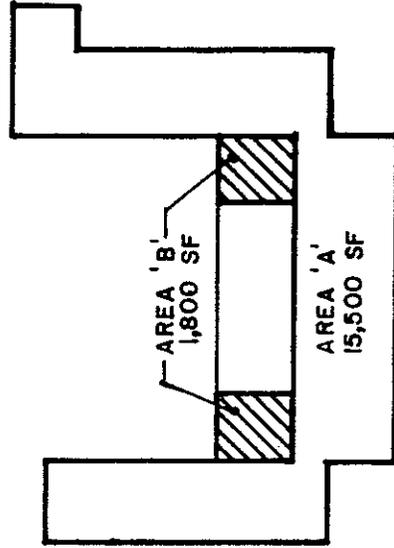
Total constructed building area (to exterior face of exterior walls, a.k.a. "contractor building area") _____	<input type="text"/>	sq.ft.
---	----------------------	--------



FIRST FLOOR
 EXISTING (AREA 'A') = 15,500 SF
 ADDITION (AREA 'B') = 24,000 SF



SECOND FLOOR
 EXISTING (AREA 'A') = 15,500 SF
 ADDITION (AREA 'B') = 8,500 SF



THIRD FLOOR
 EXISTING (AREA 'A') = 15,500 SF
 ADDITION (AREA 'B') = 1,800 SF

BUILDING AREAS

CODE REFERENCE PLAN LEGEND

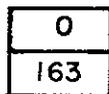


ROOM NUMBER

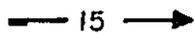
ROOM OCCUPANCY LOAD

$\frac{875}{20} = 43 P$ — AREA IN SQUARE FEET
 — OCCUPANCY LOAD FACTOR

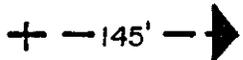
EXIT CAPACITY



— ACTUAL EGRESS OCCUPANCY OF DOOR OR STAIR
 — MAXIMUM ALLOWABLE EGRESS OCCUPANCY OF DOOR OR STAIR



DIRECTION OF TRAVEL
 WITH ACCUMULATED OCCUPANCY LOAD



MAXIMUM TRAVEL DISTANCE
 FROM FURTHEST POINT



ACCESSIBLE AREA OR EXIT



1 HOUR FIRE RATED WALL
 (TIGHT TO DECK ABOVE)

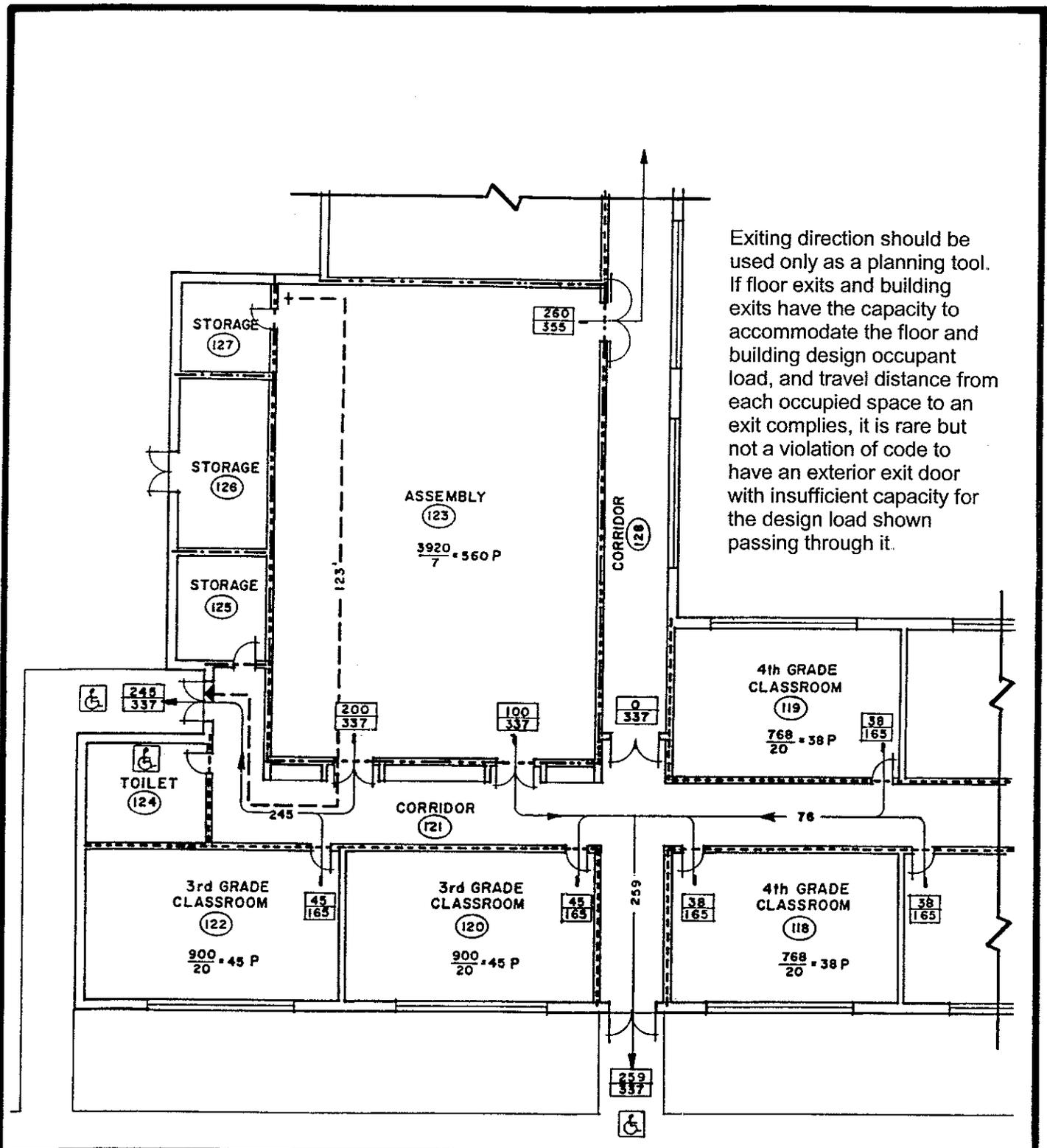


2 HOUR FIRE RATED WALL
 (TIGHT TO DECK ABOVE)
 2 HOUR FIRE WALL WHERE NOTED



20 MINUTE FIRE RESISTANCE RATING

NOTE: IF MORE THAN ONE OF THE ABOVE IS USED, THEN OTHER ADDITIONAL SYMBOLS MAY BE CREATED AND USED.



Exiting direction should be used only as a planning tool. If floor exits and building exits have the capacity to accommodate the floor and building design occupant load, and travel distance from each occupied space to an exit complies, it is rare but not a violation of code to have an exterior exit door with insufficient capacity for the design load shown passing through it.

Note: Do not obscure building elements and/or information with wall rating symbol(s).

SAMPLE EXITING DIAGRAM

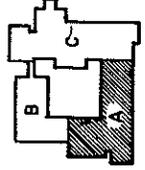
ARCHITECT'S TITLE BLOCK

FLOOR PLAN

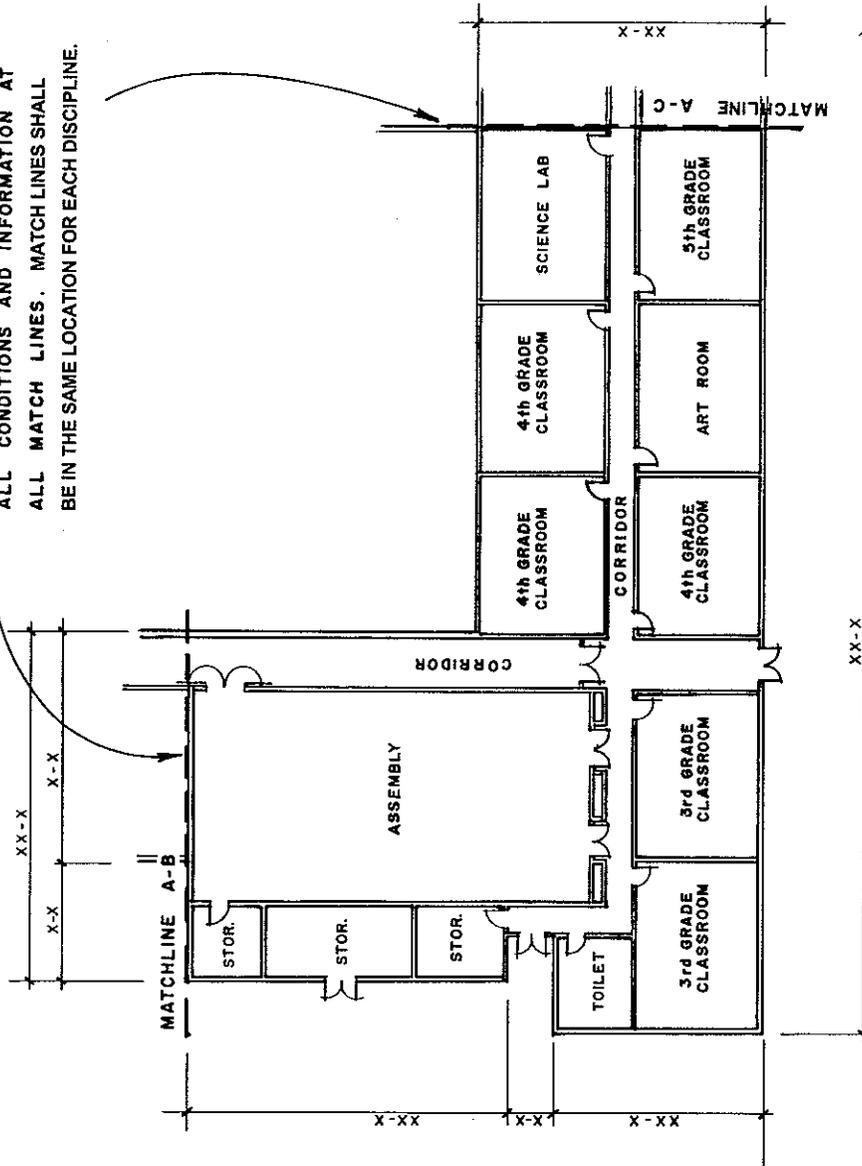
PROJECT NO.

GENERAL NOTES
AND
LEGENDS

KEY PLAN



CAUTION: DO NOT FORGET TO SHOW ALL CONDITIONS AND INFORMATION AT ALL MATCH LINES. MATCH LINES SHALL BE IN THE SAME LOCATION FOR EACH DISCIPLINE.



FLOOR PLAN - SECTION A

SCALE 1/8"=1'-0" (MINIMUM)

LEGEND

	E	EXISTING TO REMAIN
	RE	REMOVE EXISTING
	RL	RELOCATE EXISTING
	NL	NEW LOCATION OF EXISTING RELOCATED
	NR	NEW TO REPLACE EXISTING
	RR	REMOVE AND REPLACE ON NEW SURFACE

USE THIS LEGEND IN CONJUNCTION WITH THE ANSI MECHANICAL, PLUMBING, AND ELECTRICAL SYMBOLS. A SOLID DOT IN THE BOX INDICATES USE IN SET.

