OWENSBORO INDOOR SPORTS FACILITY

500 WEST THIRD STREET, OWENSBORO, KY 42301

SCB PROJECT NUMBER: 2259

OWENSBORO BID NUMBER: 4387

CONSTRUCTION DOCUMENTS

MAY 20, 2024

OWNER:

CITY OF OWENSBORO

TOM WATSON - MAYOR

MARK CASTLEN - MAYOR PRO TEM
SHARON NESMITH - COMMISSIONER
BOB GLENN - COMMISSIONER
PAMELA L. SMITH-WRIGHT - COMMISSIONER
NATE PAGAN - CITY MANAGER

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SHERMAN CARTER BARNHART ARCHITECTS

SHERMAN CARTER BARNHART ARCHITECTS, PLLC

PROJECT MANAGER: ANDREW H. OWENS, AIA, CID

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SUITE 110
LEXINGTON, KY 40508
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CIVIL ENGINEER

AMERICAN ENGINEERS, INC.
65 ABERDEEN DRIVE
GLASGOW, KENTUCKY 42141
P (270) 651-7220

STRUCTURAL ENGINEER

LOLLEY & ASSOCIATES
309 EAST FOURTH STREET
OWENSBORO KY 42303
P (270) 683-2770

MECHANICAL/ELECTRICAL ENGINEER

MARCUM ENGINEERING
500 S 17TH STREET
PADUCAH, KY. 42003
P (270) 444-9274

SMITH - K. STAPLETON REGISTERED NO 3293 COMMONWEALTH OF KENTUCKY ARCHITECTS

FINAL DOCUMENTS

SCB PROJECT NO. 2259

2259 OWENSBORO INDOOR SPORTS FACILITY
CIVIL COVER SHEET
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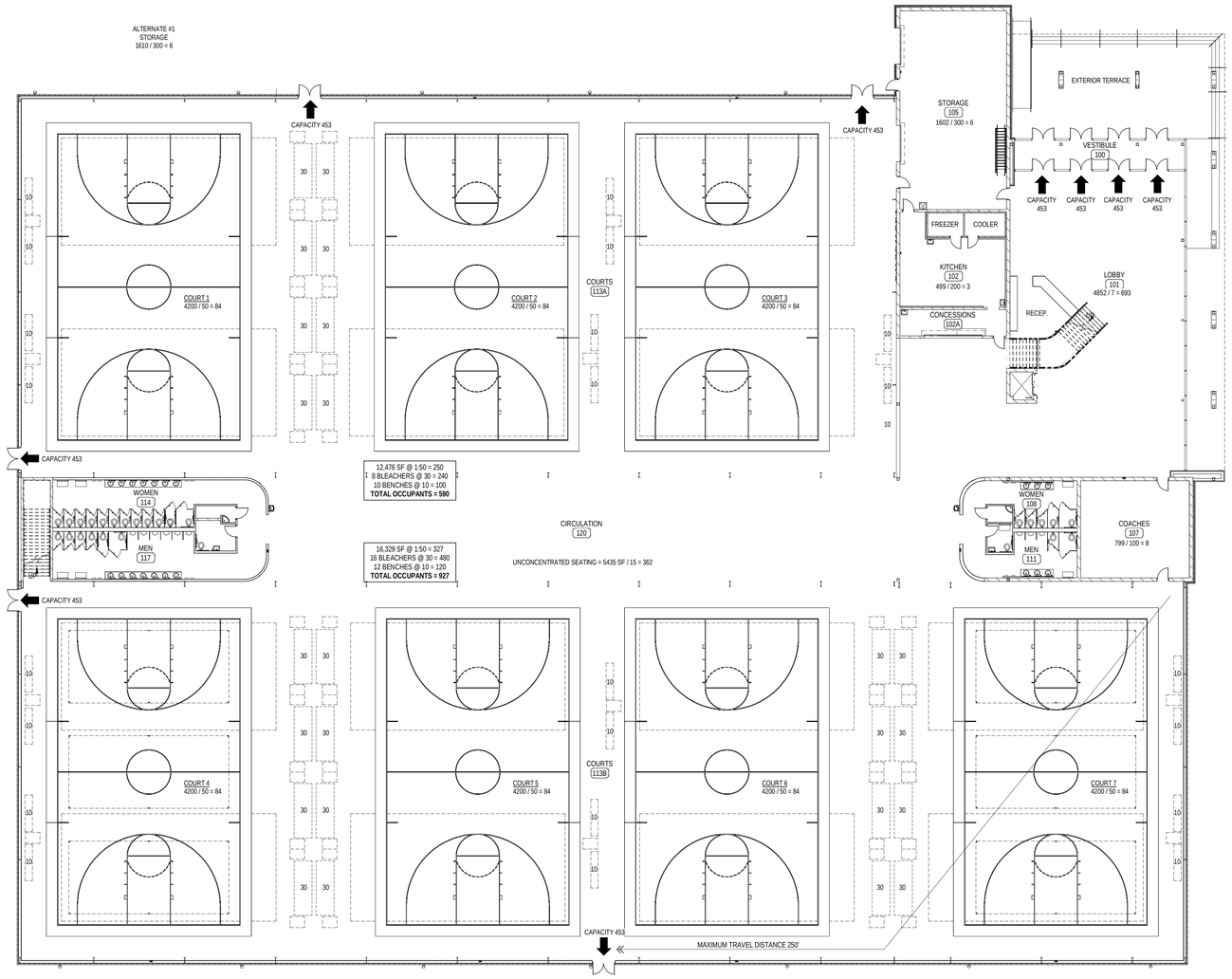
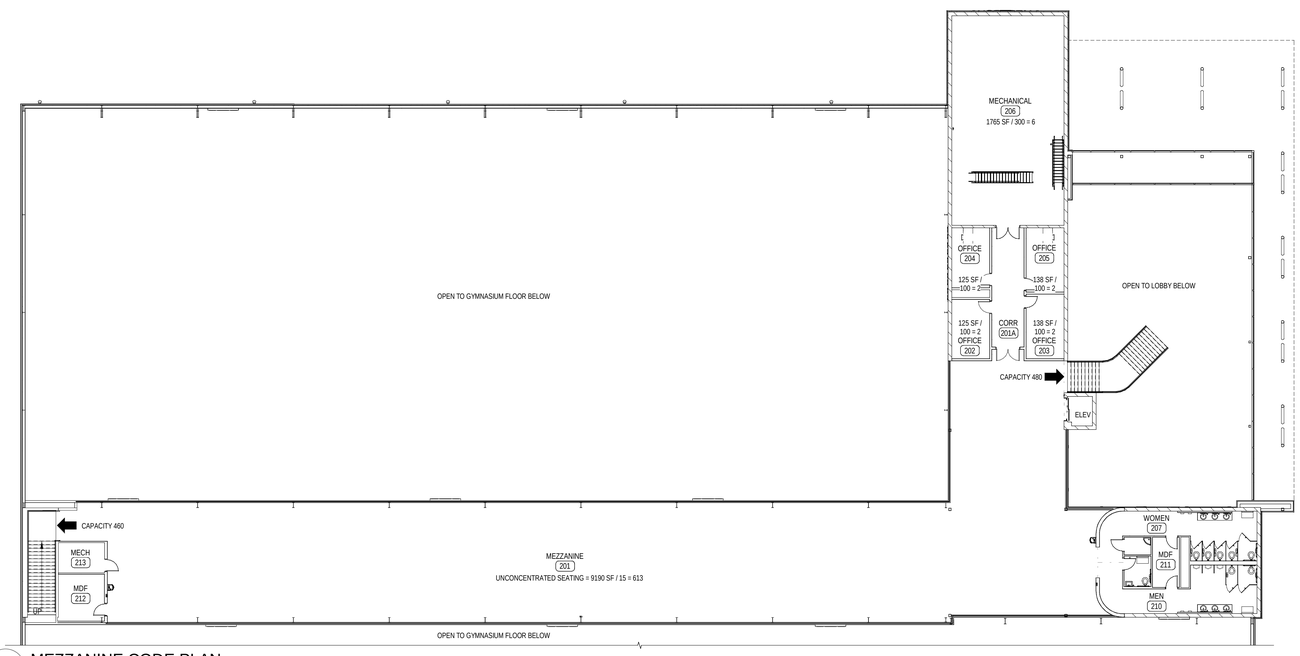


1 FIRST FLOOR CODE PLAN
1/16" = 1'-0"

NORTH



2 MEZZANINE CODE PLAN
1/16" = 1'-0"

SEISMIC DESIGN CRITERIA

(REFER TO SHEET SO.1 FOR ADDITIONAL INFORMATION)

RISK CATEGORY	III
SITE CLASS	D
SEISMIC DESIGN CATEGORY	C

OCCUPANT LOAD CALCULATION

OCCUPANT LOAD CALCULATION:

EXIT CAPACITY 4,077 OCCUPANTS

COURTS: 84 X 7 = 588
COURT AUXILIARY AREA 1 = 590
COURT AUXILIARY AREA 2 = 927
UNCONCENTRATED SEATING = 362
LOBBY = 693
COACHES = 8
KITCHEN = 3
STORAGE = 6
MEZZANINE UNCONCENTRATED SEATING = 613
OFFICE = 2
OFFICE = 2
OFFICE = 2
OFFICE = 2
MECHANICAL = 6

TOTAL OCCUPANTS = 3,804

MAX OCCUPANTS ARE CALCLUATED BASED ON VOLLEYBALL COURTS (WORST CASE)
4 TEAMS PER COURT X 11 PLAYERS PER TEAM - 44
14 COURTS X 44 = 616
1 SPECTATOR PER PLAYER = 616 X 2 = 1,232
ROUNDED TO 1,300 TO ACCOUNT FOR STAFF

ENERGY CODE COMPLIANCE

2012 IECC COMCHECK - PASS ASHRAE

SPECIAL INSPECTIONS PER CHAPTER 17 OF THE KENTUCKY BUILDING CODE

NOTE: IN ADDITION TO OTHER TESTS AND INSPECTIONS REQUIRED BY THE SPECIFICATIONS, THE OWNER SHALL PROVIDE THE SERVICES OF QUALIFIED THIRD-PARTY INSPECTORS TO PERFORM ALL REQUIRED SPECIAL INSPECTIONS AS FOLLOWS:

SECTION	ITEM	REQUIRED? _YES_	__NO_	REMARKS
1705.2	FABRICATORS	__X__	_____	STEEL FABRICATION SPECIAL INSPECTION IS REQUIRED IF THE FABRICATOR IS NOT A.I.S.C. OR AWS CERTIFIED.
1705.2.1	STEEL	__X__	_____	STRUCTURAL STEEL AND JOISTS, PER TABLE 1705.2.2
1705.3	CONCRETE	__X__	_____	PER TABLE 1705.3
1705.4	MASONRY	__X__	_____	PER TMS 402 / TMS 602
1705.5	WOOD	_____	__X__	NONE
1705.6	SOILS	__X__	_____	PER TABLE 1705.6
1705.7	DRIVEN DEEP FOUNDATION	_____	__X__	NONE
1705.8	CAST-IN-PLACE DEEP FOUNDATIONS	_____	__X__	NONE
1705.9	HELICAL PILE FOUNDATIONS	_____	__X__	NONE
1705.10	INSPECTIONS FOR WIND RESISTANCE	_____	__X__	Vasd 120 MPH, WIND EXPOSURE CAT. "C"
1705.11	INSPECTIONS FOR SEISMIC RESISTANCE	__X__	_____	SEISMIC DESIGN CATEGORY "D"
1705.12	TESTING & QUALIFICATION FOR SEISMIC RESISTANCE	__X__	_____	SEISMIC DESIGN CATEGORY "D"
1705.12.1	STRUCTURAL STEEL	__X__	_____	SEISMIC DESIGN CATEGORY "D"
1705.12.2	STRUCTURAL WOOD	_____	__X__	NONE
1705.12.3	COLD-FORMED STEEL LIGHT-FRAME CONST.	_____	__X__	NONE
1705.12.4	DESIGNATED SEISMIC SYSTEMS	__X__	_____	SEISMIC DESIGN CATEGORY "D"
1705.12.5	ARCHITECTURAL COMPONENTS	__X__	_____	SEISMIC DESIGN CATEGORY "D"
1705.12.6	PLUMBING, MECHANICAL AND ELECTRICAL COMPONENTS	__X__	_____	SEISMIC DESIGN CATEGORY "D"
1705.12.9	COLD-FORMED STEEL SPECIAL BOLTED MOMENT FRAMES	_____	__X__	NONE
1705.14	SPRAYED FIRE-RESISTANT MATERIALS	_____	__X__	NONE
1705.15	MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS	_____	__X__	NONE
1705.16	EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)	_____	__X__	NONE
1705.17	FIRE-RESISTANT PENETRATIONS AND JOINTS	__X__	_____	RISK CATEGORY III
1705.18	TESTING FOR SMOKE CONTROL	_____	__X__	NONE

NOTE: REFER TO STRUCTURAL SHEETS FOR STRUCTURAL QUALITY ASSURANCE

CODE COMPLIANCE INFORMATION

GENERAL INFORMATION :

CODE: KENTUCKY BUILDING CODE 2018, THIRD EDITION

USE GROUP: A-4 (ASSEMBLY)

CONSTRUCTION TYPE: TYPE II B

FIRE PROTECTION: FULLY SPRINKLERED PER NFPA 13, VOICE ALARM

BUILDING HEIGHT CALCULATIONS :

ALLOWABLE HEIGHT = 1 STORY / 65'-0" (TABLE 507.4)
ACTUAL BUILDING HEIGHT = 1 STORY + MEZZANINE / 42'-8"

TRAVEL DISTANCES :

TRAVEL DISTANCE TO EXIT:
ACTUAL MAXIMUM TRAVEL DISTANCE: 228'-0"
(MAXIMUM ALLOWABLE TRAVEL DISTANCE: 250'-0" (PER TABLE 1017.2)

BUILDING AREA:

ALLOWABLE AREA = UNLIMITED PER SECTION 507.4
(SECTION 507.4)
* BUILDING HAS 60' PUBLIC WAY
DISTANCE TO LOT LINE + PUBLIC RIGHT-OF-WAY = 60'+ ON ALL SIDES

BUILDING AREA:

FIRST FLOOR-	77,326 SQ. FT.
MEZZANINE -	13,021 SQ. FT.
EXTERIOR COVERED TERRACE	2,642 SQ. FT.
ALTERNATE STORAGE ROOM	1,610 SQ. FT.
TOTAL AREA:	94,599 SQ. FT.

MINIMUM FIRE RESISTANCE RATINGS (PER TABLES 601 AND 602)

STRUCTURAL FRAME :	0 HR
BEARING WALLS EXTERIOR :	0 HR
BEARING WALLS INTERIOR :	0 HR
NON-BEARING EXTERIOR WALLS :	0 HR > 30' DISTANCE
NON-BEARING INTERIOR WALLS :	0 HR
FLOOR CONSTRUCTION :	0 HR
ROOF CONSTRUCTION { < 20 FT. ABOVE FLOOR } :	0 HR
ROOF CONSTRUCTION { > 20 FT. ABOVE FLOOR } :	0 HR

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

CODE INFORMATION

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG, DB
CHECKED	BKL, DB, AHO

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REVISIONS

No.	Description	Date

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OWENSBORO INDOOR SPORTS FACILITY
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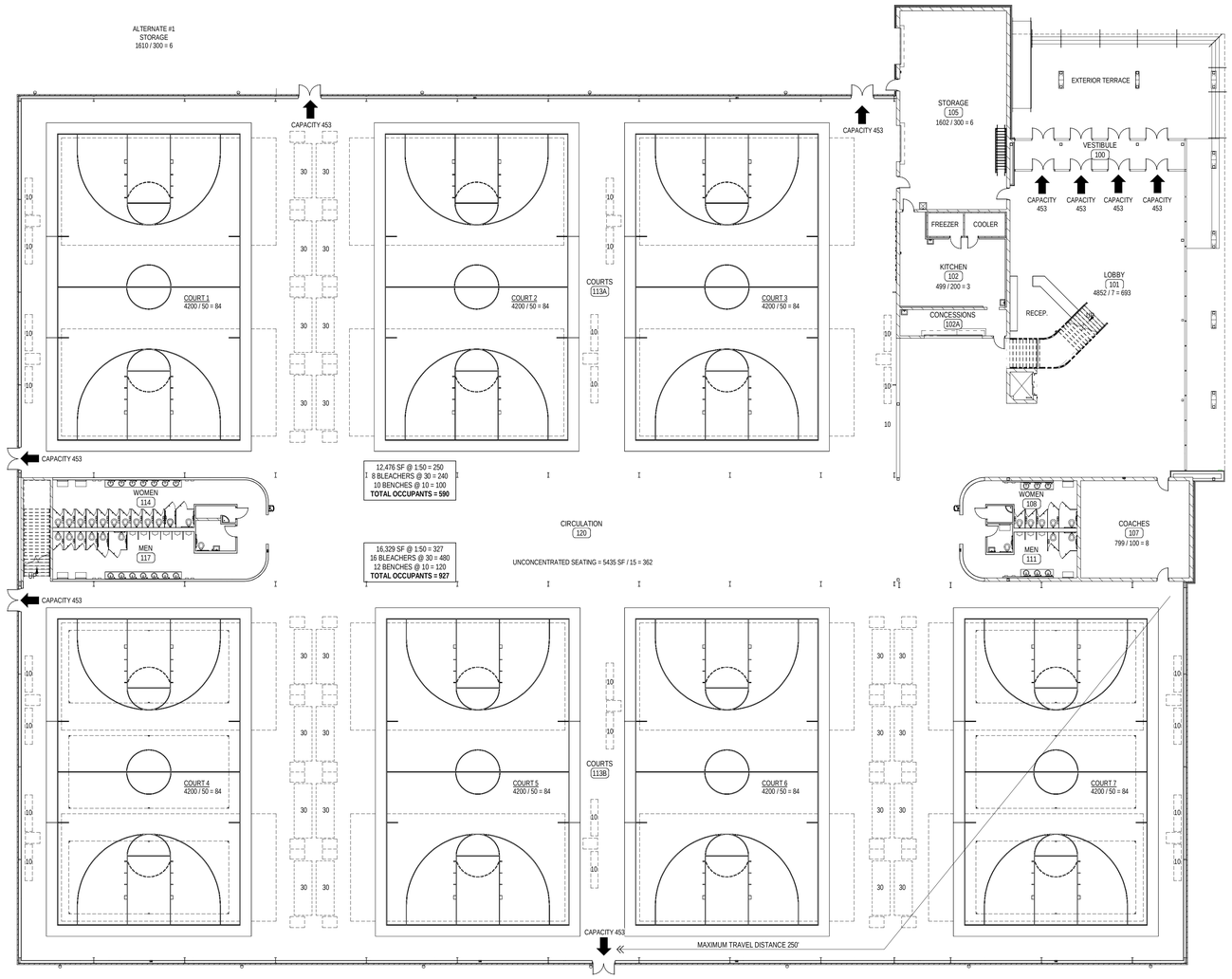

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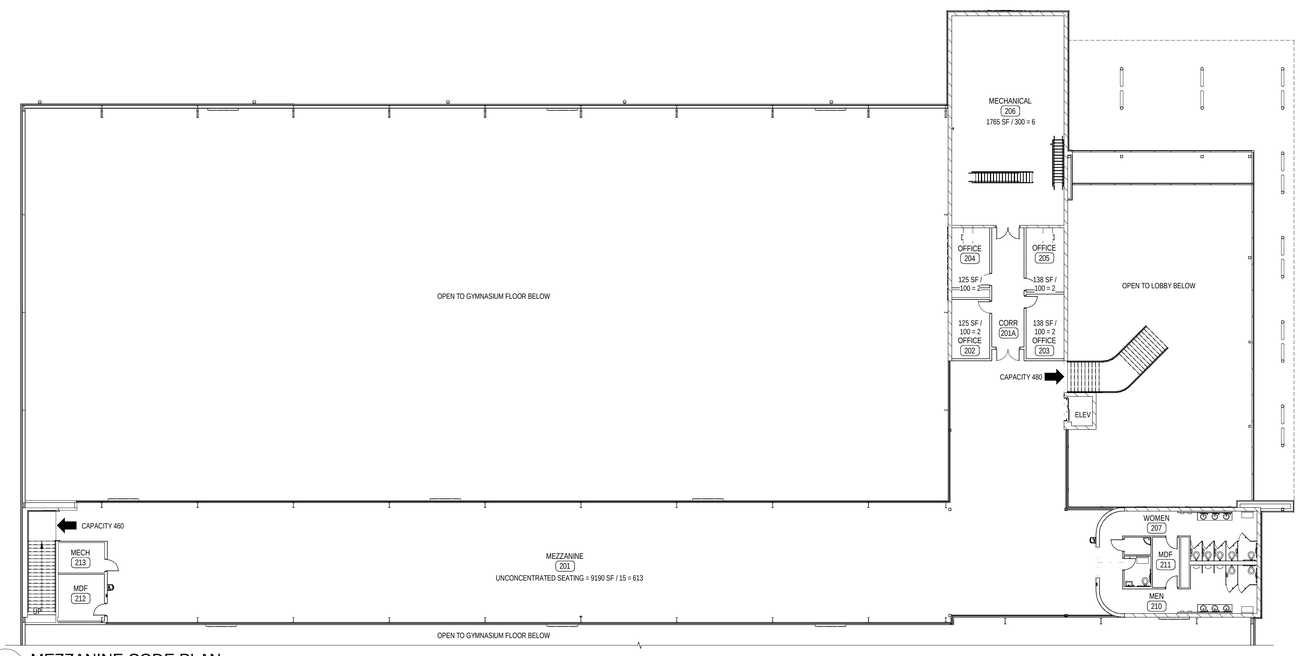

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1705.16	EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)	_____	__X__	NONE
1705.17	FIRE-RESISTANT PENETRATIONS AND JOINTS	__X__	_____	RISK CATEGORY III
1705.18	TESTING FOR SMOKE CONTROL	_____	__X__	NONE

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FLOOR CONSTRUCTION :	0 HR
ROOF CONSTRUCTION (< 20 FT. ABOVE FLOOR) :	0 HR
ROOF CONSTRUCTION (> 20 FT. ABOVE FLOOR) :	0 HR

SHERMAN CARTER BARNHART ARCHITECTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

CODE INFORMATION

JOB NO.	2259
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REVISIONS

No.	Description	Date

SHEET
C0.1

2259
OWENSBORO INDOOR SPORTS FACILITY
5/17/2024 11:30:33 AM

CIVIL CONSTRUCTION PLANS
FOR
OWENSBORO INDOOR SPORTS FACILITY
OWENSBORO, KY
DAVIESS COUNTY

GENERAL NOTES

1. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL PERMITTING AUTHORITIES.
2. NO GRADING, STRIPPING, EXCAVATION, FILLING OR OTHER DISTURBANCE OF THE NATURAL GROUND COVER SHALL TAKE PLACE UNTIL PROPOSED SOIL EROSION CONTROL PLAN HAS BEEN APPROVED AND IN PLACE.
3. ALL DIMENSIONS INVOLVING CURB ARE SHOWN TO FACE OF CURB, UNLESS NOTED OTHERWISE.
4. IN THE CASE OF CONFLICT BETWEEN THIS DRAWING AND ANY OTHER DRAWING AND/ OR SPECIFICATIONS, THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR CLARIFICATION.
5. THE CONTRACTOR SHALL BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES AND THE REQUIREMENTS OF LOCAL UTILITY COMPANIES.
6. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL BARRICADES, WARNING SIGNS, FLASHING LIGHTS AND THE TRAFFIC CONTROL DEVICES DURING CONSTRUCTION. CONTRACTOR SHALL COMPLY WITH OSHA REGULATIONS AND SAFETY REQUIREMENTS.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE SAFETY OF ALL VEHICLE TRAFFIC IN AND AROUND THE CONSTRUCTION AREA.
8. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 4" TOPSOIL, SEEDED, MULCHED AND WATERED AS NECESSARY TO PROVIDE SUBSTANTIAL GRASS COVER.
9. ALL PAVEMENT MARKINGS INCLUDING STRIPES, DIRECTIONAL ARROWS, ETC., SHALL BE WHITE PAINT (TWO COATS). HANDICAP SYMBOL COLORS SHALL BE PER LOCAL CODE. APPROVED EXTERIOR PAINTS ARE AS FOLLOWS:

   PRATT AND LAMBERT TRAFFIC PAINT
   SHERWIN-WILLIAMS PRO-MAR TRAFFIC MARKING
   -PAINT B29 SERIES
   GLIDDEN ROMARK TRAFFIC PAINT
   PPG ZONE AND TRAFFIC MARKING PAINT
   FOY-JOHNSTON TRAFFIC PAINT 9862
10. ANY DAMAGE TO JAMES T. ROGERS DRIVE OR 31-E DUE TO CONSTRUCTION ACTIVITIES SHALL BE REPAIRED TO NEW CONDITION AT NO **COST TO THE OWNER(S). EXTENTS OF DAMAGE AND REPAIR SHALL BE COORDINATED AND APPROVED BY THE OWNER(S) AND ENGINEER PRIOR TO CONSTRUCTION.**
11. **ROCK REMOVAL SHALL BE UNCLASSIFIED. ROCK REMOVAL REQUIREMENTS ARE OUTLINED IN SPECIFICATION SECTION 312200 EARTHWORK**
12. CLARIFICATION: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERMIT ANY WORK WITHIN THE TRIBUTARY TO SOUTH FORK BEAVER CREEK ALONG 31E. A BLUELINE STREAM ON USGS MAPPING. IF CONSTRUCTION ACTIVITIES EXCEED THE CURRENT PIPE EXTENSION SCOPE WHICH, AS DESIGNED, IS BELOW THE REGULATED TRIGGER FOR STREAM DISTURBANCE OF 0.03 ACRES OF IMPACT, ABOVE WHICH REQUIRING AN INDIVIDUAL PERMIT PER GUIDELINES OUTLINED BY US ARMY CORPS OF ENGINEERS.
13. CLARIFICATION: THE METHOD FOR TREE CLEARING, GRUBBING, BURNING AND/OR REMOVAL WILL BE AT THE DISCRETION OF THE CONTRACTOR AND HIS/HER SUBCONTRACTORS PER PERMITTING REQUIREMENTS FOR STATE, FEDERAL AND/OR LOCAL (CITY-COUNTY AND FIRE DEPT.) REVIEW PRIOR TO BEGINNING CONSTRUCTION. OPEN BURNING IS REGULATED BY 401 KAR 63:005.

GRADING AND DRAINAGE NOTES:

1. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL NOTIFY KY-811 48 HOURS PRIOR TO EXCAVATION.
2. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
3. NO CUT OR FILL SLOPES SHALL BE CONSTRUCTED STEEPER THAN 3H:1V UNLESS SPECIFICALLY NOTED ON THE PLANS.
4. SITE GRADES AROUND PAVEMENT AND BUILDING AREAS SHALL BE GRADED DURING CONSTRUCTION TO PREVENT PONDING. ANY SURFACE WATER ACCUMULATION IN THE PAVEMENT AND BUILDING AREAS SHALL BE DRAINED IMMEDIATELY TO AVOID SATURATION OF THE SUBGRADE SOILS.
5. ALL EXCAVATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST OSHA GUIDELINES AS MANDATED IN CURRENT FEDERAL, STATE AND LOCAL REGULATIONS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE IN PROVIDING SAFE WORKING CONDITIONS IN CONNECTION WITH ANY EXCAVATION WORK.
6. SUITABLE FILL MATERIAL PLACED UNDER BUILDING AREAS SHALL BE PLACED IN MAXIMUM 8-INCH (LOOSE THICKNESS) VERTICAL LIFTS, WITH EACH LIFT BEING COMPACTED TO A MINIMUM OF 98 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY, AT A MOISTURE CONTENT WITHIN 2 PERCENT OF OPTIMUM. THE COMPACTION REQUIREMENT MAY BE REDUCED TO 95 PERCENT IN PROPOSED PAVED AREAS, AND TO 92 PERCENT IN PROPOSED LANDSCAPE AREAS. WETTING OR DRYING OF THE SOILS MAY BE NECESSARY TO ACHIEVE A MOISTURE CONTENT SUITABLE FOR COMPACTION. REPRESENTATIVE AND ADEQUATE FIELD DENSITY TESTING SHALL BE PERFORMED BY INDEPENDENT TESTING AGENCY PROVIDED BY OWNER TO VERIFY THAT COMPACTION REQUIREMENTS HAVE BEEN MET.
7. STONE BASES SHOULD BE COMPACTED TO A DENSITY SATISFACTORY TO ENGINEER, TYPICALLY 84% OF SOLID VOLUME OR BY TEST STRIP METHODS.
8. ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, FENCING, TREES, ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OF OFF SITE.
9. GRADE LINES SHOWN ARE FINISHED GRADE. CONTRACTOR SHOULD SEE DETAIL SHEET FOR APPROPRIATE PAVEMENT TYPE TO DETERMINE SUB-GRADE ELEVATIONS FOR PAVING AREAS.
10. CONTRACTOR IS ADVISED THAT FINAL GRADING AND CURB PLACEMENT SHALL BE COMPLETED TO ACCOMMODATE THE FOLLOWING:
    A. NO WATER WILL POND AT POINTS WHERE LANDSCAPE ISLANDS EXTEND INTO PARKING FIELDS.
    B. SPACES DESIGNATED FOR HANDICAP PARKING AND ACCESS AISLE SHALL HAVE A FINAL SLOPE AFTER PAVING IS COMPLETED OF NOT MORE THAN 2.0%. IF EITHER OF THESE ITEMS ARE NOT CONSTRUCTED AS OUTLINED ABOVE, REWORK WILL BE PROVIDED BY THE CONTRACTOR TO CORRECT DEFICIENCIES AT THE CONTRACTORS EXPENSE.
11. THE CONTRACTOR SHALL VERIFY POSITIVE FLOW FOR ALL STORM SEWER SYSTEMS. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

UTILITY NOTES:

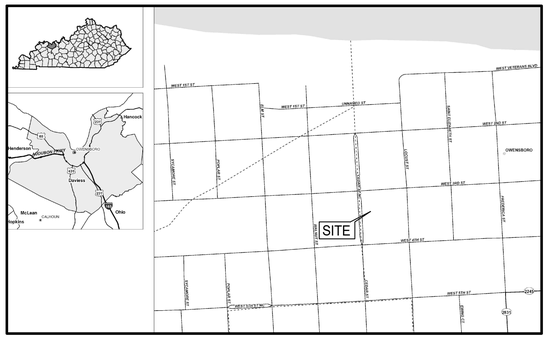
1. THE CONTRACTOR IS ADVISED THAT ALL EXISTING UTILITIES SHOWN WERE FIELD SURVEYED BASED ON LOCATIONS PROVIDED BY EACH UTILITY COMPANY. OTHER UTILITIES MAY EXIST THAT ARE UNMAPPED. THE CONTRACTOR IS ADVISED TO FIELD VERIFY ALL UNDERGROUND UTILITIES BY CONTACTING THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS TO EXCAVATION.
2. ALL UTILITIES TO BE CONSTRUCTED TO WITHIN 5' OF BUILDING.
3. BACK FILL OF ALL TRENCHES BENEATH STRUCTURES AND/OR PAVEMENT SHALL BE CRUSHED STONE OR SIMILAR MATERIAL AS APPROVED BY ENGINEER.
4. CONTRACTORS ARE ADVISED TO COORDINATE INSTALLATION OF ALL BURIED CONDUITS AND LINES SUCH THAT LINES WHICH CROSS ARE LAID BEGINNING WITH DEEPEST LINE FIRST.
5. DEPTH OF WATERLINE SHALL BE ADJUSTED AS REQUIRED TO ALLOW FOR SPECIFIED PLACEMENT OF SANITARY AND STORM SEWERS, BUT IN NO CASE LESS THAN 30".
6. TAPPING AND INSPECTION FEES TO BE PAID BY CONTRACTOR, METER FEES TO BE PAID BY OWNER.
7. CONTRACTOR SHALL COORDINATE WATER AND SEWER SERVICES CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL UTILITY CO.
8. ALL TRENCHING, PIPE LAYING AND BACK FILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
9. CONTRACTOR SHALL OBTAIN APPROVAL FROM ALL GOVERNING AGENCIES HAVING JURISDICTION OF UTILITY SYSTEMS PRIOR TO INSTALLATION.
10. ALL GATE VALVES SHALL BE PROVIDED WITH VALVE BOX IN ACCORDANCE WITH WATER UTILITY STANDARDS.
11. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE HYDRANTS AND SHALL BE CONSTRUCTED ACCORDING TO WATER DEPARTMENT STANDARDS. 12. ALL WATER AND SANITARY SEWER SERVICE LINES TO THE BUILDING(S) SHALL BE PROVIDED WITH A TEMPORARY PLUG (FOR OTHERS TO REMOVE AND EXTEND AS NECESSARY).
12. THE CONTRACTOR SHALL FLUSH AND TEST ALL NEW UTILITY LINES ACCORDING TO THE STATE DIVISION OF WATER OR LOCAL WATER CO. STANDARDS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS AND ELEVATIONS OF EXISTING AND PROPOSED UTILITIES PRIOR TO CONSTRUCTION. ANY CONFLICTS DISCOVERED AFTER CONSTRUCTION HAS BEGUN, SHALL BE CORRECTED AT CONTRACTORS EXPENSE.
14. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATER AND SEWER LINES IS TEN FEET OUTSIDE DIAMETER TO OUTSIDE DIAMETER. THE MINIMUM VERTICAL SEPARATION IS EIGHTEEN INCHES.
15. BEFORE YOU DIG: CONTRACTOR SHALL NOTIFY BUD, 1-800-752-6077 48 HOURS PRIOR TO EXCAVATION, TO LOCATE AND FLAG ALL UNDERGROUND UTILITIES WITHIN THE PROPOSED RIGHT OF WAY.

JOB SITE SAFETY

1. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY DURING CONSTRUCTION. JOB SITE SAFETY IS OUTSIDE THE SCOPE OF WORK OF AMERICAN ENGINEERS, INC. AND SHERMAN CARTER BARNHART AND NEITHER THE PROFESSIONAL ACTIVITIES OR THE PRESENCE OF AEI OR SUBCONSULTANTS AT THE CONSTRUCTION SITE SHALL RELIEVE THE CONTRACTOR OR ANY OTHER ENTITY OF THEIR OBLIGATION, DUTIES, AND RESPONSIBILITIES INCLUDED, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCES, TECHNIQUES, TO PROCEDURES NECESSARY FOR PERFORMING SUPERINTENDING OR COORDINATING ALL PORTIONS OF THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH AND SAFETY PRECAUTIONS REQUIRED BY GOOD CONSTRUCTION PRACTICES OR ANY REGULATORY AGENCIES. ANYONE USING INFORMATION FROM THESE PLANS ACKOWLEDGES AND WARRANTS THAT AEI IS NOT RESPONSIBLE FOR SITE SAFETY IN ANY WAY.

ACCESSIBILITY INFORMATION

1. ALL RAMPS SIDEWALKS AND APRONS SHALL BE COMPLIANT WITH THE MOST CURRENT DEPARTMENT OF JUSTICE ADA REQUIREMENTS (ADA STANDARDS FOR ACCESSIBLE DESIGN, CODE OF FEDERAL REGULATIONS, CURRENT EDITION).
2. THE ELEVATION OF ALL EXTERIOR WALKS AND SLABS SHALL BE ADA COMPLIANT AND AT 1/4" BELOW FINISH FLOOR AT ALL DOORS. AN ADA LANDING SHALL BE PROVIDED AT ALL DOORS.
3. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL BE ADA COMPLIANT, NOT TO EXCEED 2% IN ANY DIRECTION.



LOCATION MAPS
NOT TO SCALE

ENGINEER
RICHARD TUTT, P.E.
AMERICAN ENGINEERS, INC.
65 ABERDEEN DRIVE
GLASGOW, KENTUCKY 42141
(270) 651-7220

SURVEYOR
JEFFREY C. SMITH, P.L.S.
AMERICAN ENGINEERS, INC.
65 ABERDEEN DRIVE
GLASGOW, KENTUCKY 42141
(270) 651-7220

LEGEND / ABBREVIATIONS

ABBREVIATIONS

A	AREA
ALT	ALTERNATE
AMP	AMPERE
ARCH	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
B/C	BACK OF CURB
BIT	BITUMINOUS PAVEMENT
BM	BENCH MARK
C	CONDUIT
CAL	CALIPER
CB	CATCH BASIN
CFH	CUBIC FEET PER HOUR
C.I.	CURB ISLAND
CIR	CIRCUIT
CONC	CONCRETE
DBI	DITCH BOTTOM INLET
DIA	DIAMETER
(E)	EAST
E.I.F.S.	EXTERIOR INSULATION FINISHING SYSTEM
EL, ELEV	ELEVATION
EQ	EQUIVALENT
ES	END SECTION
ETC	ETCETRA
FH	FIRE HYDRANT
FF	FINISHED FLOOR
FT	FOOT SQUARE
GND, GRD	GROUND
GP	GUTTER PAN
GPD	GALLONS PER DAY
GPM	GALLONS PER MINUTE
GV&BOX	GATE VALVE AND BOX
HC	HIGH CAPACITY
HD	HEAVY DUTY
HEX	
HT	HEIGHT
IE	INVERT ELEVATION
KVA	KILAVOLT AMPERE
LBS	POUNDS
LD	LIGHT DUTY
LED	LIGHT EMITTING DIODE
LF	LINEAR FEET
LG	LARGE
MANUF	MANUFACTURE
MAT'L	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
MH	MANHOLE
(N)	NORTH
OC	ON CENTER
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATON
PC	POINT OF CURVATURE
PE	POLYETHYLENE
PH	PHASE
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RE:	REFERENCE
REQ'D	REQUIRED
ROW	RIGHT-OF-WAY
RW	RETAINING WALL
(S)	SOUTH
SAN	SANITARY SEWER
SB	SOIL BORING
SF, SQFT	SQUARE FEET
SQ	SQUARE
STM	STORM SEWER
STRUC	STRUCTURE
TC	TOP OF CURB
TEL	TELEPHONE
TP	TOP OF PAVEMENT
TRNF	TRANSFORMER
TS	TOP OF SLAB
TW	TOP OF WALL
TYP	TYPICAL
UC	UTILITY CROSSING
UD	UNDER DRAIN
W	WIRE
(W)	WEST
W/	WITH
WC	WATER COLUMN
WTR	WATER
WWF	WELDED WIRE FABRIC

LEGEND

- RIGHT OF WAY
- PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING 1' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING CONCRETE CURB W/ DROP CURB
- EDGE OF PAVEMENT
- EXISTING OVERHEAD WIRES
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING WATER LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING SANITARY SEWER
- EXISTING STORM
- EXISTING GASLINE
- EXISTING FENCE
- EXISTING FIRE HYDRANT
- WATER VALVE
- WATER METER
- GAS METER
- EXISTING POWER POLE
- EXISTING LIGHT POLE (2 LIGHTS)
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM SEWER MANHOLE
- DROP BOX INLET (DBI)
- EXISTING TRANSFORMER PAD
- TELEPHONE PEDESTAL
- EXISTING TREE
- SPRINKLER HEAD
- EXISTING SIGN
- BENCH MARK
- DOWNSPOUT
- ELECTRIC JUNCTION BOX
- EXISTING GUIDE WIRE
- EXISTING CLEANOUT
- EXISTING BOLLARD
- EXISTING STRUCTURE (AS NOTED)
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING LANDSCAPED AREA

AGENCIES

ZONING
OMPC:
200 EAST 3RD STREET
OWENSBORO, KY 42302
TELEPHONE: 270-687-8650

BUILDING PERMITS
OMPC:
200 EAST 3RD STREET
OWENSBORO, KY 42302
TELEPHONE: 270-687-8650

GAS
ATMOS ENERGY
3275 HIGHLAND POINTE DR.
OWENSBORO, KY42303
270-685-8000

TELEPHONE
AT&T
5115 FREDERICA STREET
OWENSBORO, KY 42301
TELEPHONE: 270-685-8405

ELECTRIC
OMU
2070 TAMARACK RD.
OWENSBORO, KY 42301
270-926-3200

SEWER
RWRA
2101 GRIMES AVE.
OWENSBORO, KY 42303
270-687-8450

WATER
OMU
2070 TAMARACK RD.
OWENSBORO, KY 42301
270-926-3200

TRANSPORTATION
KYTC DISTRICT 2
1840 NORTH MAIN STREET
MADISONVILLE, KY 42431
TELEPHONE: 270-824-7080

CITY OF OWENSBORO
CITY ENGINEERING OFFICE
11410 W. 5TH STREET
OWENSBORO, KY 42301
270-687-8641

INDEX OF SHEETS

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5/15/24	C-2.2	EPSC PLAN PHASE II
5/15/24	C-3.0	SITE LAYOUT PLAN
5/15/24	C-3.1	DIMENSIONED SITE LAYOUT PLAN
5/15/24	C-3.2	DIMENSIONED SITE LAYOUT PLAN
5/15/24	C-4.0	GRADING & DRAINAGE PLAN
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5/15/24	C-6.1	CONSTRUCTION DETAILS
5/15/24	C-6.2	CONSTRUCTION DETAILS

SHEET INDEX LEGEND

01/01/23
- MOST RECENT ISSUE DATE
- LATEST REVISION NUMBER
- FILLED IN CIRCLE INDICATES DRAWING INCLUDED IN THIS DRAWING SET.

Kentucky 811

BEFORE YOU DIG

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY RICHARD TUTT 22.0.0 LICENSED PROFESSIONAL ENGINEER

AEI A SDA Company
AMERICAN ENGINEERS, INC.
DESIGNING YOUR FUTURE
65 Aberdeen Drive Glasgow KY
270.651.7220

OWENSBORO INDOOR SPORTS FACILITY
500 W 3RD ST, OWENSBORO, KY 42301

CIVIL INFORMATION & GENERAL NOTES

JOB NO.	223-061
DATE	05-20-24
DRAWN	M. ALLEN
CHECKED	R. TUTT

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AMERICAN ENGINEERS, INC.

REVISIONS

No.	Description	Date

SHEET
C-1.0

OWENSBORO, DAVIESS CO., KY.
VICINITY MAP (NOT TO SCALE)

GENERAL NOTES

1. THIS SURVEY IS SUBJECT TO ANY AND ALL LEGAL EASEMENTS AND RIGHT OF WAYS RECORDED OR UNRECORDED, INCLUDING BUT NOT LIMITED TO THOSE SHOWN HEREON.

2. THIS SURVEY IS SUBJECT TO ANY AND ALL FACTS THAT MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH.

3. THE LOCATION OF THE UNDERGROUND AND ABOVE GROUND UTILITIES SHOWN HEREON ARE BASED ON THE FIELD LOCATION OF FOUND VISIBLE STRUCTURES OR AS FLAGGED AND/OR PAINTED BY THEIR RESPECTIVE UTILITY COMPANIES. OTHER UTILITIES MAY EXIST, NO GUARANTEE IS EXPRESSED OR IMPLIED AS TO THE ACTUAL LOCATION AND/OR EXISTENCE OF SAID UNDERGROUND UTILITIES ON THIS SITE.

4. THE PROPERTY SHOWN HEREON IS SUBJECT TO THE RULES, REGULATIONS, SETBACKS AND ORDINANCES SET FORTH BY THE LOCAL PLANNING COMMISSION.

5. GPS NOTE:
95 % OF SURVEY WAS PERFORMED USING TRIMBLE - R12i - DUAL FREQUENCY GPS UNITS UTILIZING REAL TIME KINEMATIC SURVEYING TECHNIQUES. WITH AN UNADJUSTED PRECISION TO CONTROL POINTS BEING LESS THAN 0.04' OR BEING GREATER THAN 1 : 10,000.

6.FLOOD ZONE NOTE:
THIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD ZONE AS INDICATED BY FLOOD INSURANCE RATE MAPS COMMUNITY PANEL NO. 21059C0138D, EFFECTIVE DATE OF APRIL 16, 2009

7. THIS IS NOT A BOUNDARY SURVEY. NOT TO BE RECORDED OR USED FOR THE TRANSFER OF REAL PROPERTY. LOT LINES ARE SHOWN FOR INDEXING PURPOSES ONLY AND SHOULD NOT BE CONSTRUED TO BE TRUE AND ACCURATE.

PARCEL OWNER AND SOURCE OF TITLE FOR SURVEY

CITY OF OWENSBORO
101 FOURTH STREET, PO BOX 10003
OWENSBORO, KY 42302

PVAs
006-02-02-001.00, 006-02-02-003.00, 006-02-02-004.00
006-02-02-005.00, 006-02-02-006.00, 006-02-02-007.00
006-02-02-008.00, 006-02-02-009.00, 006-02-02-010.00
006-02-02-011.00, 006-02-02-012.00

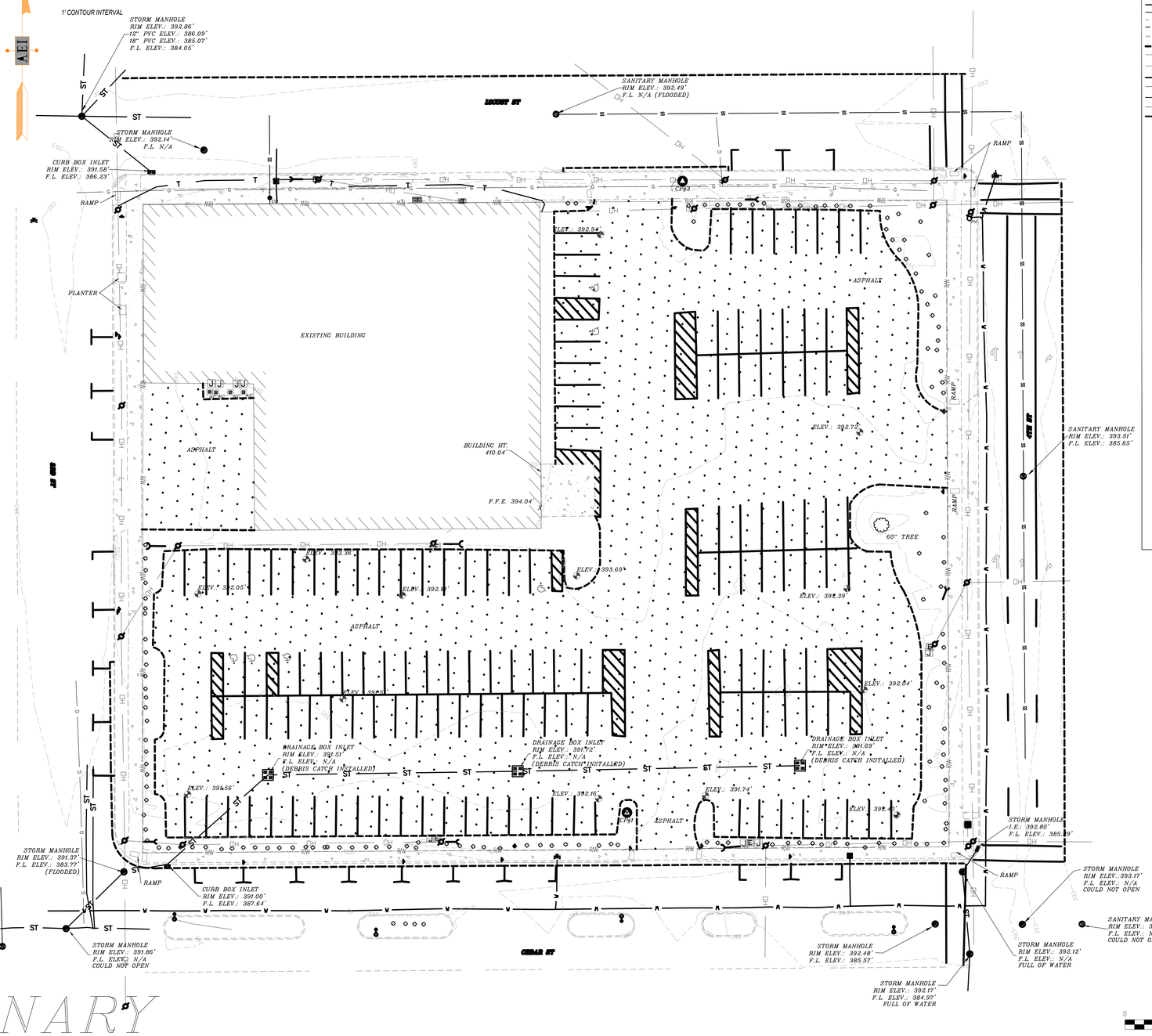
DEED BOOK 1077 PAGE 350

BASIS OF BEARINGS AND ELEVATIONS
THE BASIS OF THE BEARINGS SHOWN HEREON WERE BASED ON GRID NORTH AS IT RELATES TO THE KENTUCKY STATE PLANE COORDINATE SYSTEM (SINGLE ZONE) NAD83. ALL ELEVATIONS SHOWN HEREON WERE BASED ON NAVD88 (GEOID 18). AS OBSERVED VIA RTK BASED OFF OF NGS CORS NETWORK. FEBRUARY, 2023.

1' CONTOUR INTERVAL

CONTROL POINT TABLE

Point	Northing	Easting	Elevation	Description
1	3877457.5[illegible]	4[illegible]	397.97	CP/1PCS
3	3877[illegible]741	4[illegible]	392.51	NAIL



PRELIMINARY

LEGEND
SYMBOLS THAT MAY APPEAR ON DRAWING

- RIGHT OF WAY
- PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING 1' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING CONCRETE CURB W/ DROP CURB
- EDGE OF PAVEMENT
- EXISTING OVERHEAD WIRES
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING WATER LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING SANITARY SEWER
- EXISTING GASLINE
- EXISTING FENCE
- F.H. EXISTING FIRE HYDRANT
- WATER VALVE
- WATER METER
- GAS METER
- EXISTING POWER POLE
- EXISTING LIGHT POLE (FLIGHTS)
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM SEWER MANHOLE
- DROP BOX INLET (DBI)
- EXISTING TRANSFORMER PAD
- TELEPHONE PEDESTAL
- EXISTING TREE
- SPRINKLER HEAD
- EXISTING SIGN
- BORE HOLE
- DS DOWNSPOUT
- ELECTRIC JUNCTION BOX
- EXISTING GUIDE WIRE
- CO EXISTING CLEANOUT
- EXISTING BOLLARD
- EXISTING STRUCTURE (AS NOTED)
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING RIP RAP
- EXISTING LANDSCAPED AREA

SHERMAN CARTER BARNHART ARCHITECTS

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270.651.7200

OWENSBORO INDOOR SPORTS FACILITY

500 W 3RD ST, OWENSBORO, KY 42301

EXISTING TOPOGRAPHIC PLAN

JOB NO.	223-061
DATE	05-20-24
DRAWN	M. ALLEN
CHECKED	R. TUTT

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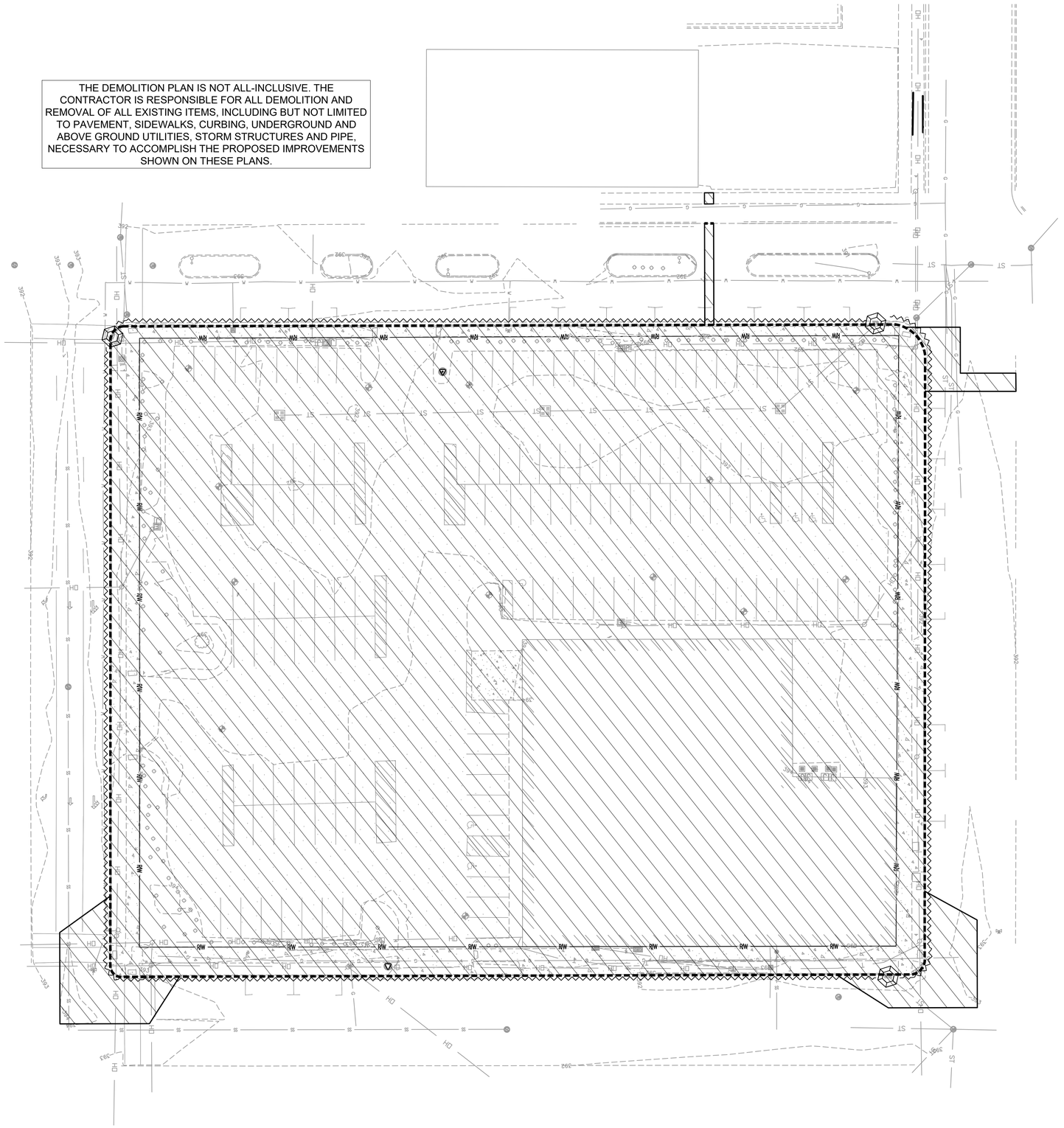
REVISIONS

No.	Description	Date

SHEET

C-2.0

THE DEMOLITION PLAN IS NOT ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND REMOVAL OF ALL EXISTING ITEMS, INCLUDING BUT NOT LIMITED TO PAVEMENT, SIDEWALKS, CURBING, UNDERGROUND AND ABOVE GROUND UTILITIES, STORM STRUCTURES AND PIPE, NECESSARY TO ACCOMPLISH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.



LEGEND
SYMBOLS THAT MAY APPEAR ON DRAWING

- SITE DEMOLITION - REMOVE ASPHALT, CONCRETE, SIDEWALK, UTILITIES, DROP BOX INLETS, BUILDING, ECT. NOT LIMITED TO ITEMS LISTED.
- CURB & GUTTER REMOVAL

CONSTRUCTION LEGEND

- INLET PROTECTION RE: DETAIL 9 / C-6.0
- FIBER ROLL RE: DETAIL 10 / C-6.0

EROSION PREVENTION MAINTENANCE SCHEDULE:

ALL BMP'S NEED TO BE MAINTAINED EVERY SEVEN (7) DAYS, AFTER EVERY STORM EVENT THAT EQUALS OR EXCEEDS 1/2 INCH PRECIPITATION, OR AFTER HEAVY USE.

SILT FENCE:
1. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO 1/3 THE HEIGHT OF THE FENCE.
2. IF FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.
3. TAKE CARE TO AVOID UNDERMINING OR DAMAGING THE FENCE WHEN CLEANING OUT SEDIMENT.
4. REMOVE THE FENCE AFTER ITS CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED. REMOVE THE FENCE AND SEDIMENT DEPOSITS, BRING THE DISTURBED AREA TO GRADE, AND STABILIZE IT USING THE APPROPRIATE PERMANENT STABILIZATION METHOD.

TEMPORARY CONSTRUCTION ENTRANCE:
1. CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY.
2. MADE DAILY INSPECTIONS DURING WET WEATHER. MAINTENANCE IS REQUIRED MORE FREQUENTLY IN WET CONDITIONS.
3. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
4. WASH OR REPLACE STONE AS NEEDED AND AS DIRECTED BY THE INSPECTOR. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFFSITE BY VEHICLES. FREQUENT WASHING WILL EXTEND THE USEFUL LIFE OF THE STONE.
5. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. REPAIR ANY BROKEN PAVEMENT IMMEDIATELY.
6. REMOVE TEMPORARY CONSTRUCTION ENTRANCE AS SOON AS THEY ARE NO LONGER NEEDED TO PROVIDE ACCESS TO THE SITE.

STONE BAG INLET PROTECTION:
1. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE STONE BAGS SILT CHECK BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO 1/3 THE GEIGHT OF THE FENCE.
2. IF STONE BAGS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE OR DAMAGES OCCUR, REPLACE THE AFFECTED STONE BAGS IMMEDIATELY.
3. TAKE CARE TO AVOID UNDERMINING OR DAMAGING THE STONE BAGS WHEN CLEANING OUT SEDIMENT..
4. REMOVE THE STONE BAGS AFTER ITS CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED. REMOVE THE STONE BAGS AND SEDIMENT DEPOSITS, BRING THE DISTURBED AREA TO GRADE, AND STABILIZE IT USING THE APPROPRIATE PERMANENT STABILIZATION METHOD.

EROSION PREVENTION & SEDIMENT CONTROL NOTES:

1. THE APPROVED EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLAN SHALL BE IMPLEMENTED PRIOR TO ANY LAND DISTURBING ACTIVITIES ON THE CONSTRUCTION SITE. ANY MODIFICATIONS TO THE APPROVED EPSC PLAN MUST BE REVIEWED AND APPROVED BY BOWLING GREEN PUBLIC WORKS OFFICE. EPSC BMP'S SHALL BE INSTALL PER THE PLAN AND BOWLING GREEN PUBLIC WORK STANDARDS.
2. ACTIONS MUST BE TAKEN TO MINIMIZE THE TRACKING OF MUD AND SOIL FROM CONSTRUCTION AREAS ONTO PUBLIC ROADWAYS. SOIL TRACKED ONTO THE ROADWAY SHALL BE REMOVED DAILY.
3. SOIL STOCKPILES SHALL BE LOCATED AWAY FROM STREAMS, PONDS,SWALED AND CATCH BASINS. STOCKPILES SHALL BE SEEDED, MULCHED, AND ADEQUATELY CONTAINED THROUGH THE USE OF SILT FENCE.
4. WHERE CONSTRUCTION OR LAND DISTURBANCE ACTIVITY WILL OR HAS TEMPORARILY CEASED ON ANY PORTION OF A SITE, TEMPORARY SITE STABILIZATION MEASURES SHALL BE REQUIRED AS SOON AS PRACTICABLE, BUT NO LATER THAN 14 CALENDAR DAYS AFTER ACTIVITY HAS CEASED.
5. SEDIMENT-LADEN GROUNDWATER ENCOUNTERED DURING TRENCHING, BORING OR OTHER EXCAVATION ACTIVITIES SHALL BE PUMPED TO A SEDIMENT TRAPPED DEVICE PRIOR TO BEING DISCHARGED INTO A STREAM, POND, SWALE OR CATCH BASIN.

EPSC & CONSTRUCTION PHASE 1

1. THE FOLLOWING PHASING IS SUGGESTED BUT IS SUBJECT TO CHANGE UPON THE SELECTION OF A SITE CONTRACTOR THAT MAY PROPOSE A MORE FEASIBLE PLAN. ANY CHANGES TO THE APPROVED EROSION PREVENTION AND SEDIMENT CONTROL PLAN WILL RESULT IN REQUIRING REDLINE PLANS TO BE SUBMITTED FOR REVIEW AND APPROVAL BY BOWLING GREEN PUBLIC WORK.
2. INSTALL INLET PROTECTION.
3. INSTALL TEMPORARY SILT FENCE PROTECTION.
4. INSTALL CONSTRUCTION ENTRANCE.
5. BEGIN EARTHWORK.

SITE DEMOLITION GENERAL NOTES:

1. THE CONTRACTOR SHALL CONFORM TO LOCAL CODES, OBTAIN ALL PERMITS AND GIVE ALL NOTICES REQUIRED FOR EXECUTION OF THE WORK.
2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL CHARTED AND UNCHARTED UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN, REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
3. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE LIMITS OF DEMOLITION WITH THE OWNER'S REPRESENTATIVE.
4. SAW CUT TO PROVIDE A CLEAN EDGE IN AREAS WHERE EXISTING PAVEMENT, WALKS, OR CURBS ARE TO BE REMOVED. THE EXTENT OF PAVEMENT DEMOLITION SHALL BE COORDINATED WITH THE LIMIT OF NEW IMPROVEMENTS ON THE PROPOSED SITE IMPROVEMENT PLANS.
5. THE CONTRACTOR SHALL COORDINATE PHASING OF THE DEMOLITION WITH THE OWNER'S REPRESENTATIVE AND LOCAL GOVERNING AGENCY PRIOR TO BEGINNING WORK. DISRUPTION OF EXISTING UTILITY SERVICES AND TRAFFIC PATTERNS SHALL BE MINIMIZED TO THE EXTENT POSSIBLE AND INITIATED ONLY AFTER APPROVAL BY THE LOCAL GOVERNING AGENCY AND THE UTILITY COMPANIES.
6. CAVITIES CREATED DURING DEMOLITION SHALL BE SUITABLY BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING RECOMMENDATIONS AND SPECIFICATIONS.
7. THE CONTRACTOR SHALL USE WATER SPRINKLING AND/OR OTHER SUITABLE METHODS AS NEEDED TO CONTROL DUST CAUSED BY THE DEMOLITION WORK.
8. THE CONTRACTOR IS RESPONSIBLE FOR ALL ABOVE GROUND AND BELOW GROUND DEMOLITION AND REMOVAL NECESSARY TO ACCOMPLISH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
9. THE CONTRACTOR SHALL PRESERVE AND PROTECT SURVEY CONTROL POINTS AND SHALL BE RESPONSIBLE FOR REPLACEMENT OF ANY DISTURBED CONTROL POINTS AT NO COST TO THE OWNER.
10. SITE LIGHTING DEMOLITION AND LAYOUT SHALL BE COORDINATED WITH THE ELECTRICAL DRAWINGS.
11. RELOCATION OF EXISTING PLANT MATERIALS SHALL BE COORDINATED WITH THE OWNER AND RELOCATED TO A DESIGNATED AREA ON SITE.
12. EXISTING SHRUBS TO BE PRESERVED ARE TO BE BARRICADED BEFORE BEGINNING CONSTRUCTION.
13. THE CONTRACTOR SHALL INCORPORATE INTO HIS WORK ANY ISOLATION VALVES OR TEMPORARY PLUGS REQUIRED TO CONSTRUCT NEW UTILITY LINES WHILE DEMOLISHING EXISTING UTILITY LINES.
14. REFER TO CONSTRUCTION MANAGER SITE PHASING REQUIREMENTS FOR ADDITIONAL INFORMATION.
15. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 4" TOPSOIL, SEEDED, MULCHED AND WATERED AS NECESSARY TO PROVIDE SUBSTANTIAL GRASS COVER.
16. ANY DAMAGE FROM CONSTRUCTION ACTIVITIES WITHIN PROPERTY LINES SHALL BE REPAIRED TO NEW CONDITION AT NO COST TO THE OWNER(S). EXTENTS OF DAMAGE AND REPAIR SHALL BE COORDINATED AND APPROVED BY THE OWNER(S) AND ENGINEER PRIOR TO CONSTRUCTION.

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DEMOLITION & EROSION PROTECTION SEDIMENT CONTROL PLAN PHASE I

JOB NO.	223-061
DATE	05-20-24
DRAWN	M. ALLEN
CHECKED	R. TUTT

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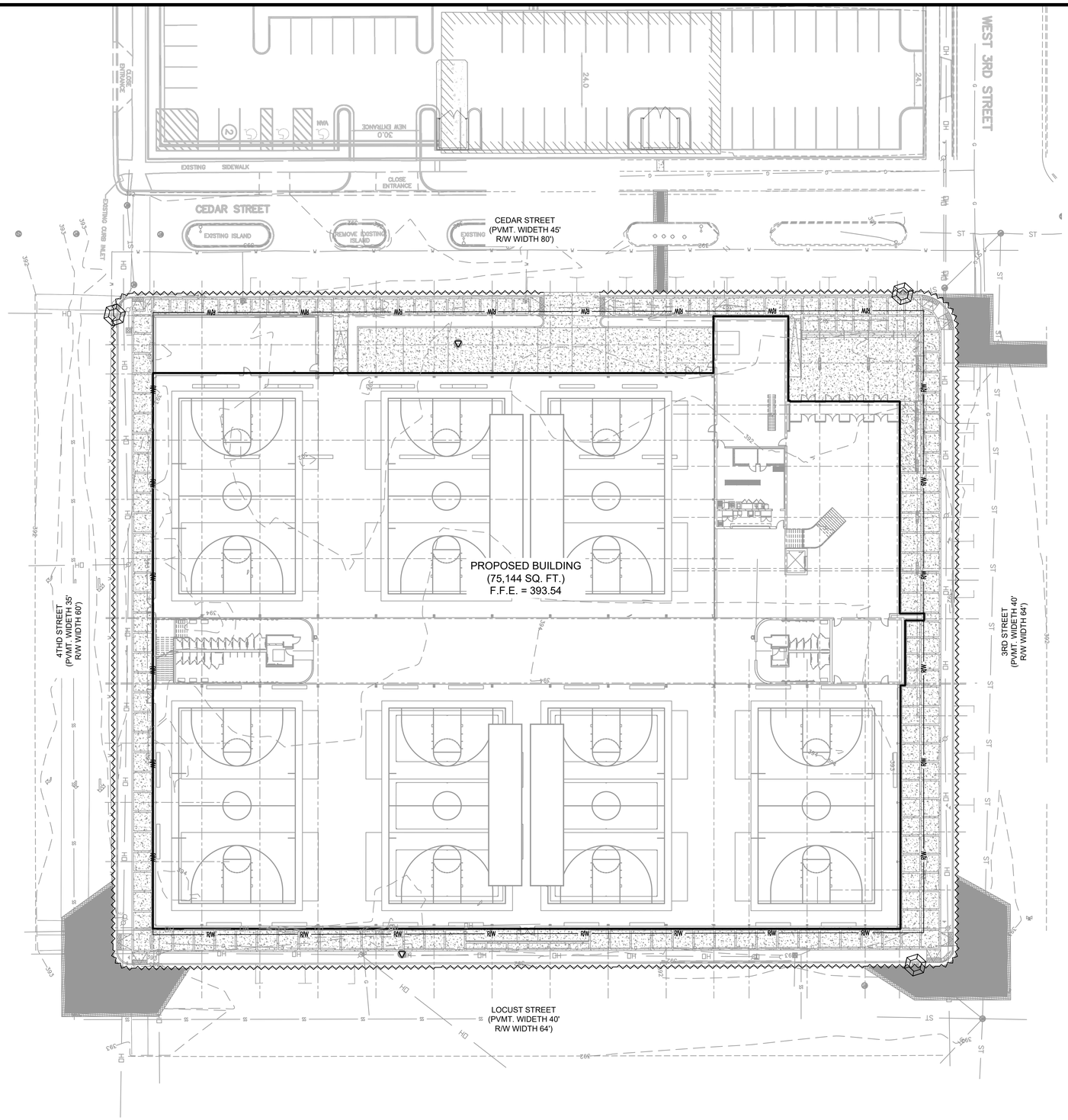

CONSTRUCTION LEGEND

INLET PROTECTION
RE: DETAIL 9 / C-6.0

FIBER ROLL
RE: DETAIL 10 / C-6.0

EPSC & CONSTRUCTION PHASE 2

1. THE FOLLOWING PHASING IS SUGGESTED BUT IS SUBJECT TO CHANGE UPON THE SELECTION OF A SITE CONTRACTOR THAT MAY PROPOSE A MORE FEASIBLE PLAN. ANY CHANGES TO THE APPROVED EROSION PREVENTION AND SEDIMENT CONTROL PLAN WILL RESULT IN REQUIRING REDLINE PLANS TO BE SUBMITTED FOR REVIEW AND APPROVAL BY BOWLING GREEN PUBLIC WORK.
2. MAINTAIN EXISTING INLET PROTECTION.
3. MAINTAIN EXISTING TEMPORARY SILT FENCE PROTECTION.
4. MAINTAIN EXISTING CONSTRUCTION ENTRANCE.
5. BEGIN EARTHWORK.
6. CONSTRUCT BUILDING.
7. INSTALL STORM DRAINAGE SYSTEM.
8. INSTALL NEW INLET PROTECTION.
9. INSTALL UTILITIES.
10. INSTALL CURBING, PAVEMENT AND SIDEWALKS.
11. REMOVE TEMPORARY EROSION CONTROL DEVICES AFTER SUBSTANTIAL COMPLETION.

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ARCHITECTS

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EROSION PREVENTION EROSION CONTROL PLAN PHASE II

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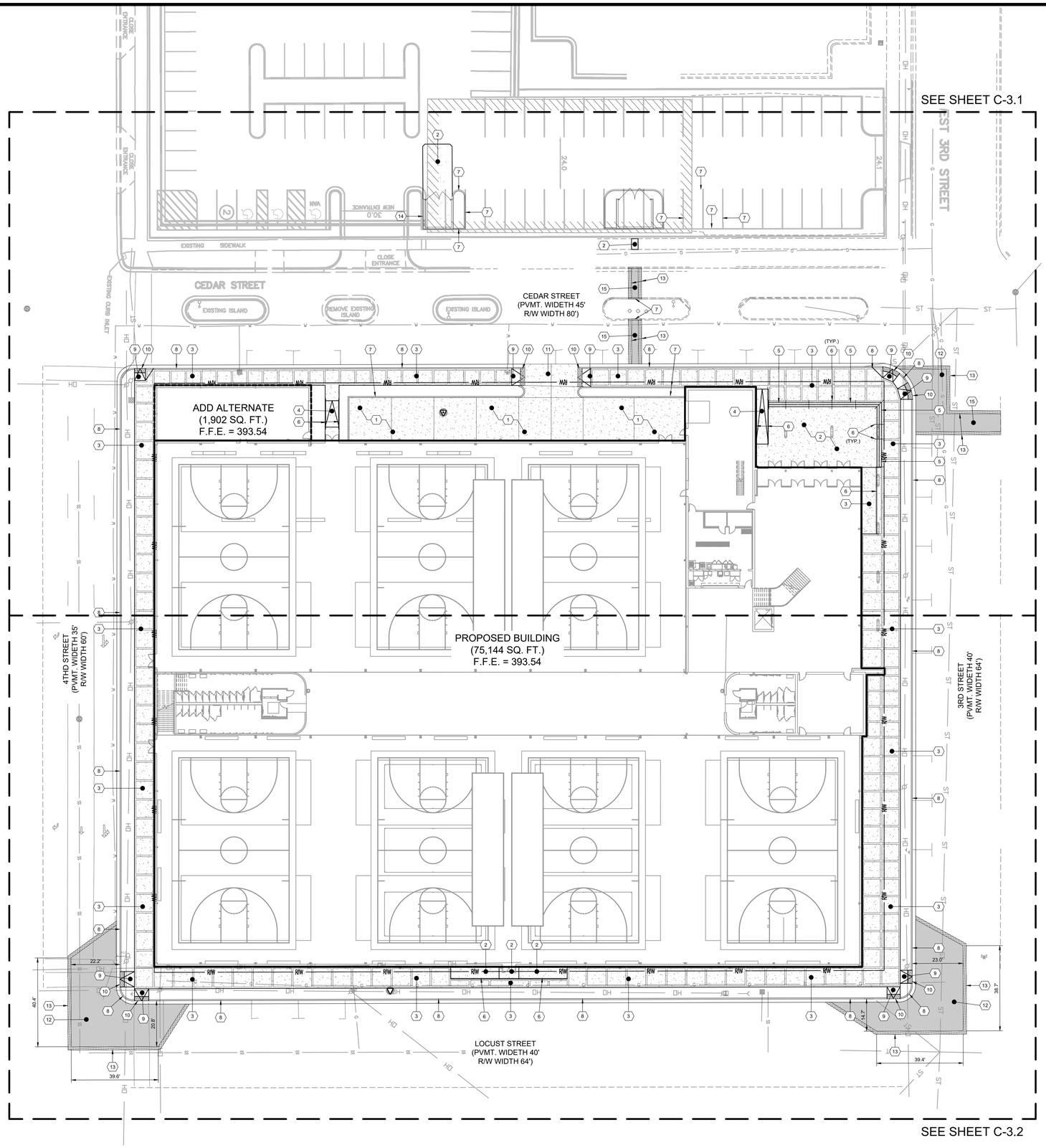

CONSTRUCTION LEGEND

- CONCRETE PAVEMENT / SIDEWALK
- HEAVY DUTY ASPHALT PAVEMENT
- EDGE KEY
- TACTILE WARNING STRIP

GENERAL NOTES

1. LOT LIGHTING CONCRETE FOOTINGS TO CONFORM WITH THE SOILS REPORT RECOMMENDATIONS FOR THIS PARTICULAR SITE.
2. ANY WORK PERFORMED IN THE R.O.W. SHALL BE PER CITY GUIDELINES AND STANDARD SPECIFICATIONS.
3. ALL EXPOSED CONCRETE CORNERS TO BE CHAMFERED AND/OR TO HAVE RADII.
4. ALL EXPOSED CONCRETE CURBS, SIDEWALK, SLABS, PAVEMENT, AND FOUNDATIONS SHALL BE TREATED WITH AN AQURON CONCRETE TREATMENT AS MANUFACTURED BY AQURUN, OR APPROVED EQUAL.
5. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF ANY REMAINING SITE IMPROVEMENTS PRIOR TO CONSTRUCTION.
6. ALL JOINTS WHERE NEW PAVEMENT ADJOINS EXISTING PAVEMENT SHALL BE SAW CUT, TO INSURE A STRAIGHT CLEAN LINE, OR WILL BE CARRIED TO THE NEXT EXPANSION JOINT ON DOT R.O.W. WHERE FEASIBLE.
7. ALL CURB RADII SHALL BE 5' (U.N.O.).
8. ALL CURB FACES AND PAVEMENT ELEVATION SHALL MATCH ADJOINING CURBING AND PAVEMENT EXACTLY.
9. STABILIZE AND GRASS ALL SLOPES TO PREVENT EROSION.
10. ALL DIMENSIONS ARE GIVEN TO THE FACE OF CURB.
11. CONTRACTOR TO USE EXISTING TOPOGRAPHIC PLAN IN CONJUNCTION WITH THIS SITE PLAN FOR LOCATION AND SIZES OF EXISTING FEATURES.
12. UNDERGROUND UTILITIES ARE BASED ON FIELD SURVEY. OTHER UTILITIES MAY EXIST AND ARE UNMAPPED. CONTRACTOR TO FIELD VERIFY UTILITIES IN PROJECT AREA. CONTRACTOR WILL REPLACE/MEND ALL UTILITIES DAMAGED DURING CONSTRUCTION.
13. PROVIDE 1/2" EXPANSION JOINT MATERIAL WITH SEALANT WHERE CONCRETE CURBS, SIDEWALK, OR PAVING ABUTS STORM STRUCTURES, BUILDINGS, ETC.
14. AT END OF PROJECT, CONTRACTOR SHALL REMOVE ALL CONSTRUCTION FENCING, EROSION CONTROL STRUCTURES, AND OTHER TEMPORARY SERVICES ON SITE.
15. ALL 90° CONCRETE PAVEMENT CORNERS SHALL RECEIVE 12" BY 12" CHAMFER.
16. ALL DISTURBED AREAS AND PARKING LOT ISLANDS SHALL RECEIVE A MINIMUM OF 6" TOPSOIL, SEEDED AND WATERED AS NECESSARY TO PROVIDE SUBSTANTIAL GRASS COVER.
17. ANY DAMAGE TO EXISTING STREETS/ROADS DUE TO CONSTRUCTION ACTIVITIES SHALL BE REPAIRED TO NEW CONDITION AT NO COST TO THE OWNER(S). EXTENTS OF DAMAGE AND REPAIR SHALL BE COORDINATED AND APPROVED BY THE OWNER(S) AND ENGINEER PRIOR TO CONSTRUCTION.
18. RE-STRIPE PAVEMENT MARKINGS TO MATCH EXISTING CONDITIONS.
19. REFER TO OWENSBORO METROPOLITAN PUBLIC IMPROVEMENT SPECIFICATIONS FOR ALL WORK IN THE RIGHT-OF-WAY

KEY NOTES

1. HEAVY DUTY CONCRETE PAVEMENT. RE: DETAIL 1 / C-6.0
2. ADA COMPLIANT SIDEWALK. RE: DETAIL 2 / C-6.0
3. ADA COMPLIANT SIDEWALK WITH PAVER FRAME. RE: DETAIL 3 / C-6.0
4. ADA COMPLIANT RAMP. RE: DETAIL 2 / C-6.0 AND SHEET C-4.0 GRADING PLAN
5. CONCRETE STEPS. RE: DETAIL 5 / C-6.0
6. HANDRAIL. RE: DETAIL 6 / C-6.0
7. HEADER CURB. RE: DETAIL 7 / C-6.0
8. R/W CURB AND GUTTER. RE: DETAIL 11 / C-6.0
9. R/W SIDEWALK RAMP. RE: DETAIL 12 / C-6.0 AND SHEET C-4.0 GRADING PLAN
10. R/W TACTILE WARNING STRIP. RE: DETAIL 1 / C-6.1
11. R/W CONCRETE ENTRANCE. RE: DETAIL 2 / C-6.1
12. HEAVY DUTY ASPHALT PAVEMENT. RE: DETAIL 8 / C-6.0
13. EDGE KEY. RE: DETAIL 4 / C-6.0
14. DUMPSTER ENCLOSURE. RE: DETAIL 3 / C-6.1
15. STREET CUT REPAIR. RE: DETAIL 4 / C-6.1

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SITE LAYOUT PLAN

JOB NO.	223-061
DATE	05-20-24
DRAWN	M. ALLEN
CHECKED	R. TUTT

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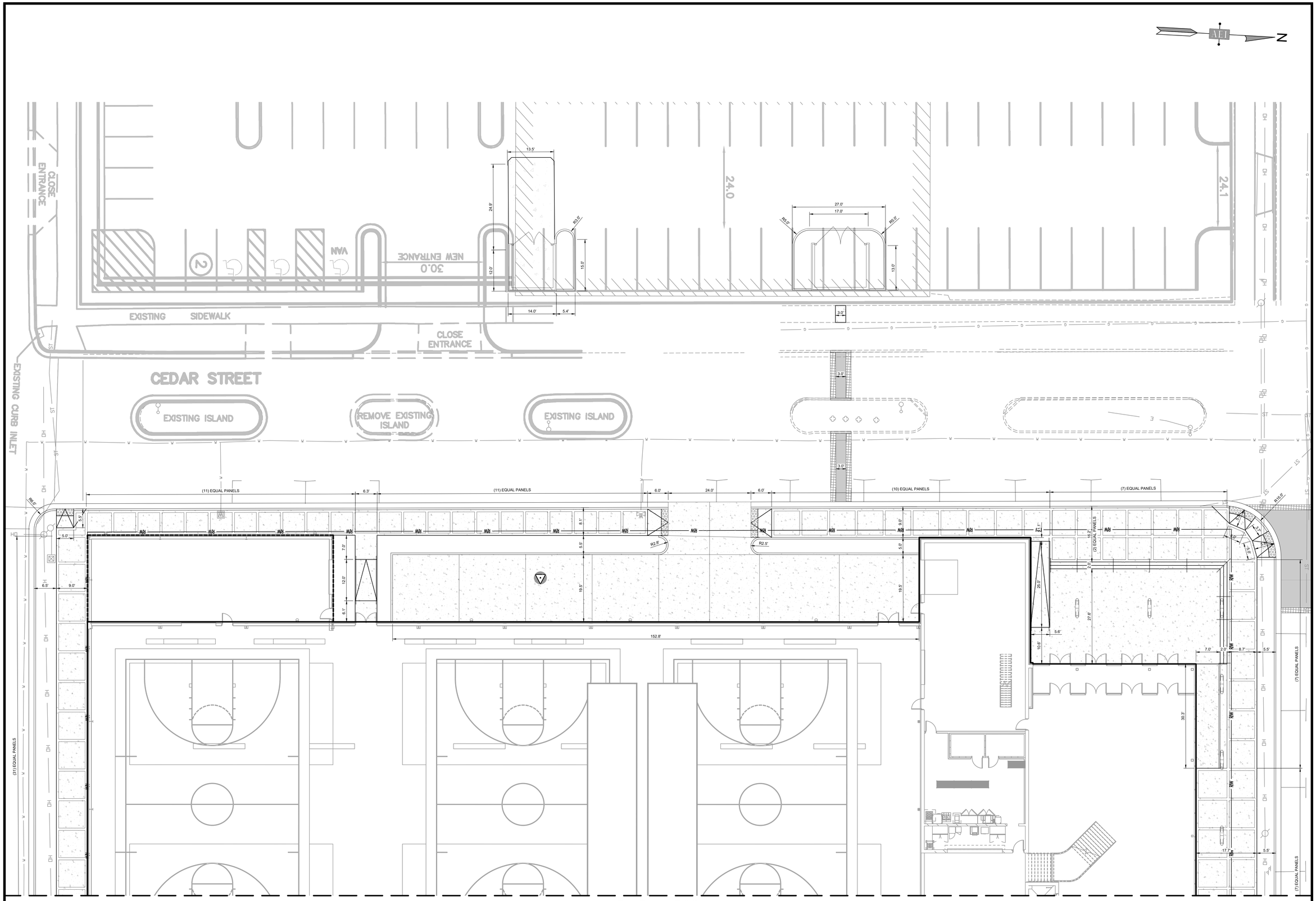

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DIMENSIONED SITE LAYOUT PLAN

JOB NO.	223-061
DATE	05-20-24
DRAWN	M. ALLEN
CHECKED	R. TUTT

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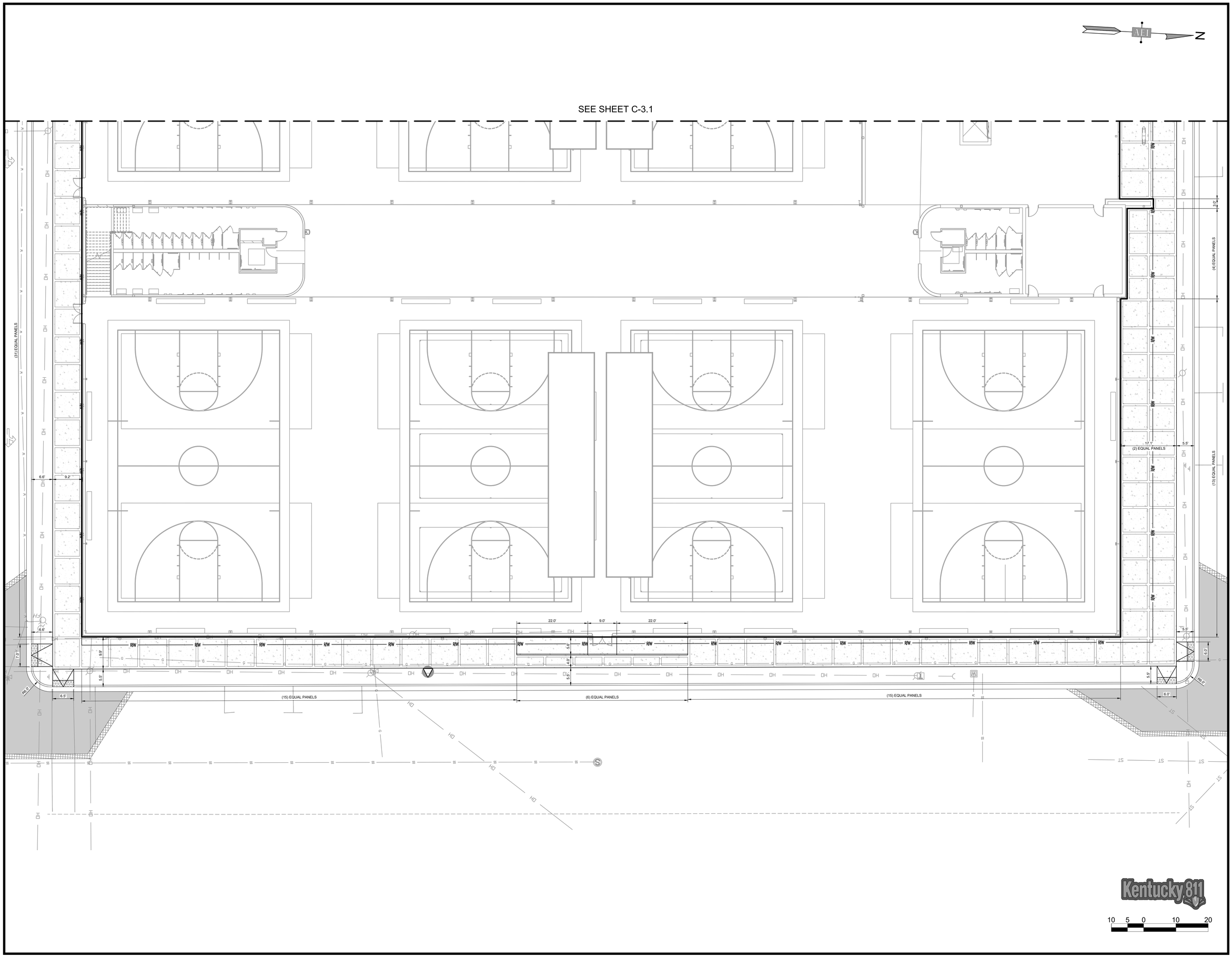

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DIMENSIONED SITE LAYOUT PLAN

JOB NO.	223-061
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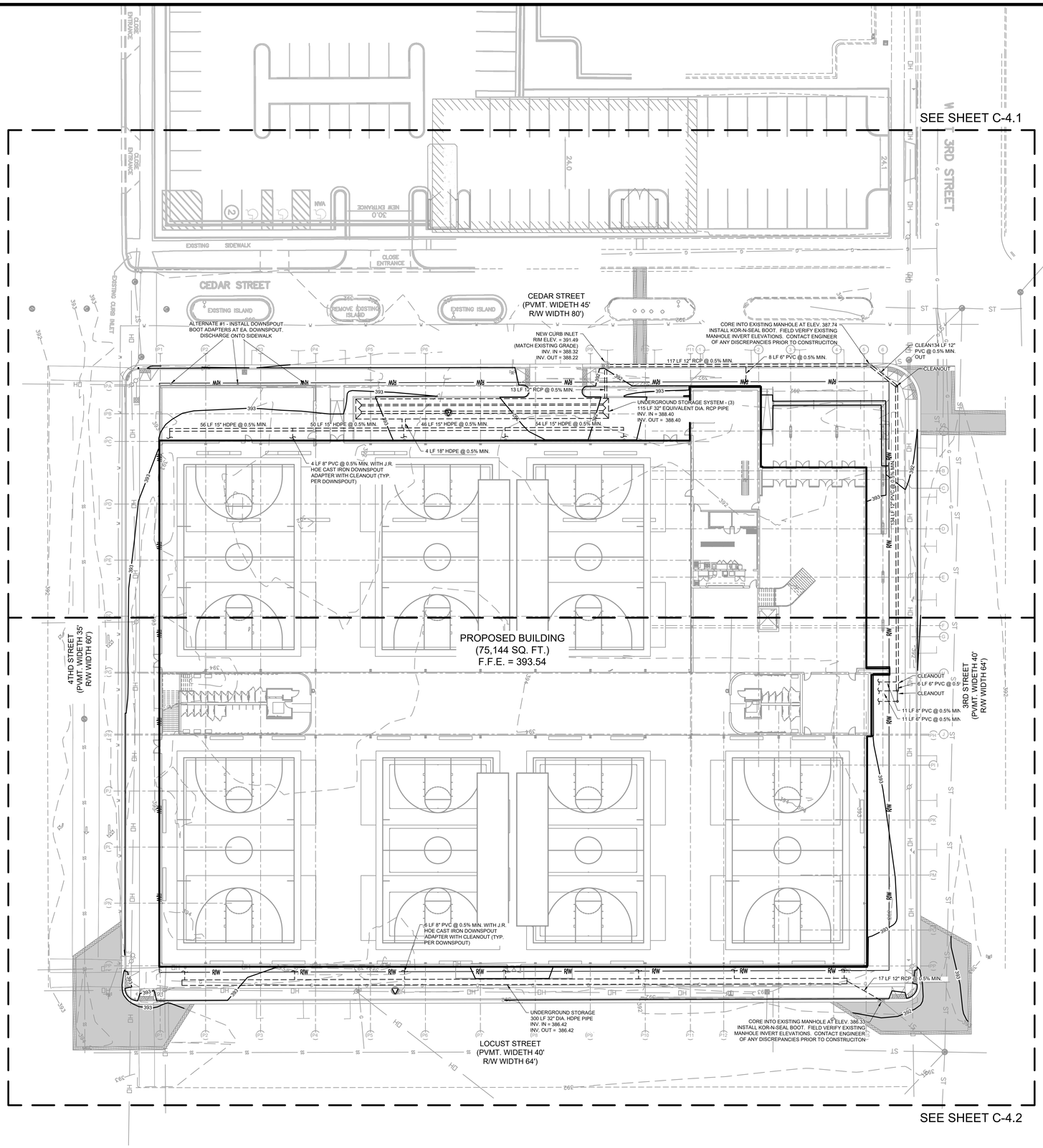

DRAINAGE STRUCTURE NOTES:

1. ALL LENGTHS OF SEWER PIPES ARE APPROXIMATES. CONTRACTOR SHALL PROVIDE PIPE MATERIALS AND FITTINGS AS NECESSARY TO COMPLETE STORM SEWER SYSTEM AS INDICATED OR REQUIRED.
2. ALL PIPES ENTERING STORM SEWER STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
3. ALL PIPE CONNECTIONS SHALL BE WATERTIGHT.
4. ADJUST DRAIN FRAMES AND GRATES OR COVERS TO FINISH GRADE AND ENSURE THAT GRATES AND FRAMES ARE FIRMLY SEATED.
5. PROVIDE CONSISTENT SLOPE TO STORM DRAINAGE STRUCTURES. AVOID ABRUPT GRADE CHANGES ADJACENT TO DRAINAGE STRUCTURE.
6. ALL DOWNSPOUTS SHALL BE CONNECTED WITH DOWNSPOUT BOOT TO THE STORM SEWER SYSTEM.
7. THE FOUNDATION DRAIN SHALL BE CONNECTED TO STORM SEWER SYSTEM AS NECESSARY TO PROVIDE POSITIVE DRAINAGE.
8. ALL SIDEWALK AND CURB HEIGHTS ARE SIX (6) INCHES UNLESS NOTED OTHERWISE.
9. PROVIDE 5% MINIMUM SLOPE AWAY FROM BUILDING IN GRASS AREAS UNLESS NOTED OTHERWISE.
10. PROPOSED GRADE AROUND BUILDING SHALL BE 2 INCHES BELOW FINISH FLOOR MINIMUM UNLESS NOTED OTHERWISE.
11. CONNECT FOUNDATION DRAINS TO PROPOSED STORM SYSTEM.
12. REFER TO OWENSBORO METROPOLITAN PUBLIC IMPROVEMENT SPECIFICATIONS FOR ALL WORK IN THE RIGHT-OF-WAY.

ADA GENERAL ACCESSIBILITY GUIDELINE NOTES:

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ADA COMPATIBILITY PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES ARISE, CONTACT THE ENGINEER IMMEDIATELY.

1.	CURB RAMP:	
	MAXIMUM RUNNING SLOPE	8.33%
	TARGET MAX. RUNNING SLOPE	7.5%-8.0%
2.	ACCESSIBLE PARKING PAD:	
	MAX. CROSS SLOPE IN ANY DIRECTION	2.0%
	TARGET MAX. CROSS SLOPE IN ANY DIRECTION	1.5%-1.9%
3.	CROSSWALKS AND ACCESSIBLE ROUTES:	
	MAX. RUNNING SLOPE	5.0%
	TARGET MAX. RUNNING SLOPE	4.5%-4.9%
	MAX. CROSS SLOPE	2.0%
	TARGET MAX. CROSS SLOPE	1.5%-1.9%
4.	CLEAR FLOOR AREAS AT DOOR OPENINGS:	
	MAX. RUNNING SLOPE	2.0%
	TARGET MAX. RUNNING SLOPE	1.5%-1.9%
	MAX. CROSS SLOPE	2.0%
	TARGET MAX. CROSS SLOPE	1.5%-1.9%

SYMBOLS THAT MAY APPEAR ON THIS PLAN

SYMBOL	ABBREVIATION
XXX.XX FG	FINISH GRADE
XXX.XX EX	TIE TO EXISTING
XXX.XX TC	TOP OF CURB
XXX.XX BC	BOTTOM OF CURB
XXX.XX TS	TOP OF SIDEWALK
XXX.XX BS	BOTTOM OF SIDEWALK
XXX.XX TW	TOP OF WALL
XXX.XX BW	BOTTOM OF WALL

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GRADING & DRAINAGE PLAN

JOB NO.	223-061
DATE	05-20-24
DRAWN	M. ALLEN
CHECKED	R. TUTT

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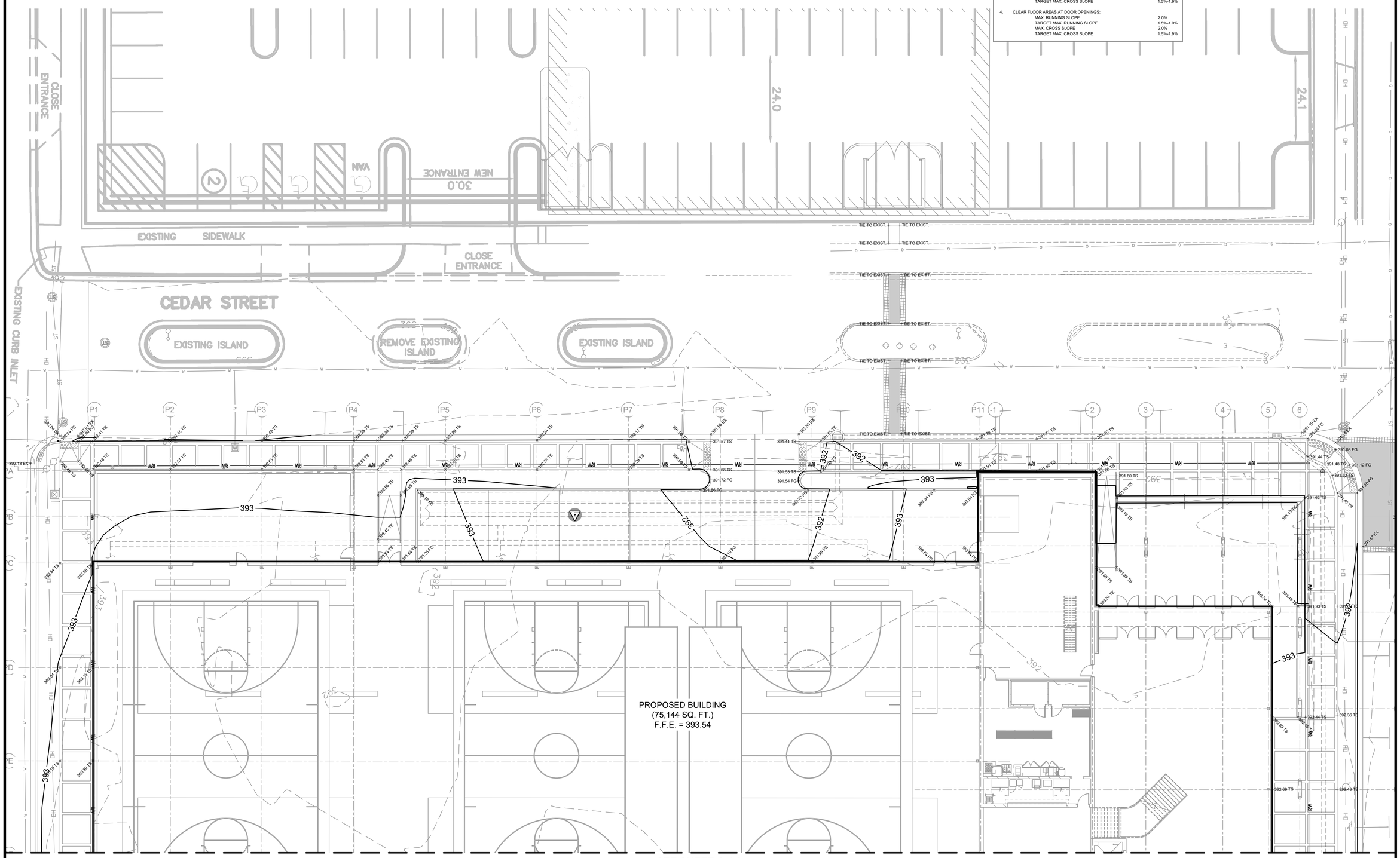
C-4.0

SYMBOLS THAT MAY APPEAR ON THIS PLAN	
SYMBOL	ABBREVIATION
XXX.XX FG	FINISH GRADE
XXX.XX EX	TIE TO EXISTING
XXX.XX TC	TOP OF CURB
XXX.XX BC	BOTTOM OF CURB
XXX.XX TS	TOP OF SIDEWALK
XXX.XX BS	BOTTOM OF SIDEWALK
XXX.XX TW	TOP OF WALL
XXX.XX BW	BOTTOM OF WALL

ADA GENERAL ACCESSIBILITY GUIDELINE NOTES:

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ADA COMPATIBILITY PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES ARISE, CONTACT THE ENGINEER IMMEDIATELY.

1. CURB RAMP-
   - MAXIMUM RUNNING SLOPE 8.33%
   - TARGET MAX. RUNNING SLOPE 7.5%-8.0%
2. ACCESSIBLE PARKING PAD:
   - MAX. CROSS SLOPE IN ANY DIRECTION 2.0%
   - TARGET MAX. CROSS SLOPE IN ANY DIRECTION 1.5%-1.9%
3. CROSSWALKS AND ACCESSIBLE ROUTES:
   - MAX. RUNNING SLOPE 5.0%
   - TARGET MAX. RUNNING SLOPE 4.5%-4.9%
   - MAX. CROSS SLOPE 2.0%
   - TARGET MAX. CROSS SLOPE 1.5%-1.9%
4. CLEAR FLOOR AREAS AT DOOR OPENINGS:
   - MAX. RUNNING SLOPE 2.0%
   - TARGET MAX. RUNNING SLOPE 1.5%-1.9%
   - MAX. CROSS SLOPE 2.0%
   - TARGET MAX. CROSS SLOPE 1.5%-1.9%



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ENLARGED GRADING PLAN

JOB NO.	223-061
DATE	05-20-24
DRAWN	M. ALLEN
CHECKED	R. TUTT

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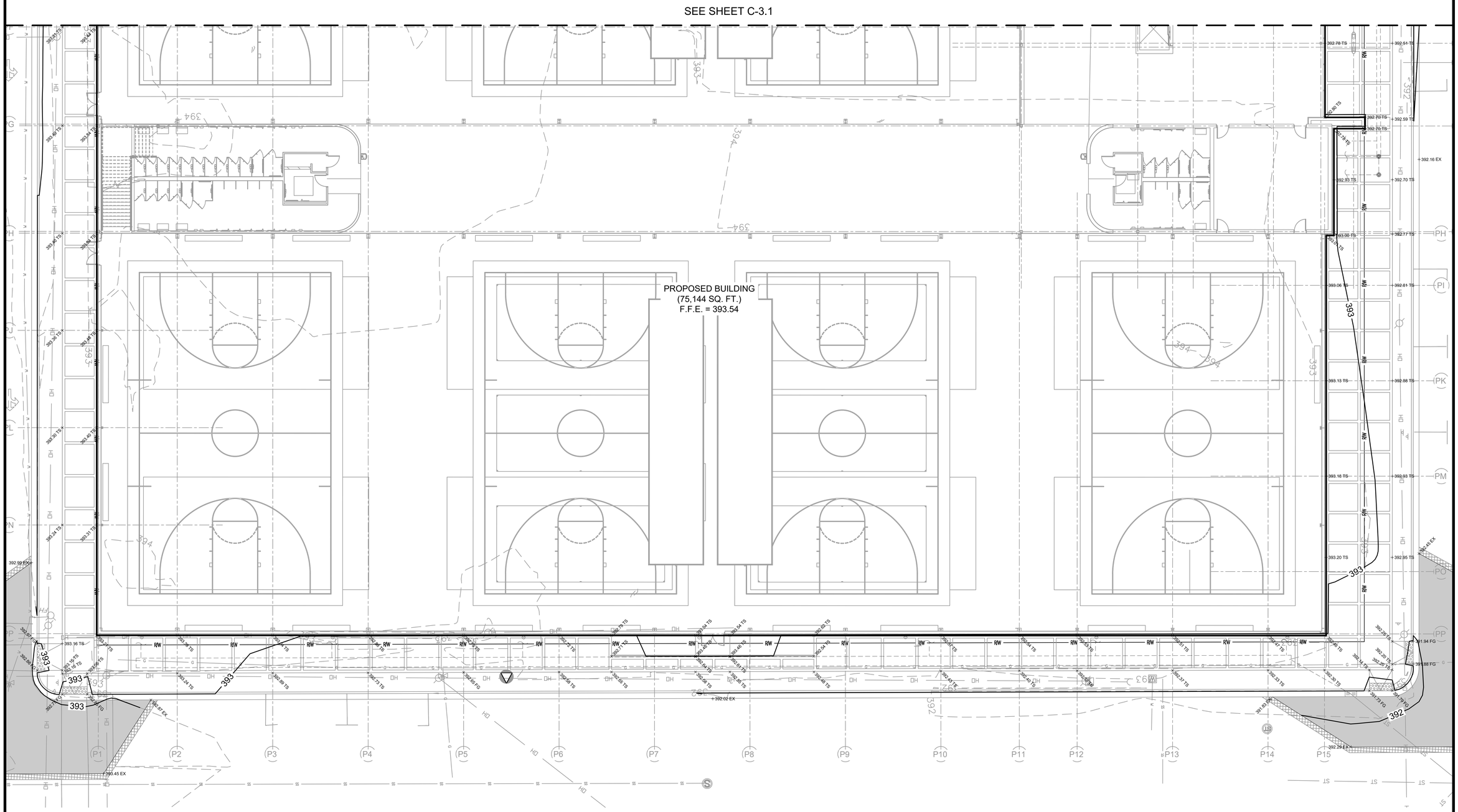
SYMBOLS THAT MAY APPEAR ON THIS PLAN	
SYMBOL	ABBREVIATION
XXX.XX FG	FINISH GRADE
XXX.XX EX	TIE TO EXISTING
XXX.XX TC	TOP OF CURB
XXX.XX BC	BOTTOM OF CURB
XXX.XX TS	TOP OF SIDEWALK
XXX.XX BS	BOTTOM OF SIDEWALK
XXX.XX TW	TOP OF WALL
XXX.XX BW	BOTTOM OF WALL

ADA GENERAL ACCESSIBILITY GUIDELINE NOTES:

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ADA COMPATIBILITY PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES ARISE, CONTACT THE ENGINEER IMMEDIATELY.

1. CURB RAMP:
   - MAXIMUM RUNNING SLOPE 8.33%
   - TARGET MAX. RUNNING SLOPE 7.5%-8.0%
2. ACCESSIBLE PARKING PAD:
   - MAX. CROSS SLOPE IN ANY DIRECTION 2.0%
   - TARGET MAX. CROSS SLOPE IN ANY DIRECTION 1.5%-1.9%
3. CROSSWALKS AND ACCESSIBLE ROUTES:
   - MAX. RUNNING SLOPE 5.0%
   - TARGET MAX. RUNNING SLOPE 4.5%-4.9%
   - MAX. CROSS SLOPE 2.0%
   - TARGET MAX. CROSS SLOPE 1.5%-1.9%
4. CLEAR FLOOR AREAS AT DOOR OPENINGS:
   - MAX. RUNNING SLOPE 2.0%
   - TARGET MAX. RUNNING SLOPE 1.5%-1.9%
   - MAX. CROSS SLOPE 2.0%
   - TARGET MAX. CROSS SLOPE 1.5%-1.9%



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ENLARGED GRADING PLAN

JOB NO.	223-061
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DRAWN	M. ALLEN
CHECKED	R. TUTT

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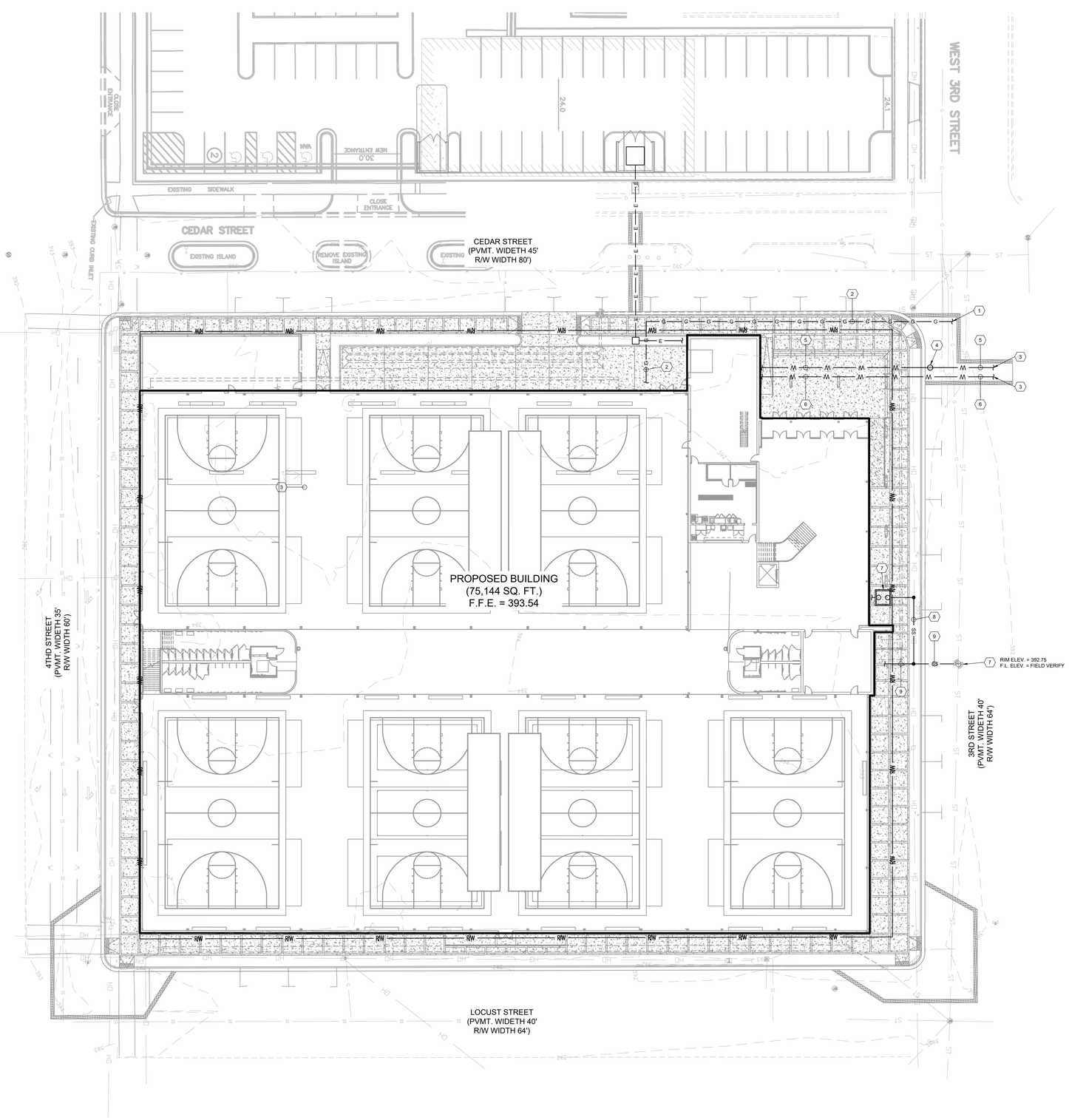

PROPOSED UTILITY LEGEND

—— SS ——	PROPOSED SANITARY SEWER
—— W ——	PROPOSED WATER SERVICE
—— E ——	PROPOSED UNDERGROUND ELECTRIC
—— G ——	PROPOSED UNDERGROUND GAS
—— T ——	PROPOSED COMMUNICATIONS

UTILITY NOTES:

1. THE CONTRACTOR IS ADVISED THAT ALL EXISTING UTILITIES SHOWN WERE FIELD SURVEYED BASED ON LOCATIONS PROVIDED BY EACH UTILITY COMPANY. OTHER UTILITIES MAY EXIST THAT ARE UNMAPPED. THE CONTRACTOR IS ADVISED TO FIELD VERIFY ALL UNDERGROUND UTILITIES BY CONTACTING THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS TO EXCAVATION.
2. ALL UTILITIES TO BE CONSTRUCTED TO WITHIN 5' OF BUILDING.
3. BACK FILL OF ALL TRENCHES BENEATH STRUCTURES AND/OR PAVEMENT SHALL BE CRUSHED STONE OR SIMILAR MATERIAL AS APPROVED BY ENGINEER.
4. CONTRACTORS ARE ADVISED TO COORDINATE INSTALLATION OF ALL BURIED CONDUITS AND LINES SUCH THAT LINES WHICH CROSS ARE LAID BEGINNING WITH DEEPEST LINE FIRST.
5. DEPTH OF WATERLINE SHALL BE ADJUSTED AS REQUIRED TO ALLOW FOR SPECIFIED PLACEMENT OF SANITARY AND STORM SEWERS, BUT IN NO CASE LESS THAN 30".
6. TAPPING AND INSPECTION FEES TO BE PAID BY CONTRACTOR, METER FEES TO BE PAID BY OWNER.
7. CONTRACTOR SHALL COORDINATE WATER AND SEWER SERVICES CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL UTILITY COMPANY.
8. ALL TRENCHING, PIPE LAYING AND BACK FILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
9. CONTRACTOR SHALL OBTAIN APPROVAL FROM ALL GOVERNING AGENCIES HAVING JURISDICTION OF UTILITY SYSTEMS PRIOR TO INSTALLATION.
10. ALL GATE VALVES SHALL BE PROVIDED WITH VALVE BOX IN ACCORDANCE WITH WATER UTILITY STANDARDS.
11. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE HYDRANTS AND SHALL BE CONSTRUCTED ACCORDING TO WATER DEPARTMENT STANDARDS.
12. ALL WATER AND SANITARY SEWER SERVICE LINES TO THE BUILDING(S) SHALL BE PROVIDED WITH A TEMPORARY PLUG (FOR OTHERS TO REMOVE AND EXTEND AS NECESSARY).
12. THE CONTRACTOR SHALL FLUSH AND TEST ALL NEW UTILITY LINES ACCORDING TO THE STATE DIVISION OF WATER OR LOCAL WATER CO. STANDARDS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS AND ELEVATIONS OF EXISTING AND PROPOSED UTILITIES PRIOR TO CONSTRUCTION. ANY CONFLICTS DISCOVERED AFTER CONSTRUCTION HAS BEGUN, SHALL BE CORRECTED AT CONTRACTORS EXPENSE.
14. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATER AND SEWER LINES IS TEN FEET OUTSIDE DIAMETER TO OUTSIDE DIAMETER. THE MINIMUM VERTICAL SEPARATION IS EIGHTEEN INCHES.
15. BEFORE YOU DIG: CONTRACTOR SHALL NOTIFY BUD, 1-800-752-6077 48 HOURS PRIOR TO EXCAVATION, TO LOCATE AND FLAG ALL UNDERGROUND UTILITIES WITHIN THE PROPOSED RIGHT OF WAY.
16. REFER TO OWENSBORO METROPOLITAN PUBLIC IMPROVEMENT SPECIFICATIONS FOR ELECTRICAL AND WATER STANDARD DETAILS.
17. REFER TO REGIONAL WATER RESOURCE AGENCY FOR SANITARY SEWER STANDARD DETAILS.

