

1 ELECTRICAL COMMUNICATION FLOOR PLAN - LEVEL 1 - UNIT A
1/8" = 1'-0"

ELECTRICAL COMMUNICATIONS GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT AND STANDARD BACKBOXES FOR SYSTEMS SHOWN ON THIS DRAWING IN BASE PROPOSAL.
2. IN ANY EXPOSED AREAS SUCH AS GYMNASIUMS, SHOPS, FIELD HOUSES, JANITORS CLOSETS, OR MECHANICAL/ELECTRICAL ROOMS ALL LOW VOLTAGE CABLING SHALL BE ENCLOSED IN CONDUIT.
3. ALL COMMUNICATIONS CABLING SHALL RUN DOWN THE CORRIDORS AND BRANCH OFF TO EACH CLASSROOM. TRUNKING SHALL BE RAN PRIMARILY PERPENDICULAR TO BUILDING WALLS AND SHALL NOT BE RAN OVER CLASSROOMS.
4. WHERE NO FINISHED CEILINGS ARE SCHEDULED ALL DEVICES, CONDUIT, AND BACKBOXES SHALL BE INSTALLED UP AGAINST BOTTOM OF DECK AND SHALL NOT PROTRUDE BELOW BOTTOM OF STEEL. THE ARCHITECT SHALL APPROVE ALL ROUTING OF ALL EXPOSED ROUGH-INS PRIOR TO PLACEMENT.
5. ANY SIGNAL, OUTLET OR OTHER DEVICE MOUNTED ON A COLUMN, PILASTER, OR SIMILAR WALL OFFSET SHALL BE CENTERED.
6. COORDINATE MOUNTING HEIGHT OF DEVICES ABOVE MILLWORK WITH ARCHITECTURAL PLANS.
7. VERIFY MARKERBOARD, TACKBOARD, AND DOOR SWING LOCATIONS WITH ARCHITECTURAL PLANS - DO NOT INSTALL DEVICES IN THESE AREAS.
8. COORDINATE EXACT LOCATION OF ALL DEVICES, ETC. INSTALLED IN MOVEABLE FURNITURE WITH ARCHITECT AND OWNER.
9. CONFIRM ALL COMMUNICATIONS DEVICE LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN. THE ARCHITECT RESERVES THE RIGHT TO LOCATE DEVICES ANYWHERE WITHIN EACH ROOM AND DETERMINE SURFACE RACEWAY ROUTING IF APPLICABLE.
10. COORDINATE EXACT MECHANICAL EQUIPMENT LOCATION AND TYPE WITH MECHANICAL PLANS AND MECHANICAL CONTRACTOR. DO NOT INSTALL CONDUIT WITHIN 3'-0" OF ANY HVAC DEVICE UNLESS THE DEVICE SERVES THAT UNIT.
11. FIRE ALARM CONTRACTOR SHALL PROVIDE DUCT MOUNTED SMOKE DETECTORS AND CONTROL RELAYS WHERE REQUIRED. MECHANICAL CONTRACTOR SHALL INSTALL HOUSING AND SAMPLE TUBES IN DUCT. FIRE ALARM CONTRACTOR TO PROVIDE LOW VOLTAGE CONNECTION TO FIRE ALARM.
12. FIRE ALARM CONTRACTOR SHALL VERIFY CIRCUIT STYLE, QUANTITY, AND LOCATIONS OF DEVICES TO MEET ALL APPLICABLE CODES, LAWS, AND ALL REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION FOR INCLUSION IN BASE PROPOSAL.
13. REFER TO SPECIFICATION DIVISION 27 AND 28 FOR ADDITIONAL INFORMATION.

ELECTRICAL COMMUNICATION PLAN NOTES

- 1 NEW LOCATION OF OWNER PROVIDED GYM IDF RACK, FEED RACK WITH NEW FIBER FROM NEW IDF LOCATION.
- 2 MOUNT DEVICE AT STRUCTURE HEIGHT.
- 3 PROVIDE WEATHERPROOF SINGLE GANG JUNCTION BOX WITH 1" RIGID THREADED CONDUIT STUBBED INTO ACCESSIBLE ATTIC SPACE FOR EXTERIOR CAMERA CABLING.
- 4 PROVIDE WEATHERPROOF SINGLE GANG JUNCTION BOX WITH 1" RIGID THREADED CONDUIT STUBBED INTO ACCESSIBLE ATTIC SPACE FOR EXTERIOR WIRELESS ACCESS POINT CABLING.
- 5 PROVIDE NEW DATA DROPS AT EXISTING LOCATIONS.

IN ANY AREAS WITH OPEN STRUCTURE, CONTRACTOR SHALL PROVIDE 1" CONDUIT FROM EACH DEVICE OUTLET LOCATION, EXTENDED AT STRUCTURE AND STUBBED INTO ACCESSIBLE CORRIDOR SPACE ABOVE CEILING.

IN ANY AREAS WITH OPEN STRUCTURE, ALL LOW VOLTAGE CABLING SHALL BE ENCLOSED IN CONDUIT.

THE EXISTING FIRE ALARM SYSTEM SHALL BE MODIFIED AS NECESSARY BY CONTRACTOR TO KEEP STUDENT OCCUPIED AREAS OPERATIONAL AS REQUIRED BY THE PROJECT PHASING. AT THE CLOSE OF THE PROJECT, THE ENTIRE EXISTING FIRE ALARM SYSTEM INCLUDING THE PANEL AND ALL DEVICES AND CABLING SHALL BE REMOVED.

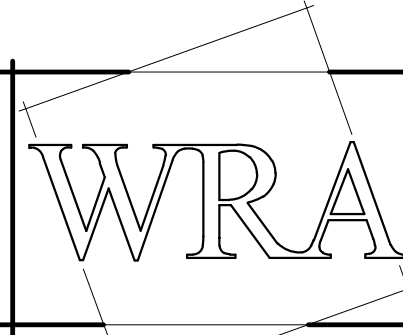
THE EXISTING INTERCOM SYSTEM SHALL BE MODIFIED AS NECESSARY BY CONTRACTOR TO REMAIN IN PLACE AND OPERATIONAL AS REQUIRED BY THE PROJECT PHASING. AT THE CLOSE OF THE PROJECT, THE ENTIRE INTERCOM SYSTEM INCLUDING THE HEADEND AND ALL DEVICES AND CABLING SHALL BE REMOVED.

THE EXISTING NETWORK SHALL BE MODIFIED AS NECESSARY BY CONTRACTOR TO REMAIN IN PLACE AND OPERATIONAL AS REQUIRED BY THE PROJECT PHASING. CONTRACTOR SHALL PROVIDE TEMPORARY FIBER BACKBONE BETWEEN CLOSETS AS REQUIRED. AT THE CLOSE OF THE PROJECT, THE EXISTING NETWORK SYSTEM INCLUDING ALL DEVICES AND CABLING SHALL BE REMOVED.

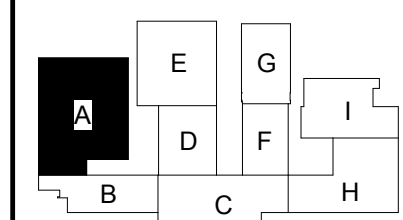
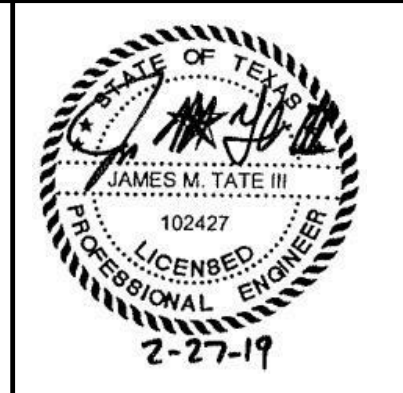


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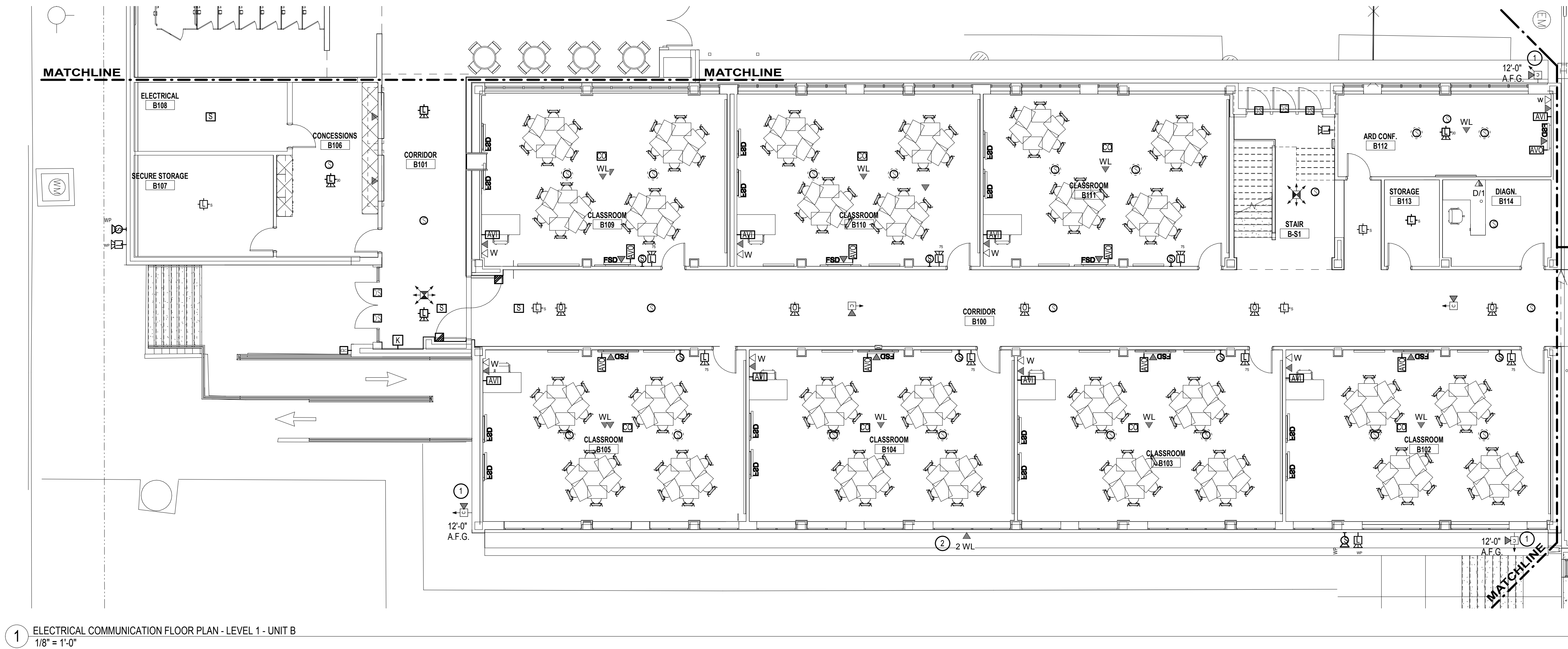
415 Hagg Dr, River Oaks, TX 76114

REVISIONS:

JOB NO. 1741
DATE: February 27, 2019

ELECTRICAL COMM.
FLOOR PLAN - LEVEL 1
- UNIT A
ET201

2/27/2019 9:24:06 AM



ELECTRICAL COMMUNICATION PLAN NOTES

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2. PROVIDE WEATHERPROOF SINGLE GANG JUNCTION BOX WITH 1" RIGID THREADED CONDUIT STUBBED INTO ACCESSIBLE ATTIC SPACE FOR EXTERIOR WIRELESS ACCESS POINT CABLING.

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4. WHERE NO FINISHED CEILINGS ARE SCHEDULED ALL DEVICES, CONDUIT, AND BACKBOXES SHALL BE INSTALLED UP AGAINST BOTTOM OF DECK AND SHALL NOT PROTRUDE BELOW BOTTOM OF STEEL. THE ARCHITECT SHALL APPROVE ALL ROUTING OF ALL EXPOSED ROUGH-INS PRIOR TO PLACEMENT.
5. ANY SIGNAL, OUTLET OR OTHER DEVICE MOUNTED ON A COLUMN, PILASTER, OR SIMILAR WALL OFFSET SHALL BE CENTERED.
6. COORDINATE MOUNTING HEIGHT OF DEVICES ABOVE MILLWORK WITH ARCHITECTURAL PLANS.
7. VERIFY MARKERBOARD, TACKBOARD, AND DOOR SWING LOCATIONS WITH ARCHITECTURAL PLANS - DO NOT INSTALL DEVICES IN THESE AREAS.
8. COORDINATE EXACT LOCATION OF ALL DEVICES, ETC. INSTALLED IN MOVEABLE FURNITURE WITH ARCHITECT AND OWNER.
9. CONFIRM ALL COMMUNICATIONS DEVICE LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN. THE ARCHITECT RESERVES THE RIGHT TO LOCATE DEVICES ANYWHERE WITHIN EACH ROOM AND DETERMINE SURFACE RACEWAY ROUTING IF APPLICABLE.
10. COORDINATE EXACT MECHANICAL EQUIPMENT LOCATION AND TYPE WITH MECHANICAL PLANS AND MECHANICAL CONTRACTOR. DO NOT INSTALL CONDUIT WITHIN 3'-0" OF ANY HVAC DEVICE UNLESS THE DEVICE SERVES THAT UNIT.
11. FIRE ALARM CONTRACTOR SHALL PROVIDE DUCT MOUNTED SMOKE DETECTORS AND CONTROL RELAYS WHERE REQUIRED. MECHANICAL CONTRACTOR SHALL INSTALL HOUSING AND SAMPLE TUBES IN DUCT. FIRE ALARM CONTRACTOR TO PROVIDE LOW VOLTAGE CONNECTION TO FIRE ALARM.
12. FIRE ALARM CONTRACTOR SHALL VERIFY CIRCUIT STYLE, QUANTITY, AND LOCATIONS OF DEVICES TO MEET ALL APPLICABLE CODES, LAWS, AND ALL REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION FOR INCLUSION IN BASE PROPOSAL.
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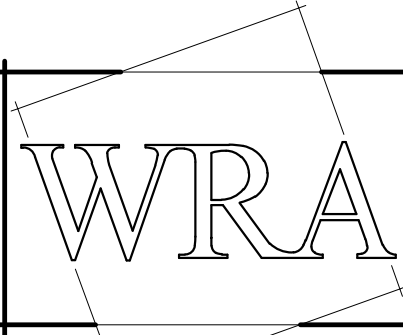
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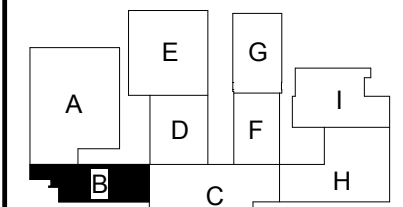
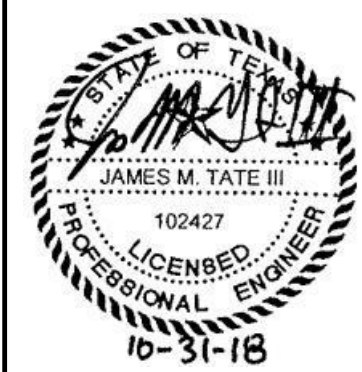


