ENVIRONMENTAL HEALTH AND SAFETY PROJECT CHECKLIST

Plans contain *Life Safety and Code Compliance Pages* depicting the following information at a minimum:

- ☐ **Occupancy types and applicable Florida Building Code (FBC) and Florida Fire Prevention Code (FFPC) editions**
- ☐ **Design criteria shown with allowed and provided comparisons for all egress components**
- ☐ **Detailed information outlining compliance with both the FBC and FFPC requirements for any vertical openings**
- ☐ **Detailed information regarding laboratory unit classifications and chemical limits**
- ☐ **Detailed information on hazardous materials, control area designations, separation, quantities planned and allowed limits**
- ☐ **Detailed occupant loads and factors for all areas (net and gross), with totals by floor and for the building**
- ☐ **Occupant loads assigned to circulation and waiting areas, and egress widths take into account double occupancy at class change times for concentrated classroom areas.**
- ☐ **Building height, square footage, and construction type**
- ☐ **Room use and room numbers**
- ☐ **Rated walls and shafts**
- ☐ **Fire extinguisher locations**
- ☐ **General emergency lighting and exit sign locations**
- ☐ **Emergency systems control panels and annunciation locations**
- ☐ **Draft stopping where required by FFPC**
- ☐ **Locations of special suppression systems**
- ☐ **Clear notation for any exception, equivalency, or special arrangement proposed with code justification**
- ☐ **Detailed information outlining compliance with both the FBC and FFPC requirements for access controlled egress**

Additional items below will be verified throughout the design review:

ACCESS AND EGRESS

- ☐ **Site fire department access plan for construction and final building with signage and truck turning radiuses**
- ☐ **Details provided for all stairs and ramps in compliance with the Standards, the FFPC and the FBC**
- ☐ **All changes in elevation are adequately identified**
- ☐ **Roof levels with equipment are provided with fixed stair and elevator access where necessary, all others provided with access every level**
- ☐ **Details provided for all handrails and guardrails, loose ends on handrails to return to wall, and guardrail designs meet the 4" sphere requirement**
- ☐ **Egress doors swing in proper direction**

- ☐ **Sufficient number of exits are provided and located within required travel distances**
- ☐ **Doors have appropriate fire rating for location**
- ☐ **Doors must be provided with panic / fire exit hardware and closers where required**
- ☐ **Where doors swing out into a corridor or high pedestrian traffic area they are alcoved**
- ☐ **Doors swing in the direction of egress from areas provided with clean agent protection**
- ☐ **Stairwell and rated area separation doors are positive latching**
- ☐ **Stairwell and exit widths for concentrated classroom buildings take into account up to double occupancy at class change times**
- ☐ **Stairwells are provided with identification signage for FFPC, number, and location within the building**
- ☐ **Landings and loading docks and similar more than 30 inches above grade are provided with a guardrail**
- ☐ **Guards and railings provided with sufficient structural integrity to endure heavy use**
- ☐ **All access ladders extending more than 20 feet above grade shall be provided with fall protection cages per OSHA Standard**
- ☐ **Exit paths are provided to the public way for all exits, storm grates and similar trip hazards are avoided**
- ☐ **Exterior stairwell exposures properly protected**

SYSTEMS AND EQUIPMENT

- ☐ **Emergency lighting and exit signage provided**
- ☐ **Radioactive source illuminated signs are not permitted**
- ☐ **Storage rooms and hazardous areas are fire separated or protected as required per code.**
- ☐ **Fire extinguisher are specified to campus standard and located in common areas without locking cabinets.**
- ☐ **Fire alarm, sprinkler, standpipe, emergency lighting, and similar systems are provided as separately installed systems for each building served**
- ☐ **Fire alarms and mass notification systems are provided where require by code and the UCF Standards.**
- ☐ **Fire alarm control panels are located in a normally occupied area near a fire fighter entrance**
- ☐ **Fire alarm control panels are provided with smoke protection**
- ☐ **Pull stations are provided at all exits and entrance to all stairwells and at NFPA required travel distances**
- ☐ **Visual strobes are provided as required by NFPA 72 and FBC (ADA), classrooms / areas exceeding 20’ by 20’ are provided with notification, mechanical rooms are provided with visuals where audible may be low**
- ☐ **Where visual devices are shown on fire alarm system plans, minimum candela ratings are indicated**
- ☐ **Minimum audible dB levels are provided in accordance with NFPA 72, maximums do not exceed UCF Standard, tone and recorded message is acceptable (no shrill devices)**
- ☐ **Remote annunciators are provided for the alarm system, fire pumps, and generators as needed and located in the main lobby with the FACP or as approved by the owner**