KEY NOTES

1. APPROXIMATE LOCATION OF GAS TIE-IN
2. GAS LINE INSTALLED BY ATMOS ENERGY. TRENCHING AND SLEEVING BY CONTRACTOR
3. APPROXIMATE LOCATION OF WATER HOT TAP
4. 3" TRAFFIC RATED WATER METER
5. 3" SDR-21 DOMESTIC WATER SUPPLY
6. 6" C-900 FIRE SUPPRESSION LINE
7. SANITARY SEWER MANHOLE
8. 4" SDR-35 SANITARY SEWER LINE @ 1.25% MINIMUM. REFER TO PLUMBING PLANS FOR CONTINUATION
9. 6" SDR-35 SANITARY SEWER LINE @ 1.25% MINIMUM. REFER TO PLUMBING PLANS FOR CONTINUATION
10. GREASE INTERCEPTOR. REFER TO PLUMBING PLANS FOR CONTINUATION
11. SANITARY SEWER CLEANOUT

40 20 0 40 80

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY RICHARD TUTT 16.2024 LICENSED PROFESSIONAL ENGINEER

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44 Aberdeen Drive Glasgow KY
270.651.7200

OWENSBORO INDOOR SPORTS FACILITY

500 W 3RD ST, OWENSBORO, KY 42301

SITE UTILITY PLAN

JOB NO.	223-061
DATE	05-20-24
DRAWN	M. ALLEN
CHECKED	R. TUTT

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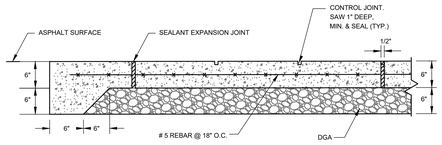
REVISIONS

No.	Description	Date

SHEET

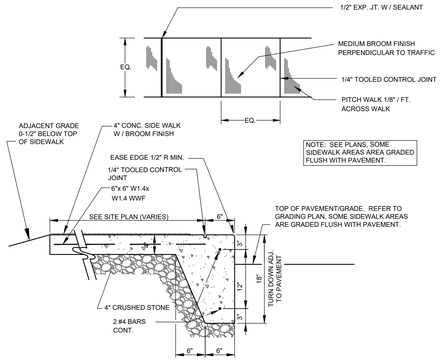
C-5.0



NOTES:
1. CONCRETE SHALL BE 4000 PSI AND MODULUS OF RUPTURE 650 PSI.
2. PROVIDE 1/2" EXPANSION JOINT SPACING WITH #5 BARS AT 18" O.C. EACH WAY (HEAVY BROOM FINISH).
3. PROVIDE 1/4" SAWN CONTROL JOINTS AT 25' O.C. MAX. SPACING.
4. PROVIDE EDGE EXPANSION JOINT AT STOOPS.
5. PROVIDE CONTROL JOINT SPACING AS FOLLOWS:
   6' FOR PAVEMENT 6' WIDE,
   8' FOR PAVEMENT 8' WIDE,
   10' FOR PAVEMENT 10' WIDE,
   12' FOR PAVEMENT 12' WIDE.
6. DGA SHOULD BE COMPACTED A MINIMUM OF 95 PERCENT OF THE MAXIMUM STANDARD PROTECTOR DRY DENSITY AS PER ASTM D-698. MOISTURE CONTENT SHALL BE WITHIN 4% OF OPTIMUM.

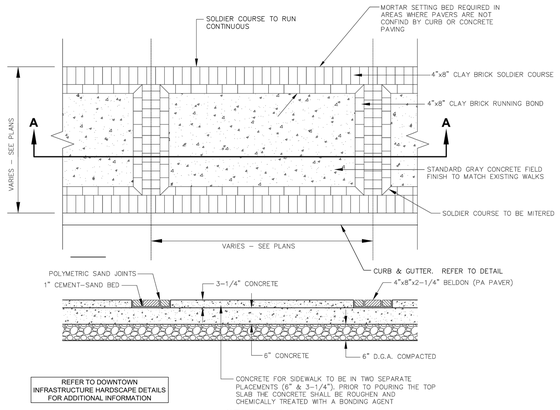
HEAVY DUTY CONCRETE PAVEMENT
DETAIL 1
N.T.S.

CONTRACTOR TO PROVIDE SMOOTH TROWLED CUSTOM 3" BORDER FOR CONCRETE PATTERN. WIDTH OF BORDER SHALL BE EQUAL AT EDGES AND TOOLED JOINTS. USE CUSTOM FINISHING TOOLS AS REQUIRED.



NOTE: SEE PLANS, SOME SIDEWALK AREAS AREA GRADED FLUSH WITH PAVEMENT.

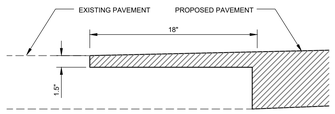
SIDEWALK
DETAIL 2
N.T.S.



SECTION A-A

SIDEWALK PAVING CONDITION TYPE 3
WITH BANDING LAYOUT
NOT TO SCALE

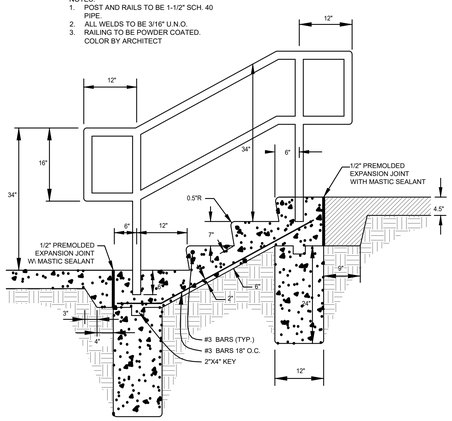
SIDEWALK WITH PAVER FRAME
DETAIL 3
N.T.S.



NOTE:
WORK UNDER THIS ITEM SHALL INCLUDE CUTTING OUT THE EXISTING BITUMINOUS SURFACE TO A MINIMUM DEPTH OF 1.5" AND WIDTH AS SHOWN, SO THE NEW SURFACE WILL KEY INTO THE EXISTING SURFACE.

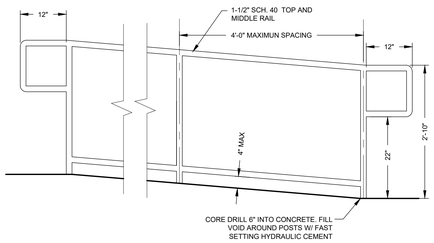
EDGE KEY
DETAIL 4
N.T.S.

NOTES:
1. POST AND RAILS TO BE 1-1/2" SCH. 40 PIPE.
2. ALL WELDS TO BE 3/16" U.N.O.
3. RAILING TO BE POWDER COATED. COLOR BY ARCHITECT

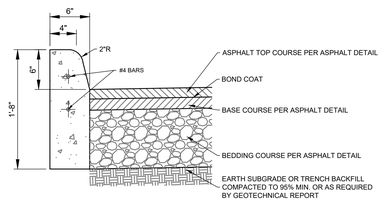


CONCRETE STEPS
DETAIL 5
N.T.S.

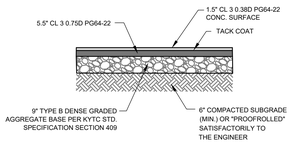
NOTES:
1. POST AND RAILS TO BE 1-1/2" SCH. 40 PIPE.
2. ALL WELDS TO BE 3/16" U.N.O.
3. RAILING TO BE POWDER COATED. COLOR BY ARCHITECT



HANDRAIL
DETAIL 6
N.T.S.

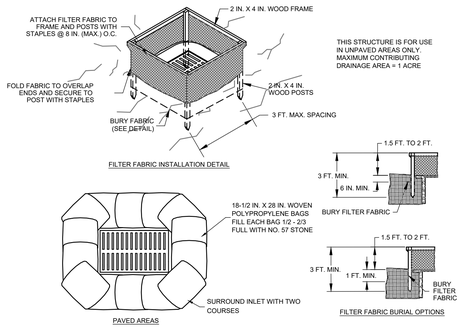


HEADER CURB
DETAIL 7
N.T.S.



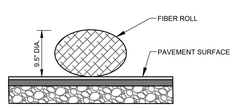
HEAVY DUTY BITUMINOUS PAVEMENT
DETAIL 8
N.T.S.

CONSTRUCT DOWNSTREAM DIKE WHEN REQUIRED TO PREVENT BY-PASS FLOW.

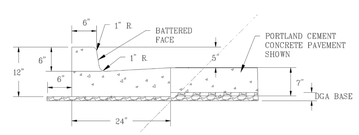


INLET PROTECTION
DETAIL 9
N.T.S.

NOTE: FIBER ROLL PROTECTION PLACED IN ASPHALT LOCATIONS SHALL HAVE SAND BAGS PLACED AT POINTS ALONG THE BARRIER. BAGS ARE INTENDED TO PREVENT MOVEMENT AND PROVIDE STABILIZATION FOR THE FIBER ROLL DEVICE AND SHALL BE PLACED ON TOP, PERPENDICULAR TO RUN. SAND BAG PLACEMENT NOT MORE THAN 8 FEET APART.



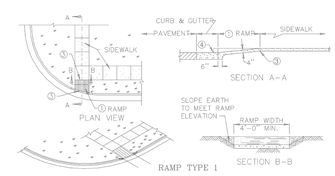
FIBER ROLL
DETAIL 10
N.T.S.



R/W CURB & GUTTER
DETAIL 11
N.T.S.

NOTES

RAMPS SHALL BE PAID PER SQ. YARD OF 4" CONC. SIDEWALK AND THE UNIT PRICE SHALL INCLUDE ALL MATERIALS, FORMS, AND INCIDENTALS NECESSARY FOR CONSTRUCTION. THE RAMP SHALL BE CONSTRUCTED OF CLASS "A" CONCRETE. A BROOM FINISH OR EQUAL NON-SKID FINISH IS REQUIRED.
THE NORMAL GUTTER LINE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.
RAMPS SHOULD BE LOCATED WITHIN MARKED LIMITS OF CROSSWALKS.
USE RAMP TYPE 3 WHEN POINT A TO B IS LESS THAN 20 FEET.
USE RAMP TYPE 4 WHEN POINT A TO B IS 20 FEET OR MORE.
① MAX. RAMP SLOPE 12:1.
② CURB RETURN REQUIRED WHEN UTILITY STRIP IS 4 FEET OR GREATER. FOR UTILITY STRIP LESS THAN 4 FEET, THE AREA IS TO BE SURFACED WITH SIDEWALK WITHIN THE RAMP.
③ 1/2" EXPANSION JOINT AT BACK OF CURB LINE AND AT SIDEWALK LINE.
④ NO BUMP PERMITTED. SAME SLOPE AS RAMP AND NOT TO EXCEED 1" IN HEIGHT.



R/W CURB RAMP
DETAIL 12
N.T.S.

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY RICHARD TUTT 10293 LICENSED PROFESSIONAL ARCHITECT

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48 Ashcraft Drive Glasgow KY
270-651-7200

OWENSBORO INDOOR SPORTS FACILITY
500 W 3RD ST, OWENSBORO, KY 42301

CONSTRUCTION DETAILS

JOB NO.	223-061
DATE	05-20-24
DRAWN	M. ALLEN
CHECKED	R. TUTT

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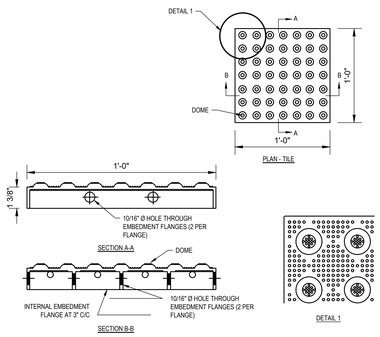
REVISIONS

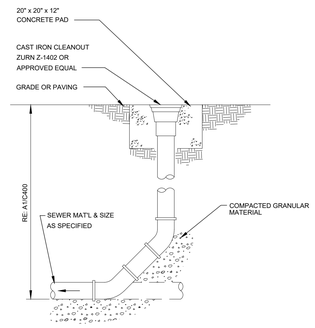
No.	Description	Date

SHEET
C-6.0

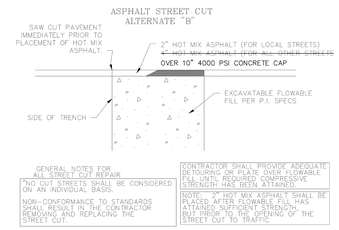


NOTES:
1. CAST IN PLACE TILE INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH ARMOR TILE SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. FOR CUSTOM SIZING CONTACT MANUFACTURER.
4. COLOR: COLONIAL RED

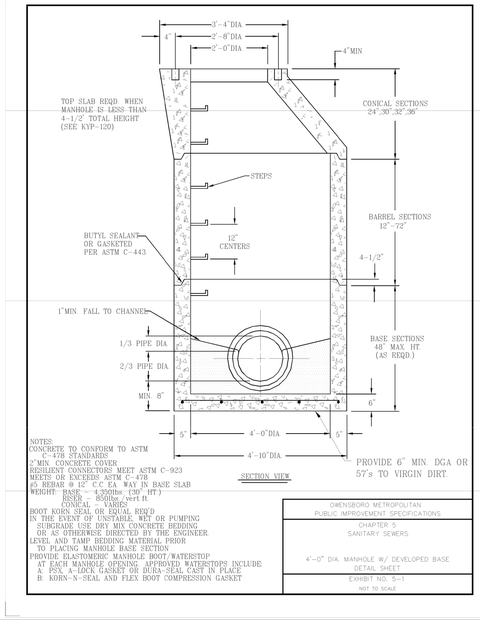
TACTILE WARNING STRIP DETAIL 1
N.T.S.



TYP. CLEANOUT DETAIL 2
N.T.S.

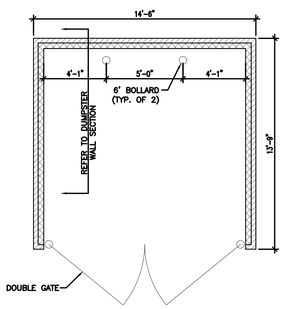


STREET CUT REPAIR DETAIL 4
N.T.S.

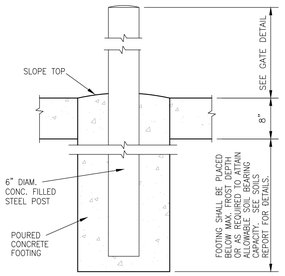


NOTES:
CONCRETE TO CONFORM TO ASTM C-478 STANDARDS
2"MIN. CONCRETE COVER
RESILIENT CONNECTORS MEET ASTM C-923
MEETS OR EXCEEDS ASTM C-478
#5 REBAR @ 12" C.C EA. WAY IN BASE SLAB
WEIGHT: BASE - 4,350lbs (30" HT.)
RISER - 850lbs./vert.ft.
CONICAL - VARIES
BOOT KORN SEAL OR EQUAL REQ'D IN THE EVENT OF UNSTABLE, WET OR PUMPING SUBGRADE USE DRY MIX CONCRETE BEDDING OR AS OTHERWISE DIRECTED BY THE ENGINEER.
LEVEL AND TAMP BEDDING MATERIAL PRIOR TO PLACING MANHOLE BASE SECTION
PROVIDE ELASTOMERIC MANHOLE BOOT/WATERSTOP AT EACH MANHOLE OPENING. APPROVED WATERSTOPS INCLUDE:
A. PSX, A-LOCK GASKET OR DURA-SEAL CAST IN PLACE
B. KORN-N-SEAL AND FLEX BOOT COMPRESSION GASKET

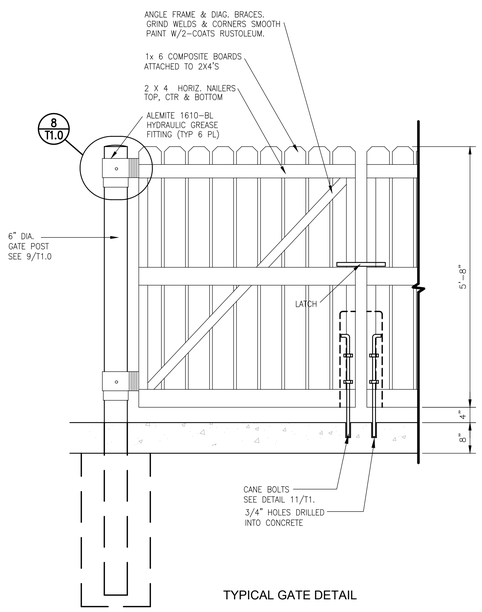
OWENSBORO METROPOLITAN
PUBLIC IMPROVEMENT SPECIFICATIONS
CHAPTER 5
SANITARY SEWERS
4'-0" DIA. MANHOLE W/ DEVELOPED BASE DETAIL SHEET
EXHIBIT NO. 5-1
NOT TO SCALE



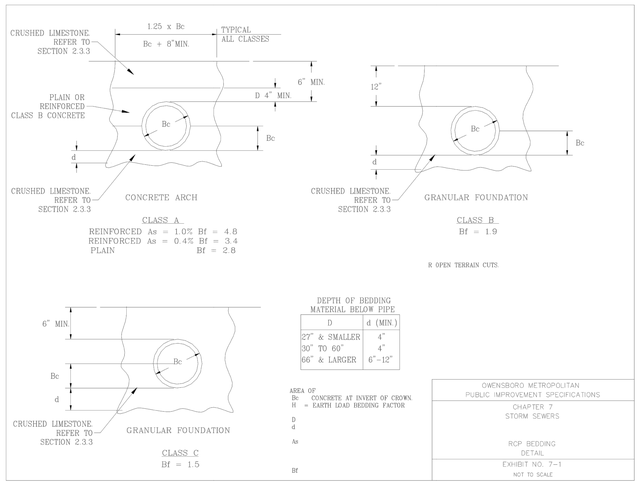
PLAN VIEW



GATE POST DETAIL



TYPICAL GATE DETAIL



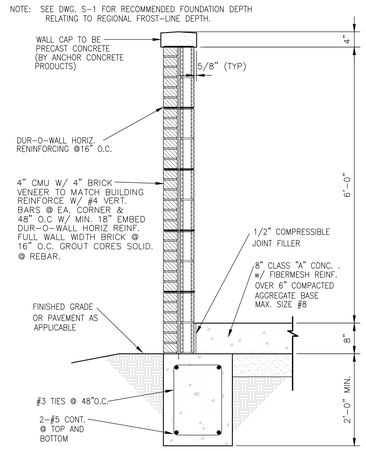
DEPTH OF BEDDING MATERIAL BELOW PIPE

D	d (MIN.)
27" & SMALLER	4"
30" TO 60"	4"
66" & LARGER	6"-12"

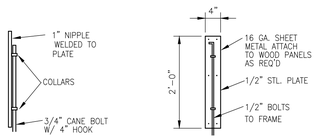
AREA OF
Bc = CONCRETE AT INVERT OF CROWN.
H = EARTH LOAD BEDDING FACTOR
D
d
As
Bf

OWENSBORO METROPOLITAN
PUBLIC IMPROVEMENT SPECIFICATIONS
CHAPTER 7
STORM SEWERS
RCP BEDDING DETAIL
EXHIBIT NO. 7-1
NOT TO SCALE

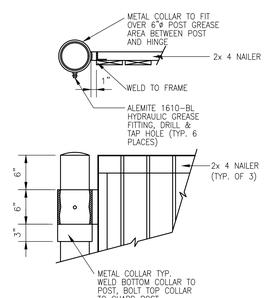
NOTE: SEE DWG. S-1 FOR RECOMMENDED FOUNDATION DEPTH RELATING TO REGIONAL FROST-LINE DEPTH.



WALL SECTION



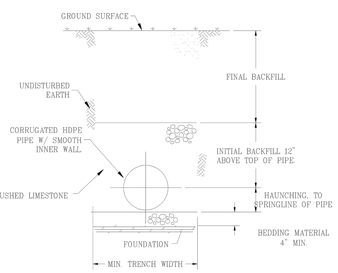
BOLT DETAIL



HINGE DETAIL

DUMPSTER ENCLOSURE DETAIL 3
N.T.S.

NOTES:
1. #57 crushed stone encasement. Place #57 crushed stone or equal in 6" maximum layers and work in around pipe by hand within the haunching zone.
2. For pipes with bells larger than the O.D. of the pipe barrel, provide bell holes in pipe bedding, no larger than necessary to ensure uniform pipe support. Fill all voids under bell by hand with bedding material
3. To prevent migration of fines and loss of pipe support for installations where significant groundwater flow is anticipated, such as if pumping methods are required to dewater the trench excavation below the water table, or if after construction, the permeable encasement will act as a french drain under high ground water levels, the entire perimeter of the #57 crushed stone encasement shall be wrapped with an approved geotextile fabric, or the pipe is to be bedded and backfilled with dense grade, brought up in 6" maximum layers and compacted to 90% standard density.
4. For installations where the trench bottom is unstable, undercut to a depth as required by the engineer, and replace with a foundation of #57 crushed stone or dense grade compacted in maximum six inch layers.
5. To prevent damage to pipe and disturbance of the pipe encasement, provide a minimum depth of cover of 24" above the top of the pipe before allowing construction equipment to traffic the trench surface.
6. Pipe joints to be bell and spigot with O'ring gasket meeting ASTM F477.
7. Pipe sizes 30" through 48" are for information only. These pipe sizes are only to be used in special circumstances, and at the approval of the Engineer.



TYPICAL TRENCH CROSS-SECTION
(N.T.S.)

Unless otherwise specified by the Engineer, Minimum trench widths shall be as follows:

NOMINAL DIAMETER (IN)	MIN. RECOMMENDED TRENCH WIDTH (IN)
4	21
6	23
8	25
10	28
12	31

NOMINAL DIAMETER (IN)	MIN. RECOMMENDED TRENCH WIDTH (IN)
15	34
18	39
24	48
SEE NOTE 7	
30	66
36	78
42	83
48	89

OWENSBORO METROPOLITAN
PUBLIC IMPROVEMENT SPECIFICATIONS
CHAPTER 7
STORM SEWERS
HDPE PIPE BEDDING DETAIL
EXHIBIT NO. 7-3
NOT TO SCALE

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY RICHARD R. TUTT LICENSED PROFESSIONAL ENGINEER

AEI AMERICAN ENGINEERS, INC.
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65 Ashcraft Drive Glasgow KY
270-651-7200

OWENSBORO INDOOR SPORTS FACILITY

500 W 3RD ST, OWENSBORO, KY 42301

CONSTRUCTION DETAILS

JOB NO.	223-061
DATE	05-20-24
DRAWN	M. ALLEN
CHECKED	R. TUTT

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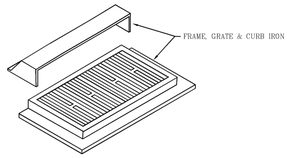
No.	Description	Date

SHEET

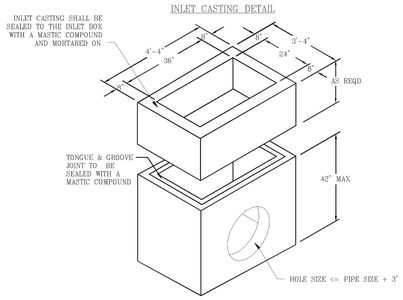
C-6.1

ACCEPTABLE CASTINGS
FOR CURB INLETS
- NEENAH R-3246
- EAST JORDAN 7030 M-4
- JOHN BOUCHARD & SONS 3080

ACCEPTABLE CASTINGS
FOR VALLEY INLETS
(IN DRIVEWAYS)
- NEENAH R-3510
- EAST JORDAN 7370



INLET CASTING DETAIL



INLET BOX DETAIL

NOTES:
CLASS A CONCRETE
2"MIN. CONCRETE COVER
OPENINGS FOR PIPE AS REQ'D.
REINF -#5 REBAR @ 12" C.C. EA. WAY
6" THICK BASE SLAB
WEIGHT: BASE - 3,600lbs.max
RISER - 300lbs./vert.ft.
FOR PIPES LARGER THAN 30", ADDITIONAL DESIGN IS REQUIRED

OWENSBORO METROPOLITAN PUBLIC IMPROVEMENT SPECIFICATIONS
CHAPTER 7 STORM SEWERS
INLET BOX AND CASTING DETAILS
EXHIBIT NO. 7-5
NOT TO SCALE

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
RICHARD E. TUTT
LICENSED PROFESSIONAL ENGINEER

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44 Aberdeen Drive Glasgow KY
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REVISIONS

No.	Description	Date

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CODES AND SPECIFICATIONS

A. GENERAL BUILDING CODE
The Contract Documents are based on the requirements of the Kentucky Building Code, latest Edition. This code shall include all addenda and amendments in force at the date of these documents unless noted otherwise.

B. CONCRETE CODES
The design, detailing and erection of all concrete elements shall additionally be based on the following:
1. Building Code Requirements for Reinforced Concrete (ACI 318-11), Specifications for Structural Concrete for Buildings
(ACI 301) and all other Committee Reports and Specifications as published by the American Concrete Institute including all amendments and addenda in force at the date of these documents.
2. Manual of Standard Practice, latest edition, as published by the Concrete Reinforcing Steel Institute (CRSI) including all supplements in force at the date of these documents.
3. Structural Welding Code, Reinforcing Steel, AWS D1.4 latest edition, American Welding Society.

C. MASONRY CODES
The design, detailing and erection of all masonry elements shall be based on the following:
1. Building Code Requirements for Masonry Structures (ACI 530-11).

D. STRUCTURAL STEEL CODES
The design, detailing and erection of all structural steel elements shall additionally be based on the following:
1. Specification for Structural Steel Buildings - Allowable And Plastic Design, latest edition as published by the American Institute of Steel Construction (AISC).
2. Specification for Structural Joints Using ASTM A325 or A490 Bolts, latest edition, as approved by the Research Council on Structural Connections.
3. Structural Welding Code - Steel, ANSI/AWS D1.1, American Welding Society.
All Codes and Specifications listed above shall include all amendments and addenda in force at the date of these documents.

E. PRECAST AND PRECAST-PRESTRESSED REQUIREMENTS
The design, detailing and erection of precast and precast prestressed elements shall additionally be based on the recommendations presented in the PCI Design Handbook, latest edition, as published by the Prestressed Concrete institute.

F. CONFLICTS IN STRUCTURAL REQUIREMENTS
Where conflict exists between the various publications as specified herein, the strictest requirements of the various publications shall govern. Where conflict exists between the various parts of the Contract Documents (Architectural Drawings, Structural Drawings, General Notes, Specifications) the strictest requirements shall govern.

DESIGN CRITERIA

A. DEAD LOADS
1. Dead Loads. Dead load materials assumed in the design are shown on the Architectural and Structural Drawings. Any changes in construction materials from those shown on the architectural or structural drawings shall be reported by the General Contractor to the Structural Engineer for verification of load carrying capacity of the structure.

B. LIVE LOADS
1. Principal design live loads are shown below. All live loads whether listed below or not are based on the requirements of the building code cited in these General Notes above unless the loads listed below are greater. Live load reduction as specified herein has been used unless specifically excluded below. Design live loads are based on the more restrictive of the uniform load listed below or the concentrated load listed acting over an area 2.5 square feet.

MINIMUM FLOOR LIVE LOAD

CATEGORY	UNIFORM LOAD (PSF)	CONCENTRATED LOAD (LB)
Roof	20	
Walways, Stairs and Lobbies	100	
Storage and Mechanical	125	
Typical 1st and 2nd Floor	100	

NOTE: See Sheets LP1-4 for additional information regarding Live Loads.

C. SNOW LOADS
Snow loads used in the strength design of the building frame shall be based on the general building code referenced above. The snow load constants are as follows:
P_g = Ground Snow Load = 15 PSF
C_e = Exposure Factor = 1.0
I = Importance Factor =1.1
C_t= 1.0
Pf = Flat Roof Snow Load = 11.6 PSF

D. RAIN LOADS
Load = 5 PSF

E. WIND LOADS
Wind pressures used in the strength design of the building frame shall be based on the general building code referenced above.The wind load constants are as follows:
Basic Wind Speed: 115 MPH (Ultimate)
Exposure: B
I = Importance Factor = 1.0
Internal Pressure Coefficient (GC_{pi}) = +- 0.18
Components and Cladding:

(AREA D)

ROOF

AREA	Surface Pressure (PSF) 10 SF	Surface Pressure (PSF) 50 SF	Surface Pressure (PSF) 100 SF
Negative Zone 1	-23.6	-22.1	-21.5
Negative Zone 2	-41.2	-33.5	-30.2
Negative Zone 3	-60.9	-51.7	-47.7
Positive All Zones	16.0	16.0	16.0
Overhang Zone 2	-48.2	-48.2	-48.2
Overhang Zone 3	-81.0	-62.6	-57.7

WALL

AREA	Surface Pressure (PSF) 10 SF	Surface Pressure (PSF) 100 SF	Surface Pressure (PSF) 500 SF
Negative Zone 4	-28.0	-24.2	-21.5
Negative Zone 5	-34.6	-26.9	-21.5
Positive Zones 4&5	25.8	22.0	19.3

(AREA A,B,C)

ROOF

AREA	Surface Pressure (PSF) 10 SF	Surface Pressure (PSF) 50 SF	Surface Pressure (PSF) 100 SF
Negative Zone 1	-23.6	-22.1	-21.5
Negative Zone 2	-41.2	-33.5	-30.2
Negative Zone 3	-60.9	-51.7	-47.7
Positive All Zones	16.0	16.0	16.0
Overhang Zone 2	-48.2	-48.2	-48.2
Overhang Zone 3	-81.0	-62.6	-57.7

WALL

AREA	Surface Pressure (PSF) 10 SF	Surface Pressure (PSF) 100 SF	Surface Pressure (PSF) 500 SF
Negative Zone 4	-28.0	-24.2	-21.5
Negative Zone 5	-34.6	-26.9	-21.5
Positive Zones 4&5	25.8	22.0	19.3

F. SEISMIC LOADS
1. AREA D:
The seismic loads used in the strength design of the building frame shall be based on the general building code referenced above.
The seismic load constants are as follows:
S_{DS} = 0.283
S_{D1} = 0.198
Site Class = C
Seismic Design Category = C
Seismic Importance Factor = 1.25
Basic Structural System: Building Frame Systems
Seismic Resisting System: Steel Ordinary Concentrically Braced Frames
R = 3.25
Ω_0 = 2
C_d = 3.25
Base Shear =
Analysis Procedure: Equivalent Lateral Force

2. AREA D:
The seismic loads used in the strength design of the building frame shall be based on the general building code referenced above.
The seismic load constants are as follows:
S_{DS} = 0.283
S_{D1} = 0.198
Site Class = C
Seismic Design Category = C
Seismic Importance Factor = 1.25
Basic Structural System: Bearing Wall Systems
Seismic Resisting System: Ordinary Reinforced Masonry Shear Walls
R = 2
Ω_0 = 2.5
C_d = 1.75
Base Shear =
Analysis Procedure: Equivalent Lateral Force

3. AREA A, B, C: (PEMB)
The seismic loads used in the strength design of the building frame shall be based on the general building code referenced above.
The seismic load constants are as follows:
S_{DS} = 0.283
S_{D1} = 0.198
Site Class = C
Seismic Design Category = C
Seismic Importance Factor = 1.25
Basic Structural System: Building Frame Systems
Seismic Resisting System: Ordinary Concentrically Braced Frame
R = 3.25
Ω_0 = 2
C_d = 3.25
Base Shear =
Analysis Procedure: Equivalent Lateral Force

4. AREA A, B, C: (PEMB)
The seismic loads used in the strength design of the building frame shall be based on the general building code referenced above.
The seismic load constants are as follows:
S_{DS} = 0.283
S_{D1} = 0.198
Site Class = C
Seismic Design Category = C
Seismic Importance Factor = 1.25
Basic Structural System: Resisting Frame Systems
Seismic Resisting System: Steel Ordinary Moment Frames
R = 3.5
Ω_0 = 3
C_d = 3
Base Shear =
Analysis Procedure: Equivalent Lateral Force

FOUNDATION – GENERAL

A. GEOTECHNICAL REPORT
Foundation design is based on the geotechnical investigation (soil report) as follows:

REPORT OF GEOTECHNICAL ENGINEERING SUBSURFACE CHARACTERIZATION
SPORTSPLEX
OWENSBORO, KENTUCKY
PROJECT: 2305.0010.SHE
VECTOR ENGINEERS, INC.
MAY 27, 2023

The soil report is available to the General Contractor upon request to the Owner. The information included therein may be used by the General Contractor for his general information only. The Architect and Engineer will not be responsible for the accuracy or applicability of such data therein.

B. FOUNDATION APPROVAL AND INSPECTION BY GEOTECHNICAL ENGINEER
Unless authorized otherwise by the Owner or Architect, the General Contractor shall notify the Geotechnical Engineer for review of foundation bearing surface, inspection of foundation installation and foundation installation methods (including construction dewatering methods where required) and shall not place concrete prior to Engineer's approval.

C. SLAB-ON-GRADE CONSTRUCTION
1. Specifications. Unless specified otherwise, slab on grade construction shall follow the recommendations of Guide for Concrete Floor and Slab Construction ACI 302.1R.
2. Subgrade Preparation.
a. Areas containing slab on grade construction shall be stripped to sufficient depth to remove all vegetation, top soil, organic or other unsuitable materials.
b. Site excavated soil may not be used for slab on grade subgrade material without the approval of the Geotechnical Engineer.
c. All grade adjustments for slab on grade construction shall be accomplished with select fill as specified in these General Notes.
d. No slab on grade concrete shall be poured against a final prepared subgrade containing free water, ice, frost, mud or other unsuitable material.
3. Reinforcing Steel.
a. See the drawings for typical slab reinforcement requirements.
b. All welded wire fabric shall be furnished in flat sheets. Lap ends and sides one cross wire spacing plus 2" at splices.
c. Lap continuous slab on grade reinforcing steel 30 bar diameters at splices but not less than 12".
d. All reinforcing steel and welded wire fabric for slabs on grade shall be chaired with slab bolsters designed for support on soil to provide specified cover to reinforcing steel.
4. Construction and Control Joints. See details on the drawings for requirements of construction and control joints for slab-on-grade construction.

D. SELECT FILL
1. Select fill material shall be placed in maximum 8" loose lifts and compacted to 98% of Standard Proctor Density (ASTM D698) at ± 2% of optimum moisture. General Contractor to verify with Geotechnical Engineer.

AUGERCAST PILE FOUNDATION

A. FOUNDATIONS
These Contract Documents have been prepared using an augercast pile foundation with a capacity and depth as specified below.

B. PILE CAPACITY AND LENGTH
1. Pile Capacity
Pile compression capacity shall be 100 Tons working load as indicated on the plans.
2. Pile Length.
The length of the piles shall be 65 feet in length as indicated on the plans.

C. PILE SIZE
Augercast piles shall be 16 inches in diameter. See plans for reinforcing.

CONCRETE

A. CLASSES OF CONCRETE
All concrete shall conform to the requirements as specified in the table below unless noted otherwise on the drawings:

USAGE	28 DAY COMP. STRENGTH (PSI)	CONC. TYPE	MAX. SIZE AGG.	REMARKS
1. Footings	4000	NW	1 1/2"	
2. Slab on Grades, Found. Walls	4000	NW	1"	
3. Pimbs - Supporting Steel Column	4000	NW	1"	
4. Micropiles	4000			Grout Mix

Notes: NW = Normal weight concrete
LW = Light weight concrete
All concrete shall be proportioned for maximum allowable unit shrinkage of 0.03% at 28 days as determined by ASTM C157.

B. CONCRETE MIX DESIGNS
1. Engineer Approval. Concrete mix designs must be submitted a minimum of 15 days prior to the start of the work for Engineer and Owner's testing laboratory approval prior to placement of concrete in the plant or field. Any adjustments in approved mix designs including changes in admixtures must be submitted in writing to the Engineer and Owner's testing laboratory for approval prior to use in the field.

REINFORCING STEEL

A. SPECIFICATION
1. Reinforcing Steel. All reinforcing steel shall conform to the Specification for Deformed and Plain Billet Steel Bars for Concrete Reinforcement, ASTM A615 Grade 60 unless noted otherwise on the drawings. All reinforcing steel required to be welded shall conform to ASTM A706 Specification for Low Alloy Steel Deformed Bars for Concrete Reinforcement.
2 Welded Wire Fabric. Welded smooth wire fabric for concrete reinforcement shall conform to the Specification for Welded Steel Wire Fabric for Concrete Reinforcement, ASTM A185 with a yield strength of 65,000 PSI. Welded deformed wire fabric for concrete reinforcement shall conform to the Specification for Welded Deformed Wire Fabric for Concrete Reinforcement, ASTM A497 with a yield strength of 70,000 PSI. All welded wire fabric shall be furnished in flat sheets only.
3 Wire. Smooth wire for spiral reinforcement shall conform to the Specification for Cold Drawn Wire for Concrete Reinforcement, ASTM A82 with a minimum yield strength of 70,000 PSI.
4. Lap splices shall be Class A unless noted otherwise.

B. REINFORCING STEEL COVERAGE
Reinforcing steel coverage should conform to the requirements specified below. Cover specified shall be considered minimums that may require increasing where reinforcing steel intersects for different member types. Cover in structural members not specified below shall conform to the requirements of ACI 318 unless specified otherwise on the drawings.
1. Foundation Members
a. Basement Walls - 2" dirt face, ¾" interior face, unless noted otherwise
b. Foundation Walls - 2" both faces
c. Sump Walls, Pit Walls - 2" both faces
d. Footings - 3" bottom and sides, 2" top
e. Interior Slab on Grade - 1" top cover for one layer of steel
- 1" top cover, 3" bottom cover for two layers of steel
f. Exterior Slab on Grade - 2" top cover for one layer of steel

CONCRETE MASONRY

A. CODES AND SPECIFICATIONS
All concrete masonry construction shall conform to the requirements of the local building code cited in these General Notes and the following codes:
1. Building Code Requirements for Concrete Masonry Structures, ACI 530-13.
2. Standard Building Code Requirements for Masonry Construction, The Masonry Society.

B. HOLLOW LOAD BEARING CONCRETE MASONRY UNITS
Unless noted otherwise on the Architectural Drawings or Specifications, all concrete block walls shall utilize hollow load bearing units (CMU) conforming to ASTM C90 Hollow Load Bearing Concrete Masonry Units, Type 1, Grade N. Unless specified otherwise, units shall be lightweight. Units shall be cured by autoclave treatment at a minimum temperature of 350 F and a minimum pressure of 125 psi, or cured in a moisture controlled atmosphere as specified for Type 1 units. The Contractor shall furnish all required sizes and shapes as required to complete the work.

C. GROUT
Grout for masonry construction shall comply with the requirements of ASTM C476, Standard Specification for Mortar and Grout for Reinforced Masonry.
1. Fine Grout. Fine grout containing sand, Portland cement and lime (lime is an optional ingredient) without coarse aggregate shall be used in grout spaces less than 2" in any horizontal direction unless otherwise specified.
2. Coarse Grout. Coarse grout containing sand, Portland cement, lime (lime is an optional ingredient), and coarse aggregate shall be used in grout spaces 2" or more in the least horizontal dimension unless indicated otherwise.
3. Strength. Grout shall attain a minimum 28 day compressive strength of 2500 psi using 3"x3"x3"f'" or 3"x3"x 6" test specimens cast in molds with a flat non-absorbent base and masonry units having the same moisture condition as those being laid forming the sides of the specimens. Specimens shall be capped according to ASTM C617 and tested according to ASTM C39.

D. PRISM STRENGTH
1. Compressive Strength, f'm.
The compressive strength of masonry construction, f'm shall be as indicated below:

	Class of Masonry	28 Day Compressive Strength, f'm
a. Single Wythe Hollow Masonry		2000 PSI

2. Prism Tests. Prism tests shall be made for each class of masonry on the project using an assembly of actual masonry units, mortar and grout as planned in the work. Tests shall be run according to the requirements of ASTM E447 Test Methods for Compressive Strength of Masonry Prisms.

E. HORIZONTAL JOINT REINFORCING AND TIES
1. Specification. All horizontal joint reinforcing and ties shall be butt-welded wire units fabricated from cold drawn steel wire complying with ASTM A82 Cold Drawn Steel Wire for Concrete Reinforcement. Fabricated units shall have deformed continuous side rods and plain cross rods and shall be prefabricated in straight lengths of not less than 10 feet. Out-to-out width of units shall be approximately 2" less than the nominal width of the wall positioned so that side rods have full embedment in mortar with mortar coverage of not less than 5/8" on joint faces exposed to the exterior and not less than ½" elsewhere. All units shall be fabricated from 9 gauge rods minimum unless noted otherwise. Exterior walls shall have units hot dip galvanized after fabrication to comply with ASTM A153, Class B-2 coating (1.5 oz. per sq. ft.). Interior walls in conditioned space shall have units that are mill galvanized according to ASTM 641 Class 3. Prefabricated matching corner ("L") and intersecting ("T") sections shall be used to form continuous reinforcement around all corners and for anchoring abutting walls and partitions.
2. Single-Wythe Masonry Walls. All single-wythe masonry walls shall be reinforced with ladder type or truss type units with a single pair of side rods and continuous diagonal or perpendicular cross rods attached to side rods no farther apart than 16" on center. Units shall be spaced in the wall at not more than 16" on center vertically.
3. Brick and Block Cavity Wall. All brick and block cavity walls shall be reinforced with ladder or truss type units in the back-up block wall having a single pair of side rods and continuous diagonal or perpendicular cross rods attached to side rods not farther apart than 16" on center. Units shall be spaced in the block wall at not more than 16" on center vertically. The outer brick wythe shall be tied to the block back-up wall with rectangular type adjustable wall ties manufactured from 3/16" diameter wire hot dip galvanized to comply with ASTM A153, Class B-2 coating (1.5 oz. per sq. ft.). One wall tie shall be provided for each 2.66 square feet of wall area spaced not farther apart than 16 inches vertically and 24" horizontally. Wall ties shall be placed in alternate courses from block wall horizontal reinforcing. Bed joints of opposing wythes shall not be farther apart vertically than 1½" either direction. Ties shall be sized to extend a minimum of 2" into the brick and block joints.
4. Additional Reinforcement at Top and Bottom of Walls. Provide horizontal wall reinforcement in the bed joint of the second course and top course of masonry in addition to the typical reinforcing specified above.
5. Additional Reinforcement at Wall Openings. Provide additional horizontal reinforcing in the first and second bed joints 8" apart immediately above lintels and below sills of all openings. Such reinforcement not otherwise continuous shall extend a minimum of two feet past the opening on each side. Horizontal wall reinforcement interrupted by the jamb of an opening shall have the cross rod or side rod bent and hooked at the jamb. Provide an additional rectangular adjustable tie at the jamb for each joint not containing the normal horizontal reinforcing unit.
6. Splices in Horizontal Wall Reinforcing. Horizontal wall reinforcing shall be spliced a minimum of 6" at splices.

F. STABILITY AND BRACING OF MASONRY WALLS DURING CONSTRUCTION
All masonry walls shown on the architectural and structural drawings have been designed to resist the required code vertical and lateral forces applied to them in the final configuration only assuming full bracing top, bottom, and/or side of wall as shown. It is the responsibility of the Contractor to properly and adequately brace all masonry walls at all stages during construction to resist erection loads and lateral loads that could possibly be applied prior to completion of construction.

ANCHOR RODS

A. SPECIFICATION
1. All anchor rods shall be made from threaded round stock conforming to ASTM F1554, Grade 36 steel unless indicated otherwise in the column schedule or detailed on the drawings. Grade 36 anchor rods shall conform with the ASTM F1554 S1 Supplemental Requirements for Weldability.
2. Anchor rods shall conform to ASTM F1554, S4 and S5 requirements for toughness.

B. NUTS
All nuts with anchor rods shall be hex head conforming to ASTM Specification A563, Grade A (Grade D or DH for Grade 105 Anchor Rods).

C. WASHERS
Washers for all base plates shall be as specified by AISC.

D. TEMPLATES
All anchor rods set in concrete shall utilize 1/8" thick steel templates same size as the base plate. Templates shall be detailed on the shop drawings.

E. MINIMUM ANCHOR ROD SIZE
Unless indicated otherwise in the Column Schedule or on the drawings, anchor rods shall be ASTM F1554 steel and size shall be ¾" diameter (1'-0" minimum embedment).

NON-SHRINK GROUT FOR BASE PLATES AND BEARING PLATES

A. TYPE
Grout for base plates and bearing plates shall be a non-metallic, shrinkage resistant, premixed, non-corrosive, non-staining product containing Portland cement, silica sands, shrinkage compensating agents and fluidity improving compounds.

B. SPECIFICATIONS
Non-shrink grout shall conform to Corps of Engineers Specification for Non-Shrink Grout, CRD-C621-83.

C. COMPRESSIVE STRENGTH
Twenty-eight day compressive strength as determined by grout cube tests, shall be 8,000 PSI.

D. PLACEMENT
Grout shall be placed in a fluid flowable state under baseplates that have a form built around them for grout confinement. Grout should be cured according to manufacturer's recommendations.

E. MINIMUM THICKNESS
Minimum thickness of grout under all baseplates and bearing plates shall be 1 1/2", unless specified otherwise on the drawings.

STRUCTURAL STEEL

A. SPECIFICATIONS
The design, fabrication and erection of all structural steel shall conform to the following:
1. Specifications for Structural Steel Buildings latest edition, published by the American Institute of Steel Construction (AISC).
2. Detailing for Steel Construction as published by AISC.
3. Engineering for Steel Construction as published by AISC.
4. Code of Standard Practice for Steel Buildings and Bridges (Latest Edition) as published by AISC (exceptions to this Code are noted below).

B. MATERIAL
1. ASTM Specification and Grade
Clearly mark the grade of steel on each piece, with a distinguishing mark visible from floor surfaces, for the purpose of field inspection of proper grade of steel. Unless noted otherwise on the drawings, structural steel shall be as follows:
a. W-Shape Beams. All W-Shape beams shall conform to ASTM A992 – Standard Specification for Steel for Structural Shapes for Use in Building Framing.
b. Edge Angles and Bent Plates. All edge angles and bent plates shall conform to ASTM A36.
c. Angle Hangers and Braces (Kickers). All hangers and braces (kickers) shall conform to ASTM A36.
d. Rolled Columns. All rolled columns shall conform to ASTM A992 – Standard Specification for Steel for Structural Shapes for Use in Building Framing.
e. Tube Sections. All square or rectangular tubing sections shall conform to ASTM A500, Grade B.
f. Connection Material.
(1) Beam Column Stiffener Plates and Doubler Plates. Beam column stiffener plates and doubler plates (if indicated) shall be the grade of steel to which they are connected (highest grade if more than one grade is used.)
(2) All connection material, except as noted otherwise herein or on the drawings, including bearing plates, gusset plates, stiffener plates, filler plates, angles, etc. shall be A36 steel unless a higher or matching grade of steel with the members connected is required by strength or stiffness calculation and provided the resulting sizes are compatible with the connected members.

C. CONNECTIONS
1. Typical connection details are indicated on the drawings.
2. a. The design of all steel connections for the project shall be performed under the direct supervision of a registered professional engineer in the state where the project is located, employed by the fabricator.
b. The fabricator's registered professional engineer shall submit complete design calculations for each connection. Such calculations shall show details of the assembled joint with all bolts and welds required. Where predesigned conditions are taken directly from tables in the AISC Manual, calculations need not be submitted provided the job design conditions precisely match those assumed in the AISC manual, all data extracted from the tables is clearly identified with the table number and all such connections are so indicated in the calculations submitted.
c. All design calculations shall be sealed by the fabricator's registered professional engineer.
d. Shop Drawings submitted without complete design calculations will not be approved.
3. Simple Beam Connections.
a. All typical beam simple connections shall be standard double angle or single angle framed beam connections using bolts as specified in Structural Bolts and Threaded Fasteners section of these General Notes.
b. Single plate "shear tab" connections may be used provided there is no axial force in the beam and they are designed strictly according to the procedures defined in "Allowable Stress Design of Simple Shear Connections" published by the American Institute for Steel Construction.
c. Simple Beam Design Capacity. Unless a larger reaction is shown otherwise on the plans, minimum design forces shall be a reaction R equal to one half the total uniform load capacity from the table of Allowable Loads on Beams in the AISC Manual Part 2 for given shape, span and grade of steel. Add to the reaction listed above, any loads or reactions of members supported by the beam within three feet of beam end and the vertical components of forces in brace members framing into the beam. Minimum reaction capacity shall be 12.0 kips and each connection shall contain not less than two bolts.
5. Base Plates and Bearing Plates.
a. Finish. All baseplates and bearing plates shall be finished in accordance with AISC Specification M2.8.
b. Attachment to Column. Unless shown otherwise on the drawings, all baseplates and bearing plates shall be welded all around to the column with minimum fillet welds as specified in AISC Table J2.4.
c. Setting Base Plates. Baseplates shall be set to the elevation indicated on the drawings and leveled using steel shims (plastic shims will not be allowed) or by three leveling screws with weldments at the plate edges. Plates shall be supported by high strength non-shrink non-metallic grout after all protruding plates have been trimmed. Tighten anchor bolts after supported members have been positioned and plumbed.
d. Anchor Bolt Holes in Baseplates. Hole sizes in baseplates shall be made oversize per AISC: 3/8" thick plate washers shall be provided for oversized holes.

BOLT SIZE	HOLE SIZE
3/4" Diameter to 1" Diameter, Inclusive	Diameter + 5/16"
Over 1" Diameter to 2" Diameter Inclusive	Diameter + 1/2"
Over 2" Diameter	Diameter + 3/4"

6. Steel Shelf Angles. Shelf angles supporting face brick shown on the drawings to be continuous shall be furnished in one piece between brick control joints. See Architect's Drawings for control joint location. Provide a ¼" gap at each joint. The gap shall not be welded. Provide support for shelf angle not more than 1'-0" from each end and in between as shown on the drawings. Shelf angles shall be continuous around corners with corner joint complete penetration welded.

D. FABRICATION
1. Fabricate and assemble structural assemblies in shop to greatest extent possible. Fabrication of structural steel in accordance with AISC Specification and as indicated on approved final shop drawings. Fabricator shall coordinate joint fit-up procedures with erector. Provide camber in structural members where indicated. The General Contractor shall coordinate provision of all erection bolts, lifting lugs or other devices required for erection with the fabricator and the erector.
2. Dimensional Tolerances. Dimensional tolerances of fabricated structural steel shall conform to Section 6.4 of the AISC Code of Standard Practice.

E. GALVANIZING
1. Scope. Hot dip galvanize after fabrication all structural steel items and their connections permanently exposed to the outside, whether specified on the drawings or not. Such items include, but are not limited to:
a. Shelf angles
b. All embedded plates in concrete
c. Building skin support steel exposed to moisture outside the exterior waterproofing surface. Examine the architectural and structural drawings for other items required to be hot dipped galvanized. Galvanize all nuts, bolts and washers used in the connection of such steel. Field welded connections shall have welds protected with "Z.R.C. Cold Galvanizing Compound" as manufactured by the Z.R.C. Products Company.

F. SURFACE PREPARATION AND PAINTING.
1. Specification. Surface preparation, paint and painting practices shall conform to the Steel Structures Painting Manual, Volumes 1 and 2, as published by the Steel Structures Painting Council (SSPC).
2. Surfaces which are to be fireproofed with spray-on fireproofing or embedded in concrete shall not be shop painted. Do not paint top flanges of composite beams nor surfaces of members where welding or high strength friction bolting will occur.
Coordinate all shop painting of structural steel with architect's painting requirements as specified on the architectural drawings and in the specifications.

G. SUBMITTALS
1. Shop Drawings. All Structural Steel Shop Drawings shall be sealed by a registered professional engineer in the state where the project is located and shall be submitted for review and approval.

STRUCTURAL BOLTS AND THREADED FASTENERS

A. SPECIFICATION
1. F1852 Bolts. All bolts in structural connections shall conform to ASTM F3125, Grade F1852, Type 1, High Strength Bolts for Structural Steel Joints unless indicated otherwise on the drawings.
2. Bolts and Nuts, High Strength Bolts. Bolts and nuts for all high strength bolts shall be heavy hex head conforming to ANSI Standards B18.2.1 and B18.2.2. Nuts shall conform to ASTM A563, Standard Specification for Carbon and Alloy Steel Nuts.
3. Washers. All washers shall be circular, flat and smooth and shall conform to the requirements of Type A washers in ANSI Standard B23.1. Washers for high strength bolts shall be hardened and conform to ASTM F436, Specification for Hardened Steel Washers. Beveled washers for American Standard Beams and channels shall be square or rectangular, shall taper in thickness (16.23% slope) with an average thickness of 5/16". When an outer face of a bolted part has a slope grater than 1:20 with respect to a plane normal to the bolt axes, a beveled washer shall be used.
4. Structural Joints Using Bolts. The design and assembly of structural joints using any bolt types listed above shall conform to all requirements of the AISC Specification.
5. Structural Joints Using High Strength Bolts. The design and assembly of structural joints using high strength bolts shall conform to the Specification for Structural Joints Using ASTM A325 or A490 Bolts as approved by the Research Council on Structural Connections of the Engineering Foundation.

B. DESIGN
1. Minimum Bolt Diameter. Minimum bolt diameter shall be ¾ inch.
2. Connection Type. Unless noted otherwise on the drawings or in these General Notes, all bolted connections shall be bearing type connections using standard holes (hole diameter nominally 1/16 inch in excess of nominal bolt diameter) with threads included in the shear planes.
3. Shear Connection of Welded Moment Connected Pieces. All shear connections of welded moment c onnected pieces shall be slip critical connections using high strength bolts.
4. Simple Beams. Simple shear connections shall be capable of end rotations of unrestrained beams as specified in Section 1.15.4 of the AISC Specification.
5. Oversize, Short Slotted and Long Slotted Holes. The dimensions and washer requirements of oversize, short slotted, and long slotted holes shall conform to the High Strength Bolting Specification cited above.
6. Allowable Working Stresses. The allowable working stresses of bolts shall be as specified in the AISC Specification Table 1.5.2.1 and Tables 2 and 2A of the High Strength Bolting Specification cited above.
7. Minimum Strength of Bolted Connections. Unless noted otherwise on the drawings, all shop and field bolted connections shall develop as applicable the full tensile or compressive strength of the member. All members with bolted moment connections, noted on the drawings with "MC", shall be bolted to develop the full flexural capacity of the member, unless noted otherwise on the drawings.

C. INSTALLATION
1. Washers. Washers under the bolt head and/or nut shall be used as required by the bolt specification cited above.
2. Tightening of High Strength Slip Critical Bolts by Use of a Direct Tension Indicator.
a. All field bolting of high strength slip critical bolts shall use load indicator washers ("Coronet Load Indicators" as manufactured by Cooper and Turner, Inc. or "Bethlehem Load Indicator Washers" as manufactured by Bethlehem Steel Corp.) with hardened washers as specified by the manufacturer.
3. Bolt Lubrication. All bolts shall be well lubricated at time of installation. Dry, rusty bolts will not be allowed. Bolts or nuts shall be wax dipped by the bolt supplier or "*Johnson's* Stick Wax 140" shall be used with all bolts in the shop or field.
4. Impact Wrenches. Properly sized and lubricated air impact wrenches with adequate air pressure shall be utilized for all bolt installation.
5. New Bolts. All bolts shall be new and shall not be reused.

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ARCHITECTS

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GENERAL NOTES

JOB NO.	22070
DATE	MAY 20, 2024
DRAWN	STAFF
CHECKED	TEL

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PRECAST CONCRETE

A. SPECIFICATIONS
In addition to the General Building Code and Specifications cited in theses General Notes, the design, fabrication and erection of all precast elements shall conform to the following:
1. Manual for Quality Control for Plants and Production of Precast Prestressed Concrete Products, PCI MNL 116 as published by the Prestressed Concrete Institute.
2. Manual for Quality Control for Plants and Production of Architectural Precast Concrete Products, PCI MNL 117. Conflicting provisions or design procedures in ACI and PCI publications as cited at the beginning of these General Notes shall be interpreted by adhering to the stricter or more conservative publication.

B. DESIGN
1. Precast Details. Typical details for precast elements are shown on the drawings. Modifications to details shown must be submitted by the Precaster and approved by the Engineer prior to the preparation and submission of shop drawings.
2. Registered Engineer. The design of all precast units and connections not specifically detailed on the drawings shall be performed by or under the direct supervision of a registered professional engineer in the state where the project is located, employed by the Precaster. Precast members shall be designed for the dead loads of the members, live loads as outlined in these General Notes, construction loads and all handling and erection loads. See submittal requirements below.
3. Connections. Connection design for all precast members shall utilize an additional load factor of 1.33 as recommended by Section 6.3 of the PCI Design Handbook, Third Edition.

C. CONCRETE
Concrete shall conform to all requirements specified elsewhere in these General Notes and additional items specified herein.
1. Classes of Concrete

MEMBER	MIN. 28 DAY COMPRESSIVE STRENGTH (PSI)	CONC. TYPE	MAX AGGREGATE SIZE
Hollow Core	5000 psi	NW	1"

NW = Normal weight concrete
All concrete shall be proportioned for a maximum allowable unit shrinkage of 0.03% at 28 days as determined by ASTM C157.
2. Calcium Chloride. Calcium chloride or admixtures containing calcium chloride shall not be used in precast concrete.

D. CONCRETE FINISH
Refer to Specifications for concrete finish requirements.

E. BEARING PADS
1. Type. All bearing pads shall be AASHTO grade chloroprene pads manufactured from 100 percent chloroprene (neoprene) as the only elastomer. The pads shall conform to the requirements of the AASHTO Standard Specification for Highway Bridges, Section 25, Division 2. Provide pads with a shore A hardness durometer of sixty plus or minus five.
2. Design. The design of all bearing pads shall conform to the PCI Design Handbook, Third Edition, Section 6.5.8, except as noted below. The design bearing pressure shall not exceed 800 psi under total service load and 500 psi under dead load.
3. Submittals. The General Contractor shall submit the manufacturer's technical literature of all bearing pads for Engineer review.

F. ERECTION
1. Erection Design. The Erector shall submit for Engineer review complete design calculations and installation drawings of the erection process prepared by a registered professional engineer in the state where the project is located. Such calculations shall specify any temporary bracing required to maintain stability of the structure during the erection process and any other conditions of erection. The calculations shall show assumed loading, material strengths, stresses and size and location of required bracing.
2. Design Strength of Members. Precast units shall not be installed until the concrete has attained its design compressive strength.
3. Erector's Responsibilities. The Erector shall study the shop drawings and erection drawings prior to the installation of any precast units. The Erector shall check access, building lines, grades, bearing surfaces, anchor bolts and all other cast-in-place work for proper location, alignment and elevation and shall notify the General Contractor of all conditions requiring alteration for proper fit of the precast units. The erector shall handle and erect all members in the proper sequence and by the prescribed methods specified on the shop drawings and installation drawings. Precast units shall be adequately braced until all permanent connections are installed and all grout and topping slabs have cured for at least seven days. Additional bracing or shoring shall be provided for all unsymmetric members to prevent rotation during erection and pouring of topping slab. No single lees shall be used on the project.
4. Erection Tolerances. Precast units shall be erected to the tolerances as specified in Part 8 of the PCI Design Manual, Third Edition, unless indicated otherwise on the drawings. If the structure is found to be out of tolerance, erection shall be stopped and not continued again until proper positioning of the members has been achieved and can be maintained.

G. QUALITY ASSURANCE
1. General. The Precaster shall practice and maintain all quality control provisions as required by the PCI Plant Certification Program and as outlined in PCI MNL 116 and 117. The Precasters Quality Control Manual as practice shall be submitted for Engineer review.
2. Testing Laboratory Inspection. The Precaster shall plan for and cooperate with the Owner's testing laboratory in all inspection programs planned for the project.
3. Certified Inspector. The Precaster shall plan for and cooperate with the Certified Inspector commissioned to implement the inspection program required.
4. Products Not Meeting Specifications. Precast units that do not conform to all specified requirements including strength, tolerances, both fabrication and erection and finishes shall be rejected and replaced with units meeting all requirements of the Contract Documents, unless approval by the Engineer, Architect and Owner is obtained in writing for an authorized repair.

J. SUBMITTALS
1. Precast Unit Design. The Precaster's design of all precast elements shall be submitted for Engineer approval. Such calculations shall be performed by or under the direct supervision of a registered professional engineer in the state where the project is located. The calculations must be bound with the Engineer's signature, seal and date sealed on the cover sheet. Calculations must be indexed by precast element and arranged in a logical orderly fashion. Incomplete or partial submittals will be rejected. Where computer aided design is submitted, the input data must be included and output must be clear. At least one hand calculation must be submitted for each member type designed by computer.
2. Precast Erection Design. The Erector shall submit installation drawings and engineering calculations of the erection process sealed by a registered engineer in the state where the project is located for Engineer review.
3. Shop Drawings.
   a. Erection Drawings. The Precaster shall submit complete erection drawings showing dimensional plans, elevations, sections and details with precast unit marks for each element.
   b. Production Drawings (Shop Tickets). The Precaster shall submit production drawings of typical precast members showing dimensions, reinforcing steel, embedded items and all connections to adjacent precast members or other structures. Non-typical members shall be submitted upon request.
   c. Engineering Seal. All shop drawings shall be sealed by a registered professional engineer in the state where the project is located.

OPEN WEB STEEL JOISTS

A. GENERAL
1. Examine the structural drawings for joist type, size, number, spacing, special loading and required accessories.
2. Joist Types. All open web steel joists shall be one of the following types:
   a. K Series. All joists marked on the plan with a K series designation shall be parallel chord underslung (top bearing) and shall meet the requirements specified below.

B. CODES AND SPECIFICATIONS
Fabrication of open web steel joists shall comply with the following codes and specifications:
1. Standard Specifications, Load Tables and Weight Tables for Steel Joists and Joist Girders adopted by the Steel Joist Institute (SJI), Latest Edition.
2. Standard Specifications for Joist Girders, adopted by Steel Joist Institute, Latest Edition.
3. Recommended Code of Standard Practice for Steel Joists and Joist Girders, Latest Edition.
4. American Welding Society ANSI/AWS D1.1 Structural Welding Code - Steel or SJI Technical Digest #8, "Welding of Open Web Steel Joists", with successful passage of load tests as defined in the specifications.

C. FABRICATION AND ERECTION
1. Camber. Joists shall be cambered for 15 psf dead load. Provide standard SJI camber unless specified otherwise on the drawings. Review the Structural Drawings and Specifications for information concerning dead loads on members requiring other than standard SJI camber. Joist camber must be shown on shop drawings submitted for review. Camber not shown on shop drawings will be cause for rejection.
2. Splices. Splices in members of joists shall be designed and fabricated in accordance with SJI specifications except that splices in each of the two angles or bars of any member shall not occur at the same location, but shall be staggered a minimum of 6 inches.
3. Top Chord Extensions and Extended Ends. Provide top chord extensions and extended ends where shown on the architectural and structural drawings. Design and fabrication shall conform to SJI specification and load tables.
4. Bottom Chord Extensions. Joists shown with bottom chord extensions shall not have connections made until after the full dead load is applied.
5. Bridging. Provide horizontal or diagonal type bridging for all joists as required by SJI specification. The ends of all bridging lines terminating at walls or beams shall be anchored thereto at top and bottom chords. Provide all required bridging anchors. Examine the structural drawings carefully for special bridging requirements.
6. Ceiling Extensions. Provide ceiling extensions of sufficient strength to support ceiling construction in areas having ceilings attached directly to bottom chord.
7. Attachment to Joists.
   a. The Contractor shall ensure that no cuts or holes are made in the members of the erected joists for attachment of ceiling, ducts, pipes or any other items not specifically provided in the contract drawings. Use of power driven fasteners in the diagonal and bottom chord members of the joists is prohibited.
   b. The Contractor shall not hang any elements from the top or bottom chords of joist except ceiling, ducts, pipes or other items specifically shown on the Contract Documents, without the written authorization of the Engineer. All pipes, ducts and other mechanical, electrical and plumbing equipment suspended from the joists shall have the hanger attached at a joist panel point only. No mechanical, electrical or plumbing equipment shall be hung along the top or bottom chord between panel points except as approved otherwise in writing by the Architect/Engineer. All ceilings weighing 3 PSF or less may have the grid hung anywhere along the bottom chord. Ceilings weighing more than 3 PSF shall have the grid hung only at joist panel points. Heavy pipes, ducts or other equipment hung from bar joists may require additional joist reinforcement and shall be referred to the Engineer for framing.
8. End Supports and End Anchorage.
   a. Provide standard depth of bearing for all joists as shown below unless detailed other wise on the drawings: (1) All K Series - 2½"
   b. Provide flat bearing for all joists.
   c. Provide minimum end bearing on steel, concrete and masonry supports as required by SJI specifications. For joist spans less than sixty feet center joist bearing over the center of support unless detailed otherwise on the drawings. If two joist abut each other at the support, provide 1/4" space between joist ends centered over the support. If sufficient bearing does not exist, stagger the ends of each joist and center bearing over the center of support. All joists equal to or over 60 feet in length must have required bearing centered over the center of the support. Stagger joist ends as required to satisfy this requirement.
   d. Provide minimum end anchorage to steel and masonry supports as required by SJI specifications unless detailed otherwise on the drawings. Provide minimum 3/8" bearing plate with one ½" Diameter x 4" stud of sufficient plan size to maintain minimum required weld for all joists bearing on concrete.
9. Shop Paint. Provide all joists and accessories with one shop coat of paint as specified in SJI Standards. Prepare surface as required by paint manufacturers recommendations and provide a continuous dry paint thickness of not less than 0.5 mils.
10. Accessories and Attachments. Examine architectural, structural and mechanical drawings for any accessories or attachments required to be provided for steel joists.

D. DESIGN
1. The design of all open web joists shall conform to the codes and specifications cited above.
2. All joists shall carry the design loads as specified in the SJI load tables as the minimum requirement. Additionally, the joists shall be designed to carry any other load types and patterns as indicated on the structural drawings. Examine the structural drawings for any other loads required to be carried by any joist.
3. Any situation requiring headers for steel joists and not shown on the structural drawings shall be submitted to the Engineer for framing.

E. STABILITY DURING ERECTION
Where bar joists are utilized, and columns are not framed in at least two directions with structural steel members, a bar joist shall be field bolted at columns (each end of joist) to provide lateral stability during construction.

F. SUBMITTALS
1. Joist manufacturer shall submit the following for Engineer review and approval:
   Shop Drawings showing joist layout, connections and all accessories. The drawings shall also include joist length, camber, mark, number, type, location, spacing and bridging. Shop drawings not showing all information cited above will be rejected.

WELDING OF STRUCTURAL STEEL

A. CODE
All shop and field welding shall conform to all requirements in the Structural Welding Code -Steel, ANSI/AWS D1.1, as published by the American Welding Society (AWS).

B. WELDER CERTIFICATION
All shop and field welders shall be certified according to AWS procedures for the welding process and welding position used.

C. MINIMUM SIZE AND STRENGTH
1. Fillet Welds. Minimum size of fillet welds shall be as specified in Table 1.17.2A in the AISC Manual of Steel Construction.
2. Partial Penetration Groove Welds. The minimum effective throat thickness of partial penetration groove welds shall be as specified in Table 1.17.2B in the AISC Manual of Steel Construction.
3. Minimum Strength of Welded Connections. Unless noted otherwise on the drawings, all shop and field welds shall develop the full tensile strength of the member or element joined. All members with moment connections, noted on the drawings with "MC", shall be welded to develop the full flexural capacity of the member, unless noted otherwise on the drawings.

D. FILLER METAL REQUIREMENTS
1. Strength. Weld metal shall be as specified in AISC Manual of Steel Construction Table 1.5.3.
2. Electrodes. Electrodes for various welding process shall be as specified below:
   a. SMAW: E70XX low hydrogen
   b. SAW: F7X-EXXX
   c. GMAW: ER70S-X
   d. FCAW: E7XT-X
   e. Weathering Steel Electrodes shall conform to Table 4.1.4 of the AWS D1.1 Manual.

STEEL ROOF DECK

A. SCHEDULE
Provide, as specified below, steel roof deck with the indicated depth, design thickness, moment of inertia, positive section modulus, negative section modulus and suggested manufacturer:
(Roof deck: 2.0DA Dovetail acoustical deck painted)

LOCATION	DEPTH	THK.	MOMENT OF INERTIA	POSITIVE SECTION MODULUS	NEGATIVE SECTION MODULUS	REMARKS
Typical	2"	0.0358	0.472	0.343	0.334	Type DA

The deck(s) specified shall meet all requirements of the Steel Roof Deck Specifications of the Steel Deck Institute (SDI). Other manufacturers may be submitted for Engineer approval provided all the above requirements are satisfied.

B. SPECIFICATION
The design, fabrication and erection of all roof deck shall conform to the Steel Deck Institute Design Manual for Composite Decks, Form Decks and Roof Decks as published by the Steel Deck Institute (SDI).

C. GRADE OF STEEL
Steel deck shall be manufactured from steel conforming to ASTM Designation A611 for painted deck or A653 Structural Quality for galvanized deck or Engineer approved equal, having a minimum yield strength of 40,000 PSI.

D. FINISH
1. Galvanizing. Steel deck shall be galvanized with a protective zinc coating conforming to ASTM A653 G90 class.

E. ATTACHMENT
1. Screws.
   a. Typical Requirements (Type DA). Roof deck units shall be screwed to each structural support member using #12 TEK screws using 24.5/4 pattern. Screw spacing along the perimeter should be reduced to 24.5/6 pattern for a distance of 10 feet in from the deck edges.
   b. Side Laps. Side laps of adjacent units shall be fastened with #12 TEK screws so that spacing between supports and fasteners does not exceed 18 inches.
2. Minimum Bearing. Provide a minimum end bearing to 2" over supports.
3. End Laps. End laps of sheets shall be a minimum of two inches and shall occur over supports. Roofs having a slope of ¼ inch or more in 12 inches shall be erected beginning at the low side to insure that end laps are shingle fashion.
4. All ends of deck shall (except cantilever ends as specified) shall be supported continuously. Contact engineer for clarification, if required.

F. DECK SPANS
Metal deck spans shall not exceed the maximum center to center spans as required by SDI criteria. Where possible, all metal deck shall extend over three or more supports.

G. ACCESSORIES
Provide minimum 20 gauge ridge and valley plates, minimum 20 gauge cant strips, minimum 14 gauge sump pans, minimum 20 gauge inside or outside closure channels, minimum 20 gauge butt strips at change of deck directions, minimum 20 gauge filler sheets and rubber closures as required to provide a finished surface for the application of insulation and roofing.

H. SUBMITTALS
Shop Drawings. The metal deck manufacturer shall submit shop drawings showing complete deck layout, attachment details, accessories and other details for Engineer approval prior to start of erection.

PRE-ENGINEERED METAL BUILDING SYSTEM

A. SPECIFICATION
In addition to the General Building Code and Specifications cited in these General Notes, the design, fabrication and erection of all pre-engineered building components shall conform to the following:
1. Low-Rise Building Systems Manual, latest edition and addenda, as published by the MEtal Building Manufacturers Association.
2. Aluminum Construction Manual, latest edition and addenda, as published by the American Aluminum Manufacturers Association.
3. The metal building manufacturer shall be certified in accordance with the American Institute of Steel Construction (AISC) quality certification program, category MB for metal buildings. The manufacturer shall provide proof of certification of Owner's and Engineer's records.

B. LOADS
The structural design of all components of the pre-engineered building system shall satisfy the loading requirements of both these General Building Code cited above and the Low-Rise Building Systems Manual cited above. Where the loading requirements conflict, the load condition yielding the more conservative (i.e. stronger and/or stiffer) structural member design shall govern. The design loads shall include all loads specifically noted on these plans and details and the following:
1. It shall be the responsibility of the pre-engineered metal building design engineer to review all contract documents to determine the weight of all permanent building material and attachments (including mechanical systems and equipment, electrical systems and fixtures, plumbing, sprinklers, moveable partitions, athletic equipment, scoreboards, etc.).
2. Dead Loads.
   a. Building Dead Load. The weight of the building system including roof material, wall panels, roof and wall girts, insulation material, main framing elements, bracing members and connection material.
   b. Collateral Dead Load. The weight of additional permanent building materials such as sprinklers, mechanical systems, electrical systems, fire suppression systems, etc. The minimum collateral dead load shall be 10 psf. G.C. to coordinate/verify with PEMB supplier.
3. Live Loads. Roof and floor live loads shall be as defined above in these general notes and in the General Building Code.
4. Snow Loads. Snow loading shall be determined as required by the General Building Code cited above and the Low-Rise Building Systems Manual. The stricter loading requirements shall govern.
5. Seismic Loads. Seismic loading shall be determined as required by the General Building Code cited above and the Low-Rise Building Systems Manual. The stricter loading requirement shall govern.
6. Wind Loads. Wind Loading shall be determined as required by the General Building Code cited above and the Low-Rise Building Systems Manual. The stricter loading requirement shall govern.
7. Other Loads. See plans.
8. Loads applied to the Pre-Engineered Metal Building by the athletic equipment (See sheet S4.0).

C. DESIGN
1. Registered Engineer. The design of all building components and connections not specifically detailed on these drawings shall be performed by or under the direct supervision of a professional enfineer registered in the state where the project is located, employed by the building manufacturer. Components shall be designed for the dead loads of the members, dead and live loads as outlined in these General Notes, construction loads and all handling and erection loads. See submittal requirements below.
2. The building designer shall provide column base reaction loads to the Structural Engineer for use in design of the foundation system.
3. It shall be the responsibility of the metal building manufacturer to review the Architectural and Structural drawings. Where the design intent of the Architect and Structural Engineer is not clear or where the metal building manufacturer's layout differs from that indicated on the Architectural and Structural plans, the metal building manufacturer shall inform the Architect or Engineer prior to proceeding with any work. The Architect or the Structural Engineer shall clarify the design intent or discrepancy in writing to the building manufacturer, and the Architect's/Engineer's decision is final.
4. It shall be the responsibility of the metal building manufacturer to size and specify anchor bolt grade, size, quantity, layout and length.

D. SUBMITTALS
1. Erection Drawings. The manufacturer shall submit complete erection drawings showing dimensional plans, elevations, sections and details. Erection drawings shall show each type of structural building frame required and their location within the structure; details of anchor bolt settings and anchor bolt sizes and length (where required); sidewall, endwall and roof framing; diagonal bracing and location within the structure; metal floor deck and joist types; wall and roof insulation types; longitudinal and transverse cross sections; details of curbs, roof jackets and items penetrating the roof; trim, gutters, downspouts, liner panels, wall and roof coverings and all accessory items; materials; other pertinent information required for proper and complete fabrication, assembly and erection of a watertight metal building system. Erection drawings shall specify final conditions for bolt tightening and brace cable tensioning.
2. Engineering Seal. All shop drawings shall be sealed, signed and dated by a professional engineer registered in the state where the project is located.
3. Certification. The manufacturer shall provide written certification, signed and sealed by a professional engineer registered in the state where the project is located, attesting that the building design meets the specified loading requirements, the requirements of codes and authorities having jurisdiction at the project site, and other specified requirements.

E. HANDLING AND STORAGE
1. The metal building components shall be delivered or stored in such a way that they will not be damaged or deformed.
2. Stack material on platforms or pallets above grade and in such a manner that they will drain freely. Protect material with weather-resistant covering or under roof.
3. Damaged material must be reported to determine if replacement is required.

F. ERECTION
Install all metal building components in strict compliance with manufacturer's instructions, approved final shop drawings and the codes and specifications cited in these General Notes. Do not field cut or alter structural building members without prior written approval of both the building manufacturer and the Architect/Engineer.

MISCELLANEOUS

A. CONTRACT DOCUMENTS
It is the responsibility of the General Contractor to obtain all Contract Documents and latest addenda and to submit such documents to all subcontractors and material suppliers prior to the submittal of shop drawings, fabrication of any structural members and erection in the field.

B. DRAWING CONFLICTS
The General Contractor shall compare the Architectural and Structural drawings and report any discrepancy to the Architect and Engineer prior to the fabrication and installation of any structural members. Unless documented in writing otherwise by the Architect or Engineer, the General Contractor shall assume the stricter requirement of conflicting provisions on the Architectural and/or Structural Drawings and Specifications.

C. EXISTING CONDITIONS
The General Contractor shall verify all dimensions and conditions of any existing buildings at the job site and report any discrepancies from assumed conditions shown on the drawings to the Architect and Engineer prior to the fabrication and erection of any members.

D. RESPONSIBILITY OF THE CONTRACTOR FOR STABILITY OF THE STRUCTURE DURING CONSTRUCTION
All structural elements of the project have been designed by the Structural Engineer to resist the required code vertical and lateral forces that could occur in the final completed structure only. It is the responsibility of the Contractor to provide all required bracing during construction to maintain the stability and safety of all structural elements during the construction process until the structure is tied together and completed.

SUBMITTALS

A. SHOP DRAWING REVIEW
The Engineer will review the General Contractor's shop drawings and related submittals (as indicated below) with respect to the ability of the detailed work, when complete, to be a properly functioning integral element of the overall system designed by the Engineer. Before submitting a shop drawing or any related material to the Engineer, the General Contractor shall review each such submission for conformance with the means, methods, techniques, sequences, and operations of construction, and safety precautions and programs incidental thereto, all of which are the sole responsibility of the General Contractor; approve each such submission before submitting it; and so stamp each such submission before submitting it. The Engineer shall assume that no shop drawing or related submittal comprises a variation unless the General Contractor advised the Engineer otherwise via a written instrument which is acknowledged by the Engineer in writing. The shop drawing and related material (if any) called for are indicated below. In the event that the Engineer will require more than ten (10) working days to perform review, the Engineer shall so notify the General Contractor. The Engineer shall return shop drawings and related materials with comments provided that each submission has been called for and is stamped by the General Contractor as indicated above. The Engineer shall return without comment material not called for or which had not been approved by the General Contractor.

B. SHOP DRAWINGS
The General Contractor shall submit for Engineer review shop drawings for the following items:
1. Reinforcing Steel
2. Concrete Mix Design (#)
3. Bar Joists (*)
4. Structural Steel (*)
5. Roof Metal Deck
6. Precast Concrete Hollow Core (*)
7. Pre-Engineered Metal Building (*)

Items marked (*) shall have shop drawings sealed by a registered engineer in the state where the project is located. Items marked (#) shall be submitted for Engineers record only and will not have the Engineer's shop drawings stamp affixed. All shop drawings must be reviewed and sealed by the General Contractor prior to submittal. Contractor shall submit one set of sepias and two sets of blueline prints for all shop drawings specified to be returned by the Engineer.

C. REPRODUCTION
The use of reproductions of these contract documents by any contractor, subcontractor, erector, fabricator or material supplier in lieu of preparation of shop drawings signifies his acceptance of all information shown hereon as correct, and obligates himself to any job expense, real or implied, arising due to any errors that may occur hereon.

D. SUBMITTAL RESPONSIBILITY
Submittal review by Ted Lolley & Associates is for the general conformance with the information given and the design concept expressed in the structural plans and specifications and not for the purpose of determining the accuracy and completeness of dimensions and quantities which shall remain the responsibility of the Contractor. The review of submittals by Ted Lolley & Associates does not relieve the Contractor of responsibility to comply with the structural plans and specifications. Ted Lolley & Associate's review of the contractor's submittals does not constitute approval of the contractor's safety measures, nor does it constitute approval of the means and methods of construction.

SPECIAL INSPECTIONS

A. GENERAL
1. Owner: The Owner shall engage a Special Inspector as required by the governing building code. The purpose of the Special Inspection is to report and record construction procedures highlighting those that are not in accordance with the Contract Documents and the Contractor's erection and shoring plans.
2. Contractor. The special inspections do not relieve the Contractor from their responsibility to perform the work in accordance with the Contract Documents or to carry out their own quality control. The Contractor is responsible for scheduling inspections and tests. Sufficient notice and lead time must be allowed for the inspections and tests. Failure to do so may result in rework. The Contractor shall provide safe access to areas requiring inspection and tests. When deficiencies are discovered, the Contractor must take action to remedy the deficiencies as directed the Engineer whose seal is applied to these plans. Deficiencies that require re-analysis and redesign by the Engineer shall be paid for by the Contractor. The Contractor is responsible for testing services that are required for material submittals and are not part of the special inspection program, such as aggregate tests, concrete mix design, testing of controlled fill materials, and other items outlined in the specifications.

SHERMAN CARTER BARNHART ARCHITECTS

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GENERAL NOTES

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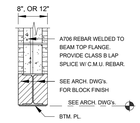
CONCRETE MASONRY UNIT (CMU) LOAD BEARING WALL SCHEDULE

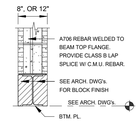
1. [ ] INDICATES WALL SIZE AND REINFORCING.
2. REINFORCING SHALL BE LOCATED IN CENTER OF WALL, UNLESS NOTED OTHERWISE.
3. CELLS WITH REINFORCING SHALL BE GROUTED SOLID, FULL HEIGHT.
4. ALL NON-LOADBEARING CMU (8" OR 6") SHALL BE REINFORCED WITH #4 AT 48" O.C., UNLESS NOTED OTHERWISE. (SEE SCHEDULE)
5. ALL CMU BELOW GRADE SHALL BE GROUTED SOLID.
6. SEE TYPICAL DETAILS FOR ALL OTHER INFORMATION.
7. FLUSH WALL PILASTERS:SHALL CONTAIN REINFORCING AS SHOWN BELOW. BARS SHALL BE CENTERED IN EACH CELL. MINIMUM LENGTH OF PILASTERS SHALL BE 1'-4", UNLESS NOTED OTHERWISE. UNLESS PILASTER NOTED OTHERWISE ON PLANS, REFER TO DETAILS 6, 7, 11 / S3.0.
8. SEE SHEARWALL DETAIL 14/S3.0 FOR ADDITIONAL INFORMATION REGARDING ALL SHEARWALLS. UNLESS NOTED OTHERWISE, ALL LOAD BEARING CMU/STRUCTURAL WALLS SHALL BE CONSIDERED SHEARWALLS.
9. ALL VERTICAL REINFORCING BARS SHALL BE POSITIONED UTILIZING BAR POSITIONERS TO ENSURE PROPER LAP SPLICE AND LOCATION.
10. SEE 12/S3.0 FOR TYPICAL CMU WALL CONSTRUCTION. PROVIDE BOND BEAMS AT 4'-0" (MAX.) ON CENTER VERTICALLY. 8" CMU TO RECEIVE 2-#4 CONT. BARS AND 10" & 12" CMU TO RECEIVE 2-#5 CONT. BARS.

MARK	CMU SIZE	VERTICAL REINFORCING	BOND BEAM	REMARKS
CMU1	12"	#6 AT 32" ON CENTER	2 - #5'S	
CMU2	8"	#5 AT 24" ON CENTER	2 - #4'S	

STRUCTURAL LINTEL SCHEDULE (SL)



TYPE "A1"



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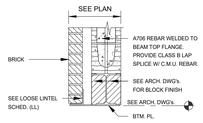


TYPE "B"

MARK	TYPE	LINTEL / PLATE SIZE	REMARKS
SL-1	A1	W8x24 W/ 1/4"x11" BTM. PL.	
SL-2	A1	W8x24 W/ 1/4"x11" BTM. PL.	
SL-3	A2	W8x40 W/ 1/4"x11" TOP PL.	

NOTES:

1. WHEN SPAN EXCEEDS 6'-0" SHORE THE LINTEL DURING CONSTRUCTION.
2. GROUT ALL C.M.U. CELLS SOLID TO 1'-4" ABOVE THE LINTEL.
3. FPR TYPE B & C LINTEL, USE BRICK TIES AT 1'-4" O.C. TACK WELD TO BEAM WEB
4. BEAM PLATES SHALL EXTEND OPENING EDGE TO OPENING EDGE.
5. BEARING LENGTH ON EACH END SHALL EQUAL 1/12 x LINTEL SPAN (8" MIN.). INSTALL ON FRESH MORTAR BED.
6. WELD PLATES W/ MIN. 3/16" FILLET WELD, 3" LONG, AT 12" O.C. (TYP. MIN. WELD)
7. ALL LINTELS EXPOSED TO THE EXTERIOR SHALL BE GALVANIZED.
8. SEE THE ARCHITECTURAL PLANS AND THE STRUCTURAL PLANS FOR LOOSE STEEL LINTELS (LL) AS MAY BE REQUIRED TO SUPPORT FACE BRICK AND OTHER NON-LOAD BEARING MASONRY.

LOOSE STEEL (LL) LINTEL SCHEDULE

WALL TYPE	NOMINAL WALL THICKNESS	CLEAR MASONRY OPENING WIDTH	STEEL LINTEL SECTION
BRICK	4"	UP TO 6'-6"	4"x3 1/2"x5/16"(LLV) ANGLE
		UP TO 7'-6"	5"x3 1/2"x5/16"(LLV) ANGLE
		UP TO 8'-6"	6"x3 1/2"x5/16"(LLV) ANGLE
		UP TO 11'-0"	6"x3 1/2"x1/2"(LLV) ANGLE
CONCRETE MASONRY UNIT (CMU)	6"	UP TO 7'-0"	2-3 1/2"x2 1/2"x5/16"(LLV) ANGLES
	8"	UP TO 7'-6"	2-4"x3 1/2"x5/16"(LLV) ANGLES
		UP TO 8'-6"	2-5"x3 1/2"x5/16"(LLV) ANGLES
		UP TO 11'-0"	2-6"x3 1/2"x5/16"(LLV) ANGLES
	10"	UP TO 9'-6"	2-6"x4"x5/16"(LLV) ANGLES
		UP TO 11'-0"	2-7"x4"x5/16"(LLV) ANGLES
	12"	UP TO 7'-6"	3-4"x3 1/2"x5/16"(LLV) ANGLES
		UP TO 8'-6"	3-5"x3 1/2"x5/16"(LLV) ANGLES
		UP TO 11'-0"	3-6"x3 1/2"x5/16"(LLV) ANGLES

NOTES:

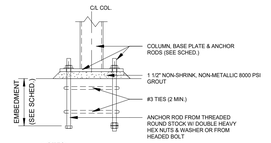
1. LINTELS CALLED OUT ON THIS SCHEDULE ARE FOR NON-LOAD BEARING MASONRY WALLS AND ARE FOR LOAD BEARING MASONRY WALLS WHERE STEEL LINTEL IS NOT REFERENCED AND THE LOAD IS INTRODUCED ABOVE THE LINTEL AT A DISTANCE GREATER THAN THE LINTEL SPAN.
2. CMU IS MASONRY MATERIAL COMPLYING WITH THE ASTM C90 SPECIFICATION. ALL CMU MATERIAL SHALL BE NORMAL WEIGHT UNLESS NOTED OTHERWISE.
3. PROVIDE MINIMUM 8" BEARING EACH END OF LINTEL. LINTEL BEARING LENGTH SHALL BE 1/12 LINTEL CLEAR SPAN.
4. ALL LINTELS EXPOSED TO THE EXTERIOR SHALL BE HOT-DIPPED GALVANIZED UNLESS NOTED OTHERWISE. ALL OTHER LINTELS SHALL BE PAINTED.
5. WHEN THE LINTEL CLEAR SPAN EXCEEDS 3'-6", SHORE THE LINTEL AT 4'-0" O.C. (MAX.) UNTIL ALL MORTAR AND GROUT HAVE REACHED 75 PERCENT OF SPECIFIED COMPRESSIVE STRENGTH.
6. CONTROL JOINTS AT MASONRY OPENINGS UTILIZING THE LOOSE STEEL LINTELS ON THIS SCHEDULE SHALL CONFORM TO THE TYPICAL DETAILS.
7. ANY LINTEL CONDITIONS NOT COVERED BY THIS SCHEDULE SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.

NON LOAD BRG. CMU REINF. SCHEDULE

NOM. CMU THICKNESS	REINFORCEMENT		REMARKS
	VERTICAL	BOND BEAM	
8" NON LOAD-BEARING	#4 @ 48" O.C.	2-#4 CONT.	
6" NON LOAD-BEARING	#4 @ 48" O.C.	1-#4 CONT.	

NOTES:

1. BOND BEAM REINFORCING DOES NOT REQUIRE HOOKS AT ENDS FOR NON LOAD BEARING WALLS, U.N.O.
2. ALL NON-LOAD BEARING TOP OF WALLS TO BE BRACED AT 36 x NOMINAL WALL THICKNESS. IF INTERSECTING WALLS EXCEED SPACING, BRACE ACCORDINGLY.



NOTES:

1. ALL ANCHOR RODS SHALL BE ASTM F1554 GRADE 36.
2. HEADED BOLT OR THREADED STOCK MATERIAL MUST BE USED FOR ANCHOR RODS

4 Typical Anchor Rod Detail
1" = 1'-0"

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SCHEDULES AND TYPICAL DETAILS

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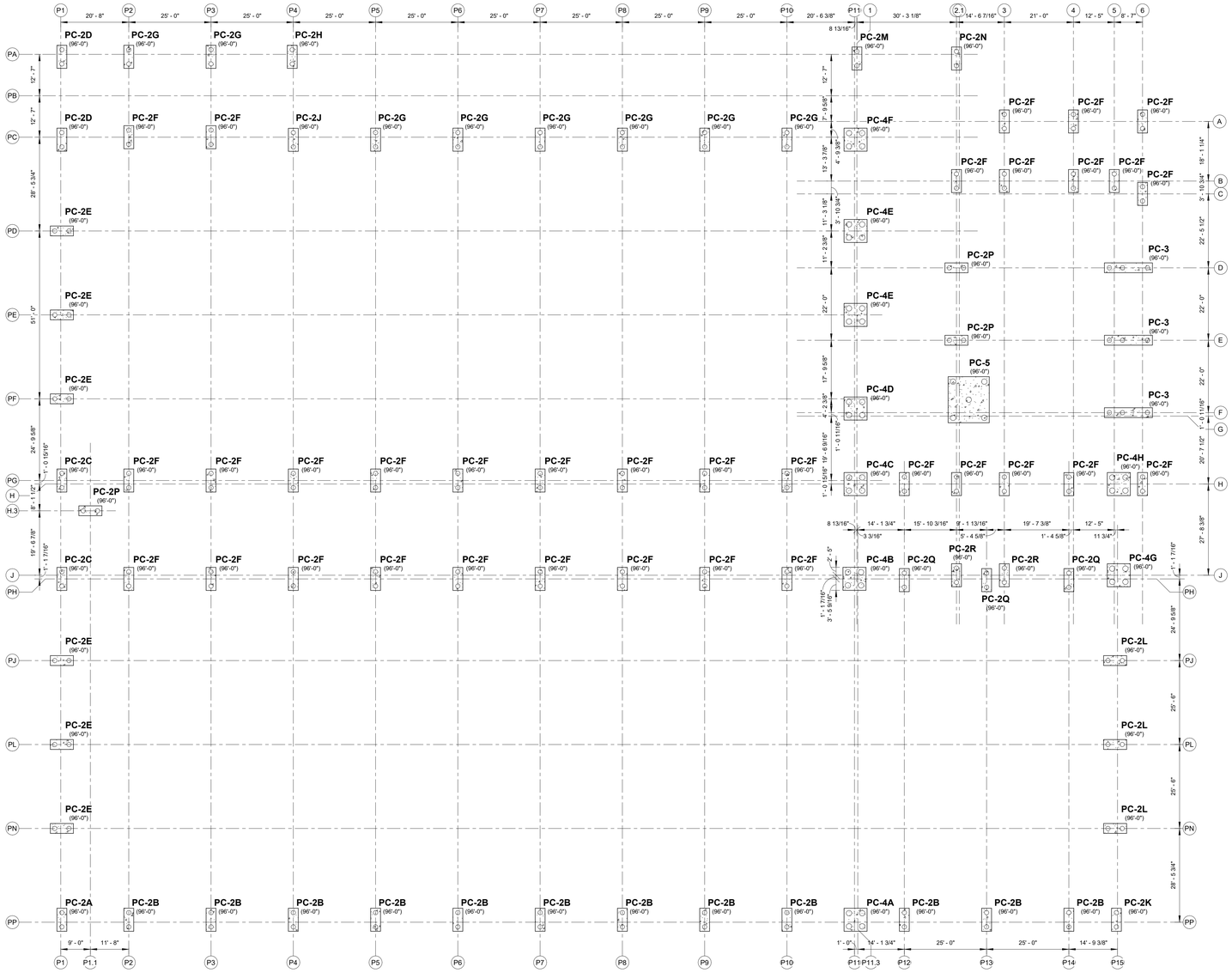
S0.2



Augercast Pile/Cap Plan
1/16" = 1'-0"

N

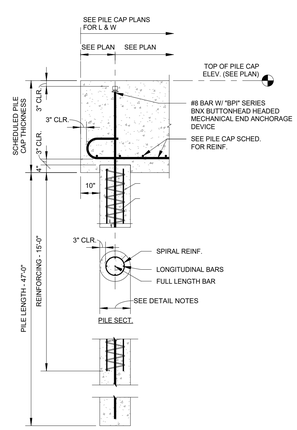
A.C. PILE CAP PLAN NOTES:

1. **PC-2** (99'-4") INDICATES PILE CAP MARK & TOP OF PILE CAP ELEVATION. SEE S1.1 FOR PILE CAP DETAILS.
2. SEE STRUCTURAL GENERAL NOTES SHEETS S0.0 & S0.1 FOR ADDITIONAL AUGERCAST PILE REQUIREMENTS.
3. ASSUMED FINISH FLOOR ELEVATION = 100'-0", UNLESS NOTED OTHERWISE.
4. AUGER CAST PILES TO BE 16" DIAMETER (100 TON/65'-0" LENGTH) AS SPECIFIED BY GEOTECHNICAL REPORT.
5. SEE S2.0 FOR GRADE BEAMS.
6. SEE STATEMENT OF SPECIAL INSPECTIONS FOR PILE TESTING REQUIREMENTS. PILE CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT FOR THE REQUIRED LOAD TEST (ASTM D1143). SPECIAL INSPECTOR SHALL BE RESPONSIBLE FOR THE RECORDING AND DOCUMENTING OF THE TEST.
7. SEE SHEET S2.0 FOR GENERAL FOUNDATION INFORMATION REFERRING TO ITEMS SUCH AS FOUNDATION WALLS, GRADE BEAMS, FOOTINGS, SLAB-ON-GRADE, ETC.

PILE CAP (PC) SCHEDULE

MARK	THICKNESS	BOTTOM REINFORCEMENT		PILES (NUMBER)	DETAIL	NOTES
		LONG BARS	SHORT BARS			
PC-2	48	4-#9(H)	7-#9(H)	2	SEE S1.1	
PC-3	48	4-#9(H)	13-#9(H)	3	SEE S1.1	
PC-4	48	10-#9(H)	10-#9(H)	4	SEE S1.1	
PC-5	48	10-#9(H)	10-#9(H)	5	SEE S1.1	

NOTES:
(H) DESIGNED CAPACITY 60 TONS. ALL PILES 16" DIA.



1 / S1.0 Pile Section Detail
1/4" = 1'-0"

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A.C. PILE & CAP PLAN

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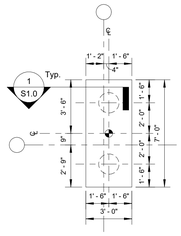
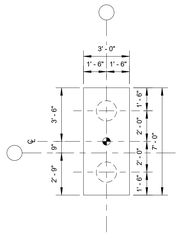
SHEET
S1.0



1 S1.1 PC-2A 1/4" = 1'-0"



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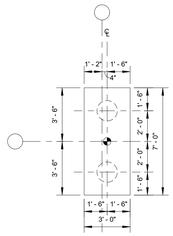

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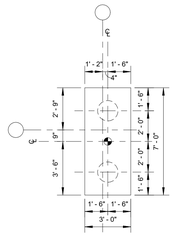

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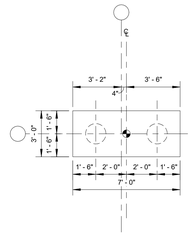

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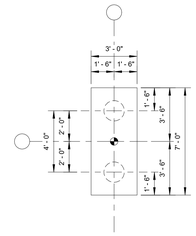

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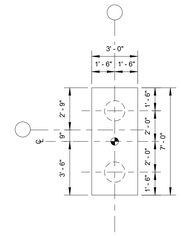
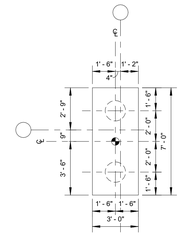


7 S1.1 PC-2G 1/4" = 1'-0"



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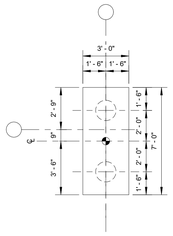

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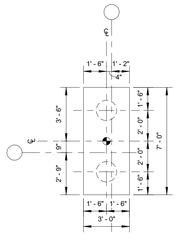

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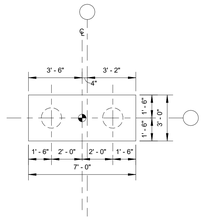

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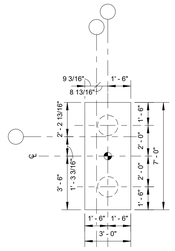

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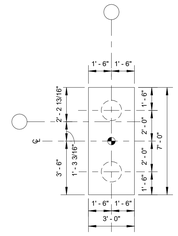

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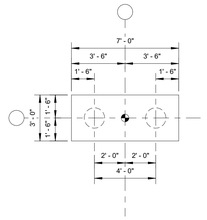

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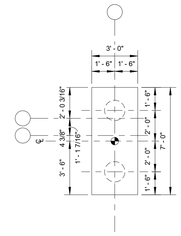

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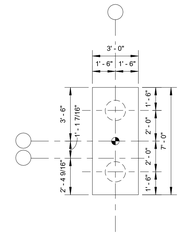

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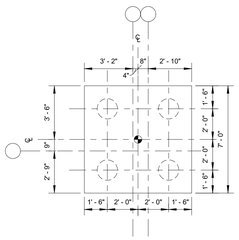

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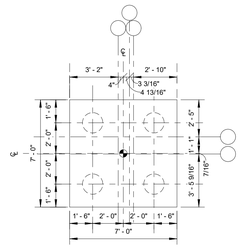
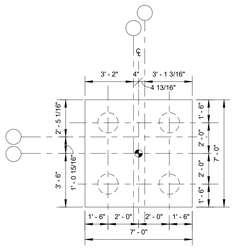


18 S1.1 PC-4B 1/4" = 1'-0"



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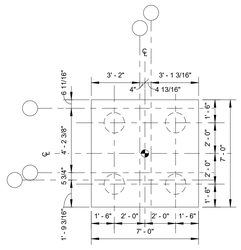

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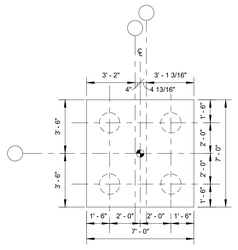

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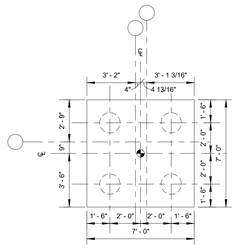

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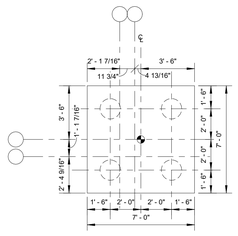

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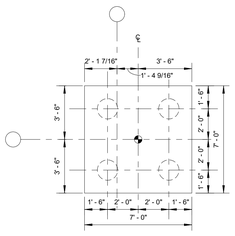

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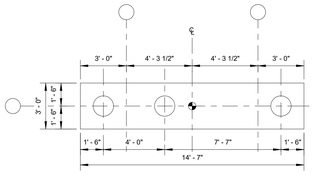
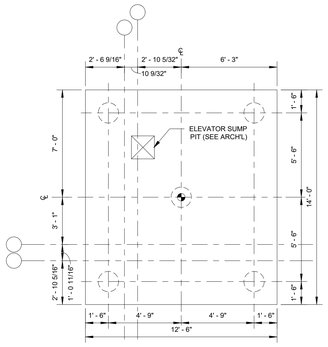


25 S1.1 PC3 1/4" = 1'-0"



26 S1.1 PC-5 1/4" = 1'-0"

PILE CAP DETAIL NOTES

1. SEE 1.0 FOR PILE CAP SCHEDULE FOR ADDITIONAL INFORMATION.
2. SEE DETAIL 1/S1.0 FOR TYPICAL A.C. PILE CAP DETAIL.

SHERMAN CARTER BARNHART ARCHITECTS

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PILE CAP DETAILS

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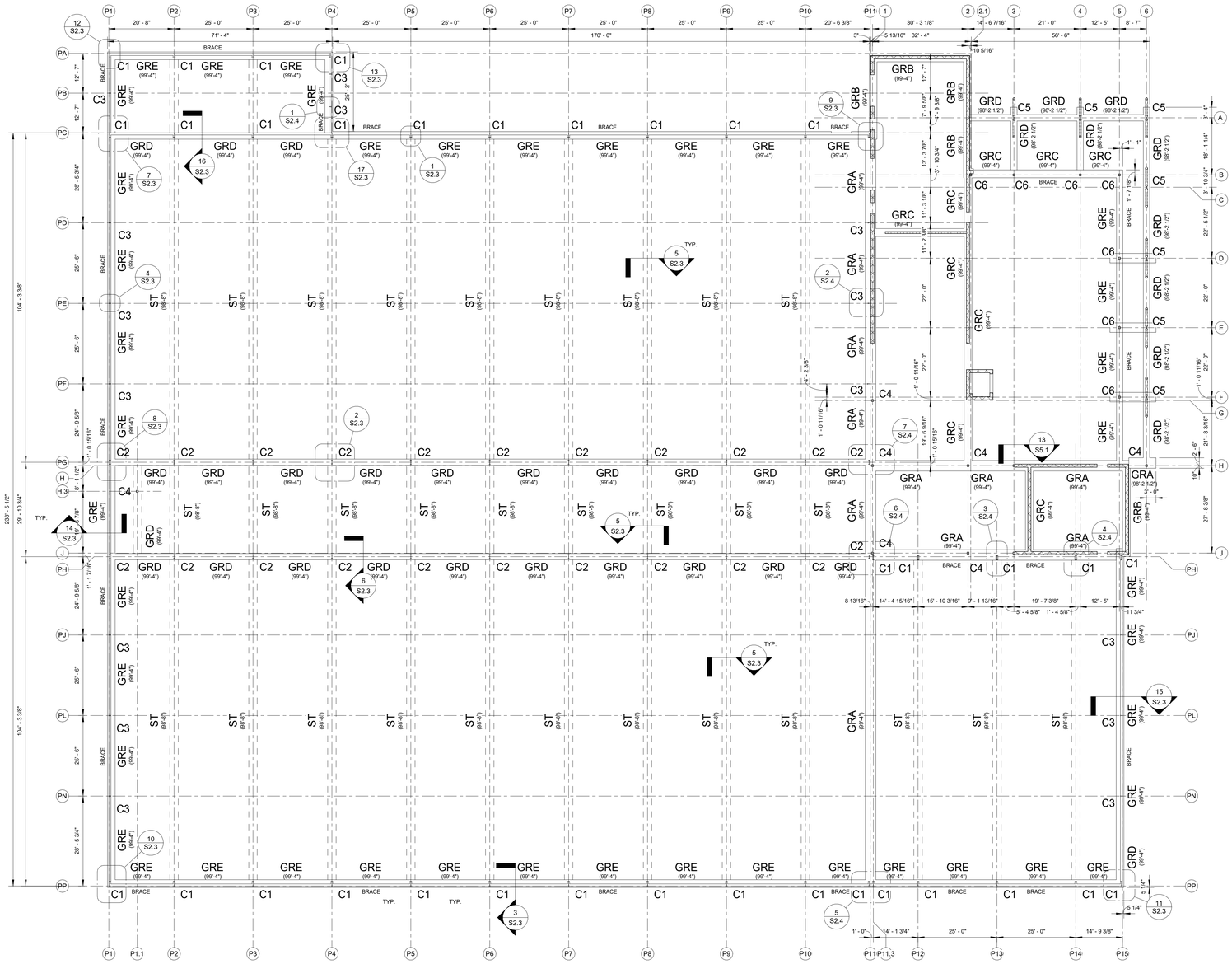
SHEET

S1.1



Foundation Plan
1/16" = 1'-0"

FOUNDATION PLAN NOTES

1. SEE S0.0 AND S0.1 FOR GENERAL NOTES.
2. SEE SHEET S0.2 & S2.0 FOR SCHEDULES.
3. SEE S6.0 & S6.1 FOR BRACE ELEVATIONS & DETAILS.
4. FINISH SLAB-ON-GRADE ELEVATIONS:
   A. CALLED 100'-0" (393.73'), UNLESS NOTED OTHERWISE.
5. NEW SLAB-ON-GRADE CONSTRUCTION:

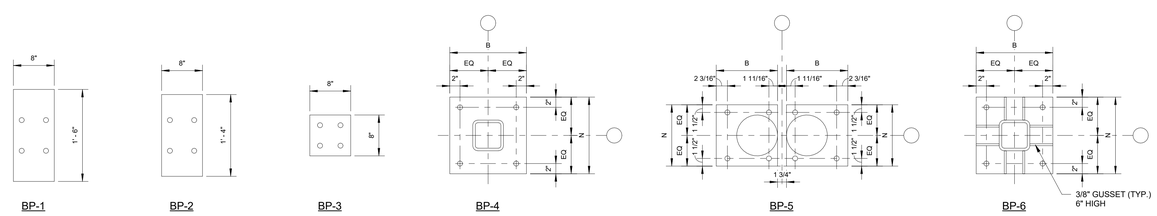
   EXPOSED CONCRETE
   A. 6" NORMAL WEIGHT CONCRETE ON 10 MIL POLYETHYLENE VAPOR BARRIER ON 4" COMPACTED GRANULAR FILL ON PREPARED SUBGRADE. REINFORCE THE SLAB WITH #4 @ 12" O.C. EACH WAY (MID-DEPTH).
   B. SEE SPECIFICATIONS FOR SLAB-ON-GRADE EXPOSED CONCRETE (POLISHED, STAINED, ETC.).
   C. PROVIDE BOLSTERS, CHAIRS, SPACES AND OTHER DEVICES FOR SPACING, SUPPORTING AND FASTENING REINFORCING BARS AND WELDED WIRE MESH REINFORCEMENT IN PLACE.
   D. CONTROL / CONSTRUCTION JOINT SPACING SHALL NOT EXCEED 10'-0" O.C. POSITION JOINTS AT COLUMN CENTERLINES AND/OR AS INDICATED ON ARCHITECTURAL AND STRUCTURAL PLANS AND DETAILS. ASPECT RATIO (PANEL LENGTH TO WIDTH) SHALL NOT EXCEED 1.5.
   E. G.C. TO HAVE A PRE-POUR CONSTRUCTION MEETING. G.C., ARCHT, ENGINEER AND CONCRETE CONTRACTOR SHALL BE PRESENT TO DISCUSS PROCEDURES AND PROCESS FOR POUR AND TO MITIGATE SHRINKAGE CRACKS.
   F. G.C. TO SUBMITT CONSTRUCTION / CONTROL JOINT PLAN FOR ARCHT. AND ENGINEER REVIEW AND APPROVAL.
   G. ALL SAWN CJs SHALL BE DONE AS SOON AS CONCRETE IS CAPABLE OF WITHSTANDING WORKER AND EQUIPMENT.
   H. SLAB-ON-GRADE SHALL BE CURED AND PROTECTED AS REQUIRED BY ACI PROCEDURES.
   I. CONCRETE CONTRACTOR SHALL HAVE 5 YEARS MIN. EXPERIENCE WITH EXPOSED CONCRETE INSTALLATION AND HAVE PROVEN RESULTS.

   ALL OTHER TYPICAL CONCRETE SLAB-ON-GRADE
   A. TYPICAL TO BE 6" NORMAL WEIGHT CONCRETE ON 10 MIL POLYETHYLENE VAPOR BARRIER ON 4" COMPACTED GRANULAR FILL ON PREPARED SUBGRADE. REINFORCE THE SLAB WITH #4 @ 12" O.C. EACH WAY (MID-DEPTH).
6. SEE CIVIL / SITE / PLUMBING DRAWINGS FOR UNDERGROUND PIPE LOCATIONS AND ELEVATIONS. STEP FOOTINGS AS REQUIRED AND SLEEVE WALL PER DETAIL 4/S2.2.
7. PROVIDE A THICKENED SLAB-ON-GRADE BENEATH ALL NON-LOADBEARING CMU WALL CONSTRUCTION. SEE DETAIL 9/S2.2.
8. PROVIDE CONTROL / CONSTRUCTION JOINTS IN SLAB PER DETAIL 1&2/S2.2. LOCATE JOINTS AT 12'-6" O.C. (MAX), UNLESS NOTED OTHERWISE.
9. ALL CMU WALLS SHOWN ON PLAN SHALL BE CONSIDERED SHEAR WALLS. SEE SCHEDULES AND DETAIL 12/S2.2.
10. SEE ARCH'L & CIVIL FOR EXTERIOR SLAB-ON-GRADE
11. TOP OF ALL GRADE BEAMS TO BE 99'-4", UNLESS NOTED OTHERWISE. (SEE PLANS)
12. TOP OF ALL PILE CAPS TO BE 96'-0", UNLESS NOTED OTHERWISE. (SEE PLANS)
13. G.C. SHALL COORDINATE PEMB COLUMNS, BASE PLATES, ANCHOR RODS, REACTIONS, ETC. WITH THE PLANS. ANY DISCREPANCIES OR CONFLICTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. PLANS AND SPECIFICATIONS HAVE BEEN DESIGNED BASE UPON PRELIMINARY INFORMATION PROVIDED BY THE PEMB SUPPLIER. DESIGN CHANGES SHALL BE PERFORMED AT ADDITIONAL COST.
14. PROVIDE THRUST RODS AND ENCASEMENT AT MAIN FRAMES. EXTEND FULL LENGTH (COLUMN TO COLUMN) AND PROVIDE CLASS B LAP SPLICES. (SEE DETAIL X/S?.?). TOP OF CONCRETE = 98'-11", UNLESS NOTED OTHERWISE.
15. G.C. TO COORDINATE ALL FOOR OPENINGS W/ PEMB SUPPLIER

GRADE BEAM SCHEDULE

MARK	SIZE W.	SIZE H.	HORIZONTAL REINFORCEMENT T_R	H_R	B_{R1}	B_{R2}	TIES S_R (END, FIELD, END)	REMARKS
GRA	3'-4"	4'-0"	5-#8	3-#8 E.F.	5-#8	5-#8	#5 @ 4", #5 @ 18", #5 @ 4"	
GRB	2'-0"	4'-0"	4-#8	3-#8 E.F.	4-#8	5-#8	#5 @ 6", #5 @ 12", #5 @ 6"	BRICK LEDGE AT EXTERIOR
GRC	2'-6"	4'-0"	4-#8	3-#8 E.F.	5-#8	5-#8	#5 @ 6", #5 @ 12", #5 @ 6"	
GRD	2'-0"	4'-0"	4-#6	3-#6 E.F.	———	5-#6	#3 @ 12" O.C.	
GRE	2'-0"	4'-0"	4-#6	3-#6 E.F.	———	5-#8	#3 @ 12" O.C.	BRICK LEDGE AT EXTERIOR

1. L.W. INDICATES LONG WAY (SHORT BARS ALONG THE LONG DIRECTION OF FOOTING)
2. S.W. INDICATES SHORT WAY (LONG BARS ALONG SHORT DIRECTION OF FOOTING)
3. TOP OF ALL GRADE BEAMS AT 99'-4"
4. E.F. INDICATES EACH FACE.