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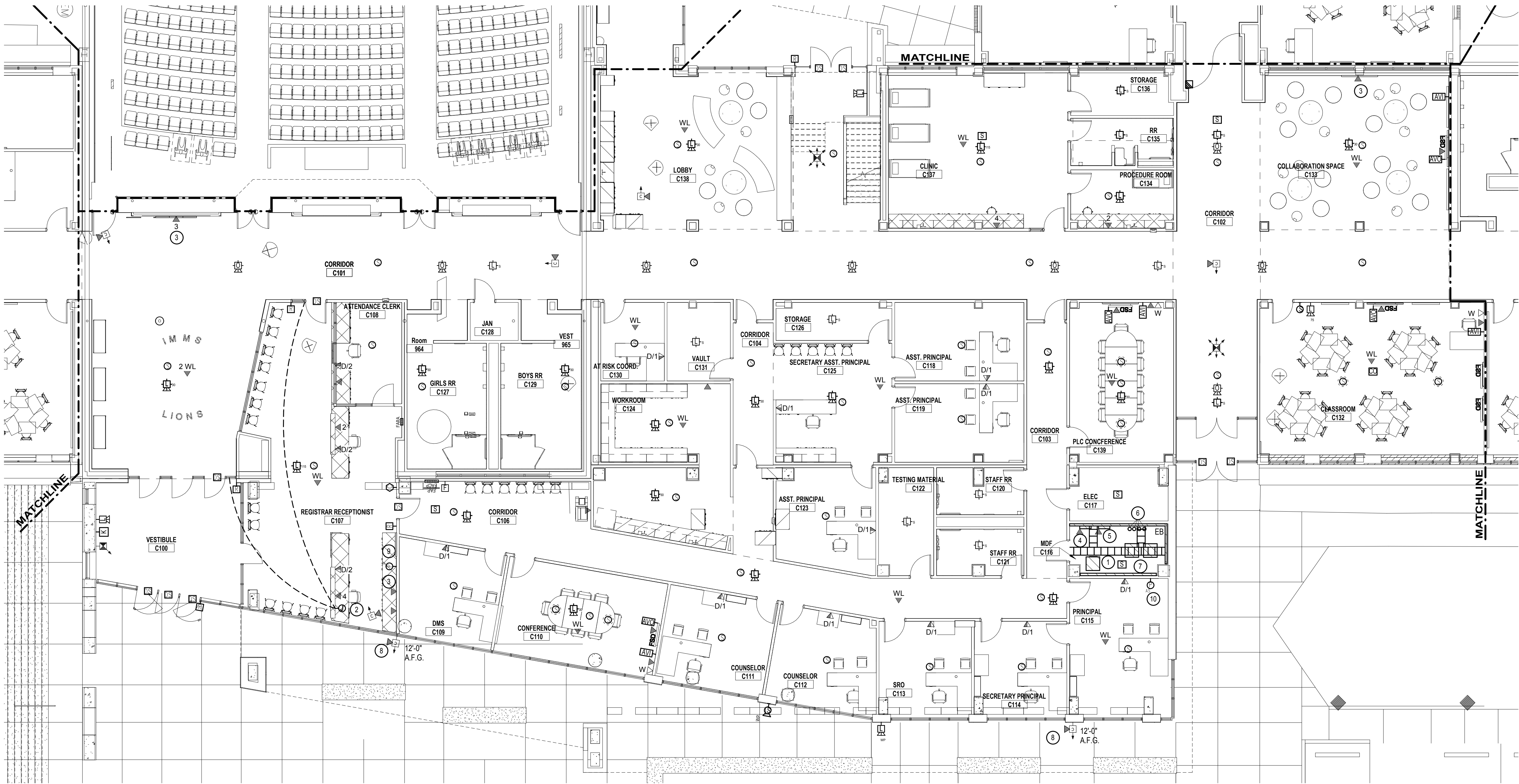
415 Hagg Dr, River Oaks, TX 76114

REVISIONS:

JOB NO. 1741
DATE: February 27, 2019

ELECTRICAL COMM.
FLOOR PLAN - LEVEL 1
- UNIT B
ET202

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1 ELECTRICAL COMMUNICATION FLOOR PLAN - LEVEL 1 - UNIT C
1/8" = 1'-0"

ELECTRICAL COMMUNICATION PLAN NOTES

1. INTERCOM RACK.
2. JUNCTION BOX FOR DOOR RELEASE HARDWARE.
3. DATA FOR DIGITAL SIGNAGE: COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECT PRIOR TO INSTALLATION.
4. SECURITY PANEL.
5. CARD ACCESS PANEL.
6. PROVIDE TWO 4" UNDERGROUND CONDUITS FOR NETWORK SERVICE ENTRY, ONE 2" UNDERGROUND CONDUIT FOR SPARE, AND ONE 1-1/2" CONDUIT TO MARQUEE FOR COMMUNICATIONS CABLING - SEE SITE PLAN.
7. MDF RACKS.
8. PROVIDE WEATHERPROOF SINGLE GANG JUNCTION BOX WITH 1" RIGID THREADED CONDUIT STUBBED INTO ACCESSIBLE ATTIC SPACE FOR EXTERIOR CAMERA CABLING.
9. DESKTOP INTERCOM PAGING MIC.
10. INTERCOM ADMIN. SET WALL MOUNTED @ 44" A.F.F.

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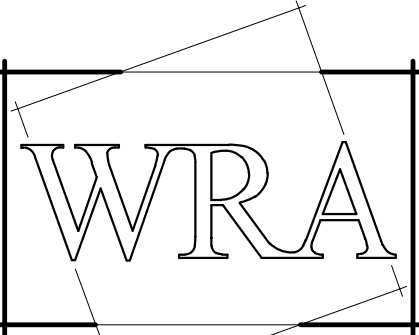
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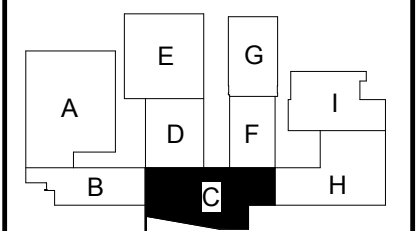
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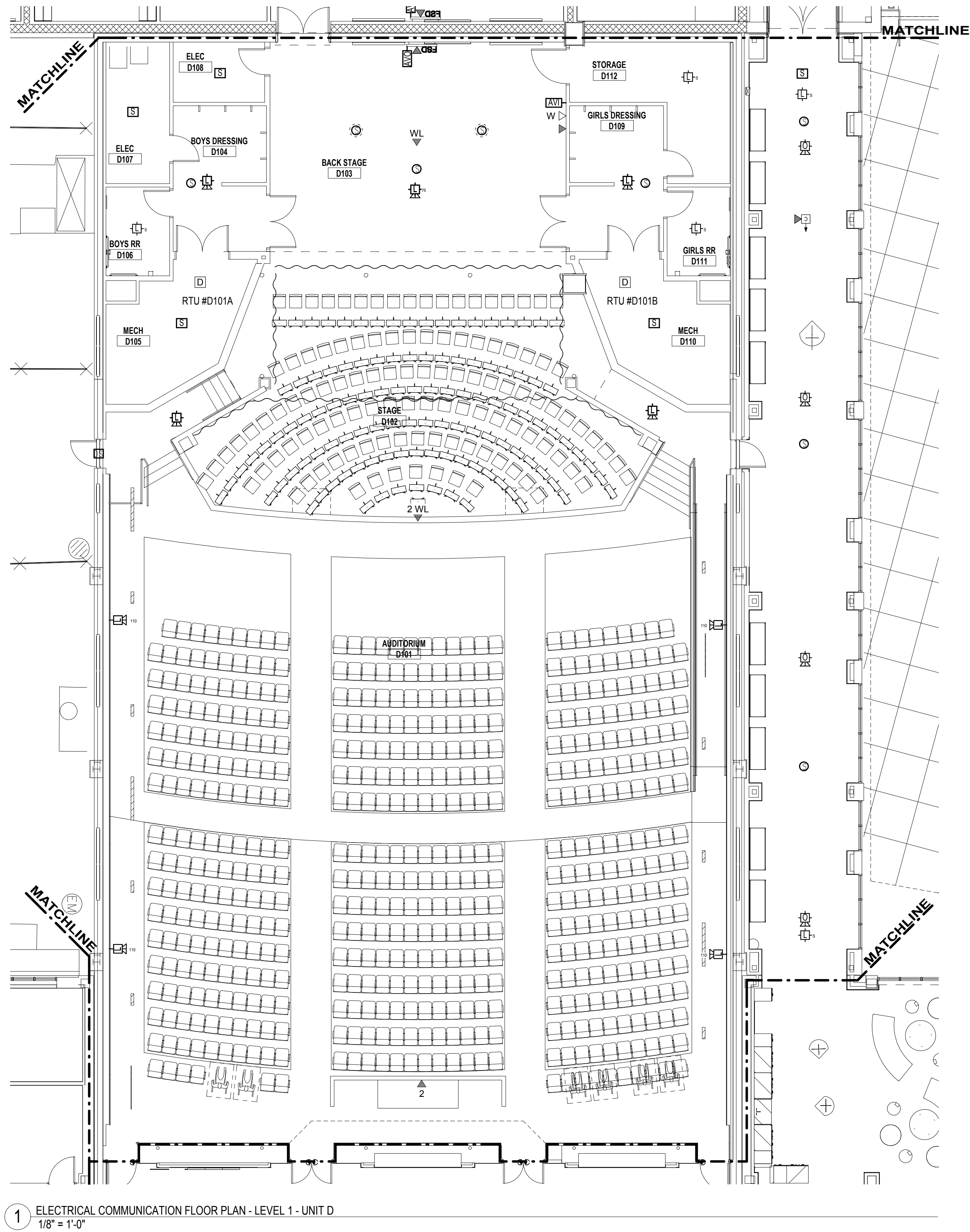
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FLOOR PLAN - LEVEL 1
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DATA CONTRACTOR TO RECABLE ALL DATA DROPS
BACK TO NEW MDF/IDF RACK IN THIS AREA.

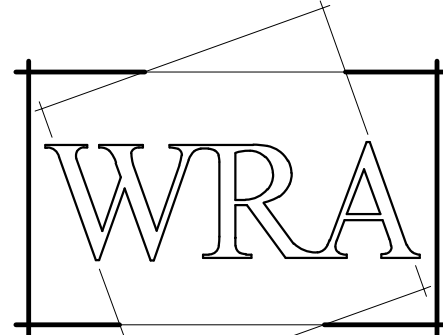
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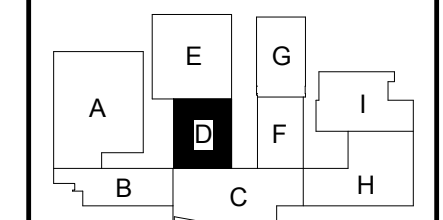
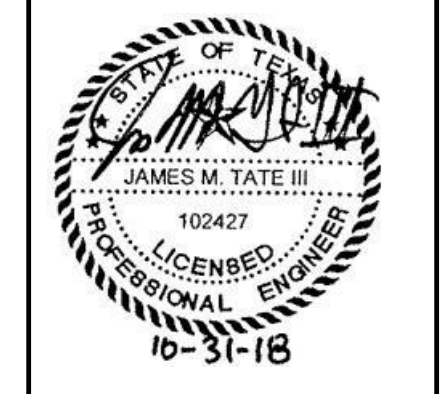
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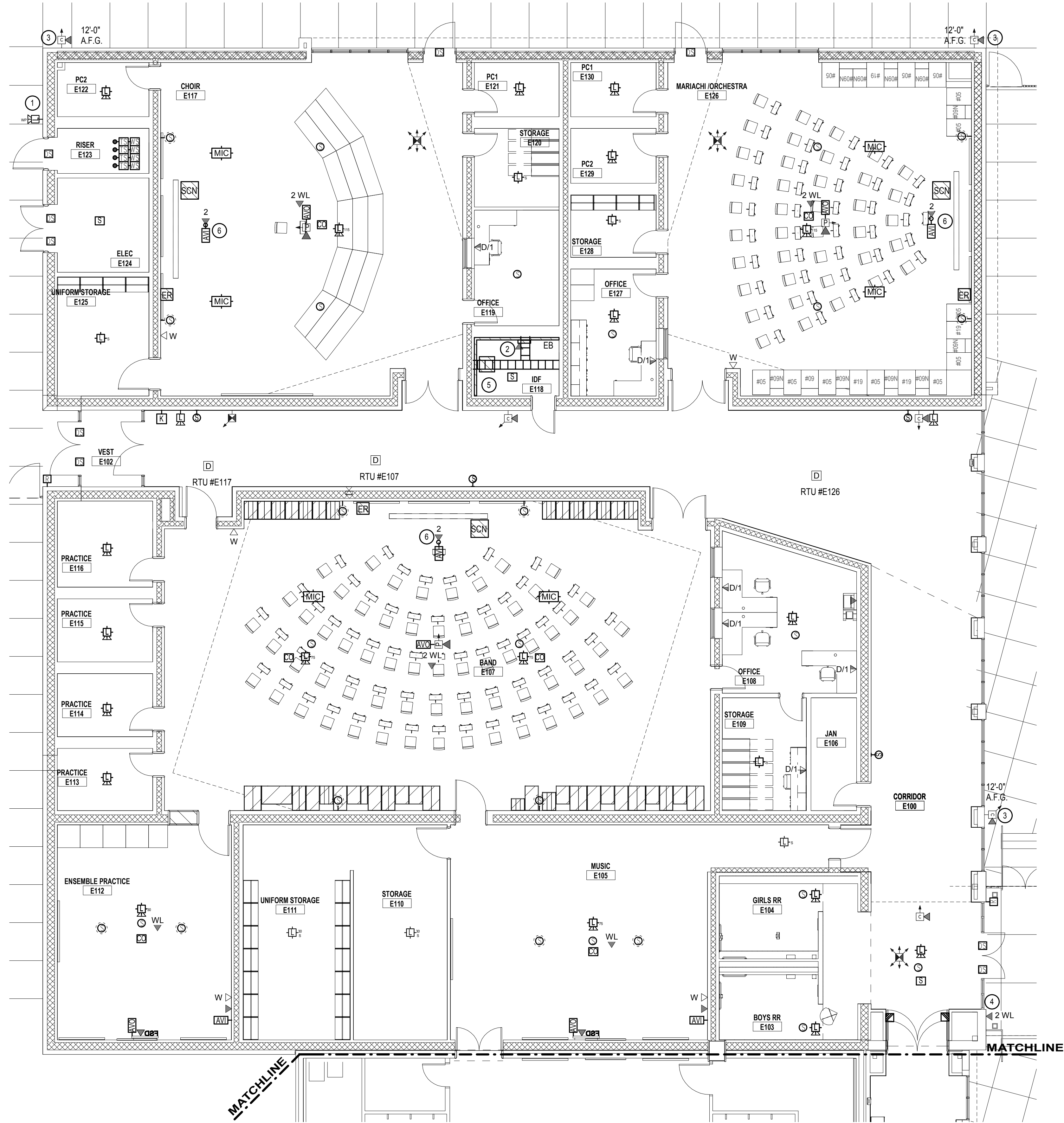
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1 ELECTRICAL COMMUNICATION FLOOR PLAN - LEVEL 1 - UNIT E
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ELECTRICAL COMMUNICATION PLAN NOTES

- 1 WATERFLOW ALARM SPEAKER STROBE.
- 2 CARD ACCESS PANEL.
- 3 PROVIDE WEATHERPROOF SINGLE GANG JUNCTION BOX WITH 1" RIGID THREADED CONDUIT STUBBED INTO ACCESSIBLE ATTIC SPACE FOR EXTERIOR CAMERA CABLING.
- 4 PROVIDE WEATHERPROOF SINGLE GANG JUNCTION BOX WITH 1" RIGID THREADED CONDUIT STUBBED INTO ACCESSIBLE ATTIC SPACE FOR EXTERIOR WIRELESS ACCESS POINT CABLING.
- 5 IDF RACK.
- 6 EXTEND 1-1/4" CONDUIT FROM ACCESSIBLE SPACE ABOVE DROP CEILING, DOWN INSIDE WALL, AND UNDER SLAB TO FLOOR BOX. PROVIDE POWER AND DATA TO FLOOR BOX THROUGH SEPARATE CONDUITS UNDER SLAB.
- 7 AMPLIFIER ENCLOSURE ABOVE CEILING.

