

## **Prince George's County**

Department of Permitting, Inspections and Enforcement

## BUILDING PLAN REVIEW DIVISION Fire/Life Safety Section

9400 Peppercorn Place, 2nd Floor Largo, Maryland 20774 (301) 636–2070 • FAX: (301) 883–7148



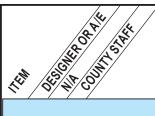
## FIRE/LIFE SAFETY PLAN REVIEW MINIMUM SUBMISSION (CASE TYPES: CI, CU, CGU, CE, CEU, CUW, CEW, CIW, CIEU, CIE)

Pursuant to 2018 IBC 105.3 (7), the following checklist is required to be submitted as a document uploaded to the ProjectDox Life/Safety **Document** Folder. The Designer or Architect/Engineer (AE) is required to checkmark each item or use the N/A box where not applicable. If any box is **not checked**, **the review will be terminated**.

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12	Descriptions									
	GENERAL									
1.				Address of project on plans matches application.						
2.				Drawings are legible. ( <i>Note:</i> Handwritten text on drawings is not accepted.)						
3.				Building Code and all other associated codes for the project with the correct year are shown on the drawing set, use group, and number of stories.						
4.				Name, Address and Phone information is on the cover sheet or individual plan sheets of designer(s).						
5.				Drawings are sized to 24" x 36" (minimum). Minimum Plan Scale is 1/8 inch = 1 foot with a text height of 1/8". Details are 1/4 inch = 1 foot.						
6.				Graphic scale is provided on all plans. Column Grid IDs are included as appropriate.						
7.				Plans are ready for construction. ( <i>Note:</i> Plans marked "For Bid Only," "Permit Only," or "80% Progress," etc., will be rejected.)						
8.				All permit set drawings have a cover page and a drawing index. Index matches sheet number.						
9.				Key Plan is included on each applicable drawing to show the location(s) of work.						
10.				True North Arrow is included on all floor and site plans. Plan north arrow is optional.						
11.				Building and Trades plans are orientated with the same plan north.						
12.				All fire-rated walls and partitions are clearly delineated on all plans, including Architectural, MEP, Fire & IT plans. Appropriate legends and symbols are included.						
13.				Scope of work is provided. Work description is specific and matches documents submitted.						
14.				Symbols and abbreviations list is included.						
15.				New, existing and demo work designations are clearly distinguished.						
16.				Required electronic or original seal and signature by a Maryland Professional Engineer, including professional statement certification with expiration date of license per state of Maryland (COMAR 09.23.03.10 or COMAR 09.21.02.04) are provided. (Copy and paste seals are not accepted.) Interior alteration cases with wall reconfigurations or cases for a new tenant, or fit-outs with a change of Use require an architect's sign and seal on the architectural drawings. A professional Engineer/Registered Architect sign and seal is not required if the case scope and limitation meet the requirements in DPIE's "Building and Trade Permits Plan Review Submission for Architectural and Professional Engineer (A/E) Seal Requirements" document.						

