

**INTRODUCTION TO
BLUEPRINT READING**

▶ INSTITUTE FOR FACILITIES MANAGEMENT

AIA
Continuing
Education
Provider

▶ FACULTY: SADIE GREINER, PE, LEED AP
▶ DIRECTOR, DESIGN & CONSTRUCTION
▶ UNIVERSITY OF IOWA

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AIA Credits

Credit(s) earned on completion of this course will be reported to American Institute of Architects (AIA) Continuing Education Session (CES) for AIA members.

Certificates of Completion for both AIA members and non-AIA members are available upon request.

This course is registered with AIA CES for continuing professional education. As such, it does not include content that may be deemed or construed to be an approval or endorsement by the AIA of any material of construction or any method or manner of handling, using, distributing, or dealing in any material or product.

Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.

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CORE DESCRIPTION

561 Introduction to Blueprint Reading APPAU201909

This hands-on fundamentals course is designed for individuals in facilities administration and operations who are responsible for reviewing design drawings for campus projects. Learn the techniques for reviewing and interpreting plans and elevations by envisioning three-dimensional space from a two-dimension representation. Review how architectural and engineering drawings, better known as “blueprints”, once reproduced for review, are structured, layered, detailed, cross-referenced and more.


Faculty: Sadie Greiner

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LEARNING OBJECTIVES

1. Discuss the responsibilities for reviewing design drawings for campus project.
2. Learn the techniques for reviewing and interpreting plans by envisioning three-dimensional space from a two-dimension representation.
3. Review architectural and engineering drawings, are structured, layered, and more
4. Review how blue prints are cross referenced.



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PRESENTATION OUTLINE

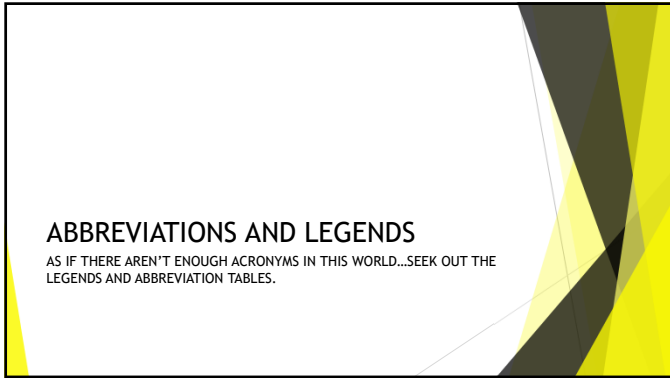
- ▶ DRAWINGS
 - ▶ COVER SHEET
 - ▶ SITE PLANS
 - ▶ ARCHITECTURAL PLANS
 - ▶ ENGINEERING DRAWINGS
 - ▶ DETAILS / SECTIONS / SCHEDULES
- ▶ SPECIFICATIONS
 - ▶ 50 DIVISIONS
- ▶ ADDENDA
- ▶ SUPPLEMENTAL INSTRUCTIONS

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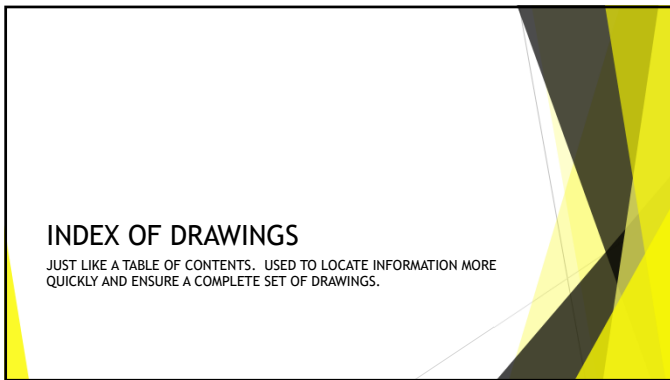
COVER SHEET

PROJECT TITLE, ARCHITECT/ENGINEER NAME(S), CONTACT INFORMATION, PROJECT LOCATION MAP, DATE (ISSUED/ BID) AND INDEX OF PLAN SHEETS.

