Project Owner:	Shelby Public Schools
Project Name:	New Elementary Technology Systems
Issue Date:	November 14, 2022

PROJECT QUESTIONS AND ANSWERS

This document provides answers to questions asked by bidders who have reviewed the <u>Technology Request for Bid</u> for the above referenced project.

Q1: The specifications talk of a fiber connection between the High School and the Elementary and states that the information is contained in the drawings. Yet, there are no drawings showing this. Is that inclusive of this bid?

A: Yes. The Fiber Contractor will provide the required fiber to connect the HS and the New Elementary. Conduit will be provided by the Electrical Contractor from the HS MDF to the New Elementary MDF.

Q2: Are we only concerned with the locations noted in "blue" on the prints for any technology cabling? Or, are ALL symbols to be considered even if they are not blue in color?

A: All data drops whether black or blue are indicated with a #D notation (1D, 2D, etc.). Please be aware that there are multiple symbols depending on termination locations.

Q3: Is the cable tray in place throughout the school already? I see no contractor requirements for tray.

A: Cable tray is shown on the drawings in the corridors and will be provided by the Electrical Contractor.

Q4: Who is the Electrical Contractor?

A: Allied Electric

Q5: Who is responsible for fire stopping?

A: If the conduit is only used by a specific trade, example Low Voltage Cabling Contractor, then the Low Voltage Cabling Contractor is responsible. If the pathway is shared, contractor is to coordinate with Electrical Contractor.

Q6: Does the classroom audio system require an IP Data Drop, indicated with an **S4** Symbol? **A:** No.

Q7: Will there be a print for the outdoor pathway?

A: Please see the attached drawing: Site Electrical Plan.

Q8: When it mentions second and third shift is that in reference to the High School?

A: Yes.

Q9: How many SFP Modules? **A:** See specifications page 85.

Bid ID: 2752	Communications by Design, Inc.
Questions and Answers Issued: November 15, 2022	Proprietary Information – All Rights Reserved

Q10: We understand that there will be a conduit between the new elementary and the high school. This conduit will be used to provide a route for fiber optic cable. Is this a metal conduit when it is inside the existing high school? Is this a metal conduit when it is in the new elementary? Does it stay in the ground and come up in the new elementary, in the telecom room there?

A: See Question 1.

Q11: Are the ceilings all lift out drop in tile? Ceiling height?

A: See the attached drawings: Reflected Ceiling Plan.

Q12: I do not see any print showing the fiber path between schools as was stated at the pre-bid. At least not in the original bid-pack. Can said print be provided

A: Please see the attached drawing: Site Electrical Plan.

Q13: The access control credentials state 13.56MhHz and the card readers are 125kHz. Do you want kHz credentials or multi-class readers?

A. Multi-class readers. HID multiCLASS SE RP15 (Mullion Style) and HID multiClass SE RP40 (Wall Switch Style).

Q14: Can you provide the Electrical Symbol Legend.

A: Please see the drawing Electrical Details.

END OF QUESTIONS AND ANSWERS #1

Bid ID: 2752	Communications by Design, Inc.
Questions and Answers Issued: November 15, 2022	Proprietary Information – All Rights Reserved

SOFFIT GRILLE (8x16 U.O.N.)

