

NEW CONSTRUCTION

A NEW AUXILIARY GYM

1000 EAST 7TH ST. ALTAMONT, KS 67330



CONSTRUCTION DOCUMENTS

MONTH #TH, 2022

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GENERAL PROJECT NOTES:

- DRAWINGS & SPECIFICATIONS ARE THE PROPERTY OF THE ARCHITECT & MAY NOT BE REUSED OR REPRODUCED IN ANY MANNER WITHOUT EXPRESSED WRITTEN CONSENT.
- 2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN ON THE DRAWINGS & AT THE JOB SITE & SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES, OMISSIONS &/OR CONFLICTS BEFORE PROCEEDING WITH THE PROJECT & THE ORDERING OF MATERIALS. ALL SUBSTITUTIONS & CHANGES TO THESE DRAWINGS MUST BE SUBMITTED TO THE ARCHITECT FOR APPROVAL.
- 3. CONTRACTOR MUST COMPLY WITH ALL RULES & REGULATIONS OF AGENCIES HAVING JURISDICTION & SHALL CONFORM TO ALL CITY, COUNTY, STATE & FEDERAL CONSTRUCTION, SAFETY & SANITARY LAWS, CODES, STATUTES & ORDINANCES. ALL FEES, TAXES, PERMITS, APPLICATIONS & CERTIFICATES OF INSPECTION, & THE FILING OF ALL WORK WITH GOVERNMENTAL AGENCIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR
- ALL WORK SHALL BE PERFORMED BY SKILLED & QUALIFIED WORKMEN IN ACCORDANCE WITH THE BEST PRACTICES OF THE TRADES INVOLVED & IN COMPLIANCE WITH THE MANUFACTURER'S CURRENT PRINTED INSTALLATION GUIDE, BUILDING REGULATIONS &/OR GOVERNMENTAL LAWS, BUILDING CODES, STATUTES OR ORDINANCES.
- WORK SHALL BE ACCOMPLISHED WITH MINIMAL DISRUPTION TO OPERATIONS. IF REQUIRED, THE OWNER RESERVES THE RIGHT TO TEMPORARILY STOP WORK OF SPECIFIC CONSTRUCTION OPERATIONS SHOULD THE OWNER IDENTIFY AN EMERGENCY OR DANGER EXITS TO THE WELFARE OF THE OCCUPANTS ON ACCOUNT OF SUCH WORK OR OPERATIONS.
- SCHEDULE ALL WORK PRODUCING EXCESS NOISE OR VIBRATIONS WITH OWNER TO MINIMIZE DISRUPTION TO BUILDING OWNER & OPERATIONS. ALL WORK FOUND TO BE DISRUPTIVE SHALL BE SUSPENDED IMMEDIATELY UPON NOTICE FROM OWNER & RESCHEDULED FOR A MORE APPROPRIATE TIME. THE WORK SHALL BE SCHEDULED IN ADVANCE TO ALLOW ADVANCE NOTICE & ALTERNATE ACCOMMODATIONS FOR OCCUPANTS. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING THE WORK IN ADVANCE SO AS NOT TO DELAY THE PROGRESS OF THE WORK.
- 7. ALL WORK SHALL BE ERECTED & INSTALLED PLUMB, LEVEL, SQUARE, TRUE & IN PROPER
- 8. DO NOT SCALE DRAWINGS. FIELD VERIFY ALL DIMENSIONS & QUANTITIES.
- ALL MATERIALS SHALL BE NEW, UNUSED & OF THE HIGHEST QUALITY IN EVERY RESPECT, UNLESS OTHERWISE NOTED. MANUFACTURED MATERIALS & EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS & INSTRUCTIONS.
- CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE OF ACCUMULATION OF WASTE MATERIALS OR RUBBISH. PREMISES TO BE PICKED UP & CLEANED DAILY OF ALL CONSTRUCTION DEBRIS. AT THE COMPLETION OF THE WORK, LEAVE THE JOB SITE FREE OF ALL MATERIALS & THOROUGHLY CLEAN. ERECT & MAINTAIN DUST PARTITIONS AS REQUIRED FOR ALL PHASES OF CONSTRUCTION TO PREVENT DIRT, DUST OR WET SURFACES/FINISHES FROM ENTERING ADJACENT OCCUPIED SPACES.

MAINTAIN ALL EXIT PATHS FOR THE DURATION OF CONSTRUCTION. ERECT & MAINTAIN

APPROPRIATE SAFETY BARRIERS & PATHWAYS TO PROTECT & SEPARATE PUBLIC &

- TENANTS FROM HAZARDOUS CONDITIONS. BARRIERS SHALL BE MAINTAINED.
- 12. KEEP ALL ADHESIVES, SEALANTS & CLEANING MATERIALS AWAY FROM ALL IGNITION SOURCES. DO NOT SMOKE WHILE USING THESE MATERIALS.
- 13. CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING & PATCHING REQUIRED FOR THEIR WORK. REPAIR ANY EXISTING MATERIAL OR EQUIPMENT DAMAGED BY THESE OPERATIONS. REPAIR DAMAGE TO EXISTING BUILDING, CEILINGS, PAVING, WALKS, PLANTING AREAS INCURRED DURING CONSTRUCTION. PATCH ALL FLOOR AREAS, WALLS, & CEILINGS ALTERED DURING CONSTRUCTION AS WHERE OR NOT INDICATED BY THE DRAWINGS.
- SCHEDULE WITH OWNER ALL WORK REQUIRING THE DISABLING OF ALL BUILDING SAFETY SYSTEMS, INCLUDING BUT NOT LIMITED TO STANDPIPES, SPRINKLERS, FIRE ALARMS & SECURITY SYSTEMS. THE WORK SHALL BE SCHEDULED IN ADVANCE TO ALLOW ADVANCE NOTICE & ACCOMMODATIONS FOR TENANTS. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING THE WORK IN ADVANCE SO AS NOT TO DELAY THE PROGRESS OF THE WORK.
- 15. SEAL ALL PENETRATIONS WITHIN RATED WALLS WITH APPROVED FIRE RATED SEALANT. FIRE TAPE &/OR FILL VOIDS AT TOP OF FIRE RATED WALLS AS REQUIRED BY CODE & INSTALL FIRE RATED SEAL CLOSURE AT ALL OPENINGS, GAPS & TOP & BOTTOM OF FRAMING WHEN DAMAGED DURING NEW CONSTRUCTION / RENOVATION EFFORTS & MODIFICATIONS.
- 16. THE GENERAL CONTRACTOR SHALL COORDINATE ACCESS TO/& STORAGE ON SITE WITH THE OWNER. THE GENERAL CONTRACTOR SHALL ALSO REPAIR DAMAGE TO ALL ADJACENT AREAS OCCURRING DURING CONSTRUCTION.
- 17. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR SUPPLYING & INSTALLING ALL COMPONENTS & ACCESSORIES, EQUIPMENT, MATERIALS, HARDWARE & OTHER ITEMS NECESSARY (UNLESS NOTED OTHERWISE) FOR A COMPLETE & FINISHED JOB.

BUILDING CODE INFORMATION:

REFERENCE CODES

CODE REVIEW

EXITS REQUIRED:

STAIRS

2006 IBC 2006 IFC 2006 NFPA 101 LIFE SAFTY CODE 2002 NFPA 17

ACTUAL FLOOR AREA:

2010 ADA AMERICANS WITH DISABILITIES ACT

OCCUPANCY CLASSIFICATION: E-EDUCATIONAL

OCCUPANCY LOAD: E-EDUCATIONAL 85

CONSTRUCTION TYPE: IIB

ALLOWABLE FLOOR AREA: 14,500 SF (TABLE 503) AREA OF INCREASE 25,375SF

ALLOWABLE HEIGHT: 2 STORIES (TABLE 503)
ACTUAL HEIGHT: 1 STORY

EXITS PROVIDED: 8

EXIT WIDTH REQUIRED: # OCCUPANTS X 2 INCHES = INCHES REQU

EXIT WIDTH REQUIRED: # OCCUPANTS X .2 INCHES = INCHES REQUIRED (PER 1005.3.2)
WIDTH REQUIRED: 855 X .2 = 171"
WIDTH PROVIDED: 504"

3 (TABLE 1019.1)

20,231 SF - COMPLIANT

FIRE RESISTANCE RATINGS FOR BUILDING ELEMENTS (TABLE 601 AND 602)
ROOF ASSEMBLY 0 HR

0 HR

NON-BEARING WALL ASSEMBLIES 0 HR
STRUCTURAL FRAME 0 HR
BEARING WALLS 0 HR
CORRIDORS 0 HR



ARCHITECT

ECHELON ARCHITECTURE AND DESIGN

P.O. BOX 373 107 N. PENNSYLVANIA AVE.

SUITE 2F INDEPENDENCE, KS 67301 (620)-577-9300

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MEP ENGINEER

PKMR ENGINEERS, LLC 2933 SW WOODSIDE DR. SUITE C TOPEKA, KS 66614 (785) 273-2447 WWW.PKMRENG.COM



STRUCTURAL ENGINEER

STEWARD ENGINEERING 200 INDEPENDENCE ROAD, SEDAN, KS, 67361

(620)-262-2826



CIVIL ENGINEER

MKEC ENGINEERING SERVICES 411 N. WEBB RD. WICHITA, KS 67206 (316)-684-9600

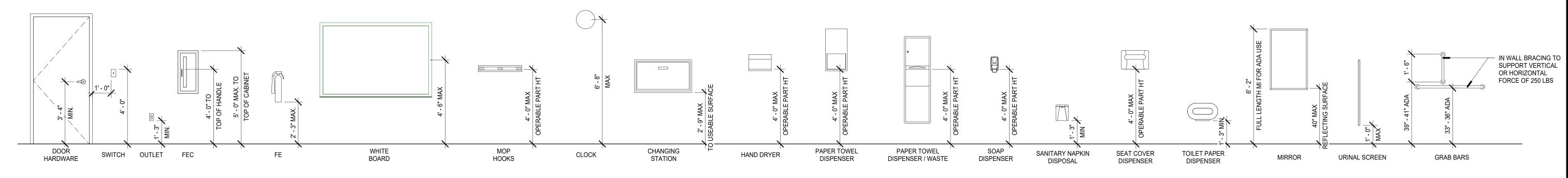


USD506

USD506 LABETTE COUNTY SCHOOLS DR. JOHN WYRICK 601 S. HIGH SCHOOL ST. ALTAMONT, KS 67330 WWW.USD506.ORG

ADA DOOR APPROACHES

1/4" = 1'-0"



MISC. MOUNTING HEIGHTS

3/8" = 1'-0"

GENERAL CONSTRUCTION BID PACKAGE:

- 1. BUILDING PAD PREP INCLUDING EXISTING SITE PAVING & ALL REQUIRED SUBSURFACE SOILS TO ACCOMODATE NEW STRUCTURAL FILL MATERIAL PER GEOTECHNICAL ENGINEERS REPORT.
- 2. INSTALL NEW REINFORCED CONCRETE FOOTINGS & CONCRETE SLAB FOR
- 3. PURCHASE, SUPPLY AND ERECT A SINGLE SLOPED PRE-ENGINEERED METAL BUILDING SYSTEM, INCLUDING ALL ROOF & WALL PANELS (SUB FRAMING). SIMPLE SAVER ROOF & WALL INSULATION SYSTEMS, RAKES, GUTTERS, DOWNSPOUTS & ALL NECESSARY FLASHINGS. PEMB STRUCTURE WILL INCLUDE ALL REQUIRED STRUCTURAL SUPPORT MEMBERS FOR INSTALLATION OF OWNER SUPPLIED & INSTALLED ROOF/CEILING MOUNTED BASKETBALL GOALS.
- 4. INSTALLATION OF MASONRY VENEER, INCLUDING ALL ASSOCIATED ANCHORS, FLASHINGS, WEEPS, CAPS, & REINFORCING
- 5. INSTALLATION OF ALL NEW SITE PAVING, EQUIPMENT PADS, BOLLARDS & MASONRY SCREEN WALLS AS WELL AS ALL ASSOCIATED REINFFORCING, FLASHING ANCHORS & TRIM.

PROJECT ADD ALTERNATES:

- INSTALLATION OF ALUMINUM STOREFRONT DOORS @ 107A, 107C, 107D, 108 & 118 IN LIEU OF HOLLOW METAL DOORS & FRAMES AS SPECIFIED AS BASED BID. ALUMINUM DOORS @ FRAMES SHALL BE OF SIMILAR SIZE. AT DOUBLE DOORS A REMOVABLE CENTER MULLION WILL BE INSTALLED SO AS THAT RIM STYLE PANIC HARDWARE CAN BE UTILIZED. WHERE DOORS OCCUR AT MASONRY OPENINGS PROVIDE DOUBLE STACKED FRAMING AT HEAD.
- INSTALLATION OF PRE-FORMED PAC-CLAD BOX RIB 1 OUTSIDE CORNERS IN LIEU OF FORMED FLASHING OUTSIDE CORNERS.
- DEMO OF EXISTING ENTRY CANOPY'S @ NORTH AND SOUTH SIDE OF HARRISON GYM & INSTALLATION OF NEW CANOPY SYSTEM AS WELL AS ASSOCIATED PREFINISHED METAL WALL PANEL SYSTEM AND ALUMINUM STOREFRONT DOOR & WINDOW SYSTEM. ALTERNATE SHOULD ALSO INCLUDE ANY REQUIRED REINFORCED CONCRETE SITE PAVING TO ACCOMODATE NEW CANOPY FOOTINGS.





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STRUCTION

CON

NEW

GENERAL

DRAWN BY KG REVISIONS

INFORMATION

PROJECT NUMBER 23-09

8/14/2023 SHEET NUMBER

CODE REVIEW

APPLICABLE CURRENT CODES

2006 INTERNATIONAL BUILDING CODE

2006 INTERNATIONAL FIRE CODE (IFC)

2007 NATIONAL FIRE PROTECTION ADMINISTRATION (NFPA)

2002 NFPA 17 DRY CHEMICAL EXTINGUISHING SYSTEM

2008 NATIONAL ELECTRIC CODE

2002 NATIONAL FUEL GAS CODE

2006 NFPA LIFE SAFETY CODE

2006 NFPA 102 ASSEMBLY SEATING

2006 NFPA 101A ALTERNATIVE APPROACH TO LIFE SAFETY

KANSAS FIRE PREVENTION CODE

FACILITY NAME/ADDRESS

USD506 LABETTE COUNTY SCHOOLS AUX. HIGH SCHOOL GYM 601 HIGH SCHOOL AVE. ALTAMONT, KS 67330

MATT KING, AIA **ARCHITECT**

HECKMAN, BRUENING & KING, LLC 107 N. PENNSYLVANIA AVE, SUITE 2F

INDEPENDENCE, KS. 67301 LABETTE

NONE

WATER SUPPLY CITY OF ALTAMONT

BUILDING DEPARTMENT CITY OF FREDONIA ATLAMONT VOLUNTEER FIRE RESPONDING FIRE SERVICE

BUILDING NEW CONSTRUCTION

REQUIRED SEPARATION OF OCCUPANCIES (HOURS)

COUNTY

1 HOUR FIRE RATED WALL @ STORAGE ROOM w/ 45 MIN RATED OPENINGS

FIRE SAFETY SYSTEMS

FUTURE ADDITIONS

FIRE ALARM SYSTEM w/ PULL STATIONS & INTERCONNECTED SMOKE DETECTORS w/ BATTERY BACK UP **EXIT SIGNS & LIGHTS** FIRE EXTINGUISHERS

OCCUPANCY LOAD

E OCCUPANT LOAD = 855

BUILDING AREA & OCCUPANT LOAD INFORMATION:

USD 506 GYM

Chapter 3 Occupancy:

Chapter 5 General Building Heights & Areas:

E IIB = 2/14,500 area increase 25,375 - **COMPLIANT**

Storage Rooms over 100 square feet require 1 hour separation or automatic fire extinguishing system – <u>1 hour rated Fire</u> Barrier @ storage room

Chapter 6 Types of Construction

Structural Frame = 0 Bearing Walls

Exterior = 0 Interior = 0

Non-Bearing Walls & Partition = 0 Floor Construction = 0 Roof Construction = 0

Table 602 Fire Resistance Rating Requirements for Exterior Walls on Fire Separation Distance -

X < 5 = 1 HOUR 5 < X < 10 = 1 HOUR 10 < X < 30 = 0 HOUR

X > 30 = 0 HOUR

NO RATING REQUIRED AT EXTERIOR WALLS

Chapter 7 Fire and Smoke Protection Features

Section 706 Fire Barrier, 706.3.6 Incidental Use Area - The fire barrier separating incidental use areas shall have a fire resistance rating of not less than that indicated on Table 508.2 – <u>1 Hour Fire Barrier provided around Storage Room</u>

706.5 Continuity – Fire barriers shall extend from the top of the floor/ceiling assembly below to the underside of the floor or roof slab or deck above and shall be securely attached thereto. Such fire barriers shall be continuous through concealed spaces, such as the space above a suspended ceiling. The supporting construction for fire barriers shall be protected to afford the required fire-resistance rating of the fire barrier supported, except for 1-hour fire-resistance-rated incidental use areas separations as required by Table 508.2 in building of Type IIB, IIB and VB construction. Hollow vertical spaces within a fire barrier shall be fireblocked in accordance with section 717.2 at every floor level. – 1 Hour rated Fire barrier @ Storage room shall extend from floor to roof deck above.

Table 715.4 Fire Door and Fire Shutter Fire Protection Ratings – Fire Barriers, Other fire barriers Required Assembly Rating

1 hour, Minimum Fire Door and Fire Shutter Assembly Rating equal to 3/4 hour or 45 minutes. – 45 minute rated door & frames shall be provided at Storage room door Fire Barrier walls.

Chapter 9 Fire Protection & Life Safety Systems

903.2.2 Group E – An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E Fire Areas greater than 20,000 square feet in area. 2. Throughout every portion of educational buildings below the level of exit discharge

Exceptions: An automatic sprinkler system is note required in any fire area or area below the level of exit discharge where every classroom throughout the building has at least one exterior exit door at ground level. – <u>Compliant, Fire sprinkler</u>

907.2.3 Group E – A manual fire alarm system shall be installed in Group E occupancies. When automatic sprinkler systems or smoke detectors area installed such systems or detectors shall be connected to the building fire alarm system.

1. Group E occupancies with occupant load of less than 50

The entire system will have a emergency battery back up system.

2. Manual fire alarm boxes are not required in Group E occupancies where all the following apply:

2.1 Interior Corridors are protected by smoke detectors with alarm verification 2.2 Auditoriums, cafeterias, gymnasiums and the like are protected by heat detectors or other approved

2.3 Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved

detection devices.

2.4 Off-premises monitoring is provided

2.5 The capability to activate the evacuation signal from a central point is provided. 2.6 In buildings where normally occupied spaces are provided with a two-way communication system

between such spaces and a constantly attended receiving station from where a general evacuation alarm can be sounded except in locations specifically designated by the fire code official.

A manual fire alarm system will be installed throughout the building. Pull stations shall be located at each exterior egress location. Horn/storbes & interconnected smoke detectors shall be placed throughout the building as well.

3. Manual fire alarm boxes shall not be required in Group E occupancies where the building is equipped throughout with an approved automatic sprinkler system, the notification appliances will activate on sprinkler water flow and manual activation is provided form a normally occupied location.

Chapter 10 Means of Egress: Table 1004.1.1 Maximum Floor Area Allowances per Occupant

Concession #09 283sf = 283/150 total of occupancy of 2

Gym #11 12,111sf – Fixed seating of 550 Gym floor @ 8,000/50 100 total occupancy 650 (2 means of egress required. 650*0.2 = 130 inch egress width required)

Visitor Locker Room #14 390sf = 390/50 total 8 occupants Home Locker Room #15 390sf = 390/50 total 8 occupants Band Director #17 129sf = 129/150 total 1 occupant

Music Director #23 129sf = 129/150 total 1 occupant Band/Choir #24 2,254sf = 2,254/20 total 113 occupants (2 means of egress required. 113*0.2 = 22.6inch egress

1004.3 Posting of occupant load – Compliant Room occupancy signage for Gym will be posted near all doors to gym as well as exterior exit doors within the gym itself

1005 Means of Egress Sizing:

855 total occupants by 0.2 = 171 inches wide exterior egress openings required – **Compliant 504inch wide** exterior egress width total provided 400% more provided

1008.1.9 Panic and Fire exit hardware – Compliant panic hardware provided at all exterior egress exit doors as well as doors from gym to lobby

<u>Table 1015.1 Spaces with one means of egress</u>: Occupancy E or A Maximum occupant load of 49 - <u>Compliant 6 exterior</u> exit points provided. 2 points of egress provided @ band/music room, 4 points of egress provided for @ gym

<u>Table 1019.1 Minimum Number of Exists for occupant load</u> – Occupant load (per story) 1-500 = 2, 501 – 1,000 = 3 – Compliant. Band Room has 2 exits, gym has 6 exits

Section 1025 Assembly - Compliant

Section 2902 Minimum Plumbing Facilities

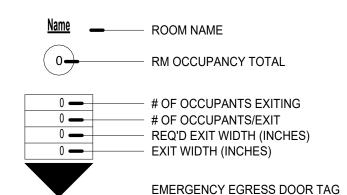
Table 2902.1 Minimum Number of Required Plumbing Fixtures

Gym Occupancy similar to A-4 total occupant load 650 equals 325 men & 325 women. Waterclosets A-4 Men is equal 1/75 for the first 1,500 and then 1/120 for the remainder. 325/75 = 4.33. Lavatories for men 1/200. 325/150 = 1.625. . Waterclosets A-4 Women is equal 1/40 for the first 1,500 and then 1/60 for the remainder. 325/40 = 8.125 Lavatories for women 1/150. 325/150 =

Band Room equals E educational facilities. Watercloset's for men's & womens equal 1/50 therefore 57.5 persons for men's and 57.5 persons for women's. 57.5/50 = 1.15 for men and 1.15 for women

Team Rooms equals educational facilities. Watercloset's for men's & womens equal 1/50 therefore 8 persons for men's and 8 persons for women's. 57.5/50 = 0.16 for men and 0.16 for women

Compliant total number of waterclosets for men's provided is 6, total number of waterclosets for womens's provided is 11. 2 janitors closets provides as well as 2 sets of drinking fountains.



CODE FOOTPRINT LEGEND

- EXIT SIGN W/ ARROWS EMERGENCY LIGHT FIRE EXTINGUISHER

> SMOKE DETECTOR FIRE ALARM CONTROL PANEL — FIRE ALARM PULL STATION

FIRE ALARM STROBE FIRE ALARM HORN/STROBE

FIRE ALARM HORN — 1 HR FIRE WALL

00' - 0" TRAVEL DISTANCE PATH OF TRAVEL

STRUC-CON NEW

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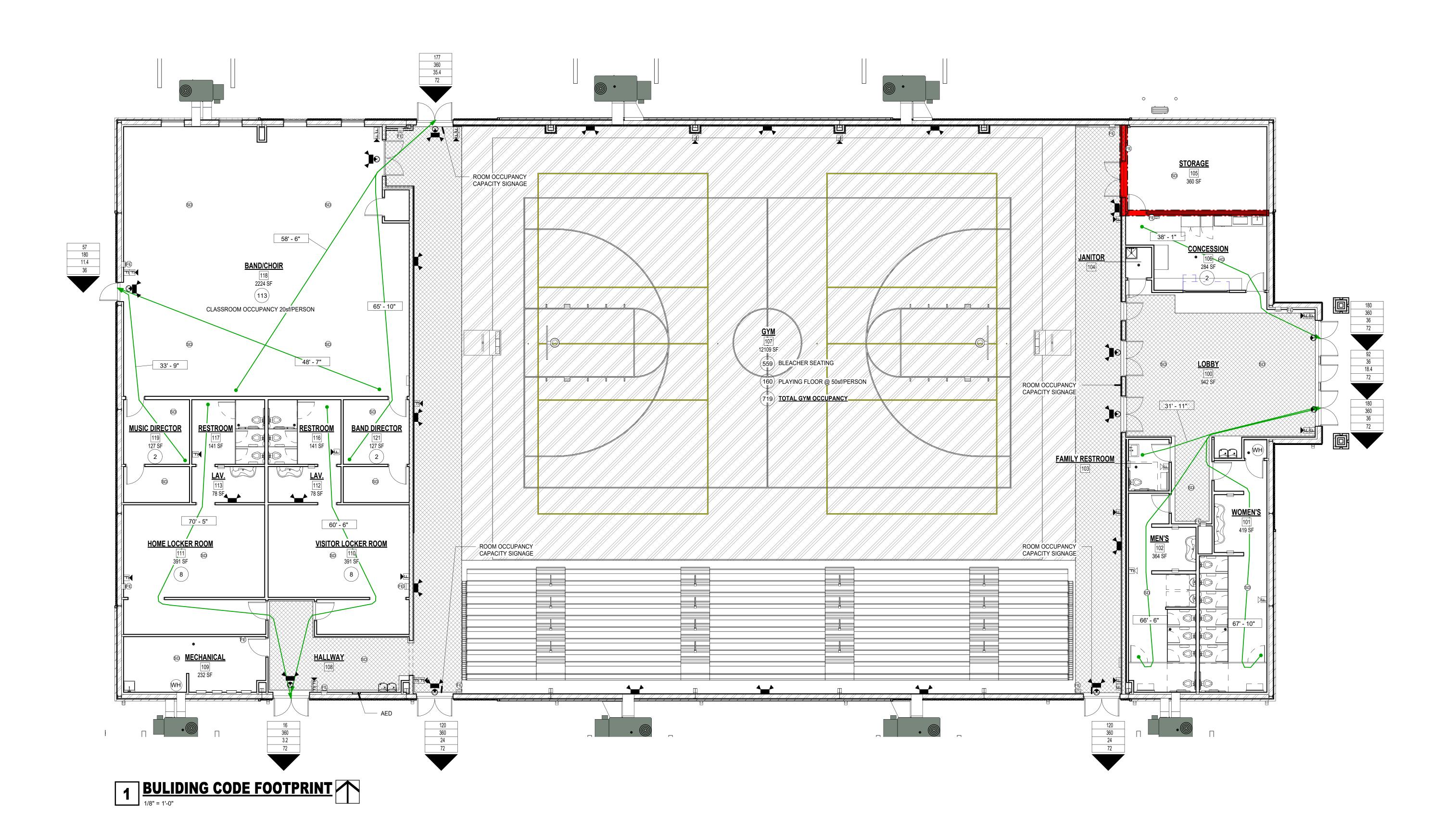
LIFE SAFETY PLAN/CODE **FOOTPRINT**

MANAGER DRAWN BY KG REVISIONS

PROJECT NUMBER

23-09 8/14/2023

SHEET NUMBER





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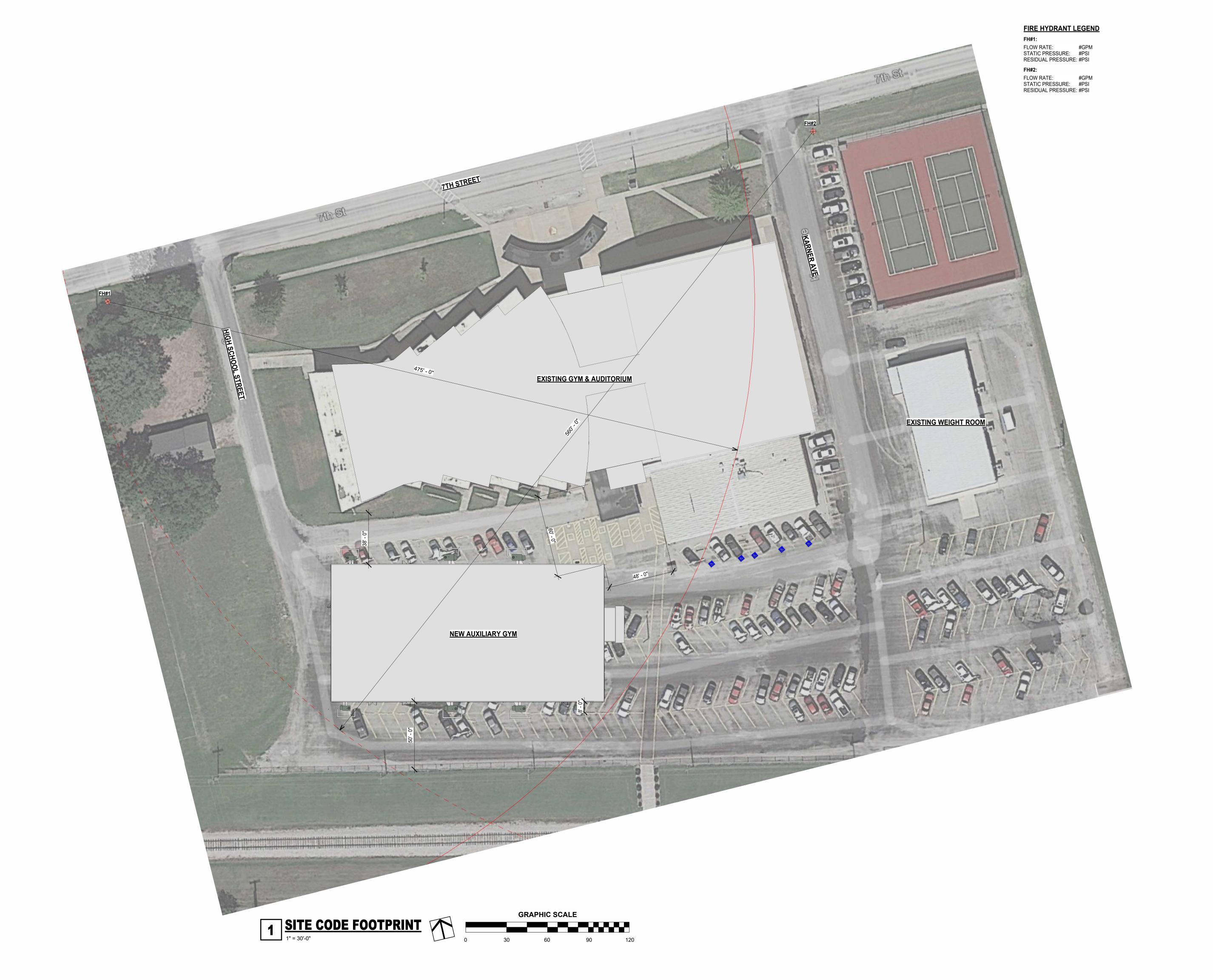
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BUILDING CODE **FOOTPRINT**

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LS102







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STRUCTION

NEW CON

SITE CODE FOOTPRINT

| MANAGER | DRAWN BY | | | | | | |
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PROJECT NUMBER

LS103

GENERAL NOTES

- UNLESS SHOWN OR STATED OTHERWISE ON THESE DRAWINGS, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF ALTAMONT STANDARD SPECIFICATIONS AND STANDARD SPECIAL PROVISIONS.
- 2. THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE COMMENCEMENT OF SITE WORK. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF DISCREPANCIES OR VARIATIONS FROM THE PLANS.
- THE SITE PLAN IS BASED ON A SURVEY OF THE SITE. CONDITIONS OF THE SITE AT THE TIME OF CONSTRUCTION MAY VARY FROM THE SURVEYED CONDITIONS. CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR WILL BE REQUIRED TO PROVIDE NOTICE TO UTILITY COMPANIES A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO ANY **EXCAVATION, AS FOLLOWS:**

KANSAS ONE-CALL 687-2470

- TRAFFIC CONTROL SIGNAGE (IF APPLICABLE) SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL" AND CITY OF ALTAMONT STANDARDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TRAFFIC CONTROL DEVICES AND ENSURE ALL TRAFFIC CONTROL DEVICES ARE CLEAN, PROPERLY VISIBLE, OPERATING CORRECTLY AND LOCATED PROPERLY. THE CONTRACTOR SHALL IMMEDIATELY REPLACE ANY DAMAGED, DEFACED, INOPERABLE OR MISSING DEVICES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
- 7. ANY CURB, GUTTER, SIDEWALKS OR PAVEMENT THAT IS DAMAGED IN EXCESS OF THE CONSTRUCTION SHOWN IN THIS PLAN SET SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- 8. ALL EXISTING UTILITIES AND SERVICE LINES SHALL BE KEPT IN SERVICE AT ALL TIMES DURING CONSTRUCTION OF THIS PROJECT, UNLESS OTHERWISE AUTHORIZED BY THE OWNER'S REPRESENTATIVE.
- 9. THE PAVEMENT SECTIONS SHOWN IN THESE PLANS ARE PROVIDED IN ACCORDANCE WITH THE RECOMMENDATIONS PRESENTED IN THE GEOTECHNICAL REPORT LISTED BELOW.
- 10. A GEOTECHNICAL REPORT HAS BEEN PREPARED FOR THIS PROJECT BY PALMERTON & PARRISH, INC., PROJECT 23-0826, DATED 04/12/2023. CONTRACTOR SHALL REFER TO REPORT FOR RECOMMENDED PAVEMENT THICKNESS, SUBGRADE PREPARATION AND TRENCH BACKFILLING. IF ANY DISCREPANCIES ARISE BETWEEN THE PLANS, SPECIFICATIONS AND GEOTECHNICAL REPORT, THE MORE CONSERVATIVE REQUIREMENT SHALL
- 11. REFER TO ARCHITECTURAL PLANS FOR ALL BUILDING DIMENSIONS AND LAYOUT. BUILDING SHALL NOT BE STAKED FROM CIVIL DRAWINGS.
- 12. THE CONTRACTOR SHALL REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS AND WASTE MATERIALS INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
- 13. THE ENGINEER WHOSE SEAL APPEARS ON THESE PLANS IS NOT RESPONSIBLE FOR THE DESIGN. STRUCTURAL INTEGRITY, OR SUITABILITY OF ANY RETAINING WALLS. THE BOTTOM OF WALL ELEVATIONS LISTED ON THESE PLANS ARE FINISHED GRADES AT THE WALL. ANY AMOUNT OF WALL AND FOOTINGS BELOW FINISHED GRADE REQUIRED BY THE RETAINING WALL DESIGN SHALL BE INSTALLED. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL RETAINING WALLS AND SHALL SUBMIT CONSTRUCTION PLANS, SHOP DRAWINGS. AND DETAILS TO THE ARCHITECT/OWNER FOR REVIEW AND APPROVAL.

SEEDING NOTES

- 10-20-10 @ 150 LBS./ACRE

- CONTRACTOR SHALL COMPLETE STABILIZATION WHEN SOIL DISTURBING ACTIVITIES CEASE TEMPORARILY AND WILL NOT RESUME FOR 14 DAYS OR MORE.
- TEMPORARY SEEDING: ALL AREAS DISTURBED, WITH EXCEPTION OF PROPOSED HARDSCAPE AREAS, SODDED AREAS AND LANDSCAPED AREAS SHALL BE SEEDED AND FERTILIZED AS FOLLOWS: - ANNUAL RYE @ 150 LBS./ACRE
- ALL AREAS SHALL BE FINE GRADED AND SURFACES SHALL BE FREE FROM STICKS, SMALL STONES, AND OTHER EXTRANEOUS MATERIALS.
- ALL SEED SHALL BE DISTRIBUTED WITH AN ACCEPTABLE DRILL INTENDED FOR SUCH OPERATIONS, OR OTHER EQUIPMENT APPROVED BY THE OWNER'S REPRESENTATIVE. SEEDING DEPTH SHALL BE 1/4". USE A NO-TILL DRILL WHEN SEEDING INTO A COVER CROP.
- ALL SEEDED AREAS SHALL BE IMMEDIATELY MULCHED WITH PRAIRIE HAY AT A RATE OF 2 TONS/ACRE, UNLESS SEEDING INTO A COVER CROP. ANCHOR MULCH BY CRIMPING INTO TOPSOIL WITH SUITABLE MECHANICAL EQUIPMENT.
- SEEDING SHALL NOT BE COMPLETED DURING PERIODS OF RAIN, SEVERE DROUGHT, HIGH WINDS, EXCESSIVE MOISTURE, FROZEN GROUND OR OTHER CONDITIONS THAT PRECLUDE SATISFACTORY RESULTS.
- ANY WASHOUT THAT OCCURS SHALL BE RE-GRADED AND RE-SEEDED UNTIL AN ACCEPTABLE STAND IS ESTABLISHED.
- ALL SEEDED AREAS SHALL BE GUARANTEED FOR NOT LESS THAN 1 (ONE) FULL YEAR FROM THE TIME OF SUBSTANTIAL COMPLETION.

GRADING NOTES

- 1. MKEC ENGINEERING, INC. HAS PREPARED THESE PLANS IN ACCORDANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS.
- 2. ALL SITE WORK FOR THIS PROJECT IS CONSIDERED "UNCLASSIFIED". THE TERM "UNCLASSIFIED" EXCAVATION SHALL BE DEFINED AS MEANING THE CONTRACTOR BEARS THE ENTIRE RISK OF THE SOIL QUANTITIES AND/OR TYPE (E.G. ROCK, CLAY, PEAT, SILT, SHALE, ETC.) ENCOUNTERED EITHER ABOVE OR BELOW PROPOSED SUBGRADES. IN THE EVENT IT BECOMES NECESSARY FOR UNSUITABLE SOIL TO BE HANDLED, REMOVED FROM THE SITE, OR FOR SUITABLE MATERIAL TO BE IMPORTED TO THE SITE, THE CONTRACTOR SHALL BEAR THE ENTIRE COST OF SUCH ADDITIONAL WORK. "UNSUITABLE" SOIL ALSO INCLUDES SATURATED SOILS THAT MAY NEED REPLACING AND/OR TREATING IN ORDER TO MEET SCHEDULE DATES. THIS DEFINITION OF "UNCLASSIFIED" SUPERCEDES ANY CONTRARY DEFINITIONS OR STATEMENTS WHICH MAY BE CONTAINED IN SPECIFICATIONS, PLANS, OR OTHER DOCUMENTS.
- 3. EXISTING LAWN AND TREES OUTSIDE THE NOTED LIMITS OF CONSTRUCTION SHALL BE OFF LIMITS TO ANY TYPE OF CONSTRUCTION ACTIVITY EXCEPT TO FINAL SEEDING OPERATIONS. TEMPORARY CONSTRUCTION FENCE SHALL BE ERECTED AROUND THESE SITES PRIOR TO THE START OF ANY CONSTRUCTION. WORK SHALL BE LIMITED AS MUCH AS POSSIBLE TO WITHIN THE LIMITS OF GRADING. USE SMALLER EQUIPMENT WHERE NECESSARY.
- 4. THIS IS DESIGN GRADING. ALL GRADES SHALL BE CONTOURED SMOOTHLY WITH GENTLE ROUNDING/SHAPING OF ALL AFFECTED LAND SURFACES. ABRUPT GRADE TRANSITIONS ARE NOT ACCEPTABLE. SURVEY STAKES ARE FOR GENERAL GRADING PURPOSES ONLY. NOT ALL SLOPES ARE CONSTANT AND THEREFORE THE GRADING PLANS SHALL BE REFERRED TO FOR FINAL GRADE SHAPING. THE GRADING SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE ADDITION OF THE TOPSOIL LAYER.
- EXISTING UTILITY VAULTS, MANHOLES, RISERS, ETC, SHALL BE ADJUSTED TO PROPOSED GRADES. WHEN LOCATED IN SIDEWALK OR PAVEMENT AREAS, TOPS SHALL BE SET FLUSH WITH THE SIDEWALK OR PAVEMENT.
- 6. ALL SPOT ELEVATIONS REPRESENT FINISHED SURFACE OR FLOW LINE GRADES, UNLESS OTHERWISE NOTED.
- 7. THE CONTRACTOR IS TO PROVIDE TEMPORARY SEEDING, FERTILIZING, MULCHING, LANDSCAPING OR SODDING OF ALL DISTURBED AREAS. THIS WORK TO BE DONE IN ACCORDANCE WITH THE LANDSCAPING PLANS AND SPECIFICATIONS.
- PROPOSED CONTOURS SHOWN ON THESE PLANS ARE FINAL SURFACE CONTOURS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ADJUSTMENTS FOR PAVEMENT THICKNESS, SUBGRADE THICKNESS, TOPSOIL REMOVALS, ETC.

PAVING NOTES

- REFER TO PAVING PLANS FOR CURRENT HORIZONTAL DIMENSIONS AND LAYOUT.
- 2. ALL DIMENSIONS ARE SHOWN TO BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- UNLESS OTHERWISE NOTED, ALL SIDEWALKS SHALL BE 4" CONCRETE.
- 4. SIDEWALKS SHALL NOT EXCEED 2% CROSS SLOPE OR 5% LONGITUDINAL SLOPE.
- 5. SIDEWALK EXPANSION JOINT FILLER SHALL BE GREY. SELF-LEVELLING POLYURETHANE SEALANT
- 6. CONTRACTOR TO DRILL & EPOXY #4 BARS (L=2'-0"; MIN. 9" EMBED) @ 24" O.C. INTO EXIST. CONCRETE PAVEMENT AND CURB & GUTTER WHEREVER PROPOSED ABUTS EXISTING.
- 7. AGGREGATE BASE UNDER PAVEMENT SHALL EXTEND A MINIMUM OF 1' BEYOND THE BACK OF CURB.
- 8. UNLESS OTHERWISE NOTED, ALL CURB TO BE FULL (6"). REFER TO GRADING PLAN FOR DETERMINATION OF CURB TYPE (REVERSE OR STANDARD) TO BE CONSTRUCTED.
- 9. UNLESS OTHERWISE NOTED, ALL PARKING STALLS ARE 9' x18'.
- 10. PARKING STRIPING SHALL BE 4" WIDE, WHITE IN COLOR
- 11. ADA PARKING STALL LOADING AISLE STRIPING SHALL BE 4" WIDE, 2' O.C. @ 45° ANGLE. WHITE IN COLOR.
- 12. PAVEMENT MARKINGS SHALL BE AN UNDILUTED ALKYD TRAFFIC PAINT. APPLY PAINT WITH MECHANICAL EQUIPMENT TO PRODUCE PAVEMENT MARKINGS WITH UNIFORM, STRAIGHT EDGES. APPLY AT MANUFACTURER'S RECOMMENDED RATE TO PROVIDE A MINIMUM WET FILM THICKNESS OF 15 MILS. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR SURFACE PREPARATION AND APPLICATION.

EROSION CONTROL

- EROSION CONTROL SHOULD MEET ALL FEDERAL, STATE, COUNTY AND LOCAL
- 2. SEE SEEDING NOTES FOR DISTURBED AREA STABILIZATION OUTSIDE OF
- 3. THE CONTRACTOR SHALL COMPLETE STABILIZATION WHEN SOIL DISTURBING
- 4. CONTRACTOR SHALL PROVIDE EROSION PROTECTION THROUGHOUT PROJECT CONSTRUCTION. THE PLAN PROVIDED HERE WITHIN IS FOR FINAL PROTECTION. VARIOUS PHASES OF THIS PLAN SHALL BE IMPLEMENTED OR MODIFIED TO CONTROL EROSION.
- 5. THE CONTRACTOR(S) ARE RESPONSIBLE FOR EROSION CONTROL IN
- INSTALLED PER THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND INFORMATION PROVIDED IN THESE PLANS AND MAINTAINED THROUGHOUT CONSTRUCTION BY THE CONTRACTOR UNTIL THE PROJECT IS COMPLETED AND THE EROSION CONTROL MEASURES ARE NO LONGER NEEDED. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH MAINTENANCE AND/OR REPLACEMENT OF EROSION CONTROL MEASURES AS DETERMINED BY THE ENGINEER UNTIL PROJECT IS ACCEPTED OR THE EROSION CONTROL MEASURES ARE NO LONGER NEEDED.
- IN ORDER TO PREVENT SILT OR SEDIMENT FROM ENTERING ADJACENT PROJECT.
- 8. ANY MUD TRACKED ONTO ADJACENT PAVED AREAS OR STREETS SHALL BE REMOVED AT THE END OF EACH WORK DAY.
- PER THE REQUIREMENTS OF THE NOI/SWPPP, BMP INSPECTION REPORTS SHALL BE COMPLETED BY THE CONTRACTOR WEEKLY AND WITHIN 24 HOURS AFTER A
- 10. CONTRACTOR SHALL PROVIDE A SIGN NEAR THE ENTRANCE WITH THE
 - A. CONTACT NAME AND INFORMATION
 - B. A COPY OF THE NOI

UTILITY NOTES

- CONSTRUCTION.
- 2. UNLESS OTHERWISE NOTED IN PROJECT SPECIFICATIONS OR CONSTRUCTION DOCUMENTS, PIPE MATERIALS SHALL BE AS FOLLOWS:

WATER LINE

3" OR SMALLER 4" OR LARGER -C900 OR C905 PVC

6" OR SMALLER

6" OR SMALLER -SCHEDULE 40 PVC

12" OR LARGER -CLASS III RCP, UNLESS OTHERWISE NOTED

- INSTALLATION, BEDDING, & TESTING OF UTILITY INSTALLATIONS SHALL BE AS PER
- CITY OF ALTAMONT STANDARD SPECIFICATIONS AND STANDARD SPECIAL PROVISIONS.
- 4. UTILITY TRENCH BACKFILLING SHOULD BE PER GEOTECHNICAL REPORT.
- 5. UTILITY PIPE LENGTHS ARE PROVIDED FOR INFORMATION ONLY. CONTRACTOR INSTALLING UTILITY PIPE LINES.
- 6. UTILITY CONTRACTOR TO COORDINATE BUILDING CONNECTION POINTS WITH
- 7. AN INSERTA-TEE CONNECTION, OR APPROVED EQUAL, SHOULD BE USED WHENEVER RAINLEADERS CONNECT TO STORM WATER TRUNK LINES.
- 8. INSTALL SANITARY SEWER SERVICE LINE AND CLEANOUTS PER INTERNATIONAL PLUMBING CODE (2018) REQUIREMENTS.

- CODE STANDARDS.
- HARDSCAPE AND LANDSCAPE AREAS.
- ACTIVITIES CEASE TEMPORARILY AND WILL NOT RESUME FOR 14 DAYS OR MORE.
- CONFORMATION WITH THE APPROVED DRAWINGS UNTIL PROJECT COMPLETION.
- ALL EXISTING AND PROPOSED EROSION CONTROL MEASURES SHALL BE
- PROPERTIES, APPROPRIATE BMP'S SHALL BE IMPLEMENTED WITHIN THE
- ½" RAIN. REPORTS SHALL BE KEPT WITH THE SWPPP ON SITE.
- **FOLLOWING INFORMATION:**

 - C. LOCATION OF SWPPP

CONTRACTOR TO VERIFY DEPTH & LOCATION OF EXISTING UTILITIES PRIOR TO

-ASTM D2241 IPS, CLASS 160 (SDR26) PVC

SANITARY SEWER

-SCHEDULE 40 PVC

STORM SEWER AND RAIN LEADERS

8" TO 10" -ASTM D3034 SDR-35 PVC

- TO VERIFY ACTUAL LENGTHS OF PIPE REQUIRED PRIOR TO BIDDING &
- PLUMBING PLAN AND BUILDING CONTRACTOR.

BENCHMARKS

CP 100 5/8" REBAR W/ ALUMINUM MKEC CONTROL CAP N: 1518773.178 E: 2247119.135 ELEV: 915.450

CP 101 PK NAIL W/ MKEC CONTROL WASHER N: 1518653.021 E: 2247140.881 ELEV: 914.961

PK NAIL W/ MKEC CONTROL WASHER N: 1518574.788 E: 2247495.962 ELEV: 915.662

CP 103 "+" CUT IN CONCRETE

ELEV: 916.923 HORIZONTAL DATUM: KANSAS COORDINATE SYSTEM 1983 SOUTH ZONE VERTICAL DATUM:

N: 1518740.947 E: 2247391.021

 $ec{ec{ec{ec{ec{ec{vert}}}}}$ existing underground utilities in the area contractor $ec{ec{ec{ec{vert}}}}$ IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.





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CERTIFIED BY



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DRAWING

MANAGER DRAWN BY

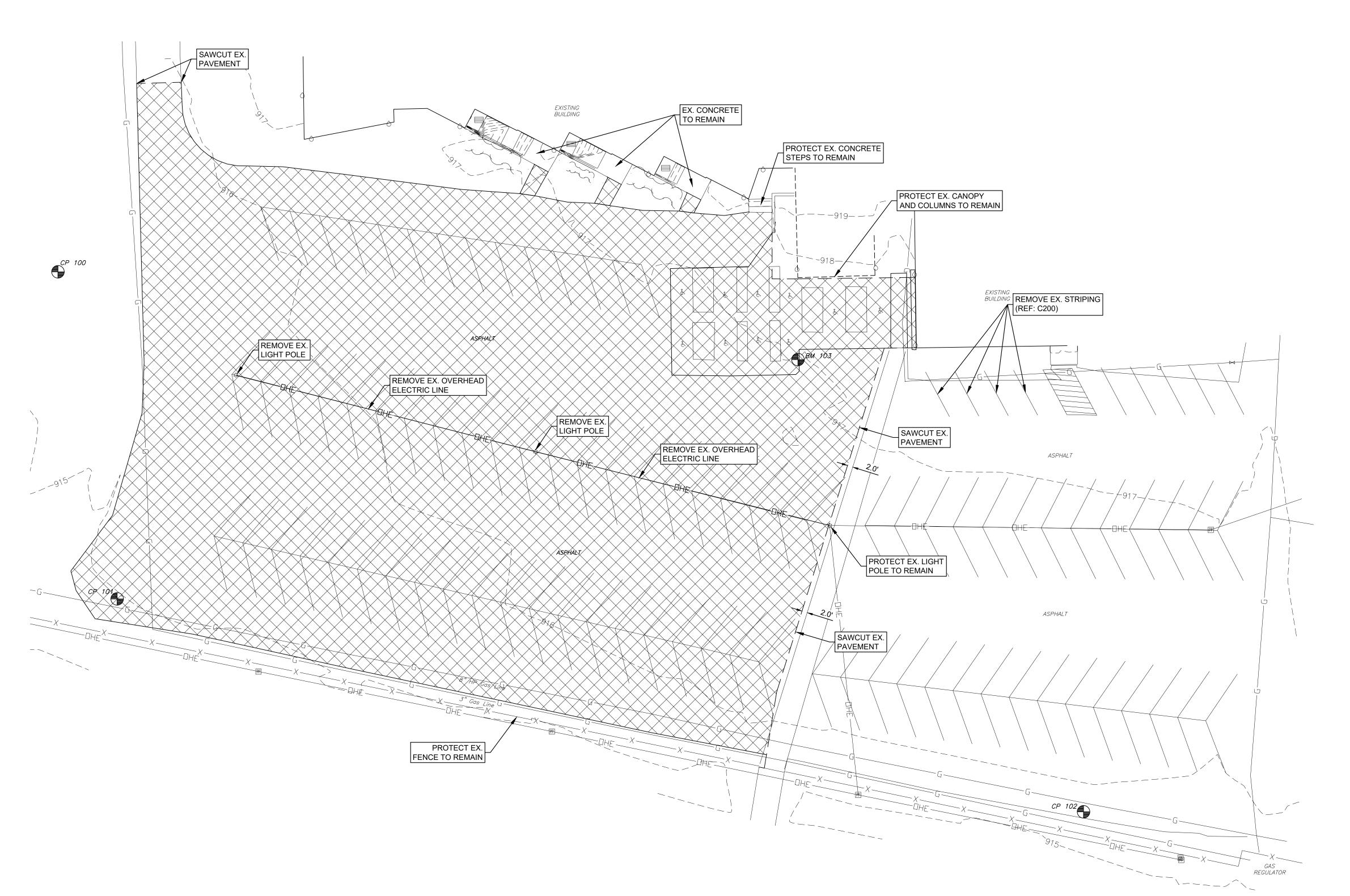
GENERAL

NOTES

MKEC REVISIONS

PROJECT NUMBER 23-09

JULY 2023 SHEET NUMBER



DEMOLITION NOTES

- 1. PRIOR TO DEMOLITION ACTIVITIES, CONTRACTOR TO NOTIFY THE ENGINEER IMMEDIATELY SHOULD THERE BE ANY DISCREPANCIES OF IF THE EXISTING CONDITIONS VARY FROM THOSE SHOWN ON THESE PLANS.
- DISPOSED OF PER LOCAL STANDARDS.

DEMOLITION LEGEND

——W—— EXISTING WATER LINE — UGT — EXISTING UNDERGROUND TELECOMM ---- OHE ---- EXISTING OVERHEAD ELECTRIC ---- UGT ---- EXISTING UNDERGROUND TELEPHONE EXISTING GAS LINE —— G ——

BENCHMARKS

CP 100 5/8" REBAR W/ ALUMINUM MKEC CONTROL CAP N: 1518773.178 E: 2247119.135 ELEV: 915.450

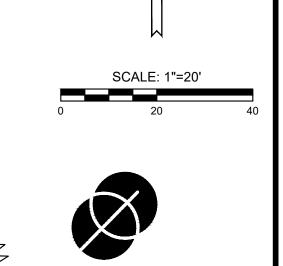
CP 101 PK NAIL W/ MKEC CONTROL WASHER N: 1518653.021 E: 2247140.881 ELEV: 914.961

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HORIZONTAL DATUM: KANSAS COORDINATE SYSTEM 1983 SOUTH ZONE VERTICAL DATUM: NAVD 88

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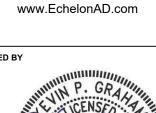


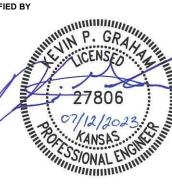
MKEC

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CON

NEW

2. ALL MATERIALS REMOVED FROM THE SITE SHALL BE

PAVEMENT REMOVAL

EXISTING SANITARY SEWER

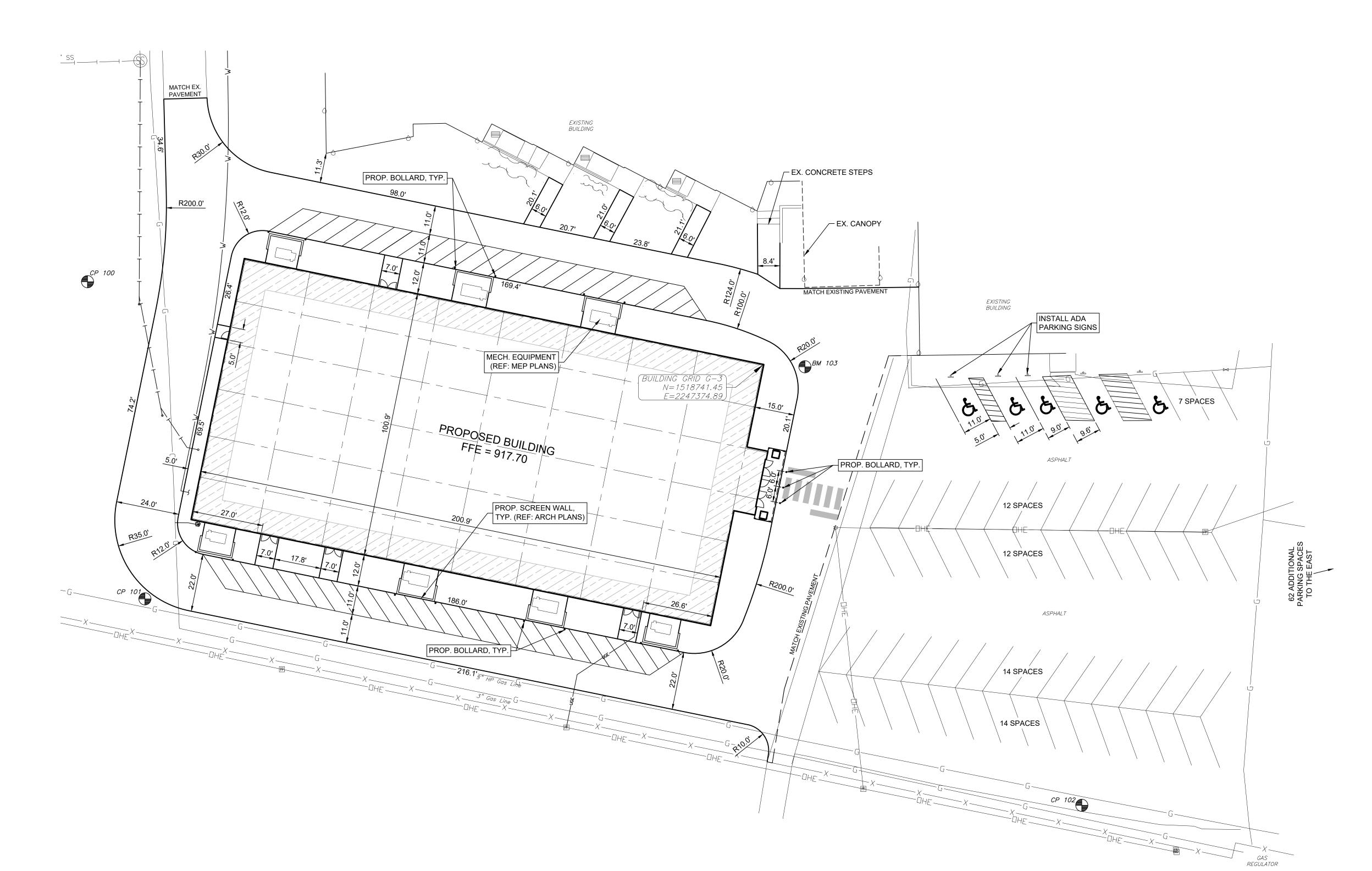
DEMOLITION PLAN

DRAWN BY KPG REVISIONS

PROJECT NUMBER

23-09

JULY 2023



PARKING SUMMARY EXISTING TOTAL PARKING* 224 SPACES EXISTING ADA SPACES 10 SPACES PARKING SPACES REMOVED 103 SPACES PROPOSED TOTAL PARKING* 121 SPACES 5 SPACES REQUIRED ADA SPACES

NOTES

1. UNLESS OTHERWISE NOTED, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF ALTAMONT STANDARD SPECIFICATIONS.

*INCLUDES EXISTING PARKING TO THE EAST NOT SHOWN ON PLAN

- 2. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
- 3. REFER TO ARCHITECTURAL CONSTRUCTION DRAWINGS FOR EXACT BUILDING DIMENSIONS.

BENCHMARKS

CP 100 5/8" REBAR W/ ALUMINUM MKEC CONTROL CAP N: 1518773.178 E: 2247119.135 ELEV: 915.450

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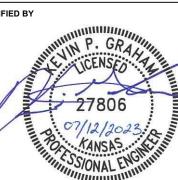
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SCALE: 1"=20'



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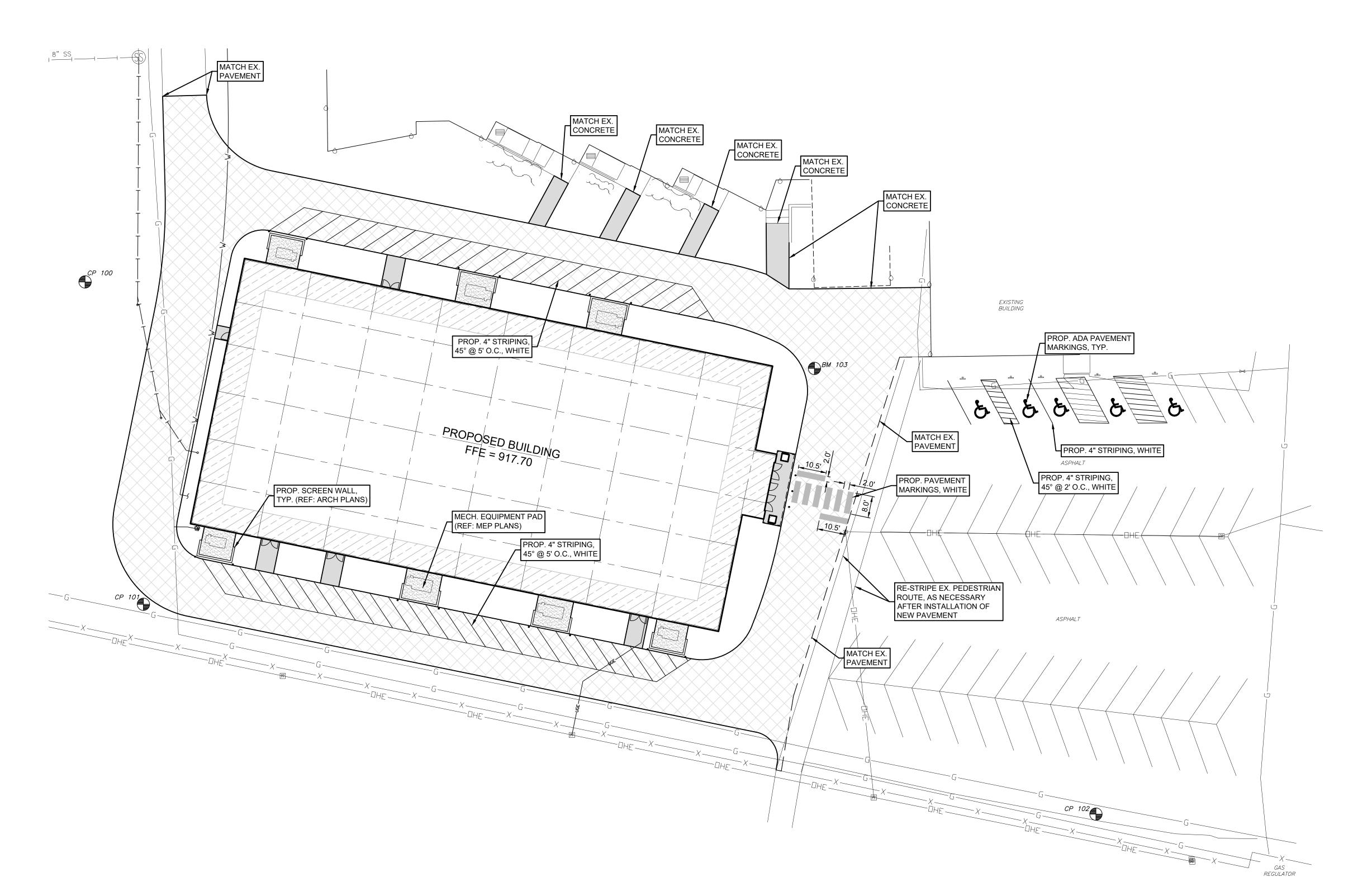
STRUCTION CON (

DIMENSION CONTROL PLAN

DRAWN BY MANAGER MKEC REVISIONS

23-09 JULY 2023

PROJECT NUMBER



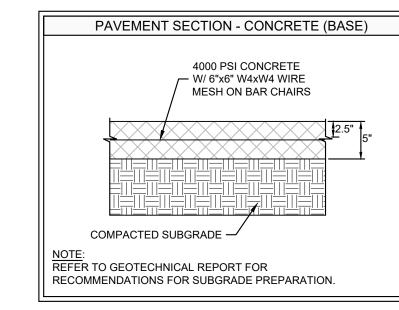
LEGEND

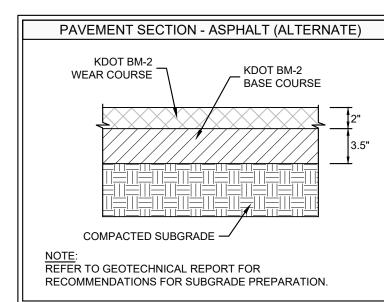
VEHICULAR PAVEMENT

4" CONCRETE SIDEWALK

NOTES

1. REFER TO GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT UNDER THE TITLE "NEW GYMNASIUM - HARRISON GYMNASIUM AUDITORIUM", PREPARED BY PALMERTON & PARRISH, INC., DATED 04/12/2023. (PROJECT NO. 23-0826)





BENCHMARKS

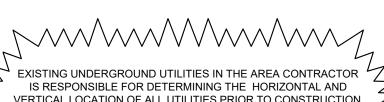
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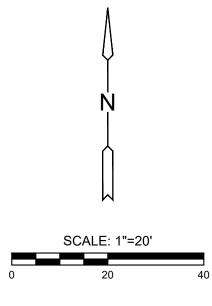
CP 102 PK NAIL W/ MKEC CONTROL WASHER N: 1518574.788 E: 2247495.962 ELEV: 915.662

CP 103 "+" CUT IN CONCRETE N: 1518740.947 E: 2247391.021 ELEV: 916.923

HORIZONTAL DATUM: KANSAS COORDINATE SYSTEM 1983 SOUTH ZONE VERTICAL DATUM:



EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR
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ANY DISCREPANCIES ON THE PLANS.







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STRUCTION

CON

NEW

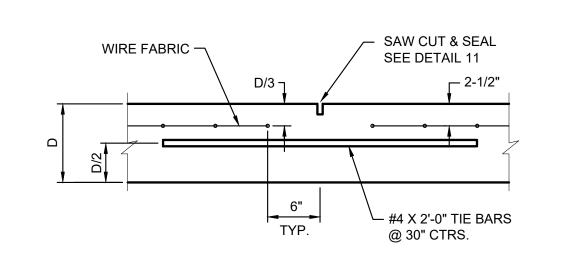
C

DRAWING **PAVING PLAN**

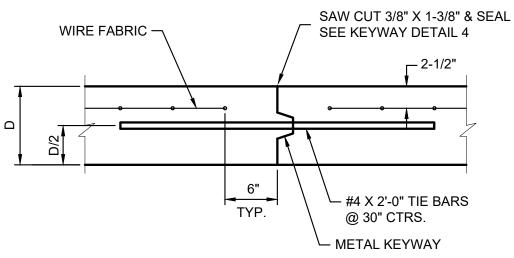
MANAGER DRAWN BY KPG REVISIONS

PROJECT NUMBER 23-09

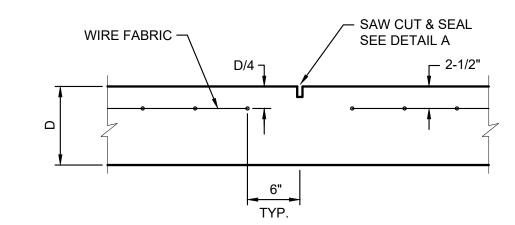
JULY 2023



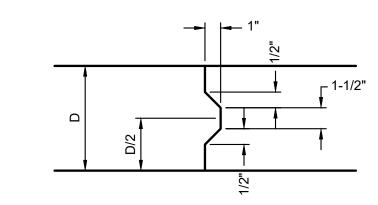




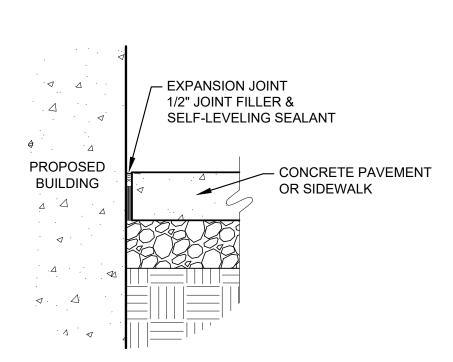
LONGITUDINAL JOINT DETAIL (OPTIONAL)

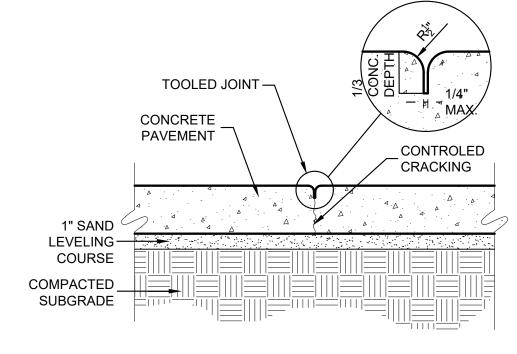


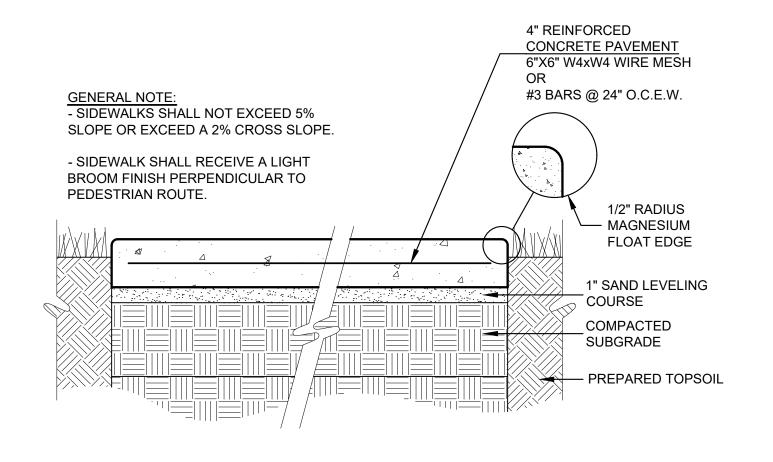


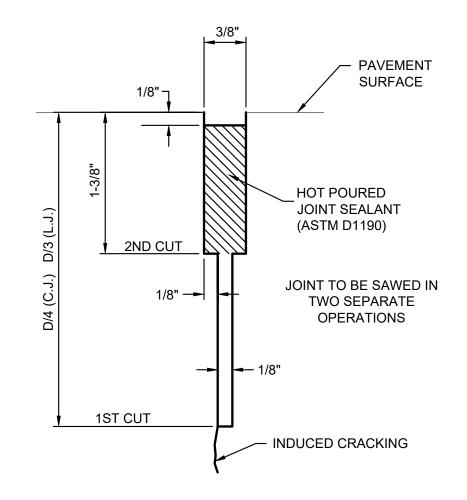










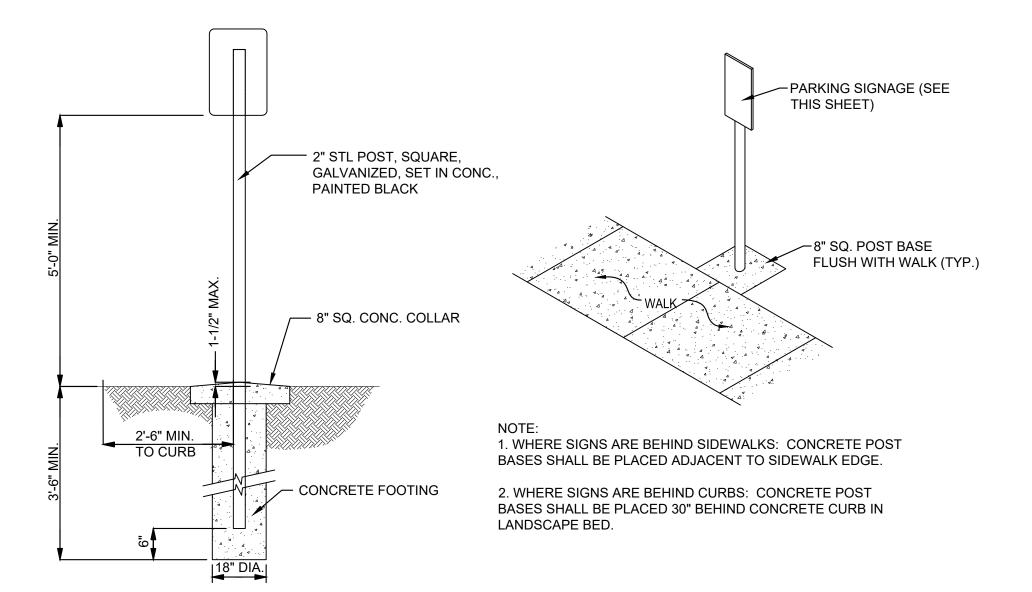


EXPANSION JOINT AT BUILDING

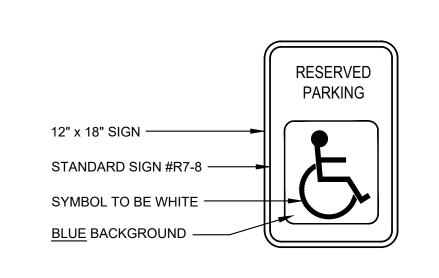










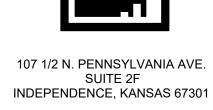


- 1. ALL SIGNS TO BE 0.080" THICK ALUMINUM 2. ALL SIGNS SHALL CONFORM WITH ALL CURRENT A.D.A.,
- FEDERAL, STATE AND LOCAL CODES AND REGULATIONS.
- 3. ONE AT EACH HANDICAP STALL

HANDICAPPED PARKING SIGN











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C

STRUCTION

CON

NEW

DRAWING **PAVING DETAILS**

MANAGER MKEC REVISIONS

PROJECT NUMBER 23-09 JULY 2023

NOTES

- ALL SPOT ELEVATIONS REPRESENT FINISHED SURFACE OR FLOW LINE GRADES, UNLESS OTHERWISE NOTED.
- GRADES IN ALL SIDEWALK, ACCESSIBLE ROUTES, INCLUDING DRIVEWAY CROSSINGS, SHALL CONFORM TO ALL APPLICALBE A.D.A STANDARDS: NOT TO EXCEED 5% ALONG TRAVEL PATH WITH NOT MORE THAN 2% CROSS SLOPE AND NOT TO EXCEED 2% IN ANY DIRECTION IN ACCESSIBLE PARKING AREAS.
- 3. MAXIMUM SLOPE IN TURF AREAS SHALL BE 4:1.

LEGEND

BENCHMARKS

CP 100 5/8" REBAR W/ ALUMINUM MKEC CONTROL CAP
N: 1518773.178 E: 2247119.135
ELEV: 915.450

CP 101 PK NAIL W/ MKEC CONTROL WASHER
N: 1518653.021 E: 2247140.881
ELEV: 914.961

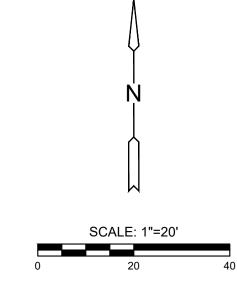
CP 102 PK NAIL W/ MKEC CONTROL WASHER N: 1518574.788 E: 2247495.962 ELEV: 915.662

CP 103 "+" CUT IN CONCRETE
N: 1518740.947 E: 2247391.021
ELEV: 916.923

HORIZONTAL DATUM: KANSAS COORDINATE SYSTEM 1983 SOUTH ZONE VERTICAL DATUM: NAVD 88

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR
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CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF
ANY DISCREPANCIES ON THE PLANS.





HELON H + DESIGN



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NEW GYM FOR USD506
SH SCHOOL AVE ALTAMONT KS 673

STRUCTION

CON

NEW

GRADING
PLAN

MANAGER DRAWN BY

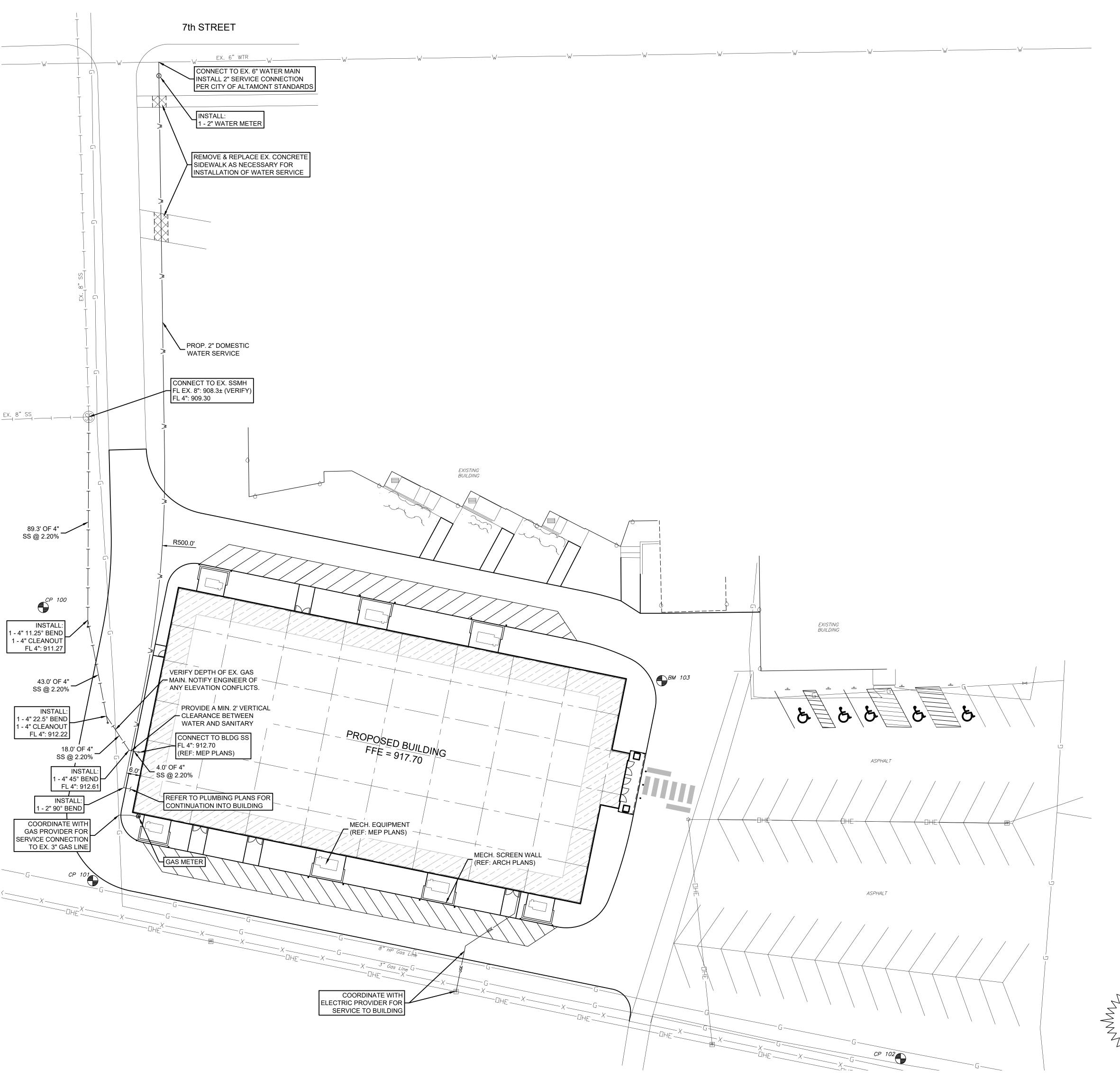
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REVISIONS

PROJECT NUMBER

JULY 2023
SHEET NUMBER

C300



LEGEND

| | WATERLINE |
|-------------|-----------------------|
| ├ ── | SANITARY SEWER |
| —— UGT—— | UNDERGROUND TELEPHON |
| UGE | UNDERGROUND ELECTRICA |
| ——ОНЕ—— | OVERHEAD ELECTRICAL |
| ——— G ——— | UNDERGROUND GAS |

NOTES

- 1. REFER TO SHEET C100 FOR UTILITY GENERAL NOTES.
- 2. REFER TO MEP PLANS FOR SITE EQUIPMENT.
- 3. CONTRACTOR TO OBTAIN ANY NECESSARY PERMITS FROM THE CITY OF ALTAMONT FOR CONNECTIONS TO EXISTING WATER AND SANITARY MAINS. CONTRACTOR SHALL NOTIFY CITY TO ANY CONSTRUCTION ACTIVITIES WITHIN PUBLIC R.O.W.
- 4. PRIOR TO CONSTRUCTION, CONTRACTOR TO VERIFY DEPTH AT THE EXISTING SANITARY SEWER MANHOLE AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- ALL BUILDING DOWNSPOUTS SHALL DISCHARGE AT GRADE. REFER TO ARCH. PLANS.

BENCHMARKS

5/8" REBAR W/ ALUMINUM MKEC CONTROL CAP N: 1518773.178 E: 2247119.135 ELEV: 915.450

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ANY DISCREPANCIES ON THE PLANS. ANY DISCREFAINGLES CO.



SCALE: 1"=20'



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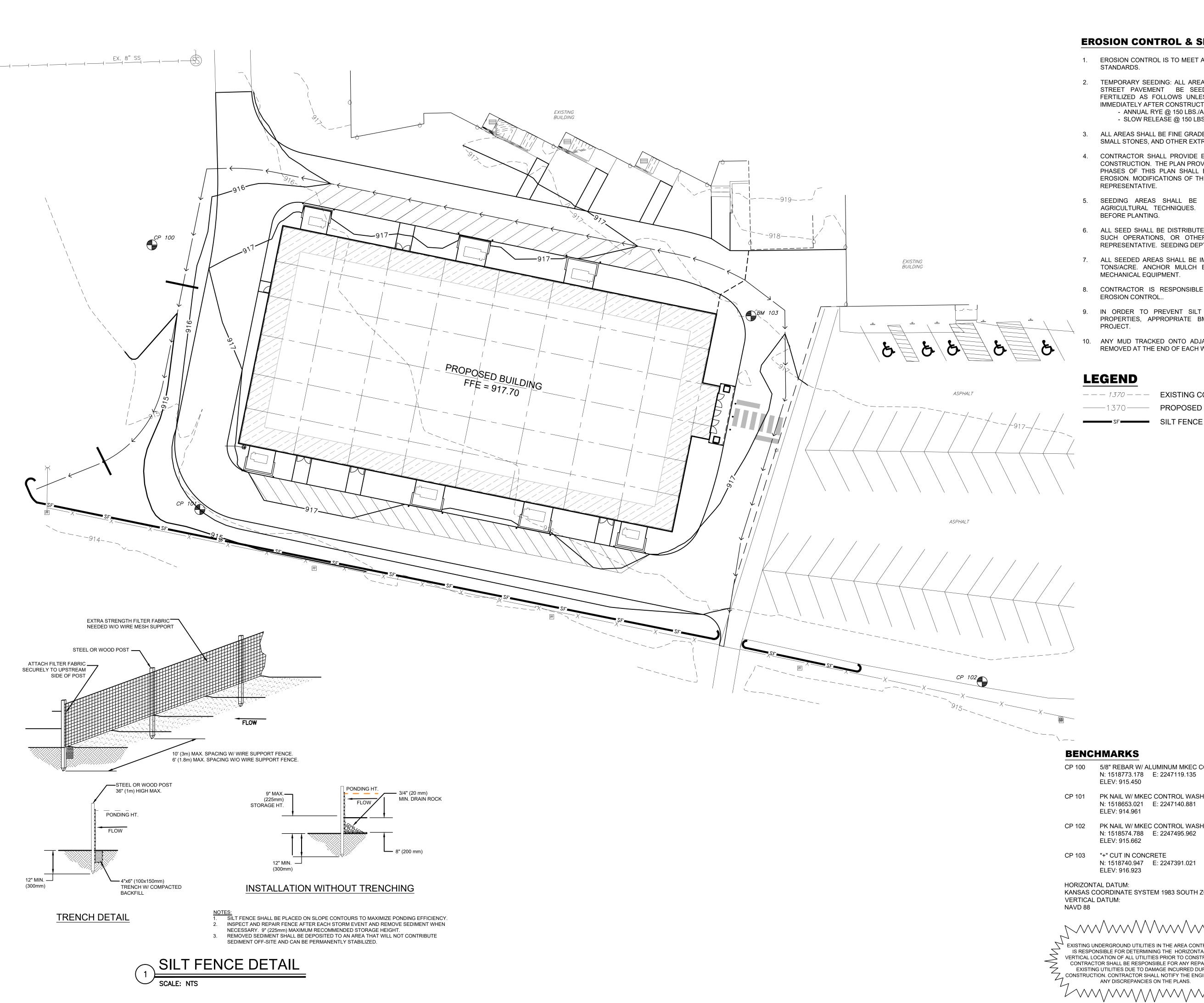
UTILITY PLAN

MANAGER DRAWN BY KPG

REVISIONS

PROJECT NUMBER

23-09 JULY 2023



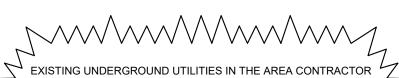
EROSION CONTROL & SEEDING NOTES

- 1. EROSION CONTROL IS TO MEET ALL FEDERAL, STATE, COUNTY AND LOCAL CODE
- 2. TEMPORARY SEEDING: ALL AREAS DISTURBED WITH EXCEPTION OF PROPOSED STREET PAVEMENT BE SEEDED (COST SUBSIDIARY TO PROJECT) AND FERTILIZED AS FOLLOWS UNLESS PERMANENT SEEDING CAN BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION .:
 - ANNUAL RYE @ 150 LBS./ACRE - SLOW RELEASE @ 150 LBS./ACRE
- 3. ALL AREAS SHALL BE FINE GRADED AND SURFACE SHALL BE FREE FROM STICKS, SMALL STONES, AND OTHER EXTRANEOUS MATERIALS.
- 4. CONTRACTOR SHALL PROVIDE EROSION PROTECTION THROUGHOUT PROJECT CONSTRUCTION. THE PLAN PROVIDED HERE IS FOR FINAL PROTECTION, VARIOUS PHASES OF THIS PLAN SHALL BE IMPLEMENTED OR MODIFIED TO CONTROL EROSION. MODIFICATIONS OF THE PLAN SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE.
- SEEDING AREAS SHALL BE PREPARED FOR PLANTING WITH COMMON AGRICULTURAL TECHNIQUES. APPROVE WITH OWNER'S REPRESENTATIVE BEFORE PLANTING.
- 6. ALL SEED SHALL BE DISTRIBUTED WITH AN ACCEPTABLE DRILL INTENDED FOR SUCH OPERATIONS, OR OTHER EQUIPMENT APPROVED BY THE OWNER'S REPRESENTATIVE. SEEDING DEPTH SHALL BE 1/4 OF AN INCH.
- 7. ALL SEEDED AREAS SHALL BE IMMEDIATELY MULCHED WITH PRAIRIE HAY AT 2 TONS/ACRE. ANCHOR MULCH BY CRIMPING INTO TOPSOIL WITH SUITABLE MECHANICAL EQUIPMENT.
- 8. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND IMPLEMENTING ALL
- 9. IN ORDER TO PREVENT SILT OR SEDIMENT FROM ENTERING ADJACENT PROPERTIES, APPROPRIATE BMP'S SHALL BE IMPLEMENTED WITHIN THE
- 10. ANY MUD TRACKED ONTO ADJACENT PAVED AREAS OR STREETS SHALL BE REMOVED AT THE END OF EACH WORK DAY.

---1370--- EXISTING CONTOUR ——1370—— PROPOSED CONTOUR

- CP 100 5/8" REBAR W/ ALUMINUM MKEC CONTROL CAP N: 1518773.178 E: 2247119.135
- CP 101 PK NAIL W/ MKEC CONTROL WASHER N: 1518653.021 E: 2247140.881
- CP 102 PK NAIL W/ MKEC CONTROL WASHER N: 1518574.788 E: 2247495.962
- CP 103 "+" CUT IN CONCRETE N: 1518740.947 E: 2247391.021

KANSAS COORDINATE SYSTEM 1983 SOUTH ZONE



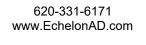
EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING
CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF
ANY DISCREPANCIES ON THE PLANS.

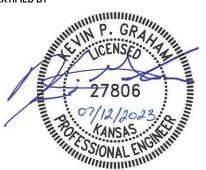


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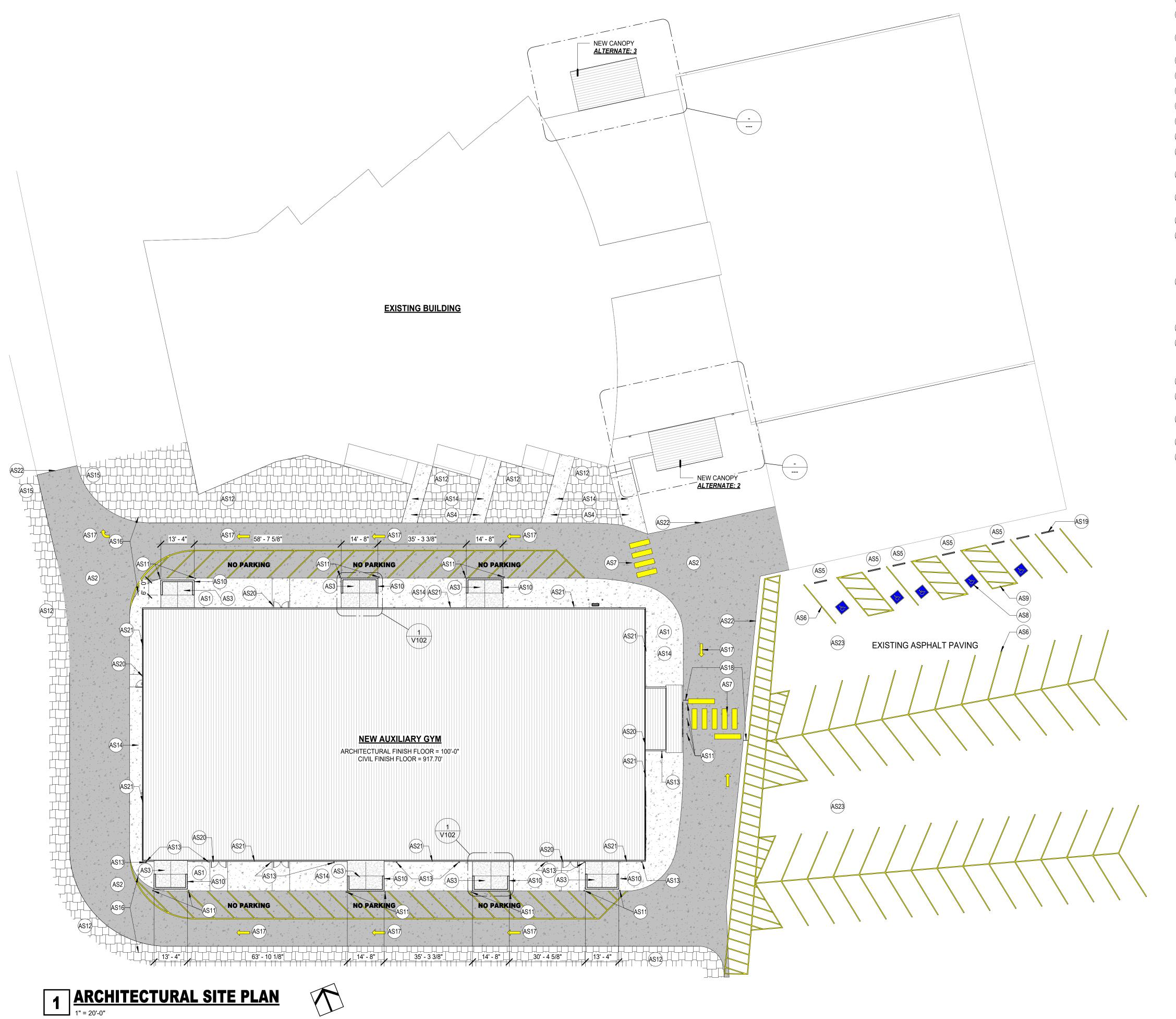
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EROSION CONTROL **PLAN**

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PROJECT NUMBER 23-09

JULY 2023



ARCHITECTURAL SITE PLAN KEY NOTES:

ARCHITECTURAL DETAIL-1/V102

- (AS1) STANDARD REINFORCED CONCRETE SIDEWALK RE: CIVIL
- (AS2) HEAVY REINFORCED CONCRETE SITE PAVING *RE: CIVIL*
- (AS3) 4" THICK REINFORCED CONCRETE EQUIPMENT PAD **RE**:
- INFILL NEW 4" CONCRETE SIDEWALK PAVING BETWEEN NEW
 - ADDITION & EXISTING SITE PAVING
- ADA PARKING SIGNAGE POST MOUNTED RE: CIVIL DETAIL
- (AS6) 4" WIDE PAINTED PARKING STRIPE
- (AS7) 2'-0" WIDE PAINTED CROSSWALK STRIPE
- (AS8) PAINTED ADA PARKING SYMBOL *RE: 6/V102*
- (AS9) PAINTED ADA ACCESS AISLE *RE: 6/V102*
- MASONRY SCREEN WALL RE: SCREEN WALL DETAIL-2/V102 CONCRETE FILLED STEEL BOLLARD WITH PLASTIC SLEEVE -
- RE:4/V102
- RE-GRADE SITE AND INSTALL NEW GRASS SEED, COVER WITH HAY AND WATER – RE: CIVIL
- REINFORCED CONCRETE TROUGH @ DOWNSPOUT RE: ARCHITECTURAL DETAIL
- SLOPE CONCRETE FOR DRAINAGE
- ENTRANCE ONLY SIGNAGE MOUNTED ON POST 12"X18" ALUMINUM SIGN w/ ROUNDED CORNERS &/ 3M HI INTENSITY REFLECTIVE FILM/INK & (02) 3/8" DIAMETER MOUNTING HOLES ON 8' TALL "U" SHAPED GALVANIZED SIGN POST SET 2'-6" DEEP IN GROUND w/ 8" ROUND CONCRETE BASE
- EXIT ONLY SIGNAGE MOUNTED ON POST 12"X18" ALUMINUM SIGN w/ ROUNDED CORNERS & 3M HI INTENSITY REFLECTIVE FILM/INK & (02) 3/8" DIAMETER MOUNTING HOLES ON 8' TALL "U" SHAPED GALVANIZED SIGN POST SET 2'-6" DEEP IN GROUND w/ 8" ROUND CONCRETE BASE
- PAINTED DIRECTIONAL ARROW ON PAVEMENT
- POST MOUNTED STOP SIGN <u>12"X12" ALUMINUM SIGN w/ OCTAGON</u> W/ 3M HI INTENSITY REFLECTIVE FILM/INK & (02) 3/8" DIAMETER MOUNTING HOLES ON 8' TALL "U" SHAPED GALVANIZED SIGN POST SET 2'-6" DEEP IN GROUND w/ 8" ROUND CONCRETE BASE
- WHEEL STOP
- EXPANSION JOINT w/ TRAFFIC SEALANT & #4's X 1-0 @ 24" O.C. @ BUILDING FACE
- EXPANSION JOINT w/ TRAFFIC SEALANT & #4's X 1-0 @ 48" O.C. @ BUILDING FACE
- NEW PAVING UP TO THE EXISTING
- RESTRIPE EXISTING LINES





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ARCHITECTURAL SITE PLAN

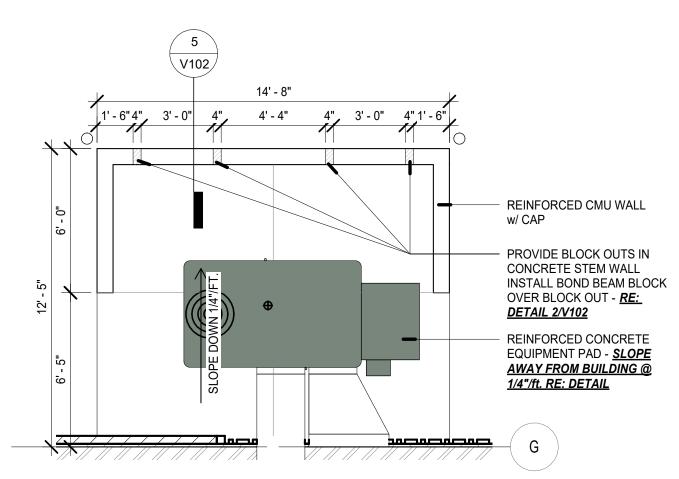
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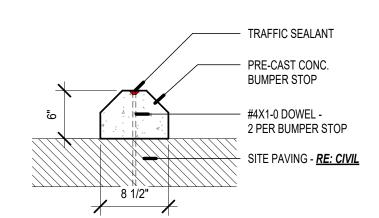
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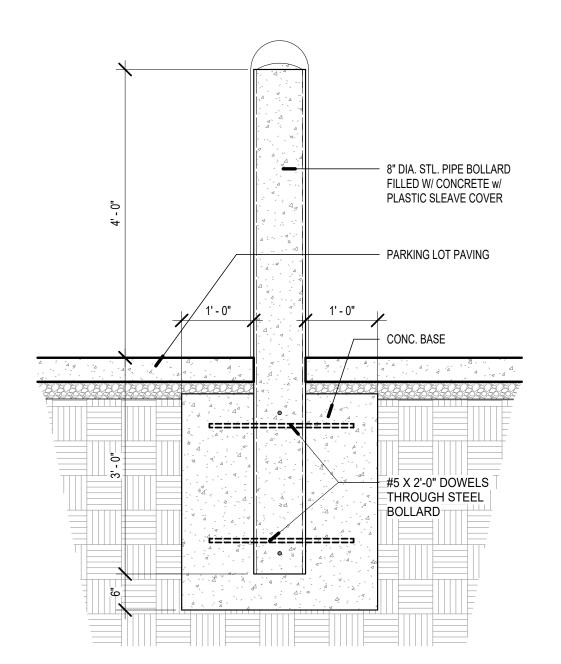
V101



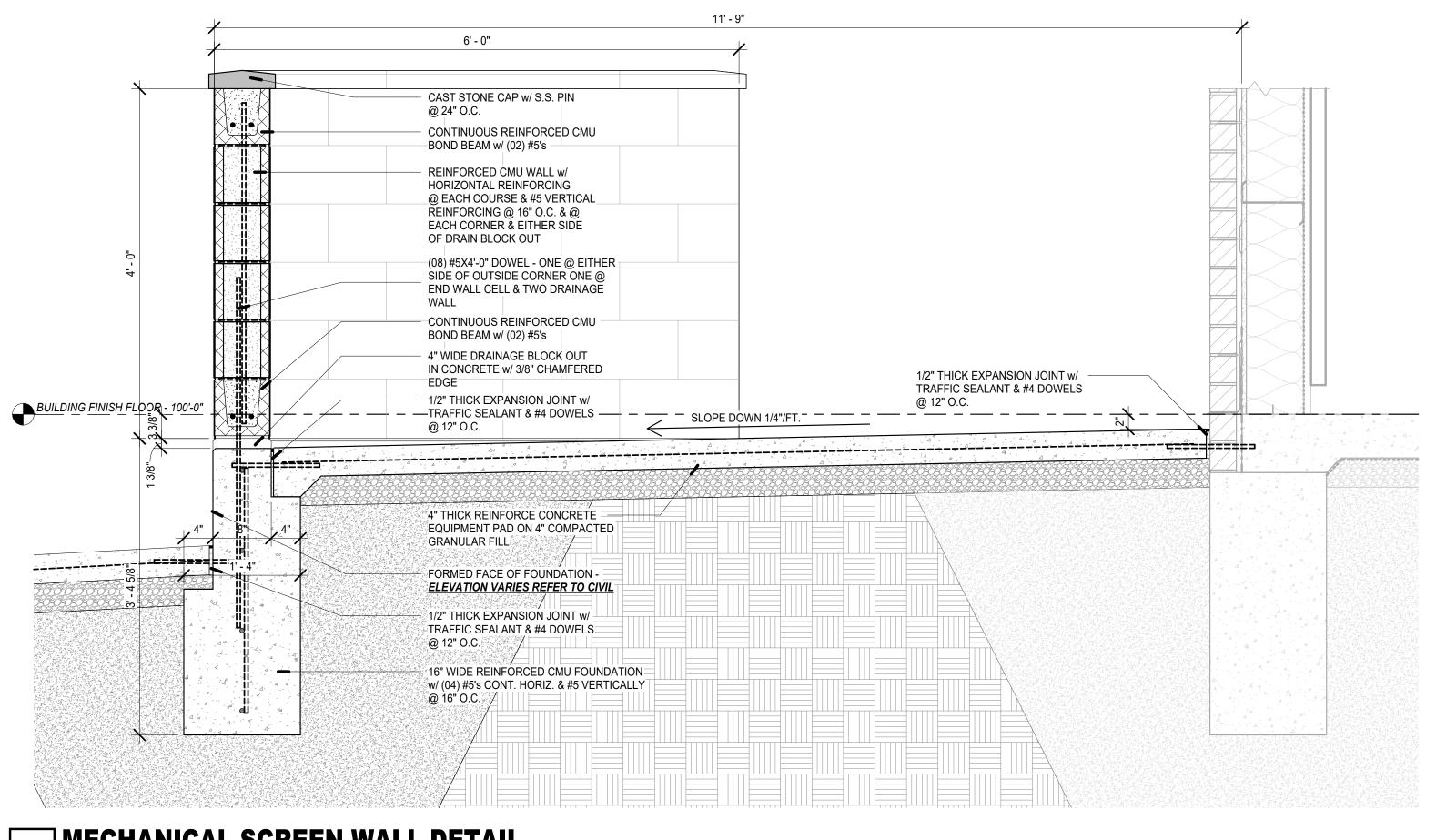
1 TYPICAL EQUIPMENT PAD PLAN 1/4" = 1'-0"



3 BUMPER STOP 1" = 1'-0"

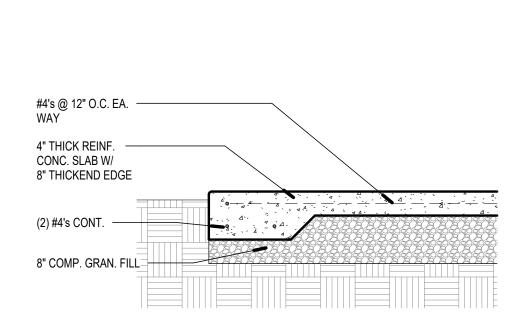




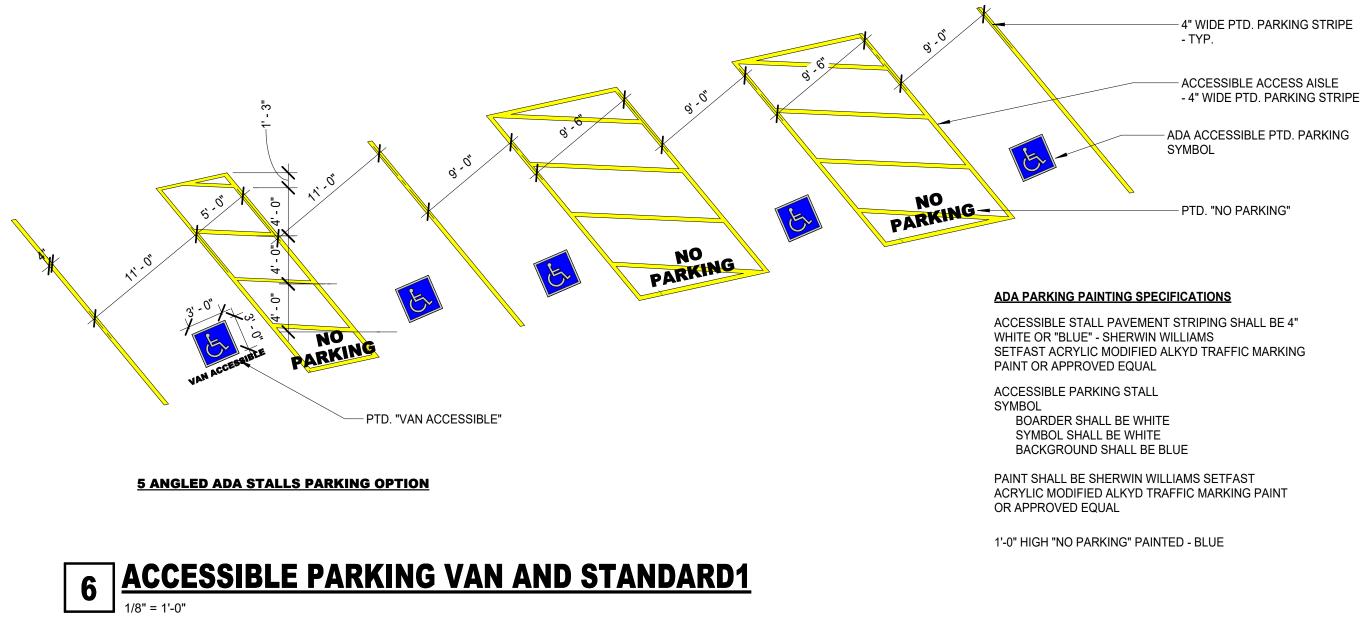


2 MECHANICAL SCREEN WALL DETAIL

1" = 1'-0"







1'-0" HIGH "NO PARKING" PAINTED - BLUE



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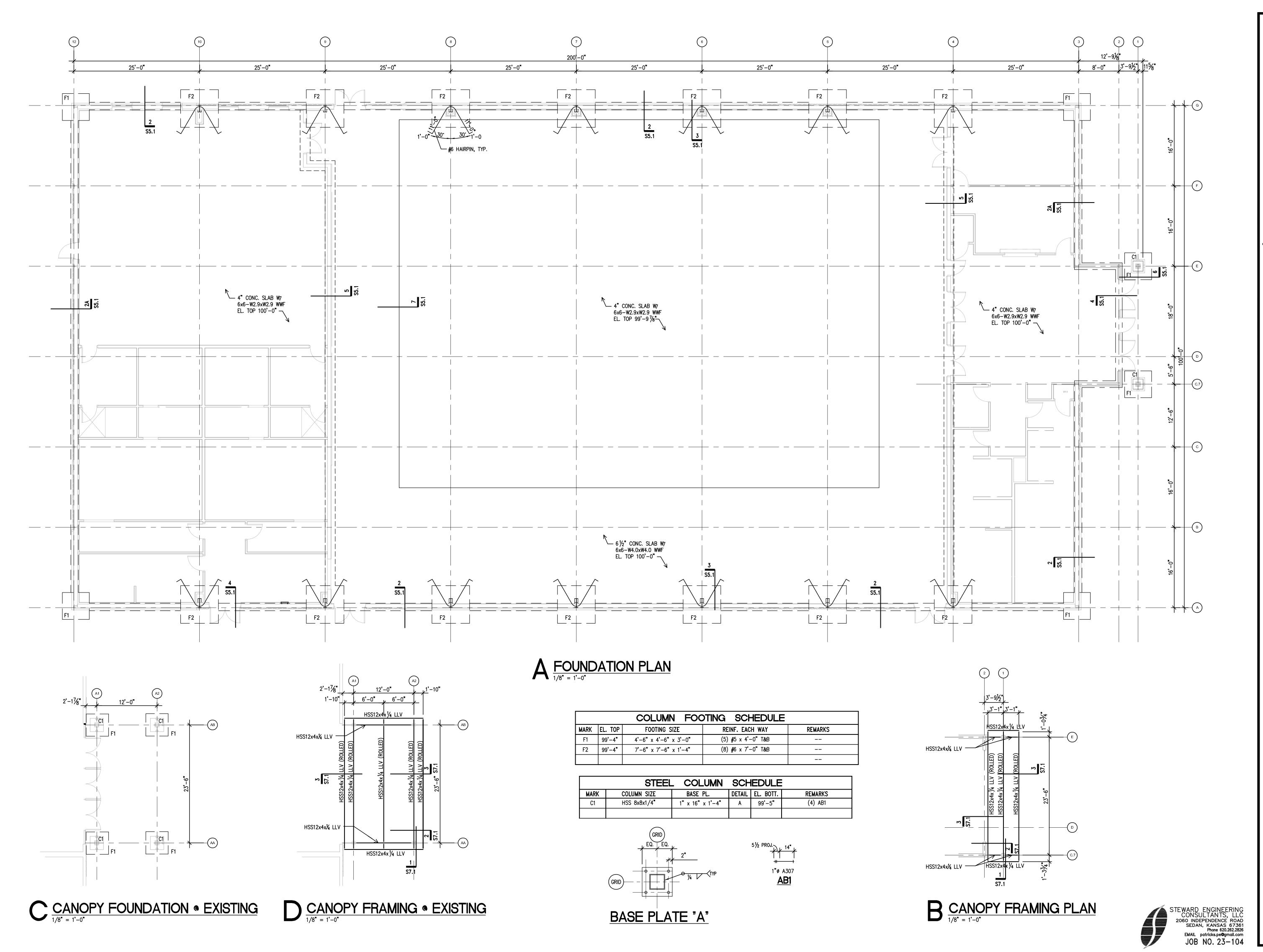
SITE DETAILS

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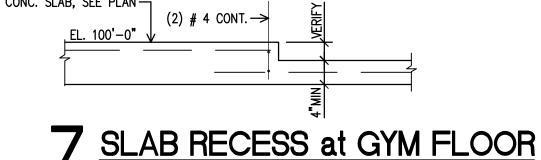
DRAWING STRUCTURAL **PLANS**

PBS

PROJECT NUMBER

7/26/2023 SHEET NUMBER

S2.1



ALL NOTES HEREAFTER ARE TYPICALLY APPLICABLE UNLESS OTHERWISE NOTED ON PLANS OR DETAILS.

G 1 THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECT'S PLANS BEFORE STARTING WORK. G 2 SEE ARCHITECTURAL PLANS FOR EXACT DIMENSIONS AND LOCATIONS OF OPENINGS IN WALLS, ROOF AND FLOOR SYSTEMS.

G 3 THE CONTRACTOR SHALL VERIFY ALL MECHANICAL OPENING SIZES, LOCATIONS AND UNIT WEIGHTS WITH MECHANICAL CONTRACTOR. G 4 SUBMIT ALL SHOP DRAWINGS ON ONE REPRODUCIBLE PRINT AND TWO BLUE-LINE PRINTS. THE REPRODUCIBLE PRINT WILL BE RETURNED. ALL BLUE-LINE PRINTS REQUIRED BY THE CONTRACTOR ARE THE RESPONSIBILITY OF THE CONTRACTOR.

G 5 GENERAL CONTRACTOR SHALL APPROVE AND STAMP ALL SHOP DRAWINGS BEFORE SUBMITTING FOR STRUCTURAL REVIEW. ALL DEVIATIONS FROM THE CONTRACT DRAWINGS SHALL BE HIGHLIGHTED BY THE FABRICATOR AND GENERAL CONTRACTOR.

G 6 CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY BRACING, SHORING, GUYING, ETC. AND OTHER METHODS TO PREVENT EXCESSIVE STRESSES AND HOLD STRUCTURAL ELEMENTS IN PLACE DURING CONSTRUCTION. THESE PROVISIONS TO REMAIN IN PLACE UNTIL SUFFICIENT PERMANENT MEMBERS ARE CONSTRUCTED TO INSURE THE SAFETY OF THE STRUCTURE.

G 7 ALL DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS, UNLESS SHOWN OTHERWISE.

FS 1 FOUNDATION DESIGN IS BASED ON AN ASSUMED BEARING CAPACITY. PREPARATION OF SOILS AT BUILDING PAD AND ALL SOILS WORK. INCLUDING BACKFILL OF UTILITY TRENCHES AND VERIFICATION OF BEARING MATERIALS, SHALL BE UNDER THE DIRECTION OF A QUALIFIED SOILS ENGINEER. PROXIMITY OF UTILITY TRENCHES TO BUILDING FOUNDATION SYSTEM SHALL BE AS APPROVED BY THE SOILS ENGINEER

TO INSURE THE INTEGRITY OF THE BEARING SOILS. FS 2 ALL FOUNDATIONS SHALL BEAR ON UNDISTURBED EARTH OR ENGINEERED FILL AT ELEVATIONS SHOWN ON DETAILS. BEARING MATERIALS TO BE VERIFIED BY A LICENSED SOILS ENGINEER.

FS 3 ALL ABANDONED FOUNDATIONS, UTILITIES, ETC., THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED. BEAR NEW FOUNDATIONS ON ENGINEERED FILL OR INCREASE BEARING DEPTH TO UNDISTURBED EARTH AT REMOVED OBSTRUCTIONS.

FS 4 ALL FOUNDATIONS (OR PORTIONS THEREOF) BELOW GRADE MAY BE EARTH FORMED BY NEAT EXCAVATIONS, SOIL PERMITTING.

FS 5 FOOTINGS TO BE CENTERED ON WALLS, OR COLUMNS, U.N.O. FS 6 GRADE BEAM CONSTRUCTION JOINTS TO BE CENTERED BETWEEN PIERS.

C 1 CONCRETE REINFORCING FABRICATOR AND GENERAL CONTRACTOR SHALL CERTIFY THAT THEY HAVE REVIEWED ALL SHOP DRAWING SHEETS BEFORE SUBMITTING FOR REVIEW, BY STAMPING EACH SHEET, OR BY COMPANY LETTERHEAD STATING THE SAME, FOR EACH SUBMITTAL. ALL DEVIATIONS FROM THE CONTRACT DRAWINGS SHALL BE HIGHLIGHTED BY THE FABRICATOR AND/OR GENERAL CONTRACTOR. SHOP DRAWINGS SUBMITTED FOR ENGINEER'S REVIEW ARE ONLY CHECKED FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS. NO RESPONSIBILITY IS ASSUMED BY THE ENGINEER FOR THE CORRECTNESS OF DIMENSIONS, DETAILS, QUANTITIES OR PROCEDURES SHOWN ON THE SHOP DRAWINGS.

C 2 SHOP DRAWINGS SHALL BE PREPARED IN KEEPING WITH THE CURRENT NATIONAL STANDARDS: A.C.I. AND C.R.S.I.

C 3 CONCRETE SHALL CONFORM TO THE CURRENT "ACI MANUAL OF CONCRETE PRACTICE".

C 4 ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, EXCEPT CONCRETE SLABS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS AND HAVE 4% TO 6% ENTRAINED AIR. SEE PLANS AND DETAILS FOR ADDITIONAL STRENGTHS AND REQUIREMENTS.

C 5 PORTLAND CEMENT SHALL MEET ASTM C150, TYPE I OR III. C 6 ALL AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL MEET ASTM

C 7 NO ADMIXTURES, OTHER THAN AIR ENTRAINMENT, SHALL BE USED

WITHOUT THE ARCHITECT'S OR ENGINEER'S PRIOR APPROVAL C 8 REINFORCING SHALL BE DETAILED, FABRICATED, AND PLACED PER CRSI AND ACI. INCLUDING CONCRETE COVER AND BAR SUPPORTS. (DESIRED METHOD OF SUPPORTING TOP BARS IN THICK MATS TO BE VERIFIED WITH CONTRACTOR.) PROVIDE CORNER BARS AT ALL "TRENCH FOOTING" AND WALL INTERSECTIONS INCLUDING THICKENED SLABS. CORNER BARS TO MATCH HORIZONTAL REINFORCING IN QUANTITY, SIZE AND SPACING. AT INTERSECTIONS OF CONTINUOUS OR SPREAD

FOOTINGS, EXTEND ALL BARS TO FAR SIDE OF INTERSECTING FOOTING. C 9 LAP BARS AT ALL SPLICES AND DOWELS. MINIMUM LAP AS SCHEDULED BELOW, UNLESS NOTED OTHERWISE ON PLANS AND/OR DETAILS. STAGGER ALL SPLICES 24" MINIMUM:

BAR SIZE VERTICAL BARS HORIZONTAL BARS CORNER BARS #6 AND SMALLER 36 BAR DIA. 46 BAR DIA. 33 BAR DIA. #7 AND LARGER 45 BAR DIA. 58 BAR DIA. 42 BAR DIA. C 10 LAP WELDED WIRE FABRIC 6" OR ONE FULL MESH, WHICHEVER IS

C 11 ALL REINFORCING SHALL MEET ASTM A615, GRADE 60. REINFORCING TO BE WELDED SHALL MEET ASTM A706, GRADE 60. ALL WELDED WIRE FABRIC (WWF) SHALL MEET ASTM A185.

AT FORMED SURFACES LATER EXPOSED TO SOIL OR WEATHER: 1 1/2" AT ALL OTHER FORMED SURFACES: 3/4" AT SLABS. C 13 WELDING OF REINFORCEMENT SHALL BE WITH LOW HYDROGEN ELECTRODES IN CONFORMANCE WITH "WELDING REINFORCING STEEL,

ETC.", AWS D12.1. REINFORCING TO BE WELDED SHALL MEET ASTM A706. GRADE 60. C 14 ALL CONCRETE SLABS SHALL HAVE FROM 4% TO 6% ENTRAINED AIR. C 15 ALL SLABS ON GRADE SHALL BE 4" THICK WITH 6x6 W2.1/W2.1 WWF

C 12 CONCRETE PROTECTION FOR REINFORCING: 3" AT FOUNDATIONS; 2"

AT MID-DEPTH. SEE ARCHITECTURAL PLANS FOR FINISH ELEVATIONS. SEE DETAILS FOR CONTROL AND/OR CONSTRUCTION JOINTS. C 16 FLOOR SLABS ON GRADE SHALL HAVE SAWN CONTROL JOINTS LOCATED TO FORM APPROXIMATELY SQUARE PANELS OF NOT MORE THAN 169 SQUARE FEET. CONSTRUCTION JOINTS MAY BE SUBSTITUTED AT

COLUMN CENTERLINES WHEREVER POSSIBLE C 17 NO HOLES OR OPENINGS THROUGH FOUNDATION WALLS AND/OR FOOTINGS ARE PERMITTED WITHOUT ENGINEERS APPROVAL.

CONTRACTORS OPTION. CONTROL JOINTS SHALL BE CENTERED ON

C 18 NO ALUMINUM SHALL BE EMBEDDED IN ANY CONCRETE. C 19 PROVIDE 2-#5, 4'-0" LONGER THAN OPENING DIMENSION, ON ALL

SIDES OF OPENINGS IN ALL CONCRETE. C 20 LOCATION OF CONSTRUCTION JOINTS, RUSTICATION JOINTS AND BRICK LEDGES SHALL BE APPROVED BY ARCHITECT OR ENGINEER.

C 21 EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4". C 22 CONDUIT OR PIPE SHALL NOT EXCEED 30% OF SLAB THICKNESS AND SHALL BE PLACED BELOW TOP LAYER OF REINFORCING CONCENTRATION OF CONDUITS OR PIPES SHALL BE AVOIDED EXCEPT WHERE DETAILED OPENINGS ARE PROVIDED.

S 1 STEEL FABRICATOR AND GENERAL CONTRACTOR SHALL CERTIFY THAT THEY HAVE REVIEWED ALL SHOP DRAWING SHEETS BEFORE SUBMITTING FOR REVIEW, BY STAMPING EACH SHEET, OR BY COMPANY LETTERHEAD STATING THE SAME, FOR EACH SUBMITTAL. ALL DEVIATIONS FROM THE CONTRACT DRAWINGS SHALL BE HIGHLIGHTED BY THE FABRICATOR AND/OR GENERAL CONTRACTOR. SHOP DRAWINGS SUBMITTED FOR ENGINEER'S REVIEW ARE ONLY CHECKED FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS. NO RESPONSIBILITY IS ASSUMED BY THE ENGINEER FOR THE CORRECTNESS OF DIMENSIONS. DETAILS, QUANTITIES OR PROCEDURES SHOWN ON THE SHOP

S 2 SHOP DRAWINGS SHALL BE PREPARED IN KEEPING WITH THE CURRENT NATIONAL STANDARDS: A.I.S.C.

DRAWINGS.

S 3 ELEVATIONS TOP OF STEEL NOTED ON DRAWINGS. BEAMS FRAME

FLUSH AT TOP UNLESS NOTED THUS (+/-). S 4 NO SUBSTITUTION OF MEMBERS WITHOUT ENGINEER'S APPROVAL S 5 STRUCTURAL STEEL SHALL MEET THE LATEST AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR

S 6 ALL WIDE FLANGE AND WT STEEL SHAPES SHALL MEET ASTM A992(Fy = 50 KSI). ALL TUBING SHALL MEET ASTM A500, GR. B (Fy=46 KSI).

ALL PLATES, ANGLES, AND MISC. STEEL SHALL MEET ASTM 36

ALL PIPES SHALL MEET ASTM A53, GR. B (Fy=35 KSI). S 7 BOLTS SHALL BE A325N, WITH WASHERS AS REQUIRED (EXCEPT

ANCHOR BOLTS SHALL BE A307). S 8 ALL FIELD CONNECTIONS SHALL BE BOLTED UNLESS NOTED OTHERWISE. S 9 WELDING SHALL CONFORM TO THE STANDARDS SET FORTH IN THE AWS PUBLICATION "WELDING IN BUILDING CONSTRUCTION". WELDS SHALL BE MADE USING E70xx ELECTRODES. MINIMUM FIELD AND SHOP WELD

SIZE TO BE 1/4" FILLET WELD, UNLESS NOTED OTHERWISE. S 10 ERECTION DRAWINGS SHALL SHOW ALL FIELD WELDS REQUIRED. S 11 NO OPENINGS TO BE PLACED IN BEAM WEBS OR FLANGES WITHOUT

ENGINEER'S APPROVAL. S 12 ALL BEAMS SHALL HAVE STANDARD AISC FRAMING CONNECTIONS. S 13 ALL STEEL DECK SHALL BE WELDED TO ALL MEMBERS ON WHICH IT

S 14 ALL STEEL ROOF DECK SHALL BE, 1 1/2", 20 GA., WIDE RIB, PAINTED, CAPABLE OF DEVELOPING 225 PLF WIND DIAPHRAGM SHEAR. ERECT PER MANUFACTURER'S SPECIFICATION.

CS 1 ALL MATERIALS SHALL BE EQUAL TO THOSE MANUFACTURED BY DIETRICH INDUSTRIES INC., 500 GRANT STREET, SUITE 2226, PITTSBURGH, PENNSYLVANIA 15219.

CS 2 PHYSICAL PROPERTIES AND ALLOWABLE LOAD CAPABILITIES OF MEMBERS SHALL BE DEVELOPED IN ACCORDANCE WITH AISI "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION.

CS 3 ALL STUDS AND/OR JOISTS AND ACCESSORIES SHALL BE OF THE TYPE, SIZE, STEEL THICKNESS AND SPACING SHOWN ON THE PLANS. STUDS, RUNNERS, BRACING AND BRIDGING SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-955. ALL GALVANIZED STUDS, JOISTS AND ACCESSORIES SHALL CONFORM TO THE REQUIREMENTS OF ASTM

CS 4 FRAMING COMPONENTS MAY BE PREASSEMBLED INTO PANELS PRIOR TO ERECTING. PREFABRICATED PANELS SHALL BE SQUARE, WITH COMPONENTS ATTACHED IN A MANNER AS TO PREVENT RACKING.

CS 5 HANDLING AND LIFTING OF PREFABRICATED PANELS SHALL NOT CAUSE DISTORTION OF THE PANEL OR INDIVIDUAL MEMBERS IN ANY MANNER. CS 6 WALL STUD BRIDGING SHALL BE ATTACHED IN A MANNER TO PREVENT STUD ROTATION PRIOR TO LOADING THE WALL. BRIDGING ROWS SHALL BE SPACED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION BUT NOT MORE THAN 4'-0" O.C. VERTICALLY.

CS 7 CUTTING OF STEEL FRAMING MEMBERS MAY BE ACCOMPLISHED WITH A SAW OR SHEAR. TORCH CUTTING OF LOAD BEARING MEMBERS IS NOT PERMITTED. CUTTING OF LOADED MEMBERS IS NOT PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER.

CS 8 AXIALLY LOADED STUDS SHALL BE INSTALLED SEATED SQUARELY AGAINST THE WEB PORTION OF THE TOP AND BOTTOM TRACKS. TRACKS SHALL REST ON A CONTINUOUS, UNIFORM BEARING SURFACE. CS 9 SPLICING OF AXIALLY LOADED MEMBERS IS NOT PERMITTED. CS 10 WHERE SPLICING OF TRACK IS NECESSARY BETWEEN STUD SPACINGS

A PIECE OF STUD SHALL BE PLACED IN THE TRACK FASTENED WITH TWO SCREWS OR WELDS PER FLANGE TO EACH PIECE OF TRACK. CS 11HOLES THAT ARE FIELD CUT INTO STEEL FRAMING MEMBERS SHALL BE WITHIN THE LIMITATIONS OF THE PRODUCT AND ITS DESIGN. PROVIDE REINFORCEMENT WHERE HOLES ARE CUT THROUGH LOAD BEARING MEMBERS IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS

AND AS APPROVED BY THE ENGINEER. CS 12 WELDS SHALL CONFORM TO THE REQUIREMENTS OF AWS D1.1, AWS D1.3, AND AISI MANUAL SECTION E2. WELDS MAY BE BUTT, FILLET,

SPOT OR, GROOVE TYPE. ALL WELDS SHALL BE TOUCHED UP USING ZINC RICH PAINT. CS 13 STEEL DRILL SCREWS SHALL BE OF THE MINIMUM DIAMETER INDICATED BY THE DESIGN OF THAT PARTICULAR ATTACHMENT DETAIL. PENETRATION THROUGH JOINED MATERIALS SHALL NOT BE LESS THAN

3 EXPOSED THREADS. CS 14 SCREWS SHALL HAVE A PROTECTIVE COATING AT LEAST EQUIVALENT TO CADMIUM OR ZINC PLATING (ASTM A-165 TYPE NS) FOR USE IN EXTERIOR ASSEMBLIES.

PREFABRICATED METAL BUILDING: MB 1 THE BUILDING SHALL BE A PREFABRICATED METAL STRUCTURE OF THE SIZE AND CONFIGURATION SHOWN. THE BUILDING SHALL BE FABRICATED ACCORDING TO AISC, MBMA AND AISI LATEST SPECIFICATIONS. WHEN CONFLICTS OCCUR BETWEEN AISC, MBMA, AND AISI, THE MOST STRINGENT SHALL CONTROL. THE DIMENSIONAL TOLERANCES OUTLINED IN THE AWS CODE UNDER WORKMANSHIP AND THE TOLERANCES APPLICABLE TO ROLL FORMED STEEL UNDER THE AISC "STANDARD MILL PRACTICE" SECTION SHALL BE REQUIRED IN THE

FABRICATION OF THE STEEL BUILDING FRAMES. MB 2 THE BUILDING SHALL BE DESIGNED ACCORDING TO THE AISC, MBMA AND AISI LATEST SPECIFICATIONS AND ANY ADDITIONAL REQUIREMENTS DICTATED BY LOCAL CODE OR GIVEN IN THESE NOTES. WHEN

CONFLICTS OCCUR. THE MOST STRINGENT SHALL GOVERN. MB 3 A COMPLETE DESIGN ANALYSIS OUTLINING BUILDING LOAD CSE COMBINATIONS INCLUDING GRAVITY, WIND AND SEISMIC LOADING TO RIGID FRAMES, GIRTS, PURLINS AND X-BRACING, ETC. SHALL BE SUBMITTED WITH THE METAL BUILDING SHOP DRAWINGS. ANALYSIS SHALL SHOW RESULTANT FORCES TO METAL BUILDING SUPPORT STRUCTURE SUCH AS FOUNDATIONS OR WALLS. SHOP DRAWINGS SHALL INCLUDE DETAILS OF ALL MAIN MEMBERS, TYPICAL CONNECTIONS (SHOWING BOLT HOLES AND WELDS), AND ERECTION DRAWINGS INCLUDING A LAYOUT OF ANCHOR BOLTS AND OTHER EMBEDDED ITEMS. SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED BEARING THE SEAL OF AN ENGINEER REGISTERED IN THE STATE WHERE THE

PROJECT IS LOCATED. MB 4 ANCHOR BOLTS SHALL BE DESIGNED BY THE METAL BUILDING MANUFACTURER. THERE SHALL BE NO CONCRETE COLD JOINTS WITHIN

THE DEVELOPMENT LENGTH OF ANY ANCHOR BOLT. SEE DETAILS. MB 5 CONTRACTOR SHALL SUBMIT METAL BUILDING DESIGN, AS OUTLINED ABOVE, TO ARCHITECT/ENGINEER, PRIOR TO COMMENCING FOUNDATION CONSTRUCTION, TO ALLOW VERIFICATION OF FOOTING DESIGNS AND CONFIGURATIONS FOR LOADS FROM METAL BUILDING.

MB 6 THE BUILDING SHALL BE DESIGNED TO SUPPORT ALL MECHANICAL AND KITCHEN EQUIPMENT INCLUDING HEATERS, SPRINKLERS, EXHAUST SYSTEMS, AND ALL OTHER SUCH DEVICES. ADDITIONAL GIRTS OR PURLINS SHALL BE PLACED IN CONVENIENT LOCATIONS FOR ATTACHMENT OF ALL EQUIPMENT.

DEFLECTION TO h/240 AT THE BUILDING EAVE FOR A BASIC WIND SPEED OF 90 MPH PER GENERAL STRUCTURAL NOTES. MB 8 CROSS BRACING SHALL USED TO TAKE LATERAL DIAPHRAGM LOADS UNLESS THE METAL PANELS ARE THROUGH FASTENED TO THEIR SUPPORTS. LOAD TESTS ON METAL PANELS MUST BE SUBMITTED

MB 7 THE BUILDING FRAME SHALL BE DESIGNED TO LIMIT THE LATERAL

WHERE THESE ARE USED AS A DIAPHRAGM. MB 9 DESIGN OF METAL ROOF PURLINS, GIRTS AND X-BRACING FOR RESULTANT WIND FORCES IN ALL DIRECTIONS BY MANUFACTURER. MB 10 METAL ROOF DESIGNER RESPONSIBLE FOR ALL MEMBERS AND CONNECTIONS TRANSFERRING RESULTANT LATERAL ROOF FORCES TO

BUILDING WALLS INCLUDING TOP OF WALL SUPPORT. HORIZONTAL DEFLECTION SHALL BE LESS THAN OR EQUAL TO L/360. MB 11 THE ROOF SYSTEM SHALL BE DESIGNED TO SUPPORT ALL MISCELLANEOUS EQUIPMENT. REFERENCE PLAN A/S2.2 AND ARCHITECTURAL FOR DESCRIPTIONS. ADDITIONAL GIRTS AND/OR PURLINS SHALL BE PLACED IN CONVENIENT LOCATIONS FOR

ATTACHMENT/SUPPORT (INCLUDING LATERAL) OF ALL EQUIPMENT.

M 1 MASONRY REINFORCING FABRICATOR AND GENERAL CONTRACTOR SHALL CERTIFY THAT THEY HAVE REVIEWED ALL SHOP DRAWING SHEETS BEFORE SUBMITTING FOR REVIEW, BY STAMPING EACH SHEET, OR BY COMPANY LETTERHEAD STATING THE SAME, FOR EACH SUBMITTAL. ALL DEVIATIONS FROM THE CONTRACT DRAWINGS SHALL BE HIGHLIGHTED BY THE FABRICATOR AND/OR GENERAL CONTRACTOR. SHOP DRAWINGS SUBMITTED FOR ENGINEER'S REVIEW ARE ONLY CHECKED FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS. NO RESPONSIBILITY IS ASSUMED BY THE ENGINEER FOR THE CORRECTNESS OF DIMENSIONS, DETAILS, QUANTITIES OR PROCEDURES SHOWN ON THE SHOP DRAWINGS.

M 2 SHOP DRAWINGS SHALL BE PREPARED IN KEEPING WITH THE CURRENT NATIONAL STANDARDS: N.C.M.A.

M 3 HOLLOW CONCRETE BLOCK (MASONRY) UNITS SHALL MEET ASTM C90, LIGHT WEIGHT, TYPE 1 WITH A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI ON THE NET AREA (f'm = 1500 PSI).

M 4 NO "U" TYPE LINTEL BLOCKS SHALL BE USED FOR BOND BEAMS, U.N.O. USE OPEN BOTTOM STANDARD BOND BEAM BLOCK WITH NOTCHED KNOCK-OUT WEBS AND EXPANDED METAL LATH GROUT

M 5 MASONRY DESIGN STRENGTH (f'm) SHALL BE DETERMINED BY PRISM TESTS CONFORMING TO ASTM E447, METHOD B, IN ADVANCE OF BEGINNING MASONRY WORK. STANDARD AGE OF TEST SPECIMENS

M 6 MASONRY WORK SHALL HAVE SPECIAL INSPECTION AS DEFINED BY THE

GOVERNING BUILDING CODE.

M 7 NO STACKED BOND MASONRY CONSTRUCTION SHALL BE ALLOWED. M 8 MORTAR FOR USE IN MASONRY SHALL MEET ASTM C270, TYPE M OR

M 9 GROUT FOR USE IN MASONRY SHALL MEET ASTM C476; COMPRESSIVE STRENGTH = 2000 PSI (2500 PSI FOR f'm = 2000 PSI) (3250 PSI FOR f'm = 2500 PSI) AT 28 DAYS WITH NOT LESS THAN 6 1/2 SACKS OF CEMENT PER YARD, COURSE SAND OR PEA GRAVEL (3/8" MAX. AGGREGATE), AND A SLUMP OF NOT GREATER THAN 8".

M 10 VERTICAL GROUT LIFT OPTIONS: LOW-LIFT GROUTING: GROUT LIFTS SHALL NOT EXCEED 4'-0" MAX. THE TOP OF EACH GROUT LIFT SHALL BE 2" BELOW THE TOP OF THE MASONRY UNIT. ALL AIR POCKETS SHALL BE REMOVED BY RODDING OR

VIBRATING THE GROUT. HIGH-LIFT GROUTING: PROVIDE CLEANOUTS AT EACH BAR LOCATION. GROUT POURS SHALL NOT EXCEED 6'-0".

SEE MINIMUM CMU WALL REINFORCEMENT DETAIL A/S7.1 FOR

ADDITIONAL INFORMATION. M 11 MASONRY BEARING WALLS SHALL BE LAID WITH ALL FACE SHELLS SOLIDLY IN MORTAR.

MASONRY UNITS.

M 12 REINFORCING BARS SHALL MEET ASTM A615 GR. 60 (FY=60,000 PSI). ALL CELLS CONTAINING REINFORCEMENT SHALL BE SOLID GROUTED. M 13 PROVIDE A MINIMUM OF 1/2" GROUT BETWEEN MAIN REINFORCING AND

M 15 PROVIDE DOWELS FROM FOUNDATIONS AT ALL VERTICAL MASONRY WALL REINFORCEMENT. DOWELS SHALL MATCH VERTICAL REINFORCEMENT IN SIZE AND SPACING, UNLESS NOTED OTHERWISE ON PLANS OR DETAILS. PROVIDE ONE DOWEL FOR EACH VERTICAL WALL

M 14 HOLD VERTICAL BARS STRAIGHT AND TRUE AND CENTERED IN WALL

M 16 HORIZONTAL AND VERTICAL REINFORCEMENT SHALL BE CONTINUOUS AND LAPPED A MINIMUM NUMBER OF BAR DIAMETERS AS SCHEDULED: SINGLE REINFORCING DOUBLE REINFORCING AND BOND BMS 43 BAR DIA 51 BAR DIA.

65 BAR DIA. 43 BAR DIA 66 BAR DIA 113 BAR DIA. M 17 EXCEPT AS NOTED ON PLANS AND DETAILS, REINFORCE ALL MASONRY WALLS TYPICALLY AS FOLLOWS:

HORIZONTAL: #9 GAGE WIRE LADDER TYPE JOINT REINFORCEMENT AT 16" O.C. AND 2-#5 CONTINUOUS IN 8" DEEP BOND BEAM AT FLOOR LINES, AT 8'-0" ABOVE FINISHED FLOOR, ROOF LINES AND AT THE TOP OF PARAPET

M 18 PROVIDE 1-#5 VERTICAL MIN. AT ALL WALL ENDS, CORNERS, AND CONTROL JOINTS AND AT THE INTERSECTION OF ALL WALLS, SEE

M 19 PROVIDE 2-#5 MIN. IN 8" DEEP BOND BEAM AT HEAD AND SILL OF ALL OPENINGS IN MASONRY WALLS. EXTEND 48 BAR DIAMETERS PAST

EDGE OF OPENING. M 20 REINFORCE MASONRY AT BEARING POINTS OF ALL BEAMS, LINTELS, JOIST GIRDERS, AND TRUSSES WITH 1-#5 VERTICAL MIN. (CONTINUOUS TO FOUNDATION) IN EACH CELL BENEATH BEARING PLATES. SEE DETAILS FOR ADDITIONAL CELLS REQUIRING VERTICAL REINFORCEMENT.

M 21 SEE ARCHITECTURAL FOR LOCATIONS OF CONTROL JOINTS. CONTROL JOINT SPACING SHALL NOT EXCEED TWO TIMES THE WALL HEIGHT. PROVIDE CONTROL JOINTS AT ALL INTERSECTIONS OF LOAD BEARING AND NON-LOAD BEARING WALLS, TYPICAL.

SPECIAL INSPECTIONS ALL WORK SPECIFIED HEREIN SHALL BE INSPECTED IN ACCORDANCE WITH THE BUILDING CODE AND ALL LOCAL ORDINANCES. THE OWNER SHALL HIRE AN EXPERIENCED, QUALIFIED INSPECTOR TO PERFORM ALL THE REQUIRED INSPECTION WORK. THE ENGINEER WILL NOT PERFORM THE REQUIRED INSPECTION AS PART OF HIS DESIGN SERVICE. THE ENGINEER MAY VISIT THE SITE TO ASCERTAIN GENERAL CONFORMANCE TO THE CONTRACT DOCUMENTS AND SUCH VISITS ARE NOT TO BE CONSTRUDED AS MEETING INSPECTION REQUIREMENTS UNLESS THE ENGINEER SPECIFICALLY SO STATES

<u>DESIGN LOADS & SOIL PRESSURES:</u> GOVERNING CODE: 2018 IBC DESIGN LIVE LOADS

SITE CLASS:

NET DESIGN SOIL PRESSURE:

IN WRITING.

MIN COLLATERAL LOAD: 10 PSF SNOW LOAD: ROOF SNOW LOAD, Pf: 15 PSF EXPOSURE COEFFICIENT, Ce: 0.9IMPORTANCE FACTOR, I 1.10 THERMAL FACTOR, Ct: WIND LOADS BASIC WIND SPEED: 116 MPH EXPOSURE: SEISMIC: USE GROUP: DESIGN CATEGORY IMPORTANCE FACTOR, I: 1.25 0.160 0.084

> STEWARD ENGINEERING CONSULTANTS, LLC 2060 INDEPENDENCE ROAD SEDAN, KANSAS 67361 Phone 620.262.2826 EMAIL patricks.pe@gmail.com JOB NO. 23-104

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DRAWING

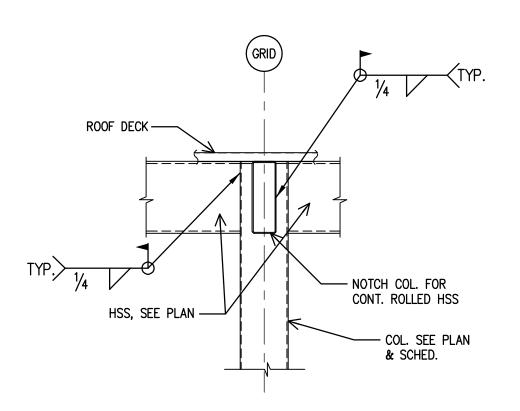
STRUCTURAL PLAN AND **DETAILS**

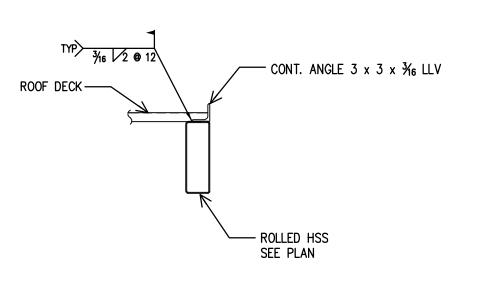
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PROJECT NUMBER

7/26/2023

SHEET NUMBER





3 SECTION • CANOPY

 $2_{\frac{3}{4} = 1'-0"}$

| LINTEL SUPPORT SCHEDULE | | | | | | | | |
|-------------------------|--------------------------|-----------------|--------|----------|--------|------------------------------------|--|--|
| MARK | SIZE | LINTEL CROSS | | SUPPORTS | | DEMARKS | | |
| MARK | SIZE | SECT. | N/W | INTERIOR | S/E | REMARKS | | |
| LM | SEE REMARKS | - | _ | _ | - | SEE MINIMUM LINTELS SCHEDULE BELOW | | |
| L1 | (2) 4, 3 x 2½ x ¼ LLV | 4/S7.1 | 5/S7.1 | _ | 5/S7.1 | - | | |
| L2 | (2) 4, 5 x 3½ x 5/16 LLV | 4/S7.1 | 5/S7.1 | - | 5/S7.1 | - | | |

USE THIS SCHEDULE FOR LINTELS MARKED "LM" ON PLANS MINIMUM LINTELS UNLESS OTHERWISE NOTED, SHALL BE AS FOLLOWS: SPAN 0'-0" to 1'-8" 1/4" PLATE x WIDTH OF WALL 1'-9" to 3'-0" $\frac{1}{4}$ 3\\(\frac{3}{2} \times 3\\\(\frac{1}{2} \times \frac{1}{4} \) SEE 4 & 5/S7.1 FOR 8" CMU 12" CMU SÍM.

ADDITIONAL (1) VERT'L. BAR

SAME SIZE AS WALL VERT'LS. BUT

#9 gage wire ladder type horiz:

ADJUSTABLE WALL TIES FOR

JOINT REINFORCING @ 16"o.c.

BRICK SIMILAR.

WALL INTERSECTION

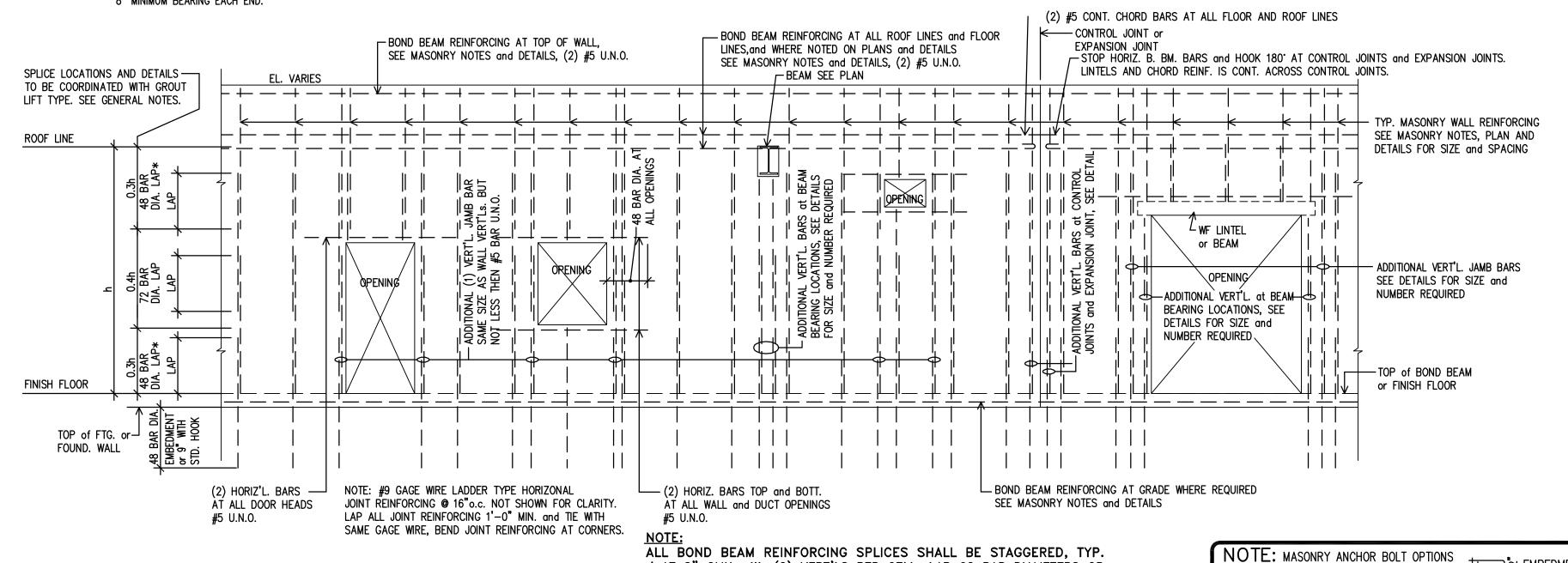
WALL CORNER

NOT LESS THEN #5 BAR U.N.O.

AT ALL WALL INTERSECTIONS

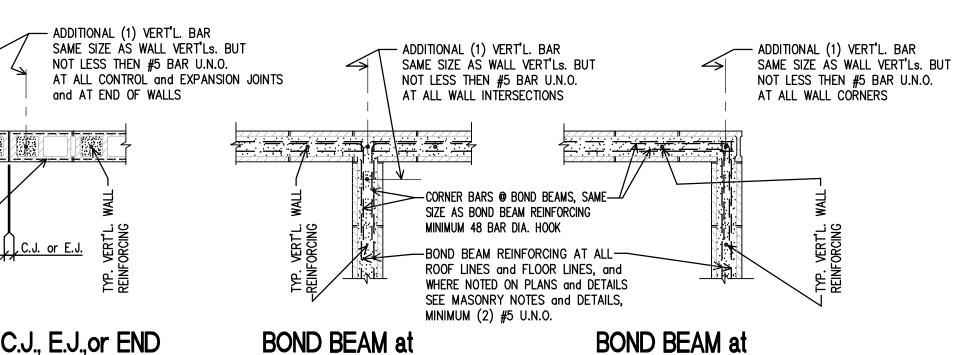
S/E - SUPPORT DETAIL @ SOUTH OR EAST END OF LINTEL N/W - SUPPORT DETAIL @ NORTH OR WEST END OF LINTEL INTERIOR - SUPPORT DETAIL @ ONE OR MORE INTERIOR SUPPORTS

NOTE: FURNISH ONE ANGLE FOR EACH 4" WIDTH OF WALL 8" MINIMUM BEARING EACH END.



STAGGER SPLICES AND LAP 48 BAR DIAMETERS MINIMUM CMU WALL REINFORCING DETAIL

* AT 8" CMU with (2) VERT'LS PER CELL, LAP 62 BAR DIAMETERS OR



WALL INTERSECTION

WALL C.J., E.J., or END

ADDITIONAL (1) VERT'L. BAR

AT ALL WALL CORNERS

SAME SIZE ÀS WALL VERT'Ls. BUT

#9 GAGE WIRE LADDER TYPE HORIZ.-

JOINT REINFORCING @ 16"o.c.

BRICK SIMILAR.

ADJUSTABLE WALL TIES FOR

NOT LESS THEN #5 BAR U.N.O.

BOND BEAM at WALL CORNER

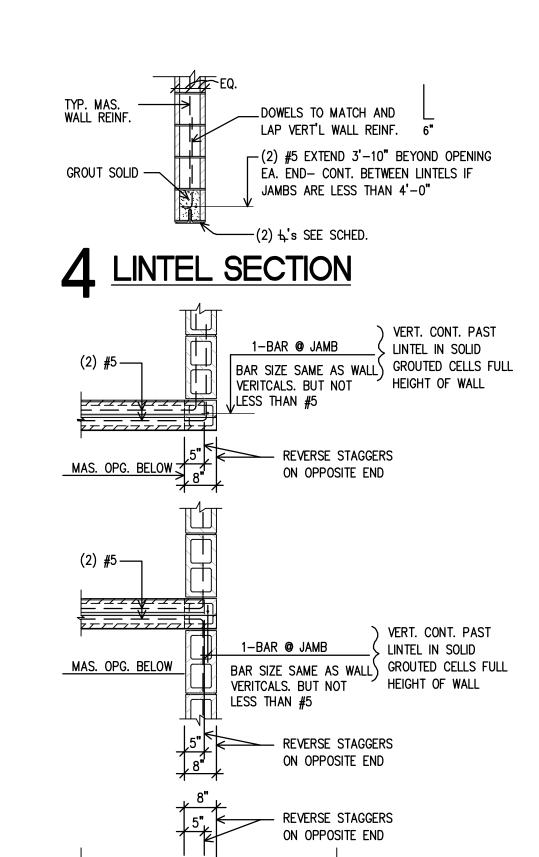
1) CAST - IN PLACE 5/8" Ø A307 BOLTS

2) EPOXY 5/8" Ø A307 with 6 5/8" EMBEDMENT, USE HY150 EPOXY

→ ™ EMBEDMENT

√5" @ 8" CMU

8³/₄" @ 12" CMU

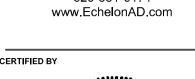


BAR SIZE SAME AS WALLS
VERTICALS. BUT NOT
LESS THAN #5 5 LINTEL BRG. DETAIL

_ \ LINTEL IN SOLID



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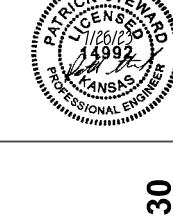
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NEW

DRAWING **STRUCTURAL**

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DETAILS

PBS PBS

PROJECT NUMBER

7/26/2023 SHEET NUMBER

STEWARD ENGINEERING CONSULTANTS, LLC 2060 INDEPENDENCE ROAD SEDAN, KANSAS 67361 Phone 620.262.2826 EMAIL patricks.pe@gmail.com JOB NO. 23-104

GENERAL PLAN NOTES:

- THESE DRAWINGS ARE INTENDED TO OUTLINE THE GENERAL SCOPE OF THE WORK. CONTRACTORS SHALL ALSO BE RESPONSIBLE FOR ADHERING TO ALL APPLICABLE CODES & GENERALLY ACCEPTED TRADE PRACTICES.
- ALL DIMENSIONS ARE FROM FACE OF STUD TO FACE OF STUD, MASONRY UNLESS NOTED OTHERWISE.
- PROVIDE NECESSARY BLOCKING/ANCHORING, AS REQUIRED FOR ANY & ALL ITEMS THAT MUST BE SECURED TO THE WALL, INCLUDING WALL MOUNTED CABINETS & EQUIPMENT, AUDIO/VISUAL, & SECURITY COMPONENTS. VERIFY LOCATIONS WITH OWNER.
- PROVIDE BLOCKING AT ALL WOOD BASE, CABINETS & SHELF BRACKETS & WALL MOUNTED RESTROOM EQUIPMENT.
- ALL DOORS TO BE LOCATED 6" FROM THE ADJACENT PERPENDICULAR STUD WALL FRAMING. PROVIDE 12" CLEAR ON PUSH SIDE OF DOOR (IF BOTH LATCH & CLOSER) & 18" CLEAR ON PULL SIDE OF ALL DOORS PER
- REFER TO DOOR SCHEDULE FOR SIZE, TYPE & FINISH OF ALL NEW DOORS
- ALL WALLS THAT TERMINATE AT 6" ABOVE CEILINGS SHALL BE BRACED TO THE STRUCTURE ABOVE WITH 25 GA. 3 5/8" METAL STUD BRACES AT 48" O.C. MAXIMUM.
- PROVIDE CONTROL JOINTS ON CONTINUOUS GYPSUM BOARD SURFACES IN EXCESS OF 20'-0" AT A MAXIMUM INCREMENT OF 20'-0" ON CENTER,

- REFER TO PLUMBING PLANS FOR ALL SPECIFICATIONS & FIXTURE QUANTITIES. THE ARCHITECTURAL FLOOR PLAN SHOWS ONLY DESIGN INTENT.
- PLUMBING FIXTURES TO BE PROVIDED & INSTALLED BY G.C., UNLESS INDICATED OTHERWISE. COORDINATE ELECTRICAL & PLUMBING CONNECTIONS WITH OWNER/TENANT.
- REFER TO THE FINISH PLAN & SCHEDULE SHEETS FOR ALL INTERIOR FLOOR & WALL FINISHES, COLORS & MATERIALS. COORDINATE WITH THE SPECIFICATIONS & ARCHITECTURAL FLOOR PLANS AS REQUIRED.
- 12. PROVIDE SIGNAGE AS REQUIRED BY CODE. REFER TO SPECIFICATIONS SECTION 10 1400-SIGNAGE.
- 13. ALL FURNITURE & EQUIPMENT BY OTHERS, U.N.O. G.C. TO COORDINATE ALL BUILT-INS WITH OWNER PRIOR TO CONSTRUCTION.
- VERIFY ELECTRICAL OUTLET & DATA BOX LOCATIONS W/ OWNER AFTER ELECTRICAL BOX INSTALLATION & PRIOR TO CONDUIT INSTALLATION. COORDINATE WITH MILLWORK, FURNITURE & EQUIPMENT LOCATIONS. RUN EXPOSED CONDUIT IN CLEAN & ORDERLY MANNER.
- 15. COORDINATE THE LOCATION & INSTALLATION OF ALL MECHANICAL & ELECTRICAL DEVICES, REGISTERS, FIXTURES, ETC. PRIOR TO INSTALLATION OF FINISH MATERIALS.



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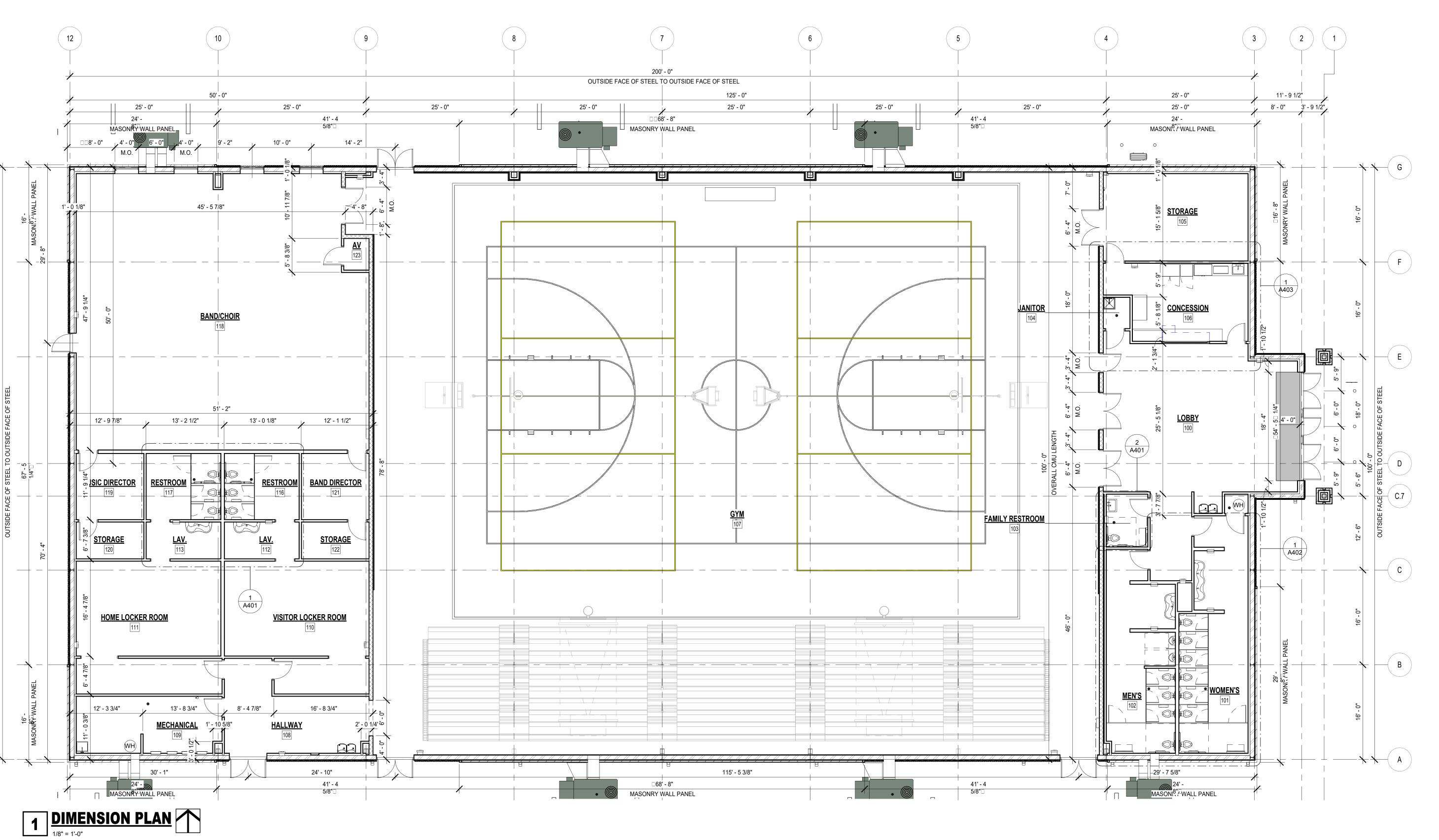
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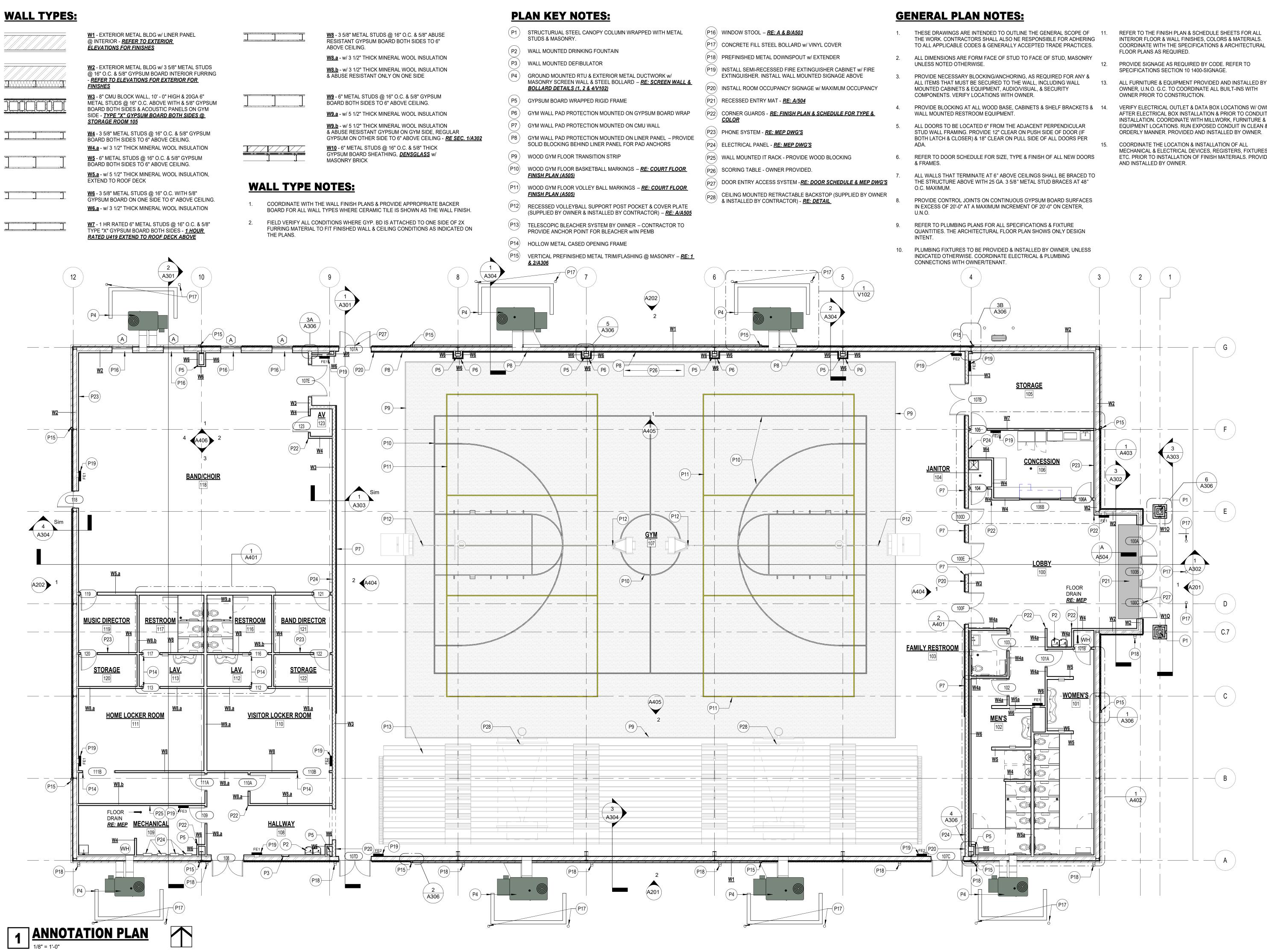
DIMENSION PLAN

MANAGER DRAWN BY KG REVISIONS PROJECT NUMBER

A101

SHEET NUMBER





PROVIDE SIGNAGE AS REQUIRED BY CODE. REFER TO

ALL FURNITURE & EQUIPMENT PROVIDED AND INSTALLED BY OWNER, U.N.O. G.C. TO COORDINATE ALL BUILT-INS WITH

VERIFY ELECTRICAL OUTLET & DATA BOX LOCATIONS W/ OWNER AFTER ELECTRICAL BOX INSTALLATION & PRIOR TO CONDUIT INSTALLATION. COORDINATE WITH MILLWORK, FURNITURE & EQUIPMENT LOCATIONS. RUN EXPOSED CONDUIT IN CLEAN &

MECHANICAL & ELECTRICAL DEVICES, REGISTERS, FIXTURES, ETC. PRIOR TO INSTALLATION OF FINISH MATERIALS. PROVIDED



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NEW CON

ANNOTATION PLAN

DRAWN BY MANAGER KG REVISIONS PROJECT NUMBER

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REFLECTED CEILING LEGEND

2X2 CEILING TILE GYPSUM BOARD SOFFIT 2X2 LIGHT TROFFER <u>RE: MEP DWG'S</u> RECESSED CAN LIGHT RE: MEP DWG'S HHIGH BAY LIGHT <u>RE: MEP DWG'S</u> WALL MOUNT STRIP LIGHT <u>RE: MEP DWG'S</u> MECHANICAL RETURN AIR DIFFUSER RE: MEP DWG'S

MECHANICAL SUPPLY AIR DIFFUSER

MECHANICAL EXHAUST FAN

<u>RE: MEP DWG'S</u>

EXIT DEVICE **REF: MEP DWG'S**

EMERGENCY LIGHT RE: MEP DWG'S

SMOKE DETECTOR <u>re: mep dwg's</u>

FIRE ALARM STROBE

FIRE ALARM HORN/STROBE

WALL MOUNTED CAMERA

WIRLESS INTERNET TRANSMITTER

CLG ELEVATION HEIGHT INDICATOR

<u>RE: MEP DWG'S</u>

RE: MEP DWG'S

RE: MEP DWG'S

HORN SYSTEM

<u>re: mep dwg's</u>

<u>RE: MEP DWG'S</u>

<u>RE: MEP DWG'S</u>

SPEAKER SYSTEM

GENERAL CEILING NOTES:

- THESE DRAW INGS ARE INTENDED TOOUTLINE THE GENERAL SCOPE OF THEWORK CONTRACTORSHALL ALSO BERESPONSIBLE FORADHERING TAOLAPPLICABLECODES& GENERALLY
- THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE REFLECTED CEILING PLANS & THE ELECTRICAL DRAWINGS.
- 3. REFER TO MECHANICAL & ELECTRICAL DRAWINGS FOR FIRE ALARM & EMERGENCY LIGHTING
- 4. COORDINATÆLLMECHANICASYSTEM BULKHEADSIZES WITIMECHANICADRAWINGS PRIORTO INSTALLATION OF SPRINKLER SYSTEM.
- THEREFLECTED CEILINGGANSINDICATEONLYARCHTECTURALFEATURES(FINISHESELEVATIONS ETC)OF THE CEILING DESIGN REFER TO ELECTRICA& HVACPLANSFORFIXTUREQUANTITIES, MANUFACTURERS& MODELNUMBERS& EQUIPMENSPECIFICATIONS. NOTIFYTHEARCHITECTIF THE REFLECTEDEILIND LANS DIFFERS ROMTHEHVAC& I OR ELECTRICAL PLANS.
- SPRINKLER HEADS & RECESSEDCANLIGHTS ARETO BE LOCATED IN THECENTEROF THE AFFECTED CEILING PANELWHERETHECEILING PANEHASA CENTER REVEALTHESPRINKLER HEAD ORLIGHT FIXTURESHALIBE LOCATED IN THE CENTEROF THE 2' x 2' PORTION OF THAT CEILING PANEL.
- 7. PROVIDE ACCESS PANELS(FIRE-RATED IN RATED ASSEMBLIES) FOR ACCESS OF ALL SERVICEABLE MEP EQUIPMENT ABOVE HARD LID CEILINGS (COORDINATE SIZE & TYPE WITH MEP DRAWINGS & EQUIPMENT REQUIREMENTS).
- NEATLY FINISH ALL GYP. BRO. WALL TO DISSIMILAR MATERIAL TRANSITIONS WHERE TO REMAIN EXPOSED TO VIEW. USE TEAR-AWAY TYPE BEAD TRIM & SEALANT AS REQUIRED.
- 9. PAINT STRUCTURAL ELEMENTS AT CEILING. REFERENCE FINISH PLAN.



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REFLECTED CEILING PLAN

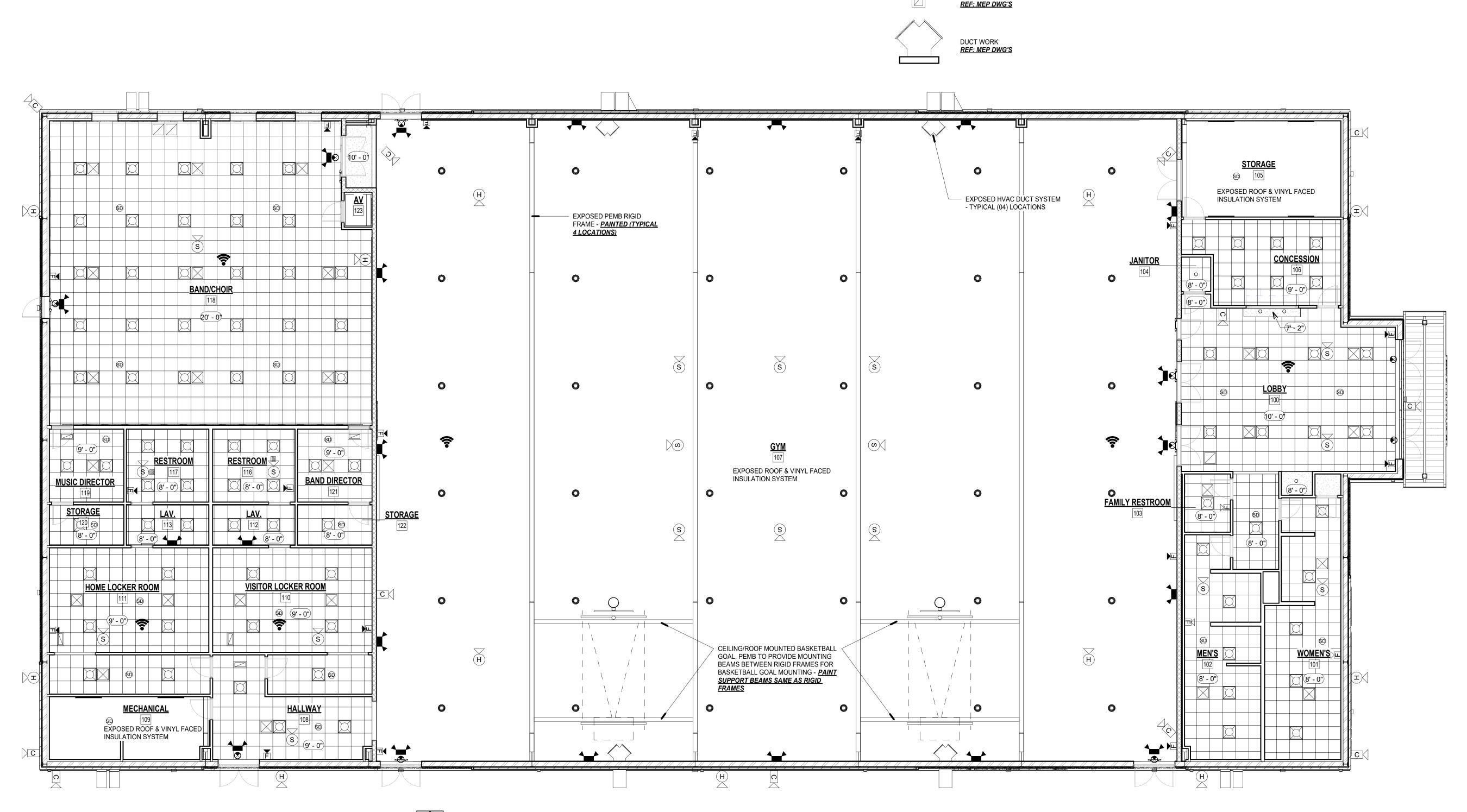
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PROJECT NUMBER

8/14/2023 SHEET NUMBER

A103

23-09



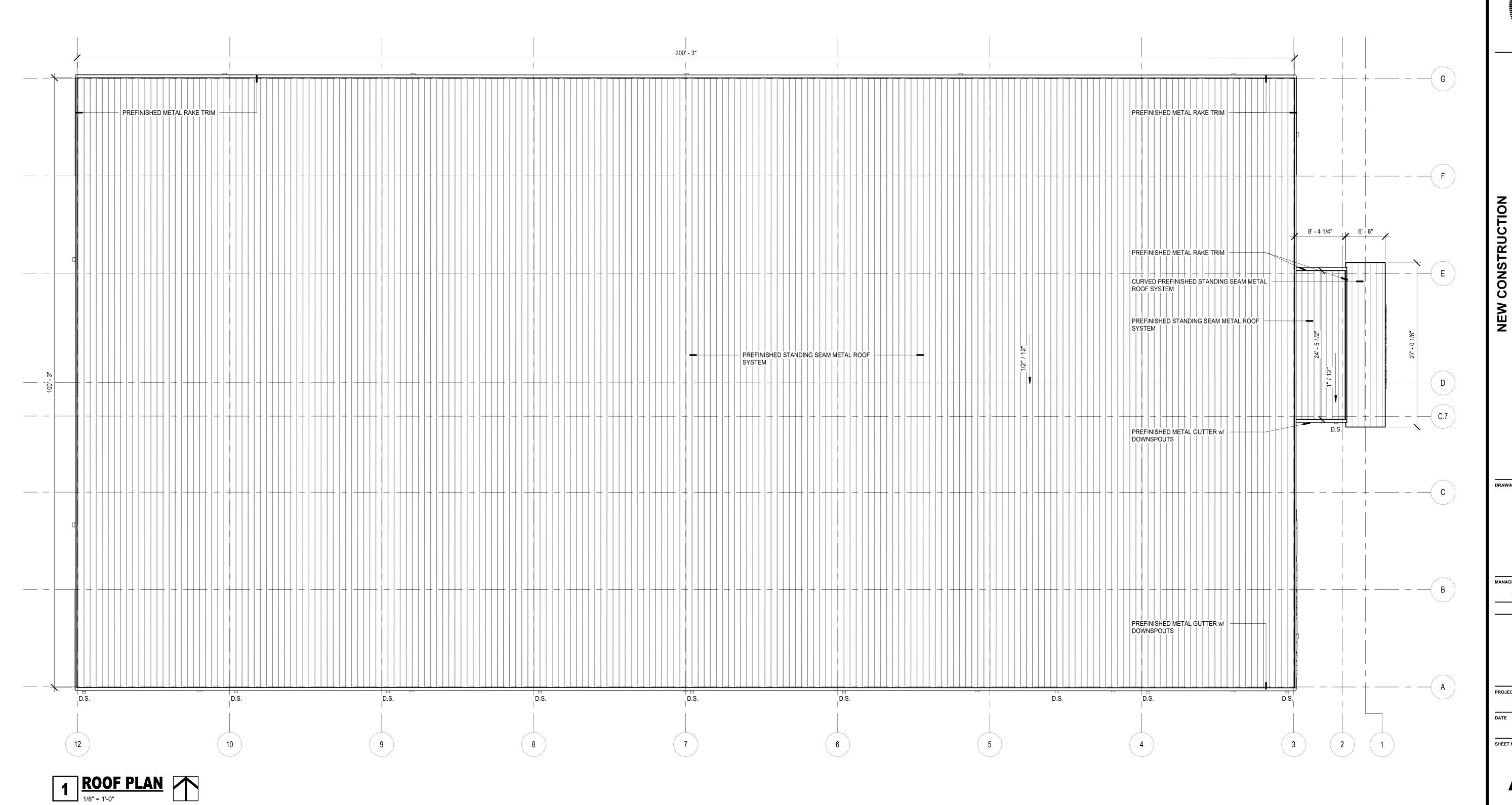
ROOF PLAN GENERAL NOTES:

- 1. GYM MAIN ROOF & LOWER ROOF DESIGNED AROUND MBCI ULTRA DECK STANDING SEAM METAL ROOF SYSTEM.
- 2. CURVED ENTRY ROOF DESIGNED AROUND MBCI BATTENLOK HS.
- MAIN ROOF & LOWER ROOF ARE SINGLE SLOPE ROOFS TO THE SOUTH w/ GUTTER & DOWNSPOUTS. TERMINATE DOWNSPOUTS @ GRADE TO CONCRETE TROUGH w/in SITE PAVING. REFER TO ROOF PLAN FOR SLOPES
- 4. PROVIDE & INSTALL ALL NECESSARY FLASHING, SUPPORT ANGLES @ GUTTERS & RAKE

ROOF COLORS:

MAIN ROOF:
BASIS OF DESIGN; MBCI ULTRA DECK STANDING SEAM - LIGHT STONE

CURVED ROOF:
BASIS OF DESIGN; MBCI BATTENLOK HS - BRITE RED
APPROVED ALTERNATE; PAC CLAD (DOUBLE LOCK OR TITE-LOC) - CARDINAL RED





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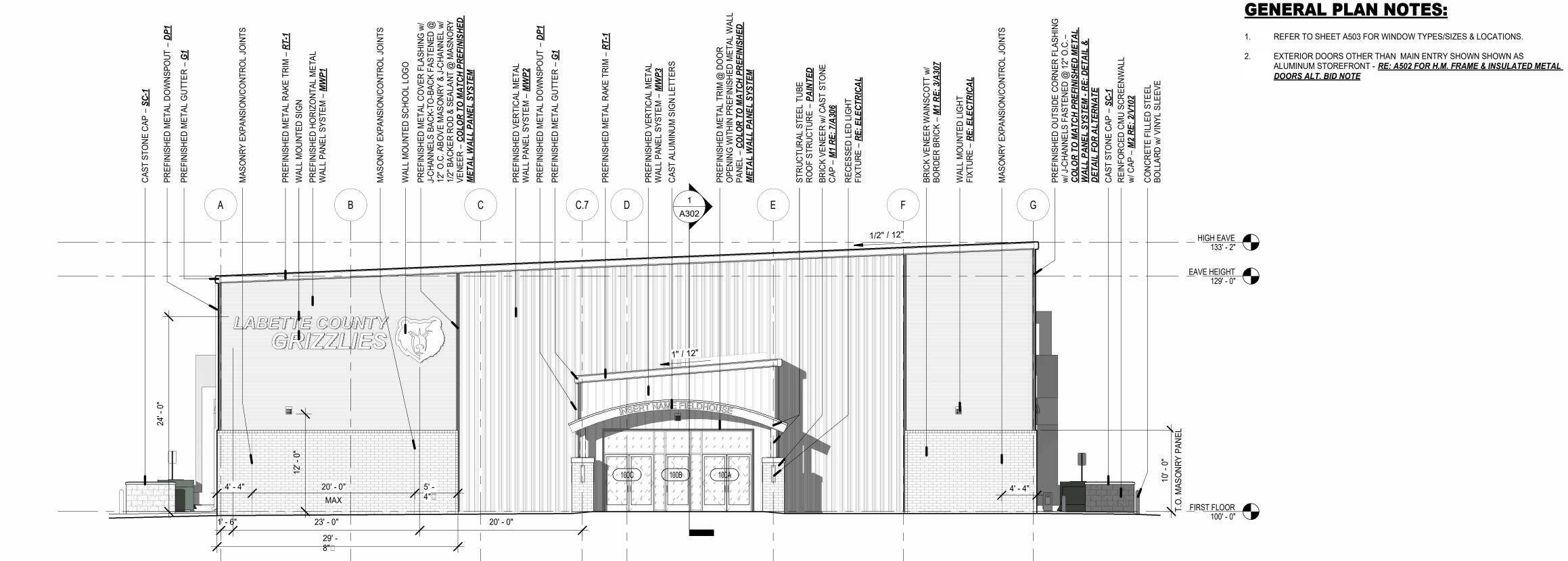


ROOF PLAN

REVISIONS

PROJECT NUMBER

8/14/2023 SHEET NUMBER



EXTERIOR ELEVATIONS FINISH SCHEDULE:

PREFINISHED METAL WALL PANELS

MWP1 - PAC-CLAD PRECISION SERIES BOX RIB BOX RIB 1, COLOR SANDSTONE MWP2 - PAC-CLAD PRECISION SERIES BOX RIB BOX RIB 4, COLOR SANDSTONE MWP3 - PAC-CLAD REVEAL WALL PANELS, COLOR GRAPHITE

G1 - GUTTERS PAC-CLAD CARDINAL RED

DP1 - DOWNSPOUT, PAC-CLAD CARDINAL RED

RT-1 - RAKE TRIM, PAC-CLAD CARDINAL RED

<u>MASONRY</u>

M1 - BRICK MASONRY: KANSAS BRICK & TILE, UTILITY BRICK, #530 DARK BURGANDY M2 – CMU; CAPITOL CONCRETE, GROUND FACED CMU SHADOW

SF-1 - ALUMINUM STOREFRONT, EQUAL TO KAWNEER, CHAMPAGNE OR PLATINUM ICE

SC-1 - CAST STONE CAP - COLOR, LIMESTONE



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> **EXTERIOR ELEVATIONS**

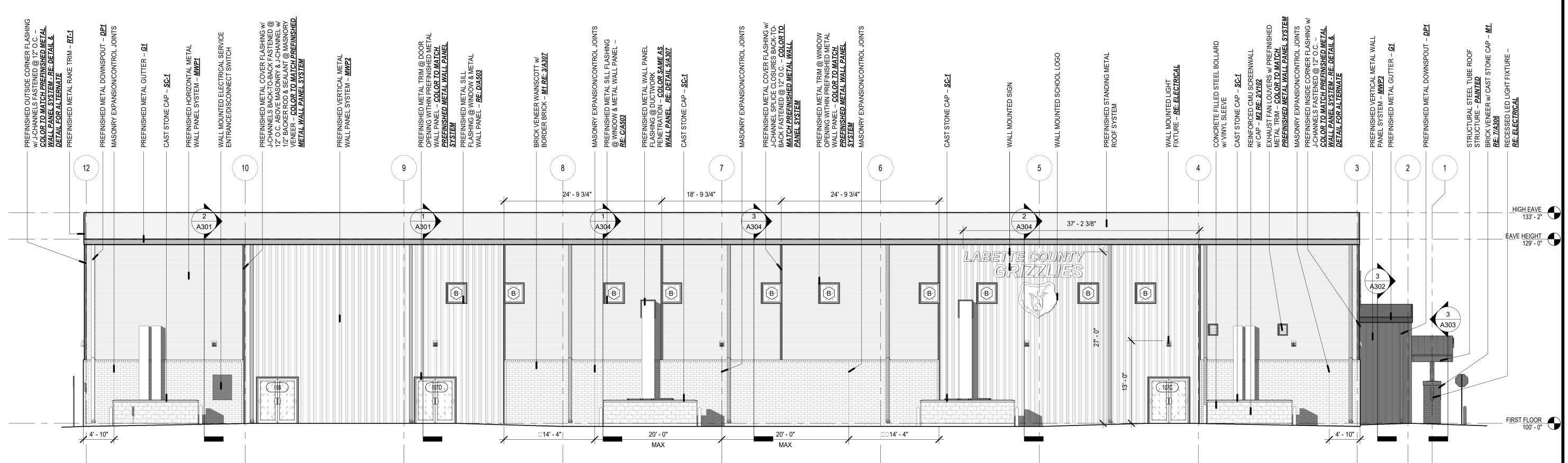
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PROJECT NUMBER

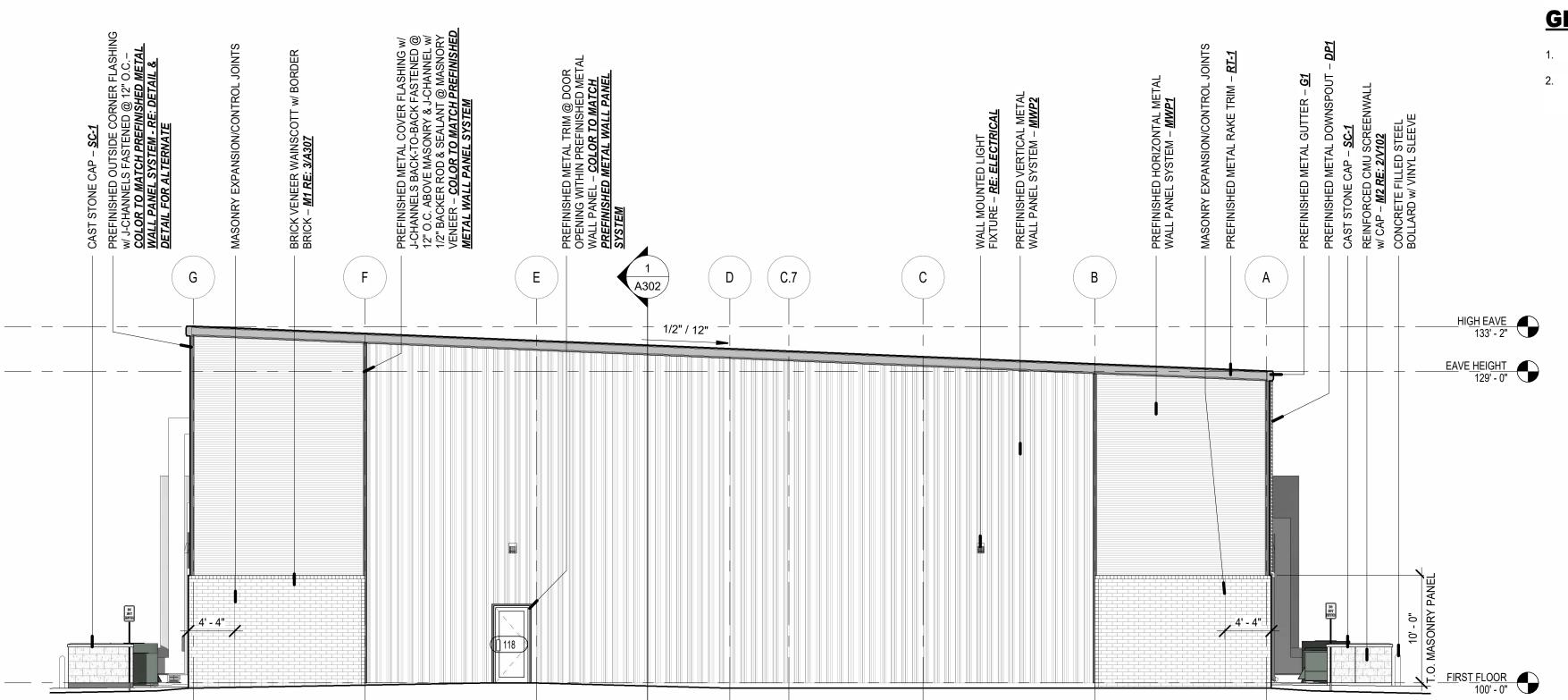
A201

1 EAST EXTERIOR ELEVATION

1/8" = 1'-0"



SOUTH EXTERIOR ELEVATION1/8" = 1'-0"



GENERAL PLAN NOTES:

- REFER TO SHEET A503 FOR WINDOW TYPES/SIZES & LOCATIONS.
- EXTERIOR DOORS OTHER THAN MAIN ENTRY SHOWN SHOWN AS ALUMINUM STOREFRONT <u>RE: A502 FOR H.M. FRAME & INSULATED METAL DOORS ALT. BID NOTE</u>

EXTERIOR ELEVATIONS FINISH SCHEDULE:

PREFINISHED METAL WALL PANELS

MWP1 - PAC-CLAD PRECISION SERIES BOX RIB BOX RIB 1, COLOR SANDSTONE MWP2 - PAC-CLAD PRECISION SERIES BOX RIB BOX RIB 4, COLOR SANDSTONE MWP3 - PAC-CLAD REVEAL WALL PANELS, COLOR GRAPHITE

G1 - GUTTERS PAC-CLAD CARDINAL RED

DP1 - DOWNSPOUT, PAC-CLAD CARDINAL RED

RT-1 - RAKE TRIM, PAC-CLAD CARDINAL RED

<u>MASONRY</u>

M1 - BRICK MASONRY: KANSAS BRICK & TILE, UTILITY BRICK, #530 DARK BURGANDY M2 – CMU; CAPITOL CONCRETE, GROUND FACED CMU SHADOW

SF-1 - ALUMINUM STOREFRONT, EQUAL TO KAWNEER, CHAMPAGNE OR PLATINUM ICE

SC-1 - CAST STONE CAP - COLOR, LIMESTONE



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STRUCTION

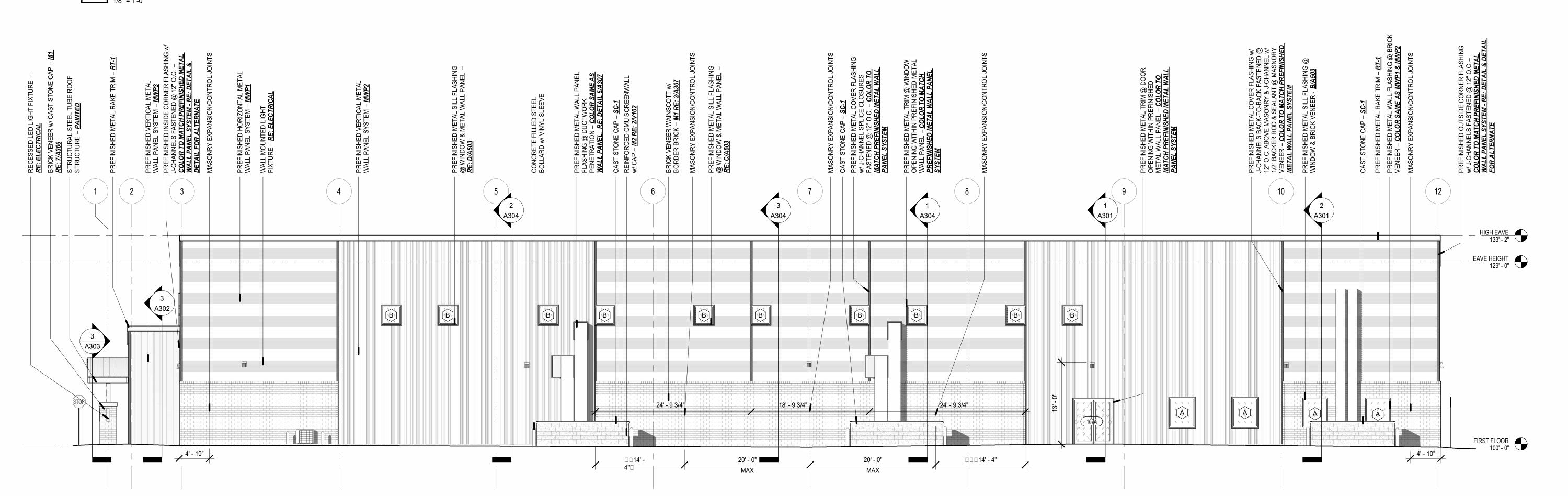
EXTERIOR ELEVATIONS

REVISIONS

A202

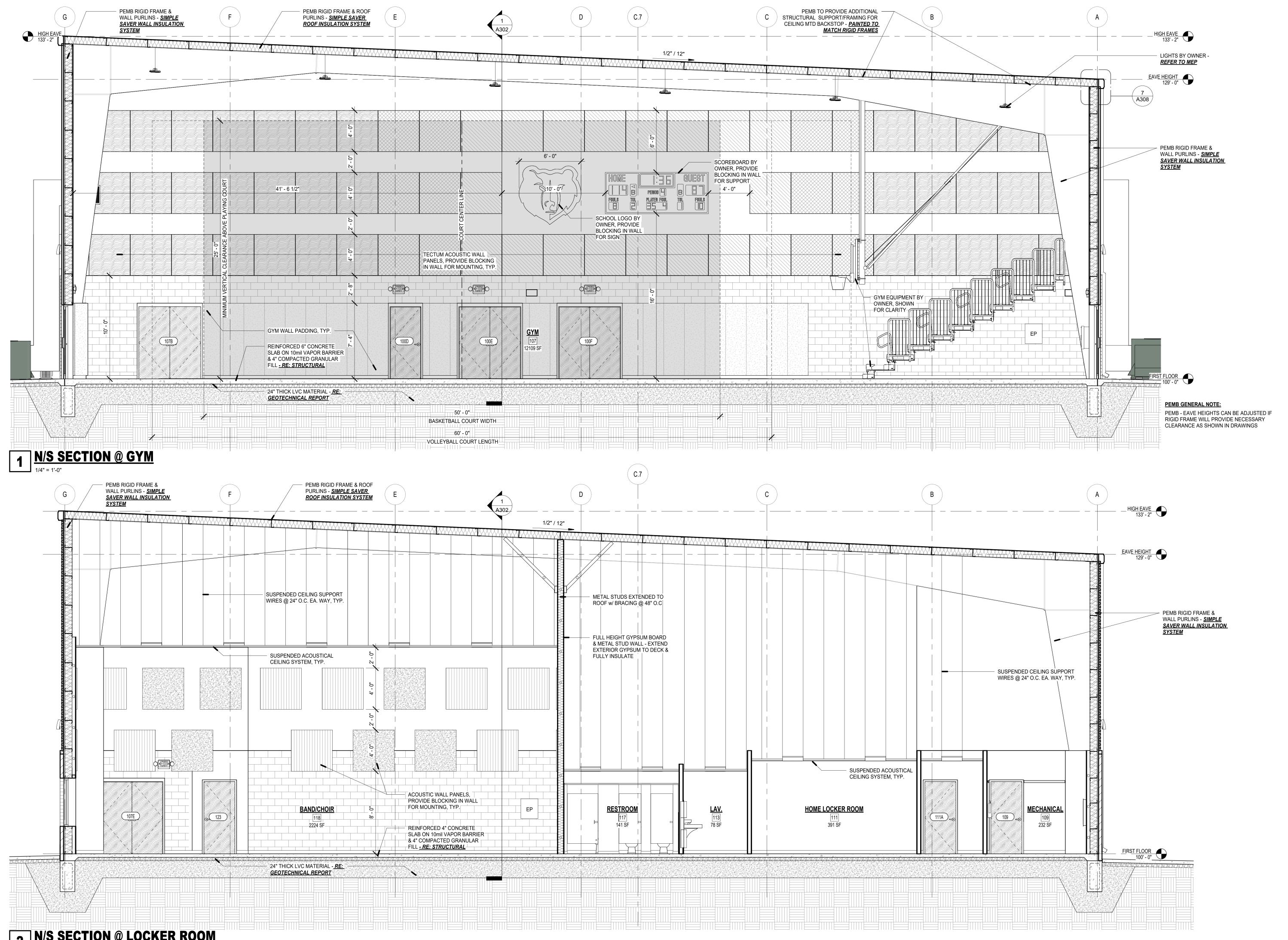
1 WEST EXTERIOR ELEVATION

1/8" = 1'-0"



2 NORTH EXTERIOR ELEVATION

1/8" = 1'-0"



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STRUCTION CON NEW

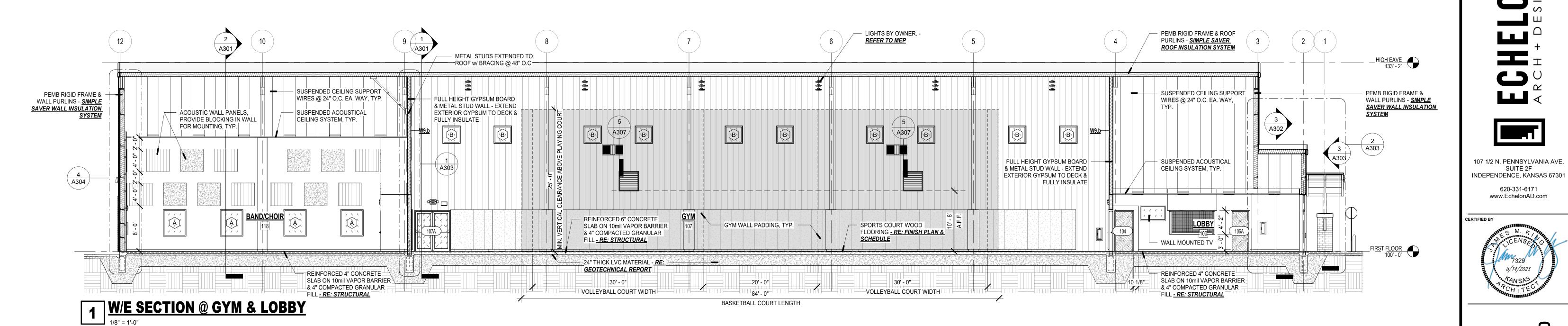
DRAWING **BUILDING SECTIONS**

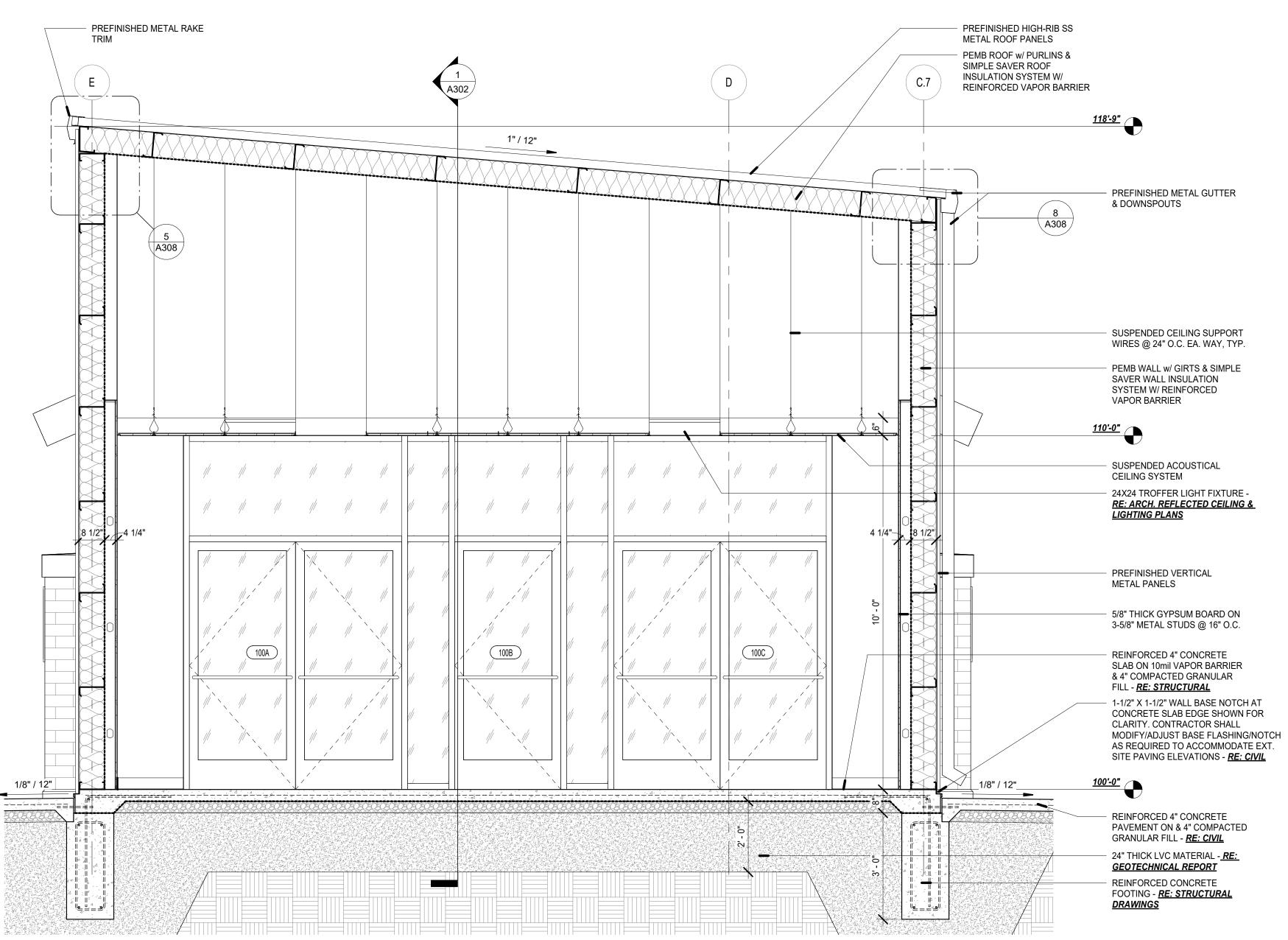
DRAWN BY MANAGER KG REVISIONS PROJECT NUMBER 23-09

SHEET NUMBER

A301

8/14/2023







DRAWING

MANAGER

PROJECT NUMBER

SHEET NUMBER

BUILDING

SECTIONS

REVISIONS

23-09

8/14/2023

A302

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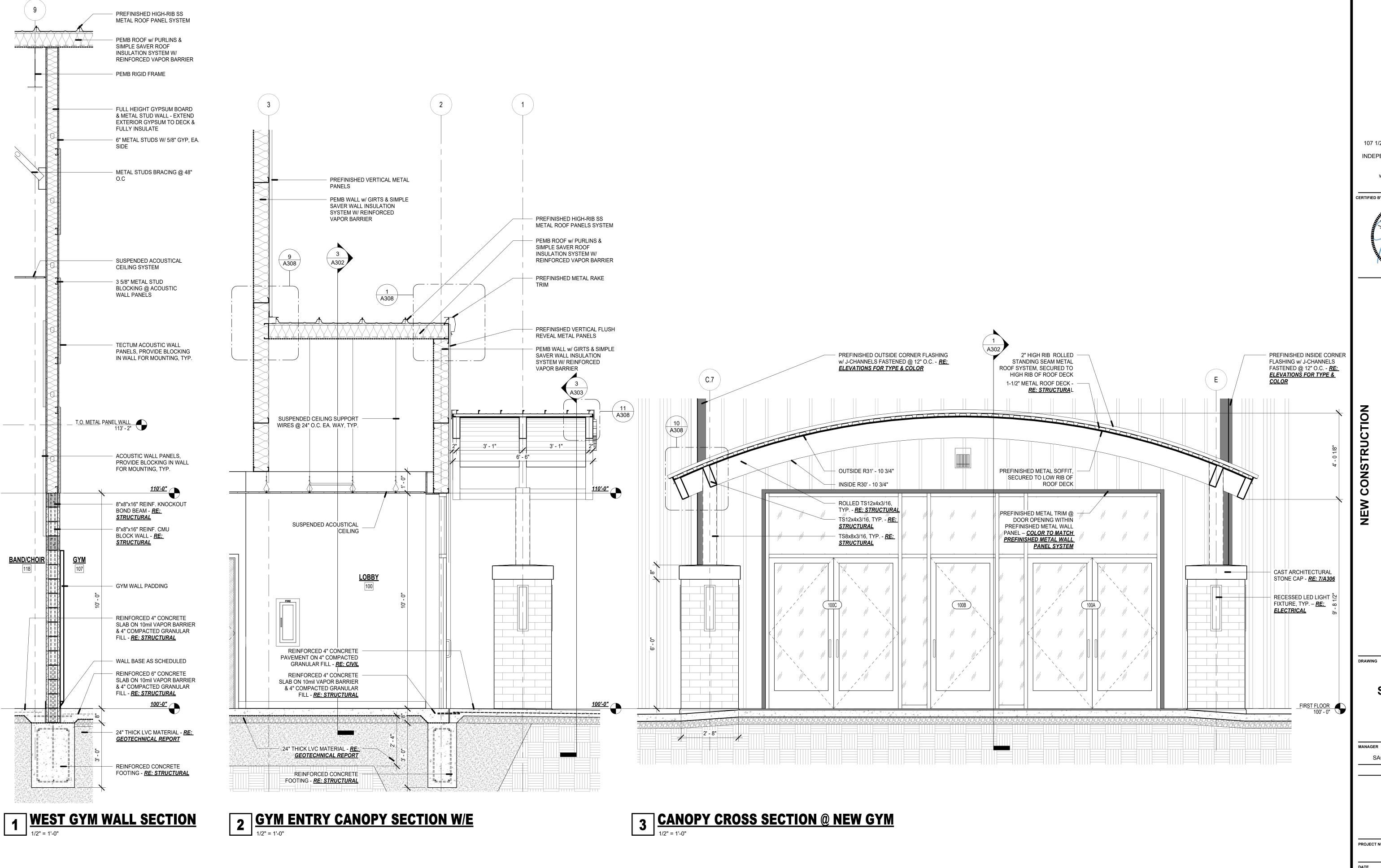
KG

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> 3 3

3 N/S SECTION @ ENTRY 1/2" = 1'-0"



Σ

CON NEW

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REVISIONS

WALL

SECTIONS

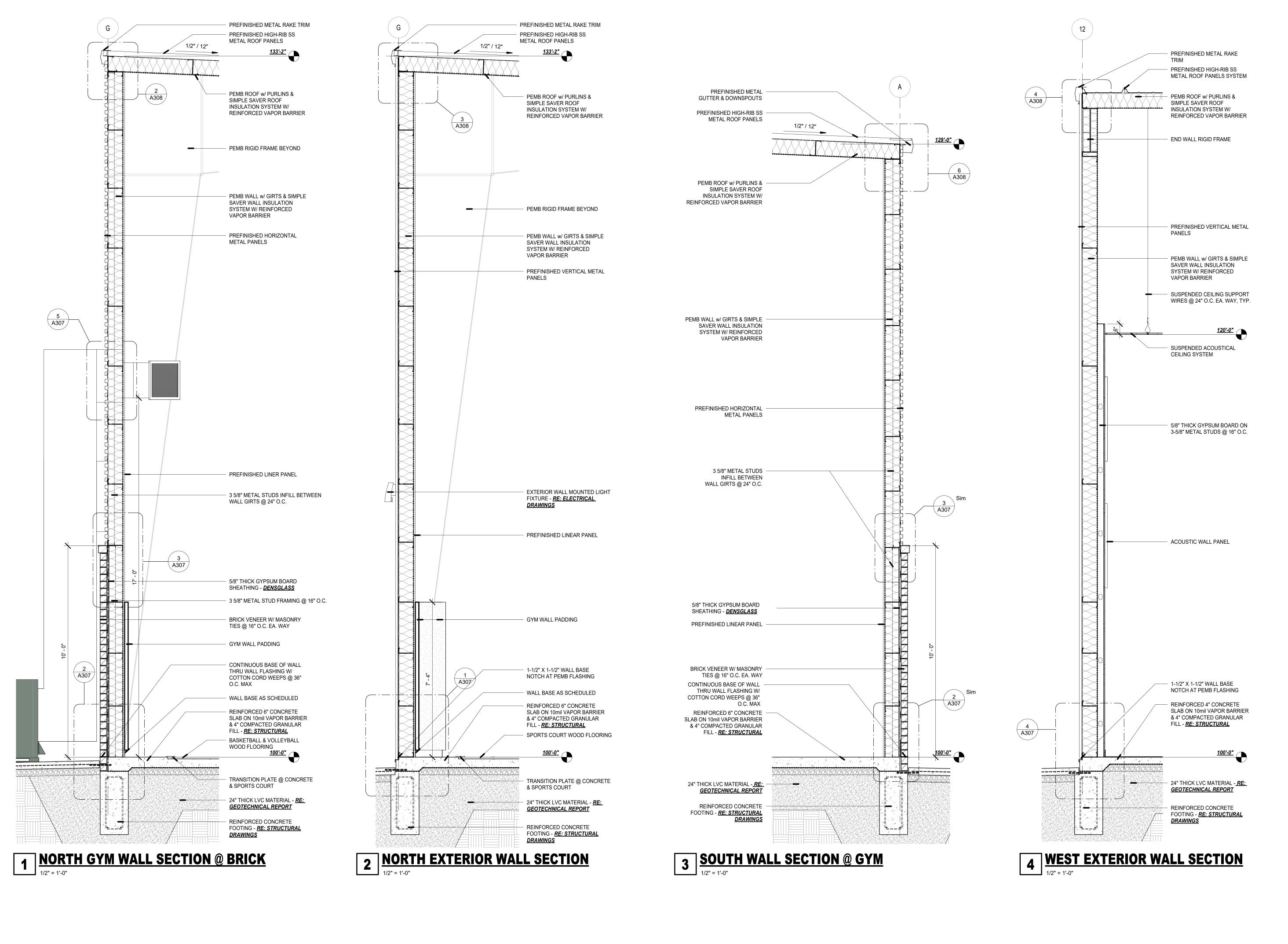
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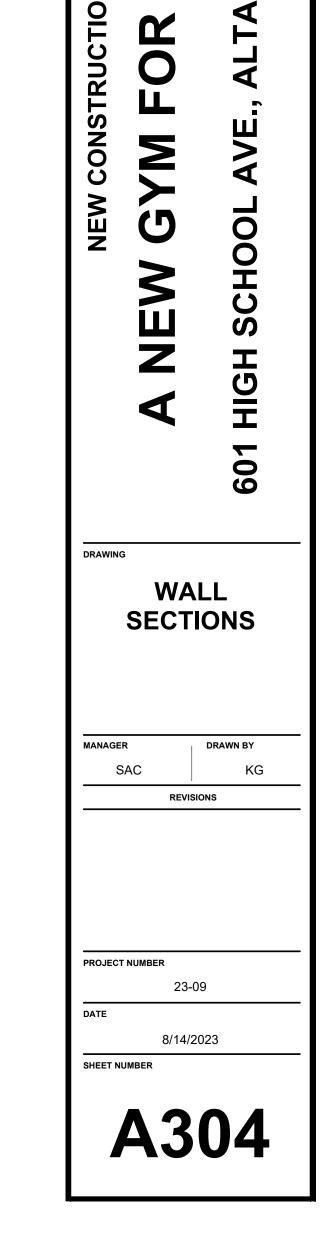
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PROJECT NUMBER 23-09

8/14/2023 SHEET NUMBER





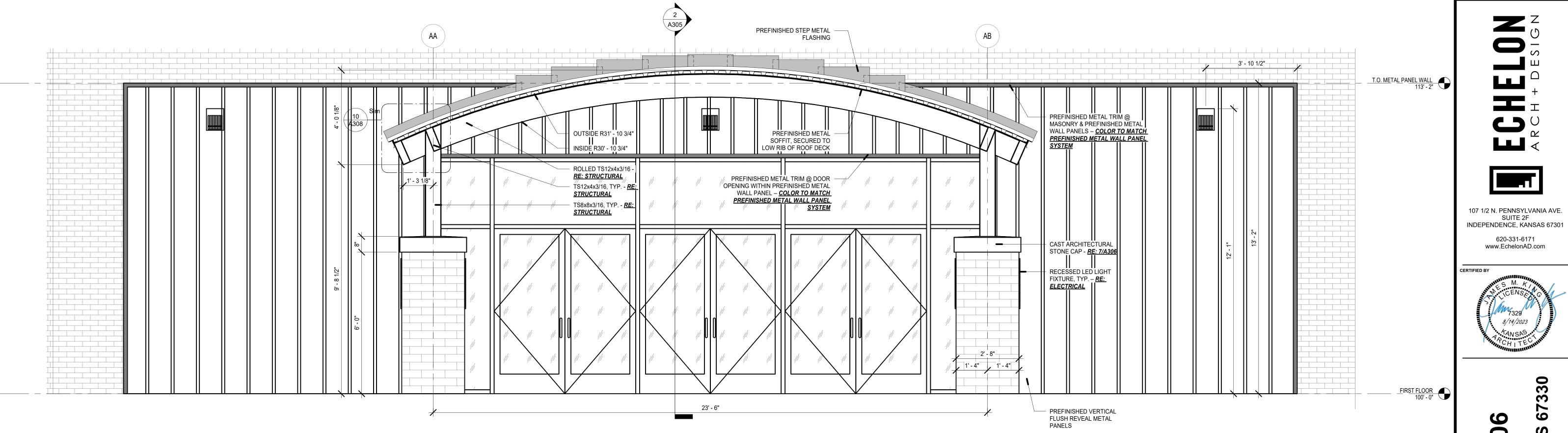
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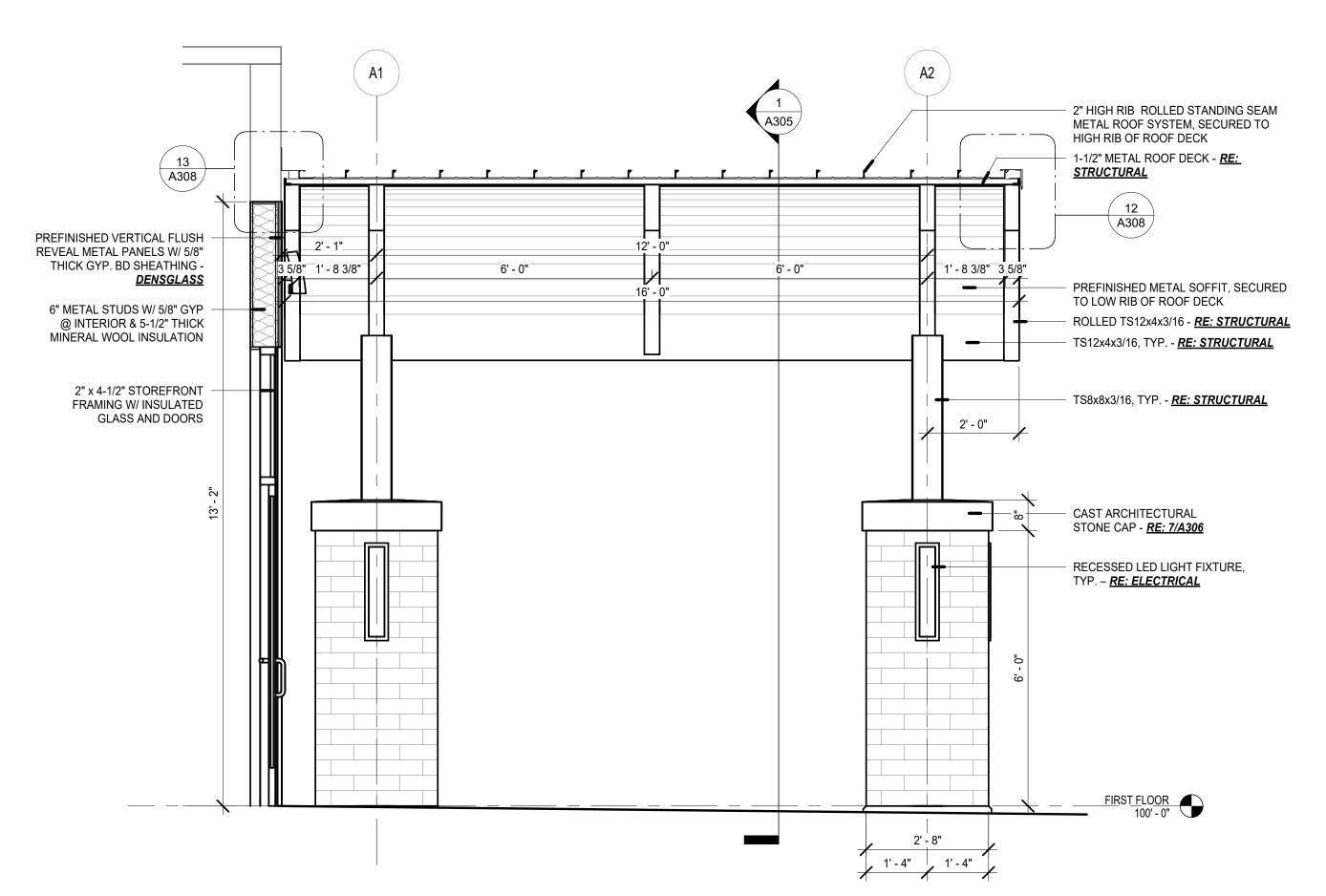
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1 TYPICAL CANOPY CROSS SECTION @ EXISTING



2 TYPICAL CANOPY SECTION @ EXISTING

506 ISTRUCTION NEW CON

DRAWING

MANAGER

PROJECT NUMBER

SHEET NUMBER

WALL

SECTIONS

REVISIONS

23-09

8/14/2023

A305

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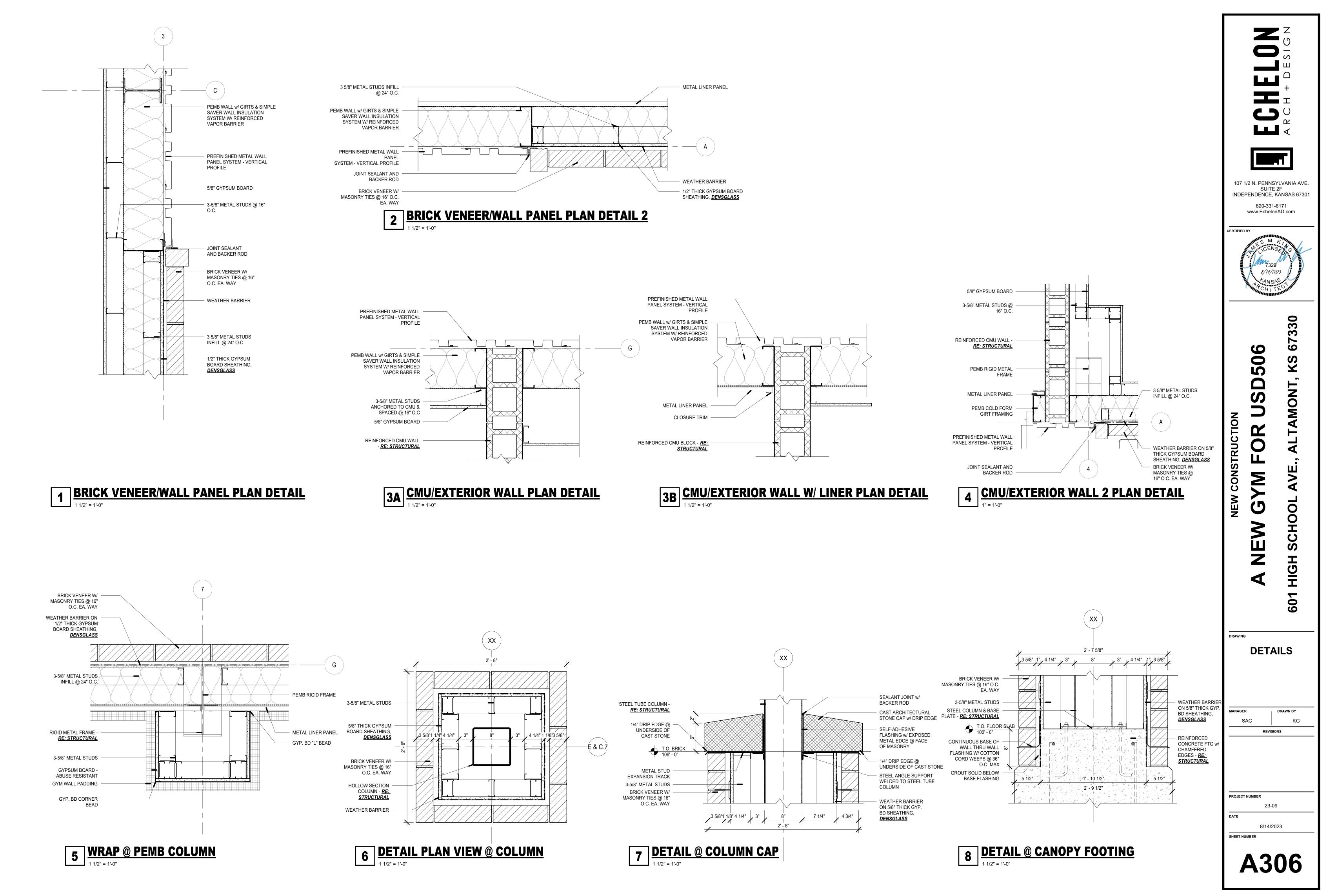
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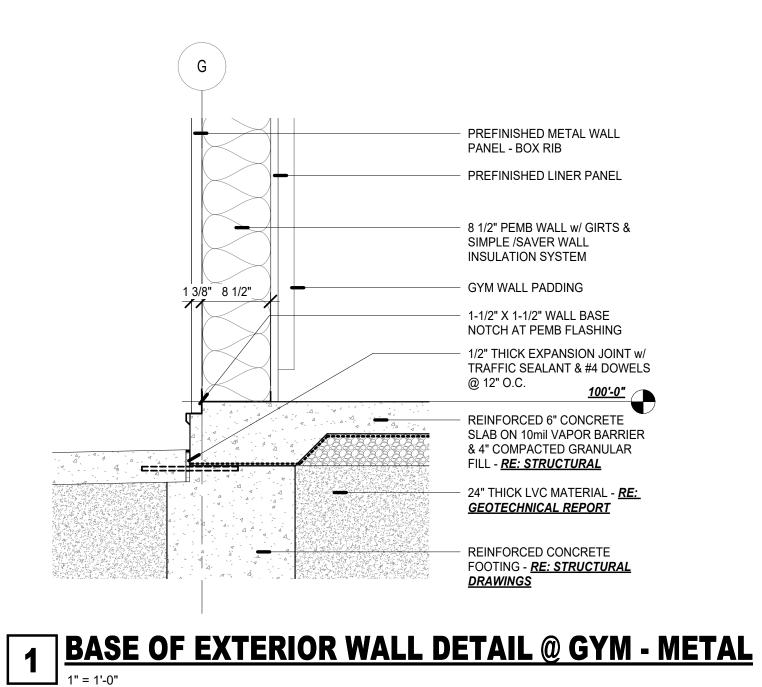
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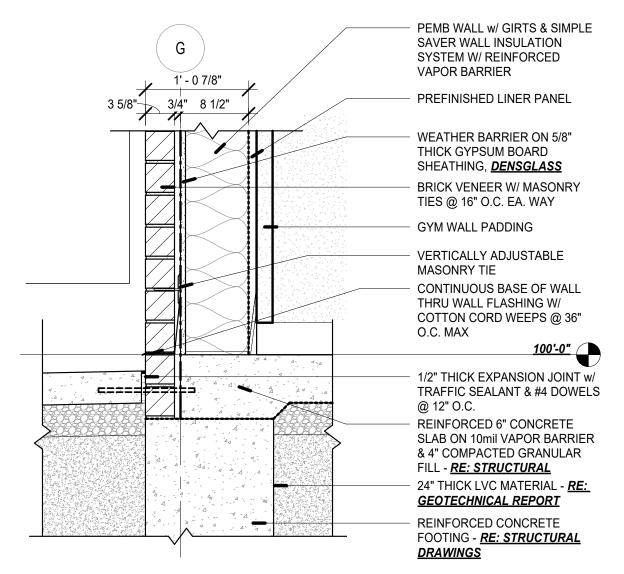
30

3





EXT. MTL. BLD'G. WALL



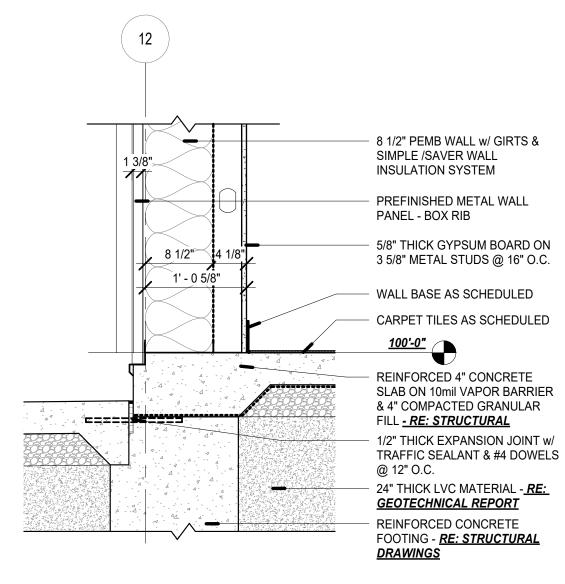


PREFIN. MTL. FLASHING W/ DRIP EDGE 8 1/2" MTL. BLD'G. ZEE GIRT FRAMING PREFIN. MTL. LINER PANEL VERTICALLY ADJUSTABLE MASONRY TIE 1/2" THICK GYPSUM BOARD SHEATHING, <u>**DENSGLASS**</u> WEATHER BARRIER SYSTEM SIMPLE SAVER WALL INSULATION W/ SUPER WHITE REINFORCED VAPOR BARRIER 4 5/8" 8 1/2" 1' - 1 1/8"

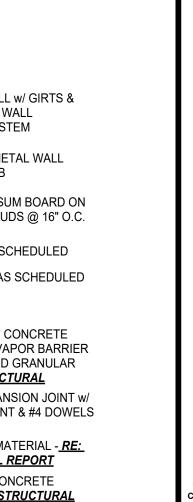
- 3 5/8" METAL STUDS INFILL @ 24" O.C.

- 8 1/2" MTL. BLD'G. FRAMING

3 BRICK/METAL DETAIL @ GYM







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STRUCTION

CON

WALL DETAILS

DRAWN BY REVISIONS

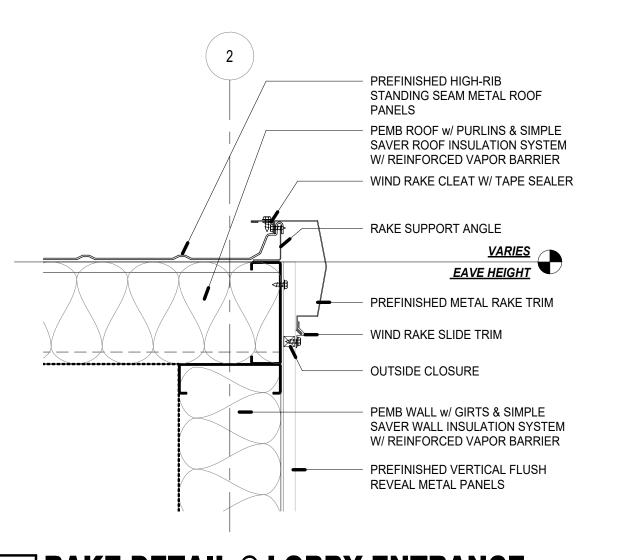
PROJECT NUMBER 23-09

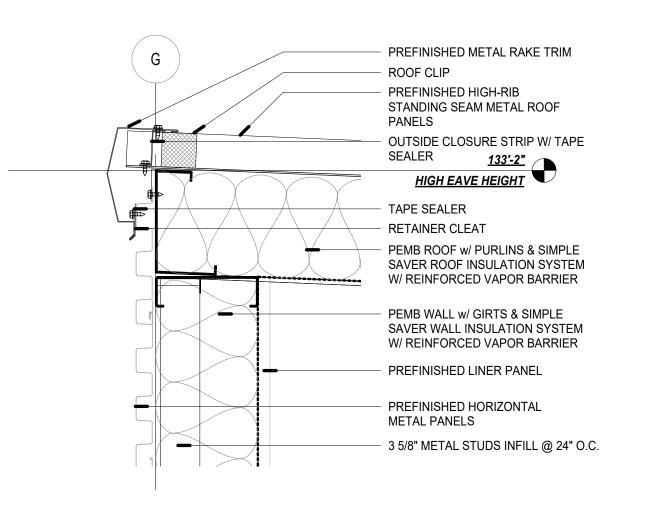
8/14/2023

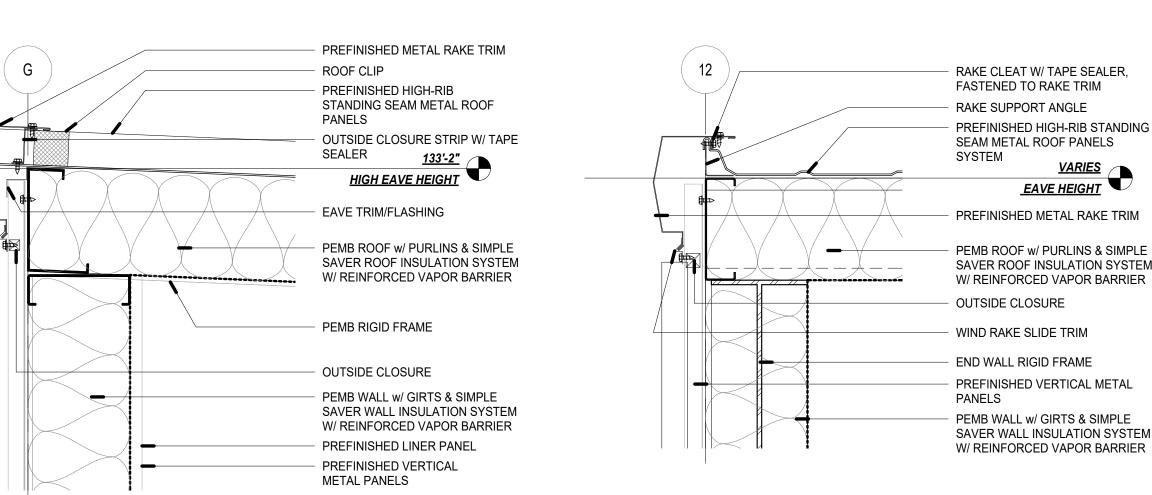
A307

- MTL. PANEL TRIM/FLASHING @ OPENING - FLASHING W/ DRIP EDGE @ HEAD OF OPENING MTL. BLD'G. GIRT FRAMING @ DUCTWORK PENETRATION - COORDINATE SIZE OF OPENINGS W/ MTL. BLD'G. MANUF. & MECH. DUCTWORK PER MECH. 1/2" EXP. JT. BETWEEN DUCT WORK & WALL W/ BACKER ROD & SEAL @ EXTERIOR & INT. SIDE OF JOINT CONT. AROUND PENETRATION CLOSURE TRIM @ DUCTWORK PENETRATION, TYP. SLOPE DUCTWORK @ EXT. 1/4" PER FOOT AWAY FROM PREFINISHED LINER PANEL SIMPLE SAVER WALL INSUL. SYS. W/ SUPER WHITE REINF. TO VAPOR BARRER AS DIRECTED BY MANUF.

5 DUCTWORK FLASHING DETAIL3/4" = 1'-0"





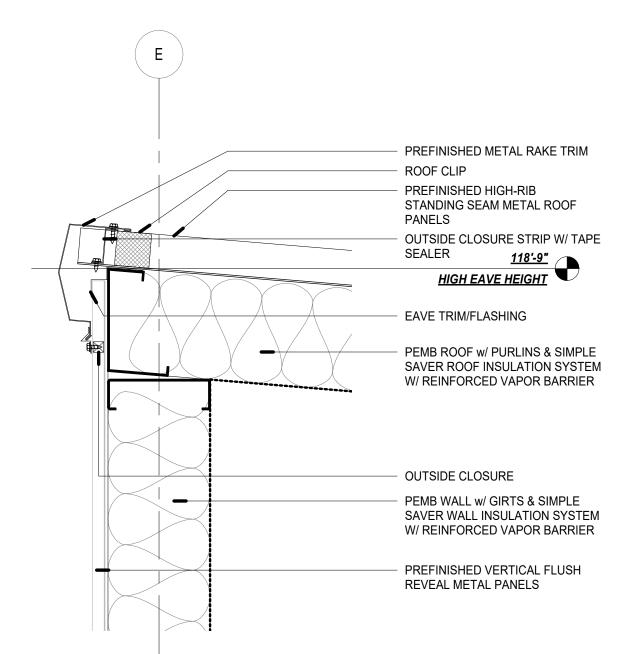


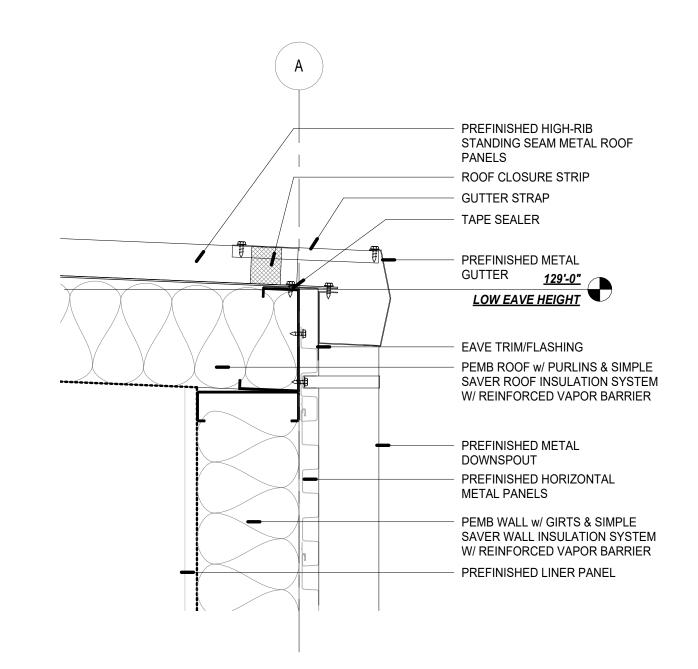


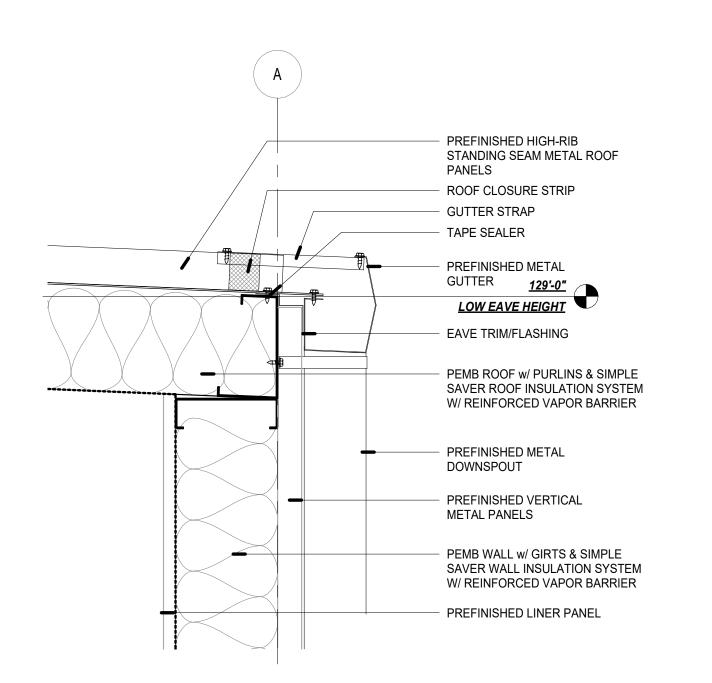
2 RAKE DETAIL @ HORIZ. PANEL 1 1/2" = 1'-0"

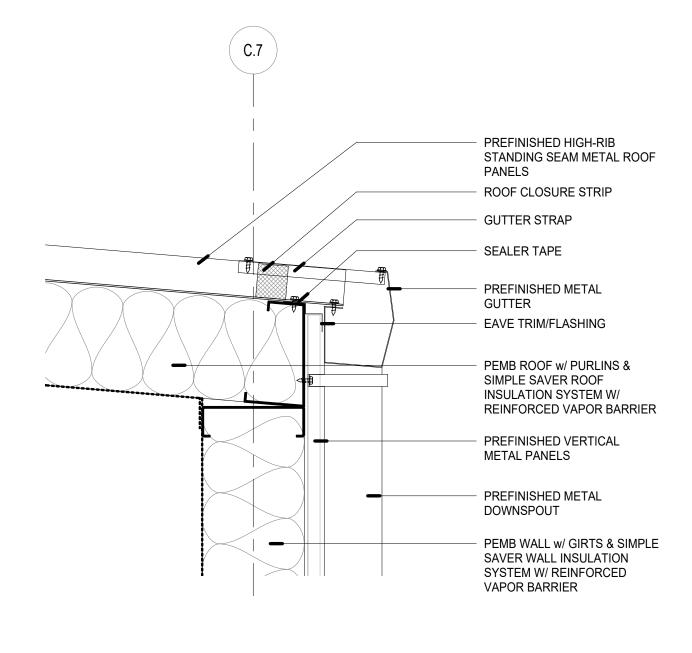
3 RAKE DETAIL @ VERTICAL PANEL 1 1/2" = 1'-0"



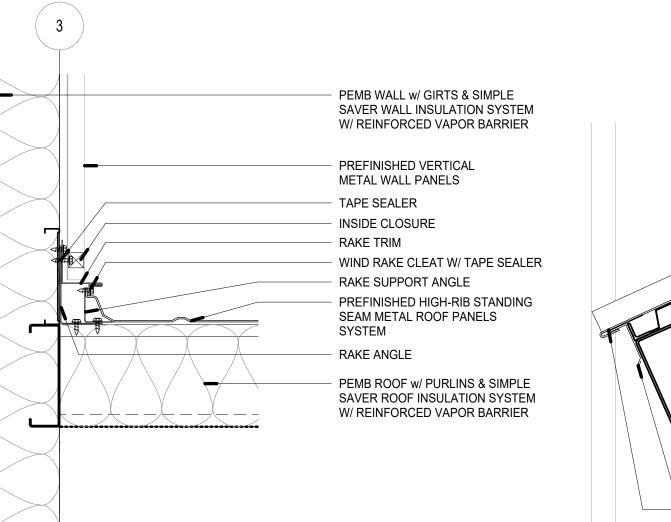








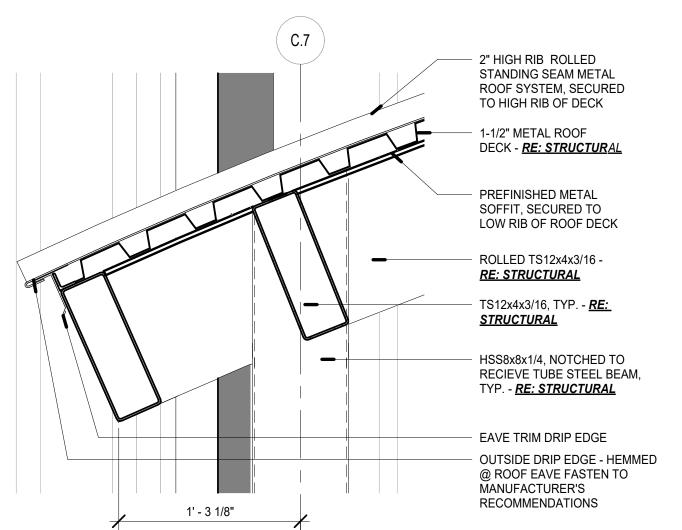
5 RAKE DETAIL @ LOBBY HIGH EAVE

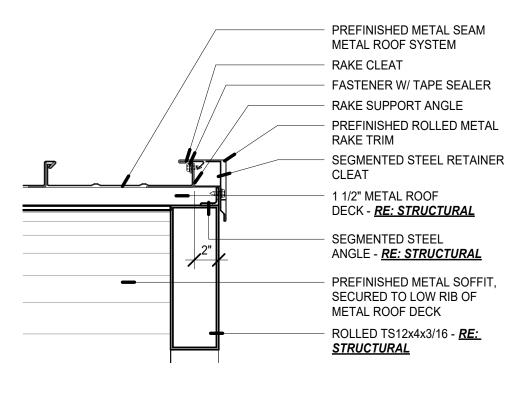


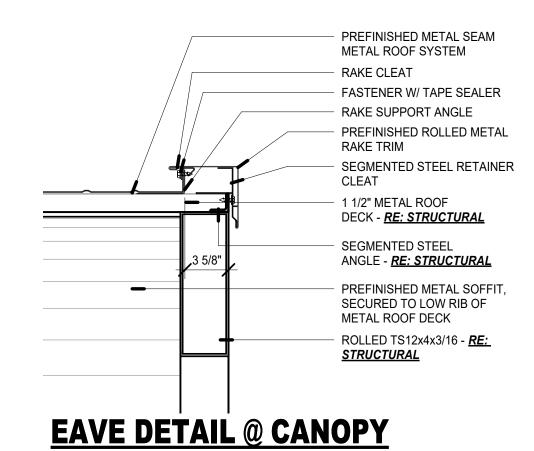


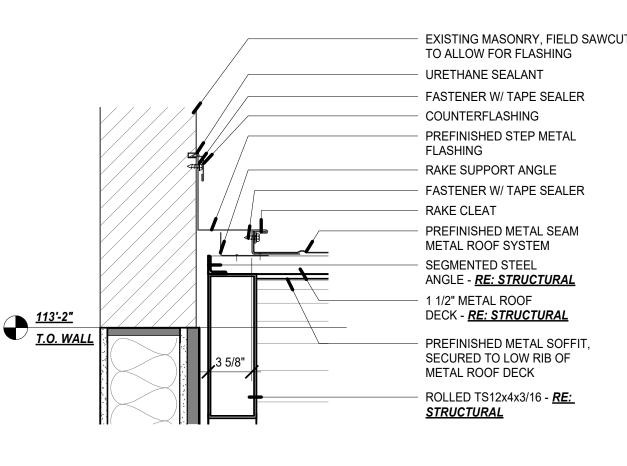












9 ROOF WALL FLASHING DETAIL

10 EAVE DETAIL @ CANOPY SIDE

11 RAKE DETAIL @ CANOPY

12 (EXISTING GYM)
1 1/2" = 1'-0"

RAKE DETAIL @ CANOPY

(EXISTING GYM)

1 1/2" = 1'-0"

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A NEW GYM FOR USD506

PROJECT NUMBER

23-09

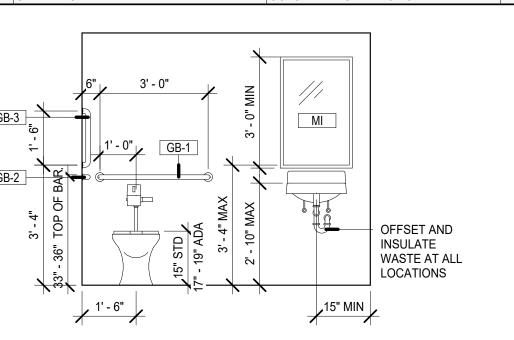
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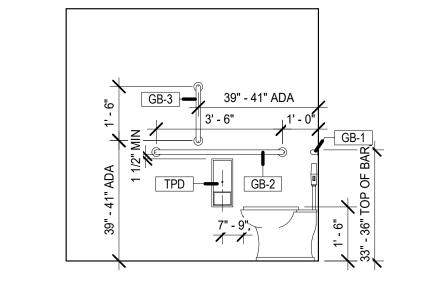
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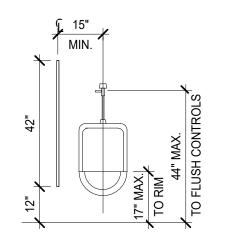
SHEET NUMBER

TOILET ACCESSORY GENERAL NOTES:

- COORDINATE ACCESSORIES WITH WALL DIMENSIONS. REFER TO THE WALL FINISH PLANS & COORDINATE ACCESSORIES & TRIM APPROPRIATELY WITH WALL FINISHES AS REQUIRED.
- BRADLEY CORPORATION IS USED AS A BASIS OF DESIGN MANUF. FOR EACH PRODUCT. EQUAL PRODUCTS FROM OTHER MANUF. WILL BE ACCEPTED. CONFIRM FINAL SELECTIONS WITH OWNER / ARCHITECT.
- INSTALL BLOCKING FOR TOILET ACCESSORY INSTALLATION & COORDINATE FINAL LOCATIONS WITH OWNER / ARCHITECT.
- 4. INSTALL INSULATED LAVATORY GUARDS ON ALL ADA COMPLIANT SINKS.



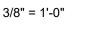


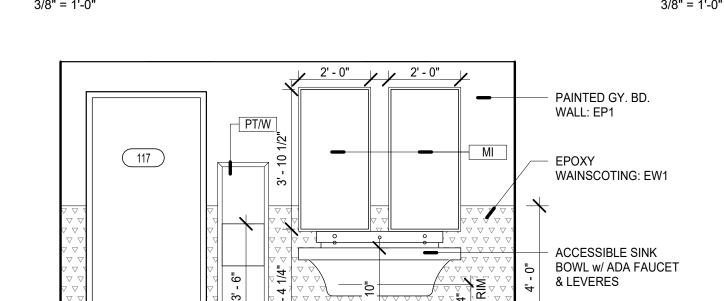


TYP. RESTROOM FRONT ELEVATION

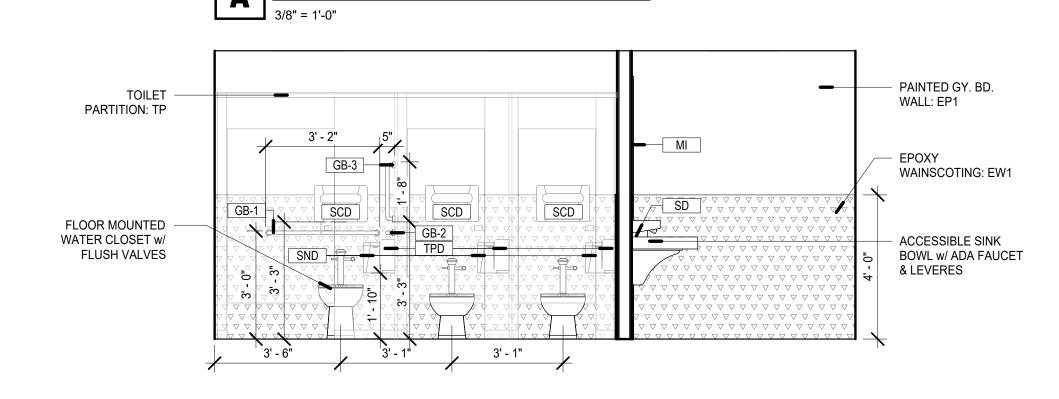
TYP. RESTROOM SIDE ELEVATION

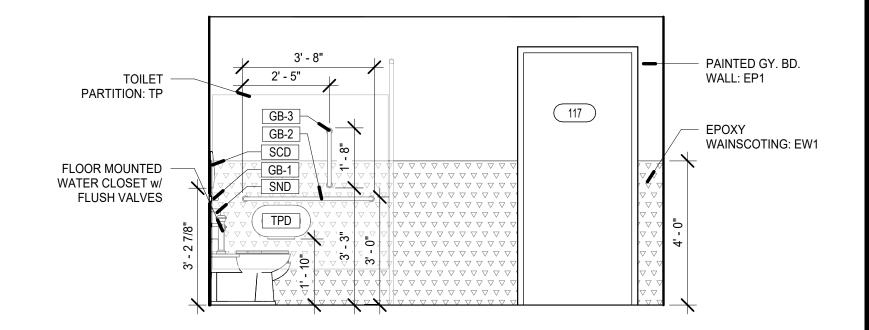
TYP. ACCESSIBLE URINAL





LOCKER ROOM ELEVATION





1 ENLARGED LOCKER ROOM RR PLAN 3/8" = 1'-0"

13' - 1 3/8"

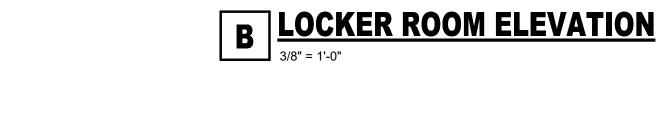
FLOOR

DRAIN

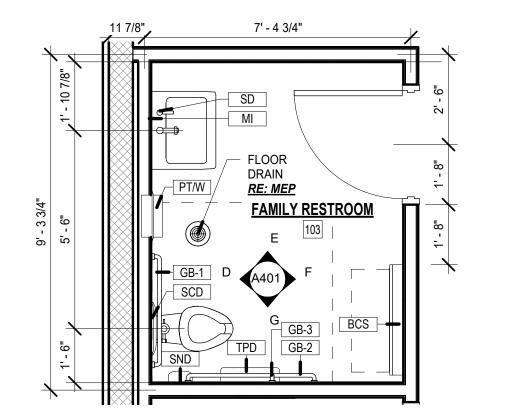
RESTROOM

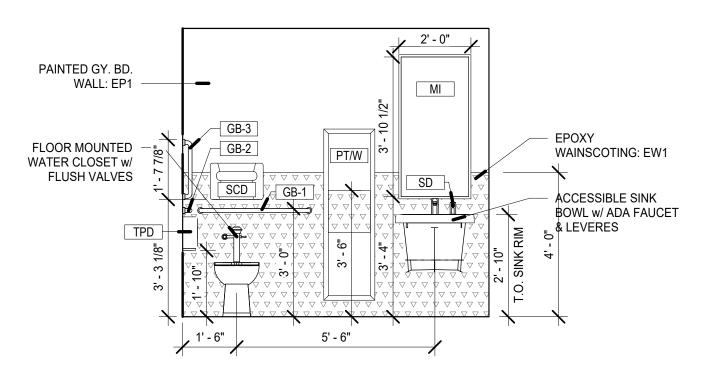
117 3' - 4" R.O.

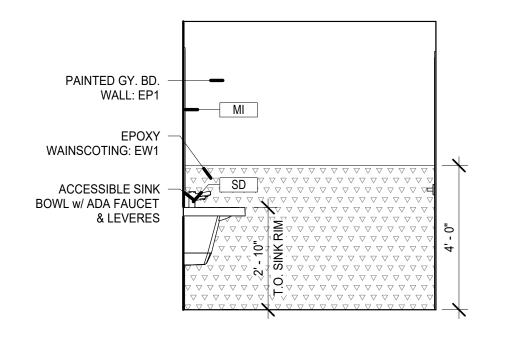
<u>RE: MEP</u>

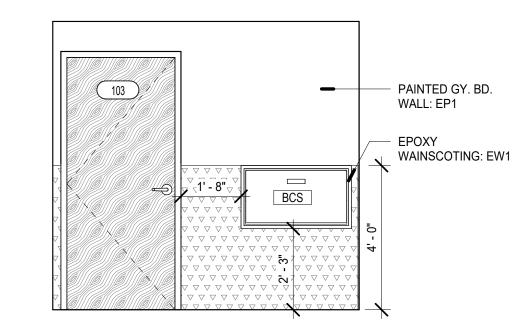


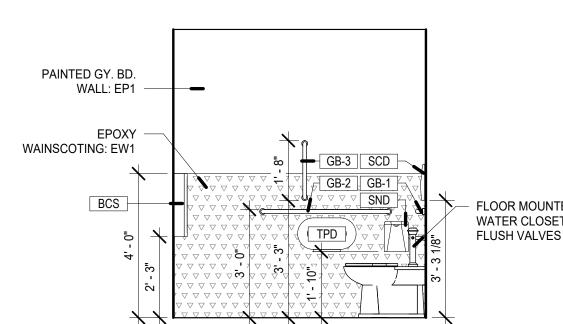
C LOCKER ROOM ELEVATION 3/8" = 1'-0"











2 ENLARGED FAMILY RR PLAN
3/8" = 1'-0"



<u>W9.a</u>

26' - 2 5/8"

CLR

<u>W5.a</u>

SCD

5' - 0" CLR 13' - 1 3/8"

DRAIN

<u>RESTROOM</u>

PAMILY RR WET WALL3/8" = 1'-0"

E FAMILY RR SIDE WALL 3/8" = 1'-0"

F FAMILY RR BACK WALL
3/8" = 1'-0"

G FAMILY RR SIDE WALL
3/8" = 1'-0"

FLOOR MOUNTED
 WATER CLOSET w/
 FLUSH VALVES

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STRUCTION

NEW CON

X

NEW NEW

ENLARGED

RESTROOMS

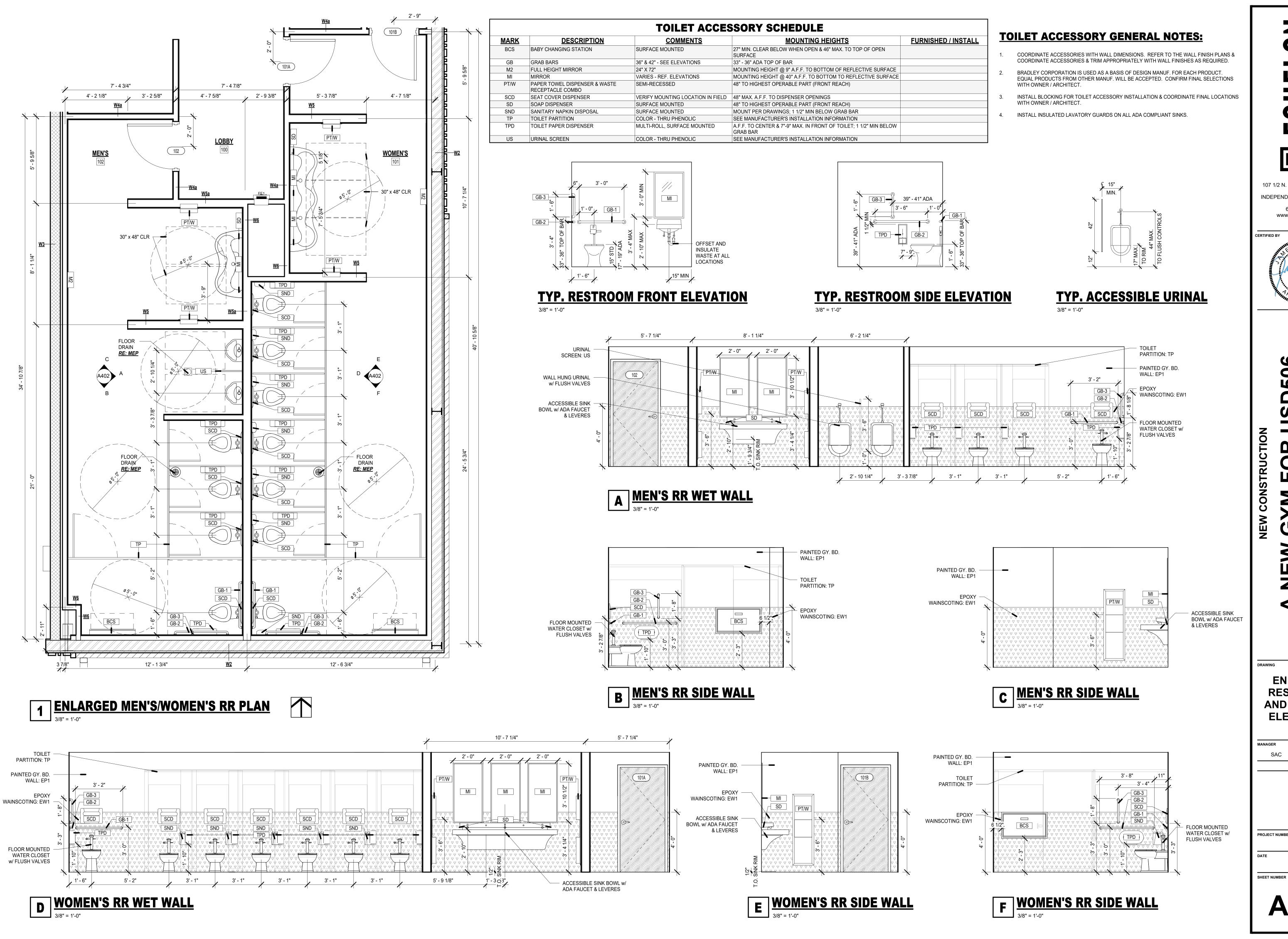
AND INTERIOR

ELEVATIONS

REVISIONS

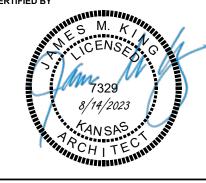
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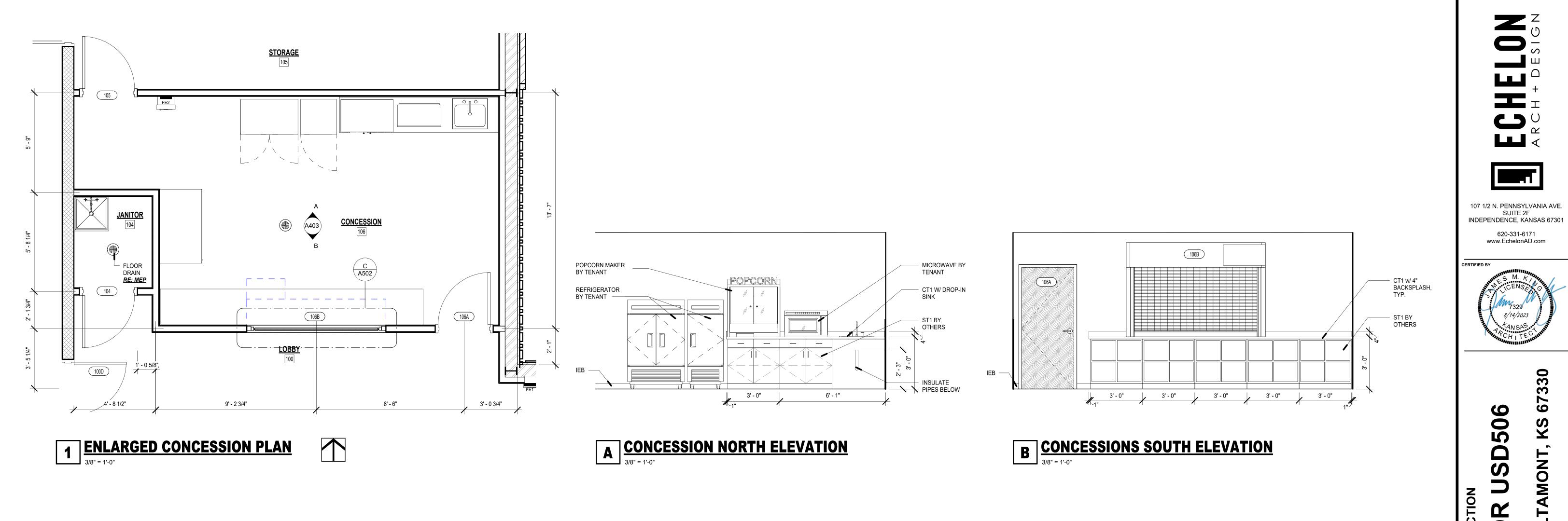
STRUC⁻ NEW CON X N N N

ENLARGED RESTROOMS AND INTERIOR ELEVATIONS

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ANF REVISIONS PROJECT NUMBER 23-09

8/14/2023



USD506 X

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NEW CONSTRUCTION

ENLARGED

PLAN &

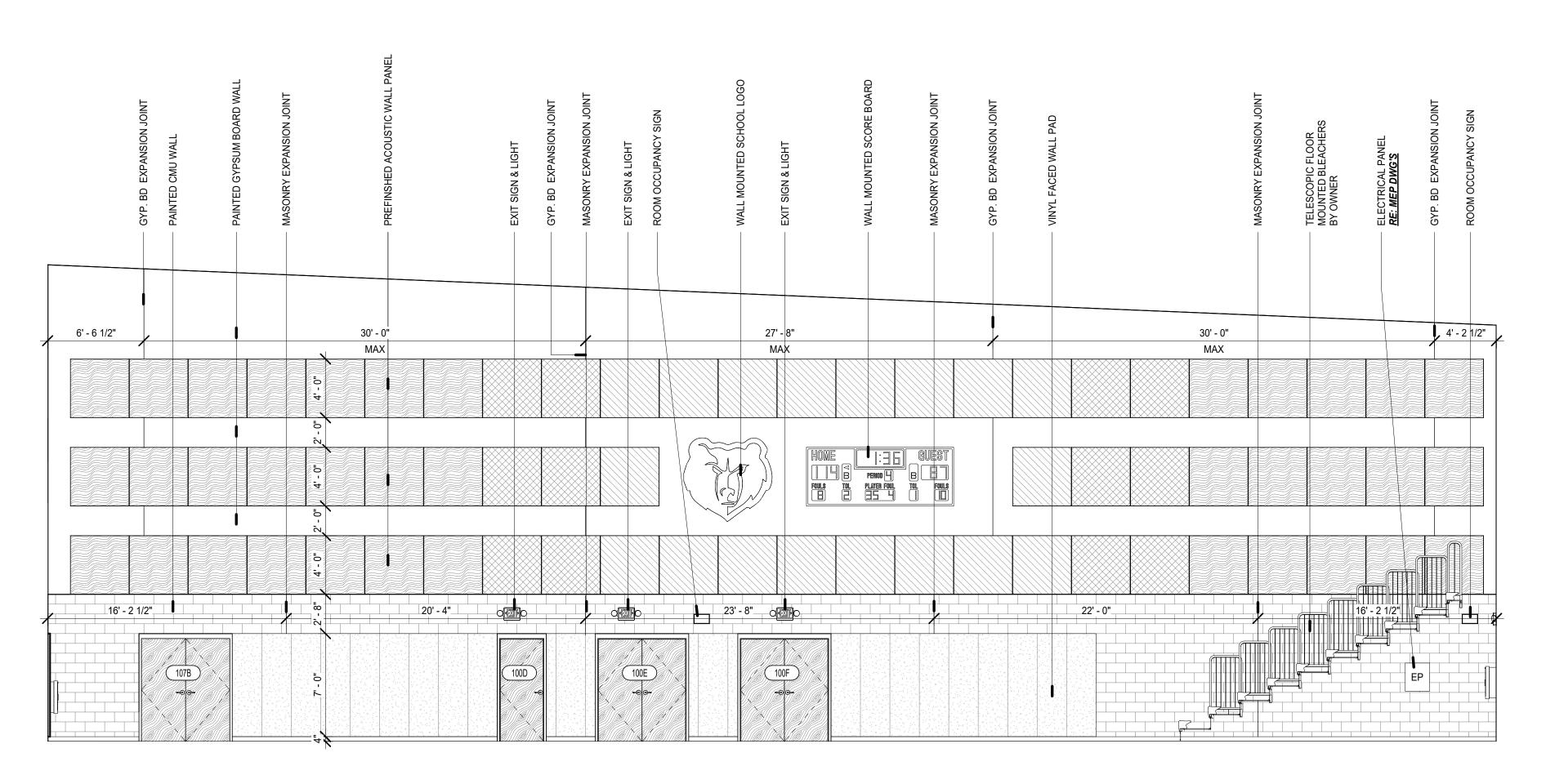
INTERIOR

ELEVATIONS

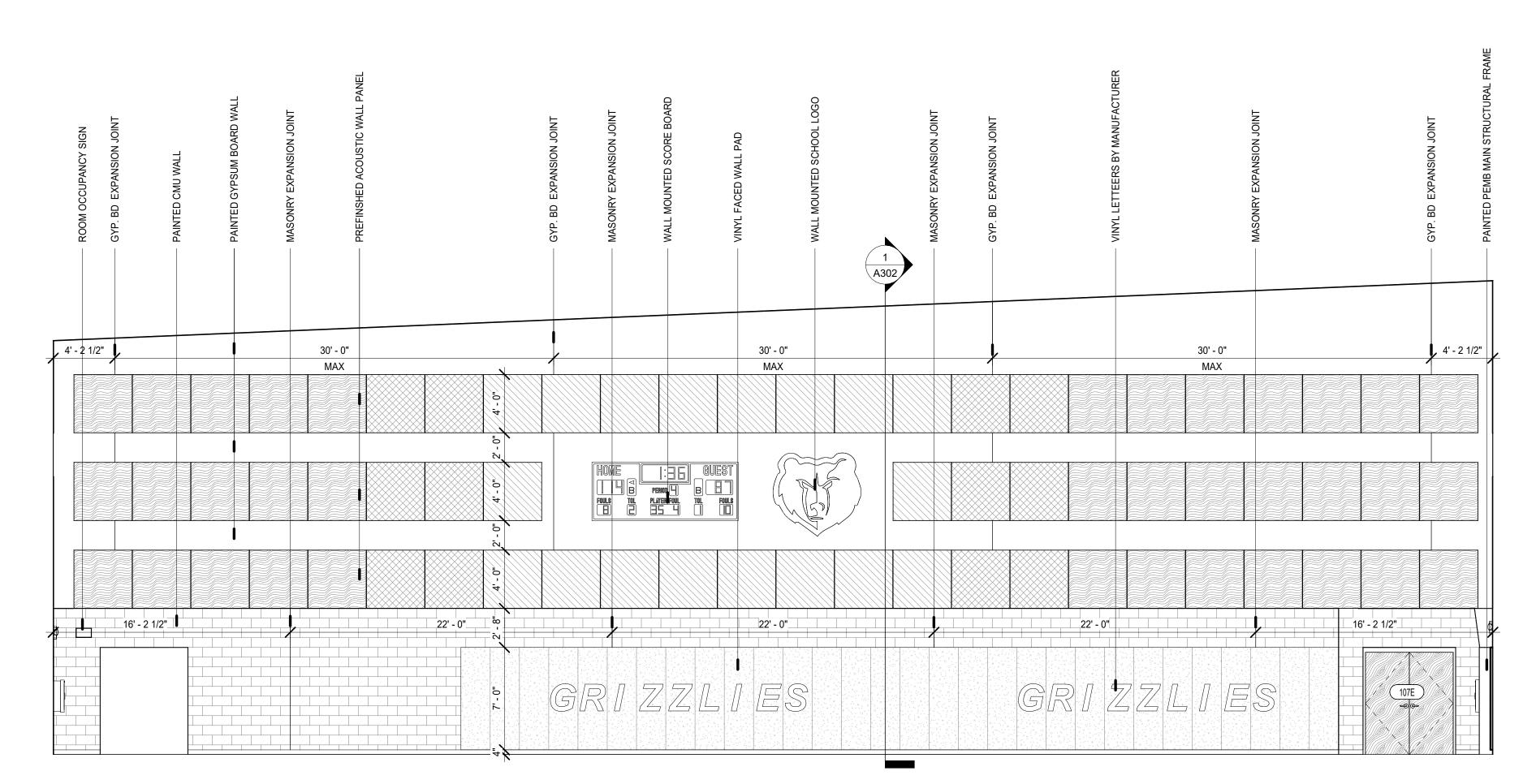
REVISIONS

8/14/2023

PROJECT NUMBER



1 GYM EAST ELEVATION 3/16" = 1'-0"



2 GYM WEST ELEVATION
3/16" = 1'-0"

WALL ACOUSTICAL PANEL LEGEND

ARMSTRONG WALL PANEL - ROSE WAP1

ARMSTRONG WALL PANEL - HONEYSUCKLE WAP2

ARMSTRONG WALL PANEL - BASALT WAP3



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SD506 NEW GYM A

STRUCTION

NEW CONS

GYM **ELEVATIONS**

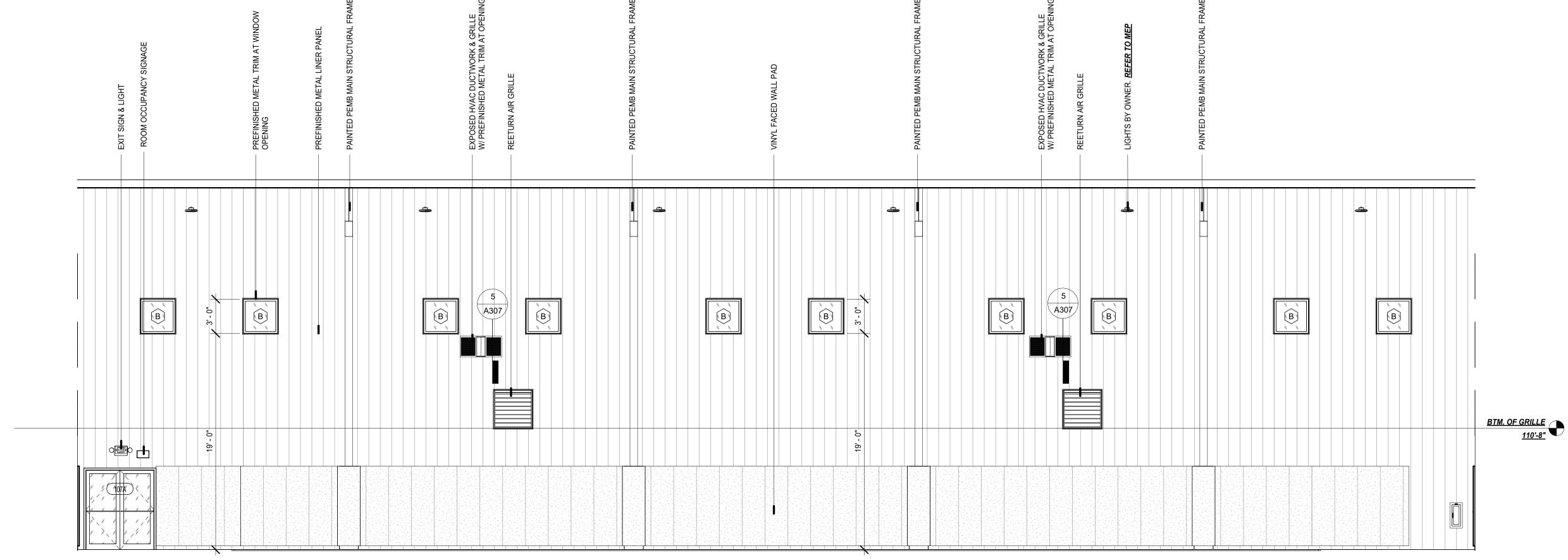
REVISIONS

PROJECT NUMBER

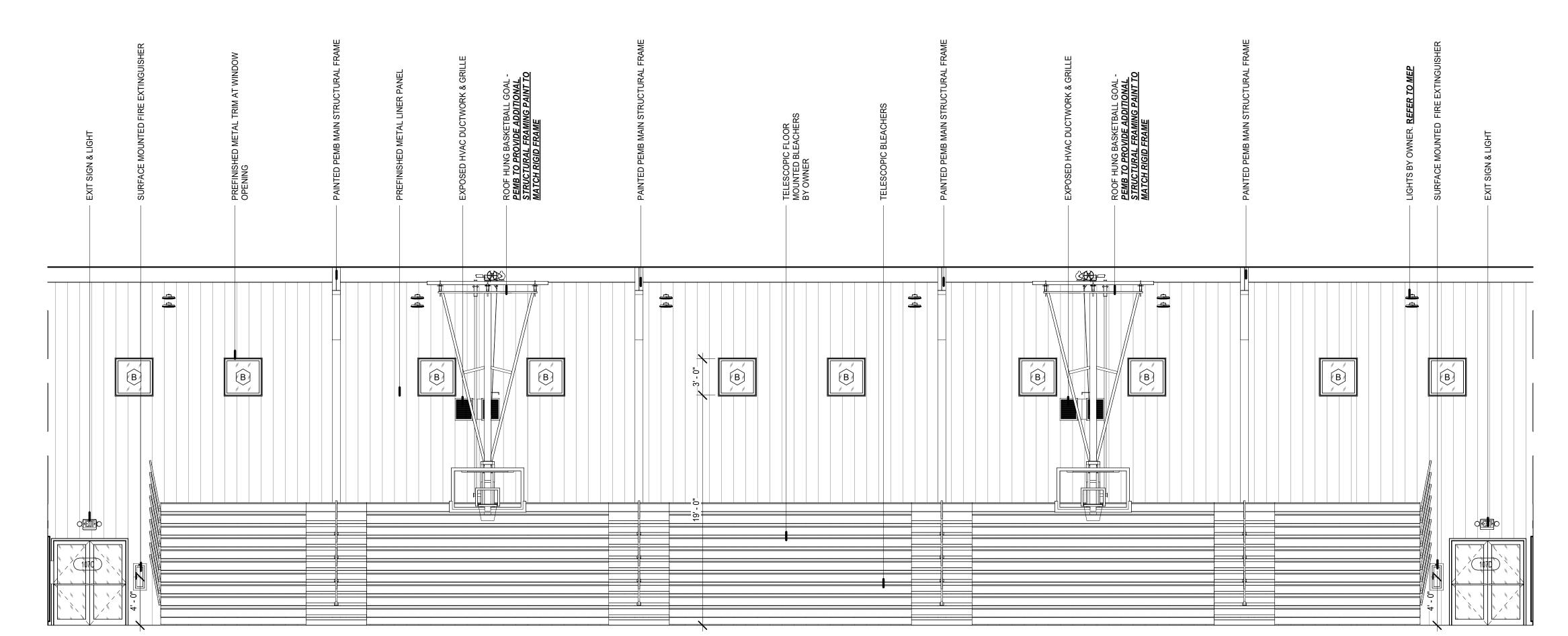
8/14/2023



1. REFER TO SHEET A503 FOR WINDOW TYPE, SIZE, AND LOCATION



1 GYM NORTH ELEVATION
3/16" = 1'-0"



2 GYM SOUTH ELEVATION
3/16" = 1'-0"

USD506 NEW CONSTRUCTION GYM NEW

GYM ELEVATIONS

REVISIONS

8/14/2023

A405

PROJECT NUMBER

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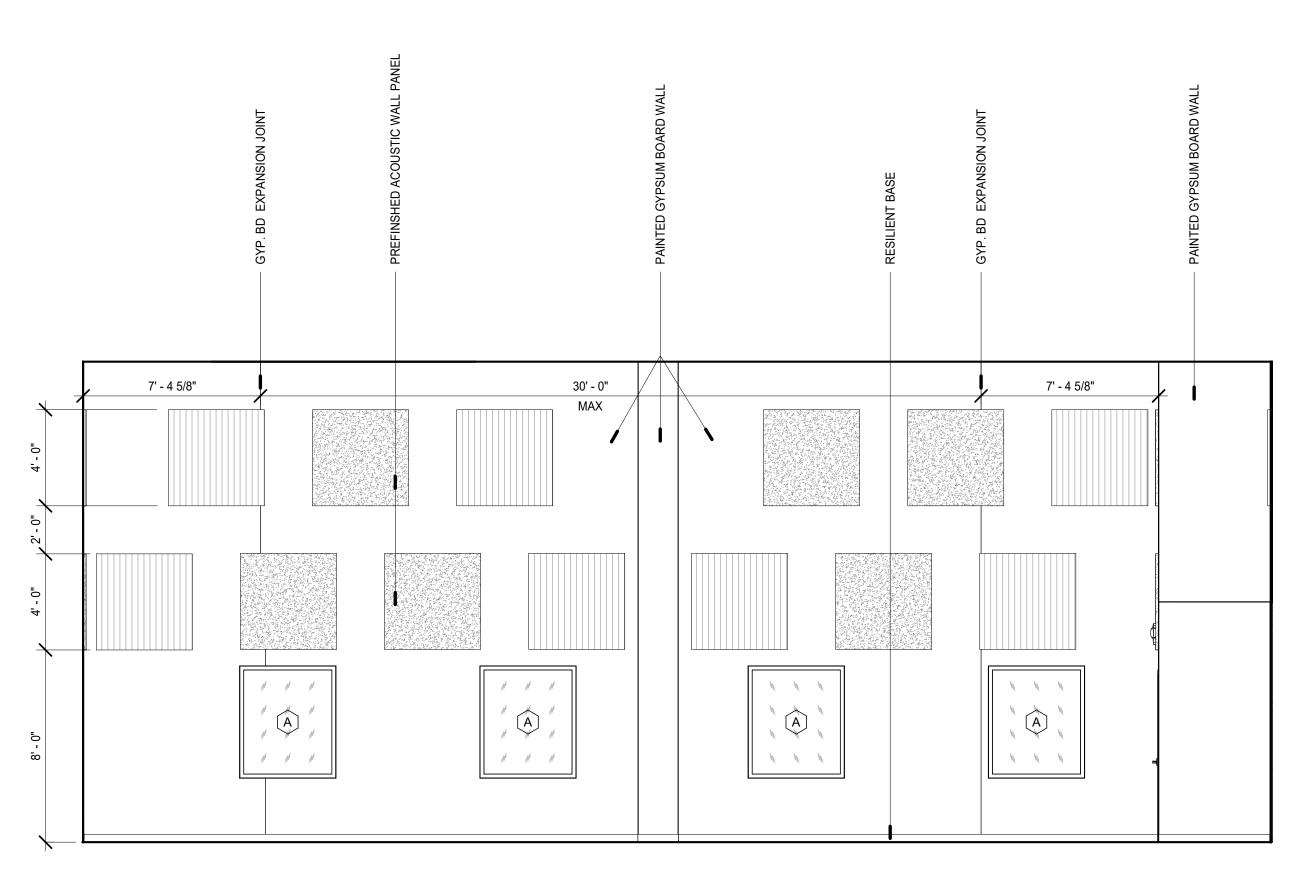
1. REFER TO SHEET A503 FOR WINDOW TYPE, SIZE, AND LOCATION

WALL ACOUSTICAL PANEL LEGEND

G&S ACOUSTICS WALL PANEL - RED WAP4

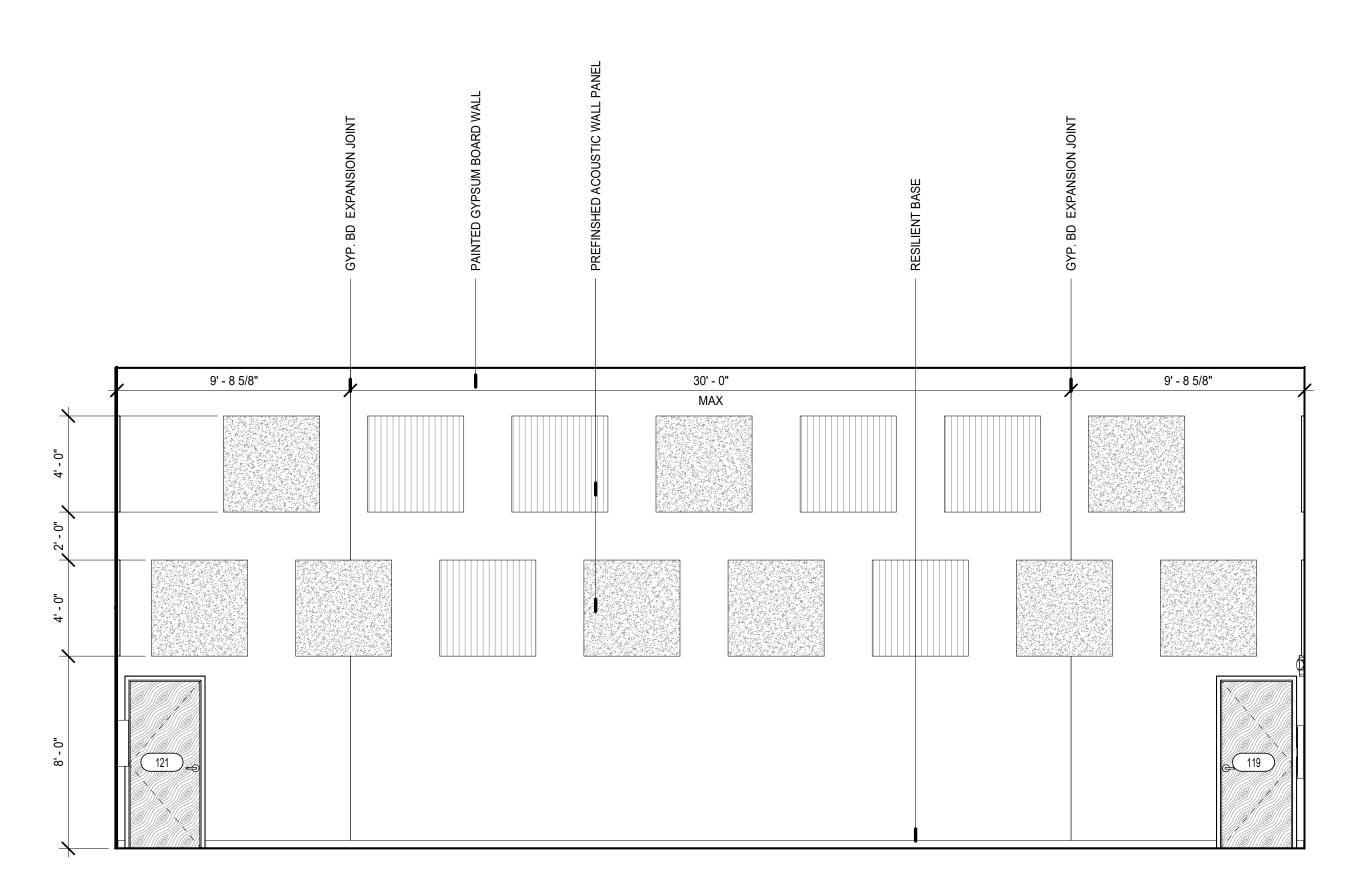


G&S ACOUSTICS WALL PANEL - YELLOW WAP5

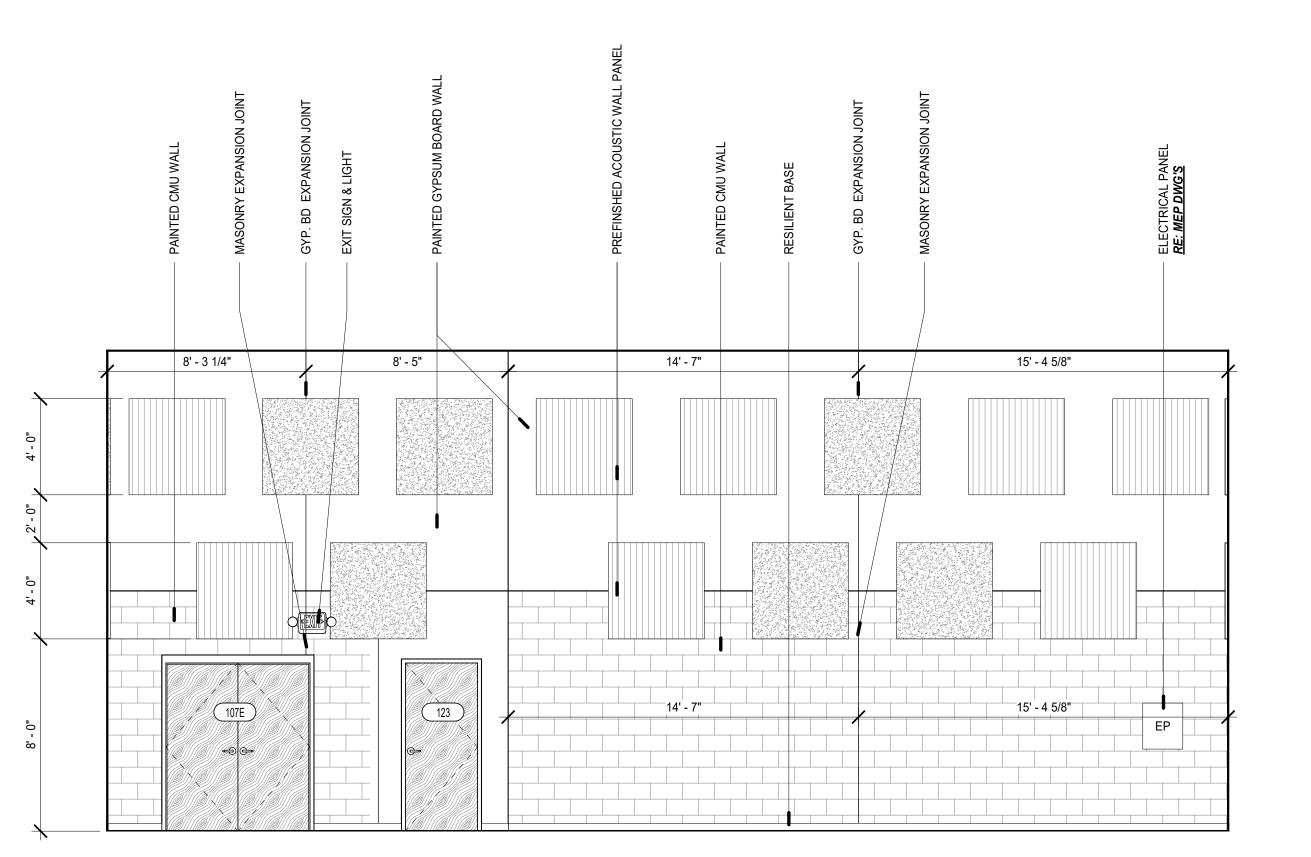


1 BAND ROOM NORTH ELEVATION

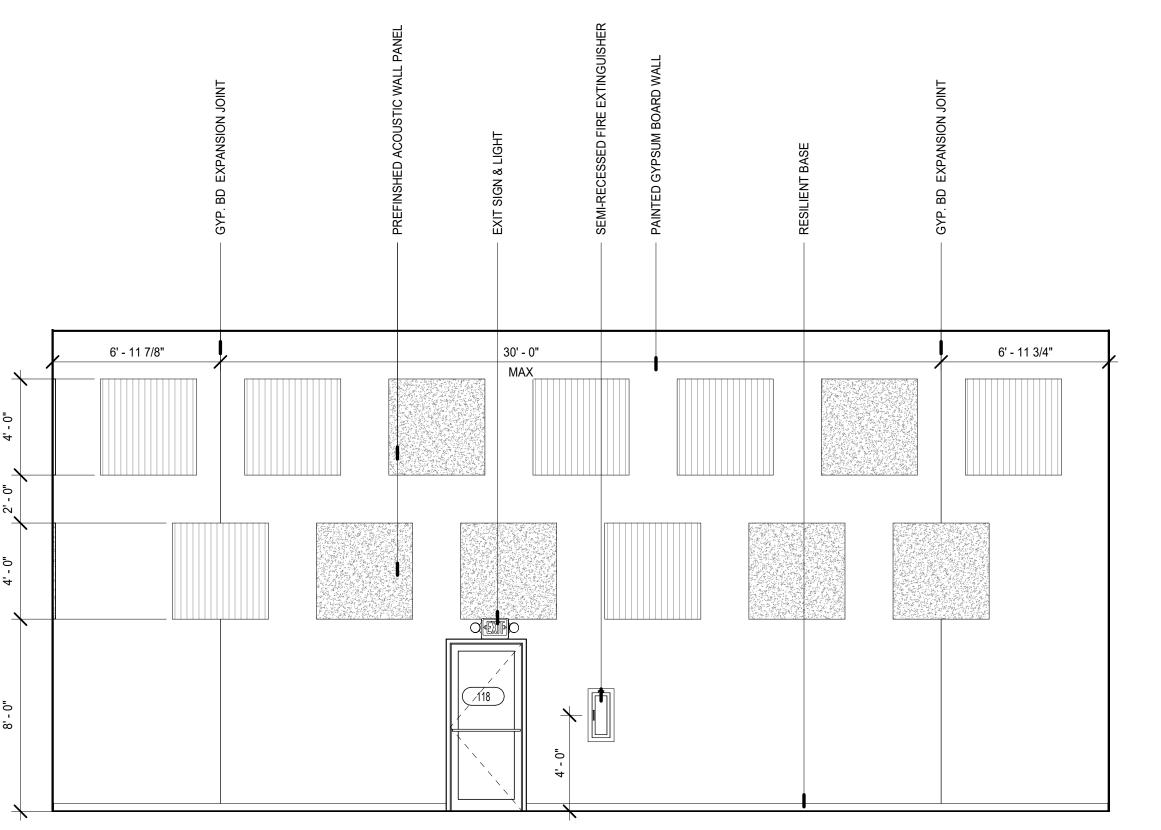
1/4" = 1'-0"



BAND ROOM SOUTH ELEVATION1/4" = 1'-0"



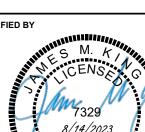
BAND ROOM EAST ELEVATION1/4" = 1'-0"



BAND ROOM WEST ELEVATION1/4" = 1'-0"



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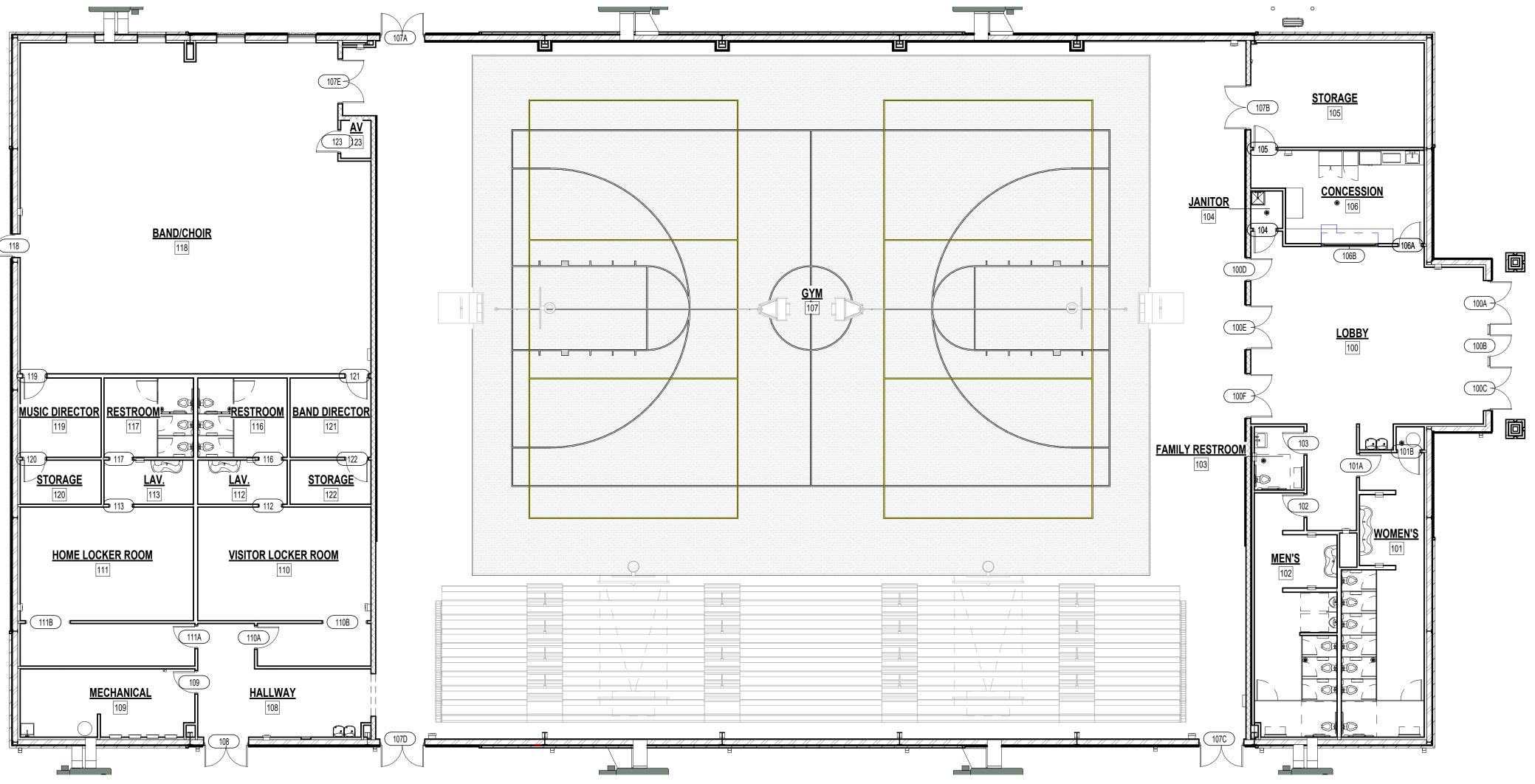


STRUCTION

BAND ROOM ELEVATIONS

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|-------|-----------|
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| I | REVISIONS |
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A406



1 DOOR FLOOR PLAN 1" = 10'-0"

| DOOF | 2 & F | FRAME S | <u>SCHEDU</u> | <u>LE</u> | | | | | | | | | | | | |
|--------|-------|----------|---------------|-----------|-------------|-----------|-----------------|--------------|-------------|----------|-----------|--------|-------------|---------|-------------|---|
| | | | | <u></u> | <u>OOOR</u> | | | | | FRAI | <u>ИЕ</u> | | | | | |
| DOOR | | | | | SIZE | | | | | | | DETAIL | S ON SHE | ET A502 | <u>FIRE</u> | |
| NUMBER | TYPE | MATERIAL | FINISH | WIDTH | HEIGHT | THICKNESS | HARDWARE | GLASS | <u>TYPE</u> | MATERIAL | FINISH | JAMB | <u>HEAD</u> | SILL | LABEL | <u>COMMENTS</u> |
| 100A | | ALUMINUM | PREFIN. | 6' - 0" | 7' - 0" | 1 3/4" | H-3 | | | ALUMINUM | PREFIN. | | | | | REMOVABLE CENTER MULL |
| 100B | D | ALUMINUM | PREFIN. | 3' - 0" | 7' - 0" | 1 3/4" | H-3 | Т | F6 | ALUMINUM | PREFIN. | G | G | G | | REMOVABLE CENTER MULL |
| 100C | Е | ALUMINUM | PREFIN. | 6' - 0" | 7' - 0" | 1 3/4" | H-3 | Т | F6 | ALUMINUM | PREFIN. | G | G | G | | REMOVABLE CENTER MULL / DOOR ACCESS SYSTEM |
| 100D | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-7 | - | F4 | H.M. | PAINT | В | В | - | | 4" HEAD |
| 100E | С | WOOD | STAIN | 6' - 0" | 7' - 0" | 1 3/4" | H-7 | - | F5 | H.M. | PAINT | В | В | - | | REMOVABLE CENTER MULL, 4" HEAD |
| 100F | С | WOOD | STAIN | 6' - 0" | 7' - 0" | 1 3/4" | H-7 | - | F5 | H.M. | PAINT | В | В | - | | REMOVABLE CENTER MULL, 4" HEAD |
| 101A | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-2 | - | F3a | H.M. | PAINT | Α | Α | - | | |
| 101B | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-4 | - | F3a | H.M. | PAINT | А | Α | - | | |
| 102 | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-2 | - | F3a | H.M. | PAINT | Α | Α | - | | |
| 103 | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-1 | - | F3a | H.M. | PAINT | Α | Α | - | | |
| 104 | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-4 | - | F3a | H.M. | PAINT | Α | Α | - | | |
| 105 | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-4 | - | F3a | H.M. | PAINT | Α | Α | - | 45MIN | |
| 106A | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-4 | - | F3a | H.M. | PAINT | Α | Α | - | | |
| 106B | F | ALUMINUM | CLEAR ANOD. | 8' - 0" | 4' - 0" | | BY MFR | - | BY MFR | STEEL | PREFIN. | С | С | С | | |
| 107A | Е | ALUMINUM | PREFIN. | 6' - 0" | 7' - 0" | 1 3/4" | H-3 | T | F2 | ALUMINUM | PREFIN. | D | D | D | | REMOVABLE CENTER MULL / DOOR ACCESS SYSTEM - ALT BID #1 - BASE BID HOLLOW METAL DOOR AND FRAMES |
| 107B | С | WOOD | STAIN | 6' - 0" | 7' - 0" | 1 3/4" | H-8 | - | F5 | H.M. | PAINT | В | В | - | 45MIN | REMOVABLE CENTER MULL, 4" HEAD |
| 107C | Е | ALUMINUM | PREFIN. | 6' - 0" | 7' - 0" | 1 3/4" | H-5 | T | F2 | ALUMINUM | PREFIN. | D | D | D | | REMOVABLE CENTER MULL - ALT BID #1 - BASE BID HOLLOW METAL DOOR AND FRAMES |
| 107D | E | ALUMINUM | PREFIN. | 6' - 0" | 7' - 0" | 1 3/4" | H-5 | T | F2 | ALUMINUM | PREFIN. | D | D | D | | REMOVABLE CENTER MULL - ALT BID #1 - BASE BID HOLLOW METAL DOOR AND FRAMES |
| 107E | С | WOOD | STAIN | 6' - 0" | 7' - 0" | 1 3/4" | H-6 | - | F5 | H.M. | PAINT | В | В | - | | REMOVABLE CENTER MULL, 4" HEAD |
| 108 | Е | ALUMINUM | PREFIN. | 6' - 0" | 7' - 0" | 1 3/4" | H-3 | T | F2 | ALUMINUM | PREFIN. | E | E | Е | | REMOVABLE CENTER MULL - ALT BID #1 - BASE BID HOLLOW METAL DOOR AND FRAMES |
| 109 | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-4 | - | F3a | H.M. | PAINT | Α | Α | - | | |
| 110A | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-2 | - | F3a | H.M. | PAINT | Α | Α | - | | |
| 110B | - | - | - | 6' - 0" | 7' - 0" | 1 3/4" | - | - | F3b | H.M. | PAINT | F | F | - | | |
| 111A | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-2 | - | F3a | H.M. | PAINT | А | Α | - | | |
| 111B | - | - | - | 6' - 0" | 7' - 0" | 1 3/4" | - | - | F3b | H.M. | PAINT | F | F | - | | |
| 112 | - | - | - | 3' - 0" | 7' - 0" | 1 3/4" | - | - | F3b | H.M. | PAINT | F | F | - | | |
| 113 | - | - | - | 3' - 0" | 7' - 0" | 1 3/4" | - | - | F3b | H.M. | PAINT | F | F | - | | |
| 116 | - | - | - | 3' - 0" | 7' - 0" | 1 3/4" | - | - | F3b | H.M. | PAINT | F | F | - | | |
| 117 | - | - | - | 3' - 0" | 7' - 0" | 1 3/4" | - | - | F3b | H.M. | PAINT | F | F | - | | |
| 118 | D | ALUMINUM | PREFIN. | 3' - 0" | 7' - 0" | 1 3/4" | H-5 | Т | F1 | ALUMINUM | PREFIN. | Е | Е | Е | | ALT BID #1 - BASE BID HOLLOW METAL DOOR AND FRAMES |
| 119 | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-9 | - | F3a | H.M. | PAINT | А | Α | - | | |
| 120 | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-4 | - | F3a | H.M. | PAINT | А | Α | - | | |
| 121 | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-9 | - | F3a | H.M. | PAINT | Α | Α | - | | |
| 122 | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-4 | - | F3a | H.M. | PAINT | А | Α | - | | |
| 123 | В | WOOD | STAIN | 3' - 0" | 7' - 0" | 1 3/4" | H-4 | - | F3a | H.M. | PAINT | Α | Α | - | | |

ALUM. COILING MESH SHUTTER

ALUM. STOREFRONT (PAIR)

<u>LEGEND</u>

ALUM - ALUMINUM
ANOD - ANODIZED
TEMP. - TEMPERED
SCW- SOLID CORE WOOD
STL - STEEL
PREFIN - PRE-FINISHED
T - TEMPERED

GENERAL NOTES:

- 1. FIELD VERIFY OPENINGS & FIT FRAME TO OPENING AS REQ'D.
- 2. ADA CLEARANCE AT PUSH SIDE OF ALL DOORS TO BE MIN. OF 12" WHERE DOOR HAS BOTH LATCH & CLOSER. ALL PULL SIDES TO BE A MIN. OF 18"
- 3. REFER TO SPECIFICATION SECTION 08 7100 FOR DETAILED HARDWARE SET DESCRIPTIONS.
- 4. NEW HARDWARE IS DESIGNED TO MATCH EXISTING HW KEYWAY. COORDINATE FINAL KEYING SCHEDULE WITH OWNER FIELD VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING SHOP DRAWINGS. OWNER WILL PROVIDE SCHLAGE CORES PROVIDED BY SMALLWOOD LOCK & SUPPLY.
- 5. ALL DOORS REQUIRED FOR EGRESS SHALL BE INSTALLED WITH APPROVED HARDWARE AS LISTED BELOW:
 - A. EXIT DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
 - B. HANDLES, PULLS, LATCHES, LOCKS & OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL BE EASY TO GRASP WITH ONE HAND & SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE. LEVER-OPERATED MECHANISMS, PUSH-TYPE MECHANISMS & U-SHAPED MECHANISMS ARE ACCEPTABLE DESIGNS.
- C. ALL DOORS TO HAVE LEVER OPERATED HARDWARE LOCKSETS & CLOSERS TO MEET ADA REQUIREMENTS.

HARDWARE GROUP:

H1 - UNISEX RESTROOM: (103)
HINGE
PRIVACY LOCK
WALL STOP
SURFACE CLOSER
SILENCER

H2 - RESTROOMS & LOCKERROOMS: (101A,102,110A & 111A)
HINGE

PUSH/PULL WALL STOP SILENCER SURFACE CLOSER

<u>H3 - EXTERIOR ALUMINUM ENTRY DOOR:</u> (100A,100B,100C,107A &108)

CONTINUOUS HINGE
PUSH/PULL
SURFACE CLOSER
WEATHER STRIPPING
SWEEP
THRESHOLD
RIM EXIT DEVICE
REMOVABLE CENTER MULL

H4 - STORAGE/MECHANICAL: (101B,104,105,106A, 109,120,122

HW HINGE STOREROOM WALLSTOP SILENCER SURFACE CLOSER HEAD & FOOT BOLT H5 - EXTERIOR EXIT ONLY: (107D,107C &118)
CONTINUOUS HINGE
SURFACE CLOSER
WEATHER STRIPPING
SWEEP
RIM EXIT DEVICE
SILENCER
REMOVEABLE CENTER MULL

H6 - BAND ROOM: (107E) HINGE CLASSROOM LOCK SURFACE CLOSER

WALL STOP SILENCER REMOVEABLE CENTER MULL

H7 - PASSAGE EXIT: (100D,100E,100F)
HINGE
PASSAGE EXIT DEVICE
SURFACE CLOSER
DOOR STOP W/ KEEPER
SILENCER
KICKPLATE

H8 - STORAGE DOUBLE DOOR: (107B)
HINGE
STOREROOM LOCKSET

STOREROOM LOCKSET HEAD & FOOTBOLTS SURFACE CLOSER SILENCER SEALS KICKPLATE

H9 - OFFICE: (119 & 121) HINGE OFFICE LOCKSET SURFACE CLOSER

WALL MOUNTED DOOR STOP

SILENCER

ALT. BID GENERAL NOTES:

1. BASE BID FOR DOORS 107A, 107C, 107D, 108 & 118 WILL BE HOLLOW METAL FRAMES WITH INSULATED METAL DOORS. HARDWARE WILL BE THE SAME AS INDICATED IN HARDWARE SCHEDULE WITH THE EXCEPTION THAT DRIP CAPS SHALL BE INSTALLED AT DOOR FRAME HEADS & BOTTOM DRIP FLASH. ALTERNATE 1 FOR THESE DOORS SHALL BE ALUMINUM STOREFRONT. STOREFRONT SHALL BE THE SAME AS THE FRONT ENTRY DOOR SYSTEM & DOORS. HARDWARE WILL BE AS INDICATED IN THE DOOR HARDWARE SCHEDULE.

A NEW GYM FOR USD506

107 1/2 N. PENNSYLVANIA AVE.

SUITE 2F

INDEPENDENCE, KANSAS 67301

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DOOR SCHEDULE & PLAN

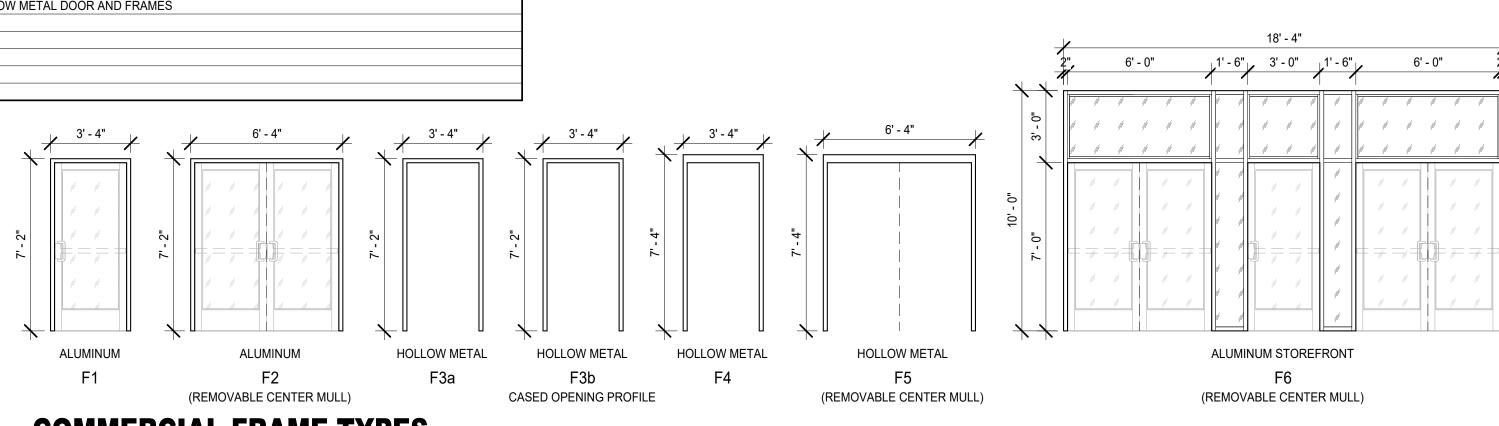
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SAC KG
REVISIONS

PROJECT NUMBER

SHEET NUMBER

8/14/2023

A50²



COMMERCIAL DOOR TYPES

WOOD

WOOD (PAIR)

С

ALUM. STOREFRONT

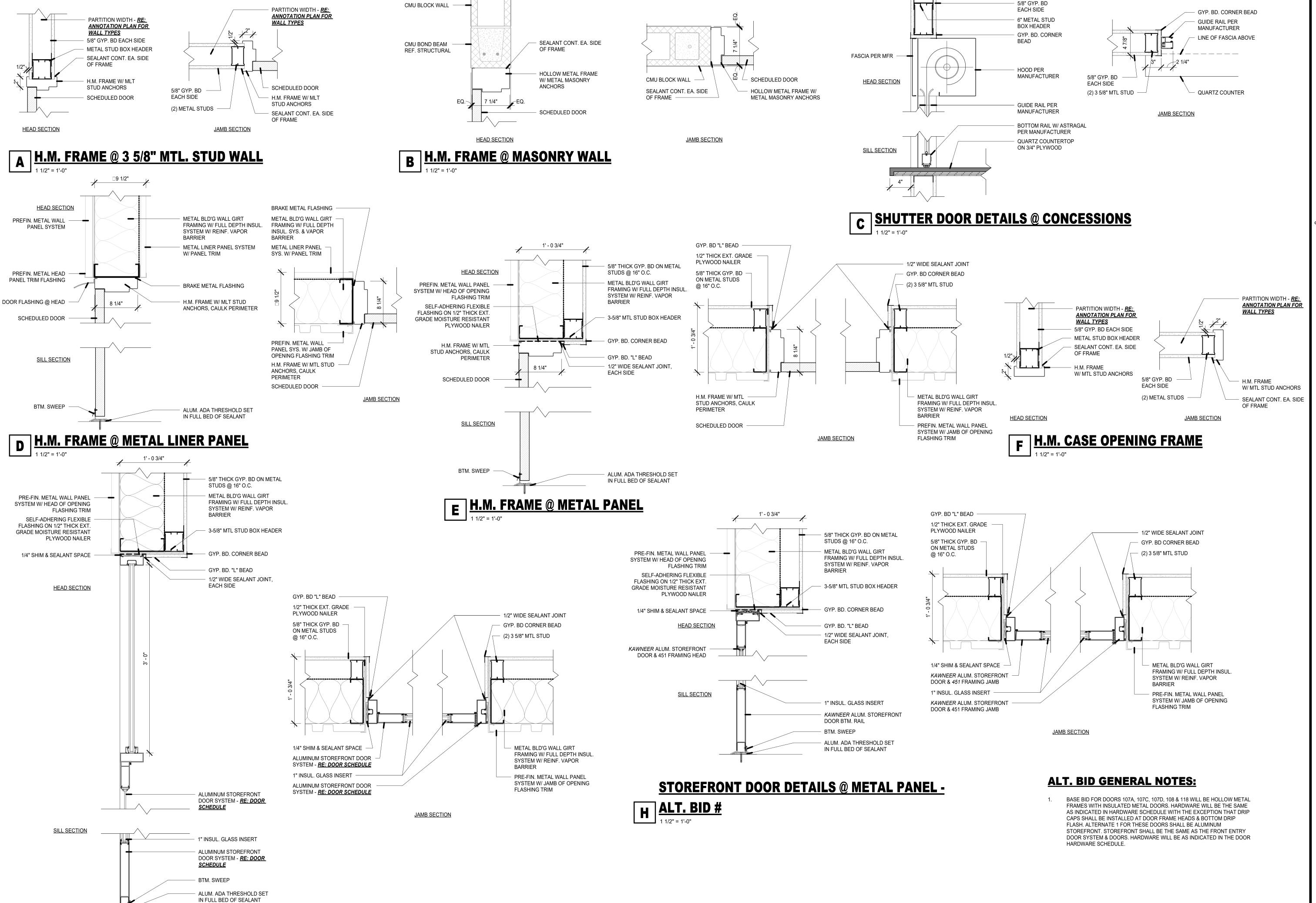
1/4" = 1'-0"

HOLLOW METAL

Α

COMMERCIAL FRAME TYPES

1/4" = 1'-0"



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50 STRUCTION CON NEW

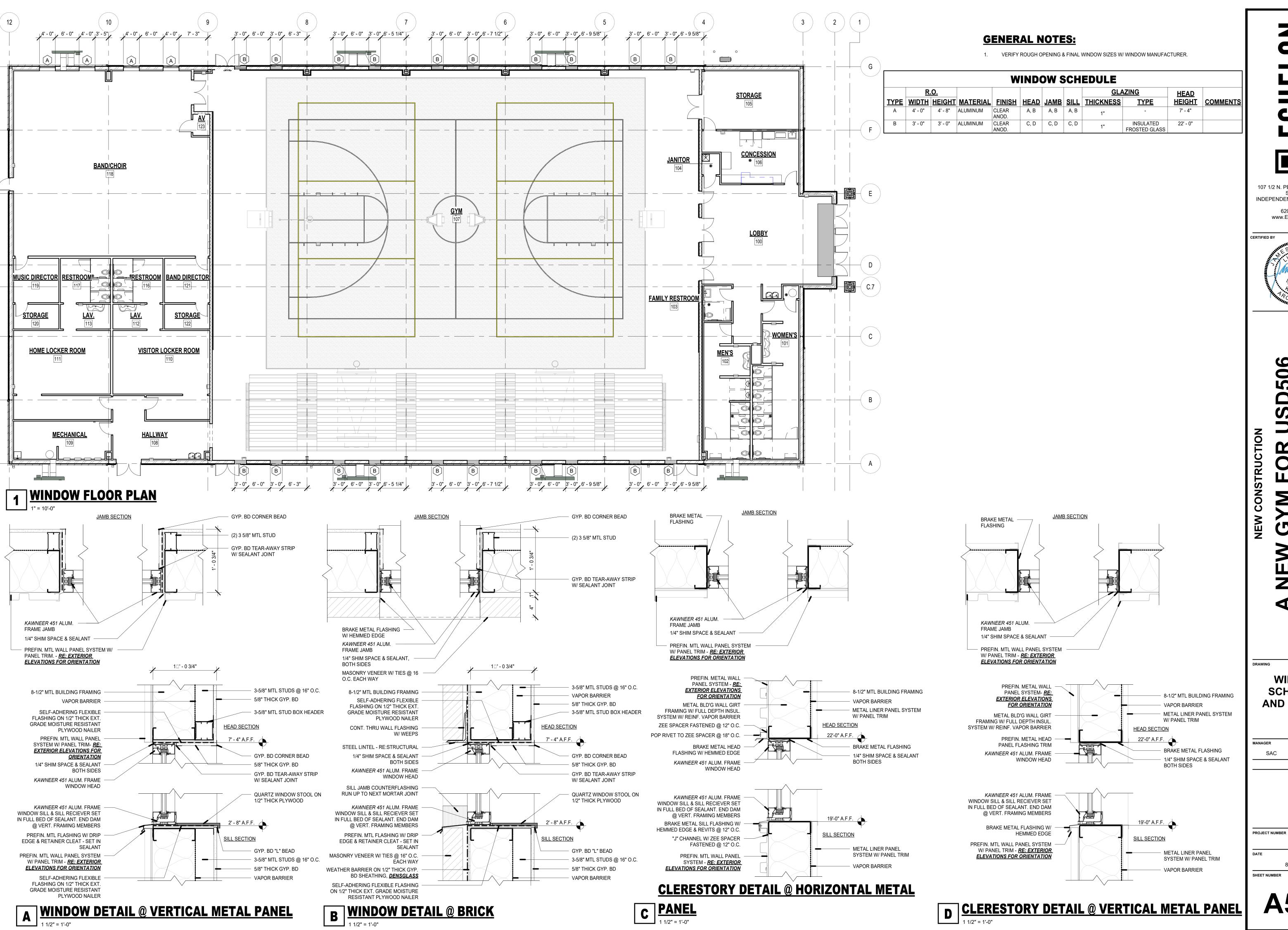
DOOR DETAILS

DRAWN BY KG REVISIONS

PROJECT NUMBER 23-09

8/14/2023 SHEET NUMBER

A502



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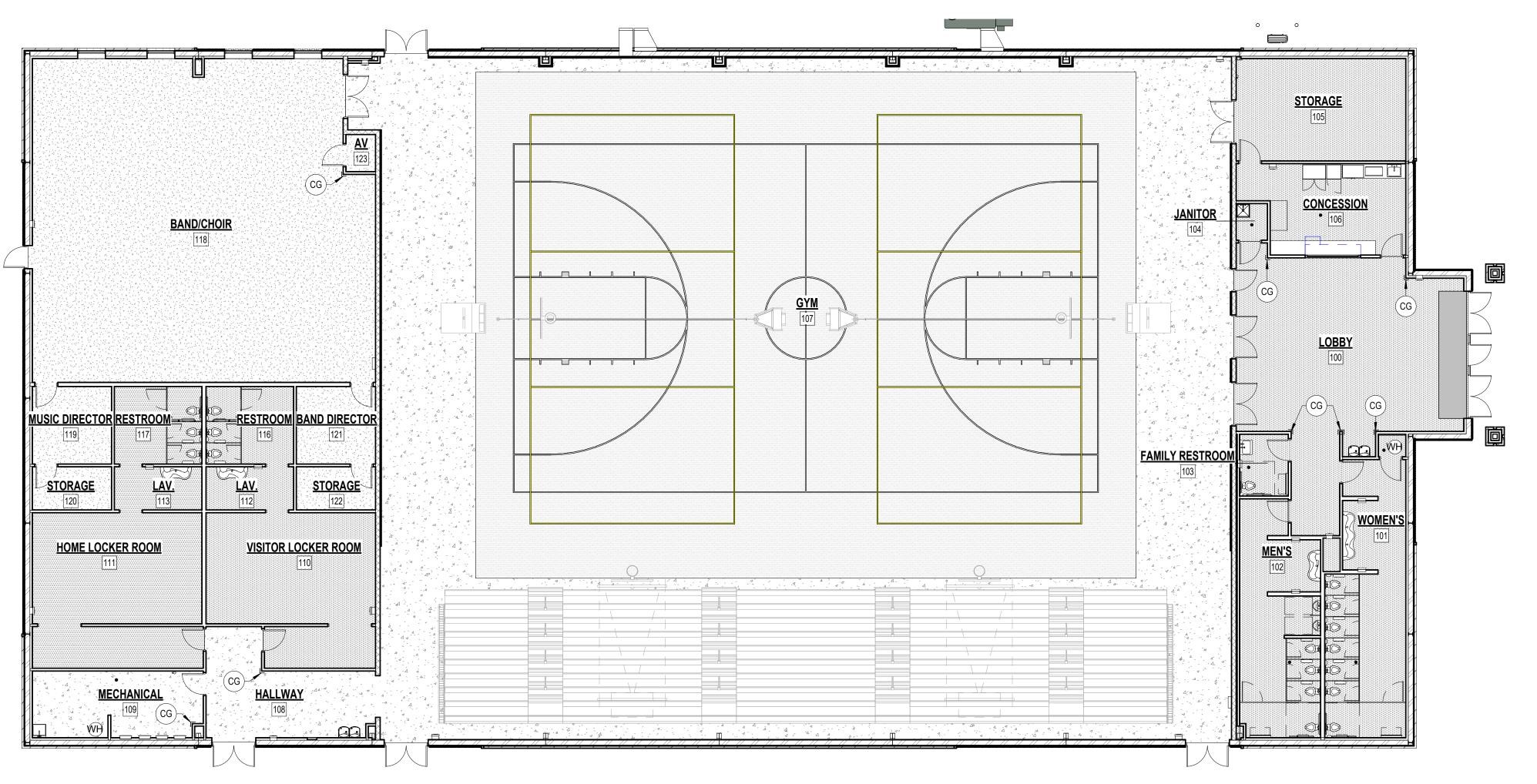


WINDOW SCHEDULE AND DETAILS

DRAWN BY KG REVISIONS

23-09

8/14/2023



FINISH PLAN LEGEND

EPOXY FLOOR

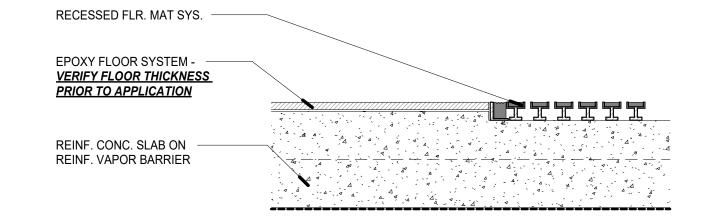
CARPET TILE CPT1

SEALED CONCRETE

WOOD FLOOR

GENERAL FINISH NOTES:

- MATERIAL COST FOR FINISHES SHOULD <u>NOT</u> INCLUDE LABOR, FREIGHT, GLUE, APPLICABLE TAXES, G.C. OVERHEAD & PROFIT.
- 2. ALL FINISHES TO COMPLY WITH CLASS A FIRE RATINGS OR AS REQUIRED BY ARCHITECT.
- CONTRACTOR TO PROVIDE THREE SAMPLES OF EACH FINISH TO INTERIOR DESIGNER FOR APPROVAL PRIOR TO INSTALLATION.
- 4. CONTRACTOR SHALL SUPPLY SEAMING DIAGRAM TO DESIGNER FOR APPROVAL BEFORE ORDERING & PRIOR TO INSTALLING MATERIALS.
- ALL MATERIALS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION UNLESS NOTED OTHERWISE.
- ALL CARPET SEAMS TO BE SEALED PER CARPET MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS.
- GENERAL CONTRACTOR TO FEATHER FLOORING AT ALL FLOOR FINISH TRANSITIONS AS
- 8. PROVIDE CARPET JOINER AT ALL TRANSITIONS BETWEEN FLOORING
- 9. DO NOT START OR STOP FINISH MATERIAL TRANSITIONS ON OUTSIDE CORNERS.
- ALL FLOOR FINISH CHANGES AT DOORWAYS OCCUR AT CENTER OF DOOR OR DOORWAY. REFER TO ARCHITECTURAL PLAN OR FINISH PLAN FOR TRANSITION LOCATIONS. TRANSITION STRIPS ARE REQUIRED AT ALL DIFFERING FLOOR MATERIALS UNLESS OTHERWISE NOTED. USE ALL APPLICABLE TRIMS NEEDED FOR FLOOR TRANSITIONS. SUBMIT TO ARCHITECT FOR FINAL APPROVAL.
- 11. FOR RUBBER BASE USE COIL PRODUCT <u>NOT</u> SEGMENTS. ALL CORNERS TO BE FIELD
- 12. ALL EXPOSED CONCRETE FLOORS TO BE SEALED AND/OR STAINED. REFERENCE FINISH SCHEDULE AND LEGEND.
- 13. ONCE INSTALLATION OF FLOOR FINISHES IS COMPLETE, PROTECT FLOORS TO PREVENT DAMAGE DURING THE REMAINDER OF THE PROJECT CONSTRUCTION. CLEAN & FINISH FLOORS PER MANUFACTURER'S RECOMMENDATIONS PRIOR TO FINAL COMPLETION &
- 14. ALL STEEL DOORS & FRAMES TO BE FACTORY PRIMED & FIELD PAINTED.
- 15. INTERIOR HOLLOW METAL DOOR FRAMES SHALL BE PAINTED.
- 16. ALL GYPSUM BOARD SOFFITS & FURR DOWNS ARE PAINTED, UNO.
- 17. REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS, VARYING CEILING MATERIALS &
- 18. COLUMNS & ALL EXPOSED SIDES TO RECEIVE PAINT COLUMNS SHALL BE ENCLOSED WITH FRAMING UNLESS OTHERWISE NOTED.
- 19. ALL WALLS RECEIVING ACCENT WALL PAINT COLOR SHALL HAVE A LEVEL 5 DRYWALL FINISH TO PROVIDE A UNIFORM SURFACE. ACCENT PAINT COLORS ARE NOTED ON THE FINISH SCHEDULE OR ELEVATIONS.
- ALL RESTROOM WALLS SHALL RECEIVE EPOXY WAINSCOTING UNLESS OTHERWISE NOTED. ALL PAINTING, FINISHES, EQUIPMENT & ANYTHING THAT WOULD NEED TO UTILIZE THE COURT
- FLOOR SPACE SHALL BE DONE PRIOR TO THE INSTALLATION OF THE SPORTS COURT. SPORTS COURT FLOORING SHALL PROCEED ONLY WHEN ALL OTHER TRADES HAVE BE





| | | | | RO | OOM FINISH S | SCHEDULE | | | |
|------|---------------------|-------|------|--------------|-------------------|--------------|-------------------|---------|-----------------|
| | | | | | N | /ALLS | | | |
| ROOM | ROOM NAME | FLOOR | BASE | <u>NORTH</u> | <u>EAST</u> | SOUTH | WEST | CEILING | <u>COMMENTS</u> |
| 100 | LOBBY | EP1 | IEB | P1 | P1 | P1 | P1 | ACT1 | SOFFIT - P2 |
| 101 | WOMEN'S | EP1 | IEB | EW1/EP1 | EW1/EP1 | EW1/EP1 | EW1/EP1 | ACT1 | SEE ELEVATIONS |
| 102 | MEN'S | EP1 | IEB | EW1/EP1 | EW1/EP1 | EW1/EP1 | EW1/EP1 | ACT1 | SEE ELEVATIONS |
| 103 | FAMILY RESTROOM | EP1 | IEB | EW1/EP1 | EW1/EP1 | EW1/EP1 | EW1/EP1 | ACT1 | SEE ELEVATIONS |
| 104 | JANITOR | EP1 | IEB | EP1 | EP1 | EP1 | EP1 | ACT1 | |
| 105 | STORAGE | EP1 | IEB | P1 | P1 | P1 | P1 | EXPOSED | |
| 106 | CONCESSION | EP1 | IEB | P1 | P1 | P1 | P1 | ACT1 | |
| 107 | GYM | WD/SC | RB | PMWP | P1/WAP1/WAP2/WAP3 | PMWP | P1/WAP1/WAP2/WAP3 | ACT1 | SEE ELEVATIONS |
| 108 | HALLWAY | SC | RB | P1 | P1 | P1 | P1 | ACT1 | |
| 109 | MECHANICAL | SC | RB | P1 | P1 | P1 | P1 | EXPOSED | |
| 110 | VISITOR LOCKER ROOM | EP1 | IEB | EW1/EP1 | EW1/EP1 | EW1/EP1 | EW1/EP1 | ACT1 | SEE ELEVATIONS |
| 111 | HOME LOCKER ROOM | EP1 | IEB | EW1/EP1 | EW1/EP1 | EW1/EP1 | EW1/EP1 | ACT1 | SEE ELEVATIONS |
| 112 | LAV. | EP1 | IEB | EW1/EP1 | EW1/EP1 | EW1/EP1 | EW1/EP1 | ACT1 | SEE ELEVATIONS |
| 113 | LAV. | EP1 | IEB | EW1/EP1 | EW1/EP1 | EW1/EP1 | EW1/EP1 | ACT1 | SEE ELEVATIONS |
| 116 | RESTROOM | EP1 | IEB | EW1/EP1 | EW1/EP1 | EW1/EP1 | EW1/EP1 | ACT1 | SEE ELEVATIONS |
| 117 | RESTROOM | EP1 | IEB | EW1/EP1 | EW1/EP1 | EW1/EP1 | EW1/EP1 | ACT1 | SEE ELEVATIONS |
| 118 | BAND/CHOIR | CPT1 | RB | P1/WAP4/WPA5 | P1/WAP4/WPA5 | P1/WAP4/WPA5 | P1/WAP4/WPA5 | ACT2 | SEE ELEVATIONS |
| 119 | MUSIC DIRECTOR | CPT1 | RB | P1 | P1 | P1 | P1 | ACT1 | |
| 120 | STORAGE | CPT1 | RB | P1 | P1 | P1 | P1 | ACT1 | |
| 121 | BAND DIRECTOR | CPT1 | RB | P1 | P1 | P1 | P1 | ACT1 | |
| 122 | STORAGE | CPT1 | RB | P1 | P1 | P1 | P1 | ACT1 | |
| 123 | AV | CPT1 | RB | P1 | P1 | P1 | P1 | EXPOSED | |

1 FINISH PLAN
3/32" = 1'-0"

| | | | FINISH MATER | RIAL LIST | | |
|---------------|------------------------------|-----------------------|--|------------------------------|--------------------|--|
| MARK | MATERIAL | MANUFACTURER | STYLE/PATTERN | COLOR/FINISH | SIZE/TYPE | COMMENTS |
| | | | | | | |
| 0-CEILING | | | | | | |
| ACT1 | ACOUSTICAL TILE | USG | RADAR | WHITE | 24X24 SQUARE EDGE | - |
| ACT2 | ACOUSTICAL TILE | USG | MARS HIGH NRC | WHITE | 24X24 LINE TAPERED | LOCATED IN BAND ROOM |
| 1-WALLS | | | | | | |
| EP1 | EPOXY PAINT | SHERWIN WILLIAMS | EPOXY | LIGHT FRENCH GRAY SW 0055 | _ | - |
| EW1 | EPOXY WAINSCOTING | TORGINOAL | FLAKE | SPEICAL MIX | 48" TALL | OWNER PROVIDED EPOXY WAINSCOTING SYSTEM |
| P1 | OVERALL PAINT | SHERWIN WILLIAMS | EGGSHELL | LIGHT FRENCH GRAY SW 0055 | - | - |
| P2 | CEILING PAINT | SHERWIN WILLIAMS | EGGSHELL | CEILING BRIGHT WHITE SW 7007 | 7 - | - |
| P3 | PEMB RIGID FRAME PAINT | SHERWIN WILLIAMS | SATIN | REAL RED SW6868 | - | - |
| P4 | DOOR FRAME PAINT | SHERWIN WILLIAMS | SATIN | GAUNTLET GRAY SW 7019 | - | - |
| PMWP | PREFINISHED METAL WALL PANEL | - | - | WHITE | - | - |
| WAP1 | WALL ACOUSTICAL PANEL | ARMSTRONG | TECTUM | ROSE (TRO) | 48" x 48" | LOCATED IN GYM - SEE ELEVATIONS |
| WAP2 | WALL ACOUSTICAL PANEL | ARMSTRONG | TECTUM | HONEYSUCKLE (THIS) | 48" x 48" | LOCATED IN GYM - SEE ELEVATIONS |
| WAP3 | WALL ACOUSTICAL PANEL | ARMSTRONG | TECTUM | BASALT (TRT) | 48" x 48" | LOCATED IN GYM - SEE ELEVATIONS |
| WAP4 | WALL ACOUSTICAL PANEL | G&S ACOUSTICS | FR701 2100 | RED 799 | 48" x 48" | LOCATED IN BAND ROOM - SEE ELEVATIONS |
| WAP5 | WALL ACOUSTICAL PANEL | G&S ACOUSTICS | FR701 2100 | YELLOW 744 | 48" x 48" | LOCATED IN BAND ROOM - SEE ELEVATIONS |
| 0.0405 | | | | | | |
| 2-BASE IEB | INTEGRAL EPOXY BASE | TORGINOAL | FLAKE | SPEICAL MIX | - | OWNER PROVIDED EPOXY BASE SYSTEM |
| RB | RESILIENT COVE BASE | ROPPE | 700 SERIES | BLACK/BROWN | 4" COVE | ROLLED GOODS |
| IND | RESIDIENT GOVE BROL | NOT L | 700 OLIVIES | BERONDINOVII | + 00VL | NOLLED GOODG |
| 3-FLOORING | | | | | | |
| CPT1 | CARPET TILE | MOHAWK GROUP | RISE UP GT420 | ROAN 369 | 24" x 24" | INSTALLATION METHOD |
| EP1 | EPOXY FLOOR | TORGINOAL | FLAKE | SPEICAL MIX | - | OWNER PROVIDED EPOXY FLOOR SYSTEM |
| SC | SEALED CONCRETE | SHERWIN WILLIAMS | H&C CLEARPROTECT WATER-BASED 2-PART POLYURETHANE | CLEAR | - | - |
| WD | WOOD FLOORING | ROBBINS | BIO CHANNEL STAR | - | - | - |
| 4-MILLWORK | , | | | | | |
| CT1 | COUNTERTOP | WILSONART | QUARTZ | MARFA Q6019 | _ | _ |
| ST1 | STAIN | - | - | - | - | OWNER PROVIDED |
| | 1= | | | | 1 | |
| 5-MISCELLAN | NEOUS | | | | | |
| CG | CORNER GUARD | INPRO | 150 BN HIGH IMPACT CORNER GUARD | T.B.D | 3" x 48" | SEE FINISH PLAN FOR LOCATIONS. MOUNT ABOVE WALL BASE SURFACE APPLIED w/ RETAINER CLIPS |
| DR | DOOR | VT INDUSTIRES | ALPINE | RED OAK | - | - |
| TP | TOILET PARTITION PHENOLIC | ASI GLOBAL PARTITIONS | COLOR-THRU PHENOLIC | SMOKE 8450C | - | - |
| US | URINAL SCREEN | ASI GLOBAL PARTITIONS | | SMOKE 8450C | 42" | - |
| | | | QUARTZ | DESIGNER WHITE D354-560 | 1/2" THICKNESS | WHITE CORE |



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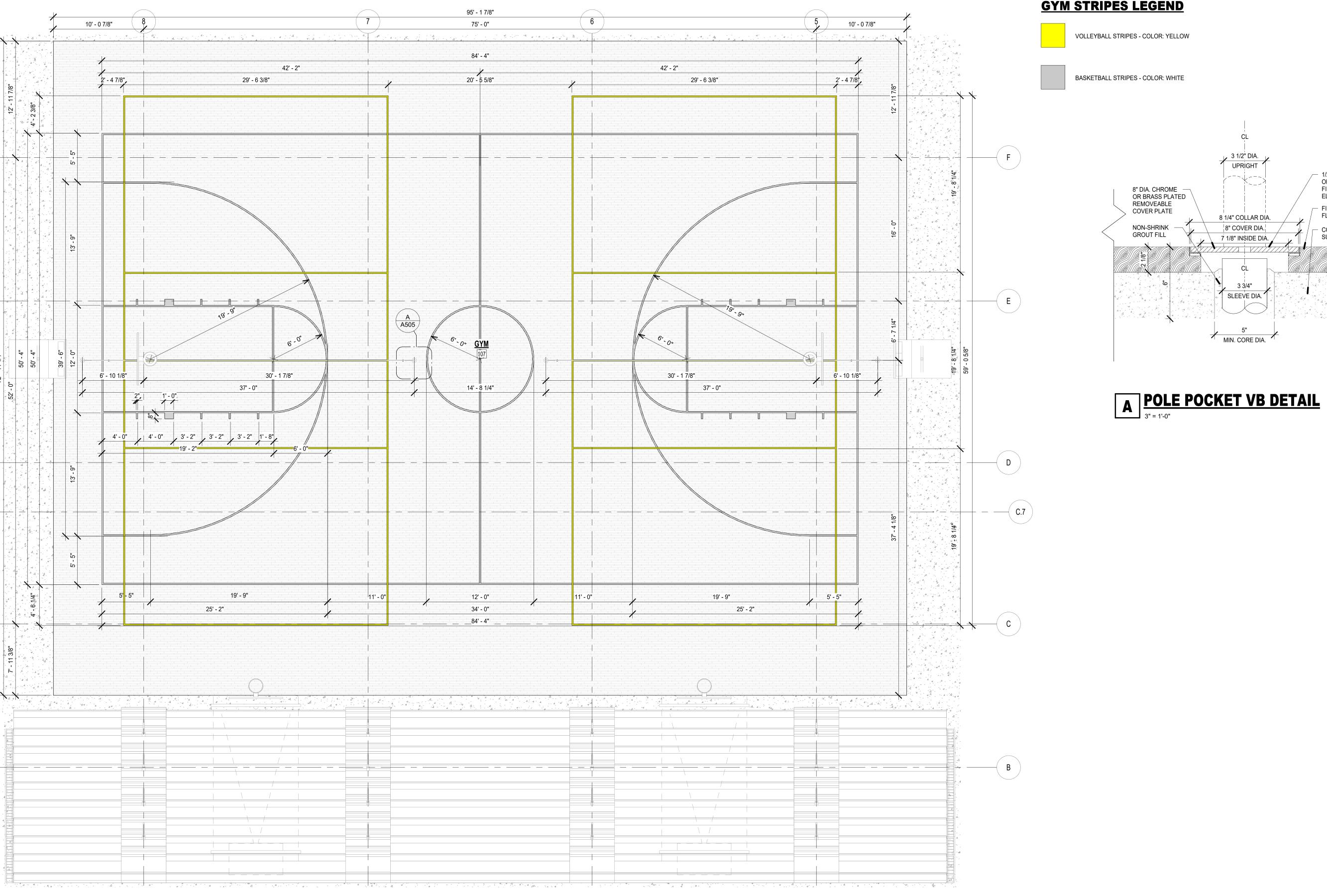
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FINISH PLAN & **SCHEDULE**

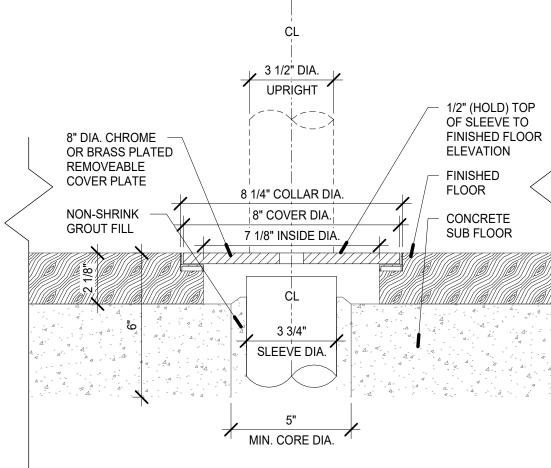
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| ANF | | | | | | | | | |
| REVISIONS | | | | | | | | | |
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| | | | | | | | | | |

PROJECT NUMBER



1 COURT FLOOR FINISH PLAN
3/16" = 1'-0"









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SD506

STRUCTION

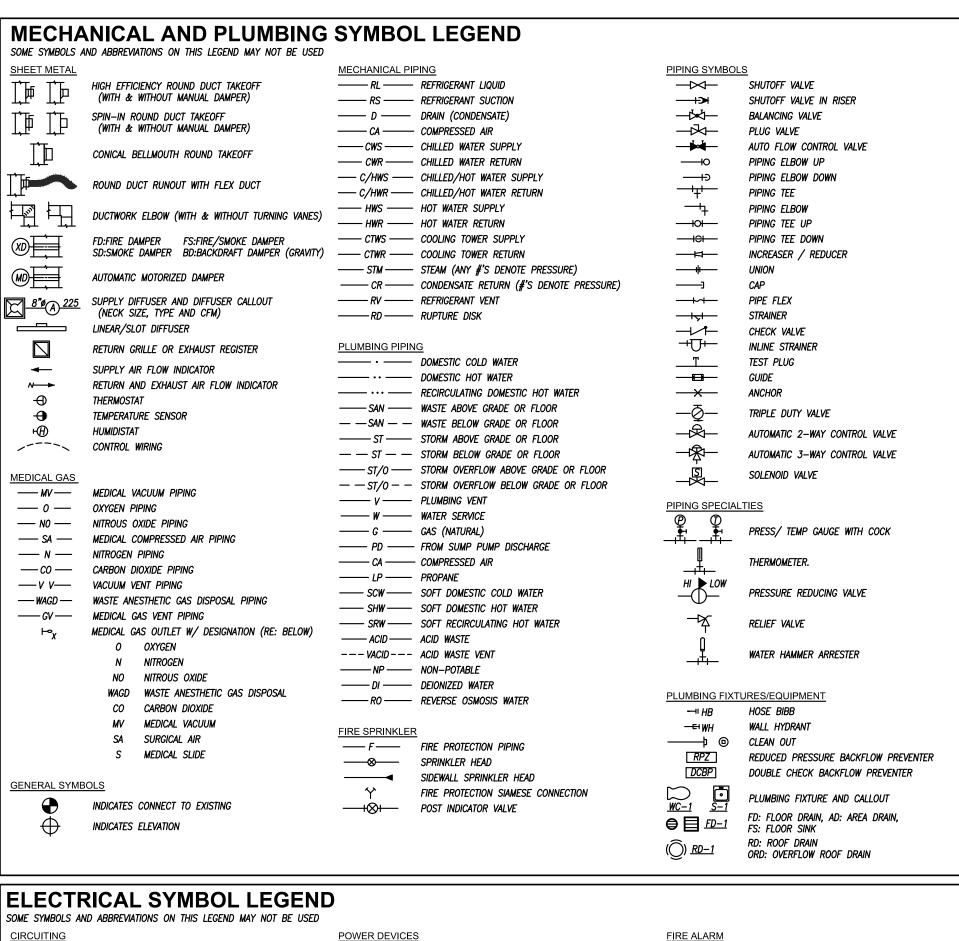
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COURT FLOOR FINISH PLAN

REVISIONS

PROJECT NUMBER

A505



| | | | | (<u>)</u> <u>RD-1</u> | RD: ROOF DRAIN ORD: OVERFLOW ROOF DRAIN |
|------------------------------|---|--------------------|---|------------------------|--|
| | RICAL SYMBOL LEGEND ID ABBREVIATIONS ON THIS LEGEND MAY NOT BE USED |) | | | |
| CIRCUITING | NO ADDITENTIONS ON THIS LEGEND MAT NOT BE USED | POWER DEVICE | <u>s</u> | FIRE ALARM | |
| | HOME RUN (2#12 1#12G UNO) | | — DUPLEX RECEPTACLE. | F | MANUAL PULL STATION |
| | INDICATES 2 PHASE, 1 N, & 1 GRD CONDUCTOR | - | LINE THRU DEVICE INDICATES ABOVE COUNTER | <u></u> | CEILING SMOKE DETECTOR |
| | HOME RUN: INDICATES SHARED CIRCUIT | GFI | SPECIAL DUPLEX RECEPTACLE | (D) | DUCT SMOKE DETECTOR |
| | HOME RUN: INDICATES #10 CONDUCTORS ENTIRELY | | (GFCI, ISOLATED GROUND, ETC.) | $\langle H \rangle$ | HEAT DETECTOR |
| | ,, | _ | QUADPLEX RECEPTACLE | ■ WF | WATERFLOW SWITCH |
| UTILITIES | UNDERGROUND ELECTRICAL | Θ_{5-50R} | SIMPLEX RECEPTACLE W/NEMA CONFIG AS NOTED | ■ TS | TAMPER SWITCH |
| | OVERHEAD ELECTRICAL | € <u>5</u> –50R | MULTI-POLE RECEPTACLE W/NEMA CONFIG AS NOTED | > 75 | VISIBLE NOTIFICATION DEVICE WITH CANDELA RATING. |
| | TELECOMMUNICATIONS CONDUIT | | CEILING MOUNTED RECEPTACLE | _ | 75cd rating unless otherwise noted on plans. Audible/visible notification device with candela |
| UGT | UNDERGROUND TELECOMMUNICATIONS CONDUIT | <u>□</u> | RECEPTACLE/DEVICE MOUNTED IN "TOMBSTONE" | ⊠< 30 | RATING. 75cd UNLESS OTHERWISE NOTED ON PLANS. |
| <u>LIGHTING</u> | | ⊙ | POKE—THRU WITH POWER | | HORN |
| • | FLUORESCENT LIGHT FIXTURE | • | POKE—THRU WITH TELECOMMUNICATIONS | 75 | CEILING—MOUNTED STROBE LIGHT WITH CANDELA RATING. MINIMUM OF 75cd RATING. |
| • | FLUORESCENT STRIP FIXTURE | 6 | POKE—THRU W/POWER AND TELECOM | | CEILING-MOUNTED COMBINATION HORN/STROBE WITH |
| ⊚ ⊡ | SURFACE/RECESSED LIGHT FIXTURE | <u>16</u> | SINGLE GANG FLOOR BOX (2, 3, 4 GANG SIMILAR) | 30 | CANDELA RATING. MIN. OF 75cd RATING. |
| ΗН | WALL-MOUNTED LIGHT FIXTURE | | DIVIDED POWER POLE | | CEILING-MOUNTED HORN |
| | POLE-MOUNTED LIGHT FIXTURE | © | CLOCK RECEPTACLE | | SPEAKER |
| H⊗ ⊗ | EXIT LIGHT | _ | PLUG MOLD / WIRE MOLD AS SPECIFIED | riangle | COMBINATION SPEAKER/STROBE |
| 4→ | BATTERY-OPERATED EMERGENCY LIGHT (WALL MTD) | () | JUNCTION BOX | | CEILING-MOUNTED SPEAKER |
| Þ⊞4 | BATTERY-OPERATED EMERGENCY LIGHT (CEILING MTD) | ĘŪ | THERMOSTAT - ELECTRIC | R | RELAY |
| ₩ | WALL—MOUNTED COMBINATION EXIT LIGHT/ BATTERY—OPERATED EMERGENCY LIGHT | | PUSH BUTTON | FACP | FIRE ALARM CONTROL PANEL |
| \$ | LIGHT SWITCH - SINGLE POLE | ∕ ⊙∕ | MOTOR | FAAP | FIRE ALARM ANNUNCIATOR PANEL |
| \$3 | LIGHT SWITCH - 3-WAY | TELEPHONE/DA | <u>TA</u> | FARA | REMOTE ANNUNCIATOR PANEL |
| \$4 | LIGHT SWITCH - 4-WAY | ◁ | TELEPHONE OUTLET (SINGLE-GANG BOX WITH (1) 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING) | FAEC | FIRE ALARM EXTENDER CABINET |
| \$ _K | LIGHT SWITCH - KEY | ∢ | LINE THRU DEVICE INDICATES ABOVE COUNTER | DH | DOOR HOLDER |
| \$ _D | LIGHT SWITCH - DIMMER | r • | DATA OUTLET (DOUBLE-GANG BOX WITH (2) 3/4" | D _{120V} | SINGLE / MULTI-STATION 120V SMOKE ALARM |
| \$ _{PL} | LIGHT SWITCH — PILOT LIGHT | | CONDUITS TO ABOVE ACCESSIBLE CEILING) | ZAM | ZONE ADDRESSABLE MODULE |
| \$ _{2P} | LIGHT SWITCH - 2 POLE | ◀ | TELEPHONE/DATA OUTLET (DOUBLE-GANG BOX WITH (2) 3/4" CONDUITS TO ABOVE ACCESSIBLE CLG.) | [IAM] | INDIVIDUAL ADDRESSABLE MODULE |
| \$ ^D ₃ | LIGHT SWITCH - 3-WAY DIMMER | 1 1 V | PHONE OUTLET WITH NUMBER OF PHONE JACKS AS INDICATED — SEE DETAILS FOR ADD'L INFO. | HFSS | KITCHEN HOOD FIRE SUPPRESSION SYSTEM PANEL |
| \$ _M | WALL-MOUNTED MOTION SWITCH | _ | DATA OUTLET WITH NUMBER OF PHONE JACKS AS | H | KITCHEN HOOD REMOTE PULL STATION |
| (M) | CEILING-MOUNTED MOTION SWITCH | ◀ 1D | INDICATED — SEE DETAILS FOR ADD'L INFO. | [ARA] | AREA OF RESCUE ASSISTANCE STATION |
| SB | SWITCHBANK - REFER TO DETAILS | ◀ 1D/1V | PHONE/DATA OUTLET WITH NUMBER OF PHONE/DATA JACKS AS INDICATED — SEE DETAILS FOR ADD'L INFO. | ARAM | AREA OF RESCUE ASSISTANCE MASTER STATION |
| FD1 | DIMMER BOARD | ⊢ŵ | WALL-MOUNTED WIRELESS INTERNET TRANSMITTER | | |
| RCS-1 | REMOTE CONTROL SWITCH AS SCHEDULED | (W) | CEILING-MOUNTED WIRELESS INTERNET TRANSMITTER | SECURITY | |
| TC | TIMECLOCK - REFER TO PLANS / DETAILS | J | | ΓŃ | CAMERA |
| EQUIPMENT | | AUDIO/VISUAL | TELEVISION OUTLET (SINGLE GANG BOX WITH (1) | PTZ | PAN/TILT/ZOOM CAMERA |
| | DISCONNECT SWITCH. RE: PLANS FOR INFORMATION. | ® | 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING) | PROX | PROXIMITY TYPE CARD READER |
| | MAGNETIC MOTOR STARTER | ® | REVERSE TELEVISION OUTLET — CABLE TO HEAD END | CARD | SWIPE CARD READER |
| ⊠ ₁ | COMBINATION DISCONNECT SWITCH / MOTOR STARTER | TDC | TEACHER'S DESK CONNECTIONS - RE: DETAILS | BG | BREAK GLASS DETECTOR |
| | TOGGLE-TYPE DISCONNECT. FURNISH WITH THERMAL | ⊢ŝ | WALL SPEAKER | ES | ELECTRIC STRIKE |
| \$ | MOTOR PROTECTION WHERE SERVING FANS/PUMPS. | S | CEILING SPEAKER | MD | SECURITY MOTION DETECTOR |
| | SURFACE PANELBOARD | HSIA | WALL SPEAKER - HORN TYPE | KP | KEYPAD / MAG LOCK |
| | RECESSED PANELBOARD | <u>\$</u> ✓ | CEILING SPEAKER - HORN TYPE | В | BUTTON / MAG LOCK |
| | DISTRIBUTION PANELBOARD | (S) _{SUB} | CEILING SPEAKER - SUBWOOFER | | |
| | SWITCHBOARD. FEEDER/MAIN CIRCUIT BREAKER SECTION AND DISTRIBUTION SECTION. | © _{ss} | CEILING SPEAKER - SOUND SYSTEM | | |
| | | $+ \hat{V}$ | VOLUME CONTROL | | |
| GENERAL SYMB | <u>OLS</u> | 1 | INTERCOM CALL STATION | | |

SOUND SYSTEM AUDIO JACK

INTERCOM MASTER STATION

REMOTE MICROPHONE CONTROL

PUBLIC ADDRESS SYSTEM AMPLIFIER

INTERCOM HANDSET

PAS

INDICATES CONNECT TO EXISTING

INDICATES ELEVATION

15000 - MECHANICAL SPECIFICATIONS

<u>SECTION 15000 - MECHANICAL REQUIREMENTS</u>

- A. ALL WORK SHALL BE IN ACCORDANCE W/ LATEST EDITION OF INTERNATIONAL BUILDING. MECHANICAL & PLUMBING CODES, CODES AS ADOPTED BY CITY, COUNTY, STATE & ALL
- OTHER APPLICABLE CODES. FURNISH & INSTALL ALL LABOR & MATERIALS REQUIRED FOR COMPLETE, FUNCTIONING, MECHANICAL & PLUMBING SYSTEMS W/ ALL ASSOCIATED EQUIPMENT & APPARATUS AS SHOWN ON PLANS. "PROVIDE" MEANS TO FURNISH & INSTALL.
- OBTAIN & PAY FOR ALL PERMITS REQUIRED FOR EXECUTION OF THIS WORK & SHALL MAKE ARRANGEMENTS FOR MODIFICATIONS TO WATER, GAS & SEWER CONNECTIONS TO VISIT SITE & OBSERVE CONDITIONS UNDER WHICH WORK WILL BE DONE. ANY
- DISCREPANCIES SHALL BE CALLED TO ARCHITECT'S ATTENTION. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN CONTRACT FOR ANY ERROR OR NEGLIGENCE ON CONTRACTOR'S PART. FINAL ACCEPTANCE OF WORK SHALL BE SUBJECT TO CONDITION THAT ALL SYSTEMS. EQUIPMENT. APPARATUS & APPLIANCES OPERATE SATISFACTORILY AS DESIGNED &
- INTENDED. WORK SHALL INCLUDE REQUIRED ADJUSTMENT OF SYSTEMS & CONTROL EQUIPMENT INSTALLED UNDER THESE SPECIFICATIONS WARRANT TO OWNER QUALITY OF MATERIAL, EQUIPMENT, WORKMANSHIP & OPERATION OF FOLIPMENT PROVIDED LINDER THESE SPECIFICATIONS FOR ONE YEAR FROM &
- AFTER COMPLETION OF BUILDING & ACCEPTANCE OF MECHANICAL SYSTEMS BY OWNER. ALL MATERIALS INSTALLED IN PLENUMS SHALL BE NONCOMBUSTIBLE OR HAVE FLAME/SMOKE INDEX OF NO MORE THAN 25/50 IN ACCORDANCE W/ ASTM E 84. ROOF PENETRATIONS — MADE BY AUTHORIZED ROOFING CONTRACTOR WHEN REQUIRED.

<u> SECTION 15100 — PLUMBING</u>

BALL & INSULATED HANDLE.

- N. WATER PIPING ALL WATER PIPING SHALL BE 95-5 TIN-ANTIMONY JOINED TYPE L COPPER. INSULATE W/ FIBERGLASS W/ ASJ & PVC COVERS. THINCKNESS IN ACCORDANCE W/ ASHRAE 90.1. WASTE & VENT PIPING - CI BELL & SPIGOT OR HUBLESS CI W/ NEOPRENE GASKET FITTINGS W/ STAINLESS STEEL BANDS. SCHED 40 PVC W/ SOLVENT WELDS MAY BE USED WHERE ALLOWED BY LOCAL CODE. PVC NOT ALLOWED IN PLENUMS. GAS PIPING - PROVIDE SCHED 40 CONT. WELD CARBON STEEL W/ CORRESPONDING FITTINGS. PROVIDE THREADED FITTINGS. PROVIDE IRON BODY—BRASS PLUG GAS STOPS. PAINT ALL EXPOSED GAS PIPING ON THE EXTERIOR OF THE BUILDING INCLUDING ON
- . EQUIVALENT VALVES LISTED ON CURRENT COMPARISON CHARTS OF SPECIFIED VALVE MANUFACTURERS BY MILWAUKEE, STOCKHAM, POWELL, RED-WHITE, CRANE, APPOLO, MUELLER, MUESSCO, WATTS, HAYS, ROCKWELL-NORDSTROM. BALL VALVES - 2" & UNDER - BRONZE FULL PORT W/ TEFLOW SEATS, BRONZE
- BALANCING VALVES ARMSTRONG MODEL CBV I OR CBV II, 125 PSI-WP AT 250 DEGREES F., METER CONNECTIONS W/ BUILT-IN CHECK VALVES SCREWED OR FLANGED ENDS. PROVIDE POLYURETHANE INSULATION COVER. CHECK VALVES - 2" 7 SMALLER SCREWED OR SOLDER BRONZE CHECK VALVE, 200 PSI-WOG/125 PSI-WSP, TEFLON OR BRONZE DISC & SEAT RING. 2-1/2" & LARGER FLANGED, ASTM 126 IRON BODY, BRONZE TRIMMED, 200 PSI-WOG/125 PSI-WSP.
- BUTTERFLY VALVES 3" & LARGER LEVER ASTM A126 CL DRILLED & TAPPED FULL LUG BODY, 200 PSI-WOG, EXTENDED NECK, BRONZE DISC, STAINLESS STEEL STEM, FIELD-REPLACEABLE EPDM SLEEVE & STEM SEALS.
- FIXTURES: AMERICAN STANDARD, KOHLER, CRANE, ZURN, TOTO STAINLESS STEEL FIXTURES: FLKAY, JUST, MOEN COMMERCIAL FITTINGS & SUPPORTS: JOSAM, SMITH, WADE, ZURN, OR JONESPEC.
- SEATS: CHURCH, OLSONITE, BEMIS OR BENEKE. TRIM BY DELTA, ELJER, KOHLER, AMERICAN STANDARD, CRANE, SLOAN. FLUSHVALVES: SLOAN, ZURN, TOTO
- DRAINS BY WADE, ZURN, WOODFORD, SMITH, JOSAM, ROOF DRAINS - CAST IRON ROOF DRAIN W/ FLANGE, CI MUSHROOM DOME. 2" DAM FOR OVERFLOW DRAINS WALL HYDRANTS JOSAM SERIES 71000 W/ CONNECTIONS FOR 3/4" PIPE & HOSE. NON-FREEZING W/ KEY, VACUUM BREAKER, LOCKING COVER, EQUIVALENT BY J.R.
- SMITH. WADE. WOODFORD OR ZURN. N. WATER HEATER — STATE, RHEEM, NATIONAL, A.O. SMITH. PORCELAINIZED GLASSLINED TANK. COLD WATER INLET DROP TUBE. MAGNESIUM ANODE RODS. U.L. SEAL, 160 PSI,
- FACTORY TEMPERATURE & PRESSURE RELIEF VALVE. N.S.F. CONSTRUCTION. 3 YR RECIRCULATION PUMPS - HORIZONTAL, OIL-LUBRICATED, ALL BRONZE. NON-OVERLOADING MOTOR. A. PROVIDE UNIONS OR FLANGED JOINTS IN EACH PIPE LINE PRECEDING CONNECTIONS TO
- EQUIPMENT TO ALLOW REMOVAL FOR REPAIR OR REPLACEMENT. PROVIDE ALL SCREWED & CONTROL VALVES W/ UNIONS ADJACENT TO EACH CONNECTION. PROVIDE SCREWED END VALVES W/ UNION ADJACENT TO VALVE UNLESS VALVE CAN BE OTHERWISE EASILY REMOVED FROM LINE.
- AFTER PIPING IS IN PLACE TEST LINES TO ENSURE NO LEAKS. ALL PIPING & EQUIPMENT SHALL BE SUPPORTED PROPERLY FROM STRUCTURE. ESCUTCHEONS - PROVIDE NICKEL-BRASS OR CHROME PLATED ON ALL EXPOSED PIPES
- WHEN PASSING THRU WALL OR CEILING OF FINISHED ROOMS. VERIFY FLOOR MATERIALS USED FROM ARCHITECTURAL PLANS & PROVIDE PROPER CLEANOUT TOPS, WHERE THEY OCCUR IN CARPET, QUARRY TILE, VINYL TILE OR PROVIDE WATER HAMMER ARRESTORS FOR ALL PLUMBING BANKS W/ FIXTURES

FIXTURES SERVED ON BRANCH LINE. <u>SECTION 15300 - HVAC</u> GENERAL

ABBREVIATIONS

AUTHORITY HAVING JURISDICTION

A/E ARCHITECT / ENGINEER

AFF ABOVE FINISHED FLOOR

AFG ABOVE FINISHED GRADE

AG ABOVE GRADE

ARCH ARCHITECT

BLDG BUILDING

BG BELOW GRADE

CONDUIT

CANDELA

CLEAN OUT

CTE CONNECT TO EXISTING

DCW DOMESTIC COLD WATER

DF DRINKING FOUNTAIN

DHW DOMESTIC HOT WATER

DDC DIRECT DIGITAL CONTROLS

E/C ELECTRICAL CONTRACTOR

DHWR DOMESTIC HOT WATER RETURN

EDF ELECTRIC DRINKING FOUNTAIN

CD COLD DECK

CLG COOLING

DIA DIAMETER

DOWN

EA EXHAUST AIR

AHU AIR HANDLING UNIT

BFP BACKFLOW PREVENTER

BMS BUILDING MANAGEMENT SYSTEM

CM COORDINATE MOUNTING HEIGHT

DCVA DOUBLE CHECK VALVE ASSEMBLY

PROVIDE COMPLETE HVAC SYSTEM AS SHOWN ON DRAWINGS INCLUDING NECESSARY EQUIPMENT, DUCTWORK, DIFFUSERS, GRILLES, & FILTERS. PROVIDE OPERATING & MAINTENANCE INSTRUCTIONS ON ALL FOUIPMENT ALL HVAC WORK SHALL BE DONE IN STRICT ACCORDANCE W/ ALL REQUIREMENTS OF

UTILIZING FLUSH VALVES IN ANY CAPACITY. LOCATE ARRESTER BETWEEN LAST TWO

- LOCAL BUILDING CODE, ASHRAE, NEC, NFPA, & ALL OTHER APPLICABLE CODES HAVING HVAC DUCTWORK SHALL BE GALV SHEET METAL OF GAUGES & JOINT TYPES SPECIFIED
- IN SMACNA MANUAL. PROVIDE TURNING VANES IN ELBOWS. VOLUME DAMPERS SHALL BE MANUAL LOCKING BLADE TYPE ALL DUCTWORK MUST BE SUPPORTED PROPERLY FROM STRUCTURE. WRAP ALL SUPPLY & OUTSIDE AIR HVAC DUCTWORK W/ CERTAINTEED 1-1/2" THICK INSULATION W/ VAPOR BARRIER IN CONCEALED LOCATIONS. ALSO LINE FIRST 10' OF SUPPLY DUCTWORK FOR SOUND ATTENUATION (IN ADDITION TO WRAP) LINE ALL RETURN AIR DUCTS & TRANSFER BOOTS W/ 1/2" LINER. DO NO WRAP EXPOSED SPIRAL

ELEV ELEVATION

EM EMERGENCY FIXTURE/DEVICE

FFCO FINISHED FLOOR CLEAN OUT

FGCO FLUSH GRADE CLEAN OUT

FWCO FLUSH WALL CLEAN OUT

GROUND / GANG

G/C GENERAL CONTRACTOR

GPM GALLONS PER MINUTE

ISOLATED GROUND

LWT LEAVING WATER TEMPERATURE

JUNCTION BOX

LED LIGHT EMITTING DIODE

M/C MECHANICAL CONTRACTOR

MCB MAIN CIRCUIT BREAKER

MAU MAKE UP AIR UNIT

HOT DECK

HTG HEATING

MA MIXED AIR

MECH MECHANICAL

MH MANHOLE

FXISTING ITEM

FFB FROM FLOOR BELO

FFA FROM FLOOR ABOVE

FLOW LINE

FLOOR

FP FIRE PROTECTION

FPM FEET PER MINUTE

ENTERING WATER TEMPERATURE

A. FLEXIBLE DUCTS — THERMAFLEX OR EQUAL SOUND RATED TYPE G—KM INSULATED. (DUCT W/O PUBLISHED ACOUSTICAL ATTENUATION RATINGS NOT ACCEPTABLE) TAKE OFF FITTING SHALL BE HI-EFF STYLE W/ LOCKING DAMPER. MAXIMUM LENGTH OF FLEXIBLE DUCTWORK SHALL BE 7'-0". DIFFUSERS & GRILLES - SEE SCHEDULE, EQUIVALENT BY PRICE, TUTTLE & BAILEY. TITUS, MATEL-AIRE, KREUGER, NAILOR. COORDINATE COLOR, MOUNTING W/ DUCT,

CEILINGS. ARCHITECT. REFRIGERANT PIPING - COPPER TUBE TYPE ACR, HARD TEMPER NITROGENIZED REFRIGERANT TUBE, ASTM B-88. TYPE L OR K. BRAZED JOINTS. INSULATE W/

ARMAFLEX IN THICKNESS PER ASHRAE 90.1. PROVIDE EXTERIOR RATED OR COATED ARMAFLEX OUTDOORS.

A. ROOFTOP UNITS AS SCHEDULED. EQUIVALENTS BY TRANE, CARRIER, YORK, LENNOX,

- AAON, DAIKIN, MUST BE APPROVED BY OWNER. MIN 14" ROOF CURB. PROVIDE SLOPED CURB AS REQUIRED FOR LEVEL UNIT INSTALLATION. ECONOMIZER W/ BAROMETRIC RELIEF. FIXED DRY BULB CONTROL. 2" MERV 7 FILTERS. LOUVERED HAIL GUARDS. 30 DEG LOW AMBIENT SPLIT SYSTEM AHUS, EVAPORATORS, & CONDENSING UNITS AS SCHEDULED. FACTORY ASSEMBLED INCLUDING COIL, CONDENSATE PAN, FAN MOTOR(S), FILTERS & CONTROLS IN INSULATED CASING W/ TXV. ARI RATED. UL LISTED & LABELED FOR INDOOR BLOWER COIL UNITS. HEAVY GAUGE, GALV STEEL. FILTERS & CONTROLS IN INSULATED CASING W/ TXV. ARI RATED. UI LISTED & LABELED FOR INDOOR BLOWER COIL UNITS. HEAVY GAUGE. GALV STEEL. FILTERS & CONTROLS IN INSULATED CASING W/ TXV. AR RATED. UL LISTED & LABELED FOR INDOOR BLOWER COIL UNITS. HEAVY GAUGE. GALV STEEL. INSULATED W/ FIBERGLASS. UL & CSA ELECTRIC HEAT MODULES. HEATERS AS SCHEDULED SINGLE—POINT CONNECTION & TERMINAL STRIP CONNECTIONS. I NI-CHROM ELEMENTS. INTEGRAL DISC SWITCH & INTERNAL FUSING. 2" MERV FILTERS. MOUNT FILTER IN SLIDE RACK W/ HINGED DOOR & LATCH IN R/A DUCTWORK, CONDENSING UNIT — HEAVY GAUGE BASE, SCROLL COMPRESSOR(S). RATED SEER NOT LESS THAN 10.3. (1) YR PARTS & LABOR SYSTEM WARRANTY & ADDITIONAL 4 YR COMPRESSOR ONLY WARRANTY. ANTI-SHORT CYCLE PREVENTION Controls. Louvered coil hail guards. 30 deg low ambient. Equivalent by RANE. LENNOX. YORK. CARRIER. AAON. DAIKIN.
- EXHAUST FANS EQUIVALENT BY COOK, PENN, ACME, GREENHECK, JENNAIRE, TWIN CITY. PROVIDE W/ SPEED CONTROLS FOR ALL FANS LESS THAN 1/3HP TO BE FURNISHED TO E/C FOR MOUNTING AT FAN. PROVIDE W/ 14" MIN. CURB. PROVIDE GREASE TRIM & VENTILATED CURB EXTENSIONS FOR GREASE FANS PROVIDE PROGRAMMABLE THERMOSTATS W/ STAGES OF HEATING AND COOLING A REQUIRED BY STAGES OF HEATING AND COOLING ON SPECIFIED EQUIPMENT. SEVEN (7) DAY PROGRAMMING CAPABILITY W/ 2 OCC/UNOCC PERIODS/DAY. AUTO HEAT/COOL CHANGE OVER LOCKING SETPOINTS TO PREVENT TAMPERING PROVIDE W/ ALL INTERFACES TO OTHER EQUIPMENT AS REQUIRED. THERMOSTATS BY HONEYWELL, JOHNSON CONTROLS, WHITE-ROGERS, TRANE, CARRIER, AAON, LENNOX, DAIKIN, OR
- . COORDINATE W/ E/C TO PROVIDE ALL WIRING BETWEEN EQUIPMENT, DAMPERS, THERMOSTATS & ALL OTHER REQUIRED CONTROLS & DEVICES. PROVIDE ANY REQUIRED INTERFACES TO FIRE ALARM OR SIMILAR SYSTEMS. PROVIDE GROUND-MOUNTED UNITS ON 4", REINFORCED CONCRETE BASE, 4" LARGER THAN UNIT ON EACH SIDE ROOF-MOUNTED UNITS ON EQUIPMENT SUPPORTS OR CURBS. ANCHOR UNITS TO PROVIDE FACTORY-AUTHORIZED SERVICE START UP ON EQUIPMENT. TRAIN OWNER'S MAINTENANCE PERSONNEL ON STARTUP, SHUTDOWN, TROUBLESHOOTING, SERVICING,
- <u>SECTION 15900 SYSTEM TESTING & BALANCING</u>
 A. CONTRACTOR SHALL PROCURE SERVICES OF INDEPENDENT TAB CONTRACTOR WHICH SPECIALIZES IN TAB OF HVAC SYSTEMS, TO BALANCE, ADJUST, & TEST AIR MOVING EQUIPMENT & DISTRIBUTION & EXHAUST SYSTEMS & ALL WATER FLOW CIRCUITS. WORK SHALL BE DONE UNDER ENGINEER EMPLOYED TAB. ALL INSTRUMENTS USED SHALL BE ACCURATELY CALIBRATED & MAINTAINED IN GOOD WORKING ORDER. IF REQUESTED TESTS SHALL BE CONDUCTED IN PRESENCE OF A/F RESPONSIBLE FOR PROJECT &/OR REPRESENTATIVE. TAB CONTRACTOR SHALL BE CERTIFIED BY NEBB OR AABC & ALL WORK SHALL BE PERFORMED IN ACCORDANCE W/ ORGANIZATIONS PUBLISHED PROCEDURE MANUALS. TESTING & BALANCING (TAB) OF BUILDING HVAC SYSTEMS WILL BE COMPLETED NEAR
- END OF CONSTRUCTION. M/C HAS RESPONSIBILITY TO COOPERATE W/, MAKE ADJUSTMENTS FOR & PROVIDE EQUIPMENT NECESSARY FOR TAB CONTRACTOR TO PRIOR TO REQUESTING TAB CONTRACTOR TO PERFORM WORK. INSTALLING CONTRACTOR SHALL MAKE ALL NECESSARY INSPECTIONS & ADJUSTMENTS TO ENSURE THAT SYSTEMS ARE COMPLETELY INSTALLED & OPERATING ACCORDING TO MANUFACTURER'S RECOMMENDATIONS & CONTRACT DOCUMENTS. CHECKS SHALL BE PERFORMED ON EACH SYSTEM INSTALLED UNDER THIS CONTRACT.
- REPORT SHEET SHALL BE PREPARED FOR EACH SYSTEM INDICATING CHECKS MADE, CORRECTIVE ACTION TAKEN WHERE REQUIRED. DATE & NAME OF INSPECTOR. SUBMIT 1) COPY TO TAB CONTRACTOR & (1) INDICATING CHECKS MADE, CORRECTIVE ACTION TAKEN WHERE REQUIRED, DATE & NAME OF INSPECTOR. SUBMIT (1) COPY TO TAB CONTRACTOR & (1) TO A/E. TAB CONTRACTOR WILL NOT BEGIN UNTIL CHECKLIST HAS BEEN RECEIVED & REVIEWED. TAB CONTRACTOR SHALL AT MINIMUM: VERIFY & INSPECT THAT SYSTEMS ARE CLEAN. FAN ROTATION. BEARINGS. CLEARANCES. ALIGNMENT, VIBRATION ISOLATORS. FILTERS. DAMPER OPERATION & POSITION FOLLIPMENT IS INSTALLED TRANSFER OPENINGS IN WALLS, AIR LEAKS, COIL FINS/DAMAGE.
- BALANCING CONTRACTOR SHALL PREPARE CERTIFIED REPORT OF ALL TESTS PERFORMED REPORT SHALL BE WRITTEN ON STANDARD FORMS PREPARED BY NEBB OR AABC OR FACSIMILES THEREOF. BALANCING CONTRACTOR SHALL SUBMIT 3 COPIES OF THIS REPORT TO M/C WHO SHALL SUBMIT THEM TO A/E FOR REVIEW & DISTRIBUTION. CONNECTIONS. COIL & DAMPERS ARRANGEMENTS. PSYCHOMETRIC CHART ON EACH AHU. W/ COOLING COIL SHOWING OUTDOOR RETURN MIXED AIR TEMPS AT MINIMUM
- OUTDOOR AIR CONDITION. COIL LEAVING AIR CONDITION AT FULL COOLING COIL FLOW. tab report shall include all nebb or AABC forms completed as required b' TAB CONTRACTOR SHALL CYCLE EACH AHU THROUGH CONTROL SEQUENCE OF PERATION TO VERIFY PROPER OPERATION. ANY INCONSISTENCY W/ CONTRACT DOCUMENTS SHALL BE REPORTED TO A/E & TEMP CONTROL CONTRACTOR. TEMP CONTROL CONTRACTOR SHALL TAKE ACTION TO CORRECT ANY CONTROL INCONSISTENCY DURING INSTALLATION OF HVAC SYSTEMS TAB CONTRACTOR SHALL PERIODIC INSPECTION VISITS TO PROJECT SITE. PROPER PLACEMENT & INSTALLATION OF CONTROL &

BALANCING DEVICES SHALL BE VERIFIED BY THESE INSPECTIONS. M/C SHALL MAKE

ALL CORRECTIONS IN CONTROL & BALANCING DEVICE LOCATIONS AS REQUESTED BY

TAB CONTRACTOR. FOLLOWING EACH VISIT TAB CONTRACTOR SHALL REPORT TO A/E

ALL ITEMS NOTED. ACTION TAKEN & PROGRESS OF INSTALLATION.

MLO MAIN LUGS ONLY

OUTSIDE AIR

PVC POLYVINYLCHLORIDE

RE/REF REFER / REFERENCE

RELOCATED ITEM

RPZ REDUCED PRESSURE ZONE

RA RETURN AIR

RR RESTROOM

SA SUPPLY AIR

GFCI GROUND FAULT CIRCUIT INTERUPTER SPD SURGE PROTECTIVE DEVICE

RFLIFF FAN

SHUNT TRIP

TFA TO FLOOR ABOVE

TFB TO FLOOR BELOW

TP TAMPERPROOF

TYP TYPICAL

TRANSFER AIR

UNO UNLESS NOTED OTHERWISE

VTR VENT THROUGH ROOF

WCO WALL CLEANOUT

WG WIRE GUARD

WP WEATHERPROOF

ARCHITECTURAL CASEWORK AND ELEVATIONS

ALL DEVICES NOT INDICATED OTHERWISE.

FROM VIEW WHERE REASONABLY POSSIBLE.

VRF VARIABLE REFRIGERANT FLOW

GENERAL ELECTRICAL NOTES

LATEST ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE,

1. COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE

2. COORDINATE LOCATIONS OF RECEPTACLES, SWITCHES, ETC. WITH

3. REFER TO MOUNTING HEIGHTS DETAIL FOR MOUNTING HEIGHTS OF

4. PROVIDE ALL EMPTY CONDUITS WITH PULL STRINGS AND BUSHED

5. CONTRACTOR SHALL CONCEAL ALL CONDUIT, FITTINGS, AND DEVICES

LOCAL AND STATE CODES. AND REQUIREMENTS OF THE AHJ.

ORD OVERELOW ROOF DRAIN

P/C PLUMBING CONTRACTOR

PSI POUNDS PER SQUARE INCH

NFA NET FREE AREA

NL NIGHT LIGHT

GEN. MECHANICAL NOTES

1. COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERISION OF THE INTERNATIONAL MECHANICAL CODE. LOCAL AND STATE CODES. AND REQUIREMENTS OF THE AHJ. 2. ANY POWER FOR CONTROL SYSTEMS TO BE PROVIDED BY E/C IS INDICATED ON ELECTRICAL PLANS. ANY ADDITIONAL LINE VOLTAGE OR LOW VOLTAGE POWER REQUIRED BY THE M/C OF SUBCONTRACTORS TO HAVE A FULLY FUNCTIONING SYSTEM SHALL BE PROVIDED BY THE M/C CONTRACTOR OR SUBS.

3. ALL EQUIPMENT SHALL BE ADEQUATELY AND PROPERLY SUPPORTED AND FASTENED FROM STRUCTURE. 4. ALL EQUIPMENT AND ACCESSORIES INSTALLED IN CONCEALED SPACES REQUIRING ACCESS SHALL BE PROVIDED WITH ACCESS DOORS MEETING ANY FIRE REQUIREMENTS OF THE WALL/CEILING THEY ARE INSTALL FD.

5. EACH AIR HANDLING UNIT OVER 2000CFM SHALL BE PROVIDED WITH A SMOKE DETECTOR TO SHUT DOWN THE UNIT PER IMC 606 AS REQUIRED BY AHJ. COORDINATE WITH OTHER TRADES. 6. START UP AND ADJUST ALL EQUIPMENT AND VERIFY ALL MECHANICA SYSTEMS IN OPERATE IN ACCORDANCE WITH THEIR INTENDED PURPOSES. SUBMIT BALANCE AND START UP REPORTS TO THE A/E. REFER TO SPECIFICATIONS FOR ANY ADDITIONAL REQUIREMENTS.

GENERAL PLUMBING NOTES 1. COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE

LATEST ADOPTED VERISION OF THE INTERNATIONAL PLUMBING CODE LOCAL AND STATE CODES, AND REQUIREMENTS OF THE AHJ. 2. NO PIPING SHALL BE INSTALLED WHERE IT WILL SUBJECT TO FREEZING TEMPERATURES. PIPING IN EXTERIOR WALLS SHALL BE INSTALLED ON THE WARM SIDE OF BUILDING INSULATION, INSULATED AND THE CHASE SHALL BE VENTILATED WITH GRILLE'S ALLOWING INDOOR AMBIENT CONDITIONS TO CIRCULATE THROUGH THE CHASE. 3. PROVIDE CLEANOUTS IN THE FOLLOWING LOCATIONS: 3.1. IN ALL HORIZONTAL DRAINS (WITHIN THE BUILDING) NOT MORE

- THAN 100 FEET APART. 3.2. IN BUILDING SEWERS LOCATED NO MORE THAN 100 FEET APART MEASURED FROM THE UPSTREAM ENTRANCE OF THE CLEANOUT. 3.3. EACH CHANGE OF DIRECTION OF THE BUILDING DRAIN OR HORIZONTAL WASTE OR SOIL LINES GREATER THAN 45 DEGREES.WHERE MORE THAN ONE CHANGE OF DIRECTION OCCURS IN A RUN OF PIPING, ONLY ONE CLEANOUT SHALL BE REQUIRED FOR EACH 40 FEET OF DEVELOPED LENGTH OF THE DRAINAGE
- 3.4. AT THE BASE OF EACH WASTE OR SOIL STACK. 3.5. NEAR THE JUNCTION OF THE BUILDING DRAIN AND BUILDING

16000 - ELECTRICAL SPECIFICATIONS

SECTION 16000 - ELECTRICAL REQUIREMENTS

GENERAL REQUIREMENTS A. ALL WORK SHALL BE IN ACCORDANCE W/ LATEST EDITION OF INTERNATIONAL BUILDING CODE, NATIONAL ELECTRICAL CODE, NFPA, CODES AS ADOPTED BY CITY, COUNTY,

STATE & ALL OTHER APPLICABLE CODES. B. ALL MATERIALS & EQUIPMENT SHALL BE NEW & SHALL BEAR U.L. LABEL WHERE APPLICABLE. PROVIDE WATERPROOF EQUIPMENT ENCLOSURES WHERE REQUIRED. C. OBTAIN & PAY FOR ALL PERMITS REQUIRED FOR EXECUTION OF THIS WORK & SHALL MAKE ARRANGEMENTS FOR MODIFICATIONS TO ELECTRICAL CONNECTIONS TO BUILDING

D. CONTRACTOR SHALL PROVIDE ALL LABOR & MATERIALS REQUIRED TO HAVE COMPLETE FUNCTIONING ELECTRICAL LIGHTING & POWER SYSTEMS TOGETHER W/ ALL ASSOCIATED EQUIPMENT & APPARATUS AS SHOWN ON PLANS. E. WHERE AN ELECTRICAL DEVICE IS REQUIRED BY CODE BUT NOT SHOWN, IT SHALL BE PROVIDED AS THOUGH FULLY SHOWN & SPECIFIED. F. CONTRACTOR SHALL VISIT SITE & OBSERVE CONDITIONS UNDER WHICH WORK WILL BE DONE. ANY DISCREPANCIES SHALL BE CALLED TO ARCHITECT'S ATTENTION. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION FOR ANY ERROR OR

NEGLIGENCE ON CONTRACTOR'S PART. G. FINAL ACCEPTANCE OF WORK SHALL BE SUBJECT TO CONDITION THAT ALL SYSTEMS. EQUIPMENT, APPARATUS & APPLIANCES OPERATE SATISFACTORILY AS DESIGNED & INTENDED. WORK SHALL INCLUDE REQUIRED ADJUSTMENT OF SYSTEMS & CONTROL FOUIPMENT INSTALLED UNDER THESE SPECIFICATIONS.

H WARRANT TO OWNER CHALITY OF MATERIALS FOLLIPMENT WORKMANSHIP & OPERATION OF EQUIPMENT PROVIDED UNDER THESE SPECIFICATIONS FOR ONE YEAR FROM & AFTER COMPLETION OF BUILDING & ACCEPTANCE OF MECHANICAL SYSTEMS BY OWNER. I. ALL MATERIALS INSTALLED IN PLENUMS SHALL BE NONCOMBUSTIBLE OR HAVE FLAME/SMOKE INDEX OF NO MORE THAN 25/50 IN ACCORDANCE W/ ASTM E 84.

SECTION 16100 - CONDUIT & CONDUCTORS A. FOLLOW CIRCUITING SHOWN ON PLANS. USE NO CONDUIT SMALLER THAN 1/2" & NO CONDUCTORS SMALLER THAN #12 GA. UNLESS NOTED OTHERWISE. B. WIRE SHALL BE IN NON-FLEXIBLE METALLIC CONDUIT (EMT, IMC OR RMC) FOR ALL CIRCUITS AND FEEDERS GREATER THAN 30A, LIGHT SWITCH RISERS, KITCHEN CIRCUITS

C. MC CABLE ACCEPTABLE FOR BRANCH CONVENIENCE CIRCUITS AND LIGHTING CIRCUITS. DO NOT DAISY CHAIN LIGHT FIXTURES. PROVIDE MC LUMINARY CABLE WITH BUILT-IN TWISTED JACKETED PAIR FOR LIGHTING CIRCUITS FOR LIGHTING CONTROLS. D. CONDUIT INSTALLED BELOW GRADE SHALL BE SCHEDULE 80 PVC HEAVY WALL PLASTIC CONDUIT MEETING NEMA STANDARDS & ULLISTED FOR UNDERGROUND & EXPOSED USE. PROVIDE GRS RADIUS BENDS & RISERS AS CONDUITS RISE ABOVE GRADE OR ABOVE FLOOR SLAB.

E. PROVIDE INTERLOCKING SPACERS FOR MULT RUNS OF UG CONDUITS IN SAME TRENCH. F. LIGHTING & RECEPTACLE CIRCUIT CONDUCTORS SHALL BE COPPER THWN/THHN 600 VOLT, 75 DEG C, COLOR CODED AS DESCRIBED UNDER APPLICABLE CODES. NO ROMEX. PLASTIC FLEX TUBING ETC PERMITTED. LIGHT FIXTURE WIRE INSULATION SHALL HAVE TEMP RATING NOT LESS THAN INDIVIDUAL FIXTURE MANUF RECOMMENDED

G. CIRCUITS W/ NO. 8 OR LARGER CONDUCTORS. MOTOR CIRCUITS. POWER & FEEDER CIRCUITS & BUILDING SERVICE FEEDERS SHALL BE COPPER THWN/THHN 600 VOLT.

H. ALL CONDUIT, JUNCTION BOXES. ETC. ABOVE CEILINGS SHALL BE SUPPORTED FROM STRUCTURE. PIPE SLEEVES, HANGERS & SUPPORTS SHALL BE FURNISHED & SET & CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER & PERMANENT LOCATIONS.

SECTION 16200 — GROUNDING A. SUPPLEMENT GROUNDED NEUTRAL OF SECONDARY DISTRIBUTION SYSTEM W/ EQUIPMENT GROUNDING SYSTEM, INSTALLED SO THAT METALLIC STRUCTURES, FNCLOSURES, RACEWAYS, JUNCTION BOXES, OUTLET BOXES, CABINETS, MACHINE FRAMES. PORTABLE EQUIPMENT & OTHER CONDUCTIVE ITEMS OPERATE CONTINUOUSLY AT GROUND POTENTIAL & PROVIDE LOW IMPEDANCE PATH FOR GROUND FAULT

D. SYSTEM SHALL COMPLY W/ NATIONAL ELECTRICAL CODE. DRAWINGS & AS SPECIFIED . PROVIDE EQUIPMENT GROUND BUS IN BASE OF LOW VOLTAGE, SWITCHGEAR BRAZED OR OTHERWISE ADEQUATELY CONNECTED BY AN APPROVED METHOD TO GROUND RODS. D. PROVIDE IN CONDUIT GREEN INSULATED COPPER GROUND CONDUCTOR TO MAIN

METALLIC WATER SERVICE ENTRANCE & CONNECT BY MEANS OF ADEQUATE GROUND E. EQUIPMENT GROUNDING CONDUCTORS FOR BRANCH CIRCUIT HOME RUNS SHOWN ON DRAWINGS SHALL INDICATE AN INDIVIDUAL & SEPARATE GROUND CONDUCTOR FOR THAT BRANCH CIRCUIT WHICH SHALL BE TERMINATED AT BRANCH CIRCUIT PANELBOARD, SWITCHBOARD. OR OTHER DISTRIBUTION EQUIPMENT. F. PROVIDE LOW VOLTAGE DISTRIBUTION SYSTEM W/ SEPARATE GREEN INSULATED.

EQUIPMENT GROUNDING CONDUCTOR FOR EACH SINGLE OR THREE—PHASE FEEDER. SINGLE PHASE 120 VOLT BRANCH CIRCUITS FOR LIGHTING & POWER SHALL CONSIST OF PHASE & NEUTRAL CONDUCTORS & GREEN GROUND CONDUCTOR INSTALLED IN COMMON CONDUIT WHICH SHALL SERVE AS GROUNDING CONDUCTOR. G. GROUNDING CONDUCTORS SHALL BE AS SHOWN ON PLANS OR IF NOT SPECIFICALLY SHOWN SHALL BE NO SMALLER THAN THAT REQUIRED BY NEC.

<u>SECTION 16300 — ELECTRICAL EQUIPMENT</u> A. JUNCTION BOXES & OUTLET BOXES SHALL BE GALVANIZED KNOCKOUT TYPE. LIGHTING FIXTURE BOXES IN CEILINGS SHALL NOT BE LESS THAN 4" OCTAGONAL KNOCKOUT TYPE. OUTLETS SHALL BE INSTALLED IN LOCATIONS SHOWN ON DRAWINGS EXCEPT OUTLETS MAY BE MOVED 4 FEET IN EITHER DIRECTION IF SO DIRECTED. WITHOUT ADDITIONAL COST. BOXES SHALL BE FLUSH MOUNTED ON WALLS FOR CONCEALED WORK. GANGABLE BOXES SHALL BE USED IN ALL GYPBOARD SURFACES.

A. BRANCH CIRCUIT 208/240V PANELS SHALL BE CAPACITY SHOWN W/ TIN PLATED COPPER BUSSING & BRACED FOR MINIMUM OF 22,000A AIC OR AS OTHERWISE NOTED OR REQUIRED (SERIES RATED ACCEPTABLE). BOLT ON CIRCUIT BREAKERS. 480V PANELS SAME EXCEPT 25,000A AIC MIN. MINIMUM 20" WIDE W/ GALV STEEL ENCLOSURE W/ HINGED DOOR & KEYED LOCK. COORD TRIM WITH MOUNTING LOCATION. PANELS TO BE RECESSED WHENEVER POSSIBLE B. DISTRIBUTION PANELS SHALL BE CAPACITY SHOWN & SHALL BE SQUARE D I—LINE W/ TIN PLASTED COPPER BUSSING. 65KAIC MIN OR AS OTHERWISE NOTED/REQ'D. BOLL ON CIRCUIT BREAKERS (SERIES RATED ACCEPTABLE), GALV STEEL ENCLOSURE, C. FQUIVALENT BY SQUARE D. SIEMENS, CUTLER HAMMER, OR GE.

SECTION 16350 — ELECTRICAL IDENTIFICATION

A. MANUFACTURED LABELS FOR EACH PANELBOARD & TRANSFORMER. TYPEWRITTEN PANEL SCHEDULES MOUNTED IN PANELS R PRINTEN TAPE STYLE LAREL FOR FACH RECEPTACLE INDICATING PANEL & CIRCUIT #

C. MANUFACTURED LABELS FOR ALL DISCONNECT SWITCHES INDICATING EQUIPMENT

D. BRANCH CIRCUITS — IDENTIFY FACH CIRCUIT W/ WIRE MARKERS WHEN FNCLOSURE LABEL AND WIRE COLORS DO NOT PROVIDE ENOUGH INFORMATION TO IDENTIFY EACH CIRCUIT WITHOUT TRACING. FEEDERS & BRANCH CIRCUIT HOME RUNS W/ WIRE

MARKER W/ PANEL & CKT #. BOX COVERS ABOVE LAY-IN CEILINGS NEATLY MARKED W/ INDELIBLE MARKER. E. FÍRE ALARM — NAMEPLATE ON EACH FIRE ALARM TERMINAL CABINET. LABEL ALL

SECTION 16400 - WIRING DEVICES A. CONVENIENCE OUTLETS - SPEC GRADE 20 AMP DUPLEX W/ GROUND & SS WALL

PLATES. OTHER OUTLETS SHALL BE VERIFIED W/ EQUIPMENT SUPPLIERS FOR PROPER NEMA CONFIGURATIONS. PROVIDE GFIC RATED DEVICES WHERE INDICATED AND AS REO'D PER CODE

B. PROVIDE GFIC RATED DEVICES WHERE INDICATED AND ANYWHERE REQUIRED PER THE C. PROVIDE AFCI PROTECTION ON ALL CIRCUITS REQUIRED PER THE NEC. D. PROVIDE TAMPER RESISTANT RECEPTACLES ON ALL RECEPTACLES IN PUBLIC AREAS,

AREAS ACCESSIBLE TO CHILDREN, AND WHERE OTHERWISE REQUIRED TO BE TAMPER

RESISTANT PER THE NEC. . LIGHT SWITCHES - SPEC GRADE 20 AMP TOGGLE SWITCHES W/ SS WALL PLATES. WALL MOTION SWITCHES — SPEC GRADE, PIR, OVERRIDE. G. CEILING MOTION SWITCHES — SPEC GRADE, DUAL TECHNOLOGY, MODEL AS REQ'D BY ROOM CONFIGURATION. ALL NECESSARY POWER PACKS AND RELAYS. H. WALL MOTION SWITCHES (BATHROOM) — DUAL RELAY, SPEC GRADE, PIR, 2ND RELAY FOR OPERATION OF FYHALIST FAN DELAY

COLOR OF DEVICES AS DIRECTED BY ARCHITECT EQUIVALENT DEVICES BY LEVITON, BRYANT, HUBBEL, WATTSTOPPER, LITHONIA, SENSOR

A. ALL OUTLETS, SHALL BE MOUNTED W/ BOTTOM AT 18" AFF & SWITCHES W/ BOTTOM AT 44" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE ON PLANS. REFER TO ARCH FOR OTHER REQUIRED ELEVATIONS AND CABINETRY COORDINATION.

<u> SECTION 16500 — LED LUMINAIRES</u>

A. PROVIDE LIGHTING FIXTURES W/ ALL ACCESSORIES REQ'D FOR HANGING. COORD MOUNTING OF LIGHTING FIXTURES W/ ARCHITECT & G/C. ADDITIONAL FIXTURE SUPPORTS SHALL BE PROVIDED BY E/C. SUPPORTS SHALL COMPLY W/ LATEST EDITION OF NEC. PROVIDE LIGHTING FIXTURE SECURING CLIPS AS REQUIRED CONSULT ARCH PLANS FOR CEILING TYPES & PROVIDE SURFACE & RECESSED LIGHTING FIXTURES W/ APPROPRIATE MOUNTING COMPONENTS & ACCESSORIES. 3. REFER TO LIGHTING FIXTURE SCHEDULE PLANS FOR FIXTURE TYPES.

EQUIVALENT LUMINAIRES BY CREE, COOPER, HUBBELL, INFINITY, LITHONIA, WILLIAMS, COLUMBIA, EXITRONICS, LITEALARM, EXIDE, MULE, DUALLITE SECTION 16600 — FIRE ALARM SYSTEM
A. PROVIDE COMPLETE & OPERATIONAL MICROPROCESSOR BASED FIRE ALARM SYSTEM. SYSTEM SHALL MONITOR SPRINKLER SYSTEM TAMPER & FLOW SWITCHES, OPERATE AIR HANDLING UNIT DUCT SMOKE DETECTORS & UNIT SHUTDOWN, CONTROL NOTIFICATION

B. PROVIDED W/ BATTERY BACKUP FOR 24 HOURS OF OPERATION & 5 MINUTES OF C. SUBMIT SHOP DRAWINGS W/ WIRING DIAGRAMS & BATTERY CALCS FOR APPROVAL TO FIRE MARSHALL AND AHJ.

APPLIANCES & PROVIDE THIRD PARTY/CENTRAL STATION MONITORING THROUGH DIGITAL

A. MICROPROCESSOR BASED FIRE ALARM CONTROL PANEL W/ INDICATION & NOTIFICATION CIRCUITS REQUIRED BASED ON DEVICES & DESCRIPTION HEREIN. COMPLETE CONTROL PANEL W/ POWER SUPPLY, BATTERIES, PROCESSOR, DIALER, ETC. IN SINGLE CABINET.

ALARM COMMUNICATOR OR DIALER

- MANUFACTURED BY SIEMENS, SIMPLEX, NOTIFIER, OR APPROVED EQUAL. . PHOTOELECTRIC DUCT SMOKE DETECTORS W/ SAMPLING TUBE. PROVIDE REMOTE TEST SWITCH & INDICATOR FOR EACH. LOCATION APPROVED BY ARCHITECT. ACTIVATION OF DUCT SMOKE DETECTORS SHALL SHUT DOWN RESPECTIVE AIR HANDLING PHOTOELECTRIC CEILING MOUNTED SMOKE DETECTORS.
- D. SINGLE ACTION PULL STATIONS. REMOTE ANNUNCIATOR FOR RECESSED MOUNTING. COORDINATE LOCATION WITH FIRE
- PROVIDE ALL REQUIRED FAN AND OTHER SHUTDOWN RELAYS FOR DOORS, DAMPERS, ETC. COORDINATE W/ OTHER TRADES.
- G. NOTIFICATION APPLIANCES STROBES & COMBINATION HORN/STROBES. 15/75 CANDELA RATING UNLESS OTHERWISE NOTED OR REQUIRED. WEATHERPROOF WHERE FXTERIOR MOUNTED. H. HEAT DETECTORS — RATE OF RISE OR FIXED AS REQUIRED BY APPLICATION.
- . COORDINATE TO PROVIDE POWER & SHUTDOWN OR OPERATION OF FIRE/SMOKE DAMPERS, DOOR HOLD OPENS, POWER TO DOOR LOCKS &ACCESS CONTROL & OTHER I. MODULES FOR MONITORING STATUS OF SPRINKLER SYSTEM TAMPER & FLOW
- A. INSTALLED & TESTED PER NFPA 72 & APPLICABLE SECTIONS OF NFPA 70. PROVIDE COMPLETE FIRE ALARM SYSTEM AS DESCRIBED HEREIN & SHOWN TO BE WIRED, CONNECTED, & IN FIRST CLASS CONDITION. INCLUDE SUFFICIENT CONTROL UNIT(S), ANNUNCIATOR(S), MANUAL STATIONS, AUTOMATIC FIRE DETECTORS, SMOKE DETECTORS, AUDIBLE & VISIBLE NOTIFICATION APPLIANCES, WIRING, TERMINATIONS, ELECTRICAL BOXES, & ALL NECESSARY MATERIAL FOR COMPLETE OPERATING SYSTEM. B. SYSTEM SHALL BE ULLISTED. C. SYSTEM WIRING: WIRE & CABLE SHALL BE LISTED FOR ITS INTENDED USE BY AN
- APPROVAL AGENCY ACCEPTABLE TO AHJ & SHALL BE INSTALLED IN ACCORDANCE W/ APPROPRIATE ARTICLES FROM CURRENT APPROVED EDITION OF NEC. <u>SECTION 16700 – LOW VOLTAGE CABLING</u> ARIE FOR CARIE TELEVISION OUTLETS
- B. PROVIDE ALL NECESSARY CABLING. EQUIPMENT. BOXES. SPLITTERS. CONNECTORS. COVERS, ETC. FOR COMPLETE & OPERATIONAL SYSTEM.

A. CABLING SHALL BE INSTALLED CONCEALED IN NEW & EXISTING CONSTRUCTION. B. CABLING SHALL BE UL LISTED FOR INTENDED USE & INSTALLED IN ACCORDANCE W/ APPROPRIATE ARTICLES FROM LATEST NEC.

COORDINATION NOTES

- 1. COORDINATE REQUIREMENTS FOR INSTALLATION OF SYSTEMS AND EQUIPMENT WITH ALL OTHER TRADES.
- 2. THE CONTRACTOR SHALL COORDINATE THE ROUTING AND PATH OF ALL SYSTEMS. CONDUITS. PIPES. DUCTS. FTC WITH THE POSITION AND LAYOUT OF THE STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING NECESSARY OFFSETS, TURNS, RISES AND DROPS FOR SYSTEMS AND COMPONENTS AS NEEDED TO INSTALL THE MEI SYSTEMS TO CLEAR STRUCTURE, CEILINGS, ETC AND OTHER SYSTEMS
- IN POTENTIAL CONFLICT WITH ROUTING. COORDINATE WORK WITH OTHER TRADES TO INSTALL SYSTEMS ABOVE CEILING HEIGHTS INDICATED ON ARCHITECTURAL PLANS. . CHECK SPACE REQUIREMENTS WITH OTHER TRADES A STRUCTURE/CONSTRUCTION TO INSURE THAT ALL MATERIALS AND EQUIPMENT CAN BE INSTALLED IN THE SPACE ALLOTTED INCLUDING FINISHED SUSPENDED CEILINGS AND OTHER SPACES. CHASES. ETC
- AND APPROVED. 5. TRANSMIT TO OTHER TRADES ALL INFORMATION REQUIRED FOR WORK TO BE PROVIDED UNDER THEIR RESPECTIVE SECTIONS IN AMPLE TIME FOR INSTALLATION.
- 6. WHEREVER WORK INTERCONNECTS WITH WORK OF OTHER TRADES, COORDINATE WITH THOSE TRADES TO INSURE THAT ALL SUBCONTRACTORS HAVE THE INFORMATION NECESSARY SO THAT THEY MAY PROPERLY INSTALL ALL CONNECTIONS AND EQUIPMENT IDENTIFY ALL ITEMS OF WORK THAT REQUIRE ACCESS SO THAT TH CEILING TRADE WILL KNOW WHERE TO INSTALL ACCESS DOORS AND

'. COORDINATE, PROJECT AND SCHEDULE WORK WITH OTHER TRADES IN

WITHIN THE BUILDING. MAKE MODIFICATIONS THERETO AS REQUIRED

- ACCORDANCE WITH THE CONSTRUCTION SEQUENCE. 8. DRAWINGS SHOW THE GENERAL RUNS OF CONDUITS. PIPING AND DUCTWORK AND APPROXIMATE LOCATION OF OUTLETS. AN SIGNIFICANT CHANGES IN LOCATION OF ITEMS NECESSARY IN ORDER TO MEET FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/FNGINFER AND RECEIVE HIS APPROVAL BEFORE SUCH ALTERATIONS ARE MADE. ALL SUCH MODIFICATIONS SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.). CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND REPAIR
- OF SURFACES, AREAS AND PROPERTY THAT MAY BE DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES. 10. ADJUST LOCATION OF PIPING, DUCTWORK, ETC. TO PREVENT INTERFERENCES, BOTH ANTICIPATED AND ENCOUNTERED. DETERMINE THE EXACT ROUTE AND LOCATION OF EACH ITEM PRIOR FABRICATION. MAKE OFFSETS, TRANSITIONS AND CHANGES DIRECTION IN SYSTEMS AS REQUIRED TO MAINTAIN ADEQUATE
- CLEARANCES AND HEADROOM. 11. WHEREVER THE WORK IS OF SUFFICIENT COMPLEXITY. PREPAI ADDITIONAL COORDINATION DRAWINGS AND ORGANIZE ON-SITE MEETINGS WITH ALL RELATED SUBCONTRACOTRS TO COORDINATE 1 WORK BETWEEN TRADES . DRAWINGS SHALL CLEARLY SHOW TH WORK AND ITS RELATION TO THE WORK OF OTHER TRADES. AND BE SUBMITTED FOR REVIEW PRIOR TO COMMENCING SHOP FABRICATION OR ERECTION IN THE FIELD.
- 12. COORDINATE WITH LOCAL UTILITY PROVIDERS FOR THEIR REQUIREMENTS FOR SERVICE CONNECTIONS AND PROVIDE ALL NECESSARY PAYMENTS, MATERIALS, LABOR AND TESTING ACCOMPLISH THE WORK.

GENERAL NOTES

- 1. SOME ROOM NAMES MAY NOT BE SHOWN FOR PURPOSE OF CLARIFYING PLAN. REFER TO ARCHITECTURAL PLANS FOR REFERENCE TO ROOM NAMES NOT SHOWN.
- 2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND KEEP AT THE JOB SITE, AN UP TO DATE SET OF "RECORD DRAWINGS" SHOWING ALL CHANGES FROM THE ORIGINAL PLANS THE CONTRACTOR SHALL DELIVER THE "RECORD DRAWINGS" T ENGINEER AT THE CONCLUSION OF THE PROJECT **ELECTRONICALLY** 3. THESE DRAWINGS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL
- VERIFY ALL CONDITIONS (NEW AND EXISTING). DIMENSIONS, AND CLEARANCES PRIOR TO THE COMMENCEMENT OF WORK AND SHALL INCLUDE ALL COSTS. EQUIPMENT. MATERIAL ACCESSORIES, ETC. REQUIRED FOR A FULLY COMPLETE, FUNCTIONAL AND CODE COMPLIANT INSTALLATION. 4. FINAL LOCATIONS OF ALL DEVICES, LIGHT FIXTURES, EQUIPMENT ETC SHALL BE INDICATED ON THE ARCHITECTURAL DRAWINGS ALL DIMENSIONAL INFORMATION SHALL BE OBTAINED FROM
- BE OBTAINED FROM MEP DRAWINGS. 5. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS, APPROVALS, LICENSES, ETC. AS NEEDED FOR THE COMPLETE COORDINATE WITH THE OWNER FOR ALL FEES AND DATA NEEDED FOR THIS.

ARCHITECTURAL PLANS. NO DIMENSIONAL INFORMATION SHALL

FIRE SEALING NOTES

- COORDINATE CONSTRUCTION OF OPENINGS AND PENETRATING ITEMS TO ENSURE THAT THROUGH-PENETRATION FIRESTOP SYSTEMS ARE INSTALLED ACCORDING TO SPECIFIED AND APPLICABLE UL
- COORDINATE SIZING OF SLEEVES, OPENINGS, CORE—DRILLED HOLES, OR CUT OPENINGS TO ACCOMMODATE THROUGH-PENETRATION FIRESTOP SYSTEMS. 3. DO NOT COVER UP THROUGH—PENETRATION FIRESTOP SYSTEM
- INSTALLATIONS UNTIL EXAMINED BY NSPECTOR, IF REQUIRED BY AUTHORITIES HAVING JURISDICTION. P. COMPATIBILITY: PROVIDE THROUGH—PENETRATION FIRESTOP SYSTEMS THAT ARE COMPATIBLE WITH ONE ANOTHER: WITH THE SUBSTRATES FORMING OPENINGS: AND WITH THE ITEMS. IF ANY. PENETRATING

THROUGH-PENETRATION FIRESTOP SYSTEMS, UNDER CONDITIONS OF

- SERVICE AND APPLICATION. AS DEMONSTRATED THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE. 5 PROVIDE COMPONENTS FOR FACH THROUGH—PENETRATION FIRESTOP SYSTEM THAT ARE NEEDED TO INSTALL FILL MATERIALS. USE ONLY COMPONENTS SPECIFIED BY THROUGH—PENETRATION FIRESTOP SYSTEM MANUFACTURER AND APPROVED BY QUALIFIED TESTING AND
- INSPECTING AGENCY FOR FIRESTOP SYSTEMS INDICATED. PROVIDE SLEEVES THROUGH ALL FIRE_RATED WALLS AND FILL VOIDS SURROUNDING SLEEVES AND INTERIOR TO SLEEVES AROUND PIPING WITH FIRE STOP PUTTY WITH U.L. LISTED 3 HOUR RATING INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.

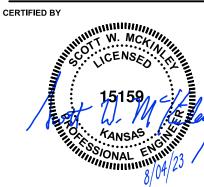
FLOOR/CEILING/ CEILING/ROOF ASSEMBLIES TO MAINTAIN UL LISTING

7. FIRE SEAL ALL PIPING, CONDUIT, CABLE, ETC PENETRATIONS ROUTED THROUGH FIRE RATED WALLS. 8. PROVIDE FIRE RATED ENCLOSURES OR WRAPS ON LIGHT FIXTURES AND OTHER ITEMS PENETRATING FIRE RATED CEILINGS,





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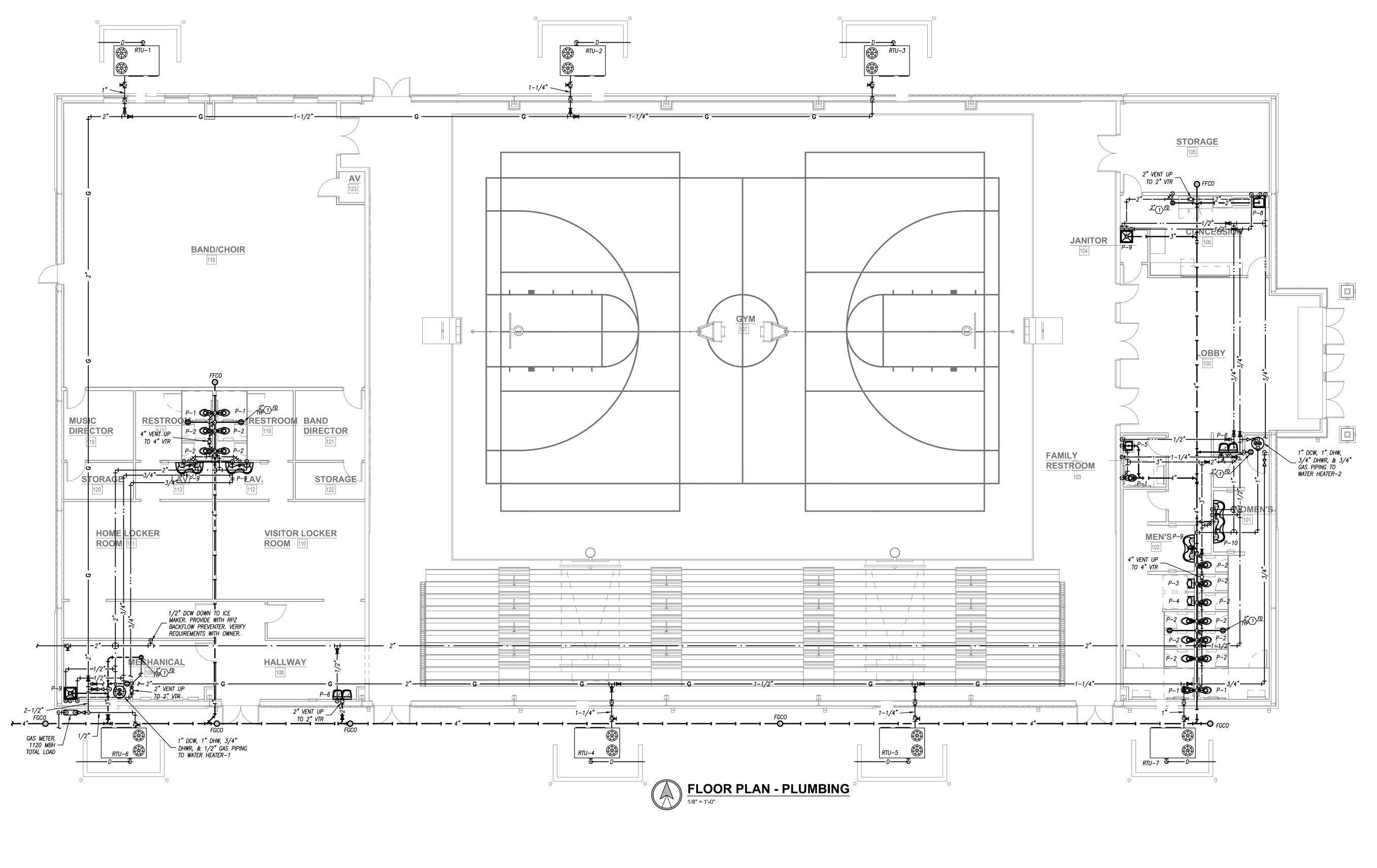
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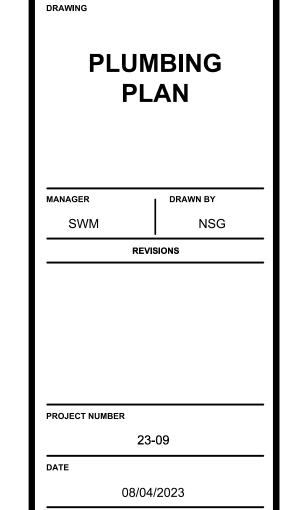
MANAGER DRAWN BY NSG REVISIONS

PROJECT NUMBER

23-09

08/04/2023





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| PLAN | FIXTURE | | FITTINGS | | | PIPE | SIZES | |
|------|-----------------------------------|---|-------------------------------|--|-------|------|--------|------|
| MARK | MODEL | FIXTURE DESCRIPTION | MODEL | FITTINGS DESCRIPTION | WASTE | VENT | DCW | DHW |
| P-1 | AMERICAN STANDARD 3461.001 | ADA COMPLIANT WATER CLOSET: FLUSH VALVE, WHITE ELONGATED BOWL, FLOOR MOUNTED, 1.6 GALLON SIPHON JET FLUSHING ACTION | SLOAN 111 | EXPOSED WATER CLOSET FLUSH VALVE, CHROME PLATED 1.6 GALLON FLUSH, WITH WALL AND SPUD FLANGES MOUNT HANDLE AT 26" ABOVE FLOOR ON WIDE SIDE OF RESTROOM STALL | 4" | 2" | 1-1/4" | |
| | | | CHURCH 9500 C | SEAT: WHITE, SOLID PLASTIC, OPEN FRONT, ELONGATED | | | | |
| P-2 | AMERICAN STANDARD 2234.015 | WATER CLOSET: FLUSH VALVE, WHITE ELONGATED BOWL, FLOOR MOUNTED, 1.6 GALLON SIPHON JET FLUSHING ACTION | SLOAN 111 | EXPOSED WATER CLOSET FLUSH VALVE, CHROME PLATED 1.6 GALLON FLUSH, WITH WALL AND SPUD FLANGES MOUNT HANDLE AT 24" ABOVE FLOOR | 4" | 2" | 1-1/4" | |
| | CHURCH 9500C | SEAT: WHITE, SOLID PLASTIC, OPEN FRONT, ELONGATED | | | | | | |
| P-3 | AMERICAN STANDARD 6590.001 | ADA COMPLIANT URINAL: WHITE WALL HUNG URINAL 0.5 GALLON SIPHON JET FLUSHING ACTION. MOUNT FIXTURE RIM AT 17" ABOVE FLOOR WITH FLOOR MOUNTED, HEAVY DUTY TUBULAR STEEL SUPPORT CARRIER | SLOAN 186–0.5 | EXPOSED URINAL FLUSH VALVE: CHROME PLATED 0.5 GALLON FLUSH, WITH WALL AND SPUD FLANGES. MOUNT HANDLE AT 43" ABOVE FLOOR ON WIDE SIDE OF RESTROOM STALL | 2" | 2" | 1" | |
| P-4 | AMERICAN STANDARD 6590.001 | URINAL: WHITE WALL HUNG URINAL 0.5 GALLON SIPHON JET FLUSHING ACTION. MOUNT FIXTURE RIM AT 24" ABOVE FLOOR WITH FLOOR MOUNTED, HEAVY DUTY TUBULAR STEEL SUPPORT CARRIER | SLOAN 186–0.5 | EXPOSED URINAL FLUSH VALVE: CHROME PLATED 0.5 GALLON FLUSH, WITH WALL AND SPUD FLANGES. MOUNT HANDLE AT 50" ABOVE FLOOR | 2" | 2" | 1" | |
| P-5 | AMERICAN STANDARD 0356.421 | ADA COMPLIANT LAVATORY: WHITE WALL HUNG LAVATORY 20"x18" WITH SINGLE HOLE, WITH CONCEALED ARM CARRIER. PROVIDE HANDLE STOP VALVES AND FLEXIBLE METAL WATER RISERS. MOUNT TOP OF RIM AT 34" ABOVE FLOOR | CHICAGO 3500 | FAUCET: SINGLE HOLE, METERING FAUCET, 1/2" CONNECTIONS, 0.5 GPM MAX FLOWRATE. CHROME PLATED BRASS GRID DRAIN, TAILPIECE, AND P-TRAP INSULATE THE TAILPIECE, P-TRAP, AND WATER RISERS | 2" | 2" | 1/2" | 1/2" |
| | | | WATTS LFMMV-M1 | THERMOSTATIC MIXING VALVE: BRONZE BODY THERMOSTATIC MIXING VALVE WITH 1/2" CONNECTIONS, FILTER WASHERS, CHECK VALVES AND LOCKABLE ADJUSTMENT CAP. MOUNT IN AN ACCESSIBLE LOCATION BELOW LAVATORY. | | | | |
| P-6 | HALSEY—TAYLOR HTHB—HAC8BLPV—NF | ADA COMPLIANT DUAL HEIGHT ELECTRIC WATER COOLER WITH BOTTLE FILLING STATION: 8 GPH OF 50 DEGREE WATER WITH FRONT AND SIDE PUSHBARS, MOUNT WITH 27" OF KNEE CLEARANCE, MOUNT ON CONCEALED ARM CARRIER | | | 2" | 2" | 1/2" | |
| P-7 | FIAT MSB-2424 | JANITORS SINK: WHITE 24"X24"X10" ONE PIECE MOLDED STONE MOP BASIN, WITH STAINLESS STEEL DRAIN BODY WITH 3" WASTE WITH STAINLESS STEEL WALL GUARDS | FIAT 830–AA | CHROME PLATED BRASS WALL MOUNTED FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, PAIL HOOK, 3/4" HOSE THREAD SPOUT, INDEXED HANDLES, WITH 5 FOOT HOSE AND BRACKET, MOP HANGER AND HOSE RACK | 3" | 2" | 1/2" | 1/2" |
| P-8 | ELKAY LR–1722 | SINGLE COMPARTMENT SINK: SEAMLESS 18 GAUGE, TYPE 302 STAINLESS STEEL, SATIN FINISH WITH FULL UNDERCOAT, HOLES 4" ON CENTERS, 7 1/2" BOWL DEPTH, SELF RIMMING, PROVIDE HANDLE STOP VALVES AND FLEXIBLE METAL WATER RISERS | AMERICAN STANDARD 7500.140 | CENTERSET GOOSENECK FAUCET WITH METAL LEVER HANDLES, 1/2" CONNECTIONS, POLISHED CHROME FINISH WITH BASKET STRAINER AND DRAIN, CHROME PLATED BRASS TAILPIECE AND P—TRAP, INSULATE THE TAILPIECE, P—TRAP, AND WATER RISERS | 2" | 2" | 1/2" | 1/2" |
| P-9 | BRADLEY MG-2/AST4 | DUAL STATION LAVATORY SYSTEM: VANDAL RESISTANT SOLID SURFACE INTEGRAL UNIT WITH PNEUMATIC PUSHBUTTON, AND THERMOSTATIC MIXING ASSEMBLY. PROVIDE WITH WALL HUNG FRAME AND VANDAL RESISTANT PEDESTAL PANEL, CHROME PLATED TAILPIECE, AND P-TRAP INSULATE THE TAILPIECE, P-TRAP, AND WATER RISERS. COLOR TO BE SELECTED BY ARCHITECT | | | 2" | 2" | 1/2" | 1/2" |
| P-10 | BRADLEY MG-3/AST4 | TRIPLE STATION LAVATORY SYSTEM: VANDAL RESISTANT SOLID SURFACE INTEGRAL UNIT WITH PNEUMATIC PUSHBUTTON, AND THERMOSTATIC MIXING ASSEMBLY. PROVIDE WITH WALL HUNG FRAME AND VANDAL RESISTANT PEDESTAL PANEL, CHROME PLATED TAILPIECE, AND P—TRAP INSULATE THE TAILPIECE, P—TRAP, AND WATER RISERS. COLOR TO BE SELECTED BY ARCHITECT | | | 2" | 2" | 1/2" | 1/2" |

| PIPING | | | | | FIELD TEST | ALLOWABLE IN | INSULA | ATION |
|--------------------------------|-------------|----------------------|-----------------|---------------------------|-----------------|--------------|-------------------|----------------|
| SYSTEM | SIZE | TYPE/SCHED | MATERIAL | ACCEPTABLE FITTINGS | PRESSURE/TIME | PLENUMS | TYPE | THICKNESS |
| DOMESTIC COLD WATER | 1/2"-2-1/2" | L | COPPER | SOLDER, PRO-PRESS | 130 PSI - 1/2HR | YES | FIBERGLASS W/ ASJ | 1/2" |
| DOMESTIC HOT WATER & HW RETURN | 1/2"-2-1/2" | L | COPPER | SOLDER, PRO-PRESS | 130 PSI - 1/2HR | YES | FIBERGLASS W/ ASJ | 1" |
| DOM. HOT & COLD BELOW GRADE | 1/2"-1-1/4" | К | COPPER | CONTINUOUS TUBING, BRAZED | 130 PSI - 1/2HR | YES | ELASTOMERIC | 3/4" (HOT ONL) |
| DOMESTIC COLD WATER | 3"-6" | L | COPPER | BRAZED, PRO-PRESS | 130 PSI - 1/2HR | YES | FIBERGLASS W/ ASJ | 1/2" |
| DOMESTIC HOT WATER | 3"-6" | L | COPPER | BRAZED, PRO-PRESS | 130 PSI - 1/2HR | YES | FIBERGLASS W/ ASJ | 1-1/2" |
| NATURAL GAS — ABOVE GRADE | 2-1/2 & Up | SCH. 40 | STEEL- SEEMED | WELDED | 75 PSI – 1HR | YES | | |
| NATURAL GAS — ABOVE GRADE | 1/2"-2" | SCH. 40 | STEEL- SEEMLESS | THREADED IRON | 75 PSI – 1HR | YES | | |
| NATURAL GAS BELOW GRADE | ALL | SDR-11 | POLYETHYLENE | FUSION JOINTS | 100 PSI - 1HR | NO | | |
| SOIL & WASTE ABOVE GRADE | 1-1/2"-6" | NO HUB / SERVICE WT. | CAST IRON | NO HUB | 10 FT - 1/2HR | YES | | |
| SOIL & WASTE ABOVE GRADE | 2"-8" | SCH. 40 | PVC | SOLVENT JOINED | 10 FT - 1/2HR | NO | | |
| SOIL & WASTE BELOW GRADE | 2"-8" | SCH. 40 | PVC | SOLVENT JOINED | 10 FT - 1/2HR | NO | | |
| DRINKING FOUNT. DRAIN | ALL | | | | | YES | ELASTOMERIC | 1/2" |
| CONDENSATE DRAIN INTERIOR | 1/2"-2" | L | COPPER | SOLDER, PRO-PRESS | 10 FT - 1/2HR | YES | FIBERGLASS W/ ASJ | 1/2" (PLENUM O |

1. ALL PIPING AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.

2. ALL INSULATION THICKNESSES SHALL MEET ASHRAE 90.1 - 2007 REQUIREMENTS AT A MINIMUM. 3. REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.

| | WATER H | IEATER SO | CHEDULE | | | | |
|---|----------------|----------------|---------------|---------|-------------|------------------|-------|
| | PLAN MARK | MANUFACTURER | MODEL NUMBER | GALLONS | CAPACITY | ELECTRICAL | NOTES |
| 1 | WATER HEATER-1 | BRADFORD WHITE | LG2PDV50H603N | 48 | 60,000 BTUH | 120V, 1PH, 20AMP | 1 |
| ١ | WATER HEATER-2 | BRADFORD WHITE | LG2PDV50H603N | 48 | 60,000 BTUH | 120V, 1PH, 20AMP | 1 |

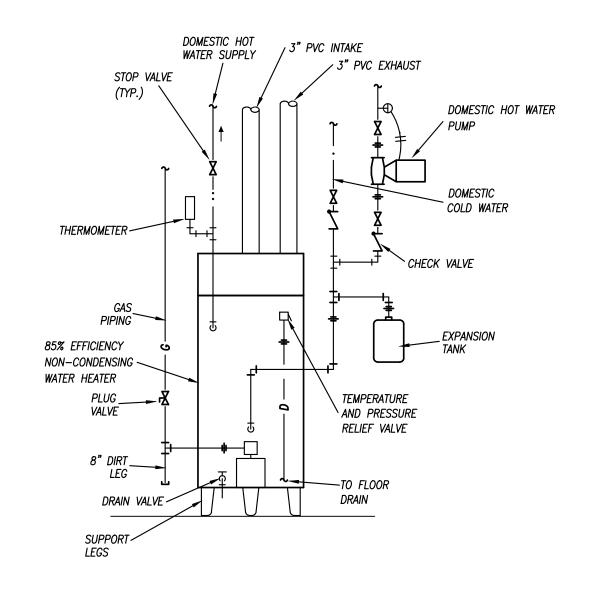
NOTES LEGEND

1 - PROVIDE CONCENTRIC VENT KIT.

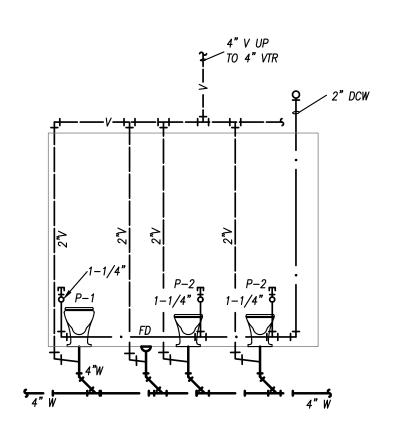
| EXPANSION TANK SCHEDULE | | | | | | | | | |
|-------------------------|--------------|--------------|-----------------|--|--|--|--|--|--|
| PLAN MARK | MANUFACTURER | MODEL NUMBER | TOTAL VOLUME | | | | | | |
| DOMESTIC HOT WATER | AMTROL | ST-8 | 3.2 | | | | | | |
| DOMESTIC HOT WATER | AMTROL | ST-8 | 3.2 | | | | | | |

| PLUMBING PUMP SCHEDULE | | | | | | | | | | |
|------------------------|----------------|--------------|-----|------------------|-------------------------------|-------------|-------|--|--|--|
| PLAN MARK | MANUFACTURER | MODEL NUMBER | GPM | HEAD FT. W.C. | ELECTRICAL CHARACTERISTICS | MAX. RPM | NOTES | | | |
| DHW RETURN | BELL & GOSSETT | PL-30B | 7 | 20 | 1/12 HP, 120V., 1ø | 2650 | 1 | | | |
| DHW RETURN | BELL & GOSSETT | PL-30B | 7 | 20 | 1/12 HP, 120V., 1ø | 2650 | 1 | | | |

NOTES LEGEND 1 - ALL BRONZE CONSTRUCTION.

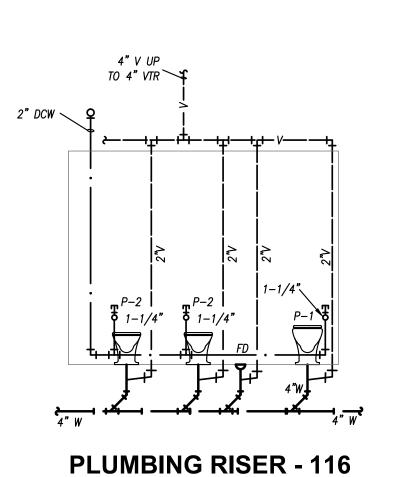


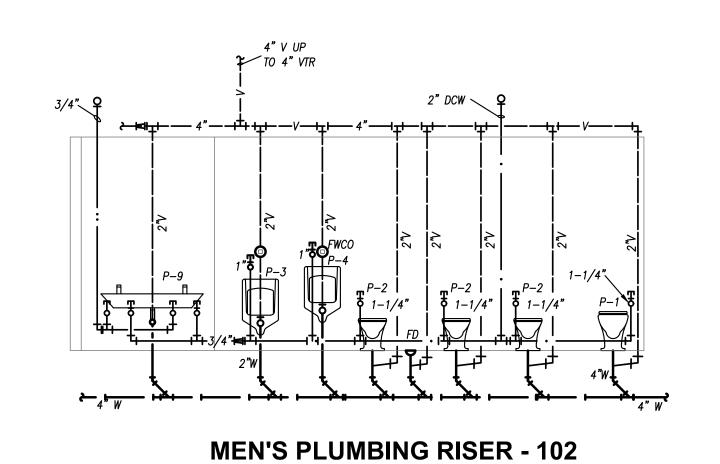
WATER HEATER DETAIL NO SCALE



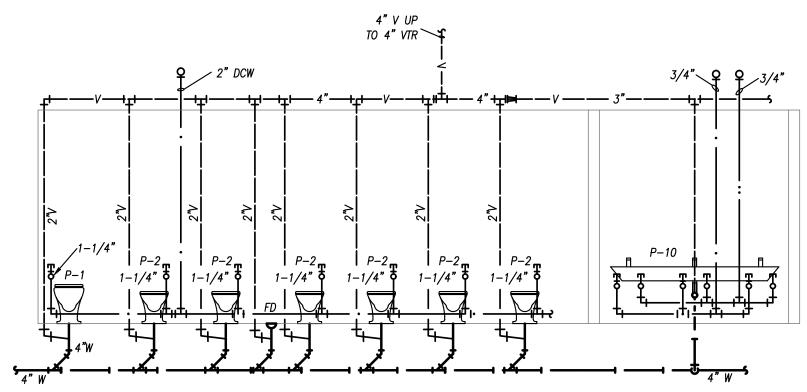
PLUMBING RISER - 117

NO SCALE





NO SCALE



WOMEN'S PLUMBING RISER - 101 NO SCALE







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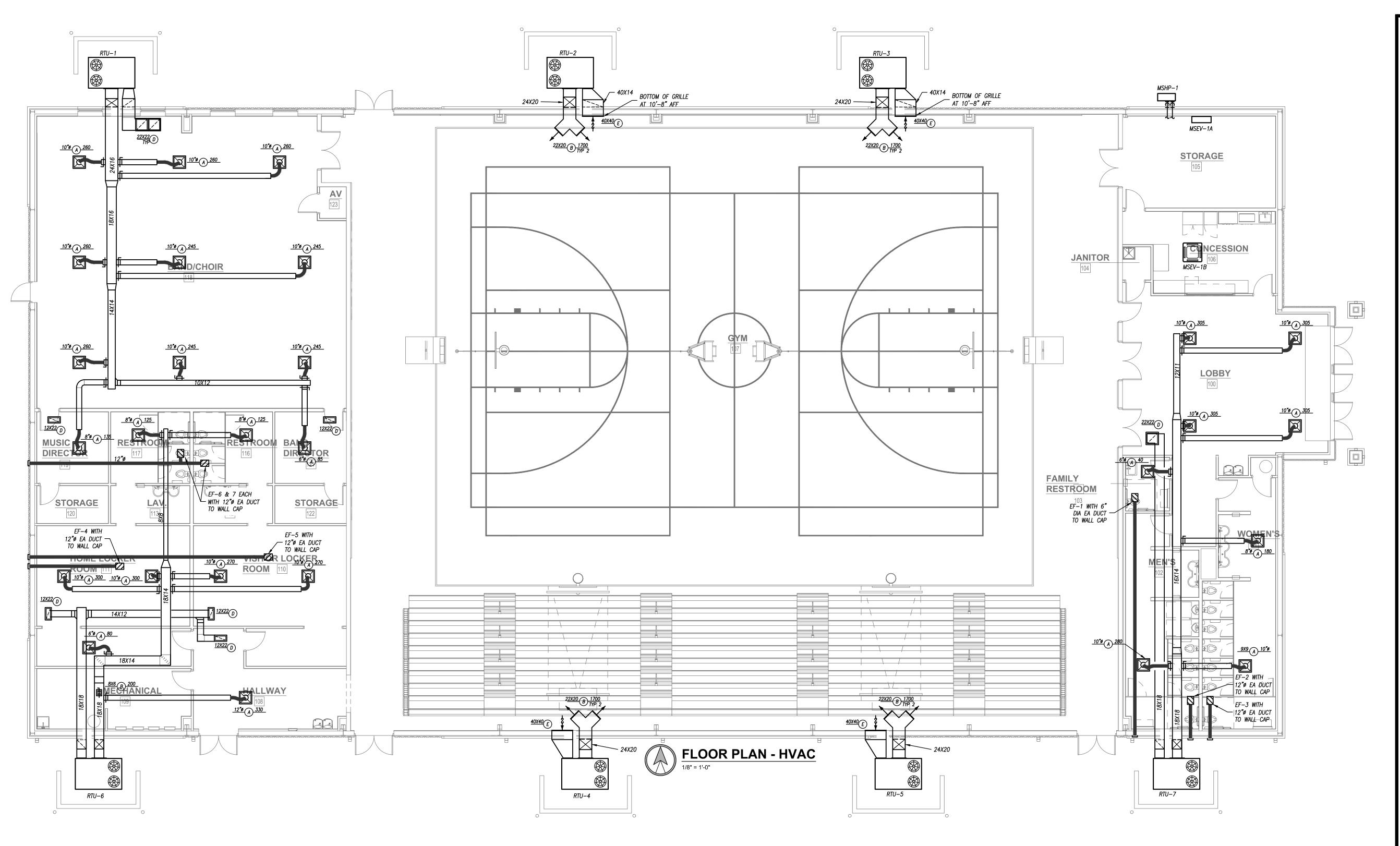
DRAWING

PLUMBING DETAILS & SCHEDULES

MANAGER NSG REVISIONS

PROJECT NUMBER 23-09

08/04/2023







DRAWING

MANAGER

PROJECT NUMBER

DRAWN BY

NSG

REVISIONS

23-09

08/04/2023

M1

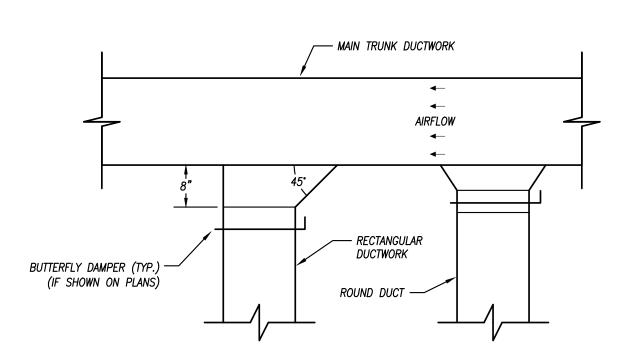
0 506 MOM SCHOOL **HVAC PLAN**

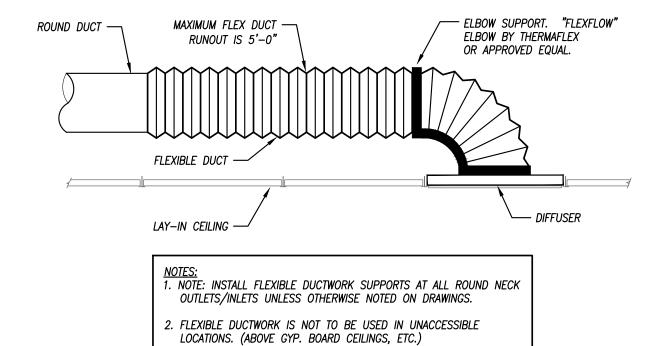
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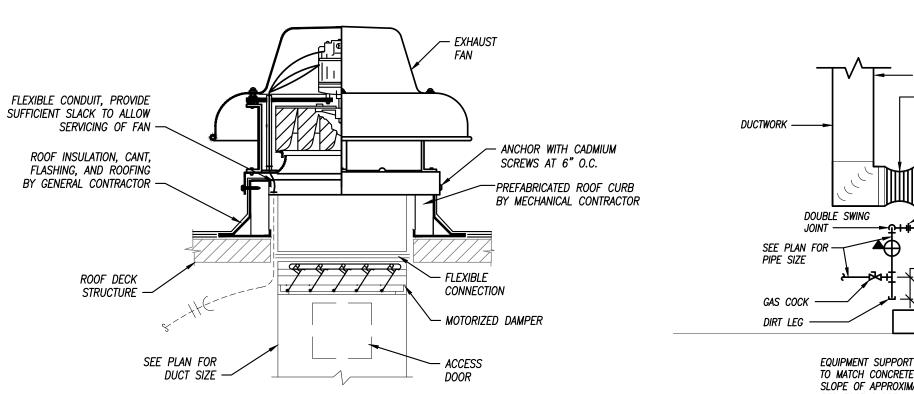


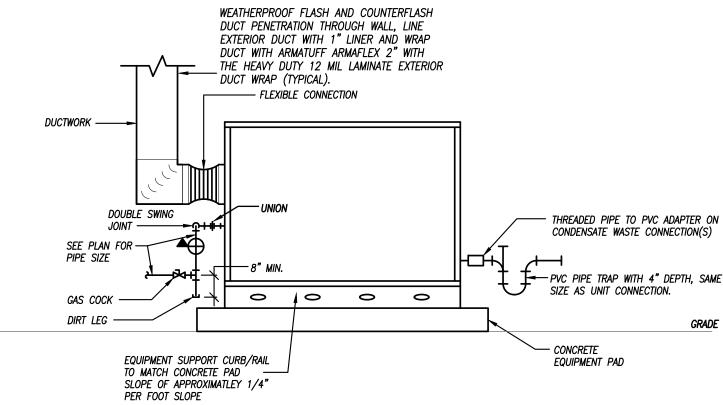


DUCTWORK TAKEOFF

NOT TO SCALE

FLEXIBLE DUCT CONNECTION TO DIFFUSER NOT TO SCALE





EXHAUST FAN DETAIL NOT TO SCALE

GROUND MOUNTED RTU DETAIL NOT TO SCALE

| | С | OUCT | | | INSULATION | | 1 |
|---------|------------------------|-----------------------|-------------|----------------------|-------------|-----------|-------|
| PURPOSE | DUTY | LOCATION | STYLE | MATERIAL | APPLICATION | THICKNESS | NOTES |
| SUPPLY | | CONCEALED | RECTANGULAR | FIBERGLASS | LINED | 1/2" | |
| | LOW PRESSURE/VELOCITY | CONCEALED | ROUND | MINERAL FIBER | WRAPPED | 1-1/2" | |
| | LOW PRESSURE/ VELOCITY | EXPOSED | RECTANGULAR | FIBERGLASS | LINED | 1/2" | |
| | | EXPOSED | ROUND | FIBERGLASS | LINED | 1/2" | |
| | ALL | UNCONDITIONED ATTICS | ALL | MINERAL FIBER | WRAPPED | 1-1/2" | 1 |
| | ALL | EXTERIOR | ALL | FLEXIBLE ELASTOMERIC | WRAPPED | 2" | |
| RETURN | | CONCEALED | RECTANGULAR | FIBERGLASS | LINED | 1/2" | |
| | | CONCEALED | ROUND | MINERAL FIBER | WRAPPED | 1-1/2" | |
| | LOW PRESSURE/VELOCITY | EXPOSED | RECTANGULAR | FIBERGLASS | LINED | 1/2" | |
| | | EXPOSED | ROUND | FIBERGLASS | LINED | 1/2" | |
| | | RETURN/TRANSFER BOOTS | RECTANGULAR | FIBERGLASS | LINED | 1/2" | |
| | ALL | UNCONDITIONED ATTICS | ALL | MINERAL FIBER | WRAPPED | 1-1/2" | 1 |
| | ALL | EXTERIOR | ALL | FLEXIBLE ELASTOMERIC | WRAPPED | 2" | |
| EXHAUST | | CONCEALED | RECTANGULAR | FIBERGLASS | LINED | 1/2" | |
| | LOW PRESSURE/VELOCITY | CONCEALED | ROUND | FIBERGLASS | LINED | 1/2" | 2 |
| | LOW FRESSORE/ VELOCITI | EXPOSED | RECTANGULAR | FIBERGLASS | LINED | 1/2" | |
| | | EXPOSED | ROUND | FIBERGLASS | LINED | 1/2" | 2 |

1. IN ADDITION TO OTHER SCHEDULED INSULATION.

2. PROVIDE LINER ONLY WITHIN 10' OF FAN FOR ACCOUSTICS.

GENERAL REMARKS (APPLICABLE TO ALL TYPES):

- 1) ALL DUCTWORK, INSULATION AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.
- 2) ALL INSULATION THICKNESSES SHALL MEET ASHRAE 90.1 2010 REQUIREMENTS AT A MINIMUM.
- 3) REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION FOR INSULATION PRODUCTS AND SYSTEMS.