4 Base Plate Details
1" = 1'-0"

COLUMN SCHEDULE (C)

MARK (SIZE)	BASE PLATE SIZE (NxBxT)	ANCHOR RODS QTY. / SIZE	ANCHOR RODS EMBEDMENT	BASE PLATE CONFIG.	P (kips) MAX.	P (kips) MIN.	V (kips)	M (ft-kips)	MIN. ANCHOR ROD EMBEDMENT	MAX. COL. DEPTH FOR 10'	MAX. COL. WIDTH FOR 10'	REMARKS
C1 (PEMB)	18"x 8"x t	PEMB	2'-0"	BP-1	65	21	45	0	24"	18"	8"	
C2 (PEMB)	16" x 8"x t	PEMB	2'-0"	BP-2	16	32	5	0	24"	16"	8"	
C3 (PEMB)	8"x 8"x t	PEMB	2'-0"	BP-3	35	-21	17	0	24"	8"	8"	
C4 (HSS 8x8x3/8)	15" x15" x t	(4) 1" DIA.	2'-0"	BP-4	———	———	———	———	24"	———	———	
C5 (2 - 8" STD. PIPE)	PR 12 x 12 x t	(4) 3/4" DIA.	2'-0"	BP-5	———	———	———	———	24"	———	———	
C6 (HSS 8x8x1/2)	15" x 15" x t	(4) 3/4" DIA.	2'-0"	BP-6	———	———	———	———	24"	———	———	

NOTE: PROVIDE LEVELING NUTS AND WASHERS.

PEMB LOAD DIAGRAM

1. THE LOADS NOTED BELOW REPRESENT THE MAXIMUM AND MINIMUM SERVICE LEVEL COLUMN LOAD REACTIONS USED FOR THE DESIGN OF THE BUILDING FOUNDATION. THESE LOADS HAVE BEEN SUPPLIED BY CHIEF BUILDINGS.
2. THE DIAGRAM ABOVE INDICATES THE ASSUMED POSITIVE DIRECTION FOR FORCES ACTING ON THE FOUNDATION FROM THE PEMB COLUMN.

SHERMAN CARTER BARNHART ARCHITECTS

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FAX: (270) 926-4122

OWENSBORO INDOOR SPORTS FACILITY

500 WEST THIRD STREET
OWENSBORO, KY 42301

GRADE BEAM PLAN

JOB NO.	22070
DATE	MAY 20, 2024
DRAWN	STAFF
CHECKED	TEL

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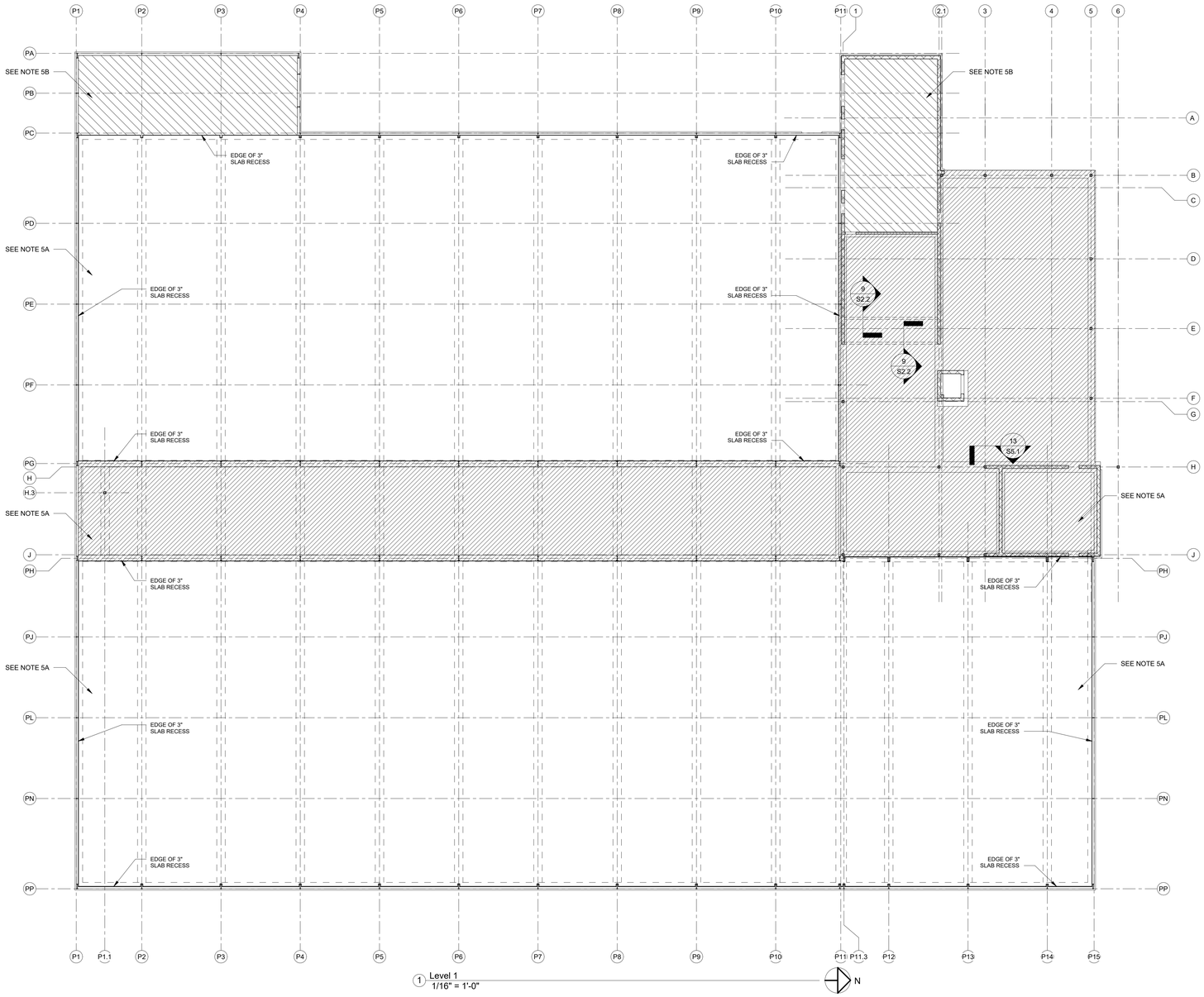
REVISIONS

SHEET

S2.0



FOUNDATION PLAN NOTES

1. SEE S0.0 AND S0.1 FOR GENERAL NOTES.
2. SEE SHEET S0.2 & S2.0 FOR SCHEDULES.
3. SEE S6.0 & S6.1 FOR BRACE ELEVATIONS & DETAILS.
4. FINISH SLAB-ON-GRADE ELEVATIONS:
   A. CALLED 100'-0" (393.73'), UNLESS NOTED OTHERWISE.
5. NEW SLAB-ON-GRADE CONSTRUCTION:

   EXPOSED CONCRETE
   A. 6" NORMAL WEIGHT CONCRETE ON 10 MIL. POLYETHYLENE VAPOR BARRIER ON 4" COMPACTED GRANULAR FILL ON PREPARED SUBGRADE. REINFORCE THE SLAB WITH #4 @ 12" O.C. EACH WAY (MID-DEPTH).
   B. 8" NORMAL WEIGHT CONCRETE ON 10 MIL. POLYETHYLENE VAPOR BARRIER ON 4" COMPACTED GRANULAR FILL ON PREPARED SUBGRADE. REINFORCE THE SLAB WITH #4 @ 12" O.C. EACH WAY (MID-DEPTH).
   C. EXPOSED CONCRETE NOTES
      a. SEE SPECIFICATIONS FOR SLAB-ON-GRADE EXPOSED CONCRETE (POLISHED, STAINED, ETC.).
      b. PROVIDE BOLSTERS, CHAIRS, SPACES AND OTHER DEVICES FOR SPACING, SUPPORTING AND FASTENING REINFORCING BARS AND WELDED WIRE MESH REINFORCEMENT IN PLACE.
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      d. G.C. TO HAVE A PRE-POUR CONSTRUCTION MEETING. G.C., ARCH'T, ENGINEER AND CONCRETE CONTRACTOR SHALL BE PRESENT TO DISCUSS PROCEDURES AND PROCESS FOR POUR AND TO MITIGATE SHRINKAGE CRACKS.
      e. G.C. TO SUBMITT CONSTRUCTION / CONTROL JOINT PLAN FOR ARCH'T. AND ENGINEER REVIEW AND APPROVAL.
      f. ALL SAWN CJs SHALL BE DONE AS SOON AS CONCRETE IS CAPABLE OF WITHSTANDING WORKER AND EQUIPMENT.
      g. SLAB-ON-GRADE SHALL BE CURED AND PROTECTED AS REQUIRED BY ACI PROCEDURES.
      h. CONCRETE CONTRACTOR SHALL HAVE 5 YEARS MIN. EXPERIENCE WITH EXPOSED CONCRETE INSTALLATION AND HAVE PROVEN RESULTS.

   ALL OTHER TYPICAL CONCRETE SLAB-ON-GRADE (STORAGE + ALT)
   A. TYPICAL TO BE 6" NORMAL WEIGHT CONCRETE ON 10 MIL. POLYETHYLENE VAPOR BARRIER ON 4" COMPACTED GRANULAR FILL ON PREPARED SUBGRADE. REINFORCE THE SLAB WITH #4 @ 12" O.C. EACH WAY (MID-DEPTH).
6. SEE CIVIL / SITE / PLUMBING DRAWINGS FOR UNDERGROUND PIPE LOCATIONS AND ELEVATIONS. STEP FOOTINGS AS REQUIRED AND SLEEVE WALL PER DETAIL 4/S2.2.
7. PROVIDE A THICKENED SLAB-ON-GRADE BENEATH ALL NON-LOADBEARING CMU WALL CONSTRUCTION. SEE DETAIL 9/S2.2.
8. PROVIDE CONTROL / CONSTRUCTION JOINTS IN SLAB PER DETAIL 1&2/S2.2. LOCATE JOINTS AT 12'-6" O.C. (MAX), UNLESS NOTED OTHERWISE.
9. ALL CMU WALLS SHOWN ON PLAN SHALL BE CONSIDERED SHEAR WALLS. SEE SCHEDULES AND DETAIL 12/S2.2.
10. SEE ARCH'L & CIVIL FOR EXTERIOR SLAB-ON-GRADE
11. TOP OF ALL GRADE BEAMS TO BE 99'-4", UNLESS NOTED OTHERWISE. (SEE PLANS)
12. TOP OF ALL PILE CAPS TO BE 96'-0", UNLESS NOTED OTHERWISE. (SEE PLANS)
13. G.C. SHALL COORDINATE PEMB COLUMNS, BASE PLATES, ANCHOR RODS, REACTIONS, ETC. WITH THE PLANS. ANY DISCREPANCIES OR CONFLICTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. PLANS AND SPECIFICATIONS HAVE BEEN DESIGNED BASE UPON PRELIMINARY INFORMATION PROVIDED BY THE PEMB SUPPLIER. DESIGN CHANGES SHALL BE PERFORMED AT ADDITIONAL COST.
14. PROVIDE THRUST RODS AND ENCASEMENT AT MAIN FRAMES. EXTEND FULL LENGTH (COLUMN TO COLUMN) AND PROVIDE CLASS B LAP SPLICES. (SEE DETAIL 5/S2.3). TOP OF CONCRETE = 98'-11", UNLESS NOTED OTHERWISE.
15. G.C. TO COORDINATE ALL OPENINGS W/ PEMB SUPPLIER

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
TED E. LOLLEY
1577
LICENSED PROFESSIONAL ENGINEER

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SLAB-ON-GRADE PLAN

JOB NO.	22070
DATE	MAY 20, 2024
DRAWN	STAFF
CHECKED	TEL

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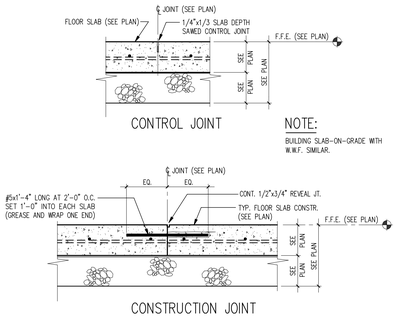
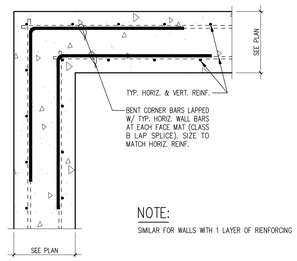
REVISIONS

SHEET

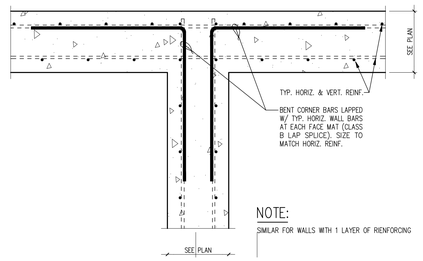
S2.1



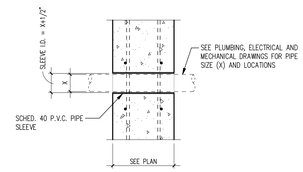
1 SLAB JOINT DETAILS
S2.2 1" = 1'-0"



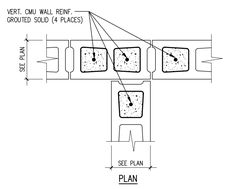
2 TEE REINFORCEMENT DET.
S2.2 1" = 1'-0"



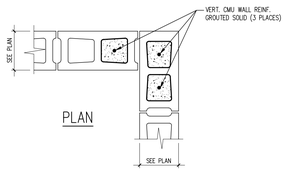
3 CORNER REINFORCEMENT DET.
S2.2 1" = 1'-0"



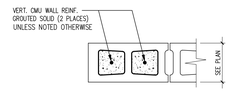
4 PIPE SLEEVE DETAIL
S2.2 1" = 1'-0"



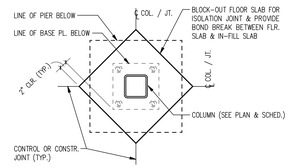
5 INTERSECTING C.M.U. WALLS
S2.2 3/4" = 1'-0"



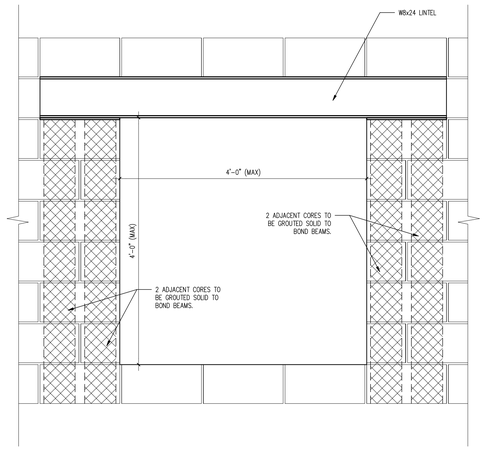
6 C.M.U. CORNER
S2.2 3/4" = 1'-0"



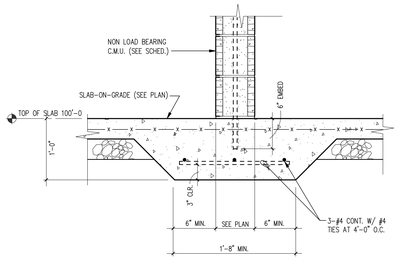
7 C.M.U. JAMB / END OF WALL
S2.2 1" = 1'-0"



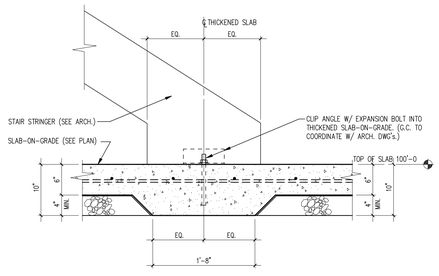
8 COLUMN ISO. JT. PLAN
S2.2 3/4" = 1'-0"



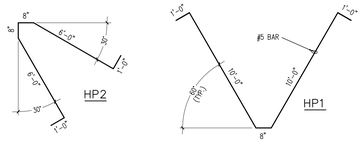
12 DETAIL
S2.2 3/4" = 1'-0"
HVAC DUCT THROUGH SHEARWALL



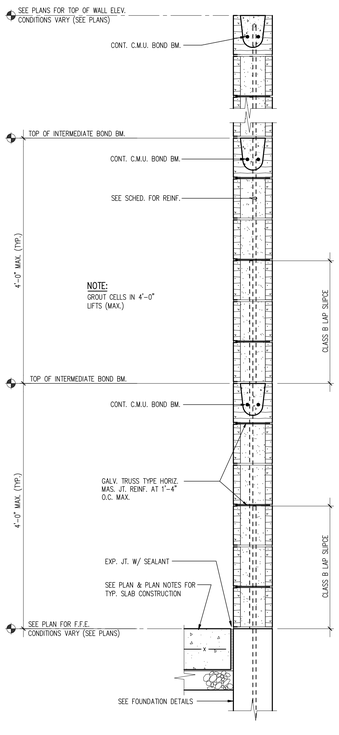
9 THICKENED SLAB DETAIL
S2.2 1" = 1'-0"
NON LOAD BEARING CMU



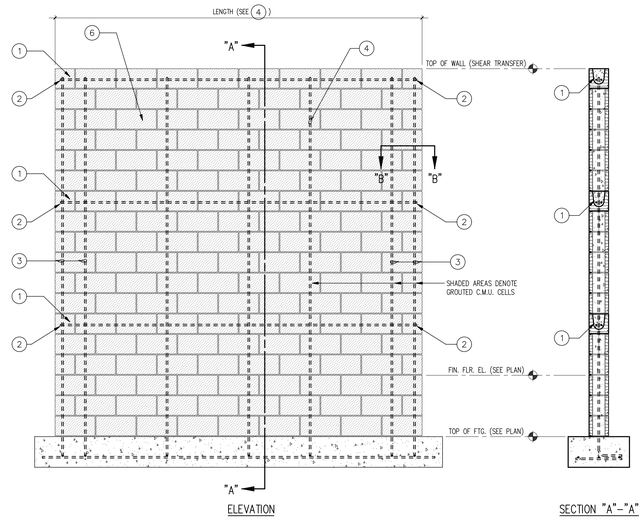
10 THICKENED SLAB DETAIL
S2.2 1" = 1'-0"



11 HAIRPIN TYPES
S2.2 NO SCALE

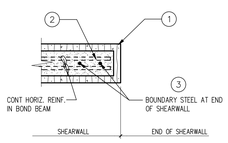


13 TYP. C.M.U. WALL
S2.2 3/4" = 1'-0"



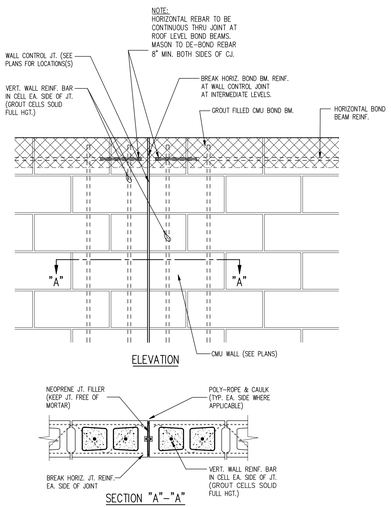
C.M.U. SHEARWALL NOTES:

1. CONTINUOUS BOND BEAMS SHALL BE SPACED AT 4'-0" (MAX.) UNLESS NOTED OTHERWISE. GROUT BOND BEAM SOLID. REINF. IN BOND BEAM SHALL BE:
   8" C.M.U. = 2-#4
   10" C.M.U. = 2-#5
   12" C.M.U. = 2-#5
2. HORIZ. REINF. IN CONTINUOUS BOND BEAMS SHALL BE EXTEND TO END OF SHEARWALL EDGE. ENDS OF SHEARWALLS MUST HAVE VERTICAL REINF. SEE C.M.U. WALL SCHEDULE FOR SIZE OF VERTICAL REINF.
3. BOUNDRY STEEL. PROVIDE 2 (MIN.) VERTICAL BARS OF SAME SIZE NOTED IN C.M.U. SCHEDULE.
4. ALL OTHER C.M.U. WALL CONSTRUCTION REQUIREMENTS SHOWN ON PLANS AND DETAILS SHALL APPLY TO SHEARWALLS. NOTES 1 AND 2 ARE ADDITIONAL INFORMATION.
5. ENDS OF SHEARWALLS SHALL BE AT ALL OPENINGS, WALL ENDS, AND AT CMU CONTROL JOINTS UNLESS NOTED OTHERWISE.
6. GROUT WALLS SOLID FULL HEIGHT.



SECTION "B"-"B"

14 TYP. C.M.U. SHEARWALL
S2.2 NO SCALE



15 C.M.U. WALL JT. DET.
S2.2 3/4" = 1'-0"

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
TED E. LOLLEY
15771
LICENSED PROFESSIONAL ENGINEER

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Fax: (270) 926-4123

OWENSBORO INDOOR SPORTS FACILITY

500 WEST THIRD STREET
OWENSBORO, KY 42301

FOUNDATION SECTIONS & DETAILS

JOB NO.	22070
DATE	MAY 20, 2024
DRAWN	STAFF
CHECKED	TEL

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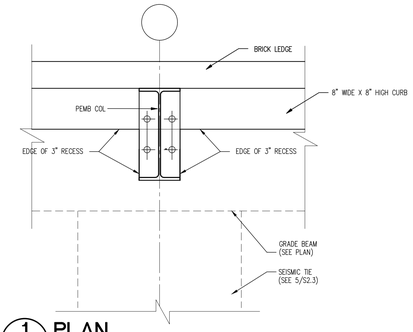
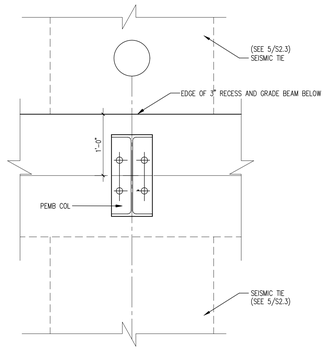
REVISIONS

SHEET

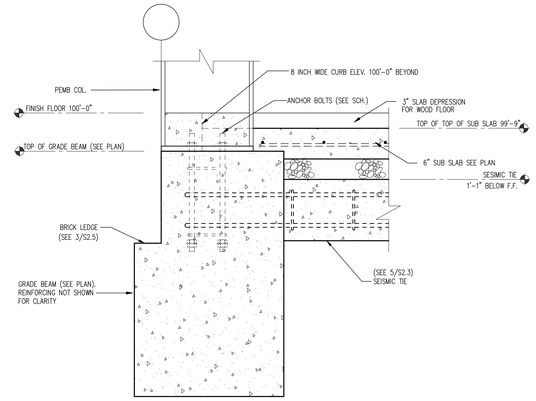
S2.2



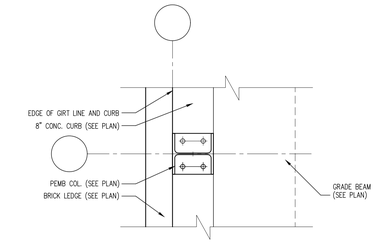
1 S2.3 **PLAN** 1" = 1'-0"
MAINFRAME COL



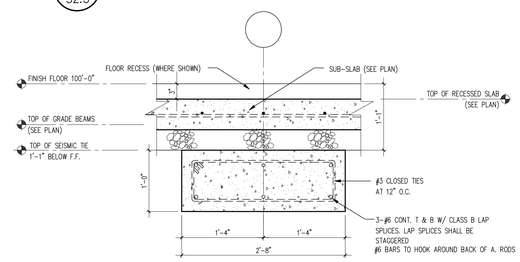
2 S2.3 **PLAN** 1" = 1'-0"
MAINFRAME COL BELOW MEZZANINE



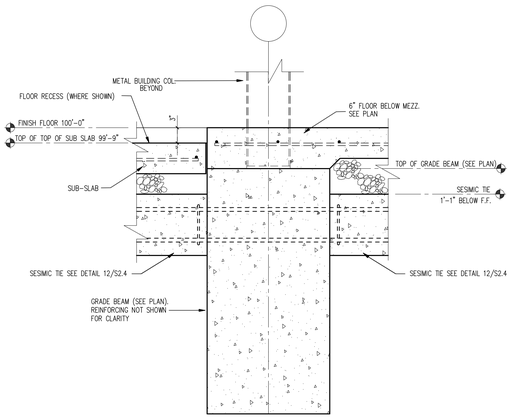
3 S2.3 **SECTION** 1" = 1'-0"
GRADE BEAM AT OUTSIDE WALL



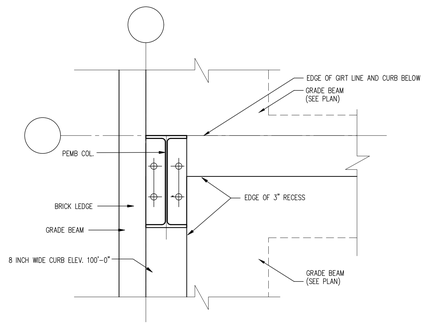
4 S2.3 **PLAN** 1" = 1'-0"
PEMB ENDWALL



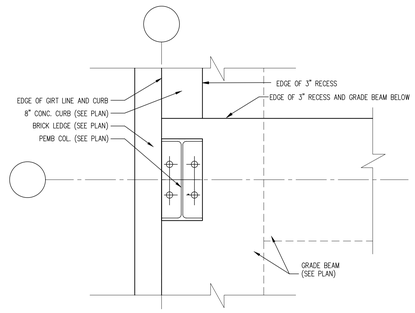
5 S2.3 **SEISMIC TIE (ST)**



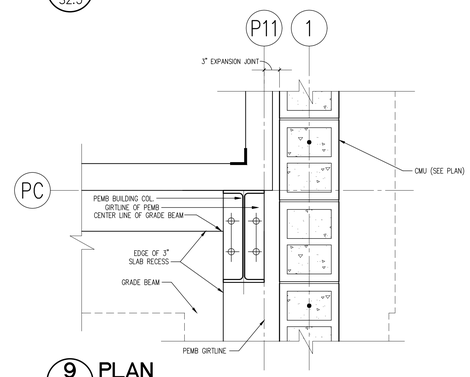
6 S2.3 **SECTION** 1" = 1'-0"
GRADE BEAM BELOW MEZZANINE



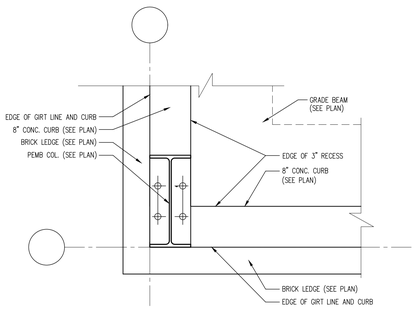
7 S2.3 **PLAN WITH ALT** 1" = 1'-0"



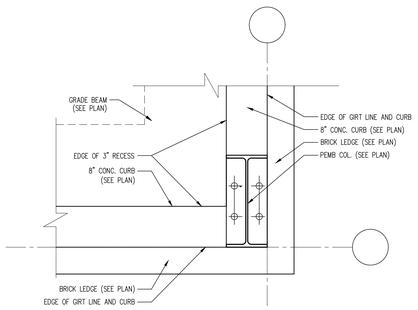
8 S2.3 **PLAN** 1" = 1'-0"
GRADE BEAM AT OUTSIDE WALL AND MEZZANINE



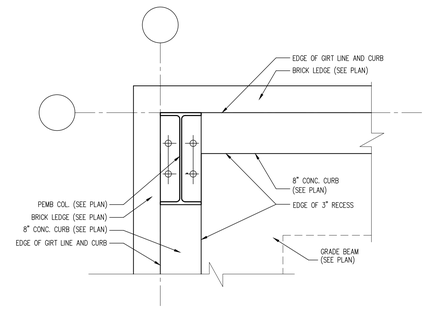
9 S2.3 **PLAN** 1" = 1'-0"



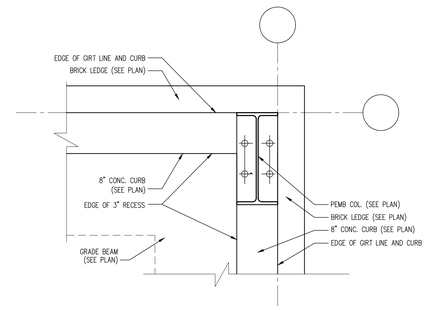
10 S2.3 **PLAN** 1" = 1'-0"



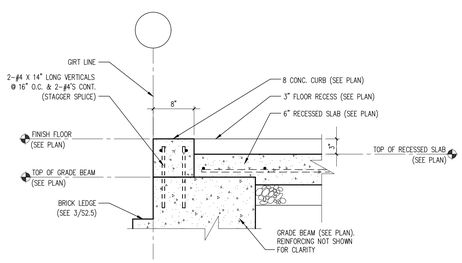
11 S2.3 **PLAN** 1" = 1'-0"



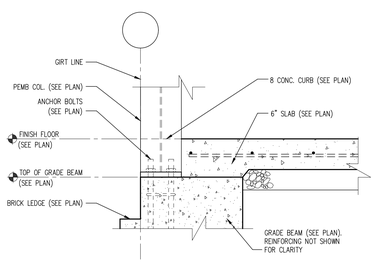
12 S2.3 **PLAN** 1" = 1'-0"



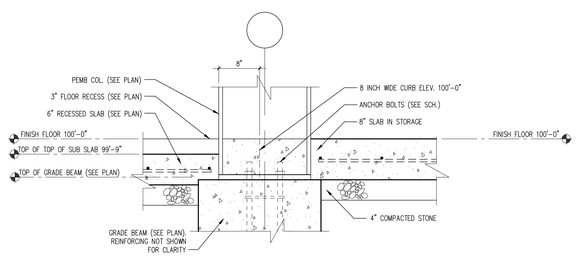
13 S2.3 **DETAIL** 1" = 1'-0"



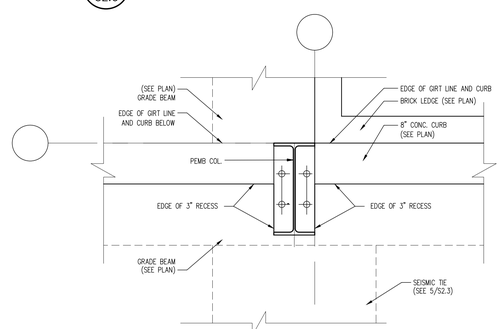
14 S2.3 **DETAIL CURB** 1" = 1'-0"



15 S2.3 **DETAIL** 1" = 1'-0"



16 S2.3 **DETAIL WITH ALT** 1" = 1'-0"
MAINFRAME COL



17 S2.3 **PLAN WITH ALT** 1" = 1'-0"

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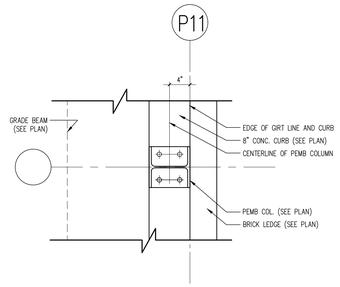
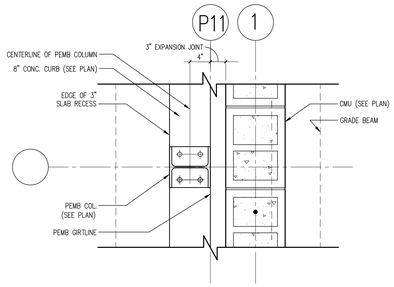
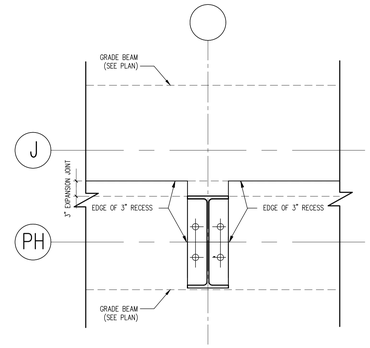
S2.3



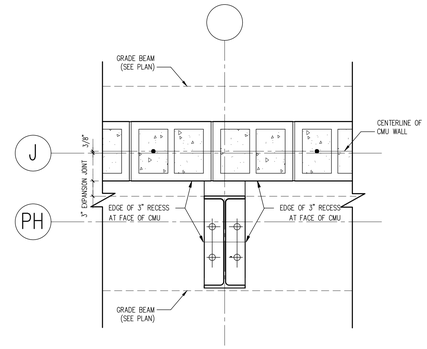
1 S2.4 **PLAN**
1" = 1'-0"



2 S2.4 **PLAN**
1" = 1'-0"



3 S2.4 **PLAN**
1" = 1'-0"



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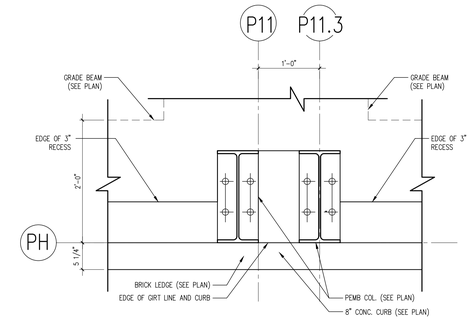
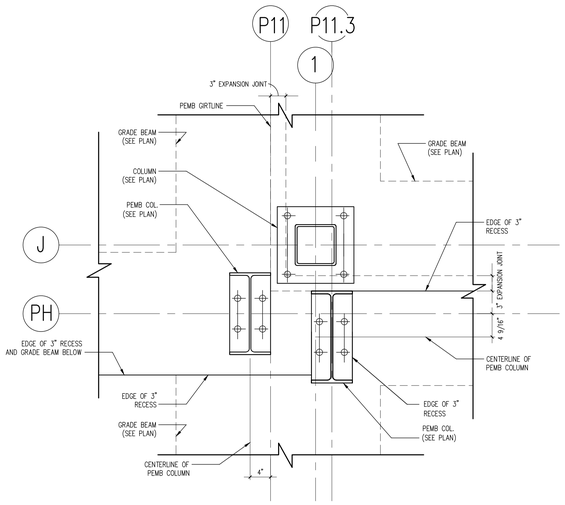
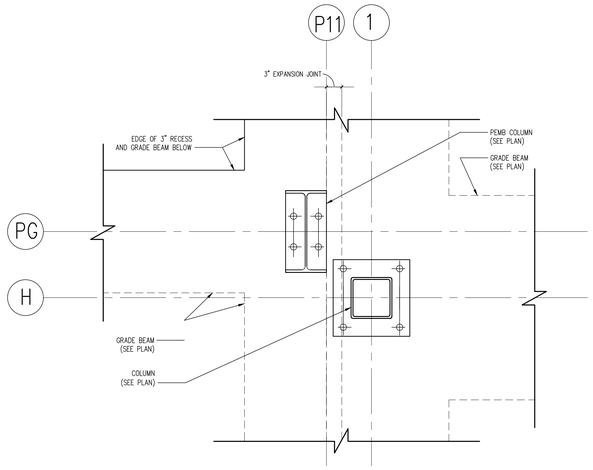
1" = 1'-0"



5 S2.4 **PLAN**
1" = 1'-0"



6 S2.4 **PLAN**
1" = 1'-0"



7 S2.4 **DETAIL**
1" = 1'-0"

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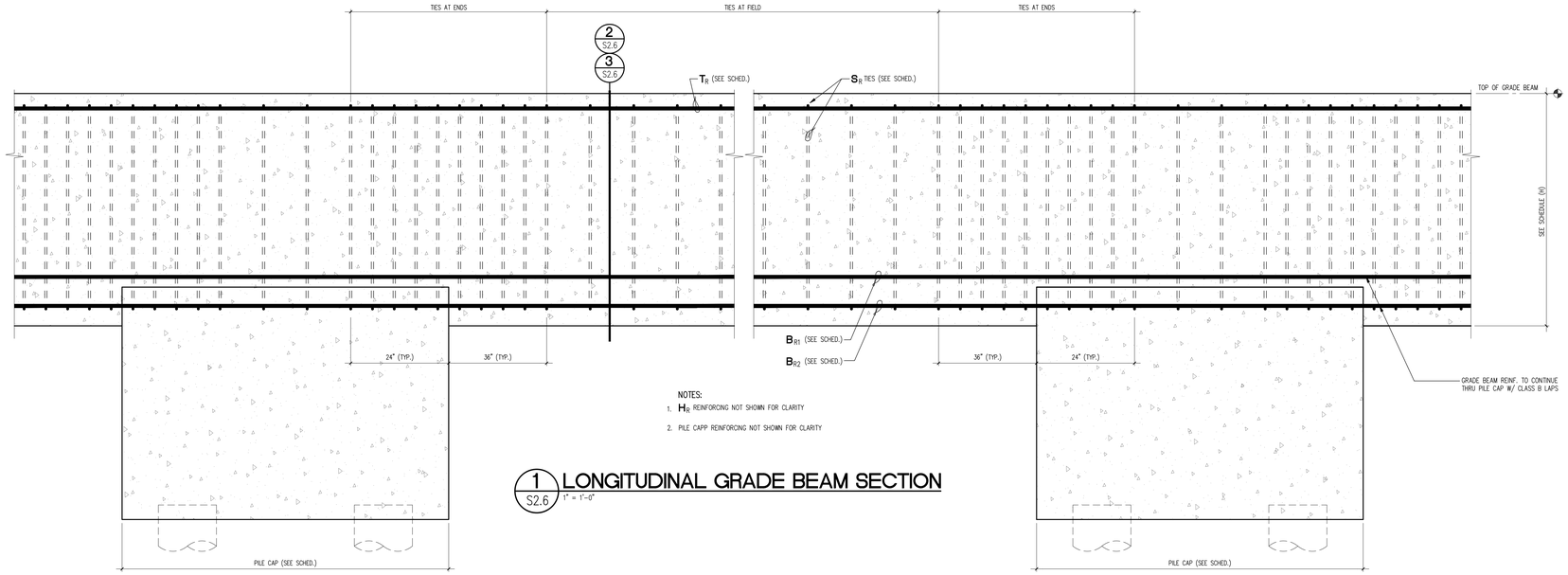
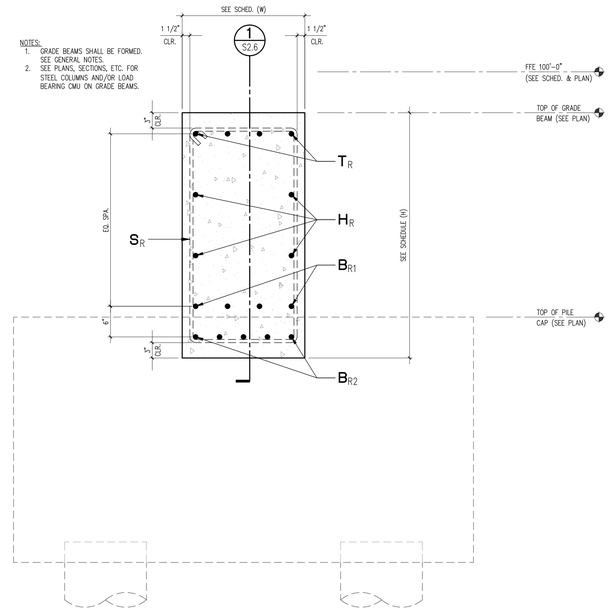
S2.4



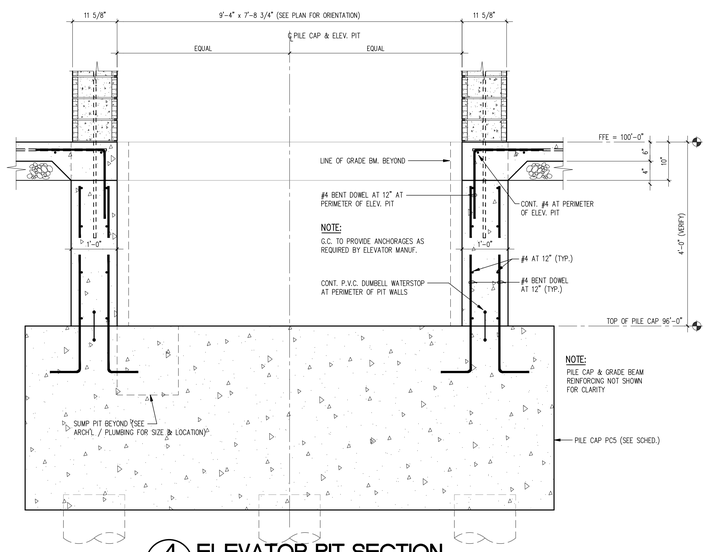
NOTES:
1. H_R REINFORCING NOT SHOWN FOR CLARITY
2. PILE CAPP REINFORCING NOT SHOWN FOR CLARITY

1 S2.6 LONGITUDINAL GRADE BEAM SECTION
1" = 1'-0"

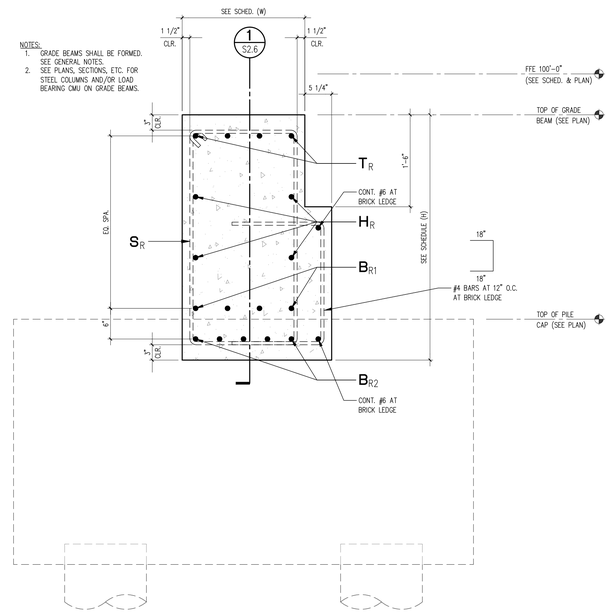


NOTES:
1. GRADE BEAMS SHALL BE FORMED. SEE GENERAL NOTES.
2. SEE PLANS, SECTIONS, ETC. FOR STEEL COLUMNS AND/OR LOAD BEARING CMU ON GRADE BEAMS.

2 S2.6 TRANSVERSE GRADE BEAM SECTION
1" = 1'-0"



4 S2.6 ELEVATOR PIT SECTION
3/4" = 1'-0"



NOTES:
1. GRADE BEAMS SHALL BE FORMED. SEE GENERAL NOTES.
2. SEE PLANS, SECTIONS, ETC. FOR STEEL COLUMNS AND/OR LOAD BEARING CMU ON GRADE BEAMS.

3 S2.6 TRANSVERSE GRADE BEAM SECTION AT BRICK LEDGE
1" = 1'-0"

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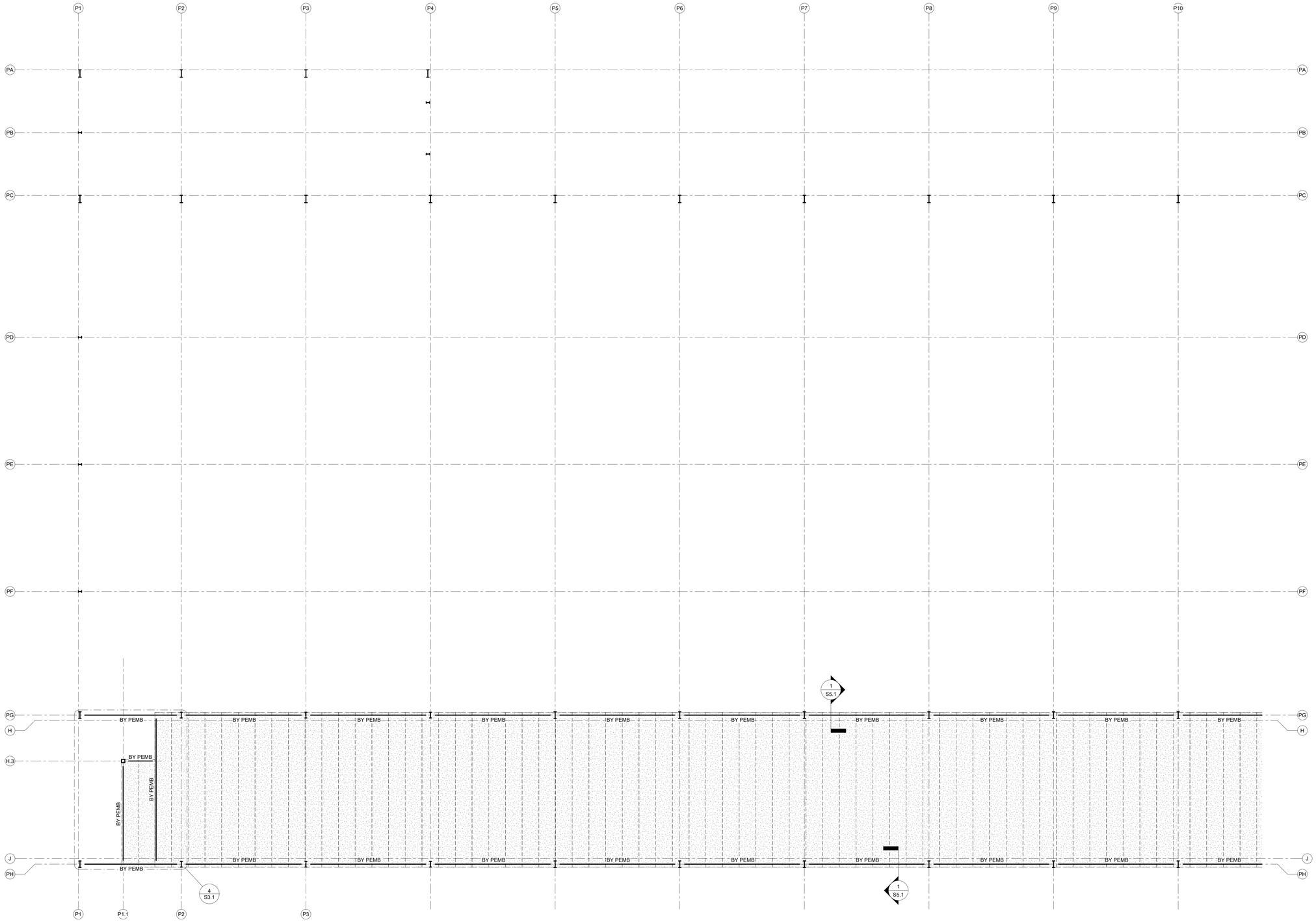
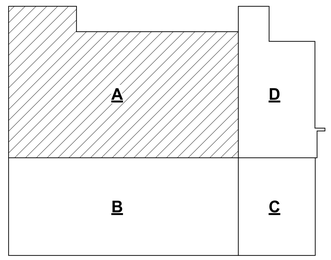
S2.5



1 Second Floor Plan - Area A
1/8" = 1'-0"

KEY PLAN



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MEZZANINE FRAMING PLAN - AREA A

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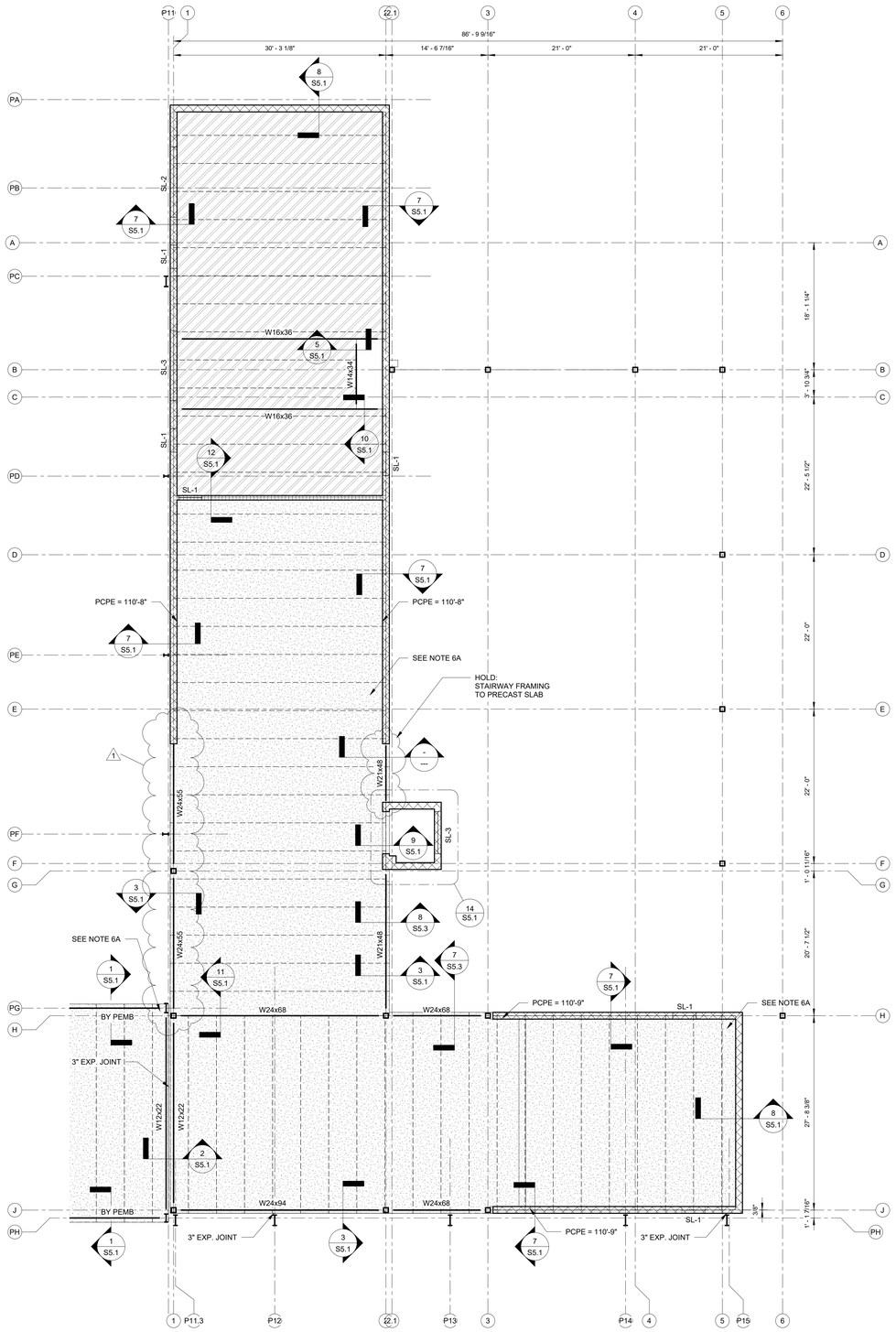
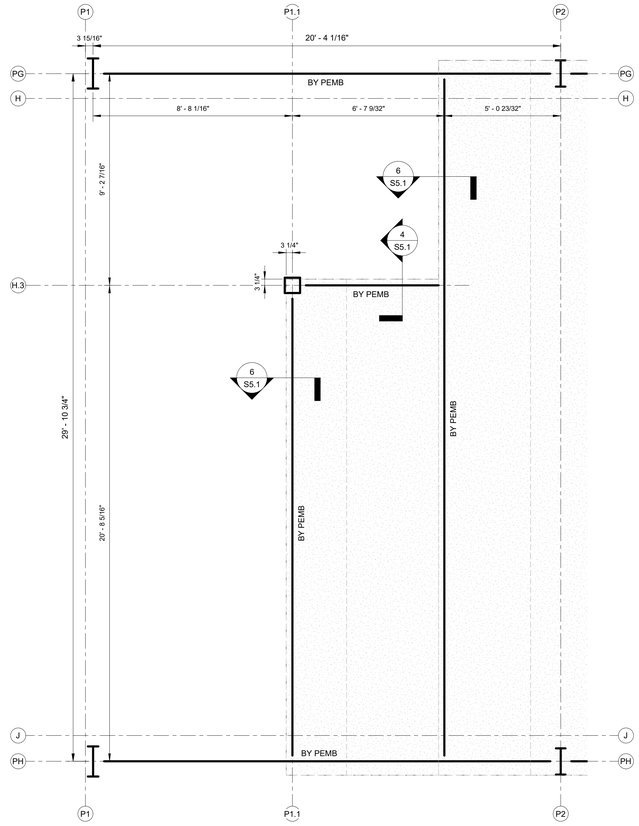
S3.0



1 Second Floor Plan - Area D
1/8" = 1'-0"

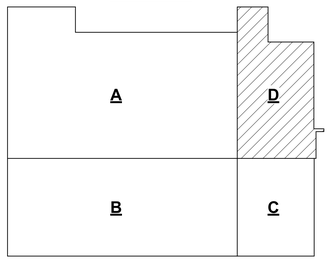


4 Enlarged Stair Framing Plan
3/8" = 1'-0"

2ND FLOOR FRAMING PLAN NOTES:

1. HOLLOW CORE PLAN DESIGN LOAD CRITERIA:
   - A. DEAD LOAD = SELF WEIGHT + 15 PSF.
   - B. LIVE LOAD:
     - MECHANICAL = 125 PSF
     - TYPICAL = 100 PSF
   - C. G.C. SHALL COORDINATE ANY/ALL OPENINGS INSTALLED IN FIELD WITH PRECAST SUPPLIER.
   - D. G.C. AND PRECAST SUPPLIER TO COORDINATE WITH MECHANICAL FOR ALL OPENINGS.
2. FINISH FLOOR ELEVATION = 112'-0", UNLESS NOTED OTHERWISE.
3. SEE SHEET 0.0 AND 0.1 FOR GENERAL NOTES.
4. SEE SHEET S3.0 FOR OVERALL PLAN.
5. SEE SHEET 0.2 FOR SCHEDULES.
6. FLOOR SYSTEM TO BE AS FOLLOWS:
   - A. FLOOR TO BE 12" HOLLOW CORE PLANKS WITH 3" TOPPING ON STEEL BEAMS / C.M.U. LOAD BEARING WALLS. REINFORCE TOPPING SLAB WITH 6x6-W1.4xW1.4 W.W.F. (FLAT SHEETS ONLY). PROVIDE SAWN CONTROL JOINTS IN THE TOPPING SLAB AT 12'-0" O.C. (MAX.). JOINTS TO BE 3/4" MAX DEPTH AND SHALL BE LOCATED ALONG HOLLOW CORE JOINTS WHEN RUNNING PARALLEL. DO NOT CUT JOINTS PERPENDICULAR TO PLANKS.
7. HOLLOW CORE PLANK BERARING ELEVATION = 110'-9", UNLESS NOTED OTHERWISE.

KEY PLAN



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MEZZANINE FRAMING PLAN - AREA D

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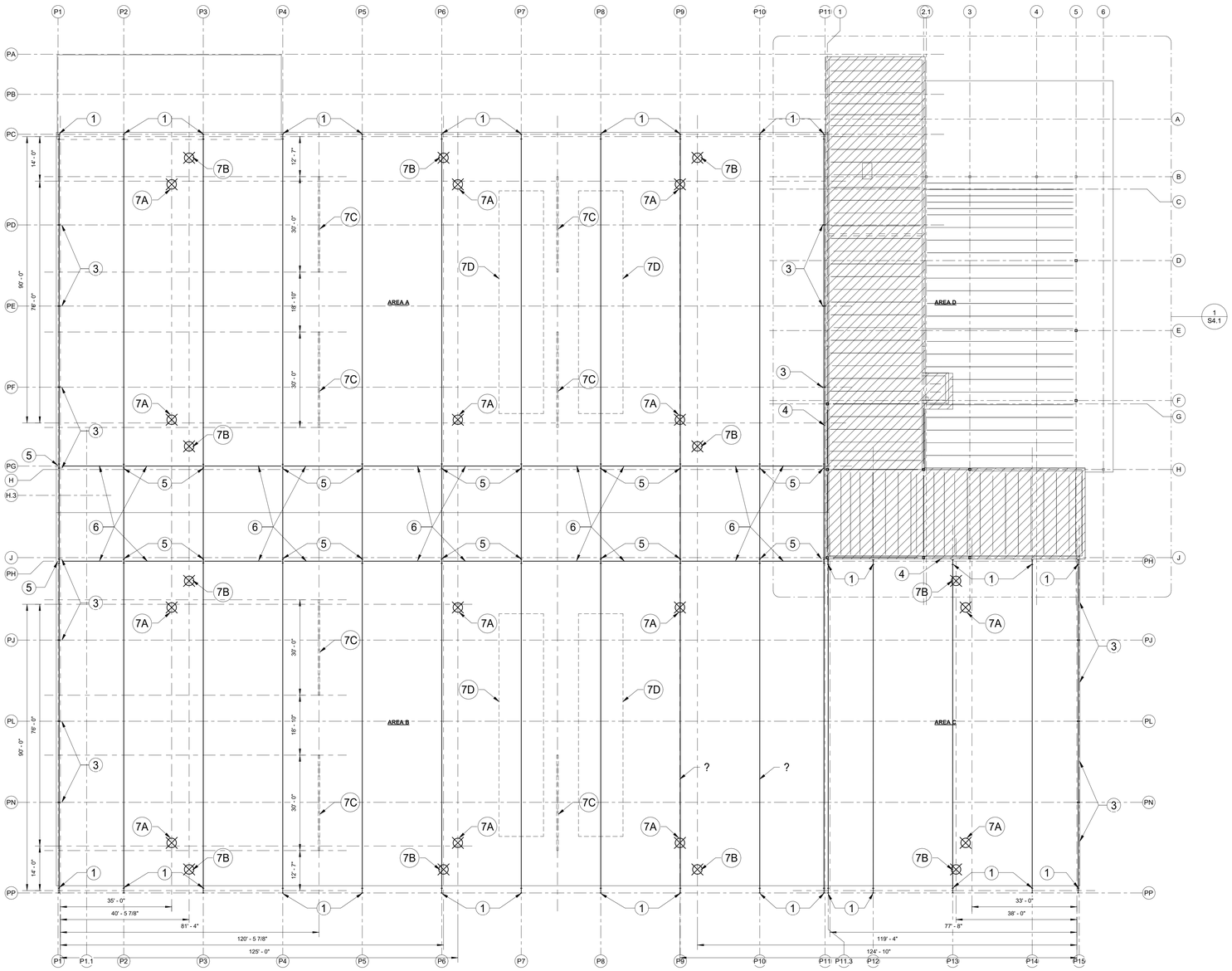
1	Mezz. Beams	5/17/24

SHEET

S3.1



1 Personnel Loading Plan & Col. Information
1/16" = 1'-0"

N

PEMB FRAMING PLAN NOTES

1. PRIMARY FRAME MAX DEPTH 18" TO 10' ABOVE FINISH FLOOR.
2. TYPICAL ENDWALL COLUMN DEPTH 14" TO 10' ABOVE FINISH FLOOR.
3. ENDWALL COLUMN DEPTH MAX 8".
4. EXPANSION JOINT
5. TYPICAL MEZANINE COLUMN MAX DEPTH 14"
6. MEZZANINE COLUMN AND BEAM
   LL = 100 PSF
   DL = 125 PSF

   BEAM LOAD
   LL = 1.5 k/ft
   DL = 2.6 k/ft
7. EQUIPMENT LOADS
   7A - BASKETBALL GOAL WEIGHT = 1500 LB
   7B - VOLLEYBALL EQUIPMENT WEIGHT = 1900 LB
   7C - CURTAIN WEIGHT = 2000 LB
   7D - BATTING CAGES = 800 LB
8. SEE JAYPRO DRAWINGS. CONTRACTOR TO SUPPLY ALL SUPPLEMENTARY STEEL FOR EQUIPMENT LOADS AND OPERATORS.

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PEMB ROOF FRAMING PLAN

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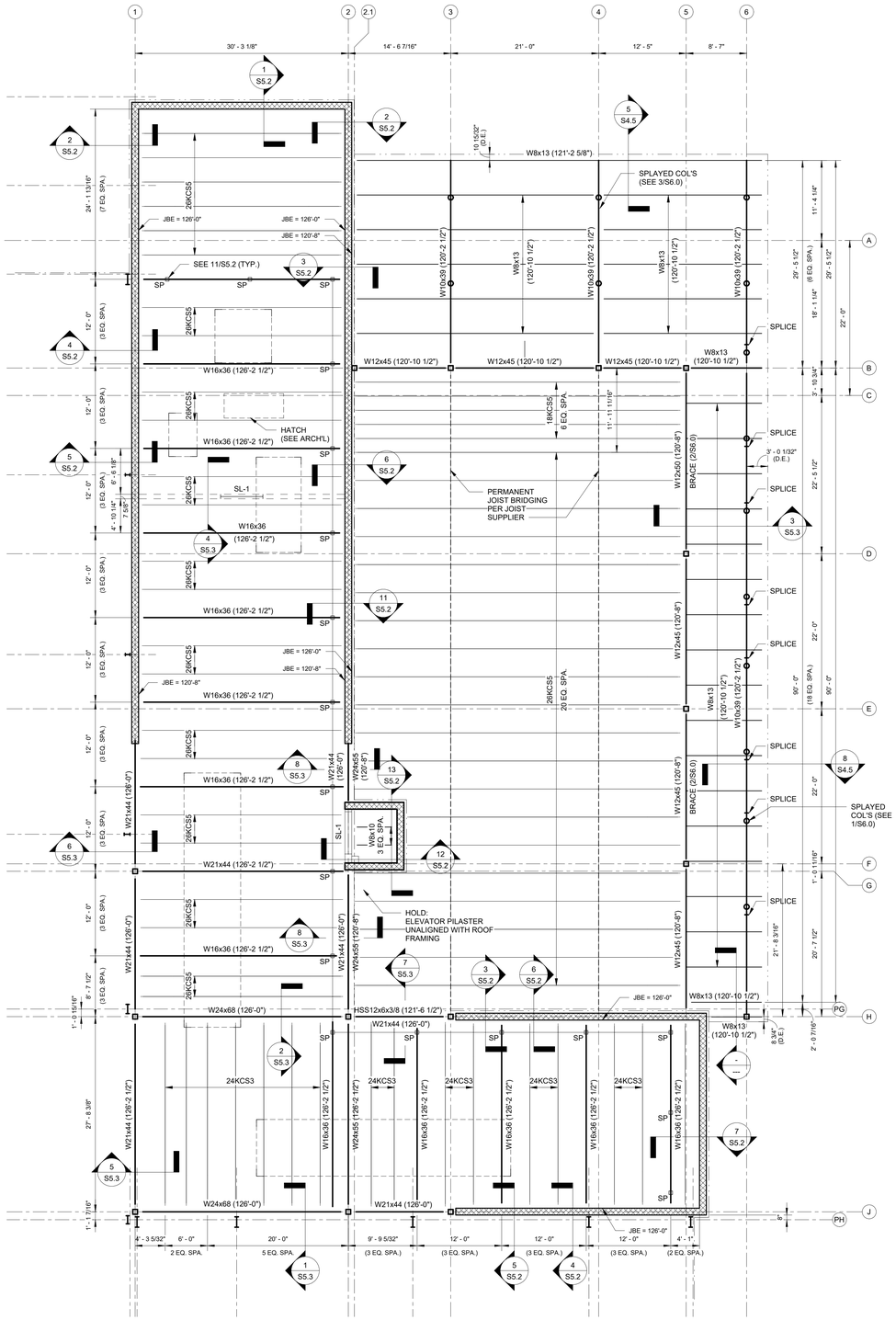
S4.0

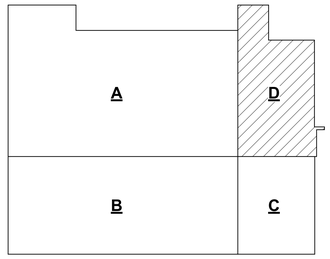


1 Roof Framing Plan - Area D
1/8" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. SEE SHEETS S0.0 AND S0.1 FOR GENERAL NOTES.
2. SEE SHEET S0.2 FOR SCHEDULES
3. ROOF FRAMING:
   A. TYPICAL LOW ROOF TO BE 2" x 20 GA., TYPE DA OR D(??), GALVANIZED METAL DECK OVER JOISTS/BEAMS. SEE GENERAL NOTES FOR ATTACHMENT.
   B. TYPICAL HIGH ROOF TO BE 2" x 20 GA., TYPE DA OR D(??), GALVANIZED METAL DECK OVER JOISTS/BEAMS. SEE GENERAL NOTES FOR ATTACHMENT.
4. (C) INDICATES BEAM CANTILEVER.
   (S) INDICATES BEAM SLOPES.
   (DE) INDICATES DECK EDGE.
5. SEE PLAN FOR TOP OF STEEL AND JOIST BEARING ELEVATIONS.
6. GENERAL CONTRACTOR TO COORDINATE ALL RTU'S WITH MECHANICAL.
7. 3'-0" x 5'-0" ROOF HATCH. SEE ARCH'L. FOR ADDITIONAL INFORMATION. FINAL BEAM PLACEMENT TO BE COORDINATED WITH HATCH SUPPLIER AND SHOP DRAWINGS. G.C. TO VERIFY ACCORDINGLY. INSTALL L4x4x5/16 ALONG PERIMETER OF OPENING FOR DECK EDGE SUPPORT AND HATCH CURB INSTALLATION.
8. SCREEN WALL
   A. SP INDICATES HSS 4x4x1/4 POST.

KEY PLAN



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500 WEST THIRD STREET
OWENSBORO, KY 42301

ROOF FRAMING PLAN - AREA D

JOB NO.	22070
DATE	MAY 20, 2024
DRAWN	STAFF
CHECKED	TEL

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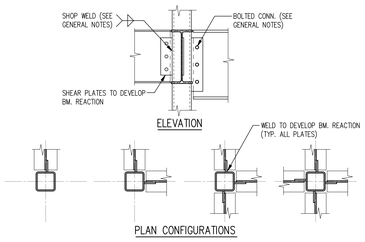
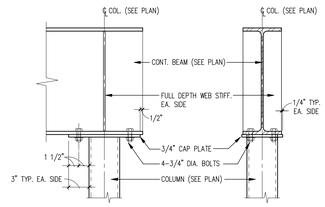
SHEET

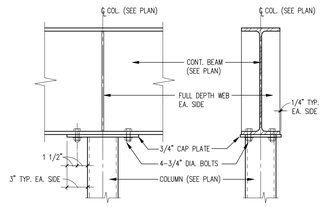
S4.1



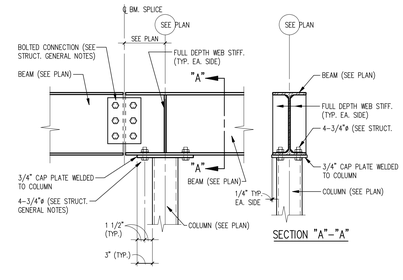
1 S5.0 BEAM CONN. TO HSS COL. (CN1)
NO SCALE



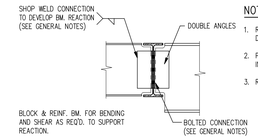
2 S5.0 BM. OVER COL. CONN. (CN2)
NO SCALE



3 S5.0 BM. OVER COL. CONN. (CN3)
NO SCALE



4 S5.0 BEAM OVER COLUMN CONN. (CN4)
1 = 1'-0"

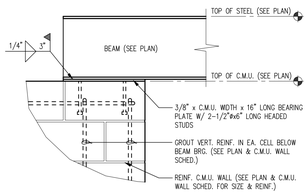


NOTES:

1. REFER TO GENERAL NOTES FOR BEAM REACTION DESIGN CRITERIA.
2. PROVIDE PRE-DESIGNED CONNECTIONS AS SHOWN IN AISC MANUAL WHERE APPLICABLE.
3. REFER TO GENERAL NOTES FOR BOLT TYPE.

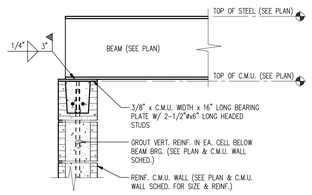
5 S5.0 BM. TO BM. SHEAR CONN. DET.
NO SCALE

NOTE:
PROVIDE C.M.U. REINFORCING AT BEARING AS SHOWN UNLESS NOTED OTHERWISE ON PLANS

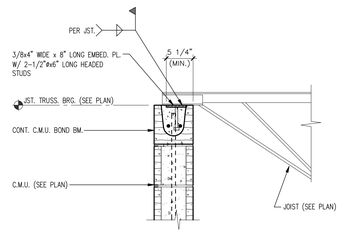


6 S5.0 TYP. DETAIL
1" = 1'-0" W/ BM. PARALLELTO C.M.U.

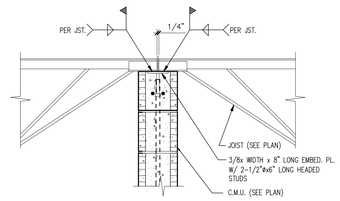
NOTE:
PROVIDE C.M.U. REINFORCING AT BEARING AS SHOWN UNLESS NOTED OTHERWISE ON PLANS



7 S5.0 TYP. DETAIL
1" = 1'-0" W/ BM. PERPENDICULAR TO C.M.U.



SINGLE

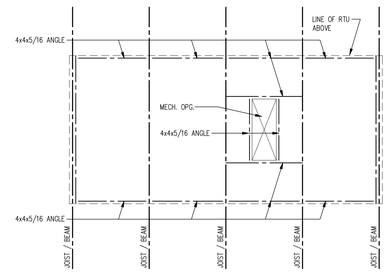


JOISTS ALIGNED

NOTE:
8" CMU= 7 5/8" PL WIDTH
10" CMU= 9 5/8" PL WIDTH
12" CMU= 11 5/8" PL WIDTH

8 S5.0 DETAIL
1" = 1'-0"

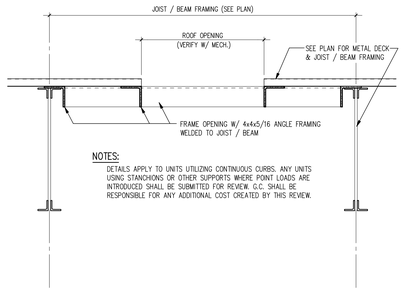
TYP. JOIST BEARING ON CMU



NOTES:

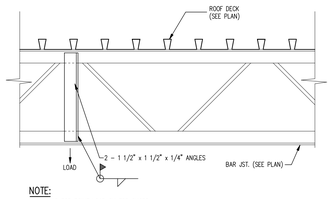
1. SEE ROOF OPENING FRAMING DETAIL FOR ADDITIONAL INFORMATION REGARDING DUCTWORK PENETRATIONS AND SUPPORT.
2. DETAILS APPLY TO UNITS UTILIZING CONTINUOUS CURBS. ANY UNITS USING STANCHIONS OR OTHER SUPPORTS WHERE POINT LOADS ARE INTRODUCED SHALL BE SUBMITTED FOR REVIEW. G.C. SHALL BE RESPONSIBLE FOR ANY ADDITIONAL COST CREATED BY THIS REVIEW.

9 S5.0 DETAIL
1" = 1'-0" MECHANICAL UNIT CURB SUPPORT PLAN



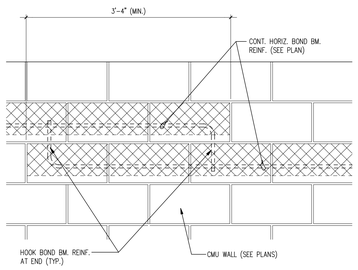
NOTES:
DETAILS APPLY TO UNITS UTILIZING CONTINUOUS CURBS. ANY UNITS USING STANCHIONS OR OTHER SUPPORTS WHERE POINT LOADS ARE INTRODUCED SHALL BE SUBMITTED FOR REVIEW. G.C. SHALL BE RESPONSIBLE FOR ANY ADDITIONAL COST CREATED BY THIS REVIEW.

10 S5.0 DETAIL
1" = 1'-0" ROOF OPENING FRAMING

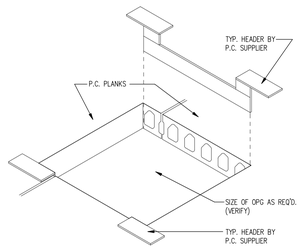


NOTE:
1. SIMILAR FOR POINT LOAD ON TOP CHORD.

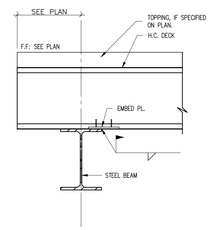
11 S5.0 CONCENTRATED LOAD DET.
1" = 1'-0"



12 S5.0 STEPPED BOND BM. DETAIL
1" = 1'-0"



13 S5.0 DETAIL
1" = 1'-0"



14 S5.0 DETAIL
1" = 1'-0" HOLLOW CORE ON STEEL BEAM

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FRAMING SECTIONS & DETAILS

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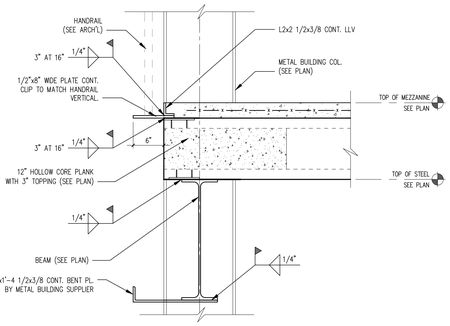
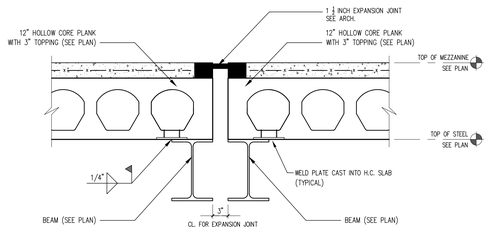
S5.0



1 S5.1 SECTION
1" = 1'-0"



2 S5.1 SECTION
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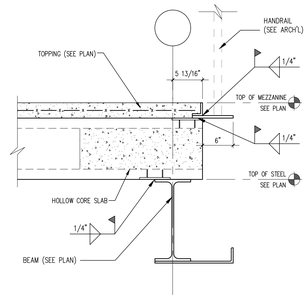

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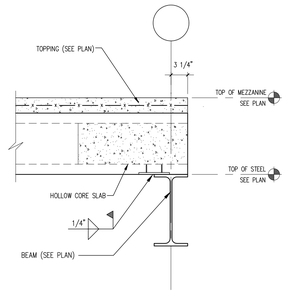
1" = 1'-0"



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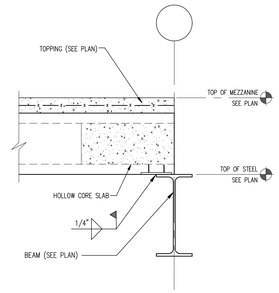
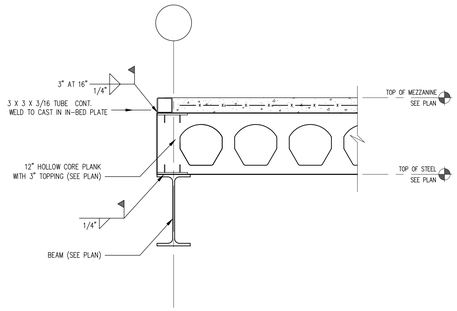
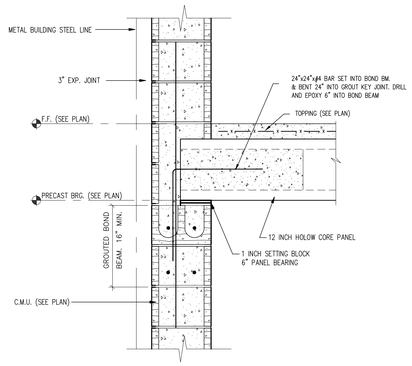
1" = 1'-0"



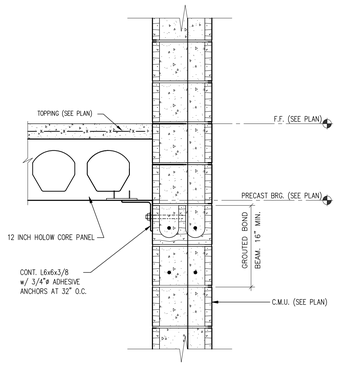
5 S5.1 SECTION
1" = 1'-0"



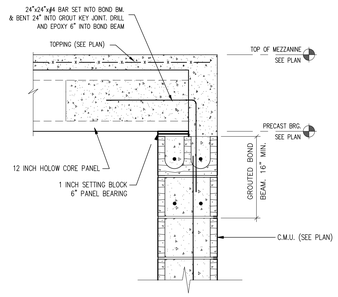
6 S5.1 SECTION
1" = 1'-0"



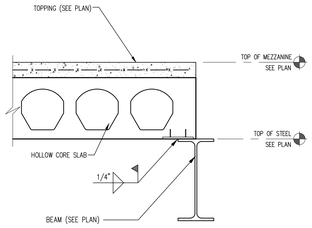
7 S5.1 H.C. @ 12" CMU BRG.
1" = 1'-0"



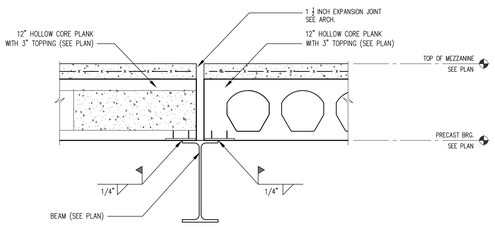
8 S5.1 H.C. @ 12" CMU BRG.
1" = 1'-0"



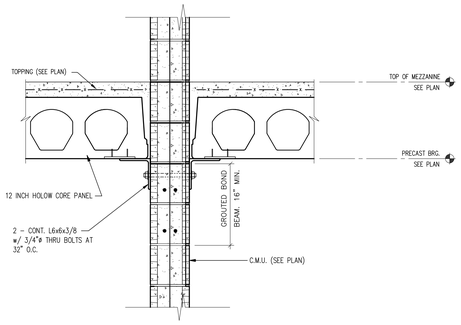
9 S5.1 H.C. @ ELEVATOR DOOR
1" = 1'-0"



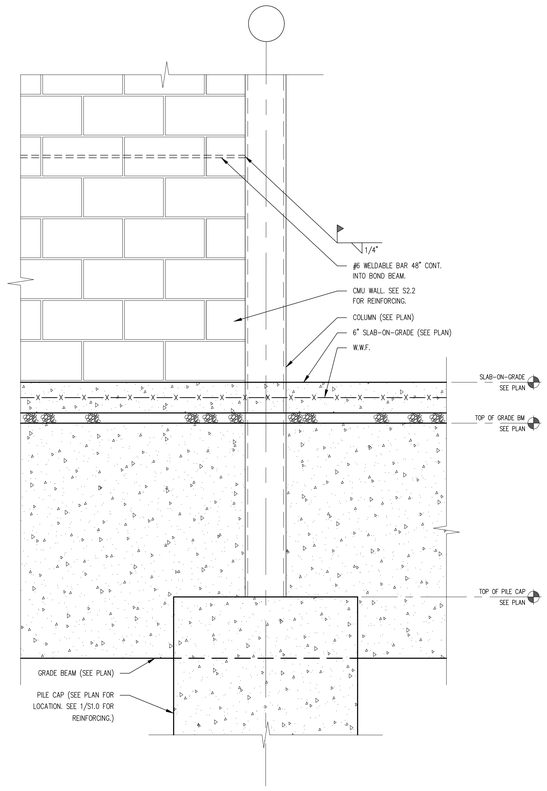
10 S5.1 SECTION
1" = 1'-0"



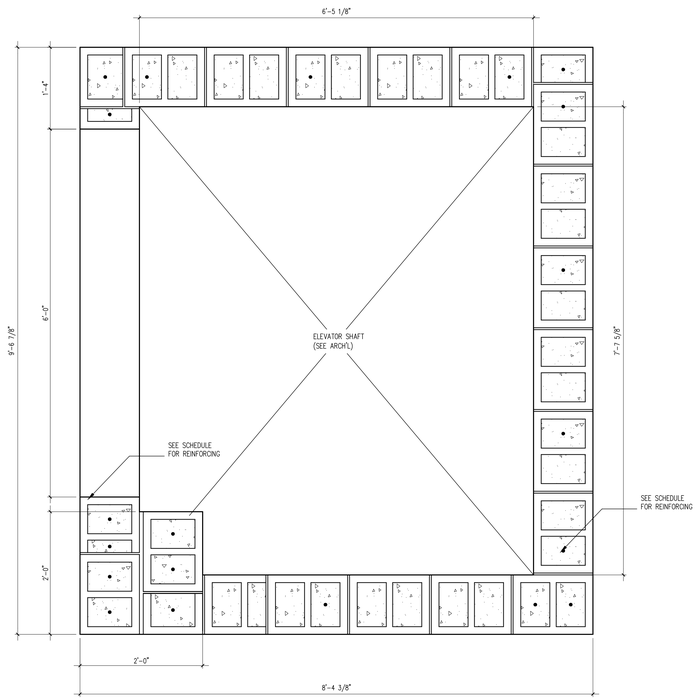
11 S5.1 SECTION
1" = 1'-0"



12 S5.1 H.C. @ 8" CMU SHEAR WALL
1" = 1'-0"



13 S5.1 H.C. @ 8" CMU SHEAR WALL
1" = 1'-0"



14 S5.1 H.C. @ ELEVATOR DOOR
1" = 1'-0"

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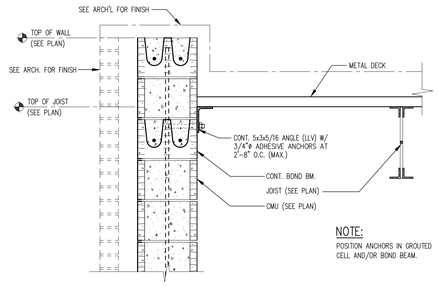
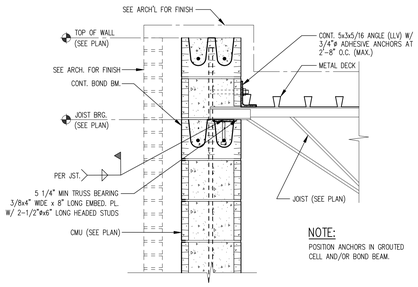
S5.1



1 SECTION
S5.2 1" = 1'-0"
DECK EDGE @ CMU



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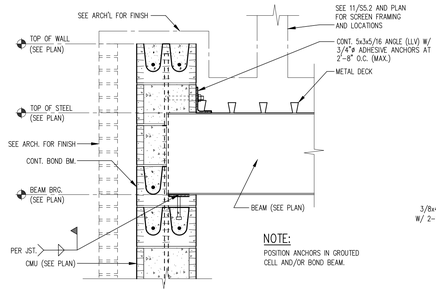

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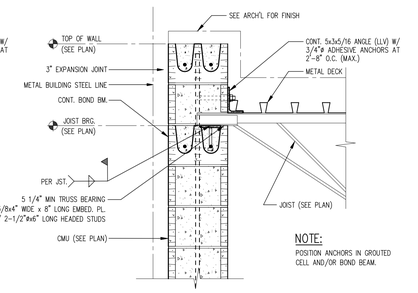

4 SECTION
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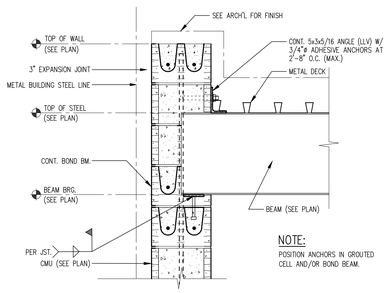
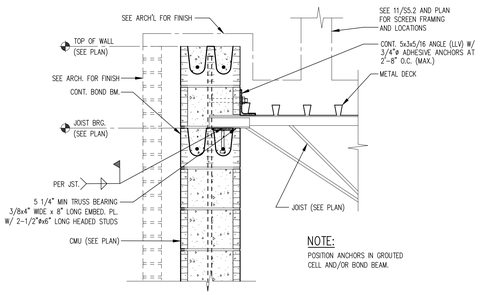
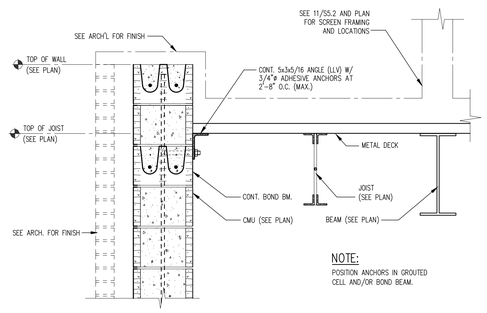


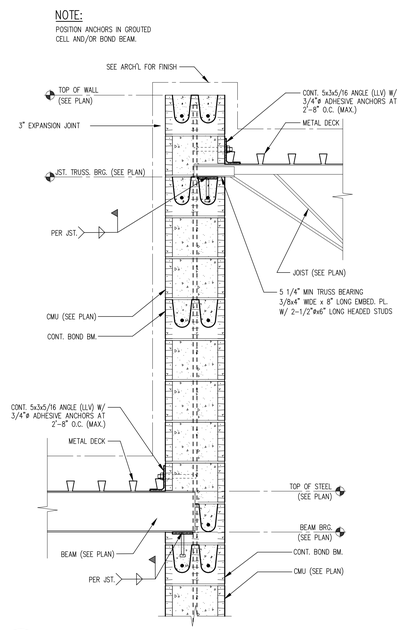
5 SECTION
S5.2 1" = 1'-0"



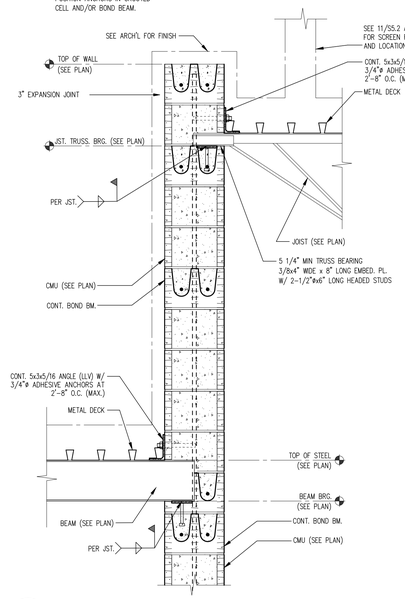
6 SECTION
S5.2 1" = 1'-0"



7 SECTION
S5.2 1" = 1'-0"
DECK EDGE & SCREEN SUPPORT



8 SECTION
S5.2 1" = 1'-0"



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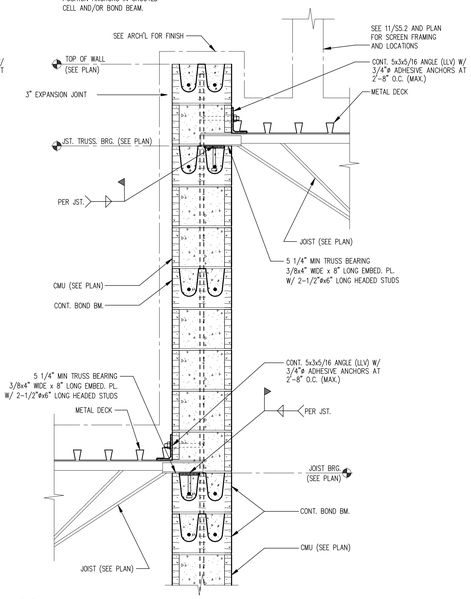
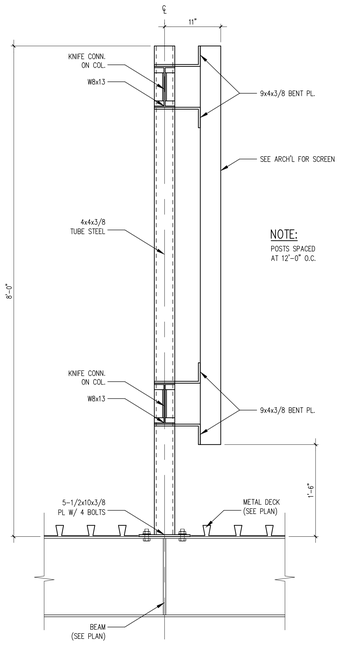
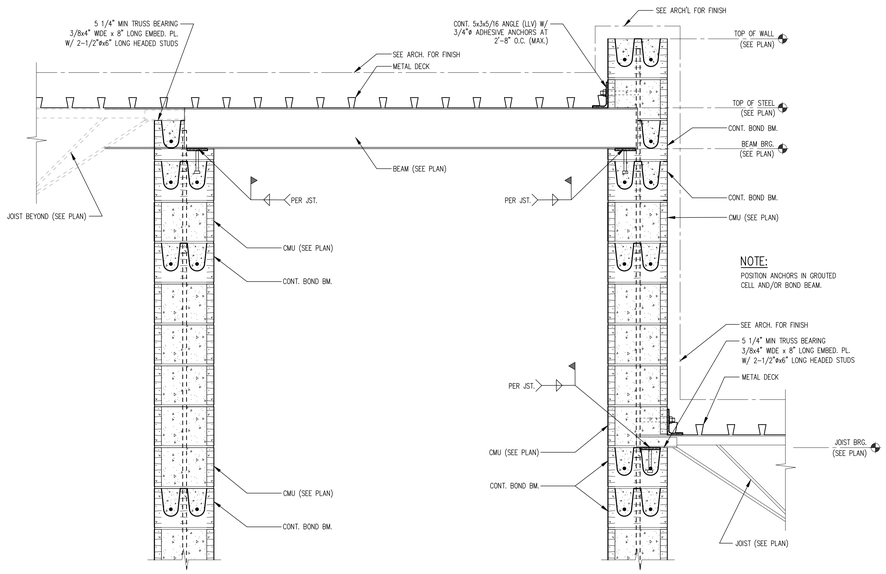


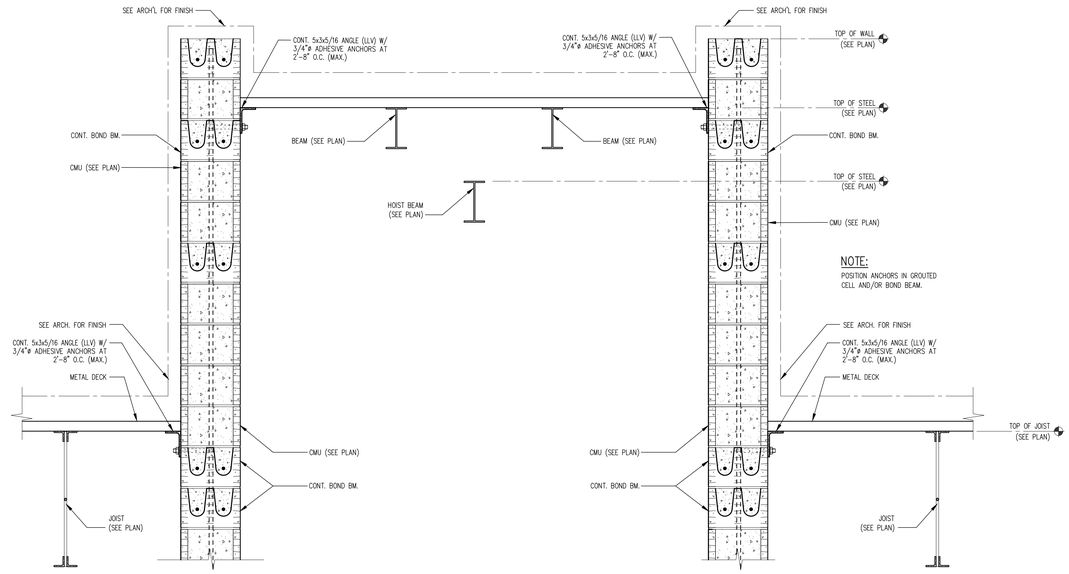
10 SECTION
S5.2 1" = 1'-0"



11 DETAIL
S5.2 1" = 1'-0"



12 SECTION
S5.3 1" = 1'-0"



13 SECTION
S5.3 1" = 1'-0"

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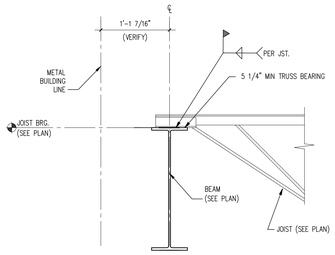
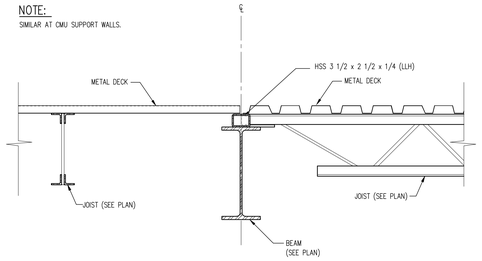
S5.2

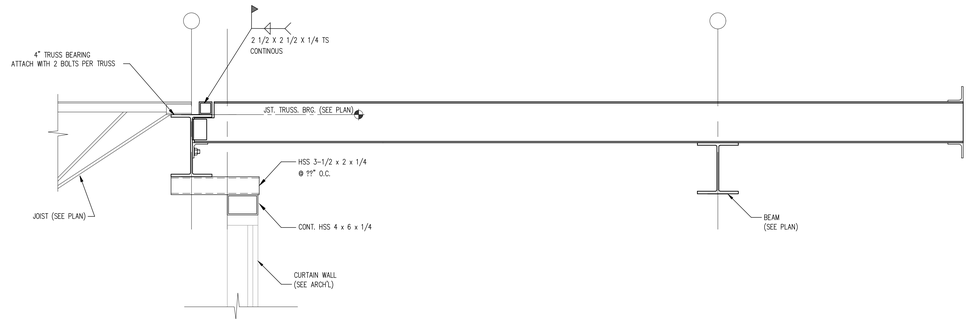


1 S5.3 SECTION
1" = 1'-0"
TYP. JOIST BEARING ON BEAM

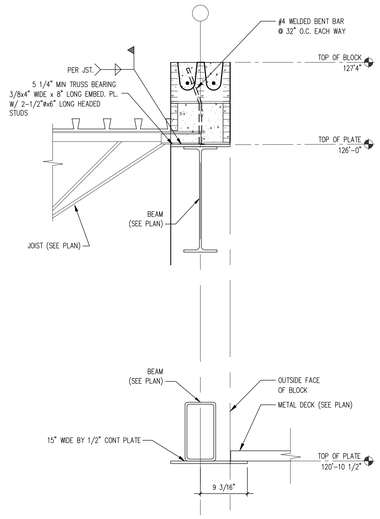
NOTE:
SIMILAR AT CMU SUPPORT WALLS.

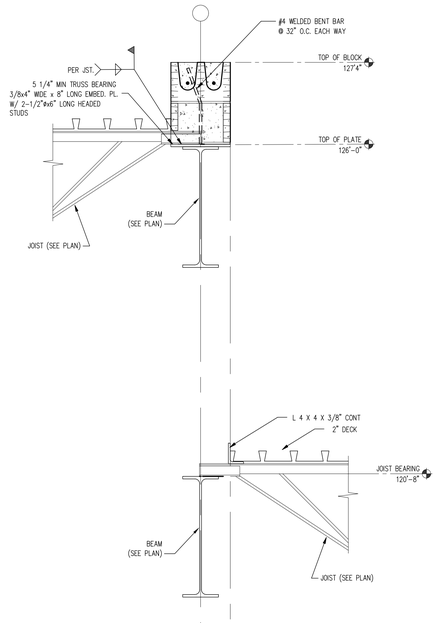


2 S5.3 SECTION
1" = 1'-0"
TYPICAL DETAIL AT CHANGE IN DECK DIRECTION



3 S5.3 SECTION
1" = 1'-0"





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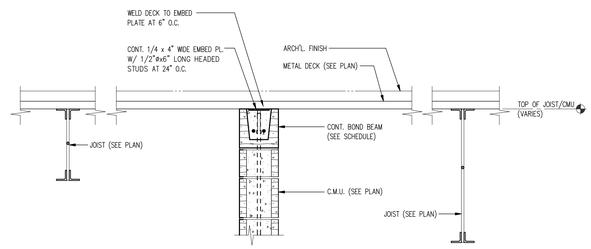
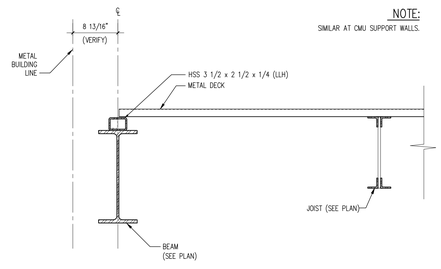


NOTE:
SIMILAR AT CMU SUPPORT WALLS.



5 S5.3 SECTION
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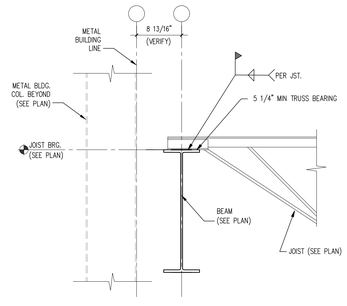
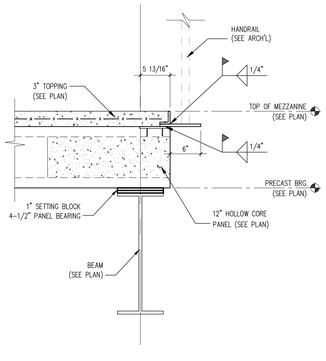
TYPICAL DETAIL AT CHANGE IN DECK DIRECTION



6 S5.3 SECTION
1" = 1'-0"
TYP. JOIST BEARING ON BEAM



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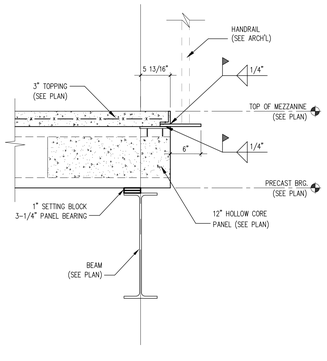
TYP. JOIST BEARING ON BEAM



8 S5.3 SECTION
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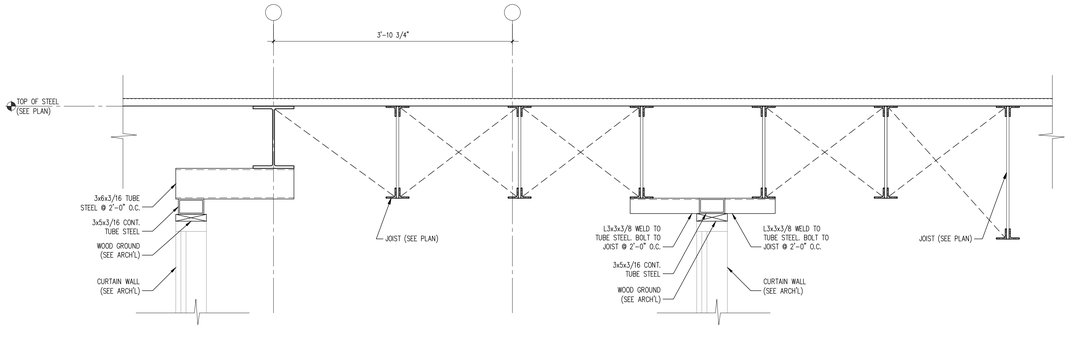

9 S5.3 SECTION
1" = 1'-0"

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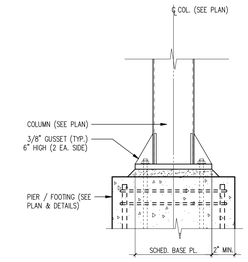
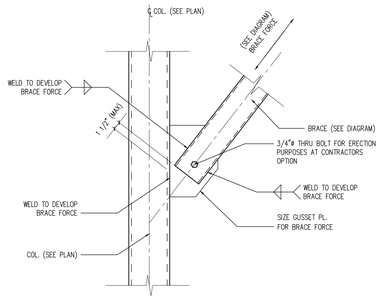
BRACE DETAIL NOTES:

1. FINISH COLUMN ENDS AND BASE PLATES PER AISC SPECIFICATIONS. SHOP WELD COLUMN TO BASE PLATE WITH MINIMUM AISC FILLET WELDS.
2. SEE COLUMN SCHEDULE FOR COLUMN, BASE PLATE AND ANCHOR ROD INFORMATION.
3. ALL FIELD WELDS FOR BRACE MEMBERS, GUSSET PLATES, ETC. SHALL BE DYE PENETRANT OR ULTRASONICALLY TESTED.
4. ALL BOLTED CONNECTIONS SHALL BE SLIP CRITICAL BOLTED CONNECTIONS (SEE GENERAL NOTES).
5. SEE PLAN FOR BEAM SIZES AND ELEVATIONS.
6. G.C. SHALL COORDINATE BASE PLATE AND GUSSET PLATE SIZE WITH PIER / FOOTING SIZE.
7. BRACE FORCES ARE TENSION AND/OR COMPRESSION. BRACE CONNECTION WELDS SHALL BE SIZED TO DEVELOP BRACE MEMBER OR (200% X BRACE FORCE) AS INDICATED IN ELEVATIONS. PROVIDE FOR THE MINIMUM OF THE TWO CONDITIONS.
8. DETAILER TO DESIGN BEAM CONNECTIONS (SHEAR) AS INDICATED IN GENERAL NOTES. ADD FORCES ASSOCIATED WITH BRACES ACCORDINGLY.



