



**IDOT Ames Complex  
Fire Alarm System  
Replacement  
BG-9A10(034)--80-85**

Iowa Department of Transportation

1020 S. 4TH ST.  
AMES, IA 50010

**CONCRETE SITE WORK NOTES**

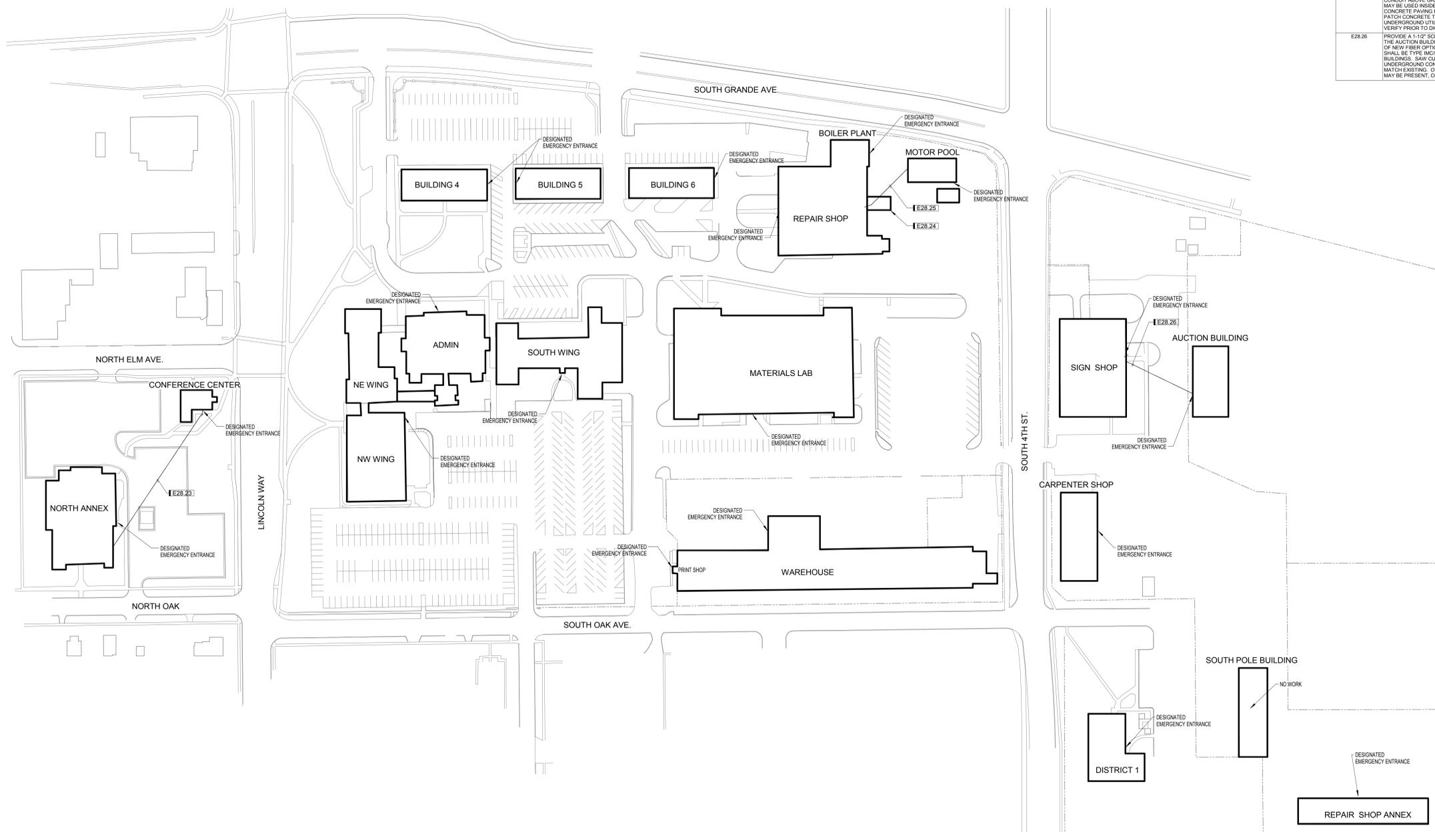
- C.01** THE MOST RECENT EDITION OF THE IOWA STATEWIDE URBAN DESIGN SPECIFICATIONS FOR PUBLIC IMPROVEMENTS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN.
- SPECIFICATIONS**
- A. CONCRETE PAVING, T + 1":**  
CONCRETE MATERIALS AND MIXING FOR ALL CONCRETE WORK, UNLESS OTHERWISE SPECIFIED, SHALL CONFORM TO IOWA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, SECTIONS 2301.01 THROUGH 2301.03 AND MATERIALS 1M. S26 FOR AIR-ENTRAINED TYPE C-4 MIX WITH TYPE I CEMENT.  
M-MIX CAN BE USED WITH APPROVAL OF ENGINEER.  
COARSE AGGREGATE DURABILITY SHALL BE CLASS II.  
COMPRESSIVE STRENGTH: 2800 PSI @ 7 DAYS AND 4000 PSI @ 28 DAYS.  
SLUMP: 3" ± 1"  
AIR CONTENT: 7.0% ± 1.5%
- TESTING: ONE SET OF TEST CYLINDERS REQUIRED FOR EACH 100 C.Y. OR ONE PER DAY IF LESS THAN 100 C.Y. FROM SAME READY MIX PLANT. CONCRETE TESTING TO BE COMPLETED BY AN INDEPENDENT TESTING LABORATORY AND PAID FOR BY CONTRACTOR. CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL REQUIRED TESTING AND GEOTECHNICAL WORK. SUBMIT ALL REPORTS TO THE ENGINEER.
- SURFACE CURING: CONTRACTOR SHALL APPLY WHITE PIGMENT LIQUID CURING COMPOUND IN A FINE SPRAY TO FORM CONTINUOUS UNIFORM FILM AFTER FINISHING AND SURFACE MOISTURE HAS DISAPPEARED, OR WITHIN 30 MINUTES OF PLACEMENT.
- SUBMIT CONCRETE MIX DESIGN MIX DESIGN TO ENGINEER FOR APPROVAL.
- B. SEALANTS:**  
JOINT SEALANTS: MEET IOWA DOT STANDARD SPECIFICATION REQUIREMENTS INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- C. REINFORCING STEEL:**  
PAVING REINFORCEMENT SHALL BE ASTM A615, GRADE 60, AND SHALL HAVE A PROTECTIVE COATING OF EPOXY APPLIED BY ELECTROSTATIC SPRAY METHOD IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A775.
- D. SUBGRADE / SUBBASE:**  
EXCAVATE 1 INCH BELOW THE BOTTOM OF THE EXISTING PAVEMENT. IF MORE THAN 1 INCH IS EXCAVATED, PLACE AND COMPACT NEW SUBBASE MATERIAL, AS REQUIRED, TO BRING THE SUBBASE TO A LEVEL 1 INCH BELOW THE BOTTOM OF THE EXISTING PAVEMENT. CORRECT UNAUTHORIZED OVER EXCAVATION AT NO ADDITIONAL COST TO THE OWNER.
- COMPACT THE EXPOSED SUBGRADE OR SUBBASE BY A MINIMUM OF FOUR COMPLETE PASSES WITH A PLATE-TYPE VIBRATORY COMPACTOR WITH A MINIMUM FORCE RATING OF 3,500 POUNDS.
- WHEN UNSTABLE MATERIAL OR EXCESSIVE MOISTURE IS ENCOUNTERED, THE ENGINEER MAY ORDER REMOVAL AND REPLACEMENT OF THE UNSTABLE MATERIAL. REMOVE EXISTING UNSTABLE SUBGRADE OR SUBBASE, OR BOTH, TO THE DEPTH DIRECTED BY THE ENGINEER. PLACE AND COMPACT NEW SUBBASE MATERIAL, AS REQUIRED TO BRING THE SUBBASE TO A LEVEL 1 INCH BELOW THE BOTTOM OF THE EXISTING PAVEMENT.
- E. TRAFFIC AND PEDESTRIAN CONTROL:**  
PROVIDE BARRICADES, FENCING, AND OTHER DEVICES TO KEEP UNAUTHORIZED PERSONNEL FROM PROJECT SITE AND WORK ZONES AND TO DIRECT TRAFFIC TO EXISTING PARKING.
- KEEP INTERFERENCE WITH TRAFFIC TO A MINIMUM. DO NOT BLOCK EXISTING PARKING LOT DRIVE AISLES OR ENTRANCE DRIVES.
- PROVIDE OWNER'S REPRESENTATIVE WITH A CONSTRUCTION STAGING PLAN SHOWING CONSTRUCTION SEQUENCING, STAGING AREAS, AND ALL ACCESS ROUTES.
- F. PAVEMENT JOINTING:**  
PROVIDE IDOT TYPE RD' JOINTS TRANSVERSELY WITH PAVEMENT DRIVE AISLES TO DOWEL INTO EXISTING PAVEMENT.
- PROVIDE IDOT TYPE BT-3 JOINTS LONGITUDINALLY TO THE INTO EXISTING PAVEMENT.
- PROVIDE IDOT TYPE 'C' JOINTS AT MAXIMUM SPACING OF 15 FEET. MATCH ALL EXISTING JOINTS.
- SEAL ALL JOINTS.

**FIRE ALARM INSTALLATION NOTES**

- ALL EXISTING FIRE ALARM PANELS, GRAPHIC WORK STATIONS, PERIPHERAL DEVICES, AND WIRING SHALL BE DEMOLISHED EXCEPT WHERE NOTED ON THE DRAWINGS. EXISTING CONDUIT AND SURFACE MOUNTED RACEWAYS ARE TO REMAIN TO BE REUSED WHERE APPLICABLE.
- CONTRACTOR TO VERIFY EXISTING CONDUIT AND RACEWAYS ARE IN GOOD CONDITION TO BE REUSED. CONTRACTOR TO REPLACE WITH NEW ANY CONDUIT, RACEWAYS, AND BACKBOXES DEEMED TO BE UNUSABLE.
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- INSTALL NEW FIRE ALARM DEVICES IN EXISTING LOCATIONS UNLESS OTHERWISE NOTED ON THE DRAWINGS. SUBSCRIPT 'N' INDICATES NEW DEVICE. SUBSCRIPT 'R' INDICATES DEVICE TO BE RELOCATED, AND SUBSCRIPT 'D' INDICATES DEVICE TO BE DEMOLISHED.
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- FOR EACH NEW CONTROL PANEL PROVIDE ONE 20A-1P CIRCUIT BREAKER TO BE INSTALLED IN AN EXISTING POWER PANEL, 75 FEET OF 3/4-INCH CONDUIT AND 120 VOLT WIRING FOR A DEDICATED CIRCUIT TO EACH CONTROL PANEL. CONTRACTOR TO VERIFY POWER PANEL LOCATION AND RECORD CIRCUIT NUMBER AND PANEL LOCATION ON RECORD DOCUMENTS.

**KEYNOTE LEGEND**

KEY	NOTE
E28.23	EXISTING UNDERGROUND DUCT BANK BETWEEN CONFERENCE CENTER AND NORTH ANNEX. DUCT BANK CONSISTS OF TWO 4-INCH CONDUITS: ONE FOR COPPER AND ONE FOR FIBER OPTIC CABLES. INSTALL NEW TWISTED PAIR CABLES BETWEEN BUILDINGS IN SPARE INNER DUCT OF COPPER CABLE CONDUIT.
E28.24	EXISTING ABOVE GRADE FUEL TANK.
E28.25	PROVIDE A 1 1/2" SCHEDULE 40 PVC CONDUIT EXTENDED FROM THE MOTOR POOL BUILDING TO THE REPAIR SHOP FOR INSTALLATION OF NEW TWISTED PAIR CABLES. EXPOSED CONDUIT ABOVE GRADE SHALL BE TYPE IMCRMC. EMT CONDUIT MAY BE USED INSIDE OF BUILDINGS. SAW CUT EXISTING CONCRETE PAVING FOR UNDERGROUND CONDUIT INSTALLATION. PATCH CONCRETE TO MATCH EXISTING. OTHER EXISTING UNDERGROUND UTILITIES MAY BE PRESENT. CONTRACTOR TO VERIFY PRIOR TO DIGGING.
E28.26	PROVIDE A 1 1/2" SCHEDULE 40 PVC CONDUIT EXTENDED FROM THE AUCTION BUILDING TO THE SIGN SHOP FOR INSTALLATION OF NEW TWISTED PAIR CABLES. EXPOSED CONDUIT ABOVE GRADE SHALL BE TYPE IMCRMC. EMT CONDUIT MAY BE USED INSIDE OF BUILDINGS. SAW CUT EXISTING CONCRETE PAVING FOR UNDERGROUND CONDUIT INSTALLATION. PATCH CONCRETE TO MATCH EXISTING. OTHER EXISTING UNDERGROUND UTILITIES MAY BE PRESENT. CONTRACTOR TO VERIFY PRIOR TO DIGGING.