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6. COORDINATE MOUNTING HEIGHT OF DEVICES ABOVE MILLWORK WITH ARCHITECTURAL PLANS.
7. VERIFY MARKERBOARD, TACKBOARD, AND DOOR SWING LOCATIONS WITH ARCHITECTURAL PLANS - DO NOT INSTALL DEVICES IN THESE AREAS.
8. COORDINATE EXACT LOCATION OF ALL DEVICES, ETC. INSTALLED IN MOVEABLE FURNITURE WITH ARCHITECT AND OWNER.
9. CONFIRM ALL COMMUNICATIONS DEVICE LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN. THE ARCHITECT RESERVES THE RIGHT TO LOCATE DEVICES ANYWHERE WITHIN EACH ROOM AND DETERMINE SURFACE RACEWAY ROUTING IF APPLICABLE.
10. COORDINATE EXACT MECHANICAL EQUIPMENT LOCATION AND TYPE WITH MECHANICAL PLANS AND MECHANICAL CONTRACTOR. DO NOT INSTALL CONDUIT WITHIN 3'-0" OF ANY HVAC DEVICE UNLESS THE DEVICE SERVES THAT UNIT.
11. FIRE ALARM CONTRACTOR SHALL PROVIDE DUCT MOUNTED SMOKE DETECTORS AND CONTROL RELAYS WHERE REQUIRED. MECHANICAL CONTRACTOR SHALL INSTALL HOUSING AND SAMPLE TUBES IN DUCT. FIRE ALARM CONTRACTOR TO PROVIDE LOW VOLTAGE CONNECTION TO FIRE ALARM.
12. FIRE ALARM CONTRACTOR SHALL VERIFY CIRCUIT STYLE, QUANTITY, AND LOCATIONS OF DEVICES TO MEET ALL APPLICABLE CODES, LAWS, AND ALL REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION FOR INCLUSION IN BASE PROPOSAL.
13. REFER TO SPECIFICATION DIVISION 27 AND 28 FOR ADDITIONAL INFORMATION.

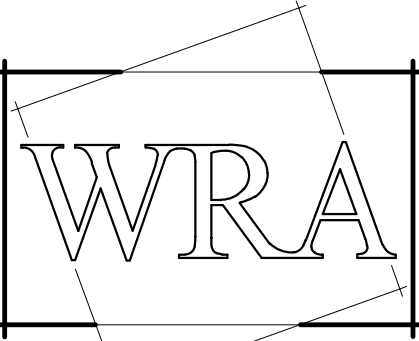
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IN ANY AREAS WITH OPEN STRUCTURE, ALL LOW VOLTAGE CABLING SHALL BE ENCLOSED IN CONDUIT.

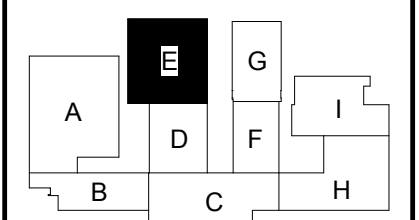
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THE EXISTING NETWORK SHALL BE MODIFIED AS NECESSARY BY CONTRACTOR TO REMAIN IN PLACE AND OPERATIONAL AS REQUIRED BY THE PROJECT PHASING. CONTRACTOR SHALL PROVIDE TEMPORARY FIBER BACKBONE BETWEEN CLOSETS AS REQUIRED. AT THE CLOSE OF THE PROJECT, THE EXISTING NETWORK SYSTEM INCLUDING ALL DEVICES AND CABLING SHALL BE REMOVED.



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IMMS Addition/Renovation

415 Hagg Dr, River Oaks, TX 76114

REVISIONS:

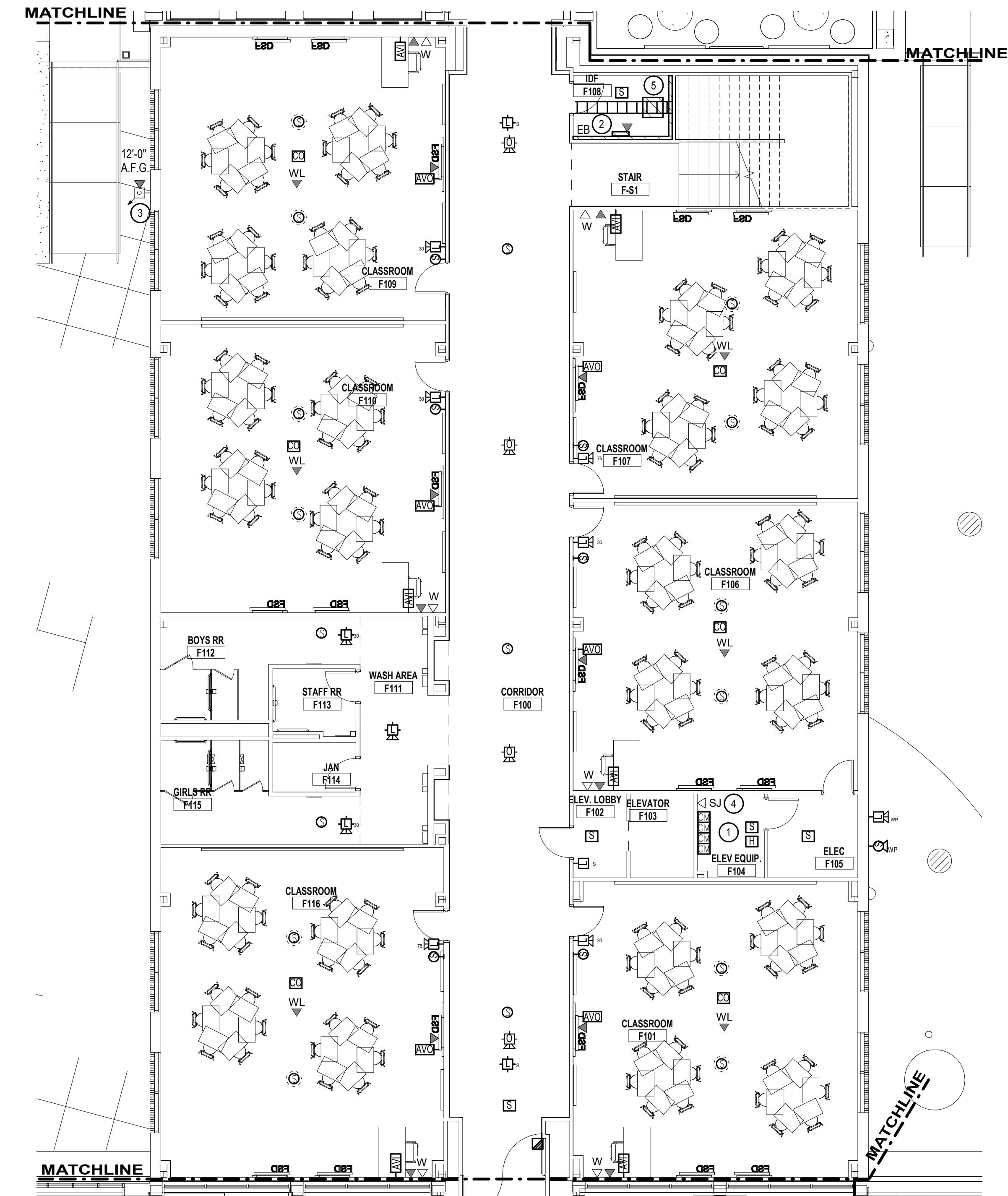
JOB NO. 1741
DATE: February 27, 2019

ELECTRICAL COMM.
FLOOR PLAN - LEVEL 1
- UNIT E
ET205



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TBPE Firm Registration No. F-893
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SUBMISSION OF BID WILL BE CONSIDERED ACKNOWLEDGMENT THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS VERIFIED ALL EXISTING JOB CONDITIONS AND INCLUDED ANY NECESSARY MODIFICATION TO EXISTING AND NEW WORK REQUIRED FOR INSTALLATION OF A COMPLETE AND WORKING SYSTEM.



1 ELECTRICAL COMMUNICATION FLOOR PLAN - LEVEL 1 - UNIT F
1/8" = 1'-0"

ELECTRICAL COMMUNICATIONS GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT AND STANDARD BACKBOXES FOR SYSTEMS SHOWN ON THIS DRAWING IN BASE PROPOSAL.
2. IN ANY EXPOSED AREAS SUCH AS GYMNASIUMS, SHOPS, FIELD HOUSES, JANITORS CLOSETS, OR MECHANICAL/ELECTRICAL ROOMS ALL LOW VOLTAGE CABLING SHALL BE ENCLOSED IN CONDUIT.
3. ALL COMMUNICATIONS CABLING SHALL RUN DOWN THE CORRIDORS AND BRANCH OFF TO EACH CLASSROOM. TRUNKING SHALL BE RAN PRIMARILY PERPENDICULAR TO BUILDING WALLS AND SHALL NOT BE RAN OVER CLASSROOMS.
4. WHERE NO FINISHED CEILINGS ARE SCHEDULED ALL DEVICES, CONDUIT, AND BACKBOXES SHALL BE INSTALLED UP AGAINST BOTTOM OF DECK AND SHALL NOT PROTRUDE BELOW BOTTOM OF STEEL. THE ARCHITECT SHALL APPROVE ALL ROUTING OF ALL EXPOSED ROUGH-INS PRIOR TO PLACEMENT.
5. ANY SIGNAL, OUTLET OR OTHER DEVICE MOUNTED ON A COLUMN, PILASTER, OR SIMILAR WALL OFFSET SHALL BE CENTERED.
6. COORDINATE MOUNTING HEIGHT OF DEVICES ABOVE MILLWORK WITH ARCHITECTURAL PLANS.
7. VERIFY MARKERBOARD, TACKBOARD, AND DOOR SWING LOCATIONS WITH ARCHITECTURAL PLANS - DO NOT INSTALL DEVICES IN THESE AREAS.
8. COORDINATE EXACT LOCATION OF ALL DEVICES, ETC. INSTALLED IN MOVEABLE FURNITURE WITH ARCHITECT AND OWNER.
9. CONFIRM ALL COMMUNICATIONS DEVICE LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN. THE ARCHITECT RESERVES THE RIGHT TO LOCATE DEVICES ANYWHERE WITHIN EACH ROOM AND DETERMINE SURFACE RACEWAY ROUTING IF APPLICABLE.
10. COORDINATE EXACT MECHANICAL EQUIPMENT LOCATION AND TYPE WITH MECHANICAL PLANS AND MECHANICAL CONTRACTOR. DO NOT INSTALL CONDUIT WITHIN 3'-0" OF ANY HVAC DEVICE UNLESS THE DEVICE SERVES THAT UNIT.
11. FIRE ALARM CONTRACTOR SHALL PROVIDE DUCT MOUNTED SMOKE DETECTORS AND CONTROL RELAYS WHERE REQUIRED. MECHANICAL CONTRACTOR SHALL INSTALL HOUSING AND SAMPLE TUBES IN DUCT. FIRE ALARM CONTRACTOR TO PROVIDE LOW VOLTAGE CONNECTION TO FIRE ALARM.
12. FIRE ALARM CONTRACTOR SHALL VERIFY CIRCUIT STYLE, QUANTITY, AND LOCATIONS OF DEVICES TO MEET ALL APPLICABLE CODES, LAWS, AND ALL REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION FOR INCLUSION IN BASE PROPOSAL.
13. REFER TO SPECIFICATION DIVISION 27 AND 28 FOR ADDITIONAL INFORMATION.

ELECTRICAL COMMUNICATION PLAN NOTES

- 1 PROVIDE FIRE ALARM CONTROL MODULES FOR ELEVATOR PRIMARY RECALL, SECONDARY RECALL, FIREFIGHTER WARNING AND POWER SHUNT-TRIP FUNCTION.
- 2 CARD ACCESS PANEL.
- 3 PROVIDE WEATHERPROOF SINGLE GANG JUNCTION BOX WITH 1" RIGID THREADED CONDUIT STUBBED INTO ACCESSIBLE ATTIC SPACE FOR EXTERIOR CAMERA CABLING.
- 4 SERVICE JACK FOR ELEVATOR EMERGENCY PHONE.
- 5 IDF RACK.

IN ANY AREAS WITH OPEN STRUCTURE, CONTRACTOR SHALL PROVIDE 1" CONDUIT FROM EACH DEVICE OUTLET LOCATION, EXTENDED AT STRUCTURE AND STUBBED INTO ACCESSIBLE CORRIDOR SPACE ABOVE CEILING.

IN ANY AREAS WITH OPEN STRUCTURE, ALL LOW VOLTAGE CABLING SHALL BE ENCLOSED IN CONDUIT.