- ☐ **Automatic detection is provided only where required.**
- ☐ **AHU duct detectors provided in accordance with NFPA 90A and AHU shutdown is in accordance with code and UCF standards**
- ☐ **AHU duct detectors will be labeled with actual duct flow for final inspection**
- ☐ **Vertical openings are protected in accordance with FFPC and FBC**
- ☐ **Exhaust and ventilation systems provided for appropriate hazards (smoke, cooking, laboratory), installed to their applicable code, and listed for the application**
- ☐ **Elevator recall, and shaft protection, and detection provided in accordance with code**
- ☐ **Fire suppression components are specified in accordance with code and the UCF standards, system control valves, backflow preventer, PIV, etc. are provided with lock and tamper monitoring**
- ☐ **Fire suppression equipment is located in dedicated spaces**
- ☐ **All stovetops are provided with hoods and suppression in accordance with NFPA 96**
- ☐ **Warehouse storage on racks are provided with sprinklers within the racks where required by NFPA 13**
- ☐ **All sprinkler system test valves and drains are hard piped to drain, systems which are not looped to be provided with a test valve/drain at the most remote point.**
- ☐ **Fire alarm and suppression system installing Contractors are directed to submit their shop drawings and cut sheets for State Fire Marshal plans review prior to system acceptance and preferably prior to 50% inspection**
- ☐ **Access control systems meet the requirements of the FFPC**
- ☐ **Office areas are provided with power receptacles on all useable walls, open floor office areas and corridors have sufficient electrical access**
- ☐ **Exterior building outlets which are likely to be used constantly are specified with a waterproof cover, one which allows the item to remain plugged in while still being weatherproof and GFI protected per NFPA 70.**
- ☐ **Electrical panel labels will be completely filled out with use and rooms / areas served, receptacle covers identified with the circuit feed**
- ☐ **Emergency and exit lighting is on dedicated circuits**
- ☐ **Main disconnects are provided for all services, fire pump controllers are located by an exterior room door for direct access**
- ☐ **Lightning protection systems is specified in accordance with NFPA 780**
- ☐ **Draperies and curtains are flame resistant and specified to meet the large and small scale tests of NFPA 701**
- ☐ **Copy of certificate of flame resistance or proof of fire retardant treatment is specified to be provided for all curtains an interior finish specialty items**
- ☐ **Fire service mains are not run under the building, risers are placed in a dedicated area close to an exterior wall, and the FDC is accessible**
- ☐ **Ceiling mounted items provide minimum head room clearance and locations are coordinated with area sprinklers and fire alarm devices**
- ☐ **Emergency generator and similar fuel tanks greater than 550 gallons are registered through EH&S/DEP prior to filling**

HVAC / INDOOR AIR QUALITY

- ☐ **Building windows are not operable except where required for residential second exit**
- ☐ **All ductwork is exterior insulated, all new ductwork to be galvanized steel**
- ☐ **All bathrooms and janitors closets do not have return to the air handlers but do have local exhaust**
- ☐ **All fresh air intakes are provided with pre-filtration prior to AHU mixing**
- ☐ **All supply and return is ducted**
- ☐ **Outside air intakes are not located near potential contaminant sources**
- ☐ **Vapor barriers are used for protection against moisture intrusion.**
- ☐ **Overall building envelope is designed to be slightly positive in pressure with respect to the outside**
- ☐ **Local exhaust is provided at break areas with food warming appliances and at copier locations**
- ☐ **Generator exhaust location is away from building intakes and openings**
- ☐ **HVAC test and balance planned prior to final/occupancy**
- ☐ **HVAC systems planned to be running not less than 2 weeks prior to final /occupancy**
- ☐ **All contractor provided items that give off vapors or smells are installed in advance of occupancy to allow vapors to dissipate**
- ☐ **ALL construction activities including punch list items that involve odorous chemicals, painting, dust, or noise are completed prior to any occupancy**
- ☐ **Where internet type connections are used to provide building HVAC controls, the installation shall be arranged such that the loss of IT connectivity allows continued operation in fail safe modes for all life safety systems, egress able door pressures, exhaust, etc.**

LABORATORY AND CHEMICAL SAFETY

- ☐ **Chemical areas provided with negative exhaust ventilation**
- ☐ **Emergency eyewash and shower units with drains provided**
- ☐ **Floors and counter bases at chemical use and storage areas sealed liquid tight**
- ☐ **Laboratory uses and chemical limits and assumptions are defined**
- ☐ **Doors to all work areas with hazardous chemicals and into clean agent protected rooms are provided with a vision panel**

MISC

- ☐ **State Fire Marshal plans review is included in the project schedule**
- ☐ **Environmental Compliance Requirements for contractors has been included in the procedures**
- ☐ **Trash and recycling rooms properly protected and separated**
- ☐ **Rated walls are maintained continuously from floor to deck or listed assembly**
- ☐ **NRTL assembly number and design is shown for each type of rated wall construction and penetration**
- ☐ **Plans submitted for review no larger than 30" tall when rolled and no more than approximately 100 pages per volume for easy handling**