



## Module 2: CONTRACTOR'S REVIEW

**Objectives:** After completing this module, you will be able to:

- State the contractor's responsibilities for reviewing contract plans.
- Describe the benefit of proper layout drawings.
- State the importance of requesting clarifications from the Government.
- Discuss the need for review of design extensions, designs for design-build projects, and designs for value engineering change proposals.

A. **Review Plans and Specifications:** Contract clause, "Specifications and Drawings for Construction," requires the contractor to review plans and specifications and request clarification where necessary. The term "Request for Information (RFI)" and other similar terms are often used to ask for clarification of the contract. Examples of items that CQC personnel shall review are as follows:

- **Site conditions and restraints:** Check for proper utility interface with existing facilities. Verify location of utilities in the facility, waste disposal, site location, site survey control point, etc.
- **Proper allowance for maintenance space and access:** The contractor is required by the contract to prepare layout drawings of equipment to assure that adequate maintenance access has been provided. The importance of the CQC participation and assurance of compliance with this requirement is critical to proper coordination. This will avoid many potentially costly conflicts.
- **Conflicts and discrepancies between plans and specifications.**

These examples are not meant to be all inclusive but merely to point out the type of situations that can lead to added costs to both the contractor and the government if proper reviews are not performed by CQC personnel.

B. **RFI Process:** The contractor should include procedures in the QC plan for

a RFI process. Each RFI may be handled by separate letter, by pre-printed forms, or on the daily QC report, as mutually agreed. The questions should be specific and clearly presented. The answers should be documented as mutually agreed. When the contractor notes a discrepancy, a recommended solution should be included with the RFI. The prime contractor has the responsibility to coordinate the work of all the subcontractors and suppliers. When a subcontractor or supplier submits a RFI, the prime contractor has to review the request and coordinate it among his offices and with other firms. Under no circumstance should the RFI be passed to the Government without this coordination being accomplished. For design-build contracts the designer of record must answer RFI's concerning the contractor's design and extensions of design required by the plans and specifications.

- C. **Contractor Furnished Designs:** In addition to the need for coordination review of Government furnished plans and specifications, the QC Manager must review contractor furnished designs.

Examples are:

- Design-Build: In this type of contract, the contractor's QC efforts must include design quality control. The QC plan must include details of reviews to be implemented to ensure that the design will comply with the criteria provided. Some quality is also defined in the Government's Request For Proposals (RFP).
  - Extensions of Design: Many contracts contain requirements for the contractor to provide designs such as pre-engineered metal buildings, fire alarm and protection systems, cathodic protection, etc. It becomes critical that the contractor designs are coordinated with all other aspects of the project so that proper interfaces are maintained. Where extensions of the design are required (structural steel details, concrete reinforcement drawings, etc.) by the contractor, subcontractors, or suppliers they must be coordinated with other activities. This coordination review is performed with other contractually required submittal reviews.
- D. **Value Engineering Change Proposal (VECP):** The Government's value engineering program is based on a partnering philosophy. It recognizes that the Government and the contractor share common goals and that, by working together in a spirit of cooperation, we can produce a quality facility while saving the taxpayer money. The QC Manager should review any VECP to assure proper coordination with all affected elements of the

project. After acceptance of the VECP, the QC Manager must ensure that changes are discussed in the control meetings for all other applicable work to assure full benefit of the savings is achieved.

- E. **Design-Build:** The QC Manager must be in place for the design phase of design-build contracts and must take an active role in the review and coordination of the design, to include, but not be limited to constructibility, operability, environmental, review of all drawings and specifications, coordination between the different disciplines and trades to prevent any interferences between different components, coordination with suppliers, selection of materials and equipment to assure utilities connectivity and physically fitting into provided spaces, etc.