THE EXISTING FIRE ALARM SYSTEM SHALL BE MODIFIED AS NECESSARY BY CONTRACTOR TO KEEP STUDENT OCCUPIED AREAS OPERATIONAL AS REQUIRED BY THE PROJECT PHASING. AT THE CLOSE OF THE PROJECT, THE ENTIRE EXISTING FIRE ALARM SYSTEM INCLUDING THE PANEL AND ALL DEVICES AND CABLING SHALL BE REMOVED.

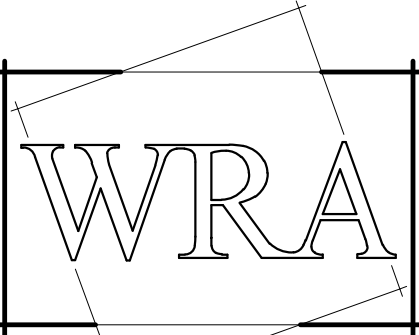
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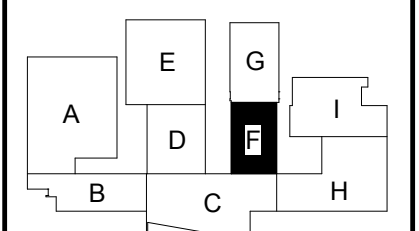


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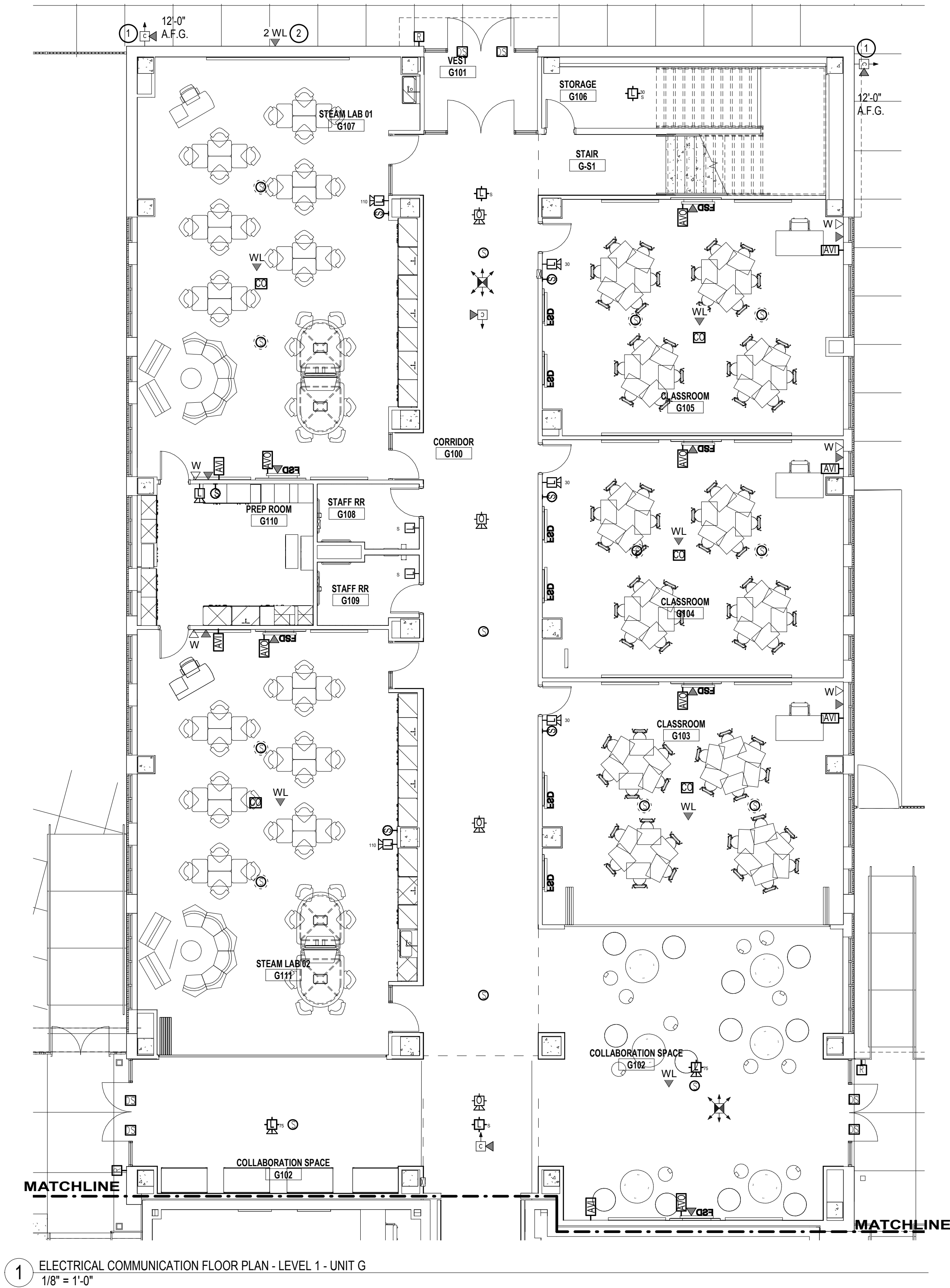
IMMS Addition/Renovation

415 Hagg Dr, River Oaks, TX 76114

REVISIONS:

JOB NO. 1741
DATE February 27, 2019

ELECTRICAL COMM.
FLOOR PLAN - LEVEL 1
- UNIT F
ET206



1 ELECTRICAL COMMUNICATION FLOOR PLAN - LEVEL 1 - UNIT G
1/8" = 1'-0"

ELECTRICAL COMMUNICATION PLAN NOTES

1. PROVIDE WEATHERPROOF SINGLE GANG JUNCTION BOX WITH 1" RIGID THREADED CONDUIT STUBBED INTO ACCESSIBLE ATTIC SPACE FOR EXTERIOR CAMERA CABLING.
2. PROVIDE WEATHERPROOF SINGLE GANG JUNCTION BOX WITH 1" RIGID THREADED CONDUIT STUBBED INTO ACCESSIBLE ATTIC SPACE FOR EXTERIOR WIRELESS ACCESS POINT CABLING.

ELECTRICAL COMMUNICATIONS GENERAL NOTES

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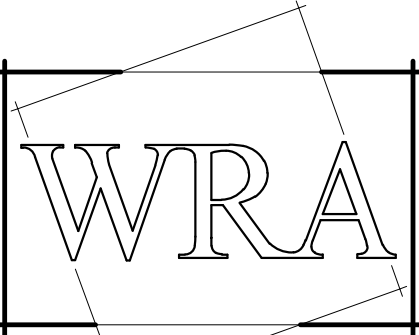
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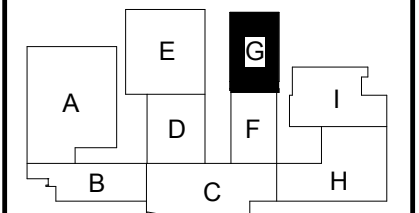


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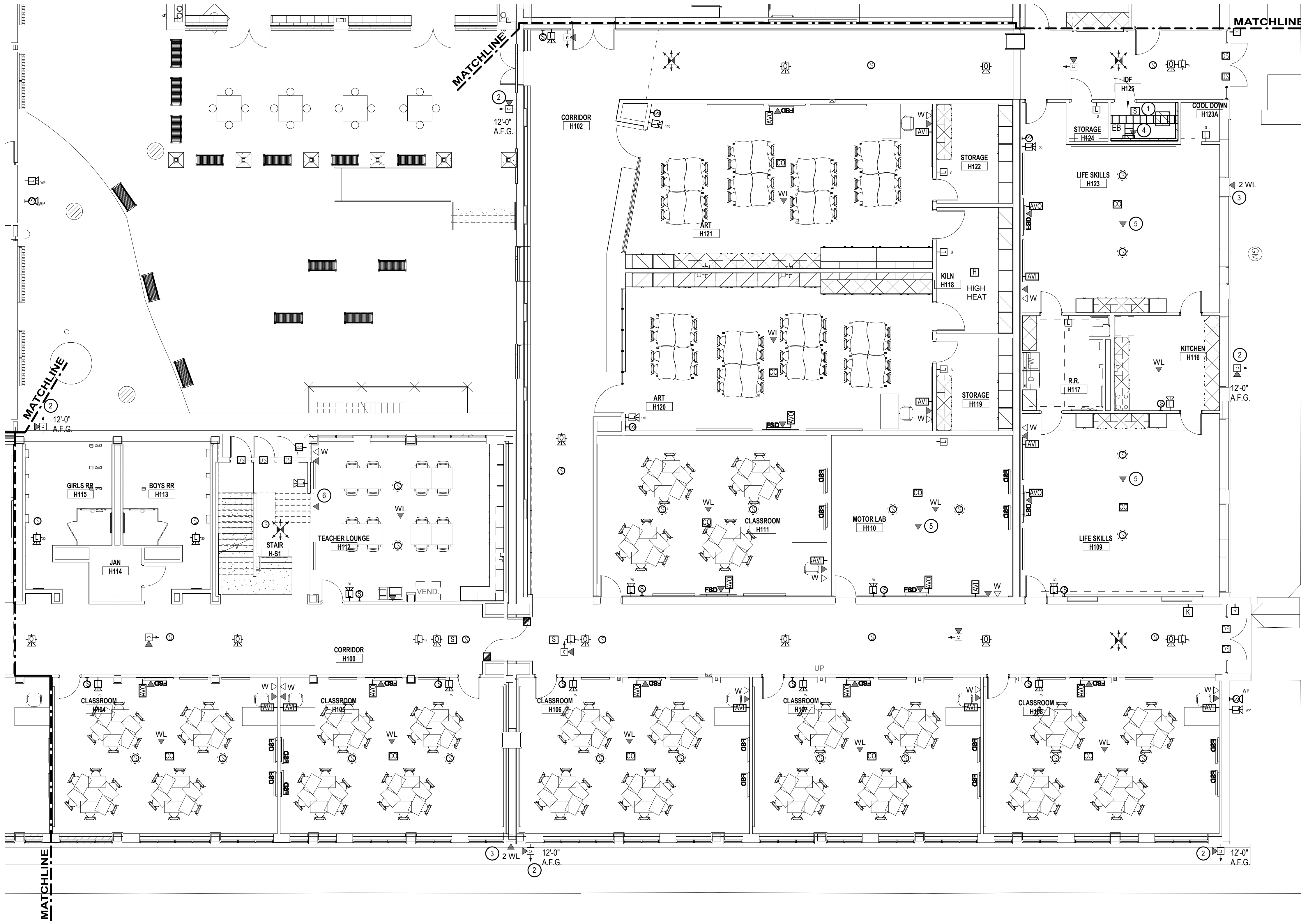
415 Hagg Dr, River Oaks, TX 76114

REVISIONS:

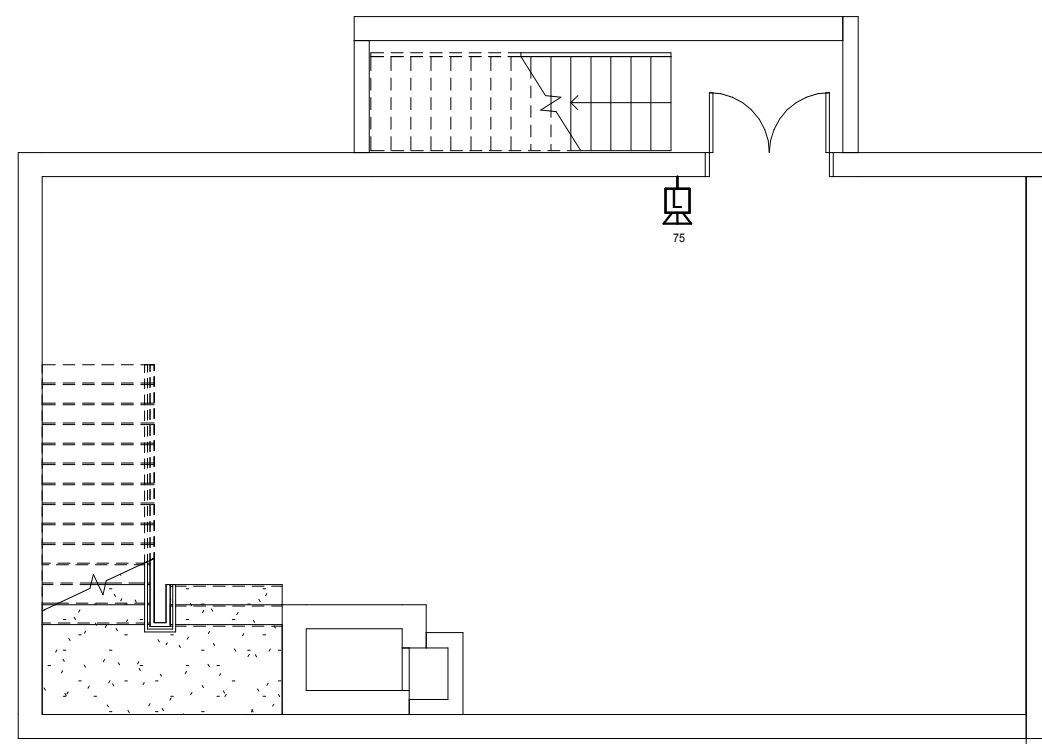
JOB NO. 1741
DATE: February 27, 2019

ELECTRICAL COMM.
FLOOR PLAN - LEVEL 1
- UNIT G
ET207

1 ELECTRICAL COMMUNICATION FLOOR PLAN - LEVEL 1 - UNIT H
1/8" = 1'-0"



2 ELECTRICAL COMMUNICATION BASEMENT FLOOR PLAN
1/8" = 1'-0"



ELECTRICAL COMMUNICATION PLAN NOTES

1. IDF RACK.
2. PROVIDE WEATHERPROOF SINGLE GANG JUNCTION BOX WITH 1" RIGID THREADED CONDUIT STUBBED INTO ACCESSIBLE ATTIC SPACE FOR EXTERIOR CAMERA CABLING.
3. PROVIDE WEATHERPROOF SINGLE GANG JUNCTION BOX WITH 1" RIGID THREADED CONDUIT STUBBED INTO ACCESSIBLE ATTIC SPACE FOR EXTERIOR WIRELESS ACCESS POINT CABLING.
4. CARD ACCESS PANEL.
5. DATA ABOVE CEILING FOR FUTURE CAMERA.
6. DATA FOR FUTURE DISPLAY LOCATION. COORDINATE EXACT LOCATION WITH OWNER/ARCHITECT.

