

**Cherokee County  
Fire &  
Emergency  
Services**



**Plan Review**

**Emergency Communications System(s) (RADIO)<sup>1</sup>**

Job Name: \_\_\_\_\_  
 Address: \_\_\_\_\_ Bldgs. Suite: \_\_\_\_\_  
 City: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Responsible Party: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Email: \_\_\_\_\_

**GENERAL INFORMATION:**

Area of Building: \_\_\_\_\_ Number of Stories \_\_\_\_\_  
 Occupancy Type: \_\_\_\_\_ Construction Type \_\_\_\_\_  
 Radio System Type: BDA  Y  N  DAS  Y  N  Radiating Cable: Y  N   
 Radio Donor Site \_\_\_\_\_ Number of Remote Amplifiers \_\_\_\_\_

✓ = Pass, X = Fail, NA = Not applicable **Status**

**DRAWING SUBMITTAL REQUIREMENTS**

1) Plans shall be clearly labeled and legible.	
2) Plans shall include a single line wiring diagram including cable type.	
3) Plans shall include a title sheet with full specifications and system operational description.	
4) Manufacturers specifications and cut sheets shall be included with plans.	
5) Plans shall include a vicinity map which includes Cherokee County system towers and building latitude and longitude.	
6) Plans shall include details of system supervision and central station monitoring per IFC 510.4.2.4(3). Monitoring by the FACP is the preferred method. Signals shall be supervisory.	
7) Plans shall show a grid pattern for each level, not less than 20 grids per floor. Floors greater than 32,000 sf shall utilize a maximum 40-ft x 40-ft grid.	
8) Floor plans for each level (basement included) must show anticipated signal levels in each grid.	
9) Plans shall indicate the location of all system components.	
10) Plans shall identify critical areas as defined in NFPA 72, 24.5.2.2.1	
11) Location and anticipated talk-in signal level at the closest Cherokee tower site (-95dBm required)	
12) All critical areas -as defined in NFPA 72- SHALL BE COVERED WITH A MINIMUM OF -95dBm, show anticipated signal coverage in each area for talk-in and talk-out.	
13) Shall be capable of transmitting all Cherokee 7/800 MHz frequencies and modulation technologies	
14) All system electronics shall be enclosed in NEMA 4 cabinet, batteries must be separate or utilize a sound engineered design. Separate battery cabinets -when using sealed batteries- are not required to be NEMA 4 compliant.	
15) Two independent power supplies shall be provided; secondary supply must provide a 24-hr supply at 100% of maximum current draw (show calculations). When using an NFPA 110 emergency generator a minimum of 8-hours run-time is required.	
16) Dedicated monitoring panel provided in fire command center (If there is a command center)	
17) Annual testing is required per IFC 510. All submissions shall include a proposal between the owner and an approved testing agency for annual testing, inspection and re-certification. Building owners must acknowledge the necessity of annual testing by means of a written statement scanned onto the plan set.	
18) System acceptance and testing criteria shall be provided for review and approval.	
19) System certification shall be provided and shall include a complete catalog of all tests and signal levels achieved after installation.	
20) Complete system acceptance testing documentation shall be kept on site in a document box located at the BDA cabinet.	
21) Adequate means to protect all fire rated penetrations shall be detailed in the plan set	
22) All cables shall be documented to be rated for their respective use, plenum, riser etc.	
23) ERRC Designs shall bear both a FCC General Radio License and Low Voltage License credentials and signatures. Original signatures are required on the cover page of all plan sets.	
24) Provide the FCC General Radio License for the lead installation technician. All ERRC installations require a Low-Voltage Permit through the applicable permit office.	

1.) The above is not an all-inclusive list; all applicable fire and life safety provisions must be met. Cherokee County reserves the right to order the disconnection and/or disconsolidation of any system that fails to perform or causes interference, harmful or otherwise to any Cherokee County Communications system.