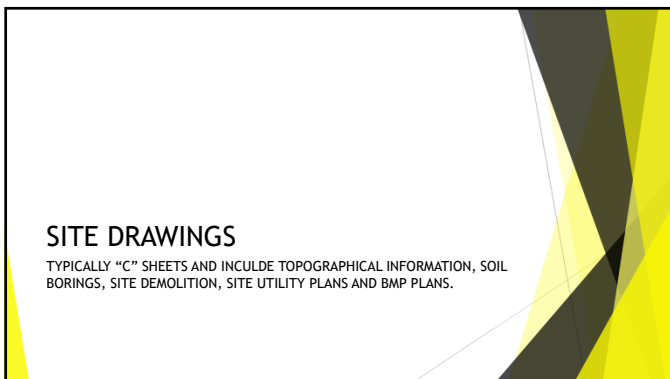
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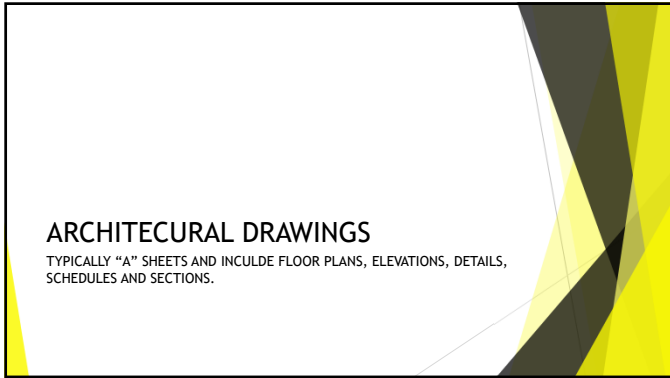
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ARCHITECTURAL DRAWINGS

TYPICALLY "A" SHEETS AND INCLUDE FLOOR PLANS, ELEVATIONS, DETAILS, SCHEDULES AND SECTIONS.

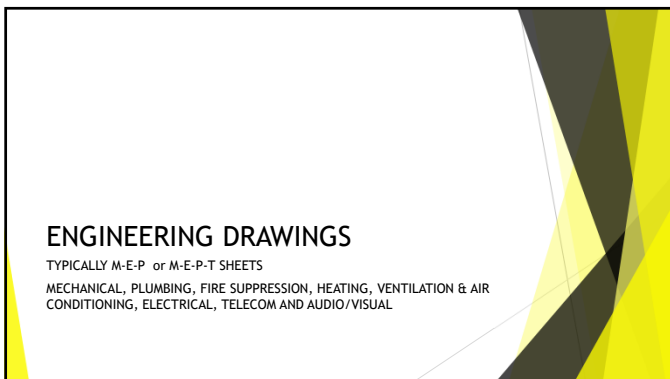
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SCHEDULES

FINISH SCHEDULES, DOOR HARDWARE SCHEDULES, FURNITURE SCHEDULES, RESTROOM ACCESSORY SCHEDULES, ETC.

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ENGINEERING DRAWINGS

TYPICALLY M-E-P or M-E-P-T SHEETS
MECHANICAL, PLUMBING, FIRE SUPPRESSION, HEATING, VENTILATION & AIR CONDITIONING, ELECTRICAL, TELECOM AND AUDIO/VISUAL