ELECTRICAL COMMUNICATIONS GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT AND STANDARD BACKBOXES FOR SYSTEMS SHOWN ON THIS DRAWING IN BASE PROPOSAL.
2. IN ANY EXPOSED AREAS SUCH AS GYMNASIUMS, SHOPS, FIELD HOUSES, JANITORS CLOSETS, OR MECHANICAL/ELECTRICAL ROOMS ALL LOW VOLTAGE CABLING SHALL BE ENCLOSED IN CONDUIT.
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4. WHERE NO FINISHED CEILINGS ARE SCHEDULED ALL DEVICES, CONDUIT, AND BACKBOXES SHALL BE INSTALLED UP AGAINST BOTTOM OF DECK AND SHALL NOT PROTRUDE BELOW BOTTOM OF STEEL. THE ARCHITECT SHALL APPROVE ALL ROUTING OF ALL EXPOSED ROUGH-INS PRIOR TO PLACEMENT.
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6. COORDINATE MOUNTING HEIGHT OF DEVICES ABOVE MILLWORK WITH ARCHITECTURAL PLANS.
7. VERIFY MARKERBOARD, TACKBOARD, AND DOOR SWING LOCATIONS WITH ARCHITECTURAL PLANS - DO NOT INSTALL DEVICES IN THESE AREAS.
8. COORDINATE EXACT LOCATION OF ALL DEVICES, ETC. INSTALLED IN MOVEABLE FURNITURE WITH ARCHITECT AND OWNER.
9. CONFIRM ALL COMMUNICATIONS DEVICE LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN. THE ARCHITECT RESERVES THE RIGHT TO LOCATE DEVICES ANYWHERE WITHIN EACH ROOM AND DETERMINE SURFACE RACEWAY ROUTING IF APPLICABLE.
10. COORDINATE EXACT MECHANICAL EQUIPMENT LOCATION AND TYPE WITH MECHANICAL PLANS AND MECHANICAL CONTRACTOR. DO NOT INSTALL CONDUIT WITHIN 3'-0" OF ANY HVAC DEVICE UNLESS THE DEVICE SERVES THAT UNIT.
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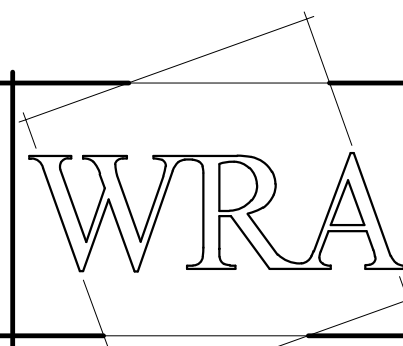
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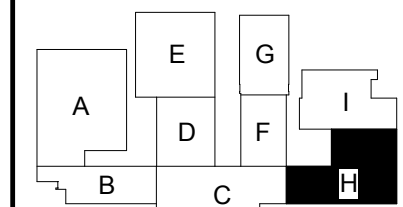
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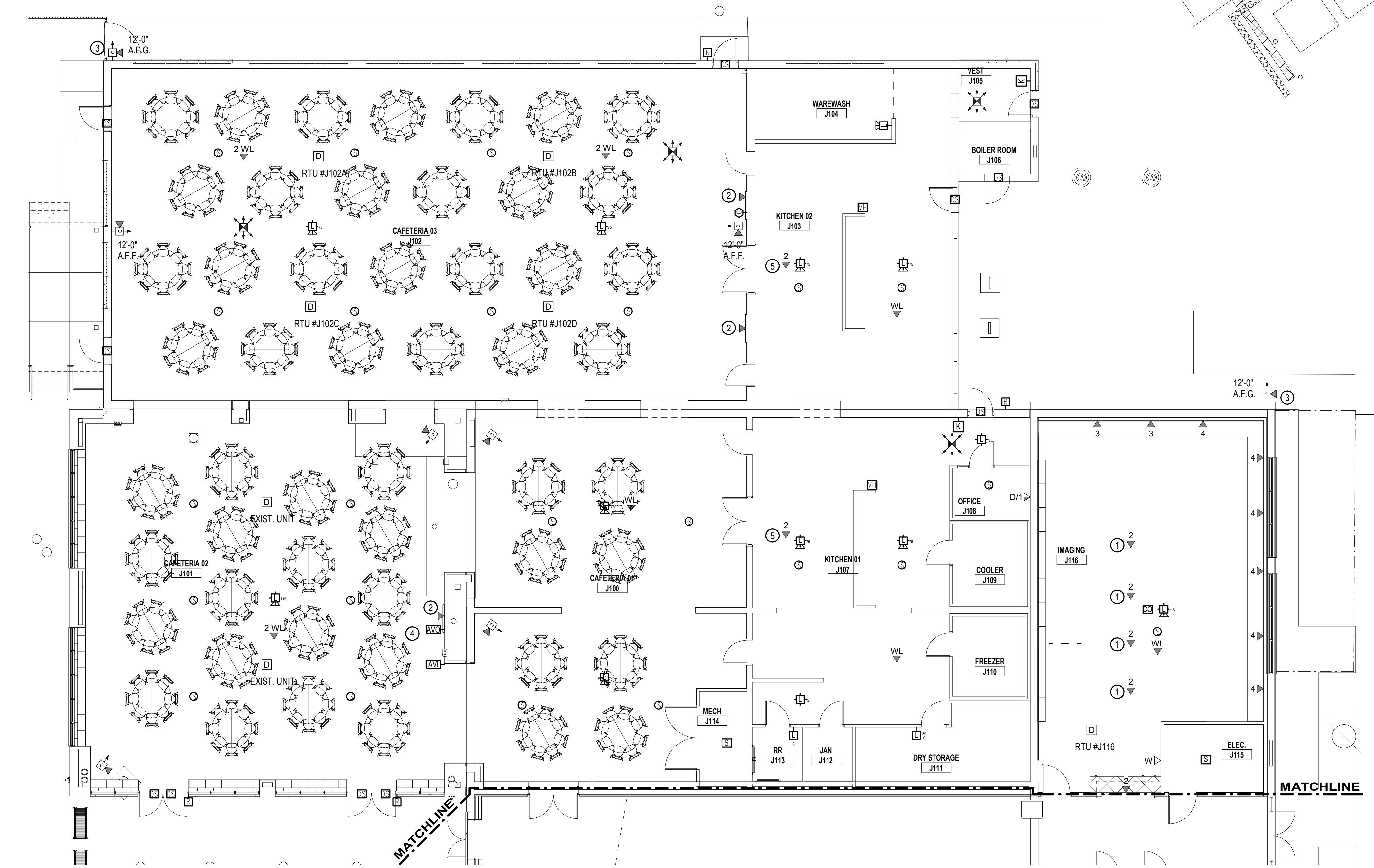
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ELECTRICAL COMM.
FLOOR PLAN - LEVEL 1
- UNIT H
ET208



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1 ELECTRICAL COMMUNICATION FLOOR PLAN - LEVEL 1 - UNIT I
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13. REFER TO SPECIFICATION DIVISION 27 AND 28 FOR ADDITIONAL INFORMATION.

ELECTRICAL COMMUNICATION PLAN NOTES

1. EXTEND CABLING FROM ATTIC SPACE, DOWN WALL THROUGH SURFACE MOUNTED RACEWAY AND STUB UP IN MILLWORK AS REQUIRED. COORDINATE WITH ELECTRICAL SHEET FOR RACEWAY INFORMATION AND LOCATIONS.
2. DATA FOR DIGITAL SIGNAGE. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECT PRIOR TO INSTALLATION.
3. PROVIDE WEATHERPROOF SINGLE GANG JUNCTION BOX WITH 1" RIGID THREADED CONDUIT STUBBED INTO ACCESSIBLE ATTIC SPACE FOR EXTERIOR CAMERA CABLING.
4. PROVIDE AUDIO CABLING FROM SIGNAGE LOCATION TO EXISTING LOCAL SOUND SYSTEM AND CONNECT TO INPUT ON MIXER.
5. EXISTING P.O.S. REUSE EXISTING CONDUIT, FIELD VERIFY EXACT DATA LOCATIONS.

EXISTING DATA LOCATIONS IN THIS AREA TO REMAIN. DATA CONTRACTOR TO RE-CABLE ALL DATA DROPS BACK TO NEW MDF/IDF RACK IN THIS AREA.

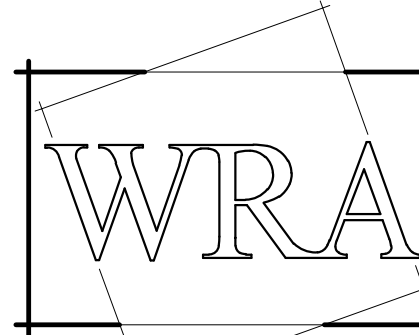
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IN ANY AREAS WITH OPEN STRUCTURE, ALL LOW VOLTAGE CABLING SHALL BE ENCLOSED IN CONDUIT.

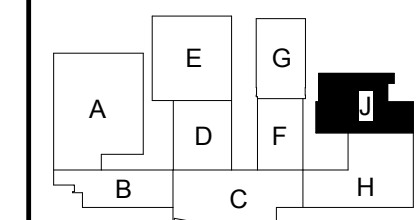
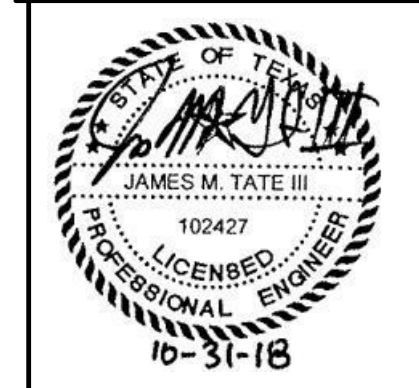
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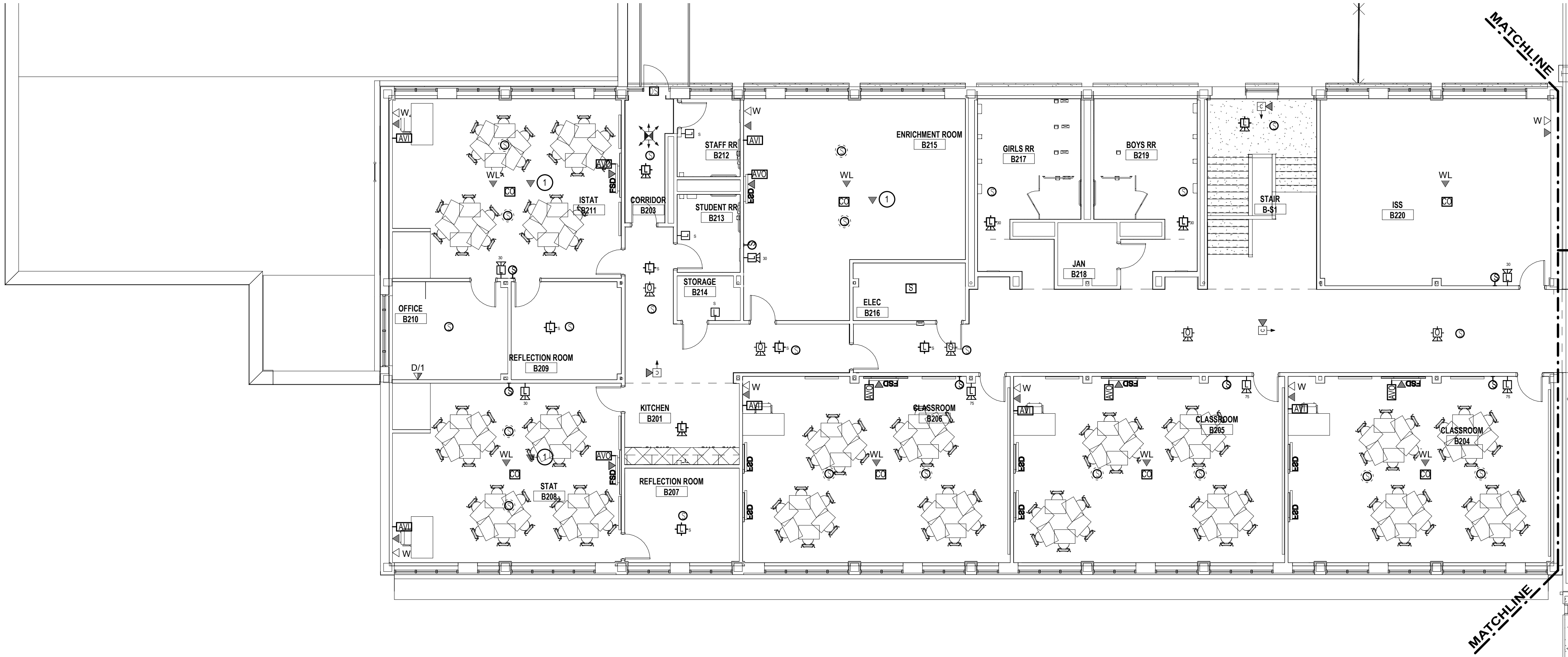
ELECTRICAL COMM.
FLOOR PLAN - LEVEL 1
- UNIT I
ET209



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1 ELECTRICAL COMMUNICATION FLOOR PLAN - LEVEL 2 - UNIT B
1/8" = 1'-0"



ELECTRICAL COMMUNICATION PLAN NOTES

- 1 DATA ABOVE CEILING FOR FUTURE CAMERA.