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				PHASED CONSTRUCTION					
17.				Construction Phasing Plan with detailed information on the scope of work for <b>each phase</b> : dates/duration of construction, temporary walls, path(s) of egress, emergency lighting, and the exit signs. These items are shown, along with the appropriate number of permit applications for each phase, where applicable.					
18.				Identifiable delineation of permit limits is provided. For example, Footing & Foundation vs. Core & Shell, etc.					
19.				Submittals for each phase of construction are complete and sufficient for that permit. Supporting information marked "for reference only" is provided where other permits and documents are referenced.					
				REVISIONS TO APPROVED PLANS					
20.	_			Revised sheets are clearly marked (after initial permit approval) on Drawing Sheet Index.					
21.				A letter indicating all the changes made and the sheet numbers on which they are made is provided.					
22.		_		A simple design narrative to explain the scope of work for design or permit revision is provided.					
23.				Revision clouds are provided with the appropriate delta symbol and revision number matching the revision block number with date.					
				REVISIONS FOR RESUBMISSION					
24.				Revision clouds are provided with the appropriate delta symbol and revision number matching the revision block number with date.					
25.				A narrative letter indicating a response to each comment and reference sheet where change was made is provided.					
				FIRE AND LIFE SAFETY					
26.				Building Code analysis/compliance narrative with references include the following:					
				a. Codes are included that were used for design, including the State of Maryland amendments and Prince George's County Subtitles. The Prince George's County website was checked for up-to-date code editions. International Fire Code (IFC) is used for high-piled storage, PV systems, combustible storage, combustible dusts, grain processing and storage, medical gas systems, and higher education laboratories. Subtitles 4 and 11 were checked for references to IFC.					
				b. If IEBC is used, the alteration level with data (floor area vs. work area and alteration type, etc.) and reasoning is provided.					
				c. Code references for each item below are provided.					
				d. Existing <u>and</u> proposed Use and Occupancy classifications of the tenant space/building are provided.					
				e. Incidental use(s) involved are identified.					
				f. Multiple-use groups are classified as accessory, separated, or non-separated per the current Building Codes.					
				g. Construction type of the building is provided. For podium buildings or structures with multiple buildings and construction types, a matrix/chart/key plan for each building is provided.					
				h. Building height information from the lowest level of the Fire Department access road and from the lowest grade level are provided.					
				i. The building is "considered a high-rise" or "not specified" labeling is provided.					
				j. Building/tenant area information is provided.					
				k. Frontage increase calculations are provided.					

			6	Descriptions  FIRE AND LIFE SAFETY (cont'd.)
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TEM	/5			Descriptions
				FIRE AND LIFE SAFETY (cont'd.)
				Basement grade plane calculations are provided.
				m. Occupant load calculations, which include the area of each space and the occupant load factor for each function, are provided. Occupant load calculation results are rounded up for each space; and the most stringent occupant load factor is used from NPFA 101, Table 7.3.1.2, and IBC, Table 1004.5 (e.g., Kitchen 100 ft²/person is used per NFPA 101 instead of kitchen 200 ft²/person per IBC).
				n. Occupant load calculation results are rounded up for each space.
				o. The number of required exits are submitted.
				p. Exit capacity and expected capacity per the occupant load calculations are submitted.
				q. Existing and Proposed Automatic Fire Sprinkler Systems with type are provided.
				r. Existing and Proposed Fire Alarm Systems are provided.
				s. Existing and Proposed Emergency Voice/Alarm Communication Systems are provided.
				t. Use and Occupancy classification of the adjacent tenants is provided.
				u. Demising wall fire resistance ratings are provided.
				v. The fire resistance ratings of the building elements are provided. This information includes the subtitle amendments.
				w. Roof fire classification is provided.
27.				The FPEDE Report is provided per Prince George's County, Subtitle 4, Section 4-113, NFPA 101, and NFPA 1.
28.				A Demolition Plan is provided that clearly shows the demo work. If no demolition work is necessary, a note is presented on the "scope of work" section on the cover page.
29.				Floor plans are provided with dimensions (building perimeter, corridor, dead-end corridor, etc.) and wall, window, and door labels, including the existing doors and walls; room labels clearly showing the function of each room and space; and, if applicable, the standpipe/sprinkler room location is shown for new sprinkler systems.
30.				A Reflected Ceiling Plan is provided and shows the ceiling height in each location, ceiling material, decorative materials with dimensions and height drop, exit signs, hoods, etc.
31.				A Roof Plan is provided that includes dimensions, opening/equipment locations, pathways and distances, FRT wood locations, parapet locations, occupied areas, exits, etc.
32.				Furniture/Fixture Layout Plans showing the furniture layout, shelving locations, aisles with dimensions, seating arrangements, counters, kitchen/cooking equipment, hoods, etc. are provided. All possible layouts are presented for flexible and open-plan areas.
33.				Elevation Plans (all sides) are provided with building height from the lowest grade, each floor height, dimensions, labels, etc. Calculations are included, as appropriate, to demonstrate compliance with wall opening requirements.
34.				Building sections are provided.