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SPECIFICATIONS

- ▶ PROCUREMENT AND CONTRACTING REQUIREMENT GROUP
 - ▶ DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS
- ▶ GENERAL REQUIREMENTS SUBGROUP
 - ▶ DIVISION 01 - GENERAL REQUIREMENTS
- ▶ FACILITY CONSTRUCTION SUBGROUP
 - ▶ DIVISION 02 - EXISTING CONDITIONS
 - ▶ DIVISION 03 - CONCRETE
 - ▶ DIVISION 04 - MASONRY
 - ▶ DIVISION 05 - METALS
 - ▶ DIVISION 06 - WOOD AND PLASTICS
 - ▶ DIVISION 07 - THERMAL AND MOISTURE PROTECTION
 - ▶ DIVISION 08 - OPENINGS
 - ▶ DIVISION 09 - FINISHES
 - ▶ DIVISION 10 - SPECIALTIES
 - ▶ DIVISION 11 - EQUIPMENT
 - ▶ DIVISION 12 - FURNITURE
 - ▶ DIVISION 13 - SPECIAL CONSTRUCTION
 - ▶ DIVISION 14 - CONVEYING EQUIPMENT
- ▶ FACILITY SERVICES SUBGROUP
 - ▶ DIVISION 21 - FIRE SUPPRESSION
 - ▶ DIVISION 22 - PLUMBING
- ▶ FACILITY SERVICES SUBGROUP CONTINUED
 - ▶ DIVISION 23 - HEATING VENTILATING AND AIR CONDITIONING
 - ▶ DIVISION 25 - INTEGRATED AUTOMATION
 - ▶ DIVISION 26 - ELECTRICAL
 - ▶ DIVISION 27 - COMMUNICATIONS
 - ▶ DIVISION 28 - ELECTRONIC SAFETY AND SECURITY
- ▶ SITE AND INFRASTRUCTURE SUBGROUP
 - ▶ DIVISION 31 - EARTHWORK
 - ▶ DIVISION 32 - EXTERIOR IMPROVEMENTS
 - ▶ DIVISION 33 - UTILITIES
 - ▶ DIVISION 34 - TRANSPORTATION
 - ▶ DIVISION 35 - WATERWAY AND MARINE
- ▶ PROCESS EQUIPMENT SUBGROUP
 - ▶ DIVISION 40 - PROCESS INTEGRATION
 - ▶ DIVISION 41 - MATERIAL PROCESSING AND HANDLING EQUIPMENT
 - ▶ DIVISION 42 - PROCESS HEATING, COOLING AND DRYING EQUIPMENT
 - ▶ DIVISION 43 - PROCESS GAS AND LIQUID HANDLING, PURIFICATION AND STORAGE EQUIPMENT
 - ▶ DIVISION 44 - POLLUTION CONTROL EQUIPMENT
 - ▶ DIVISION 45 - INDUSTRY-SPECIFIC MANUFACTURING EQUIPMENT
 - ▶ DIVISION 48 - ELECTROLYSIS EQUIPMENT

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ADDENDA

ISSUED AFTER PROJECT HAS BEEN ADVERTISED BUT BEFORE BIDS ARE RECEIVED...

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SUPPLEMENTAL INSTRUCTIONS

ISSUED AFTER CONTRACT HAS BEEN AWARDED TO A GENERAL CONTRACTOR...

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SUPPLEMENTAL INSTRUCTIONS

- ▶ ALSO KNOWN AS "ITC" OR "ASI" OR "ESI"
 - ▶ INSTRUCTIONS TO CONTRACTOR
 - ▶ ARCHITECT'S SUPPLEMENTAL INSTRUCTION
 - ▶ ENGINEER'S SUPPLEMENTAL INSTRUCTION
- ▶ ISSUED THROUGHOUT CONSTRUCTION PHASE
- ▶ MEANT TO:
 - ▶ PROVIDE CLARIFICATIONS
 - ▶ CHANGE CONTRACT REQUIREMENTS


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ACTIVITY QUESTIONS

- ▶ WHAT DOES THE SCOPE OF THE PROJECT COVER?
- ▶ WHAT TYPE OF FLOORING IS GOING BACK IN?
- ▶ DOES THE PROJECT INCLUDE ANY
 - ▶ BID ALLOWANCES?
 - ▶ BID ALTERNATES?
 - ▶ UNIT PRICES?
- ▶ WERE PLANS CHANGED BY ADDENDA?
- ▶ WHAT IS THE PROJECT DURATION?
- ▶ WHAT SPECIALTY ITEMS ARE INCLUDED IN THE PROJECT?
- ▶ IS LIGHTING BEING REPLACED?
- ▶ IS HVAC BEING UPGRADED?
- ▶ ARE DOOR AND DOOR FRAMES BEING REPLACED ALONG WITH ACCESS SECURITY UPGRADES?

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This concludes The American Institute of Architects Continuing Education Systems Course



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