ELECTRICAL COMMUNICATIONS GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT AND STANDARD BACKBOXES FOR SYSTEMS SHOWN ON THIS DRAWING IN BASE PROPOSAL.
2. IN ANY EXPOSED AREAS SUCH AS GYMNASIUMS, SHOPS, FIELD HOUSES, JANITORS CLOSETS, OR MECHANICAL/ELECTRICAL ROOMS ALL LOW VOLTAGE CABLING SHALL BE ENCLOSED IN CONDUIT.
3. ALL COMMUNICATIONS CABLING SHALL RUN DOWN THE CORRIDORS AND BRANCH OFF TO EACH CLASSROOM. TRUNKING SHALL BE RAN PRIMARILY PERPENDICULAR TO BUILDING WALLS AND SHALL NOT BE RAN OVER CLASSROOMS.
4. WHERE NO FINISHED CEILINGS ARE SCHEDULED ALL DEVICES, CONDUIT, AND BACKBOXES SHALL BE INSTALLED UP AGAINST BOTTOM OF DECK AND SHALL NOT PROTRUDE BELOW BOTTOM OF STEEL. THE ARCHITECT SHALL APPROVE ALL ROUTING OF ALL EXPOSED ROUGH-INS PRIOR TO PLACEMENT.
5. ANY SIGNAL, OUTLET OR OTHER DEVICE MOUNTED ON A COLUMN, PILASTER, OR SIMILAR WALL OFFSET SHALL BE CENTERED.
6. COORDINATE MOUNTING HEIGHT OF DEVICES ABOVE MILLWORK WITH ARCHITECTURAL PLANS.
7. VERIFY MARKERBOARD, TACKBOARD, AND DOOR SWING LOCATIONS WITH ARCHITECTURAL PLANS - DO NOT INSTALL DEVICES IN THESE AREAS.
8. COORDINATE EXACT LOCATION OF ALL DEVICES, ETC. INSTALLED IN MOVEABLE FURNITURE WITH ARCHITECT AND OWNER.
9. CONFIRM ALL COMMUNICATIONS DEVICE LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN. THE ARCHITECT RESERVES THE RIGHT TO LOCATE DEVICES ANYWHERE WITHIN EACH ROOM AND DETERMINE SURFACE RACEWAY ROUTING IF APPLICABLE.
10. COORDINATE EXACT MECHANICAL EQUIPMENT LOCATION AND TYPE WITH MECHANICAL PLANS AND MECHANICAL CONTRACTOR. DO NOT INSTALL CONDUIT WITHIN 3'-0" OF ANY HVAC DEVICE UNLESS THE DEVICE SERVES THAT UNIT.
11. FIRE ALARM CONTRACTOR SHALL PROVIDE DUCT MOUNTED SMOKE DETECTORS AND CONTROL RELAYS WHERE REQUIRED. MECHANICAL CONTRACTOR SHALL INSTALL HOUSING AND SAMPLE TUBES IN DUCT. FIRE ALARM CONTRACTOR TO PROVIDE LOW VOLTAGE CONNECTION TO FIRE ALARM.
12. FIRE ALARM CONTRACTOR SHALL VERIFY CIRCUIT STYLE, QUANTITY, AND LOCATIONS OF DEVICES TO MEET ALL APPLICABLE CODES, LAWS, AND ALL REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION FOR INCLUSION IN BASE PROPOSAL.
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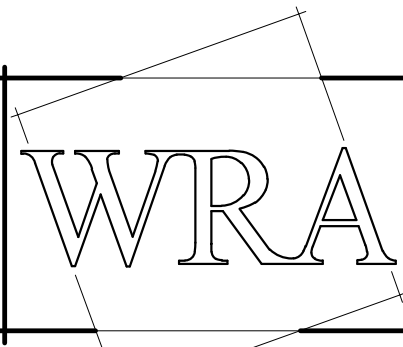
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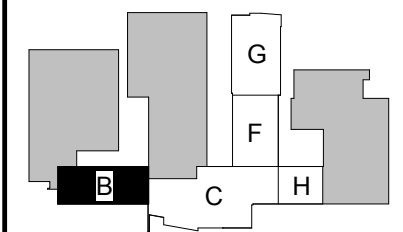
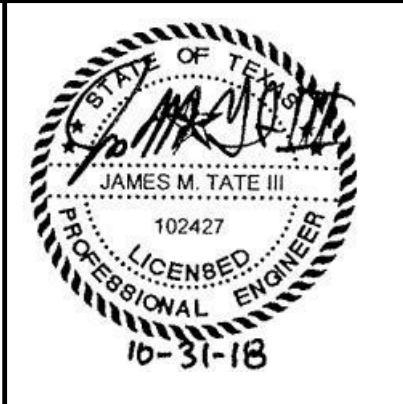


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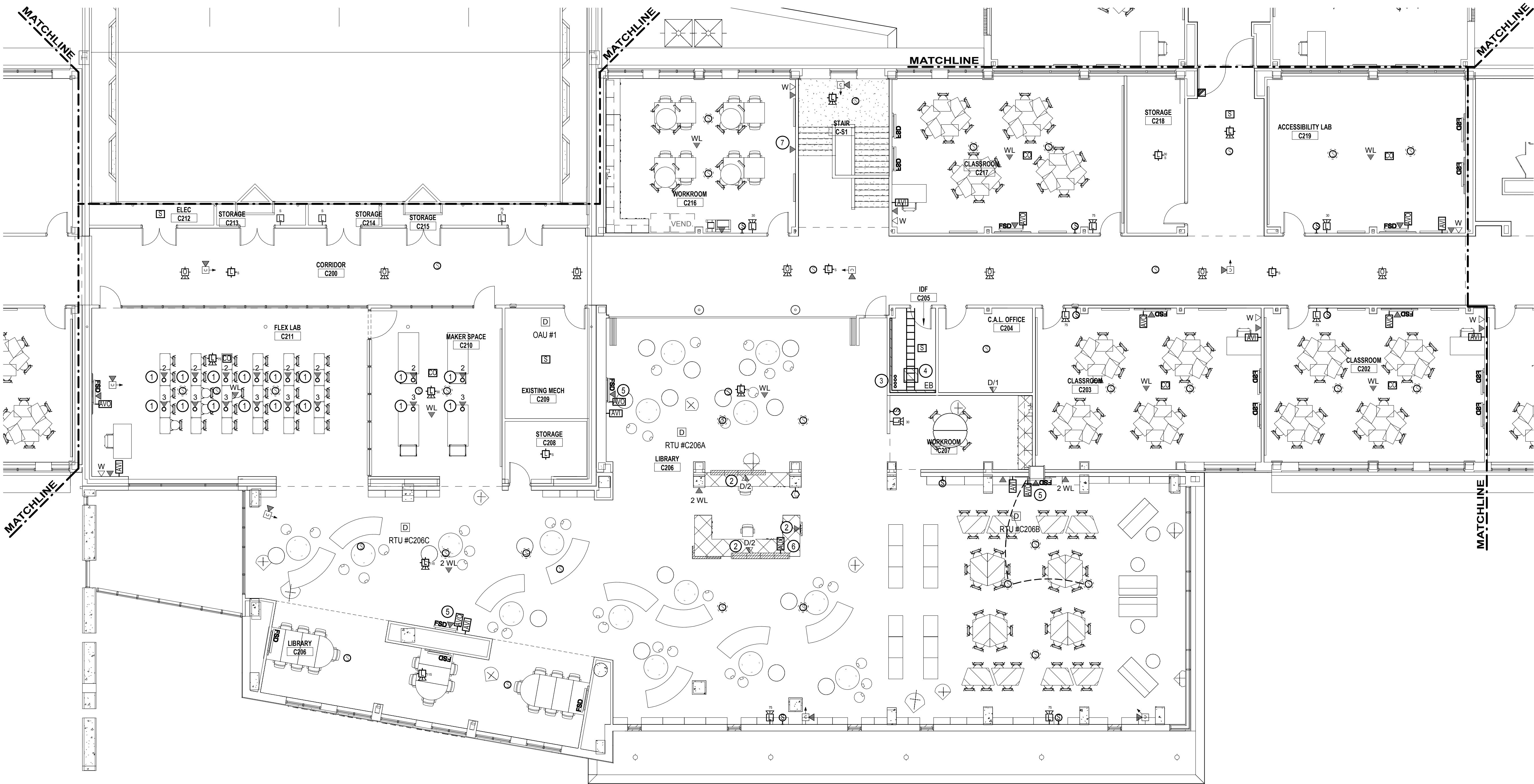
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ELECTRICAL COMM.
FLOOR PLAN - LEVEL 2
- UNIT B
ET210

1 ELECTRICAL COMMUNICATION FLOOR PLAN - LEVEL 2 - UNIT C
1/8" = 1'-0"



ELECTRICAL COMMUNICATION PLAN NOTES

1. EXTEND 1-1/4" CONDUIT FROM ACCESSIBLE SPACE ABOVE DROP CEILING, DOWN INSIDE WALL, AND UNDER SLAB TO FLOOR BOX. PROVIDE POWER AND DATA TO FLOOR BOX THROUGH SEPARATE CONDUITS UNDER SLAB.
2. EXTEND 1-1/4" CONDUIT FROM ACCESSIBLE SPACE ABOVE DROP CEILING, DOWN INSIDE WALL, AND UNDER SLAB TO STUB UP. EXTEND CABLING AND MOUNT DEVICE IN FIXTURE AS REQUIRED.
3. FOUR 3" HOLES CORE DRILLED THROUGH FLOOR FOR COMMUNICATION CABLING FROM BELOW.
4. IDF RACK.
5. DATA FOR DIGITAL SIGNAGE. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECT PRIOR TO INSTALLATION.
6. AUX. INPUT FOR LOCAL SOUND.
7. DATA FOR FUTURE DISPLAY LOCATION. COORDINATE EXACT LOCATION WITH OWNER/ARCHITECT.

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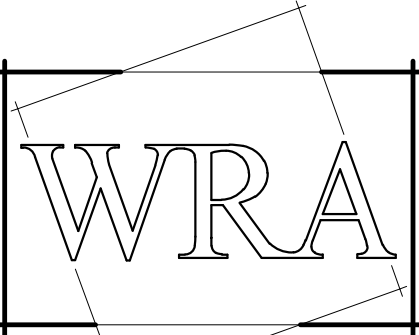
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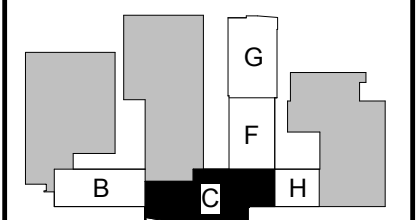


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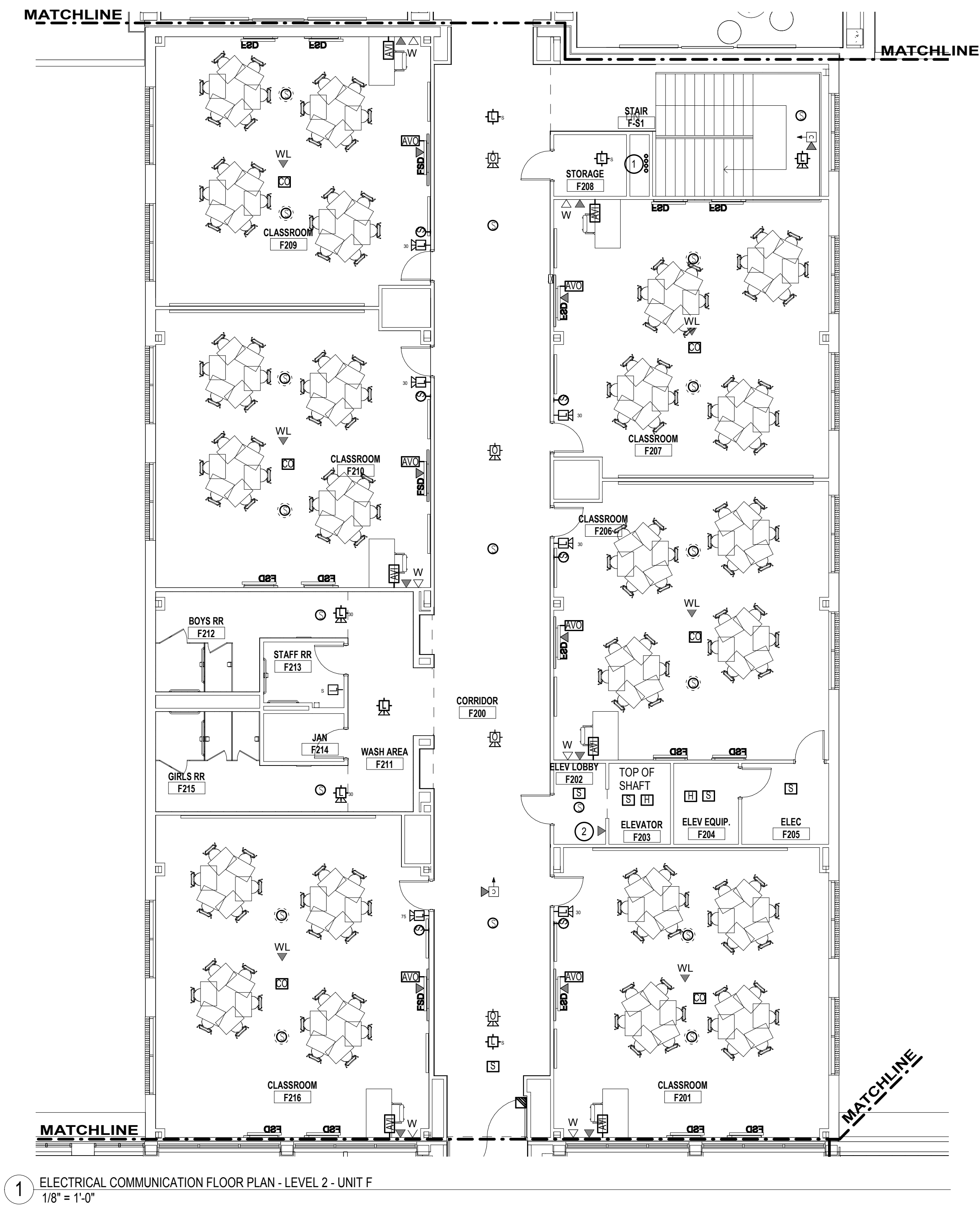
IMMS Addition/Renovation

415 Hagg Dr, River Oaks, TX 76114

REVISIONS:

JOB NO. 1741
DATE: February 27, 2019

ELECTRICAL COMM.
FLOOR PLAN - LEVEL 2
- UNIT C
ET211



1 ELECTRICAL COMMUNICATION FLOOR PLAN - LEVEL 2 - UNIT F
1/8" = 1'-0"

ELECTRICAL COMMUNICATIONS GENERAL NOTES

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ELECTRICAL COMMUNICATION PLAN NOTES

- 1 FOUR 3" HOLES CORE DRILLED THROUGH FLOOR FOR COMMUNICATION CABLING FROM BELOW.
- 2 DATA FOR ELEVATOR LOBBY EMERGENCY TWO-WAY COMMUNICATIONS.