NOTE: USE CURRENT APPLICABLE A.N.S.I. STANDARDS FOR MECHANICAL, PLUMBING AND ELECTRICAL SYMBOLS.

THE FOLLOWING PAGES CONTAIN SAMPLES OF THE SYMBOLS REQUIRED TO BE USED.

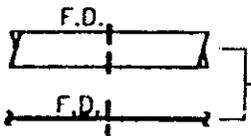
HVAC SYMBOL LIST

 Supply or Outside Air Duct Up or Csd

 Supply or Outside Air Duct Down

 Return or Exhaust Duct Up Or Crg/Crr

 Return or Exhaust Duct Down

 Fire Damper

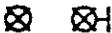
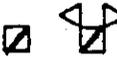
 Volume Damper

 Duct Smoke Detector

 Direction of Supply or Outside Air

 Direction of Return or Exhaust Air

ELECTRICAL LEGEND

-  RECESSED DOWNLIGHT FIXTURE; SUBLETTER INDICATES FIXTURE TYPE
-  EMERGENCY RECESSED DOWNLIGHT FIXTURE; SUBLETTER INDICATES FIXTURE TYPE/EMERGENCY POWER BACK UP
-  SURFACE-MOUNTED LIGHT FIXTURE; SUBLETTER INDICATES FIXTURE TYPE
-  WALL-MOUNTED LIGHT FIXTURE; SUBLETTER INDICATES FIXTURE TYPE
-  TYPICAL CEILING-MOUNTED, FLOURESCENT LIGHT FIXTURE; SUBLETTER INDICATES FIXTURE TYPE
-  TYPICAL FLOURESCENT LIGHT FIXTURE WIRED FOR NORMAL AND EMERGENCY/24-HOUR EMERGENCY POWER BACK UP/NIGHT-LIGHT/WALK-THRU CIRCUIT
-  FLOURESCENT WALL-MOUNTED FIXTURE; SUBLETTER INDICATES FIXTURE TYPE
-  LINEAR FLOURESCENT FIXTURE; SUBLETTER INDICATES FIXTURE TYPE
-  POWER/LIGHT TRACK WITH NUMBER OF FIXTURES AS INDICATED ON PLANS; SUBLETTER INDICATES FIXTURE TYPE
-  CEILING OR WALL-MOUNTED, SELF-CONTAINED EXIT SIGN WITH EMERGENCY POWER BACK UP AND DIRECTIONAL CHEVRONS INDICATED ON PLANS
-  CEILING OR WALL-MOUNTED EXIT SIGN WITH DIRECTIONAL CHEVRONS INDICATED ON PLANS
-  CEILING OR WALL-MOUNTED, SELF-CONTAINED EMERGENCY LIGHT UNIT; FIXTURE SHALL MONITOR MAJOR LIGHTING CIRCUIT IN AREA
-  CEILING OR WALL-MOUNTED, SELF-CONTAINED EMERGENCY LIGHT UNIT WITH REMOTE POWER CAPABILITIES; FIXTURE SHALL MONITOR MAJOR LIGHTING CIRCUIT IN AREA. SUBLETTER "M" INDICATES MASTER UNIT; SUBLETTER "S" INDICATES SLAVE UNIT

ELECTRICAL LEGEND

	MANUAL FIRE ALARM PULL STATION
	FIRE ALARM VISUAL INDICATING UNIT
	FIRE ALARM AUDIO/VISUAL INDICATING UNIT
	FIRE ALARM SPEAKER/VISUAL INDICATING UNIT (VOICE EVAC. SYSTEM)
	MASTER FIRE ALARM PULL BOX
	SMOKE DETECTOR FOR ELEVATOR RECALL CONTROLS
	FIRE ALARM CEILING-MOUNTED SPEAKER
	REMOTE FIRE ALARM FLASHING STROBE LIGHT
	FIRE ALARM CONTROL PANEL
	FIRE ALARM FLOW SWITCH
	SPRINKLER ALARM SUPERVISORY SWITCH
	COMMUNICATION PHONE TO F.A.C.P.
	AUTOMATIC FIRE ALARM SMOKE DETECTOR
	AUTOMATIC HEAT DETECTOR WITH TEMPERATURE RATING
	FIRE ALARM MAGNETIC DOOR HOLD DEVICE
	EMERGENCY CALL SWITCH
	EMERGENCY CALL LIGHT
	EMERGENCY SHUT-OFF SWITCH (SPECIFY ELECTRICAL OR GAS)

CONNECTICUT STATE DEPARTMENT OF EDUCATION (SDE)

BUREAU OF SCHOOL FACILITIES (BSF)

MASTER LIST

INTRODUCTION

The Bureau of School Facilities (BSF) of the State Department of Education (SDE) is responsible for reviewing and approving school construction documents for completeness and code conformity. The BSF is the only group that reviews for all state and federal codes and laws simultaneously, and is in a unique position to construct this Master List.

PURPOSE

The purpose of this publication is to act as a guide to assist design professionals and local code enforcement officials to easily cross-reference code requirements for many aspects of construction, i.e., egress, additions, assembly/stage, etc. This will expedite our review by helping to ensure that the number of code violations and oversights on plans submitted are at an absolute minimum. It is not intended to replace any code requirement, but to act as a building plan design/review aid. Also, this document in no way alleviates the design professional's responsibility to complete construction documents in conformance with all legal requirements, not just those listed herein.

FUTURE UPDATES

The SDE cannot be responsible for changes that may occur to codes that render parts of this document inaccurate. Users who agree to accept and use this document should be willing to make necessary changes to it if code requirements change, until revisions and reprinting can be made by this department.

**BUREAU OF SCHOOL FACILITIES
MASTER LIST**

THIS DOCUMENT IS ADVISORY ONLY, AND IS NOT INTENDED TO REPLACE ANY LOCAL, STATE OR FEDERAL REQUIREMENTS. IT IS A COMBINATION OF MAJOR CODE ITEMS DRAWN FROM APPLICABLE STATE CODES AND FEDERAL LAWS AS THEY PERTAIN TO CONNECTICUT SCHOOLS PRE-K THROUGH 12. THE MOST RESTRICTIVE CODES APPLY AND NOT ALL ITEMS WOULD PERTAIN TO ALL SCHOOLS. THIS DOCUMENT CAN BE EFFECTIVELY USED AS A CHECKLIST FOR DEVELOPING OR REVIEWING CONSTRUCTION DOCUMENTS AND IS SUBJECT TO REVISIONS.

LEGEND

(New)	NEW OCCUPANCY OR NEW CONSTRUCTION (including work within existing buildings)
(Existing)	EXISTING BUILDINGS
(IBC)	2003 INTERNATIONAL BUILDING CODE (adopted by the 2005 State Building Code)
(IFC)	2003 INTERNATIONAL FIRE CODE (adopted by the 2005 State Fire Code, Parts I, II, & III)
(NFPA 101)	2003 NFPA 101 (adopted by the 2005 State Fire Code, Part IV)
(504)	SECTION 504, REHABILITATION ACT 1973
(ADA)	AMERICANS WITH DISABILITIES ACT
(OSHA)	CURRENT O.S.H.A. - TITLE 29/LABOR
(HEALTH)	CURRENT CONNECTICUT PUBLIC HEALTH CODE
(CGS)	CONNECTICUT GENERAL STATUTES

1. EGRESS

- A. Separate exits from each floor
 - (New) 1018.1, Table 1018.1, 1014.2.1, 1014.2.2, (IBC, IFC)
4.3.10 and Part 104: Subparts A, B, C (504)
4.1.3(8)(9), 4.3.10 (ADA)
 - (Existing) 15.2.4, 15.2.1.1, 7.4 (NFPA 101)
4.3.10 and Part 104: Subparts A, B, C (504)

- B. Area of refuge:
 - (New) 4.1.2(7)(d) and Part 104: Subparts A, B, C (504)
 - (Existing) 4.1.6(1)(a), 4.1.2(7)(d), and Part 104: Subparts A, B, C (504)

- C. Doors in direction of travel:
 - (New) 1008.1.2 (IBC, IFC)
 - (Existing) 15.2.1.1, 7.2.1.4.2, 7.2.1.4.3 (NFPA 101)

- D. No exit through hazardous areas:
 - (New) 1013.2 (IBC, IFC)
 - (Existing) 15.2.1.1, 7.5.1.6 (NFPA 101)

1. EGRESS (cont.)

- E. Number of assembly exits:
 - (New) 1018.1, Table 1018.1 (IBC, IFC)
4.3.10 and Part 104: Subparts A, B, C (504)
4.1.3(8)(9), 4.3.10 (ADA)
 - (Existing) 15.1.2.2.1, 13.2.4, 7.4 (NFPA 101)
4.3.10 and Part 104: Subparts A, B, C (504)

- F. Assembly main entrance/exit:
 - (New) 1024.2 (IBC, IFC)
Section 3 (CGS P.A. 03-231)
 - (Existing) 15.1.2.2.1, 13.2.3.6.1, 13.2.3.6.5 (NFPA 101)

- G. Assembly other exits:
 - (New) 1024.3 (IBC, IFC)
 - (Existing) 15.1.2.2.1, 13.2.3.7, 13.2.3.7.4 (NFPA 101)

- H. Occupant load and exit capacity:
 - Educational:
 - (New) 1004.1, 1005.1, 1024.1, Table 1004.1.2, Table 1005.1 (IBC, IFC)
 - (Existing) 15.1.7, 15.2.3.1, 7.3, Table 7.3.1.2, Table 7.3.3.1 (NFPA 101)

 - Assembly:
 - (New) 1004.1, 1005.1, Table 1004.1.2, Table 1005.1 (IBC, IFC)
 - (Existing) 15.1.2.2.1, 13.2.3.1, Table 7.3.1.2, Table 7.3.3.1 (NFPA 101)

- I. Two remote doorways
 - (New) 1014 (IBC, IFC)
4.3.10 and Part 104: Subparts A, B, C (504)
4.1.3(8)(9), 4.3.10 (ADA)

- J. Travel distance and common path:
 - (New) 1015.1, Table 1015.1, 1013.3, 1024.8 (IBC, IFC)
 - (Existing) 15.2.6, 15.2.5.3, 15.2.1.1, 7.12.1, 15.1.2.2.1, 13.2.5.1.1, 13.2.6 (NFPA 101)

2. ADDITIONS, NEW CONSTRUCTION, AND EXISTING (when applicable)

- A. Determine use group, construction type, and fire resistance rating of structure elements:
 - (New) 301.1, 401.1, 602.1, Table 601 (IBC)

- B. Building limitations:
 - (New) Chapters 5 and 6 (IBC)

- C. Fire walls and opening protectives:
 - (New) 705.1, 715 (IBC)

- D. Fire separation distance, exterior walls, and openings:
 - (New) 704.5, 704.8, 704.12; Tables 601, 602, 704.8 (IBC)

- E. Mixed occupancies:
 - (New) 302.3 (IBC)

2. ADDITIONS, NEW CONSTRUCTION, AND EXISTING (when applicable) **(cont.)**

- F. Separation of occupancies and opening protectives
(New) 302.3.2, Table 302.3.2, 706.3.6, 706.7, 715, Table 715.3 (IBC)
- G. Existing structures
(Existing) Chapter 34 (IBC)