## EXERCISE

### Module 2

1. Name three instances of contractor extensions of designs.
2. Name some possible areas that must be addressed during the contractor's coordination review of plans and specifications.
3. What are the responsibilities of the QC Manager during the design phase of a design-build project?
4. The following (4A through 4F) are extracts from specifications and drawings for a recent designed project. They all contain errors, omissions, or inconsistencies that were discovered during the review. Examine the "highlighted" area(s) of each, and indicate what clarification is needed.

Exercise

Clarification Needed

4A

4B

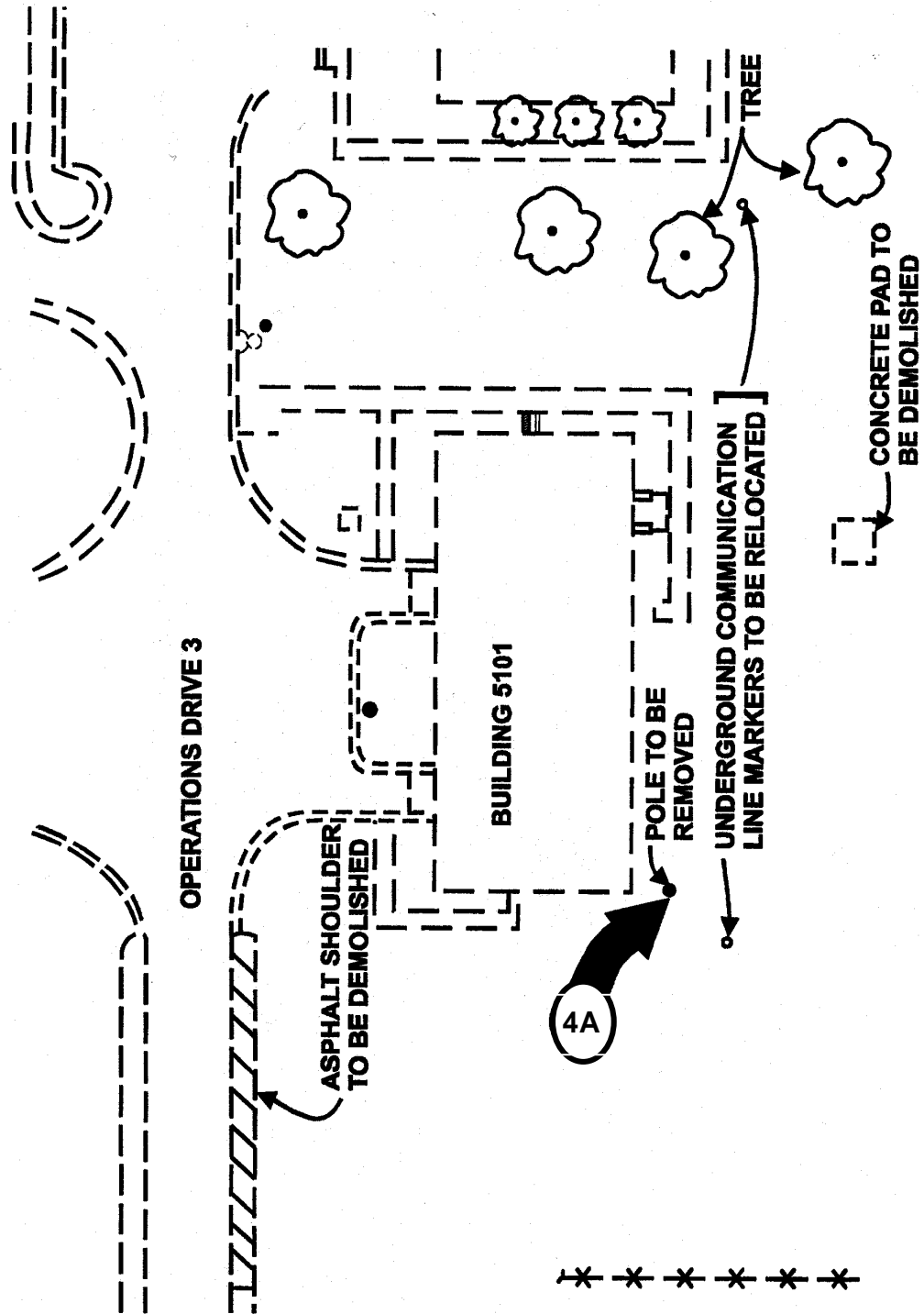
4C

4D

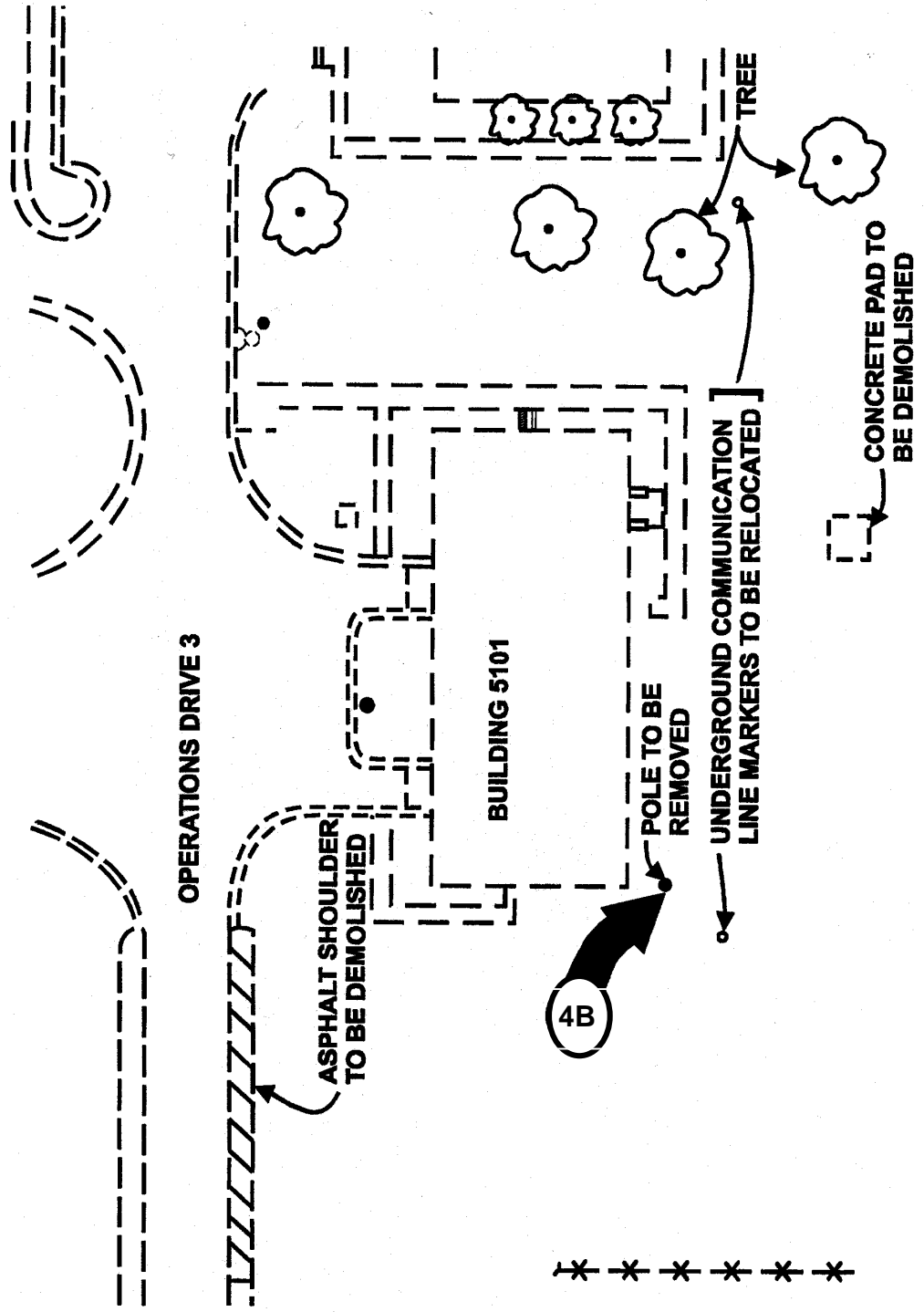
4E

4F

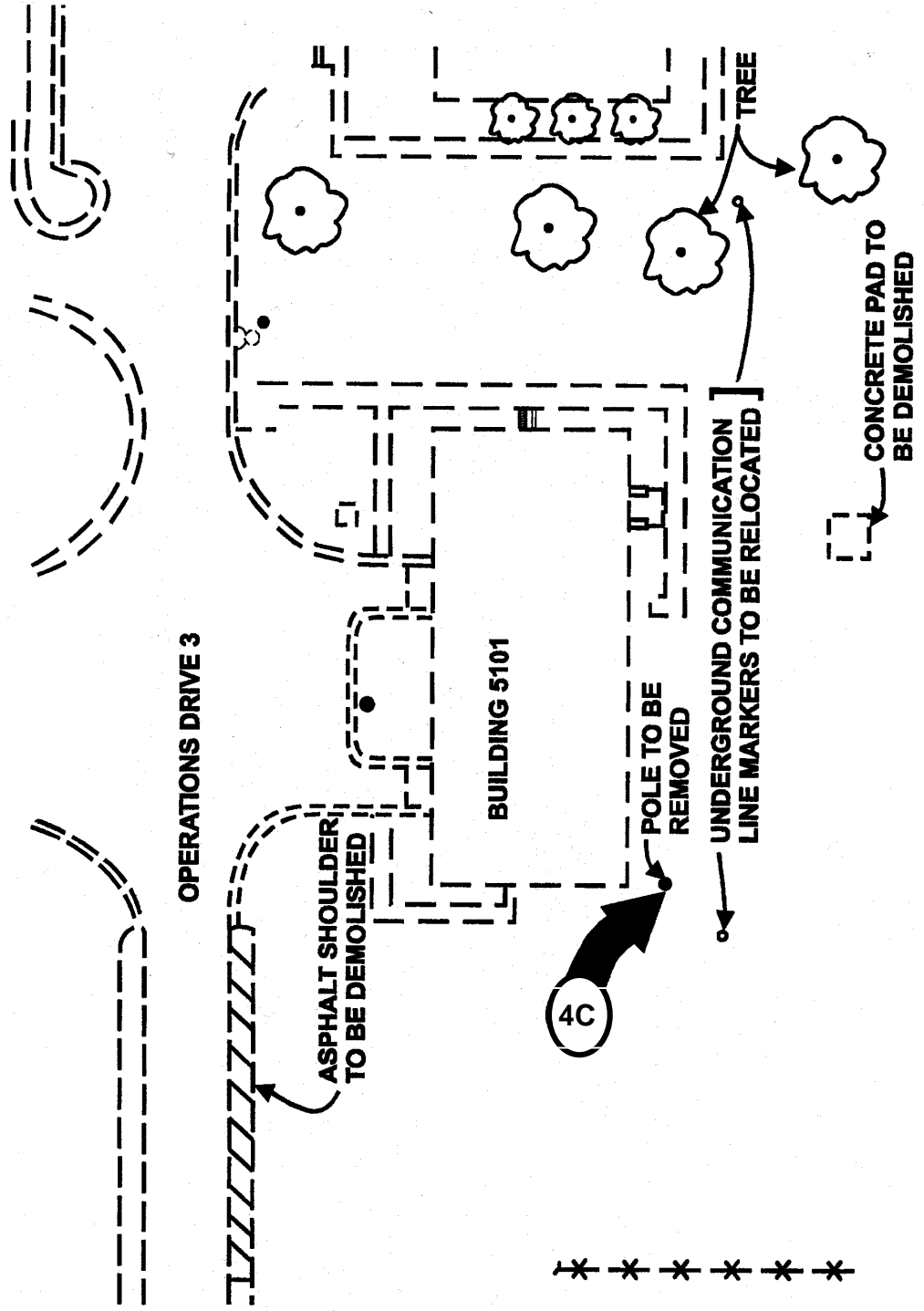
# EXERCISE QUESTION 4A:



# EXERCISE QUESTION 4B:

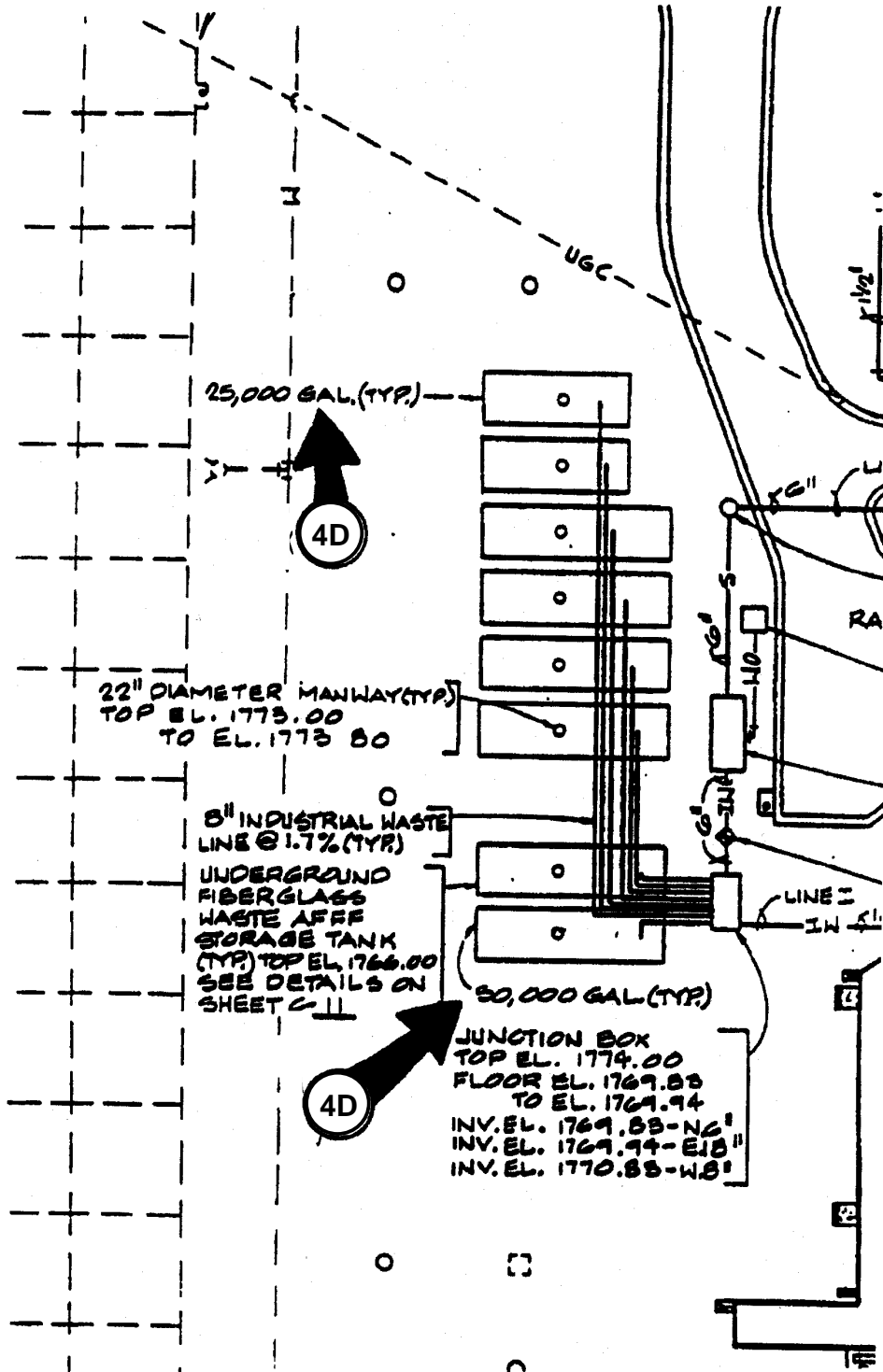


# EXERCISE QUESTION 4C:

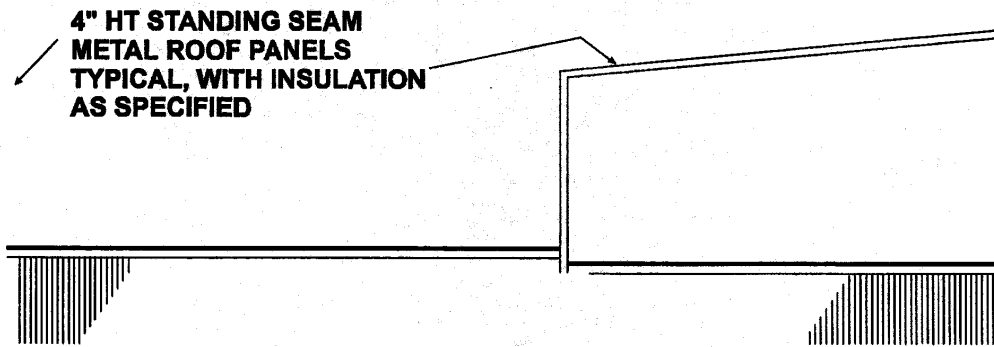