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Replacement  
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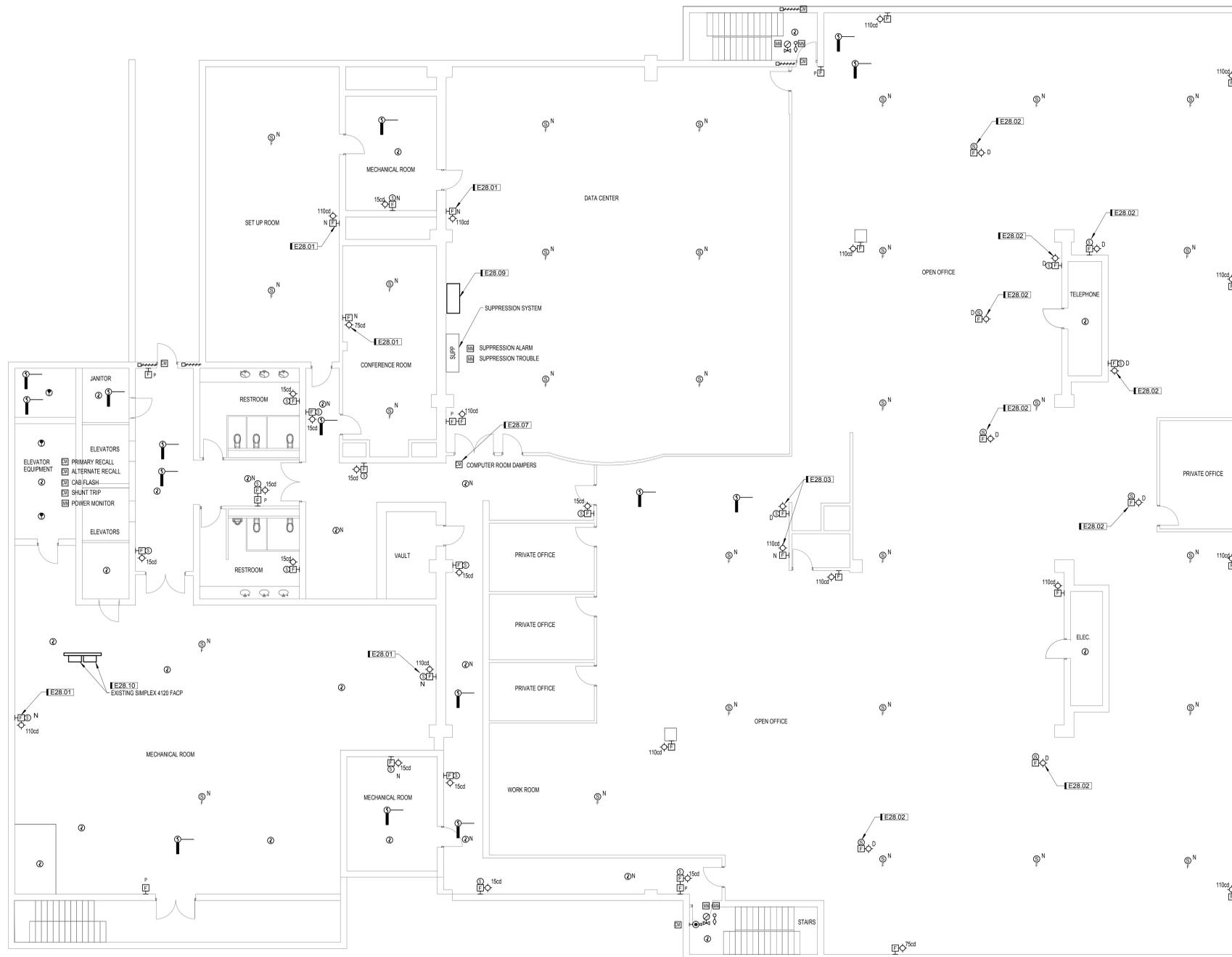
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**KEYNOTE LEGEND**

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E28.01	LOCATION OF EXISTING DEVICE NOT VERIFIED. INSTALL NEW DEVICE IN EXISTING DEVICE LOCATION PROVIDED EXISTING LOCATION MEETS NFPA REQUIREMENTS. ADJUST CABEL A RATING AS REQUIRED TO MEET NFPA 72 REQUIREMENTS. IF NO EXISTING LOCATION EXISTS, DEVICE SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS.
E28.02	EXISTING DEVICE TO BE DEMOLISHED
E28.03	EXISTING DEVICE LOCATION TO BE DEMOLISHED. INSTALL NEW DEVICE IN NEW LOCATION.
E28.07	CONTRACTOR TO FIELD VERIFY QUANTITY AND LOCATIONS OF ALL DUCT DETECTORS, SPRINKLER FLOW AND TAMPER SWITCHES, AND RELAYS NEEDED FOR MONITORING AND/OR CONTROLLING AIR HANDLING UNITS, SMOKE DAMPERS, P.V. DOOR HOLDERS, ETC.
E28.09	APPROXIMATE LOCATION OF EXISTING FIBER TERMINATIONS.
E28.10	PROVIDE FLOOR MOUNTED STRUCTURAL STEEL CHANNEL ASSEMBLY FOR MOUNTING OF NEW CONTROL PANEL.

★ GROUP B OCCUPANCY. BUILDING IS FULLY SPRINKLED.



**1 ADMIN BLDG BASEMENT LEVEL**  
1/8" = 1'-0"

DRAWN SKL  
APPROVED NES  
ISSUED FOR CONSTRUCTION  
DATE 9/18/2015  
FIELD BOOK

PROJECT NO.: 4151330

ADMINISTRATION BUILDING -  
BASEMENT LEVEL

**E3.01**



**IDOT Ames Complex  
Fire Alarm System  
Replacement  
BG-9A10(034)--80-85**

Iowa Department of Transportation

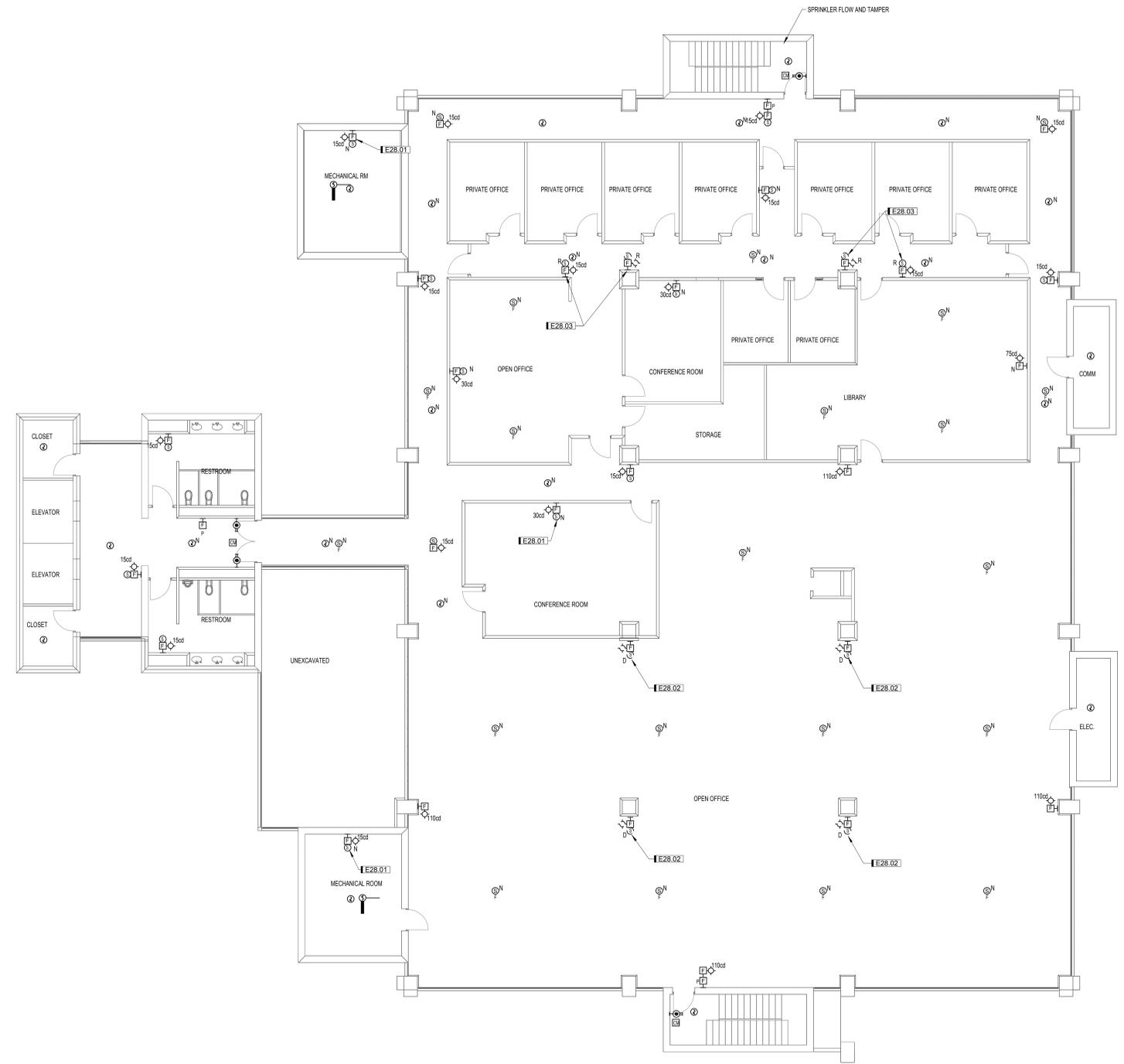
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\* GROUP B OCCUPANCY. BUILDING IS FULLY SPRINKLED.



N  
1 ADMIN BLDG LEVEL 2  
1/8" = 1'-0"

DRAWN	SKL
APPROVED	NES
ISSUED FOR	CONSTRUCTION
DATE	9/18/2015
FIELD BOOK	

PROJECT NO.: 4151330

ADMINISTRATION BUILDING -  
LEVEL 2

E3.03

**IDOT Ames Complex  
Fire Alarm System  
Replacement  
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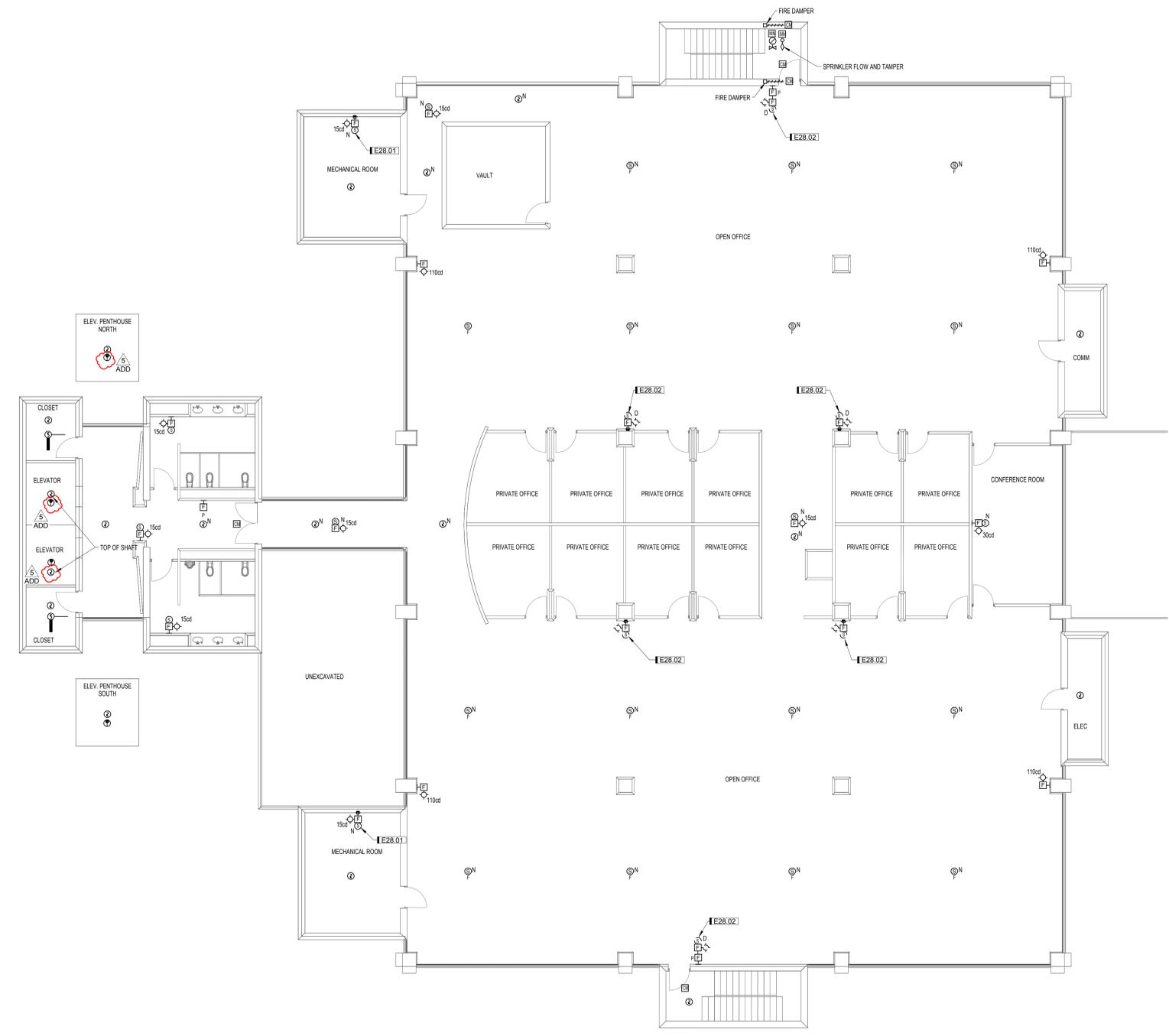
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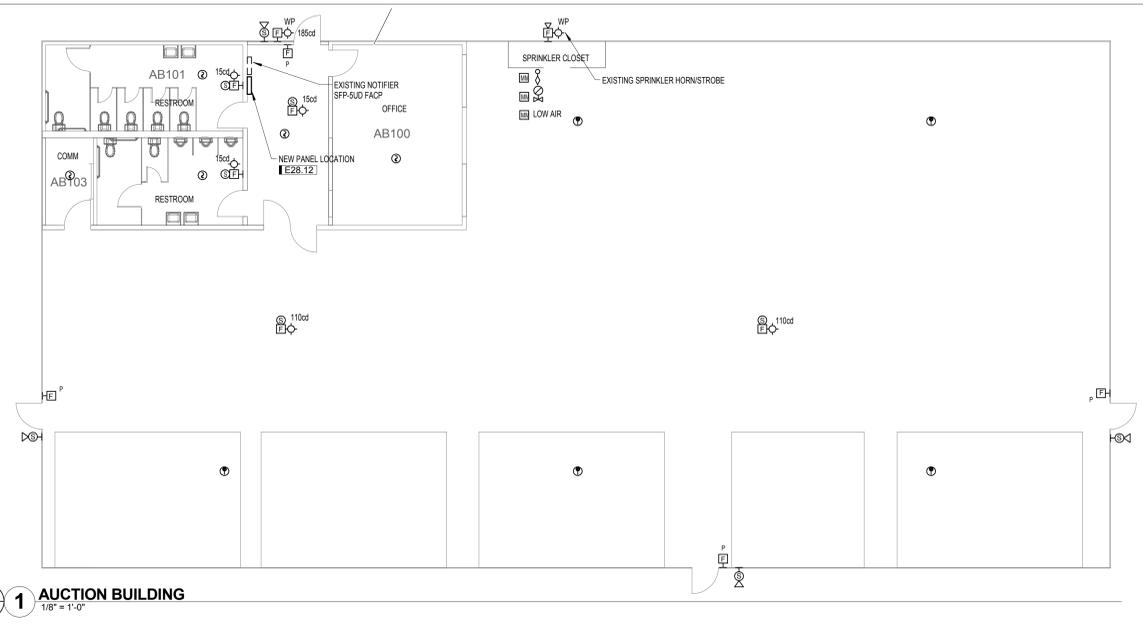
★ GROUP B OCCUPANCY. BUILDING IS FULLY SPRINKLED.