1 S6.0 DETAIL
NO SCALE



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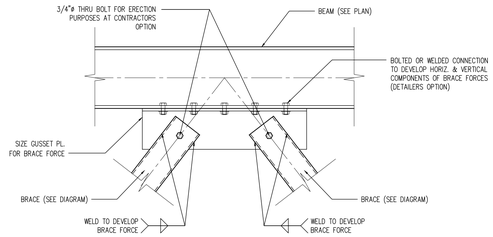

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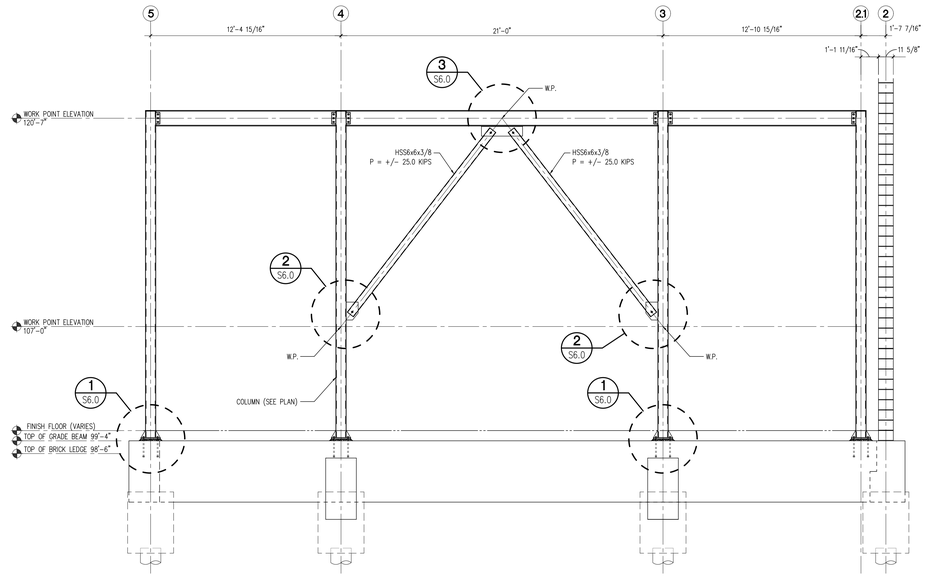
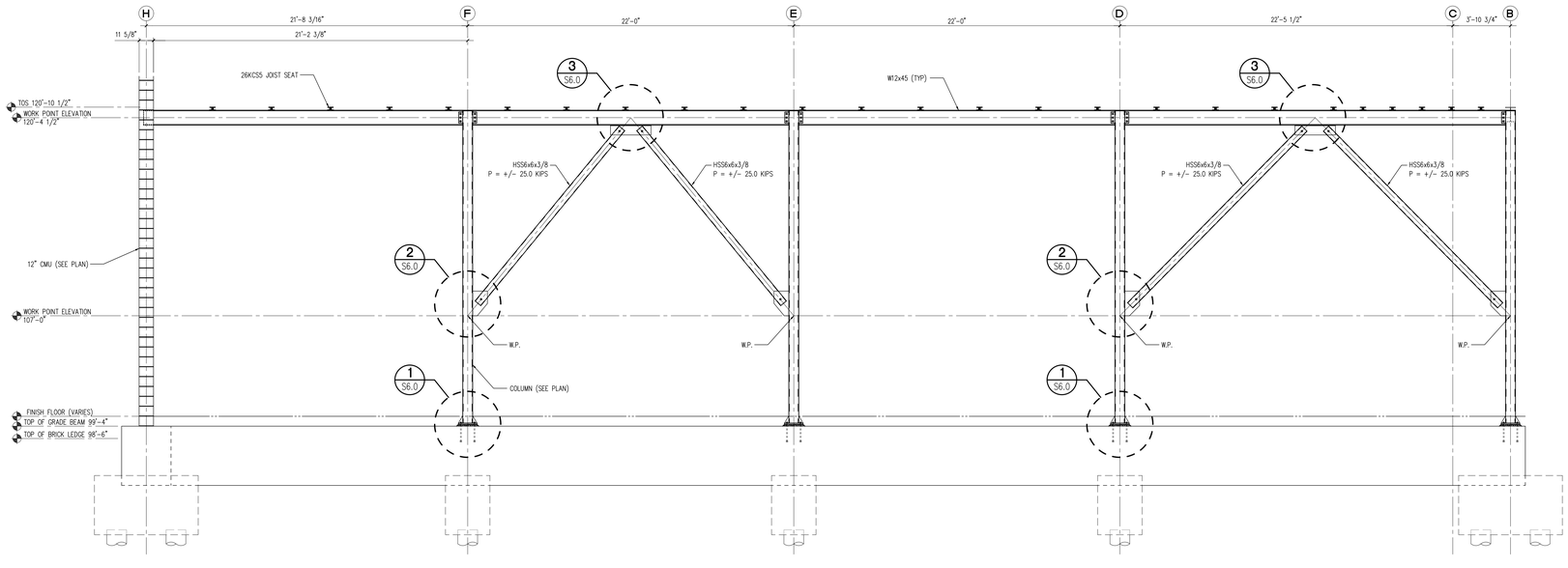


4 S6.0 V-BRACE COLUMN ELEVATION (LINE B LOOKING EAST)
1/4" = 1'-0"



1 S6.0 V-BRACE COLUMN ELEVATION (LINE 5 LOOKING SOUTH)
1/4" = 1'-0"

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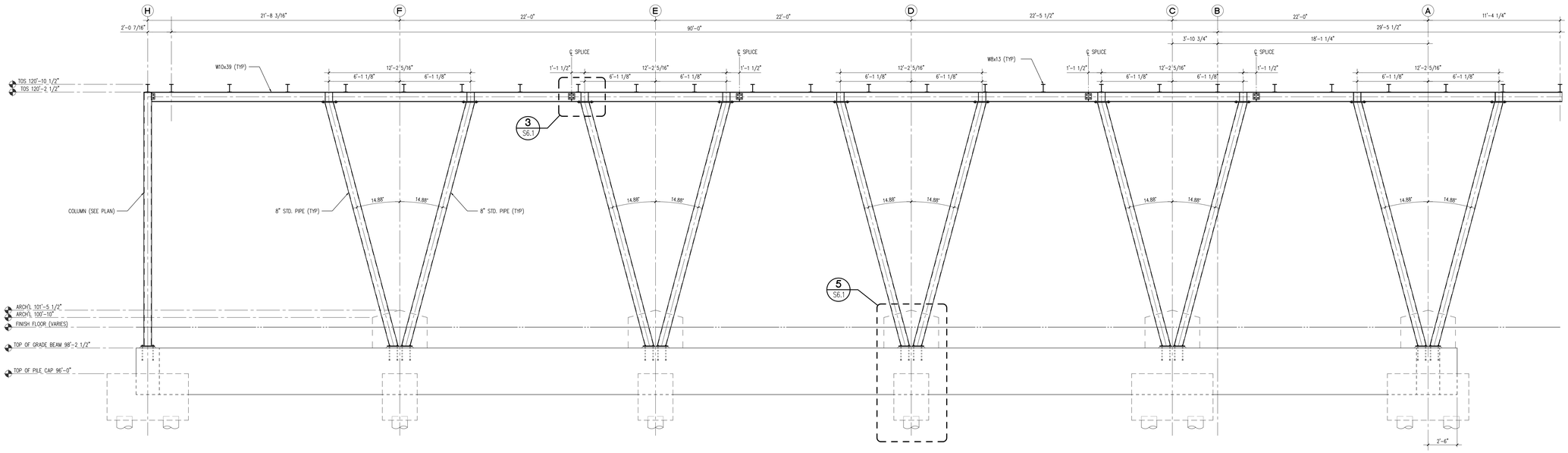
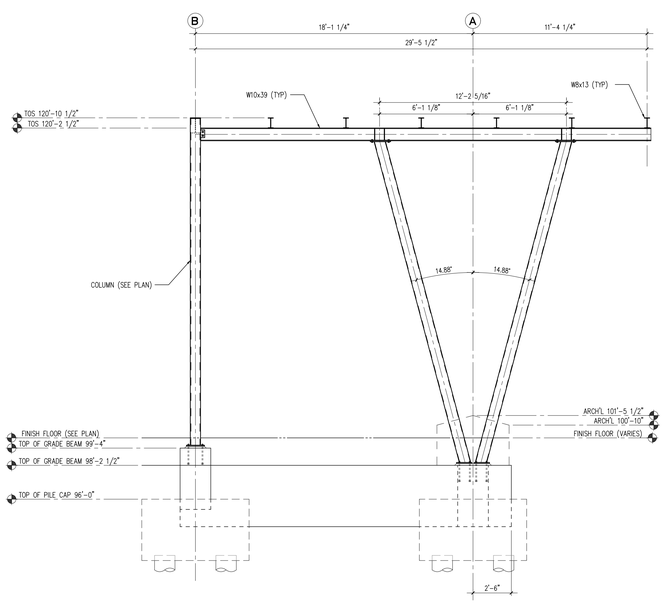
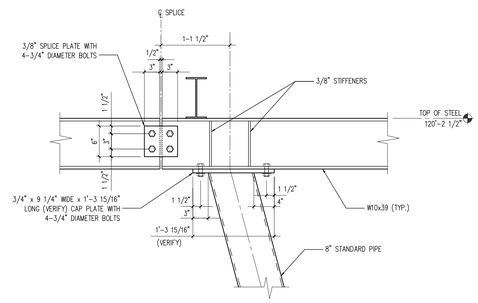


1 S6.1 SPLAYED COLUMN ELEVATION (LINE 7 LOOKING SOUTH)



2 S6.1 SPLAYED COLUMN ELEVATION (LINES 3 AND 4 LOOKING SOUTH)



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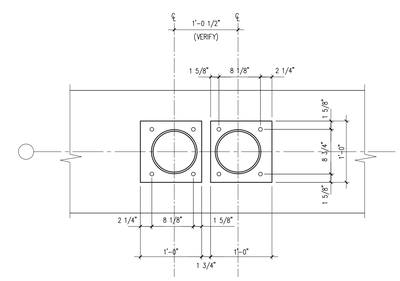

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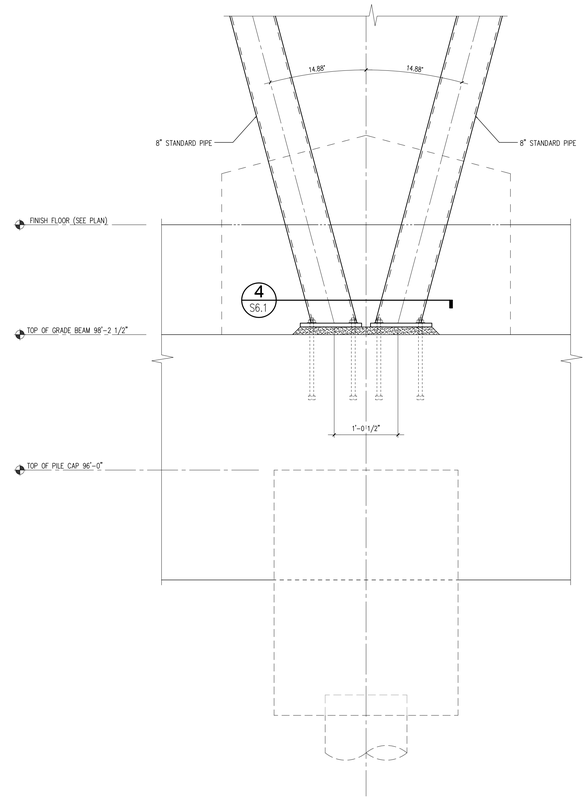

5 S6.1 DETAIL
NO SCALE

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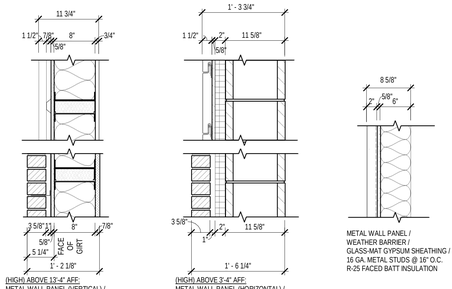
ABBREVIATIONS

A	
@	AT
AB	ANCHOR BOLT
AND	AND
A/C	AIR CONDITIONING
ACOUS	ACOUSTICAL
ACWD	ALUM. CLAD WOOD DOOR
ADA	AMERICANS WITH DISABILITIES ACT
ADJ.	ADJUST, ADJUSTABLE
ADH.	ADHESIVE
A.F.F.	ABOVE FINISH FLOOR
AGG.	AGGREGATE
AHU	AIR HANDLING UNIT
ALUM.	ALUMINUM
ANCH.	ANCHOR
AP	ACCESS PANEL
APPROX.	APPROXIMATE
ASSY	ASSEMBLY
AUTO	AUTOMATIC
B	
BD.	BOARD
BTWN.	BETWEEN
BEV.	BEVELED
BIT.	BITUMINOUS
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
B.O.	BOTTOM OF
BOT. OR BTM.	BOTTOM
BUR	BUILT UP ROOFING
BRG. OR BRNG.	BEARING
C	
CAB.	CABINET
CB	CATCH BASIN, CHALKBOARD
C/C	CENTER TO CENTER (SAME MEANING AS OC)
CEM	CEMENT
C.T.	CERAMIC TILE
CF	CUBIC FEET
CFI	CONTRACTOR FURNISHED AND INSTALLED
CHAN	CHANNEL
CI	CAST IRON
CJ	CONTROL JOINT
CLG.	CEILING
CLOS	CLOSET
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC.	CONCRETE
COND	CONDITION, CONDENSER, CONDENSATE
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
CONTR	CONTRACTOR
CORRUG	CORRUGATED
CR	COLD ROLLED
CSG	CASING
CTSK	COUNTERSINK
CU	CUBIC
CULV	CULVERT
CW	COLD WATER, CLOCKWISE
CY	CUBIC YARD
D	
DBL.	DOUBLE
DEP	DEPRESSED
DET.	DETAIL
DF	DRINKING FOUNTAIN
DIA.	DIAMETER
DIM.	DIMENSION
DN.	DOWN
DO	DITTO
DS	DOWNSPOUT
DWG.(S)	DRAWING(S)
E	
EA.	EACH
EJ	EXPANSION JOINT
EL. OR ELEV.	ELEVATION
ELEC	ELECTRIC, ELECTRICAL
EMER	EMERGENCY
ENCL	ENCLOSURE
ENT	ENTRANCE
EP	ELEC. PANEL
EQ.	EQUAL
EQUIV	EQUIVALENT
ESMT	EASEMENT
EW	EACH WAY
EWC	ELECTRIC WATER COOLER (SEE MECH DWGS)
EXIST. OR EX.	EXISTING
EXP	EXPANSION
EXT.	EXTERIOR
F	
FAB	FABRICATE
FC	FIRE CODE
FD	FLOOR DRAIN (SEE MECH DWGS)
FDN.	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
F.F.E.	FINISHED FLOOR ELEVATION
FH	FULL HEIGHT
FIN.	FINISH, FINISHED
FL	FLOOR
FLASH	FLASHING
FLEX	FLEXIBLE
FRT	FIRE RETARDANT TREATED
FTG.	FOOTING
FURR.	FURRING
F.V.	FIELD VERIFY
G	
GA.	GAUGE
GALV.	GALVANIZED
GB	GRAB BAR
GEN	GENERATOR
GF CMU	GROUND FACE CONC. MAS. UNIT
GI	GALVANIZED IRON
GFI	GROUND FAULT INTERRUPT
GL	GLASS, GLAZING
GLUE LAM	GLUE-LAMINATED
GND	GROUND
GR	GRADE
GST	GLAZED STRUCTURAL TILE
GYP.	GYPSUM
H	
HI	HIGH
HARD	HARDENED
HB	HOSE BIB
HC	HOLLOW CORE
HD BD	HARD BOARD
HC	HANDICAPPED
HDR	HEADER
HDWE	HARDWARE
HD WD	HARDWOOD
HEX	HEXAGONAL
HT.	HEIGHT
HOL	HOLLOW
HM OR H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
HP	HORSEPOWER
HTG	HEATING
HTR	HEATER
HW	HOT WATER, HARD WHITE
I	
ID	INSIDE DIAMETER
IF	INSIDE FACE
INCL	INCLUDED
INSUL.	INSULATION
INT	INTERIOR
INV	INVERT
J	
JB	JUNCTION BOX
JST.	JOIST
JT	JOINT
K	
KBC	KENTUCKY BUILDING CODE
L	
L	ANGLE, LONG
LAM.	LAMINATE
LF	LIGHT FIXTURE, LINEAR FEET
LH	LEFT HAND
LLV	LONG LEG VERTICAL
LOC	LOCATION
LT	LIGHT
LTWT	LIGHTWEIGHT
M	
MAS.	MASONRY
MATL.	MATERIAL
MAX.	MAXIMUM
MB	MARKER BOARD
MC	MISCELLANEOUS CHANNEL
MDO	MEDIUM DENSITY OVERLAY
MECH.	MECHANICAL
MED.	MEDIUM, MEDICINE
MTL.	METAL
MFR.	MANUFACTURER
MH	MANHOLE
MIN.	MINIMUM, MINUTE
MISC.	MISCELLANEOUS
ML AND P	METAL LATH AND PLASTER
M.O.	MASONRY OPENING
MS	MOP SINK
MT.	MOUNT
MTD.	MOUNTED
MTG.	MOUNTING
MULL.	MULLION
N	
NA	NOT APPLICABLE
NET	MEANS EXACT DIMENSION REQUIRED
NIC	NOT IN CONTRACT
NO. OR #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O	
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
O.F.	OUTSIDE FACE
OFI	OWNER FURNISHED AND INSTALLED
OF-CI	OWNER FURNISHED, CONTRACTOR INSTALLED
O.H.	OPPOSITE HAND
OH	OVERHEAD
OPNG.	OPENING
OPP.	OPPOSITE
P	
PART	PARTITION
PART. BD.	PARTICLE BOARD
PASS	PASSAGE
PC	PRECAST
P/C	POURED CONCRETE
PERF	PERFORATED
PERIM	PERIMETER
PERP.	PERPENDICULAR
PF CMU	PREFACED CONC. MAS. UNIT
PH	PHASE
PLAS	PLASTER
PLUMB	PLUMBING
PLYWD.	PLYWOOD
POL	POLISHED
POLY CARB	POLYCARBONATE SHEET
PREFAB.	PREFABRICATED
PROJ.	PROJECT, PROJECTED
PR.	PAIR
PSMB	PENCIL SHARPENER BLOCK
P.T.	PRESSURE TREATED
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PWG	POLISHED WIRE GLASS
+/-	PLUS OR MINUS
Q	
Q.T.	QUARRY TILE
R	
R.	RISER, RADIUS
R. OR RAD.	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REBAR	REINFORCING BAR
RECIRC	RECIRCULATE
REF	REFERENCE, REFER
REF.	REFRIGERATOR
REINF.	REINFORCE, REINFORCED, REINFORCING
REQD.	REQUIRED
RET.	RETAINING, RETURN
RESIL	RESILIENT
RH	RIGHT HAND, ROUND HEAD
R.O.	ROUGH OPENING
ROW OR R/W	RIGHT OF WAY
RRT	RAISED RADIAL TILE
S	
SB	SPLASH BLOCK
SC	SOLID CORE
SCHD.	SCHEDULE
SECT	SECTION
SEP	SEPARATE, SEPARATION
SF	SQUARE FEET, SAND FILL
SHEATH	SHEATHING
SHT.	SHEET
SIM. - SIM	SIMILAR
S.M.	SHEET METAL
SPA	SPACE(S)
SPEC(S).	SPECIFICATIONS
SPM	SINGLE-PLY MEMBRANE
SQ.	SQUARE
S.S.	STAINLESS STEEL
STA	STATION
STD	STANDARD
STL.	STEEL
STOR.	STORAGE
STRUCT.	STRUCTURAL
SUSP.	SUSPENDED
SYMM	SYMMETRICAL
T	
T	TREAD, THICK
TB	TACKBOARD
TC	TOP OF CURB
TCE	TOP OF CURB ELEVATION
TDS	TURNED DOWN SLAB
TEL	TELEPHONE
TFE	TOP OF FOOTING ELEVATION
T AND G	TONGUE AND GROOVE
THK	THICK, THICKNESS
THRESH	THRESHOLD
T.O.	TOP OF
TOC	TOP OF CONCRETE
TOL	TOILET
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TS	TACK STRIP, STRUCTURAL STEEL TUBING
TOW	TOP OF WALL
TYP. - TYP	TYPICAL
U	
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORY
UNFIN.	UNFINISHED
U.N.O.	UNLESS NOTED OTHERWISE
V	
VAC	VACUUM
VB	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VERT.	VERTICAL
V.I.F.	VERIFY IN FIELD
W	
W	WIDE
WH	WATER HEATER
W.R.	WATER RESISTANT
WWF	WELDED WIRE FABRIC
X	
X	BY
Y	
YD	YARD

WALL / PARTITION SCHEDULE



(HIGH) ABOVE 12'-4" AFF:
METAL WALL PANEL (VERTICAL) /
7/8" FURRING CHANNELS @ 16" O.C. VERTICALLY
WEATHER BARRIER /
GLASS-MAT GYPSUM SHEATHING /
METAL BUILDING C-GIRTS W / SHEET MTL.
CLOSURE & SPRAY FOAM INSULATION
16 GA. METAL STUDS @ 16" O.C.
R-25 FACED BATT INSULATION /
INTERIOR PEMB LINER PANEL ABOVE 8'-0" A.F.F.

(LOW) BELOW 13'-4" AFF:
BRICK /
AIR SPACE /
WEATHER BARRIER /
GLASS-MAT GYPSUM SHEATHING /
METAL BUILDING C-GIRTS W / SHEET MTL.
CLOSURE & SPRAY FOAM INSULATION
16 GA. METAL STUDS @ 16" O.C. /
R-25 FACED BATT INSULATION /
HAT CHANNELS HORIZONTALLY @ 16" O.C.
INTERIOR MDF / P-LAM. WALL PANELS TO 8'-0" A.F.F.

A

(HIGH) ABOVE 3'-4" AFF:
METAL WALL PANEL (HORIZONTAL) /
WEATHER BARRIER /
GLASS-MAT GYPSUM SHEATHING
RIGID INSULATION
CMU

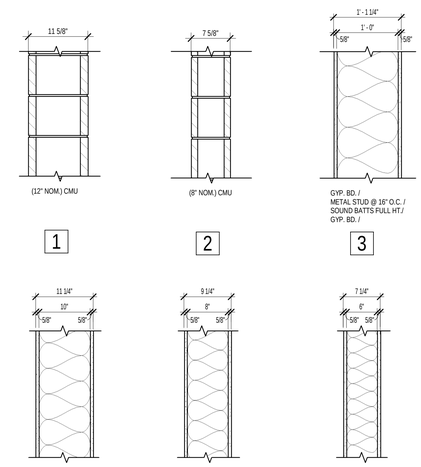
(LOW) BELOW 3'-4" AFF:
BRICK /
AIR SPACE /
WEATHER BARRIER /
RIGID INSULATION /
CMU

B

METAL WALL PANEL /
WEATHER BARRIER /
GLASS-MAT GYPSUM SHEATHING /
16 GA. METAL STUDS @ 16" O.C.
R-25 FACED BATT INSULATION

C

EXTERIOR WALL TYPES



(12" NOM.) CMU

1

(8" NOM.) CMU

2

GYP. BD. /
METAL STUD @ 16" O.C. /
SOUND BATTS FULL HT. /
GYP. BD. /

3

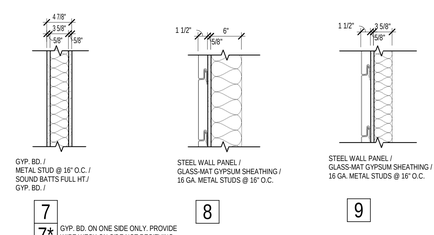
GYP. BD. /
METAL STUD @ 16" O.C. /
SOUND BATTS FULL HT. /
GYP. BD. /

4

GYP. BD. /
METAL STUD @ 16" O.C. /
SOUND BATTS FULL HT. /
GYP. BD. /

5 / 5* GYP. BD. ON ONE SIDE ONLY. PROVIDE WIRE WESH ON SIDE NOT RECIEVING GYP. BD. TO KEEP INSUL. VERT.

6 / 6* GYP. BD. ON ONE SIDE ONLY. PROVIDE WIRE WESH ON SIDE NOT RECIEVING GYP. BD. TO KEEP INSUL. VERT.



GYP. BD. /
METAL STUD @ 16" O.C. /
SOUND BATTS FULL HT. /
GYP. BD. /

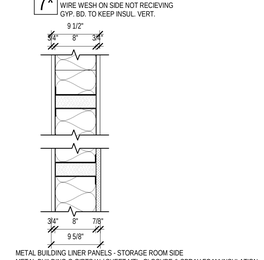
7 / 7* GYP. BD. ON ONE SIDE ONLY. PROVIDE WIRE WESH ON SIDE NOT RECIEVING GYP. BD. TO KEEP INSUL. VERT.

STEEL WALL PANEL /
GLASS-MAT GYPSUM SHEATHING /
16 GA. METAL STUDS @ 16" O.C.

8

STEEL WALL PANEL /
GLASS-MAT GYPSUM SHEATHING /
16 GA. METAL STUDS @ 16" O.C.

9



METAL BUILDING LINER PANELS - STORAGE ROOM SIDE
METAL BUILDING C-GIRTS W / SHEET MTL. CLOSURE & SPRAY FOAM INSULATION
16 GA. METAL STUDS @ 16" O.C. /
R-25 FACED BATT INSULATION /
INTERIOR MDF / P-LAM. WALL PANELS UP TO 8' - 0" A.F.F. - COURT SIDE

10

INTERIOR WALL TYPES

PARTITION TYPE GENERAL NOTES:

UNLESS NOTED OTHERWISE, ALL EXTERIOR WALLS ARE TO BE TYPE "**A**" AND ALL INTERIOR WALLS ARE TO BE TYPE "**1**".

P1 METAL STUD PARTITION FRAMING IN THIS PROJECT USES "STANDARD" STUD LENGTHS (REFER TO SPECIFICATIONS FOR REQUIREMENT). CONTRACTOR SHALL TAKE NOTE THAT BOTTOM PLATES SIT ON SLAB WITH SILL GASKET.

P2 UNLESS NOTED OTHERWISE, EXTEND INTERIOR PARTITIONS FULL HEIGHT TO DECK, UNLESS NOTED OTHERWISE.

P3 INTERIOR WALL TYPES ARE IDENTIFIED BY NUMBER AND EXTERIOR WALL ASSEMBLY TYPES BY LETTER.

P4 PROVIDE COMPLETE CLOSURE BETWEEN DECKING AND METAL STUD PARTITIONS TO ACHIEVE FULL AND COMPLETE CLOSURE OF ALL VOIDS AT TOP OF WALLS INDICATED TO EXTEND FULL HEIGHT. CONTRACTOR TO MAINTAIN CONTINUOUS THERMAL BARRIER

P5 PROVIDE THE FOLLOWING CLOSURE MATERIALS AT TOP OF INTERIOR MASONRY AND STUD WALLS AND PARTITIONS.

(a) FULL-HEIGHT NON-RATED WALLS: FILL VOIDS WITH BATT INSULATION.

P6 PROVIDE BULLNOSED MASONRY UNITS AT ALL OUTSIDE CMU CORNERS.

P7 REFER TO WALL SECTIONS AND MISCELLANEOUS DETAILS FOR WALL TRANSITIONS ABOVE ADJACENT ROOF LEVELS - I.E.: BRICK LEDGES, CMU WIDTH AND WALL TYPE TRANSITIONS.

P8 PROVIDE SPECIFIED CAVITY VENTS AT 48" O.C.., AT TOP OF MASONRY WALL CAVITIES AND ABOVE MORTAR NET AT BOTTOM OF WALL CAVITIES TO ALLOW FOR PROPER VENTING OF WALLS.

P9 CONTRACTOR SHALL SEAL "WEATHERTIGHT" ANY VOIDS IN EXTERIOR WALL PRIOR TO INSTALLATION OF VENEER

P10 CONTRACTOR SHALL INSTITUTE ALL MEASURES NECESSARY TO ACHIEVE WEATHERTIGHTNESS OF EXTERIOR WALLS BY ALLOWING POSITIVE DRAINAGE OF WATER TO THE EXTERIOR WHERE FLASHING IS INDICATED OR REQUIRED.

(a) KEEP ALL CAVITIES FREE OF MORTAR AND WICKS.

(b) PROVIDE WEEPS AND WICKS ON TOP OF THRU-WALL FLASHING AT 16" O.C. HORIZONTAL AND DO NOT ALLOW THEM TO BECOME CLOSED-OFF.

(c) AT EXTERIOR VENEER PROVIDE MASONRY TIES @ 16" O.C. HORIZONTALLY AND 16" O.C. VERTICALLY, STAGGERED.

(d) TOOL ALL MORTAR JOINTS AT THE PROPER TIME TO CONSOLIDATE THE SURFACE AND REDUCE WATER INFILTRATION.

(e) INSTALL MORTAR NETTING AT ALL THROUGH WALL FLASHING LOCATIONS.

(f) PRIOR TO APPLICATION OF DAMP-PROOFING, CONTRACTOR TO SEAL ALL CONTROL JOINTS, EXPANSION JOINTS.

(g) ALL THRU-WALL FLASHING TO EXTEND 1/2" MIN. BEYOND FACE VENEER. FLASHING TO BE TRIMMED FLUSH WITH FACE VENEER PER DIRECTION OF ARCHITECT.

P11 CMU AND GYPSUM BOARD EXPOSED TO VIEW SHALL BE PAINTED UNLESS NOTED OTHERWISE. REFER TO ROOM FINISH

P12 REFER TO ROOM FINISH GROUPS FOR BASE CONDITION.

P13 MOISTURE-RESISTANT GYPSUM BOARD SHALL BE PROVIDED AT ALL GYPSUM BOARD ASSEMBLIES SUBJECT TO MOISTURE (TOILETS ALL WALLS, FOOD PREP ALL WALLS, MECHANICAL OR LOCATIONS WITH DRINKING FOUNTAINS).

P14 PROVIDE MECHANICAL RESTRAINT OF INSULATION WHERE NOT RESTRAINED BY OTHER MATERIALS (HORIZONTAL WIRE FURRING AT 16" o.c. VERTICAL MAX.

P15 PROVIDE MANUFACTURER'S STANDARD CLOSED CELL NEOPRENE SILL PLATE GASKET BELOW STUD AT ALL INTERIOR AND EXTERIOR STUD WALLS TO SEPARATE STUD FROM CONCRETE AT FIRST FLOOR.

P16 REFER TO SPECIFICATIONS FOR GYPSUM BOARD CONTROL JOINT SPACING REQUIREMENTS.

P17 AT GYPSUM ASSEMBLIES, PROVIDE FIBER REINFORCED GYPSUM BOARD TO 8'-0" MIN. A.F.F. WITH STANDARD GYP. BD. ABOVE AT ALL CORRIDORS AND PUBLIC SPACES.

P18 MASONRY SPECIFICATIONS AND STRUCTURAL DOCUMENTS FOR REINFORCEMENT TYPE AND MATERIAL. FOR MASONRY VENEERS ON STUD OR ICF WALL CONSTRUCTION, PROVIDE ADJUSTABLE MASONRY TIES AT 16" MAXIMUM HORIZONTALLY AND 16" MAXIMUM VERTICALLY. REFER TO MASONRY SPECIFICATIONS FOR MASONRY TIE TYPE. UNLESS SPECIFICALLY REQUIRED BY DETAILS, DO NOT PLACE TIES OR ANCHORS IN THE SAME COURSE AS FLASHINGS. STRADDLE ANCHORS ABOVE OR BELOW FLASHINGS TO MAINTAIN MAXIMUM SPACINGS INDICATED. MASONRY REINFORCING TO BE MADE SPECIFICALLY FOR THE MASONRY TYPE AND BACK UP APPLICATIONS SHOWN. STONE VENEERS TO UTILIZE TOP AND BOTTOM STONE ANCHORS, TYPE AND SPACING AS DETERMINED BY THE STONE MANUFACTURER FOR THE APPLICATIONS SHOWN, REFER TO STONE SPECIFICATIONS FOR ANCHOR CRITERIA. REINFORCEMENT, MASONRY TIES, AND STONE ANCHORS INDICATED ON THE PROJECT DRAWINGS ARE NOT PRODUCT SPECIFIC AND ARE SHOWN FOR REFERENCE ONLY, REFER TO PROJECT SPECIFICATIONS, MANUFACTURER DATA, AND APPROVED SHOP DRAWINGS FOR SPECIFIC INFORMATION. IN THE EVENT THAT A DRAWING DOES NOT GRAPHICALLY INDICATE REINFORCEMENT, TIES, OR ANCHORS, THE REINFORCEMENT, TIES AND ANCHORS ARE STILL REQUIRED. IF QUESTIONS EXIST REGARDING SPECIFIC DETAIL CONDITIONS CONTACT THE PROJECT ARCHITECT FOR ADDITIONAL INFORMATION. IN NO CASE SHALL REINFORCEMENT, TIES, OR ANCHORS BE OMITTED. REINFORCEMENT, TIES AND ANCHORS ARE TO BE INSTALLED IN STRICT COMPLIANCE WITH MANUFACTURER WRITTEN INSTALLATION GUIDELINES.

P19 ALL EXTERIOR WALLS ARE WALL TYPE A AND ALL INTERIOR PARTITIONS ARE WALL TYPE 1 UNLESS NOTED OTHERWISE.

ROOM FINISH GROUPS

GENERAL NOTES:

1. WHERE MORE THAN ONE FINISH IS LISTED REFER TO PLANS, SECTIONS, AND DETAILS.
2. REFER TO TYPICAL BASE DETAIL.
3. REFER TO TYPICAL FLOOR TRANSITION / THRESHOLD DETAILS.
4. REFER TO REFLECTED CEILING PLANS FOR CEILING INFORMATION.
5. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION AT CEILINGS.
6. REFER TO SHEETS A9.1 FOR FLOOR STRIPING PLANS.
7. SOFFIT PAINT TO BE ACCENT COLORS U.N.O.
8. ALL STEEL EXPOSED TO VIEW TO BE PAINTED.

XXX 1

FLOOR - TINTED HARDENED CONCRETE SEALER
BASE - 4" RUBBER BASE
WALLS - C.M.U., GYP BOARD (PAINT) OR METAL BUILDING WALL PANEL

NOTE: PROVIDE RUBBER STAIR TREADS AND RISERS AT STAIRCASES

XXX 2

FLOOR - HARDWOOD GYM FLOOR
BASE - 4" VENTED COVE BASE, REFER TO DETAIL A9.1
WALLS - C.M.U., GYP BOARD (PAINT) OR METAL BUILDING WALL PANEL

XXX 3

FLOOR - CERAMIC TILE
BASE - TILE
WALLS - C.M.U., GYP BOARD (PAINT) OR METAL BUILDING WALL PANEL

XXX 4

FLOOR - CARPET TILE
BASE - 6" RESILIENT BASE
WALLS - LATEX PAINT

XXX 5

FLOOR - QUARRY TILE
BASE - 6" QUARRY BASE
WALLS - EPOXY PAINT

SYMBOL LEGEND

NAME # REF.	ROOM FINISH GROUP. REFER TO THIS SHEET.
	DOOR NUMBER. REFER TO A8.1.
	PLAN KEY NOTE. REFER TO A1.1 AND A1.2.
	WALL PARTITION. REFER TO THIS SHEET.
	FRAME TYPES. REFER TO A8.1.
	TOILET ACCESSORIES. REFER TO A2.2.
	ELEVATION KEY NOTE. REFER TO A3.1 AND A3.2.
	ROOF KEY NOTE. REFER TO A4.1.
	CEILING PLAN KEY NOTE. REFER TO A7.1 AND A7.2.
	SIGNAGE TYPE. REFER TO A2.2.
FE	WALL MOUNTED FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER AND CABINET, REFER TO DETAIL 3/A6.1.
	ELEVATION MARK
	COLUMN LINE IDENTIFICATION
1 A101	DETAIL OR ENLARGED PLAN
1 A101	EXTERIOR OR INTERIOR ELEVATIONS
1 A101	PARTIAL SECTION OR DETAILS
1 A101	WALL OR BUILDING SECTION

GENERAL NOTES

G1 NIC MEANS "NOT IN CONTRACT". TO BE PROVIDED AND INSTALLED BY OWNER.

G2 DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.

G3 EXTERIOR WALL DIMENSIONS ARE TO EXTERIOR SIDE OF FACE MASONRY OR METAL PANEL ALL INTERIOR DIMENSIONS ARE TO FACE OF STUDS (NOT INCLUDING FURRING), MASONRY OR CENTER LINE OF STEEL, U.N.O.

G4 ALL CHANGES IN FLOOR FINISHES SHALL OCCUR UNDER THE CENTERLINE OF THE DOOR -TYPICAL.

G5 GYPSUM CEILING BOARD SHALL BE USED AT ALL HORIZONTAL APPLICATIONS OF GYPSUM BOARD.

G6 ALL CONCEALED WOOD BLOCKING SHALL BE PRESSURE TREATED (P.T.) WHERE BLOCKING IS IN CONTACT WITH SLABS ON GRADE OR MASONRY OR CONCRETE, AND ELSEWHERE WHERE NOTED.

G7 PRESSURE TREATED (P.T.) WOOD SHALL BE SEPARATED FROM CONTACT WITH METAL WITH SELF - ADHERING ELASTOMERIC MEMBRANE.

G8 ALL FASTENERS OR ANCHORS IN CONTACT WITH P.T. WOOD SHALL BE G-90 (MIN.) HOT-DIPPED GALVANIZED OR STAINLESS STEEL.

G9 CONTRACTOR SHALL PROVIDE ALL CONCEALED BLOCKING REQUIRED FOR ATTACHMENT AND SUPPORT OF EQUIPMENT, FIXTURES, FRAMES, ETC.

G10 COORDINATE ALL FLOOR DRAIN LOCATIONS WITH MEP CONTRACTOR.

G11 REFER TO ENLARGED PLANS FOR DIMENSIONS NOT SHOWN ON 1/16" OR 1/8" SCALE PLANS.

G12 CONTACT BETWEEN DISSIMILAR METALS SHALL BE SEPARATED WITH BUTYL TAPE, OR OTHER MEANS TO PREVENT GALVANIC CORROSION.

G13 SYMBOLS THAT REPRESENT MEP AND STRUCTURAL ITEMS ON ARCHITECTURAL DRAWINGS ARE FOR GRAPHIC PURPOSES ONLY. REFER TO MEP AND STRUCTURAL DRAWINGS FOR SPECIFIC INFORMATION.

G14 CONTRACTOR SHALL VERIFY ALL ROUGH OPENING SIZES FOR FRAMES AND DOORS AND COORDINATE ANY REQUIRED ADJUSTMENTS WITH THE ARCHITECT, PRIOR TO INSTALLATION.

G15 ALL EXPOSED CORNERS AND EDGES OF GYPSUM BOARD SHALL BE FINISHED WITH METAL CORNER BEAD OR TRIM, RESPECTIVELY.

G16 REFER TO STRUCTURAL DRAWINGS FOR TYPES, SIZE, LOCATION, CONNECTIONS,REINFORCEMENT AND OTHER REQUIREMENTS PERTAINING TO STRUCTURAL COMPONENTS.

G17 OFCI MEANS "OWNER FURNISHED, CONTRACTOR INSTALLED".

G18 CONTINUOUS SEALANT (AND BACKER ROD AS REQUIRED FOR PROPER JOINT INSTALLATION) SHALL BE INSTALLED BETWEEN ALL INTERFACES OF MASONRY, HOLLOW METAL AND ALUMINUM FRAMING, GYPSUM BOARD, PLASTIC LAMINATE, SOLID SURFACE MATERIAL, AND OTHER MATERIAL CHANGES WHETHER SPECIFICALLY INDICATED AT ALL LOCATIONS OR NOT. BACKER ROD SHALL BE USED BEHIND ALL SEALANT CONDITIONS (TYP.); WHERE SPECIFIC CONDITIONS DO NOT ALLOW BACKER ROD TO BE USED, A BOND BREAKER SHALL BE USED AT THE BACK OF THE JOINT.

G19 12"x12" MINIMUM PAINTED ACCESS PANELS SHALL BE PROVIDED AND INSTALLED WHERE REQUIRED TO MAINTAIN CONCEALED ELECTRICAL AND MECHANICAL SYSTEMS WHETHER INDICATED ON THESE DRAWINGS OR NOT. LOCATIONS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION.

ALTERNATES

1. ADDITIONAL STORAGE ROOM.
2. OWNER PREFERRED HVAC CONTROLS.
3. OWNER PREFERRED ACCESS CONTROLS.
4. OWNER PREFERRED GYMNASIUM EQUIPMENT.

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

KYLE STANFIELD, REGISTERED ARCHITECT, KENTUCKY, 32254

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

ABBREVIATIONS, SYMBOL LEGEND,GENERAL NOTES, AND PARTITION TYPES

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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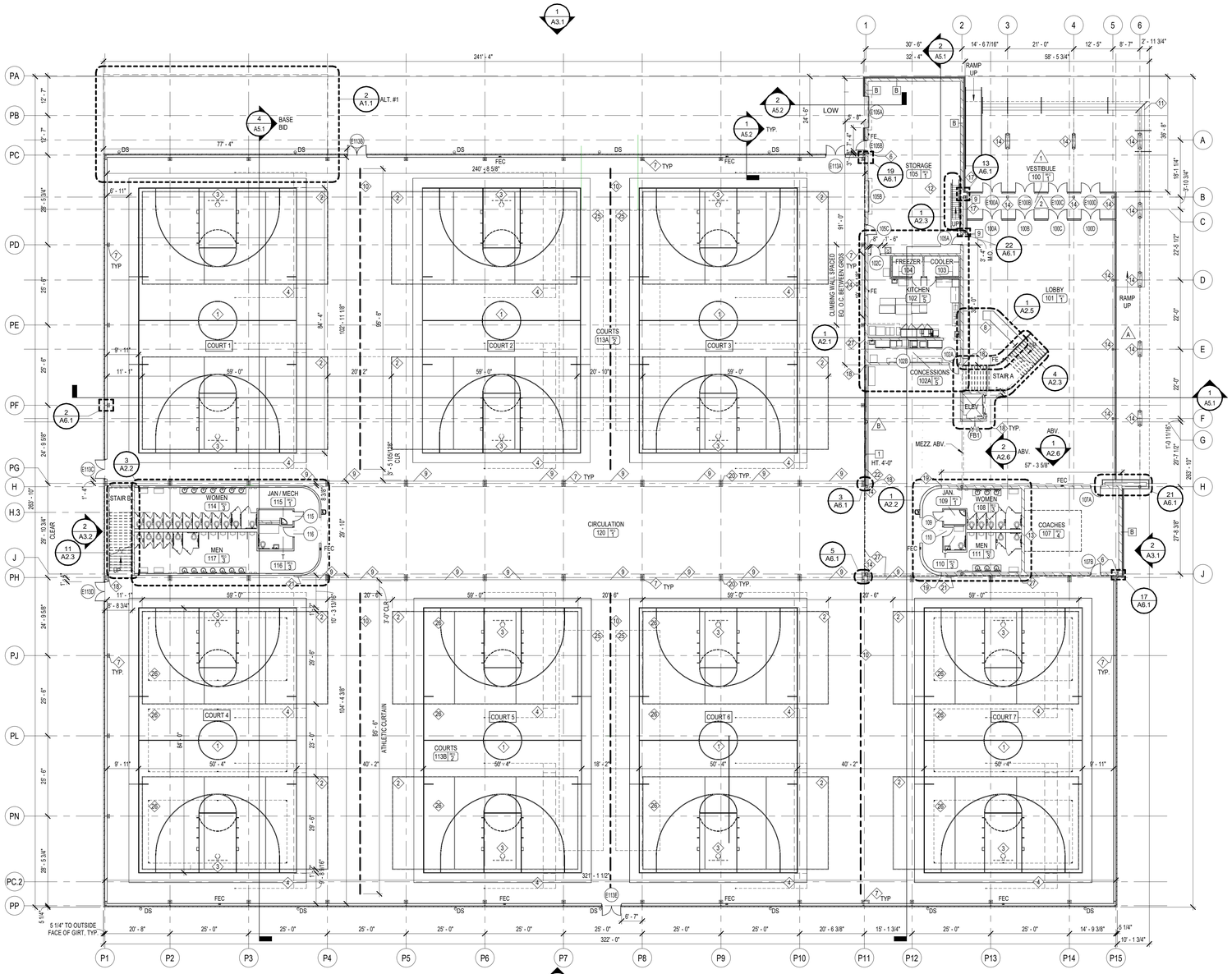
REVISIONS

No.	Description	Date

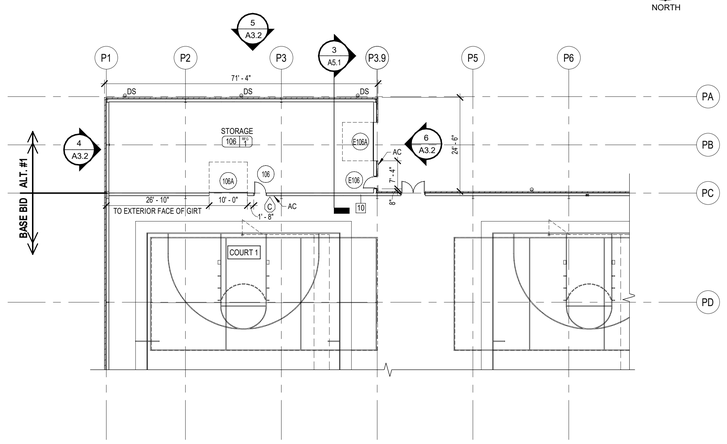
SHEET

N0.1



1 FLOOR PLAN
1/16" = 1'-0"

NORTH



2 FLOOR PLAN - ALTERNATE #1
1/16" = 1'-0"

NORTH

GENERAL NOTES

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2. REFER TO ROOF PLAN AND MECH DRAWINGS FOR ADDITIONAL INFORMATION REGARDING WORK AT ROOF.
3. REFER TO SHEET N0.1 FOR GENERAL NOTES AND PARTITION TYPES.
4. REFER TO DETAILS ON SHEET A6.1 FOR TYPICAL WALL INTERSECTION DETAILS.
5. REFER TO SHEET A2.2 FOR TOILET ACCESSORY SCHEDULE.
6. REFER TO SHEET A9.1 FOR COURT LAYOUT DIMENSIONS.

KEYNOTES

NOTE: NOT ALL KEYNOTES MAY APPLY TO THIS SHEET.

1. BASKETBALL COURT, REFER TO COURT LAYOUT ON SHEET A9.1.
2. VOLLEYBALL COURT, REFER TO COURT LAYOUT ON SHEET A9.1.
3. RETRACTABLE BASKETBALL GOAL.
4. SIDE-FOLDING CEILING MOUNTED VOLLEYBALL STANDARD AND NET.
5. SCORE BOARD - WALL MOUNTED
6. EXPANSION JOINT WHERE CONVENTIONALLY-FRAMED STRUCTURE MEETS PEMB. REFER TO DETAILS.
7. PEMB FRAME OR COLUMN. PROVIDE WALL PADDING ON ALL EXPOSED FACES. REFER TO DETAIL 1/A6.1.
8. TICKET SALES RECEPTION DESK, REFER TO ENLARGED PLANS AND SPECIFICATIONS
9. WOOD FLOOR TRANSITION ALUMINUM COVER.
10. RETRACTABLE GYMNASIUM DIVIDER, REFER TO SPECIFICATIONS.
11. EXTERIOR STAIRS AND HANDRAILS, REFER TO CIVIL.
12. INDUSTRIAL STAIRS, REFER TO DETAIL AND MANUF. STANDARDS.
13. GOLF SIMULATOR.
14. STEEL COLUMN, REFER TO STRUCT.
15. NOT USED.
16. DEDICATION PLAQUE - DRAFT - FINAL TEXT & LAYOUT - TBD BY ARCHITECT.
17. WALL MOUNTED DOOR OPERATOR PAD INSTALLED AT ADA HEIGHT
18. BULLNOSE.
19. ALIGN GYP WITH CMU WALL.
20. NOT USED.
21. WALL-MOUNTED DIVIDER NETTING, BASKETBALL GOAL AND VOLLEYBALL STANDARD CONTROL PANEL. PROVIDE INDEPENDENT OPERATION OF EACH SECTION OF DIVIDER NETTING, BASKETBALL GOAL AND SET OF VOLLEYBALL STANDARDS.
22. SOFFIT ABOVE.
23. WALL MOUNTED TELEVISIONS.
24. MODULAR CLIMBING WALL. REFER TO SPECIFICATIONS. INSTALL PER MANUFACTURER'S REQUIREMENTS. PROVIDE GROUTED SOLID CMU AND BLOCKING AS REQUIRED.
25. RETRACTABLE BATTING CAGE.
26. PICKLEBALL STRIPING OUTLINE, REFER TO COURT LAYOUT ON SHEET A9.1.

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY

500 WEST THIRD STREET
OWENSBORO, KY 42301

FIRST FLOOR PLAN

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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REVISIONS

No.	Description	Date

SHEET

A1.1

2259
OWENSBORO INDOOR SPORTS FACILITY
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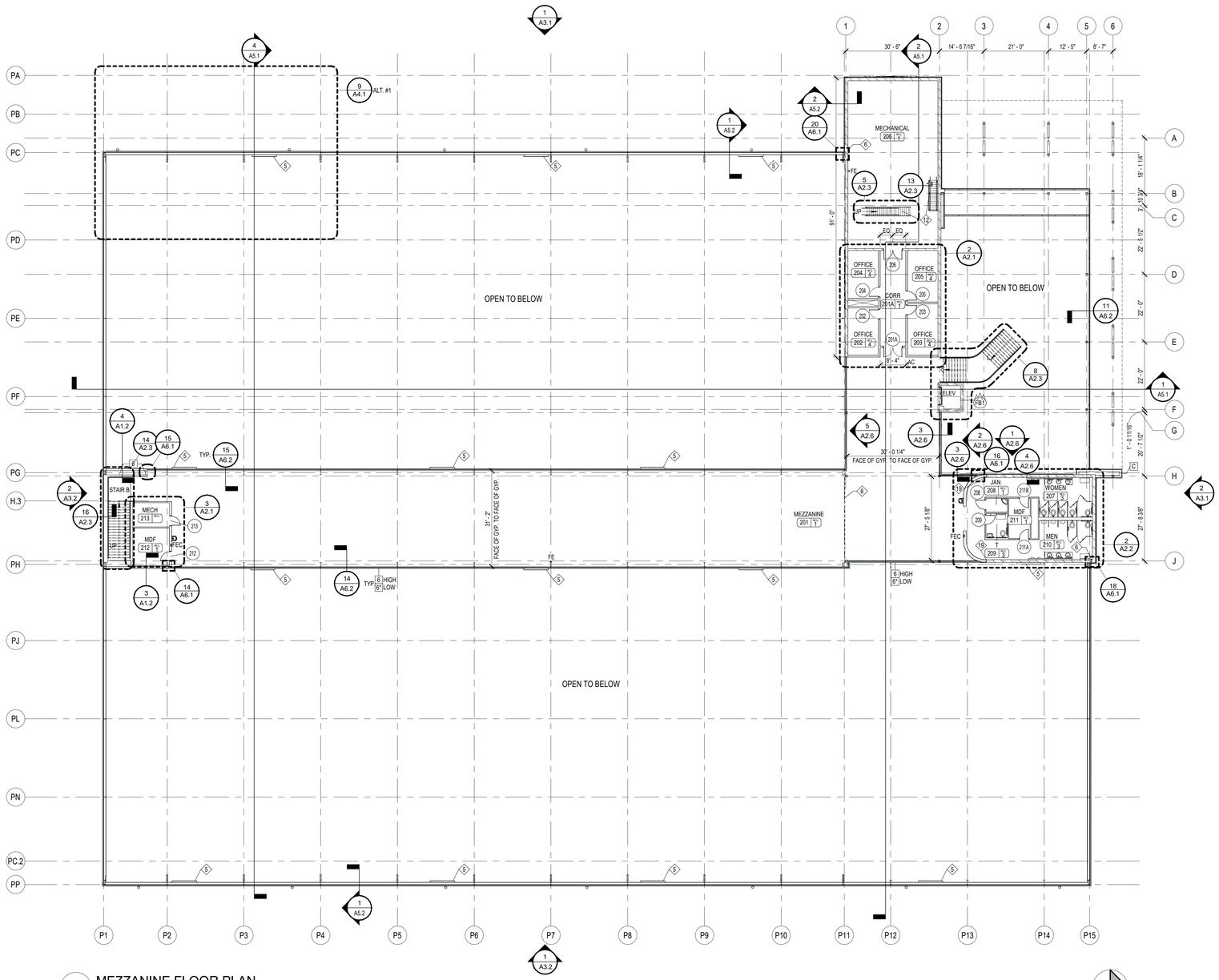
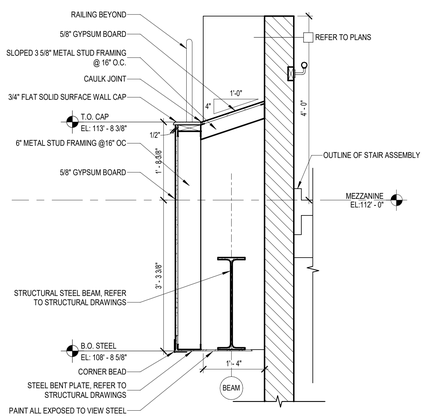
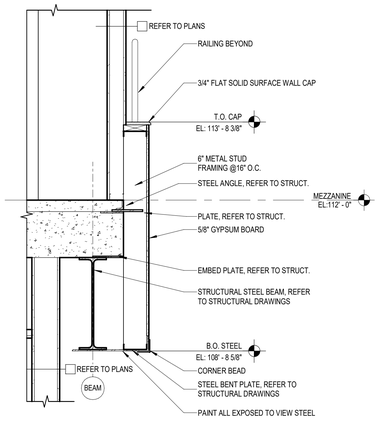


1 MEZZANINE FLOOR PLAN
1/16" = 1'-0"

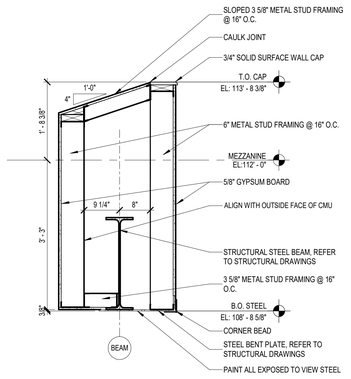
NORTH



4 SECTION DETAIL
3/4" = 1'-0"



3 SECTION DETAIL
3/4" = 1'-0"



2 SECTION DETAIL
3/4" = 1'-0"

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6. REFER TO SHEET A9.1 FOR COURT LAYOUT DIMENSIONS.

KEYNOTES

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6. EXPANSION JOINT WHERE CONVENTIONALLY-FRAMED STRUCTURE MEETS PEMB. REFER TO DETAILS.
7. PEMB FRAME OR COLUMN. PROVIDE WALL PADDING ON ALL EXPOSED FACES. REFER TO DETAIL 1/A6.1.
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14. STEEL COLUMN, REFER TO STRUCT.
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25. RETRACTABLE BATTING CAGE.
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SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY

500 WEST THIRD STREET
OWENSBORO, KY 42301

MEZZANINE FLOOR PLAN

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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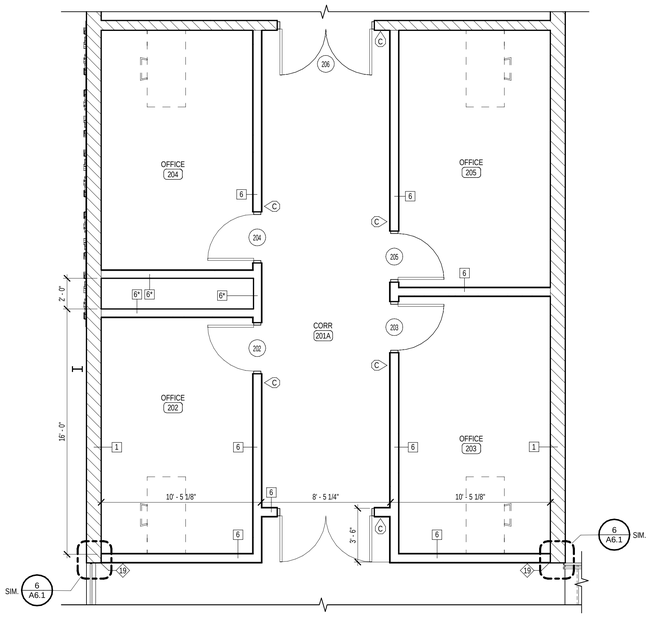
REVISIONS

No.	Description	Date

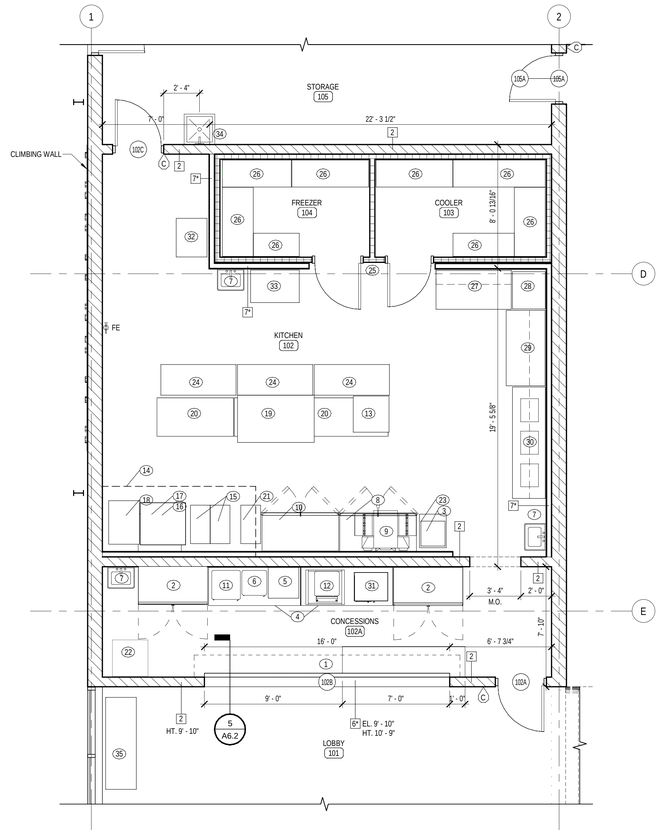
SHEET

A1.2

2259
OWENSBORO INDOOR SPORTS FACILITY
5/17/2024 11:47:48 AM



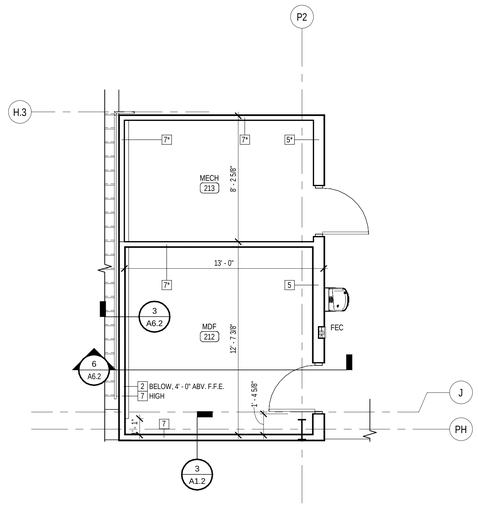
2 ENLARGED PLAN
1/4" = 1'-0"



1 ENLARGED CONCESSION PLAN
1/4" = 1'-0"

KITCHEN SCHEDULE

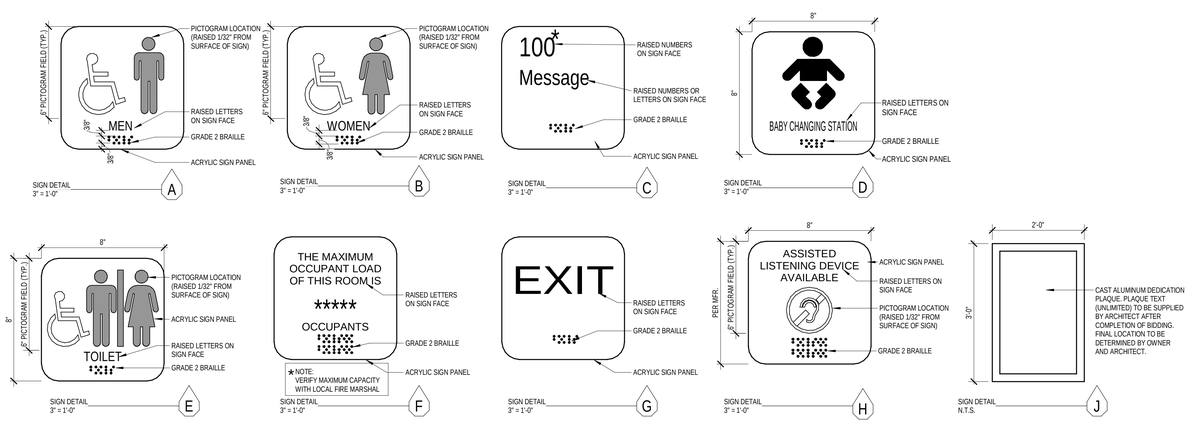
(X)	ACCESSORY	PROV. / INSTALLER	MANUFACTURER	MODEL NO.
1	FRONT COUNTER	CFCI	REFER TO ARCHITECTURAL	-
2	REFRIGERATED MERCHANDISER	OFCI	TRUE	GDM-47-HC-LD
3	HOT DOG ROLLER	OFCI	APW WYOTT	HRS-205
4	STAINLESS WORK TABLE (72")	OFCI	JOHN BOOS	ST6-3072SSK-X
5	SLANT MERCHANDISING DISPLAY WARMER	OFCI	HATCO	GRSDS-41
6	FOOD PAN WARMER, COUNTERTOP	OFCI	HATCO	HW-FUL
7	HAND SINK	CFCI	JOHN BOOS (REFER TO MEP)	PBHS-W-1410-P-SSLR-X
8	REFRIGERATED WORK TOP	0FCI	CONTINENTAL REFRIGERATOR	SW60NBS
9	CONVEYOR OVEN	0FCI	TURBO CHEF	HHC1618 VNTLS-48
10	WORK TOP FREEZER	OFCI	CONTINENTAL REFRIGERATOR	SWF60NBS
11	HOT FOOD DISPLAY CASE, COUNTERTOP	OFCI	HATCO	FDWD-1
12	NACHO CHIP WARMER	OFCI	HATCO	FST-1-MN
13	MICROWAVE / IMPINGEMENT OVEN	OFCI	TURBO CHEF	i5-9500-1
14	HOOD	CFCI	REFER TO MEP	-
15	GAS FLOOR FRYER	OFCI	VULCAN	1TRT45A W / HOSE CONNECT KIT
16	GAS COUNTERTOP GRIDDLE	OFCI	VULCAN	936RX W / HOSE CONNECT KIT
17	REFRIGERATED EQUIPMENT STAND	OFCI	CONTINENTAL REFRIGERATOR	D36GN
18	RANGE WITH CONVECTION OVEN BASE	OFCI	VULCAN	24S-4BN AND 24S-4BP W / HOSE CON.
19	SANDWICH / SALAD PREP REFRIGERATOR	OFCI	CONTINENTAL REFRIGERATOR	RA60N18M
20	STAINLESS WORK TABLE (62")	OFCI	JOHN BOOS	ST6-3660SSK-X
21	DUMP STATION (FRYMATE)	OFCI	VULCAN	FRYMATE VX1S & FRYMATE VX21S
22	SOFT-SERVE MACHINE (EXISTING)	OFCI	STOELTING	F231-309I2P
23	WARMING DRAWER	OFCI	HATCO	HDW-3N
24	SHELVING (24X60)	OFCI	OLYMPIC	J2460K
25	WALK IN COOLER/FREEZER	OFCI	IMPERIAL BROWN	CUSTOM
26	SHELVING	OFCI	OLYMPIC	J1836K
27	CLEAN DISHTABLE W/ SHELF ABOVE	OFCI	JOHN BOOS	CDT6-S48SBK-L
28	DISHWASHER	OFCI	CMA DISHMACHINES	180-VL
29	SOILED DISHTABLE W/ SHELF ABOVE	OFCI	JOHN BOOS	SDT4-S48SBK-R
30	THREE COMPARTMENT SINK	CFCI	JOHN BOOS	3B16204-2D24-X
31	POPCORN POPPER	OFCI	GOLD MEDAL PRODUCTS	2005
32	ICE MAKER/ BIN	OFCI	ICE-O-MATIC	CIM0836FA
33	ONE COMPARTMENT SINK	CFCI	JOHN BOOS	E1S8-18-12
34	MOP SINK	CFCI	JOHN BOOS	PBMS2424-12-X
35	CONDIMENT/ TRASH CART	OFCI		-



3 ENLARGED PLAN
1/4" = 1'-0"

GENERAL SIGNAGE NOTES

1. CHARACTERS SHOWN ON THIS SHEET ARE COMPUTER GENERATED. SPACING OF CHARACTERS IS NOT ACCURATE. CORRECT "VISUAL" SPACING IS THE RESPONSIBILITY OF THE MANUFACTURER.
2. PICTOGRAMS ARE SHOWN HEREIN FOR INFORMATION AND INTENT ONLY. MECHANICAL, CAMERA - READY ARTWORK SHALL BE SUPPLIED BY THE SIGNAGE CONTRACTOR.
3. COLORS OF PANEL SIGNS TO BE SELECTED BY ARCHITECT AND OWNER.
4. UNLESS OTHERWISE NOTED, ALL SIGNS TO BE MOUNTED BESIDE DOORS AT 5'-0" A.F.F. TO CENTER OF SIGN AND 2" FROM EDGE OF DOOR FRAME ON THE STRIKE SIDE. THE ARCHITECT SHALL BE CONSULTED BEFORE PLACEMENT OF SIGNAGE FOR LEFTHAND AND RIGHTHAND ORIENTATION OF SIGNS.
5. UNLESS OTHERWISE NOTED, ALL SIGNS TO BE MOUNTED UNDER WINDOWS OR SIDELITES SHALL BE MOUNTED 2" FROM BOTTOM OF SILL TO TOP EDGE OF SIGN AND CENTERED ON THE WINDOW.
6. ON SIGN DETAILS = THREE CHARACTER NUMBER TO BE SUPPLIED BY ARCHITECT.
7. ALL SIGNAGE SHALL MEET REQUIREMENTS OF ADAAG OF THE AMERICANS WITH DISABILITIES ACT (ADA).
8. MESSAGE (COPY) TO BE DETERMINED BY ARCHITECT AND OWNER.
9. ROOM NAMES AND NUMBERS SHOWN HERE ARE FOR CONSTRUCTION PURPOSES ONLY. FINAL ROOM NAMING AND NUMBERING FOR SIGNAGE SHALL BE PROVIDED BY OWNER.
10. ALL SIGNAGE KEY NOTES WITH AN ASTERISK (*) ARE FOR CLARIFICATION OF THE MOUNTING LOCATION OF A SIGN SPECIFIED IN THE DOOR SCHEDULE.
11. ALL SIGNAGE SHOWN MOUNTED ON H.M. OR ALUM. STOREFRONT FRAMES TO BE FULLY ADHERED TO THE GLASS 5'-0" A.F.F. WITH FINISHED BACK PANEL.



SIGNAGE SCHEDULE

REFER TO ENLARGED FLOOR PLANS FOR LOCATIONS

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

ENLARGED PLANS

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SHEET
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2259
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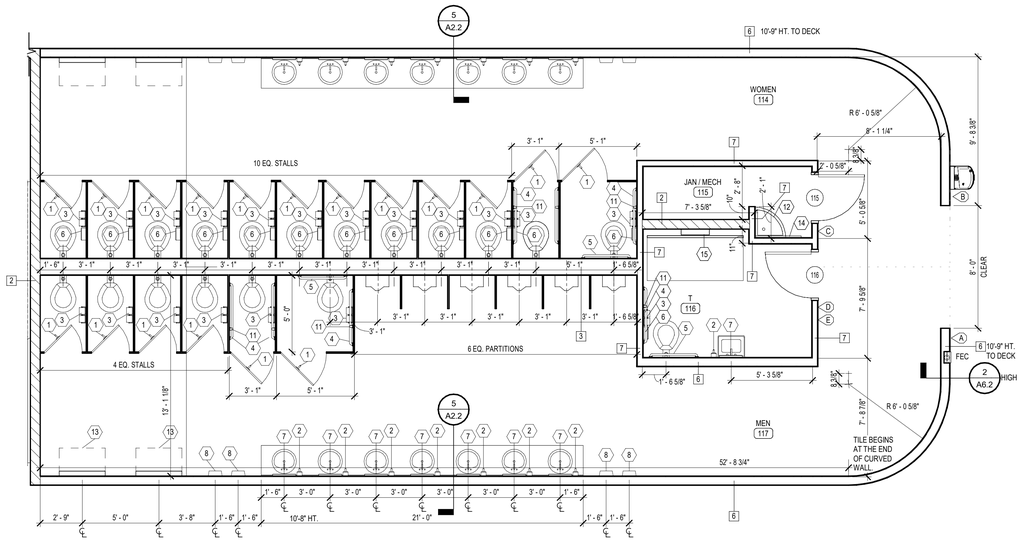
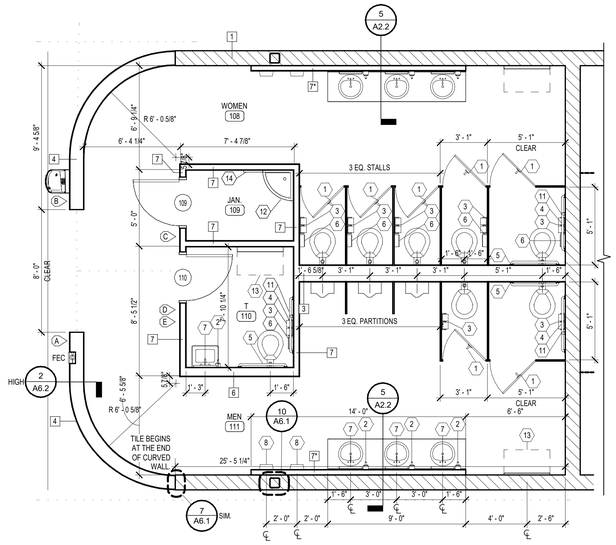
5/17/2024 11:30:59 AM



3 ENLARGED RESTROOM PLAN
1/4" = 1'-0"



1 ENLARGED RESTROOM PLAN
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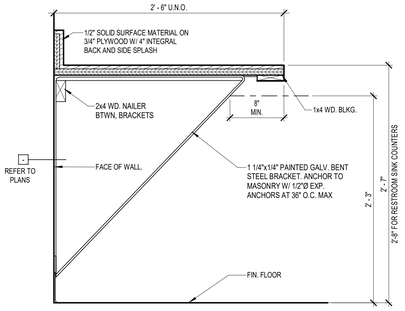
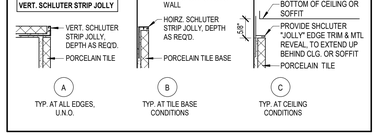


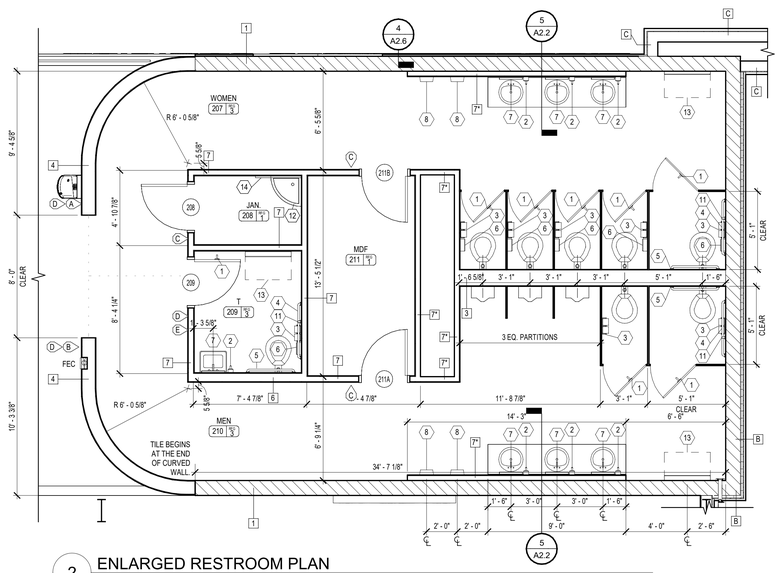
5 COUNTER SECTION
1 1/2" = 1'-0"

TILE EDGE / TRIM DETAILS

NOTE: AT CORNERS PROVIDE VERT. SCHLUTER STRIP JOLLY



4 TILE EDGE DETAIL @ CMU
6" = 1'-0"



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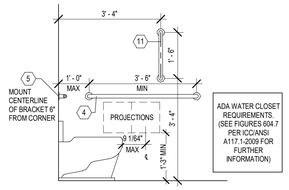
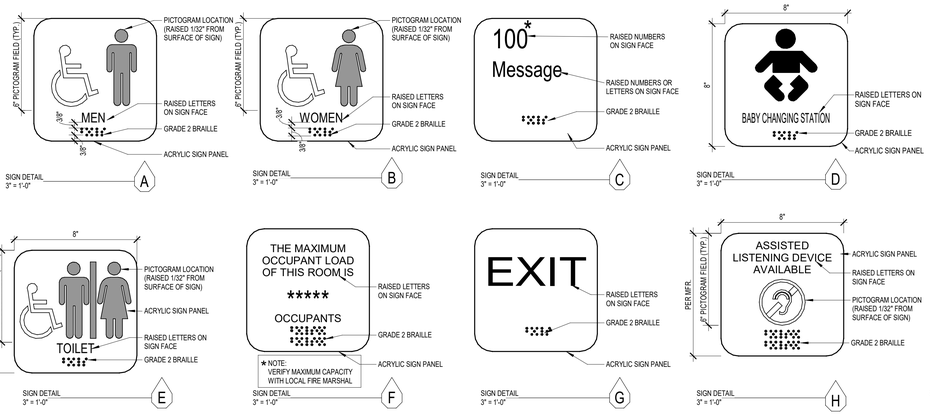


6 TYP. GRAB BAR LAYOUT
1/2" = 1'-0"



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TOILET ACCESSORY SCHEDULE

-	ACCESSORY	MTG. HT.	MFR.
1	COAT HOOK	48" TOP OF HOOK	ASI 8425 OR APPROVED EQUAL
2	SOAP DISPENSER (SURFACE MTD.)	40" TO VALVE	N.I.C.
3	TOILET PAPER DISPENSER (SURFACE MOUNTED)	24" TO CENTER LINE	OFCI
4	42" S.S. GRAB BAR (1-1/4")	33" TO CENTERLINE	ASI 3100-P-42 OR APPROVED EQUAL
5	36" S.S. GRAB BAR (1-1/4")	33" TO CENTERLINE	ASI 3100-P-36 OR APPROVED EQUAL
6	SANITARY NAPKIN DISPOSAL (SURFACE MOUNTED)	24" TO TOP (28" FOR ADA)	ASI 0473-A
7	MIRROR W/ S.S. FRAME - 24"x36"OR	40" TO BOTTOM	ASI 0600-B - 24"x36"OR APPROVED EQUAL
8	HAND DRYER	50" TO TOP	DYSON AIRBLADE V OR APPROVED EQUAL
9	24" S.S. GRAB BAR (1-1/4")	33" TO CENTERLINE	ASI 3100-P-24 OR APPROVED EQUAL
10	48" S.S. GRAB BAR (1-1/4")	33" TO CENTERLINE	ASI 3100-P-48 OR APPROVED EQUAL
11	18" VERTICAL S.S. GRAB BAR (1-1/4")	40" TO BTM. CENTERLINE	ASI 3100-P-18 OR APPROVED EQUAL
12	MOP BASIN	FLOOR MOUNTED	SEE PLUMBING
13	BABY CHANGING STATION	33" MAX. TO OPENED POSITION	KOALA KARE KB310-SSWM OR APPROVED EQUAL
14	MOP / BROOM HOLDER (36" WIDE)	72" TO TOP	BOBRICK B-239 X 34
15	ADULT CHANGING TABLE	REFER TO MFR.	KOALA KARE KHB3000-AHL OR APPROVED EQUAL

GENERAL TOILET ACCESSORY NOTES

1. MODEL NUMBERS. DENOTE TOILET ACCESSORIES PRODUCTS OFFERED BY "AMERICAN SPECIALTIES, INC. (ASI) AND REPRESENT THE LEVEL OF QUALITY REQUIRED AND SHALL BE USED AS A BASIS OF DESIGN.
2. ALL ITEMS SHALL BE LOCATED HORIZONTALLY AND MOUNTED TO SPECIFIC POINT ABOVE FINISH FLOOR SURFACES IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) - ANSI A117.1-2009.
3. REFER TO MEP DWGS. AND SPECIFICATIONS FOR PLUMBING FIXTURES, CONTROLS, AND FLOOR DRAIN LOCATIONS.
4. ALL EXPOSED PIPING AT LAVATORIES / HC LAV'S. SHALL BE INSULATED AND COVERED WITH A PRE MOLDED RIGID INSULATION JACKET.
5. ALL TOILET ACESSORIES TO INCLUDE VANDAL RESISTANT OPTION.
6. REFER TO ALL FLOOR PLAN SHEETS FOR ACCESSORIES REQUIRED AT OTHER LOCATIONS.
7. INSTALL GRAB BARS TO ALLOW 1 1/2" BETWEEN GRAB BAR AND WALL.
8. REFER TO TYPICAL ADA COMPLIANT GRAB BAR LAYOUT 4/A2.2.

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

KYLE STANFIELD NO. 32024653 COMMONWEALTH OF KENTUCKY REGISTERED ARCHITECT

OWENSBORO INDOOR SPORTS FACILITY

500 WEST THIRD STREET
OWENSBORO, KY 42301

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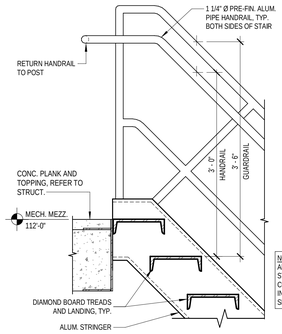
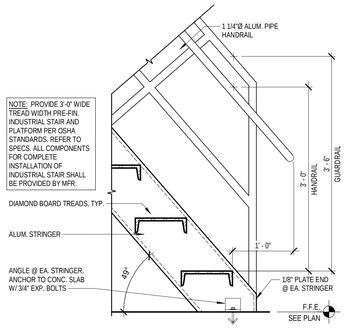


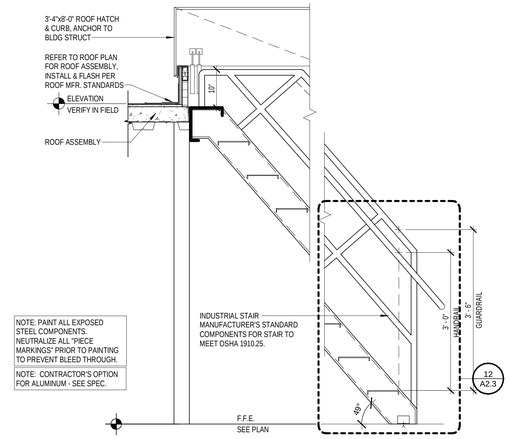
NOTE: ALUM. INDUSTRIAL STAIR AND PLATFORM PER OSHA STANDARDS. REFER TO SPECS. ALL COMPONENTS FOR COMPLETE INSTALLATION OF INDUSTRIAL STAIR SHALL BE PROVIDED BY MFR.

15 DETAIL
1" = 1'-0"



NOTE: PROVIDE 3'-0" WIDE TREAD WIDTH PRE-FIN. INDUSTRIAL STAIR AND PLATFORM PER OSHA STANDARDS. REFER TO SPECS. ALL COMPONENTS FOR COMPLETE INSTALLATION OF INDUSTRIAL STAIR SHALL BE PROVIDED BY MFR.

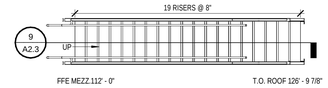
12 DETAIL
1" = 1'-0"



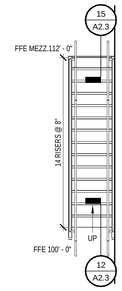
NOTE: PAINT ALL EXPOSED STEEL COMPONENTS. NEUTRALIZE ALL "PIECE MARKINGS" PRIOR TO PAINTING TO PREVENT BLEED THROUGH.

NOTE: CONTRACTOR'S OPTION FOR ALUMINUM - SEE SPEC.

9 DETAIL
3/4" = 1'-0"



5 INDUSTRIAL STAIR PLAN
1/4" = 1'-0"



1 INDUSTRIAL STAIR PLAN
1/4" = 1'-0"

STAIR HANDRAIL AND GUARDRAIL NOTES

STRINGERS:

1. MC 12 X 10.6 STEEL CHANNEL STRINGER (PAINT), CLOSE ALL EXPOSED SIDES AND ENDS WITH 1/8" STEEL PLATE (PAINT).

LANDINGS:

2. 3" CONCRETE FILL ON 12 GA. STEEL PAN.

LANDING SUPPORTS:

3. C 8 X 18.75 EXTEND TO CONCRETE BEARING WALLS. PROVIDE FULL WELD TO STAIR. PROVIDE ADDITIONAL CLIP ANGLES, PLATE ETC. AS REQ'D TO COMPLETE FULL BEARING CONDITION.

3A. C 6 X 13 EXTEND FROM STRINGER TO STRINGER. PROVIDE FULL WELD, ADDITIONAL CLIP ANGLES, PLATE, ETC. AS REQUIRED.

4. 3" X 3" X 1/4" STEEL ANGLE LANDING SUPPORT.

5. AT LANDINGS GREATER THAN 4'-0" IN LENGTH PROVIDE S3X5.7's FOR ADDITIONAL SUPPORT.

TREADS:

6. 2" CONCRETE FILL ON STEEL PAN.

TREAD/RISER PANS:

7. 12 GA. STEEL PAN PROVIDE PROFILE AS SHOWN IN DETAIL 3/A2.4.

TREAD/RISER PAN SUPPORTS:

8. 1 1/2" X 1 1/2" X 1/8" STEEL ANGLE, WELD TO STRINGERS AS REQUIRED TO RECEIVE PANS. LOCATE ANGLES INSIDE PANS.

STAIR AND LANDING RAILINGS:

9. TS 1 1/2" X 1 1/2" VERTICAL SUPPORTS. WELD TO STRINGERS @ 4' - 1" O.C. MAX. (EQUAL SPACING)

10. TS 1 1/2" X 1 1/2" STEEL HORIZONTAL RAILS, CONT.

11. 9 GA. 1"x1" WWF WELD TO STEEL ANGLE FRAME.

HANDRAIL:

12. 1 1/4" DIA. STANDARD STEEL PIPE HANDRAIL. PROVIDE BRACKETS AT VERTICAL SUPPORTS. RETURN TO WALL AT ENDS AND CLOSE ENDS OF RAILINGS. INSTALL AT 36" ABOVE STAIR NOSINGS AND LANDINGS. REFER TO DETAIL 1/A2.4 FOR WALL-MOUNTED HANDRAIL DETAILS. PAINT TYP.

13. HANDRAIL BRACKET.

14. 1/2" x 1/2" x 1/8" STEEL ANGLE.

STAIR GENERAL NOTES

1. STEEL STAIR, LANDING AND RAIL ASSEMBLIES SHALL BE FABRICATED AND INSTALLED AS REQUIRED TO MEET OR EXCEED ALL CODE REQUIREMENTS FOR DESIGN LOADINGS.

2. ALL STAIR RISERS WITHIN A FLIGHT SHALL BE EQUAL IN HEIGHT.

3. FIELD PAINT ALL EXPOSED STEEL COMPONENTS WITH SPECIFIED COATING OVER SHOP APPLIED PRIMER. NEUTRALIZE PIECE MARKINGS PRIOR TO PAINTING. PROVIDE LANDING, TREAD AND NOSING FINISHES INDICATED IN ROOM FINISH GROUPS. CORRECT ANY DEFECTS OR DAMAGE TO PRIMER PRIOR TO PAINTING.

4. NOT USED.

5. ALL RAILING CONNECTIONS SHALL BE WELDED CONTINUOUSLY AND GROUND SMOOTH.

6. RAILING CLEARANCE: SHALL BE LESS THAN 4 INCHES OF CLEAR SPACE BETWEEN ANY TWO RAILINGS, BETWEEN RAILINGS AND WALL OR OTHER SURFACE, AND ANY HORIZONTAL RAILING AND A STRINGER.

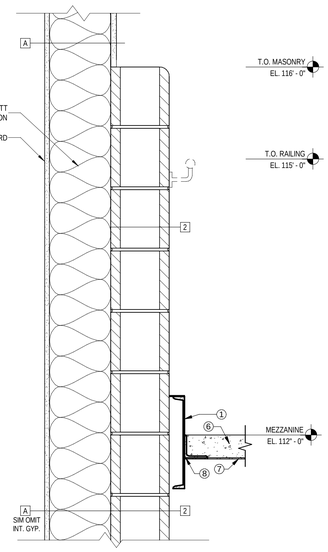
7. MEMBER SIZES ARE MINIMUMS. STAIR FABRICATOR SHALL INSTALL MEMBERS SIZED AS NEEDED TO ACHIEVE REQUIRED LOADINGS. ARCHITECT SHALL BE INFORMED OF ANY REQ'D REVISION PRIOR TO SHOP DRAWING SUBMITTALS.

8. FIELD VERIFY FINAL RAILINGS DIMENSIONS AFTER STRINGERS ARE INSTALLED.

9. HANDRAIL DIMENSIONS ARE TO STAIR NOSINGS.

10. PROVIDE SEALANT AT BOTTOM INTERSECTION OF STRINGERS AND FLOOR FINISH TO MATCH STRINGER FINISH COLOR, TYP.

11. AT EXPOSED LOCATIONS, ANCHORAGE OF STAIR COMPONENTS TO CMU AND CONCRETE SHALL BE THROUGH STINGERS, CHANNELS OR OTHER MAIN PERIMETER MEMBERS IN CONJUNCTION WITH POCKETS, EMBEDS OR SIMILAR CONCEALED METHODS AS ENGINEERED BY THE STAIR FABRICATOR. EXPOSED CLIPS AND BOLTED CONNECTIONS BELOW SUCH MEMBERS SHALL NOT BE PERMITTED.



16 DETAIL
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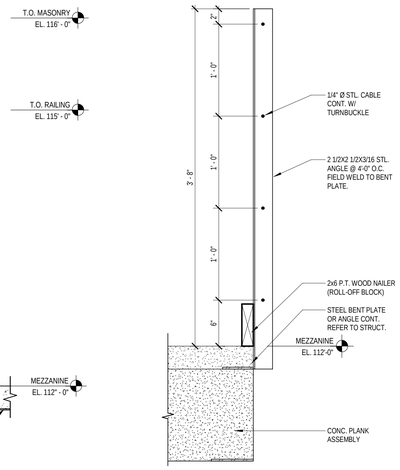

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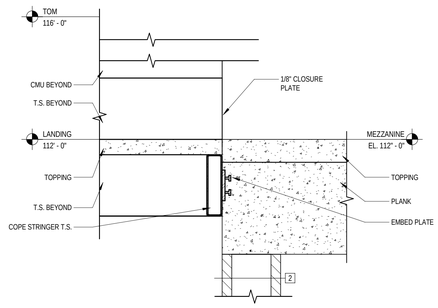
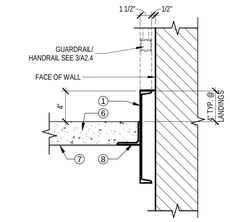


10 DETAIL
1 1/2" = 1'-0"



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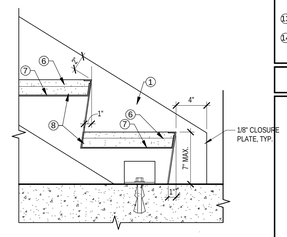

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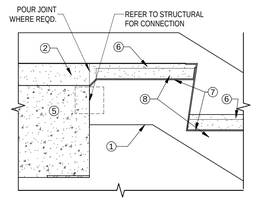

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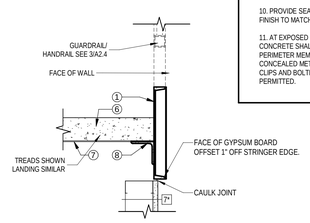

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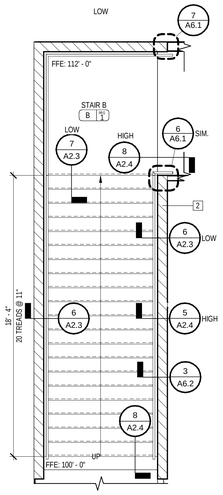
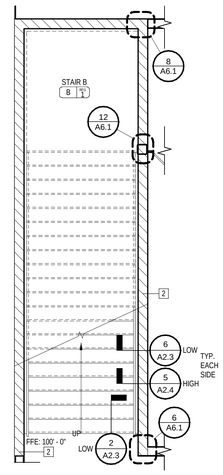


14 STAIR B PLAN
1/4" = 1'-0"



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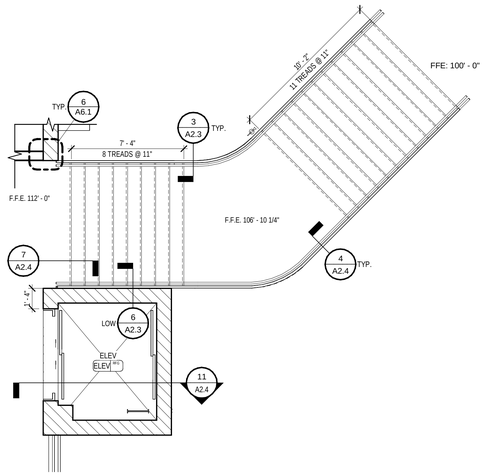
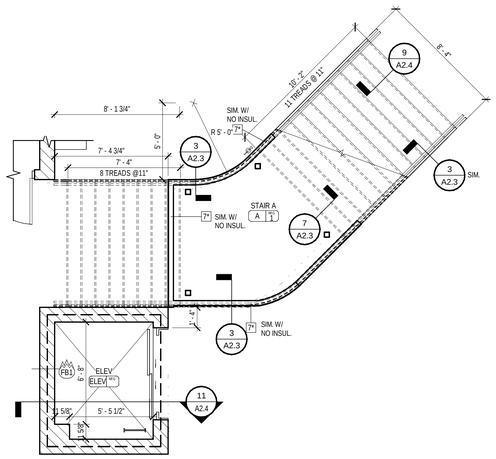
1/4" = 1'-0"



8 ELEVATOR AND STAIR A PLAN
1/4" = 1'-0"



4 ELEVATOR AND STAIR A PLAN
1/4" = 1'-0"

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

ENLARGED STAIRS & ELEVATOR PLANS & DETAILS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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REVISIONS

No.	Description	Date

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A2.3

2259
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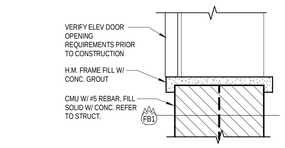
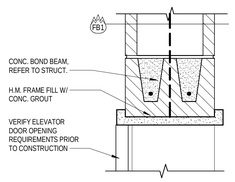
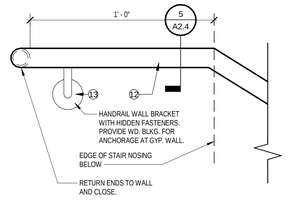
5/17/2024 11:31:16 AM



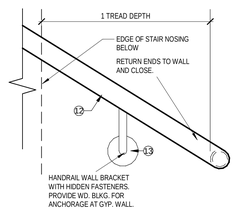
12 ELEVATOR JAMB DETAIL
1 1/2" = 1'-0"



10 ELEVATOR HEAD DETAIL
1 1/2" = 1'-0"

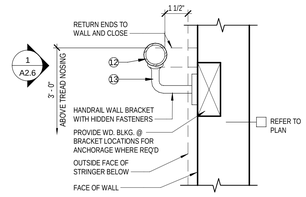


AT TOP OF STAIR/RAMP RUN

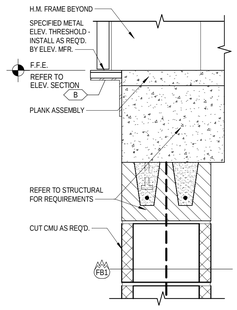


AT BOTTOM OF STAIR RUN

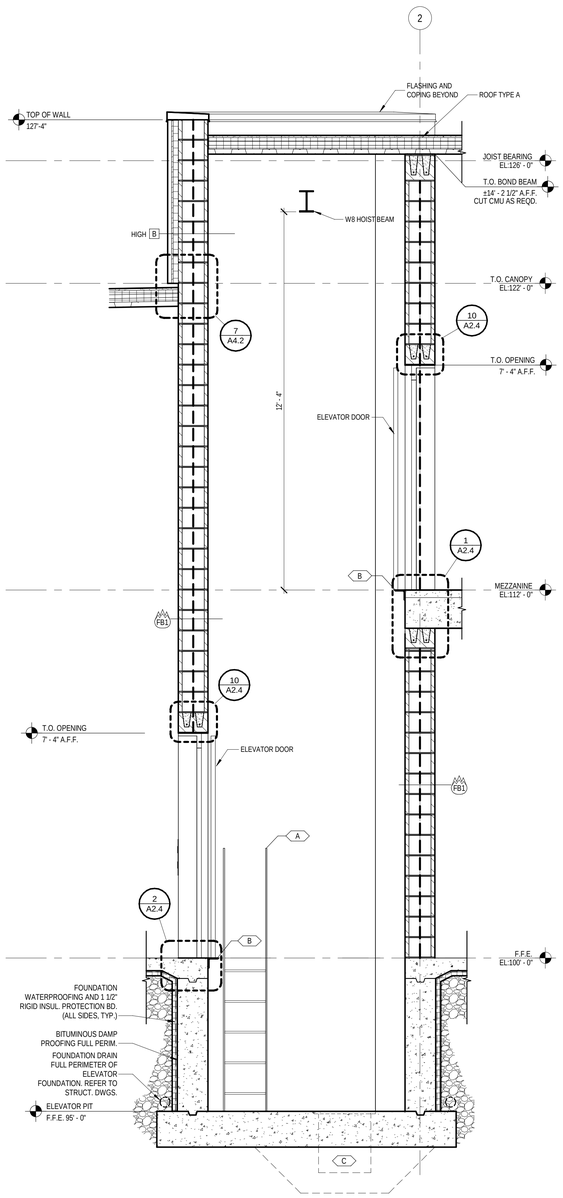
8 WALL HANDRAIL DETAIL - TYP.
3" = 1'-0"



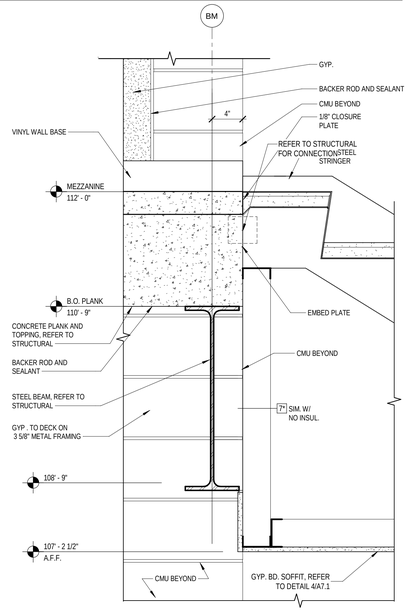
5 HANDRAIL DETAIL - TYP.
3" = 1'-0"



1 ELEVATOR SILL DETAIL
1 1/2" = 1'-0"



11 ELEVATOR SECTION
1/2" = 1'-0"



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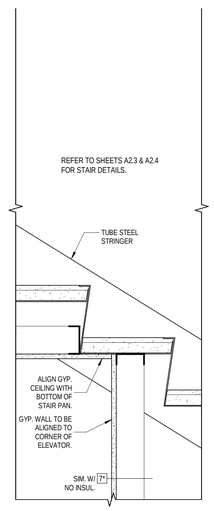

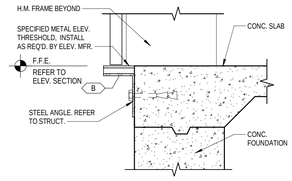

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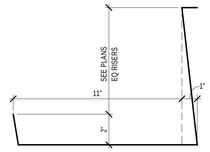
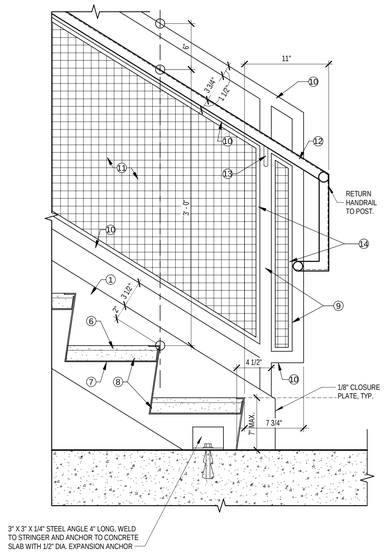
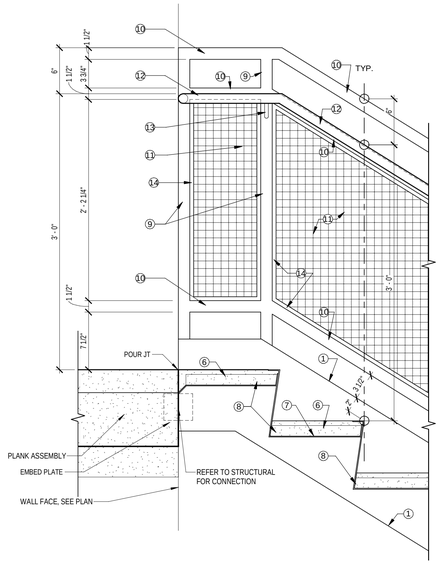


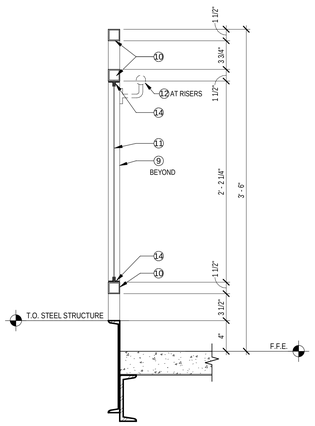
3 STAIR PAN DETAIL
3" = 1'-0"



9 GUARDRAIL @ FIRST FLOOR
1 1/2" = 1'-0"



7 GUARDRAIL @ SECOND FLOOR
1 1/2" = 1'-0"



4 GUARDRAIL SECTION
1 1/2" = 1'-0"

STAIR HANDRAIL AND GUARDRAIL NOTES

STRINGERS:

1. MC 12 X 10.6 STEEL CHANNEL STRINGER (PAINT), CLOSE ALL EXPOSED SIDES AND ENDS WITH 1/8" STEEL PLATE (PAINT).

LANDINGS:

2. 3" CONCRETE FILL ON 12 GA. STEEL PAN.

LANDING SUPPORTS:

3. C 8 X 18.75 EXTEND TO CONCRETE BEARING WALLS. PROVIDE FULL WELD TO STAIR. PROVIDE ADDITIONAL CLIP ANGLES, PLATE ETC. AS REQ'D TO COMPLETE FULL BEARING CONDITION.

14A. C 6 X 13 EXTEND FROM STRINGER TO STRINGER. PROVIDE FULL WELD, ADDITIONAL CLIP ANGLES, PLATE, ETC. AS REQUIRED.

4. 3" X 3" X 1/4" STEEL ANGLE LANDING SUPPORT.

5. AT LANDINGS GREATER THAN 4'-0" IN LENGTH PROVIDE S3X5.7's FOR ADDITIONAL SUPPORT.

TREADS:

6. 2" CONCRETE FILL ON STEEL PAN.

TREAD/RISER PANS:

7. 12 GA. STEEL PAN PROVIDE PROFILE AS SHOWN IN DETAIL 3/A2.4.

TREAD/RISER PAN SUPPORTS:

8. 1 1/2" X 1 1/2" X 1/8" STEEL ANGLE, WELD TO STRINGERS AS REQUIRED TO RECEIVE PANS. LOCATE ANGLES INSIDE PANS.

STAIR AND LANDING RAILINGS:

9. TS 1 1/2" X 1 1/2" VERTICAL SUPPORTS. WELD TO STRINGERS @ 4' - 1" O.C. MAX. (EQUAL SPACING)

10. TS 1 1/2" X 1 1/2" STEEL HORIZONTAL RAILS, CONT.

11. 9 GA. 1"x1" WWF WELD TO STEEL ANGLE FRAME.

HANDRAIL:

12. 1 1/4" DIA. STANDARD STEEL PIPE HANDRAIL. PROVIDE BRACKETS AT VERTICAL SUPPORTS. RETURN TO WALL AT ENDS AND CLOSE ENDS OF RAILINGS. INSTALL AT 36" ABOVE STAIR NOSINGS AND LANDINGS. REFER TO DETAIL 1/A2.4 FOR WALL-MOUNTED HANDRAIL DETAILS. PAINT TYP.

13. HANDRAIL BRACKET.

14. 1/2" x 1/2" x 1/8" STEEL ANGLE.

STAIR GENERAL NOTES

1. STEEL STAIR, LANDING AND RAIL ASSEMBLIES SHALL BE FABRICATED AND INSTALLED AS REQUIRED TO MEET OR EXCEED ALL CODE REQUIREMENTS FOR DESIGN LOADINGS.

2. ALL STAIR RISERS WITHIN A FLIGHT SHALL BE EQUAL IN HEIGHT.

3. FIELD PAINT ALL EXPOSED STEEL COMPONENTS WITH SPECIFIED COATING OVER SHOP APPLIED PRIMER. NEUTRALIZE PIECE MARKINGS PRIOR TO PAINTING. PROVIDE LANDING, TREAD AND NOSING FINISHES INDICATED IN ROOM FINISH GROUPS. CORRECT ANY DEFECTS OR DAMAGE TO PRIMER PRIOR TO PAINTING.

4. NOT USED.

5. ALL RAILING CONNECTIONS SHALL BE WELDED CONTINUOUSLY AND GROUND SMOOTH.

6. RAILING CLEARANCE: SHALL BE LESS THAN 4 INCHES OF CLEAR SPACE BETWEEN ANY TWO RAILINGS, BETWEEN RAILINGS AND WALL OR OTHER SURFACE, AND ANY HORIZONTAL RAILING AND A STRINGER.

7. MEMBER SIZES ARE MINIMUMS. STAIR FABRICATOR SHALL INSTALL MEMBERS SIZED AS NEEDED TO ACHIEVE REQUIRED LOADINGS. ARCHITECT SHALL BE INFORMED OF ANY REQ'D REVISION PRIOR TO SHOP DRAWING SUBMITTALS.

8. FIELD VERIFY FINAL RAILINGS DIMENSIONS AFTER STRINGERS ARE INSTALLED.

9. HANDRAIL DIMENSIONS ARE TO STAIR NOSINGS.

10. PROVIDE SEALANT AT BOTTOM INTERSECTION OF STRINGERS AND FLOOR FINISH TO MATCH STRINGER FINISH COLOR, TYP.

11. AT EXPOSED LOCATIONS, ANCHORAGE OF STAIR COMPONENTS TO CMU AND CONCRETE SHALL BE THROUGH STINGERS, CHANNELS OR OTHER MAIN PERIMETER MEMBERS IN CONJUNCTION WITH POCKETS, EMBEDS OR SIMILAR CONCEALED METHODS AS ENGINEERED BY THE STAIR FABRICATOR. EXPOSED CLIPS AND BOLTED CONNECTIONS BELOW SUCH MEMBERS SHALL NOT BE PERMITTED.

ELEVATOR GENERAL NOTES

A. ALL PROJECTIONS AND/OR SETBACKS WHICH OCCUR HORIZONTALLY ALONG THE WALLS ENCLOSING THE HOISTWAY SHALL BE PROJECTED WITH A BEVELED SURFACE AT AN ANGLE OF NO LESS THAN 75 DEGREES FROM HORIZONTAL

B. ELEVATOR CAB FLOOR FINISH SHALL BE LVT.

C. SEE ELEVATOR SPECIFICATION SECTION FOR OTHER REQUIREMENTS.

D. ELEVATOR CONTRACTOR SHALL PROVIDE AND INSTALL ANY SUPPLEMENTAL STRUCTURE, SUPPORTS, BEAMS, ANCHORS, OR OTHER COMPONENTS REQUIRED FOR ELEVATOR LOADS, REACTIONS, OR EQUIPMENT SUPPORT AS REQUIRED FOR A COMPLETE OPERATING SYSTEM AND THAT COMPLIES WITH ALL APPLICABLE CODES.

E. ELEVATOR CONTRACTOR SHALL COORDINATE LOCATIONS OF ANCHORS, EMBEDS, BEAM POCKETS, ETC. WITH OTHER TRADES AS REQUIRED FOR PROPER CONSTRUCTION SEQUENCE.

ELEVATOR & HOISTWAY NOTES

PIT LADDER:

A — PROVIDE 18" WIDE WALL MOUNTED STEEL PIT LADDER W/ RUNGS AT 12" O.C. LADDER SHALL PROJECT 7" (TO CENTERLINE OF RUNG) OFF WALL AND SIDE RAILS SHALL EXTEND 4'-0" ABOVE ADJACENT FLOOR LEVEL. PRIME AND PAINT LADDER AND COORDINATE LOCATION WITH ELEVATOR MFR. BEFORE FABRICATION AND INSTALLATION. MAINTAIN 4" CLEARANCE EACH SIDE OF RAIL.

SILL ANGLE:

B — PROVIDE STL. ANGLE, BOLT ATTACHED STL. ANGLE TO CONC. SLAB, ON EACH FLOOR AT ELEVATOR DOOR LOCATION. COORDINATE FINISH FLOOR ELEVATION (F.F.E.) AS REQUIRED TO ACCEPT ELEVATOR MFRS. THRESHOLD UNIT AND SCHEDULED FLOOR FINISHES.

SUMP PIT:

C — 24" X 24" X 24" SUMP PIT W/ MTL. GRATE COVER COORD. W/ STRUCT. & M/E DWGS. VERIFY LOCATION W/ ELEVATOR MFR. SEE M & E DRAWINGS FOR PUMP INFORMATION.

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

KYLE STANFIELD REGISTERED ARCHITECT NO. 32259 COMMONWEALTH OF KENTUCKY

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

STAIR AND ELEVATOR DETAILS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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2259
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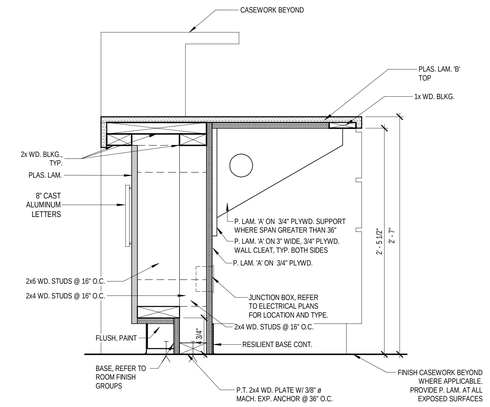

9 DESK SECTION
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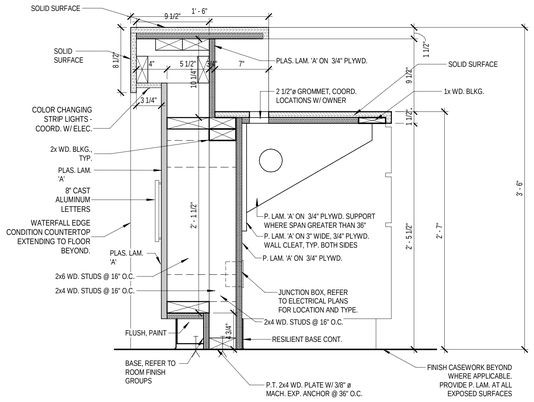

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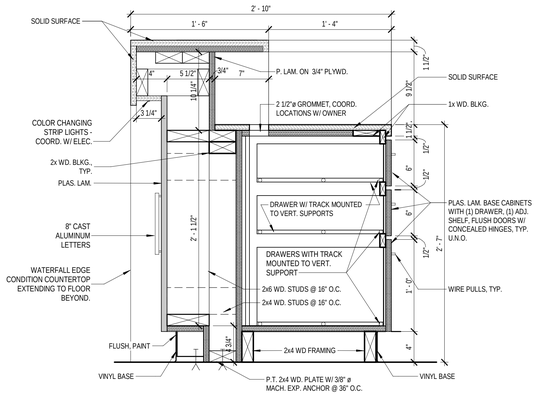
1 1/2" = 1'-0"



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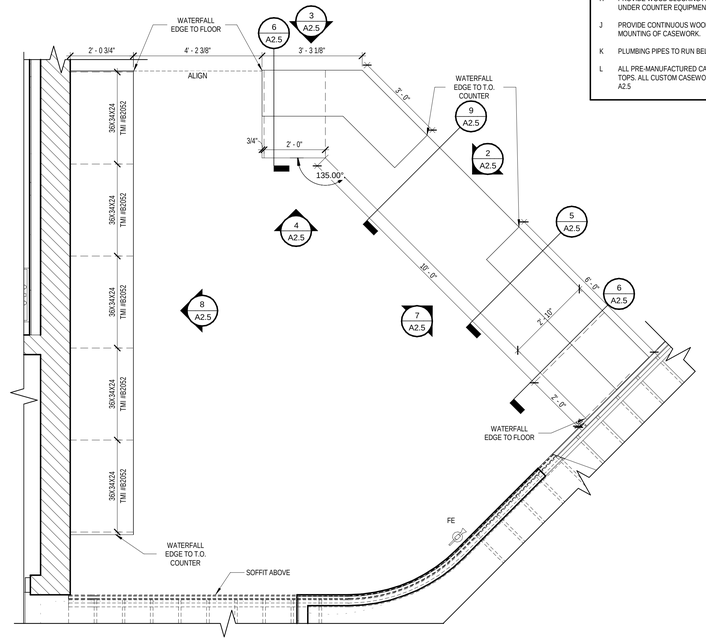
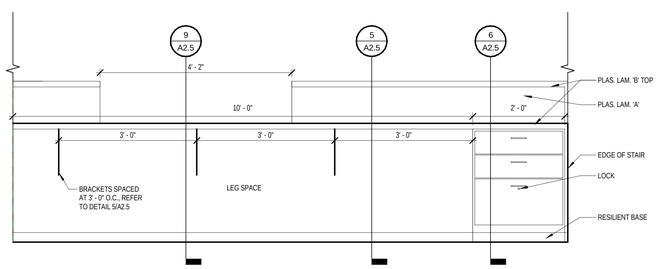
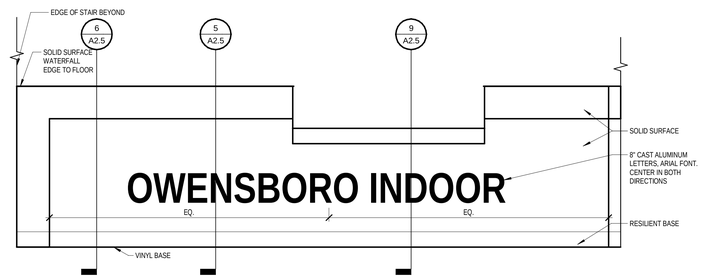
1 1/2" = 1'-0"



1 ENLARGED PLAN
1/2" = 1'-0"



7 CASEWORK ELEVATION
3/4" = 1'-0"



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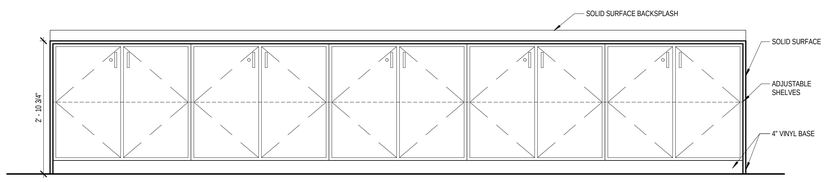
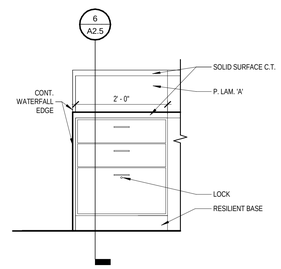
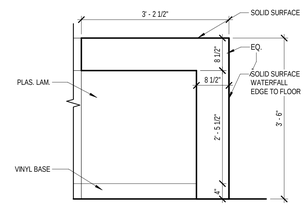
3/4" = 1'-0"



8 CASEWORK ELEVATION
3/4" = 1'-0"



4 CASEWORK ELEVATION
3/4" = 1'-0"



3 CASEWORK ELEVATION
3/4" = 1'-0"

CASEWORK NOTES

TYPICAL CASEWORK MODEL NUMBERS SHOWN ARE TMI SYSTEMS DESIGN CORP. (PHONE NO. 1-800-456-6716) AND REPRESENT THE LEVEL OF QUALITY REQUIRED AND SHALL BE USED AS THE BASIS FOR EQUAL PRODUCTS. HEIGHT INDICATED IS TO TOP OF COUNTERTOP.

XXXXX — TMI MODEL #
WxHxD — WIDTHxHEIGHT (T.O. COUNTERTOP) xDEPTH

A MOUNT ALL BASE AND WALL CASEWORK PER ADA GUIDELINES AND ANSI A117.1-2009.

B MOUNT TOP OF UPPER WALL CABINETS @ 7'-0" A.F.F., U.N.O.

C COUNTERTOPS SHALL BE PROVIDED AT ALL CASEWORK .

D PROVIDE FINISHED END PANELS AT ALL EXPOSED LOCATIONS.

E PROVIDE 4" BACK AND SIDE SPLASH AT ALL WALL LOCATIONS.

F PROVIDE INFILL PANELS AS REQUIRED TO CONCEAL VOIDS @ ALL BASE CABINETS.

G ALL WALL AND BASE CABINETS SHALL HAVE LOCKS ON DOORS AND DRAWERS. PROVIDE ONE KEY SYSTEM PER ROOM AND ONE MASTER KEY.

H PROVIDE WOOD BLOCKING AS REQUIRED TO SUPPORT COUNTERTOP. COORDINATE W/ UNDER COUNTER EQUIPMENT.

J PROVIDE CONTINUOUS WOOD BLOCKING @ METAL STUD WALL LOCATIONS FOR MOUNTING OF CASEWORK.

K PLUMBING PIPES TO RUN BELOW CASEWORK AS SHOWN ON MECH. DWGS.

L ALL PRE-MANUFACTURED CASEWORK AND WINDOW SILLS SHALL HAVE SOLID-SURFACE TOPS. ALL CUSTOM CASEWORK SHALL HAVE PLASTIC LAMINATE TOPS, REFER TO SHEET A2.5

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

ENLARGED PLANS, CASEWORK NOTES & DETAILS

JOB NO.	2259
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CHECKED	DB, AHO

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SHEET
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2259
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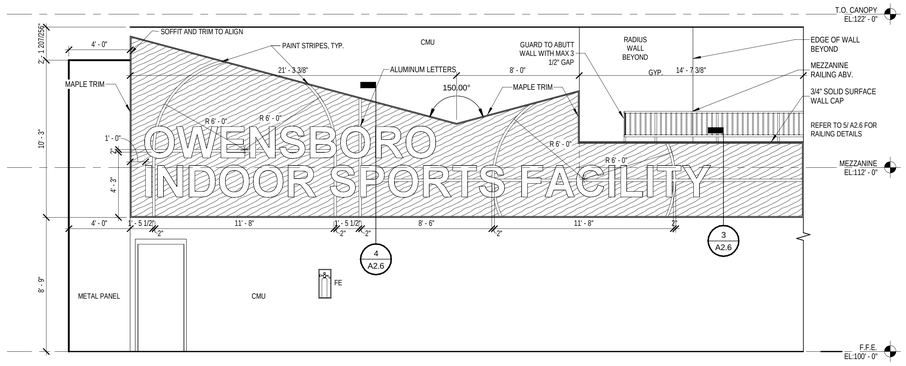
5/17/2024 11:31:29 AM

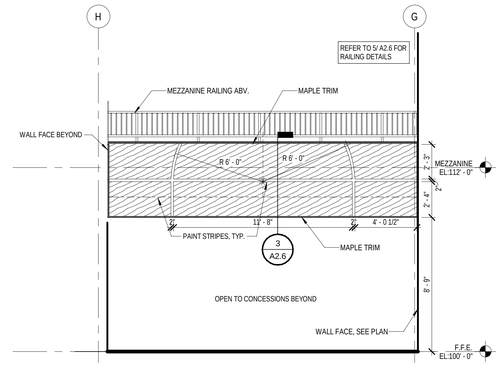
INTERIOR ELEVATION LEGEND

HARDWOOD TO MATCH COLOR AND STAIN OF GYM FLOOR.