3. ASSEMBLY, STAGE, PLATFORM (interior and exterior areas)

- A. Assembly seating (interior and exterior and assistive listening)
(New) 1108.2, 1108.2.7 (IBC), 1024.9, 1024.1.1 (IBC, IFC)
4.1.2(18), 4.33 (504)
4.1.3(19), 4.33 (ADA)
(Existing) 15.1.2.2.1, 13.2.5.4.4, 13.2.5.6.3 (NFPA 101)
4.33, 4.1.6(4)(f), and Part 104: Subparts A, B, C (504)
4.33, 4.1.6(3)(f), and Part 35: Subparts B, C, D (ADA)
- B. Stage standpipes:
(New) 410.7 (IBC), 905.3.4 (IBC, IFC)
(Existing) 15.1.2.2.1, 13.4.5.12.1 (NFPA 101)
- C. Stage vents:
(New) 410.3.7, (IBC), 401.10 (IFC)
(Existing) 15.1.2.2.1, 13.4.5.5 (NFPA 101)
- D. Stage curtain:
(New) 410.3.5 (IBC), 401.10 (IFC)
(Existing) 15.1.2.2.1, 13.3.3.1, 13.4.5.7, 10.2, 10.3.1 (NFPA 101)
- E. Proscenium walls:
(New) 410.3.4 (IBC), 401.10 (IFC)
- F. Catwalks:
(New and Existing)
1910.23(c),(e)(1), (e)(4) (OSHA)
- G. Stage and platform access:
(New) 1108.2.8 (IBC)
4.33.5 and Part 104: Subparts A, B, C (504)
4.33.5 and Part 35: Subparts B, C, D (ADA)
(Existing) 4.1.6(4)(f)(ii), 4.33.5, and Part 104: Subparts A, B, C (504)
4.1.6(3)(f)(ii), 4.33.5, and Part 35: Subparts B, C, D (ADA)
- H. Stage accessory rooms:
(New) 410.5 (IBC), 401.10 (IFC)

4. CLASSROOMS AND ALL OTHER ROOMS (not specifically named in this checklist)

- A. Window for rescue & ventilation for all student occupancies:
(New) 1025.1.1 (IBC, IFC)
(Existing) 15.2.11.1.1, 15.2.11.1.2 (NFPA 101)
- B. Preschool through second grade and level of exit discharge:
(New) 419.1.1, 419.1.2 (IBC), 401.16 (IFC)
(Existing) 15.2.1.2 (NFPA 101)

4. CLASSROOMS AND ALL OTHER ROOMS (not specifically named in this checklist) (cont.)

- C. Sinks:
 - (New) 1101.2, 1109.3, and ICC A117.1 Section 606.1 (IBC)
4.24 and Part 104: Subparts A, B, C (504)
4.24 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.24 and Part 104: Subparts A, B, C (504)
4.24 and Part 35: Subparts B, C, D (ADA)

- D. Drinking fountains:
 - New) 1101.2, 1109.5, and ICC A117.1 Section 602.1 (IBC)
4.15 and Part 104: Subparts A, B, C (504)
4.15 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.15 and Part 104: Subparts A, B, C (504)
4.15 and Part 35: Subparts B, C, D (ADA)

- E. Toilet rooms:
 - (New) 1101.2, 1109.2, and ICC A117.1 Section 601.1 (IBC)
4.22 and Part 104: Subparts A, B, C (504)
4.22 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.22 and Part 104: Subparts A, B, C (504)
4.22 and Part 35: Subparts B, C, D (ADA)

- F. Workstations:
 - (New) 1101.2, 1109.11, and ICC A117.1 (IBC)
4.1.2(17), 4.32, and Part 104: Subparts A, B, C (504)
4.1.3(18), 4.32, and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.32, and Part 104: Subparts A, B, C (504)
4.32, and Part 35: Subparts B, C, D (ADA)

- G. Accessibility to tiers:
 - (New) 1104, 1101.2 and ICC A117.1 Sections 301.1, 401.1 (IBC)
4.33.5 and Part 104: Subparts A, B, C (504)
4.33.5 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.33.5 and Part 104: Subparts A, B, C (504)
4.33.5 and Part 35: Subparts B, C, D (ADA)

5. CORRIDOR

- A. Protection:
 - (New) 1016.1 (IBC, IFC)
 - (Existing) 15.3.6 (NFPA 101)

- B. Opening protectives (except hazardous areas and stairs)
 - (New) 1016.1, 708.6, Table 715.3, 1101.2 and ICC A117.1 Section 404.2.10 (IBC)
 - (Existing) 15.3.6, 8.3, and Table 8.3.4.2 (NFPA 101)

- C. Drinking fountains:
 - (New) 1101.2, 1109.5, and ICC A117.1 Section 601.1 (IBC)
4.15 and Part 104: Subparts A, B, C (504)
4.15 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.15 and Part 104: Subparts A, B, C (504)
4.15 and Part 35: Subparts B, C, D (ADA)

5. CORRIDOR (cont.)

- D. Deadends:
 - (New) 1016.3 (IBC, IFC)
 - (Existing) 15.2.5.2, 13.2.5.1.2 (NFPA 101)
- E. Smoke compartments:
 - (Existing) 15.3.7.1 (NFPA 101)
- F. Continuity:
 - (New) 1003 (IBC, IFC)
 - (Existing) 15.2.1.1, 15.7.4.2, 7.1.10 (NFPA 101)
- G. Width:
 - (New) 1016.2 (IBC, IFC)
 - (Existing) 15.2.1.1, 7.3.4, 15.2.3.2 (NFPA 101)

6. DOORS

- A. Size:
 - (New) 1008.1.1 (IBC, IFC)
4.13 and Part 104: Subparts A, B, C (504)
4.13 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 15.2.2.2.1, 7.2.1.2.4 (NFPA 101)
4.13.5 and Part 104: Subparts A, B, C (504)
4.13.5 and Part 35: Subparts B, C, D (ADA)
- B. Door encroachment:
 - (New) 1005.2 (IBC, IFC)
 - (Existing) 15.2.5.5, 7.2.1.4.4 (NFPA 101)
- C. Maneuvering clearance at doors:
 - (New) 1101.2 and ICC A117.1 Section 404.2.3 (IBC)
4.13.6 and part 104: Subparts A, B, C (504)
4.13.6 and part 35: Subparts B, C, D (ADA)
 - (Existing) 413.6, and part 104: Subparts A, B, C (504)
413.6, and part 35: Subparts B, C, D (ADA)
- D. Safety glass:
 - (New) 2406.1, 2406.3 (IBC)
- E. Door surface:
 - (New) 1101.2 and ICC A117.1 Section 404.2.9 (IBC)
- F. Guard bars on sidelights:
 - (Existing) 15.2.1.1, 7.2.1.1.2 (NFPA 101)
- G. Doors in series:
 - (New) 1008.1.7 (IBC, IFC)
4.13.7 and Part 104: Subparts A, B, C (504)
4.13.7 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.13.7 and Part 104: Subparts A, B, C (504)
4.13.7 and Part 35: Subparts B, C, D (ADA)

7. ELEVATORS AND LIFTS

- A. Elevators and lifts:
 - (New) 1109.6, 1109.7, 1101.2 and ICC A117.1 Sections 407, 410, Table 407.4.1, Figure 407.1 (IBC)
4.10.9, 4.11 and Part 104: Subparts A, B, C (504)
4.10.9, 4.11 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.1.6(4)(c), 4.10.9, 4.11 and Part 104: Subparts A, B, C (504)
4.1.6(3)(c), 4.10.9, 4.11 and Part 35: Subparts B, C, D (ADA)

- B. Controls and operations:
 - (New) 1101.2 and ICC A117.1 Section 407, 410 (IBC)
4.10, 4.11, 4.27 and part 104: Subparts A, B, C (504)
4.10, 4.11 and part 35: Subparts B, C, D (ADA)
 - (Existing) 4.10, 4.11, 4.27, and part 104: Subparts A, B, C (504)
4.10, 4.11, and part 35: Subparts B, C, D (504)

- C. Enclosure:
 - (New) 3002.1, 707.4, 3006.4 (IBC)
 - (Existing) 15.3, 8.6 (NFPA 101)

8. FINISHES AND FURNISHINGS

- A. Classification and requirements:
 - (New) 801.1(IBC, IFC)
 - (Existing) 15.3.3, 13.3.3, 10.2 (NFPA 101)

9. HARDWARE

- A. Positive latching locksets or latchsets:
 - (New) 708.6, 715.3.7.1 (IBC)
 - (Existing) Connecticut State Fire Code Supplement, Part 11, Sec. 29-292-12e (&13e), and NFPA 80 Sect 2-4.4

- B. Closers:
 - (New) 708.6, 715.3.7, 302.1.1 (IBC)
 - (Existing) 15.3.6, 8.3.3.3, 8.4.3.5; 15.2.1.1, 7.1.3.2.1(4); 15.3.2.1, 8.3.3.3 (NFPA 101)

- C. Panic exit devices:
 - (New) 1008.1.9 (IBC, IFC)
4.13.9 and Part 104: Subparts A, B, C (504)
4.13.9 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 15.2.2.2.2 (NFPA 101)
4.13.9 and Part 104: Subparts A, B, C (504)
4.13.9 and Part 35: Subparts B, C, D (ADA)

- D. Accessible door hardware:
 - (New) 1101.2 and ICC A117.1 Section 404.2.6 (IBC)
4.13.9 and Part 104: Subparts A, B, C (504)
4.13.9 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.13.9 and Part 104: Subparts A, B, C (504)
4.13.9 and Part 35: Subparts B, C, D (ADA)

- E. Tactile warnings:
 - (New & Existing) 4.29.3, and Part 104: Subparts A, B, C (504)

10. HAZARDOUS AREAS (also see sprinklers)

A. Protection:

Shops:

(New) 302.1.1, Table 302.1.1 (IBC)
(Existing) 15.3.2.1(2) (NFPA 101)

Storage:

(New) 302.1.1, Table 302.1.1 (IBC)
(Existing) 15.3.2.1(1) (NFPA 101)

Boiler:

(New) 302.1.1, Table 302.1.1 (IBC)
(Existing) 15.3.2.1(1)(a) (NFPA 101)

Waste:

(New) 302.1.1, Table 302.1.1 (IBC)
(Existing) 15.3.2.1(1) (NFPA 101)

Garage:

(New) 302.1.1, Table 302.1.1 (IBC)
(Existing) 15.3.2.1(2), 40.3.2 (NFPA 101)

Finish:

(New) 302.1.1, Table 302.1.1 (IBC)
(Existing) 15.3.2.1(2)(a) (NFPA 101)

Labs/Prep:

(New) C.G.S. 29-337; 1996 NFPA 45 Sect 3-1.6 (IFC)
(Existing) 15.3.2.1(2) (NFPA 101)

Rooms with hazardous contents:

(New) 302.1.1, Table 302.1.1 (IBC)
(Existing) 15.3.2.1(2)(a) (NFPA 101)

Janitor closets:

(New) 302.1.1, Table 302.1.1 (IBC)
(Existing) 15.3.2.1(1)(d) (NFPA 101)