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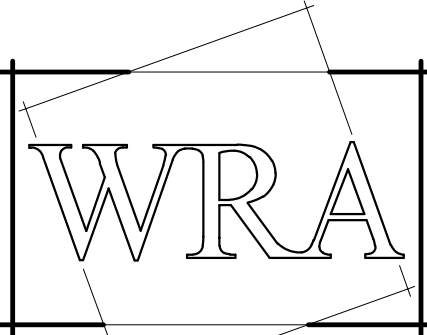
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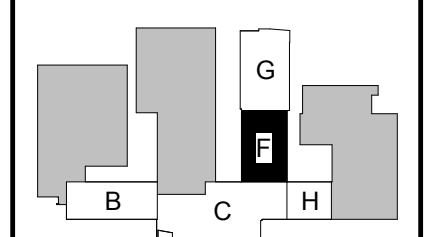


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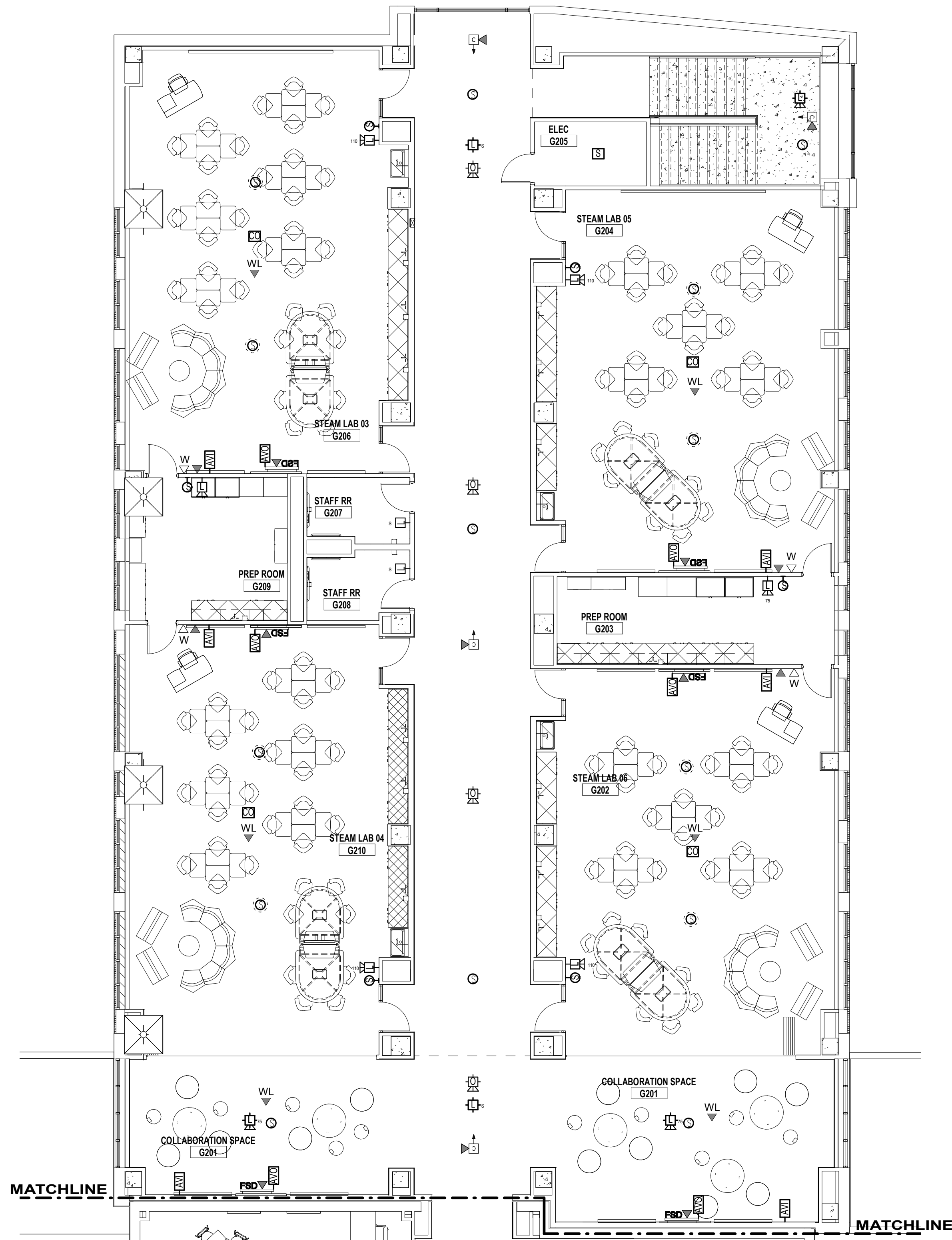
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REVISIONS:

JOB NO. 1741
DATE: February 27, 2019

ELECTRICAL COMM.
FLOOR PLAN - LEVEL 2
- UNIT F
ET212

2/27/2019 9:24:48 AM



1 ELECTRICAL COMMUNICATION FLOOR PLAN - LEVEL 2 - UNIT G
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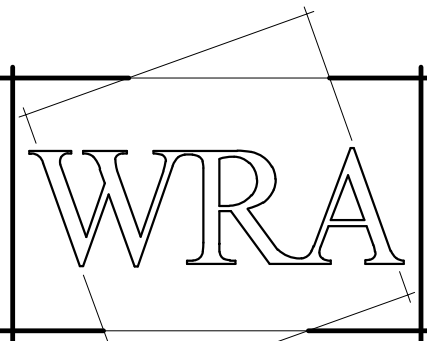
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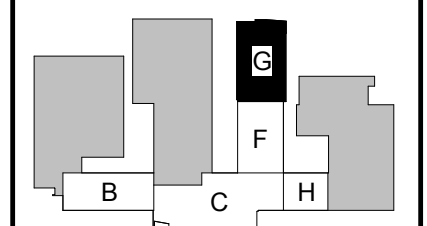


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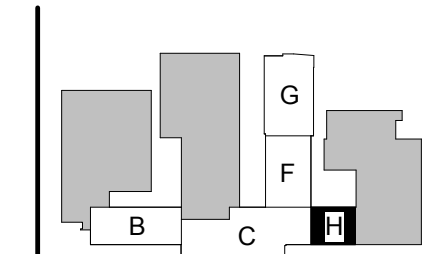
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ELECTRICAL COMM.
FLOOR PLAN - LEVEL 2
- UNIT G
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IMMS Addition/Renovation

415 Hagg Dr, River Oaks, TX 76114

REVISIONS:

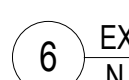
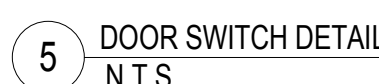
JOB NO.	1741
DATE:	February 27, 2019
ELECTRICAL COMM. FLOOR PLAN - LEVEL 2 - UNIT H ET214	

1. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT AND STANDARD BACKBOXES FOR SYSTEMS SHOWN ON THIS DRAWING IN BASE PROPOSAL.
2. IN ANY EXPOSED AREAS SUCH AS GYMNASIUMS, SHOWS, FIELD HOUSES, JANITORS CLOSETS, OR MECHANICAL/ELECTRICAL ROOMS, LOW VOLTAGE CABLING SHALL BE ENCLOSED IN CONDUIT.
3. ALL COMMUNICATIONS CABLING SHALL RUN DOWN THE CORRIDORS AND BRANCH OFF TO EACH CLASSROOM. TRUNKING SHALL BE RAN PRIMARILY PERPENDICULAR TO BUILDING WALLS AND SHALL NOT BE RAN OVER CLASSROOMS.
4. WHERE NO FINISHED CEILINGS ARE SCHEDULED ALL DEVICES, CONDUIT, AND BACKBOXES SHALL BE INSTALLED UP ABOVE BOTTOM OF DECK AND SHALL NOT PROTRUDE BELOW BOTTOM OF STEEL. THE ARCHITECT SHALL APPROVE ALL ROUTING OF ALL EXPOSED ROUGH-INS PRIOR TO PLACEMENT.
5. ANY SIGNAL, OUTLET OR OTHER DEVICE MOUNTED ON A COLUMN, PILASTER, OR SIMILAR WALL OFFSET SHALL BE CENTERED.
6. COORDINATE MOUNTING HEIGHT OF DEVICES ABOVE MILLWORK WITH ARCHITECTURAL PLANS.
7. VERIFY MARKERBOARD, TACKBOARD, AND DOOR SWING LOCATIONS WITH ARCHITECTURAL PLANS - DO NOT INSTALL DEVICES IN THESE AREAS.
8. COORDINATE EXACT LOCATION OF ALL DEVICES, ETC. INSTALLED IN MOVEABLE FURNITURE WITH ARCHITECT AND OWNER.
9. CONFIRM ALL COMMUNICATIONS DEVICE LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN. THE ARCHITECT RESERVES THE RIGHT TO LOCATE DEVICES ANYWHERE WITHIN EACH ROOM AND DETERMINE SURFACE RACEWAY ROUTING IF APPLICABLE.
10. COORDINATE EXACT MECHANICAL EQUIPMENT LOCATION AND TYPE WITH MECHANICAL PLANS AND MECHANICAL CONTRACTOR. DO NOT INSTALL CONDUIT WITHIN 3'-0" OF ANY HVAC DEVICE UNLESS THE DEVICE SERVES THAT UNIT.
11. FIRE ALARM CONTRACTOR SHALL PROVIDE DUCT MOUNTED SMOKE DETECTORS AND CONTROL RELAYS WHERE REQUIRED. MECHANICAL CONTRACTOR SHALL INSTALL HOUSING AND SAMPLE TUBES IN DUCT. FIRE ALARM CONTRACTOR TO PROVIDE LOW VOLTAGE CONNECTION TO FIRE ALARM.
12. FIRE ALARM CONTRACTOR SHALL VERIFY CIRCUIT STYLE, QUANTITY, AND LOCATIONS OF DEVICES TO MEET ALL APPLICABLE CODES, LAWS, AND ALL REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION FOR INCLUSION IN BASE PROPOSAL.
13. REFER TO SPECIFICATION DIVISION 27 AND 28 FOR ADDITIONAL INFORMATION.

IN ANY AREAS WITH OPEN STRUCTURE, ALL LOW VOLTAGE CABLING SHALL BE ENCLOSED IN CONDUIT.

THE EXISTING NETWORK SHALL BE MODIFIED AS NECESSARY BY CONTRACTOR TO REMAIN IN PLACE AND OPERATIONAL AS REQUIRED BY THE PROJECT PHASING. CONTRACTOR SHALL PROVIDE TEMPORARY FIBER BACKBONE BETWEEN CLOSETS AS REQUIRED. AT THE CLOSE OF THE PROJECT, THE EXISTING NETWORK SYSTEM INCLUDING ALL DEVICES AND CABLING SHALL BE REMOVED.



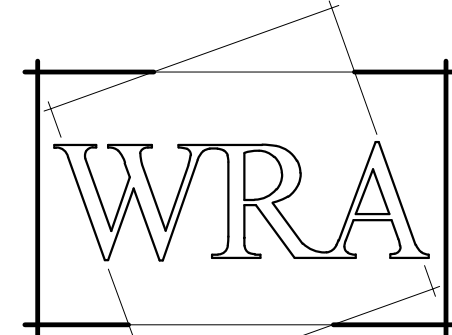


NOTES: 1. SOME SYMBOLS MAY NOT BE USED.
2. ACCESSIBLE DEVICES HIGHEST OPERABLE PART TO BE 48" MAXIMUM/18" MINIMUM A.F.F. - REFER TO ARCHITECTURAL DRAWINGS.
3. DIMENSIONS GIVEN A.F.F. ARE TO BOTTOM OF BOX.

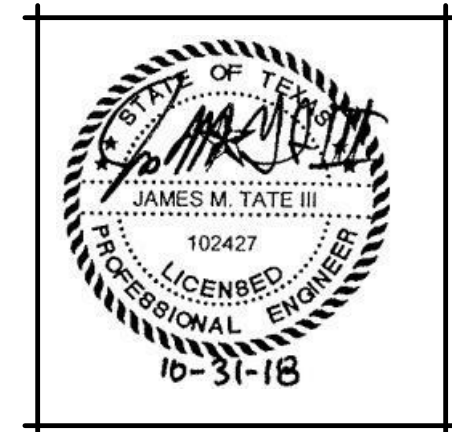
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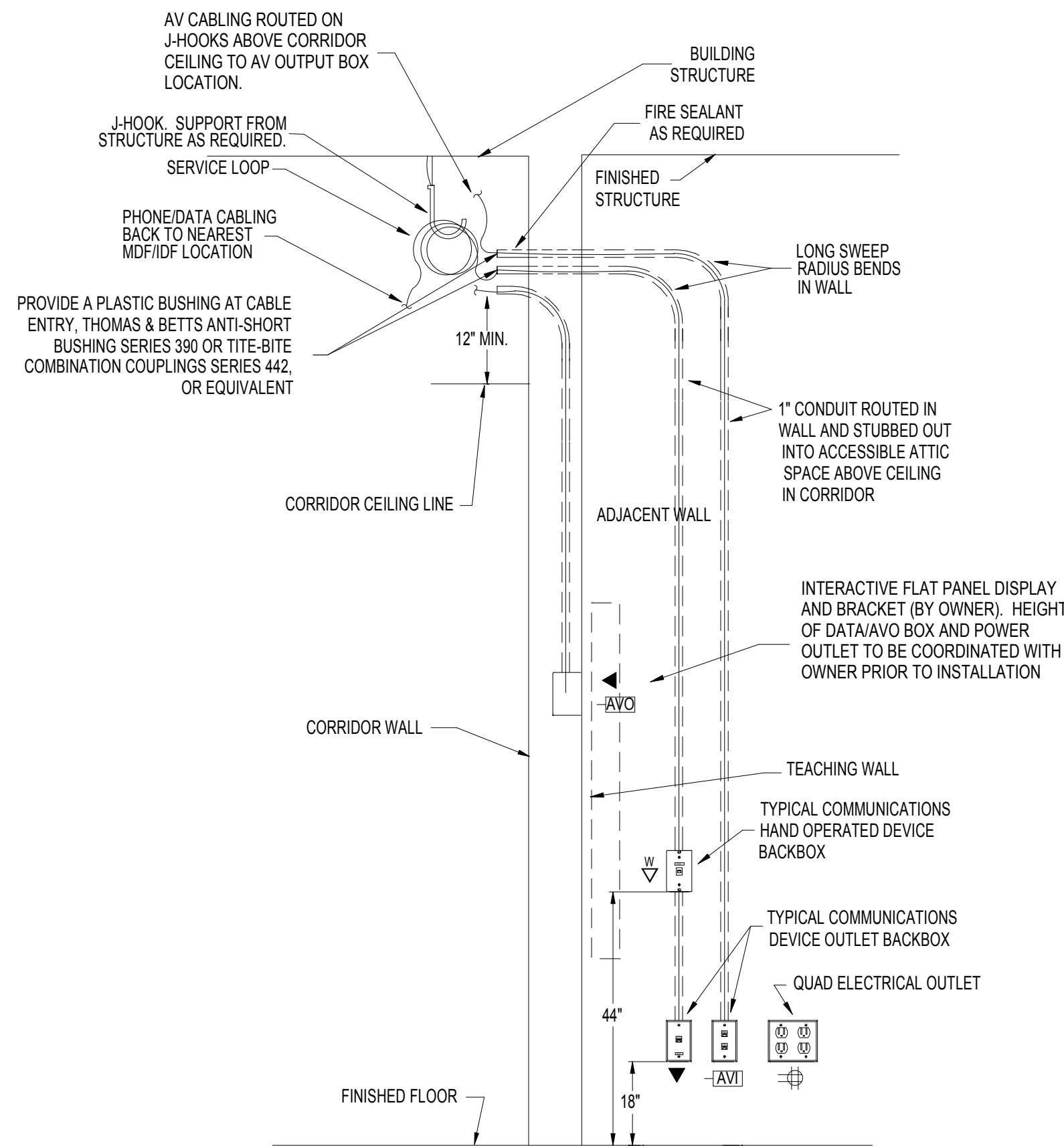
REVISIONS:	
JOB NO.	1741
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ELECTRICAL COMM. DETAILS AND SYMBOLS ET712	