2" PAINT STRIPING - COLOR TO MATCH THE MAIN COLOR OF COURT STRIPING



1 INTERIOR ELEVATION
1/4" = 1'-0"



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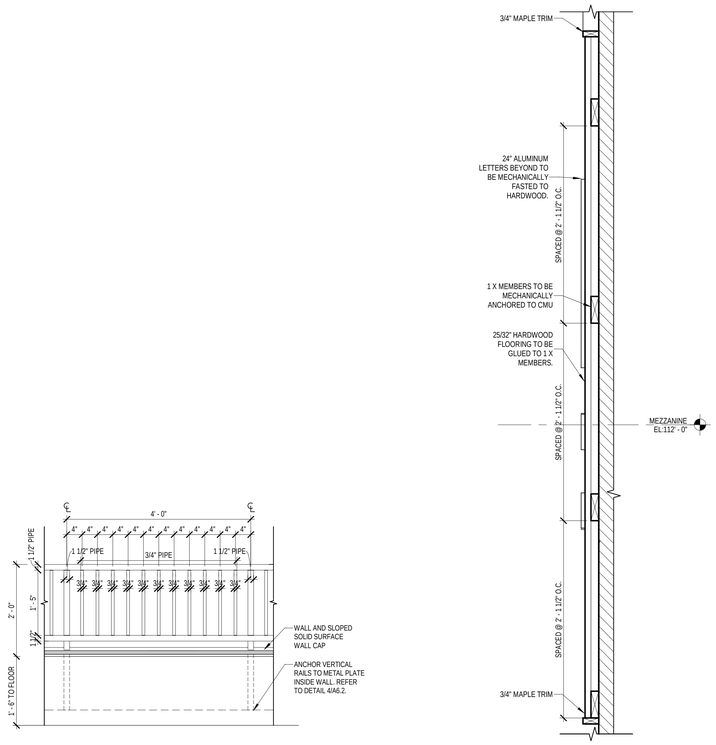
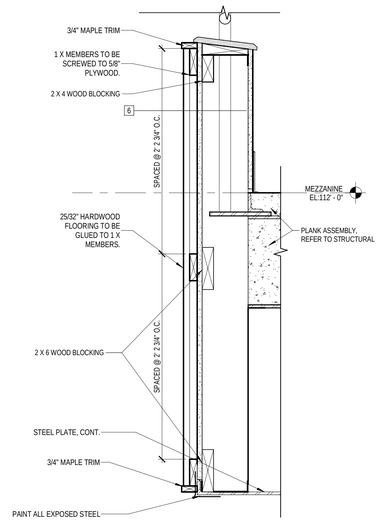
1/4" = 1'-0"



4 SECTION DETAIL
1 1/2" = 1'-0"



3 SECTION DETAIL
1 1/2" = 1'-0"

5 RAILING DETAIL
3/4" = 1'-0"

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

KYLE STEPHEN SMITH REGISTERED NO. 3202 FIELD ARCHITECT

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

INTERIOR ELEVATIONS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	CRG
CHECKED	DB, AHO

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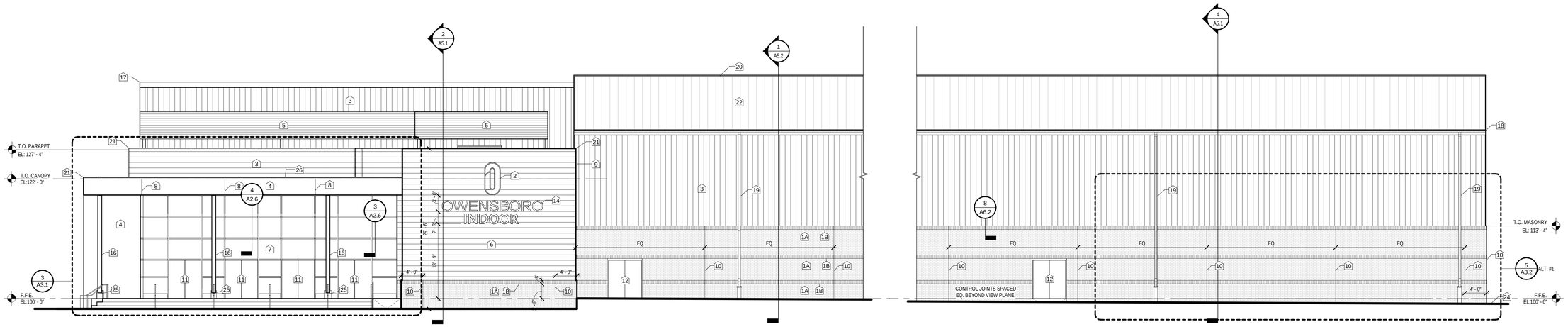
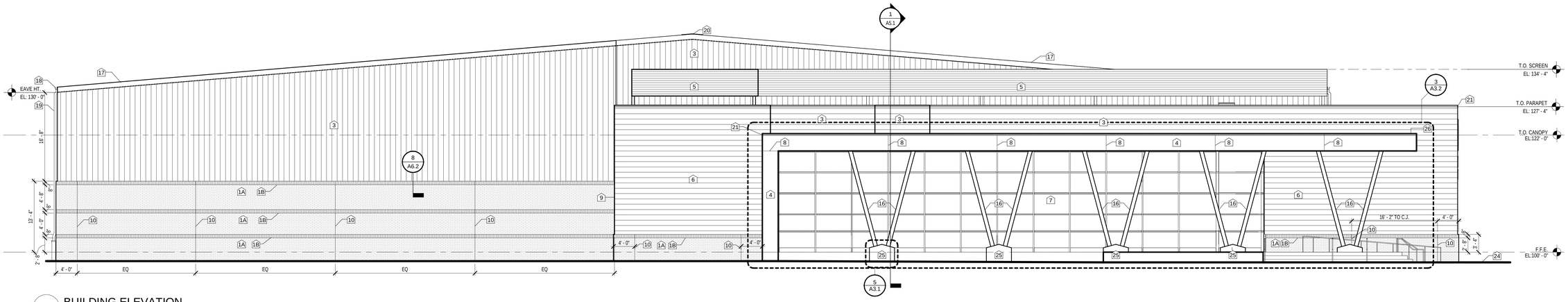
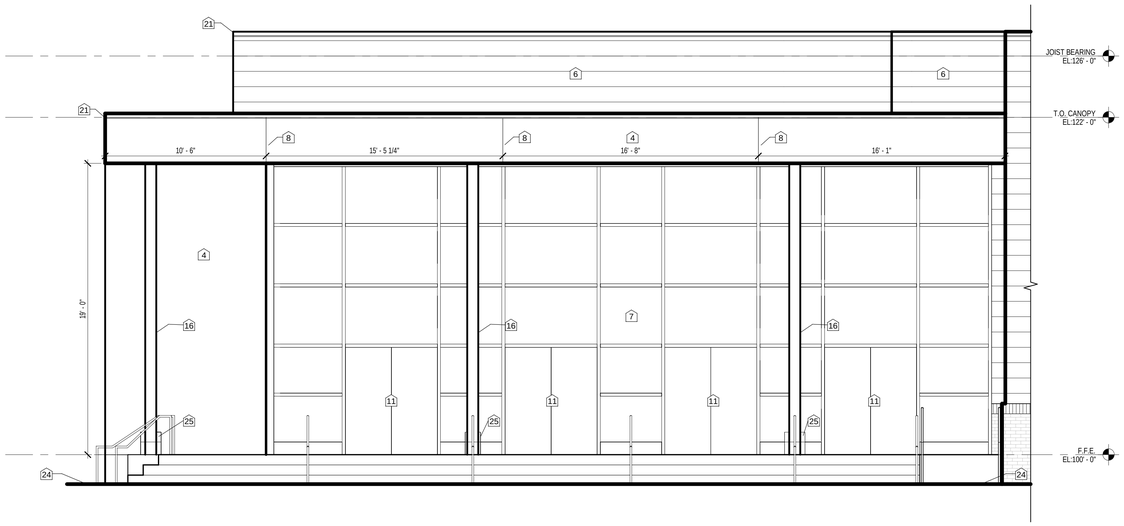


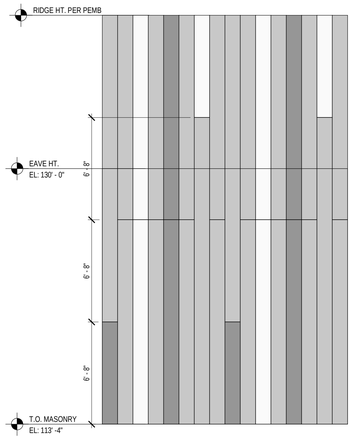
1 BUILDING ELEVATION
1/8" = 1'-0"



2 BUILDING ELEVATION
1/8" = 1'-0"



3 ENLARGED BUILDING ELEVATION
1/4" = 1'-0"



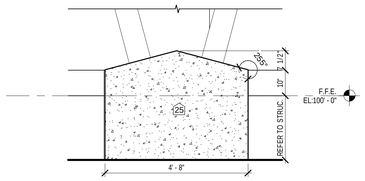
GENERAL NOTE: METAL PANEL JOINTS SHALL ALIGN WITH WINDOWS, DOORS, AND OTHER BUILDING FEATURES AS SHOWN.

WHERE METAL PANEL EXTENDS ABOVE 130' - 0", METAL PANEL SHALL BE CONTINUOUS, EXTENDING NO MORE THAN 20' - 0"

METAL PANEL COLOR LEGEND

- COLOR 01
- COLOR 02
- COLOR 03

4 VERTICAL METAL PANEL LAYOUT
1/4" = 1'-0"



5 TYP. COLUMN BASE DETAIL
1/2" = 1'-0"

GENERAL ELEVATION NOTES

BUILDING ELEVATIONS SHOWN ON THIS DRAWING ARE INTENDED FOR GENERAL REFERENCE PURPOSES ONLY. REFER TO REFERENCED SECTIONS AND DETAILS FOR MORE FULLY DESCRIBED CONDITIONS AND REQUIREMENTS.

A. MATERIALS INDICATIONS AND DESCRIPTIONS, VERTICAL AND OTHER DIMENSIONS SHOWN ON ONE BUILDING ELEVATION APPLY TO OTHER BUILDING ELEVATIONS WHERE SHOWN UNLESS NOTED OTHERWISE.

B. LINES REPRESENTING PAVING AND FINISH GRADES ARE APPROXIMATE AND ARE SHOWN FOR REFERENCE PURPOSES ONLY. REFER TO SITE PLANS FOR SPECIFIC GRADE AND SPOT ELEVATIONS AT EACH RESPECTIVELY.

C. REFER TO FLOOR PLANS FOR LOCATION AND DOOR SCHEDULE FOR FULL EXTENT AND COMPLETE DESCRIPTION OF DOOR AND FRAME TYPES, PORTIONS OF DOORS, WINDOWS, STOREFRONTS, AND CURTAIN WALLS MAY BE CONCEALED BY OTHER BUILDING FEATURES SHOWN.

D. REFER TO FLOOR PLANS FOR SPECIFIC ALUMINUM STOREFRONT TYPES AND STOREFRONT ELEVATIONS.

E. LOCATIONS OF CONTROL/EXPANSION JOINTS IN MASONRY WALLS ARE SHOWN ON THIS DRAWING. SEE TYPICAL DETAILS FOR SPECIFIC REQUIREMENTS AT RESPECTIVE LOCATIONS.

F. ALL EXPOSED NEW EXTERIOR MASONRY SHALL RECEIVE APPLICATION OF SPECIFIED WATER REPELLENT.

G. ALL EXPOSED EXTERIOR METAL SUCH AS FLASHINGS, COPINGS, GUTTERS DOWNSPOUTS AND LADDERS SHALL RECEIVE THE SPECIFIED FIELD OR SHOP APPLIED FINISH COATING.

X ELEVATION KEY NOTES

1. FACE BRICK.
   A. RUNNING BOND.
   B. SOLDIER COURSE.
2. INTERNALLY-LIT ALUMINUM CHANNEL LETTER.
3. 12" WIDE STEEL WALL PANELS, SEE 4/A3.1 FOR PATTERN.
4. ALUMINUM COMPOSITE PANELS.
5. LOUVER SCREEN SYSTEM
6. 12" WIDE SEEL WALL PANELS, ONE COLOR.
7. ALUMINUM CURTAIN WALL SYSTEM.
8. PANEL JOINT.
9. EXPANSION JOINT / COVER.
10. CONTROL JOINT, CONTINUOUS SEALANT WEATHERTIGHT, REFER TO DETAIL.
11. ALUMINUM & GLASS ENTRANCE DOOR.
12. HOLLOW METAL DOOR FRAME, PAINT.
13. OVERHEAD DOOR.
14. ALUMINUM LETTERS.
15. EXHAUST VENTS, REFER TO MECHANICAL.
16. STEEL COLUMNS, PAINT.
17. PEMB RAKE TRIM.
18. PEMB GUTTER ASSEMBLY.
19. PEMB DOWNSPOUT WITH BOOT.
20. PEMB RIDGE CAP.
21. COPING.
22. PEMB METAL ROOF ASSEMBLY
23. STANDING SEAM METAL ROOF ASSEMBLY, REFER TO SPECIFICATIONS.
24. APPROXIMATE FINISH GRADE, SEE SITE PLANS.
25. COLUMN BASE.
26. GRAVEL STOP.

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

BUILDING ELEVATIONS

JOB NO.	2259
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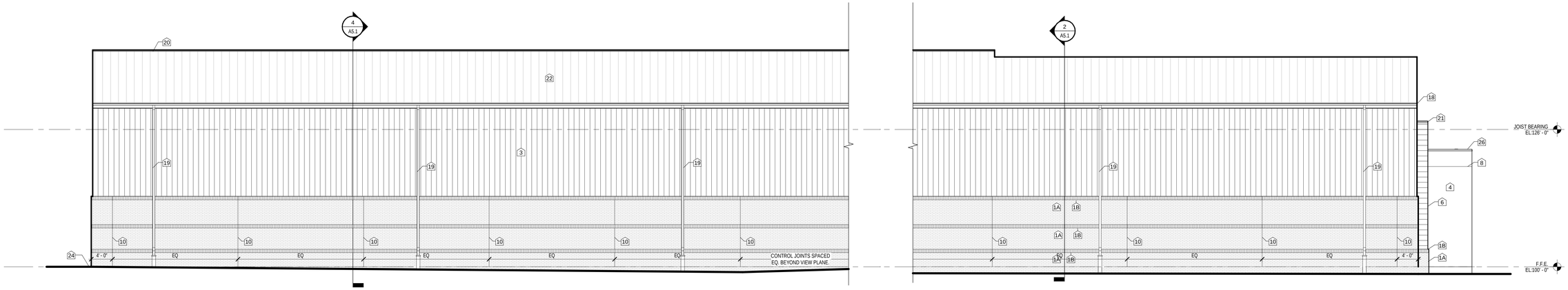
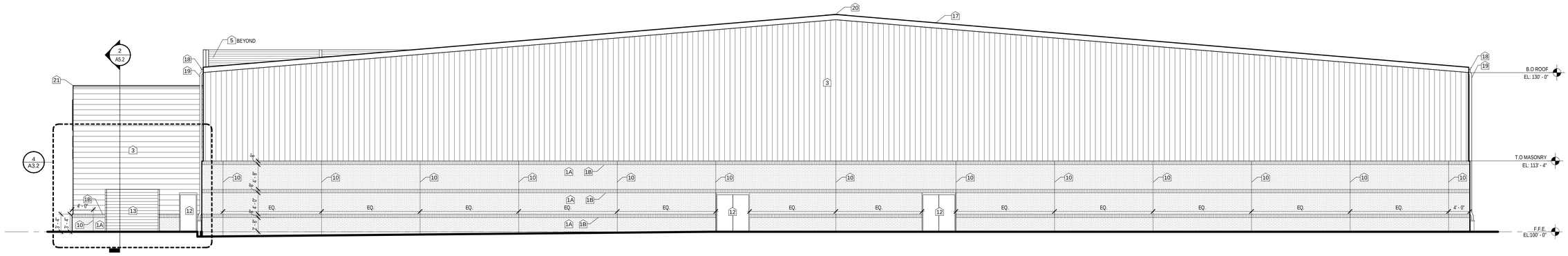
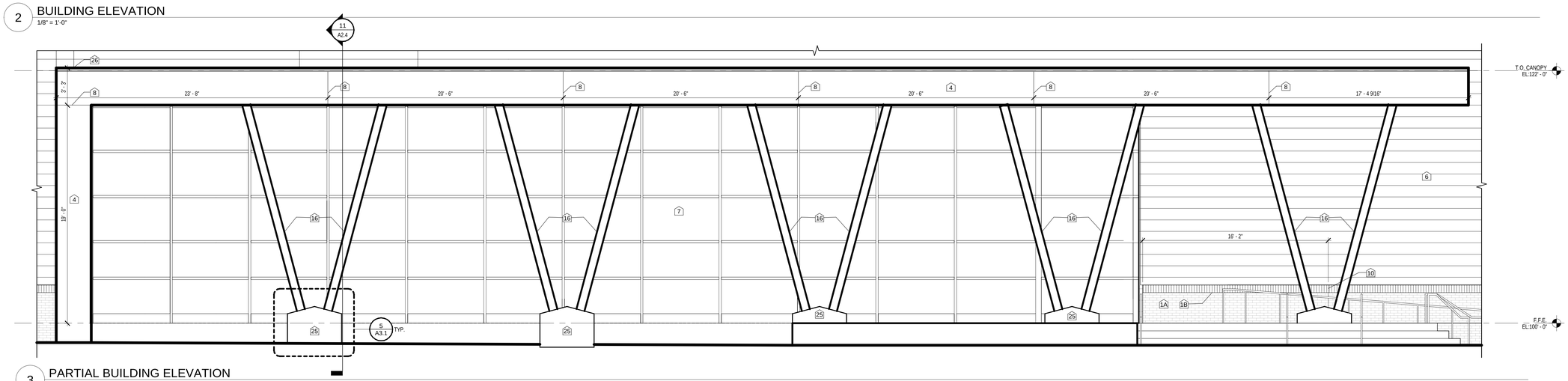


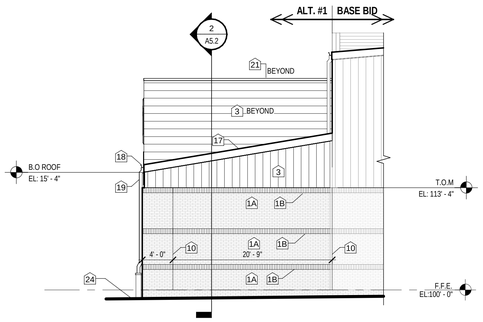
1 BUILDING ELEVATION
1/8" = 1'-0"



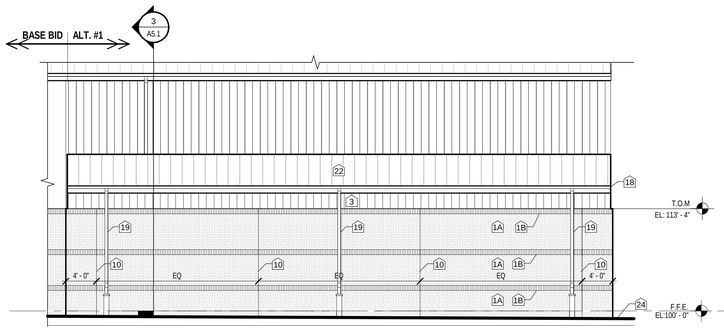
2 BUILDING ELEVATION
1/8" = 1'-0"



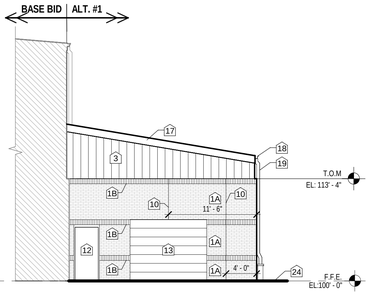
3 PARTIAL BUILDING ELEVATION
1/4" = 1'-0"



4 BUILDING ELEVATION - ALTERNATE #1
1/8" = 1'-0"



5 BUILDING ELEVATION - ALTERNATE #1
1/8" = 1'-0"



6 BUILDING ELEVATION - ALTERNATE #1
1/8" = 1'-0"

GENERAL ELEVATION NOTES

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21. COPING.
22. PEMB METAL ROOF ASSEMBLY
23. STANDING SEAM METAL ROOF ASSEMBLY, REFER TO SPECIFICATIONS.
24. APPROXIMATE FINISH GRADE, SEE SITE PLANS.
25. COLUMN BASE.
26. GRAVEL STOP.

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

BUILDING ELEVATIONS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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No.	Description	Date

SHEET
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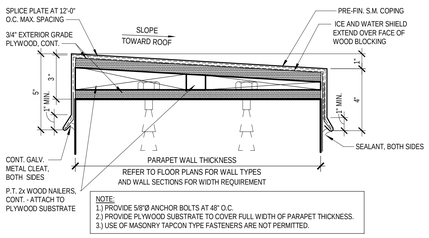
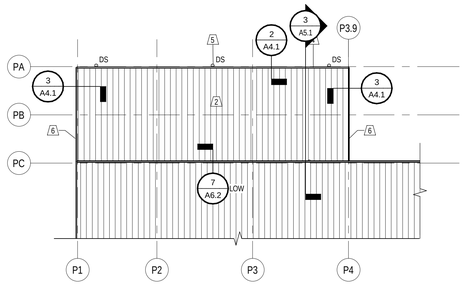
OWENSBORO INDOOR SPORTS FACILITY
5/17/2024 11:32:00 AM

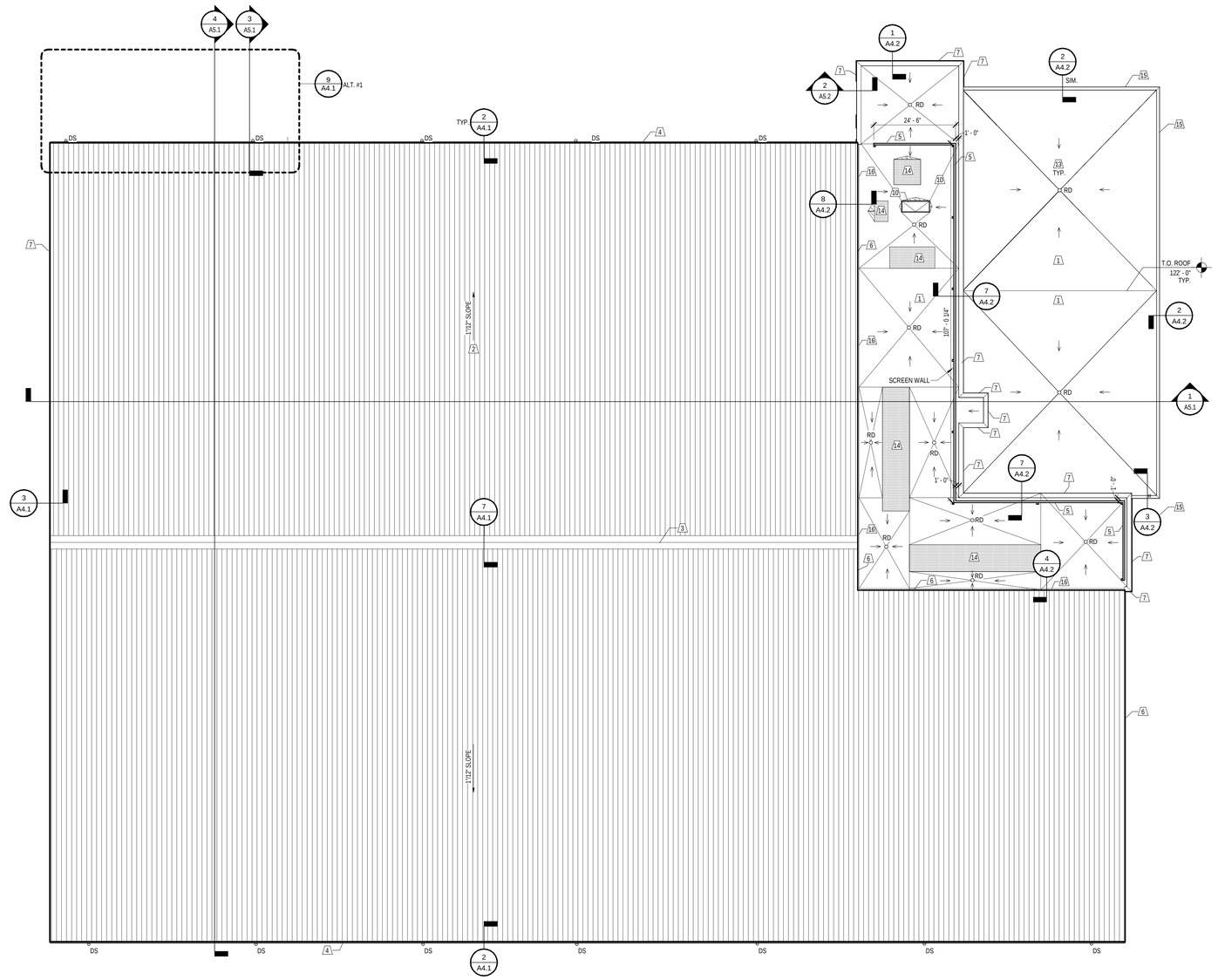


NOTE:
1.) PROVIDE 5/8"Ø ANCHOR BOLTS AT 48" O.C.
2.) PROVIDE PLYWOOD SUBSTRATE TO COVER FULL WIDTH OF PARAPET THICKNESS.
3.) USE OF MASONRY TAPCON TYPE FASTENERS ARE NOT PERMITTED.

8 COPING DETAIL
3" = 1'-0"

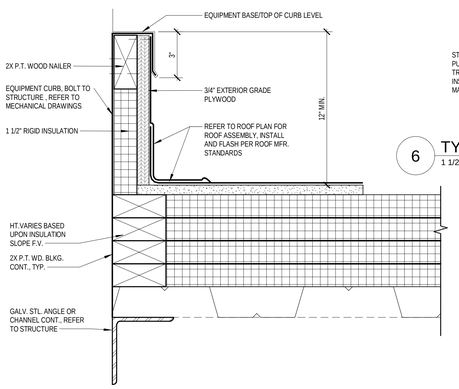


9 ROOF PLAN - ALTERNATE #1
1/16" = 1'-0"

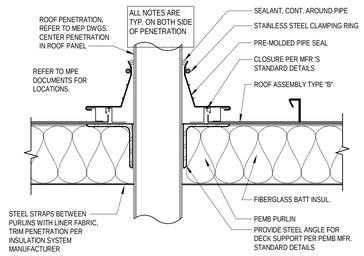


1 ROOF PLAN
1/16" = 1'-0"

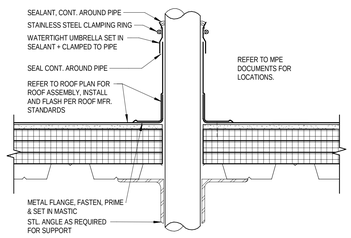
NORTH



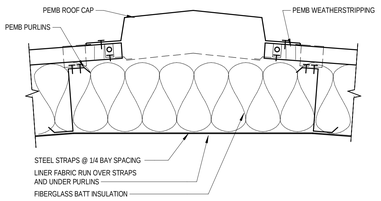
10 MECHANICAL CURB DETAIL
3" = 1'-0"



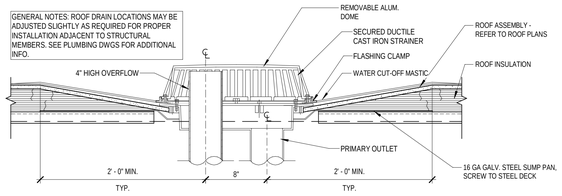
6 TYP VENT THRU ROOF AT PEMB ROOF ASSEMBLY
1 1/2" = 1'-0"



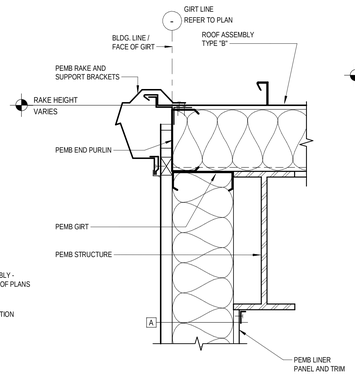
4 TYP VENT THRU ROOF AT MEMBRANE ROOF ASSEMBLY
1 1/2" = 1'-0"



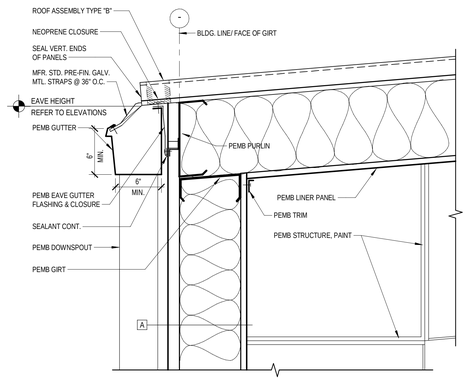
7 ROOF RIDGE DETAIL
1 1/2" = 1'-0"



5 ROOF DRAIN DETAIL
1 1/2" = 1'-0"



3 RAKE AT PEMB
1 1/2" = 1'-0"



2 GUTTER DETAIL @ PEMB
1 1/2" = 1'-0"

GENERAL ROOF NOTES

REFER TO STRUCTURAL DRAWINGS FOR SPECIFIC STRUCTURAL ELEVATIONS.

REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL ROOF MECH/ELEC ITEMS THAT MAY NOT BE SHOWN ON THIS PLAN.

FLASH ALL ROOF PENETRATIONS PER MANUFACTURER'S STANDARD DETAILS, U.N.O.

THE ROOFING CONTRACTOR SHALL NOT CONCEAL ANY WEEPS, BRICK VENTS, EXPANSION JOINTS, OR FLASHINGS. ROOFING SHALL TERMINATE AS SHOWN ON DETAILS.

THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ROOFING/FLASHING WITH OTHER TRADES FOR ADDITIONAL WORK REQUIRED.

INSTALL CRICKETS TO MAINTAIN MINIMUM CLEARANCE TO MEMBRANE AS REQUIRED ON THE UPPER SIDE OF ALL EQUIPMENT CURBS, TYPICAL.

REFER TO DETAILS 4/A4.1 OR 6/A4.1 FOR TYPICAL PENETRATION DETAILS.

REFER TO DETAIL 8/A4.1 FOR TYPICAL EQUIPMENT CURB DETAIL.

CONFIRM ALL MEMBRANE ROOF SLOPES ARE 1/4"/FT. MIN. PRIOR TO INSTALLATION.

ROOF KEY NOTES

1. ROOF TYPE 'A', REFER TO ROOF LEGEND.
2. ROOF TYPE 'B', REFER TO ROOF LEGEND.
3. PEMB RIDGE CAP.
4. PEMB GUTTER ASSEMBLY.
5. SCREEN WALL, SEE 5/6/7/A4.2
6. PRE-FIN. S.M. RAKE AND EDGE TRIM BY PEMB CONTRACTOR, REFER TO MFR. STANDARD DETAILS.
7. PARAPET COPING, REFER TO DETAIL 8/A4.1.
8. HVAC DUCT / UNITS BELOW, REFER TO MECH.
9. GAS LINE ON ROOF SUPPORTS, REFER TO P1.4
10. ROOF HATCH, REFER TO DETAIL 9/A2.3.
11. WALKWAY PADS, REFER TO SPECIFICATIONS.
12. CRICKET FOR POSITIVE DRAINAGE AROUND ROOF CURB.
13. TAPER INSULATION 1/4" PER FT. FOR POSITIVE DRAINAGE TO ROOF DRAINS.
14. HVAC UNIT, REFER TO MECHANICAL. SEE 10/A4.1 FOR MECH. CURB DETAIL.
15. GRAVEL STOP
16. 3" EXPANSION JOINT AND COVER

ROOF LEGEND

ROOF ASSEMBLY - TYPE 'A'
SINGLE TPO MEMBRANE OVER 7/16" COVER DECK OVER MINIMUM 4 1/2" SLOPED POLYISOCYANURATE RIGID INSULATION ON 2" METAL DECK (PROVIDE 1/4" PER 1'-0" SLOPE MIN. FOR INSULATION)

ROOF ASSEMBLY - TYPE 'B'
PEMB. METAL ROOF OVER METAL PURLINS, WITH R-5 THERMAL BLOCKS, 8" LOWER LAYER FIBERGLASS BATT INSULATION AND 3" UPPER LAYER FIBERGLASS BATT INSULATION WITH A TOTAL PREINSTALLED R-VALUE OF 35. SUSPEND WITH STEEL STRAP AND FABRIC SYSTEM. SLOPE 2:12.

	INDICATES CRICKET, SLOPE 1/4" PER FOOT IN DIRECTION OF ARROW
DS	PEMB DOWNSPOUT. U.N.O.
CDS	CANOPY DOWNSPOUT. TIE INTO BOOT, U.N.O.
RD	ROOF DRAIN, REFER TO DETAIL.
ORD	OVERFLOW ROOF DRAIN, REFER TO DETAIL.
VTR	VENT THRU ROOF, REFER TO DETAIL.
GEJ	GUTTER EXPANSION JOINT PER SMACNA STANDARDS
RTU	ROOF TOP UNIT, REFER TO MECHANICAL DWGS. AND CURB DETAIL.
	EXHAUST FAN / OA HOOD, REFER TO MECH. DWGS.

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

ROOF PLAN & DETAILS

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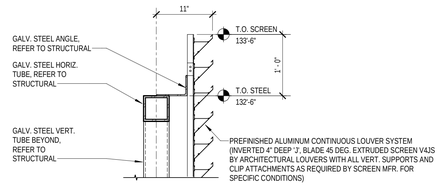
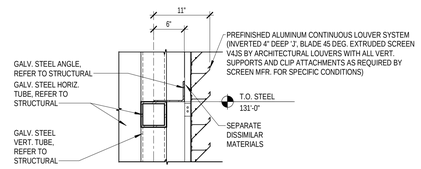
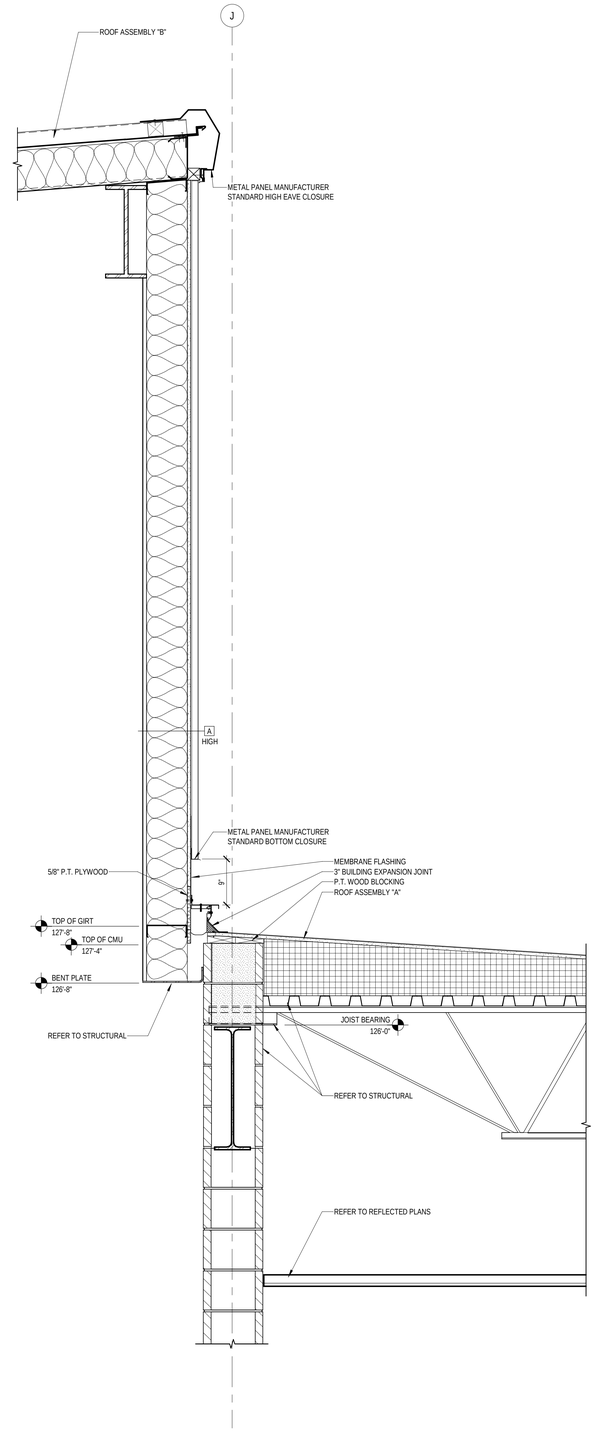


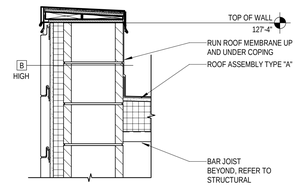
5 LOUVER SCREEN SECTION - TOP
1" = 1'-0"



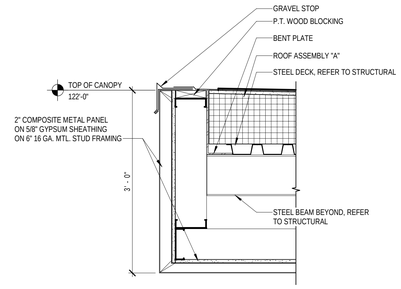
6 LOUVER SCREEN SECTION - MIDDLE
1" = 1'-0"



4 ROOF DETAIL - HIGH/LOW
1" = 1'-0"



1 ROOF DETAIL
1" = 1'-0"



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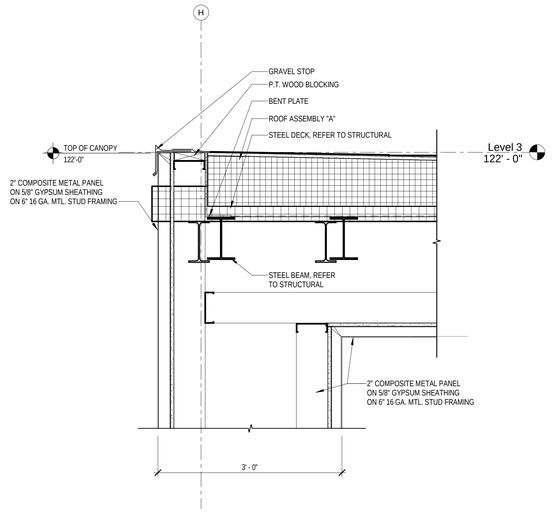

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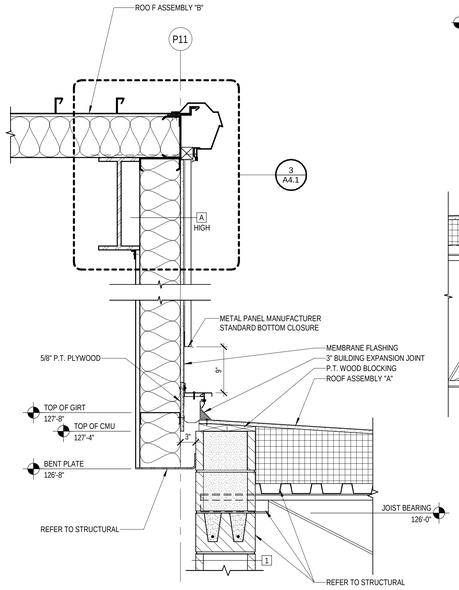
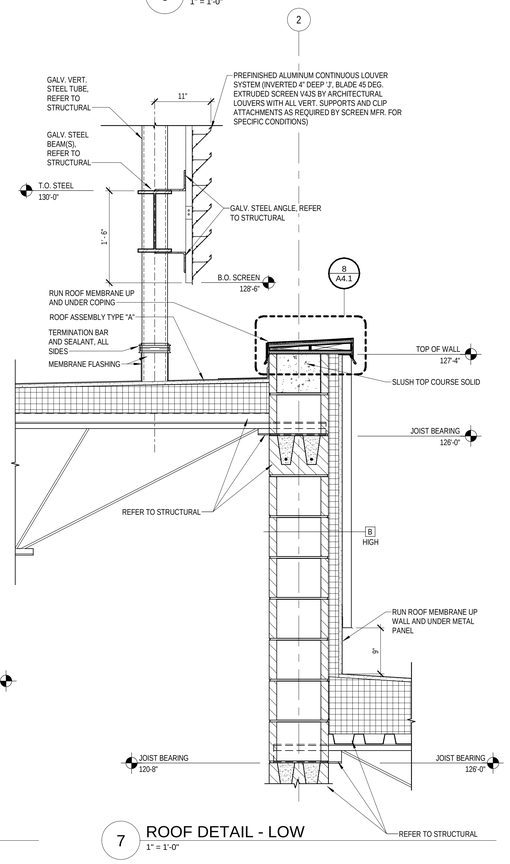


8 ROOF DETAIL - HIGH/LOW
1" = 1'-0"



7 ROOF DETAIL - LOW
1" = 1'-0"

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

ROOF DETAILS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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REVISIONS

No.	Description	Date

SHEET
A4.2

2259
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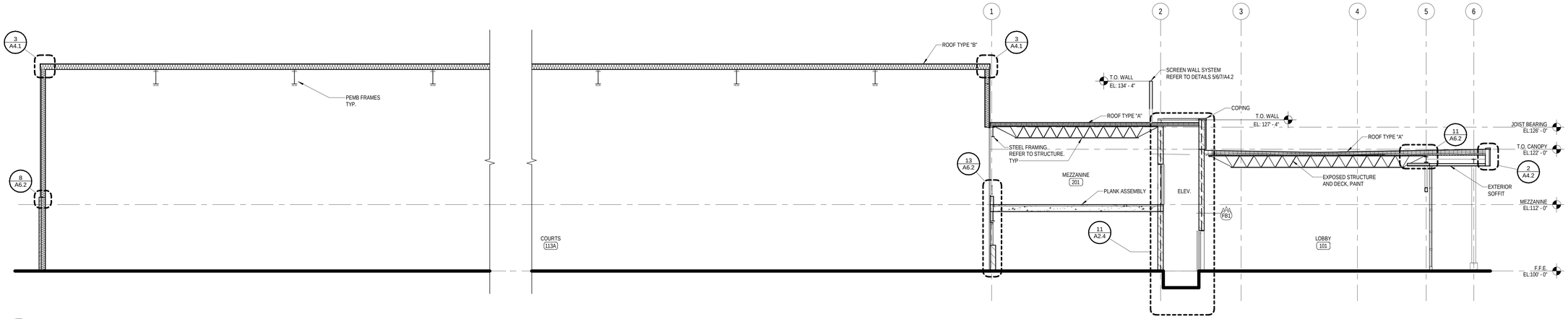
5/17/2024 11:32:14 AM



1 BUILDING SECTION
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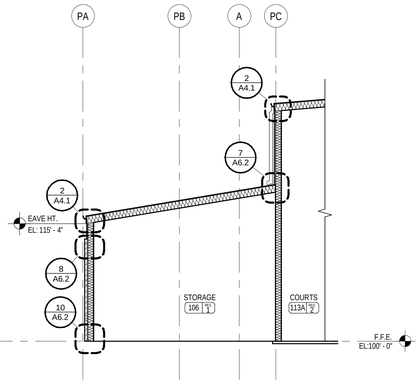

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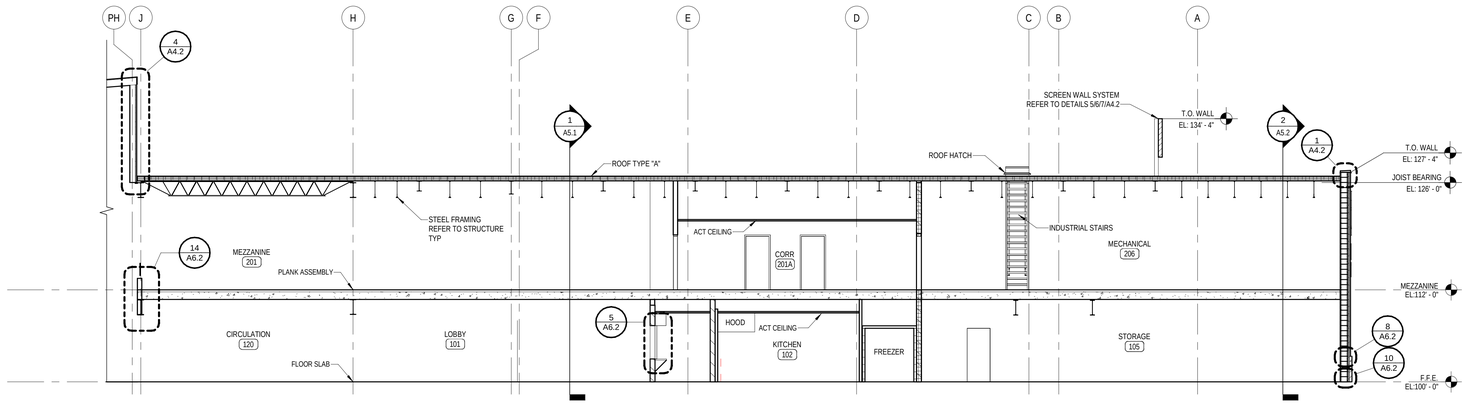

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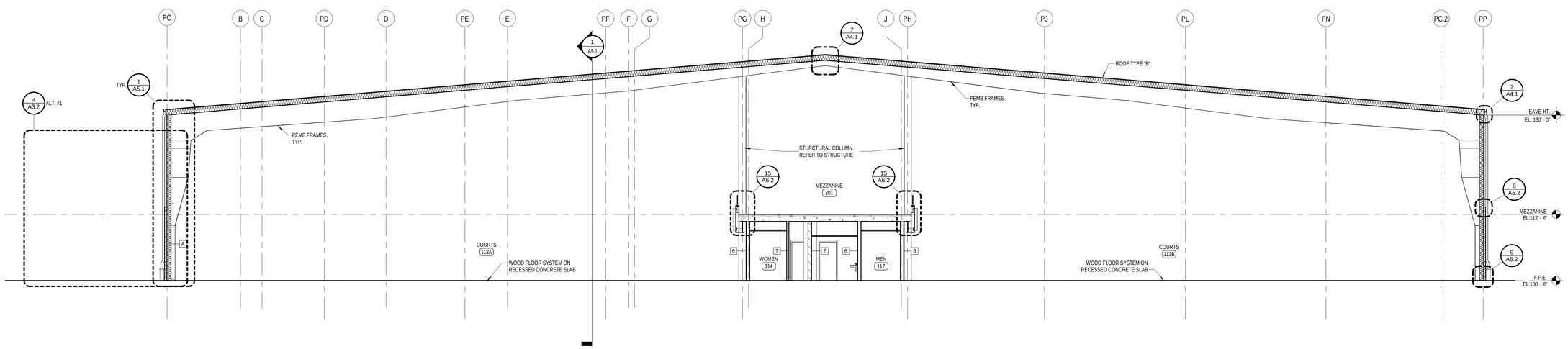

4 BUILDING SECTION
1/8" = 1'-0"

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

BUILDING SECTIONS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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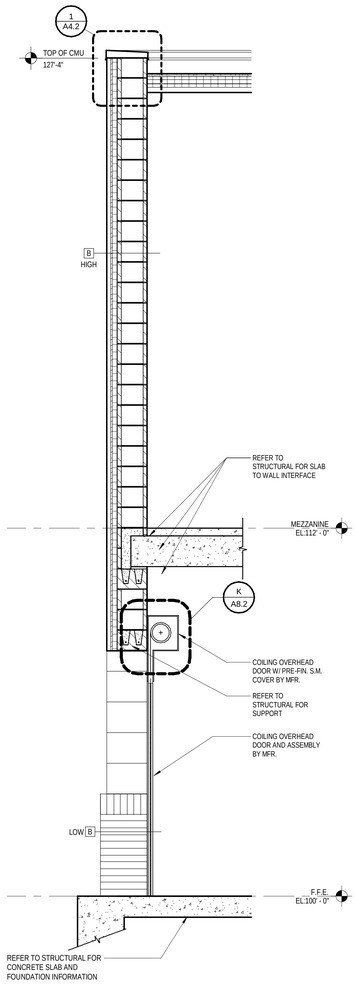

2 WALL SECTION
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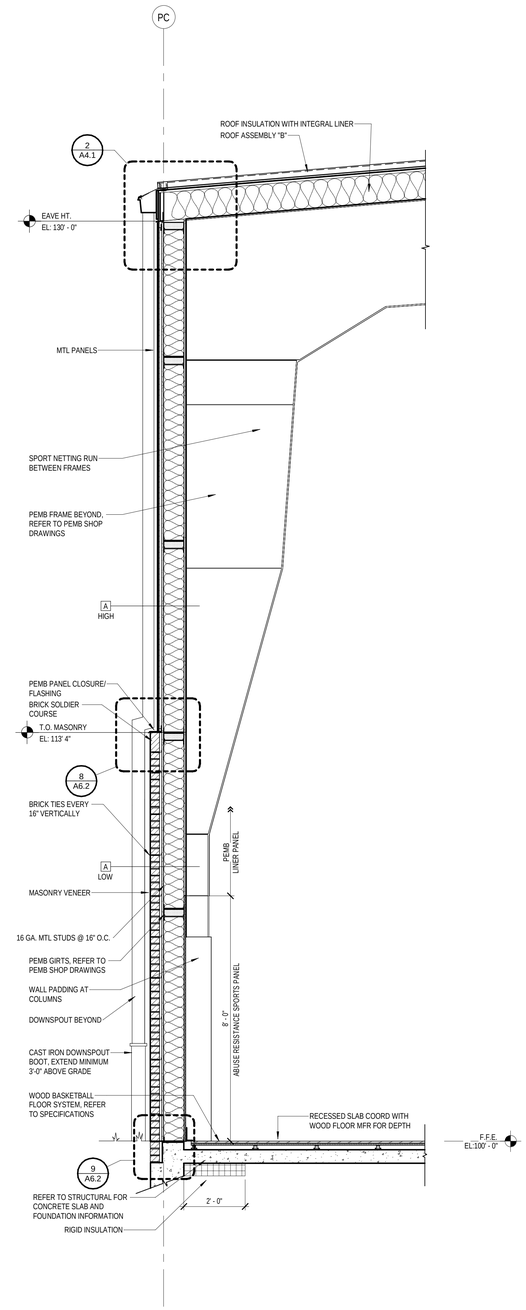

1 WALL SECTION
1/2" = 1'-0"

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

WALL SECTIONS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	Author
CHECKED	Checker

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REVISIONS

No.	Description	Date

SHEET
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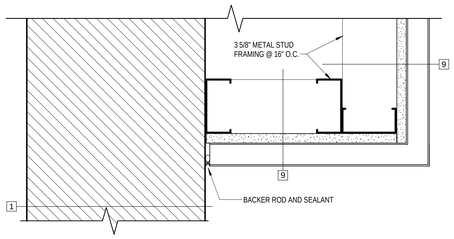
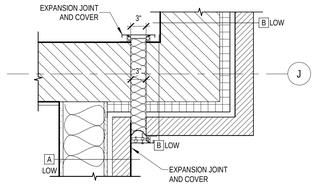


22 PLAN DETAIL
3" = 1'-0"



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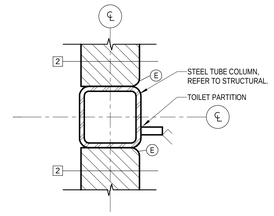
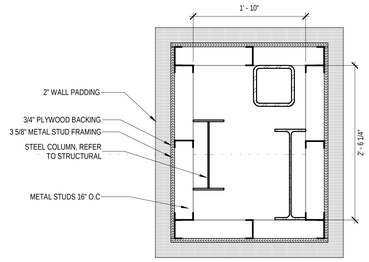


12 PLAN DETAIL
1 1/2" = 1'-0"



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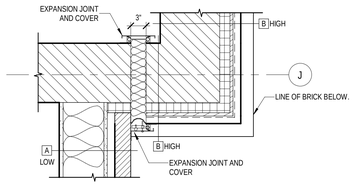

18 PLAN DETAIL
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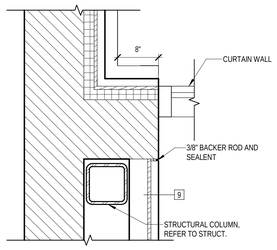

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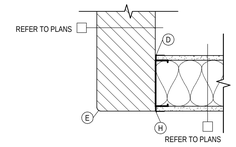
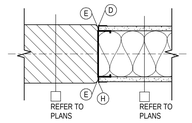
1" = 1'-0"



6 TYP. PLAN DETAIL
1 1/2" = 1'-0"



7 TYP. PLAN DETAIL
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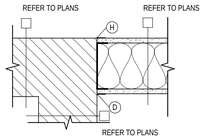
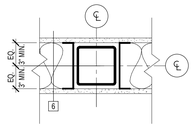
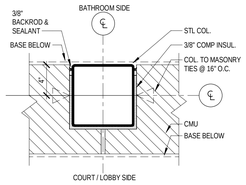


8 TYP. PLAN DETAIL
1 1/2" = 1'-0"



9 DETAIL
1 1/2" = 1'-0"



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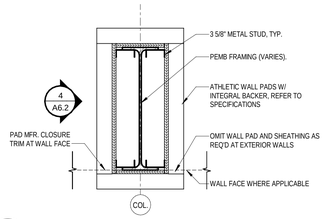

1 COLUMN PAD DETAIL
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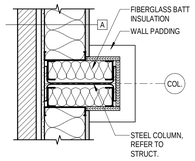

2 COLUMN DETAIL
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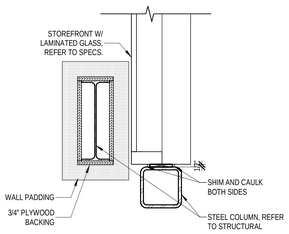

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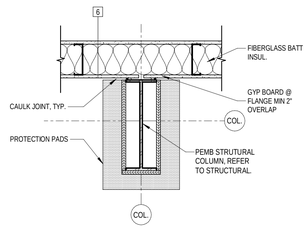

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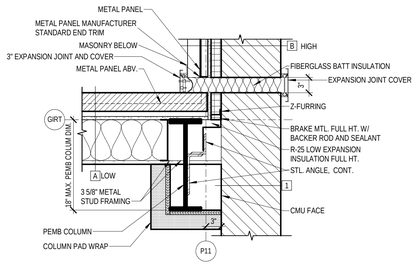

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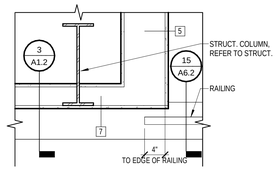

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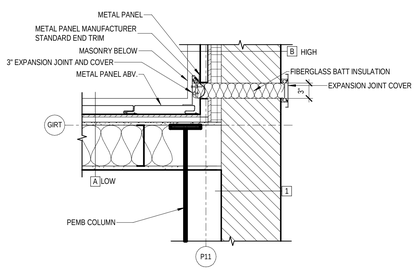

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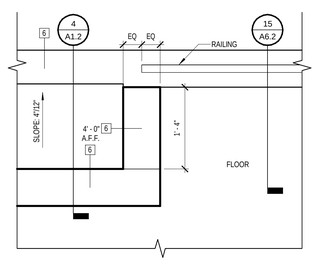

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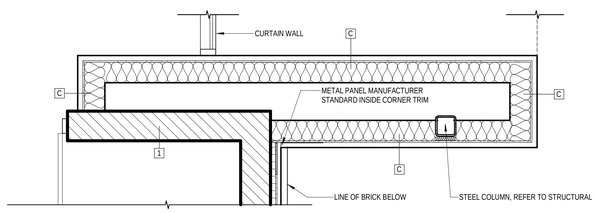
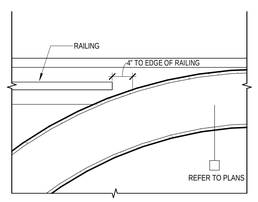


21 PLAN DETAIL
1/2" = 1'-0"



16 PLAN DETAIL
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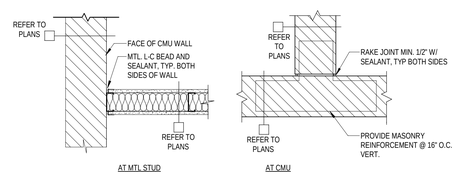

11 TYPICAL WALL INTERSECTIONS
1" = 1'-0"

GENERAL COLUMN & WALL DETAIL NOTES

1. SEE STRUCTURAL AND ARCHITECTURAL FLOOR PLANS FOR COL. LINES AND DIMENSIONS NOT SPECIFICALLY REFERENCED ON THESE DETAILS.
2. FIRE RATED SEALANT IS REQUIRED AT ALL JOINTS IN RATED WALLS.
3. DO NOT ANCHOR OR ATTACH ADJACENT MASONRY OR STEEL TO FIREWALL "FW2". DO NOT GROUT ADJACENT CMU TO FIREWALL. PROVIDE FOAM ROD AND SEALANT.
4. SAWCUT ALL MASONRY AT STRUCTURAL STEEL AS REQUIRED TO MAINTAIN A 3/8" CLEARANCE BETWEEN MASONRY AND STEEL.

PLAN DETAIL NOTES

A. STEEL COLUMN. SHOP PRIME ALL COLUMNS. SHOP PRIME AND PAINT IF NOT CONCEALED BY COLUMN COVERS OR OTHER WALL MATERIALS.
B. RAKE JOINT, MIN. 1/2", PROVIDE SEALANT CONT. FULL HEIGHT.
C. SELF ADHERED L-BEAD AND SEALANT CONT. FULL HEIGHT.
D. MTL. CORNER BEAD.
E. BULLNOSE CMU CORNER.
F. GALV. HARDWARE SCREEN TIES @ 16" O.C. VERTICAL.
G. PROVIDE GALV. LADDER TYPE HORZ. PRE-FORMED "T" OR CORNER REINF. @ 16" O.C. VERTICAL.
H. 3/8" BACKER ROD AND SEALANT, CONT. FULL HEIGHT.
I. MAINTAIN 3/8" MIN. CLEARANCE BETWEEN COL. AND CMU. PROVIDE COMPRESSIBLE FILLER BOND BREAK AT VOID.
J. GALV. MTL. COLUMN TO MASONRY WALL TIES @ EVERY OTHER VERTICAL BLOCK COURSE.
K. GALV. DOVETAIL MASONRY ANCHORS @ 16" O.C.
L. GALV. DOVETAIL SLOT, CONT. CAST INTO CONCRETE.
M. MASONRY CONTROL JOINT, BACKER ROD AND SEALANT FULL HEIGHT.
N. GYP. BD. CONTROL JOINT.
O. 3 5/8" BRICK / CALCIUM SILICATE. REFER TO ELEVATIONS WHERE APPLICABLE.
P. PRE-FIN. EXTRUDED ALUM. CLOSURE TRIM W/ HEMMED EDGE. COLOR TO MATCH ADJACENT STOREFRONT. SEPARATE DISSIMILAR METALS WHERE APPLICABLE.
Q. EXISTING TYPE MASONRY ANCHORS FASTEN TO EXISTING MASONRY.
R. PRE-FIN. ALUM. CURTAINWALL / STOREFRONT SYSTEM. REFER TO FRAME ELEVATIONS. PROVIDE 1/4" WD. SHIM CONT. @ JAMBS. PROVIDE BACKER ROD AND CONT. SEALANT @ PERIMETER OF FRAME, TYP. BOTH SIDES WHERE APPLICABLE. PROVIDE RIGID INSUL. INSERTS AT FRAME PERIMETER.
S. 2x P.T. WOOD BLOCKING AS REQUIRED.
T. WEEP WICKS, TYP.
U. FIRE RATED SEALANT FULL HEIGHT.

SHERMAN CARTER BARNHART ARCHITECTS

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DETAILS

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REVISIONS

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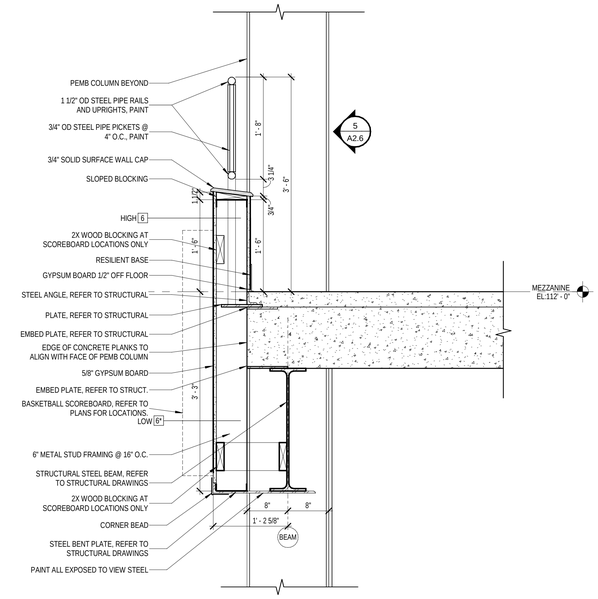
SHEET
A6.1

2259
OWENSBORO INDOOR SPORTS FACILITY
5/17/2024 11:32:34 AM



14 DETAIL
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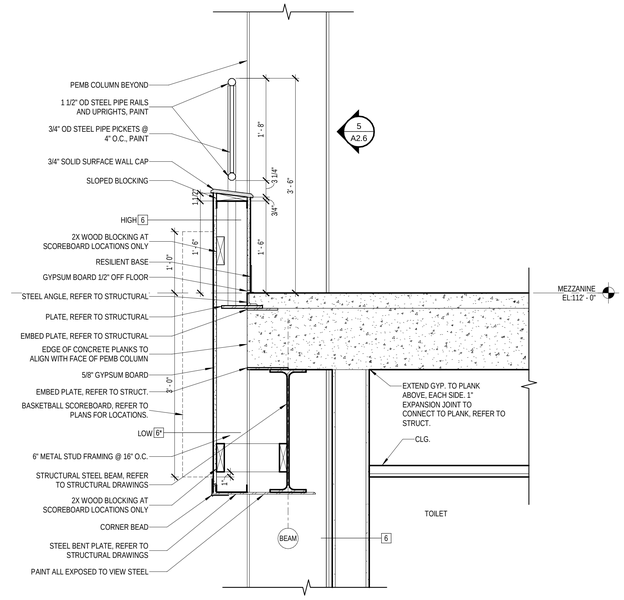
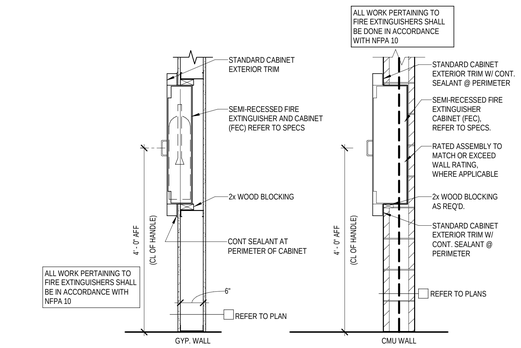
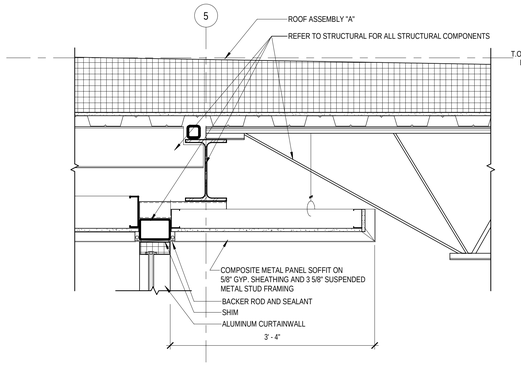


15 DETAIL
1" = 1'-0"



16 DETAIL
3/4" = 1'-0"



11 DETAIL
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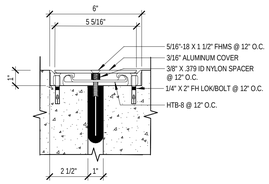
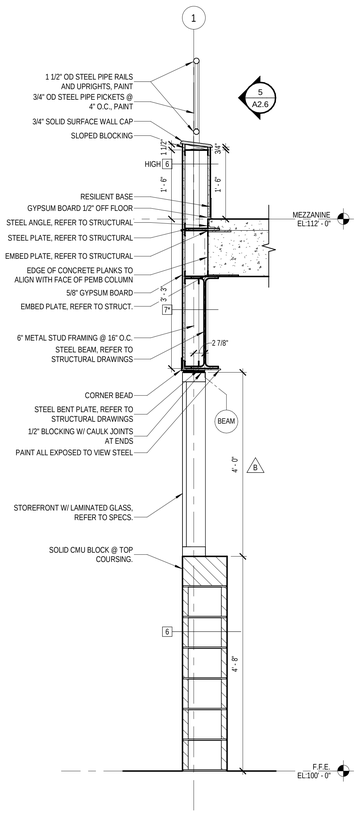
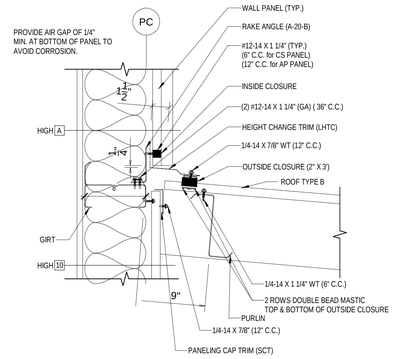


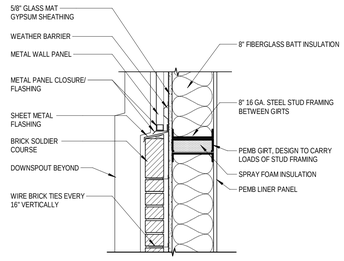
12 MEZZANINE EXP. JOINT DETAIL
3" = 1'-0"



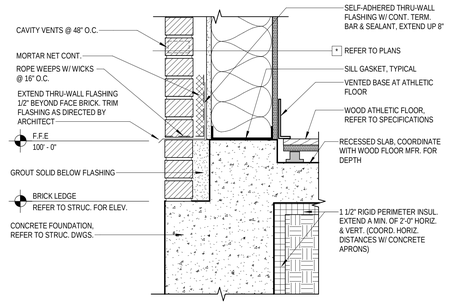
13 DETAIL
3/4" = 1'-0"



7 DETAIL
1 1/2" = 1'-0"



8 DETAIL
1" = 1'-0"



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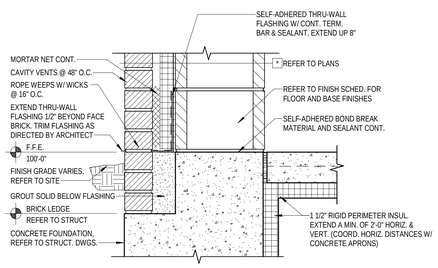

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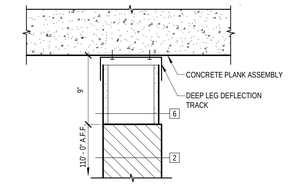

1 DETAIL
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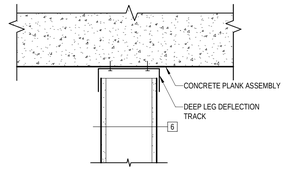

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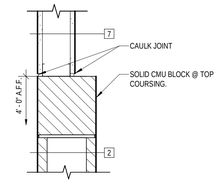

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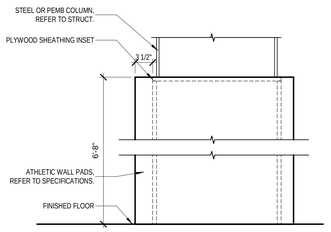
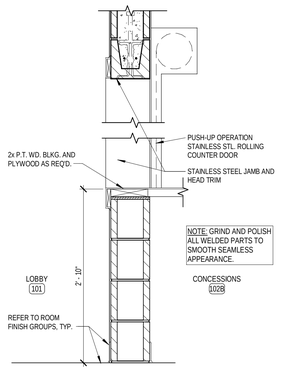
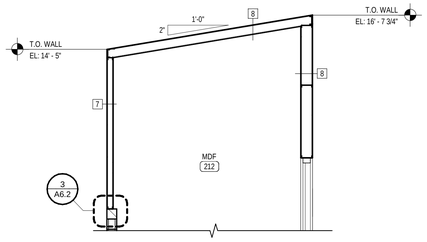
1 1/2" = 1'-0"



4 DETAIL
1" = 1'-0"



5 DETAIL
1" = 1'-0"



6 DETAIL
1/4" = 1'-0"

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

DETAILS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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REVISIONS

No.	Description	Date

SHEET
A6.2

2259
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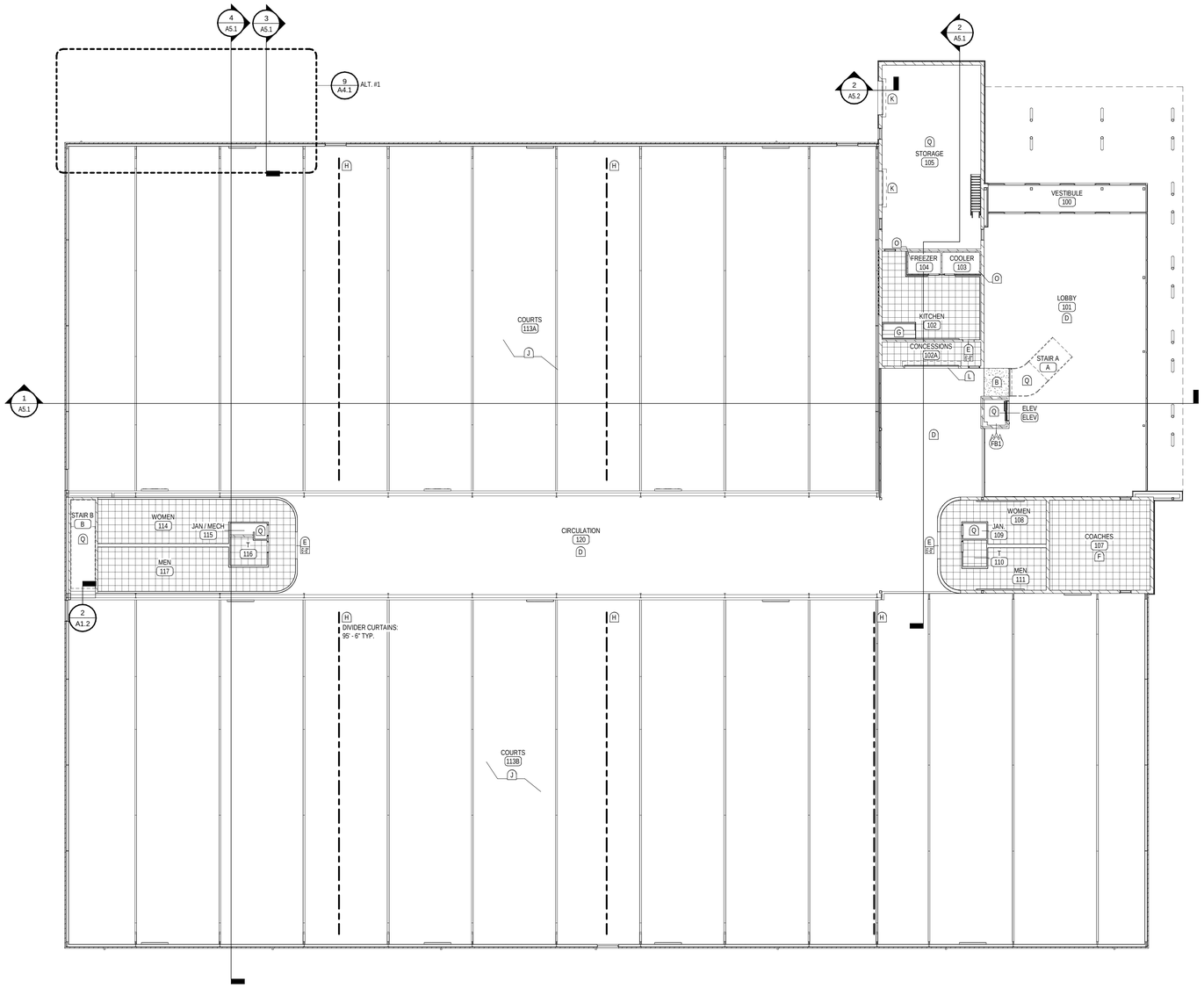
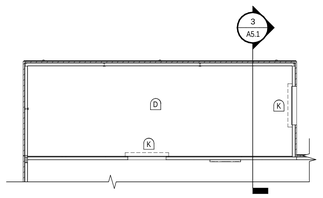
5/17/2024 11:32:42 AM

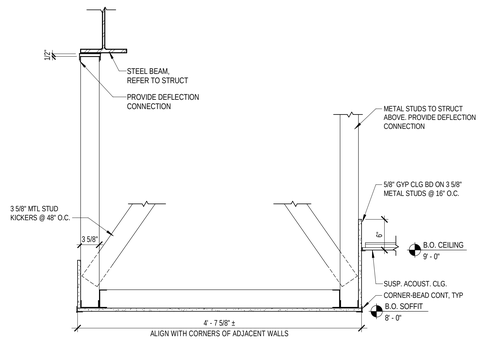


1 FIRST FLOOR CEILING PLAN
1/16" = 1'-0"

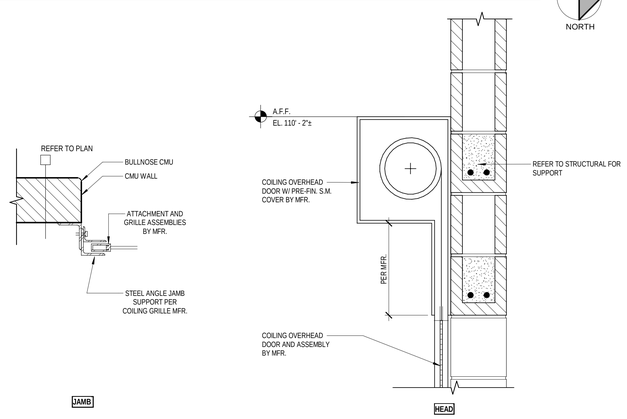
NORTH



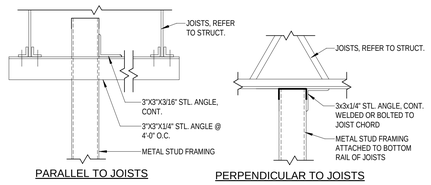
5 FIRST FLOOR REFLECTED CEILING PLAN ALT. #1
1/16" = 1'-0"



4 SOFFIT DETAIL
1" = 1'-0"



3 OHCG HEAD/JAMB DETAILS
1 1/2" = 1'-0"



2 TYPICAL SOFFIT SUPPORT
1 1/2" = 1'-0"

REFLECTED CEILING PLAN KEY NOTES

A. EXTERIOR SOFFIT, REFER TO DETAILS.
B. INTERIOR GYP. CEILING BD. SOFFIT, PAINT. REFER TO DETAIL 4/A7.1.
C. RETRACTABLE BATTING CAGE W/ COLLAPSIBLE NETTING.
D. EXPOSED METAL STRUCTURE ABOVE. PAINT ALL SURFACES EXPOSED TO VIEW. PAINT COLORS SHALL BE SELECTED BY ARCHITECT.
E. WALL OPENING.
F. ACOUSTICAL CEILING TYPE 'A'.
G. KITCHEN RANGE/EXHAUST HOOD, REFER TO FOOD SERVICE & MECH. DWGS.
H. SUSPENDED RETRACTABLE SPORTS CURTAIN.
J. SIMPLE SAVER INSULATION SYSTEM.
K. OVERHEAD COILING DOOR, REFER TO PLANS AND DETAIL 2/A5.2.
L. OVERHEAD COILING GRILLE HOUSING.
M. FOLDING VOLLEYBALL STANDARDS, NETTING AND REFEREE'S STAND.
N. RETRACTABLE BASKETBALL GOAL.
O. FREEZER AND COOLER MANUFACTURER CEILING ASSEMBLY.
P. ALUMINUM COMPOSITE PANEL SOFFIT.
Q. OPEN TO ABOVE, NO FINISH.
R. FAN, REFER TO MEP.

GENERAL CEILING NOTES

1. BASKETBALL GOALS, VOLLEYBALL NETS, BATTING CAGES, DIVIDER CURTAINS, ETC. ARE BEING HUNG FROM THE PRE-ENGINEERED METAL BUILDING ROOF STRUCTURE. THE METAL BUILDING SUPPLIER SHALL PROVIDE SUPPLEMENTAL FRAMING OR REINFORCED ROOF PURLINS TO CARRY THOSE LOADS. THE CONTRACTOR SHALL COORDINATE THE WEIGHTS, LOCATIONS, ATTACHMENT DETAILS, ETC. BETWEEN THE SUPPLIERS OF THE EQUIPMENT AND THE METAL BUILDING SUPPLIER.
2. REFER TO MECHANICAL AND/OR ELECTRICAL DRAWINGS FOR TYPE, SIZE AND OTHER REQUIREMENTS PERTAINING SPECIFICALLY TO THE REFLECTED CEILING PLANS.
3. ALL CEILINGS SHALL BE 9'-0" A.F.F. U.N.O.
4. REFER TO WALL PARTITION TYPES FOR DESCRIPTION OF WALLS EXTENDING (OR NOT) TO UNDERSIDE OF DECKING AND/OR STRUCTURE ABOVE.
5. INSTALL SPRINKLER HEADS IN THE CENTER OF CEILING PANELS.
6. INSTALL ALL SPRINKLER HEADS ON SWING ARM NIPPLES. SEE MECHANICAL DRAWINGS FOR MORE SPECIFIC REQUIREMENTS.
7. PAINT ALL ITEMS EXPOSED TO VIEW INCLUDING UNDERSIDE OF METAL DECK, BAR JOISTS, CONDUIT, & PIPING.
8. CONTRACTOR TO SUBMIT FULL COORDINATION DRAWINGS FOR ALL CEILING ITEMS INCLUDING JOIST SPACING/LIGHTING, HVAC LAYOUT AND FIRE PROTECTION SYSTEMS
9. PAINT EXPOSED STL. LINTEL. HOT-DIP GALVANIZE ALL EXTERIOR LINTELS PRIOR TO PAINTING.

REFLECTED CEILING LEGEND

2'x2' SUSPENDED ACOUSTICAL CEILING TYPE 'A' U.N.O., TYPE 'B' WHERE NOTED, REFER TO SPECIFICATIONS.

GYP. BD. CEILING SOFFIT, PAINT.

INTERIOR/EXTERIOR METAL PANEL WALL/CEILING PANEL

OPEN TO STRUCTURE ABOVE

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

KYLE STEFFIELD REGISTERED ARCHITECT NO. 3202 MARCH 15, 2024

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

FIRST FLOOR REFLECTED CEILING PLAN & DETAILS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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REVISIONS

No.	Description	Date

SHEET
A7.1

2259
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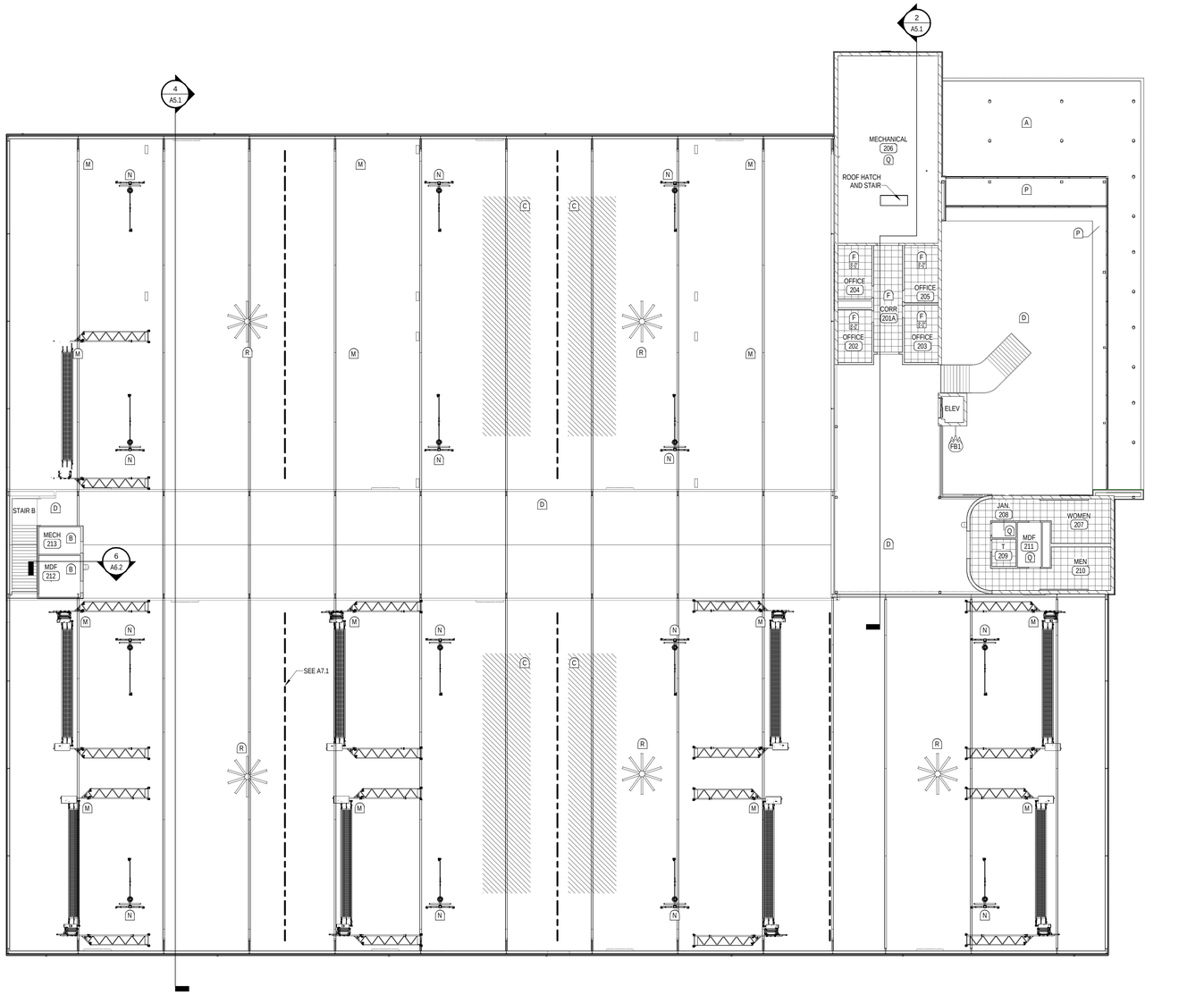

1 MEZZANINE CEILING PLAN
1/16" = 1'-0"

NORTH

REFLECTED CEILING PLAN KEY NOTES

A. EXTERIOR SOFFIT, REFER TO DETAILS.
B. INTERIOR GYP. CEILING BD. SOFFIT, PAINT. REFER TO DETAIL 4/A7.1.
C. RETRACTABLE BATTING CAGE W/ COLLAPSIBLE NETTING.
D. EXPOSED METAL STRUCTURE ABOVE. PAINT ALL SURFACES EXPOSED TO VIEW. PAINT COLORS SHALL BE SELECTED BY ARCHITECT.
E. WALL OPENING.
F. ACOUSTICAL CEILING TYPE 'A'.
G. KITCHEN RANGE/EXHAUST HOOD, REFER TO FOOD SERVICE & MECH. DWGS.
H. SUSPENDED RETRACTABLE SPORTS CURTAIN.
J. SIMPLE SAVER INSULATION SYSTEM.
K. OVERHEAD COILING DOOR, REFER TO PLANS AND DETAIL 2/A5.2.
L. OVERHEAD COILING GRILLE HOUSING.
M. FOLDING VOLLEYBALL STANDARDS, NETTING AND REFEREE'S STAND.
N. RETRACTABLE BASKETBALL GOAL.
O. FREEZER AND COOLER MANUFACTURER CEILING ASSEMBLY.
P. ALUMINUM COMPOSITE PANEL SOFFIT.
Q. OPEN TO ABOVE, NO FINISH.
R. FAN, REFER TO MEP.

GENERAL CEILING NOTES

1. BASKETBALL GOALS, VOLLEYBALL NETS, BATTING CAGES, DIVIDER CURTAINS, ETC. ARE BEING HUNG FROM THE PRE-ENGINEERED METAL BUILDING ROOF STRUCTURE. THE METAL BUILDING SUPPLIER SHALL PROVIDE SUPPLEMENTAL FRAMING OR REINFORCED ROOF PURLINS TO CARRY THOSE LOADS. THE CONTRACTOR SHALL COORDINATE THE WEIGHTS, LOCATIONS, ATTACHMENT DETAILS, ETC. BETWEEN THE SUPPLIERS OF THE EQUIPMENT AND THE METAL BUILDING SUPPLIER.
2. REFER TO MECHANICAL AND/OR ELECTRICAL DRAWINGS FOR TYPE, SIZE AND OTHER REQUIREMENTS PERTAINING SPECIFICALLY TO THE REFLECTED CEILING PLANS.
3. ALL CEILINGS SHALL BE 9'-0" A.F.F. U.N.O.
4. REFER TO WALL PARTITION TYPES FOR DESCRIPTION OF WALLS EXTENDING (OR NOT) TO UNDERSIDE OF DECKING AND/OR STRUCTURE ABOVE.
5. INSTALL SPRINKLER HEADS IN THE CENTER OF CEILING PANELS.
6. INSTALL ALL SPRINKLER HEADS ON SWING ARM NIPPLES. SEE MECHANICAL DRAWINGS FOR MORE SPECIFIC REQUIREMENTS.
7. PAINT ALL ITEMS EXPOSED TO VIEW INCLUDING UNDERSIDE OF METAL DECK, BAR JOISTS, CONDUIT, & PIPING.
8. CONTRACTOR TO SUBMIT FULL COORDINATION DRAWINGS FOR ALL CEILING ITEMS INCLUDING JOIST SPACING/LIGHTING, HVAC LAYOUT AND FIRE PROTECTION SYSTEMS
9. PAINT EXPOSED STL. LINTEL. HOT-DIP GALVANIZE ALL EXTERIOR LINTELS PRIOR TO PAINTING.

REFLECTED CEILING LEGEND

2'x2' SUSPENDED ACOUSTICAL CEILING TYPE 'A' U.N.O., TYPE 'B' WHERE NOTED, REFER TO SPECIFICATIONS.

GYP. BD. CEILING SOFFIT, PAINT.

INTERIOR/EXTERIOR METAL PANEL WALL/CEILING PANEL

OPEN TO STRUCTURE ABOVE

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

MEZZANINE CEILING PLAN & DETAILS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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ARCHITECTS, PLLC

REVISIONS

No.	Description	Date

SHEET

A7.2

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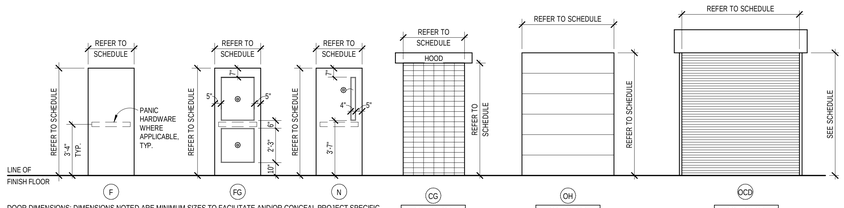
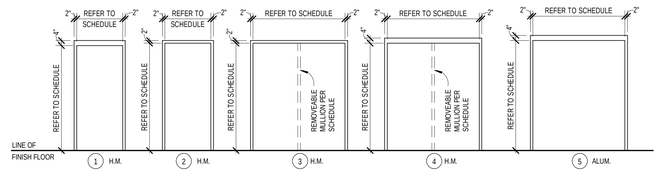
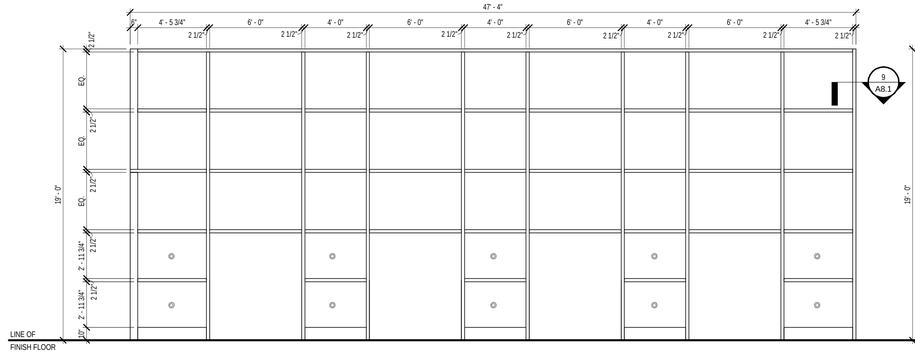


DOOR DIMENSIONS: DIMENSIONS NOTED ARE MINIMUM SIZES TO FACILITATE AND/OR CONCEAL PROJECT SPECIFIC HARDWARE, MFR. STANDARD DIMENSIONS WHICH NOMINALLY EXCEED THE MINIMUMS ARE ACCEPTABLE SUBJECT TO ARCHITECT REVIEW.

GLAZING NOTE: DIMENSIONS TO GLAZING EDGE NOTED ARE TO OUTERMOST EDGE AND DO NOT INCLUDE GLAZING TRIM
PROVIDE "FRSG" FIRE RATED SAFETY GLAZING AT RATED DOOR ASSEMBLIES
Ⓣ DENOTES TEMPERED GLASS





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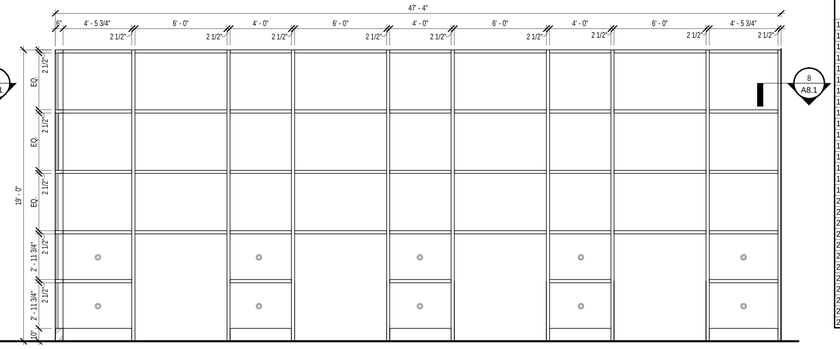
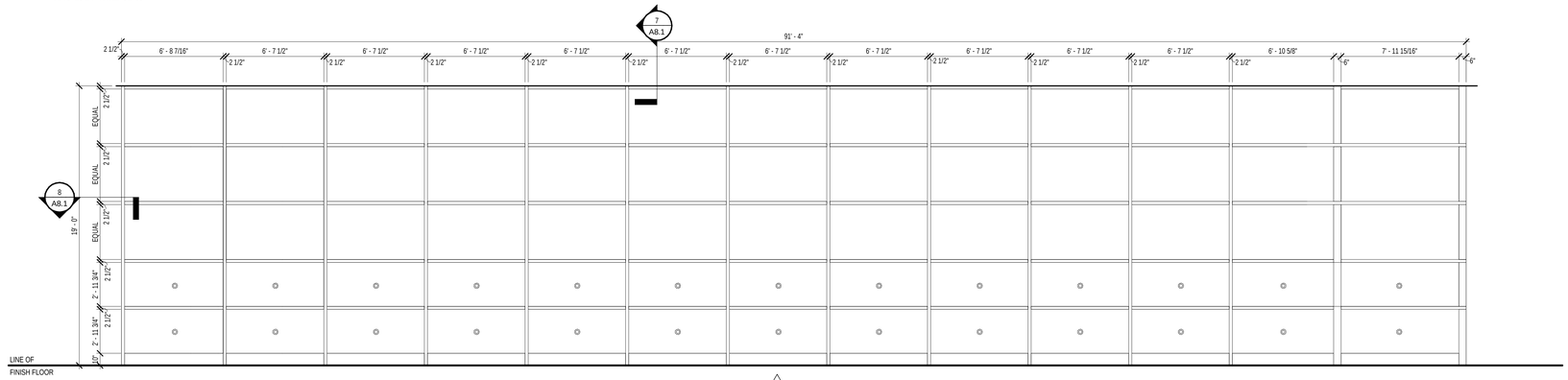


2

DOOR FRAME TYPES

Ⓣ DENOTES TEMPERED GLASS
✱ DENOTES LAMINATED GLASS

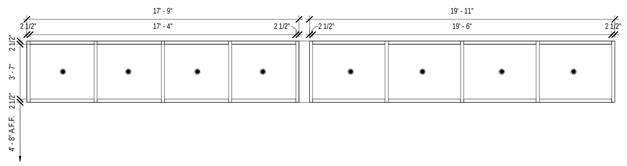
GLAZING NOTE: DIMENSIONS TO GLAZING EDGE NOTED ARE TO OUTERMOST EDGE AND DO NOT INCLUDE GLAZING TRIM



FRAME TYPES

Ⓣ DENOTES TEMPERED GLASS
✱ DENOTES LAMINATED GLASS

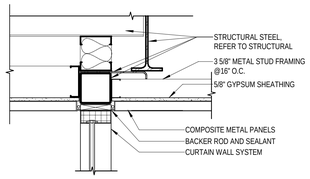
GLAZING NOTE: DIMENSIONS TO GLAZING EDGE NOTED ARE TO OUTERMOST EDGE AND DO NOT INCLUDE GLAZING TRIM



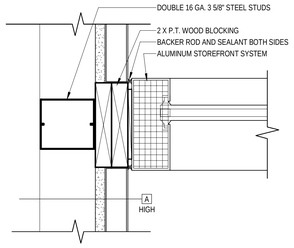
FRAME TYPES

Ⓣ DENOTES TEMPERED GLASS
✱ DENOTES LAMINATED GLASS

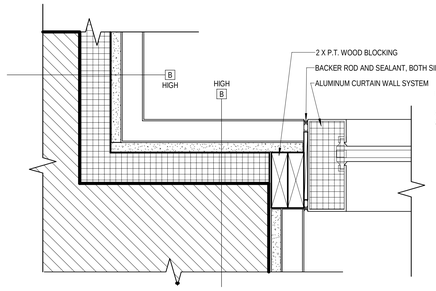
GLAZING NOTE: DIMENSIONS TO GLAZING EDGE NOTED ARE TO OUTERMOST EDGE AND DO NOT INCLUDE GLAZING TRIM



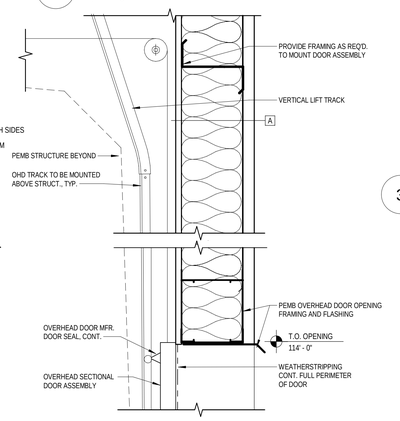
9 CURTAINWALL HEAD
1" = 1'-0"



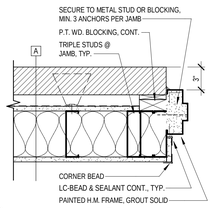
8 CURTAIN WALL JAMB DETAIL
3" = 1'-0"



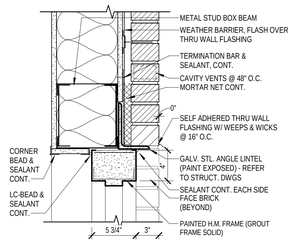
7 WALL DETAIL @ CURTAIN WALL
3" = 1'-0"



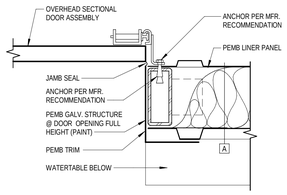
6 TYP. OVERHEAD DOOR HEAD
1 1/2" = 1'-0"



5 H.M. JAMB @ EXTERIOR MTL. STUD
1 1/2" = 1'-0"



3 H.M. HEAD @ EXTERIOR MTL. STUD
1 1/2" = 1'-0"



4 TYP. OVERHEAD DOOR JAMB
1 1/2" = 1'-0"

EXTERIOR DOOR SCHEDULE

NO.	DOOR LEAVES	DOOR LEAF W.	DOOR HEIGHT	DOOR MATERIAL	DOOR TYPE	DOOR GLAZING	FRAME MATERIAL	FRAME TYPE	FRAME GLAZING	FRAME REFER TO A8.2 AND A8.3 FOR TYPICAL DETAILS HEAD	FRAME JAMB	RATING	CLOSER[1]	REMARKS
E100A	2	3' - 0"	7' - 0"	ALUM	FG	1"	ALUM	A	1"		9/A8.1	-	105	5,8,11,12
E100B	2	3' - 0"	7' - 0"	ALUM	FG	1"	ALUM	A	1"		9/A8.1	-	105	5,8
E100C	2	3' - 0"	7' - 0"	ALUM	FG	1"	ALUM	A	1"		9/A8.1	-	105	5,8
E100D	2	3' - 0"	7' - 0"	ALUM	FG	1"	ALUM	A	1"		9/A8.1	-	105	5,8
E105A		10' - 0"	8' - 0"	MFR	OCD	-	MFR	-	-	6/A8.1	5/A8.1	-	105	7,13
E105B	1	3' - 0"	7' - 0"	HM	F	-	HM	1	-	4/A8.1	3/A8.1	-	105	1,8,12
E113A	2	3' - 0"	7' - 0"	HM	F	-	HM	1	-	4/A8.1	3/A8.1	-	105	1,5,8
E113B	2	3' - 0"	7' - 0"	HM	F	-	HM	1	-	4/A8.1	3/A8.1	-	105	1,5,8
E113C	2	3' - 0"	7' - 0"	HM	F	-	HM	1	-	4/A8.1	3/A8.1	-	-	1,5,8
E113D	2	3' - 0"	7' - 0"	HM	F	-	HM	1	-	4/A8.1	3/A8.1	-	-	1,5,8
E113E	2	3' - 0"	7' - 0"	HM	F	-	HM	1	-	4/A8.1	3/A8.1	-	105	1,5,8

INTERIOR DOOR SCHEDULE

NO.	DOOR LEAVES	DOOR LEAF W.	DOOR HEIGHT	DOOR MATERIAL	DOOR TYPE	DOOR GLAZING	FRAME MATERIAL	FRAME TYPE	FRAME GLAZING	FRAME REFER TO A8.2 AND A8.3 FOR TYPICAL DETAILS HEAD	FRAME JAMB	RATING	CLOSER[1]	REMARKS
100A	2	3' - 0"	7' - 0"	ALUM	FG	1"	ALUM	A	1"		8/A8.1	-	105	4,5,8,11
100B	2	3' - 0"	7' - 0"	ALUM	FG	1"	ALUM	A	1"		8/A8.1	-	105	4,5,8
100C	2	3' - 0"	7' - 0"	ALUM	FG	1"	ALUM	A	1"		8/A8.1	-	105	4,5,8
100D	2	3' - 0"	7' - 0"	ALUM	FG	1"	ALUM	A	1"		8/A8.1	-	105	4,5,8
102A	1	3' - 0"	7' - 0"	HM	F	-	HM	2	-	TYP	TYP	-	90	12
102B		16' - 0"	4' - 4"	MFR	CG	-	MFR	-	-	TYP	TYP	-	-	7,13
102C	1	3' - 0"	7' - 0"	HM	F	-	HM	1	-	TYP	TYP	-	90	9
105A	1	3' - 0"	7' - 0"	HM	F	-	HM	1	-	TYP	TYP	-	90	
105B		10' - 0"	8' - 0"	MFR	OCD	-	MFR	-	-	TYP	TYP	-	-	7,12,13
105C	1	3' - 0"	7' - 0"	HM	F	-	HM	1	-	TYP	TYP	-	-	12
107A	1	3' - 0"	7' - 0"	ALUM	FG	1/4"	ALUM	5	1/4"	TYP	TYP	-	105	4,9
107B	1	3' - 0"	7' - 0"	ALUM	FG	1/4"	ALUM	5	1/4"	TYP	TYP	-	105	4,9
109	1	3' - 0"	7' - 0"	HM	F	-	HM	1	-	TYP	TYP	-	-	1
110	1	3' - 0"	7' - 0"	HM	F	-	HM	1	-	TYP	TYP	-	-	1
115	1	3' - 0"	7' - 0"	HM	F	-	HM	1	-	TYP	TYP	-	-	1
116	1	3' - 0"	7' - 0"	HM	F	-	HM	1	-	TYP	TYP	-	-	1
201A	2	3' - 0"	7' - 0"	HM	FG	-	HM	3	-	TYP	TYP	-	-	8,9
202	1	3' - 0"	7' - 0"	HM	N	-	HM	2	-	TYP	TYP	-	-	
203	1	3' - 0"	7' - 0"	HM	N	-	HM	2	-	TYP	TYP	-	-	
204	1	3' - 0"	7' - 0"	HM	N	-	HM	2	-	TYP	TYP	-	-	
205	1	3' - 0"	7' - 0"	HM	N	-	HM	2	-	TYP	TYP	-	-	
206	2	3' - 0"	7' - 0"	HM	FG	-	HM	3	-	TYP	TYP	-	-	8,9
208	1	3' - 0"	7' - 0"	HM	F	-	HM	2	-	TYP	TYP	-	-	1
209	1	3' - 0"	7' - 0"	HM	F	-	HM	2	-	TYP	TYP	-	-	1
211A	1	3' - 0"	7' - 0"	HM	F	-	HM	2	-	TYP	TYP	-	90	1,12
211B	1	3' - 0"	7' - 0"	HM	F	-	HM	2	-	TYP	TYP	-	90	1,12
212	1	3' - 0"	7' - 0"	HM	F	-	HM	2	-	TYP	TYP	-	90	12
213	1	3' - 0"	7' - 0"	HM	F	-	HM	2	-	TYP	TYP	-	90	

ALTERNATE 1 DOOR SCHEDULE

NO.	DOOR LEAVES	DOOR LEAF W.	DOOR HEIGHT	DOOR MATERIAL	DOOR TYPE	DOOR GLAZING	FRAME MATERIAL	FRAME TYPE	FRAME GLAZING	FRAME REFER TO A9.0 FOR TYPICAL DETAILS HEAD	FRAME JAMB	RATING	CLOSER[1]	REMARKS
106	1	3' - 0"	7' - 0"	HM	F	-	HM	1	-	4/A8.1	3/A8.1	-	-	9,12
106A	1	10' - 0"	8' - 0"	MFR	OH	-	MFR	-	-	6/A8.1	5/A8.1	-	-	13
E106	1	3' - 0"	7' - 0"	HM	F	-	HM	1	-	4/A8.1	3/A8.1	-	90	1,9,12
E106A	1	10' - 0"	8' - 0"	MFR	OH	-	MFR	-	-	6/A8.1	5/A8.1	-	-	13

REMARKS

1. GALVANIZED DOOR & FRAME.
2. PROVIDE ASTRAGAL AND DOOR COORDINATOR, REFER TO SPECS.
3. PROVIDE SOUND SEALS AT HEAD & JAMB WITH SOUND SWEEP.
4. PROVIDE STL. REINF. PLATES WITHIN ALUM. FRAMES FOR ANCHORAGE OF ALL HARDWARE.
5. PROVIDE PANIC DEVICE.
6. PROVIDE WIDE THROW HINGES AT 180° SWINGING DOORS.
7. INSTALL PER MANUFACTURED STANDARD DETAILS & GUIDELINES.
8. REMOVABLE MULLION.
9. PROVIDE MANUAL HOLD OPEN CAPABILITY.
10. PROVIDE 14 GA. S.S. PLATE FULL WIDTH OF DOOR 24" TALL, BOTH SIDES.
11. ADA ELECTRONIC DOOR OPERATOR.
12. ACCESS CONTROL.
13. POWER OPERATED.

DOOR & FRAME NOTES:

GENERAL NOTES:
1. ALL EXTERIOR DOORS AND FRAMES TO BE INSULATED.
2. ALL EXTERIOR DOORS TO INCLUDE WEATHER STRIPPING & ADA COMPLIANT THRESHOLDS.
3. INSTALL 2x BLOCKING BETWEEN STUDS FOR WALL MOUNTED DOOR STOPS IN STUD PARTITIONS.
4. CONTRACTOR TO FIELD VERIFY DIMENSIONS OF OPENINGS IN FIELD AND THE FIT OF ALL DOORS AND HARDWARE PRIOR TO ANY FABRICATION.
5. PROVIDE WALL-MOUNTED DOOR STOP (WITH SOLID WOOD BLOCKING AS REQUIRED) AT ALL INTERIOR DOORS THAT WOULD OTHERWISE STRIKE A WALL COLUMN OR CASEWORK.
6. PROVIDE RIGID INSULATION INSERTS AT FRAMES AROUND ALL WINDOWS (LOW EXPANSION FOAM AND SHIMS) AND EXTERIOR DOORS FOR AIRTIGHT OPENINGS.

HOLLOW METAL FRAME NOTES:
1. PROVIDE REINFORCING 12 GA. CHANNEL IN FRAME HEAD AT ALL H.M. FRAMES WHERE TOTAL FRAME WIDTH IS GREATER THAN 4'-0".
2. PROVIDE 11 - GA x 2" WIDE STRAPS AT 8" O.C. IN H.M. FRAME HEADS GREATER THAN 2" IN HEIGHT, TYPICAL.
3. LINTEL BEAM LENGTH AT BRICK SHALL BE PLUS 16" LONG (MIN 8" BEARING AT EACH END UNLESS NOTED OTHERWISE). LINTEL PLATE LENGTH SHALL BE LESS 1/4" LONG (1/8" AT EACH END MAX.). REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION.
4. WHERE GLAZING IS SHOWN, THE FRAME FABRICATOR SHALL PRE-DRILL STOPS & FRAME TO RECEIVE MOUNTING SCREWS. VERIFY LOCATIONS & DEPTH OF GLAZING MATERIAL.EQUAL SPACE SCREWS.
5. UNLESS NOTED OTHERWISE, THE HINGE SIDE OF H.M. FRAME AT GYP. & MTL. STUD WALLS SHALL BE INSTALLED 4" FROM ADJ. WALLS.
6. HOLLOW METAL DOOR FRAMES AT ALL EXTERIOR & INTERIOR MECHANICAL ROOMS TO BE KERFED. PROVIDE A RECESSED SLOT RABBIT EDGE TO RECEIVE WEATHER STRIPPING TO AID IN WEATHER TIGHTNESS & SOUND ATTENUATION.
7. ALL EXTERIOR HOLLOW METAL FRAMES SHALL BE GALVANIZED, 14 GA.
8. PROVIDE RUBBER SILENCERS AT ALL DOOR OPENINGS IN H.M. FRAMES.

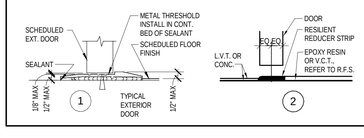
DOOR NOTES:
1. UNDERCUT AT NON-RATED S.C. WOOD DOORS 1/2" FROM BOTTOM OF DOOR TO SCHEDULED FLOOR FINISH.
2. UNDERCUT AT EXTERIOR DOORS 1/8" MAX. FROM BOTTOM OF DOOR TO TOP OF THRESHOLD. WEATHER STRIP MUST CLOSE TIGHTLY AGAINST THRESHOLD.
3. ALL EXTERIOR HOLLOW METAL DOORS BE GALVANIZED & HAVE FLUSH CLOSURE CAPS16 GA. WELD CONT. TOP & BOTTOM.
4. PROVIDE THRESHOLDS AS REQUIRED AT DOORS. SEE SHEET A9.1 FOR TYPICAL FLOOR FINISHES.

GLASS & GLAZING NOTES:
1. PROVIDE FULLY TEMPERED GLASS ( ) WHERE INDICATED ON DOOR & FRAME TYPES, OR AS REQ'D BY CODE.

HARDWARE NOTES:
1. PROVIDE & INSTALL ALL HARDWARE IN ACCORDANCE WITH ANSI A117.1 - 2009.

THRESHOLD DETAIL CONDITIONS

GENERAL NOTES:
1. REFER TO ROOM FINISH SCHEDULE ON SHEET A9.1 AND FLOOR PLANS FOR FINISHES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE PROPER THRESHOLD BETWEEN FLOOR FINISH TRANSITIONS.
2. PROVIDE RESILIENT TRANSITION STRIPS OR REDUCERS BETWEEN ALL DIFFERING FLOOR FINISH MATERIALS IE EPOXY RESIN TO TILE.
3. PROVIDE STRIP OR REDUCER PROFILE AS RECOMMENDED BY MANUFACTURER FOR APPLICATION.



SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

M. STUART FIELD
KY REG. NO. 3253
MARCH 20, 2024
SHERMAN CARTER BARNHART ARCHITECTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

DOOR SCHEDULE, DOOR, FRAME ELEVATIONS AND DETAILS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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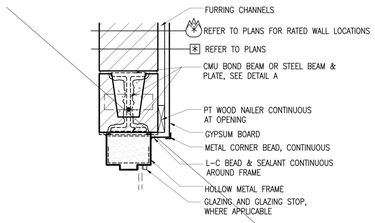
SHERMAN CARTER BARNHART ARCHITECTS, PLLC

REVISIONS

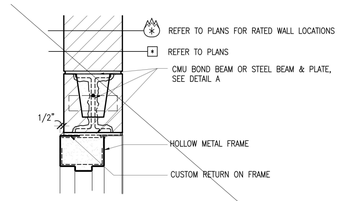
No.	Description	Date

SHEET
A8.1

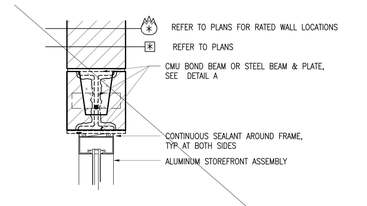
2259
OWENSBORO INDOOR SPORTS FACILITY
5/17/2024 11:33:18 AM



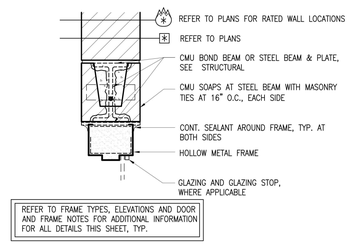
R TYPICAL HOLLOW METAL HEAD DETAIL AT CMU. W/ FURRING
1 1/2" = 1'-0"



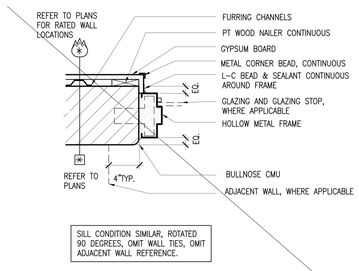
L TYPICAL H.M. HEAD DETAIL AT 135°, 145° & 180° SWING
1 1/2" = 1'-0"



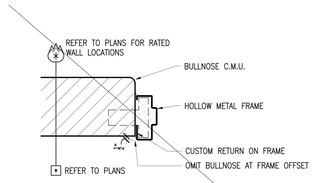
F TYPICAL ALUMINUM FRAME HEAD DETAIL AT INTERIOR CMU
1 1/2" = 1'-0"



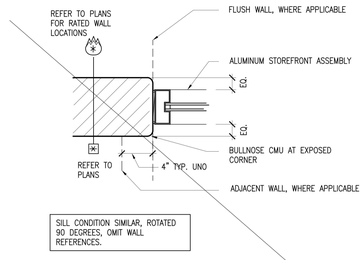
A TYPICAL HOLLOW METAL HEAD DETAIL AT INTERIOR CMU
1 1/2" = 1'-0"



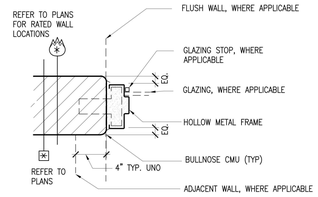
S TYPICAL HOLLOW METAL JAMB DETAIL AT CMU W/ FURRING
1 1/2" = 1'-0"



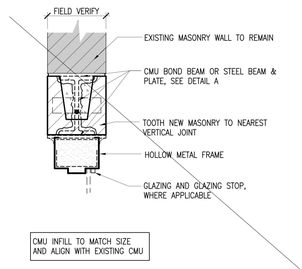
M TYPICAL H.M. JAMB DETAIL AT 135°, 145° & 180° SWING
1 1/2" = 1'-0"



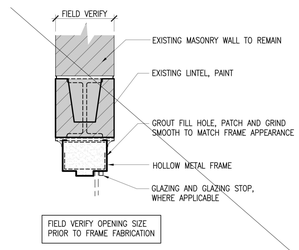
G TYPICAL ALUMINUM FRAME JAMB DETAIL AT INTERIOR CMU
1 1/2" = 1'-0"



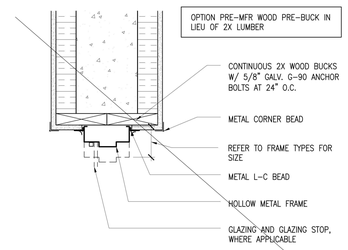
B TYPICAL HOLLOW METAL JAMB DETAIL AT INTERIOR CMU.
1 1/2" = 1'-0"



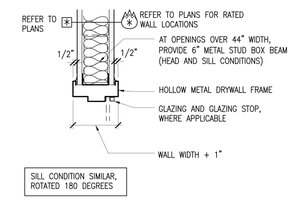
T TYPICAL HOLLOW METAL HEAD DETAIL AT EXISTING CMU INFILL
1 1/2" = 1'-0"



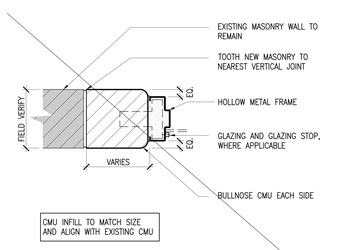
N TYPICAL HOLLOW METAL HEAD DETAIL AT EXISTING CMU OPENING
1 1/2" = 1'-0"



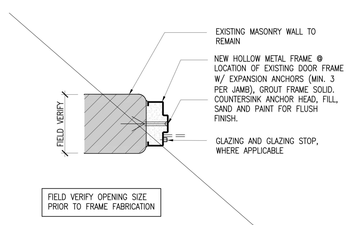
H TYPICAL HOLLOW METAL HEAD DETAIL AT ICF
1 1/2" = 1'-0"



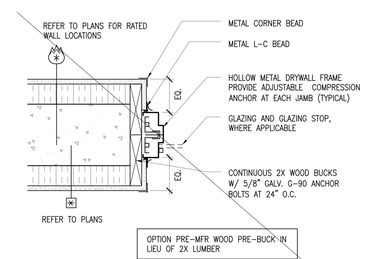
C TYPICAL HOLLOW METAL HEAD DETAIL AT METAL STUD
1 1/2" = 1'-0"



U TYPICAL HOLLOW METAL JAMB INFILL DETAIL AT EXISTING CMU
1 1/2" = 1'-0"



P TYPICAL HOLLOW METAL JAMB DETAIL AT EXISTING CMU OPENING
1 1/2" = 1'-0"



J TYPICAL HOLLOW METAL JAMB DETAIL AT ICF
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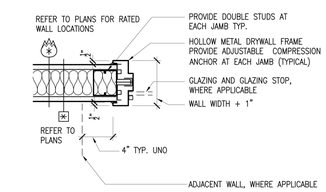
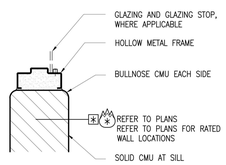
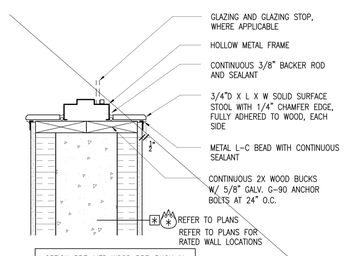


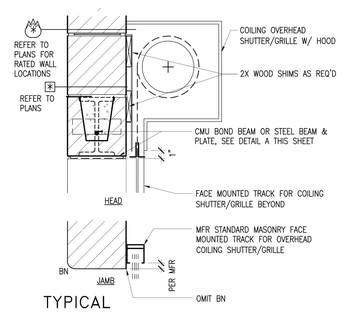
D TYPICAL HOLLOW METAL JAMB DETAIL AT METAL STUD
1 1/2" = 1'-0"



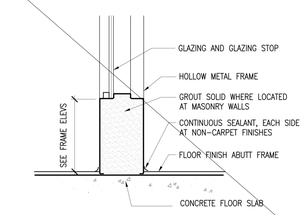
V TYPICAL HOLLOW METAL SILL DETAIL AT CMU
1 1/2" = 1'-0"



Q TYPICAL HOLLOW METAL SILL DETAIL AT ICF
1 1/2" = 1'-0"



K TYPICAL COILING OVERHEAD SHUTTER/GRILLE HEAD AND JAMB DETAIL
1 1/2" = 1'-0"



E TYPICAL HOLLOW METAL FRAME BASE DETAIL
1 1/2" = 1'-0"

DOOR AND FRAME NOTES

THE DETAILS ON THIS SHEET ARE TYPICAL OFFICE STANDARDS, TO BE UTILIZED WHERE APPLICABLE FOR THE PROJECT.

REFER TO PROJECT PLANS, WALL TYPES AND FRAME ASSEMBLIES FOR SPECIFIC REQUIREMENTS FOR THIS PROJECT.

THE NOTES BELOW APPLY TO DOOR, DOOR FRAME AND FRAMED OPENING ASSEMBLIES, AS APPLICABLE.

GENERAL NOTES:

1. REFER TO TYPICAL FRAME DETAILS, UNLESS NOTED OTHERWISE.
2. REFER TO TYPICAL THRESHOLD DETAILS, UNLESS NOTED OTHERWISE.
3. REFER TO FRAME ELEVATIONS FOR FACE DIMENSION, UNLESS NOTED OTHERWISE.
4. COORDINATE AND FIELD VERIFY DOOR AND FRAME INSTALLATIONS WITH ADJACENT MATERIALS AND OPENING DIMENSIONS. IDENTIFY CONFLICTS AND OBTAIN RESOLUTION PRIOR TO DOOR/FRAME FABRICATION.
5. LINTEL BEAM LENGTH SHALL BE M.O. PLUS 16" LONG (MIN. 8" BEARING AT EACH END UNLESS NOTED OTHERWISE). LINTEL PLATE LENGTH SHALL BE M.O. LESS 1/4" LONG (1/8" AT EACH END) REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION. PAINT EXPOSED STEEL, U.N.O.
6. RAKE ALL MORTAR JOINTS 1/2" AT EXTERIOR STEEL LINTEL BEARING LOCATIONS AND PROVIDE SEALANT TO MATCH MORTAR COLOR.
7. INSTALL ALL FRAME AND DOOR ASSEMBLIES IN FULL COMPLIANCE WITH FRAME AND DOOR MANUFACTURER PRINTED INSTALLATION GUIDELINES.
8. PROVIDE AND INSTALL ALL HARDWARE IN COMPLIANCE WITH THE APPLICABLE ARTICLES OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) AND ANSI A117.1 – 2009
9. HARDWARE NOTED ON THE DOOR SCHEDULE ARE CODE REQUIRED MINIMUMS. REFER TO HARDWARE SPECIFICATIONS FOR ADDITIONAL HARDWARE REQUIREMENTS SPECIFIC TO INDIVIDUAL DOORS. CONTACT THE ARCHITECT IN WRITING IF CONFLICTS ARE FOUND, AND OBTAIN CLARIFICATION PRIOR TO ORDER.
10. UNDERCUT NON-RATED DOORS 1/2" MAXIMUM, FROM BOTTOM OF DOOR TO TOP OF FINISH FLOOR.
11. UNDERCUT EXTERIOR DOORS 1/8" MAXIMUM FROM BOTTOM OF DOOR TO TOP OF THRESHOLD.

HOLLOW METAL DOOR / FRAME NOTES:

1. ALL HOLLOW METAL FRAME DEPTHS ARE 5 3/4", UNLESS NOTED OTHERWISE.
2. ALL HOLLOW METAL DOORS AND FRAMES ARE TO BE PAINTED, UNLESS NOTED OTHERWISE.
3. PROVIDE A MINIMUM OF THREE STRAP JAMB ANCHORS, EACH JAMB, AT MASONRY WALLS, UNLESS NOTED OTHERWISE.
4. GROUT FRAMES SOLID AT MASONRY WALLS, UNLESS NOTED OTHERWISE.
5. PROVIDE CONTINUOUS SEALANT AT EACH FRAME FACE.
6. ALL EXTERIOR HOLLOW METAL DOORS AND FRAMES TO BE GALVANIZED.
7. ALL EXTERIOR HOLLOW METAL DOORS TO BE INSULATED.
8. PROVIDE REINFORCING CHANNEL IN FRAME HEAD AT ALL H.M. FRAMES WHERE TOTAL FRAME WIDTH IS GREATER THAN 4 FT.
9. PROVIDE 11GA. X 2" WIDE STRAPS AT 8" O.C. IN H.M. FRAME HEADS GREATER THAN 2" IN HT.
10. EXTERIOR HOLLOW METAL DOORS TO HAVE FLUSH CLOSURE PLATES AT TOP AND BOTTOM.
11. TOILET STALL HOLLOW METAL DOORS TO HAVE FLUSH CLOSURE PLATES AT TOP AND BOTTOM.

ALUMINUM FRAME NOTES:

1. ALL STOREFRONT FRAME DEPTHS ARE 4 1/2", UNLESS NOTED OTHERWISE.
2. PROVIDE MANUFACTURERS STANDARD DETAILS FOR A FULL ASSEMBLY WITH ACCESSORIES FOR A COMPLETE INSTALLATION.
3. PROVIDE 3/16" STEEL REINFORCEMENT AT DOOR FRAMES FOR HARDWARE ANCHORAGE.
4. PROVIDE PRESSURE TREATED (P.T.) WOOD SHIMS AS REQUIRED FOR LEVEL INSTALLATION.
5. PROVIDE 3/8" BACKER ROD AND SEALANT CONTINUOUS AT BOTH SIDES OF THE FRAME.
6. AT EXTERIOR FRAMES, PROVIDE RIGID INSULATION INSERTS AT FRAME PERIMETER.
7. AT EXTERIOR FRAMES, PROVIDE LOW EXPANSION FOAM SEALANT AT FRAME PERIMETER SHIM VOIDS.
8. AT EXTERIOR FRAMES, PROVIDE MANUFACTURER SUB-SILL WITH END DAMS AT FRAME BASE. SUB-SILL TO BE SET IN A CONTINUOUS FULL BED OF SEALANT. COORDINATE SILL FLASHING, REFER TO DETAILS.

GLAZING NOTES:

1. ALL EXTERIOR GLAZING IS 1" INSULATED, UNLESS NOTED OTHERWISE.
2. ALL INTERIOR GLAZING IS 1/4", UNLESS NOTED OTHERWISE.
3. ⓪ DENOTES TEMPERED GLAZING.
4. PROVIDE FIRE RATED GLAZING AT ALL GLAZING APPLICATIONS IN FIRE RATED WALLS. GLAZING AS REQUIRED BY CODE FOR APPLICATION.

   "FRRG" INDICATES FIRE RESISTANT RATED GLAZING (0-H-W-"RATING") (ASTM E-119).
   "FPRG" INDICATES FIRE PROTECTION RATED GLAZING (0-H-"RATING"). THICKNESS AS REQUIRED FOR FIRE RATING DEFINED.
5. ALL GLAZING AND GLAZING STOPS AT INTERIOR DOOR AND FRAME ASSEMBLIES TO BE INSTALLED ON THE SECURE SIDE OF THE ASSEMBLIES.
6. GLAZING LOCATIONS AND DIMENSIONS INDICATED ON DOOR TYPES IS TO THE EDGE OF THE VISIBLE GLAZING.
7. WHERE GLAZING IS SHOWN, THE FRAME FABRICATOR SHALL PRE-DRILL STOPS AND FRAME TO RECEIVE MOUNTING SCREWS. VERIFY LOCATIONS AND DEPTH OF GLAZING MATERIAL.

SPECIALTY FRAME NOTES IF SECTIONAL DOORS, COILING DOORS AND COILING SHUTTERS:

1. PROVIDE MANUFACTURERS STANDARD DETAILS FOR A FULL ASSEMBLY WITH ACCESSORIES FOR A COMPLETE INSTALLATION.
2. COORDINATE MANUFACTURER FRAME ANCHOR REQUIREMENTS WITH ADJACENT CONSTRUCTION.
3. INSTALL ASSEMBLIES PER MANUFACTURERS WRITTEN INSTALLATION GUIDELINES.

SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

FRAME DETAILS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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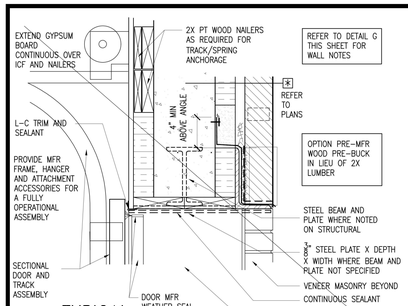
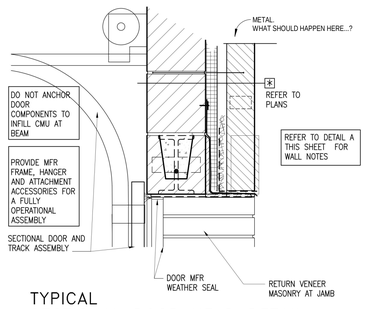
REVISIONS

No.	Description	Date

SHEET
A8.2



N TYPICAL SECTIONAL DOOR HEAD DETAIL AT ICF
1 1/2" = 1'-0"



K TYPICAL SECTIONAL DOOR HEAD DETAIL AT CMU
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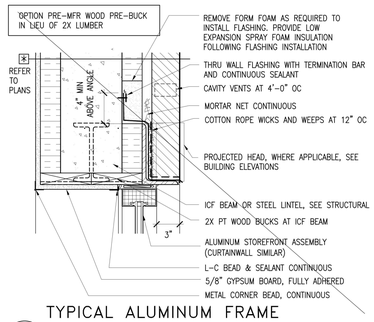

G TYPICAL ALUMINUM FRAME HEAD DETAIL AT ICF
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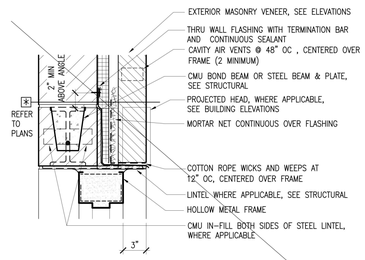
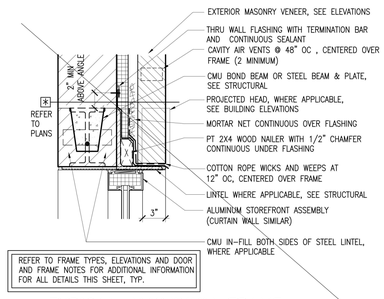


D TYPICAL HOLLOW METAL HEAD DETAIL AT MASONRY
1 1/2" = 1'-0"



A TYPICAL ALUMINUM FRAME HEAD DETAIL AT MASONRY
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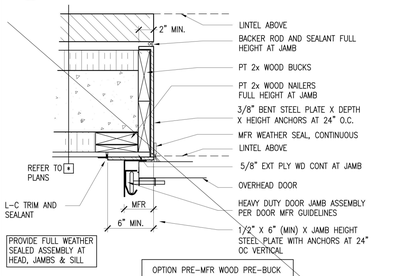
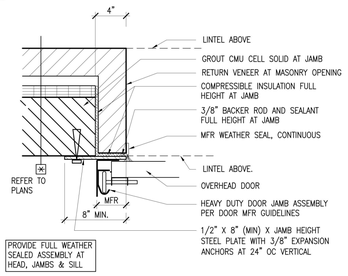


P TYPICAL SECTIONAL DOOR JAMB DETAIL AT ICF
1 1/2" = 1'-0"



L TYPICAL SECTIONAL DOOR JAMB DETAIL AT CMU
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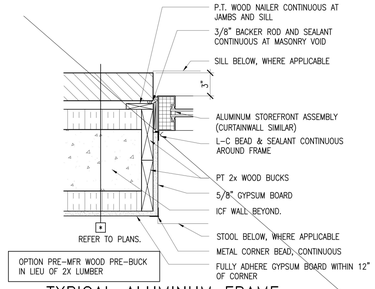

H TYPICAL ALUMINUM FRAME JAMB DETAIL AT ICF
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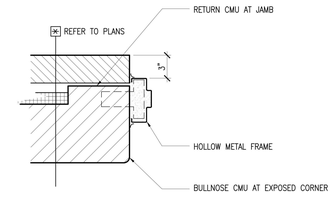
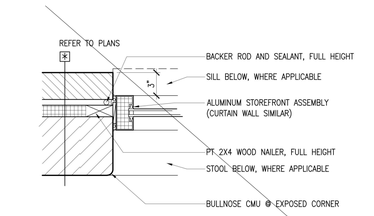
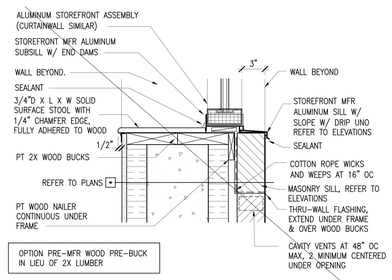


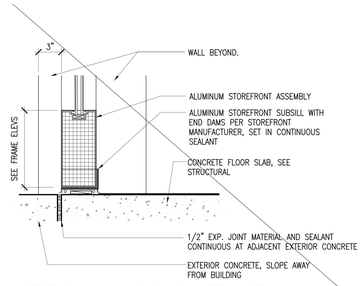
E TYPICAL HOLLOW METAL JAMB DETAIL AT MASONRY
1 1/2" = 1'-0"



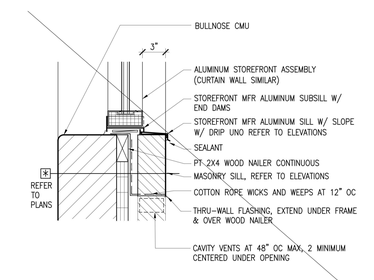
B TYPICAL ALUMINUM FRAME JAMB DETAIL AT MASONRY
1 1/2" = 1'-0"



J TYPICAL ALUMINUM FRAME SILL DETAIL AT ICF
1 1/2" = 1'-0"



F TYPICAL ALUMINUM FRAME BASE DETAIL
1 1/2" = 1'-0"



C TYPICAL ALUMINUM FRAME SILL DETAIL AT MASONRY
1 1/2" = 1'-0"

DOOR AND FRAME NOTES

THE DETAILS ON THIS SHEET ARE TYPICAL OFFICE STANDARDS, TO BE UTILIZED WHERE APPLICABLE FOR THE PROJECT.

REFER TO PROJECT PLANS, WALL TYPES AND FRAME ASSEMBLIES FOR SPECIFIC REQUIREMENTS FOR THIS PROJECT.

THE NOTES BELOW APPLY TO DOOR, DOOR FRAME AND FRAMED OPENING ASSEMBLIES, AS APPLICABLE.

GENERAL NOTES:

1. REFER TO TYPICAL FRAME DETAILS, UNLESS NOTED OTHERWISE.
2. REFER TO TYPICAL THRESHOLD DETAILS, UNLESS NOTED OTHERWISE.
3. REFER TO FRAME ELEVATIONS FOR FACE DIMENSION, UNLESS NOTED OTHERWISE.
4. COORDINATE AND FIELD VERIFY DOOR AND FRAME INSTALLATIONS WITH ADJACENT MATERIALS AND OPENING DIMENSIONS. IDENTIFY CONFLICTS AND OBTAIN RESOLUTION PRIOR TO DOOR/FRAME FABRICATION.
5. LINTEL BEAM LENGTH SHALL BE M.O. PLUS 16" LONG (MIN. 8" BEARING AT EACH END UNLESS NOTED OTHERWISE). LINTEL PLATE LENGTH SHALL BE M.O. LESS 1/4" LONG (1/8" AT EACH END) REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION. PAINT EXPOSED STEEL UNO.
6. RAKE ALL MORTAR JOINTS 1/2" AT EXTERIOR STEEL LINTEL BEARING LOCATIONS AND PROVIDE SEALANT TO MATCH MORTAR COLOR.
7. INSTALL ALL FRAME AND DOOR ASSEMBLIES IN FULL COMPLIANCE WITH FRAME AND DOOR MANUFACTURER PRINTED INSTALLATION GUIDELINES.
8. PROVIDE AND INSTALL ALL HARDWARE IN COMPLIANCE WITH THE APPLICABLE ARTICLES OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) AND ANSI A117.1 – 2009
9. HARDWARE NOTED ON THE DOOR SCHEDULE ARE CODE REQUIRED MINIMUMS. REFER TO HARDWARE SPECIFICATIONS FOR ADDITIONAL HARDWARE REQUIREMENTS SPECIFIC TO INDIVIDUAL DOORS. CONTACT THE ARCHITECT IN WRITING IF CONFLICTS ARE FOUND, AND OBTAIN CLARIFICATION PRIOR TO ORDER.
10. UNDERCUT NON-RATED DOORS 1/2" MAXIMUM, FROM BOTTOM OF DOOR TO TOP OF FINISH FLOOR.
11. UNDERCUT EXTERIOR DOORS 1/8" MAXIMUM FROM BOTTOM OF DOOR TO TOP OF THRESHOLD.

HOLLOW METAL DOOR / FRAME NOTES:

1. ALL HOLLOW METAL FRAME DEPTHS ARE 5 3/4", UNLESS NOTED OTHERWISE.
2. ALL HOLLOW METAL DOORS AND FRAMES ARE TO BE PAINTED, UNLESS NOTED OTHERWISE.
3. PROVIDE A MINIMUM OF THREE STRAP JAMB ANCHORS, EACH JAMB, AT MASONRY WALLS, UNLESS NOTED OTHERWISE.
4. GROUT FRAMES SOLID AT MASONRY WALLS, UNLESS NOTED OTHERWISE.
5. PROVIDE CONTINUOUS SEALANT AT EACH FRAME FACE.
6. ALL EXTERIOR HOLLOW METAL DOORS AND FRAMES TO BE GALVANIZED.
7. ALL EXTERIOR HOLLOW METAL DOORS TO BE INSULATED.
8. PROVIDE REINFORCING CHANNEL IN FRAME HEAD AT ALL H.M. FRAMES WHERE TOTAL FRAME WIDTH IS GREATER THAN 4 FT.
9. PROVIDE 11GA. X 2" WIDE STRAPS AT 8" O.C. IN H.M. FRAME HEADS GREATER THAN 2" IN HT.
10. EXTERIOR HOLLOW METAL DOORS TO HAVE FLUSH CLOSURE PLATES AT TOP AND BOTTOM.
11. TOILET STALL HOLLOW METAL DOORS TO HAVE FLUSH CLOSURE PLATES AT TOP AND BOTTOM.

ALUMINUM FRAME NOTES:

1. ALL STOREFRONT FRAME DEPTHS ARE 4 1/2", UNLESS NOTED OTHERWISE.
2. PROVIDE MANUFACTURERS STANDARD DETAILS FOR A FULL ASSEMBLY WITH ACCESSORIES FOR A COMPLETE INSTALLATION.
3. PROVIDE 3/16" STEEL REINFORCEMENT AT DOOR FRAMES FOR HARDWARE ANCHORAGE.
4. PROVIDE PRESSURE TREATED (P.T.) WOOD SHIMS AS REQUIRED FOR LEVEL INSTALLATION.
5. PROVIDE 3/8" BACKER ROD AND SEALANT CONTINUOUS AT BOTH SIDES OF THE FRAME.
6. AT EXTERIOR FRAMES, PROVIDE RIGID INSULATION INSERTS AT FRAME PERIMETER.
7. AT EXTERIOR FRAMES, PROVIDE LOW EXPANSION FOAM SEALANT AT FRAME PERIMETER SHIM VOIDS.
8. AT EXTERIOR FRAMES, PROVIDE MANUFACTURER SUB-SILL WITH END DAMS AT FRAME BASE. SUB-SILL TO BE SET IN A CONTINUOUS FULL BED OF SEALANT. COORDINATE SILL FLASHING, REFER TO DETAILS.

GLAZING NOTES:

1. ALL EXTERIOR GLAZING IS 1" INSULATED, UNLESS NOTED OTHERWISE.
2. ALL INTERIOR GLAZING IS 1/4", UNLESS NOTED OTHERWISE.
3. (O) DENOTES TEMPERED GLAZING.
4. PROVIDE FIRE RATED GLAZING AT ALL GLAZING APPLICATIONS IN FIRE RATED WALLS. GLAZING AS REQUIRED BY CODE FOR APPLICATION.

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7. WHERE GLAZING IS SHOWN, THE FRAME FABRICATOR SHALL PRE-DRILL STOPS AND FRAME TO RECEIVE MOUNTING SCREWS. VERIFY LOCATIONS AND DEPTH OF GLAZING MATERIAL.

SPECIALTY FRAME NOTES IE SECTIONAL DOORS, COILING DOORS AND COILING SHUTTERS:

1. PROVIDE MANUFACTURERS STANDARD DETAILS FOR A FULL ASSEMBLY WITH ACCESSORIES FOR A COMPLETE INSTALLATION.
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SHERMAN CARTER BARNHART ARCHITECTS

FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

FRAME DETAILS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
CHECKED	DB, AHO

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REVISIONS

No.	Description	Date

SHEET

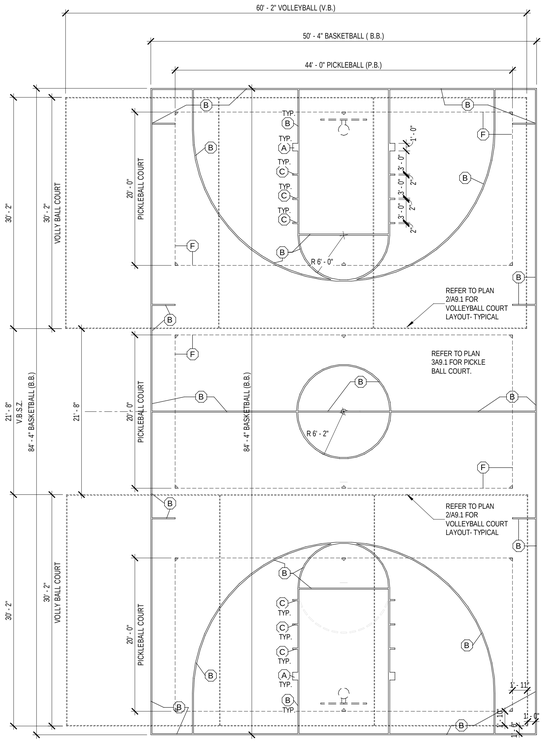
A8.3

2259
OWENSBORO INDOOR SPORTS FACILITY
5/17/2024 11:33:30 AM

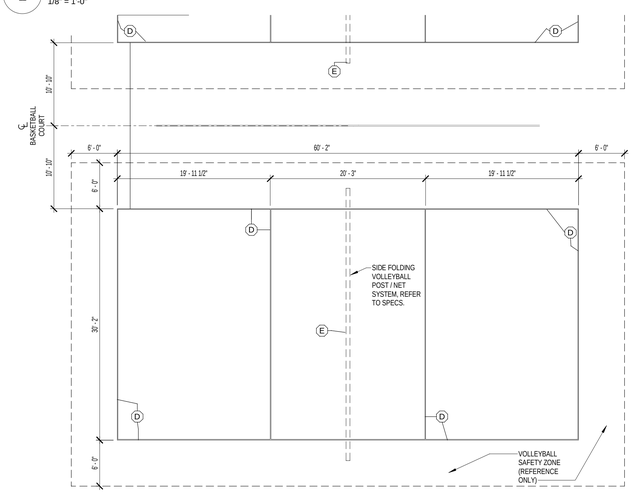
FLOOR STRIPING LEGEND

A	(BB)	12"x8" COLOR BOX
B	(BB)	2" WIDE WHITE STRIPE
C	(BB)	2" WIDE COLOR STRIPE
D	(VB)	1" WIDE STRIPE
E		OVERHEAD FOLDING VOLLEYBALL STANDARD, REFER TO A7.1
F	(PB)	STRIPING OUTLINE

1. AT LOCATIONS WHERE LINES INTERSECT, BASKETBALL COURT LINES TAKE PRECEDENCE, FOLLOWED BY VOLLEYBALL COURT LINES THEN PICKLE BALL.
2. ALL GYM FLOOR STRIPING SHALL BE IN ACCORDANCE WITH KHSAA GUIDELINES.
3. ALL STRIPES 2" WIDE U.N.O.

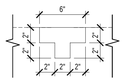


1 BASKETBALL COURT LAYOUT
1/8" = 1'-0"

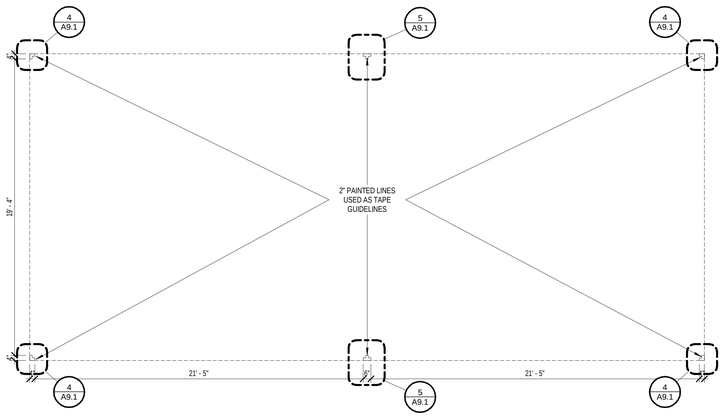


2 VOLLEYBALL COURT LAYOUT-TYPICAL
1/8" = 1'-0"

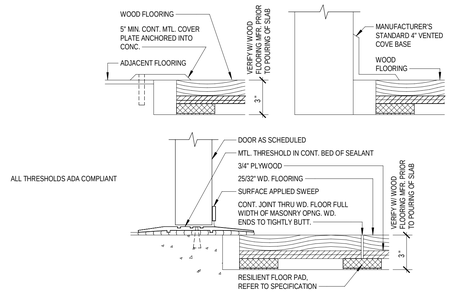
4 STRIPING DETAIL
1 1/2" = 1'-0"



5 STRIPING DETAIL
1 1/2" = 1'-0"



3 PICKLEBALL COURT
1/4" = 1'-0"



6 WOOD FLOOR EDGE DETAIL
3" = 1'-0"

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FINAL DOCUMENTS

OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

STRIPING PLANS & DETAILS

JOB NO.	2259
DATE	MAY 20, 2024
DRAWN	AN, CRG
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SHEET
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OWENSBORO INDOOR SPORTS FACILITY
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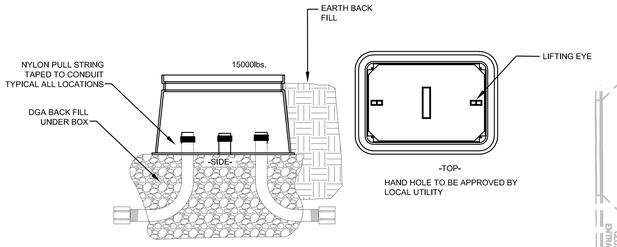
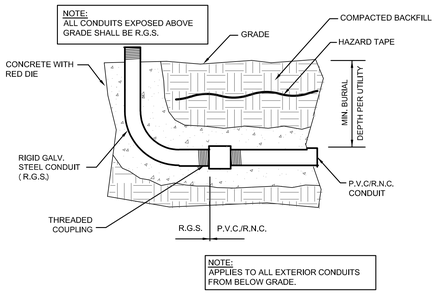


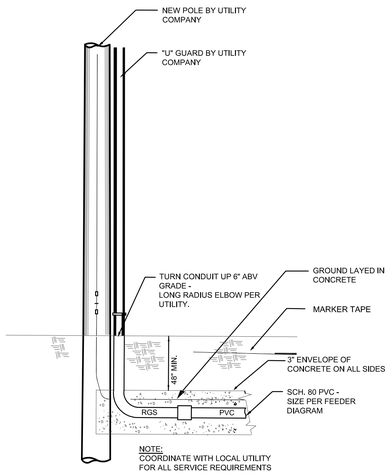
PULL BOX DETAIL

NO SCALE



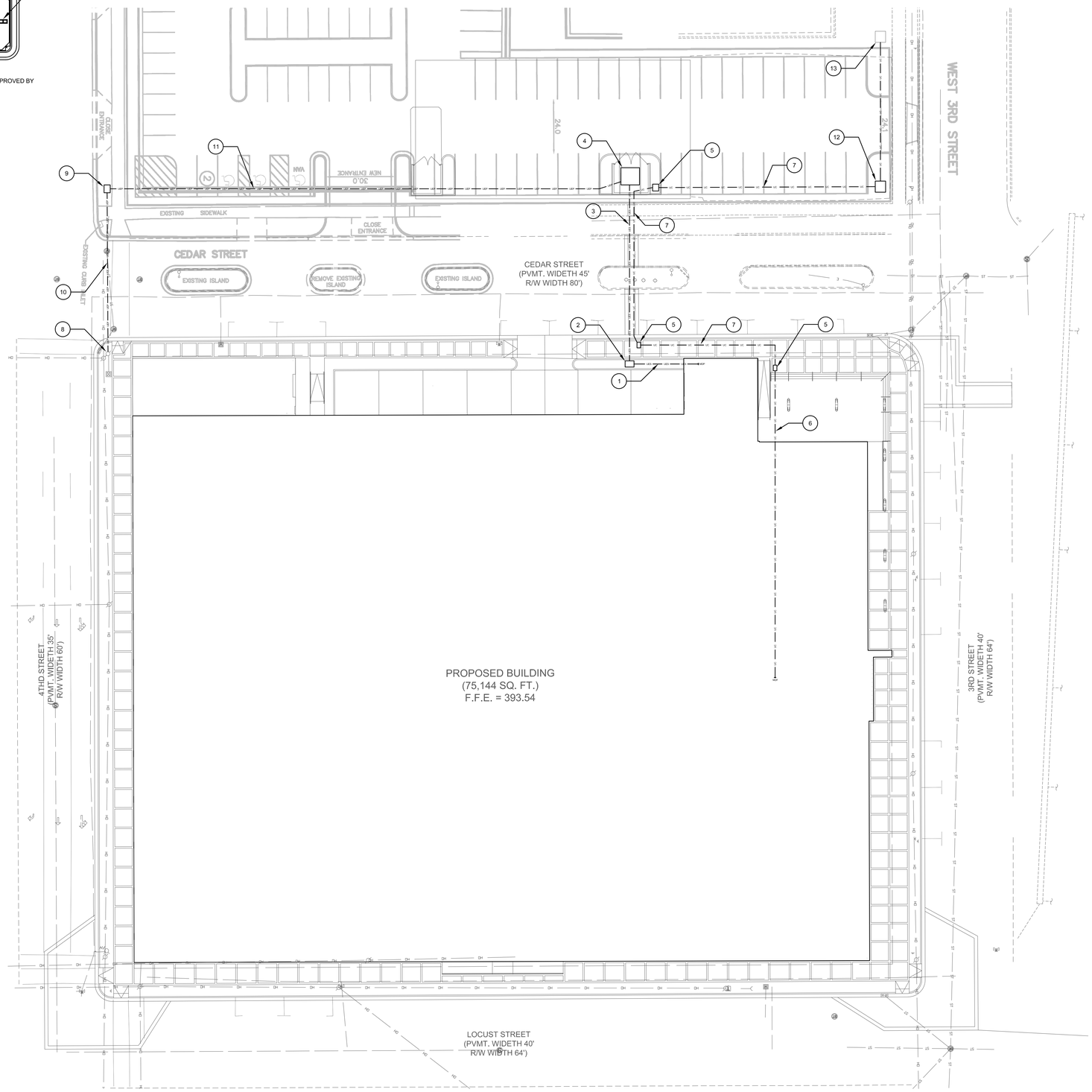
EXTERIOR CONDUIT TRANSITION DETAIL

NO SCALE (APPLIES TO UNDERGROUND FEEDERS)



TYPICAL ELECTRICAL RISER DETAIL @ UTILITY POLE

NO SCALE



ELECTRICAL SITE UTILITIES PLAN

SCALE: 1" = 20'

ELECTRICAL CONSTRUCTION TAG NOTES

(APPLIES TO THIS DRAWING ONLY)

#	
1	CONTRACTOR SHALL ROUTE UNDERGROUND CONDUIT FROM UTILITY CO. PULL BOX TO MAIN DISTRIBUTION PANEL TO BE INSTALLED WITHIN MECHANICAL ROOM. REFER TO RISER DIAGRAM FOR ALL CONDUIT AND WIRE SIZING REQUIREMENTS.
2	CONTRACTOR SHALL RECEIVE PULL BOX FROM LOCAL ELECTRIC UTILITY CO. AND INSTALL ACCORDING TO LOCAL UTILITY CO. STANDARDS. IN FINAL LOCATION DETERMINED BY LOCAL UTILITY.
3	CONTRACTOR SHALL ROUTE UNDERGROUND CONDUIT FROM UTILITY TRANSFORMER TO BE INSTALLED IN APPROXIMATE LOCATION SHOWN TO UTILITY CO. PULL BOX APPROXIMATELY WHERE SHOWN. REFER TO RISER DIAGRAM FOR ALL CONDUIT AND WIRE SIZING REQUIREMENTS.
4	LOCATION OF UTILITY TRANSFORMER. COORDINATE CONNECTION OF FEEDERS WITH UTILITY COMPANY. REFER TO THE ELECTRICAL RISER DIAGRAM ON DRAWING E3.1 FOR ADDITIONAL INFORMATION. REFER TO CIVIL FOR PAD DIMENSIONS AND DETAILS.
5	CONTRACTOR SHALL RECEIVE PULL BOX FROM LOCAL COMMUNICATIONS UTILITY CO. AND INSTALL ACCORDING TO LOCAL UTILITY CO. STANDARDS. IN FINAL LOCATION DETERMINED BY LOCAL UTILITY.
6	CONTRACTOR SHALL ROUTE (3) 2 INCH CONDUITS WITH PULLSTRING FROM TELECOM BACKBOARD LOCATED WITHIN MDF ROOM TO FIBER PULL BOX TO BE INSTALLED ON SITE. COORDINATE FINAL PLACEMENT OF PULL BOX ON SITE WITH LOCAL UTILITY PRIOR TO INSTALLATION.
7	CONTRACTOR SHALL ROUTE (3) 2 INCH CONDUITS WITH PULLSTRING FROM FIBER PULL BOX TO FIBER PULL BOX. COORDINATE FINAL PLACEMENT OF PULL BOX ON SITE WITH LOCAL UTILITY PRIOR TO INSTALLATION.
8	EXISTING PRIMARY UTILITY POLE TO REMAIN. NEW SERVICE LINE TO BE ROUTED FROM UTILITY POLE TO TRANSFORMER BY UTILITY CO. PER UTILTY CO. REQUIREMENTS.
9	CONTRACTOR SHALL RECEIVE PULL BOX FROM LOCAL ELECTRIC UTILITY CO. AND INSTALL ACCORDING TO LOCAL UTILITY CO. STANDARDS. IN FINAL LOCATION DETERMINED BY LOCAL UTILITY.
10	CONTRACTOR SHALL ROUTE (3) 4" CONDUITS WITH PULLSTRING UNDERGROUND FROM UTILITY POLE TO POWER UTILITY PULL BOX. CONTRACTOR SHALL COORDINATE CONDUIT ROUTING AT UTILITY POLE WITH LOCAL UTILITY.
11	CONTRACTOR SHALL ROUTE (3) 4" CONDUITS WITH PULLSTRING UNDERGROUND FROM POWER UTILITY PULL BOX TO TRANSFORMER. CONTRACTOR SHALL COORDINATE CONDUIT ROUTING WITH LOCAL UTILITY.
12	APPROXIMATE LOCATION OF NEW FIBER SWITCH BY UTILITY CO. COORDINATE FINAL LOCATION WITH UTILITY CO. PRIOR TO ROUTING CONDUIT.
13	APPROXIMATE LOCATION OF EXISTING FIBER SWITCH BY UTILITY CO.

SITE LEGEND

Ø	EXISTING UTILITY POLE
OH	EXISTING OVERHEAD ELECTRIC
OH	NEW OVERHEAD ELECTRIC
UEP	NEW UNDERGROUND ELECTRIC PRIMARY
UES	NEW UNDERGROUND ELECTRIC SECONDARY
UC	NEW UNDERGROUND COMMUNICATIONS

NOTICE

SEE CIVIL DRAWINGS FOR SITE GRADING, ELEVATIONS AND OTHER UTILITY ROUTINGS

NOTICE

CONTRACTOR SHALL RESTORE GRADES TO EXISTING. REFER TO SPECIFICATIONS FOR SEEDING REQUIREMENTS. REFER TO DETAILS FOR IMPROVED SURFACE INSTALLATION REQUIREMENTS.

BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT KENTUCKY 811 @ 811 OR 1-800-752-6007 FOR EXACT LOCATION OF BURIED UTILITIES PRIOR TO EXCAVATION OPERATIONS.

The New Look For Digging Safely in Kentucky
Kentucky 811
Call 811 Before You Dig

Call 811 or 800-752-6007
www.kentucky811.com
Two Business Days Before You Dig
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UTILITY CONTACT

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SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
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2024-05-17

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OWENSBORO INDOOR SPORTS FACILITY

500 WEST THIRD STREET
OWENSBORO, KY 42301

ELECTRICAL SITE UTILITIES PLAN

JOB NO.	22630
DATE	May 17, 2024
DRAWN	MSE
CHECKED	TG / MRM

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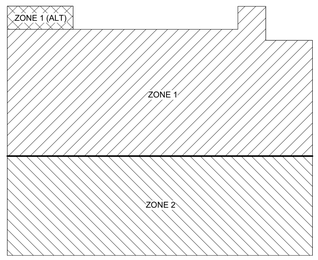
REVISIONS

No.	Description	Date

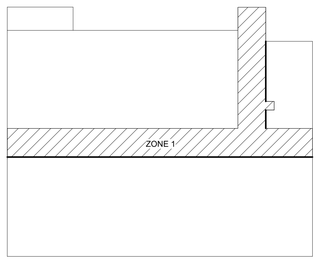
SHEET

U1.1

AUTOMATIC SPRINKLER ZONES



MAIN FLOOR

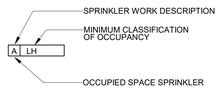


MEZZANINE

FIRE PROTECTION AREA OF COVERAGE ZONE BOUNDRY		APPROXIMATE AREA
ASZ-1A	ZONE 1 MAIN FLOOR	- 42,346 SQ. FT.
ASZ-1AA	ZONE 1 - ALTERNATE BID	- 1,683 SQ. FT.
ASZ-1B	ZONE 1 - MEZZANINE	- 13,021 SQ. FT.
ASZ-2	ZONE 2	- 33,297 SQ. FT.

NOTE:
THE APPROXIMATE AREAS PROVIDED ARE TO CONVEY SIZE AND SCALE OF PROJECT.
THESE AREAS SHOULD NOT BE USED FOR BASIS OF BID OR DESIGN.

SPRINKLER SYSTEM LEGEND



TAG	DESCRIPTION
A	SEMI-RECESSED PENDANT SPRINKLERS REQUIRED
B	UPRIGHT SPRINKLERS REQUIRED
C	SIDEWALL SPRINKLERS REQUIRED
D	DRY TYPE PENDANT SPRINKLERS REQUIRED
LH	LIGHT HAZARD OCCUPANCY
OH GR 1	ORDINARY HAZARD GROUP 1 OCCUPANCY

NOTES:
1. THE FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ALL NECESSARY ADDITIONAL FIRE PROTECTION SPRINKLERS TO PROVIDE 100% COVERAGE PER NFPA 13.
2. CONTRACTOR SHALL NOTE THE COMPLEX CEILING TYPES AND SOFFITS. REFER TO ARCHITECTURAL CEILING PLANS. CONTRACTOR SHALL INSTALL ADDITIONAL SPRINKLERS AS REQUIRED TO AVOID SPRAY OBSTRUCTIONS.

FIRE SUPPRESSION DESIGN CRITERIA

STATIC:	60	PSI
RESIDUAL:	55	PSI
WATER FLOW:	1180	GPM
DURATION:	90	MINS.
SOURCE OF WATER SUPPLY:	CITY MAIN - GRAVITY TANK	
SOURCE OF WATER FLOW DATA:	JODY GADDIS, OWENSBORO MUNICIPAL UTILITIES	
DATE OF WATER FLOW TEST:	10/17/23	
ANTICIPATED WATER DEMAND:	40	PSI
	500	GPM
CLASSIFICATION OF HAZARD(S):	LIGHT HAZARD AND ORDINARY HAZARD GROUP 1	
CLASSIFICATION OF BUILDING	ATHLETIC SPORTS COMPLEX	
SPECIFIC TYPES OF SUPPRESSION SYSTEM(S):	AUTOMATIC WET PIPE	
NFPA STANDARD(S) FOLLOWED IN DESIGN:	NFPA 13 AND 24	

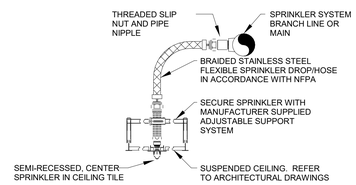
NOTE:
1. HYDRANT FLOW TEST WAS CONDUCTED ON EXISTING 14" CITY MAIN LOCATED ON 3RD STREET.

FIRE PROTECTION LEGEND

SYMBOL	DESCRIPTION
FS	FIRE SPRINKLER PIPING
FM	FIRE PROTECTION MAIN
FW	FIRE WATER SERVICE
	GATE VALVE
	OS&Y VALVE W/ TAMPER SWITCH
	PIPE REDUCER
	CHECK VALVE
	DOUBLE CHECK BACKFLOW PREVENTOR
FS	FLOW SWITCH
P	PRESSURE GAUGE
	ELECTRICAL BELL
KEY	FD MASTER KEY BOX (KNOX-BOX MODEL 3200 OR EQUAL)

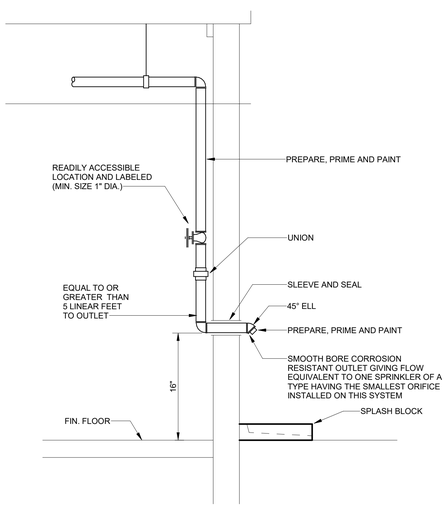
GENERAL FIRE PROTECTION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL THE CONTRACT DOCUMENTS PRIOR TO BIDDING. ANY DISCREPANCIES OR QUESTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER NINE (9) DAYS PRIOR TO THE BID DATE.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE STATE BUILDING CODE, NFPA 13: STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS, NFPA 24: STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES, AND OTHER LOCAL/STATE/ NATIONAL CODES OR STANDARDS THAT APPLY.
3. ALL WORK MUST BE PERFORMED BY A LICENSED FIRE PROTECTION CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING: VERIFICATION FLOW TEST (DO NOT USE FLOW TEST INFORMATION PROVIDED WITHIN CONTRACT DOCUMENTS), SYSTEM DESIGN, AND APPROVED SHOP DRAWINGS IN COMPLIANCE WITH THE STATE BUILDING CODE.
4. CONTRACTOR SHALL COORDINATE THE FOLLOWING WITH THE LOCAL FIRE DEPARTMENT:
   A. TYPE AND LOCATION OF KEY BOXES.
   B. TYPE AND LOCATION OF FIRE DEPARTMENT CONNECTION(S).
   C. HOSE THREAD SPECIFICATION FOR FIRE DEPARTMENT CONNECTION(S) AND ANY HYDRANT(S).
   D. SIGNAGE AT FIRE DEPARTMENT CONNECTION(S).
5. ALL WORK SHALL BE ACCEPTABLE TO THE LOCAL FIRE MARSHAL. THE CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY WORK TO RECEIVE INSPECTION APPROVAL.
6. CONTRACTOR SHALL ACQUIRE ALL APPLICABLE PERMIT(S), COORDINATE ALL INSPECTIONS, AND PAY ALL ASSOCIATED FEES (INCLUDING TAP FEES).
7. COORDINATE NEW UTILITY CONNECTION OWENSBORO MUNICIPAL UTILITY (OMU). INSTALL WORK PER OMU REQUIREMENTS AND OBTAIN NECESSARY APPROVALS.
8. USE EXTREME CAUTION WHEN EXCAVATING. UNDERGROUND UTILITIES ILLUSTRATED ARE APPROXIMATE AND ARE SHOWN TO ALERT CONTRACTOR TO THEIR PRESENCE. CONTRACTOR MUST LOCATE/VERIFY UTILITIES BY HAND TOOL EXCAVATION PRIOR TO MACHINE EXCAVATION.
9. PROTECT FIRE PROTECTION PIPING THAT IS INSTALLED UNDERGROUND FROM CORROSION PER NFPA 13 REQUIREMENTS.
10. PATCH OR REPAIR ALL PAVEMENT, SIDEWALKS, OTHER HARDSCAPES, LAWNS, OTHER SOFTSCAPES, ETC. DAMAGED IN THE COURSE OF EXTERIOR CONSTRUCTION.
11. REMOVE AND REPLACE ANY DAMAGED CEILING TILE OR GRID DUE TO INSTALLATION WORK.
12. SLEEVE ALL PIPING THROUGH NEW FLOOR AND/OR WALLS. PIPE SLEEVES SHALL BE SCHEDULE 10 AND GALVANIZED STEEL. SLEEVES ARE NOT REQUIRED FOR CORE DRILLED HOLES.
13. FIRE STOP ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES. FIRE STOPPING METHOD AND MATERIALS SHALL BE UL LISTED.
14. FLASH AND SEAL ALL FLOOR AND WALL PENETRATIONS.
15. PATCH ALL WALLS, FLOORS, CEILINGS, ETC. THAT ARE ALTERED BECAUSE OF WORK REQUIRED.
16. THESE PLANS ARE SCHEMATIC IN NATURE AND INDICATE THE APPROXIMATE AND GENERAL LOCATION OF PIPING AND/OR EQUIPMENT.
17. CONCEAL ALL PIPING IN CEILING AND/OR WALL SPACES (UNLESS NOTED OTHERWISE). PROVIDE ALL NECESSARY ACCESS DOORS IN INACCESSIBLE CEILINGS OR WALLS TO ALLOW ACCESS FOR INSPECTION, MAINTENANCE, VALVES, ETC.
18. COORDINATE PIPE ROUTING IN CEILING SPACES TO AVOID CONFLICTS WITH PLUMBING, HVAC, SPECIAL SYSTEMS, LIGHTING, NEC CLEARANCES, ETC.
19. SLOPE ALL PIPING TO THE SYSTEM MAIN DRAIN TO INSURE PROPER DRAINAGE. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ADDITIONAL AUXILIARY DRAINS TO ALLOW ALL PIPING TO BE DRAINED AS NECESSARY.
20. PROVIDE INSPECTOR'S TEST CONNECTION(S) PER NFPA 13. INSTALL WITH LABELED ACCESSIBLE TEST VALVE AND ORIFICED UNION ROUTED TO THE MAIN DRAIN OR OUTDOORS AS SECOND OPTION.
21. VERIFY ALL PIPE ROUTINGS BEFORE FABRICATION AND/OR INSTALLATION.
22. DO NOT INSTALL PIPING OR SPRINKLERS DIRECTLY OVER ELECTRICAL EQUIPMENT OR PANELS. COORDINATE ROUTINGS WITH ELECTRICAL CONTRACTOR.
23. COVER ALL OPENINGS ON WATER CONVEYANCE ITEMS (SPRINKLERS, PIPING, COMPONENTS, AND/OR EQUIPMENT), WHETHER STORED OR INSTALLED, TO PREVENT ACCUMULATION OF CONSTRUCTION DEBRIS/DUST.
24. THE FIRE PROTECTION SYSTEM DESIGN SHALL BE BASED ON THE OCCUPANCY CLASSIFICATION(S) LISTED IN THE FIRE SUPPRESSION DESIGN CRITERIA ON THE DRAWINGS.
25. THE SYSTEM TYPE SHALL BE: AUTOMATIC WET PIPE.
26. SPRINKLERS SHALL BE PENDANT, UPRIGHT, AND SIDEWALL AS NOTED. PENDANT AND SIDEWALL SPRINKLERS IN OCCUPIED SPACES SHALL BE FULLY OR SEMI-RECESSED AS NOTED, WHITE POWDER COATED. UPRIGHT SPRINKLERS SHALL BE BRASS. ESCUTCHEONS SHALL MATCH SPRINKLER.
27. INSTALL ALL NECESSARY SPRINKLERS TO PROVIDE 100% COVERAGE PER NFPA 13 AND AVOID SPRAY OBSTRUCTIONS. OBSTRUCTIONS 48" IN WIDTH, OR WIDER, REQUIRE SPRINKLERS BOTH ABOVE AND BELOW THE OBSTRUCTION.
28. ALL SPRINKLERS SHALL BE RATED FOR 175°F UNLESS NOTED TO BE HIGH TEMPERATURE. HIGH TEMPERATURE SPRINKLERS SHALL BE 250°F RATED.
29. SPRINKLERS SHALL BE CENTERED IN BOTH DIRECTIONS WITHIN CEILING TILES. SPRINKLERS SHALL BE VISUALLY ALIGNED AND INSTALLED SYMMETRICALLY IN AREAS WITH DRYWALL CEILINGS AND/OR EXPOSED INSTALLATIONS.
30. SPRINKLERS IN NEAR SPACE HEATERS AND IN OTHER POTENTIALLY HOT ENVIRONMENTS SHALL BE RATED FOR HIGH TEMPERATURE.
31. ELECTRICAL ROOMS, ELEVATOR MACHINE ROOMS, ELEVATOR SHAFTS, COMMUNICATION ROOMS, ETC. SHALL BE SUPPLIED WITH BRANCH LINES ONLY. DO NOT ROUTE MAINS THROUGH THESE TYPE SPACES.
32. TAMPER SWITCHES, FLOW SWITCHES, PRESSURE SWITCHES, CONTROL PANELS, ETC. SHALL BE MONITORED BY THE BUILDING FIRE ALARM SYSTEM. COORDINATE WORK WITH ELECTRICAL CONTRACTOR.
33. MINIMUM PIPING MATERIALS SHALL BE AS LISTED BELOW. SADDLE TEE FITTINGS ARE NOT ACCEPTABLE. REFER TO WRITTEN SPECIFICATIONS AND SITE UTILITY DRAWINGS FOR ADDITIONAL REQUIREMENTS.
   FIRE MAIN: REFER TO SITE UTILITY DRAWINGS.
   FDC MAIN: REFER TO SITE UTILITY DRAWINGS.
   WET PIPE SPRINKLER PIPING: CARBON STEEL PIPE IN SCHEDULE AS SPECIFIED.
34. SEISMICALLY SUPPORT ALL PIPING PER THE STATE BUILDING CODE AND NFPA REQUIREMENTS.
35. INSTALL A SEISMIC SEPARATION ASSEMBLY WITH FLEXIBLE FITTINGS OR FLEXIBLE PIPING PER NFPA 13 AT ALL LOCATIONS THAT SPRINKLER PIPING (REGARDLESS OF SIZE) CROSSES BUILDING EXPANSION JOINT(S). REFER TO STRUCTURAL DRAWINGS FOR EXPANSION JOINT LOCATIONS.
36. INSTALL SUPPORT CONNECTIONS PER ROOF FRAMING MANUFACTURER'S REQUIREMENTS WHEN SUSPENDING SYSTEMS FROM PRE-ENGINEERED LIGHT GAUGE STEEL TRUSSES OR PRE-ENGINEERED METAL BUILDINGS.
37. PREPARE, PRIME AND PAINT ALL PIPE, SUPPORTS AND HANGERS NOT CONCEALED.
38. KEY BOXES SHALL BE RECESSED KEY BOX WITH HINGED DOOR (KNOX-BOX MODEL 3200 OR EQUAL). MOUNT BOXES 48" TO TOP OF BOX ABOVE FINISHED WALK SURFACE. ARCHITECT SHALL SELECT COLOR AND FINAL MOUNTING LOCATION.



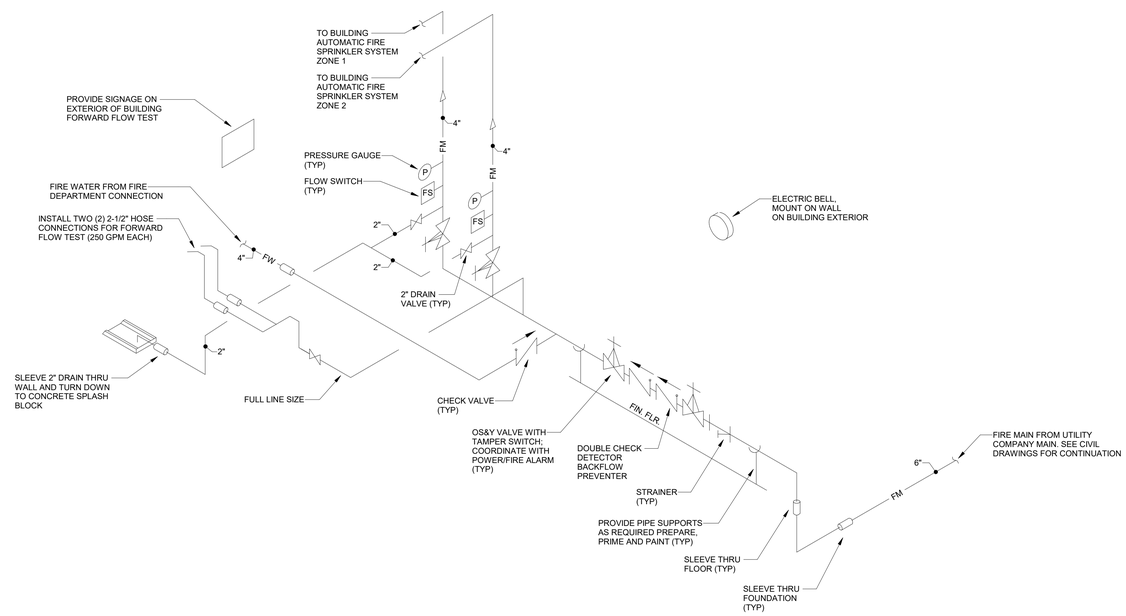
SPRINKLER DROP DETAIL

NO SCALE (REQUIRED AT ALL SUSPENDED CEILINGS)



INSPECTOR'S TEST CONNECTION DETAIL

NO SCALE



SPRINKLER RISER DIAGRAM

NO SCALE

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
Logan Overturf
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2024-05-17

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OWENSBORO, KY 42301

FIRE PROTECTION LEAD SHEET

JOB NO.	22630
DATE	MAY 20, 2024
DRAWN	RY
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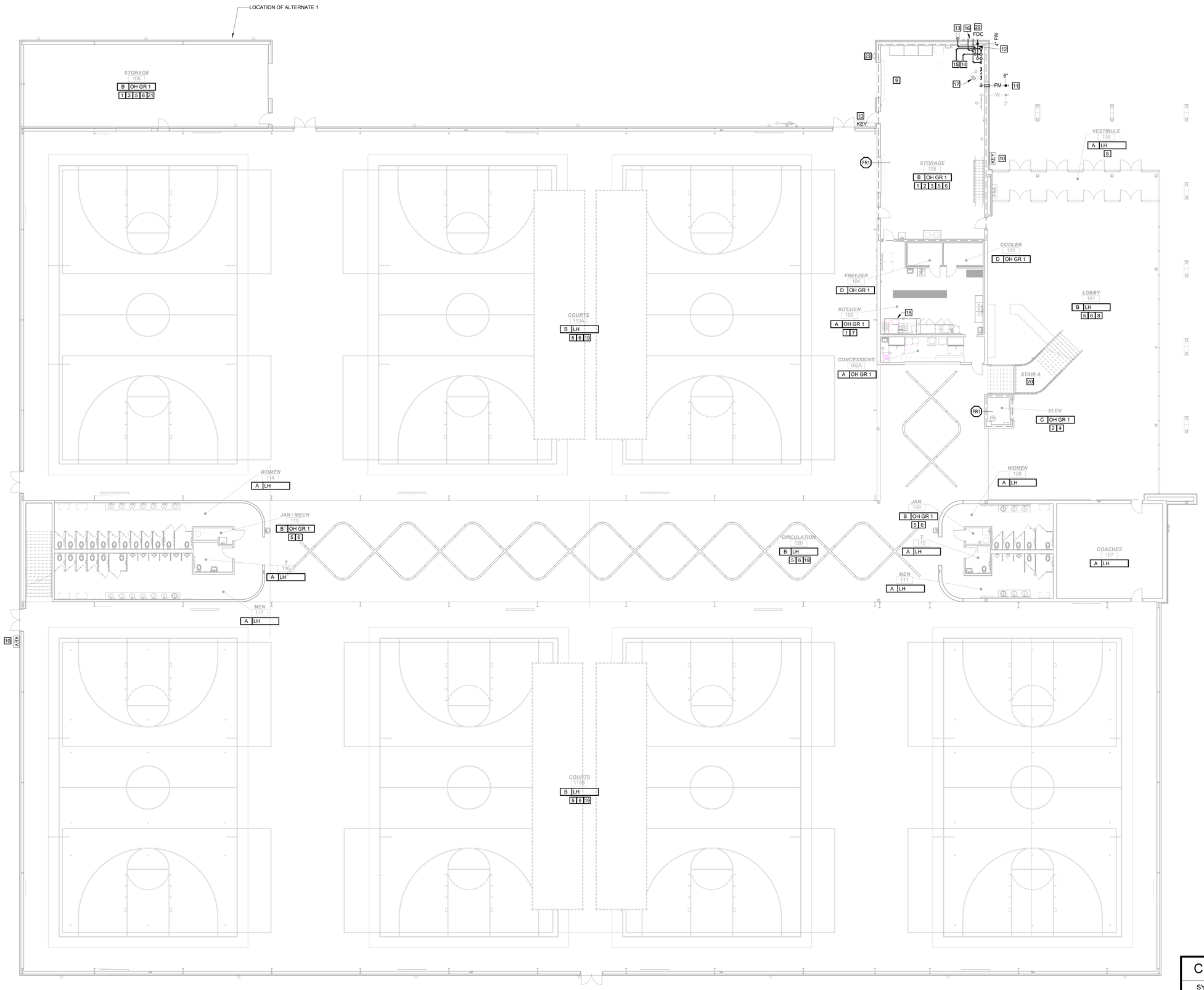

PLAN NORTH

FIRE PROTECTION FLOOR PLAN

SCALE: 3/32" = 1'-0"

MECHANICAL CONSTRUCTION TAG NOTES

#	(APPLIES TO THIS DRAWING ONLY)
1	DO NOT INSTALL PIPING OVER ELECTRICAL PANELS.
2	INSTALL HIGH TEMPERATURE SPRINKLERS IN THIS SPACE.
3	INSTALL SPRINKLER WIREGUARDS IN THIS SPACE. GUARDS SHOULD BE SUITABLE TO PREVENT ACCIDENTAL DAMAGE.
4	ONLY BRANCH LINES MAY BE INSTALLED IN THIS SPACE. DO NOT ROUTE MAINS THRU THIS SPACE.
5	PREPARE, PRIME, AND PAINT ALL EXPOSED PIPING, SUPPORTS, ETC. IN THIS SPACE. COLOR SHALL BE SELECTED BY ARCHITECT.
6	ROUTE PIPING AS HIGH AS POSSIBLE. COORDINATE WITH LIGHT FIXTURES, DUCTWORK, PIPING, STRUCTURE, ETC.
7	INSTALL ADDITIONAL SPRINKLERS DUE TO SPRAY OBSTRUCTIONS IN THIS SPACE.
8	REFER TO ARCHITECTURAL DRAWINGS FOR CEILINGS, BULKHEADS, SOFFITS, ETC. INSTALL ADDITIONAL SPRINKLERS AS REQUIRED FOR COMPLEX CEILINGS.
9	COORDINATE SPRINKLER LAYOUT WITH OVERHEAD DOOR. PROVIDE ADDITIONAL SPRINKLERS AS REQUIRED TO PROVIDE 100% COVERAGE WITH DOOR IN OPEN POSITION.
10	INSTALL FIRE DEPARTMENT KEY BOX AT 48" A.F.F. TO THE TOP OF THE BOX. COORDINATE FINAL BOX LOCATION WITH ARCHITECTURAL DRAWINGS. COORDINATE KEY BOX REQUIREMENTS WITH LOCAL FIRE DEPARTMENT CHIEF. KEY BOX SHALL HOLD KEY AND DOOR ACCESS CONTROL CARD (IF APPLICABLE).
11	6" FIRE MAIN FROM UTILITY MAIN. SEE CIVIL DRAWINGS OR SITE UTILITY DRAWING FOR CONTINUATION AND ADDITIONAL WORK.
12	4" FIRE WATER FROM FIRE DEPARTMENT CONNECTION.
13	SYSTEM DRAIN TO CONCRETE SPLASH BLOCK.
14	FIRE PROTECTION PIPING TO ZONE 1.
15	FIRE PROTECTION PIPING TO ZONE 2.
16	FORWARD FLOW TEST HOSE CONNECTIONS WITH SIGNAGE.
17	INSTALL HIGH TEMPERATURE SPRINKLERS WITHIN 7 FEET OF THE UNIT HEATER AND WITHIN 20 FEET IN FRONT OF THE UNIT HEATER.
18	KITCHEN HOOD WITH CHEMICAL SUPPRESSION SYSTEM. REFER TO HVAC DRAWINGS FOR DETAILS.
19	INSTALL SPRINKLER WIRE GUARDS IN THIS AREA. GUARDS SHALL BE SUITABLE TO PREVENT ACCIDENTAL DAMAGE.
20	PROVIDE SPRINKLERS BELOW STAIRS FOR COMPLETE COVERAGE.
21	WORK IN THIS AREA BY ALTERNATE BID. SEE ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND PROVIDE BIDS ACCORDINGLY.
22	FDC SIZE, TYPE AND FINAL PLACEMENT SHALL BE OMU STANDARD AND APPROVED BY FIRE MARSHALL PRIOR TO INSTALLATION. COORDINTE HEIGHT A.F.F. WITH HEIGHT OUTSIDE TO ENSURE PROPER HEIGHT A.F.G.
23	INSTALL ELECTRIC ALARM BELL ON EXTERIOR OF BUILDING. COORDINATE FINAL PLACEMENT WITH ARCHITECTURAL AND ELECTRICAL CONTRACTOR.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

AFD = AUTOMATIC FIRE DAMPER
F-R-R = FIRE-RESISTANT-RATED
F-R-W = FIRE-RATED-WALL
FS = FIRE STOP

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FIRE PROTECTION FLOOR PLAN

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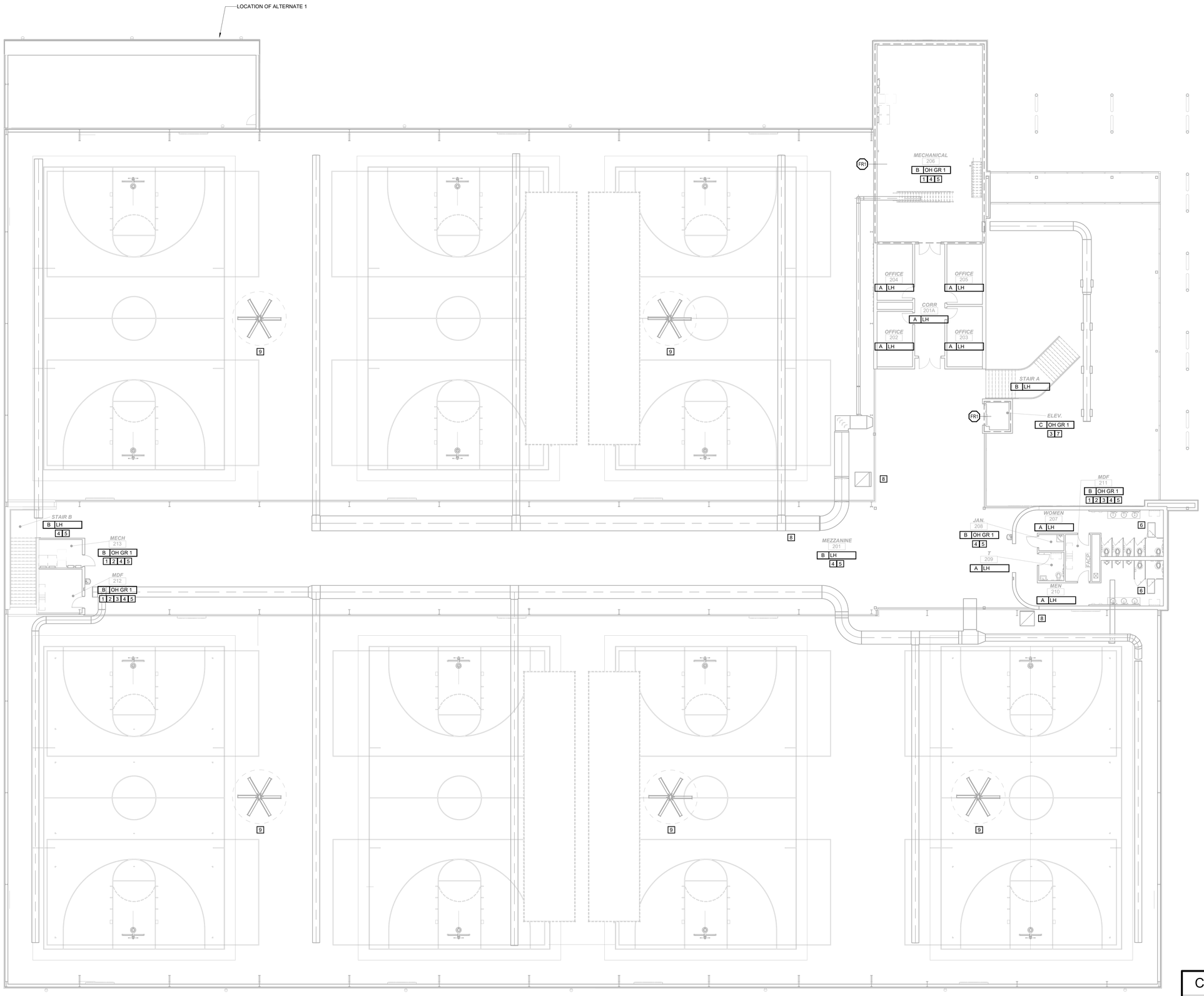

PLAN NORTH

FIRE PROTECTION MEZZANINE PLAN

SCALE: 3/32" = 1'-0"

MECHANICAL CONSTRUCTION TAG NOTES

#	(APPLIES TO THIS DRAWING ONLY)
1	DO NOT INSTALL PIPING OVER ELECTRICAL PANELS OR COMMUNICATION RACKS.
2	INSTALL HIGH TEMPERATURE SPRINKLERS IN THIS SPACE.
3	ONLY BRANCH LINES MAY BE INSTALLED IN THIS SPACE. DO NOT ROUTE MAINS THRU THIS SPACE.
4	PREPARE, PRIME, AND PAINT ALL EXPOSED PIPING, SUPPORTS, ETC. IN THIS SPACE. COLOR SHALL BE SELECTED BY ARCHITECT.
5	ROUTE PIPING AS HIGH AS POSSIBLE, COORDINATE WITH LIGHT FIXTURES, DUCTWORK, PIPING, STRUCTURE, ETC.
6	INSTALL HIGH TEMPERATURE SPRINKLERS WITHIN 7 FEET OF RADIANT CEILING HEATING PANELS.
7	SPRINKLER INSTALLED AT THE TOP OF THE ELEVATOR HOISTWAY, IF REQUIRED, SHALL BE OF HIGH-TEMPERATURE RATING.
8	PROVIDE SPRINKLERS UNDER DUCTWORK OR GROUPS OF DUCTWORK OVER 48" IN WIDTH. REFER TO HVAC DRAWINGS.
9	REFER TO HVAC DRAWINGS FOR SIZE AND LOCATION OF HIGH VOLUME LOW SPEED (HVLS) FAN LOCATION(S). HVLS FANS SHALL BE CENTERED BETWEEN FOUR (4) ADJACENT SPRINKLERS. VERTICAL CLEARANCE FROM THE HVLS FAN TO SPRINKLER DEFLECTOR SHALL BE A MINIMUM OF THREE (3) FEET PER NFPA.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

AFD = AUTOMATIC FIRE DAMPER
F-R-R = FIRE-RESISTANT-RATED
F-R-W = FIRE-RATED-WALL
FS = FIRE STOP

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SHEET

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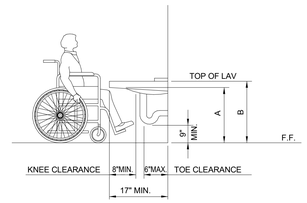
PLUMBING LEGEND

SYMBOL	DESCRIPTION
SS	SANITARY SEWER PIPING
GSS	GREASE SANITARY SEWER PIPING
G	GAS PIPING
	COLD WATER PIPING
	HOT WATER PIPING
	HOT WATER RECIRCULATION PIPING
	VENT PIPING
BFP	BACKFLOW PREVENTER
CO	CLEANOUT
CCO	COMBINATION CLEANOUT
CP	CIRCULATION PUMP
DSN	DOWNSPOUT NOZZLE
ET	THERMAL EXPANSION TANK
FD	FLOOR DRAIN
FS	FLOOR SINK
FRH	FREEZE PROOF ROOF HYDRANT
FWH	FREEZE PROOF WALL HYDRANT
GT	GREASE TRAP
HB	HOSE BIBB
IMB	ICE MAKER BOX
OR	OPEN RECEPTACLE
RD	ROOF DRAIN
TP	TRAP PRIMER
VTR	VENT THRU ROOF
WCO	WALL CLEANOUT
WH	WATER HEATER
	BALL VALVE
	GAS VALVE
	DOUBLE CHECK VALVE BACKFLOW PREVENTER
	NATURAL GAS REGULATOR
	GAS METER SET

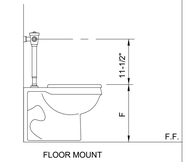
ACCESSIBLE FIXTURE DETAILS

NO SCALE



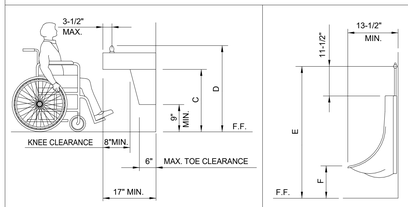
LAVATORY

NOTE:
INSTALL PLUMBING GUARDS ON PIPING BELOW ACCESSIBLE LAVATORY



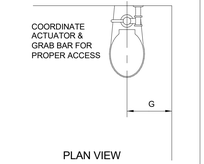
FLOOR MOUNT

ELEVATION



WATER COOLER

URINAL



PLAN VIEW

NOTE:
WATER CLOSET STYLE
MAY VARY

FLOOR MOUNT WATER CLOSET

AGE GROUP (YEARS OLD)	A (INCHES)	B (INCHES)	C (INCHES)	D (INCHES)	E (INCHES)	F (INCHES)	G (INCHES)	
							MIN.	MAX.
13 & UP	27 MIN.	34 MAX.	27 MIN.	36 MAX.	44 MAX.	17 MAX.	16	18

NOTE:
INSTALL PLUMBING FIXTURES IN ACCORDANCE WITH ADOPTED EDITION OF ICC/ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES.

SPECIALTY ITEMS

MARK	DESCRIPTION	REMARKS
BFP-1	BACKFLOW PREVENTER	WATTS SERIES LF007 MODEL LF007-NRS LEAD FREE 3" DOUBLE CHECK VALVE ASSSEMBLY WITH NON-RISING STEM GATE VALVES AND BRONZE STRAINER ASSEMBLY.
FD-1	FLOOR DRAIN	ZURN MODEL Z415B 3" OUTLET TYPE "B" (ROUND TOP) FLOOR DRAIN WITH 5" DIAMETER NICKEL BRONZE, VANDAL PROOF STRAINER.
FD-2	FLOOR DRAIN	ZURN MODEL Z415B 4" OUTLET TYPE "B" (ROUND TOP) FLOOR DRAIN WITH 6" DIAMETER NICKEL BRONZE, VANDAL PROOF STRAINER.
FS-1	FLOOR SINK	JAY R. SMITH MODEL 3410 SANI-CEPTOR ACID RESISTANT COATED FLOOR AND INDIRECT WASTE DRAIN. 8"x8"x6"DEEP CAST IRON FLANGED RECEPTOR, 6" SUMP DEPTH, A.R.C. 1/2 GRATE, VANDAL PROOF SCREWS, AND ALUMINUM SEDIMENT BUCKET. 4" OUTLET. SET WITH RIM 1" ABOVE FINISHED FLOOR. INSTALL GROUT UNDER RIM.
OR-1	OPEN RECEPTACLE	2" OPEN RECEPTACLE WITH HUB EXTENDED 1" ABOVE FINISHED FLOOR.
RD-1	ROOF DRAIN	ZURN MODEL Z100C FROET DRAIN, 14" DIAMETER BI-FUNCTIONAL ROOF DRAIN, 45 DEGREE 4" PRIMARY OUTLET, POWER COATED CAST IRON DEEP SUMP BODY, COMBINATION MEMBRANE FLASHING/GRAVEL GUARD, 4" OVERFLOW PIPE, CAST IRON DOME.
RD-2	ROOF DRAIN	ZURN MODEL Z100C FROET DRAIN, 14" DIAMETER BI-FUNCTIONAL ROOF DRAIN, 45 DEGREE 6" PRIMARY OUTLET, POWER COATED CAST IRON DEEP SUMP BODY, COMBINATION MEMBRANE FLASHING/GRAVEL GUARD, 6" OVERFLOW PIPE, CAST IRON DOME.
DSN-1	DOWNSPOUT NOZZLE	ZURN MODEL Z199 6" ROUND ALL NICKEL BRONZE BODY WITH REMOVABLE STAINLESS STEEL SCREEN.
DSN-2	DOWNSPOUT NOZZLE	ZURN MODEL Z199 8" ROUND ALL NICKEL BRONZE BODY WITH REMOVABLE STAINLESS STEEL SCREEN.
CO-1	CLEAN OUT	ZURN MODEL ZN1400 LEVEL-TROL ADJUSTABLE FLOOR CLEAN OUT, DURA-COATED CAST IRON BODY WITH GAS AND WATERTIGHT BRONZE TAPERED THREAD PLUG AND ROUND SCORIATED SECURE NICKEL BRONZE TOP WITH VANDAL-PROOF SCREWS.
WCO-1	WALL CLEAN OUT	ZURN MODEL Z1446 CLEAN OUT TEE, DURA-COATED CAST IRON BODY, GAS AND WATERTIGHT NICKEL BRONZE TAPERED THREAD PLUG AND ROUND, SMOOTH STAINLESS STEEL ACCESS COVER WITH VANDAL PROOF SCREWS.
CCO-1	COMBINATION CLEANOUT / TEST TEE	CAST IRON 4" CLEANOUT DOUBLE TEE SUITABLE FOR CLEANOUT / TESTING EITHER UPSTREAM OR DOWNSTREAM.WITH SCORIATED NICKEL BRONZE TOP.
YCO-1	YARD CLEAN OUT	ZURN MODEL Z1406 ADJUSTABLE CLEAN OUT WITH SPIGOT CONNECTION FOR CAULKING INTO HUB. DURA-COATED CAST IRON BODY WITH GAS AND WATERTIGHT BRONZE PLUG WITH POLISHED NICKEL BRONZE TOP.
GT-1	GREASE TRAP	OLDCASTLE MODEL ECG1000GTLX CONCRETE GREASE INTERCEPTOR. 1,000 GALLON CAPACITY WITH TRAFFIC RATED MANHOLE RINGS AND COVERS.
FWH-1	FREEZEPROOF WALL HYDRANT	WOODFORD MODEL 67 AUTOMATIC DRAINING WALL HYDRANT WITH LOOSE TEE KEY OPERATION AND CHROME FINISH.
FRH-1	FREEZEPROOF ROOF HYDRANT	WOODFORD MODEL SRH-MS COMMERCIAL ROOF HYDRANT SYSTEM WITH DOUBLE CHECK BACKFLOW PREVENTER, NO DRAIN, CAST IRON HYDRANT SUPPORT, 2 DEGREE CAST IRON SHIM, CAST IRON UNDER DECK FLANGE, MOUNTING BOLTS, NUTS AND WASHERS.
HB-1	HOSE BIBB	WOODFORD MODEL 24 ANTI-SIPHON WALL FAUCET WITH LOOSE TEE KEY AND POLISHED CHROME FINISH. INSTALL HOSE BIBB 18" ABOVE FINISHED FLOOR.
CP-1	DOMESTIC HOT WATER RECIRCULATING PUMP	BELL AND GOSSETT MODEL NBF-36 FOR OPEN POTABLE WATER SYSTEM, LEAD FREE, ALL BRONZE CONSTRUCTION, 7 GPM @ 20FT HD, 115 VOLTS, SINGLE PHASE.
ET-1A	EXPANSION TANK	AMTROL MODEL ST-5 THERMAL EXPANSION TANK. 2.0 GALLON TANK VOLUME, .9 GALLON ACCEPTANCE VOLUME.
ET-1B	EXPANSION TANK	AMTROL MODEL ST-5 THERMAL EXPANSION TANK. 2.0 GALLON TANK VOLUME, .9 GALLON ACCEPTANCE VOLUME.
ET-2	EXPANSION TANK	AMTROL MODEL ST-5 THERMAL EXPANSION TANK. 2.0 GALLON TANK VOLUME, .9 GALLON ACCEPTANCE VOLUME.
ET-3	EXPANSION TANK	AMTROL MODEL ST-5 THERMAL EXPANSION TANK. 2.0 GALLON TANK VOLUME, .9 GALLON ACCEPTANCE VOLUME.
TP-1	TRAP PRIMER	PRECISION PLUMBING PRODUCTS MODEL PR-500 PRIME-RITE TRAP PRIMER WITH DU-4 COPPER (DISTRIBUTION UNIT).
TP-2	TRAP PRIMER	PRECISION PLUMBING PRODUCTS MODEL PRO1-500 PRIME-RITE TRAP PRIMER WITH DU-4 COPPER (DISTRIBUTION UNIT). PROVIDE A CHECK VALVE FROM THE HOT WATER SOURCE TO THE MIXING VALVE WHEN INSTALLING ON A MOTION ACTIVATED FAUCET.
TP-3	TRAP PRIMER	PRECISION PLUMBING PRODUCTS MODEL PTS-4 PRIME-TIME TRAP PRIMER WITH SURFACE MOUNTED CABINET AND DU-4 COPPER (DISTRIBUTION UNIT).
SP-1	SUBMERSIBLE PUMP	ZOELLER "MIGHTY-MATE" MODEL 57 AUTOMATIC FLOAT OPERATED ALL CAST IRON 115V/1PH, 0.3HP, 35GPM @ 10 TDH. SUPPLY WITH OILSMART MODEL SOSSA-50 ALARM SYSTEM AS SPECIFIED ON DETAIL.
SV-1	SOLENOID VALVE	ASCO 8030 SERIES, BRASS BODY, 3/4" LOW PRESSURE SOLENOID VALVE IN "NORMALLY OPEN" OPERATING POSITION, 120 VAC, FOR NATURAL GAS SERVICE.

GENERAL PLUMBING NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE STATE BUILDING CODE, STATE PLUMBING CODE, NFPA 54 NATIONAL FUEL GAS CODE, INTERNATIONAL MECHANICAL CODE, AND OTHER LOCAL/STATE/ NATIONAL CODES OR STANDARDS THAT APPLY.
2. ACCESSIBLE PLUMBING FIXTURES SHALL BE INSTALLED PER THE STATE BUILDING CODE IN ACCORDANCE WITH THE LATEST EDITION OF ICC/ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES.
3. ALL WETTED PLUMBING ITEMS SHALL COMPLY WITH NSF 372 DRINKING WATER SYSTEM COMPONENTS - LEAD CONTENT. ALL SUPPLIERS MUST ASSURE COMPLIANCE REGARDLESS OF PRODUCTS SPECIFIED WITHIN THE CONSTRUCTION DOCUMENTS.
4. THE CONTRACTOR SHALL ACQUIRE PLUMBING PERMIT(s), COORDINATE ALL INSPECTIONS, AND PAY ALL ASSOCIATED FEES (INCLUDING TAP FEES).
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL THE CONTRACT DOCUMENTS PRIOR TO BIDDING. ANY DISCREPANCIES OR QUESTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER NINE (9) DAYS PRIOR TO THE BID DATE.
6. THESE PLANS ARE SCHEMATIC IN NATURE AND INDICATE THE APPROXIMATE AND GENERAL LOCATION OF PLUMBING, PIPING, AND/OR EQUIPMENT. COORDINATE INSTALLATION OF WORK WITH OTHER DRAWINGS AND TRADES. PRECISELY LOCATE ALL PLUMBING FIXTURE LAYOUTS AND HEIGHTS PER ARCHITECTURAL DRAWINGS IN LIEU OF PLUMBING DRAWINGS. DO NOT SCALE FROM THE PLUMBING DRAWINGS.
7. COORDINATE NEW CONNECTIONS TO UTILITIES WITH THE APPROPRIATE UTILITY COMPANY(S). INSTALL WORK PER UTILITY COMPANY REQUIREMENTS AND OBTAIN NECESSARY UTILITY COMPANY APPROVALS.
8. VERIFY ALL INVERT ELEVATIONS AND DIMENSIONS BEFORE FABRICATION AND/OR INSTALLATION. DISCOVER ALL POINT OF CONNECTIONS AND ESTABLISH ELEVATIONS AND PITCH PRIOR TO BEGINNING ANY INSTALLATION.
9. OUTDOOR CLEANOUTS SHALL TERMINATE FLUSH WITH GRADE AND BE EMBEDDED IN CONCRETE FINISHED 12"W x 12"L x 6"TK.
10. COORDINATE SANITARY SEWER PIPING WITH STRUCTURAL MEMBERS AS REQUIRED. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR RESTRICTIONS.
11. ILLUSTRATED HORIZONTAL SANITARY SEWER DRAIN LINES SHALL BE UNDERSTOOD TO BE INSTALLED BENEATH FLOOR. HORIZONTAL VENT PIPING AND WATER PIPING SHALL BE INSTALLED ABOVE CEILINGS, UNLESS NOTED OTHERWISE.
12. COORDINATE PLUMBING ROUTING IN CEILING SPACES TO AVOID CONFLICTS WITH FIRE PROTECTION, HVAC, SPECIAL SYSTEMS, LIGHTING, NEC CLEARANCES, ETC. DO NOT INSTALL PIPING DIRECTLY OVER ELECTRICAL EQUIPMENT OR PANELS.
13. CONCEAL ALL PLUMBING, PIPING, ETC. IN CEILING AND/OR WALL SPACES (UNLESS NOTED OTHERWISE). PROVIDE ALL NECESSARY ACCESS DOORS IN INACCESSIBLE CEILINGS OR WALLS TO ALLOW ACCESS FOR VALVES, TRAP PRIMERS, ETC. INSTALL SHIELD PLATES (NAIL/SCREW GUARDS) TO PROTECT PIPING INSTALLED WITHIN WOOD FRAMING.
14. REMOVE AND REPLACE ANY DAMAGED CEILING TILE OR GRID DUE TO INSTALLATION WORK.
15. SLEEVE ALL PLUMBING, PIPING, VENTS, ETC. THROUGH NEW ROOF, FLOOR, AND/OR WALLS. PIPE SLEEVES SHALL BE SCHEDULE 10 AND GALVANIZED STEEL. SLEEVES ARE NOT REQUIRED FOR CORE DRILLED HOLES.
16. FLASH AND SEAL ALL ROOF, FLOOR, AND WALL PENETRATIONS.
17. FIRE STOP ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES. FIRE STOPPING METHOD AND MATERIALS SHALL BE UL LISTED. FIRE COLLARS WILL BE REQUIRED IF PIPING IS COMBUSTIBLE. CHANGING PIPE MATERIAL TO METAL AT PENETRATION IS ACCEPTABLE.
18. PATCH ALL WALLS, FLOORS, CEILINGS, PAVEMENTS, GRADES, ETC. THAT ARE ALTERED BECAUSE OF WORK REQUIRED.
19. PLACE MILDEW RESISTANT SILICONE SEALANT AROUND ALL PLUMBING FIXTURES THAT CONTACT CASEWORK, WALLS, FLOORS, OR ANY OTHER HARD SURFACES. COLOR SHALL MATCH ADJACENT SURFACE.
20. COVER ALL OPENINGS ON WATER CONVEYANCE ITEMS (PIPING, COMPONENTS, AND/OR EQUIPMENT), WHETHER STORED OR INSTALLED, TO PREVENT ACCUMULATION OF CONSTRUCTION DEBRIS.
21. INSTALL ARRESTORS AT ALL FIXTURE SUPPLIES. ARRESTORS SHALL BE FABRICATED DURING ROUGH-IN WITH TEE, LINE SIZE PIPE (MINIMUM 6" LONG), AND PIPE CAP. REFER TO FIXTURE SUPPLY DETAIL.
22. INSTALL MANUFACTURED HAMMER ARRESTORS ON ALL PIPES SUPPLYING QUICK ACTING VALVES.
23. SECURE PLUMBING ROUGH-IN TO BUILDING STRUCTURE TO PROHIBIT MOVEMENT OF FLUSH VALVE ACTUATORS, HOSE BIBBS, WALL HYDRANTS, FIXTURE SUPPLY STOP VALVES, ETC.
24. INSTALL HOSE BIBBS 18" ABOVE FINISHED FLOOR, UNLESS NOTED OTHERWISE. INSTALL FREEZE PROOF WALL HYDRANTS 18" ABOVE FINISHED GRADE, UNLESS NOTED OTHERWISE.
25. INSTALL DIELECTRIC CONNECTIONS AT ALL DISSIMILAR MATERIAL PIPING JOINTS AND AT SLAB FOR UNDERGROUND PIPE ENTRANCES.
26. AT A MINIMUM, INSTALL TRAP PRIMERS FOR ALL FLOOR DRAINS AND OPEN RECEPTACLES LOCATED IN ROOMS THAT HAVE COMBUSTION EQUIPMENT. REFER TO DRAWINGS FOR OTHER TRAP PRIMER LOCATIONS.
27. INSTALL A PRESSURE RELIEF VALVE ON EACH WATER HEATING UNIT AND/OR TANK. ROUTE DISCHARGE LINE PER PLUMBING CODE TO AN ACCEPTABLE DRAIN OR OUTDOORS AS LAST OPTION.
28. INSTALL A DRAIN LINE FOR ALL EQUIPMENT (WATER HEATERS, TANKS, ETC.) REQUIRING A DRAIN. THE DRAIN SIZE (AT A MINIMUM) SHALL BE EQUAL TO THE UNIT'S CONNECTION SIZE BUT IN NO CASE SHALL BE LESS THAN 3/4" DIAMETER.
29. INSTALL SUPPLY CHECK VALVES ON COLD AND HOT WATER CONNECTIONS TO THE FOLLOWING FIXTURE TYPES: MOP SINKS, SERVICE SINKS, AND ANY OTHER FIXTURE WHERE CROSSOVER IS POSSIBLE. THESE MAY BE OMITTED IF INTEGRAL CHECK VALVES ARE FURNISHED WITH THE FIXTURE/FAUCET(S).
30. DOMESTIC WATER ISOLATION VALVES SHALL BE ONE PIECE BRONZE BALL TYPE AND SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS. PLASTIC BODY VALVES ARE NOT ACCEPTABLE.
31. MINIMUM PIPING MATERIALS SHALL BE AS LISTED BELOW. REFER TO WRITTEN SPECIFICATIONS AND SITE UTILITY DRAWINGS FOR ADDITIONAL REQUIREMENTS.
    WATER OUTDOOR: SCH 40 PVC PIPE WITH PRESSURE FITTINGS. REFER TO SITE UTILITY DRAWINGS.
    WATER INDOOR: TYPE L RIGID COPPER PIPE WITH SOLDERED FITTINGS OR TYPE L RIGID COPPER WITH PRESS JOINT FITTINGS (REFER TO DETAILS FOR ADDITIONAL REQUIREMENTS).
    WATER INDOOR, UNDER SLAB: PEX TUBING OR ANNEALED COPPER TUBING (NO JOINTS UNDER SLAB).
    SEWER OUTDOOR: SCH 40 PVC PIPE WITH PRESSURE FITTINGS. REFER TO SITE UTILITY DRAWINGS.
    SEWER INDOOR: SCH 40 PVC PIPE WITH DWV FITTINGS OR COPPER DWV PIPING.
    STORM WATER OUTDOOR: SCH 40 PVC PIPE WITH PRESSURE FITTINGS. REFER TO SITE UTILITY DRAWINGS.
    STORM WATER INDOOR: SCH 40 PVC PIPE WITH PRESSURE FITTINGS.
    FUEL GAS OUTDOOR, BURIED: SDR 11 POLYETHYLENE TUBING.
    FUEL GAS OUTDOOR, ABOVE GRADE: FOR PIPING DIAMETERS 2" AND SMALLER AND LOW PRESSURE: SCH 40 CARBON STEEL PIPE WITH SCREWED FITTINGS.
    FUEL GAS OUTDOOR, ABOVE GRADE: FOR PIPING DIAMETERS 2" AND SMALLER AND PRESSURE ABOVE 1 PSI: SCH 40 CARBON STEEL PIPE WITH SCREWED FITTINGS AND SEAL WELDED.
    FUEL GAS OUTDOOR, ABOVE GRADE: FOR PIPING DIAMETERS 2 1/2" AND LARGER: SCH 40 CARBON STEEL PIPE WITH WELDED FITTINGS.
    FUEL GAS INDOOR: SCH 40 CARBON STEEL PIPE (FITTINGS PER NFPA).
    FUEL GAS INDOOR AND CONCEALED (UNDER SLAB, WITHIN NON-VENTED WALL, ETC.): CSST.
32. INSULATE COLD WATER PIPING; HOT WATER (INCLUDING RECIRCULATION) PIPING; STORM WATER PIPING; AND ROOF DRAIN BODIES PER SCHEDULE.
33. SEISMICALLY SUPPORT ALL EQUIPMENT, PIPE, PLUMBING, ETC. PER THE STATE BUILDING CODE AND SEISMIC DESIGN CATEGORY AS DEFINED IN SPECIFICATIONS.
34. INSTALL SUPPORT CONNECTIONS PER ROOF FRAMING MANUFACTURER'S REQUIREMENTS WHEN SUSPENDING SYSTEMS FROM PRE-ENGINEERED LIGHT GAUGE STEEL TRUSSES OR PRE-ENGINEERED METAL BUILDINGS.
35. PLACE REINFORCED CONCRETE PADS FOR ALL FLOOR AND/OR GRADE MOUNTED EQUIPMENT. CONCRETE SHALL HAVE A DEVELOPED STRENGTH OF 4,000 PSI AT 28 DAYS. CHAMFER ALL EXPOSED EDGES AT 1".
    INDOOR PAD INSTALLATIONS:
    A. PAD SHALL BE 4" THICK (MINIMUM) BUT SUITABLE HEIGHT FOR SYSTEM OPERATION AND PROPER DRAINAGE.
    B. STEEL REINFORCEMENT SHALL BE 6" WWF, DOWELED TO FLOOR TO PREVENT LATERAL MOVEMENT.
    C. AT A MINIMUM, PAD DIMENSIONS SHALL GENERALLY EXTEND 4" PAST THE OUTER MOST EDGE OF THE UNIT.
36. ALL PLUMBING SUPPLIES TO FIXED-IN-PLACE EQUIPMENT SHALL BE CHROME PLATED TUBING WHERE EXPOSED OR COPPER TUBING WHERE CONCEALED. USE OF FLEXIBLE HOSE CONNECTIONS FOR FIXED EQUIPMENT AND FIXTURES IS NOT ACCEPTABLE.

"NO LEAD" WARNING

ALL WETTED PLUMBING ITEMS FURNISHED FOR THIS PROJECT MUST COMPLY WITH FEDERAL LAW AND NSF 372 STANDARD ENTITLED: DRINKING WATER SYSTEM COMPONENTS - LEAD CONTENT. THE CONTRACTOR AND ALL SUPPLIERS MUST COMPLY WITH THIS FEDERAL LAW REGARDLESS OF MANUFACTURERS/PRODUCTS SPECIFIED WITHIN THE CONSTRUCTION DOCUMENTS.

SHERMAN CARTER BARNHART
ARCHITECTS

STATE OF KENTUCKY
Logan Overturf
No. 32455
LICENSED PROFESSIONAL ENGINEER
2024-05-17

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OWENSBORO, KY 42301

PLUMBING LEAD SHEET

JOB NO.	22630
DATE	MAY 20, 2024
DRAWN	RY
CHECKED	LO

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SHERMAN CARTER BARNHART
ARCHITECTS, PLLC

REVISIONS

No.	Description	Date

SHEET
P0.1

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	PIPE SIZE TRAP	WASTE	C.W.	H.W.
P-1	WATER CLOSET	3"or4"	4"	1"	---

REMARKS: WATER CLOSET, FLUSH VALVE, ADA ACCESSIBLE.

KOHLER MODEL "HIGHCLIFF ULTRA" K-96057 VITREOUS CHINA, ELONGATED RIM, SIPHON ACTION, 1-1/2" TOP SPUD, LOW CONSUMPTION, FLOOR MOUNTED, RIM HEIGHT 17" MAXIMUM ABOVE FINISHED FLOOR.

SLOAN MODEL 111 ESS-1.6-OR-HW SENSOR-OPERATED FLUSH VALVE. HARDWIRED WITH ELECTRICAL OVERRIDE, 1.6 GPF, DIAPGRAGM TYPE, POLISHED CHROME FINISH WITH HIGH BACK PRESSURE VACUUM BREAKER.

SOLID PLASTIC, WHITE, ELONGATED SEAT WITH OPEN FRONT, EXTENDED BACK AND CHECK HINGE; LESS COVER.

MARK	FIXTURE	PIPE SIZE TRAP	WASTE	C.W.	H.W.
P-2	WATER CLOSET	3"or4"	4"	1"	---

REMARKS: WATER CLOSET, FLUSH VALVE, REGULAR.

KOHLER MODEL "WELLCOMME ULTRA" K-96053 VITREOUS CHINA, ELONGATED RIM, SIPHON ACTION, 1-1/2" TOP SPUD, LOW CONSUMPTION, FLOOR MOUNTED, RIM HEIGHT 15" MAXIMUM ABOVE FINISHED FLOOR.

SLOAN MODEL 111 ESS-1.6-OR-HW SENSOR-OPERATED FLUSH VALVE. HARDWIRED WITH ELECTRICAL OVERRIDE, 1.6 GPF, DIAPGRAGM TYPE, POLISHED CHROME FINISH WITH HIGH BACK PRESSURE VACUUM BREAKER.

SOLID PLASTIC, WHITE, ELONGATED SEAT WITH OPEN FRONT, EXTENDED BACK AND CHECK HINGE; LESS COVER.

MARK	FIXTURE	PIPE SIZE TRAP	WASTE	C.W.	H.W.
P-3	URINAL	2"	2"	3/4"	---

REMARKS: URINAL, WALL HUNG, ADA ACCESSIBLE.

KOHLER MODEL "BARDON" K-4991-ET VITREOUS CHINA, HIGH EFFICIENCY WASHOUT FLUSHING ACTION WITH 3/4" TOP SPUD. MOUNT LIP A MAXIMUM HEIGHT OF 17" ABOVE FINISHED FLOOR.

SLOAN MODEL 186 ESS-1.0-HW SENSOR-OPERATED FLUSH VALVE, HARDWIRED, 1.0 GPF, DIAPHRAGM TYPE, POLISHED CHROME FINISH WITH HIGH BACK PRESSURE VACUUM BREAKER.

ZURN MODEL Z1222 FLOOR MOUNTED, CONCEALED URINAL SUPPORT.

MARK	FIXTURE	PIPE SIZE TRAP	WASTE	C.W.	H.W.
P-4	URINAL	2"	2"	3/4"	---

REMARKS: URINAL, WALL HUNG, REGULAR.

KOHLER MODEL "BARDON" K-4991-ET VITREOUS CHINA, HIGH EFFICIENCY WASHOUT FLUSHING ACTION WITH 3/4" TOP SPUD. MOUNT LIP A MAXIMUM HEIGHT OF 24" ABOVE FINISHED FLOOR.

SLOAN MODEL 186 ESS-1.0-HW SENSOR-OPERATED FLUSH VALVE, HARDWIRED, 1.0 GPF, DIAPHRAGM TYPE, POLISHED CHROME FINISH WITH HIGH BACK PRESSURE VACUUM BREAKER.

ZURN MODEL Z1222 FLOOR MOUNTED, CONCEALED URINAL SUPPORT.

MARK	FIXTURE	PIPE SIZE TRAP	WASTE	C.W.	H.W.
P-5	SINK	1-1/2"	2"	1/2"	1/2"

REMARKS: LAVATORY, UNDERMOUNT, ADA ACCESSIBLE.

KOHLER MODEL "CAXTON" K-2210-N VITREOUS CHINA, 14"x17" UNDERMOUNT. MOUNT UNDER COUNTER TOP AT 34" ABOVE FINISHED FLOOR.

SLOAN MODEL SF-2300-PLG-BDM-CP-0.5GPM-MLM-IR-FCT DECK MOUNT FAUCET, HARDWIRED-POWERED, INFRARED SENSOR-ACTIVATED, BELOW DESK MANUAL MIXING VALVE, POLISHED CHROME FINISH WITH 0.5 GPM VANDAL-RESISTANT AERATOR.

POLISHED CHROME PLATED GRID STRAINER.

3/8" CHROME PLATED SUPPLIES WITH STOP.

CHROME PLATED KENTUCKY CODE "P" TRAP.

INSTALL WASTE AND SUPPLY PIPING COVERS (TRUEBRO LAV GUARD 1 OR EQUAL) IN COMPLIANCE WITH ICC/ANSI A117.1 LATEST EDITION IF KICK PANEL IS NOT PROVIDED.

MARK	FIXTURE	PIPE SIZE TRAP	WASTE	C.W.	H.W.
P-6	SINK	1-1/2"	2"	1/2"	1/2"

REMARKS: LAVATORY, UNDERMOUNT, REGULAR.

KOHLER MODEL "CAXTON" K-2210-N VITREOUS CHINA, 14"x17" UNDERMOUNT. MOUNT UNDER COUNTER TOP AT 31" ABOVE FINISHED FLOOR.

SLOAN MODEL SF-2300-PLG-BDM-CP-0.5GPM-MLM-IR-FCT DECK MOUNT FAUCET, HARDWIRED-POWERED, INFRARED SENSOR-ACTIVATED, BELOW DESK MANUAL MIXING VALVE, POLISHED CHROME FINISH WITH 0.5 GPM VANDAL-RESISTANT AERATOR.

POLISHED CHROME PLATED GRID STRAINER.

3/8" CHROME PLATED SUPPLIES WITH STOP.

CHROME PLATED KENTUCKY CODE "P" TRAP.

MARK	FIXTURE	PIPE SIZE TRAP	WASTE	C.W.	H.W.
P-7	LAVATORY	1-1/2"	2"	1/2"	1/2"

REMARKS: LAVATORY, WALL HUNG, ADA ACCESSIBLE.

KOHLER MODEL "KINGSTON" K-2005, 21-1/4"x18-1/8", VITREOUS CHINA, 4" FAUCET HOLE SPACING, INCLUDES WALL HANGER. MOUNT RIM AT 34" ABOVE FINISHED FLOOR.

SLOAN MODEL SF-2300-PLG-BDM-CP-0.5GPM-MLM-IR-FCT DECK MOUNT FAUCET, HARDWIRED-POWERED, INFRARED SENSOR-ACTIVATED, BELOW DESK MANUAL MIXING VALVE, POLISHED CHROME FINISH WITH 0.5 GPM VANDAL-RESISTANT AERATOR.

POLISHED CHROME PLATED GRID STRAINER.

3/8" CHROME PLATED SUPPLIES WITH STOP.
CHROME PLATED KENTUCKY CODE "P" TRAP.

INSTALL WASTE AND SUPPLY PIPING COVERS (TRUEBRO LAV GUARD 1 OR EQUAL) IN COMPLIANCE WITH ICC/ANSI A117.1 LATEST EDITION IF KICK PANEL IS NOT PROVIDED.

MARK	FIXTURE	PIPE SIZE TRAP	WASTE	C.W.	H.W.
P-8	MOP SINK	3"	3"	1/2"	1/2"

REMARKS: MOLDED HIGH DENSITY COMPOSITE MOP SERVICE BASIN.

ZURN MODEL Z1996-24 HIGH DENSITY COMPOSITE MOLDED MOP BASIN, 24"x24"x10" WITH STAINLESS STEEL DOME STRAINER/LINT BASKET AND A PVC DRAIN WITH ADJUSTABLE CAULKING NUT AND GASKET.

OPTIONS TO INCLUDE:
- STAINLESS STEEL BUMPER GUARDS
- HOSE AND HOSE BRACKET
- MOP HANGER
- STAINLESS STEEL DRAIN
- WALL GUARD 20 GAUGE TYPE 304 STAINLESS STEEL (2 PANELS FOR 24"x24" BASIN).

DELTA MODEL 28T9 WALL MOUNT SERVICE SINK FAUCET, CHROME PLATED WITH VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, PAIL HOOK, FOUR-ARM HOT AND COLD HANDLES AND HOSE THREAD SPOUT.

MARK	FIXTURE	PIPE SIZE TRAP	WASTE	C.W.	H.W.
P-9	EWC	1-1/2"	2"	1/2"	---

REMARKS: ELECTRIC WATER COOLER - ADA HEIGHT ADULT WITH BOTTLE FILLING STATION (BFS).

ELKAY MODEL LZS8WSVRSK BARRIER-FREE, VANDAL RESISTANT BUBBLER, WALL MOUNTED WITH CANE APRON, WATER FILTER, STAINLESS STEEL FINISH AND BOTTLE FILLING STATION. BOTTLE FILLING STATION SHALL INCLUDE AN ELECTRONIC SENSOR FOR NO-TOUCH ACTIVATION WITH AUTOMATIC 20-SECOND SHUT-OFF TIMER AND BOTTLE COUNTER.

PROVIDE ELECTRIC WATER COOLER WALL SUPPORT SYSTEM WITH TOP AND BOTTOM PLATES.

MOUNT SPOUT AT A MAXIMUM HEIGHT OF 36" ABOVE FINISHED FLOOR (ADA BFS).

MARK	FIXTURE	PIPE SIZE TRAP	WASTE	C.W.	H.W.
P-10	SINK	1-1/2"	2"	1/2"	1/2"

REMARKS: SINK, SCULLERY, SINGLE COMPARTMENT.

JUST MODEL NSFB124-J, 27"x27-1/2"x14" OVERALL, 24"x24"x14" DEEP BOWL, NO DRAIN BOARDS, 14 GAUGE STAINLESS STEEL SINK, 8" BACK SPLASH, 16 GAUGE TUBULAR LEGS WITH ADJUSTABLE FEET.

T & S BRASS MODEL B-0133-ADF12-B, 8" WALL MOUNT MIXING FAUCET, 12" SWING SPOUT WITH 2.2 GPM VANDAL RESISTANT AERATOR, 44" FLEXIBLE STAINLESS STEEL HOSE WITH 1.15 GPM SPRAY VALVE, COMPRESSION CARTRIDGES WITH SPRING CHECKS, LEVER HANDLES, ADJUSTABLE WALL MOUNTING BRACKET, SPRAY VALVE HOLDER, OVERHEAD SPRING.

JUST MODEL J-35-BLA-2 VALVE/DRAIN BODY WITH CAST BRASS REMOVABLE FLAT STRAINER AND TWIST HANDLE. CHROME PLATED TAILPIECE WITH 2" OUTLET, 4" LONG.

3/8" CHROME PLATED SUPPLIES WITH STOP.

CHROME PLATED KENTUCKY CODE "P" TRAP.

MARK	FIXTURE	PIPE SIZE TRAP	WASTE	C.W.	H.W.
P-11	SINK	1-1/2"	2"	1/2"	1/2"

REMARKS: SINK, SCULLERY, TRIPLE COMPARTMENT.

JUST MODEL NSFB345-24RL-J, 93"x27-1/2"x14" OVERALL, 15"x24"x14" DEEP BOWLS, LEFT & RIGHT DRAIN BOARDS, 14 GAUGE STAINLESS STEEL SINK, 8" BACK SPLASH, 16 GAUGE TUBULAR LEGS WITH ADJUSTABLE FEET.

T & S BRASS MODEL B-0133-ADF12-B, 8" WALL MOUNT MIXING FAUCET, 12" SWING SPOUT WITH 2.2 GPM VANDAL RESISTANT AERATOR, 44" FLEXIBLE STAINLESS STEEL HOSE WITH 1.15 GPM SPRAY VALVE, COMPRESSION CARTRIDGES WITH SPRING CHECKS, LEVER HANDLES, ADJUSTABLE WALL MOUNTING BRACKET, SPRAY VALVE HOLDER, OVERHEAD SPRING.

T & S BRASS MODEL B-0231, 8" WALL MOUNT MIXING FAUCET, 12" SWING SPOUT WITH 2.2 GPM VANDAL-RESISTANT AERATOR, COMPRESSION CARTRIDGES WITH SPRING CHECKS, LEVER HANDLES.

JUST MODEL J-35-BLA-2 VALVE/DRAIN BODY WITH CAST BRASS REMOVABLE FLAT STRAINER AND TWIST HANDLE. CHROME PLATED TAILPIECE WITH 2" OUTLET, 4" LONG.

3/8" CHROME PLATED SUPPLIES WITH STOP.

CHROME PLATED KENTUCKY CODE "P" TRAP.

APPROVED EQUAL MANUFACTURER'S:

WATER CLOSET, URINAL, LAVATORIES: AMERICAN STANDARD, KOHLER, SLOAN, ZURN OR APPROVED EQUAL.

FLUSH VALVES: AMERICAN STANDARD (DIAPHRAGM TYPE), SLOAN, ZURN OR APPROVED EQUAL.

FAUCETS: AMERICAN STANDARD, DELTA, JUST, KOHLER, SLOAN, ZURN OR APPROVED EQUAL.

ELECTRIC WATER COOLERS/BOTTLE FILLING STATION: ELKAY, HALSEY TAYLOR, HAWS, OASIS, OR APPROVED EQUAL.

MOP SINKS: FIAT, PROFLO, ZURN OR APPROVED EQUAL.

HARDWIRED PLUMBING DEVICES NOTE:
PLUMBING CONTRACTOR SHALL PROVIDE ADEQUATE QUANTITY OF EL-451 (OR EQUAL) TRANSFORMER(S) TO CONVERT 120V TO 24V FOR ALL POWERED PLUMBING DEVICES. MULTIPLE DEVICES CAN BE POWERED BY ONE TRANSFORMER. COORDINATE PLACEMENT AND EXACT QUANTITY OF TRANSFORMER(S) AND WIRING WITH ELECTRICAL CONTRACTOR.

PLUMBING INSULATION SCHEDULE

SERVICE	SIZE	INSULATION	THICKNESS (INCHES)	DENSITY (LB/CU FT)	JACKET	REMARKS
DOMESTIC HOT WATER AND HOT WATER RECIRCULATION	1.25" AND SMALLER	FLEXIBLE ELASTOMERIC	1.0	---	---	4
		MINERAL FIBER, PREFORMED PIPE, TYPE 1	1.0	1.5	ASJ	
	1.5" AND LARGER	FLEXIBLE ELASTOMERIC	1.5	---	---	4
		MINERAL FIBER, PREFORMED PIPE, TYPE 1	1.5	1.5	ASJ	
DOMESTIC COLD WATER	1.25" AND SMALLER	FLEXIBLE ELASTOMERIC	0.50	---	---	4
		MINERAL FIBER, PREFORMED PIPE, TYPE 1	0.75	1.5	ASJ / PVC	5
	1.5" AND LARGER	FLEXIBLE ELASTOMERIC	1.0	---	---	4
		MINERAL FIBER, PREFORMED PIPE, TYPE 1	1.0	1.5	ASJ / PVC	5
DOMESTIC COLD WATER	ALL SIZES (EXPOSED IN OPEN AREAS)	MINERAL FIBER, PREFORMED PIPE, TYPE 1 WITH PAINTABLE WHITE ASJ JACKET	0.75	1.5	ASJ / PVC	
SANITARY DRAIN	ALL	MINERAL FIBER, PREFORMED PIPE, TYPE 1	1.0	1.5	ASJ	
STORM WATER PIPE AND DRAIN BODIES	ALL	MINERAL FIBER, PREFORMED PIPE, TYPE 1	1.5	1.5	ASJ	

REMARKS:

1. REFER TO SPECIFICATIONS SECTION 230700 MECHANICAL INSULATION FOR SUBMITTAL REQUIREMENTS, PRODUCT INFORMATION, ACCEPTABLE MANUFACTURERS, AND INSTALLATION.
2. ACCEPTABLE PREFORMED PIPE AND TUBULAR INSULATION MATERIALS AND THICKNESSES ARE IDENTIFIED FOR EACH PIPING SYSTEM AND PIPE SIZE RANGE. IF MORE THAN ONE MATERIAL IS LISTED FOR A PIPING SYSTEM, SELECTION FROM MATERIALS LISTED IS CONTRACTOR'S OPTION
3. INSTALL ADA COMPLIANT PIPE INSULATION GUARDS FOR EXPOSED SANITARY DRAINS, DOMESTIC COLD WATER, DOMESTIC HOT WATER, AND STOPS FOR ADA PLUMBING FIXTURES.
4. FLEXIBLE ELASTOMERIC IS REQUIRED FOR AREAS SUSCEPTIBLE TO EXTERNAL WATER.
5. INSTALL PVC JACKET ON INSULATION FOR PIPES EXPOSED AND BELOW 8 FEET ABOVE FLOOR.
6. ITEMS NOT INSULATED:
   CHROME-PLATED PIPES AND FITTINGS
   UNDERGROUND PIPING
   FIRE PROTECTION PIPING

ELECTRIC STORAGE WATER HEATER SCHEDULE

MARK	MFR.	MODEL	TYPE	DIMENSIONS DIAMETER (IN.)	HEIGHT (IN.)	SERVICE/ LOCATION	TEMP. SETTING (DEG. F)	TEMP. RISE (DEG. F)	RECOVERY (GPH)	NOM. STORAGE CAPACITY (GAL.)	ELECTRICAL ELEMENTS NO. OF ELEMENTS	KW PER ELEMENT	TOTAL KW	ELECTRICAL CHARACTERISTICS VOLTAGE/ PHASE	REMARKS AND ACCESSORIES
WH-1A	LOCHINVAR	LDT-65	STORAGE TANK	21.75	60.75	STORAGE 105	120	100	49	66	2	6100	12.2	480 / 3	1-7
WH-1B	LOCHINVAR	LDT-65	STORAGE TANK	21.75	60.75	STORAGE 105	120	100	49	66	2	6100	12.2	480 / 3	1-7
WH-2	LOCHINVAR	LDT-30	STORAGE TANK	20.5	49.75	JAN. 109	120	100	20	40	2	5000	5	208 / 1	1-7
WH-3	LOCHINVAR	LDT-30	STORAGE TANK	20.5	49.75	JAN/MECH 115	120	100	20	40	2	5000	5	208 / 1	1-8

REMARKS AND ACCESSORIES:

1. SEISMICALLY RESTRAIN WATER HEATER TO ACCEPTABLE SUBSTRATE.
2. MAINTAIN MANUFACTURER'S MINIMUM CLEARANCES.
3. TANK SAVER ANODE.
4. PLATED INCOLOY, LOW DENSITY ELEMENT.
5. ENERGY CUT-OFF.
6. HINGED ACCESS DOOR.
7. PROVIDE UNIT WITH AT MINIMUM THREE YEAR TANK WARRANTY AND ONE YEAR PARTS WARRANTY.
8. PROVIDE UNIT WITH HEAT TRAP CONNECTIONS PER IECC.

A.O. SMITH, BRADFORD WHITE, LOCHINVAR, STATE, OR APPROVED EQUAL

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY PROFESSIONAL ENGINEER Logan Overturf No. 32455 LICENSED 2024-05-17

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500 WEST THIRD STREET
OWENSBORO, KY 42301

PLUMBING SCHEDULES

JOB NO.	22630
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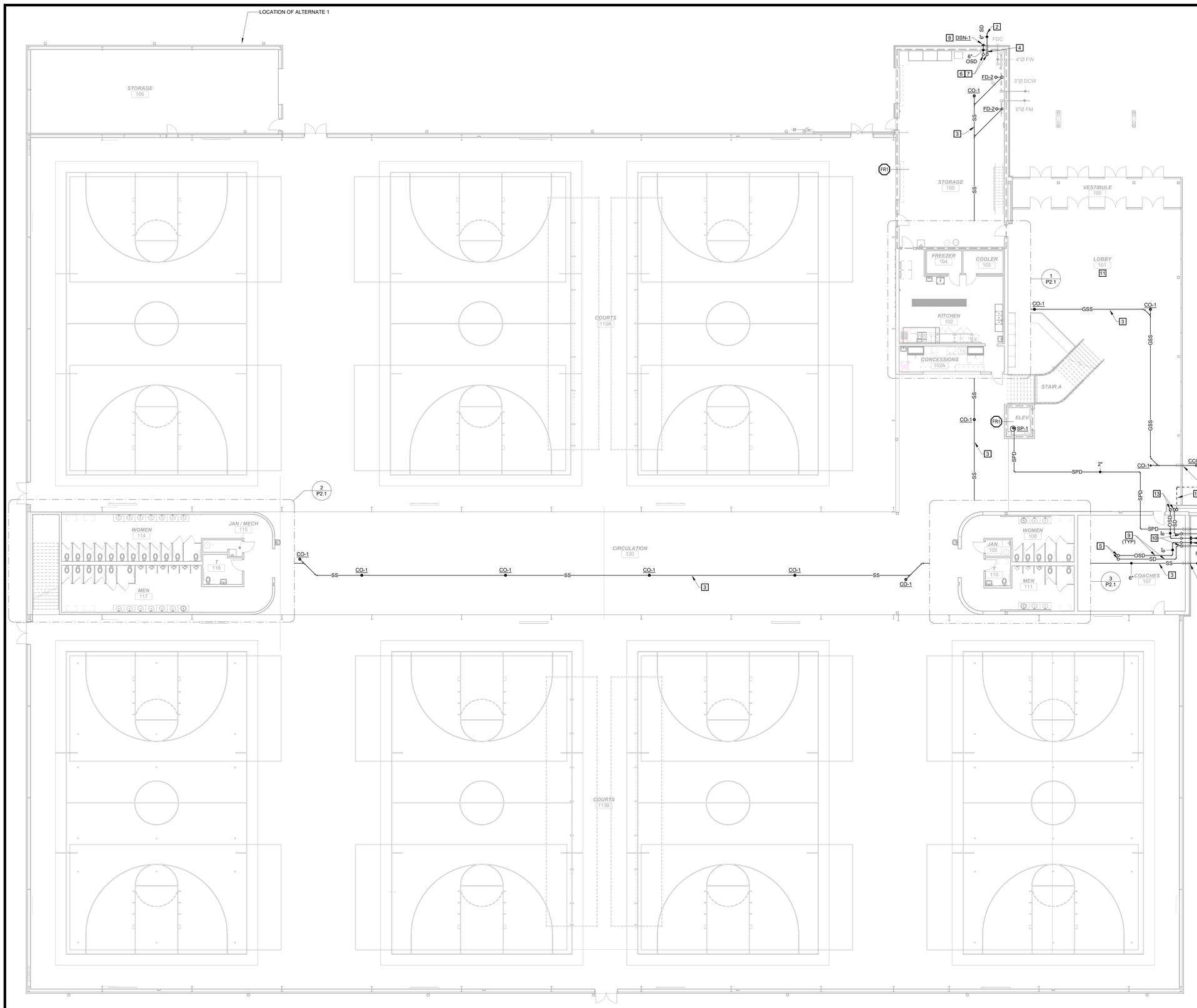

PLAN NORTH

PLUMBING FLOOR PLAN - SANITARY

SCALE: 3/32" = 1'-0"

MECHANICAL CONSTRUCTION TAG NOTES

#	(APPLIES TO THIS DRAWING ONLY)
1	SLEEVE OR CORE DRILL (WHERE ACCEPTABLE) THROUGH FOUNDATIONS TO MAINTAIN PIPE GRADE. ROUTE BELOW FOUNDATION WHERE POSSIBLE BUT PER STRUCTURAL ENGINEER/ARCHITECT RESTRICTIONS. MINIMIZE REMOVAL OF SOIL BENEATH FOUNDATION.
2	REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION AND CONTINUATION.
3	ROUTE SANITARY WASTE PIPING BELOW SLAB.
4	ROUTE STORM DRAIN PIPING BELOW SLAB AND SLEEVE THRU FOUNDATION WHERE REQUIRED.
5	6" STORM DRAIN PIPING AND OVERFLOW STORM DRAIN PIPING FROM ABOVE. SEE DRAWING P1.2 FOR CONTINUATION AND ADDITIONAL WORK.
6	6" STORM DRAIN PIPING AND OVERFLOW STORM DRAIN PIPING FROM ABOVE. COORDINATE DROP WITH FOOTINGS AND STRUCTURAL DRAWINGS. SEE DRAWING P1.2 FOR CONTINUATION AND ADDITIONAL WORK.
7	DROP STORM DRAIN PIPING AND OVERFLOW STORM DRAIN PIIPING EXPOSED ON MECHANICAL ROOM WALL.
8	TERMINATE OVERFLOW STORN DRAIN PIPING IN DOWNSPOUT NOZZLE 18" ABOVE GRADE. COORDINATE LOCATION WITH ARCHITECT.
9	ROUTE STORM DRAIN AND OVERFLOW STORM DRAIN PIPING AS HIGH AS POSSIBLE. COORDINATE WITH DUCTWORK, LIGHT FIXTURES, CONDUIT, PIPING, BUILDING STRUCTURE, ETC.
10	8" STORM DRAIN PIPING AND OVERFLOW STORM DRAIN PIPING FROM ABOVE. COORDINATE DROP WITH FOOTINGS AND STRUCTURAL DRAWINGS.
11	SPACE OPEN TO STRUCTURE ABOVE. DO NOT ROUTE SANITARY VENT PIPING THRU THIS SPACE. STORM DRAIN, OVERFLOW STORM DRAIN, AND FIRE PROTECTION PIPING ONLY.
12	CONNECT SUMP PUMP DRAIN TO STORM WATER SYSTEM.
13	8" STORM DRAIN PIPING AND OVERFLOW STORM DRAIN PIPING FROM ABOVE. SEE DRAWING P1.2 FOR CONTINUATION AND ADDITIONAL WORK.
14	COORDINATE GREASE TRAP VENT PIPE ROUTING WITH STRUCTURAL FOOTINGS AND FOUNDATIONS.
15	GREASE TRAP SHOWN IN APPROXIMATE LOCATION BASED ON LOCAL UTILITY COMPANY REQUIREMENTS. CONTRACTOR SHALL REFER TO AND COORDINATE WITH ARCHITECTURAL, CIVIL AND STRUCTURAL FOR EXACT LOCATION OF GREASE TRAP TO AVOID CONFLICT.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

AFD = AUTOMATIC FIRE DAMPER
F-R-R = FIRE-RESISTANT-RATED
F-R-W = FIRE-RATED-WALL
FS = FIRE STOP

SHERMAN CARTER BARNHART ARCHITECTS

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PLUMBING FLOOR PLAN - SANITARY

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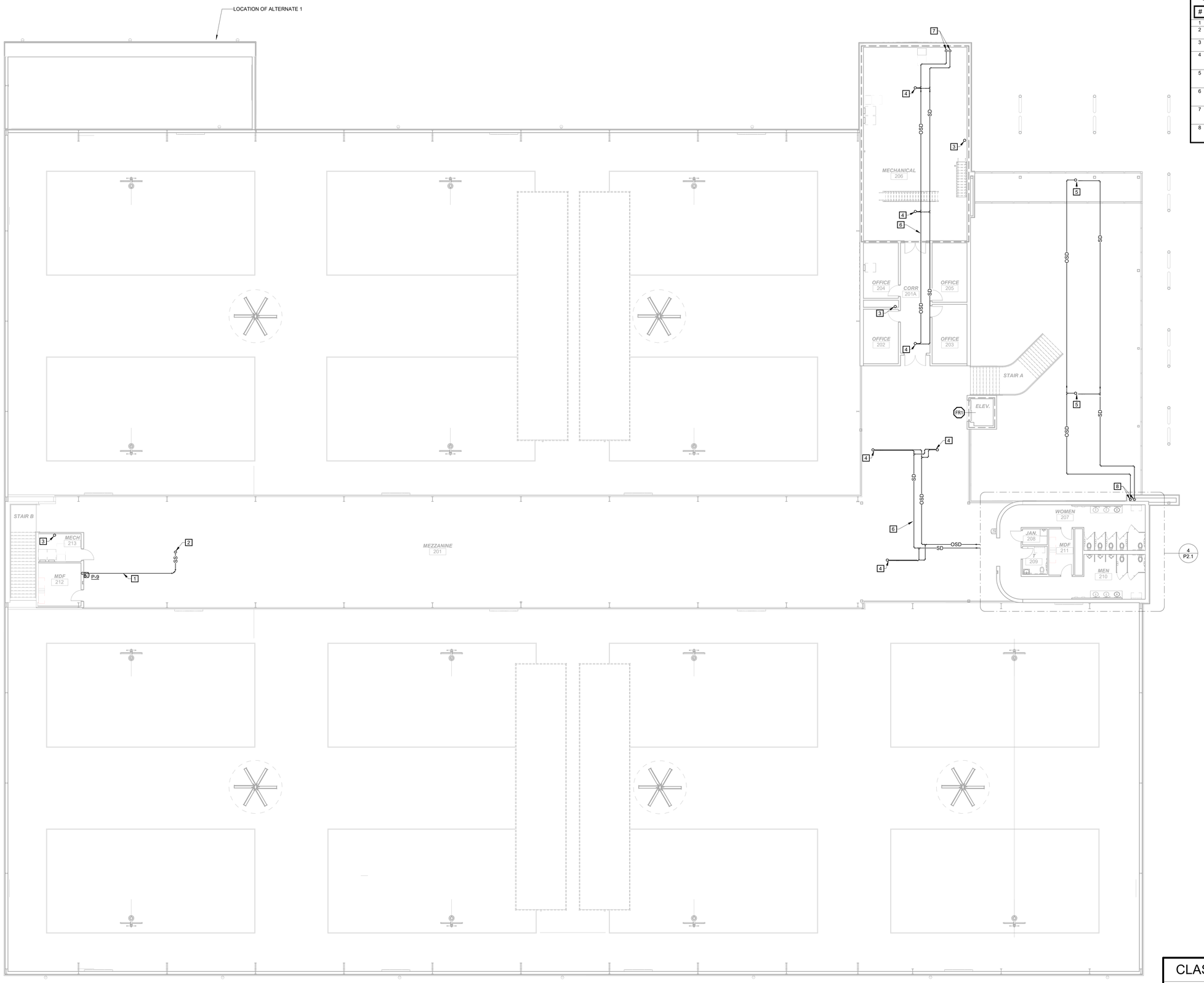

PLAN NORTH

PLUMBING MEZZANINE PLAN - SANITARY

SCALE: 3/32" = 1'-0"

MECHANICAL CONSTRUCTION TAG NOTES

#	(APPLIES TO THIS DRAWING ONLY)
1	ROUTE SANITARY WASTE PIPING BELOW FLOOR.
2	DROP 2" SANITARY SEWER PIPING TO CHASE BELOW. SEE DRAWING P1.1 FOR CONTINUATION AND ADDITIONAL WORK.
3	VENT TO ROOF. SEE ME1.1 AND DWV DIAGRAM FOR ADDITIONAL INFORMATION.
4	4" STORM DRAIN PIPING AND OVERFLOW STORM DRAIN PIPING FROM ROOF DRAIN ABOVE. SEE ME1.1 FOR CONTINUATION AND ADDITIONAL WORK.
5	6" STORM DRAIN PIPING AND OVERFLOW STORM DRAIN PIPING FROM ROOF DRAIN ABOVE. SEE ME1.1 FOR CONTINUATION AND ADDITIONAL WORK.
6	ROUTE STORM DRAIN PIPING AND OVERFLOW STORM DRAIN PIPING IN CEILING SPACE ABOVE. (TYP) SEE STORM DRAIN PIPING DIAGRAM FOR SIZES.
7	DROP 6" STORM DRAIN PIPING AND OVERFLOW STORM DRAIN PIPING TO FLOOR BELOW. SEE DRAWING P1.1 FOR CONTINUATION AND ADDITIONAL WORK.
8	ROUTE 8" STORM DRAIN PIPING AND OVERFLOW STORM DRAIN PIPING IN CEILING SPACE ABOVE AND DROP IN CHASE. SEE DRAWING P1.1 FOR CONTINUATION AND ADDITIONAL WORK.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

AFD = AUTOMATIC FIRE DAMPER
F-R-R = FIRE-RESISTANT-RATED
F-R-W = FIRE-RATED-WALL
FS = FIRE STOP

SHERMAN CARTER BARNHART ARCHITECTS

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PLUMBING MEZZANINE PLAN - SANITARY

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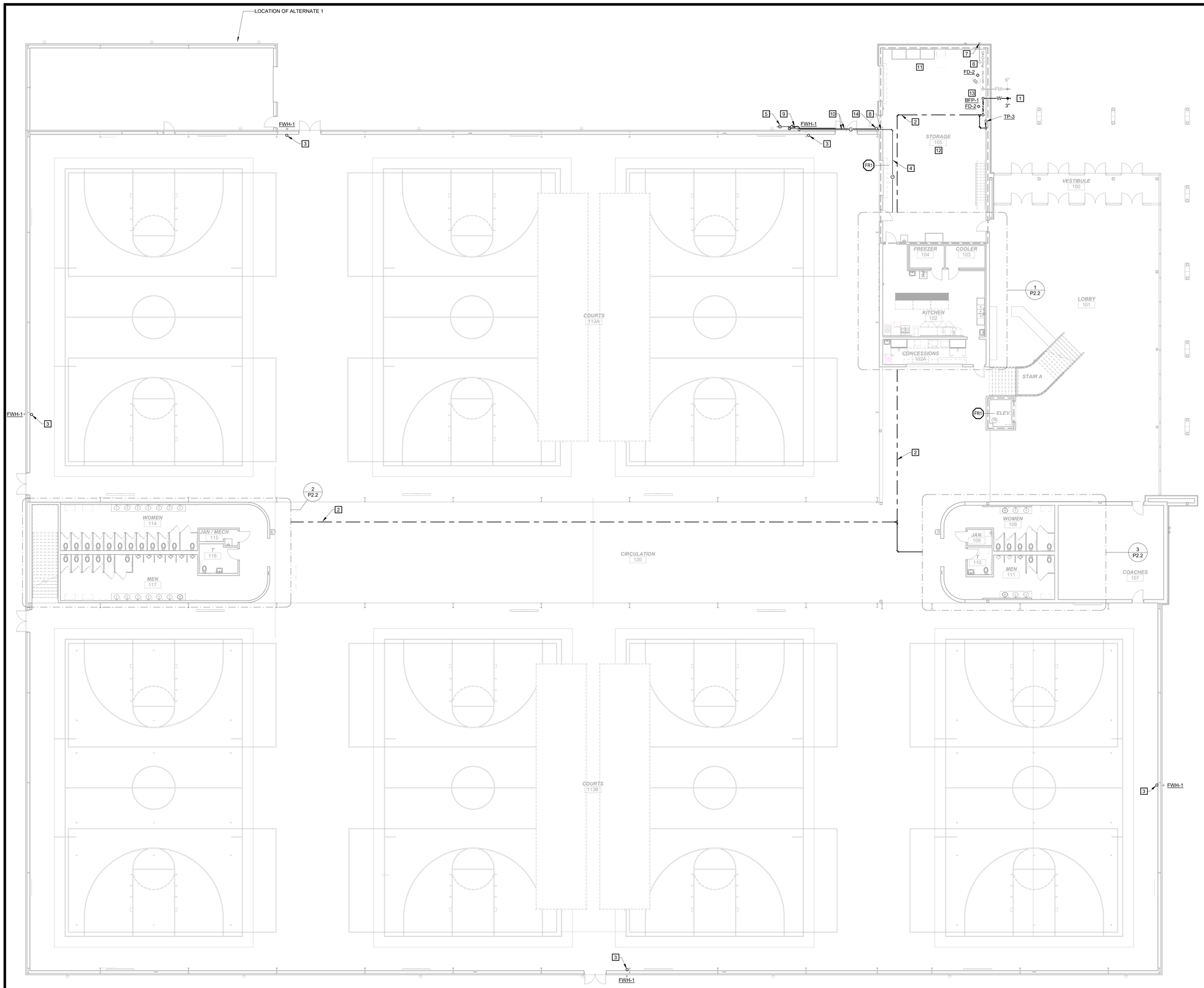

PLAN NORTH

PLUMBING FLOOR PLAN - SUPPLIES

SCALE: 3/32" = 1'-0"

MECHANICAL CONSTRUCTION TAG NOTES

#	(APPLIES TO THIS DRAWING ONLY)
1	NEW UNDERGROUND DOMESTIC WATER PIPING. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION AND CONTINUATION.
2	ROUTE DOMESTIC WATER PIPING AS HIGH AS POSSIBLE. COORDINATE WITH DUCTWORK, LIGHT FIXTURES, CONDUIT, PIPING, BUILDING STRUCTURE, ETC.
3	DOMESTIC COLD WATER DROP FROM ABOVE TO FREEZEPROOF WALL HYDRANT. COORDINATE BARREL LENGTH WITH EXTERIOR WALL CONSTRUCTION. SEE DRAWING P1.4 FOR CONTINUATION AND ADDITIONAL WORK.
4	ROUTE CARBON STEEL GAS PIPING EXPOSED AS HIGH AS POSSIBLE. COORDINATE WITH DUCTWORK, LIGHT FIXTURES, CONDUIT, PIPING, BUILDING STRUCTURE, ETC.
5	NEW GAS METER AND 2 PSI REGULATOR BY LOCAL UTILITY COMPANY. LOCATE 10 FEET FROM BUILDING OPENINGS. SEE GAS PIPING DIAGRAM FOR ADDITIONAL INFORMATION. PROVIDE BOLLARDS FOR PROTECTION WHERE SUSCEPTIBLE TO VEHICULAR DAMAGE.
6	NEW FIRE PROTECTION RISER. SEE FIRE PROTECTION DRAWINGS.
7	NEW FIRE DEPARTMENT REMOTE CONNECTION. SEE FIRE PROTECTION DRAWINGS.
8	SLEEVE CARBON STEEL GAS PIPING THRU WALL AND SEAL WATERTIGHT.
9	NEW 2 PSI TO 1/2 PSI REGULATOR BY CONTRACTOR. COORDINATE WORK WITH LOCAL UTILITY COMPANY. SEE GAS PIPING DIAGRAM FOR DELINEATION OF WORK.
10	ROUTE CARBON STEEL GAS PIPING EXPOSED HIGH ON EXTERIOR WALL.
11	DO NOT INSTALL PIPING OVER ANY ELECTRICAL PANELBOARDS OR EQUIPMENT. COORDINATE WITH ELECTRICAL CONTRACTOR FOR THE REQUIRED NEC CLEARANCES.
12	PREPARE, PRIME, AND PAINT ALL EXPOSED GAS PIPING, SUPPORTS, ETC. IN THIS SPACE. COLOR SHALL BE SELECTED BY ARCHITECT.
13	DOMESTIC WATER SERVICE RISER.
14	ROUTE CARBON STEEL GAS PIPING UP TO ROOF. SEE DRAWING ME1.1 FOR CONTINUATION AND GAS PIPING DIAGRAM FOR SIZING.
15	INSTALL ELECTRONIC TRAP PRIMER ON WALL IN AN ACCESSIBLE LOCATION. COORDINATE WITH ELECTRICAL CONTRACTOR.
16	ROUTE 1/2" SEAMLESS NO-JOINT TUBING BELOW FLOOR FROM TRAP PRIMER TO FLOOR DRAIN.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

AFD = AUTOMATIC FIRE DAMPER
F-R-R = FIRE-RESISTANT-RATED
F-R-W = FIRE-RATED-WALL
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PLUMBING FLOOR PLAN - SUPPLIES

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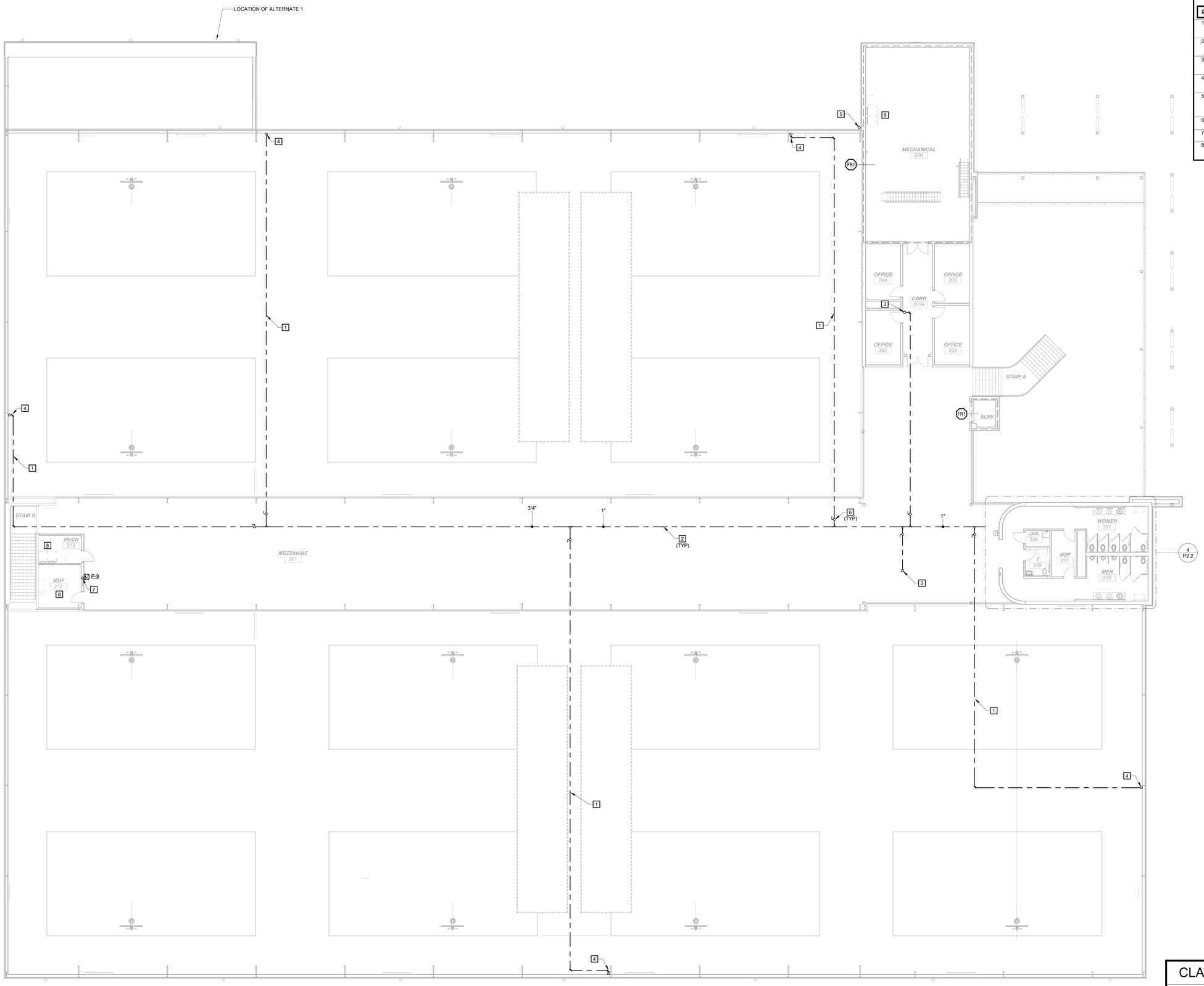

PLAN NORTH

PLUMBING MEZZANINE PLAN - SUPPLIES

SCALE: 3/32" = 1'-0"

MECHANICAL CONSTRUCTION TAG NOTES

#	(APPLIES TO THIS DRAWING ONLY)
1	ROUTE DOMESTIC WATER PIPING AS HIGH AS POSSIBLE ABOVE COURTS. COORDINATE WITH DUCTWORK, LIGHT FIXTURES, PIPING, CONDUIT, BUILDING STRUCTURE, SPORTS EQUIPMENT, ETC.
2	ROUTE DOMESTIC WATER PIPING AS HIGH AS POSSIBLE ABOVE MEZZANINE. COORDINATE WITH DUCTWORK, LIGHT FIXTURES, PIPING, CONDUIT, BUILDING STRUCTURE, ETC.
3	SLEEVE 3/4" DOMESTIC COLD WATER PIPING THRU ROOF TO SERVE FREEZEPROOF ROOF HYDRANT. SEE DRAWING ME1.1 FOR CONTINUATION AND ADDITIONAL WORK.
4	DROP 3/4" DOMESTIC COLD WATER PIPING DOWN TO FREEZEPROOF WALL HYDRANT. SEE DRAWING P1.3 FOR CONTINUATION AND ADDITIONAL WORK.
5	CARBON STEEL GAS RISER FROM METER BELOW UP TO ROOFTOP HVAC EQUIPMENT. PREPARE, PRIME AND PAINT PIPE IN COLOR SELECTED BY ARCHITECT. SEE DRAWINGS P1.3 AND ME1.1 FOR CONTINUATION AND ADDITIONAL WORK.
6	PROVIDE ISOLATION VALVE FOR FREEZEPROOF WALL HYDRANT/FREEZEPROOF ROOF HYDRANT IN AN ACCESSIBLE LOCATION.
7	DOMESTIC COLD WATER PIPING FROM BELOW. SEE DRAWING P1.3 AND WATER PIPING DIAGRAM FOR ADDITIONAL INFORMATION.
8	DO NOT ROUTE PIPING OVER ANY ELECTRICAL PANELBOARDS OR EQUIPMENT. COORDINATE WITH ELECTRICAL CONTRACTOR FOR THE REQUIRED NEC CLEARANCES.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS: ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

AFD = AUTOMATIC FIRE DAMPER
F-R-R = FIRE-RESISTANT-RATED
F-R-W = FIRE-RATED-WALL
FS = FIRE STOP

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PLUMBING MEZZANINE PLAN - SUPPLIES

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CONNECTION TO KITCHEN EQUIPMENT

1. THE PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL VALVES, SUPPLY PIPE, TRAPS, PIPING, AND ALL COMPONENTS NECESSARY TO INSTALL, CONNECT, AND PLACE IN SERVICE THE KITCHEN EQUIPMENT SHOWN ON THE PLANS.
2. THE CONTRACTOR SHALL COORDINATE LOCATION AND REQUIREMENTS WITH THE SPECIFIC EQUIPMENT SUPPLIED.

KITCHEN EQUIPMENT CONNECTION SCHEDULE

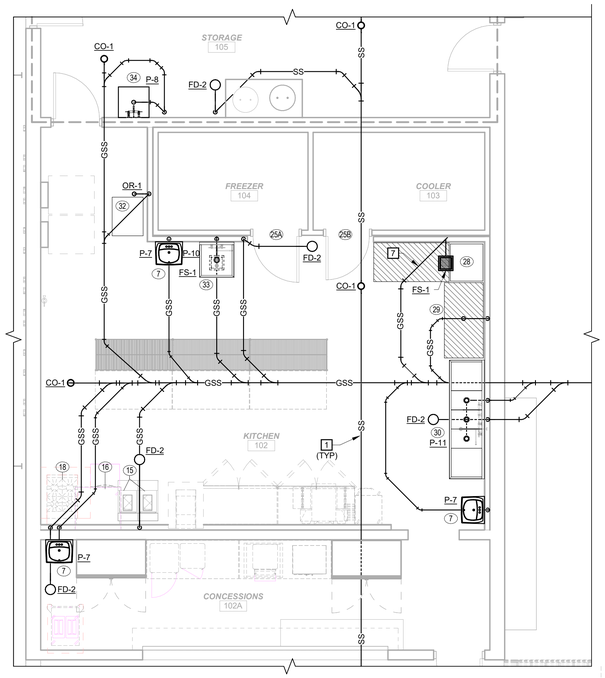
(PLUMBING ITEMS ONLY)

ITEM NO.	EQUIPMENT DESCRIPTION	COLD WATER INLET SIZE (IN)	HOT WATER INLET SIZE (IN)	WASTE/DRAIN CONNECTION SIZE (IN)	GAS (MBH)
7	HAND SINK	1/2	1/2	2	---
15	FRYER	---	---	---	70
16	COUNTERTOP GRIDDLE	---	---	---	81
18	RANGE W/ CONVECTION OVEN	---	---	---	143
25A	WALK IN COOLER	---	---	(INDIRECT)	---
25B	WALK IN FREEZER	---	---	(INDIRECT)	---
28	DISHMACHINE	1/2	1/2	(INDIRECT)	---
29	SOILED DISHTABLE W/ SHELF ABOVE	1/2	1/2	2	---
30	3 COMPARTMENT SINK	(2) 3/4	(2) 3/4	2	---
32	ICE MAKER/BIN	1/2	---	(INDIRECT)	---
33	PREP SINK	1/2	1/2	2 (INDIRECT)	---
34	MOP SINK	1/2	1/2	3	---

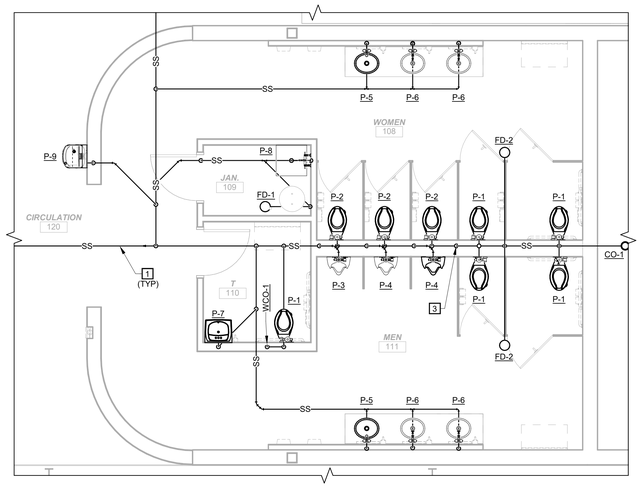
MECHANICAL CONSTRUCTION TAG NOTES

(APPLIES TO THIS DRAWING ONLY)

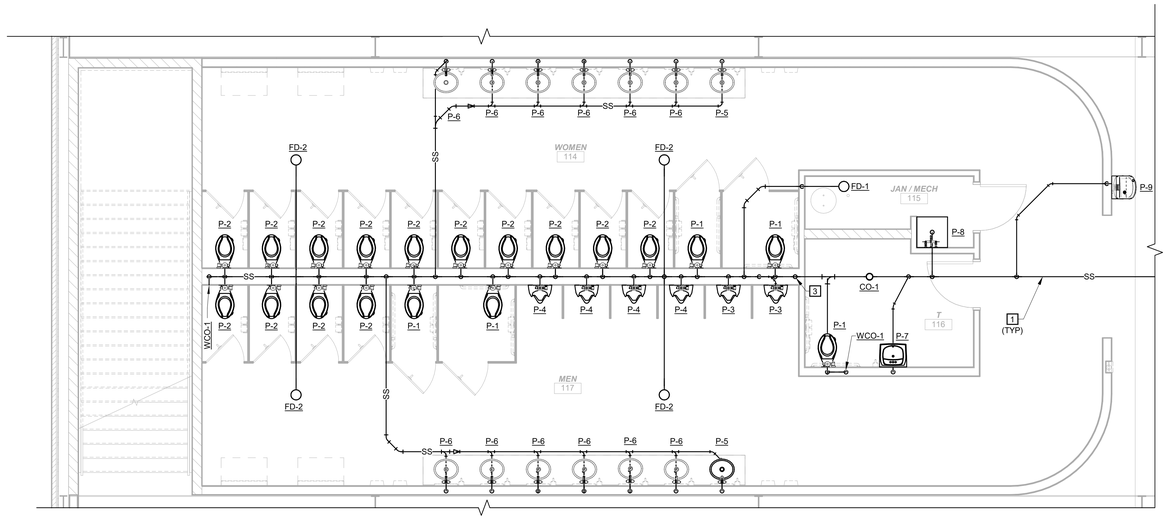
#	
1	ROUTE SANITARY WASTE PIPING BELOW SLAB.
2	ROUTE SANITARY WASTE PIPING BELOW FLOOR.
3	SANITARY WASTE PIPING DROP FROM ABOVE.
4	4" STORM DRAIN PIPING AND OVERFLOW DRAIN PIPING FROM ABOVE.
5	6" STORM DRAIN PIPING AND OVERFLOW STORM DRAIN PIPING DROP TO BELOW. SEE DRAWING P1.1 FOR CONTINUATION AND ADDITIONAL WORK. CAREFULLY COORDINATE DROP LOCATION AND ROUTING WITH DUCTWORK AND ALL OTHER TRADES TO AVOID CONFLICT.
6	DROP SANITARY SEWER PIPING TO CHASE BELOW. SEE DRAWING P1.1 FOR CONTINUATION AND ADDITIONAL WORK. CAREFULLY COORDINATE DROP LOCATION AND ROUTING WITH DUCTWORK AND ALL OTHER TRADES TO AVOID CONFLICT.
7	FIRST TEN LINEAR FEET (10') OF DRAIN PIPING FROM FLOOR SINK SHALL BE CAST IRON.



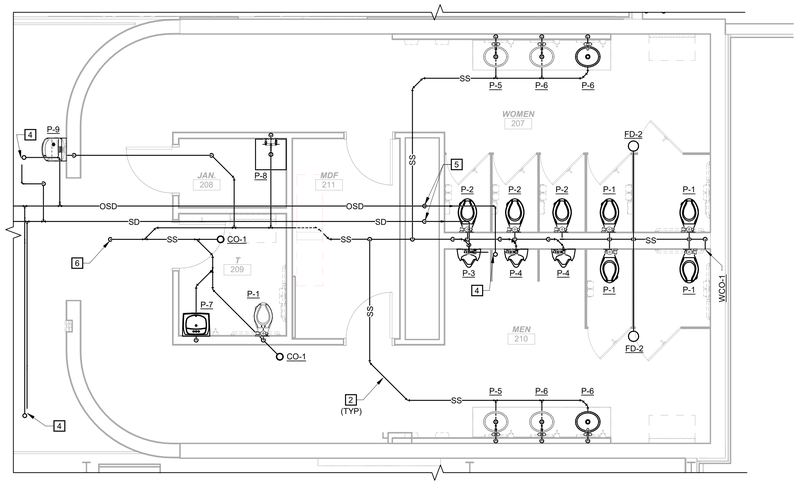
1 PLUMBING SANITARY - ENLARGED CONCESSIONS PLAN
1/4" = 1'-0"



3 PLUMBING SANITARY - ENLARGED RESTROOM PLAN NORTH
1/4" = 1'-0"



2 PLUMBING SANITARY - ENLARGED RESTROOM PLAN SOUTH
1/4" = 1'-0"



4 PLUMBING MEZZANINE SANITARY - ENLARGED RESTROOM PLAN
1/4" = 1'-0"

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

AFD = AUTOMATIC FIRE DAMPER
F-R-R = FIRE-RESISTANT-RATED
F-R-W = FIRE-RATED-WALL
FS = FIRE STOP

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
Logan Overturf
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PLUMBING ENLARGED PLANS - SANITARY

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P2.1

CONNECTION TO KITCHEN EQUIPMENT

1. THE PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL VALVES, SUPPLY PIPE, TRAPS, PIPING, AND ALL COMPONENTS NECESSARY TO INSTALL, CONNECT, AND PLACE IN SERVICE THE KITCHEN EQUIPMENT SHOWN ON THE PLANS.
2. THE CONTRACTOR SHALL COORDINATE LOCATION AND REQUIREMENTS WITH THE SPECIFIC EQUIPMENT SUPPLIED.

KITCHEN EQUIPMENT CONNECTION SCHEDULE

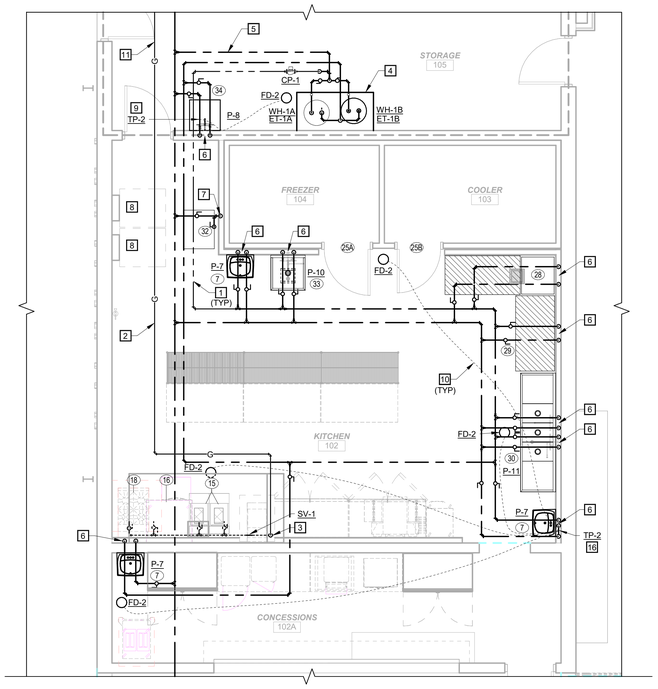
(PLUMBING ITEMS ONLY)

ITEM NO.	EQUIPMENT DESCRIPTION	COLD WATER INLET SIZE (IN)	HOT WATER INLET SIZE (IN)	WASTE/DRAIN CONNECTION SIZE (IN)	GAS (MBH)
7	HAND SINK	1/2	1/2	2	---
15	FRYER	---	---	---	70
16	COUNTERTOP GRIDDLE	---	---	---	81
18	RANGE W/ CONVECTION OVEN	---	---	---	143
25A	WALK IN COOLER	---	---	(INDIRECT)	---
25B	WALK IN FREEZER	---	---	(INDIRECT)	---
28	DISHMACHINE	1/2	1/2	(INDIRECT)	---
29	SOILED DISHTABLE W/ SHELF ABOVE	1/2	1/2	2	---
30	3 COMPARTMENT SINK	(2) 3/4	(2) 3/4	2	---
32	ICE MAKER/BIN	1/2	---	(INDIRECT)	---
33	PREP SINK	1/2	1/2	2 (INDIRECT)	---
34	MOP SINK	1/2	1/2	3	---

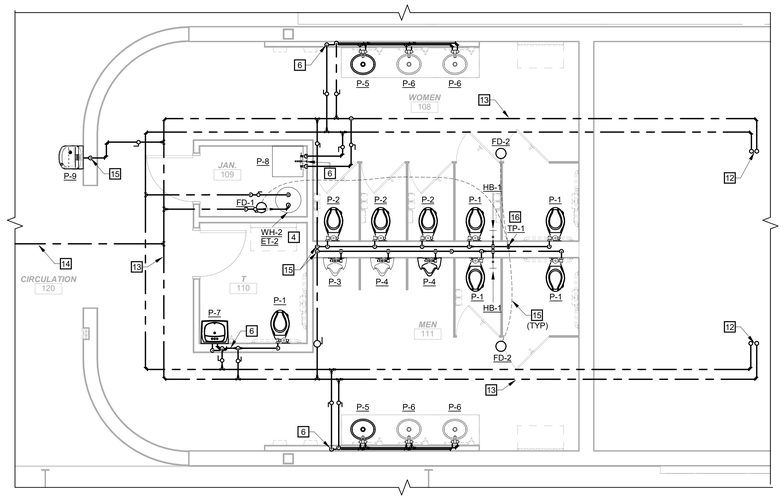
MECHANICAL CONSTRUCTION TAG NOTES

(APPLIES TO THIS DRAWING ONLY)

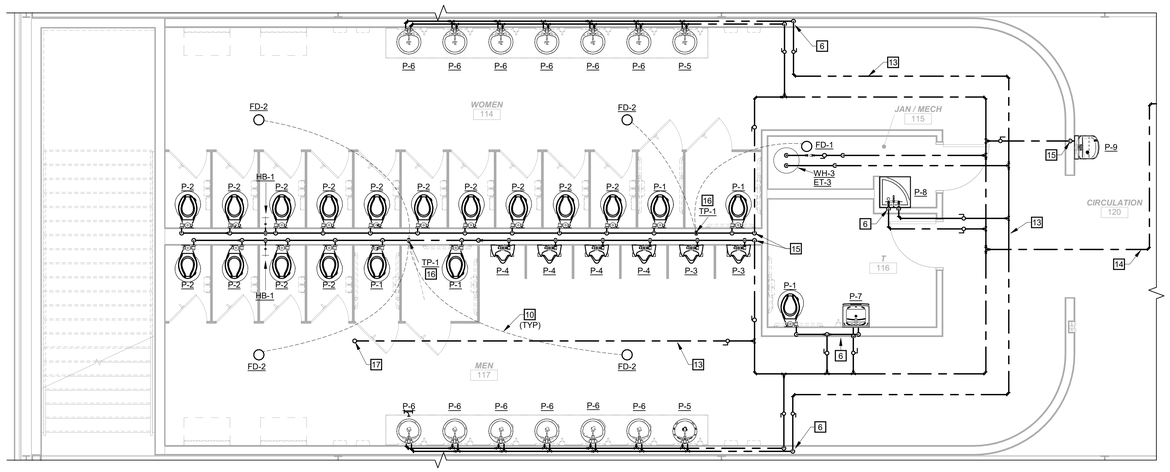
#	
1	ROUTE DOMESTIC COLD, HOT, AND RE-CIRCULATION WATER PIPING ABOVE LAY-IN CEILING. COORDINATE WITH DUCTWORK, PIPING, LIGHT FIXTURES, CONDUITS, BUILDING STRUCTURE, ETC.
2	ROUTE CARBON STEEL GAS PIPING ABOVE LAY-IN CEILING.
3	DROP CARBON STEEL GAS PIPING EXPOSED ON WALL TO SERVE CONCESSIONS EQUIPMENT. PREPARE, PRIME, AND PAINT EXPOSED GAS PIPING. SEE GAS PIPING DIAGRAM FOR SIZING.
4	INSTALL ELECTRIC WATER HEATER(S) ON RAISED CONCRETE BASE PAD.
5	ROUTE DOMESTIC COLD, HOT, AND RE-CIRCULATION WATER PIPING AS HIGH AS POSSIBLE. COORDINATE WITH DUCTWORK, PIPING, LIGHT FIXTURES, CONDUITS, BUILDING STRUCTURE, ETC.
6	DROP DOMESTIC HOT AND COLD WATER PIPING IN WALL TO SERVE PLUMBING FIXTURE(S). SEE WATER PIPING DIAGRAM FOR SIZES.
7	DROP DOMESTIC COLD WATER PIPING IN WALL TO SUPPLY ICE MACHINE. PROVIDE SHUT-OFF VALVE ON COLD WATER LINE. SEE WATER PIPING DIAGRAM FOR SIZE.
8	DO NOT ROUTE PIPING OVER ANY ELECTRICAL PANELBOARDS OR EQUIPMENT. COORDINATE WITH ELECTRICAL CONTRACTOR FOR THE REQUIRED NEC CLEARANCES.
9	INSTALL TRAP PRIMER IN AN ACCESSIBLE LOCATION. SEE WATER PIPING DIAGRAM.
10	ROUTE SEAMLESS NO-JOINT TUBING BELOW FLOOR FROM TRAP PRIMER TO FLOOR DRAIN.
11	PREPARE, PRIME, AND PAINT ALL EXPOSED CARBON STEEL GAS PIPING, SUPPORTS, ETC. IN THIS SPACE. COLOR SHALL BE SELECTED BY ARCHITECT.
12	ROUTE DOMESTIC COLD AND HOT WATER PIPING UP TO CHASE ON SECOND FLOOR MEZZANINE. COORDINATE ROUTING IN CHASE WITH DUCTWORK, PIPING, CONDUITS, BUILDING STRUCTURE, ETC. SEE ENLARGED PLAN 4 PLUMBING MEZZANINE SUPPLIES FOR CONTINUATION.
13	ROUTE DOMESTIC COLD AND HOT WATER PIPING ABOVE LAY-IN CEILING. COORDINATE WITH DUCTWORK, PIPING, LIGHT FIXTURES, CONDUITS, BUILDING STRUCTURE, ETC.
14	ROUTE DOMESTIC COLD WATER PIPING AS HIGH AS POSSIBLE BELOW MEZZANINE. COORDINATE WITH DUCTWORK, LIGHT FIXTURES, PIPING, CONDUIT, BUILDING STRUCTURE, ETC.
15	DROP DOMESTIC COLD WATER PIPING IN WALL TO SERVE PLUMBING FIXTURE(S). SEE WATER PIPING DIAGRAM FOR SIZE(S).
16	INSTALL TRAP PRIMER IN WALL AND PROVIDE ACCESS PANEL.
17	SLEEVE DOMESTIC COLD WATER PIPING UP TO SECOND FLOOR MEZZANINE TO PLUMBING FIXTURE. SEE DRAWING P1.4 FOR CONTINUATION AND ADDITIONAL WORK.
18	ROUTE DOMESTIC COLD WATER PIPING AS HIGH AS POSSIBLE ABOVE MEZZANINE. COORDINATE WITH DUCTWORK, LIGHT FIXTURES, PIPING, CONDUIT, BUILDING STRUCTURE, ETC.
19	DOMESTIC COLD AND HOT WATER PIPING FROM BELOW. COORDINATE ROUTING IN CHASE WITH DUCTWORK, PIPING, CONDUITS, BUILDING STRUCTURE, ETC. SEE ENLARGED PLAN 3 PLUMBING SUPPLIES FOR CONTINUATION.



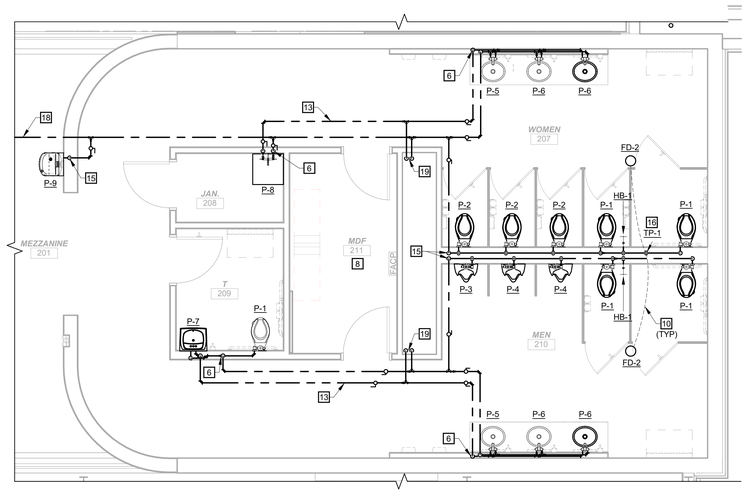
1 PLUMBING SUPPLIES - ENLARGED CONCESSIONS PLAN
1/4" = 1'-0"



3 PLUMBING SUPPLIES - ENLARGED RESTROOM PLAN NORTH
1/4" = 1'-0"



2 PLUMBING SUPPLIES - ENLARGED RESTROOM PLAN SOUTH
1/4" = 1'-0"



4 PLUMBING MEZZANINE SUPPLIES - ENLARGED RESTROOM PLAN
1/4" = 1'-0"

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

AFD = AUTOMATIC FIRE DAMPER
F-R-R = FIRE-RESISTANT-RATED
F-R-W = FIRE-RATED-WALL
FS = FIRE STOP

SHERMAN CARTER BARNHART ARCHITECTS

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Logan Overturf
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2024-05-17

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PLUMBING ENLARGED PLANS - SUPPLIES

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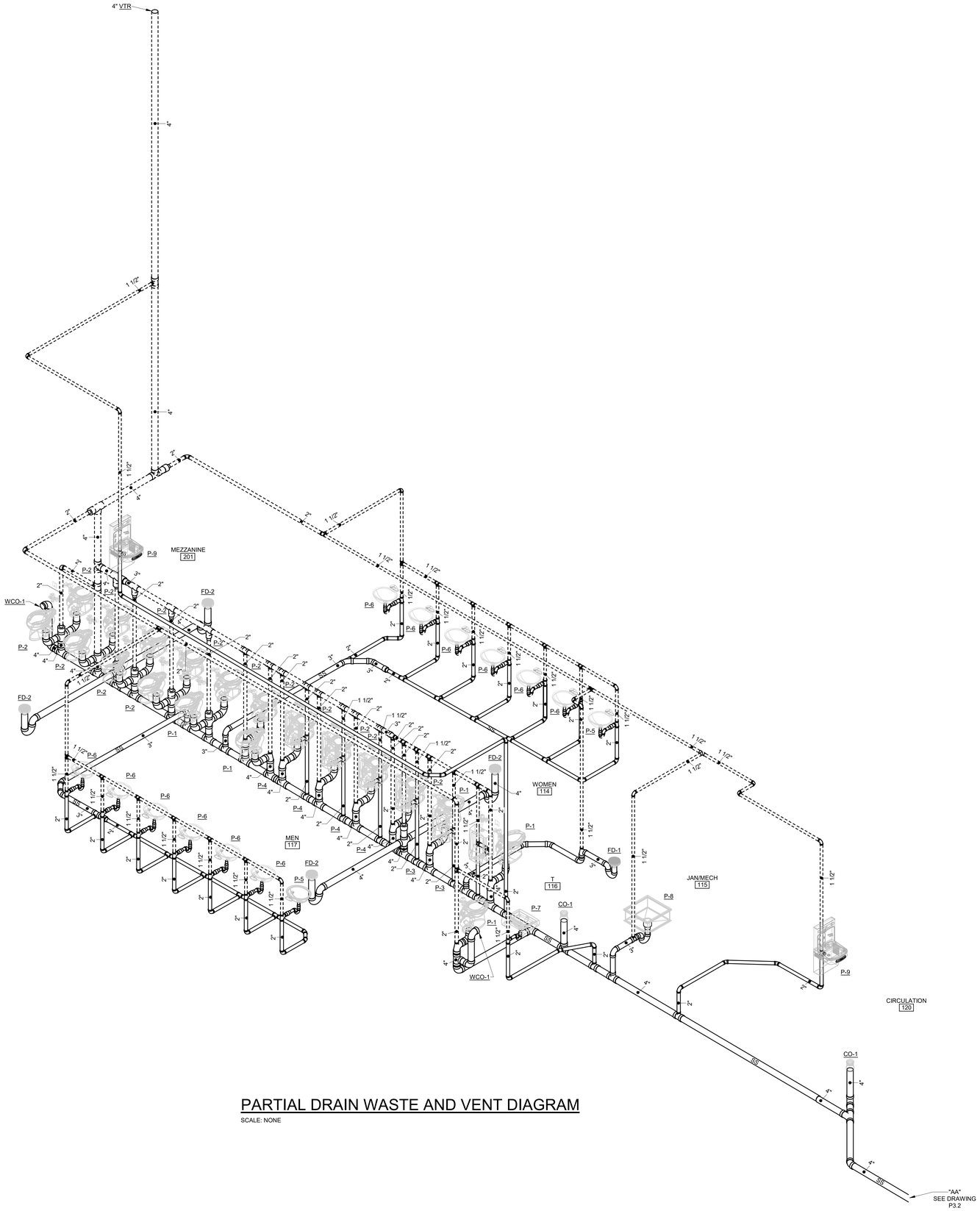

PARTIAL DRAIN WASTE AND VENT DIAGRAM

SCALE: NONE

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
Logan Overturf
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PLUMBING DRAIN, WASTE, AND VENT DIAGRAM

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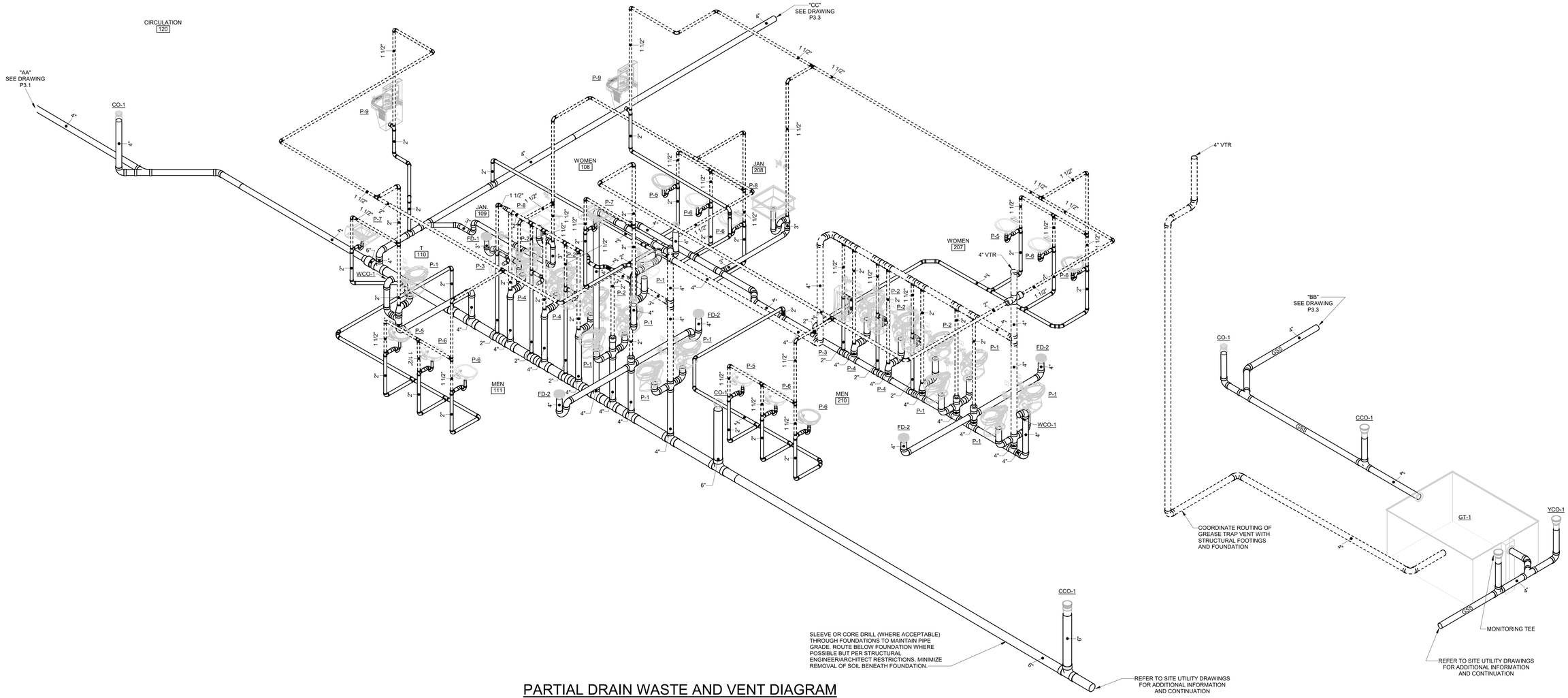

PARTIAL DRAIN WASTE AND VENT DIAGRAM

SCALE: NONE

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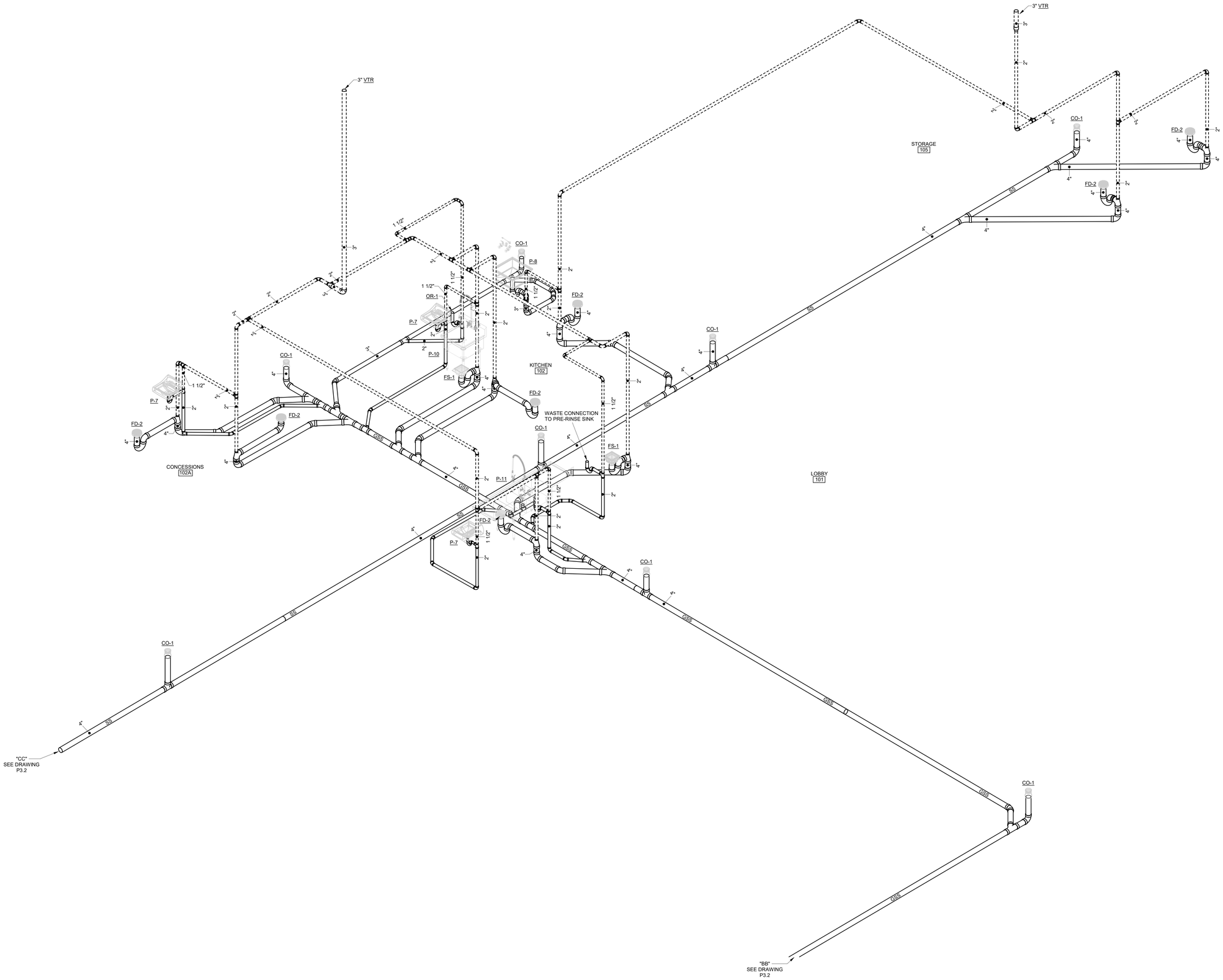

PARTIAL DRAIN WASTE AND VENT DIAGRAM

SCALE: NONE

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STATE OF KENTUCKY
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2024-05-17

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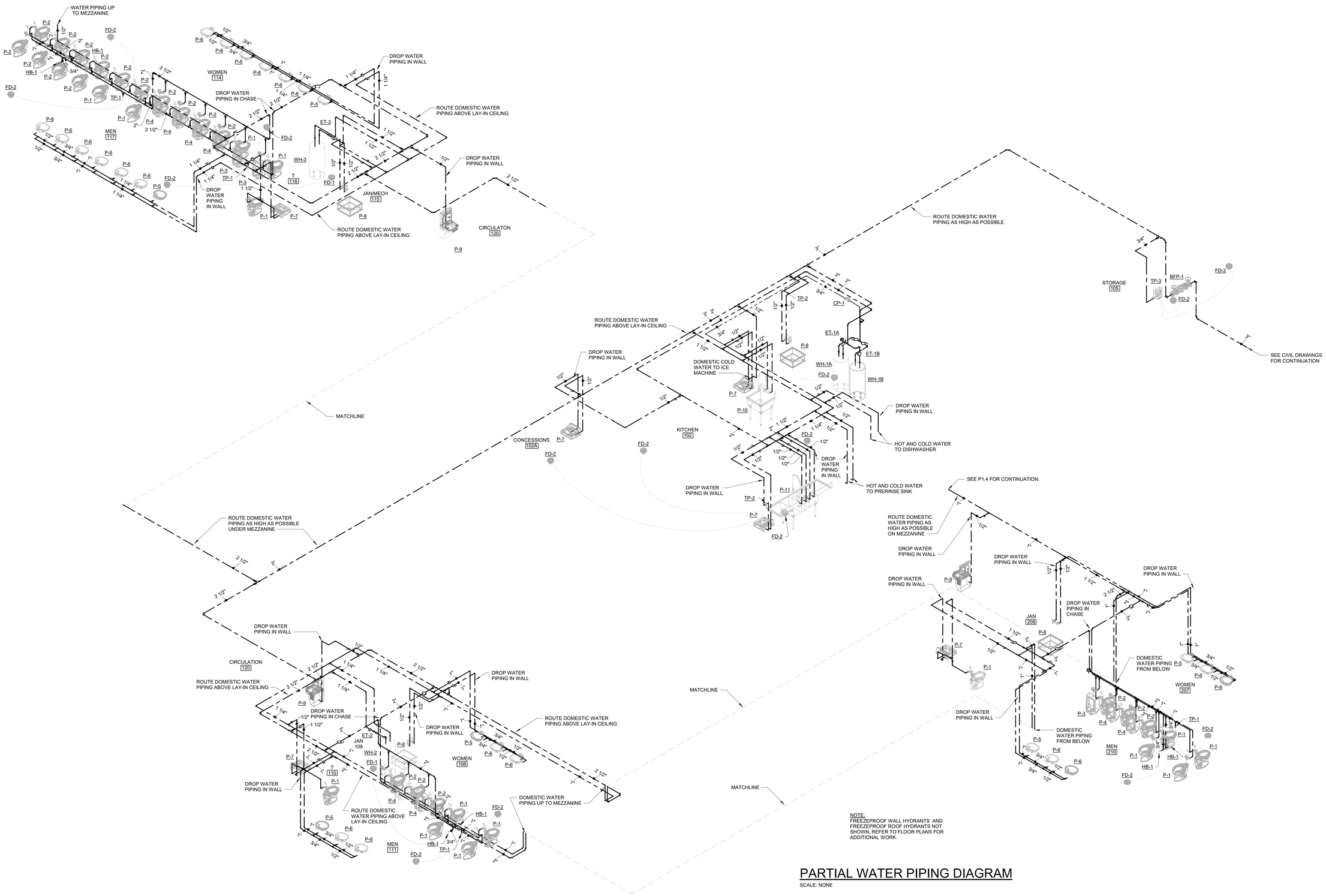

NOTE:
FREEZEPROOF WALL HYDRANTS AND FREEZEPROOF ROOF HYDRANTS NOT SHOWN, REFER TO FLOOR PLANS FOR ADDITIONAL WORK.

PARTIAL WATER PIPING DIAGRAM

SCALE: NONE

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY — Logan Overturf No. 32455 — LICENSED PROFESSIONAL ENGINEER — 2024-05-17

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PLUMBING PARTIAL WATER PIPING DIAGRAM

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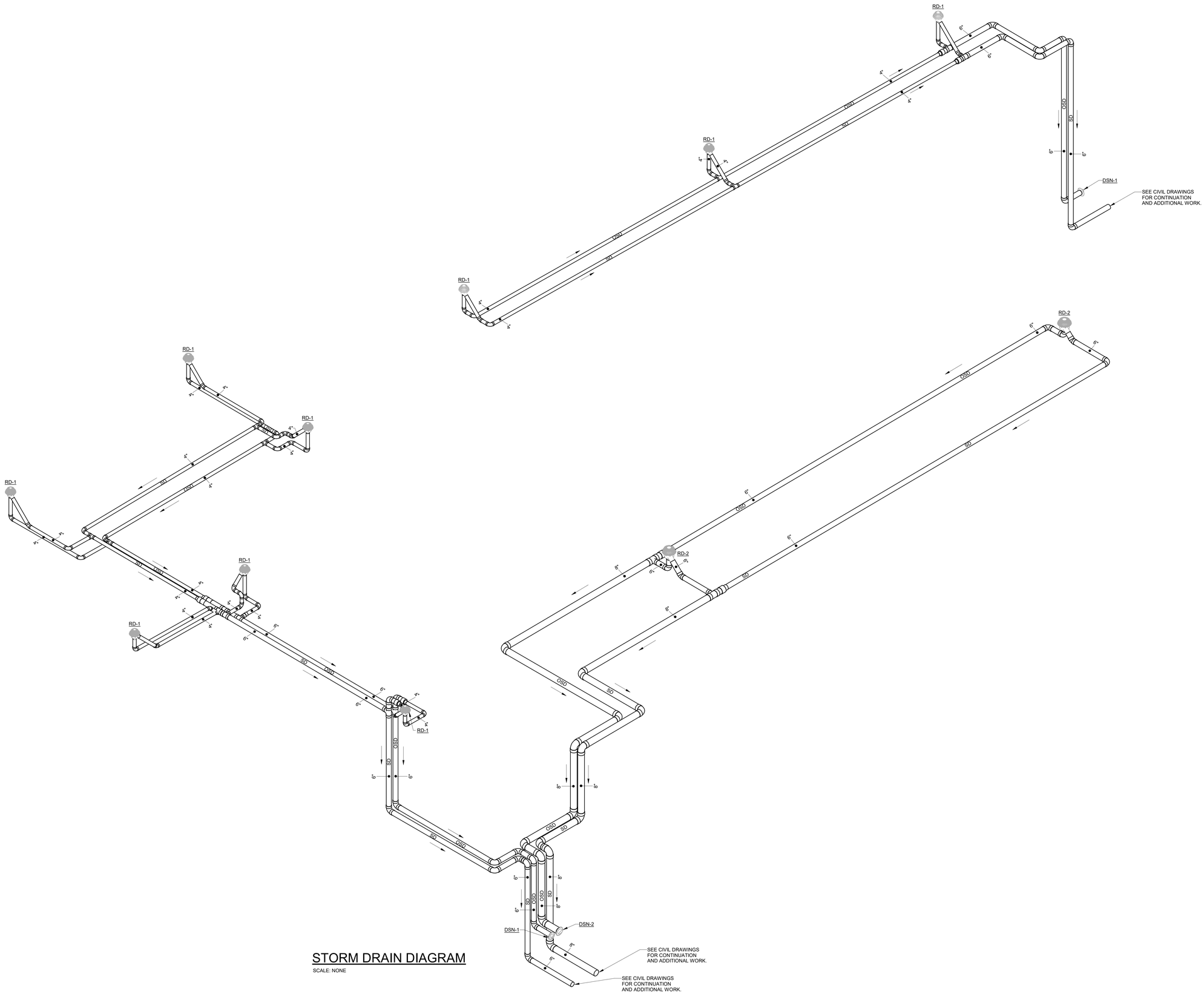

STORM DRAIN DIAGRAM

SCALE: NONE

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PLUMBING STORM WATER PIPING DIAGRAM

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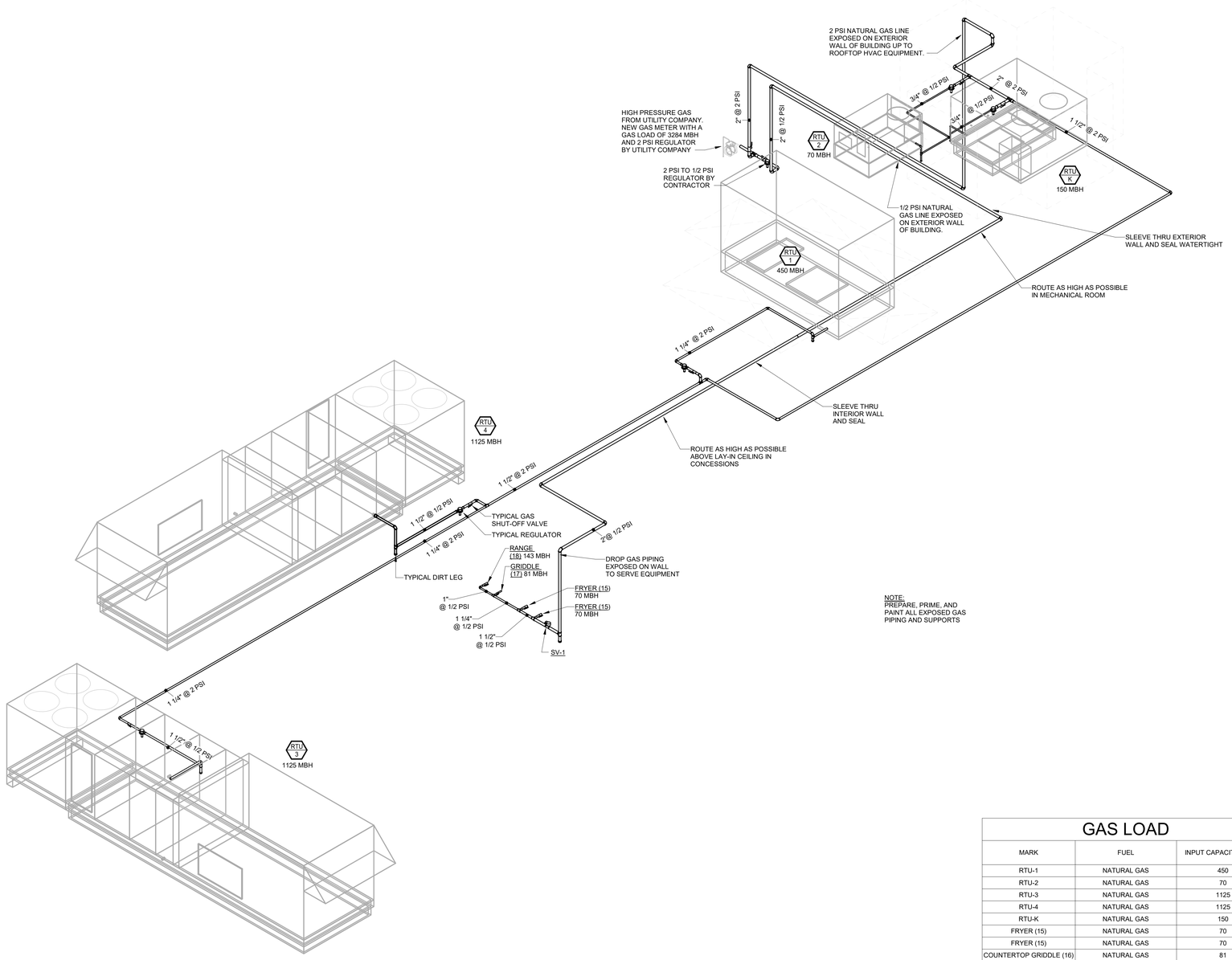

NOTE:
PREPARE, PRIME, AND PAINT ALL EXPOSED GAS PIPING AND SUPPORTS

GAS LOAD

MARK	FUEL	INPUT CAPACITY (MBH)
RTU-1	NATURAL GAS	450
RTU-2	NATURAL GAS	70
RTU-3	NATURAL GAS	1125
RTU-4	NATURAL GAS	1125
RTU-K	NATURAL GAS	150
FRYER (15)	NATURAL GAS	70
FRYER (15)	NATURAL GAS	70
COUNTERTOP GRIDDLE (16)	NATURAL GAS	81
RANGE W/ CONV. OVEN (18)	NATURAL GAS	143
TOTAL MBH		3284

GAS PIPING DIAGRAM

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
Logan Overturf
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PLUMBING GAS PIPING DIAGRAM

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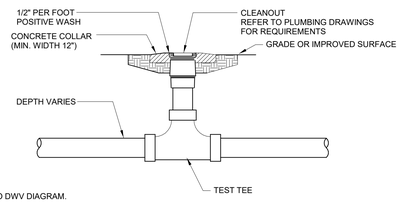
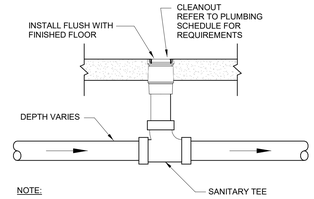


NOTE:

1. REFER TO DWV DIAGRAM.
2. CLEANTOUT INSTALLED IN IMPROVED SURFACES SHALL BE SUITABLE FOR VEHICLE TRAFFIC.
3. USE DOUBLE TEE WHERE POSSIBLE.

COMBINATION TEST TEE AND CLEANOUT DETAIL

NO SCALE

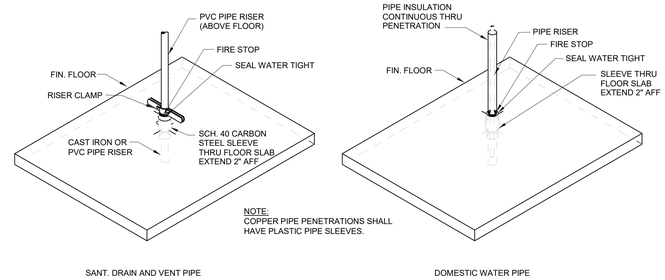


NOTE:

1. REFER TO DWV DIAGRAM FOR PIPE SIZES.
2. USE SANITARY TEE.
3. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR FLOOR FINISH TO VERIFY CLEANOUT ELEVATION.

INTERIOR CLEANOUT DETAIL

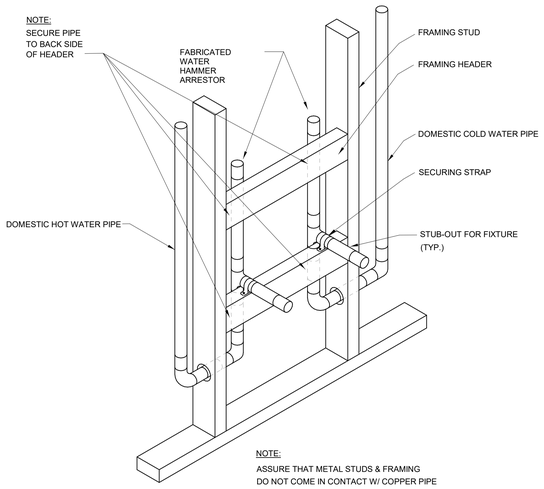
NO SCALE



NOTE:
COPPER PIPE PENETRATIONS SHALL HAVE PLASTIC PIPE SLEEVES.

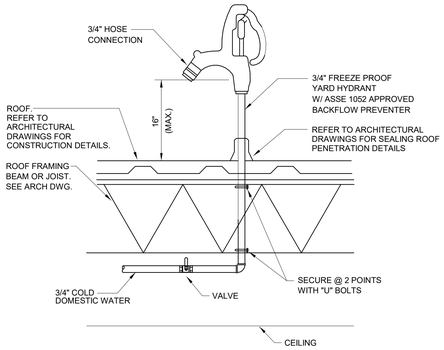
PIPE THRU FLOOR DETAIL

NO SCALE



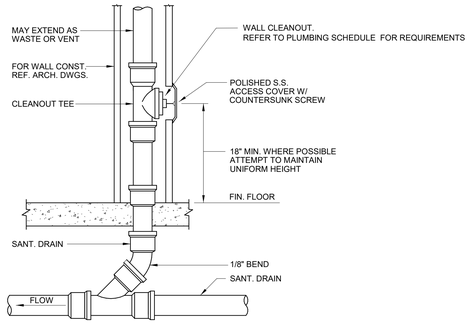
FIXTURE SUPPLY DETAIL

NO SCALE



WATER HYDRANT ON ROOF DETAIL

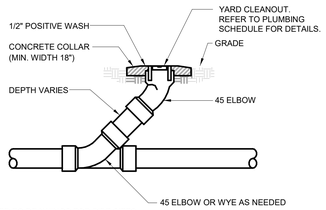
NO SCALE



NOTE:
STACK CLEANOUT IS THE SAME EXCEPT THE PIPE IS NOT IN THE WALL AND THE ACCESS COVER IS NOT NEEDED

WALL CLEANOUT DETAIL

NO SCALE

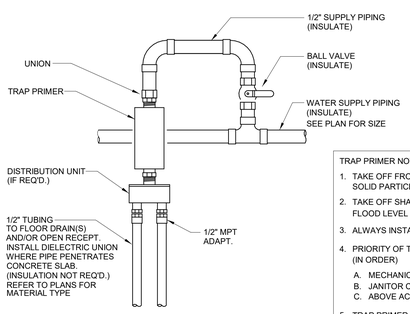


NOTES:

1. REFER TO DRAWINGS FOR PIPE SIZES.
2. CLEANOUTS SHALL BE INSTALLED SUITABLE FOR VEHICULAR TRAFFIC WHERE INSTALLED IN IMPROVED SURFACES.

YARD CLEANOUT DETAIL

NO SCALE

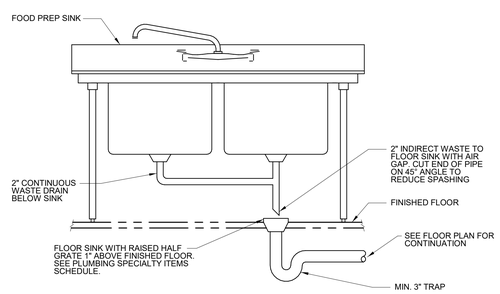


TRAP PRIMER NOTES:

1. TAKE OFF FROM TOP OF PIPE TO LIMIT SOLID PARTICLES ENTERING TRAP PRIMER
2. TAKE OFF SHALL BE MIN. 12" ABOVE FLOOD LEVEL RIM OF FLOOR DRAIN
3. ALWAYS INSTALL IN ACCESSIBLE AREA
4. PRIORITY OF TRAP PRIMER LOCATION (IN ORDER)
   A. MECHANICAL ROOMS
   B. JANITOR CLOSETS/ROOMS
   C. ABOVE ACCESSIBLE CEILINGS
5. TRAP PRIMER SHALL BE ACCESSIBLE FOR MAINTENANCE. IF THE ABOVE LOCATIONS ARE NOT PRACTICAL, LOCATE PRIMER IN AN INTERIOR WALL AND FURNISH AND INSTALL A PAINTABLE STEEL, KEY LOCKED ACCESS DOOR WITH FRAME.

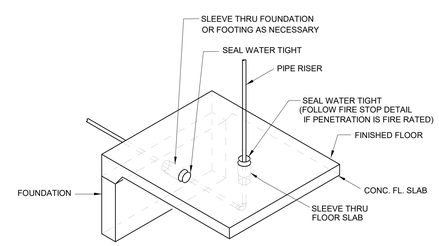
TRAP PRIMER DETAIL

NO SCALE



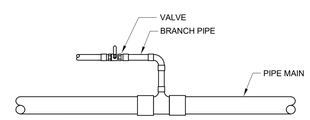
FOOD PREP INDIRECT WASTE DETAIL

NO SCALE



PIPE PENETRATION DETAIL

NO SCALE



NOTES:

1. TAKE OFF FROM TOP OF PIPE TO LIMIT SOLID PARTICLES AND TO RISE ABOVE PARALLEL PIPE.
2. CPVC AND PVC VALVES ARE NOT ACCEPTABLE.
3. VALVE STEMS SHALL BE INSTALLED ABOVE CENTER LINE OF PIPE.

PIPE TAKE OFF DETAIL

NO SCALE

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
Logan Overturf
No. 32455
LICENSED PROFESSIONAL ENGINEER
2024-05-17

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OWENSBORO INDOOR SPORTS FACILITY

500 WEST THIRD STREET
OWENSBORO, KY 42301

PLUMBING DETAILS

JOB NO.	22630
DATE	MAY 20, 2024
DRAWN	RY
CHECKED	LO

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ARCHITECTS, PLLC

REVISIONS

No.	Description	Date

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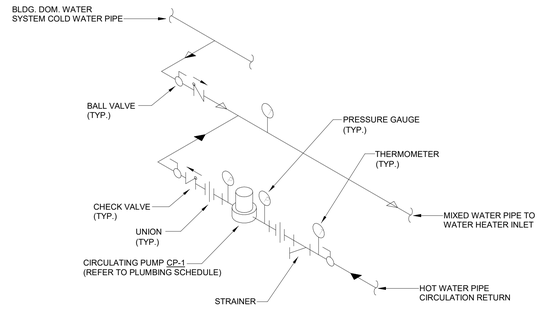
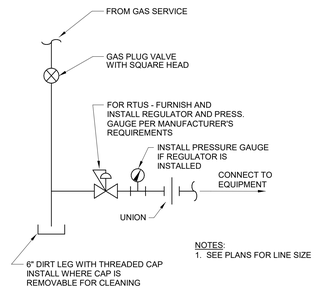


DOMESTIC WATER CIRCULATING PUMP DETAIL

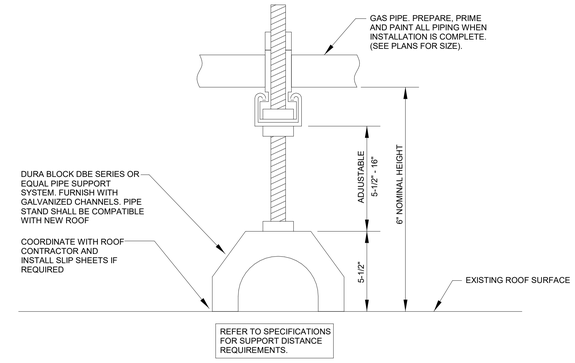
NO SCALE



NOTES:
1. SEE PLANS FOR LINE SIZE

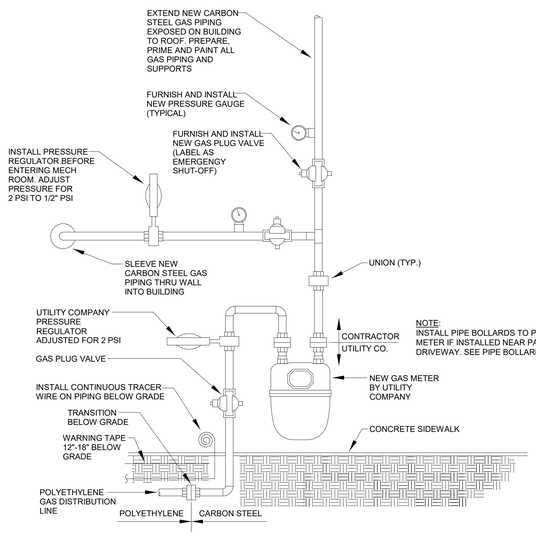
GAS CONNECTION DETAIL

NO SCALE



GAS PIPING SUPPORT DETAIL

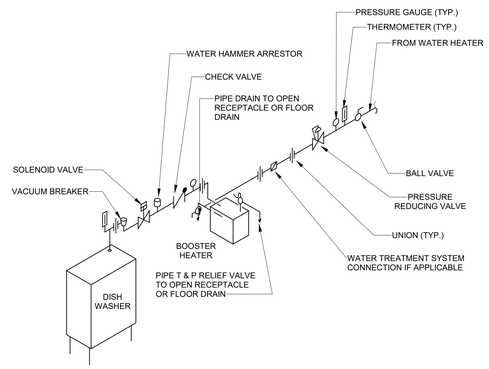
NO SCALE



NOTE:
INSTALL PIPE BOLLARDS TO PROTECT GAS METER IF INSTALLED NEAR PARKING LOT / DRIVEWAY. SEE PIPE BOLLARD DETAIL

GAS METER DETAIL

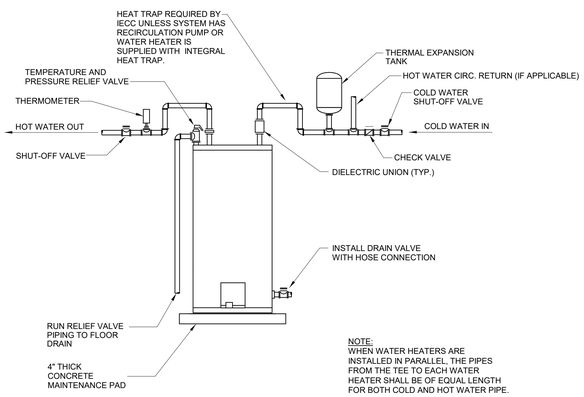
NO SCALE



NOTE:
1. INSTALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS.
2. COORDINATE WITH APPROVED KITCHEN EQUIPMENT SHOP DRAWINGS PRIOR TO EQUIPMENT ROUGH IN.

DISHWASHER AND BOOSTER HEATER PIPING DETAIL

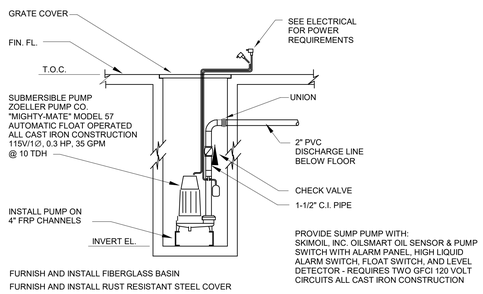
NO SCALE



NOTE:
WHEN WATER HEATERS ARE INSTALLED IN PARALLEL, THE PIPES FROM THE TEE TO EACH WATER HEATER SHALL BE OF EQUAL LENGTH FOR BOTH COLD AND HOT WATER PIPE.

WATER HEATER DETAIL

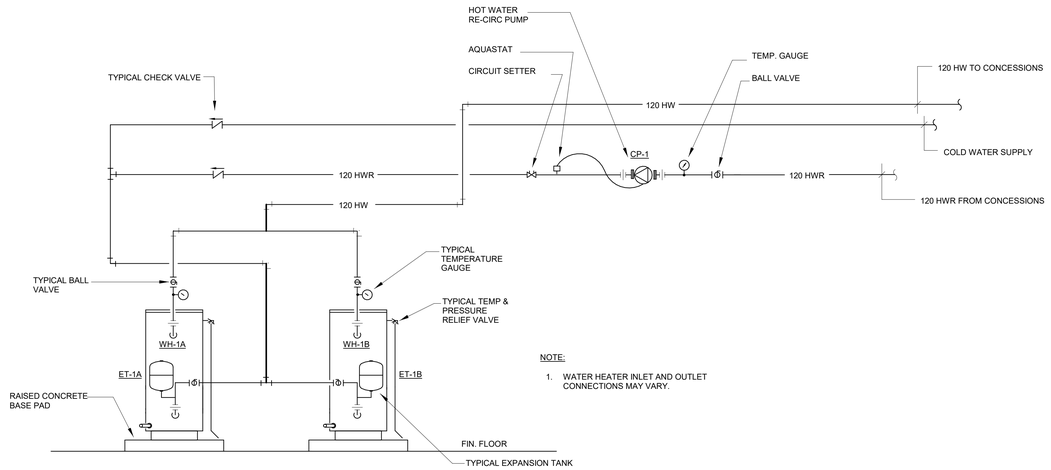
NO SCALE



PROVIDE SUMP PUMP WITH: SKIMOIL, INC. OILSMART OIL SENSOR & PUMP SWITCH WITH ALARM PANEL, HIGH LIQUID ALARM SWITCH, FLOAT SWITCH, AND LEVEL DETECTOR - REQUIRES TWO GFCI 120 VOLT CIRCUITS ALL CAST IRON CONSTRUCTION

SUMP PUMP DETAIL

NO SCALE



NOTE:
1. WATER HEATER INLET AND OUTLET CONNECTIONS MAY VARY.

DOMESTIC HOT WATER PIPING SCHEMATIC - CONCESSIONS

NO SCALE

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY — Logan Overturf No. 32455 — LICENSED PROFESSIONAL ENGINEER
2024-05-17

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OWENSBORO, KY 42301

PLUMBING DETAILS

JOB NO.	22630
DATE	MAY 20, 2024
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REVISIONS

No.	Description	Date

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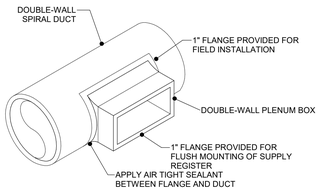
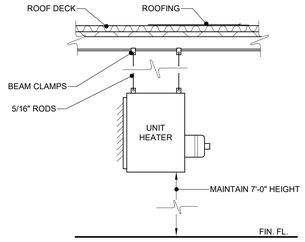


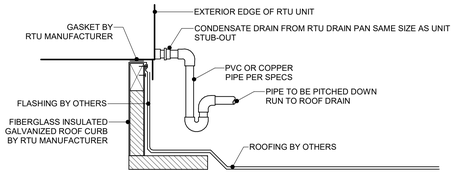
DOUBLE-WALL DUCT MOUNTED REGISTER BOOT DETAIL

NO SCALE



UNIT HEATER DETAIL

NO SCALE



1. CURB MUST BE INSTALLED LEVEL SO THAT CONDENSATE DRAINS PROPERLY. REFER TO MANUFACTURER INSTALLATION INSTRUCTIONS FOR LEVELING TOLERANCES.

ROOFTOP UNIT CONDENSATE DRAIN DETAIL

NO SCALE

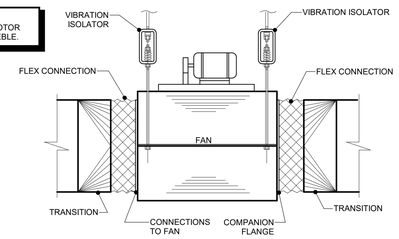
HVAC LEGEND

SA	SHEETMETAL SUPPLY-AIR DUCTWORK
RA	SHEETMETAL RETURN-AIR DUCTWORK
EA	SHEETMETAL EXHAUST-AIR DUCTWORK
00x00	NEW RECT. SHEETMETAL DUCTWORK: FIRST FIG. WIDTH, SECOND FIG. DEPTH
Ø0	NEW ROUND RIGID S.M. DUCTWORK
Ø0	NEW FLEXIBLE ROUND DUCTWORK
	SUPPLY-AIR DUCT (UP/DN)
	RETURN-AIR DUCT (UP/DN)
	EXHAUST-AIR DUCT (UP/DN)
	PIPE RISE
	PIPE DROP
	CEILING SUPPLY-AIR DIFFUSER
	CEILING RETURN-AIR GRILLE
	CEILING EXHAUST-AIR GRILLE
S-#	SUPPLY-AIR DIFFUSER (SEE SCHEDULE)
R-#	RETURN-AIR GRILLE (SEE SCHEDULE)
E-#	EXHAUST-AIR GRILLE (SEE SCHEDULE)
	AUTOMATIC FIRE DAMPER
T	THERMOSTAT
Z	ZONE SENSOR
#	NEW CONSTRUCTION NOTE
D	CONDENSATE DRAIN PIPING
REF	REFRIGERANT PIPING
S	HEAT PUMP LOOP WATER SUPPLY
R	HEAT PUMP LOOP WATER RETURN
TYPE #	EQUIPMENT TAG - TYPE & NUMBER
EF #	VENTILATING FAN (SEE SCHEDULE)
RTU #	PACKAGED ROOFTOP HVAC UNIT (SEE SCHEDULE)
RH #	ROOF HOOD (SEE SCHEDULE)
EH #	ELECTRIC UNIT HEATER (SEE SCHEDULE)
HVLS #	HIGH VOLUME LOW SPEED FAN (SEE SCHEDULE)
KEF #	KITCHEN EXHAUST FAN (SEE SCHEDULE)
KH #	KITCHEN EXHAUST HOOD (SEE SCHEDULE)

GENERAL HVAC NOTES

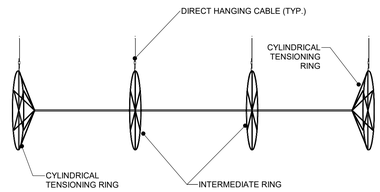
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE STATE BUILDING CODE, INTERNATIONAL MECHANICAL CODE, NFPA 54 NATIONAL FUEL GAS CODE, AND OTHER LOCAL/STATE/ NATIONAL CODES OR STANDARDS THAT APPLY.
2. THE CONTRACTOR SHALL ACQUIRE HVAC PERMIT(S), COORDINATE ALL INSPECTIONS, AND PAY ALL ASSOCIATED FEES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL THE CONTRACT DOCUMENTS AND VISITING THE PROJECT SITE TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS PRIOR TO BIDDING. ANY DISCREPANCIES OR QUESTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER NINE (9) DAYS PRIOR TO THE BID DATE.
4. THESE PLANS ARE SCHEMATIC IN NATURE AND INDICATE THE APPROXIMATE AND GENERAL LOCATION OF DUCTWORK, EQUIPMENT, AND/OR PIPING. COORDINATE INSTALLATION OF WORK WITH OTHER DRAWINGS AND TRADES.
5. VERIFY ALL DIMENSIONS BEFORE FABRICATION AND/OR INSTALLATION.
6. CONCEAL ALL DUCTWORK, PIPING, ETC. IN CEILING AND/OR WALL SPACES (UNLESS NOTED OTHERWISE). PROVIDE ALL NECESSARY ACCESS DOORS IN INACCESSIBLE CEILINGS TO ALLOW ACCESS FOR MANUAL VOLUME DAMPERS, VALVES, CONTROL COMPONENTS, ETC.
7. REMOVE AND REPLACE CEILING TILES AND/OR GRID AS REQUIRED TO INSTALL WORK. REPLACED ANY DAMAGED TILE OR GRID.
8. SLEEVE ALL DUCTWORK, PIPING, VENTS, ETC. THROUGH NEW ROOF, FLOOR, AND/OR WALLS. PIPE SLEEVES SHALL BE SCHEDULE 10 AND GALVANIZED STEEL. SLEEVES ARE NOT REQUIRED FOR CORE DRILLED HOLES.
9. FLASH AND SEAL ALL ROOF, FLOOR, AND WALL PENETRATIONS.
10. FIRE STOP ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES. FIRE STOPPING METHOD AND MATERIALS SHALL BE UL LISTED. FIRE COLLARS WILL BE REQUIRED IF PIPING IS COMBUSTIBLE.
11. PATCH ALL WALLS, FLOORS, CEILINGS, PAVEMENTS, GRADES, ETC. THAT ARE ALTERED BECAUSE OF WORK REQUIRED.
12. SEISMICALLY SUPPORT ALL EQUIPMENT, PIPE, DUCTWORK, ETC. PER THE STATE BUILDING CODE AND SEISMIC DESIGN CATEGORY DEFINED IN SPECIFICATIONS.
13. PROVIDE ALL HVAC UNITS WITH MANUFACTURER'S START-UP AND CERTIFIED REPORT FOR ENGINEER'S APPROVAL. INSTALLING CONTRACTOR START-UP IS NOT ACCEPTABLE.
14. COVER ALL OPENINGS ON AIR CONVEYANCE COMPONENTS (DUCTWORK AND/OR EQUIPMENT), WHETHER STORED OR INSTALLED, TO PREVENT ACCUMULATION OF CONSTRUCTION DUST. AIR CONVEYANCE SYSTEMS FOUND TO BE DUSTY SHALL BE PROFESSIONALLY CLEANED AND CERTIFIED BY A NADCA CONTRACTOR AT THE HVAC CONTRACTOR'S EXPENSE.
15. STORE AND INSTALL DUCTWORK AND/OR EQUIPMENT ONLY WHERE PROTECTED FROM DIRECT CONTACT WITH RAIN OR CONSTRUCTION WATER.
16. COORDINATE DUCTWORK ROUTING IN CEILING SPACES TO AVOID CONFLICTS WITH FIRE PROTECTION, PLUMBING, SPECIAL SYSTEMS, LIGHTING, NEC CLEARANCES, ETC.
17. COORDINATE DUCTWORK ROUTING IN GYM SPACES TO AVOID CONFLICTS WITH BASKETBALL GOAL SUPPORTS, VOLLEYBALL STANDARDS, CURTAINS, ETC.
18. DUCTWORK SHALL BE GALVANIZED STEEL (UNLESS SPECIFIED OTHERWISE) AND SHALL BE FABRICATED/INSTALLED IN ACCORDANCE WITH THE APPLICABLE MANUAL OR HANDBOOK OF THE SHEETMETAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION, INC. (SMACNA), LATEST ISSUE.
19. KITCHEN HOOD EXHAUST DUCTWORK SHALL BE 16 GAUGE 316L STAINLESS STEEL WITH NEAT APPEARANCE, ALL-WELDED JOINTS OR UL LISTED DUAL WALL DUCT SYSTEM. PITCH DUCTWORK AND INSTALL UL LISTED ACCESS DOORS PER IMC FOR PROPER INSPECTION/CLEANING.
20. PROVIDE 4" FLEXIBLE CONNECTIONS BETWEEN ALL HVAC UNITS AND RIGID SHEETMETAL DUCTWORK TO STOP VIBRATION TRANSMISSION.
21. INSTALL DUAL WALL TURNING VANES IN SUPPLY AIR RECTANGULAR ELBOWS. RADIUSED ELBOWS ARE NOT ACCEPTABLE.
22. FURNISH AND INSTALL AUTOMATIC FIRE DAMPERS WITH APPROPRIATELY SIZED ACCESS PANELS/DOORS AT ALL FIRE RATED ASSEMBLIES. LABEL ALL FIRE DAMPERS AND THEIR ASSOCIATED RATING TO BE HIGHLY VISIBLE FROM GROUND.
23. INSTALL A BEAD OF SEALANT BETWEEN THE BASE OF HVAC EQUIPMENT AND ROOF CURBS.
24. CONTINUOUSLY SEAL ALL DUCT JOINTS WITH MONECO, DUCTMATE, HARDCAST, OR APPROVED EQUAL DUCT SEALER. ASSURE THAT DUCT SEALER IS A WATER-BASED, LOW VOC COMPOUND. USE OF TAPE TO SEAL DUCT JOINTS IS NOT ACCEPTABLE.
25. INSTALL A CONDENSATE TRAP AND DRAIN LINE FOR ALL EQUIPMENT REQUIRING A DRAIN. THE DRAIN SIZE (AT A MINIMUM) SHALL BE EQUAL TO THE UNIT'S CONNECTION SIZE BUT IN NO CASE SHALL BE LESS THAN 1" DIAMETER. FABRICATE TRAP TO MAINTAIN TOTAL FAN STATIC PRESSURE PLUS 1 IN WC.
26. INTERNALLY INSULATE RETURN AND EXHAUST AIR GRILLE PLENUMS WITH 1/2" FIBERGLASS, ANTI-MICROBIAL DUCT LINER FOR SOUND CONTROL.
27. DUCT DIMENSIONS ARE ACTUAL SHEETMETAL SIZES AND ALLOWANCES FOR INTERNAL INSULATION HAVE BEEN ACCOUNTED FOR.
28. EXTERNALLY INSULATE SHEETMETAL DUCTWORK, TRANSITIONS, TAKE-OFFS, VOLUME DAMPERS, DIFFUSER BACKS, ETC. WITH FIBERGLASS INSULATION AND VAPOR BARRIER AS SCHEDULED AND SPECIFIED. SEAL ALL VAPOR BARRIER JOINTS.
29. INSULATE ALL REFRIGERANT PIPING WITH FLEXIBLE ELASTOMERIC THERMAL INSULATION. LINES LOCATED OUTDOORS SHALL BE INSULATED AND JACKETED WITH UV RESISTANT PVC JACKET. PROPERLY SUPPORT PIPING WITH UNISTRUT SYSTEMS.
30. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE AND PROPER INSTALLATION OF THERMOSTATS AND ALL OTHER FIELD MOUNTED CONTROL COMPONENTS. THE HVAC EQUIPMENT MANUFACTURER SHALL FURNISH COMPLETE WIRING DIAGRAMS TO THE INSTALLER FOR USE IN WIRING CONTROLS. ALL CONTROL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE CONTROL AND/OR ELECTRICAL SPECIFICATIONS AND THE LATEST NEC (NATIONAL ELECTRICAL CODE) EDITION.
31. PER ADA STANDARDS, TOP OF THERMOSTATS AND SIMILAR CONTROLS SHALL BE MOUNTED AT 48" (MAXIMUM) ABOVE THE FINISHED FLOOR.
32. FURNISH AND INSTALL LOCKABLE COVERS ON THERMOSTATS AND EXPOSED CONTROL SENSORS IN PUBLIC AREAS (GYMS AND LOBBY). THERMOSTAT COVERS SHALL BE STEEL PAINTED TO MATCH WALL: KENALL THERMO-GARD MODEL TG-510D OR APPROVED EQUAL.
33. THE FIRE ALARM CONTRACTOR SHALL FURNISH A DUCT SMOKE DETECTOR FOR EACH HVAC SYSTEM THAT IS 2,000 CFM OR GREATER RETURN AIR OR 15,000 CFM OR GREATER SUPPLY AIR. THE DUCT SMOKE DETECTOR SHALL BE COMPATIBLE WITH FIRE ALARM SYSTEM. THE MECHANICAL CONTRACTOR SHALL RECEIVE THE DUCT SMOKE DETECTOR AND INSTALL IN THE APPROPRIATE DUCT SO AS TO BE ACCESSIBLE IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE. THE DUCT SMOKE DETECTOR SHALL BE INTERLOCKED WITH THE HVAC UNIT AND FIRE ALARM SYSTEM TO SHUT DOWN AIR FAN(S) AND GENERATE A GENERAL ALARM CONDITION WHEN SMOKE IS SENSED IN THE DUCT.
34. BALANCE AIR AND/OR WATER FLOWS AND SUBMIT REPORTS FOR ENGINEER'S APPROVAL. TESTING, ADJUSTING, AND BALANCING SHALL BE PERFORMED BY A CERTIFIED AABC CONTRACTOR.
35. UNLESS SPECIFIED DIFFERENTLY WITHIN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL FURNISH AND INSTALL ADDITIONAL SHEAVES, PULLEYS, BELTS AND/OR SPEED CONTROLLERS AS REQUIRED TO BRING AIR SYSTEM TO WITHIN 10% (OR AS OTHERWISE SPECIFIED) OF DESIGN.
36. INSTALL SUPPORT CONNECTIONS PER ROOF FRAMING MANUFACTURER'S REQUIREMENTS WHEN SUSPENDING SYSTEMS FROM PRE-ENGINEERED LIGHT GAUGE STEEL TRUSSES OR PRE-ENGINEERED METAL BUILDINGS.

NOTE:
ROTATE FAN TO ENSURE MOTOR & FAN LOCATION IS SERVICEBLE.



INLINE FAN SUPPORT DETAIL

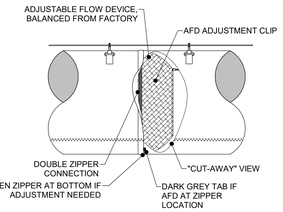
NO SCALE



FABRIC DUCT SUSPENSION DETAIL

NO SCALE

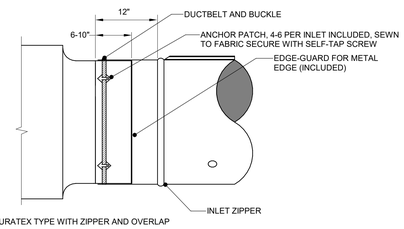
FABRIC TENSIONING SYSTEM



INSTALLED AT ZIPPER LOCATION AT INLET OR AS SPECIFIED IN OTHER LOCAITONS.
ZIPPER TO ZIPPER CONNECTION AS SHOWN. EXTERNAL LABEL IDENTIFIES LOCATION.

FABRIC DUCT ADJUSTABLE FLOW DEVICE (AFD)

NO SCALE

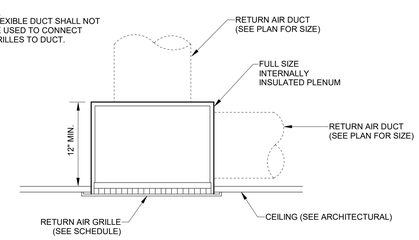


DURATEX TYPE WITH ZIPPER AND OVERLAP

FABRIC DUCT INLET ATTACHMENT DETAIL

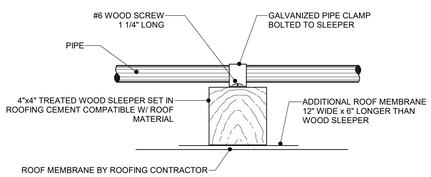
NO SCALE

NOTE:
1. FLEXIBLE DUCT SHALL NOT BE USED TO CONNECT GRILLES TO DUCT.



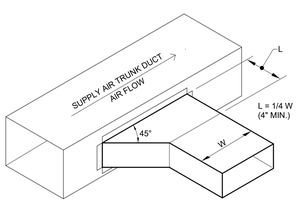
RETURN-AIR GRILLE PLENUM DETAIL

NO SCALE

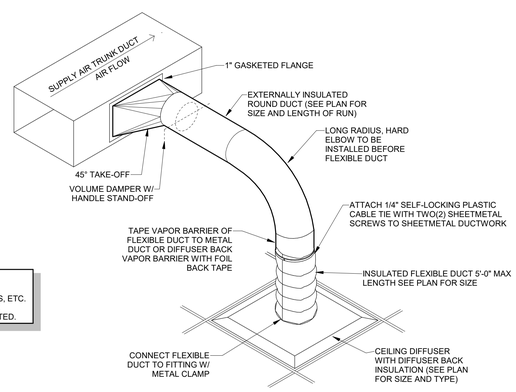


SUPPORT FOR PIPING ON ROOF

NO SCALE



RECTANGLE TAKE-OFF

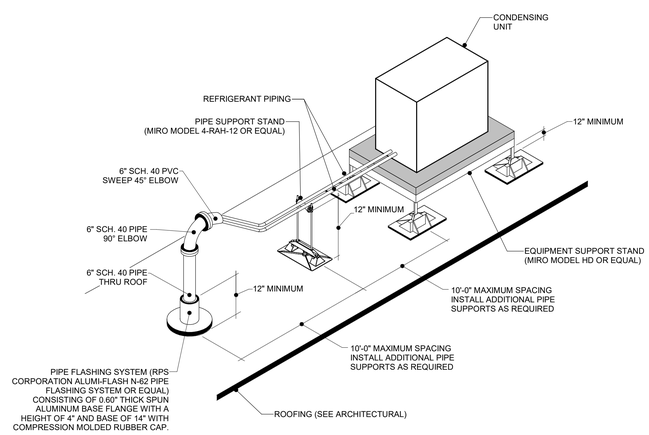


NOTE:
SPIN-INS, RAKE-OFFS, EXTRACTORS, SPLITTERS, ETC. WILL NOT BE ACCEPTED UNLESS OTHERWISE NOTED.

ROUND TAKE-OFF

SUPPLY AIR DUCT TAKE-OFF CONNECTION DETAIL

NO SCALE



COOLER AND FREEZER ROOFTOP EQUIPMENT SUPPORT REFRIGERANT PIPING ROOF PENETRATION DETAIL

NO SCALE

HVAC PIPE INSULATION SCHEDULE

SERVICE	SIZE	INSULATION	THICKNESS (INCHES)	JACKET	REMARKS
REFRIGERANT PIPING, OUTDOOR, ABOVE-GROUND	ALL	FLEXIBLE ELASTOMERIC	1.0	PVC	2
REFRIGERANT PIPING, INDOOR	ALL	FLEXIBLE ELASTOMERIC	1.0	---	

REMARKS:

1. REFER TO SPECIFICATIONS SECTION 230700 MECHANICAL INSULATION FOR SUBMITTAL REQUIREMENTS, PRODUCT INFORMATION, ACCEPTABLE MANUFACTURERS, AND INSTALLATION.
2. PVC JACKET FOR EXTERIOR APPLICATIONS SHALL BE UV RESISTANT.
3. ITEMS NOT INSULATED:
   CONDENSATE PIPING ON ROOF.