B. Opening protectives:

(New) 302.1.1.1, 706.1, Table 715.3 (IBC)
(Existing) 15.3.2.1, 8.3.4, Table 8.3.4.2 (NFPA 101)

C. Penetrations:

(New) 712.1 (IBC)
703.1 (IFC)
(Existing) 15.3.2.1, 8.7, 8.3 (NFPA 101)

11. HOME ECONOMICS (including culinary, life skills, staff lounges, etc.)

- A. Appliances:
 - (New) 1101.2, ICC A117.1 Section 804.6, IMC Section 505 (IBC)
4.34.6.7 thru 4.34.7.3, 4.27, and Part 104: Subparts A, B, C (504)
2.27 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.34.6.7 thru 4.34.7.3, 4.27, and Part 104: Subparts A, B, C (504)
4.27, and Part 35: Subparts B, C, D (ADA)

- B. Controls:
 - (New) 1101.2 and ICC A117.1 Section 804.6.4 (IBC)
4.34.6.6, 4.27 and Part 104: Subparts A, B, C (504)
4.27 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.34.6.6, 4.27, and Part 104: Subparts A, B, C (504)
4.27 and Part 35: Subparts B, C, D (ADA)

- C. Sinks:
 - (New) 1101.2 and ICC A117.1 Section 606.1 (IBC)
4.24 and Part 104: Subparts A, B, C (504)
4.24 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.24 and Part 104: Subparts A, B, C (504)
4.24 and Part 35: Subparts B, C, D (ADA)

- D. Workstations:
 - (New) 1101.2 and ICC A117.1 Section 902.1 (IBC)
4.1.2(17), 4.32 and Part 104: Subparts A, B, C (504)
4.1.3(18), 4.32 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.32 and Part 104: Subparts A, B, C (504)
4.32 and Part 35: Subparts B, C, D (ADA)

12. KITCHENS

- A. Serving line
 - (New) 1101.2 and ICC A117.1 Section 403.5 (IBC)
5.2 and Part 104: Subparts A, B, C (504)
5.5 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 5.2 and Part 104: Subparts A, B, C (504)
5.5 and Part 35: Subparts B, C, D (ADA)

- B. Suppression system:
 - (New) 2801.1 and IMC Sections 506, 507, 508, 509 (IBC)
 - (Existing) 15.3.2.2, 9.2.3, and NFPA 96 (NFPA 101)

- C. Ceilings:
 - (New & Existing) 19-13-B42(c) (HEALTH)

- D. Floors:
 - (New & Existing) 19-13-B42(b) (HEALTH)

- E. Walls:
 - (New & Existing) 19-13-B42(c) (HEALTH)

12. KITCHENS (cont.)

- F. Handwash sink:
(New & Exist) 19-13-B42(h) (HEALTH)
- G. Food prep sink:
(New & Exist) 4.24 and Part 104: Subparts A, B, C (504)
- H. Workstation:
(New & Exist) 4.32 and Part 104: Subparts A, B, C (504)
- I. Fire extinguisher:
(New) 904.11.5 (IFC), 906.1 (IBC, IFC)

13. LABORATORIES

- A. Emergency gas shutoff (Recommendation):
(New) 2801.1, 101.4.2; CGS 29-329, 29-330, 29-331 (IBC)
CGS 29-329; 1996 NFPA 54 Sect 3.10.2 (IFC)
(Existing) CGS 29-329; and 1996 NFPA 54 Sect 3.10.2 (NFPA 101)
- B. Eyewash & bodywash:
(New & Existing) 1910.151 (c) (OSHA)
- C. Sink:
(New) 1101.2 and ICC A117.1 Section 606.1 (IBC)
4.24 and Part 104: Subparts A, B, C (504)
4.24 and Part 35: Subparts B, C, D (ADA)
(Existing) 4.24 and Part 104: Subparts A, B, C (504)
4.24 and Part 35: Subparts B, C, D (ADA)
- D. Workstations (student and instructor):
(New) 1101.2 and ICC A117.1 Section 901.1 (IBC)
4.1.2(17), 4.32, and Part 104: Subparts A, B, C (504)
4.1.3(18), 4.32, and Part 35: Subparts B, C, D (ADA)
(Existing) 4.32 and Part 104: Subparts A, B, C (504)
4.32 and Part 35: Subparts B, C, D (ADA)
- E. Laboratory prep room vent:
(New) 2801.1, 101.4.2; CGS 29-329, 29-330, 29-331 (IBC)
CGS 29-320; 1996 NFPA 30 Sect 4-4.2.11 (IFC)
(Existing) CGS 29-320; 1996 NFPA 30 Sect 4-4.2.11 (NFPA 101)
- F. Fire extinguisher:
(New) 906.1 (IBC, IFC), CGS 29-337; 1996 NFPA 45 Sect 4-1 (IFC)
(Existing) CGS 29-337; 1996 NFPA 45 Sect 4-1 (NFPA 101)
- G. Fume hoods:
(New) 2801.1, 101.4.2, CGS 29-329, 29-330, 29-331; IMC 510 (IBC)
CGS 29-337; 1996 NFPA 45 Chapter 6 (IFC)
(Existing) CGS 29-337; 1996 NFPA 45 Chapter 6 (NFPA 101)

14. LOCKER/SHOWER

- A. Toilet room, water closet:
 - (New) 1101.2, 1109.1, and ICC A117.1 Section 601.1 (IBC)
4.22, 4.23, and Part 104: Subparts A, B, C (504)
4.22, 4.23, and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.1.6(4)(e), 4.22, 4.23, and Part 104: Subparts A, B, C (504)
4.1.6(3)(e), 4.22, 4.23, and Part 35: Subparts B, C, D (ADA)

- B. Unisex toilet and bathing rooms:
 - (New) 1109.2.1 (IBC)

- C. Lavatory:
 - (New) 1101.2, 1109.1, and ICC A117.1 Section 601.1 (IBC)
4.19 and Part 104: Subparts A, B, C (504)
4.19 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.19 and Part 104: Subparts A, B, C (504)
4.19 and Part 35: Subparts B, C, D (ADA)

- D. Shower:
 - (New) 1101.2, 1109.1, and ICC A117.1 Section 601.1 (IBC)
4.21 and Part 104: Subparts A, B, C (504)
4.21 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.21 and Part 104: Subparts A, B, C (504)
4.21 and Part 35: Subparts B, C, D (ADA)

- E. Bench:
 - (New) 1101.2, 1109.1, and ICC A117.1 Sections 803.4 and 903.3 (IBC)

- F. Access to gymnasium:
 - (New) 1101.2, 1104, and ICC A117.1 Section 401.1 (IBC)
4.3 and Part 104: Subparts A, B, C (504)
4.3 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.3 and Part 104: Subparts A, B, C (504)
4.3 and Part 35: Subparts B, C, D (ADA)

15. MECHANICAL/ELECTRICAL/PLUMBING

- A. Mechanical:
 - (New) 2801.1 (IBC)
 - (Existing) 15.5.2.1 (NFPA 101)

- B. Electrical:
 - (New) 2701.1 (IBC)
 - (Existing) 15.5.1, 9.1.2, NFPA 70 (NFPA 101)

- C. Plumbing:
 - (New) 2901.1 (IBC)

- D. GFI:
 - (New) 1910.303(b) (OSHA)
 - (Existing) 1910.303(b) (OSHA)
15.5.1, 9.1.2, NFPA 70 (NFPA 101)

- E. Dampers at ducts and air transfer openings in walls and through floors:
 - (New) 716, 712 (IBC)
 - (Existing) 15.5.2, 9.2, and NFPA 90A and 90B (NFPA 101)

15. MECHANICAL/ELECTRICAL/PLUMBING (cont)

- F. Minimum number of plumbing fixtures:
(New) 2902.1 (IBC)
- G. Backflow preventer:
(New) 2901.1 and IPC Section 608 (IBC)
- H. Building exterior gas shut-off valve:
(New) 2801.1, 101.4.2, C.G.S. 29-329, 29-330, 29-331 (IBC)
CGS 29-329; 1996 NFPA 54 Sect 3.10.3 (IFC)
(Existing) 15.3.2.1(2), 8.7.3, 8.7.4, and 1996 NFPA 54 Sect 3.10.3; CGS 29-329 (NFPA 101)
- I. Space above ceilings (plenum):
(New) 1016.4.1 (IBC, IFC)
(Existing) 15.5, 9.1, NFPA 90, and NFPA 70 (NFPA 101)
- J. Emergency lights:

Assembly:
(New) 1006.3 (IBC, IFC)
(Existing) 15.1.2.2.1, 13.2.9 (NFPA 101)

Stairs, Corridors:
(New) 1006.3 (IBC, IFC)
(Existing) 15.2.9, 7.9 (NFPA 101)

Means of egress:
(Existing) 15.2.9, 7.9 (NFPA 101)

Emergency power:
(New) 1006.3, 2702, (IBC, IFC)
(Existing) 15.2.9, 7.9 (NFPA 101)
- K. Exit signs:

At exits, visible from any direction, tactile:
(New) 1011.1 (IBC, IFC)
(Existing) 15.2.10, 7.10 (NFPA 101)

Assembly:
(New) 1011.1 (IBC, IFC)
(Existing) 15.1.2.2.1, 13.2.10.1, 7.10 (NFPA 101)

Emergency power:
(New) 1011.5.3 (IBC, IFC)
(Existing) 15.2.10, 7.10 (NFPA 101)
- L. Miscellaneous penetrations:
(New) 701.1 (IBC)
(Existing) Chapter 8 (NFPA 101)

16. NOTIFICATION, INITIATION, AND DETECTION

A. Fire alarms:

Assembly:

- (New) 907.2, 907.2.1, 907.2.3, 907.9, and ICC A117.1 Section 701.1 (IBC, IFC)
4.1.2(13), 4.28 and Part 104: Subparts A, B, C (504)
4.1.3(14), 4.28 and Part 35: Subparts B, C, D (ADA)
- (Existing) 15.1.2.1, 6.1.14.3.2, 15.3.4.3.1.1, 9.6.3.5 (NFPA 101)
4.28 and Part 104: Subparts A, B, C (504)
4.28 and Part 35: Subparts B, C, D (ADA)

Educational:

- (New) 907.2, 907.2.3, 907.9, and ICC A117.1 Section 701.1 (IBC, IFC)
4.1.2(13), 4.28 and Part 104: Subparts A, B, C (504)
4.1.3(14), 4.28 and Part 35: Subparts B, C, D (ADA)
- (Existing) 15.3.4.3.1.1, 9.6.3.5 (NFPA 101)
4.28 and Part 104: Subparts A, B, C (504)
4.28 and Part 35: Subparts B, C, D (ADA)

Emergency power:

- (New) 907.4 (IBC, IFC)
- (Existing) 15.3.4.3.1.1, 9.6 (NFPA 101)

B. Alarm notification activation:

- (New) 907.6 (IBC, IFC)
- (Existing) 15.3.4.3.1.1, 9.6 (NFPA 101)

C. Manual fire alarm stations:

Assembly:

- (New) 907.2.1, 907.2.3, 907.3, and ICC A117.1 Section 701.1 (IBC, IFC)
- (Existing) 15.1.2.1, 6.1.14.3.2, 15.3.4.2, 9.6.2 (NFPA 101)

Exits:

- (New) 907.2.1, 907.2.3, 907.3, and ICC A117.1 Section 701.1 (IBC, IFC)
- (Existing) 15.3.4.2, 9.6.2 (NFPA 101)

17. SHOPS/FINISH

A. Emergency electrical shutoffs:

- (New) 2701.1 and NFPA 70 (IBC)
- (Existing) 15.5.1, 9.1, and NFPA 70 (NFPA 101)

B. Eyewash & bodywash:

- (New & Existing) 1910.151(c) (OSHA)

C. Sinks:

- (New) 1101.2, 1109.3, and ICC A117.1 Section 606.1 (IBC)
4.24 and Part 104: Subparts A, B, C (504)
4.24 and Part 35: Subparts B, C, D (ADA)
- (Existing) 4.24 and Part 104: Subparts A, B, C (504)
4.24 and Part 35: Subparts B, C, D (ADA)

17. SHOPS/FINISH (cont.)

- D. Workstations (student and instructor):
 - (New) 1101.2, 1109.11, and ICC A117.1 Section 901.1 (IBC)
4.1.2(17), 4.32 and Part 104: Subparts A, B, C (504)
4.1.3(18), 4.32 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.32 and Part 104: Subparts A, B, C (504)
4.32 and Part 35: Subparts B, C, D (ADA)
- E. Drinking fountain:
 - (New) 1101.2, 1109.5, and ICC A117.1 Section 602.1 (IBC)
4.15 and Part 104: Subparts A, B, C (504)
4.15 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.15 and Part 104: Subparts A, B, C (504)
4.15 and Part 35: Subparts B, C, D (ADA)
- F. Contaminant removal system:
 - (New) 2801.1 and IMC 510.1, 511.1 (IBC)
1910.134 (OSHA)
 - (Existing) 15.5.2.1, 9.2.2, NFPA 91 (NFPA 101)
1910.134 (OSHA)
- G. Finish room equipment:
 - (New) 2701.1 and NFPA 70 (IBC)
 - (Existing) 15.5.1, 9.1, and NFPA 70 (NFPA)
- H. Finish room hood:
 - (New) 2801.1 and IMC 510.1, 511.1 (IBC)
 - (Existing) 15.5.2.1, 9.2.2, NFPA 91 (NFPA 101)
- I. Fire Extinguisher:
 - (New) 906.1 (IBC, IFC)

18. SITE (also see Sections 3 and 21)

- A. Parking:
 - (New) 1106, 1101.2, and ICC A117.1 Section 501.1 (IBC)
4.1.1(5), 4.6, and Part 104: Subparts A, B, C (504)
4.1.2(5), 4.6, and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.6 and Part 104: Subparts A, B, C (504)
4.6 and Part 35: Subparts B, C, D (ADA)
- B. Passenger loading zone:
 - (New) 1106.7, 1110.1, 1101.2, and ICC A117.1 Section 503.1 (IBC)
4.6 and Part 104: Subparts A, B, C (504)
4.6.6 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.6, and Part 104: Subparts A, B, C (504)
4.6.6, and Part 35: Subparts B, C, D (ADA)
- C. Entrances, exits, accessible routes, public way:
 - (New) 1104, 1105, 1106, 1101.2, and ICC A117.1 Section 401.1 (IBC)
4.1.1, 4.1.2(8), 4.3, 4.3.10, 4.5.1, 4.7, and Part 104: Subparts A, B, C (504)
4.1.2, 4.1.3(8)(9), 4.3, 4.3.10, 4.5.1, 4.7, 4.29, and Part 35: Subparts B, C, D (ADA)
 - (Existing) 15.2.1.1, 7.1.10.1 (NFPA 101)
4.3, 4.3.10, 4.5.1, 4.7, and Part 104: Subparts A, B, C (504)
4.3, 4.3.10, 4.5.1, 4.7, 4.29, and Part 35: Subparts B, C, D (ADA)

18. SITE (cont.)

- D. Access to athletic fields, bleachers, playgrounds, dugouts, press boxes, concessions:
 - (New) 1104,1101.2, and ICC A117.1 Section 401.1 (IBC)
 - 4.3 and Part 104: Subparts A, B, C (504)
 - 4.3 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.3 and Part 104: Subparts A, B, C (504)
 - 4.3 and Part 35: Subparts B, C, D (ADA)

19. SPACE ELEMENTS

- A. Space allowance:
 - (New) 1101.2 and ICC A117.1 Sections 301.1, 401.1 (IBC)
 - 4.2, 4.3, 4.4, and Part 104: Subparts A, B, C (504)
 - 4.2, 4.3, 4.4, and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.2, 4.3, 4.4, and Part 104: Subparts A, B, C (504)
 - 4.2, 4.3, 4.4, and Part 35: Subparts B, C, D (ADA)
- B. Reach ranges:
 - (New) 1101.2, 1109.13, and ICC A117.1 Sections 308.1 (IBC)
 - 4.2.5, 4.2.6, and Part 104: Subparts A, B, C (504)
 - 4.2.5, 4.2.6, and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.2.5, 4.2.6, and Part 104: Subparts A, B, C (504)
 - 4.2.5, 4.2.6, and Part 35: Subparts B, C, D (ADA)
- C. Signs for accessible elements and directional:
 - (New) 1101.1, 1110, 1011, 1101.2, and ICC A117.1 Section 703.1 (IBC)
 - 4.30 and Part 104: Subparts A, B, C (504)
 - 4.30 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.30 and Part 104: Subparts A, B, C (504)
 - 4.30 and Part 35: Subparts B, C, D (ADA)

20. SPRINKLERS

- A. Locations:
 - Educational occupancy:
 - (New) Public Act No.05-31 (CGS)
 - 903.2.2 (IBC, IFC)
 - (Existing) 10.3.5.3 (NFPA 101)
 - Assembly occupancy:
 - (New) 903.2 (IBC, IFC)
 - (Existing) 15.3.2.3, 13.3.5.4 (NFPA 101)
 - Finish room:
 - (New) 302.1.1, Table 302.1.1 (IBC)
 - (Existing) 15.3.2.1(2)(a) (NFPA 101)
 - Stage and accessory rooms:
 - (New) 410.6 (IBC)
 - (Existing) 15.3.2.3, 13.4.5.10 (NFPA 101)
- B. Smoketight:
 - (Existing) 15.3.6(2) (NFPA 101)

20. SPRINKLERS (cont.)

- C. Location of Heads:
 - (New) 903 (IBC, IFC)
 - (Existing) 15.3.5.5, 9.7.1.1(1) (NFPA 101)

21. STAIRS/RAMPS (interior and exterior)

- A. Stair enclosure rating (and adjacent exterior walls):
 - (New) 1019.1 (IBC, IFC)
 - (Existing) 15.2.1.1, 15.2.4, 7.1.3.2.1 (NFPA 101)
- B. Stair door rating:
 - (New) 1019.1.1 (IBC, IFC); 715.0, Tables 715.3, 715.4.3 (IBC)
 - (Existing) 15.2.1.1, 7.1.3.2.1, 8.2.2, 8.3.3, 8.3.4, Table 8.3.4.2 (NFPA 101)
- C. Stair handrails and guards:
 - (New) 1009.11, 1012 (IBC, IFC)
4.9.4 and Part 104: Subparts A, B, C (504)
4.9.4 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 15.2.1.1, 7.2.2.4 (NFPA 101)
4.9.4 and Part 104: Subparts A, B, C (504)
4.9.4 and Part 35: Subparts B, C, D (ADA)
1910.23 (a)(e) (OSHA)
- D. Stair landing guards:
 - (New) 1012 (IBC, IFC)
 - (Existing) 15.2.1.1, 7.2.2.4 (NFPA 101)
1910.23 (a)(e) (OSHA)
- E. Stair tread tapered nosing:
 - (New) 1009.3.2 (IBC, IFC)
4.9.3 and Part 104: Subparts A, B, C (504)
4.9.3 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 15.2.1.1, 7.2.2.3.3.2 (NFPA 101)
4.9.3 and Part 104: Subparts A, B, C (504)
4.9.3 and Part 35: Subparts B, C, D (ADA)
- F. Stairs to exit discharge:
 - (New) 1023.1, 1023.6 (IBC, IFC)
 - (Existing) 15.2.1.1, 7.7 (NFPA 101)
- G. No hazardous or non-occupancy opening into stairs:
 - (New) 1019.1.2 (IBC, IFC)
 - (Existing) 15.2.1.1, 7.1.3.2.1 (NFPA 101)
- H. Stair width:
 - (New) 1009.1 (IBC, IFC)
 - (Existing) 15.2.1.1 (NFPA 101)
- I. Ramp width:
 - (New) 1010.5 (IBC, IFC)
4.8.3 and Part 104: Subparts A, B, C (504)
4.8.3 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 15.2.1.1, 7.2.5.2(2) (NFPA 101)
4.8.3 and Part 104: Subparts A, B, C (504)
4.8.3 and Part 35: Subparts B, C, D (ADA)

21. STAIRS/RAMPS (interior and exterior) (cont.)

- J. Ramp handrails and guards:
 - (New) 1010.8, 1010.10 (IBC, IFC)
4.8 and Part 104: Subparts A, B, C (504)
4.8 (and Part 35: Subparts B, C, D ADA)
 - (Existing) 15.2.1.1, 7.2.5.4 (NFPA 101)
4.8 and Part 104: Subparts A, B, C (504)
4.8 and Part 35: Subparts B, C, D (ADA)

- K. Ramp surface and edge protection:
 - (New) 1010.7.1, 1010.9, (IBC, IFC)
4.8.6, 4.8.7, and Part 104: Subparts A, B, C (504)
4.8.6, 4.8.7, and Part 35: Subparts B, C, D (ADA)
 - (Existing) 15.2.1.1, 7.2.5.3.1 (NFPA 101)
4.8.6 and Part 104: Subparts A, B, C (504)
4.8.6 and Part 35: Subparts B, C, D (ADA)

- L. Ramp landings:
 - (New) 1010.6 (IBC, IFC)
4.8.4 and Part 104: Subparts A, B, C (504)
4.8.4 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 15.2.1.1, 7.2.5.3.2 (NFPA 101)
4.8.4 and Part 104: Subparts A, B, C (504)
4.8.4 and Part 35: Subparts B, C, D (ADA)

- M. Ramp slope:
 - (New) 1010.2 (IBC, IFC)
4.8.2 and Part 104: Subparts A, B, C (504)
4.8.2 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 15.2.1.1, 7.2.5.2(2) (NFPA 101)
4.8.2 and Part 104: Subparts A, B, C (504)
4.8.2 and Part 35: Subparts B, C, D (ADA)

22. TOILET ROOMS

- A. Toilet rooms, water closets:
 - (New) 1109.2, 1109.2.1, 1109.2.2, 1109.2.3, 1101.2, and ICC A117.1 Section 601.1 (IBC)
4.22 and Part 104: Subparts A, B, C (504)
4.22 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.1.6(4)(e), 4.22, and Part 104: Subparts A, B, C (504)
4.1.6(3)(e), 4.22, and Part 35: Subparts B, C, D (ADA)

- B. Unisex toilet and bathing rooms:
 - (New) 1109.2.1 (IBC)