CONTROL JOINT

CUT TILE

CEILING LEGEND

DIRECT EXTERIOR FINISH SYSTEM

GYPSUM BOARD CEILING

RECESSED 2x4 LIGHT FIXTURE

RECESSED 1x4 LIGHT FIXTURE

SURFACE / PENDANT MOUNT FIXTURE

SURFACE / PENDANT MOUNT FIXTURE

RECESSED LIGHT FIXTURE

PENDANT MOUNT FIXTURE

SURFACE MOUNT FIXTURE

PRE FINISHED VENTED

METAL SOFFIT

FIXTURE IS DESIGNATED FOR

EMERGENCY OPERATION

SINGLE FACE EXIT SIGN

DOUBLE FACE EXIT SIGN

WALL-MOUNTED EXIT SIGN

OCCUPANCY SENSOR

FIRE ALARM - VISUAL

ALUMINUM SOFFIT

SMOKE DETECTOR

PA SPEAKER

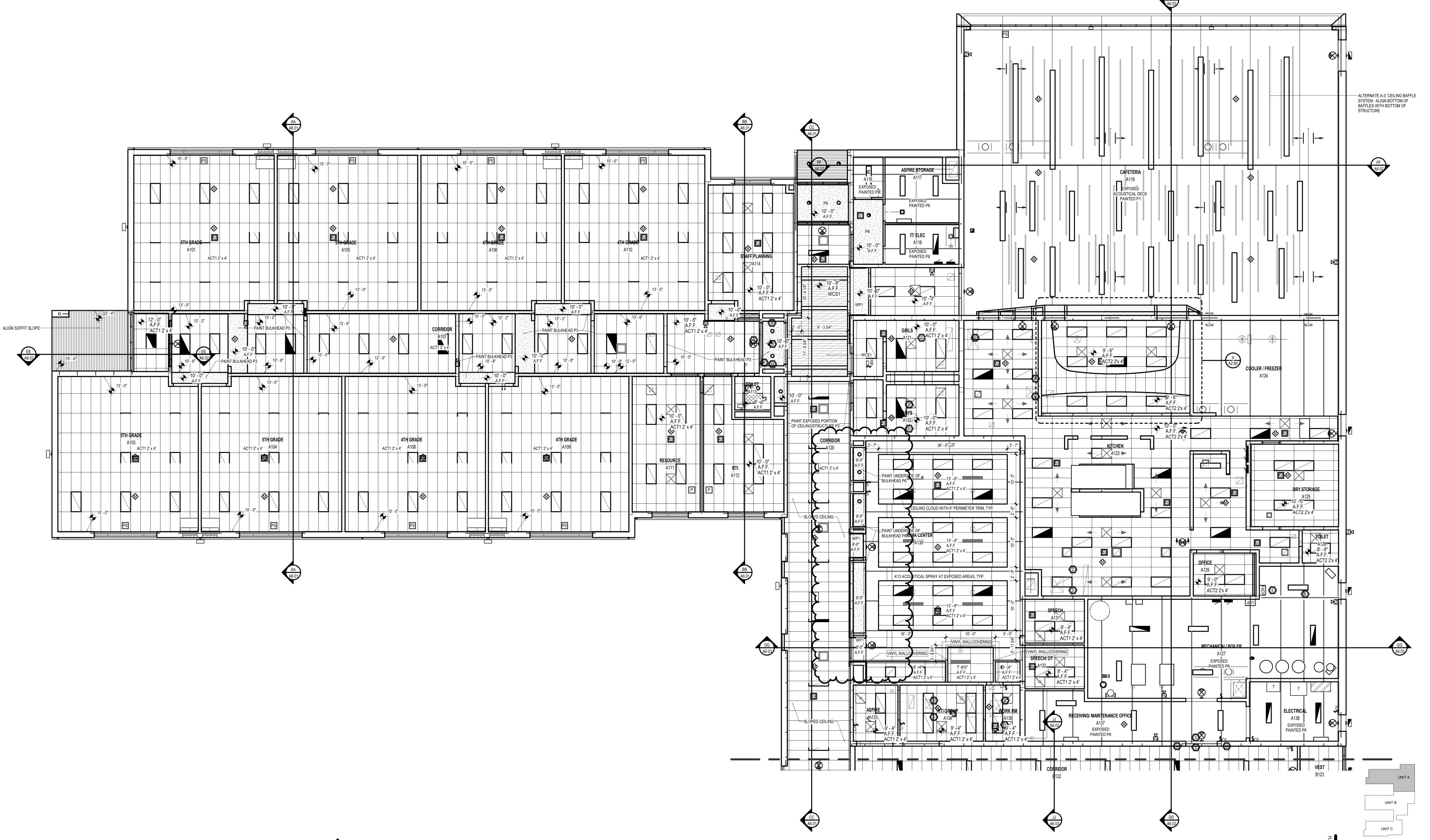
FIRE ALARM - AUDIO/VISUAL

GENERAL CEILING NOTES:

1. CONTRACTOR SHALL FOLLOW GRID PATTERN ESTABLISHED ON THE REFLECTED CEILING PLAN. ANY VARIATIONS SHALL BE APPROVED BY THE

- 2. CEILING TILE TYPE AS SPECIFIED- CEILING HEIGHTS NOTED ON REFLECTED CEILING PLANS. CEILING ELEVATIONS ARE FROM THAT ROOM'S
- 3. WIRE CEILING FROM STRUCTURE ABOVE AND WIRE FOR ADDITIONAL LOAD AT LIGHTS AND CEILING DIFFUSERS.
- 4. UNLESS OTHERWISE NOTED, CEILING TO BE SUSPENDED METAL TEE AND ACOUSTICAL TILE 2'-0"x 2'-0" OR 2'-0"x 4'-0" TYPICAL. SEE
- SPECIFICATIONS FOR MANUFACTURER AND STYLE.

 5. PENDANT MOUNTED FIXTURES CENTERED ON GRID REQUIRE GRID TO BE CUT AND SUPPORTED ON EACH SIDE.
- 6. MOUNT SPEAKERS AND SUPPLY AIR DIFFUSERS IN THE CENTER OF WHOLE CEILING PANELS. ADHERE A RIGID PANEL BACKER TO PANELS AT LOCATIONS WHICH INDICATE SPEAKERS, DIFFUSERS, LIGHTS, SMOKE DETECTORS, EXIT LIGHTS AND FIRE PROTECTION SPRINKLERS.
- PROVIDE 2'-0" CEILING GRID CROSS-TEE AT EACH RETURN AIR GRILLE.
 PROVIDE AN ADDITIONAL CROSS-TEE AT EACH SLOT DIFFUSER.
- 9. REFER TO THE MECHANICAL DRAWINGS FOR LOUVERS REQUIRED TO BE FRAMED IN GYPSUM BOARD BULKHEADS.
- ALL CEILING HEIGHTS ARE SUBJECT TO CHANGE TO ACCOMMODATE UNFORESEEN FIELD CONDITIONS COORDINATE CHANGES WITH ARCHITECT & AFFECTED DISCIPLINES.
- 11. SOME CORRIDOR CEILING PANEL LAYOUTS HAVE BEEN ADJUSTED AT A CHANGE IN CORRIDOR DIRECTION TO ACCOMMODATE LIGHTING



616.796.0200 WWW.GMB.COM

C

ISSUANCES

02.10.2022 BIDS & CONSTRUCTION 07.20.2022 BULLETIN 005 10.12.2022 BULLETIN 008

DRAWN TGD

PROJECT NO. 5-5491

NO PART OF THIS DRAWING MAY BE USED OR REPRODUCED IN ANY FORM OR BY ANY MEANS, OR STORED IN A DATABASE OR RETRIEVAL SYSTEM, WITHOUT PRIOR WRITTEN

PERMISSION OF GMB COPYRIGHT® 2021 ALL RIGHTS RESERVED

UNIT 'A' LOWER LEVEL REFLECTED CEILING PLAN

A3.1A

3. WIRE CEILING FROM STRUCTURE ABOVE AND WIRE FOR ADDITIONAL LOAD AT LIGHTS AND CEILING DIFFUSERS.

SPECIFICATIONS FOR MANUFACTURER AND STYLE.

4. UNLESS OTHERWISE NOTED, CEILING TO BE SUSPENDED METAL TEE AND ACOUSTICAL TILE 2'-0"x 2'-0" OR 2'-0"x 4'-0" TYPICAL. SEE