N  
1 ADMIN BLDG LEVEL 3  
1/8" = 1'-0"

ADD 5	12/15/2015	Addendum 5
DRAWN	SKL	
APPROVED	NES	
ISSUED FOR	CONSTRUCTION	
DATE	9/18/2015	
FIELD BOOK		
PROJECT NO.	4151330	

ADMINISTRATION BUILDING - LEVEL 3



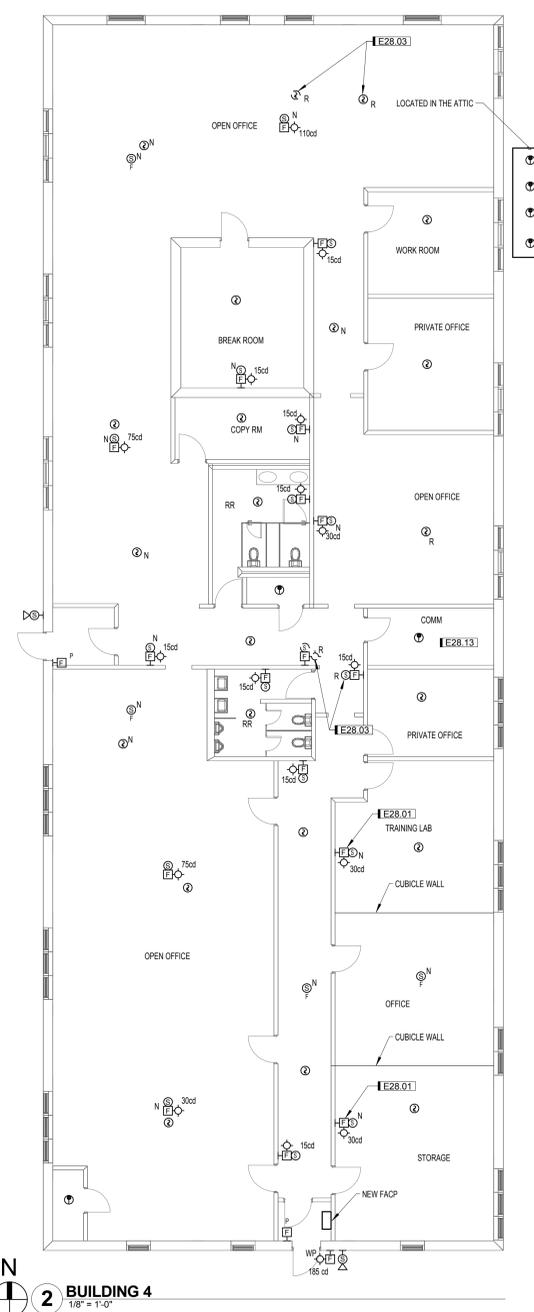
**1 AUCTION BUILDING**  
1/8" = 1'-0"

\* GROUP B OCCUPANCY. BUILDING IS FULLY SPRINKLED.

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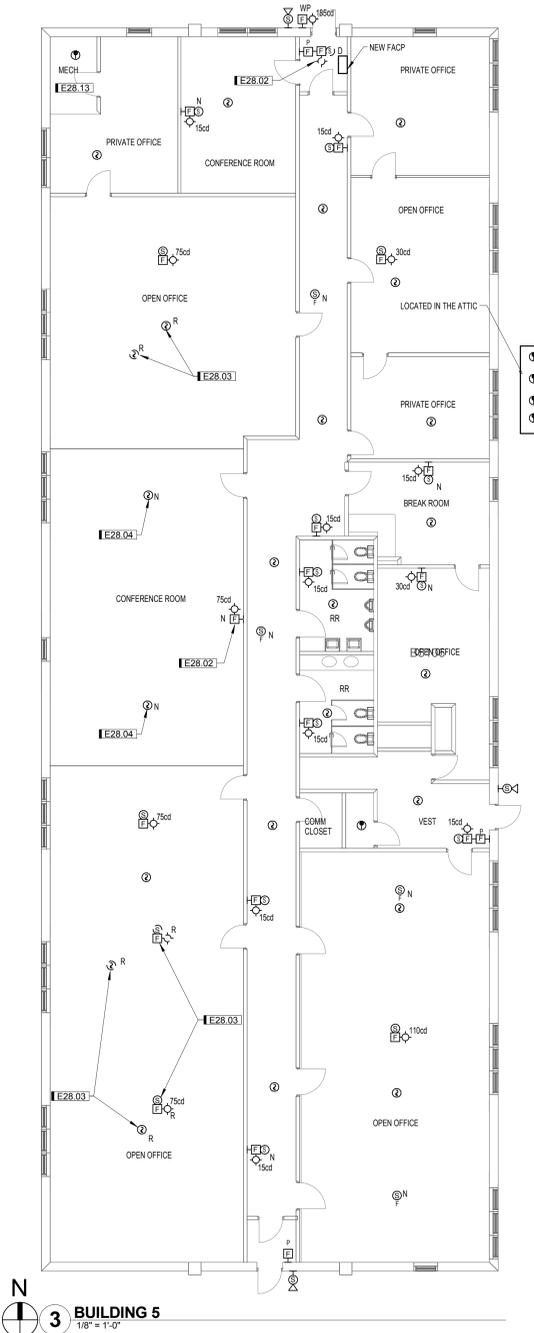
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E28.03	EXISTING DEVICE LOCATION TO BE DEMOLISHED. INSTALL NEW DEVICE IN NEW LOCATION.
E28.04	LOCATION OF EXISTING DEVICE NOT VERIFIED. INSTALL NEW DEVICE IN EXISTING DEVICE LOCATION PROVIDED EXISTING LOCATION MEETS NFPA REQUIREMENTS. ONE SMOKE DETECTOR COVERS 900 SQ FT. SMOKE DETECTORS IN CORRIDORS SHALL BE LOCATED 15 FEET FROM EACH END OF THE CORRIDOR AND NO MORE THAN 30 FEET SPACING BETWEEN EACH DEVICE.
E28.12	NEW FIBER CONNECTION FROM AUCTION BUILDING CONTROL PANEL TO SIGN SHOP CONTROL PANEL. SEE SHEET E3.13 FOR CONTINUATION.
E28.13	EXISTING COMMUNICATIONS CLOSET.



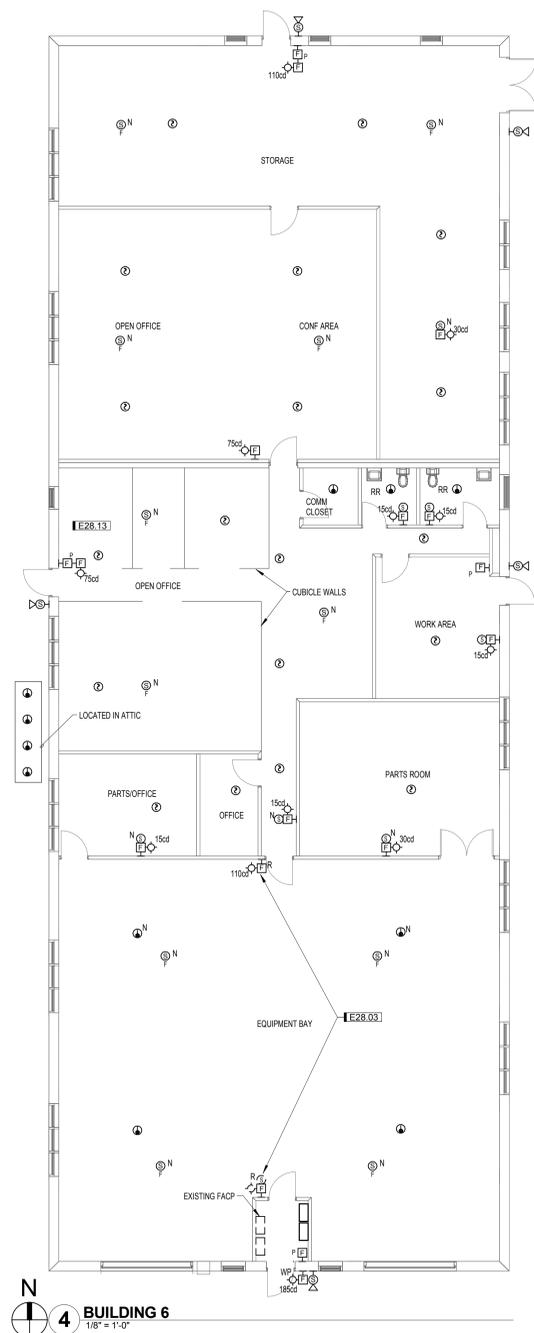
**2 BUILDING 4**  
1/8" = 1'-0"

\* GROUP B OCCUPANCY. BUILDING IS NOT PROTECTED BY A SPRINKLER SYSTEM.



**3 BUILDING 5**  
1/8" = 1'-0"

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**4 BUILDING 6**  
1/8" = 1'-0"

\* GROUP B OCCUPANCY. BUILDING IS NOT PROTECTED BY A SPRINKLER SYSTEM.

**SHIVE-HATTERY**  
ARCHITECTURE + ENGINEERING

4125 Westown Pkwy, Suite 100 | West Des Moines, Iowa 50266  
515.223.8104 | fax 515.223.6022 | www.shive-hattery.com

Iowa | Illinois | Indiana | Missouri

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AUCTION BLDG & BLDG'S 4, 5, & 6

