Construction Site Plan Checklist

2015 International Fire Code (IFC)

Date: 

Business Address: 

Business Name: 

Occupancy Classification: 

Square Feet: 

Construction Type: 

Contact Name: 

Contact Phone Number: 

Fire Safety during Construction & Demolition:

✓ Smoking (IFC 310 & 3304.1) Smoking shall be prohibited inside any area of the building under construction or demolition. The contractor may allow designated smoking areas. These designated smoking areas shall be at least 20 feet from the building, and at least 20 feet from other combustible or flammable construction material (ie. piles of lumber or flammable liquids). Designated smoking area shall have signs posted and an ash tray available for discarded smoking material. The approved ash tray shall be either a metal bucket with sand or any other commercially approved outside smoking material receptacle.

✓ Waste disposal (IFC 3304.2) Combustible debris shall not be accumulated within buildings. Combustible debris, rubbish and waste material shall be removed from buildings at the end of each shift of work. Good housekeeping shall be observed in the vicinity of the exterior of the building. Rubbish & trash shall be disposed of in dumpsters and not allowed to accumulate near the building.

✓ Temporary covering of fire protection devices (IFC 3308.7) Coverings placed on or over fire protection devices to protect them from damage during construction processes shall be immediately removed upon the completion of the construction processes in the room or area in which the devices are installed. Care shall be taken to avoid painting fire sprinkler heads and contaminating smoke detectors by construction dust or spray.

✓ Standpipe Required (IFC 3313.1) In buildings required to have standpipes, not less than one standpipe shall be provided for use during construction. Such standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring.
Automatic Sprinkler System Completion Before Occupancy (IFC 3314.1) In buildings where an automatic sprinkler system is required by the International Fire Code or the International Building Code, it shall be unlawful to occupy any portion of a building or structure until the automatic sprinkler system installation has been tested and approved by the AHJ.

Fire Extinguishers (IFC 3315.1 / 3317.3) Structures under construction or demolition shall be provided with not less than 1 portable fire extinguisher located at each stairway on all floor levels, in every storage & construction shed, any room/area where flammable or combustible liquids are stored. Roof operations utilizing heat-producing systems during construction shall have not less than one multipurpose portable fire extinguisher with a minimum of 3-A 40-B:C rating on the roof being covered or repaired.

All-Weather Access Roads during Construction:
*Access roads shall be in place prior to going vertical with combustible construction or going vertical higher than 6 feet with non-combustible construction.

Required Access (IFC 3310) Approved vehicle access for firefighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet of temporary or permanent fire department connections (FDC).

Access & Loading (IFC Appendix D102) Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved “all weather” driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds.

Fire Apparatus Access Roads:
(IFC Chapter 5 & Appendix D)
Fire Apparatus Access Road – A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as fire lane, public street, private street, parking lot lane and access roadway.

Dimensions (IFC 503.2.1) Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (exception: width shall be 26 feet minimum when IFC Appendix D105.1 & D105.2 applies), exclusive of shoulders, except for approved security gates and an unobstructed vertical clearance of not less than 13 feet 6 inches.

Turning Radius (IFC 503.2.4) The required minimum turning radius of a fire apparatus access road shall be designed to accommodate the following radiiuses: Inside turning radius of 26.5 feet & outside turning radius of 48 feet.

Dead Ends (IFC 503.2.5) Fire apparatus access roads that have a dead-end in excess of 150’ in length shall be provided with an approved area for turning around fire apparatus per IFC appendix D (Table D103.4 & Figure D103.1).
✓ **Fire Lane Marking** (*IFC 503.3*) Approved fire apparatus access roads shall be clearly identified by markings that includes the words NO PARKING – FIRE LANE along the lane to prevent the obstruction thereof. Please see fire lane document for specifications on markings and signage.

✓ **Security Gates** (*IFC 503.6 / D103.5*) Security gates installed across a fire apparatus access road shall be provided with an approved means of emergency operation by the Fire Department & shall be a minimum of 20’ wide.

**Site Access:**

✓ **Buildings exceeding three stories or 30 feet in height** (*IFC Appendix D104.1*) Buildings or facilities exceeding 30 feet or three stories in height shall have at least two means of fire apparatus access for each structure.

✓ **Buildings exceeding 62,000 square feet in area** (*IFC Appendix D104.2*) Buildings or facilities having a gross building area of more than 62,000 square feet shall be provided with two separate and approved fire apparatus access roads. **Exception:** Projects having a gross building area of up to 124,000 square feet may have a single approved fire apparatus access road, when all buildings are equipped throughout with approved automatic sprinkler systems.

✓ **Projects having more than 100 dwelling units** (*IFC D106*) Multi-family residential projects having more than 100 dwelling units shall be equipped throughout with two (2) separate & approved fire apparatus access roads. **Exception:** Projects may have up to 200 dwelling units utilizing a single access road, if the project is protected throughout with a fire sprinkler system (including all non-residential occupancies).

✓ **Remoteness** (*IFC Appendix D104.3*) Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.

**Buildings exceeding 30 feet in height:**

(*IFC Appendix D*)

✓ **Aerial Fire Apparatus Access Roads** (*IFC Appendix D105.1*) Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet in height, an approved aerial fire access road shall be provided. *For the purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greater.*

✓ **Width** (*IFC Appendix D105.2*) Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet, exclusive of shoulders, in the immediate vicinity of the building or portion thereof.