WWW.GMB.COM

C

ISSUANCES 02.10.2022 BIDS & CONSTRUCTION

07.20.2022 BULLETIN 005

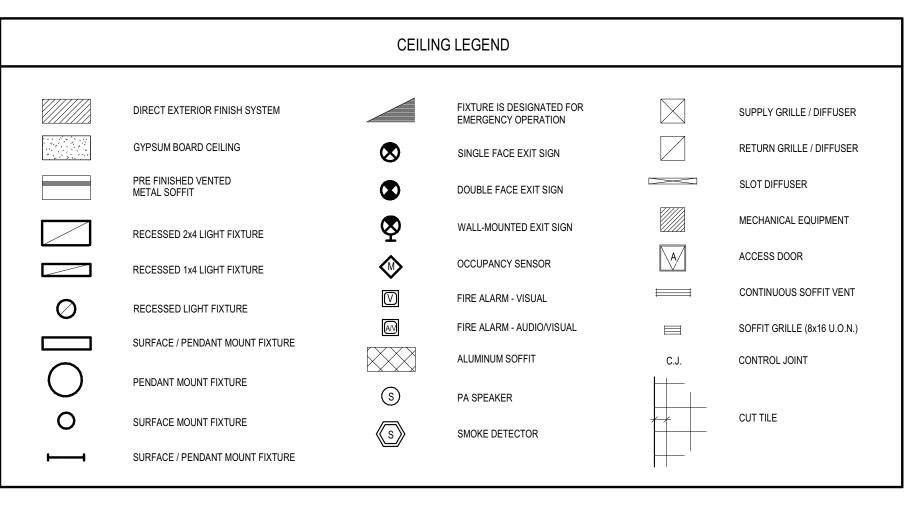
DRAWN TGD

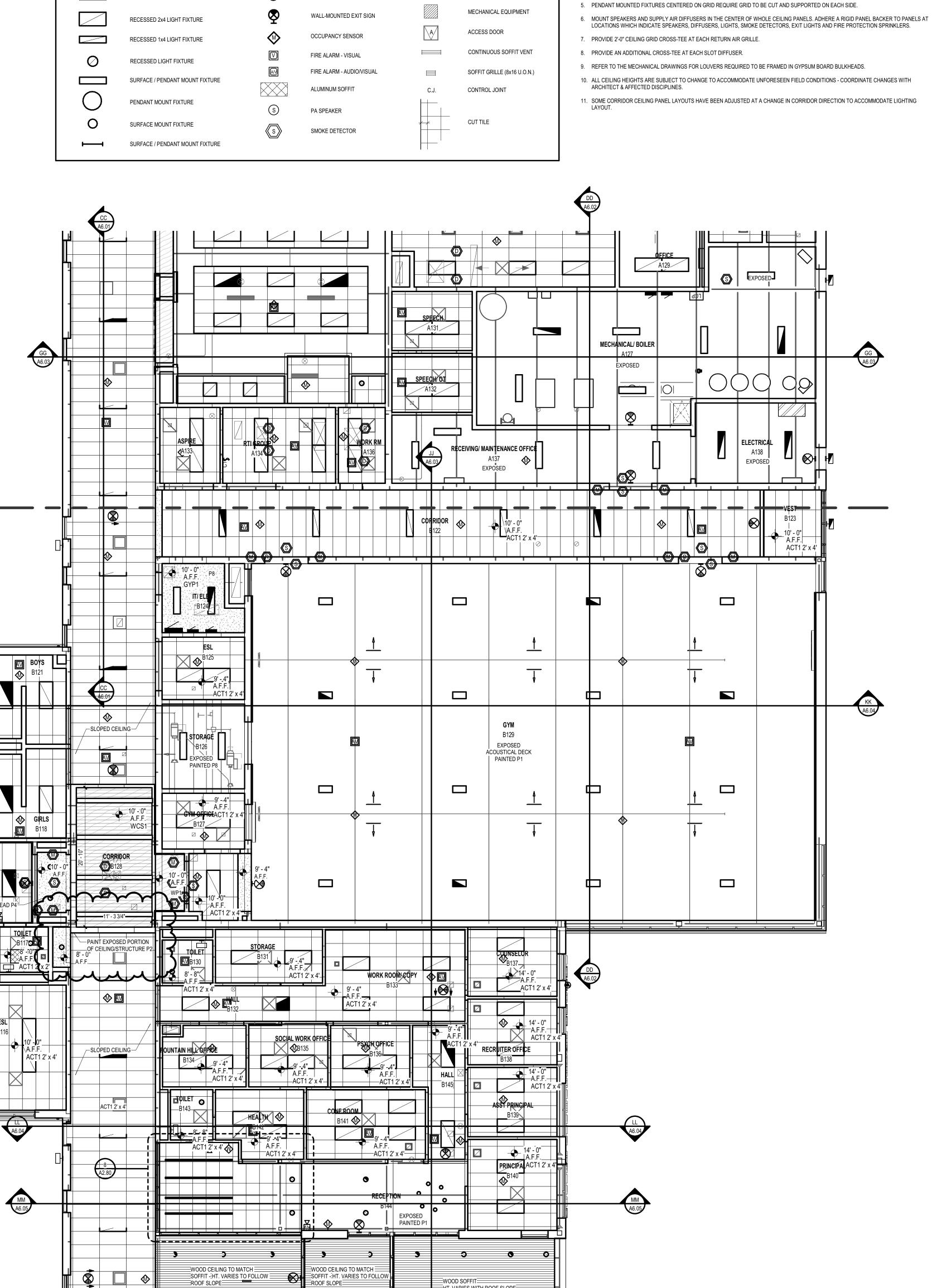
REVIEWED TGD PROJECT NO. NO PART OF THIS DRAWING MAY BE USED OR REPRODUCED IN ANY FORM OR BY ANY MEANS, OR STORED IN A DATABASE OR RETRIEVAL SYSTEM, WITHOUT PRIOR WRITTEN

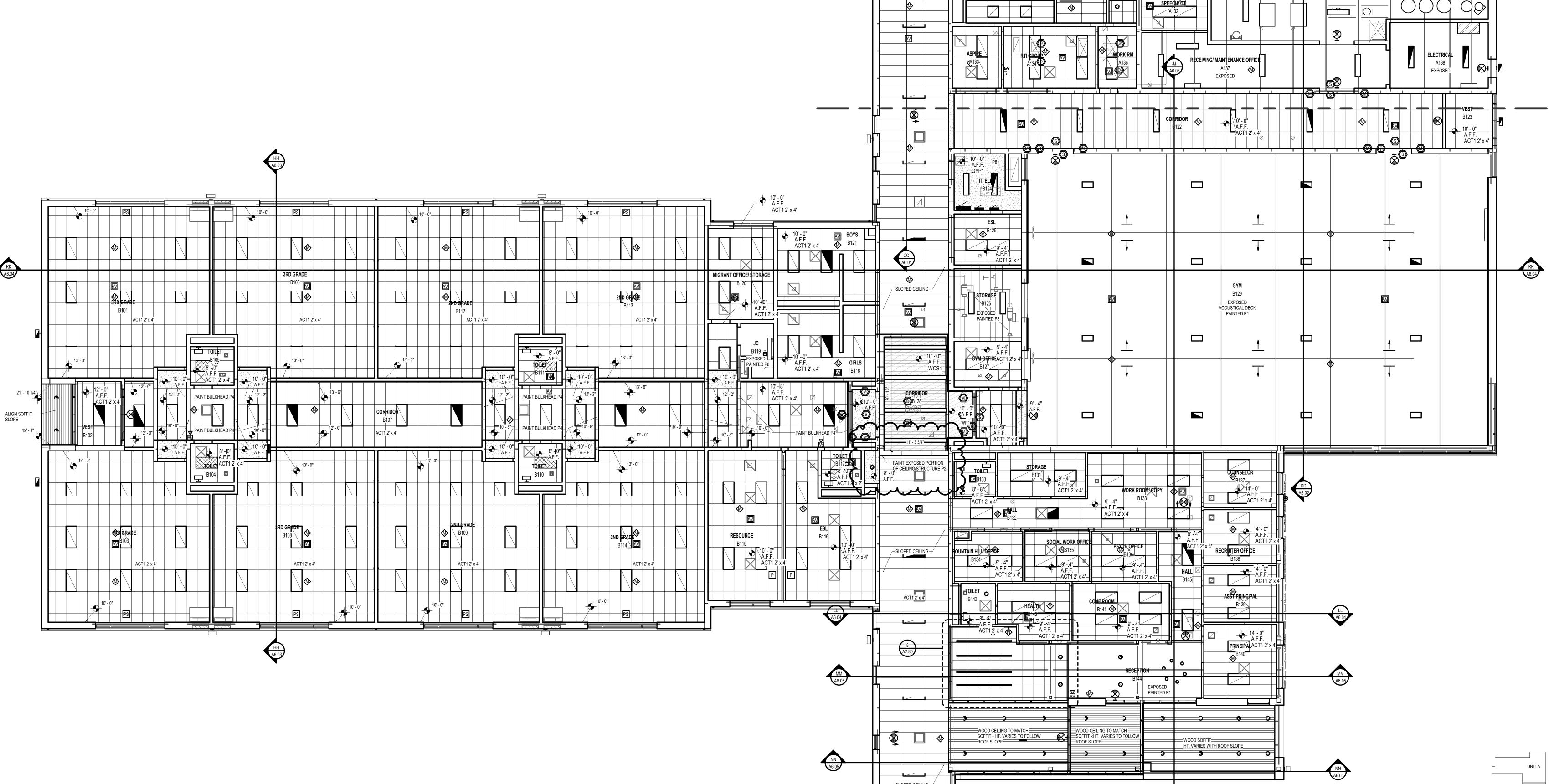
GMB COPYRIGHT© 2021 ALL RIGHTS RESERVED

UNIT 'B' MIDDLE LEVEL REFLECTED CEILING PLAN









CEILING TILE TYPE AS SPECIFIED- CEILING HEIGHTS NOTED ON REFLECTED CEILING PLANS. CEILING ELEVATIONS ARE FROM THAT ROOM'S FINISH FLOOR.