- C. Lavatory:
 - (New) 1109.2, 1101.2, and ICC A117.1 Section 601.1 (IBC)
4.22.6 and Part 104: Subparts A, B, C (504)
4.22.6 and Part 35: Subparts B, C, D (ADA)
 - (Existing) 4.22.6 and Part 104: Subparts A, B, C (504)
4.22.6 and Part 35: Subparts B, C, D (ADA)

22. TOILET ROOMS (cont.)

- D. Floor space:
(New) 1101.2, and ICC A117.1 Sections 301.1, 601.1 (IBC)
4.22.2, 4.22.3, 4.19.3, and Part 104: Subparts A, B, C (504)
4.22.2, 4.22.3, and Part 35: Subparts B, C, D (ADA)
(Existing) 4.22.2, 4.22.3, 4.19.3, and Part 104: Subparts A, B, C (504)
4.22.2, 4.22.3, and Part 35: Subparts B, C, D (ADA)
- E. Ventilation:
(New & Existing) 19-13-B110 (HEALTH)

23. VERTICAL OPENINGS (other than exit enclosures)

- A. Protection:
(New) 404, 707 (IBC)
701.1 (IFC)
(Existing) 15.3, 8.6 (NFPA 101)

24. MISCELLANEOUS:

- A. Fire extinguishers:
(New) 906.1 (IBC, IFC), 13.6 of Part V (NFPA 1)
- B. Review contract documents for any code requirements other than those listed in this document:

STATE CODES AND FEDERAL LAWS GOVERNING SCHOOL CONSTRUCTION

1. CONNECTICUT STATE BUILDING CODE

- 2003 International Building Code (IBC)
- 2003 International Mechanical Code (IMC)
- 2005 NFPA 70 National Electrical Code
- 2003 International Plumbing Code (IPC)
- 2003 ICC/ANSI A117.1
- 2003 International Existing Building Code (IEBC)
- 2005 Connecticut Supplement

2. CONNECTICUT STATE FIRE SAFETY CODE

- 2003 International Fire Code (IFC)
- 2003 NFPA 101
- 2003 NFPA 1 Uniform Fire Code
- 2005 NFPA 70 National Electrical Code
- 2005 Connecticut Supplement

3. FEDERAL LAWS

- Section 504, Rehabilitation Act 1973 including Uniform Federal Accessibility Standards (UFAS) and 504 Regulations
- Americans with Disabilities Act, Title II, including Americans with Disabilities Act Accessibility Guidelines (ADAAG) and ADA Regulations

4. CURRENT PUBLIC HEALTH CODE

5. CURRENT O.S.H.A. - TITLE 29/LABOR

CONNECTICUT STATE DEPARTMENT OF EDUCATION (SDE)
BUREAU OF SCHOOL FACILITIES (BSF)

CHECKLISTS

New, Extension, Alteration and Code Update	Pages 2 - 11
Asbestos	Page 12
Roof	Page 13
Fuel Storage Tank	Pages 14 - 15
Window	Page 16
Play Equipment	Page 17
Fixtures, Furnishings, and Equipment	Page 18

NOTES/INSTRUCTIONS:

1. Submit all checklists for each phase of each project.
2. **Do not digitize or reproduce this document other than by photocopying.**
3. Do not use “NA”, explain condition.
4. Use “**NONE**” when condition does not exist within the building.
5. Use “**NPS**” when condition is not part of the project scope.
6. Use “**MOD**” (and plan/specification page number if applicable) when an in progress or approved state modification pertains to an entry.
7. **Identify** the **phase** if work was (or is to be) completed in another phase.

DISTRICT	STATE PROJECT NO.	PHASE
SCHOOL	DATE	ARCHITECT

**BUREAU OF SCHOOL FACILITIES PLAN REVIEW CHECK LIST FOR
NEW, EXTENSION, ALTERATION AND CODE UPDATE**

The following checklist contains areas that must be addressed if applicable to your school project.

Indicate plan page number, specification section and page number in columns headed Plans, and/or Specifications where compliance is most clearly identified. Do not use N/A, explain condition.

VERIFY EACH ENTRY ON THIS CHECKLIST WITH THE PLANS AND/OR SPECIFICATIONS

This checklist is a combination of items drawn from current state and federal codes. Items pertain to new and existing unless otherwise noted. This document has been prepared for, and pertains to Connecticut schools; it is intended as a guide, please consult applicable codes.

Refer to "The Bureau of School Facilities Master List" for corresponding code numbers.

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.	
	Plans	Specifications	Y	N
Advertisement for Bids				
Statement of Bidders Qualifications/ DAS Prequalification Reg's				
General, Supplemental, and Special Conditions (Insurance, Cleanup, Etc.)				
Prevailing Wage Rates (with annual adjustment)				
Preconstruction Meeting				
Alternates				

1. EGRESS

A.	Separate exits from each Floor				
B.	Area of refuge				
C.	Doors in direction of travel				
D.	No exit through hazardous areas				
E.	Number of assembly exits				
F.	Assembly main entrance/exit				
G.	Assembly other exits				

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.	
	Plans	Specifications	Y	N

1. EGRESS (CONT.)

H.	Occupant load and exit capacity	No data required in this space		
	Educational			
	Assembly			
I.	Two remote doorways			
J.	Travel distance and common path			

2. ADDITIONS, NEW CONSTRUCTION, AND EXISTING (when applicable)

A.	Determine use group, construction type, and fire resistance rating of structure elements			
B.	Building limitations			
C.	Fire walls and opening protectives			
D.	Fire separation distance, exterior walls, and openings			
E.	Mixed occupancies			
F.	Separation of occupancies and opening protectives			
G.	Existing structures			

3. ASSEMBLY/STAGE/PLATFORM (interior and exterior areas)

A.	Assembly Seating			
B.	Stage standpipes			
C.	Stage vents			
D.	Stage curtain			
E.	Proscenium walls			
F.	Catwalks			
G.	Stage and platform access			
H.	Stage accessory rooms			

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.	
	Plans	Specifications	Y	N

4. CLASSROOMS AND ANY OTHER ROOMS (not specifically named in this checklist)

A.	Window for rescue & ventilation for all student occupancies			
B.	Preschool through second grade and level of exit discharge			
C.	Sinks			
D.	Drinking fountain			
E.	Toilet room			
F.	Workstations			
G.	Accessibility to tiers			

5. CORRIDOR

A.	Protection			
B.	Opening protectives (except hazardous areas and stairs)			
C.	Drinking fountains			
D.	Dead ends			
E.	Smoke compartments			
F.	Continuity			
G.	Width			

6. DOORS

A.	Size			
B.	Door encroachment			
C.	Maneuvering clearance at doors			
D.	Safety glass			
E.	Door surface			
F.	Guard bars on sidelights			

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.	
	Plans	Specifications	Y	N

6. DOORS (CONT.)

G.	Doors in series			
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7. ELEVATORS AND LIFTS

A.	Elevators and lifts			
B.	Controls and operations			
C.	Enclosure			

8. FINISHES AND FURNISHINGS

A.	Classification and requirements			
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9. HARDWARE

A.	Positive latching locksets or latchsets			
B.	Closers			
C.	Panic exit devices			
D.	Accessible door hardware			
E.	Tactile warnings			

10. HAZARDOUS AREAS (Also see sprinklers)

A.	Protection	No data required in this space		
	Shops			
	Storage			
	Boiler			
	Waste			
	Garage			
	Finish			

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.	
	Plans	Specifications	Y	N

10. HAZARDOUS AREAS (also see sprinklers) **(cont.)**

	Labs/prep			
	Rooms with hazardous contents			
	Janitor closets			
B.	Opening protectives			
C.	Penetrations			

11. HOME ECONOMICS (including culinary, life skills, staff lounges, etc.)

A.	Appliances			
B.	Controls			
C.	Sinks			
D.	Workstations			

12. KITCHENS

A.	Serving line			
B.	Suppression system			
C.	Ceilings			
D.	Floors			
E.	Walls			
F.	Handwash sink			
G.	Food prep sink			
H.	Workstation			
I.	Fire extinguisher			

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.	
	Plans	Specifications	Y	N

13. LABORATORIES

A.	Emergency gas shutoff			
B.	Eyewash & bodywash			
C.	Sink			
D.	Workstation (student and instructor)			
E.	Laboratory prep room vent			
F.	Fire extinguisher			
G.	Fume hoods			

14. LOCKER/SHOWER

A.	Toilet room, water closets			
B.	Unisex toilet and bathing rooms			
C.	Lavatory			
D.	Shower			
E.	Bench			
F.	Access to gymnasium			

15. MECHANICAL/ELECTRICAL/PLUMBING

A.	Mechanical			
B.	Electrical			
C.	Plumbing			
D.	GFI			
E.	Dampers at ducts and air transfer openings in walls and through floors			
F.	Minimum number of plumbing fixtures			
G.	Backflow preventer			
H.	Building exterior gas shut-off valve			

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.	
	Plans	Specifications	Y	N

15. MECHANICAL/ELECTRICAL/PLUMBING (cont.)

I.	Space above ceiling (plenum)			
J.	Emergency lights	No data required in this space		
	Assembly			
	Stairs, corridors			
	Means of egress			
	Emergency power			
K.	Exit signs	No data required in this space		
	At exits and visible from any direction, tactile			
	Assembly			
	Emergency power			
L.	Miscellaneous penetrations			

16. NOTIFICATION, INITIATION, AND DETECTION

A.	Fire alarms	No data required in this space		
	Assembly			
	Educational			
	Emergency power			
B.	Alarm notification activation			
C.	Manual fire alarm stations	No data required in this space		
	Assembly			
	Exits			

17. SHOPS/FINISH

A.	Emergency electrical shutoffs			
B.	Eyewash & bodywash			

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.	
	Plans	Specifications	Y	N

17. SHOPS/FINISH (cont.)

C.	Sinks			
D.	Workstation (student and instructor)			
E.	Drinking fountain			
F.	Contaminant removal system			
G.	Finish room equipment			
H.	Finish room hood			
I.	Fire extinguisher			

18. SITE (also see Sections 3 and 21)

A.	Parking			
B.	Passenger loading zone			
C.	Entrances, exits, accessible routes, public way			
D.	Access to athletic fields, bleachers, playgrounds, dugouts, press boxes, concessions.			

19. SPACE ELEMENTS

A.	Space allowance			
B.	Reach ranges			
C.	Signs for accessible elements and directional			

20. SPRINKLERS

A.	Locations	No data required in this space		
	Educational occupancy			
	Assembly occupancy			
	Finish room			
	Stage and accessory rooms			

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.	
	Plans	Specifications	Y	N

20. SPRINKLERS (cont.)

B.	Smoketight			
C.	Location of heads			

21. STAIRS/RAMPS (interior and exterior)

A.	Stair enclosure rating (and adjacent exterior walls)			
B.	Stair door rating			
C.	Stair handrails and guards			
D.	Stair landing and guards			
E.	Stair tread tapered nosing			
F.	Stairs to exit discharge			
G.	No hazardous or non-occupancy opening into stairs			
H.	Stair width			
I.	Ramp width			
J.	Ramp handrails and guards			
K.	Ramp surface and edge protection			
L.	Ramp landings			
M.	Ramp slope			

22. TOILET ROOMS

A.	Toilet room, water closets			
B.	Unisex toilet and bathing rooms			
C.	Lavatory			
D.	Floor space			
E.	Ventilation			

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.	
	Plans	Specifications	Y	N

23. VERTICAL OPENINGS (other than exit enclosures)

A.	Protection			
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24. MISCELLANEOUS

A.	Fire extinguishers			
B.	Review contract documents for any code violations other than those covered in this document	No data required in this space		

**BUREAU OF SCHOOL FACILITIES PLAN REVIEW CHECK LIST FOR
ASBESTOS**

The following checklist contains areas that must be addressed if applicable to your school project. Please indicate plan page number, specification section and page number in columns headed Plans, and/or Specifications where compliance is most clearly identified. Do not use N/A, explain condition.

