

**City of Kalamazoo
Department of Public Safety
Fire Marshal**

SITE PLAN REVIEW REQUIREMENTS - December 2017

Site – Date – Location

THE FOLLOWING ARE REQUIRED, DEVIATION REQUIRES CONSULTATION WITH THE FIRE MARSHAL'S OFFICE.

1. Installation of Knox Box. The size shall be a “3200” series or larger. The vault shall be mounted unobstructed and visible approximately five feet from ground level near a main access door.. Devices may only be purchased at www.knoxbox.com. Further information is available at <https://kalamazoopublicsafety.org/fire/marshal/>
2. A Knox elevator key box shall be installed adjacent to any elevator.
3. The size, use, access and orientation of the building may require larger or additional Knox key vaults and / or externally mounted plans & document vaults.
4. Externally mounted electrical disconnects shall utilize the Knox disconnect switch if the owner wishes to secure the switch..
5. **Storage and use of chemicals on site shall have all SDS information and submit Right to Know survey as well as prepare and submit Wellhead Protection Survey.** <https://www.kalamazocity.org/docman/forms/site-plan-review/4196-chemical-inventory-and-storage-form/file>
6. **Architect shall review and classify hazard class of the site and/or structure.**
7. **Maximum Allowable Quantities of regulated material shall be submitted as well as detailed plan indicating how requirements are being met for each control area. A maximum of four control areas allowed.**
8. **Storage and use of hazardous materials may require a permit to do so from the Fire Marshal's Office.**
9. Outdoor sale displays shall be included on submitted site plan. This shall include LP sales or container transfer cages.
10. Fire hydrants not publicly owned cannot be considered for use during site plan review.
11. The Fire Department Connections (FDC) shall have Knox **2.5” Locking FDC Plugs** with swivel-guard, model 3040 or 3041.
12. The FDC shall be within 100’ of a fire hydrant.
13. The FDC shall be remotely located away from the building, unless not practical. The location of the fire department connection shall be approved.
14. Immediate access to FDC shall be maintained in clear view without obstruction by parked vehicles, fences, bushes, trees, walls, dumpsters or any other object.
15. The FDC shall be accessible by hard surfaced pavement which is maintained during all-weather environments. Hard surface shall be cement or asphalt. The width shall allow a vehicle or hose line to be advance or connected.
16. FDC shall be so located so that fire apparatus and hydrant lines connected to supply the system will not obstruct access to the buildings for other fire apparatus.
17. Public/private fire hydrants shall be identified signage approved by the City of Kalamazoo.
18. Public and Private fire hydrants shall be supplied by a main not less than 8” in diameter.
19. Fire hydrant placement shall be approved by the Fire Marshal's Office.
20. Fire hydrants shall not be farther than 300 feet from the site.
21. Fire hydrant spacing shall not exceed 300 feet from each hydrant.

22. Water mains serving fire suppression systems shall not be less than 6" in diameter. Main size may be reduced upon submittal of engineered/architectural stamped & sealed fire suppression plans in detail including calculations. Plans shall be approved by the COK.
23. Fire department connections not remotely located shall be located on the street side of the building.
24. FDC not remotely located shall be fully visible and recognizable from the street.
25. The FDC shall be identifiable to approaching fire apparatus.
26. The FDC shall be indicated by an approved sign mounted on the street, front, side of the building or adjacent to a remotely located FDC.
27. FDC signage shall have the letters "FDC" at least 6 inches high. The letters shall be a Arabic or Helvetic style font.
28. FDC Signage shall be installed 10' above grade or above obstructions above the connection.
29. FDC signage shall be reflective with white letters with a red background. All such signs shall be subject to the approval of the fire code official.
30. FDC shall have an exterior rated strobe & horn device above the FDC, approximately 10' in height. Device shall be in clear view to approaching fire apparatus. The horn and & strobe shall remain active until manually reset.
31. Protective Bollards shall be required to protect egress doors or pathways where vehicles or other devices (dumpsters, shopping carts, outside displays etc) can be parked or placed which could impede the pathway or door motion from a required egress door
32. Protective Bollards shall be installed protecting any exposed electric or gas device, connection, piping, meter, FDC, fire hydrant, fire stand pipe connection, LP Storage tank, LP transfer point, LP point of sale.
33. Protective bollards shall also be erected at any point where a vehicle will be driving alongside or up to the building such as that of a dive thru sales window.
34. Protective bollards shall be placed regardless of whether or a sidewalk is placed between the device and the area for parking.
35. Protective bollards shall be constructed to the minimum standard detailed in section 312.2 & 312.3 of the International Fire Code (2009).
 - a. Constructed of steel not less than 4" in diameter and concrete filled.
 - b. Spaced not less than 4' between post on center.
 - c. Set not less than 3' deep in a concrete footing of not less than 15" diameter.
 - d. Set with the top of the post not less than 3' above ground.
 - e. Located not less than 3' from the protected object.
 - f. Physical barriers shall be a minimum of 36" in height and shall resist a force of 12,000 pounds applied 36" above the adjacent ground surface.
36. After landscaping, the discharge ports for hydrants shall be 24" from the ground measured from the bottom of the lowest port to the ground.
37. Building identification shall be placed in a position that is plainly legible and visible from any street or road fronting the property.
38. Those properties fronting more than one street or road shall identify the address by both number and street name on each side of road frontage.
39. The address numbers and street name shall contrast with their background.
40. Commercial structures shall have address numbers at least 12" to 24" high.
41. Address letters indicating street names shall be 6" to 24", height to be approved.
42. Parking lots, driveways and service & access drives shall be designed and constructed to allow the maneuverability and weight of fire service aerial devices.

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43. Private street name signs shall meet the minimum requirements pertaining to visibility, reflectivity and size as those established for a public roadway.
 44. Fire access lanes when required shall be a minimum of 20' wide and provide 13'6" height clearance. Signage shall be erected prohibiting parking.
 45. Turning radius of parking lots and fire access lanes shall be constructed to allow turning and full operation of fire apparatus during an emergency.
 46. Dead end access roads and parking lots in excess of 150 feet in length shall be provided with approved provisions for the fire apparatus to turn around.
 47. Overhangs or other portions of the structure which is to be driven under shall be approved by the Fire Marshal's Office. Engineered specs shall be provided.
 48. Bridges which support the weight of fire apparatus over void spaces shall be approved by the Fire Marshal's Office. Engineered specs shall be provided.
 49. Security gates restricting access shall be approved pursuant to code. Approved fences, gates or other barriers shall be accessed thru Knox padlocks or access switches.
- 50. The AHJ reserves the right to implement field adjustments as needed.**

Jim Williams
Fire Marshal