6. MOUNT SPEAKERS AND SUPPLY AIR DIFFUSERS IN THE CENTER OF WHOLE CEILING PANELS. ADHERE A RIGID PANEL BACKER TO PANELS AT

LOCATIONS WHICH INDICATE SPEAKERS, DIFFUSERS, LIGHTS, SMOKE DETECTORS, EXIT LIGHTS AND FIRE PROTECTION SPRINKLERS.

10. ALL CEILING HEIGHTS ARE SUBJECT TO CHANGE TO ACCOMMODATE UNFORESEEN FIELD CONDITIONS - COORDINATE CHANGES WITH

11. SOME CORRIDOR CEILING PANEL LAYOUTS HAVE BEEN ADJUSTED AT A CHANGE IN CORRIDOR DIRECTION TO ACCOMMODATE LIGHTING

UNLESS OTHERWISE NOTED, CEILING TO BE SUSPENDED METAL TEE AND ACOUSTICAL TILE 2'-0"x 2'-0" OR 2'-0"x 4'-0" TYPICAL. SEE SPECIFICATIONS FOR MANUFACTURER AND STYLE.

3. WIRE CEILING FROM STRUCTURE ABOVE AND WIRE FOR ADDITIONAL LOAD AT LIGHTS AND CEILING DIFFUSERS.

5. PENDANT MOUNTED FIXTURES CENTERED ON GRID REQUIRE GRID TO BE CUT AND SUPPORTED ON EACH SIDE.

9. REFER TO THE MECHANICAL DRAWINGS FOR LOUVERS REQUIRED TO BE FRAMED IN GYPSUM BOARD BULKHEADS.

7. PROVIDE 2'-0" CEILING GRID CROSS-TEE AT EACH RETURN AIR GRILLE.

8. PROVIDE AN ADDITIONAL CROSS-TEE AT EACH SLOT DIFFUSER.

ARCHITECT & AFFECTED DISCIPLINES.