VERIFY EACH ENTRY ON THIS CHECKLIST WITH THE PLANS AND/OR SPECIFICATIONS.

AMP Preparer		AMP Coordinator		PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED		Reviewer Use only. Complies with code.	
		Plans	Specifications	Y	N		
1.	Type(s) and amount(s) of ACM to be abated						
2.	Notification of demolition and renovation to DPH prior approval of in-state disposal required from DEP						
3.	Proper worker protection (OSHA req.)						
4.	Licensed air sampling professional employed by school district						
5.	Pre-abatement meeting						
6.	All ACM locations identified						
7.	Employees' decontamination system						
8.	Waste disposal system (ACM removal from contaminated area)						
9.	Negative air pressure system						
10.	Proper worksite preparation						
11.	Reoccupancy clearance standards						
12.	Replacement materials specified						
13.	DPH approved project designer						
14.	Mini-containment – "Alternative Work Practice" approved by DPH						
15.	Alternates						

**BUREAU OF SCHOOL FACILITIES PLAN REVIEW CHECK LIST FOR
ROOF**

The following checklist contains areas that must be addressed if applicable to your school project (complete this checklist for new schools and addition projects). Please indicate plan page number in columns headed Plans, and/or Specifications where compliance is most clearly identified. Do not use N/A, explain condition.

VERIFY EACH ENTRY ON THIS CHECKLIST WITH THE PLANS AND/OR SPECIFICATIONS.

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.		
		Plans	Specifications	Y	N
1.	New roof insulation must meet energy requirement of Building Code (provide roof assembly "R" value(s))				
2.	Roof plans and specifications:	No data required In this space			
	a) Show all new roof surfaces				
	b) Show all construction.				
	c) Show drainage (slopes)				
	D) Details				
3.	Roof pitch ½":1'-0" or roof pitch Waiver (existing roofs)				
4.	Fall protection at skylights & roof hatches (OSHA 1910.23)				
5.	Guards for mechanical equipment within 10 feet of a roof edge or open side of a walking surface (I.M.C 304.10)				
6.	Alternates				

**BUREAU OF SCHOOL FACILITIES PLAN REVIEW CHECK LIST FOR
FUEL STORAGE TANK**

The following checklist contains areas that must be addressed if applicable to your school project. Please indicate page number, specification section and page number in columns headed Plans, and/or Specifications where compliance is most clearly identified. Do not use N/A, explain condition.

VERIFY EACH ENTRY ON THIS CHECKLIST WITH THE PLANS AND/OR SPECIFICATIONS.

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.			
		Plans	Specifications	Y	N	
1.	Removal & disposal of	No data required In this space				
	a) Tank					
	b) Residual fluids					
	c) Cleaning liquids					
2.	Water pollution control	No data required In this space				
	a) Erosion by surface water tank					
	b) Contamination of sub-surface water					
3.	Concrete pads for:	No data required In this space				
	a) Ballast (show tie-downs)					
	b) Fuel fill pipe (if any)					
4.	Type of backfill & how installed, depths, etc.					
5.	Method of tank installation (Connecticut Oil Burning Equipment Code, Connecticut Liquefied Petroleum Gas and Liquefied Natural Gas Code, NFPA 30, & UL tests)					

FUEL STORAGE TANK WORK (cont.)

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.		
		Plans	Specifications	Y	N
6.	Specify tank:	No data required In this space			
	a) material, openings, cathodic/ corrosion protection (steel)				
	b) piping - fill, vent, supply, return, leak detection, spill overflow prevention, etc.				
	c) controls, valves, gages				
	d) plumbing & electrical connections				
7.	Final testing before covering installation				
8.	Re-seeding of any disturbed lawn or planting areas				
9.	Re-paving of any disturbed parking areas or walks, ramps, etc.				
10.	Alternates				

BUREAU OF SCHOOL FACILITIES PLAN REVIEW CHECK LIST FOR WINDOW

The following checklist contains areas that must be addressed if applicable to your school project (complete this checklist for new schools and addition projects). Please indicate plan page number, specification section and page number in columns headed Plans, and/or Specifications where compliance is most clearly identified. Do not use N/A, explain condition.

VERIFY EACH ENTRY ON THIS CHECKLIST WITH THE PLANS AND/OR SPECIFICATIONS.

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.		
		Plans	Specifications	Y	N
1.	Demo/asbestos abatement (see asbestos checklist)				
2.	Floor plans (all floors) (with all spaces identified)				
3.	Recue & ventilation windows identified (RV) on plans (all spaces occupied by students)				
4.	Bottom of window opening (height above floor) (not "top of sill")				
5.	Clear opening (dimensioned) for all Rescue & ventilation windows				
6.	Latching mechanism operation (for new Educational occupancies no more than 48" A.F.F.) must be operable without the use of tools)				
7.	Security screen/bars (easily openable without the use of tools)				
8.	Egress doors and hardware (if part of project or in lieu of RV windows)				
9.	Alternates				

**BUREAU OF SCHOOL FACILITIES PLAN REVIEW CHECK LIST FOR
PLAY EQUIPMENT**

The following checklist contains areas that must be addressed if applicable to your school project. Please indicate plan page number, specification section and page number in columns headed Plans, and/or Specifications where compliance is most clearly identified. Do not use N/A, explain condition.

VERIFY EACH ENTRY ON THIS CHECKLIST WITH THE PLANS AND/OR SPECIFICATIONS.

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.		
		Plans	Specifications	Y	N
1.	Surfacing				
2.	Fall Height				
3.	Use zones				
4.	Layout, design, installation, maintenance, and materials				
5.	General hazards				
6.	Entrapment				
7.	Stairways and ladders				
8.	Handrails				
9.	Platforms, guardrails, and protective barriers				
10.	Major types of equipment				
11.	Ground level play components				
12.	Elevated play components				
13.	Accessible routes				
14.	Ramps				
15.	Transfer systems				
16.	Maneuvering space				
17.	Reach ranges				
18.	Entry points and seats				

DISTRICT	STATE PROJECT NO.	PHASE
SCHOOL	DATE	ARCHITECT

**BUREAU OF SCHOOL FACILITIES PLAN REVIEW CHECK LIST FOR
FIXTURES, FURNISHINGS, AND EQUIPMENT**

The following checklist contains areas that must be addressed if applicable to your school project. Please indicate plan page number, specification section and page number in columns headed Plans, and/or Specifications where compliance is most clearly identified. Do not use N/A, explain condition.

VERIFY EACH ENTRY ON THIS CHECKLIST WITH THE PLANS AND/OR SPECIFICATIONS.

PAGE(S) WHERE CODE ITEM IS MOST CLEARLY IDENTIFIED			Reviewer Use only. Complies with code.		
		Plans	Specifications	Y	N
1.	Advertisement for Bids				
2.	Statement of Bidders Qualifications				
3.	General & Special Conditions (Insurance, Cleanup, etc.)				
4.	Wage Rates				
5.	Preconstruction Meeting				
6.	Alternates				
7.	Cost Estimate (with summary of costs)				
8.	Documentation (drawings/specs)				
9.	Workstations, desks, and appliances (including for persons with disabilities) for adult student and staff when applicable. Provide cut sheets with manufacturer's dimensions; knee clearances (30"w, 27"h, 19"d); height of tables, counters, and work surfaces (28" – 34" to top).				
10.	Workstations, desks, and appliances for children with disabilities (when applicable). Provide cut sheets with manufacturer's dimensions; knee clearances (30"w, 24"h, 19"d); height of tables, counters, and work surfaces (26" – 30" to top).				

**CONNECTICUT STATE DEPARTMENT OF EDUCATION (SDE)
BUREAU OF SCHOOL FACILITIES (BSF)**

RELOCATABLES

Note that Relocatables (Modulars) have all the same code requirements as an addition (**new construction**).

PROJECT MEETINGS

1. **Schedule PREP Meeting** (conducted by Plan Reviewer) right after the Design Professional is selected (no drawings needed yet, but schematic ok). A discussion of PCT submission requirements will occur. Refer to the SECTION 1, Page 1 for general information and attendee requirements.
2. **Schedule PCT Meeting** (conducted by Plan Reviewer) when Design Professional completes bidding documents (clearly showing all intended work and related areas). Refer to the SECTION 1, Page 2 for general information and attendee requirements. All construction documents shall be signed and sealed.
3. **Refer to all sections of BSF Guidelines** for document preparation, administrative requirements, and code requirements not specifically noted within this section (including Section 4, page 4, # 15).

DOCUMENT SUBMISSION

1. **General Information Required**
 - a. ED-042 Form signed and dated with project number (and applicable phase number).
 - b. Completed Checklist. Be sure that all applicable areas of the Master List and large checklist are addressed.
 - c. Completed Roof Checklist and related letter(s).
2. **If attached to existing building**
 - a. Exiting load from existing having impact (including actual maximum travel distance).
 - b. Allowable Area Limits/Firewalls/Fire Separations.
3. **Site Plan (Signed and Sealed)**
 - a. Orientation to existing buildings (with dimensions).
 - b. Spot grades (floor & exterior grade) at exit doors.
 - c. Ramps, stairs, and site built elements (include details).
 - d. Sidewalk or pavement to public walkway (accessible).
 - e. Parking for persons with disabilities and certification of accessible route to relocatables and/or through existing building to relocatables.
 - f. Accessible route from existing building to relocatable.

DOCUMENT SUBMISSION (CONT.)

4. **Floor Plans, Foundations, Exterior Elevations, Building Section(s)/Details (Signed and Sealed)**
 - a. General configuration (with dimensions).
 - b. Doors' size and hardware (function) including applicable existing.
 - c. Specialty areas.
 - d. Compliant toilet facilities either in the relocatable or in the existing building (show details/dimensions) and the accessible route.
 - d. Compliant toilet facilities either in the relocatable or in the existing building (show details/dimensions) and the accessible route.
 - e. Site-built elements shall be detailed to the level of final working drawings.

5. **Detailed Notes**
 - a. Fire alarm connection and back-up power requirements.
 - b. Electrical specifications and/or drawings with notes.
 - c. Mechanical specifications and/or drawings with notes.
 - d. Construction information/occupancy loads (if attached to existing).
 - e. Seismic design criteria and seismic certification.
 - f. Special details/conditions (include handrail details).
 - g. Plumbing fixture count (must accommodate additional occupancy loads).
 - h. Lot lines, exterior wall ratings, opening protectives (per State Building Code).