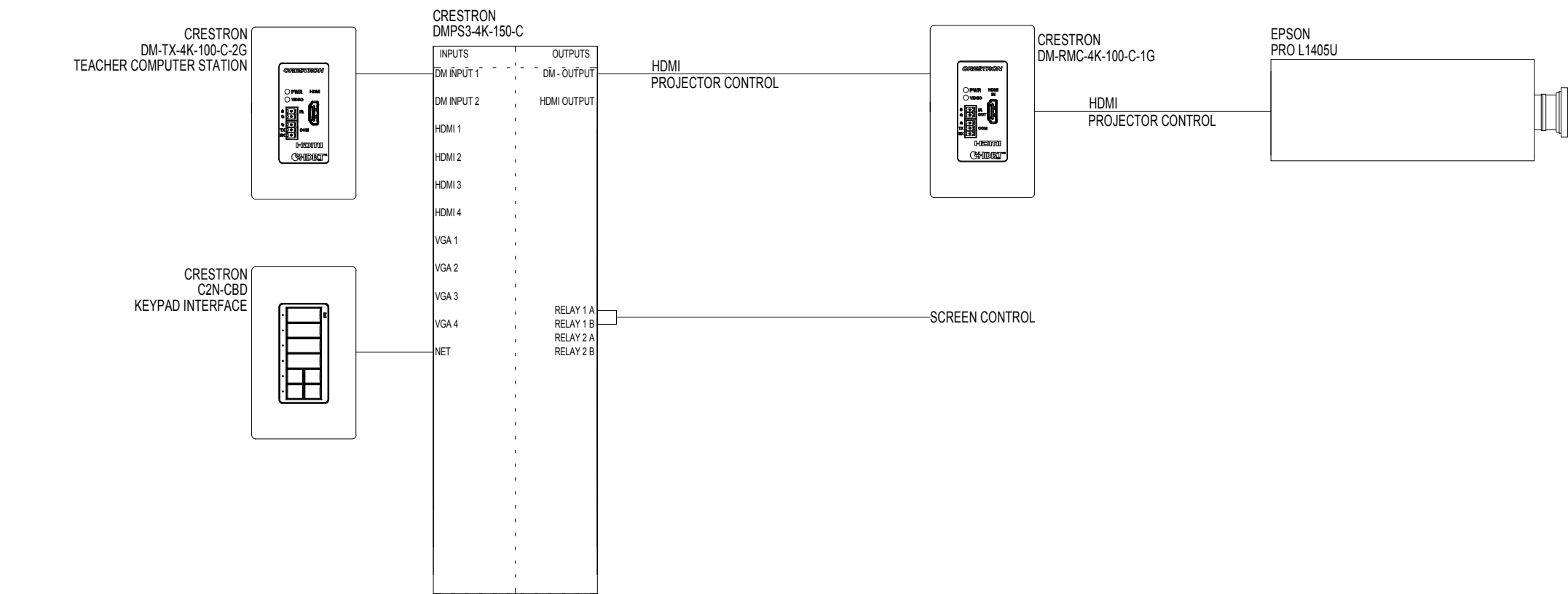
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SUBMISSION OF BID WILL BE CONSIDERED ACKNOWLEDGMENT THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS VERIFIED ALL EXISTING JOB CONDITIONS AND INCLUDED ANY NECESSARY MODIFICATION TO EXISTING AND NEW WORK REQUIRED FOR INSTALLATION OF A COMPLETE AND WORKING SYSTEM.

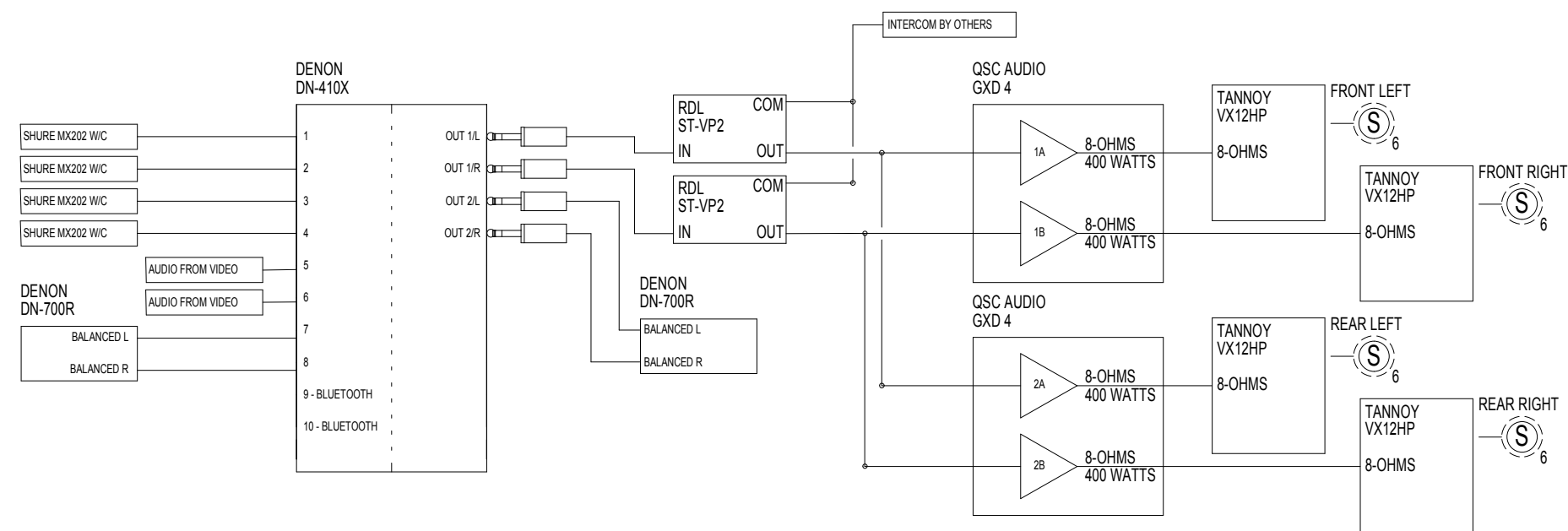
RESPONSIBILITY MATRIX		FURNISHED BY		INSTALLED BY		NOTES
SECTION	TASK	CONTRACTOR	OWNER	CONTRACTOR	OWNER	
27 10 30	DATA CABLING PLANT					DEVICES NOTED AS OWNER FURNISHED, OWNER INSTALLED SHALL BE INSTALLED BY OWNER
	CABLING, RACKS, PATCH PANELS					
	NETWORK SWITCHES/SERVERS					SELECTED CONTRACTOR. OWNER'S INSTALLER SHALL COORDINATE WITH GENERAL CONTRACTOR FOR INSTALLATION OF THESE SYSTEMS.
	WIRELESS ACCESS POINTS					
27 40 18	AUDIO VIDEO CABLING/BRACKETS					
	TV/TV BRACKETS					
	FINE ARTS PROJECTORS/BRACKETS					
	CLASSROOM AV CABLING					
	CLASSROOM LOCAL SOUND					
27 51 25	SOUND REINFORCEMENT					
	TURN KEY FINE ARTS ROOMS					
	TURN KEY GYMNASIUM SYSTEM					
27 51 40	INTERCOM COMMUNICATION					
	HEADEND EQUIPMENT					
	SPEAKERS					
	CLOCKS					
28 13 27	BUILDING ACCESS CONTROL					
	TURNKEY ACCESS SYSTEM					
28 21 23	VIDEO SURVEILLANCE SYSTEM					
	IP CAMERAS					
	IP CAMERA CABLING					
	IP CAMERA SERVER					
28 31 24	INTRUDER ALARM SYSTEM					
	TURNKEY ALARM SYSTEM					
28 46 21	FIRE DETECTION AND ALARM					
	VOICE EVAC ALARM SYSTEM					



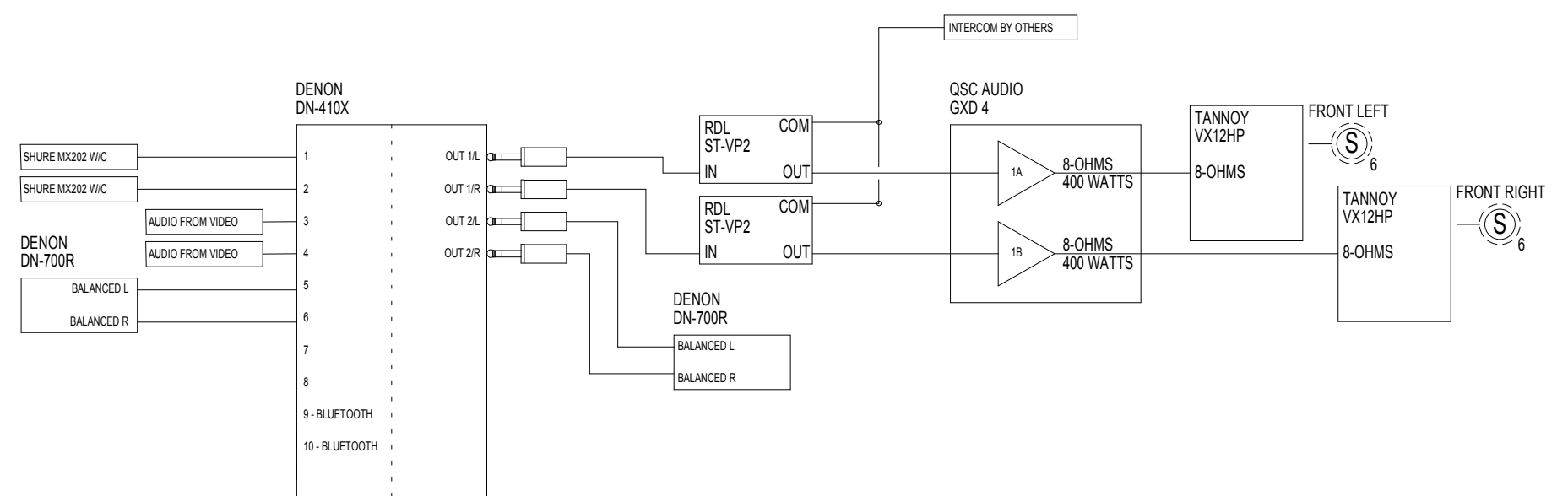
1 TYPICAL TEACHERS DEVICE BACKBOX LAYOUT
N.T.S.



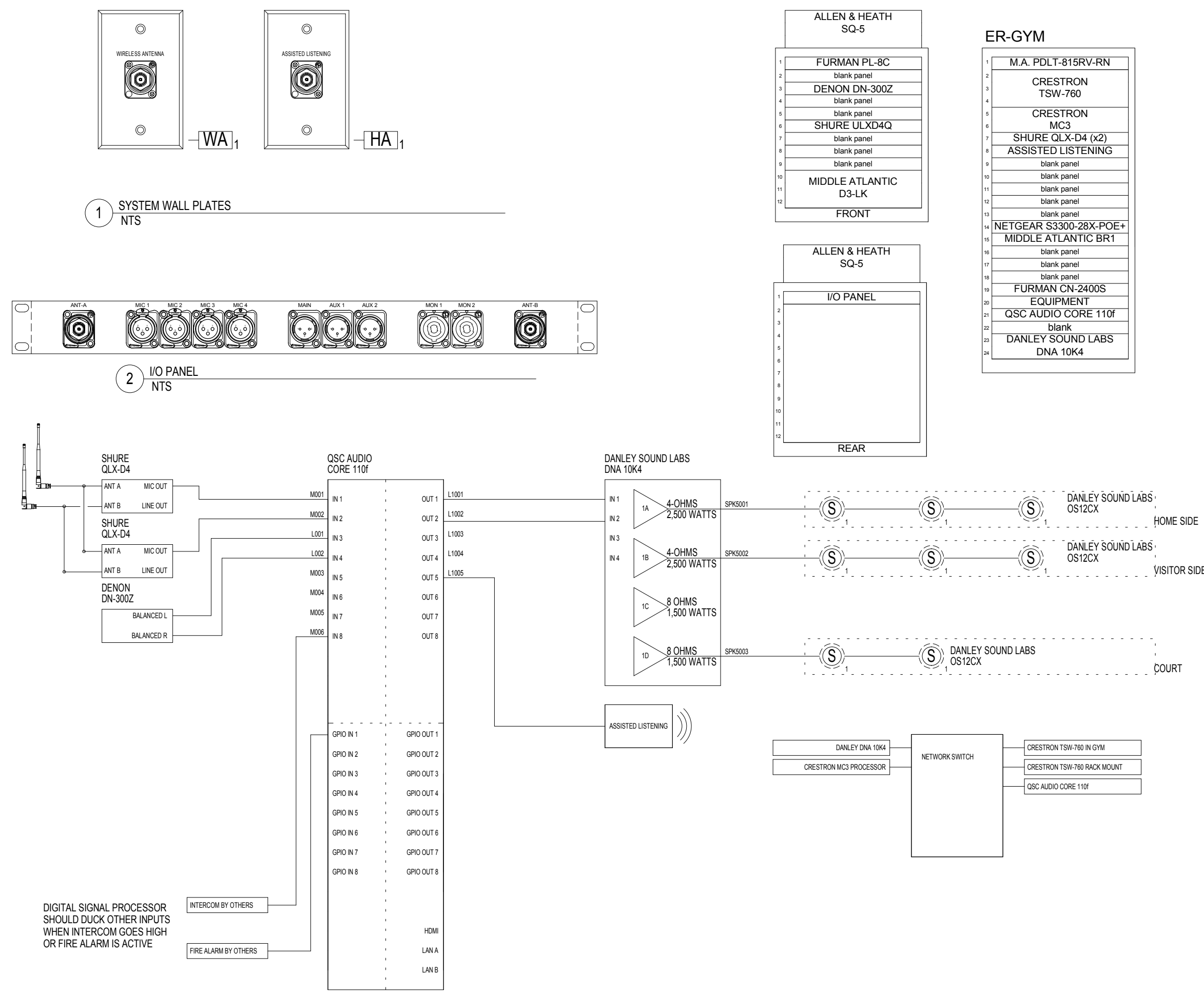
7 TYPICAL VIDEO FOR BAND HALL, CHOIR HALL, AND MARIACHI HALL
N.T.S.



1 BAND HALL ONE-LINE DIAGRAM
N.T.S.



2 CHOIR HALL AND MARIACHI HALL SOUND SYSTEM ONE-LINE DIAGRAMS
N.T.S.



3 GYMNASIUM SOUND SYSTEM ONE-LINE DRAWING
N.T.S.

ER-BND
FURMAN PL-8C
CRESTRON DAMPS3-4K100
blank panel
DENON DN-700R
blank panel
DENON DN-410X
blank panel
QSC AUDIO CND 4
blank panel
QSC AUDIO CND 4
blank panel
MIDDLE ATLANTIC D4-LK

ER-CHR
ER-MAR
FURMAN PL-8C
CRESTRON DAMPS3-4K100
blank panel
DENON DN-700R
blank panel
DENON DN-410X
blank panel
QSC AUDIO CND 4
blank panel
QSC AUDIO CND 4
blank panel
MIDDLE ATLANTIC D4-LK