616.796.0200

WWW.GMB.COM

C

ISSUANCES

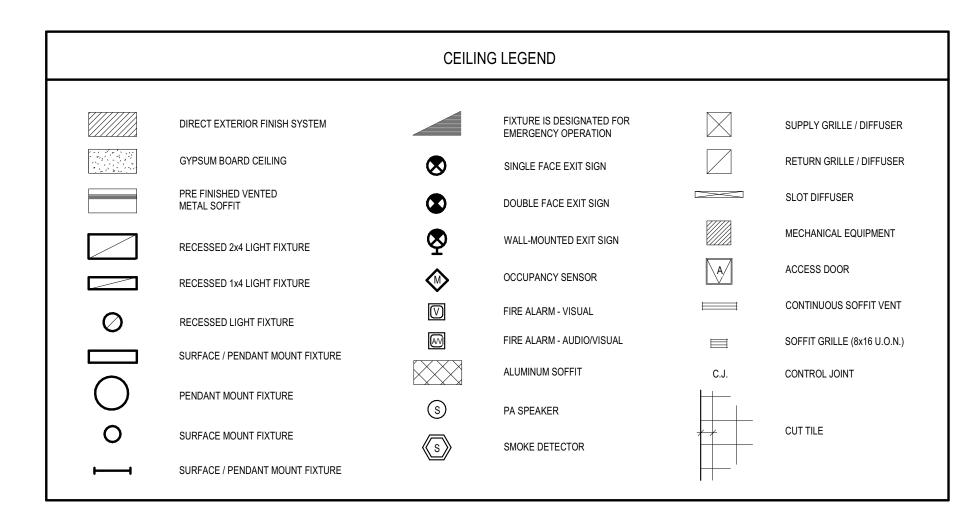
07.20.2022 BULLETIN 005

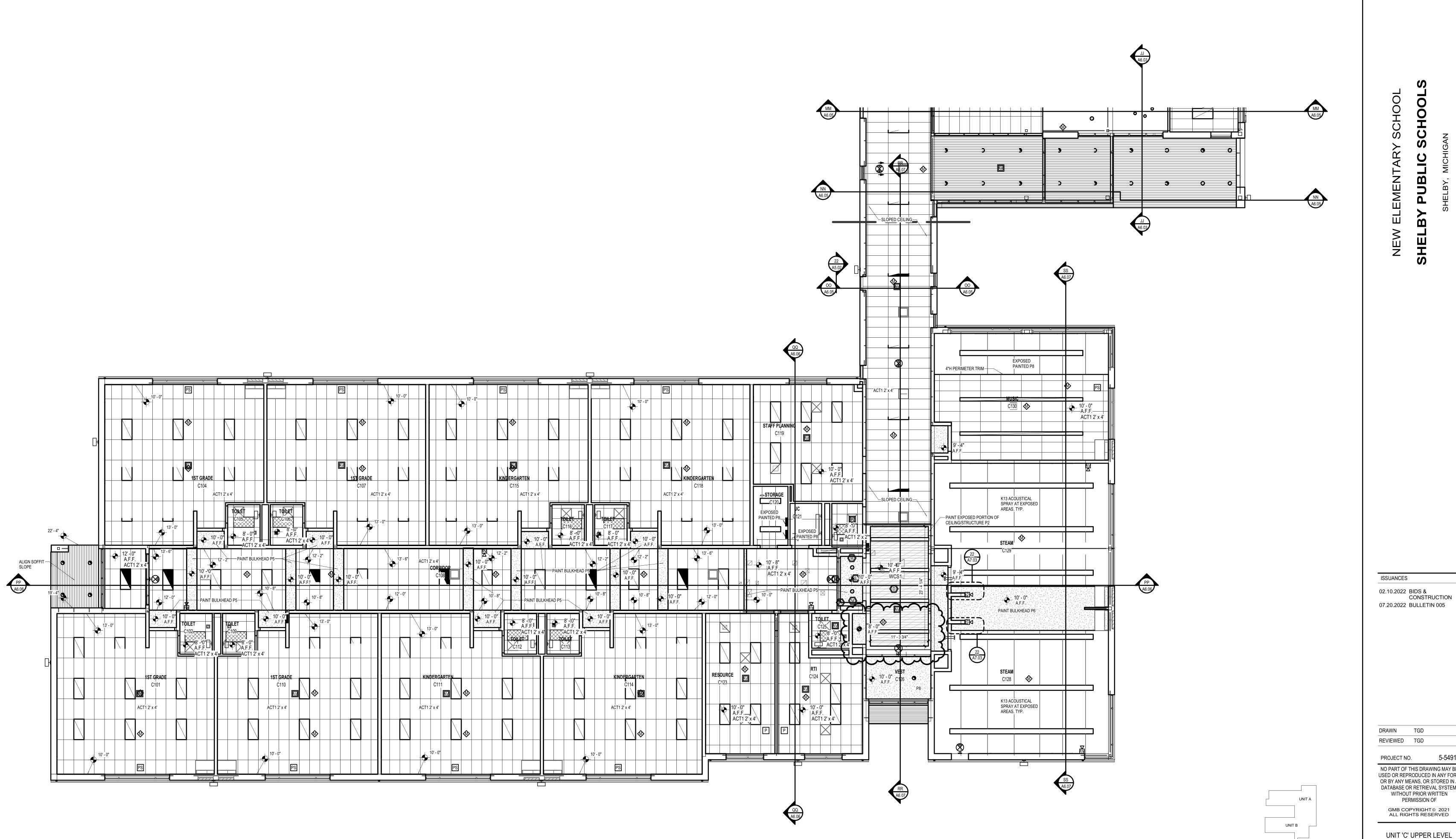
DRAWN TGD

REVIEWED TGD PROJECT NO. NO PART OF THIS DRAWING MAY BE USED OR REPRODUCED IN ANY FORM OR BY ANY MEANS, OR STORED IN A DATABASE OR RETRIEVAL SYSTEM, WITHOUT PRIOR WRITTEN GMB COPYRIGHT® 2021 ALL RIGHTS RESERVED

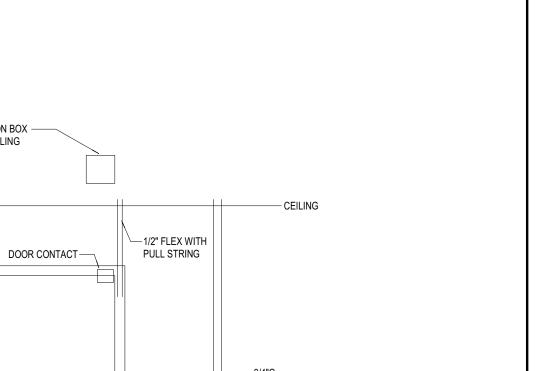
UNIT 'C' UPPER LEVEL RELFECTED CEILING PLAN

A3.1C









_ELECTRIC STRIKE

> RECESSED 2 GANG BOX WITH SINGLE GANG MUDRING. READER PLACED OVER COVER PLATE. MOUNT

AT 40" AFF.

ELEVATION SECURED SIDE NOTES:

1. SEE SPECIFICATION FOR SPECIFIC DOOR CONTROL DEVICES PER SECURED DOOR.

1. SEE SPECIFICATION FOR SPECIFIC DOOR CONTROL DEVICES PER SECURED DOOR. 2. COORDINATE WITH ACCESS CONTROL CONTRACTOR AND SHOP DRAWINGS FOR

SPECIFIC REQUIREMENTS.