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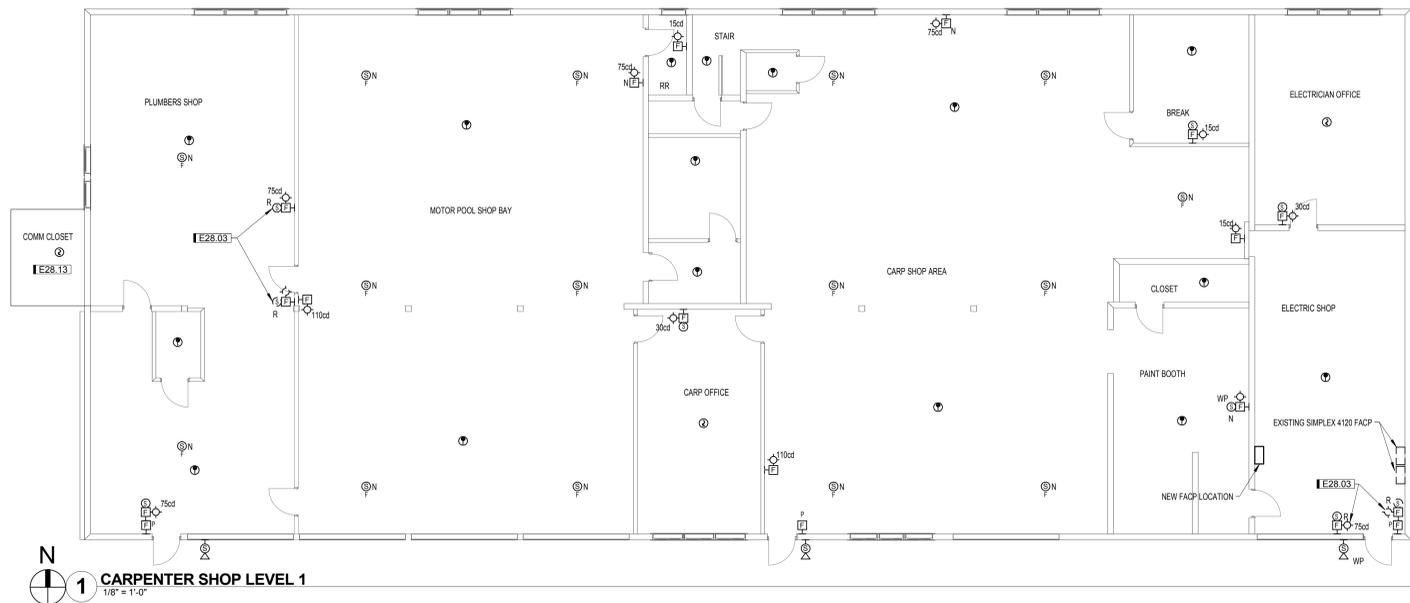
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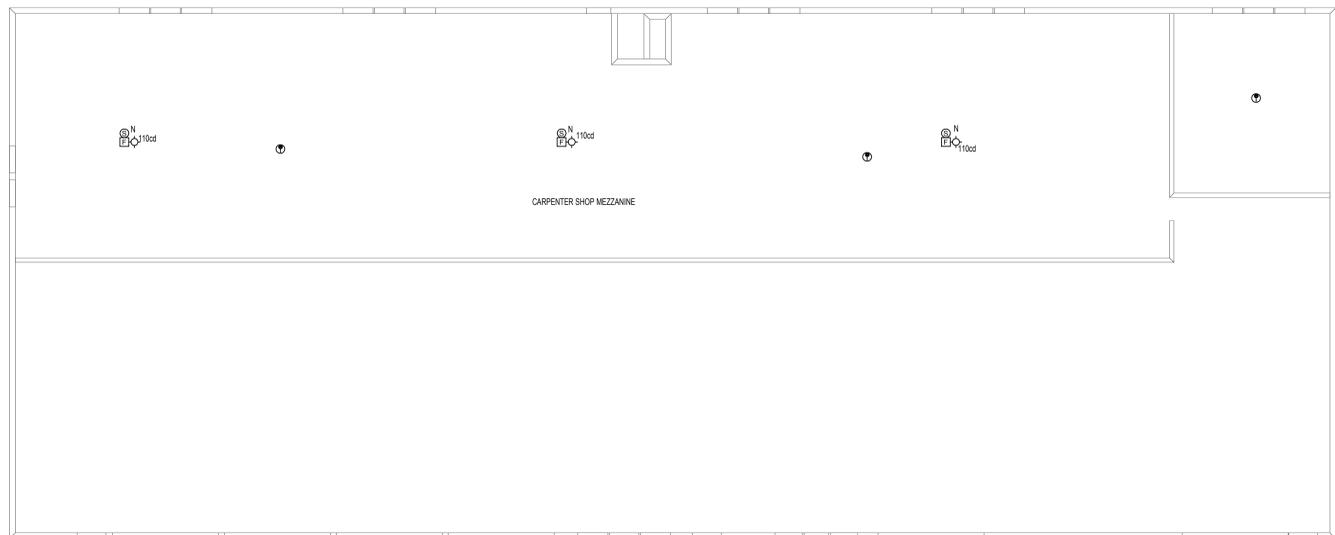
**KEYNOTE LEGEND**

KEY	NOTE
E28.03	EXISTING DEVICE LOCATION TO BE DEMOLISHED. INSTALL NEW DEVICE IN NEW LOCATION.
E28.13	EXISTING COMMUNICATIONS CLOSET.

\* GROUP F OCCUPANCY. BUILDING IS NOT PROTECTED BY A SPRINKLER SYSTEM.



**1 CARPENTER SHOP LEVEL 1**  
1/8" = 1'-0"



**2 CARPENTER SHOP LEVEL 2**  
1/8" = 1'-0"

DRAWN	SKL
APPROVED	NES
ISSUED FOR	CONSTRUCTION
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CARPENTER SHOP

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Replacement  
BG-9A10(034)--80-85**

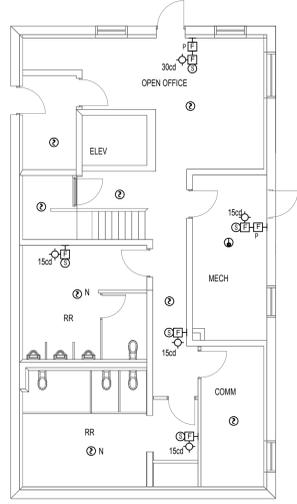
Iowa Department of Transportation  
1020 S. 4TH ST.  
AMES, IA 50010

**FIRE ALARM INSTALLATION NOTES**

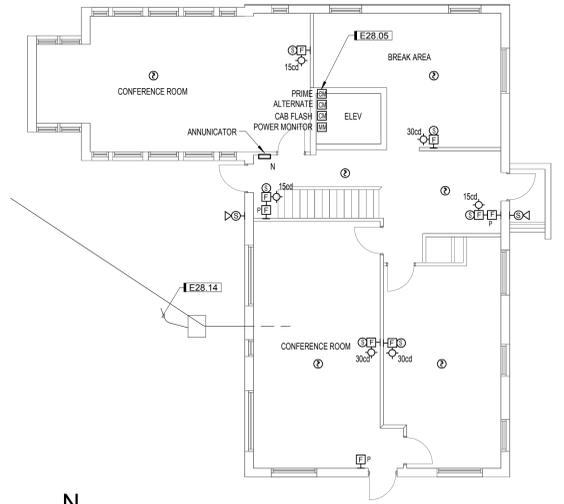
- ALL EXISTING FIRE ALARM PANELS, GRAPHIC WORK STATIONS, PERIPHERAL DEVICES, AND WIRING SHALL BE DEMOLISHED EXCEPT WHERE NOTED ON THE DRAWINGS. EXISTING CONDUIT AND SURFACE MOUNTED RACEWAYS ARE TO REMAIN TO BE REUSED WHERE APPLICABLE.
- CONTRACTOR TO VERIFY EXISTING CONDUIT AND RACEWAYS ARE IN GOOD CONDITION TO BE REUSED. CONTRACTOR TO REPLACE WITH NEW ANY CONDUIT, RACEWAYS, AND BACKBOXES DEEMED TO BE UNUSABLE.
- ALL NEW FIRE ALARM PANELS SHALL COMMUNICATE USING THE SAME TECHNOLOGY. ALL FIRE ALARM PANELS SHALL BE CONNECTED TO THE FIRE ALARM NETWORK VIA FIBER OPTIC CABLE UNLESS NOTED OTHERWISE. GRAPHIC WORK STATIONS SHALL BE CAPABLE OF FULL CONTROL, INCLUDING SILENCING AND SYSTEM RESET.
- INSTALL NEW FIRE ALARM DEVICES IN EXISTING LOCATIONS UNLESS OTHERWISE NOTED ON THE DRAWINGS. SUBSCRIPT 'N' INDICATES NEW DEVICE, SUBSCRIPT 'R' INDICATES DEVICE TO BE RELOCATED, AND SUBSCRIPT 'D' INDICATES DEVICE TO BE DEMOLISHED.
- INSTALL NEW WIRING IN EXISTING CONDUIT AND SURFACE MOUNTED RACEWAYS.
- CONTRACTOR SHALL VERIFY QUANTITY OF MISCELLANEOUS FIRE ALARM INTERFACE RELAYS NEEDED TO MONITOR AND CONTROL EXISTING AIR HANDLING UNITS, SPRINKLER FLOW AND TRIPPER SWITCHES, SMOKE DAMPERS, EXHAUST FAN SHUT DOWN, DOOR HOLDER RELEASE, AND ELEVATOR RECALL. VERIFY WITH OWNER DESIRED CONTROL PRIOR TO PROGRAMMING.
- FOR EACH NEW CONTROL PANEL PROVIDE ONE 20A-1P CIRCUIT BREAKER TO BE INSTALLED IN AN EXISTING POWER PANEL, 75 FEET OF 3/4-INCH CONDUIT AND 120 VOLT WIRING FOR A DEDICATED CIRCUIT TO EACH CONTROL PANEL. CONTRACTOR TO VERIFY POWER PANEL LOCATION AND RECORD CIRCUIT NUMBER AND PANEL LOCATION ON RECORD DOCUMENTS.

**KEYNOTE LEGEND**

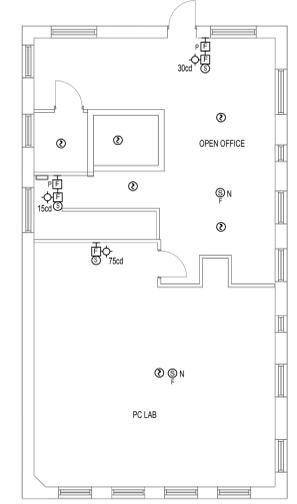
KEY	NOTE
E28.03	EXISTING DEVICE LOCATION TO BE DEMOLISHED. INSTALL NEW DEVICE IN NEW LOCATION.
E28.05	CONTRACTOR SHALL PROVIDE ADDRESSABLE RELAY MODULES FOR ELEVATOR RECALL. VERIFY ELEVATOR RECALL REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION.
E28.13	EXISTING COMMUNICATIONS CLOSET.
E28.14	NEW TWISTED PAIR CABLES IN CONDUIT FOR CONNECTION OF CONFERENCE CENTER DEVICES TO NORTH ANNEX CONTROL PANEL.



**1 CONFERENCE CENTER LOWER LEVEL**  
1/8" = 1'-0"  
\* GROUP B OCCUPANCY. BUILDING IS NOT PROTECTED BY A SPRINKLER SYSTEM.



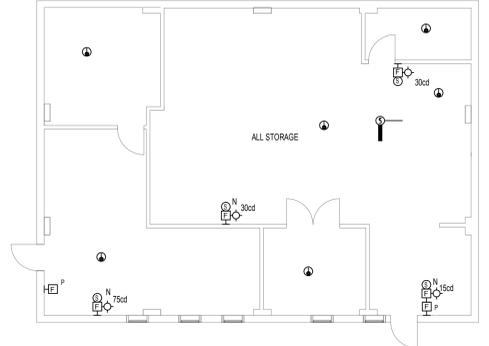
**2 CONFERENCE CENTER LEVEL 1**  
1/8" = 1'-0"  
\* GROUP B OCCUPANCY. BUILDING IS NOT PROTECTED BY A SPRINKLER SYSTEM.



**3 CONFERENCE CENTER LEVEL 2**  
1/8" = 1'-0"  
\* GROUP B OCCUPANCY. BUILDING IS NOT PROTECTED BY A SPRINKLER SYSTEM.



**4 DISTRICT 1 LEVEL 1**  
1/8" = 1'-0"  
\* GROUP B OCCUPANCY. BUILDING IS NOT PROTECTED BY A SPRINKLER SYSTEM.



**5 DISTRICT 1 LEVEL 2**  
1/8" = 1'-0"  
\* GROUP B OCCUPANCY. BUILDING IS NOT PROTECTED BY A SPRINKLER SYSTEM.

DRAWN	SKL
APPROVED	NES
ISSUED FOR	CONSTRUCTION
DATE	9/18/2015
FIELD BOOK	

PROJECT NO.: 4151330

**CONFERENCE CENTER &  
DISTRICT 1**

**IDOT Ames Complex  
Fire Alarm System  
Replacement  
BG-9A10(034)--80-85**

Iowa Department of Transportation

1020 S. 4TH ST.  
AMES, IA 50010

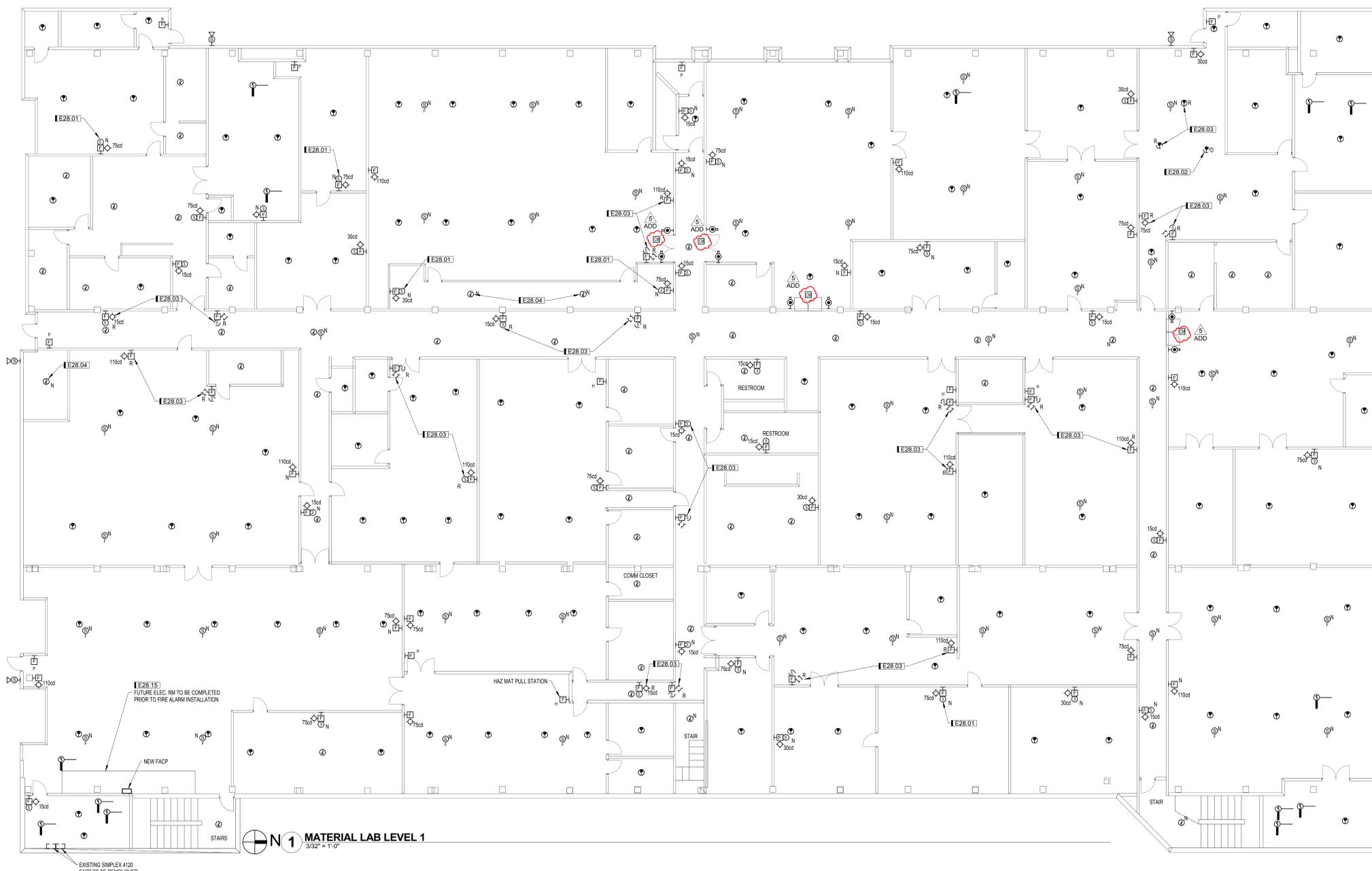
**FIRE ALARM INSTALLATION NOTES**

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3. ALL NEW FIRE ALARM PANELS SHALL COMMUNICATE USING THE SAME TECHNOLOGY. ALL FIRE ALARM PANELS SHALL BE CONNECTED TO THE FIRE ALARM NETWORK VIA FIBER OPTIC CABLE UNLESS NOTED OTHERWISE. GRAPHIC WORK STATIONS SHALL BE CAPABLE OF FULL CONTROL INCLUDING SILENCING AND SYSTEM RESET.
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5. INSTALL NEW WIRING IN EXISTING CONDUIT AND SURFACE MOUNTED RACEWAYS.
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7. FOR EACH NEW CONTROL PANEL, PROVIDE ONE 20A-1P CIRCUIT BREAKER TO BE INSTALLED IN AN EXISTING POWER PANEL, 75 FEET OF 3/4" INCH CONDUIT AND 18VOLT WIRING FOR A DEDICATED CIRCUIT TO EACH CONTROL PANEL. CONTRACTOR TO VERIFY POWER PANEL LOCATION AND RECORD CIRCUIT NUMBER AND PANEL LOCATION ON RECORD DOCUMENTS.

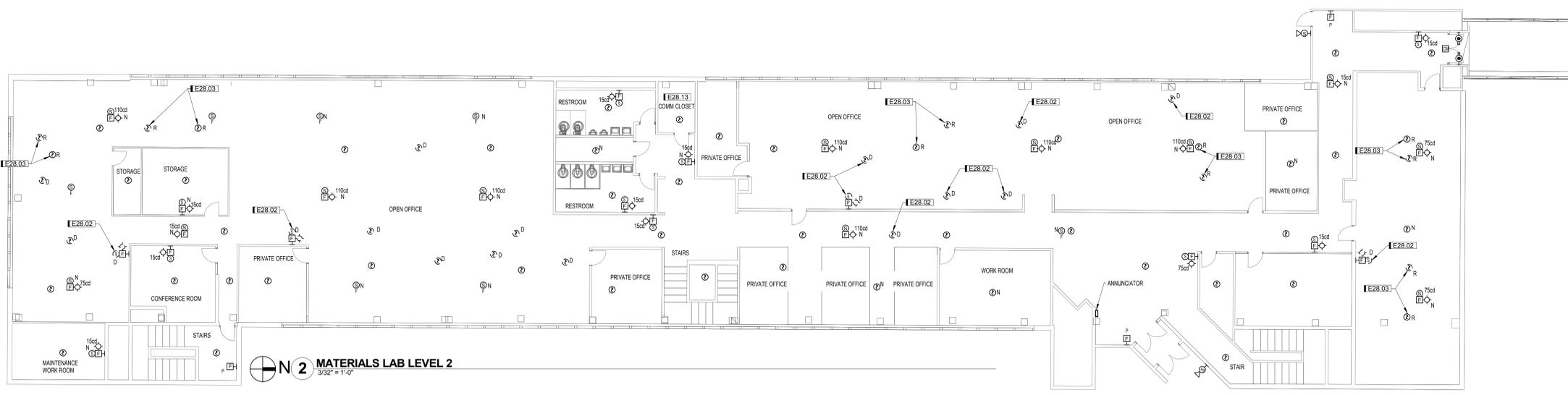
**KEYNOTE LEGEND**

KEY	NOTE
E28.01	LOCATION OF EXISTING DEVICE NOT VERIFIED. INSTALL NEW DEVICE IN EXISTING DEVICE LOCATION PROVIDED EXISTING LOCATION MEETS NFPA REQUIREMENTS. ADJUST CABLE RATING AS REQUIRED TO MEET NFPA 72 REQUIREMENTS. IF NO EXISTING LOCATION EXISTS, DEVICE SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS.
E28.02	EXISTING DEVICE TO BE DEMOLISHED. INSTALL NEW DEVICE IN NEW LOCATION.
E28.03	LOCATION OF EXISTING DEVICE NOT VERIFIED. INSTALL NEW DEVICE IN EXISTING DEVICE LOCATION PROVIDED EXISTING LOCATION MEETS NFPA REQUIREMENTS. ONE SMOKE DETECTOR COVERS 900 SQ FT. SMOKE DETECTORS IN CORRIDORS SHALL BE LOCATED 15 FEET FROM EACH END OF THE CORRIDOR AND NO MORE THAN 30 FEET SPACING BETWEEN EACH DEVICE.
E28.13	EXISTING COMMUNICATIONS CLOSET.
E28.15	ELECTRICAL SUBSTATION REPLACEMENT WILL BE DONE UNDER SEPARATE CONTRACT. COORDINATE WITH OWNER FOR INSTALLATION OF NEW FIRE ALARM CONTROL PANEL IN NEW ROOM TO BE CONSTRUCTED AROUND SUBSTATION.

\* GROUP B OCCUPANCY. BUILDING IS NOT PROTECTED BY A SPRINKLER SYSTEM.



**N 1 MATERIAL LAB LEVEL 1**  
3/32" = 1'-0"



**N 2 MATERIALS LAB LEVEL 2**  
3/32" = 1'-0"

ADD 5 12/15/2015 Addendum 5

DRAWN SKL  
APPROVED NES  
ISSUED FOR CONSTRUCTION  
DATE 9/18/2015  
FIELD BOOK

PROJECT NO.: 4151330

**MATERIAL LAB**

**E3.08**



**IDOT Ames Complex  
Fire Alarm System  
Replacement  
BG-9A10(034)--80-85**

Iowa Department of Transportation

1020 S. 4TH ST.  
AMES, IA 50010

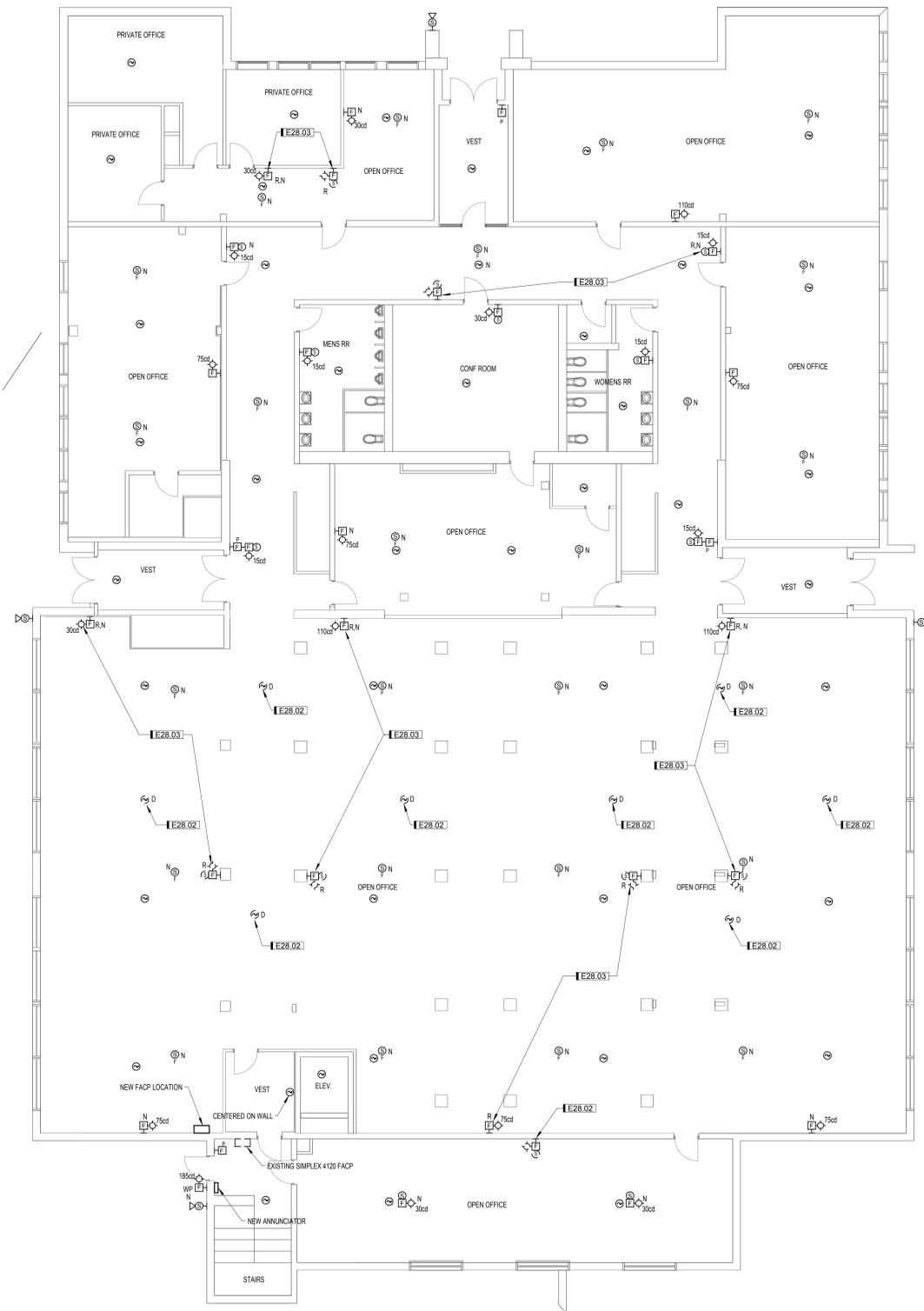
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**KEYNOTE LEGEND**

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E28.02	EXISTING DEVICE TO BE DEMOLISHED.
E28.03	EXISTING DEVICE LOCATION TO BE DEMOLISHED; INSTALL NEW DEVICE IN NEW LOCATION.
E28.08	CONTRACTOR TO VERIFY ELEVATOR RECALL REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION.
E28.13	EXISTING COMMUNICATIONS CLOSET.

\* GROUP B OCCUPANCY. BUILDING IS NOT FULLY PROTECTED BY A SPRINKLER SYSTEM. LOWER LEVEL IS FULLY SPRINKLED.



**2 NORTH ANNEX LEVEL 1**  
1/8" = 1'-0"



**1 NORTH ANNEX LOWER LEVEL**  
1/8" = 1'-0"

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APPROVED	NES
ISSUED FOR	CONSTRUCTION
DATE	9/18/2015
FIELD BOOK	

PROJECT NO.: 4151330

NORTH ANNEX



**IDOT Ames Complex  
Fire Alarm System  
Replacement  
BG-9A10(034)--80-85**

Iowa Department of Transportation  
1020 S. 4TH ST.  
AMES, IA 50010

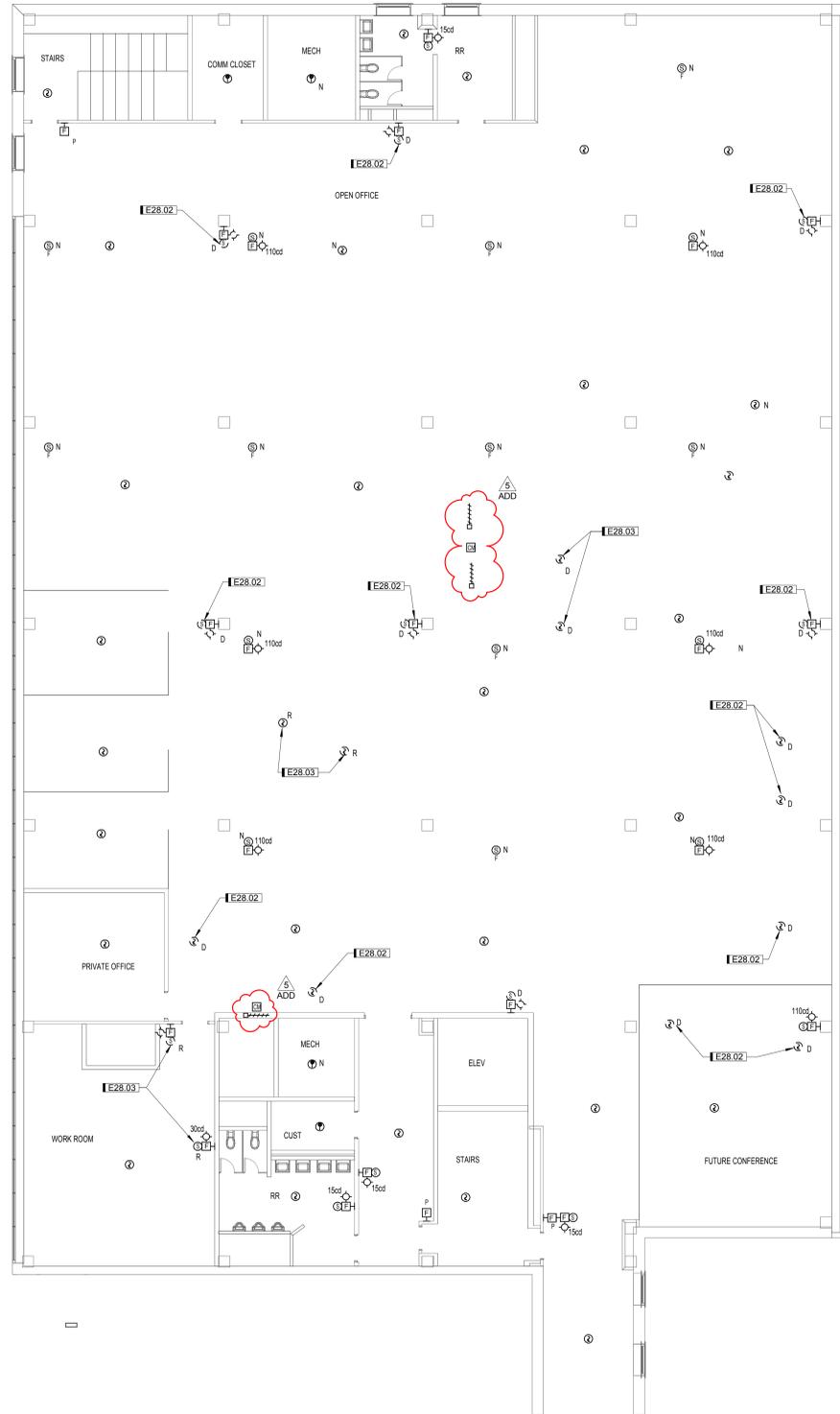
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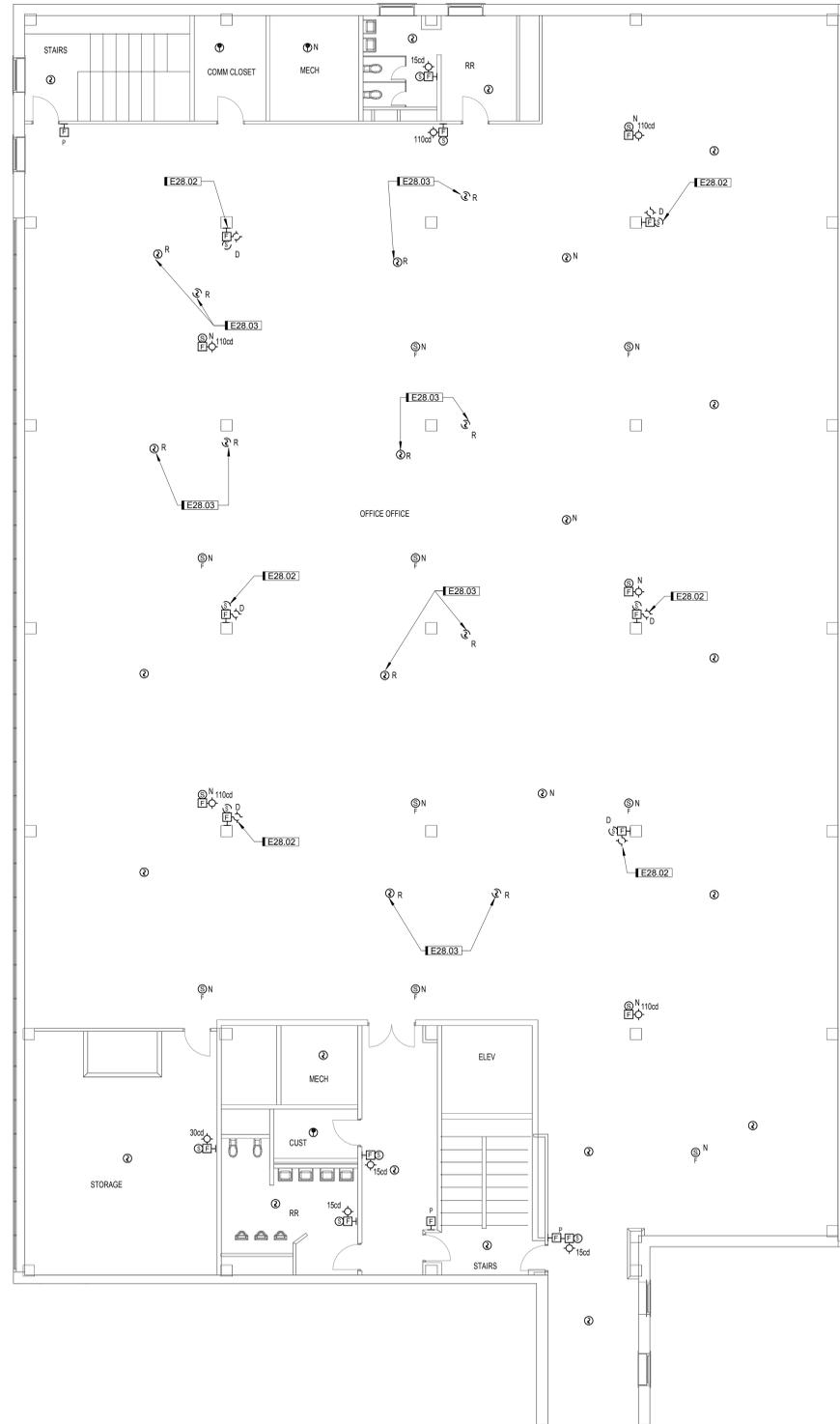
**KEYNOTE LEGEND**

KEY	NOTE
E28.02	EXISTING DEVICE TO BE DEMOLISHED.
E28.03	EXISTING DEVICE LOCATION TO BE DEMOLISHED; INSTALL NEW DEVICE IN NEW LOCATION.

\* GROUP B OCCUPANCY. BUILDING IS NOT PROTECTED BY A SPRINKLER SYSTEM.



**1 NORTHWEST WING LEVEL 2**  
1/8" = 1'-0"



**2 NORTHWEST WING LEVEL 3**  
1/8" = 1'-0"

ADD 5 12/15/2015 Addendum 5

DRAWN SKL  
APPROVED NES  
ISSUED FOR CONSTRUCTION  
DATE 9/18/2015  
FIELD BOOK

PROJECT NO.: 4151330

NORTHWEST WING - LEVEL 2  
& 3

**IDOT Ames Complex  
Fire Alarm System  
Replacement  
BG-9A10(034)--80-85**

Iowa Department of Transportation

1020 S. 4TH ST.  
AMES, IA 50010

**FIRE ALARM INSTALLATION NOTES**

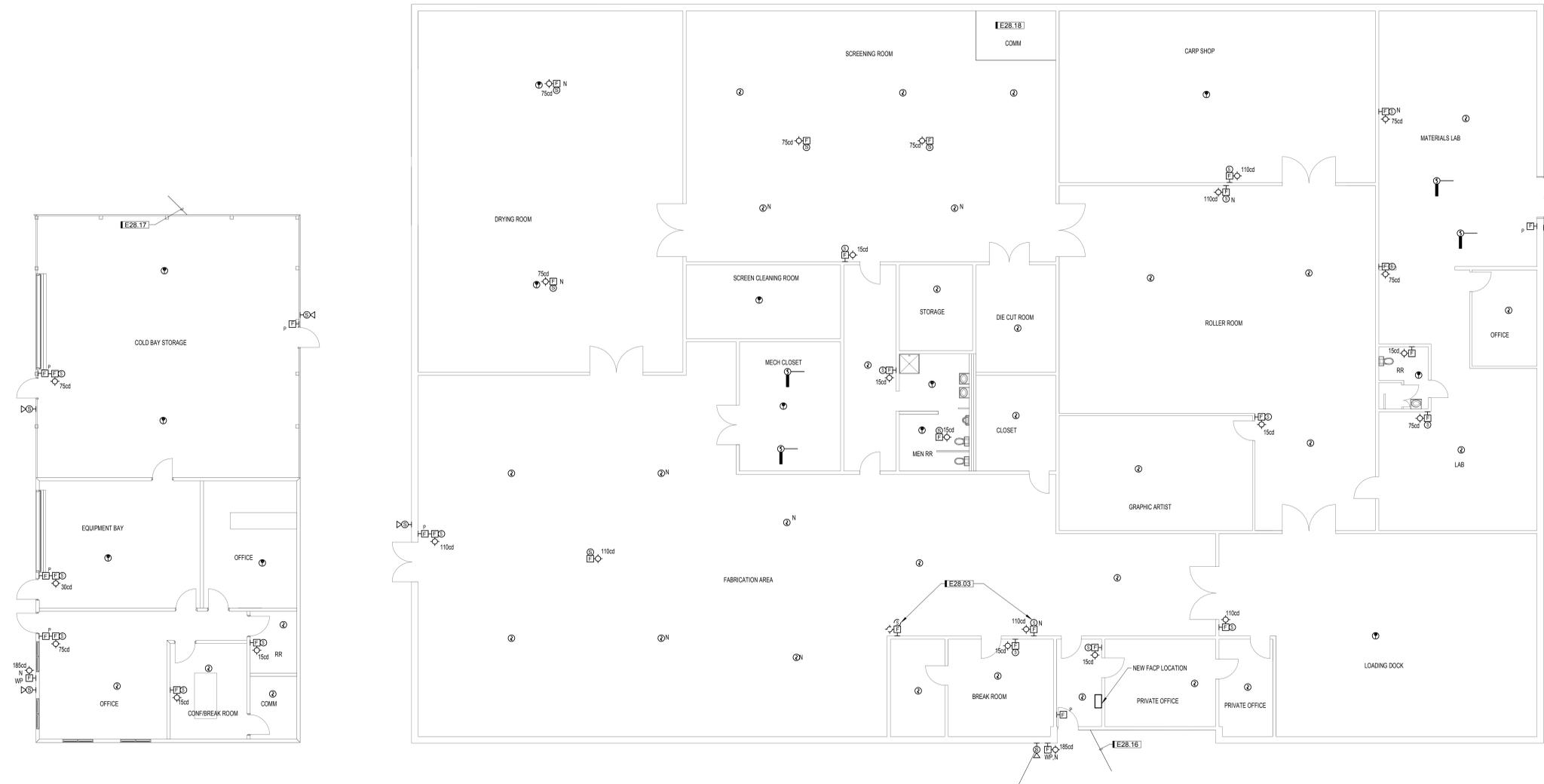
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**KEYNOTE LEGEND**

KEY	NOTE
E28.03	EXISTING DEVICE LOCATION TO BE DEMOLISHED. INSTALL NEW DEVICE IN NEW LOCATION.
E28.16	NEW FIBER CONNECTION IN CONDUIT FROM SIGN SHOP CONTROL PANEL TO AUCTION BUILDING CONTROL PANEL. SEE SHEET E3.09 FOR CONTINUATION.
E28.17	NEW TWISTED PAIR CABLE IN CONDUIT FOR CONNECTION OF MOTOR POOL DEVICES TO REPAIR SHOP CONTROL PANEL. SEE SHEET E3.14 FOR CONTINUATION.
E28.18	EXISTING DATA RACK LOCATION.

★ MOTOR POOL: GROUP S OCCUPANCY. BUILDINGS ARE NOT PROTECTED BY A SPRINKLER SYSTEM.

★ SIGN SHOP: GROUP F OCCUPANCY. BUILDINGS ARE NOT PROTECTED BY A SPRINKLER SYSTEM.



**1 MOTOR POOL**  
1/8" = 1'-0"

**2 SIGN SHOP**  
1/8" = 1'-0"

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APPROVED NES  
ISSUED FOR CONSTRUCTION  
DATE 9/18/2015  
FIELD BOOK

PROJECT NO.: 4151330

MOTOR POOL & SIGN SHOP

**IDOT Ames Complex  
Fire Alarm System  
Replacement  
BG-9A10(034)--80-85**

Iowa Department of Transportation  
1020 S. 4TH ST.  
AMES, IA 50010

**FIRE ALARM INSTALLATION NOTES**

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**KEYNOTE LEGEND**

KEY	NOTE
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E28.03	EXISTING DEVICE LOCATION TO BE DEMOLISHED; INSTALL NEW DEVICE IN NEW LOCATION.
E28.13	EXISTING COMMUNICATIONS CLOSET.
E28.19	NEW TWISTED PAIR CABLE IN CONDUIT FOR CONNECTION OF MOTOR POOL DEVICES TO REPAIR SHOP CONTROL PANEL. SEE SHEET E3.13 FOR CONTINUATION.

★ GROUP B OCCUPANCY. BUILDINGS ARE NOT PROTECTED BY A SPRINKLER SYSTEM.



**1 REPAIR SHOP LEVEL 1**  
1/8" = 1'-0"

**2 REPAIR SHOP LEVEL 2**  
1/8" = 1'-0"

DRAWN	SKL
APPROVED	NES
ISSUED FOR	CONSTRUCTION
DATE	9/18/2015
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PROJECT NO.: 4151330

REPAIR SHOP

**IDOT Ames Complex  
Fire Alarm System  
Replacement  
BG-9A10(034)--80-85**

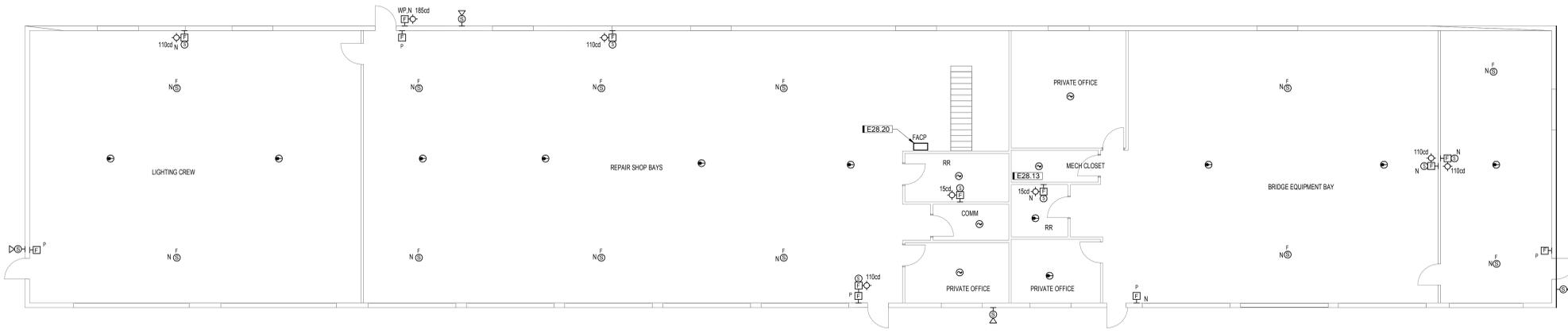
Iowa Department of Transportation  
1020 S. 4TH ST.  
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- FIRE ALARM INSTALLATION NOTES**
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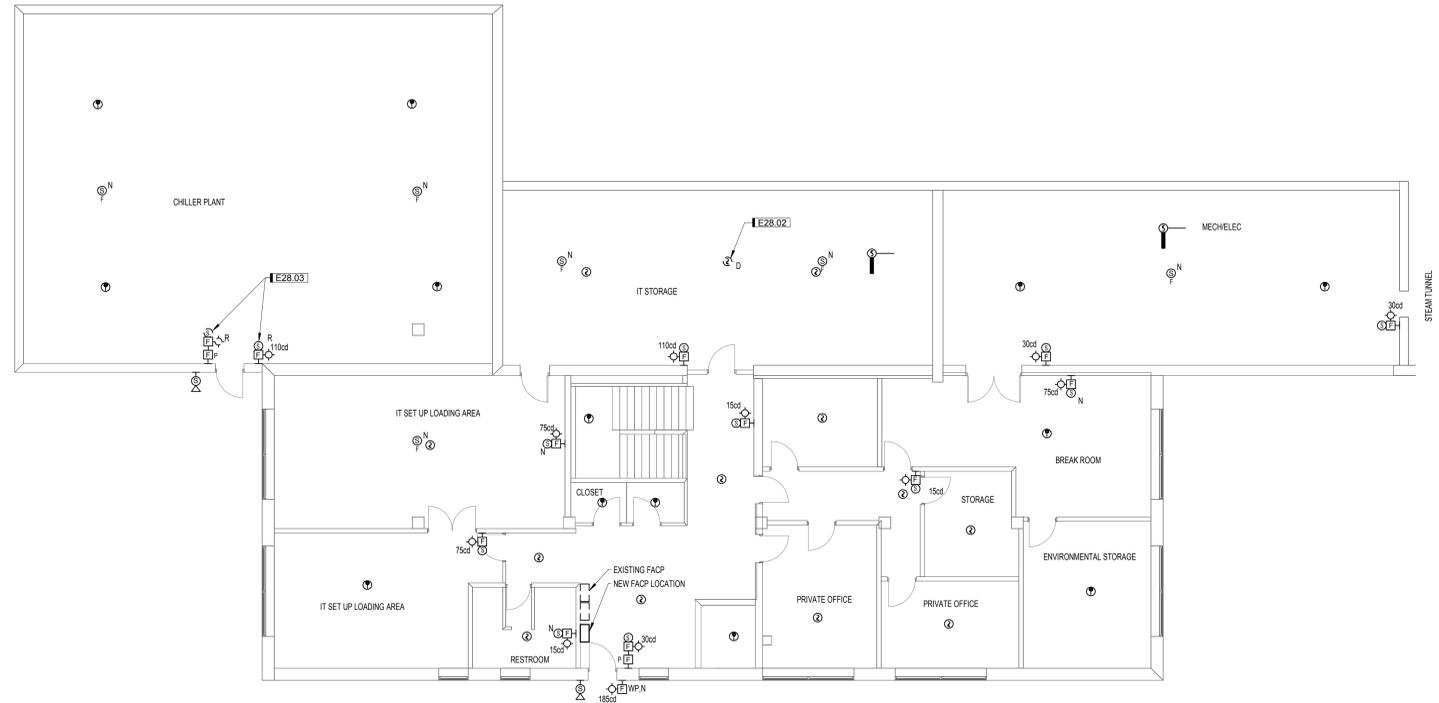
**KEYNOTE LEGEND**

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E28.03	EXISTING DEVICE LOCATION TO BE DEMOLISHED. INSTALL NEW DEVICE IN NEW LOCATION.
E28.13	EXISTING COMMUNICATIONS CLOSET
E28.20	PROVIDE FLOOR MOUNTED STRUCTURAL STEEL CHANNEL ASSEMBLY FOR MOUNTING OF NEW CONTROL PANEL.

★ GROUP B OCCUPANCY. BUILDINGS ARE NOT PROTECTED BY A SPRINKLER SYSTEM.



**1 REPAIR SHOP ANNEX**  
1/8" = 1'-0"



**2 SOUTH WING LOWER LEVEL**  
1/8" = 1'-0"


DRAWN	SKL
APPROVED	NES
ISSUED FOR	CONSTRUCTION
DATE	9/18/2015
FIELD BOOK	

PROJECT NO.: 4151330

**REPAIR SHOP ANNEX &  
SOUTH WING LOWER LEVEL**

**IDOT Ames Complex  
Fire Alarm System  
Replacement  
BG-9A10(034)--80-85**

Iowa Department of Transportation  
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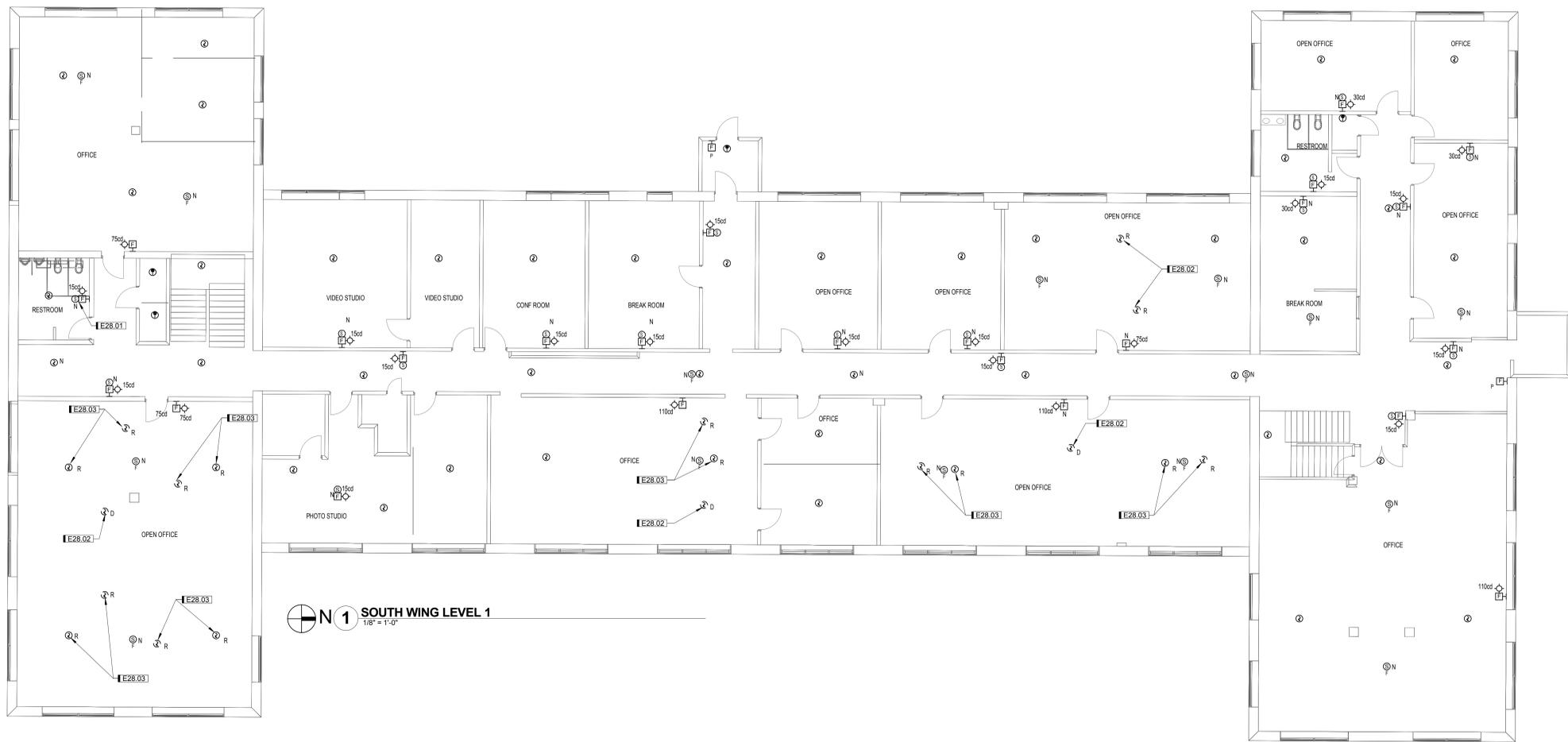
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- INSTALL NEW FIRE ALARM DEVICES IN EXISTING LOCATIONS UNLESS OTHERWISE NOTED ON THE DRAWINGS. SUBSCRIPT "N" INDICATES NEW DEVICE, SUBSCRIPT "R" INDICATES DEVICE TO BE RELOCATED, AND SUBSCRIPT "D" INDICATES DEVICE TO BE DEMOLISHED.
- INSTALL NEW WIRING IN EXISTING CONDUIT AND SURFACE MOUNTED RACEWAYS.
- CONTRACTOR SHALL VERIFY QUANTITY OF MISCELLANEOUS FIRE ALARM INTERFACE RELAYS NEEDED TO MONITOR AND CONTROL EXISTING AIR HANDLING UNITS, SPRINKLER FLOW AND TAMPER SWITCHES, SMOKE DAMPERS, EXHAUST FAN SHUT DOWN, DOOR HOLDER RELEASE, AND ELEVATOR RECALL. VERIFY WITH OWNER DESIRED CONTROL PRIOR TO PROGRAMMING.
- FOR EACH NEW CONTROL PANEL PROVIDE ONE 20A-1P CIRCUIT BREAKER TO BE INSTALLED IN AN EXISTING POWER PANEL, 75 FEET OF 3/4-INCH CONDUIT AND 120 VOLT WIRING OR A DEDICATED CIRCUIT TO EACH CONTROL PANEL. CONTRACTOR TO VERIFY POWER PANEL LOCATION AND RECORD CIRCUIT NUMBER AND PANEL LOCATION ON RECORD DOCUMENTS.

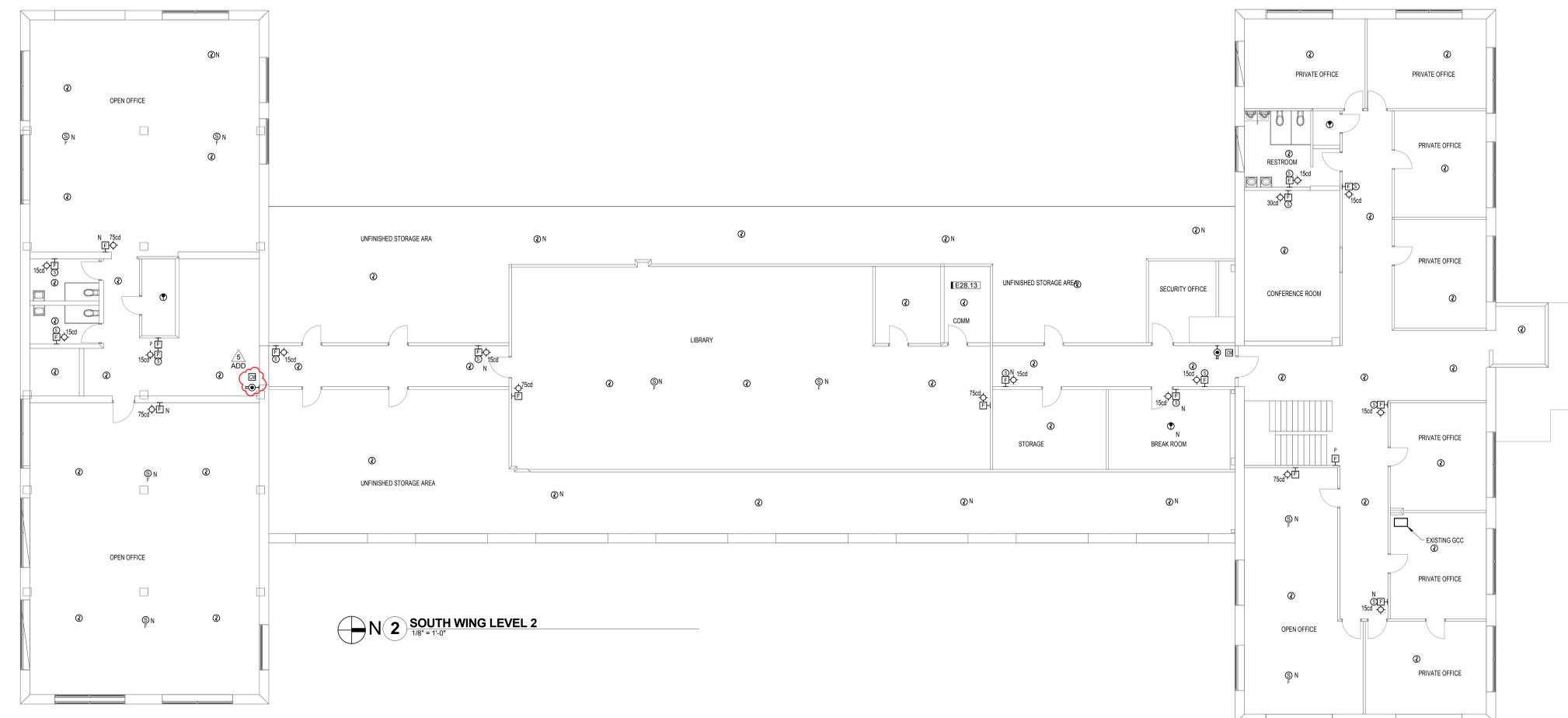
**KEYNOTE LEGEND**

KEY	NOTE
E28.01	LOCATION OF EXISTING DEVICE NOT VERIFIED. INSTALL NEW DEVICE IN EXISTING DEVICE LOCATION PROVIDED EXISTING LOCATION MEETS NFPA REQUIREMENTS. ADJUST CABLE RATING AS REQUIRED TO MEET NFPA REQUIREMENTS. IF NO EXISTING LOCATION EXISTS, DEVICE SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS.
E28.02	EXISTING DEVICE TO BE DEMOLISHED.
E28.03	EXISTING DEVICE LOCATION TO BE DEMOLISHED. INSTALL NEW DEVICE IN NEW LOCATION.
E28.13	EXISTING COMMUNICATIONS CLOSET.

★ GROUP B OCCUPANCY. BUILDINGS ARE NOT PROTECTED BY A SPRINKLER SYSTEM.



**1 SOUTH WING LEVEL 1**  
1/8" = 1'-0"



**2 SOUTH WING LEVEL 2**  
1/8" = 1'-0"

ADD 5 12/15/2015 Addendum 5

DRAWN SKL  
APPROVED NES  
ISSUED FOR CONSTRUCTION  
DATE 9/18/2015  
FIELD BOOK

PROJECT NO.: 4151330

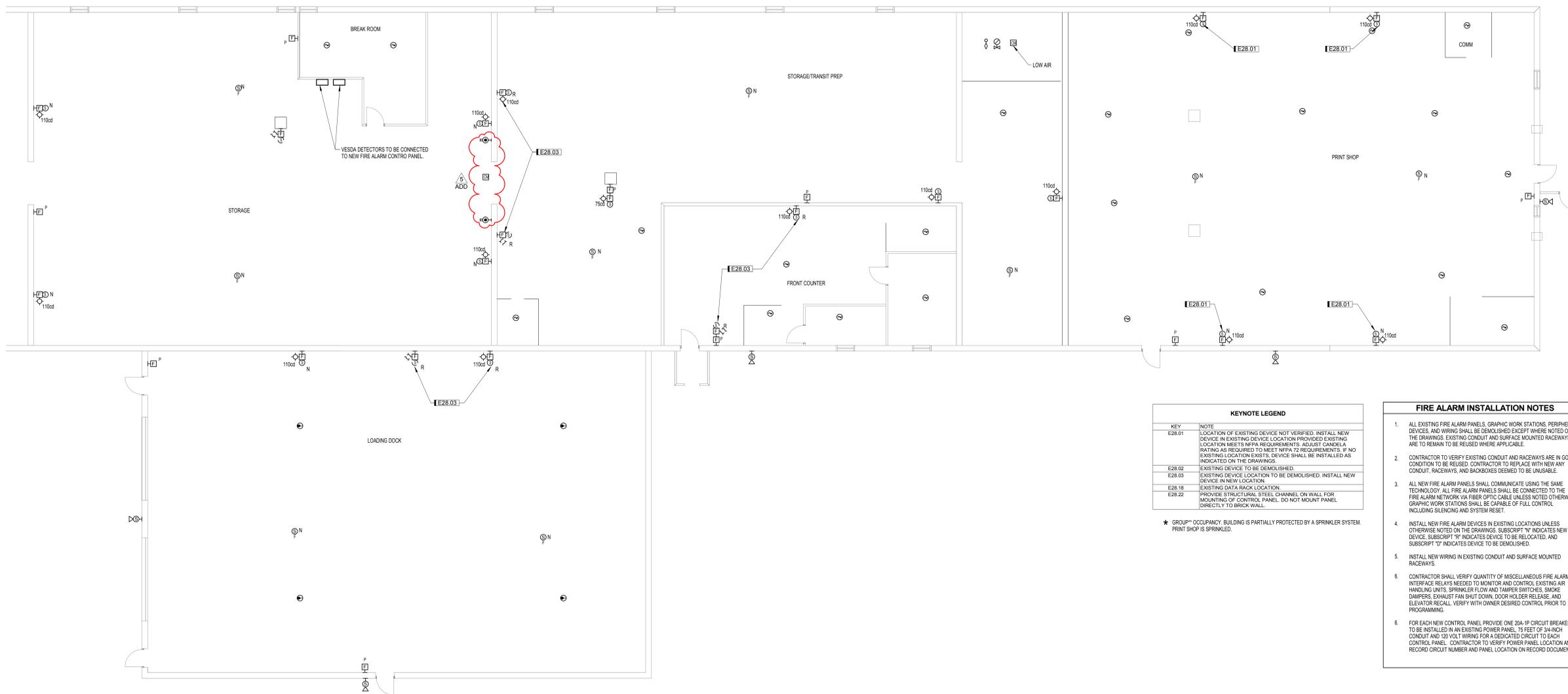
**SOUTH WING - LEVEL 1 & 2**

**IDOT Ames Complex  
Fire Alarm System  
Replacement  
BG-9A10(034)--80-85**

Iowa Department of Transportation  
1020 S. 4TH ST.  
AMES, IA 50010



**1 WAREHOUSE NORTH**  
1/8" = 1'-0"



**2 WAREHOUSE SOUTH**  
1/8" = 1'-0"

KEYNOTE LEGEND	
KEY	NOTE
E28.01	LOCATION OF EXISTING DEVICE NOT VERIFIED. INSTALL NEW DEVICE IN EXISTING DEVICE LOCATION PROVIDED EXISTING LOCATION MEETS NFPA REQUIREMENTS. ADJUST CANDELA RATING AS REQUIRED TO MEET NFPA 72 REQUIREMENTS. IF NO EXISTING LOCATION EXISTS, DEVICE SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS.
E28.02	EXISTING DEVICE TO BE DEMOLISHED.
E28.03	EXISTING DEVICE LOCATION TO BE DEMOLISHED. INSTALL NEW DEVICE IN NEW LOCATION.
E28.18	EXISTING DATA RACK LOCATION.
E28.22	PROVIDE STRUCTURAL STEEL CHANNEL ON WALL FOR MOUNTING OF CONTROL PANEL. DO NOT MOUNT PANEL DIRECTLY TO BRICK WALL.

\* GROUP "O" OCCUPANCY. BUILDING IS PARTIALLY PROTECTED BY A SPRINKLER SYSTEM. PRINT SHOP IS SPRINKLED.

FIRE ALARM INSTALLATION NOTES	
1.	ALL EXISTING FIRE ALARM PANELS, GRAPHIC WORK STATIONS, PERIPHERAL DEVICES, AND WIRING SHALL BE DEMOLISHED EXCEPT WHERE NOTED ON THE DRAWINGS. EXISTING CONDUIT AND SURFACE MOUNTED RACEWAYS ARE TO REMAIN TO BE REUSED WHERE APPLICABLE.
2.	CONTRACTOR TO VERIFY EXISTING CONDUIT AND RACEWAYS ARE IN GOOD CONDITION TO BE REUSED. CONTRACTOR TO REPLACE WITH NEW ANY CONDUIT, RACEWAYS, AND BACKBOXES DEEMED TO BE UNUSABLE.
3.	ALL NEW FIRE ALARM PANELS SHALL COMMUNICATE USING THE SAME TECHNOLOGY. ALL FIRE ALARM PANELS SHALL BE CONNECTED TO THE FIRE ALARM NETWORK VIA FIBER OPTIC CABLE UNLESS NOTED OTHERWISE. GRAPHIC WORK STATIONS SHALL BE CAPABLE OF FULL CONTROL INCLUDING SILENCING AND SYSTEM RESET.
4.	INSTALL NEW FIRE ALARM DEVICES IN EXISTING LOCATIONS UNLESS OTHERWISE NOTED ON THE DRAWINGS. SUBSCRIPT "N" INDICATES NEW DEVICE. SUBSCRIPT "R" INDICATES DEVICE TO BE RELOCATED. AND SUBSCRIPT "D" INDICATES DEVICE TO BE DEMOLISHED.
5.	INSTALL NEW WIRING IN EXISTING CONDUIT AND SURFACE MOUNTED RACEWAYS.
6.	CONTRACTOR SHALL VERIFY QUANTITY OF MISCELLANEOUS FIRE ALARM INTERFACE RELAYS NEEDED TO MONITOR AND CONTROL EXISTING AIR HANDLING UNITS, SPRINKLER FLOW AND TAMPER SWITCHES, SMOKE DAMPERS, EXHAUST FAN SHUT DOWN, DOOR HOLDER RELEASE, AND ELEVATOR RECALL. VERIFY WITH OWNER DESIRED CONTROL PRIOR TO PROGRAMMING.
7.	FOR EACH NEW CONTROL PANEL PROVIDE ONE 20A-1P CIRCUIT BREAKER TO BE INSTALLED IN AN EXISTING POWER PANEL, 75 FEET OR 3/4 INCH CONDUIT AND 120 VOLT WIRING FOR A DEDICATED CIRCUIT TO EACH CONTROL PANEL. CONTRACTOR TO VERIFY POWER PANEL LOCATION AND RECORD CIRCUIT NUMBER AND PANEL LOCATION ON RECORD DOCUMENTS.

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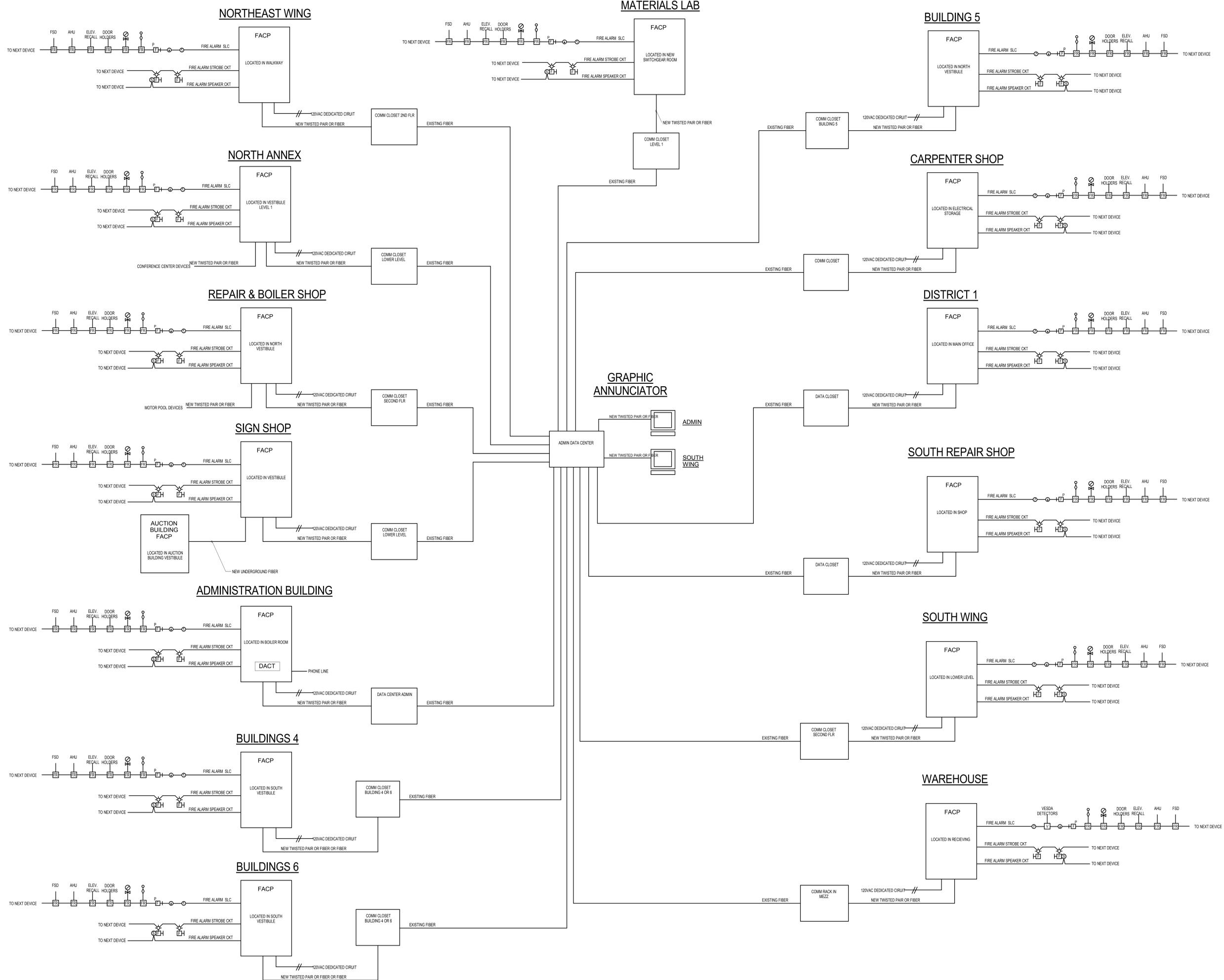
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WAREHOUSE

**IDOT Ames Complex  
Fire Alarm System  
Replacement  
BG-9A10(034)--80-85**

Iowa Department of Transportation  
1020 S. 4TH ST.  
AMES, IA 50010



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WIRING SCHEMATIC