✓ **Proximity to building** (*IFC Appendix D105.3*) At least one of the required access routes meeting the condition of IFC Appendix D105.2 shall be located within a minimum of 15 feet and a maximum of 30 feet from the building, and shall positioned parallel to one entire side of the building. This side of the building shall be approved by the Fire Code Official.
High-Piled Combustible Storage:
(*IFC chapter 32*)

High-Piled Combustible Storage – Storage of combustible materials in closely packed piles or combustible materials on pallets, in racks or on shelves where the top of storage is greater than 12 feet in height or high hazard commodities greater than 6 feet in height. High-hazard commodities may include such items as rubber tires, Group A plastics, flammable liquids, idle pallets (pallet storage) and similar commodities.

* If the design of your building includes high-pile combustible storage areas then please reference IFC chapter 32 for specific guidelines and requirements.

Fire Hydrant:
(*IFC Section 507 and Appendix B & C*)

✓ Where required (*IFC 507.5.1*) Commercial buildings, without a fire sprinkler system, shall be within 400 feet of a fire hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building. Exceptions: Group R-3 & Group U occupancies, the distance requirement shall be 600 feet. For buildings equipped throughout with a fire sprinkler system, the maximum distance shall be 600 feet.

✓ Clear Space Around Hydrants (*IFC 507.5.5*) A 3 foot clear space shall be maintained around the circumference of fire hydrants.

✓ Number of fire hydrants (*IFC Appendix C103.1*) The minimum number of fire hydrants required shall not be less than that listed in IFC Table C105.1. This table is based on the required GPM of water flow required for firefighting operations also known as “fire flow”.

✓ Required GPM fire flow (*IFC Appendix B105*) The required GPM fire flow is based on IFC Table B105.1. There is a reduction of 75% fire flow for commercial buildings equipped throughout with a fire sprinkler system. Factors required to accurately compute the fire flow are the construction type and square feet of the building area.

Comments:

Fire Lane:

✓ Designation (*IFC Chapter 5 / Ordinance 10.04.004*) Fire Lane and Access Roads shall be approved by the Fire Marshal.

✓ Dimensions (*IFC 503.2.1*) Fire apparatus access roads shall have an unobstructed width of not less than 20 feet.

✓ Specifications for Marking (*IFC 503.3.2*) Fire lane markings shall be upon the vertical surface of the curb unless otherwise approved by the Fire Marshal. Fire lane striping shall consist of a six (6) inch wide red background stripe with four (4) inch high white letters using three quarter (3/4) inch stroke stating "FIRE LANE NO PARKING" or "NO PARKING FIRE LANE" to be painted upon the red stripe every forty (40) feet along the entire length of the fire lane, showing the exact boundary of the fire lane.
Plans Review/Permits Required:
It’s the responsibility of the general contractor, architect, engineer, lease and property owner to submit construction documents for review and permit to agencies having jurisdiction. The Fire Marshal’s Office will be available for consultation to determine if a permit is required.

☐ Underground fire line pipe and tap into the water main (IFC 105.7.1).
☐ Aboveground fire riser pipe and fire sprinkler piping (IFC 105.7.1).
☐ Fire pump installation and piping (IFC 105.7.7).
☐ Fire alarm systems (IFC 105.7.6).
☐ Kitchen vent hood extinguishing system (IFC 105.7.1).
☐ Stairwell Pressurization / smoke evacuation systems (IFC 105.7.14).
☐ Cryogenic fluid storage system (IFC 105.7.4).
☐ Fire Command Center (IFC 508.1.4).
☐ Stationary Storage Battery Systems > 50 gallons of electrolyte (IFC 105.7.2)
☐ Emergency Responder Radio Coverage System (IFC 105.7.5).
☐ High-Piled storage (IFC 105.6.23).

Fire Marshal’s Office Inspections required:
☐ Underground fire line pipe, connections, thrust blocking, hydro test & flush witness.
☐ Aboveground fire sprinkler pipe installation, connections, pipe hangers & hydro test.
☐ Fire alarm installation, test & integration with other systems connected.
☐ Clean agent (FM 200) suppression system installation, integration with other systems & fan test.
☐ Kitchen vent hood extinguishing system installation, functional test, integration with other systems.
☐ Dry powder/chemical extinguishing systems (as used in paint booth areas).
☐ Underground / aboveground fuel storage tank installation or removal.
☐ Specialty systems (i.e. stairwell pressurization, smoke evacuation, heat vents, generator, elevator recall, ect.)
☐ Final fire inspection for other life safety elements (i.e. fire hydrants, fire apparatus access roads, fire
lane marking, posted address, fire extinguishers, emergency lighting, exit signage, egress doors & hardware, occupant load calculation, high pressure cylinders, hazardous gases or liquids, high piled stock & shelving, exposed electrical, etc.).

Comments:

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__________________________________________________________________________

Name (Print)  Signature

Please contact the Lubbock Fire Marshal’s Office with any questions:

Lt. Terry Davis
Assistant Fire Marshal
twdavis@mylubbock.us
806-775-3601

Please note: Site plan is not a review for code compliance from the Fire Marshal’s Office. Plan reviews are to be determined based on a formal submittal to the Fire Marshal’s Office.