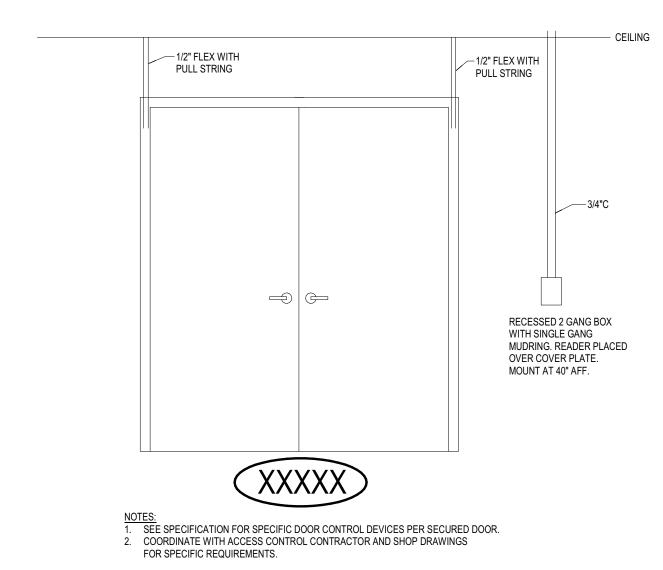
4" JUNCTION BOX —

ABOVE CEILING

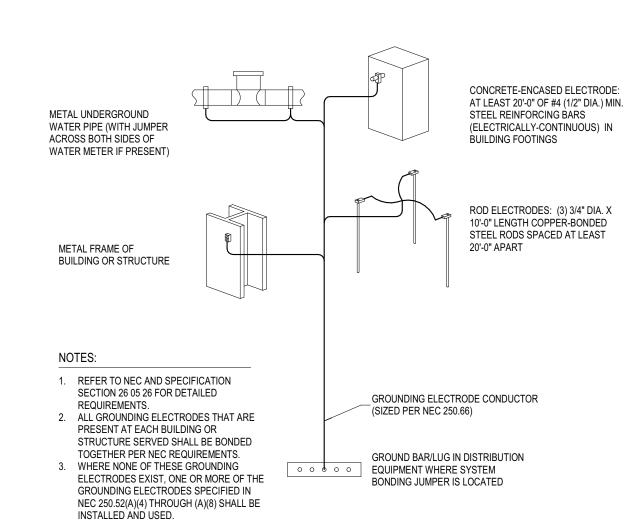
1/2" FLEX WITH-

PULL STRING ONLY IF

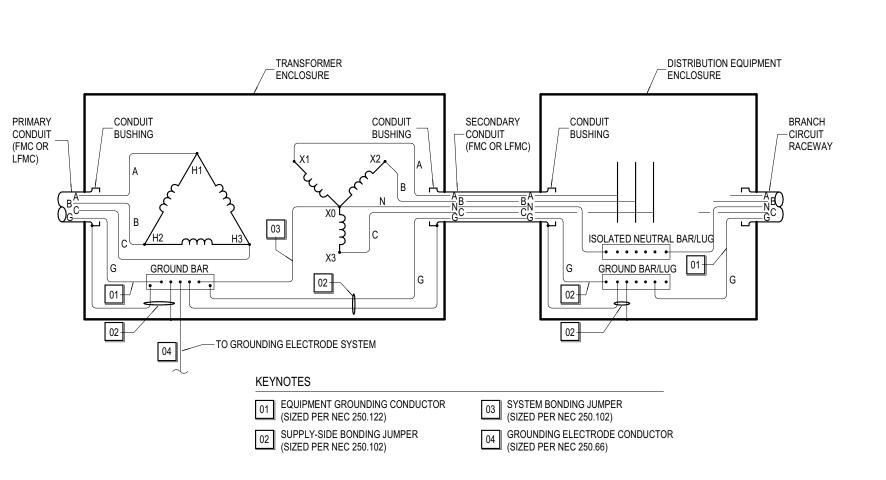
ELECTRIC PANIC BAR



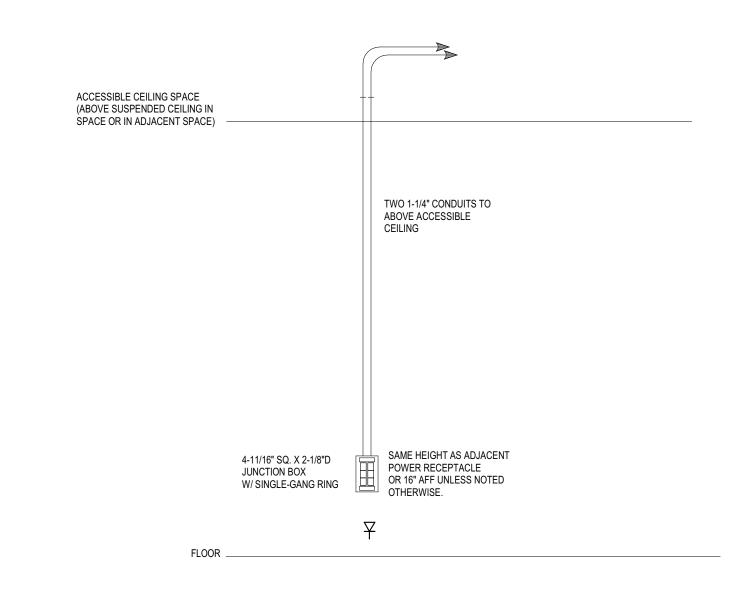
DOUBLE SECURED DOOR ROUGH-IN

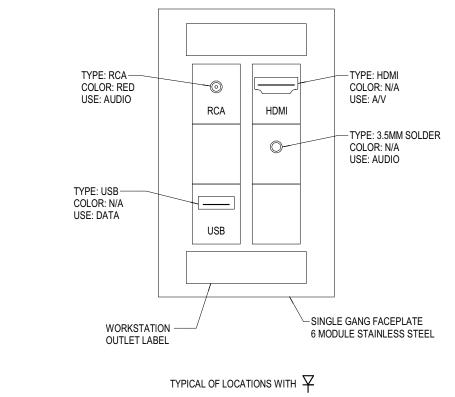


GROUNDING ELECTRODE SYSTEM DETAIL

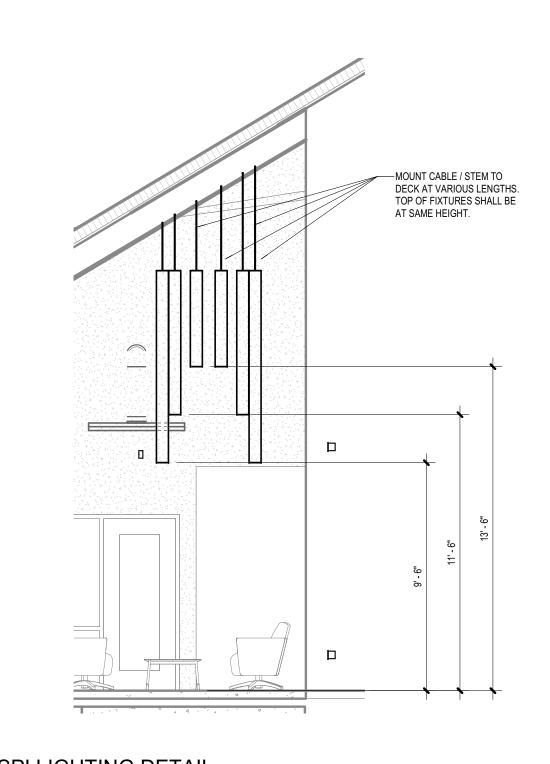


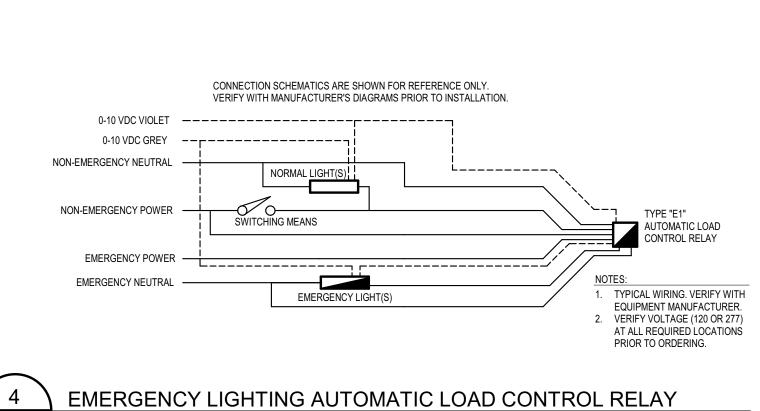
SEPARATELY DERIVED SYSTEM GROUNDING/BONDING SCHEMATIC (SYSTEM BONDING AT SOURCE)