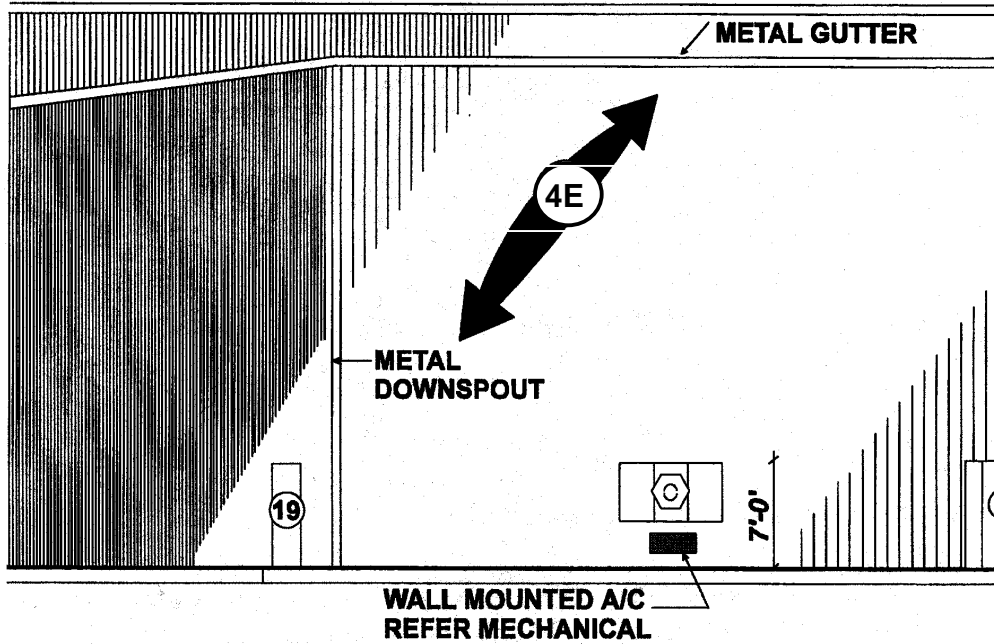




# EXERCISE QUESTION 4D:



# EXERCISE QUESTION 4E:



# EXERCISE QUESTION 4F:

