



# CONTRA COSTA COUNTY FIRE PROTECTION DISTRICT

## ERRCS

F.D. Permit Number \_\_\_\_\_

Date \_\_\_\_\_

Description of Work: \_\_\_\_\_

Project Name: \_\_\_\_\_ Address: \_\_\_\_\_

Suite: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

Contractor: \_\_\_\_\_ Contractor's License/Type #: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone No. ( ): \_\_\_\_\_ Email: \_\_\_\_\_

### OFFICE USE ONLY: DO NOT COMPLETE BELOW THIS LINE

We have reviewed the proposed **Emergency Responder Radio Coverage System (ERRCS)** shop drawing plans and specifications. Our review is to ensure compliance with the minimum code requirements related to fire and life safety as set forth in the 2022 California Fire Code, 2022 California Building Code, 2019 NFPA 1221, and 2022 NFPA 72. The following **selected** comments shall apply to this application.

- The building shall be considered to have acceptable emergency responder communication coverage when signal strength measurements in 95 percent of all areas on each floor of the building and 99% of critical areas as defined by NFPA 1221, 9.6.7.3 meet the signal strength requirements per (CFC 510.4.1)
- Buildings and structures that cannot support the required level of in-building, two-way emergency responder communication coverage shall be equipped with systems and components to enhance the radio signals and achieve the required level of in-building, two-way emergency responder communication coverage. (CFC 510.4.2.1)
- The in-building, two-way emergency responder communication coverage system shall be provided with an approved secondary source of power. The secondary source of power shall be capable of operating the emergency responder communication coverage system for a minimum of 12 hours. Once primary power is lost, the power to the system shall automatically transfer to the secondary power supply. (CFC 510.4.2.3 and 1203.2.3)
- Mechanically protect and label the dedicated circuit breaker(s) serving the emergency responder communication coverage systems primary power as well as remote radio units. Label all control equipment with the location of the electrical panel and associated circuit breaker number on the exterior of the box. (NFPA 72 10.6.5)
- The in-building, two-way emergency responder communication coverage system shall be electrically supervised and monitored via the building fire alarm system and central station. (CFC 510.4.2.5)
- To maintain proper alignment with the system designed donor site, donor antennas shall be permanently affixed on the building or where approved, mounted on a movable sled with clearly visible sign stating "MOVEMENT OR REPOSITIONING OF THIS ANTENNA IS PROHIBITED WITHOUT APPROVAL FROM THE FIRE CODE OFFICIAL." The antenna installation shall be in accordance with the applicable requirements in the California Building Code for weather protection of the building envelope. (510.5.1) CFC

(CONTINUED OVER)

Fee computed by: \_\_\_\_\_ Amount Due: \$ \_\_\_\_\_

Received by: \_\_\_\_\_ Amount Received: \$ \_\_\_\_\_

Cash  Credit  Check No. \_\_\_\_\_ Invoice No. \_\_\_\_\_

- The connection between the backbone cable and the antenna cables shall be made within an enclosure that matches the building's fire rating, and passage of the antenna distribution cable in and out of the enclosure shall be fire-stopped (9.6.2.4) NFPA 1221
- Provide a *dedicated* visual annunciator panel in an approved location. (NFPA 1221 9.6.13.2)
- An Emergency Power-Off (EPO) switch shall be provided to disconnect primary and secondary power to all ERRC Systems. The required EPO means shall be installed in an approved location.
- The system shall be capable of **modification or expansion** in the event frequencies changes are required by the FCC or additional frequencies are made available by the FCC. (CFC 510.4.2.6)
- Post permanent signage on the door(s) of the room or space leading to the BDA and/or remote radio units. The sign shall be plastic or metal, with white ERRCS letters and radio-tower symbol on red background. (509.1) CFC
- The minimum qualifications of the emergency responder communication coverage system designer and lead installation personnel shall include: (CFC 510.5.3)
  - a. A valid FCC-issued general radio operators license; and
  - b. Certification of in-building system training issued by an approved organization or approved school, or a certificate issued by the manufacturer of the equipment being installed.
- Upon completion of installation, the system shall be tested in accordance with Section 510.5.4 of the California Fire Code.
- The ERRCS shall be maintained and operational at all times. (CFC 510.6)
- Contact the County Radio Technicians at [radio@cccfd.org](mailto:radio@cccfd.org) to schedule an acceptance test of the system. The BDA system shall not be powered up overnight until this signal test has been completed. The final inspection shall be coordinated subsequent to the County Radio Technician acceptance test. Documentation of the County Radio Technician acceptance test, grid test report, and a completed copy of the Contra Costa County BDA Management Form shall be available for review at the time of final inspection.**
- Additional comments: \_\_\_\_\_

Approved plans **shall** be onsite at time of inspection. Failure to have approved plans onsite may result in the **cancellation of the inspection**, and a **re-inspection fee** being assessed.

Contact the Fire District at **925-941-3300 ext. 3902** (minimum **two** working days' notice required) to schedule an onsite inspection. No inspections will be scheduled on Fridays.

***On the morning of the inspection, a confirmation telephone call made to the Fire District at 925-941-3300 is necessary between 8:00 and 8:30 AM. Otherwise, the inspection will be cancelled.***

***Final acceptance may be subject to field inspections.***

**Approval does not relieve the designer / contractor from complying with all applicable fire code requirements, nor does it abrogate the requirements of other authorities having jurisdiction.**

- Approved as submitted                       Approved with Comments                       Denied, Resubmittal Required

Reviewed by: \_\_\_\_\_ Date: \_\_\_\_\_