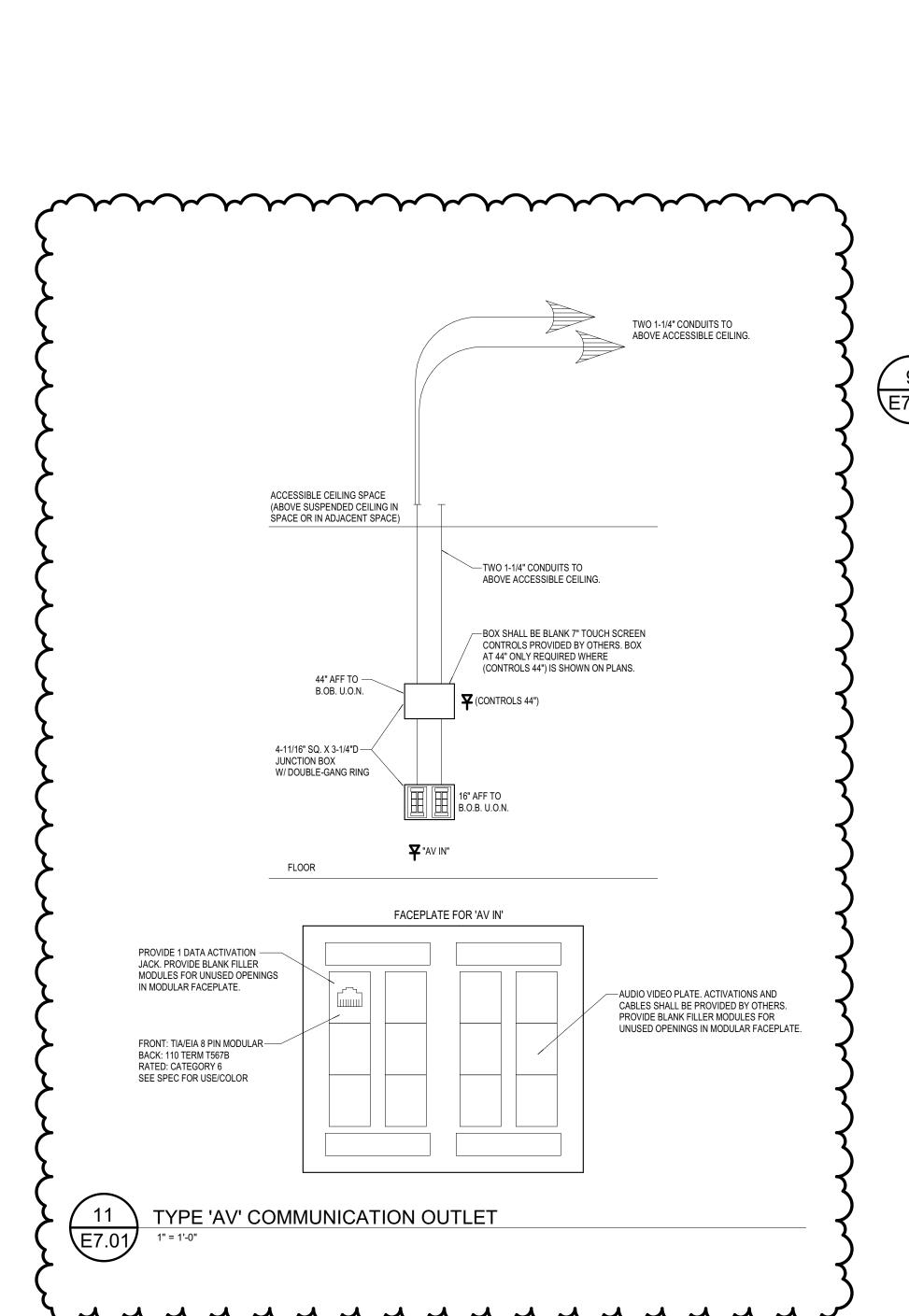


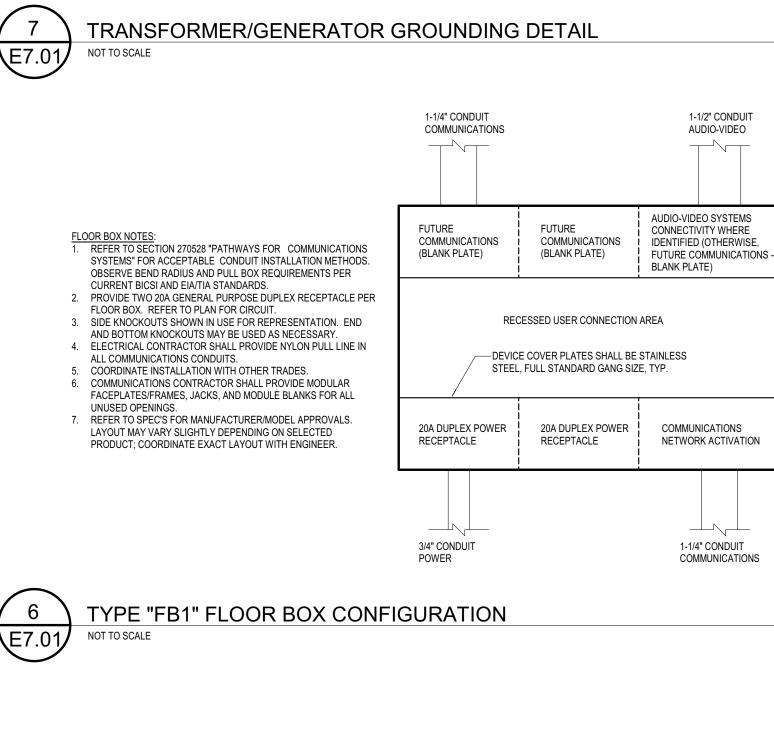


TYPICAL AUDIO/VISUAL COMMUNICATION OUTLET









----- 10'-0" GRD. ROD (TYP.)

✓GROUND RODS —

FRONT GROUND RODS-

4. 9. 1. 2. 1

EXOTHERMIC WELD — CONNECTION.(TYP.)

BRING GRD. ROD LEADS — THRU CABLE OPENING

/--#5 @ 12" O.C. EACH WAY CENTERED IN SLAB

DIMENSIONS ARE TYPICAL FOR ALL FOUR CORNERS.

SLAB DIMENSIONS PER EQUIPMENT MANUFACTURER RECOMMENDATIONS.

INFO SHOWN IS MINIMUM REQUIREMENT, COORD WITH EQUIPMENT MANUFACTURER'S RECOMMENDATIONS IF MORE STRINGENT. 4. ANY SLAB OPENINGS ARE TO BE COORDINATED WITH EQUIPMENT

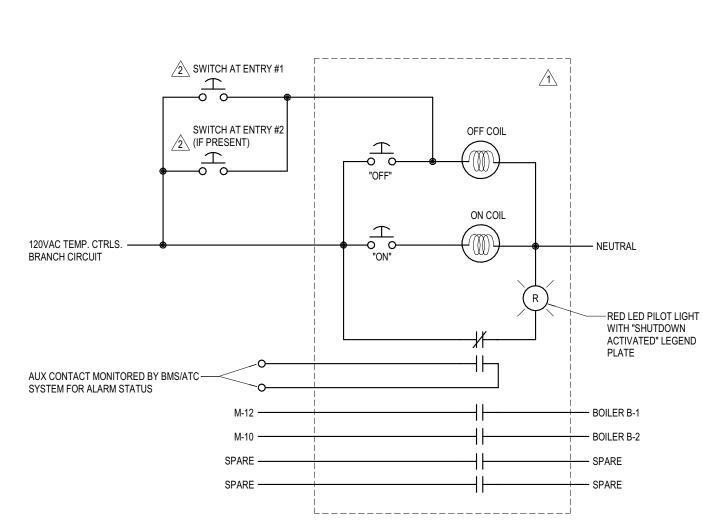
5. SLAB TO BE POURED ON COMPACTED BASE - COORD W/ CIVIL & GEOTECH.