OWNER WILL PURCHASE THIS EQUIPMENT, CONTRACTOR TO RECEIVE AND INSTALL EQUIPMENT

| RO | OF TOP U | NIT SCH | IEDUI | _E - THR | EE PHA | SE ELEC | TRIC WIT | H GAS H | IEAT | | | | | | | |
|--------------|--------------|-----------------|---------|-------------|-----------------------|------------|-------------|---------------------|-------|--------------------|-----------|---------------------|----------------------|----------|---------|---------|
| PLAN MARK | MANUFACTURER | MODEL NUMBER | SIZE | REFRIGERANT | MINIMUM EFFICIENCY | AIRFLOW | COMPRESSORS | COOLING CAPACITY | CFM | EXTERNAL STATIC | OA CFM | HEATING CAPACITY | ELECTRICAL | WEIGHT | FILTER | NOTES |
| RTU-1 | LUXAIRE | ZJ-090 N12B2B | 7.5 TON | R-410A | 13 IEER | HORIZONTAL | (2) SCROLLS | 88,000 BTUH | 2,500 | 0.7" | 300 | 120 MBH | 208 V., 3 PH, 60 AMP | 1100 LBS | MERV 13 | 1,2,3,4 |
| RTU-2 | LUXAIRE | ZJ-120 N18B2B | 10 TON | R-410A | 12.8 IEER | HORIZONTAL | (2) SCROLLS | 124,000 BTUH | 3,400 | 0.7" | 350 | 180 MBH | 208 V., 3 PH, 60 AMP | 1200 LBS | MERV 13 | 1,2,3,4 |
| RTU-3 | LUXAIRE | ZJ-120 N18B2B | 10 TON | R-410A | 12.8 IEER | HORIZONTAL | (2) SCROLLS | 124,000 BTUH | 3,400 | 0.7" | 350 | 180 MBH | 208 V., 3 PH, 60 AMP | 1200 LBS | MERV 13 | 1,2,3,4 |
| RTU-4 | LUXAIRE | ZJ-120 N18B2B | 10 TON | R-410A | 12.8 IEER | HORIZONTAL | (2) SCROLLS | 124,000 BTUH | 3,400 | 0.7" | 350 | 180 MBH | 208 V., 3 PH, 60 AMP | 1200 LBS | MERV 13 | 1,2,3,4 |
| RTU-5 | LUXAIRE | ZJ-120 N18B2B | 10 TON | R-410A | 12.8 IEER | HORIZONTAL | (2) SCROLLS | 124,000 BTUH | 3,400 | 0.7" | 350 | 180 MBH | 208 V., 3 PH, 60 AMP | 1200 LBS | MERV 13 | 1,2,3,4 |
| RTU-6 | LUXAIRE | ZJ-061 N08B2B | 5 TON | R-410A | 14.5 SEER | HORIZONTAL | (2) SCROLLS | 59,000 BTUH | 2,000 | 0.7" | 200 | 80 MBH | 208 V., 3 PH, 45 AMP | 800 LBS | MERV 13 | 1,2,3,4 |
| RTU-7 | LUXAIRE | ZJ-061 N08B2B | 5 TON | R-410A | 14.5 SEER | HORIZONTAL | (2) SCROLLS | 59,000 BTUH | 2,000 | 0.7" | 200 | 80 MBH | 208 V., 3 PH, 45 AMP | 800 LBS | MERV 13 | 1,2,3,4 |

NOTES LEGEND

- 1. PROVIDE CONCRETE PAD, DISCONNECT SWITCH, HAIL GUARDS, HOT GAS HUMIDITY CONTROL, AND ECONOMIZER
- 2. PROVIDE WALL MOUNTED 7-DAY PROGRAMMABLE THERMOSTAT 3. PROVIDE INTERNAL VIBRATION ISOLATION FOR THE RTU FAN AND COMPRESSORS
- 4. PROVIDE EQUIPMENT SUPPORT CURB/RAIL TO MATCH CONCRETE PAD SLOPE OF APPROXIMATLEY 1/4" PER FOOT SLOPE

OWNER WILL PURCHASE THIS EQUIPMENT. CONTRACTOR TO RECEIVE AND INSTALL EQUIPMENT

| O 111 | | *************************************** | COLITION II | | /·· ···- | 111, 0011 | | \ 10 I\L0. | v — <i>1</i> | | | (OII IVIE |
|--------------|------------|---|-----------------|-----------------|----------|------------------------------|------|--------------|--------------|---------------------|------------|-----------|
| MIN | VI-S | PLIT DU | CTLESS H | HEAT F | PUMP | SCHEE | ULE | | | | | |
| | .AN \RK | MANUFACTURER | MODEL NUMBER | NOMINAL SIZE | | HEATING MBH (47° AMBIENT) | | ELECTRICAL | MOCP AMPS | MIN CIRCUIT AMPS | DISCONNECT | NOTES |
| MSHI | P-1 | MITSUBISHI | NTXMPH20A122B | 1.5 TON | 19.0 | 22.0 | 22.0 | 208/240V, 1ø | 40 | 29.5 | YES | 1.2 |

NOTES LEGEND

1. PROVIDE WITH CONDENSATE PUMP.

2. VERIFY EXACT REFRIGERANT LINE SIZES WITH MANUFACTURER.

OWNER WILL PURCHASE THIS EQUIPMENT, CONTRACTOR TO RECEIVE AND INSTALL EQUIPMENT

| MINI-S | PLIT DU | CTLESS E | VAPO | RATC | R SCH | EDUL | E | | |
|--------------|--------------|-----------------|-----------------|--------------------|-------------------------|----------------|----------------|--------------|-------|
| PLAN MARK | MANUFACTURER | MODEL NUMBER | NOMINAL SIZE | MAX CFM CLG/HTG | ENTERING AIR DRY/WET | COOLING MBH | HEATING MBH | ELECTRICAL | NOTES |
| MSEV-1A | MITSUBISHI | NTXWPH09B112A | 0.75 TON | 380/430 | 80/67 | 9.0 | 9.6 | 208/240V, 1ø | 1.2 |
| MSEV-1B | MITSUBISHI | NTXCKS09A112A | 0.75 TON | 230/230 | 80/67 | 9.0 | 11.0 | 208/240V, 1ø | 1.2 |

NOTES LEGEND

1. PROVIDE WIRED REMOTE THERMOSTAT, AND CONDENSATE PUMP.

2. VERIFY EXACT REFRIGERANT LINE SIZES WITH MANUFACTURER.

| EXH | AUST FAN | SCHEDU | LE | | | | | | | | |
|--------------|--------------|--------------|----------|---------|-----|--------------------|--------------------------|--------|------------|-----------|-------|
| PLAN MARK | MANUFACTURER | MODEL NUMBER | MOUNTING | SERVICE | CFM | STATIC PRESSURE | ELECTRICAL | DRIVE | DISCONNECT | DAMPER | NOTES |
| EF-1 | GREENHECK | SP-B90 | CEILING | EXHAUST | 75 | 1/4" | 50 WATTS, 120V, 1 PHASE | DIRECT | YES | BACKDRAFT | 1 |
| EF-2 | GREENHECK | SP-A510 | CEILING | EXHAUST | 450 | 1/4" | 224 WATTS, 120V, 1 PHASE | DIRECT | YES | BACKDRAFT | 3 |
| EF-3 | GREENHECK | SP-A700 | CEILING | EXHAUST | 525 | 1/4" | 350 WATTS, 120V, 1 PHASE | DIRECT | YES | BACKDRAFT | 3 |
| EF-4 | GREENHECK | SP-A700 | CEILING | EXHAUST | 500 | 1/4" | 350 WATTS, 120V, 1 PHASE | DIRECT | YES | BACKDRAFT | 3 |
| EF-5 | GREENHECK | SP-A700 | CEILING | EXHAUST | 500 | 1/4" | 350 WATTS, 120V, 1 PHASE | DIRECT | YES | BACKDRAFT | 3 |
| EF-6 | GREENHECK | SP-A250 | CEILING | EXHAUST | 225 | 1/4" | 83 WATTS, 120V, 1 PHASE | DIRECT | YES | BACKDRAFT | 3 |
| EF-7 | GREENHECK | SP-A250 | CEILING | EXHAUST | 225 | 1/4" | 83 WATTS, 120V, 1 PHASE | DIRECT | YES | BACKDRAFT | 4 |

- 1. PROVIDE WITH WALL DISCHARGE MODEL WC-6 WITH BUILT IN BIRDSCREEN AND BACK DRAFT DAMPER.
- 2. PROVIDE WITH WALL DISCHARGE HOODED WALL CAP MODEL WC-8 WITH BUILT IN BIRDSCREEN AND BACK DRAFT DAMPER. 3. PROVIDE WITH WALL DISCHARGE HOODED WALL CAP MODEL WC-18X8 WITH BUILT IN BIRDSCREEN AND BACK DRAFT DAMPER.
- 4. SHARE WALL CAP WITH EF-6

| GR | ILLE, REC | SISTER & | DIFFUSE | R SCHE | DULE | | | |
|--------------|--------------|-----------------|----------------|------------|------------------|----------|-------------------|-------|
| PLAN MARK | MANUFACTURER | MODEL NUMBER | SERVICE | MOUNT TYPE | VOLUME DAMPER | MATERIAL | MATERIAL COLOR | NOTES |
| Α | PRICE | SMD-3P | SUPPLY | GRID | NO | STEEL | WHITE | 2 |
| В | PRICE | 520-D | SUPPLY | FLANGE | YES | STEEL | WHITE | |
| С | NOT USED | | | | | | | |
| D | PRICE | 535-0 | RETURN/EXHAUST | GRID | NO | STEEL | WHITE | 1 |
| Ε | TITUS | 33RL-HEAVY DUTY | RETURN | FLANGE | NO | STEEL | WHITE | |

NOTES LEGEND

1. PROVIDE WITHOUT SCREW HOLES WHERE USED IN A GRID CEILING

2. PAN TO FIT A 2'X2' GRID.





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CON

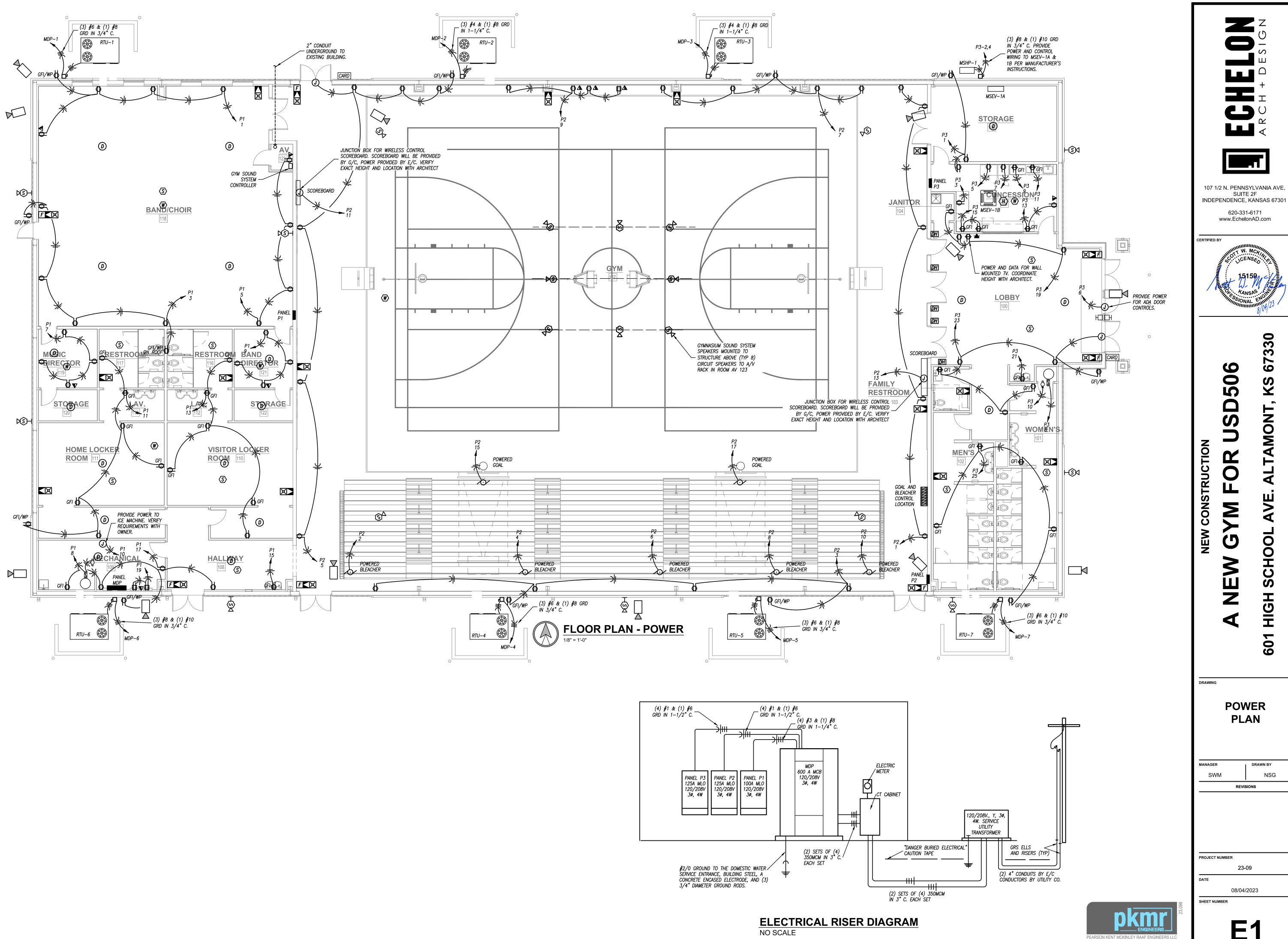
DRAWING

HVAC DETAILS & SCHEDULES

| MANAGER | DRAWN BY |
|---------|----------|
| SWM | NSG |
| REVIS | SIONS |

PROJECT NUMBER 23-09 08/04/2023





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NEW CONS

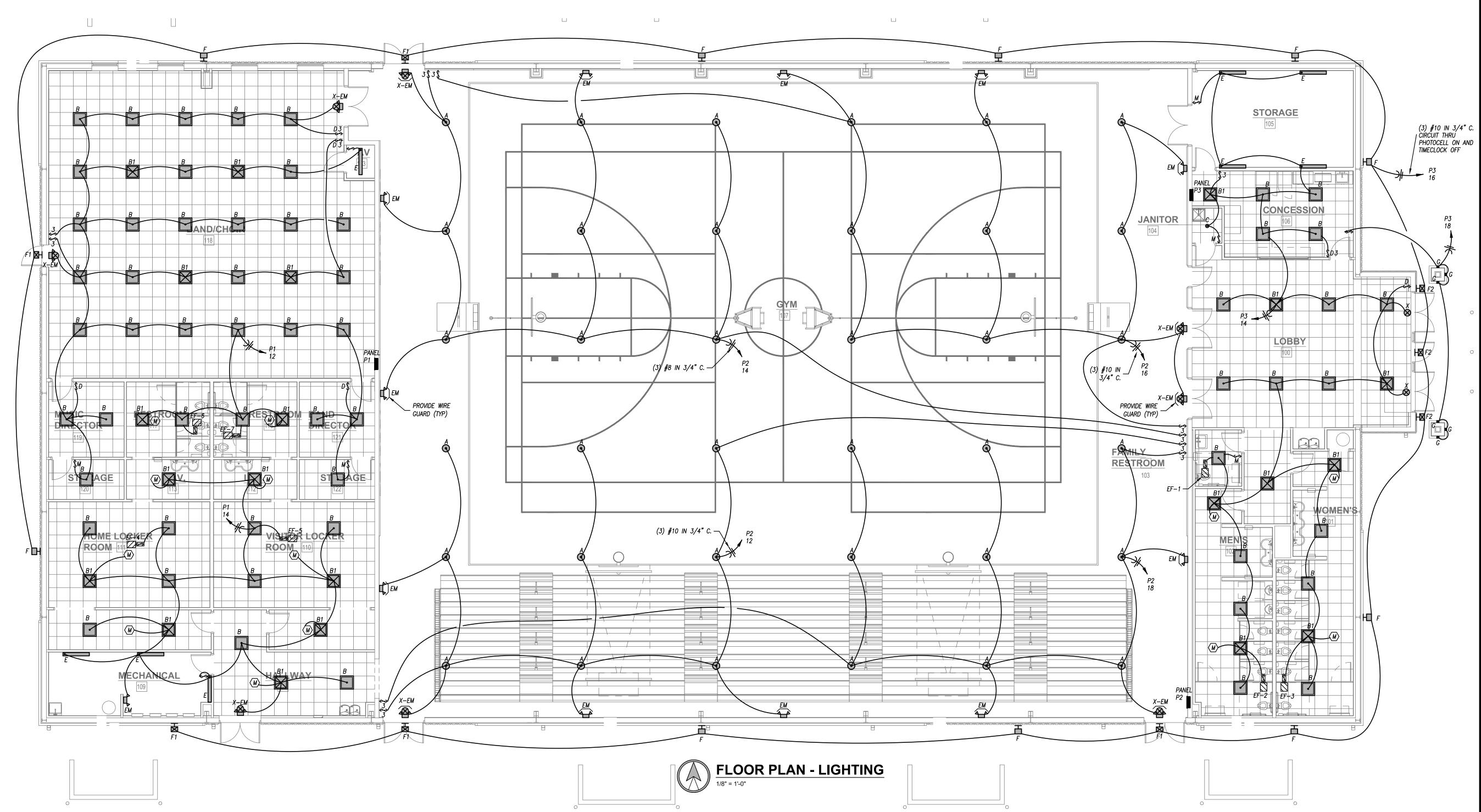
DRAWING **POWER PLAN** MANAGER DRAWN BY NSG REVISIONS PROJECT NUMBER 23-09 08/04/2023

E1

2949 SW WANAMAKER DR., TOPEKA, KANSAS 66614

WWW.PKMRENG.COM

785.273.2447



| LIGH | T FIXTURE | SCHEDULE | | | | | | |
|--------------|--------------|---------------------------------------|------|----------------------|--------------|-------------------------|----------|---------|
| PLAN MARK | MANUFACTURER | MODEL | SIZE | MOUNTING | FINISH | MIN LUMEN/MAX WATTS | CRI/CCT | NOTES |
| Α | LITHONIA | JEBL-18000LM-FRGL-MVOLT-40-80-WGX | - | SUSPENDED | WHITE | 18,000 LUMENS/136 WATTS | 80/4000K | 1,3 |
| В | LITHONIA | CPX-2X2-AL07-80CRI-SSW7-SWL-MVOLT | 2X2 | RECESSED | WHITE | 4,000 LUMENS/37 WATTS | 80/3500K | 1 |
| B1 | LITHONIA | CPX-2X2-AL07-80CRI-SSW7-SWL-MVOLT-E7W | 2X2 | RECESSED | WHITE | 4,000 LUMENS/37 WATTS | 80/3500K | 1,2 |
| С | LITON | LCMPD7R-W-TS35 | 7" | SURFACE | WHITE | 1,100 LUMENS/14 WATTS | 80/3500K | 1,4 |
| D | LITHONIA | BLWP4-48L-ADSM-EZ1-LP835 | 4' | SURFACE | WHITE | 4,800 LUMENS/44 WATTS | 80/3500K | 1 |
| Ε | LITHONIA | CSS-L48-4000LM-MVOLT-40K-80CRI | 4' | SURFACE WALL | WHITE | 4,000 LUMENS/36 WATTS | 80/4000K | 1 |
| F | TRACE LITE | WLZ4-3-4K-BR | - | SURFACE WALL | BRONZE | 4,700 LUMENS/40 WATTS | 80/4000K | 1 |
| F1 | TRACE LITE | WLZ4-3-4K-BR-BB | - | SURFACE WALL | BRONZE | 4,700 LUMENS/40 WATTS | 80/4000K | 1,2,4,5 |
| F2 | TRACE LITE | WLZ2-3-4K-BR-BB | - | SURFACE WALL | BRONZE | 3,100 LUMENS/25 WATTS | 80/4000K | 1,2,4,5 |
| G | VISA | OW1604-L40K(L)-MVOLT | 38" | SEMI RECESSED WALL | BY ARCHITECT | 1,450 LUMENS/18 WATTS | 80/4000K | 1,4,5 |
| ЕМ | DUAL LITE | LZ2-03L | _ | SURFACE | WHITE | | | 1,2 |
| Х | DUAL LITE | LXURWE | | SURFACE WALL/CEILING | WHITE | LED | | 2 |
| X-EM | DUAL LITE | HCXURW-03L | _ | SURFACE WALL/CEILING | WHITE | LED | | 2 |

NOTES LEGEND

- 1. PROVIDE DIMMABLE LED DRIVER UNIVERSAL VOLTAGE
- 2. PROVIDE EMERGENCY BATTERY MINIMUM OF 1000 LUMENS FOR 90 MINUTES
- 3. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION.
- 4. PROVIDE WET LOCATION RATED FIXTURE.
- 5. PROVIDE COLD LOCATION RATED BALLAST.



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LIGHTING PLAN

PROJECT NUMBER

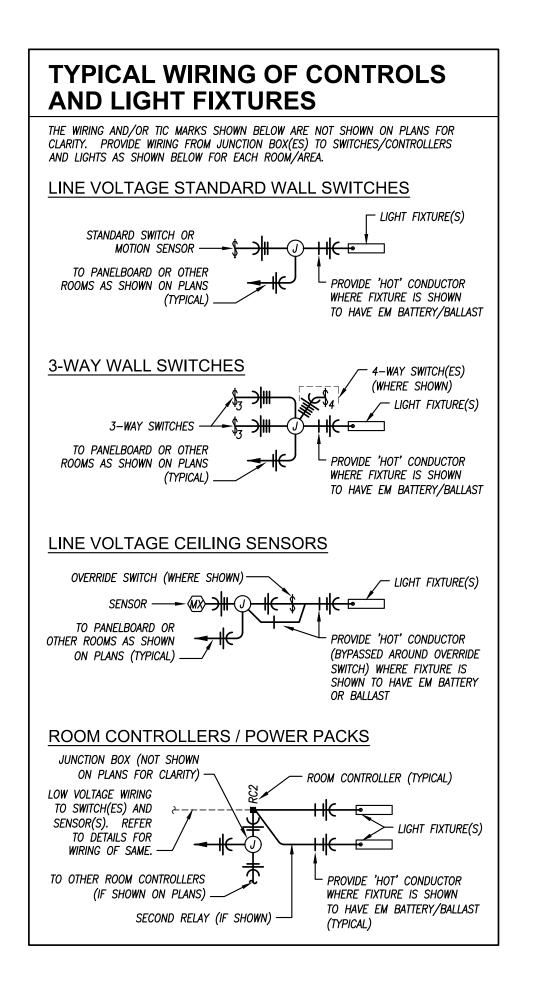
23-09

DATE

08/04/2023

E2

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GENERAL LIGHTING NOTES

- 1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
- 2. ALL CIRCUITING SHOWN ON THIS PLAN IS DIAGRAMMATIC.
- 2.1. ALL FIXTURES SHALL BE FED FROM JUNCTION BOXES WITH LIGHT FIXTURE WHIPS (<6'). DAISY-CHAINING OF FIXTURES IS NOT ALLOWED. 2.2. SWITCH BOX LOCATIONS SHALL BE WIRED SO THAT A NEUTRAL WIRE IS
- AVAILABLE AT THE SWITCH BOX LOCATION, EITHER IN THE BOX OR AVAILABLE TO BE ADDED VIA RACEWAY OR AN ACCESSIBLE WALL CAVITY.
- 2.3. WALL SWITCHES FOR SEPARATE LOAD TYPES (EM/NORMAL, 120/277V, ETC.) SHALL NOT BE IN A SINGLE BOX. 2.4. REFÉR TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

MOUNTING HEIGHTS FOR WALL-MOUNTED DEVICES

CEILING-MOUNTED DETECTOR -

DO NOT PLACE -

DETECTOR IN

WALL-MOUNTED DETECTOR -

THIS AREA

₽ULL STATION

CATV OUTLET DEVICES AND

MOUNTING BRACKETS

<u>POWER/COMMUNICATION DEVICES:</u> OUTLETS SHALL BE LOCATED AT 16" A.F.F. TO THE BOTTOM

LOCATED AT 2" ABOVE THE BACKSPLASH OF THE COUNTER

OPERABLE DEVICES SHALL BE LOCATED AT 48" A.F.F. TO

WALL-MOUNTED OPERABLE DEVICES INCLUDE, BUT ARE NOT

NURSE/PATIENT CALL DEVICES (INLUDING THOSE FOR

THE TOP OF THE OPERABLE PORTION OF THE DEVICE.

LIGHT SWITCHES, DIMMERS, CONTROLS, ETC.

OTHER CONTROL OR "CALL" DEVICES

OF THE BOX. ABOVE COUNTER DEVICES SHALL BE

TO THE BOTTOM OF THE DEVICES. VERIFY WITH

ARCHITECTURAL DETAILS.

LIMITED TO THE FOLLOWING:

PUSH BUTTONS

WALL-MOUNTED OPERABLE DEVICES:

ABOVE COUNTER DEVICES.

ELEVATIONS AND CABINETRY

COORDINATE WITH ARCH.

SHOP DRAWINGS.

— POWER/COMMUNICATIONS DEVICES AND

SYSTEMS FURNITURE OUTLETS

CEILING-MOUNTED HORN -OR HORN/STROBE

— — — — — — — — — HORN

- WALL-MOUNTED OPERABLE DEVICES

STROBE

GENERAL NOTES: 1. MOUNTING HEIGHTS SHOWN IN THIS DETAIL ARE TYPICAL

CONDITIONS. NOTIFY ARCHITECT IMMEDIATELY OF ANY

UNLESS OTHERWISE NOTED ON THE PLANS.

2. SEE ARCHITECTURAL ELEVATIONS FOR SPECIAL

3. ALL INSTALLATIONS SHALL COMPLY WITH ADA.

CEILING, WHICHEVER IS LOWER (ADA 2010).

<u>VISUAL FIRE ALARM NOTIFICATION DEVICES (STROBE)</u> LOCATE DEVICE SO THE BOTTOM OF THE DEVICE IS BETWEEN 80" AND 96" A.F.F. (NFPA) OR 6" BELOW

AUDIBLE FIRE ALARM NOTIFICATION DEVICES (HORN)
LOCATE DEVICE SO THAT THE TOP OF UNIT IS NOT MORE

THAN 90" A.F.F. AND NOT LESS THAN 6" BELOW CEILING

FIRE ALARM ACTIVATION DEVICES (PULL STATION) LOCATE FRONT—APPROACH DEVICES SO THAT THE HIGHEST

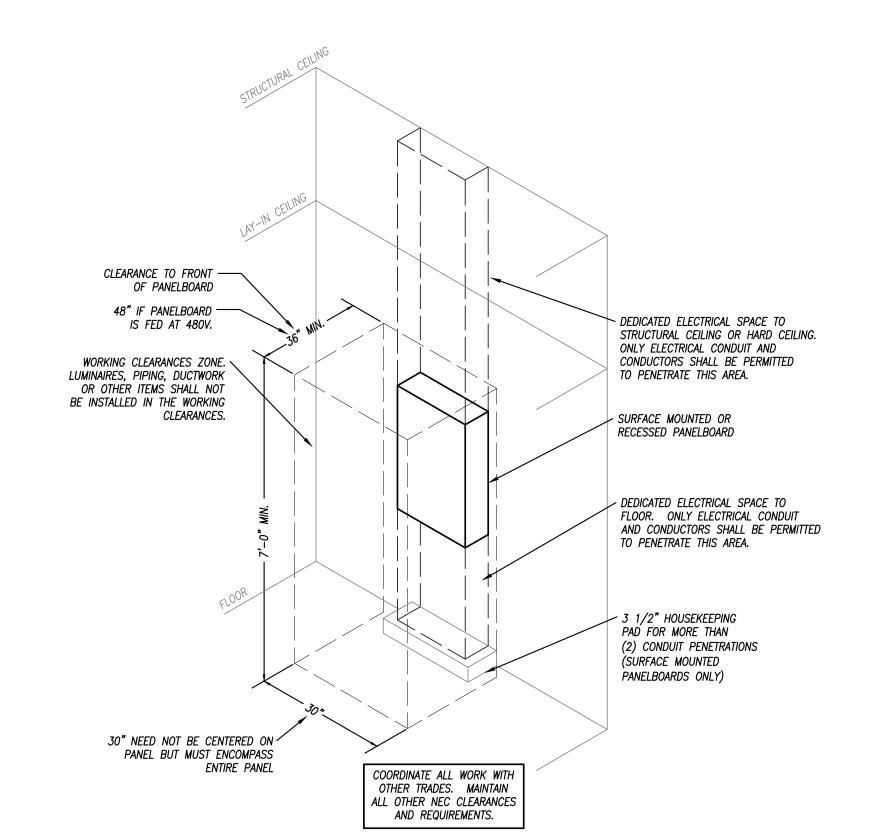
OPERABLE PORTION OF THE DEVICE IS NOT MORE THAN

48" A.F.F (ADA 2010) AND NOT LESS THAN 42" A.F.F.

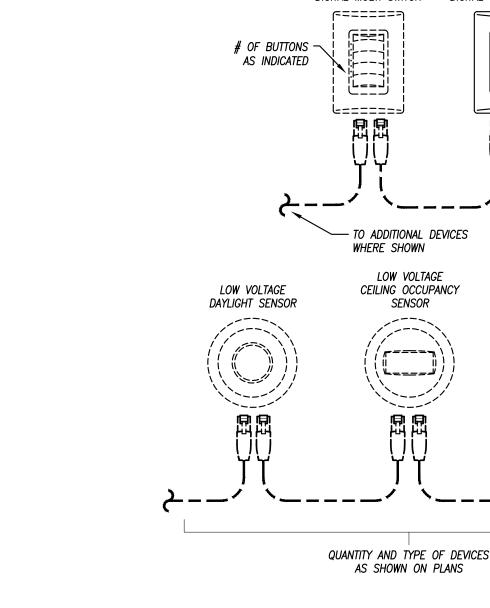
FINISH CEILING -

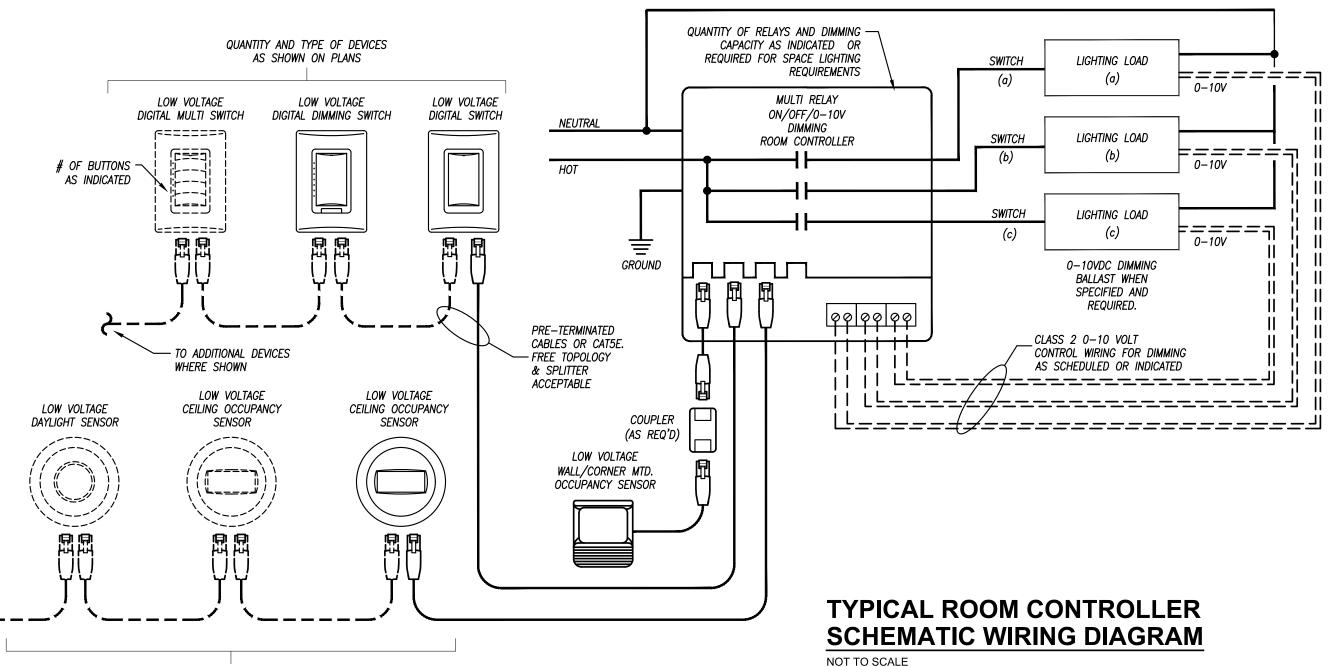
FINISH FLOOR -

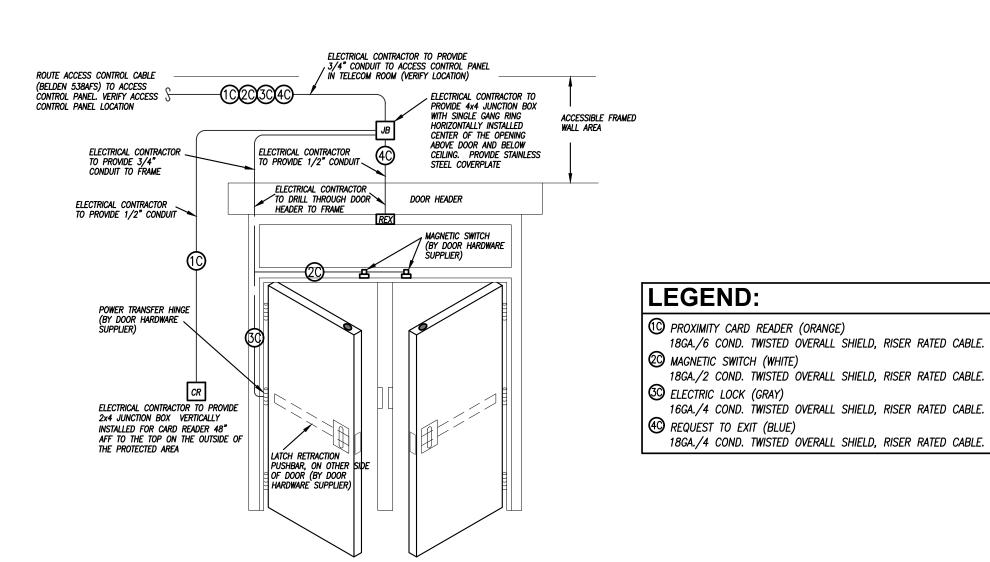
CONFLICTS.



TYPICAL PANELBOARD INSTALLATION DETAIL NOT TO SCALE







ACCESS CONTROL DOOR DETAIL

NO SCALE

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NEW

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DRAWING **ELECTRICAL DETAILS &**

MANAGER DRAWN BY NSG REVISIONS

SCHEDULES

PROJECT NUMBER 23-09

08/04/2023

E3

| | | | PANEL | | | | | OLI | | | | |
|------------------------------------|--|------------|-------------|-------------------|------------------|-------------|-----------------|--------------|-------------|---------------------|----------|----------------|
| PANEL | ESIGNATION | | BUS AMPS: | | | LTAGE: | | | MOUNTING: | | | |
| M | DP1 | MAIN BREAK | | | PHASI | E/WIRE: | 3Ø, 4W | | LOCATION: | MECHANIC | AL | |
| CIRCUI | | SCCR RA | TING (AIC): | 35,000 | CIRCI | UIT BRE | AVED | I | | FEEDER | <u> </u> | |
| | CIRCUIT D | ESIGNATION | | KVA | 5350 8600 00 550 | FRAME | N 9 2 100 100 C | CETC | # OF WIRES | 00 0-0 0-00-0 0-0 0 | | CONDUIT |
| T NO. | RTU-1 | | | 40.7 | | | | | 100 | SIZE | 1,191 | |
| 1 | | | | 18.7 | 3 | 100 | 60 | 1 | 3 | #6 | #8 | 3/4" |
| 2 | RTU-2 RTU-3 | | | 18.8 | 3 | 100 | 60 60 | 1 | 3 | #4 | #8 | 1-1/4" |
| 3 | RTU-4 | | | 18.8 | 3 | 100 | 60 | 1 | 3 | #4 | #8 | 1-1/4" 3/4" |
| 4 | RTU-5 | | | 18.8 | 3 | 100 | 60 | 1 | | #6 | #8 | 3/4" |
| 5 | RTU-6 | | | 18.8 11.8 | 3 | 100 | 45 | 1 | 3 | #8 | #10 | 3/4" |
| 6 | RTU-7 | | | 11.8 | 3 | 100 | 45 | 1 | 3 | #6 | #10 | 3/4" |
| 7 | PANELBOARD |) D4 | | 15.2 | 3 | 100 | 100 | 1 | 4 | #1 | #10 | 1-1/2" |
| 8 | PANELBOARD | | | 20.6 | 3 | 200 | 125 | 1 | 4 | #1 | #6 | 1-1/2" |
| 9 | 10 PANELBOARD P3 | | | | 3 | 200 | 125 | 1 | 4 | #1 | #6 | 1-1/2" |
| | The state of the s | | | | 3 | 200 | 125 | <i>'</i> | - | #1 | #0 | 1-1/2 |
| 12 | | | | | | <u> </u> | - | - | - | | - | - |
| 12 | STAGE | | | 0.0 | | | | | _ | | - | |
| | | Р | ANELBOA | RD SIZIN | IG LOA | D | | | | | | |
| LOAD I | DESCRIPTION | | CONNECTE | | | AND FA | CTOR | COD | E MIN. (VA) | | | |
| LIGHTS | 3 | | 9,960 | | | 1.25 | | | 12,450 | | | |
| RECEP | TACLES | | 24,46 | 0 | 10K | VA + 50% F | REST | | 17,230 | | | |
| мотог | RS | | 8,900 |) | 1.25 x LAR | RGEST + SUI | M OF REST | | 9,200 | | | |
| AIR CC | NDITIONING | | 117,73 | 32 | | 1.00 | | | 117,732 | | | |
| SPACE | SPACE HEATING | | | | | 0.00 | | | 0 | | | |
| HEAT I | IEAT PUMP 7,0 | | |) | | 1.00 | | | 7,080 | | | |
| CONTI | CONTINUOUS 0 | | | | | 1.25 | | | 0 | | | |
| NON-C | ONTINUOUS | | 6,900 |) | | 1.00 | | | 6,900 | | | |
| MISC. LOADS 1 0 | | | | | 1.00 | | | 0 | | | | |
| TOTAL CONNECTED LOAD (VA): 175,032 | | | 32 | SIZING LOAD (VA): | | | | 'A): 170,592 | | | | |
| TAL CO | TAL CONNECTED LOAD (AMPS): 485.8 | | | 8 | SIZING | LOAD (A | MPS): | | | | | |

| PANEL DESIGNATION: | D2 | | | | | | | MAII | N LUG | AMPS: | 125 | SCC | R RATING (AIC): | 10,000 | |
|--------------------|-----------|-------|--------|----------|----------|----|----|--------|--------|-------|---------|------------|---------------------|-------------|--|
| TANEE DESIGNATION. | PZ | | | | | # | | MA | IN BRE | AKER: | M.L.O. | | | | |
| MOUNTING: | RECESS | ED | | | | 1 | 5 | | VOL | TAGE: | 208/120 | | | | |
| LOCATION: | GYM | | | | | | צ | F | PHASE | WIRE: | 3Ø, 4W | | | | |
| DESCRIPTION | | PHASE | | С | /B | (| 5 | C | /B | | PHASE | | DESCRIF | TION | |
| DESCRIPTION | Α | В | С | TRIP | POLE | | | POLE | TRIP | Α | В | С | DESCINI | TION | |
| REC-GYM | 900 | | | 20 | 1 | 1 | 2 | 1 | 20 | 1200 | | | POWER | ED BLEACHER | |
| REC-GYM | | 1260 | | 20 | 1 | 3 | 4 | 1 | 20 | | 1200 | | POWER | ED BLEACHER | |
| REC-GYM | | | 900 | 20 | 1 | 5 | 6 | 1 | 20 | | | 1200 | POWER | ED BLEACHER | |
| REC-GYM | 900 | | | 20 | 1 | 7 | 8 | 1 | 20 | 1200 | | | POWER | ED BLEACHER | |
| REC-SCORERS TABLE | | 900 | | 20 | 1 | 9 | 10 | 1 | 20 | | 1200 | | POWER | ED BLEACHER | |
| SCOREBOARD | | | 1200 | 20 | 1 | 11 | 12 | 1 | 20 | | | 1230 | L | IGHTING-GYM | |
| SCOREBOARD | 1200 | | | 20 | 1 | 13 | 14 | 1 | 20 | 1230 | | | L | IGHTING-GYM | |
| POWERD GOAL | | 1200 | | 20 | 1 | 15 | 16 | 1 | 20 | | 1230 | | L | IGHTING-GYM | |
| POWERD GOAL | | | 1200 | 20 | 1 | 17 | 18 | 1 | 20 | | | 1230 | L | IGHTING-GYW | |
| SPARE | - | | | 20 | 1 | 19 | 20 | 1 | 20 | | | | | SPARE | |
| SPARE | | - | | 20 | 1 | 21 | 22 | 1 | 20 | | - | | SPA | | |
| SPARE | | | - | 20 | 1 | 23 | 24 | 1 | 20 | | | - | | SPARE | |
| SPACE | - | | | - | 1 | 25 | 26 | 1 | - | - | | | | SPACE | |
| SPACE | | - | | - | 1 | 27 | 28 | 1 | - | | - | | | SPACE | |
| SPACE | | | - | - | 1 | 29 | 30 | 1 | | | | - | | SPACE | |
| TOTALS | 3000 | 3360 | 3300 | | | | | | | 3630 | 3630 | 3660 | TOTALS | | |
| | | | | - | | | | | ' | | | | | | |
| P/ | ANELB | OARD | SIZING | LOAD |) | | | | | | | CONI | NECTED PHASE L | OADS | |
| LOAD DESCRIPTION | CONNI | ECTED | | DEMAN | D | C | OD | E MIN. | (VA) | | PH | ASE | VA | AMPS | |
| LIGHTS | 4,9 | 20 | | 1.25 | | | | 6,150 | | | - / | 4 | 6,630 | 55.2 | |
| RECEPTACLES | 4,8 | 860 | 10KV | 'A + 50% | REST | | | 4,860 | | | 16 | 3 | 6,990 | 58.2 | |
| MOTORS | W | | | | M OF RE. | 4 | | 8,700 | | | (| 0 | 6,960 | 58.0 | |
| AIR CONDITIONING | (| 0 | | 1.00 | | | | 0 | | | TOT | ALS | 20,580 | 57.1 | |
| SPACE HEATING | (| 0 | | 0.00 | | | | 0 | | | | | | | |
| HEAT PUMP | (| 0 | | 1.00 | | | | 0 | | | REMARK | <u>(S:</u> | | | |
| CONTINUOUS | | 0 | | 1.25 | | | | 0 | | | 1. CUTL | ER HAMI | MER POW-R-LINE 1A O | R EQUAL. | |
| NON-CONTINUOUS | 2,4 | 100 | | 1.00 | | | | 2,400 | | | | | | | |
| MISC. LOADS 1 | (| 0 | | 1.00 | | | | 0 | | | | | | | |
| | | | S | IZING | LOAD: | | | 22,110 | | | | | | | |
| | | SIZ | ING LO | DAD (A | MPS): | | | 61 | | | | | | | |

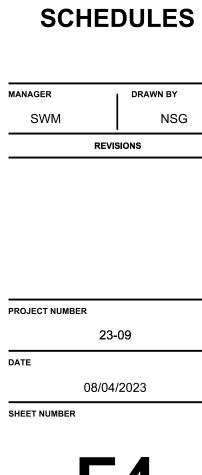
1. CUTLER HAMMER POW-R-LINE 4B PANELBOARD OR EQUAL.

2. SINGLE SECTION, 44" WIDE PANELBOARD. 3. FURNISH PANELBOARD WITH EXTERNAL SPD.

| MOUNTING: RECESSED LOCATION: BAND/CHOIR PHASE C/B C/B PHASE/WIRE: 30, 4W | PANEL DESIGNATION: | P1 | | | | | 4 | | | | AMPS: | | SCC | R RATING (AIC): | 22,000 |
|---|--|-----------|-------|-------------|-----------|----------|----|----------|--------|--------|-------|---------|-------------|---------------------|------------------------|
| DESCRIPTION | | | | | | | | - 1 | MA | | | | | | |
| DESCRIPTION | | | | | | | = | 5 | | | | | | | |
| DESCRIPTION | LOCATION: | | | | | | | | | | | | | T | |
| REC-BAND/CHOIR 900 20 1 1 2 2 1 20 - SPAIR REC-BAND/CHOIR 900 20 1 5 6 1 20 - SPAIR REC-BAND/CHOIR 900 20 1 5 6 1 20 - SPAIR REC-BAND/CHOIR 720 20 1 5 6 1 20 - SPAIR REC-BAND/CHOIR 720 20 1 5 6 1 20 - SPAIR REC-BAND/CHOIR 720 20 1 9 9 10 1 20 1200 WATER HEATE REC-BAND DIRECTOR 720 20 1 9 9 10 1 20 1800 CICE MACHINE REC-HOME LOCKER 1440 20 1 1 11 12 1 20 1800 CICE MACHINE REC-HOME LOCKER 1260 20 1 13 14 1 20 1400 LIGHTING-BAND & RESTROOM REC-VISITOR LOCKER 1260 20 1 13 14 1 20 1400 LIGHTING-BAND & RESTROOM REC-VISITOR LOCKER 1260 20 1 13 14 1 20 1400 LIGHTING-LOCKER ROOM REC-VISITOR LOCKER 1400 20 1 1 17 18 1 1 20 1400 LIGHTING-LOCKER ROOM REC-VISITOR LOCKER 1400 20 1 1 17 18 1 1 20 1400 CICE MACHINE REC-MECHANICAL 900 20 1 1 17 18 1 1 20 1400 CICE MACHINE REC-MECHANICAL 900 20 1 1 17 18 1 1 20 1400 CICE ROOM SPAIR SPAIR SERVER RACKS 1000 20 1 1 17 18 1 1 20 1400 CICE ROOM SPAIR SPAIR SPAIR CICE 14 1 20 1400 CICE ROOM SPAIR SPAIR SPAIR CICE 14 1 20 1400 CICE ROOM SPAIR SPAIR SPAIR CICE 14 1 20 1 20 1 20 1 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 | DESCRIPTION | | | 1 | | | C | ر (| | | | 1 | | DESCRIF | PTION |
| REC-BAND/CHOIR 900 20 1 3 4 1 20 - SPAIR REC-BAND/CHOIR 900 20 1 5 6 1 20 - SPAIR REC-BAND/CHOIR 900 20 1 5 6 1 20 - SPAIR REC-BAND/CHOIR 720 20 1 7 8 1 20 1200 WATER HEATE REC-BAND DIRECTOR 720 20 1 9 10 1 20 1800 IGE MACHINING REC-HOME LOCKER 1440 20 1 11 12 1 20 1610 LIGHTING-BAND & RESTROOM REC-VISITOR LOCKER 1260 20 1 13 14 1 20 1400 LIGHTING-BAND & RESTROOM REC-VISITOR LOCKER 1260 20 1 15 16 1 20 - SPAIR REC-BAND/CHOIR 900 20 1 15 16 1 20 - SPAIR SERVER RACKS 1000 900 20 1 17 18 1 20 - SPAIR SPAIR SPAIR SPAIR SPAIR 900 1 20 1 19 20 1 20 - SPAIR SPAIR SPAIR 900 20 1 1 21 22 1 20 - SPAIR SPAIR SPAIR 900 20 1 21 22 1 20 - SPAIR SPAIR 900 900 1 20 1 20 20 1 20 9 900 90 90 90 90 90 90 90 90 90 90 90 | REC-BAND/CHOIR | | Ь | C | | | 1 | 2 | | | | В | C | | SPARI |
| REC-BAND/CHOIR 900 20 | | 300 | 900 | | | | | | | F1 477 | - | _ | | | |
| REC-MUSIC DIRECTOR 720 | | | 900 | 900 | | | | | - | | | - | _ | | |
| REC-BAND DIRECTOR 720 | SHAMINETS . NORTH ARROWS INTERESTINATION OF A SHAME A. | 720 | | 900 | | | | \vdash | - | | 1200 | | - | IA/A | |
| REC-HOME LOCKER | | 720 | 720 | | | | | | | | 1200 | 1800 | | | |
| REC-VISITOR LOCKER 1260 20 1 13 14 1 20 1400 LIGHTING-LOCKER ROOM DRINKING FOUNTAIN 500 20 1 15 16 1 20 - SPAÉ REC-MECHANICAL 900 20 1 17 18 1 20 - SPAÉ SERVER RACKS 1000 20 1 19 20 1 20 - SPAÉ SERVER RACKS 1000 20 1 19 20 1 20 - SPAÉ SPAÉ SPARE - 20 1 21 22 1 20 - SPAÉ SPAÉ SPACE - 10 1 25 26 1 - SPAÉ SPAÉ SPACE - 1 1 25 26 1 - SPAÉ SPAÉ SPACE - 1 1 27 28 1 - SPAÉ SPAÉ SPACE - 1 1 27 28 1 - SPAÉ SPAÉ SPACE - 1 1 29 30 1 - SPAÉ SPAÉ SPACE - 1 1 29 30 1 - SPAÉ SPAÉ SPAÉ SPAÉ SPAÉ SPAÉ SPAÉ SPAÉ | | | 720 | 1440 | | | | | | | | 7000 | 1610 | | |
| DRINKING FOUNTAIN | | 1260 | | 1440 | - | - 5 | | | | 0.173 | 1400 | | 1010 | | |
| REC-MECHANICAL 900 20 1 17 18 1 20 | | 1200 | 500 | | | | | | - | | 1400 | - | | LIOITINO-LO | Control of the Control |
| SERVER RACKS 1000 20 1 19 20 1 20 - SPAR SPARE - 20 1 21 22 1 20 - SPAR SPACE - 20 1 23 24 1 20 - SPAR SPACE - 1 25 26 1 - - SPAC SPACE - 1 27 28 1 - - SPAC SPACE - 1 27 28 1 - - SPAC SPACE - 1 27 28 1 - - SPAC SPACE - 1 29 30 1 - - SPAC TOTALS 3880 2120 3240 2600 1800 1610 TOTALS LIGHTS 3,010 1.25 3,763 3 A 6,480 54.0 </td <td></td> <td></td> <td>000</td> <td>900</td> <td></td> <td>~</td> <td>_</td> <td>\vdash</td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> | | | 000 | 900 | | ~ | _ | \vdash | | | | | _ | | |
| SPARE - 20 1 21 22 1 20 - SPAR SPARE - - 20 1 23 24 1 20 - SPAGE SPACE - - 1 25 26 1 - - SPAGE SPACE - - 1 27 28 1 - - SPAGE SPACE - - 1 29 30 1 - - SPAGE SPACE - - 1 29 30 1 - - SPAGE TOTALS 3880 2120 324 | | 1000 | | 300 | | | | | | | _ | | | | |
| SPARE | | 7000 | | | | | | | | | | _ | | | |
| SPACE | The state of the s | | | _ | 10000 | | | | | 0.471 | | | _ | | |
| SPACE | The state of the s | - | | | | 8 | - | \vdash | - | | _ | | | | No. 100 111 100 100 |
| CONNECTED PHASE LOADS PANELBOARD SIZING LOAD | 993441 ADM (90.99) | | | | | - | _ | \vdash | - | - | | _ | | | SPACE |
| TOTALS 3880 2120 3240 | | | | | - | - | | | | - | | | - | | SPACE |
| LOAD DESCRIPTION CONNECTED DEMAND CODE MIN. (VA) | | 3880 | 2120 | 3240 | | - | 20 | 00 | | | 2600 | 1800 | 1610 | TOTALS | |
| LOAD DESCRIPTION CONNECTED DEMAND CODE MIN. (VA) | | | | | I | | | | | | | | | | |
| LIGHTS 3,010 1.25 3,763 A 6,480 54.0 | P. | ANELB | OARD | SIZING | LOAD |) · | | | | | | | CON | NECTED PHASE L | OADS |
| RECEPTACLES 9,240 10KVA + 50% REST 9,240 B 3,920 32.6 | LOAD DESCRIPTION | CONN | ECTED | | DEMAN | D | С | OD | E MIN. | (VA) | | PH | ASE | VA | AMPS |
| MOTORS 0 TALARGEST + SUM OF RES 0 AIR CONDITIONING 0 1.00 0 SPACE HEATING 0 0.00 0 HEAT PUMP 0 1.00 0 CONTINUOUS 0 1.25 0 NON-CONTINUOUS 3,000 1.00 3,000 | LIGHTS | 3,0 | 010 | | 1.25 | | | | 3,763 | | 1 | , | 4 | 6,480 | 54.0 |
| AIR CONDITIONING 0 1.00 0 TOTALS 15,250 42.3 SPACE HEATING 0 0.00 0 HEAT PUMP 0 1.00 0 CONTINUOUS 0 1.25 0 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1 | RECEPTACLES | 9,2 | 240 | 10KV | 'A + 50% | REST | | | 9,240 | | | I | 3 | 3,920 | 32.6 |
| SPACE HEATING 0 0.00 0 HEAT PUMP 0 1.00 0 CONTINUOUS 0 1.25 0 NON-CONTINUOUS 3,000 1.00 3,000 | MOTORS | | 0 | F x L A R G | EST + SU. | M OF RES | | | 0 | | 1 | (| C | 4,850 | 40.4 |
| HEAT PUMP 0 1.00 0 REMARKS: CONTINUOUS 0 1.25 0 1. CUTLER HAMMER POW-R-LINE 1A OR EQUAL. NON-CONTINUOUS 3,000 1.00 3,000 | AIR CONDITIONING | (| 0 | | 1.00 | | | | 0 | | 1 | ТОТ | ALS | 15,250 | 42.3 |
| CONTINUOUS 0 1.25 0 1. CUTLER HAMMER POW-R-LINE 1A OR EQUAL. NON-CONTINUOUS 3,000 1.00 3,000 | SPACE HEATING | | 0 | | 0.00 | | | | 0 | |] | | | | |
| NON-CONTINUOUS 3,000 1.00 3,000 | HEAT PUMP | | 0 | | 1.00 | | | | 0 | | | REMARI | (S : | | |
| 2 (10 A) | CONTINUOUS | (| 0 | | 1.25 | | | | 0 | | | 1. CUTL | ER HAMI | IER POW-R-LINE 1A O | R EQUAL. |
| MISC. LOADS 1 0 1.00 0 | NON-CONTINUOUS | 3,0 | 000 | | 1.00 | | | | 3,000 | | | | | | |
| | MISC. LOADS 1 | | 0 | | 1.00 | | | | 0 | | | | | | |
| | | | SIZ | ING LO | DAD (A | MPS): | | | 44 | | I | | | | |

| PANEL DESIGNATION: | P3 | | | | | | | | N LUG | | | SCC | CR RATING (AIC): | 10,000 |
|---------------------|-------|-------|--------|---------|----------|----|----------|--------|-------|-------|---------|---------|---------------------|-------------|
| | | | | | | | ‡ - | MAI | N BRE | | | | | |
| MOUNTING: | | | | | | | ווייאויי | | | TAGE: | | | | |
| LOCATION: | | | | | |] | 2 | | PHASE | | - | | 1 | |
| DESCRIPTION | | PHASE | | | /B | (|) | C | 7777 | | PHASE | | DESCRIP | TION |
| | Α | В | С | TRIP | POLE | | | POLE | TRIP | Α | В | С | | |
| REC-STORAGE | 540 | | | 20 | 1 | 1 | 2 | 2 | 40 | 3540 | | | | MSHP-1 |
| REC-CONCESSION | | 1000 | | 20 | 1 | 3 | 4 | • | - | | 3540 | | | |
| REC-CONCESSION | | | 1000 | 20 | 1 | 5 | 6 | 1 | 20 | | | 500 | | ADA DOOR |
| REC-CONCESSION | 1000 | | | 20 | 1 | 7 | 8 | 1 | 20 | 1000 | | | WAT | ER HEATER-2 |
| REC-CONCESSION | | 1000 | | 20 | 1 | 9 | 10 | 1 | 15 | | 500 | | | RECIRC PUMP |
| REC-CONCESSION | | | 1000 | 20 | 1 | 11 | 12 | 1 | 20 | | | - | | SPARE |
| REC-CONCESSION | 720 | | | 20 | 1 | 13 | 14 | 1 | 20 | 1580 | | | LIGHTING-LOBBY/C | ONESSION/RF |
| REC-CONCESSION | | 720 | | 20 | 1 | 15 | 16 | 1 | 20 | | 380 | | LIGHTI | NG-EXTERIOR |
| SPARE | | | - | 20 | 1 | 17 | 18 | 1 | 20 | | | 110 | LIGHTING-EX | TRIOR ENTRY |
| REC-LOBBY | 900 | | | 20 | 1 | 19 | 20 | 1 | 20 | - | | | | SPARE |
| DRINKING FOUNTAIN | | 500 | | 20 | 1 | 21 | 22 | 1 | 20 | | - | | | SPARE |
| REC-LOBBY/RESTROOMS | | | 1080 | 20 | 1 | 23 | 24 | 1 | 20 | | | - | | SPARE |
| REC-RESTROOMS | 900 | | | 20 | 1 | 25 | 26 | 1 | - | - | | | | SPACE |
| SPARE | | - | | 20 | 1 | 27 | 28 | 1 | • | | - | | | SPACE |
| SPARE | | | ,- | 20 | 1 | 29 | 30 | 1 | | | | - | | SPACE |
| TOTALS | 4060 | 3220 | 3080 | | | | | | | 6120 | 4420 | 610 | TOTALS | |
| P | ANFIR | OARD | SIZING | IOAD | Y | | | | | 1 | | CONI | NECTED PHASE LO | OADS |
| LOAD DESCRIPTION | | ECTED | | EMAN | | С | OD | E MIN. | (VA) | | PH/ | ASE | VA | AMPS |
| LIGHTS | | 70 | | 1.25 | | | | 2,588 | ,, | | | 4 | 10,180 | 84.8 |
| RECEPTACLES | | 360 | 10KV | A + 50% | REST | | | 10,180 | | | | 3 | 7,640 | 63.6 |
| MOTORS | | 00 | V | | M OF RE | | | 625 | | | | 0 | 3,690 | 30.7 |
| AIR CONDITIONING | (| 0 | | 1.00 | | | | 0 | | | ТОТ | ALS | 21,510 | 59.7 |
| SPACE HEATING | | 0 | | 0.00 | | | | 0 | | | | | | |
| HEAT PUMP | 7,0 | 80 | | 1.00 | | | | 7,080 | | | REMARK | KS: | | |
| CONTINUOUS | (| 0 | | 1.25 | | | | 0 | | | 1. CUTL | ER HAMI | MER POW-R-LINE 1A O | R EQUAL. |
| NON-CONTINUOUS | 1,5 | i00 | | 1.00 | | | | 1,500 | | | | | | |
| MISC. LOADS 1 | - | 0 | | 1.00 | | | | 0 | | | | | | |

SIZING LOAD (AMPS):



ELECTRICAL

PANELBOARD

REVISIONS

NSG

107 1/2 N. PENNSYLVANIA AVE. SUITE 2F INDEPENDENCE, KANSAS 67301

620-331-6171 www.EchelonAD.com

23-09

PEARSON KENT MCKINLEY RAAF ENGINEERS LLC 2949 SW WANAMAKER DR., TOPEKA, KANSAS 66614 785.273.2447 WWW.PKMRENG.COM