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/	FIRE AND LIFE SAFETY (cont'd.)								
35.				The Site Plan is provided and shows the street names, distances between the buildings/structures/ equipment (generator, grill/fire pit, storage tanks, etc.) located within the same property, and distances to the property lines, location of the tenant space/building, and the fence and gate locations. If the scope includes additions or new building fire hydrant locations, distances from the fire hydrant to the exterior of the building as the hose is laid and Fire Department access roads with dimensions are provided. If the building/tenant space will have a new sprinkler system, the FDC location, fire hydrant locations, and distances from the fire hydrants to the FDC as hose is laid are also provided.					
				The Site Plan is provided for the items listed below:					
			$\overline{}$	Any new building (including a storage shed)					
	$\rightarrow$		-	Any addition					
				<ul> <li>A change in construction type where the construction type is decreasing in fire resistance rating, i.e., increasing in combustibility</li> </ul>					
				A new sprinkler system being installed in a building					
				<ul> <li>Modification in a streetscape that decreases street access to the building or alters any existing fire lane (i.e., reduces fire truck access)</li> </ul>					
				Ground floor pool addition					
				Relocation of the existing Fire Department Connection (FDC)					
				Changes to the water supply or relocation of fire hydrant					
				Addition of any pole or sign that would block a fire hydrant or FDC					
36.				A life safety plan is provided for all floors showing the following information:					
				Delineate all fire resistance-rated walls and their type (e.g., fire barrier, partition, etc.)					
			$\vdash$	Smoke compartments					
				Fire areas					
				Boundary of all smoke/fire-rated walls, including those around an atrium					
				• Exits					
				Exit access stairs/ramps					
				Horizontal exits					
				Dimensions of corridors and aisles					
				Exit access travel distances and common path of egress travel distances					
			$\vdash$	Occupant load for each travel path					
				Egress capacity of egress components (exits, stairs, ramps, etc.)					
				<ul> <li>Exit discharge components (egress courts, etc.) and locations, access to public way outside of the building</li> </ul>					
				<ul> <li>Delayed egress or special locking location shown with appropriate symbols such as card readers, sensors, push-to-exit</li> </ul>					
				<ul> <li>Occupant load of each space/room shown with occupant load factor used and area (net or gross) of each room or space</li> </ul>					
				<ul> <li>Total occupant load for each floor and the total occupant load for the entire building</li> </ul>					
				Remoteness between required exits and exit access doors					

			/6	Descriptions  FIRE AND LIFE SAFETY (cont'd.)
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NEW YEAR	. /		N.	Descriptions
	_	<u>*/</u>	<u> </u>	FIRE AND LIFE SAFETY (cont'd.)
				Annunciator location
	_		$\vdash$	Sprinkler room location
	_		$\vdash$	Fire pump location and type
	_		$\vdash$	Standpipe locations
	_		-	Fire hose valve locations at horizontal exits, exit enclosures, exit stairs, etc.
	_	_	•	Provide any additional details or sections that are necessary to explain the life safety design intent.
37.		П		Wall/floor details are provided with material types, fire resistance ratings, and listings from nationally
				recognized testing agency, e.g., UL/FM # or IBC chapter 7 compliance.
38.				Concealed space details (materials, dimensions, area, draft-stop locations, fire-stop, heat detector, etc.) are provided.
39.				Fire-stopping and draft-stopping locations and details are provided.
40.		۵		Platform/stage drawings and details are provided with dimensions, materials, and use of the underneath area. Verify "no storage" if the area below will not be used as a storage area.
41.				Cooking equipment information with model number(s) are provided on the plans.
42.				Manufacturer's cut sheets are provided for the cooking equipment.
43.				Hood information with the model number and type are provided on the plans.
44.				Manufacturer's cut sheets are provided for the hood.
45.		۵		The hood manual pull station location is provided on the floor plan. It is in the path of egress. The measurements are a min. 10 ft and a max. 20 ft from the edge of the hood.
46.		۵		Details for ramps/stairs that include slope, risers/treads, dimensions, and handrails/guards are provided; up and down directions are indicated.
47.				Interior wall, floor, and ceiling finish schedule/type material along with the flame spread index (e.g., Class A, B, C) are provided.
48.				Door and hardware schedules are provided. All door schedules are on plans. All door hardware sets are called out and present on a plan sheet, including special locking devices. (Referring to specification is not accepted.) Additionally, all new and existing hardware components (do not state "Existing to Remain" without providing a hardware set) and those that support access control are identified.
49.		۵		Window schedule is provided. Providing fall prevention is verified on the schedule as stated in IBC, Section 1015.8.
50.				Tempered glass and fire resistance ratings of the doors and windows are provided on the plans and schedule.
51.		۵		Penetration details for fire-rated construction with nationally recognized test ratings, e.g., UL/FM#, are provided.
52.				For projects using International Existing Building Code (IEBC), answer ALL of the following questions in the scope of work on the plan sheet:
				What is the purpose of the renovation?
				What is the square footage of any floor where work is being performed?
				What is the total floor area of the building?
				What repairs are being conducted?
				What are the alterations?

		/	Descriptions  FIRE AND LIFE SAFETY (cont'd.)
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			FIRE AND LIFE SAFETY (cont'd.)
			Are the alterations considered Level 1, 2 or 3?
			Where are the work areas?
			See: Work Areas
			What is the square footage of the work areas on each floor?
			What is the total square footage of the work areas in the building?
			Is there a change of occupancy?
			Is the structure a historic building?
			Is the building being moved?
			<ul> <li>What work is being performed in the primary function area(s)?</li> </ul>
			<ul> <li>Is there an accessible route, including an accessible restroom and an accessible drinking fountain, to each affected primary function area?</li> </ul>
			Any supplemental requirements and work that is outside of the work area(s) are identified and explained. Any work proposed in a primary function area and the corresponding accessible route are identified. If upgrades are necessary to provide an accessible route, they are identified.
53.			Existing and proposed Fire Protection and Life Safety Systems (automatic sprinkler system, fire alarm system, automatic smoke detection system, emergency voice/alarm communication system, smoke control system, etc.) are provided in the code analysis. All required fire protection systems are identified on plans with correct NFPA standards and editions (NFPA 13, 13R, 13D, NFPA 72, etc.).
54.			It has been stated whether or not the building is proposed to have a fire alarm system, and if it is, the type of system (e.g., manual, voice evacuations) is provided.
55.			For Smoke Control Systems, the rational analysis is provided where required.
56.			The primary Fire Department Connection (FDC) on the address side of the building (if sprinklered) is provided. For high-rise buildings, the secondary FDC location, remote from the primary FDC, is provided.
57.			The fire hose valve locations are at horizontal exits, exit enclosures, exit stairs, main floor landings, etc.
58.			For flammable and combustible liquid tanks, the sizes are indicated and location(s) shown and dimensioned from all property lines and the nearest structure (including other tanks) on site. All on-site and off-site roads and driveways accessing the site are shown. Also, Prince George's County Subtitle 11, Sections 11-260 and 11-259 have been checked and applicable information supplied.
59.			The Fire Service access elevator is clearly identified.
60.			All hazardous materials are identified; controlled areas and maximum allowable quantities are stated.
61.			Height of storage, racks, and shelves are provided.
62.			Commodity types and storage methods, along with quantities, are provided on the plans.
63.			<b>Fire Safety During Construction and Demolition:</b> Compliance with NFPA 241 and the <u>Prince George's County Code, Subtitle 11</u> is provided; at minimum, the following have been demonstrated/called out on plans:
			<ul><li>On-site firefighting water supply is available during construction/demolition</li><li>Standpipe</li></ul>
			Fire Department Connection (FDC)
			Plans verify the Fire Department has access to an all-weather surface to within 100 feet of the FDC.

FIRE AND LIFE SAFETY (cont'd.)  34.					
Deferred Shop Drawings are submitted as separate permit applications, as required, for the following fire protection systems: sprinklers, standpipes, alternative fire suppression systems, fire detection and alarms, fire pumps, kitchen hoods, Emergency Responder Radio Coverage, etc.  Notes are provided on the Building Permit construction set that clearly indicate the shop drawings for the required systems will be submitted separately.  In-building emergency communications coverage  Contact Prince George's County's Public Safety Communications Technical Services Section at MTCnotification@co.pg.md.us.  For fences/guards, details are provided showing the openings between the pickets.  Retaining walls are provided with guards when the height is more than 30 inches and Prince George's County Subtitle 4, Section 4-172 was checked.  All gates that impede Fire Department access to a site are equipped with either a KnoxBox or a siren-operated system. Each KnoxBox is called out on the plans. (Contact Prince George's County			/c	No.	
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