6. PROVIDE 4000 PSI CONCRETE W/ LIMESTONE AGGREGATE & 6% AIR

7. GRADE OF REINFORCING RODS = ASTM A 615/A 615M, GRADE 60.

2" CLR TYP. —→ |-

---#5 BAR @ RE-ENTRANT



30A, 4-POLE, MECHANICALLY-HELD CONTACTOR WITH 120VAC CONTROL COILS, MOMENTARY ON/OFF PUSH BUTTONS, ONE N.C. AND ONE N.O. AUX CONTACTS, RED LED PILOT LIGHT WIRED TO N.C. AUX CONTACT FOR "OFF" INDICATION. CUSTOM ENGRAVED DEVICE LABELS, NEMA 1 ENCLOSURE. PROVIDE ENGRAVED NAMEPLATE INDICATING "EMERGENCY BOILER SHUTDOWN". RED MOMENTARY PUSHBUTTON SWITCH MOUNTED ON YELLOW POLYCARBONATE BODY, CLEAR

POLYCARBONATE HINGED COVER, CUSTOM LABEL "BOILER SHUTDOWN". PROVIDE "STOPPER

STATION" SERIES AS MFR'D BY SAFETY TECHNOLOGY INTL. INC., MODEL NO. SS2224ZA-EN OR

APPROVED EQUIV. PROVIDE W/ MATCHING BACKBOX (MODEL NO. KIT-71101A-Y) FOR APPLICATIONS WITHOUT A RECESSED SWITCH BOX FOR MOUNTING **BOILER EMERGENCY SHUTDOWN CONTROL DETAIL**

ELECTRICAL DETAILS

ISSUANCES

DRAWN

REVIEWED PRH

PROJECT NO.

BJE

NO PART OF THIS DRAWING MAY BE

USED OR REPRODUCED IN ANY FORM

OR BY ANY MEANS, OR STORED IN A

DATABASE OR RETRIEVAL SYSTEM,

WITHOUT PRIOR WRITTEN

PERMISSION OF

GMB COPYRIGHT© 2021 ALL RIGHTS RESERVED

02.10.2022 BIDS &

02.24.2022 ADDENDUM 001 10.12.2022 BULLETIN 008

CONSTRUCTION

ELECTRICAL SITE GENERAL NOTES

SHOWING ALL UTILITIES IN THE AREA.

REQUIREMENTS.

1. REFER TO SITE/CIVIL PLANS FOR ADDITIONAL INFORMATION.

OWNER RECORDS AND MAINTENANCE PERSONNEL.

2. LOCATIONS SHOWN FOR EXISTING UTILITIES (IF ANY) ARE APPROXIMATE AND DERIVED FROM GENERAL OBSERVATION AND/OR AVAILABLE RECORDS. THIS

CONTRACTOR SHALL FIELD-VERIFY LOCATIONS, SIZES, AND TYPES OF ALL EXISTING UNDERGROUND UTILITIES, CONDUITS, AND CABLES PRIOR TO

4. PROTECT THE SITE, ADJACENT PROPERTY, AND UTILITY SERVICES FROM DAMAGE OR DISRUPTION OF SERVICE/ACCESS. DAMAGE TO EXISTING

COMMENCEMENT OF WORK. CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES TO IDENTIFY PUBLIC UTILITIES. VERIFY ALL PRIVATE UTILITIES WITH

STRUCTURES, SITE, OR UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S

5. ALL UNDERGROUND CONDUIT SHALL BE RIGID NONMETALLIC (RNC) TYPE. ALL UNDERGROUND BENDS/ELBOWS SHALL BE GALVANIZED RIGID METALLIC (RMC)
TYPE, PROTECTED FROM CORROSION PER CONDUIT SPECIFICATION

6. INSTALL DETECTABLE UNDERGROUND WARNING TAPE ABOVE ALL UNDERGROUND CONDUITS AND CABLES, COLOR PER APWA UNIFORM COLOR

7. ALL EXISTING TREES TO REMAIN SHALL BE CAREFULLY PROTECTED. DO NOT DRIVE HEAVY EQUIPMENT WITHIN 12 FEET OF TREE TRUNKS. BRANCHES WHICH ARE DAMAGED DURING DEMOLITION OR CONSTRUCTION SHALL BE CUT OUT AS DIRECTED BY THE ARCHITECT/ENGINEER. ANY ROOTS OF EXISTING TREES TO REMAIN WHICH ARE EXPOSED DUE TO DEMOLITION SHALL BE COVERED WITHIN 6 HOURS WITH SOIL. DAMAGED TREES SHALL BE REPLACED

AT THE DISCRETION OF THE ARCHITECT/ENGINEER AT THE EXPENSE OF THE

8. PATCH AND REPAIR GRASS AND/OR OTHER IMPROVED PLANTINGS AS REQUIRED WHERE NEW UNDERGROUND CONDUITS, CABLES, AND/OR DUCTBANKS ARE INSTALLED. CONTRACTOR SHALL BACKFILL TRENCHES, LEVEL OUT SOIL FOR SHALL BROOK ANY EXCESS MATERIAL PRIOR TO SEEDING BERAID.

9. CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND REPAIR ANY EXISTING SURFACE FINISHES AND OTHER ITEMS THAT ARE DISTURBED DURING THE

ASPHALT, LANDSCAPING, FENCING, STRUCTURES, IRRIGATION,

COURSE OF DEMOLITION AND CONSTRUCTION, INCLUDING GRASS, CONCRETE,

LIGHT FIXTURE

SITE LIGHTING POLE -— FINISH TO MATCH LIGHT FIXTURE

RUN CONDUCTORS

---LOCATE IN-LINE FUSE HOLDER & FUSE BEHIND POLE HAND-

HOLE - FUSE EACH FIXTURE SEPARATELY

-PROVIDE FULL ROUND BASE COVER

PROVIDE LEVELING NUTS

-CHAMFER CONCRETE 1" @ 45 DEG. ALL AROUND TOP

GRADE OR PAVING

-RUBBED FINISH

---#3 TIES @ 12"O.C.

BOLTS SUPPLIED W/LIGHTPOLE

-(4) HOOKED ANCHOR

—(4)#6 BARS VERTICAL

CODE (RED FOR ELECTRIC POWER/LIGHTING, ORANGE FOR COMMUNICATIONS/ALARM/SIGNAL). REFER TO SPECIFICATIONS.

CONTRACTOR RESPONSIBLE FOR THE DAMAGE.

PRIOR TO SEEDING REPAIR.

UNDERGROUND UTILITIES, ETC.

IN ISLAND: CENTER POLE

GROUT SOLID BETWEEN — POLE BASE AND POLE FOUNDATION. PROVIDE

> IN TRAFFIC AREAS: 3'-0' IN PEDESTRIAN AREAS: 3".

WEEP HOLE AS

PARKING LOT: 3'-0" SIDEWALK: 3'-0" ROAD SHOULDER: 5'-0"

PLAN SHALL NOT BE INTERPRETED AS SHOWING EXACT LOCATIONS OR

ISSUANCES

PROJECT NO. NO PART OF THIS DRAWING MAY BE USED OR REPRODUCED IN ANY FORM OR BY ANY MEANS, OR STORED IN A
DATABASE OR RETRIEVAL SYSTEM,
WITHOUT PRIOR WRITTEN
PERMISSION OF

GMB COPYRIGHT® 2021 ALL RIGHTS RESERVED

ES2.01

SITE ELECTRICAL PLAN