6. **Specifications (Signed and Sealed if a separate package)**
 - a. General outline (performance) specifications (CSI format). Final Specifications for site built elements.
 - b. Require "Third Party" inspection (stamped) drawings for local permit requirements.

7. **Ineligible Costs Worksheet**
 - d. Costs for refurbishing an on-site relocated structure are not considered eligible for reimbursement.

**CONNECTICUT STATE DEPARTMENT OF EDUCATION (SDE)
BUREAU OF SCHOOL FACILITIES (BSF)**

PLAY EQUIPMENT

GENERAL

1. Refer to all sections of this manual for document preparation, document submission, administrative and code requirements not specifically noted within this section. Playground equipment may be submitted as part of the construction phase of a project or as a separate phase.
2. Refer to all sections of the following documents:
 1. BSF Master List for Play Equipment.
 2. *Public Playground Safety Handbook (Pub. # 325 April 2008)* - The U.S Consumer Product Safety Commission (CPSC) referenced by the Connecticut Department of Consumer Protection Regulations.
 3. *The Americans with Disabilities Act Accessibility Guidelines (ADAAG); Play Areas*-Federal Register October 18, 2000 / Final Rule.
 4. *ASTM Standards* -- The American Society for Testing and Materials, referenced by the *Public Playground Safety Handbook* and *ADAAG; Play Areas*.
3. Refer to supplemental PREP meeting hand out package for format and graphic examples.

DOCUMENT SUBMISSION

1. Submit play equipment (and area surfacing) as a separate phase.
2. Provide a completed BUREAU OF SCHOOL FACILITIES Plan Review Checklist for Play Equipment.
3. Identify for which age groups the equipment is intended. If more than one age group is expected to use the equipment, identify the intended age group for each area, and provide adequate separations, barricades, or buffer zones as required. Provide appropriate signage to identify the age group for each area (Pre-school = 2 to 5 years, School Age = 5 to 12 years).
4. Provide a complete list of all components to be incorporated in the play area, identifying the activity type of each component (i.e. climbing, pretending etc.). Include a breakdown of the ground-level and elevated components. Further identify the accessible components and the inaccessible components in SDE format.
5. Show the accessible route to the play area as well as within the play area and to the elevated components. Connect entry and exit points of elevated play components.

DOCUMENT SUBMISSION (CONT.)

6. Provide plans/drawings, signed and sealed by architect or engineer, at a conventional legible scale ($\frac{1}{4}$ " = 1'-0" minimum or larger if necessary for clarity):
 - a. Site Plan showing orientation and accessible route (and surfacing materials) to the play area.
 - b. Footing Plans with dimensions and details.
 - c. Plans with dimensions of each piece of equipment and Use Zones.
 - d. Elevations with dimensions for equipment clearances and heights.
 - e. Orthographic (3-D) perspective (at approx. 45 degrees).
7. Show and dimension the specific Use Zones for each piece of equipment and the Use Zone surfacing, materials, and thickness and/or reference Table 1 Critical Heights for Tested Materials. Include the following note: "Playground surfacing shall meet or exceed U.S. Consumer Product Safety Commission Guidelines for critical height based on ASTM F-1292 impact attenuation testing for the fall heights required by the play components included in the design. The current design, per the manufacturer of the play equipment, calls for meeting a fall height of ' ? ' - ' ? ' ". The contractor shall confirm final maximum fall height requirements and appropriate surfacing thickness with the playscape manufacturer prior to construction."
8. Provide a set of Specifications signed and sealed by architect or engineer (including but not limited to):
 - a. Boiler plate items identified on BSF Checklist.
 - b. Material and installation Specifications.
 - c. Manufacturer's installation instructions (State Contract projects only).
9. Check to ensure coordination of information on the drawings with the Installation Instructions.
10. The owner/operator (school district) must **provide a letter** (copied to the local BOE) that states: The District (name) will provide lifetime surfacing and equipment maintenance for the playscapes at the school (name) to ensure compliance with ADA, CPSC, and ASTM requirements. Regular safety/maintenance checks will be performed and recorded by our maintenance personnel.
11. Section 2.6 of the CPSC *Public Playground Safety Handbook* requires that after assembly and prior to the use of the equipment, the equipment should be thoroughly inspected by an independent qualified safety inspector to inspect playgrounds for safety, hired by the owner.

Sections 10-292(a), (c), and (d) of the Connecticut General Statutes permit the use of State Contracts by school districts in lieu of bidding out for the work or commodity. However, such work or commodity shall be reviewed and approved by BSF prior to signing of the contract(s). For further information go to the internet address <http://www.das.state.ct.us>.

If playground equipment and installation services are to be let out for bidding purposes, then the documents (plans and specifications) shall be presented with generic architectural details, not proprietary information. If a proprietary design is reviewed by BSF and subsequently, a different manufacturer is selected, then the plans (for the selected design) will be required to be re-submitted to BSF for another review.

Note to LEA:

Do not place an order or enter into any contract (DAS or otherwise) until district receives written plan approval from the BSF.

**BUREAU OF SCHOOL FACILITIES MASTER LIST
FOR PLAY EQUIPMENT**

THIS DOCUMENT IS ADVISORY ONLY, AND IS NOT INTENDED TO REPLACE OR BE ALL-INCLUSIVE OF ANY LOCAL, STATE OR FEDERAL REQUIREMENTS AND GUIDELINES. IT IS A COMBINATION OF ITEMS DRAWN FROM APPLICABLE STATE AND FEDERAL GUIDELINES AS THEY PERTAIN TO CONNECTICUT SCHOOL K THROUGH 12 PLAYGROUNDS. THIS DOCUMENT CAN BE EFFECTIVELY USED AS A CHECKLIST FOR DEVELOPING OR REVIEWING CONSTRUCTION DOCUMENTS AND IS SUBJECT TO REVISIONS.

LEGEND

- (PPSH) *Public Playground Safety Handbook (Pub. # 325 April 2008) – U.S. Consumer Product Safety Commission, as referenced by the Connecticut Department of Consumer Protection*
- (ADAAGPL) *The Americans with Disabilities Act Accessibility Guidelines; Play Areas – Federal Register April 30, 1998 / Proposed Rules*
- (ASTM) *The American Society for testing and materials F 1487- Standard Consumer Safety Performance Specification for Playground Equipment for Public Use*
- (ADAAG) *The Americans with Disabilities Act Accessibility Guidelines;*
- (UFAS) *Uniform Federal Accessibility Standards*

1. Surfacing
2.4, Table 2, and Figure 1 (PPSH)
15.6.7, 2.3.2.1 (ADAAGPL)
9.1.1 (ASTM)
2. Fall Heights
1.8, 5.3 (PPSH)
9.1.1 (ASTM)
3. Use Zones
1.8, 5.3 (PPSH)
9 (ASTM)
4. Layout, design, installation, maintenance, and materials
2 (PPSH)
4, 5, 9, 11, 12, 13 (ASTM)
5. General hazards
3 (PPSH)
6 (ASTM)
6. Entrapment
3.3 (PPSH)
6.1 (ASTM)

7. Stairways and ladders
5.2.1, and Table 6 (PPSH)
7.2 (ASTM)
8. Handrails
5.2.3 (PPSH)
15.6.4.5 (ADAAGPL)
7.2.6 (ASTM)
9. Platforms, guardrails, and protective barriers
5.1 (PPSH)
7.5 (ASTM)
10. Major types of equipment
5.3 (PPSH)
8 (ASTM)
11. Ground level play components
15.6.2 (ADAAGPL)
12. Elevated play components
15.6.3 (ADAAGPL)
13. Accessible routes
15.6.4 (ADAAGPL)
4.3 (ADAAG)
4.3 (UFAS)
14. Ramps
15.6.4.4 (ADAAGPL)
15. Transfer systems
15.6.5 (ADAAGPL)
16. Maneuvering space
15.6.6.1 (ADAAGPL)
17. Reach ranges
15.6.6 and appendix table (ADAAGPL)
18. Entry points and seats
15.6.6.4 (ADAAGPL)

CONNECTICUT STATE DEPARTMENT OF EDUCATION
BUREAU OF SCHOOL FACILITIES (BSF)

FIXTURES, FURNISHINGS, AND EQUIPMENT PROJECTS

When **fixtures, furnishings, and equipment (FF&E)** are part of a school construction project budget (whether provided by the contractor or the owner), documentation for the same shall be submitted for BSF review and approval prior to letting out for bidding purposes.

If the FF&E is not submitted as a part of the construction documents, then the district must submit a new phasing letter signed by the superintendent, indicating their intent to include FF&E as a separate phase for BSF review.

The school district must schedule a Plan Completion Test (PCT) meeting for FF&E projects/phases.

Please be aware that the current prevailing wage rates, determined by the Connecticut Department of Labor, may apply to work which requires construction, refurbishing or assembly of any of the FF&E items per CGS Sec. 31-53. Contact the Connecticut Department of Labor 10 to 20 days prior to advertising for bid.

SUBMISSION REQUIREMENTS (see PCT Test Sheet)

1. Completed ED042 form (with state project and phase numbers, signatures, and dates).
2. The documents submitted for BSF review shall be the same as the bid documents package (with state project and phase numbers), including but not limited to drawings, specifications, catalog-cuts, etc. Provide a Table of Contents with number of pages for each item listed.
3. Provide a professional cost estimate and Ineligible and Limited Eligible Costs Worksheet (ICW). The cost estimate presentation shall be grouped by categories with quantities, unit prices, subtotals, and totals (including soft costs). The cost estimate shall have a summary (front page). The cost estimate summary should have a list of eligible and ineligible costs. The ICW shall include ineligible costs of **all phases** of the project.
4. Submit the completed BSF CHECKLIST FOR FIXTURES, FURNISHINGS, AND EQUIPMENT (Section 7).
5. Specifications shall be in the typical (CSI or other industry standard) format and may include catalog-cuts. Each page of the specifications shall have a Section number and a page number at the bottom. Sequential numbering of each FF&E item is necessary. Each item shall be clearly identified with operational/function requirements, mounting heights as well as dimensional clearances for code compliance, when applicable.
6. Plans providing furniture layouts, with item or model numbers shall be provided.

SUBMISSION REQUIREMENTS (cont.)

7. The documents may be required to be prepared by a licensed design professional(s) when construction and/or installation is to be coordinated with specific trades (e.g. fixtures/equipment requiring electrical, mechanical and/or plumbing connections).
8. All FF&E projects, in addition to providing documentation indicating specific details, dimensions, function, operation, etc., shall include in the Contract Documents the following **Code Compliance**

Notes:

In order to meet the needs of persons with disabilities, when applicable all items shall comply with the current Connecticut Basic Building Code including 2003 ICC/ANSI A117.1, Section 504 Rehabilitation Act 1973 including the Uniform Federal Accessibility Standards (UFAS) and 504 Regulations, and the Americans with Disabilities Act Title II including the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and ADA Regulations.

Accessible knee clearances shall be a minimum of: 30 " wide, 27" high (24" child), and 19" deep.

Compliance with the current Connecticut Fire Safety Code and current O.S.H.A.–Title 29/Labor is also required when applicable.

The "items" shall include, but are not limited to fixtures, furnishings, equipment, workstations (including built-ins), playground equipment, laboratory fume hoods, darkroom equipment, welding stations, shop equipment, etc.