DUCT INSULATION SCHEDULE

SERVICE	INSULATION	THICKNESS (INCHES)	DENSITY (LB/CU FT)	JACKET	REMARKS
CONCEALED SUPPLY AIR DUCTWORK	MINERAL FIBER BLANKET	2.2	0.75	FSK	
EXPOSED SUPPLY AIR DUCTWORK (NON DUAL WALL)	MINERAL FIBER PIPE AND TANK WRAP	1.5	0.75	ASJ	
DIFFUSER BACKS	MINERAL FIBER BLANKET	2.2	0.75	FSK	
RETURN AND EXHAUST AIR GRILLE PLENUM BOXES	MINERAL FIBER ANTI-MICROBIAL LINER	1.0	3	N/A	
INTERIOR EXHAUST AIR DUCTS	MINERAL FIBER BLANKET	2.2	0.75	FSK	2
RETURN AIR DUCTWORK AND PLENUMS (WHERE NOTED)	MINERAL FIBER ANTI-MICROBIAL LINER	0.5	3.00	N/A	
EXTERIOR SUPPLY AIR AND RETURN AIR DUCT AND PLENUMS	MINERAL FIBER BOARD	2.0	0.75	ALUMINUM	3
KITCHEN HOOD EXHAUST DUCTWORK	FIRE BARRIER WRAP, 2 LAYERS	2.0	0.75	FSK	

REMARKS:

1. REFER TO SPECIFICATIONS SECTION 230700 MECHANICAL INSULATION FOR SUBMITTAL REQUIREMENTS, PRODUCT INFORMATION, ACCEPTABLE MANUFACTURERS, AND INSTALLATION.
2. INTERIOR EXHAUST AND RELIEF AIR DUCTS SHALL BE INSULATED FOR THE FIRST TEN FEET FROM THE BUILDING ENVELOPE PENETRATION.
3. ALUMINUM JACKET SHALL BE EMBOSSED, MINIMUM 0.02 INCHES THICK. ALUMINUM FOIL/POLYMER LAMINATE (ALUMIGUARD) IS NOT ACCEPTABLE.
4. ITEMS NOT INSULATED:
   RETURN AND EXHAUST DUCTWORK OTHER THAN NOTED ABOVE
   FACTORY-INSULATED FLEXIBLE DUCTS
   FLEXIBLE CONNECTIONS
   VIBRATION CONTROL DEVICES
   DOUBLE WALL DUCTWORK
   UNIT HEATERS

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
Logan Overturf
No. 32455
LICENSED PROFESSIONAL ENGINEER
2024-05-17

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OWENSBORO, KY 42301

HVAC LEAD SHEET

JOB NO.	22630
DATE	MAY 20, 2024
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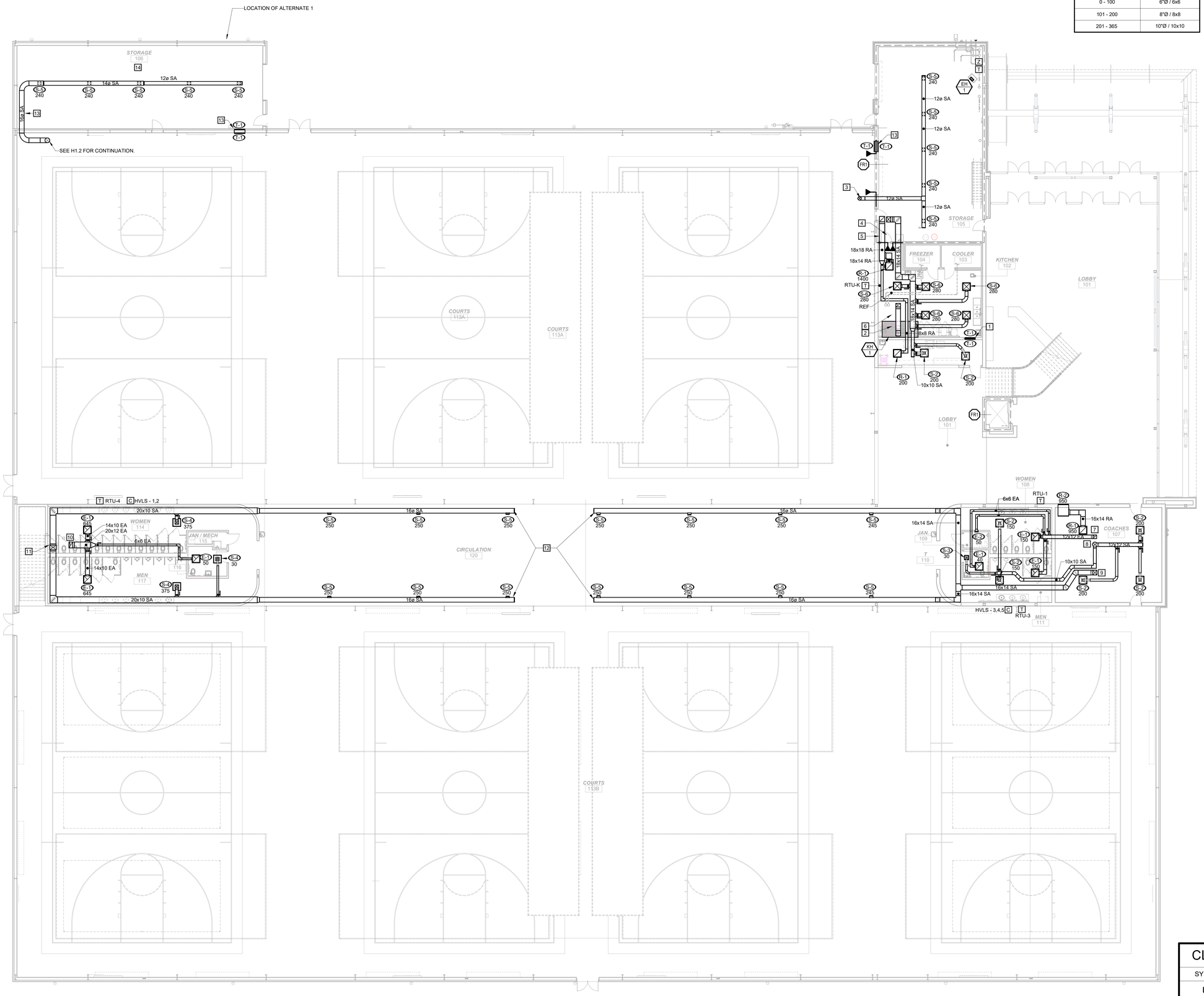
REVISIONS

No.	Description	Date

SHEET

H0.1



PLAN NORTH

HVAC FLOOR PLAN

SCALE: 3/32" = 1'-0"

DUCT RUN-OUT SCHEDULE

CFM RANGE	SIZE
0 - 100	6"Ø / 6x6
101 - 200	8"Ø / 8x8
201 - 365	10"Ø / 10x10

MECHANICAL CONSTRUCTION TAG NOTES

#	(APPLIES TO THIS DRAWING ONLY)
1	1025 CFM TRANSFER AIR THROUGH OPEN DOORWAY FROM ADJACENT SPACE WHEN KITCHEN HOOD EXHAUST FAN OPERATES.
2	GREASE DUCT SHALL HAVE NO DIPS OR TRAPS, AND HORIZONTAL RUNS SHALL BE SLOPED 1/16" PER FOOT TOWARDS THE HOOD. PROVIDE RATED ACCESS DOOR AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER.
3	12" DIA FROM MEZZANINE LEVEL. SEE H1.2 FOR CONTINUATION.
4	18x14 SA FROM MEZZANINE. SEE H1.2 FOR CONTINUATION.
5	18x18 RA TO MEZZANINE. SEE H1.2 FOR CONTINUATION.
6	16x12 EA TO MEZZANINE. SEE H1.2 FOR CONTINUATION.
7	12x12 EA TO MEZZANINE. SEE H1.2 FOR CONTINUATION.
8	16" DIA. SA FROM MEZZANINE. SEE H1.2 FOR CONTINUATION.
9	16x14 SA FROM MEZZANINE. SEE H1.2 FOR CONTINUATION.
10	20x12 EA TO MEZZANINE. SEE H1.2 FOR CONTINUATION.
11	22x16 SA FROM MEZZANINE. SEE H1.2 FOR CONTINUATION.
12	HOLD DUCT AS HIGH AS POSSIBLE BELOW MEZZANINE SLAB.
13	1200 CFM TRANSFER AIR
14	ALL WORK THIS AREA BY ALTERNATE BID, INCLUDING ALL DUCT AND TRANSFER OPENINGS. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS AND PROVIDE BID ACCORDINGLY.
15	PROVIDE WALL CONTROLLER FOR KITCHEN HOOD AT ADA HEIGHT. CONTROLLER SHALL BE CAPABLE OF ALL FUNCTIONS OF HOOD MOUNTED CONTROLLER.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

AFD = AUTOMATIC FIRE DAMPER
F-R-R = FIRE-RESISTANT-RATED
F-R-W = FIRE-RATED-WALL
FS = FIRE STOP

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HVAC FIRST FLOOR PLAN

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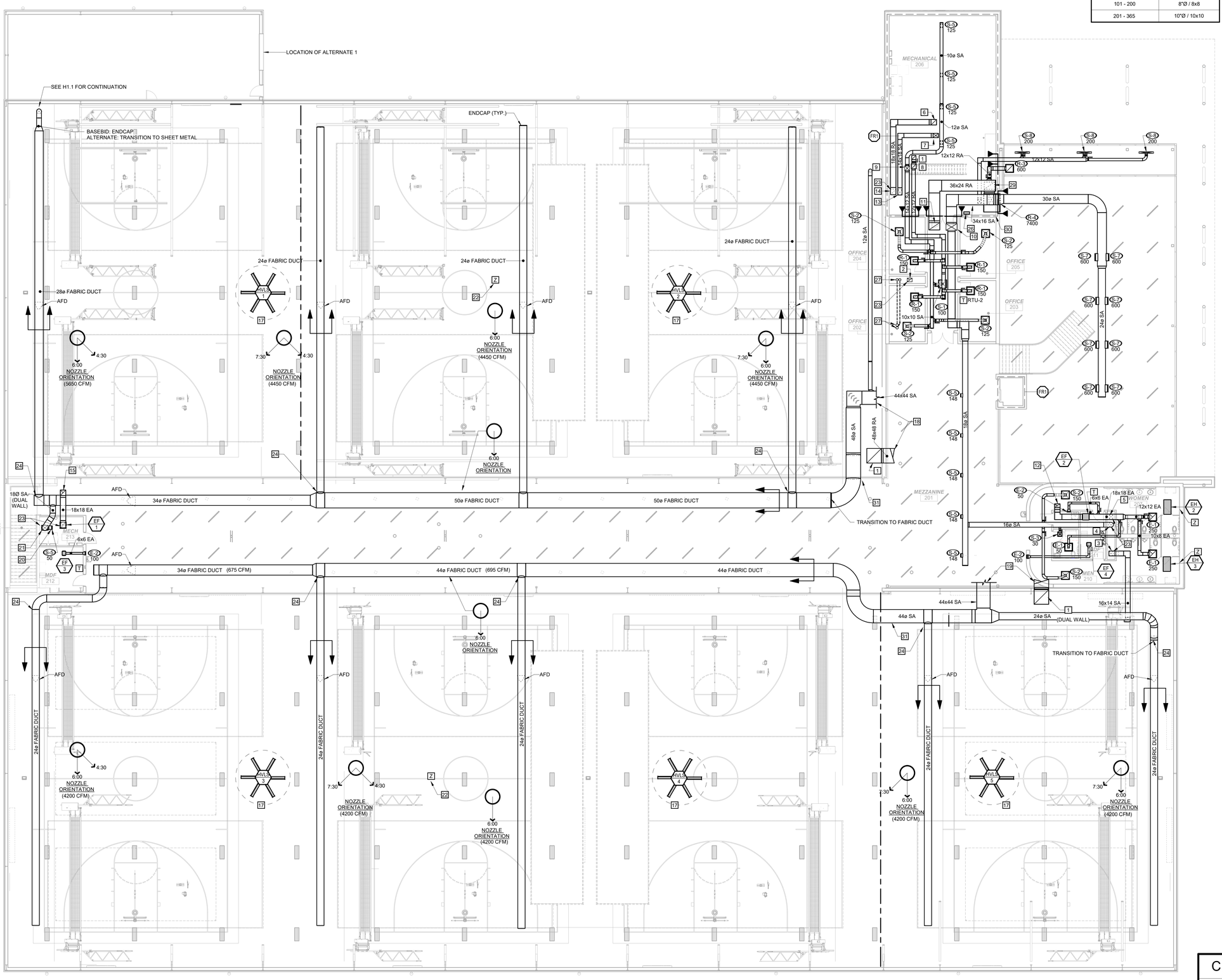

PLAN NORTH

HVAC MEZZANINE PLAN

SCALE: 3/32" = 1'-0"

DUCT RUN-OUT SCHEDULE

CFM RANGE	SIZE
0 - 100	6"Ø / 6x6
101 - 200	8"Ø / 8x8
201 - 365	10"Ø / 10x10

MECHANICAL CONSTRUCTION TAG NOTES

#	(APPLIES TO THIS DRAWING ONLY)
1	RA ELBOW TURNED UP. TERMINATE WITH WIRE MESH SCREEN.
2	16X12 GREASE DUCT UP AND DOWN. PROVIDE ACCESS DOOR IN DUCT ABOVE CEILING.
3	16x14 SA DOWN TO FIRST FLOOR. SEE H1.1 FOR CONTINUATION.
4	16" DIA. DOWN TO FIRST FLOOR. SEE H1.1 FOR CONTINUATION.
5	12x12 SA DOWN TO FIRST FLOOR. SEE H1.1 FOR CONTINUATION.
6	18x18 RA TO RTU-K. SEE ME1.1 FOR CONTINUATION.
7	18x14 SA FROM RTU-K. SEE ME1.1 FOR CONTINUATION.
8	16x16 SA FROM RTU-2. SEE ME1.1 FOR CONTINUATION.
9	16x16 RA TO RTU-2. SEE ME1.1 FOR CONTINUATION.
10	36x22 SA FROM RTU-1. SEE ME1.1 FOR CONTINUATION.
11	36x24 RA TO RTU-1. SEE ME1.1 FOR CONTINUATION.
12	18x12 EA TO ROOF.SEE ME1.1 FOR CONTINUATION.
13	18x14 SA TO FIRST FLOOR. SEE H1.1 FOR CONTINUATION.
14	18x18 RA TO FIRST FLOOR. SEE H1.1 FOR CONTINUATION.
15	18x18 EA TO ROOF.SEE ME1.1 FOR CONTINUATION.
16	22x16 SA TO FIRST FLOOR. SEE H1.1 FOR CONTINUATION.
17	HVLS FANS ARE SHOWN IN MOST IDEAL LOCATION, HOWEVER, CONTRACTOR SHALL COORDINATE FINAL LOCATIONS OF HVLS FANS WITH THE LOCATIONS OF SPORTS EQUIPMENT AND KHSAA REQUIREMENTS. COORDINATE WITH LIGHTING AND STRUCTURAL ON FINAL PLACEMENT TO AVOID CONFLICT. MINIMUM HEIGHT TO BE 25' A.F.F.
18	DUCT THROUGH WALL TO RTU-4. SEE ME1.1 FOR CONTINUATION.
19	DUCT THROUGH WALL TO RTU-3. SEE ME1.1 FOR CONTINUATION.
20	INSTALL SUPPLY AIR DIFFUSER (S-5) IN VERTICAL TO SERVE MECH. 213.
21	TRANSITION TO 22x16 SA AT FLOOR.
22	INSTALL BAS TEMPERATURE SENSOR ON STRUCTURE WITHIN 5 FEET OF THE ROOF DECK.
23	COORDINATE FLOOR PENETRATIONS WITH STRUCTURAL CONCRETE PLANK. PROVIDE A FIRE DAMPER IN THE VERTICAL.
24	CONTRACTOR SHALL CAREFULLY COORDINATE FINAL ROUTING OF FABRIC DUCT WITH ALL OTHER EQUIPMENT IN SPACE TO AVOID CONFLICT WITH EQUIPMENT, STRUCTURE, SUPPORTS, LIGHTS, FANS, ETC.
25	FABRIC DUCT DESIGN INTENT IS TO BRANCH OFF MAIN AND FOLLOW SLOPE OF ROOF, AS HIGH AS POSSIBLE (MINIMUM 25' A.F.F. WHERE DUCT IS ABOVE PLAYING SURFACES). REFER TO STRUCTURAL AND ARCHITECTURAL PLANS FOR SPECIFIC ROOF/STRUCTURE SLOPES AND COORDINATE FINAL LAYOUT WITH PEMB SHOP DRAWINGS.
26	APPROXIMATE LOCATION OF TEMPERATURE CONTROLS CABINET HEAD END. COORDINATE FINAL PLACEMENT WITH OWNER. TEMPERATURE CONTROLS CONTRACTOR AND ELECTRICAL CONTRACTOR.
27	REFIGERANT FROM ROOF. SEE ME1.1 FOR CONTINUATION.
28	REFIGERANT TO FIRST FLOOR. SEE H1.1 FOR CONTINUATION.
29	34x24 RA TO BOTTOM OF DUCT.
30	FULL SIZE RA PLENUM
31	PROVIDE OFFSETS AND TRANSITIONS IN DUAL WALL DUCT AS REQUIRED TO ROUTE DUCT FROM SIDEWALL PENETRATION TO FINAL HEIGHT REQUIRED AND APPOXIMATELY WHERE SHOWN ON H2.1. OFFSET AROUND ARCHITECTURAL AND STRUCTURAL FEATURES AS RQEUIRED. COORDINATE WITH ALL OTHER TRADES FOR FINAL DUCT PLACEMENT.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

AFD = AUTOMATIC FIRE DAMPER
F-R-R = FIRE-RESISTANT-RATED
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FS = FIRE STOP

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HVAC MEZZANINE PLAN

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REVISIONS

No.	Description	Date

SHEET

H1.2

PACKAGED ROOFTOP HVAC UNIT SCHEDULE

MARK	SERVICE	MFR.	MODEL	SIZE	CONFIGURATION	WEIGHT (LBS)	DIMENSIONS L x W x H (INCHES)	SUPPLY FAN AND MOTOR DATA						OUTSIDE AIRFLOW CFM			EXHUAST FAN AND MOTOR DATA						GAS HEATING					DX COOLING						HOT GAS REHEAT		ELECTRICAL CHAR.				REMARKS AND ACCESSORIES	MARK
								SUPPLY CFM	EXT. S.P. (IN. H2O)	FAN RPM	NUMBER OF FANS	EACH FAN MOTOR HP	TOTAL FAN BHP	MINIMUM	DESIGN	ECONOMIZER	EXHAUST CFM	EXT. S.P. (IN. H2O)	FAN RPM	NUMBER OF FANS	EACH FAN MOTOR HP	TOTAL FAN BHP	FUEL	MAXIMUM INPUT CAPACITY (MBH)	MAXIMUM OUTPUT CAPACITY (MBH)	STAGES OR MODULATION	EFF. (%)	TOTAL COOLING CAPACITY (MBH)	SENS. COOLING CAPACITY (MBH)	COMP QTY	COMPRESSOR CONTROL	CONDENSER FAN CONTROL	EER	TOTAL CAPACITY (MBH)	LAT (DEG F)	VOLTAGE / PHASE	MCA (AMPS)	MOCP (AMPS)	SCCR (KA)		
RTU-1	LOBBY	DAIKIN	DPSA	020	DOWNFLOW	3,833	163 x 77 x 83	8,000	1.25	2,429	1	10.0	6.8	600	600	8,000	6,800	0.50	941	2	1.5	1.6	NAT. GAS	450	360	10-100%	80%	249	207	1	MODULATING	ON-OFF	10.4	149	70	460 / 3	60.3	90	10	1-24, 26	RTU-1
RTU-2	OFFICES	DAIKIN	DRG	036	DOWNFLOW	576	74 x 49 x 40	1,200	0.50	-	1	1.2	-	125	125	1,200	N/A	N/A	N/A	N/A	N/A	N/A	NAT. GAS	70	56.7	2-STAGE	81%	36	29.5	1	2-STAGE	ON-OFF	12.1	N/A	N/A	460 / 3	10.1	15	5	1-16, 26, 27	RTU-3
RTU-3	EAST COURTS 113B	DAIKIN	DPSA	075	HORIZONTAL	14,412	433 x 97 x 102	24,500	1.25	2,217	4	7.7	27.6	1,700	7,000	24,500	23,000	0.50	1,410	2	4.1	5.50	NAT. GAS	1125	931	10-100%	82%	912	668	4	1 MODULATING	MODULATING	10.0	397	70	460 / 3	158.2	175	10	1-26	RTU-4
RTU-4	WEST COURTS 113A	DAIKIN	DPSA	075	HORIZONTAL	14,412	433 x 97 x 102	24,500	1.25	2,217	4	7.7	27.6	1,700	7,000	24,500	23,000	0.50	1,410	2	4.1	5.50	NAT. GAS	1125	931	10-100%	82%	912	668	4	1 MODULATING	MODULATING	10.0	397	70	460 / 3	158.2	175	10	1-26	RTU-5

REMARKS AND ACCESSORIES:

1. PROVIDE UNIT WITH AT MINIMUM ONE (1) YEAR PARTS AND LABOR WARRANTY, FIVE (5) YEAR COMPRESSOR WARRANTY, AND TEN (10) YEAR GAS HEAT EXCHANGER WARRANTY.
2. COOLING CAPACITIES ARE BASED STANDARD AHRI/ASHRAE CONDITIONS ON 95F db /78F wb AMBIENT AIR , 74F db AND 62F wb RETURN AIR TEMPERATURE.
3. FANS SHALL BE DIRECT DRIVE.
4. R410A REFRIGERANT.
5. PROVIDE UNIT WITH MANUFACTURER'S START-UP AND CERTIFIED REPORT FOR ENGINEER'S REVIEW AND APPROVAL. INSTALLING CONTRACTOR START-UP IS NOT ACCEPTABLE.
6. PROVIDE UNIT WITH 2" MERV 13 PLEATED FIBERGLASS FILTERS.
7. ELECTRICAL CONTRACTOR SHALL PROVIDE CONVENIENCE RECEPTACLES AS SHOWN ON ELECTRICAL DRAWINGS.
8. PROVIDE UNIT WITH HINGED ACCESS PANELS.
9. PROVIDE UNIT WITH CONDENSER COIL GUARD.
10. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ELECTRICAL DISCONNECT SWITCH.
11. PROVIDE MOTORS WITH THERMAL OVERLOAD AND PHASE FAILURE PROTECTION.
12. PROVIDE UNIT WITH STAINLESS STEEL HEAT EXCHANGER WITH GAS VALVE AND GAS SHUTOFF, IGNITION, ELECTRONIC FLAME SENSOR, AND INDUCED-DRAFT BLOWER.
13. EQUIPMENT SHORT-CIRCUIT CURRENT RATING (SCCR) SHALL BE EQUAL TO, OR GREATER THAN THE MINIMUM AS SCHEDULED. EQUIPMENT NAME PLATE SHALL INCLUDE SCCR IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE 2017 440.4(B). SCCR SHALL BE PROVIDED FOR ENGINEERING REVIEW ON EQUIPMENT SHOP DRAWING SUBMITTALS.
14. PROVIDE UNIT WITH FAN MOTORS THAT ARE EITHER EC MOTORS OR PROVIDE VFD WITH UNIT.
15. CONTROLS RESPONSIBILITIES: THE EQUIPMENT PROVIER SHALL PROVIDE ALL CONTROL FUNCTIONALITY REQUIRED FOR THE PROPER OPERATION/PROTECTION OF THE EQUIPMENT (FANS, COMPRESSORS, COMPONENTS, ETC.). THE TEMPERATURE CONTROL CONTRACTOR (TCC) SHALL PROVIDE CONTROL FUNCTIONALITY PER THE SEQUENCE OF OPERATIONS SPECIFICATION VIA EQUIPMENT MANUFACTURER'S CONTROLS, BAS, OR COMBINATION OF BOTH. TCC SHALL PROVIDE THERMOSTAT. THE HVAC CONTRACTOR IS RESPONSIBLE FOR COORDINATION BETWEEN TCC AND EQUIPMENT PROVIDER TO ASSURE ALL REQUIREMENTS OF THE SEQUENCE OF OPERATIONS ARE MET.
16. PROVIDE WITH INSULATED ROOF CURB SUITABLE FOR ROOF TYPE.
17. PROVIDE UNIT WITH A MINIMUM 1" DOUBLE WALL INSULATED CONSTRUCTION.
18. PROVIDE UNIT WITH SPACE MOUNTED HUMIDITY SENSOR FOR UNITS INDICATED TO HAVE HOT GAS REHEAT FOR ACTIVE DEHUMIDIFICATION.
19. PROVIDE UNIT WITH TWO INDEPENDENT REFRIGERANT CIRCUITS, EACH WITH LOW PRESSURE CONTROL, FILTER-DRIER, THERMAL EXPANSION VALVE, AND HIGH PRESSURE SAFETY SWITCH.
20. NOT USED
21. PROVIDE UNIT WITH STAINLESS STEEL, DOUBLE SLOPE CONDENSATE DRAIN PAN.
22. FIRE ALARM CONTRACTOR SHALL FURNISH A DUCT SMOKE DETECTOR FOR THE RETURN AIR DUCT IN UNITS THAT ARE GREATER THAN 2,000 CFM RETURN, AND A SMOKE DETECTOR FOR THE SUPPLY DUCT IN UNITS THAT ARE GREATER THAN 15,000 CFM IN THE SUPPLY DUCT. DUCT SMOKE DETECTORS SHALL BE COMPATIBLE WITH FIRE ALARM SYSTEM. MECHANICAL CONTRACTOR SHALL RECEIVE DUCT SMOKE DETECTORS FROM FIRE ALARM CONTRACTOR AND INSTALL IN DUCTWORK IN AN ACCESSIBLE LOCATION AND ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE. DUCT SMOKE DETECTORS SHALL BE INTERLOCKED WITH HVAC UNIT AND FIRE ALARM SYSTEM TO SHUT DOWN THE UNIT OPERATION AND INITIATE A GENERAL ALARM CONDITION WHEN SMOKE IS SENSED IN THE DUCT.
23. PROVIDE UNIT WITH 100% FULLY MODULATING AIRSIDE ECONOMIZER WITH COMPARATIVE ENTHALPY CONTROLS AND POWERED EXHAUST.
24. PROVIDE SPACE MOUNTED CO2 SENSOR TO MONITOR CO2 LEVELS. OUTSIDE AIR DAMPER SHALL MODULATE TO MAINTAIN ACCEPTABLE LEVELS, NOT MORE THAN 1,000 PPM (ADJUSTABLE). SEE SPECIFICAITONS SECTION SEQUENCE OF OPERATIONS.
25. PROVIDE UNIT WITH 24" TALL INSULATED ROOF CURB. WHERE HORIZONTAL CONFIGURATION IS NOT AVAILABLE, PROVIDE UNIT WITH 48" (OR TALLER AS NEEDED TO ALLOW 16" BETWEEN TOP OF ROOF AND BOTTOM OF SA/RA DUCT OPENINGS) INSULATED PLENUM CURB.
26. MECHANICAL CONTRACTOR SHALL SIZE AND PROVIDE UNIT WITH A NEEDLE-POINT IONIZATION DEVICE (GLOBAL PLASMA SOLUTIONS OR EQUAL). DEVICE SHALL BE PROVIDED AT 24V, POWERED AND CONTROLLED BY TEMPERATURE CONTROLS CONTRACTOR TO ACTIVATE WHENEVER THE SUPPLY FAN IS ON.
27. PROVIDE UNIT WITH 100% AIRSIDE ECONOMIZER AND BAROMETRIC RELIEF WITH COMPARATIVE ENTHALPY CONTROLS. PROVIDE WITH ULTRA LOW LEAKAGE DAMPERS.

DAIKIN-APPLIED, TRANE, CARRIER, JOHNSON CONTROLS-YORK, OR APPROVED EQUAL

KITCHEN ROOFTOP HVAC UNIT SCHEDULE

MARK	SERVICE	MFR.	MODEL	SIZE	CONFIGURATION	WEIGHT (LBS)	DIMENSIONS L x W x H (INCHES)	SUPPLY FAN			OUTSIDE AIRFLOW CFM			GAS HEATING					DX COOLING						HOT GAS REHEAT		ELECTRICAL CHAR.				REMARKS AND ACCESSORIES
								SUPPLY CFM	EXT. S.P. (IN. H2O)	FAN MOTOR HP	MINIMUM	DESIGN	ECONOMIZER	FUEL	MAXIMUM INPUT CAPACITY (MBH)	MAXIMUM OUTPUT CAPACITY (MBH)	STAGES OR MODULATION	EFF. (%)	TOTAL COOLING CAPACITY (MBH)	SENS. COOLING CAPACITY (MBH)	COMP. QTY	COMPRESSOR CONTROL	CONDENSER FAN CONTROL	IEER	TOTAL CAPACITY (MBH)	LAT (DEG F)	VOLTAGE / PHASE	MCA (AMPS)	MOCP (AMPS)	SCCR (KA)	
RTU-K	CONCESSIONS	DAIKIN	DSPA	007	DOWNFLOW	2,210	91 x 97 x 57	1,800	0.50	4.0	0	1,000	1,800	NAT. GAS	150	120	MODULATING 10:1	80%	93	60	2	1 MODULATING	MODULATING	19.8	YES-MODULATING		460 / 3	17.0	20	5	SEE BELOW

REMARKS AND ACCESSORIES:

1. PROVIDE UNIT WITH AT MINIMUM ONE (1) YEAR PARTS AND LABOR WARRANTY, FIVE (5) YEAR COMPRESSOR WARRANTY, AND TEN (10) YEAR GAS HEAT EXCHANGER WARRANTY.
2. COOLING CAPACITIES ARE BASED STANDARD AHRI/ASHRAE CONDITIONS ON 95F db /75F wb AMBIENT AIR , 74F db AND 62F wb RETURN AIR TEMPERATURE.
3. OUTSIDE AIR DAMPER SHALL MODULATE TO POSITION DETERMINED BY TEST & BALANCE TO PROVIDE DESIGN OUTSIDE AIRFLOW WHEN KITCHEN HOOD EXHAUST FAN OPERATES. OUTSIDE AIR DAMPER SHALL BE CLOSED WHEN HOOD EXHAUST FAN IS OFF AND UNIT IS NOT IN ECONOMIZER MODE.
4. FANS SHALL BE DIRECT DRIVE.
5. PROVIDE UNIT WITH MANUFACTURER'S START-UP AND CERTIFIED REPORT FOR ENGINEER'S REVIEW AND APPROVAL. INSTALLING CONTRACTOR START-UP IS NOT ACCEPTABLE.
6. PROVIDE UNIT WITH 2" MERV 13 PLEATED FIBERGLASS FILTERS.
7. PROVIDE UNIT WITH FACTORY INSTALLED, FIELD WIRED 115V/1PH CONVENIENCE OUTLET. OUTLET SHALL BE POWERED WHEN UNIT DISCONNECT IS OFF.
8. PROVIDE UNIT WITH HINGED ACCESS PANELS.
9. PROVIDE UNIT WITH CONDENSER COIL GUARD.
10. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ELECTRICAL DISCONNECT SWITCH.
11. PROVIDE MOTORS WITH THERMAL OVERLOAD AND PHASE FAILURE PROTECTION.
12. PROVIDE UNIT WITH STAINLESS STEEL HEAT EXCHANGER WITH GAS VALVE AND GAS SHUTOFF, IGNITION, ELECTRONIC FLAME SENSOR, AND INDUCED-DRAFT BLOWER.
13. EQUIPMENT SHORT-CIRCUIT CURRENT RATING (SCCR) SHALL BE EQUAL TO, OR GREATER THAN THE MINIMUM AS SCHEDULED. EQUIPMENT NAME PLATE SHALL INCLUDE SCCR IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE 2017 440.4(B). SCCR SHALL BE PROVIDED FOR ENGINEERING REVIEW ON EQUIPMENT SHOP DRAWING SUBMITTALS.
14. PROVIDE UNIT WITH FAN MOTORS THAT ARE EITHER EC MOTORS OR PROVIDE VFD WITH UNIT.
15. CONTROLS RESPONSIBILITIES: THE EQUIPMENT PROVIER SHALL PROVIDE ALL CONTROL FUNCTIONALITY REQUIRED FOR THE PROPER OPERATION/PROTECTION OF THE EQUIPMENT (FANS, COMPRESSORS, COMPONENTS, ETC.). THE TEMPERATURE CONTROL CONTRACTOR (TCC) SHALL PROVIDE CONTROL FUNCTIONALITY PER THE SEQUENCE OF OPERATIONS SPECIFICATION VIA EQUIPMENT MANUFACTURER'S CONTROLS, BAS, OR COMBINATION OF BOTH. TCC SHALL PROVIDE THERMOSTAT. THE HVAC CONTRACTOR IS RESPONSIBLE FOR COORDINATION BETWEEN TCC AND EQUIPMENT PROVIDER TO ASSURE ALL REQUIREMENTS OF THE SEQUENCE OF OPERATIONS ARE MET.
16. PROVIDE WITH INSULATED ROOF CURB SUITABLE FOR ROOF TYPE.
17. PROVIDE UNIT WITH A MINIMUM 1" DOUBLE WALL INSULATED CONSTRUCTION.
18. PROVIDE UNIT WITH SPACE MOUNTED HUMIDITY SENSOR FOR UNITS INDICATED TO HAVE HOT GAS REHEAT FOR ACTIVE DEHUMIDIFICATION.
19. PROVIDE UNIT WITH TWO INDEPENDENT REFRIGERANT CIRCUITS, EACH WITH LOW PRESSURE CONTROL, FILTER-DRIER, THERMAL EXPANSION VALVE, AND HIGH PRESSURE SAFETY SWITCH.
20. PROVIDE UNIT WITH STAINLESS STEEL, DOUBLE SLOPE CONDENSATE DRAIN PAN.
21. FIRE ALARM CONTRACTOR SHALL FURNISH A DUCT SMOKE DETECTOR FOR THE RETURN AIR DUCT. DUCT SMOKE DETECTORS SHALL BE COMPATIBLE WITH FIRE ALARM SYSTEM. MECHANICAL CONTRACTOR SHALL RECEIVE DUCT SMOKE DETECTORS FROM FIRE ALARM CONTRACTOR AND INSTALL IN DUCTWORK IN AN ACCESSIBLE LOCATION AND ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE. DUCT SMOKE DETECTORS SHALL BE INTERLOCKED WITH HVAC UNIT AND FIRE ALARM SYSTEM TO SHUT DOWN THE UNIT OPERATION AND INITIATE A GENERAL ALARM CONDITION WHEN SMOKE IS SENSED IN THE DUCT.
22. PROVIDE UNIT WITH 100% AIRSIDE ECONOMIZER AND BAROMETRIC RELIEF WITH COMPARATIVE ENTHALPY CONTROLS. PROVIDE WITH ULTRA LOW LEAKAGE DAMPERS.

DAIKIN-APPLIED, TRANE, CARRIER, JOHNSON CONTROLS-YORK, CAPTIVEAIRE OR APPROVED EQUAL

ELECTRIC INFRARED HEATER SCHEDULE

MARK	AREA SERVERED	MFG.	MODEL	STYLE	MOUNTING	SIZE	HEATING CAP. (W)	FLA (AMPS)	VOLTAGE/ PHASE	REMARKS AND ACCESSORIES
EH-2	WOMEN 207	QMARK	CP501F	PANEL	CEILING	24 x 48	500	4.2	120/1	1-4
EH-3	MEN 210	QMARK	CP501F	PANEL	CEILING	24 x 48	250	4.2	120/1	1-4

REMARKS AND ACCESSORIES:

1. TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE THERMOSTAT WITH NO LOCAL SETPOINT ADJUSTMENT TO CONTROL HEATER AND CONNECT TO BUILDING AUTOMATION SYSTEM. SETPOINT SHALL BE INITIALLY 68F, ADJUSTABLE ONLY THROUGH BAS.
2. PROVIDE UNIT WITH UNIVERSAL MOUNTING CLIPS FOR INSTALLATION IN T-BAR GRID.
3. STANDARD WHITE FINISH.
4. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL NON-FUSED ELECTRICAL DISCONNECT ADJACENT TO UNIT.

QMARK, MARKEL, OR APPROVED EQUAL

ELECTRIC UNIT HEATER SCHEDULE

MARK	SERVICE	MFG.	MODEL	SIZE	CFM	MOUNTING	KW	MCA (AMPS)	ELECT. CHAR.	REMARKS AND ACCESSORIES
EH-1	105 STORAGE	QMARK	MUH	05-81	350	SUSPENDED	5.0	24.0	208 / 1	SEE BELOW

REMARKS AND ACCESSORIES:

1. PROVIDE UNIT WITH BUILT-IN THERMAL OVERLOAD PROTECTION.
2. PROVIDE UNIT WITH WALL-MOUNTED, LINE VOLTAGE THERMOSTAT WITH KNOB ADJUSTMENT: QMARK MODEL M601W OR EQUAL.
3. PROVIDE UNIT WITH FACTORY WIRED ELECTRICAL DISCONNECT SWITCH WITH SINGLE-POINT ELECTRICAL CONNECTION.
4. MOUNT UNIT WITH BOTTOM OF UNIT 8' ABOVE FINISHED FLOOR.
5. PROVIDE UNIT WITH HEAVY-DUTY DISCHARGE LOUVERS.
6. PROVIDE UNIT WITH TWO STAGES.

CHROMALOX, MARKEL, QMARK, TRANE OR APPROVED EQUAL

VENTILATING FAN SCHEDULE

PHYSICAL DATA						PERFORMANCE DATA								UNIT CONTROL			ELECTRICAL DATA			REMARKS AND ACCESSORIES	MARK
MARK	MFG.	AREA SERVED	MODEL	APPROX. UNIT WEIGHT (LBS.)	MOUNTING	RATED CFM	ESP (IN. H2O)	DRIVE	FRPM	MOTOR TYPE	MOTOR RPM	MOTOR (HP)	SONES (INLET)	OCC	TSTAT	DDC	MCA	MOCP	VOLTAGE/ PHASE		
EF-1	GREENHECK	SOUTH RESTROOMS: 114, 117	SQ-130	61	INLINE	1,290	0.25	DIRECT	1,140	ODP	1,140	0.25	7.3			X	7.2	15	115 / 1	1-5	EF-1
EF-2	GREENHECK	NORTH RESTROOMS: 108, 111, 207, 210	SQ-130	61	INLINE	1,180	0.25	DIRECT	1,027	ODP	1,027	0.25	6.2			X	7.2	15	115 / 1	1-5	EF-2
EF-3	GREENHECK	MDF	CSP-A125	16	INLINE	100	0.15	DIRECT	980	ODP	980	-	0.7		X		0.2	15	115 / 1	1-3, 6	EF-3
EF-4	GREENHECK	IDF	CSP-A125	16	INLINE	100	0.15	DIRECT	980	ODP	980	-	0.7		X		0.2	15	115 / 1	1-3, 6	EF-4

REMARKS AND ACCESSORIES:

1. PROVIDE UNIT WITH SOLID-STATE FAN SPEED CONTROL. COORDINATE INSTALLATION OF FIELD INSTALLED SPEED CONTROLLERS WITH ELECTRICAL CONTRACTOR. SPEED CONTROLLER SHALL BE MOUNTED ON OR ADJACENT TO UNIT.
2. PROVIDE UNIT WITH THERMAL OVERLOAD PROTECTION.
3. PROVIDE UNIT WITH VIBRATION ISOLATION SUSPENSION KIT.
4. PROVIDE UNIT WITH GRAVITY BACKDRAFT DAMPER.
5. PROVIDE UNIT WITH FACTORY WIRED, NON-FUSED ELECTRICAL DISCONNECT SWITCH.
6. PROVIDE UNIT WITH FACTORY WIRED, PLUG-TYPE DISCONNECT.

UNIT CONTROLS

OCC — UNIT SHALL BE CONTROLLED BY ZONE LIGHT CONTROL. COORDINATE INTERCONNECTION OF FAN TO LIGHTING POWER CIRCUIT WITH THE ELECTRICAL CONTRACTOR. PROVIDE TRANSFORMER FOR 277V TO 120V AS REQUIRED. COORDINATE WITH ELECTRICAL CONTRACTOR.

T'STAT — UNIT SHALL BE CONTROLLED BY SPACE MOUNTED 120VAC THERMOSTAT. UNIT SHALL BE ENERGIZED WHEN SPACE TEMPERATURE REACHES 80 DEGREES FAHRENHEIT (ADJUSTABLE). THERMOSTAT SHALL BE PROVIDED AND INSTALLED BY THE TEMPERATURE CONTROLS CONTRACTOR.

DDC — UNIT SHALL BE CONTROLLED BY BUILDING AUTOMATION SYSTEM TO OPERATE DURING OCCUPIED MODE.

AEROVENT, CAPTIVE AIRE, COOK, GREENHECK, OR APPROVED EQUAL

KITCHEN EXHAUST FAN SCHEDULE

PHYSICAL DATA					PERFORMANCE DATA					ELECTRICAL DATA						REMARKS AND ACCESSORIES
MARK	MFG.	SERVICE	MODEL	MOUNTING	RATED CFM	ESP (IN. H2O)	DRIVE	MOTOR TYPE	MOTOR RPM	HP	FLA	MCA	MOCP	VOLTAGE/ PHASE	SCCR (KA)	
KEF-1	CAPTIVEAIRE	KH-1	DU180HFA	ROOF	2,025	1.8	DIRECT	ODP	1,230	2	8.3	10.4	15.0	208 / 3	5	SEE BELOW

REMARKS AND ACCESSORIES:

1. UNIT SHALL BE PROVIDED BY KITCHEN HOOD MANUFACTURER.
2. PROVIDE UNIT WITH UL 762 LISTING.
3. PROVIDE UNIT WITH GREASE TRAP WITH DRAIN PIPE, BOX, AND BOX COVER.
4. PROVIDE UNIT WITH HINGE KIT TO FACILITATE SERVICE AND DUCT CLEANING. HOOD KIT SHALL INCLUDE HOOD HASP FOR POSITIVE LOCKING OF FAN HINGING ASSEMBLY.
5. PROVIDE UNIT WITH 20" HIGH, VENTED, 20 GAUGE STEEL, INSULATED ROOF CURB COMPATIBLE WITH ROOF TYPE.
6. PROVIDE WITH UNIT-MOUNTED, NEMA 3R, NON-FUSED ELECTRICAL DISCONNECT SWITCH WITH SINGLE-POINT ELECTRICAL CONNECTION.
7. PROVIDE UNIT WITH VFD. KITCHEN HOOD CONTROLLER SHALL MODULATE FAN SPEED BASED ON EXHAUST AIR TEMPERATURE.
8. PROVIDE UNIT WITH FAN BASE CERAMIC SEAL.
9. UNIT SHALL BE CONTROLLED BY PILOT LIT SWITCH. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL SWITCH. SWITCH SHALL BE LIT WHEN FAN IN OPERATION.
10. PROVIDE UNIT WITH WITH GALVANIZED BIRDSCREEN.

CAPTIVEAIRE, GREASEMASTER, GREENHECK, K-TECH, OR APPROVED EQUAL

SHERMAN CARTER BARNHART ARCHITECTS

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Logan Overturf
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2024-05-17

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H5.1

HIGH VOLUME LOW SPEED FAN SCHEDULE

MARK	MFG.	MODEL	LOCATION AND SERVICE	FAN DIAMETER (FT)	NUMBER OF BLADES	MINIMUM HEIGHT ABOVE FLOOR (FT)	MAXIMUM SPEED (RPM)	dBA	VOLTAGE/ PHASE	FLA (AMPS)	WEIGHT (LBS)	REMARKS AND ACCESSORIES
HVLS-1	GREENHECK	DS-6-12	WEST COURTS	12	6	25	119	49	460 / 3	2.5	170	SEE BELOW
HVLS-2	GREENHECK	DS-6-12	WEST COURTS	12	6	25	119	49	460 / 3	2.5	170	SEE BELOW
HVLS-3	GREENHECK	DS-6-12	EAST COURTS	12	6	25	119	49	460 / 3	2.5	170	SEE BELOW
HVLS-4	GREENHECK	DS-6-12	EAST COURTS	12	6	25	119	49	460 / 3	2.5	170	SEE BELOW
HVLS-5	GREENHECK	DS-6-12	EAST COURTS	12	6	25	119	49	460 / 3	2.5	170	SEE BELOW

REMARKS AND ACCESSORIES:

1. PROVIDE UNIT IN CUSTOM COLOR FINISH TO BE SELECTED BY ARCHITECT.
2. PROVIDE UNIT WITH ALL REQUIRED MOUNTING BRACKETS. CONTRACTOR SHALL VERIFY LENGTH OF EXTENSION TUBE/DROP LENGTH REQUIRED TO REACH MINIMUM HEIGHT ABOVE FLOOR AND TO MAINTAIN MANUFACTURER'S CLEARANCE. MINIMUM HEIGHT TO BE 25' A.F.F.
3. PROVIDE UNIT WITH GEARLESS DIRECT DRIVE MOTOR AND FACTORY-WIRED VFD.
4. PROVIDE UNIT WITH AT MINIMUM ONE (1) YEAR LIMITED LABOR WARRANTY AND TEN (10) YEAR PARTS WARRANTY.
5. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES.
6. PROVIDE UNIT WITH EXTRUDED ALUMNIMUM AIRFOIL BLADES AND STEEL FRAME.
7. UNIT SHALL BE UL LISTED IN ACCORDANCE WITH UL STANDARD 507.
8. PROVIDE UNIT WITH AIRFOIL RETAINERS, HUB CLIPS, AND SAFETY CABLES.
9. UNIT SHALL BE INTEGRATED INTO THE BUILDING AUTOMATION SYSTEM. REFER TO SECTION SEQUENCE OF OPERATIONS FOR REQUIREMENTS.
10. PROVIDE EACH GROUP OF HVLS FAN IN EACH SPACE (2 OR 3 FANS IN EACH GROUP) WITH WALL-MOUNTED LOCAL CONTROLLER WITH CODE-LOCKABLE INTERFACE FOR OVERRIDE OF BAS FUNCTION INCLUDING SPEED AND WINTER/SUMMER MODE.
11. UNIT SHALL BE INTEGRATED INTO THE FIRE ALARM SYSTEM TO STOP OPERATION OF UNIT UPON ACTIVATION OF THE FIRE ALARM SYSTEM.

BAF, GREENHECK, MACROAIR TECHNOLOGIES, OR APPROVED EQUAL

RELIEF HOOD SCHEDULE

MARK	MFG.	DESCRIPTION	SERVICE	MODEL	THROAT SIZE (INCHES)	CFM	THROAT AREA (SQ. FT.)	THROAT VELOCITY (FPM)	PRESSURE DROP (IN. H2O)	TYPE OF FRAME AND MOUNTING	REMARKS AND ACCESSORIES
RH-1	GREENHECK	SPUN ALUMINUM GRAVITY VENTILATOR	EF-1	GRSR-20	20	1,290	2.0	570	0.04	ROOF	1-6
RH-2	GREENHECK	SPUN ALUMINUM GRAVITY VENTILATOR	EF-2	GRSR-20	20	1,180	2.0	520	0.04	ROOF	1-6

REMARKS AND ACCESSORIES:

1. PROVIDE UNIT WITH GALVANIZED BIRD SCREEN.
2. PROVIDE UNIT WITH RUBBER CURB CAP STRIPPING FOR SEALING UNIT TO ROOF CURB.
3. PROVIDE UNIT WITH INSULATED ROOF CURB SUITABLE FOR ROOF TYPE AND SLOPE. INSULATION SHALL BE A MINIMUM 1" THICK.
4. PROVIDE UNIT WITH INTEGRAL BACKDRAFT DAMPER.

GREENHECK, NCA, RUSKIN, UNITED ENERTECH, OR APPROVED EQUAL

DIFFUSER AND GRILLE SCHEDULE

MARK	MFG.	MODEL	SIZE (INCHES)	NECK SIZE (INCHES)	CORE TYPE	NOM. CFM	THROW FT.	DIR.	SOUND RATING (NC)	VOLUME DAMPER	TYPE OF MOUNTING
S-1	PRICE	SPD	24" X 24"	6" Ø	PLAQUE	100	4	4 WAY	<16	NO	LAY-IN
S-2	PRICE	SPD	24" X 24"	8" Ø	PLAQUE	209	7	4 WAY	<16	NO	LAY-IN
S-3	PRICE	SPD	12" X 12"	6" Ø	PLAQUE	100	4	4 WAY	<16	NO	LAY-IN
S-4	PRICE	SMD	24" X 24"	12" X 12"	PLAQUE	327	15	4 WAY	<26	NO	LAY-IN
S-5	PRICE	520	---	12" X 8"	LOUVER	420	16	---	<21	YES	SIDEWALL
S-6	PRICE	80	24" X 24"	22" X 22"	GRID	1,995	---	---	<16	NO	LAY-IN
S-7	PRICE	80	---	24" X 12"	DRUM	600	---	---	<22	YES	SIDEWALL
S-8	PRICE	JS210	48"	-----	2 SLOT	380	31	ADJ.	<16	NO	SURFACE
R-1	PRICE	80	24" X 24"	22" X 22"	GRID	1,995	---	---	<16	NO	LAY-IN
R-2	PRICE	530	---	36" X 12"	LOUVER	1112	---	---	<21	NO	SIDEWALL
R-3	PRICE	80	24" X 24"	22" X 22"	GRID	1,995	---	---	<16	NO	SURFACE
R-4	PRICE	530	---	60" X 36"	LOUVER	8000	---	---	32	NO	SIDEWALL
E-1	PRICE	80	24" X 24"	22" X 22"	GRID	1,995	---	---	<16	NO	LAY-IN
E-2	PRICE	80	---	12X 12	GRID	1,995	---	---	<16	NO	SURFACE
T-1	PRICE	80	---	36 X 12"	GRID	1,390	---	---	---	-	SIDEWALL

REMARKS AND ACCESSORIES:

1. FURNISH DIFFUSERS WITH SQUARE-TO-ROUND NECK TRANSITIONS AS REQUIRED.
2. FURNISH ALL DIFFUSERS AND GRILLES WITH POWDER-COATED FINISH IN COLOR AS SELECTED BY ARCHITECT FROM ALL AVAILABLE OPTIONS.
3. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR CEILING TYPES AND CEILING GRID SIZE.

KRUEGER, METALAIRE, TITUS, OR APPROVED EQUAL.

KITCHEN EXHAUST HOOD SCHEDULE

MARK	MFG.	MODEL	TYPE	SIZE (L x W x H)	WEIGHT (LBS)	CFM	EXHAUST CONNECTION	EXHAUST FAN	REMARKS AND ACCESSORIES
KH-1	CAPTIVEAIRE	5424 ND-2	1	9'-0" x 54" x 24"	700	2025	16" x 12"	KEF-1	SEE BELOW

KITCHEN HOOD REMARKS AND ACCESSORIES:

1. UNIT SIZE DIMENSIONS DO NOT INCLUDE UTILITY CABINET.
2. MOUNT BOTTOM OF HOOD APPROXIMATELY 6'-8" ABOVE FINISHED FLOOR.
3. PROVIDE UNIT WITH U.L. LISTED LED LIGHTS CAPABLE OF 50 FC AT 36" ABOVE FINISHED FLOOR.
4. PROVIDE UNIT WITH 2 INCH, STAINLESS STEEL FILTERS WITH GREASE EXTRACTION PERFORMANCE OF 75% EFFICIENT OF GREASE PARTICLES 5 MICRONS IN SIZE AND PRESSURE DROP OF 1.0" W.G.
5. ALL EXPOSED SURFACES SHALL BE 430 STAINLESS STEEL CONSTRUCTION.
6. PROVIDE UNIT WITH EXTENDED 430 STAINLESS STEEL ENCLOSURE PANELS (FIELD WRAPPER) FROM TOP OF HOOD TO CEILING.
7. PROVIDE UNIT WITH 430 SS VERTICAL BACKSPLASH AND RIGHT SIDESPLASH.
8. KITCHEN HOOD SHALL BE LABELED AND TESTED IN ACCORDANCE WITH UL 710.
9. PROVIDE UNIT WITH SLOPED GREASE DRAIN WITH REMOVABLE CUP.
10. PROVIDE UNIT WITH HEAT ACTIVATION CONTROL TO CONTROL EXHAUST FAN OPERATION WHEN TEMPERATURE IS REACHED. EXHAUST FAN SHALL BE ENERGIZED AND OUTSIDE AIR DAMPER OF RTU-K OPENED.
11. PROVIDE FIRE EXTINGUISHING SYSTEM WITH THE HOOD THAT COMPLIES WITH UL 300.

    THE CONTRACTOR SHALL OBTAIN STATE APPROVAL FOR SHOP DRAWINGS OF EXHAUST HOOD AND EXTINGUISHING SYSTEM. SHOP DRAWINGS AND EQUIPMENT SPECIFICATIONS SHALL BEAR THE SEAL AND SIGNATURE OF A SUPPRESSION CONTRACTOR AND CERTIFICATE HOLDER LICENSED IN THE STATE OF KENTUCKY.
12. FURNISH AND INSTALL AN ELECTRIC GAS SHUT OFF VALVE WITH STRAINER.
13. PROVIDE UNIT WITH UNIT MOUNTED UTILITY CABINET WITH PRE-WIRED ELECTRICAL TERMINAL BOX, VFD FOR EXHAUST FAN, FIRE SUPPRESSION SYSTEM, AND ELECTRICAL CONTROL PANEL WITH ALL NECESSARY COMPONENTS FOR PROPER SYSTEM OPERATION. CABINET SHALL BE LOCATED ON THE LEFT END OF THE HOOD. CABINET SHALL CONTROL HOOD, EXHAUST FAN, AND RTU-K. PROVIDE SWITCHES ON FRONT OF CONTROL PANEL FOR LIGHT AND MANUAL OVERRIDE FOR THE EXHAUST FAN.
14. PROVIDE UNIT WITH ENERGY MANAGEMENT SYSTEM CONTROL TO MODULATE FAN SPEED BASED ON EXHAUST AIR TEMPERATURE.
15. EXHAUST HOOD SUPPLIER SHALL PROVIDE SYSTEM DESIGN VERIFICATION TO IDENTIFY ANY OPERATIONAL DISCREPANCIES AND COORDINATE RESOLUTION WITH THE INSTALLING CONTRACTOR.
16. ELECTRICAL CONTRACTOR SHALL PROVIDE 120V, 15A POWER TO HOOD CONTROL PANEL. CONTROL PANEL POWER MUST NOT BE RUN THROUGH SHUNT TRIP BREAKER.
17. ELECTRICAL CONTRACTOR SHALL PROVIDE 120V POWER TO GAS VALVE.

CAPTIVEAIRE, GREASEMASTER, GREENHECK, K-TECH, OR APPROVED EQUAL

SHERMAN CARTER BARNHART ARCHITECTS

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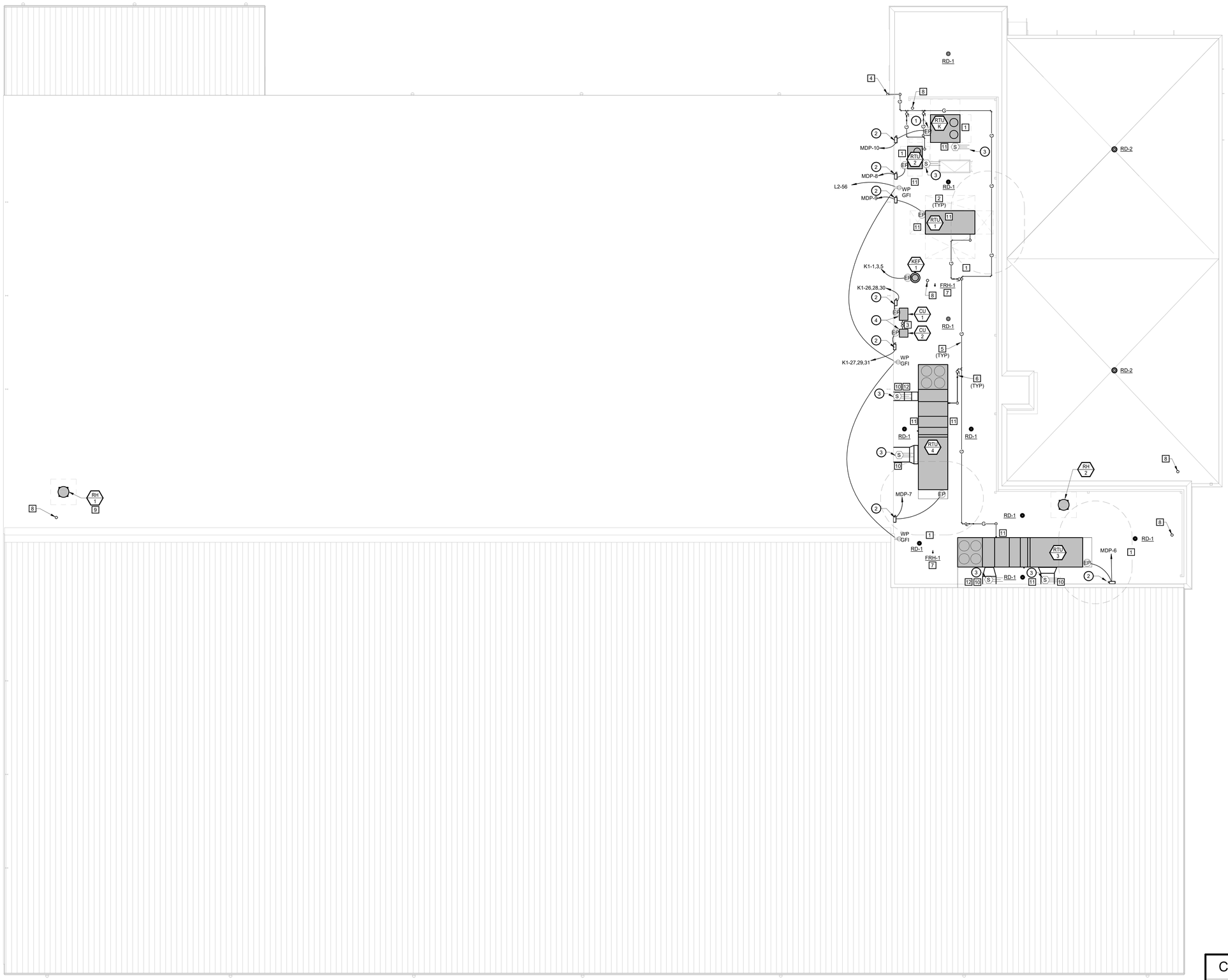
SHEET

H5.2



PLAN NORTH

ROOF PLAN

SCALE: 3/32" = 1'-0"

MECHANICAL CONSTRUCTION TAG NOTES

#	(APPLIES TO THIS DRAWING ONLY)
1	MAINTAIN 10 FT. CLEARANCE FROM OUTSIDE AIR INTAKE TO ANY PLUMBING VENT OR EXHAUST DISCHARGE (TYP.)
2	DO NOT OBSTRUCT EQUIPMENT SERVICE CLEARANCE (TYP.)
3	ROUTE REFRIGERANT PIPES BETWEEN CONDENSING UNITS AND ASSOCIATED EVAPORATORS IN FREEZER AND COOLER BOXES IN KITCHEN. REFER TO REFRIGERANT PIPING ROOF PENETRATION DETAIL ON H0.1
4	CARBON STEEL GAS PIPE RISER FROM METER BELOW. SEE DRAWING P3.4 FOR SIZING.
5	ROUTE CARBON STEEL GAS PIPING ALONG ROOF WITH ADEQUATE PIPE SUPPORTS. PREPARE, PRIME, AND PAINT ALL GAS PIPING AND FITTINGS.
6	INSTALL GAS REGULATOR 10 FEET MINIMUM FROM HVAC UNIT INTAKE OPENING. SET REGULATOR FOR 2 PSI TO 1/2 PSI OR EQUIPMENT MANUFACTURER'S RECOMMENDED OPERATING PRESSURE.
7	SLEEVE COLD WATER PIPE THRU ROOF TO SERVE FREEZEPROOF ROOF HYDRANT. FLASH AND SEAL ROOF PENETRATION WATER TIGHT.
8	PLUMBING VENT TERMINATION. DO NOT LOCATE WITHIN 10 FEET OF ANY OUTSIDE AIR INTAKE OPENING.
9	COORDINATE ROOFING/FLASHING/CURB WITH PEMB MANUFACTURER AND DETAILS.
10	ROUTE DUCT THROUGH WALL OPENINGS. COORDINATE OPENING LOCATION WITH GENERAL CONTRACTOR, STRUCTURAL SUPPORT LOCATIONS AND ALL OTHER TRADES. SLEEVE DUCTWORK THROUGH EXTERIOR WALL. FLASH AND SEAL ACCORDINGLY. SUPPORT DUCT FROM ROOF AS REQUIRED. COORDINATE CURB HEIGHT WITH ROOF INSULATION THICKNESS TO MAINTAIN 12" MINIMUM BETWEEN BOTTOM OF DUCT (INCLUDING INSULATION/JACKET/ETC.) AND ROOF.
11	ROUTE 1" CONDENSATE FROM RTU TO NEAREST ROOF DRAIN. (TYP.)
12	PROVIDE SERVICE ACCESS TO ALL SERVICE POINTS ON UNIT. CONTRACTORS SHALL PROVIDE STAIRS/PLATOFORMS AS REQUIRED FOR FULL ACCESS TO UNIT.

ELECTRICAL CONSTRUCTION TAG NOTES

1	(APPLIES TO THIS DRAWING ONLY)
1	CONTRACTOR SHALL INSTALL POWER CONNECTION TO FACTORY INSTALLED RECEPTACLE AS REQUIRED. COORDINATE ALL CONNECTION REQUIREMENTS AT UNIT WITH MANUFACTURER REQUIREMENTS.
2	CONTRACTOR SHALL INSTALL DISCONNECT ON SIDE OF UNIT IN LOCATION TO BE DETERMINED BY MANUFACTURER REQUIREMENTS. REFER TO MEHANICAL EQUIPMENT SCHEDULE ON DRAWING E5.1 FOR DISCONNECT SIZING.
3	FIRE ALARM CONTRACTOR SHALL FURNISH DUCT DETECTOR TO BE INSTALLED IN UNIT BY MECHANICAL CONTRACTOR.
4	CONNECTION TO INDOOR FREEZER/COOLER UNIT. REFER TO ENLARGED PLANS FOR CONTINUATION.

STATE OF KENTUCKY
MATTHEW MORGAN
No. 37688
LICENSED PROFESSIONAL ENGINEER
2024-05-17

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

AFD = AUTOMATIC FIRE DAMPER
F-R-R = FIRE-RESISTANT-RATED
F-R-W = FIRE-RATED-WALL
FS = FIRE STOP

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MECHANICAL-ELECTRICAL ROOF PLAN

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ME1.1

MECHANICAL CONSTRUCTION TAG NOTES

#	(APPLIES TO THIS DRAWING ONLY)
1	FABRIC DUCT TO MAINTAIN 25' CLEARANCE ABOVE PLAYING FLOOR. (TYP.)
2	PROVIDE OFFSETS AND TRANSITIONS IN DUAL WALL DUCT AS REQUIRED TO ROUTE DUCT FROM SIDEWALL PENETRATION TO FINAL HEIGHT REQUIRED AND APPOXIMATELY WHERE SHOWN ON H2.1. OFFSET AROUND ARCHITECTURAL AND STRUCTURAL FEATURES AS RQEUIRED. COORDINATE WITH ALL OTHER TRADES FOR FINAL DUCT PLACEMENT.

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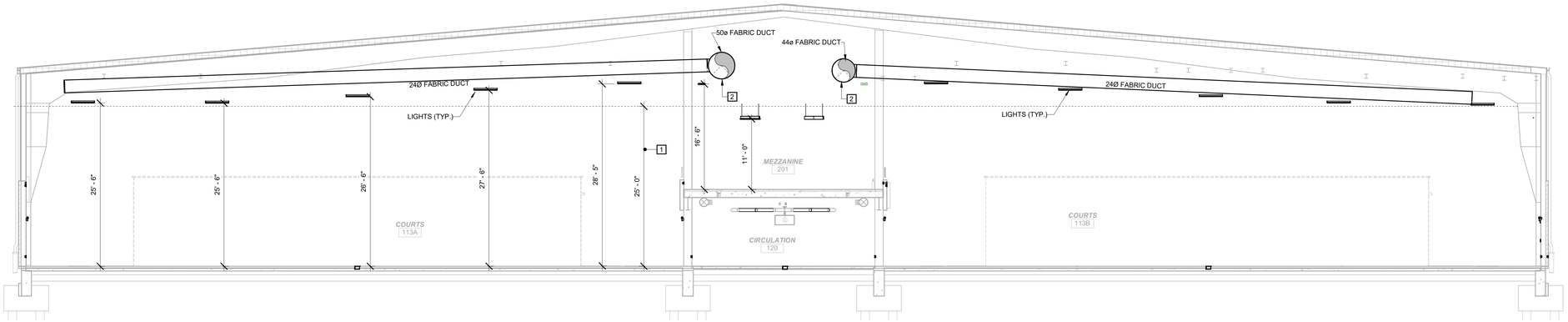
2024-05-17



MECHANICAL-ELECTRICAL ELEVATION

SCALE: 1/8" = 1'-0"

SHERMAN CARTER BARNHART ARCHITECTS

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MECHANICAL ELECTRICAL SECTIONS

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ME2.1

ELECTRICAL SYMBOL LEGEND

SYMBOL	ITEM DESCRIPTION AND REMARKS	MOUNTING
	FIRE ALARM SYSTEM	
FACP	FIRE ALARM CONTROL PANEL	60" TO CENTER AFF
FAA	FIRE ALARM REMOTE ANNUNCIATOR PANEL	60" TO CENTER AFF
FDB	FIRE DOCUMENT BOX	60" TO CENTER AFF
	FIRE ALARM HORN/SPEAKER/STROBE UNIT - AUDIBLE/VISUAL	PER CODE, 80" MINIMUM
	FIRE ALARM STROBE UNIT - VISUAL ONLY	PER CODE, 80" MINIMUM
	FIRE ALARM BREAKGLASS STATION	48" TO TOP AFF
	HEAT DETECTOR, FIXED TEMPERATURE	CEILING PER CODE
	SYSTEM SMOKE DETECTOR	CEILING PER CODE
	SYSTEM DUCT DETECTOR	DUCTWORK, PER HVAC
	SPRINKLER TREE FLOW SWITCH - REFER TO SPRINKLER RISER ON FIRE PROTECTION DRAWINGS FOR QUANTITIES.	PIV, FIELD COORD.
	SPRINKLER TREE TAMPER SWITCH - REFER TO SPRINKLER RISER ON FIRE PROTECTION DRAWINGS FOR QUANTITIES.	PIV, FIELD COORD.
	VOICE EVACUATION CONTROL PANEL	FIELD COORD.

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
BTM	BOTTOM
EC	ELECTRICAL CONTRACTOR
EGFCI	30mA EQUIPMENT GROUND FAULT CIRCUIT INTERRUPTER
FDS	FUSED DISCONNECT SWITCH
GFI	GROUND FAULT INTERRUPTING DEVICE
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
MW	MICROWAVE
NFDS	NON-FUSED DISCONNECT SWITCH
SW	SWITCHED RECEPTACLE
TCC	TEMPERATURE CONTROL CONTRACTOR
TV	TELEVISION
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
USB	DEVICE WITH INTEGRAL DUAL USB PORTS
WP	WEATHERPROOF DEVICE - WEATHER RESISTANT RATED

ELECTRICAL NOTES AND TAGS	
# A#	ELECTRICAL DETAIL NUMBER ELECTRICAL DETAIL TAG DRAWING WHERE DETAIL IS ILLUSTRATED
#	ELECTRICAL CONSTRUCTION NOTE
WIRING HOME RUNS	
	WIRING AND RACEWAY HOME RUN BACK TO POWER SOURCE ABOVE SLAB. (SEE PLAN VIEW FOR CIRCUIT TAG)

ELECTRICAL SPECIAL SYSTEMS OUTLINE

CONTRACT SYSTEM DESCRIPTION	RACEWAY/BOXES WITH PULL...	CABLING INFRASTRUCTU...	DISTRIBUTION EQUIPMENT	NOTES
GENERAL BUILDING OPERATIONAL SYSTEMS				
ADDRESSIBLE FIRE ALARM SYSTEM (VOICE EVAC)	CFCI	CFCI	CFCI	
SURGE PROTECTION DEVICES FOR PANELBOARDS	CFCI	CFCI	CFCI	
AUTOMATED LIGHTING CONTROLS - LOCALIZED AREAS - OCCUPANCY SENSOR BASED	CFCI	CFCI	CFCI	
AUTOMATED LIGHTING CONTROLS - RELAY PANELS, CONTROLLERS, GATEWAYS	CFCI	CFCI	CFCI	
DOOR ACCESS CONTROL SYSTEM AND HARDWARE	CFCI	CFCI	CFCI	1, 7, 10
INFORMATION AND TECHNOLOGY SYSTEMS				
DATA SYSTEM - CAT 6	CFCI	CFCI	CFCI	3
NETWORK WAP (WIRELESS ACCESS POINT) - CAT 6 (POE)	CFCI	CFCI	OFCI	4
VOICE SYSTEM (VOIP) - CAT 6	CFCI	CFCI	CFCI	3
INTERCOM SYSTEM - IP BASED	CFCI	CFCI	CFCI	
VIDEO SURVEILLANCE SYSTEM (CCTV SECURITY) - CAT 6 - IP BASED - WITH NETWORK VIDEO RECORDER	CFCI	CFCI	OFCI	11
NETWORK DATA RACKS - OPEN AND/OR FULLY ENCLOSED	CFCI	CFCI	CFCI	3
CABLE TRAY SYSTEM FOR NETWORK CABLING	CFCI	CFCI	CFCI	
UPS BACKUP POWER FOR NETWORK RACKS	-	-	OFOI	9
FIBER BACKBONE BETWEEN MDF CLOSETS	CFCI	CFCI	CFCI	5
FLAT PANEL POLE MOUNTED MONITORS - PRESENTATION, INFORMATIONAL	CFCI	CFCI	OFCI	2, 8
FLAT PANEL WALL MONITORS - PRESENTATION, INFORMATIONAL	CFCI	CFCI	OFCI	2, 8
PERFORMANCE SYSTEMS				
SPORTS AREA PUBLIC ADDRESS/SOUND REINFORCEMENT SYSTEM	CFCI	CFCI	CFCI	
ASSISTED LISTENING DEVICES	CFCI	CFCI	CFCI	

ABBREVIATION - DESCRIPTION:

CFCI - CONTRACTOR FURNISHED, CONTRACTOR INSTALLED - PER SPECIFICATIONS.
OFCI - OWNER FURNISHED, CONTRACTOR INSTALLED - PER SPECIFICATIONS.
OFOI - OWNER FURNISHED, OWNER INSTALLED.
NIC - NOT IN CONTRACT.

NOTES:

(1) - REFER TO ARCHITECTURAL DOOR HARDWARE SPECIFICATIONS 087100. CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, ROUGH-INS, POWER REQUIREMENTS, AS REQUIRED BY SPECIFICATIONS. COORDINATE WITH SHOP DRAWING SUBMITTALS PRIOR TO ROUGH-IN AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

(2) - "OFOI" ITEM MOUNTED ON "OFCI" BRACKET/SUPPORT SYSTEM - CONTRACTOR TO COORDINATE.

(3) - LIMITED TO CONNECTIVITY FOR EQUIPMENT RACKS AND PATCH PANELS. SWITCHES, ROUTERS, ELECTRONICS AND ETC BY OWNER.

(4) - LIMITED TO CABLE TERMINATIONS IN OUTLET BOX ABOVE CEILING - TRANSMITTER/HUB BY OWNER.

(5) - FIBER SHALL BE EQUAL TO 12-STRAND OM3 MULTI-MODE FIBER. COORDINATE CONNECTORS WITH OWNER.

(6) - NOT USED

(7) - REFER TO SPECIAL SYSTEMS DOOR HARDWARE SCHEDULE AND ARCHITECTURAL DOOR HARDWARE SPECIFICATIONS/SCHEDULE. COMPLETE DOOR ACCESS CONTROL SOFTWARE AND HARDWARE SHALL BE PROVIDED BY AND FINAL CONNECTIONS SHALL BE MADE BY MANUFACTURER/SUPPLIER LISTED IN 087000 SPECIFICATION. ALL COST FOR THE COMPLETE SYSTEM SHALL BE INCLUDED IN PROJECT. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ACCESS CONTROL SYSTEM, ROUGH-INS, CABLING, ETC. COORDINATE WITH GENERAL CONTRACTOR.

(8) - INCLUDE DATA/USB/HDMI CABLING AS REQUIRED FOR FINAL CONNECTIVITY.

(9) - CONTRACTOR SHALL COORDINATE POWER CONNECTIONS REQUIRED WITH OWNER FURNISHED UPS.

(10) - CONTRACTOR SHALL FURNISH AND INSTALL 1-1/2" C MINIMUM FOR DOOR ACCESS CONTROLS RACEWAY.

(11) -CONTRACTOR SHALL INSTALL AND PERFORM INITIAL FUNCTIONAL TESTING. OWNER TO PERFORM ANY ASSOCIATED PROGRAMMING AND/OR DETAILED SET UP PROCEDURES

THE FOLLOWING COLOR CODING SHALL BE IMPLEMENTED:

BLUE - DATA
WHITE - VOICE
GREEN - WIRELESS ACCES POINTS
PURPLE - SECURITY CAMERAS
GRAY - SPEAKERS
RED - FIRE ALARM
YELLOW - FIBER

ELECTRICAL SYMBOL LEGEND

SYMBOL	ITEM DESCRIPTION AND REMARKS	MOUNTING
	LIGHTING SYSTEM	
	RECESSED LIGHT FIXTURE AS SCHEDULED	AS NOTED
	PENDANT STRIP LIGHT FIXTURE AS SCHEDULED	AS NOTED
H	WALL MOUNTED LIGHT FIXTURE AS SCHEDULED	AS NOTED
	RECESSED DOWN LIGHT FIXTURE AS SCHEDULED	AS NOTED
	EMERGENCY EXIT FIXTURE AS SCHEDULED - ARROW OR SHADING INDICATES EGRESS PATH DIRECTION	PER DETAIL
S	SINGLE POLE LIGHTING SWITCH	PER DETAIL
S DC1	SWITCH DIMMING CONTROL 1-ZONE. nPODM-DX-(COLOR OPTIONS) MANUAL ON OPERATION.	PER DETAIL
S DC2	SWITCH DIMMING CONTROL 2-ZONE. nPODM-2P-DX-(COLOR OPTIONS) MANUAL ON OPERATION.	PER DETAIL
	CMR-6/CM-9/CM-10 PIR SENSOR, 120/277V LINE VOLTAGE OR POWER PACK USAGE AS APPLICABLE - SIZED PER LOADING.	CEILING
	PP-20-2P, 2-CIRCUIT POWER PACK UNIT FOR INTERCONNECTION TO 12/24V SENSOR - 120/277V: 20 AMP RATED.	ABV LAY-IN CEILING
	BUILDING MOUNTED PHOTOCELL	AS NOTED
nCY	ECLYPSE IP AND MANAGEMENT INTERFACE WITH SITE VIEW SOFTWARE. nECY-120-BAC-SVS	WALL
nGFX	GRAPHIC LIGHTING CONTROL POD. nGATEWAY2 GFX WITH PS 150 POWER SUPPLY	WALL

SENSOR AND LIGHTING AUTOMATION NOTE:
FURNISH AND INSTALL SENSORS, POWER PACKS AND ALL LIGHTING AUTOMATION DEVICES APPROXIMATELY AS INDICATED ON PLAN VIEW AND AS REQUIRED BY NUMBER OF CIRCUITS OF LIGHTING WITHIN THE SPACE. PLACEMENT OF SENSORS SHALL BE BASED ON ROOM GEOMETRY AND SHALL PROVIDE 100% COVERAGE OF THE SPACE - FIELD COORDINATE WITH MANUF. RECOMMENDATIONS. ALL SYSTEM COMPONENTS SHALL BE WIRED PER THE MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR SHALL COORDINATE TIME AND SENSITIVITY SETTINGS OF EQUIPMENT WITH OWNER'S PREFERENCES. INFO ABOVE IS BASED ON SENSOR SWITCH OCCUPANCY SENSORS AND PERFORMANCE AND MAY VARY, PENDING MANUFACTURER. MANUFACTURER SHALL PROVIDE A GUARANTEED LAYOUT TO THE CONTRACTOR AND SHALL ALSO SUBMIT LAYOUT IN SHOP DRAWINGS. **WHERE AN MOMENTARY LIGHT SWITCH IS SHOWN IN THE SPACE, THE SENSOR SHALL OPERATE AS A VACANCY SENSOR.**

POWER SYSTEM	
	120V, 20 AMP DUPLEX RECEPTACLE MOUNTED PERPENDICULAR TO FLOOR. — 16" TO BTM AFF UON
	120V, 20 AMP QUADRUPLEX RECEPTACLE (DOUBLE DUPLEX) — 16" TO BTM AFF UON
	120V, 20 AMP DUPLEX RECEPTACLE AT SPECIAL MOUNTING HEIGHT - REFER TO ARCHITECTURAL MILLWORK DRAWINGS — 44" TO BTM AFF UON
	120V, 20 AMP DUPLEX RECEPTACLE AT SPECIAL MOUNTING HEIGHT - REFER TO ARCHITECTURAL MILLWORK DRAWINGS — 44" TO BTM AFF UON
	POWER CONNECTION TO EQUIPMENT — FIELD COORDINATE
	FLUSH FLOORBOX - CONTRACTOR TO COORDINATE PLACEMENT AND COVERS WITH DESIGN DRAWINGS. SEE DETAIL DRAWING AND TAG NOTES. — COORD. PLACEMENT
	ROUGH-IN FOR THERMOSTAT WITH 3/4"C FROM SINGLE GANG BOX TO CEILING SPACE. — COORD WITH TCC/MC
	COMMUNICATIONS SYSTEMS - VOICE/DATA/INTERCOM
	TECHNOLOGY VOICE/DATA OUTLETS - SEE COMMUNICATION DETAIL. V#-INDICATES NUMBER OF VOICE PORTS AND CABLES DROPS. D#-INDICATES NUMBER OF DATA PORTS AND CABLES DROPS. H#-INDICATES NUMBER OF HDMI PORTS AND CABLES. M#-INDICATES NUMBER OF 3.5MM JACKS AND CABLES. REFER TO PERSPECTIVE VIEW AND OUTLET DETAIL. — WALL AT 16" TO BTM AFF U.O.N.
	TECHNOLOGY VOICE/DATA OUTLETS - SEE COMMUNICATION DETAIL. V#-INDICATES NUMBER OF VOICE PORTS AND CABLES DROPS. D#-INDICATES NUMBER OF DATA PORTS AND CABLES DROPS. H#-INDICATES NUMBER OF HDMI PORTS AND CABLES. M#-INDICATES NUMBER OF 3.5MM JACKS AND CABLES. REFER TO PERSPECTIVE VIEW AND OUTLET DETAIL. — WALL AT 44" TO BTM AFF UON
	DATA DROP FOR WIRELESS TRANSMITTER - TERMINATE CABLE IN A SURFACE MOUNTED QUICKPORT HOUSING "BISCUIT BOX" ABOVE THE CEILING - LABEL "WIFI". D#-INDICATES NUMBER OF DATA PORTS AND CABLE DROPS. — CEILING
	AUDIO SYSTEM SPEAKER — COORD. PLACEMENT
S	IP BASED PAGING SPEAKER — COORD. PLACEMENT
	WIRE BASKET TYPE CABLE TRAY SYSTEM, AS INDICATED - SEE SPECIAL SYSTEMS AND COMMUNICATIONS DETAILS. — COORD. PLACEMENT
	SPECIAL SYSTEMS - DOOR ACCESS/SECURITY
	DOOR ACCESS CARD READER - REFER TO SPECIFICATIONS — COORD. WITH CASEWORK
A	AUTO DOOR OPERATOR PUSH BUTTON - REFER TO ARCH. SPECIFICATIONS — COORD. PLACEMENT
K	KEY PAD - ROUGH-IN — COORD. PLACEMENT
	SECURITY CCTV CAMERA WITH VANDAL RESISTANT MINI-DOME, REFER TO SPECIFICATIONS. — WALL/ CEILING/ COORDINATE

FIRE ALARM NARRATIVE

1.0 GENERAL:

THE CONTRACTOR SHALL FURNISH ALL LABOR, SERVICES, HANDHELD PROGRAMMERS, SOFTWARE AND MATERIALS NECESSARY TO FURNISH AND INSTALL A COMPLETE, FUNCTIONAL FIRE ALARM SYSTEM (SYSTEM). THE SYSTEM SHALL COMPLY IN RESPECTS WITH ALL PERTINENT CODES, RULES, REGULATIONS AND LAWS OF THE AUTHORITY HAVING JURISDICTION. THE SYSTEM SHALL COMPLY IN ALL RESPECTS WITH THE REQUIREMENTS OF THE SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS AND UNDERWRITERS LABORATORIES INC. (UL) LISTINGS. FIELD COORDINATE EXACT PLACEMENT OF ALL DEVICES TO PREVENT CONFLICTS - RELOCATE AS REQUIRED. SYSTEM SHALL BE MONITORED BY AN APPROVED CENTRAL STATION. FURNISH AND INSTALL ALL POWER AND FIRE ALARM INTERFACE CONNECTIONS INDICATED BY THE ARCHITECTURAL HARDWARE PACKAGES AS APPLICABLE. FURNISH AND INSTALL A DEDICATED 120 VOLT POWER CIRCUIT FOR EACH POWER SUPPLY CABINET AS REQUIRED - EMERGENCY SOURCE IF AVAILABLE.

IT IS FURTHER INTENDED THAT UPON COMPLETION OF THIS WORK, THE OWNER BE PROVIDED WITH:

COMPLETE INFORMATION AND DRAWINGS DESCRIBING AND DEPICTING THE ENTIRE SYSTEM AS INSTALLED, INCLUDING ALL INFORMATION NECESSARY FOR MAINTAINING, TROUBLESHOOTING AND/OR EXPANDING THE SYSTEM AT A FUTURE DATE.

COMPLETE DOCUMENTATION OF SYSTEM TESTING.

CERTIFICATION THAT THE ENTIRE SYSTEM HAS BEEN INSPECTED AND TESTED, IS INSTALLED ENTIRELY IN ACCORDANCE WITH THE APPLICABLE CODES, STANDARDS, MANUFACTURER'S RECOMMENDATIONS AND UL LISTINGS AND IS IN PROPER WORKING ORDER. CONTRACTOR SHALL USE "FIRE ALARM SYSTEM CERTIFICATION AND DESCRIPTION" AS REQUIRED BY NFPA 72.

NOTE: THE INFORMATION CONTAINED ON THESE DRAWINGS IS DIAGRAMMATIC AND IS INTENDED TO INDICATE AREAS AND TYPE OF COVERAGE. ALL SYSTEM COMPONENTS AND INITIATION/NOTIFICATION APPLIANCE LAYOUTS ARE NOT INDICATED ON DRAWINGS - THE DESIGN AND APPROVAL OF THIS SYSTEM SHALL BE THE FIRE ALARM CONTRACTOR'S RESPONSIBILITY AND SHALL BE BASED ON STANDARD PRODUCTS OF FCI SYSTEM COMPONENTS TO MEET OR EXCEED ALL REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION (AHJ). FINAL APPROVAL OF OVERALL SYSTEM LAYOUT SHALL BE RESERVED BY THE ENGINEER.

ALTERNATE MANUFACTURERS WILL BE CONSIDERED. BASIS FOR CONSIDERATION WILL INCLUDE, BUT NOT BE LIMITED TO COMPLETE EQUIPMENT SUBMITTALS AND NARRATIVE DESCRIPTION OF THE PROPOSED SYSTEM, TEN (10) DAYS PRIOR TO BIDDING. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL SUBMIT FOR SHOP DRAWING APPROVALS, COMPLETE INFORMATION AND LAYOUT DRAWINGS DESCRIBING AND DEPICTING THE ENTIRE SYSTEM TO BE INSTALLED.

1.1 SYSTEM OVERVIEW

1.1.1 THE NEW FIRE ALARM SYSTEM IS TO BE DESIGNED TO REPORT TO THE SUPERVISORY SERVICE THROUGH A DIGITAL ALARM COMMUNICATOR TRANSMITTER (DACT).

1.1.2 ALL INITIATING CIRCUITS ARE TO BE ARRANGED AS STYLE C IN ACCORDANCE WITH NFPA 72.

1.1.3 ALL NOTIFICATION APPLIANCE CIRCUITS ARE TO BE ARRANGED AS STYLE 7 IN ACCORDANCE WITH NFPA 72.

1.1.4 ALL SIGNALING LINE CIRCUITS ARE TO BE ARRANGED AS STYLE 4 IN ACCORDANCE WITH NFPA 72.

1.2 FIRE ALARM CONTROL SYSTEM:

1.2.1 THE FIRE ALARM SYSTEM IS TO BE A MICROPROCESSOR-BASED VOICE EVACUATION SYSTEM CAPABLE OF TWO-WAY COMMUNICATION OVER A NETWORK OF SIGNALING LINE CIRCUITS. INTELLIGENT/ANALOG ADDRESSABLE INITIATING DEVICES SHALL COMMUNICATE WITH THE FACP AND THE FACP SHALL COMMUNICATE THROUGH THE DACT. CONTROL PANEL SHALL BE EQUAL TO GAMEWELL-FCI "ES" SERIES, NOTIFIER, OR PRIOR APPROVED EQUAL AND SHALL BE LOCATED AT THE DEMARC BACKBOARD. THE REMOTE ANNUNCIATOR LOCATION SHALL BE COORDINATED WITH LOCAL FIRE DEPARTMENT PRIOR TO INSTALLATION. FURNISH AND INSTALL ALL POWER SUPPLY CONNECTIONS TO FACP AND ELECTRIC BELLS ASSOCIATED WITH SPRINKLER SYSTEM. SUPERVISE ALL FLOW, TAMPER AND LOW PRESSURE SWITCHES ASSOCIATED WITH THE SPRINKLER RISER SYSTEM AND OR FIRE PUMP AS APPLICABLE. SUPERVISE CONNECTIONS TO HIGH VOLUME LOW SPEED FAN ASSEMBLIES WHICH ARE EQUIPPED WITH A FIRE ALARM RELAY - INTERLOCK WITH SPRINKLER FOR WATER FLOW SIGNAL. SUPERVISE ALL TAMPER VALVES, AND ETC. ASSOCIATED WITH THE ELEVATOR SYSTEM AS APPLICABLE. THE SYSTEM SHALL INCLUDE, BUT NOT BE LIMITED TO, FIREMAN'S CONTROL PANEL, REMOTE ANNUNCIATOR AND INITIATION/NOTIFICATION APPLIANCES. SUPPLEMENTAL NOTIFICATION/POWER SUPPLIES ARE REQUIRED AND ARE GENERALLY LOCATED IN THE SERVICE PLATFORM AREAS THROUGHOUT THE MAIN BUILDING.

1.3 INITIATING FUNCTIONS

1.3.1 MANUAL PULL STATIONS ARE TO BE LOCATED AT EXITS OF THE BUILDING ON ALL FLOORS PER APPLICABLE CODE. ADDITIONAL PULL STATIONS ARE TO BE PROVIDED SO THE TRAVEL DISTANCE TO A PULL STATION DOES NOT EXCEED 200 FT. MANUAL PULL STATIONS ARE TO BE INSTALLED AT EXTERIOR EGRESS DOORS FROM MECHANICAL, ELECTRICAL AND OR SPRINKLER ROOMS AS APPLICABLE.

1.3.2 AREA (SPOT) SMOKE DETECTORS GENERALLY ARE TO BE LOCATED IN VARIOUS AREAS OF THE BUILDING AS REQUIRED TO PROVIDE PROTECTION OF THE SPACES INDICATED, SPECIFICALLY STORAGE ROOMS, MECHANICAL AND ELECTRICAL ROOMS. ALSO, THERE SHALL BE SMOKE DETECTORS LOCATED ON EACH SIDE OF DOORS WITH MAGNETIC HOLD-OPENS AT SMOKE BARRIERS, THAT RELEASE UPON DETECTION OF SMOKE. A SMOKE DETECTOR SHALL BE INSTALLED FOR COVERAGE OF TO SYSTEM AUXILIARY AND CONTROL PANELS.

1.3.3 HEAT DETECTORS GENERALLY ARE TO BE LOCATED AS REQUIRED TO PROVIDE PROTECTION OF THE SPACES INDICATED IN CRITICAL AREAS THAT ARE NOT SUITABLE FOR SMOKE DETECTORS, SUCH AS DUSTY OR HIGH HUMIDITY AREAS.

1.3.4 ANALOG/ADDRESSABLE TYPE DUCT DETECTORS MUST BE LOCATED DOWNSTREAM OF AIR FILTERS AND AHEAD OF ANY BRANCH CONNECTIONS IN RETURN AIR DUCT OF HVAC UNITS HAVING A RATED CAPACITY GREATER THAN 2,000 CFM OR IN BOTH THE RETURN AND SUPPLY AIR DUCT OF UNITS RATED GREATER THAN 15,000 CFM. THESE DETECTORS WILL SHUT DOWN THEIR RESPECTIVE HVAC UNIT UPON DETECTION OF SMOKE, AND SHALL SOUND THE GENERAL BUILDING ALARM.

1.3.5 COMMERCIAL COOKING APPLIANCES HAVE SUPPRESSION SYSTEMS INSTALLED WITHIN THE HOOD AND SHALL BE ARRANGED TO SOUND AN ALARM AT THE FACP AND BE SUPERVISED.

1.3.6 WATER FLOW SWITCHES ARE GENERALLY INSTALLED ON SPRINKLER RISERS. SWITCHES SHALL BE ARRANGED TO INITIATE AN ALARM CONDITION.

1.3.7 TAMPER SWITCHES ARE GENERALLY INSTALLED ON SPRINKLER SYSTEM WATER CONTROL VALVES AT EACH FLOOR. SWITCHES SHALL BE ARRANGED TO ANNUNCIATE AN OFF-NORMAL CONDITION.

1.4 NOTIFICATION FUNCTIONS

1.4.1 VISUAL SIGNAL APPLIANCES (STROBES) MUST BE INSTALLED, AS A MINIMUM, TO CONFORM TO THE AMERICANS WITH DISABILITIES ACT (ADA) CRITERIA AND NFPA 72. SOME OF THE ADA CRITERIA ARE:

1.4.1.1 THE LAMP SHALL BE A NEON STROBE TYPE OR EQUIVALENT.

1.4.1.2 THE COLOR SHALL BE CLEAR OR NOMINAL WHITE (I.E., UNFILTERED OR CLEAR FILTERED WHITE LIGHT).

1.4.1.3 THE MAXIMUM PULSE DURATION SHALL BE 2/10TH OF ONE SECOND (0.2 SECONDS) WITH A MAXIMUM DUTY CYCLE OF 40 PERCENT. THE PULSE DURATION IS DEFINED AS THE TIME INTERVAL BETWEEN INITIAL AND FINAL POINTS OF 10 PERCENT OF MAXIMUM SIGNAL.

1.4.1.4 THE INTENSITY SHALL BE A MINIMUM OF 75 CANDELA IN ACCORDANCE WITH UL 1971.

1.4.1.5 THE FLASH RATE SHALL BE A MINIMUM OF 1 HERTZ AND A MAXIMUM OF 3 HERTZ.

1.4.1.6 THE STROBES AND OR HORN STROBES SHALL BE PLACED AT 80" TO 96" ABOVE THE HIGHEST FLOOR LEVEL WITHIN THE SPACE OR 6" BELOW THE CEILING, WHICHEVER IS LOWER, IN COMPLIANCE WITH CODE.

1.4.1.7 IN GENERAL, NO PLACE IN ANY ROOM OR SPACE REQUIRED TO HAVE A VISUAL SIGNALING APPLIANCE SHALL BE MORE THAN 50 FT. FROM THE SIGNAL (IN A HORIZONTAL PLANE). IN LARGE ROOMS AND SPACES EXCEEDING 100 FT. ACROSS WITHOUT OBSTRUCTION 6 FT. ABOVE THE FINISHED FLOOR SUCH AS AUDITORIUMS, DEVICES MAY BE PLACED AROUND THE PERIMETER, SPACED A MAXIMUM OF 100 FT. APART IN LIEU OF SUSPENDED APPLIANCES FROM THE CEILING.

1.4.1.8 NO PLACE IN COMMON CORRIDORS OR HALLWAYS IN WHICH VISUAL ALARM SIGNALING APPLIANCES ARE REQUIRED SHALL BE MORE THAN 50 FT. FROM THE SIGNAL.

1.4.1.9 VISUAL SIGNALING (STROBE) APPLIANCES SHALL BE LOCATED WITHIN 15 FT. OF THE END OF A CORRIDOR.

1.4.1.10 WHEN TWO OR MORE VISUAL SIGNALING APPLIANCES MAY BE VIEWED AT ONE TIME, THEY SHALL FLASH IN SYNCHRONIZATION.

1.4.1.11 AREAS REQUIRED TO HAVE VISUAL SIGNALING APPLIANCES INCLUDE BUT ARE NOT LIMITED TO: CORRIDORS, RESTROOMS, CONFERENCE AND MEETING ROOMS, CLASSROOMS, CAFETERIAS, FILING AND PHOTOCOPY ROOMS, BREAK ROOMS AND SIMILAR SPACES.

1.4.2 AUDIBLE ALARM DEVICES

1.4.2.1 HIGH-RISE BUILDINGS OR ASSEMBLY OCCUPANCIES ARE REQUIRED TO HAVE AUDIBLE ALARM DEVICES IN THE FORM OF SPEAKERS. THE SPEAKERS SHOULD BE ACTUATED THROUGH THE MAIN VOICE CONTROL PANEL LOCATED AT THE FACP AND BE CAPABLE OF PROVIDING A SOUND LEVEL WHICH IS A MINIMUM OF 85 DBA, IN NO CASE SHALL THE RATED OUTPUT OF A HORN BE LESS THAN 15 DBA OVER AMBIENT CONDITIONS. THE VOICE CONTROL PANELS SHOULD BE CAPABLE OF MANUAL SELECTION OF: NORMAL VOICE/TONE OPERATION; TONE ONLY OPERATION; MANUAL ONLY OPERATION.

1.4.2.2 THE VOICE CONTROL PANEL SHALL INCORPORATE A MICROPHONE WHICH IS CAPABLE OF OVERRIDING ANY OR ALL CIRCUITS, WHETHER ACTIVATED OR NOT, ON A SELECTABLE BASIS. THIS PROVIDES THE CAPABILITY OF ADDRESSING ALL CIRCUIT AUDIBLE DEVICES THROUGH AN ALL-PAGE FEATURE SIMULTANEOUSLY.

1.4.2.3 THE VOICE CONTROL PANEL SHALL BE CAPABLE OF PRODUCING TEXTUAL MESSAGES. INDIVIDUAL TEXTUAL MESSAGES PRODUCED BY THE VOICE CONTROL PANEL WILL REPEAT CONTINUOUSLY UNTIL SILENCED AT THE FACP. IN THE EVENT OF FAILURE OF THE DIGITAL MESSAGES TO BE PRODUCED, THE BUILDING VOICE CONTROL PANEL MUST AUTOMATICALLY PROVIDE A CONTINUOUS ALERT TONE. A REMOTE MICROPHONE STATION SHALL BE PROVIDED FOR PAGING FUNCTION.

1.5 AUXILIARY FUNCTIONS

1.5.1 EMERGENCY EXIT DOORS WITH SECURITY MAGNETIC LOCKS SHALL RELEASE PER NFPA 72.

1.5.2 DOORS IN RATED WALLS IN THE MEANS OF EGRESS SHALL BE HELD OPEN MAGNETICALLY. UPON ACTIVATION, THE FIRE ALARM SYSTEM MUST BE ARRANGED TO RELEASE THE MAGNET, CAUSING THESE DOORS TO CLOSE AUTOMATICALLY.

1.5.3 THE FIRE ALARM SYSTEM OPERATION FOLLOWING THE ACTIVATION OF A MANUAL PULL STATION, AREA SMOKE DETECTOR, THERMAL DETECTOR, SPRINKLER TAMPER SWITCH, SPRINKLER FLOW SWITCH OR DUCT TYPE SMOKE DETECTOR SHALL ACTIVATE THE FOLLOWING SEQUENCE:

1.5.3.1 ALL INTENDED ALARM NOTIFICATION APPLIANCES SHALL SOUND CONTINUOUSLY UNTIL THE FIRE ALARM CONTROL PANEL IS SILENCED BY THE ALARM SILENCE KEY.

1.5.3.2 ALL VISUAL NOTIFICATION APPLIANCES SHALL FLASH CONTINUOUSLY UNTIL THE FIRE ALARM PANEL IS SILENCED, ALARM CONDITION IS CLEARED AND THE CONTROL PANEL IS RESET.

1.5.3.3 A SUBSEQUENT ALARM SHALL CAUSE IT'S PROGRAMMED OR INTENDED OUTPUTS TO ACTIVATE/REACTIVATE.

1.5.3.4 INITIATE TRANSMISSION OF THE ALARM SIGNAL TO REMOTE CENTRAL STATION.

1.5.3.5 ACTIVATE A SUPERVISED SIGNAL TO THE LOCAL FIRE DEPARTMENT PER NFPA 72.

1.5.3.6 MECHANICAL CONTROLS SHALL ACTIVATE AIR-HANDLING SYSTEMS IN ACCORDANCE WITH NFPA 90.

1.5.3.7 ALL SYSTEM EVENTS SHALL BE DISPLAYED ON A FACP DISPLAY AND REMOTE ANNUNCIATOR.

1.5.3.8 THE CONTROL PANEL SHALL ALARM CONTINUOUSLY UNTIL SILENCED.

1.5.3.9 AN ALARM FROM A ZONE OR DEVICE SELECTED FOR ALARM VERIFICATION SHALL CAUSE A VISUAL SIGNAL AT THE FACP AND ANNUNCIATOR DURING THE VERIFICATION SEQUENCE. AN ALARM FROM ANY OTHER DEVICE SUCH AS A PULL STATION, SHALL OVERRIDE ALARM VERIFICATION AND CAUSE AN IMMEDIATE ALARM.

1.5.3.10 SUPERVISE CONTROL SOURCE OF ELEVATOR SHUNT TRIP CIRCUIT BREAKER BY FIRE ALARM SYSTEM. FURNISH AND INSTALL ALL MATERIALS TO INTEGRATE EXISTING ELEVATOR SYSTEMS TO NEW FIRE ALARM.

1.5.3.11 ACTIVATE NOTIFICATION APPLIANCES ASSOCIATED WITH AND REQUIRED BY THE SPRINKLER SYSTEM UPON SYSTEM WATER FLOW.

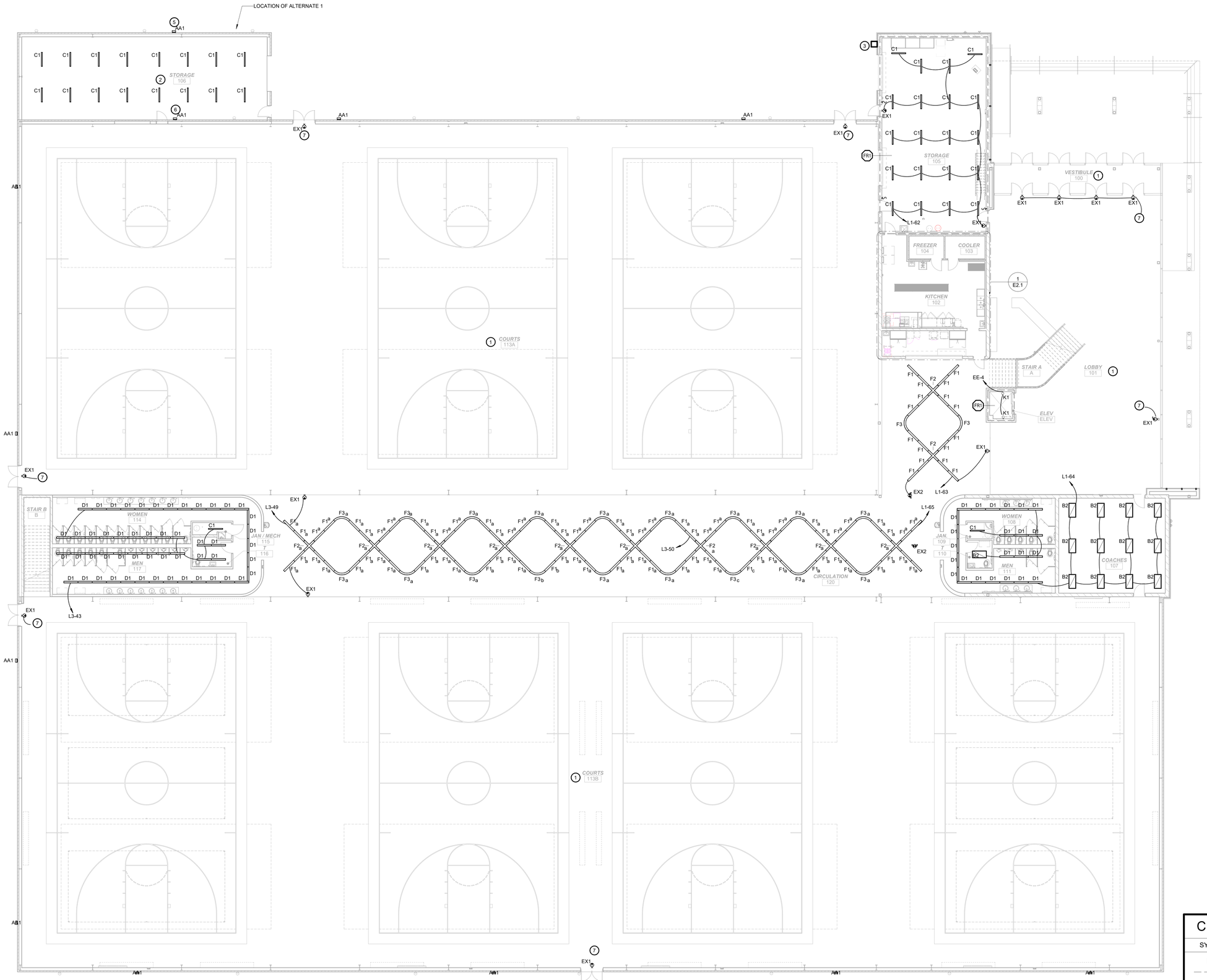
1.6 FIRE DOCUMENT BOX

THE FIRE DOCUMENT BOX (FDB) SHALL BE CONSTRUCTED OF 16 GAUGE COLD ROLLED STEEL (CRS); IT SHALL BE PAINTED WITH A DURABLE RED POWDER COAT PAINT. THE FRONT DOOR SHALL BE LETTERED WITH THE WORDS "FIRE ALARM DOCUMENTS" IN WHITE INDELIBLE LETTERS 1" IN HEIGHT. THE DOOR OF THE FDB SHALL BE LOCKED WITH A KEYED LOCK, 3/4" BARREL. THE CABINET SHALL CONTAIN A 16 GAUGE GALVANIZED CRS SLEEVE. THIS SLEEVE SHALL ALLOW FOR THE STORAGE OF 1" OF PAPER, TEST AND INSPECTION RECORDS, MANUALS AND OTHER IMPORTANT DOCUMENTS. THE SLEEVE SHALL ALSO FACILITATE THE HANGING OF KEY RINGS AND THUMB DRIVES (FOR DATA STORAGE) ALONG WITH BUSINESS CARDS AND SPACE FOR A CD "JEWEL" CASE. THE UNIT SHALL ALSO CONTAIN A 1.4OZ CAN OF SMOKE DETECTOR TEST GAS. ADHERED INSIDE THE DOOR SHALL BE A "NOTES" LABEL FOR THE RECORDING OF VALUABLE INFORMATION SUCH AS AHJ APPROVALS, VARIOUS SYSTEM CODES AND THE LOCATION OF HARD TO FIND DEVICES.

GENERAL ELECTRICAL NOTES

GENERAL

1. THE ELECTRICAL DRAWINGS ARE SCHEMATIC IN NATURE AND SHOW THE GENERAL ARRANGEMENT OF EQUIPMENT. THE DRAWINGS SHALL NOT BE SCALED FROM.
2. ALL WORK IS TO BE COORDINATED WITH ALL OTHER TRADES ON THIS PROJECT AND ELECTRICAL WORK SHALL BE INSTALLED IN A NEAT AND ORDERLY FASHION.
3. ALL NEW ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL OTHER LOCAL, STATE, AND NATIONAL CODES WHICH APPLY AS INTERPRETED BY THE AHJ (AUTHORITY HAVING JURISDICTION).
4. CONTRACTOR SHALL CUT AND PATCH AS REQUIRED DURING THE COURSE OF INSTALLATION OR AS SPECIFIED ON THE DRAWINGS. THE GENERAL CONTRACTOR SHALL BE RETAINED TO PERFORM PATCHING AND THE COSTS BORNE BY THE CONTRACTOR REQUIRING THE PATCH.
5. WIRING METHODS IN CEILING CAVITIES SHALL NOT BE SECURED TO OR SUPPORTED BY THE CEILING ASSEMBLY OR CEILING SUPPORT WIRES. INDEPENDENT GALVANIZED SUPPORT WIRES SHALL BE FURNISHED AND INSTALLED TO SUPPORT WIRING METHODS AND SHALL BE SECURED TO THE STRUCTURE. THESE SUPPORT WIRES SHALL BE DISTINGUISHED BY COLOR, TAGGING, OR PERMANENT EFFECTIVE MEANS ACCEPTABLE TO...
6. RACEWAY FILL, WHEN RACEWAY



PLAN NORTH

LIGHTING FLOOR PLAN

SCALE: 3/32" = 1'-0"

ELECTRICAL CONSTRUCTION TAG NOTES

(1) (APPLIES TO THIS DRAWING ONLY)

1	REFER TO DRAWING E1.2 FOR LIGHTING.
2	ALL WORK THIS AREA BY ALTERNATE BID, INCLUDING ROUGH-INS WIRING, RACEWAY, LIGHT FIXTURES AND ASSOCIATED CONTROLS. AS BASE BID, LABEL ALL BREAKERS ASSOCAITED WITH THIS AREA AS "SPARE". REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS AND PROVIDE BID ACCORDINGLY.
3	CONTRACTOR SHALL INSTALL PHOTOCELL ON EXTERIOR OF BUILDING AS HIGH AS POSSIBLE FOR CONTROL OF EXTERIOR LIGHTING. PHOTOCELL SHALL BE INTERCONNECTED TO ECLYPSE PANEL LOCATED WITHIN MECHANICAL ROOM.
4	CONTRACTOR SHALL FIELD COORDINATE PLACEMENT OF LIGHTING WITHIN SPACE WITH ALL OTHER APPURTENANCES TO BE INSTALLED.
5	LOCATION OF LIGHT FIXTURE IF ALTERNATE BID IS ACCEPTED.
6	LOCATION OF LIGHT FIXTURE IF ALTERNATE BID IS NOT ACCEPTED.
7	EXTEND TO LIGHTING CIRCUIT SHOWN ON SECOND FLOOR.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

AFD = AUTOMATIC FIRE DAMPER
F-R-R = FIRE-RESISTANT-RATED
F-R-W = FIRE-RATED-WALL
FS = FIRE STOP

SHERMAN CARTER BARNHART ARCHITECTS

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OWENSBORO INDOOR SPORTS FACILITY

500 WEST THIRD STREET
OWENSBORO, KY 42301

LIGHTING FLOOR PLAN

JOB NO.	22630
DATE	MAY 20, 2024
DRAWN	DN
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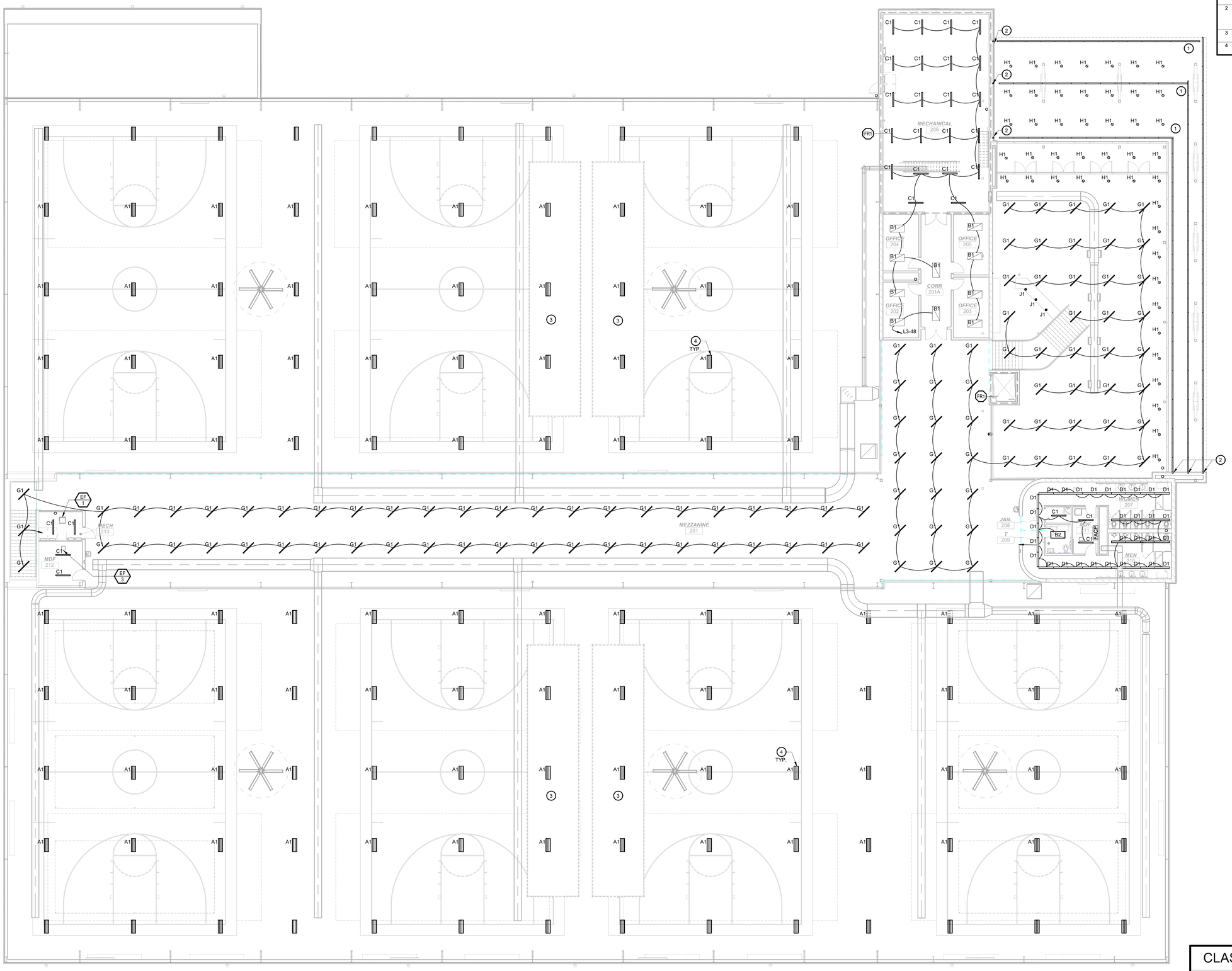
No.	Description	Date

SHEET

E1.1



PLAN NORTH

LIGHTING MEZZANINE PLAN

SCALE: 3/32" = 1'-0"

ELECTRICAL CONSTRUCTION TAG NOTES

(1) (APPLIES TO THIS DRAWING ONLY)

1	CONTRACTOR SHALL CAREFULLY COORDINATE CANOPY LIGHTING WITH ARCHITECTURAL CANOPY MATERIALS SELECTION AND INSTALLATION INSTRUCTIONS.
2	LIGHTING SHALL CONTINUE VERTICALLY ON THE FACE OF THE ARCHITECTURAL WING WALL. REFER TO ARCHITECTURAL PLANS AND DETAILS FOR EXACT PLACEMENT. REFER TO ARCHITECTURAL AND MANUFACTURER FOR INSTALLATION DETAILS.
3	CONTRACTOR SHALL FIELD COORDINATE PLACEMENT OF LIGHTING WITHIN SPACE WITH ALL OTHER APPURTENANCES TO BE INSTALLED.
4	CONTRACTOR SHALL FIELD COORDINATE PLACEMENT OF LIGHT FIXTURES WITH HVLS FAN TO BE INSTALLED.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

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F-R-R = FIRE-RESISTANT-RATED
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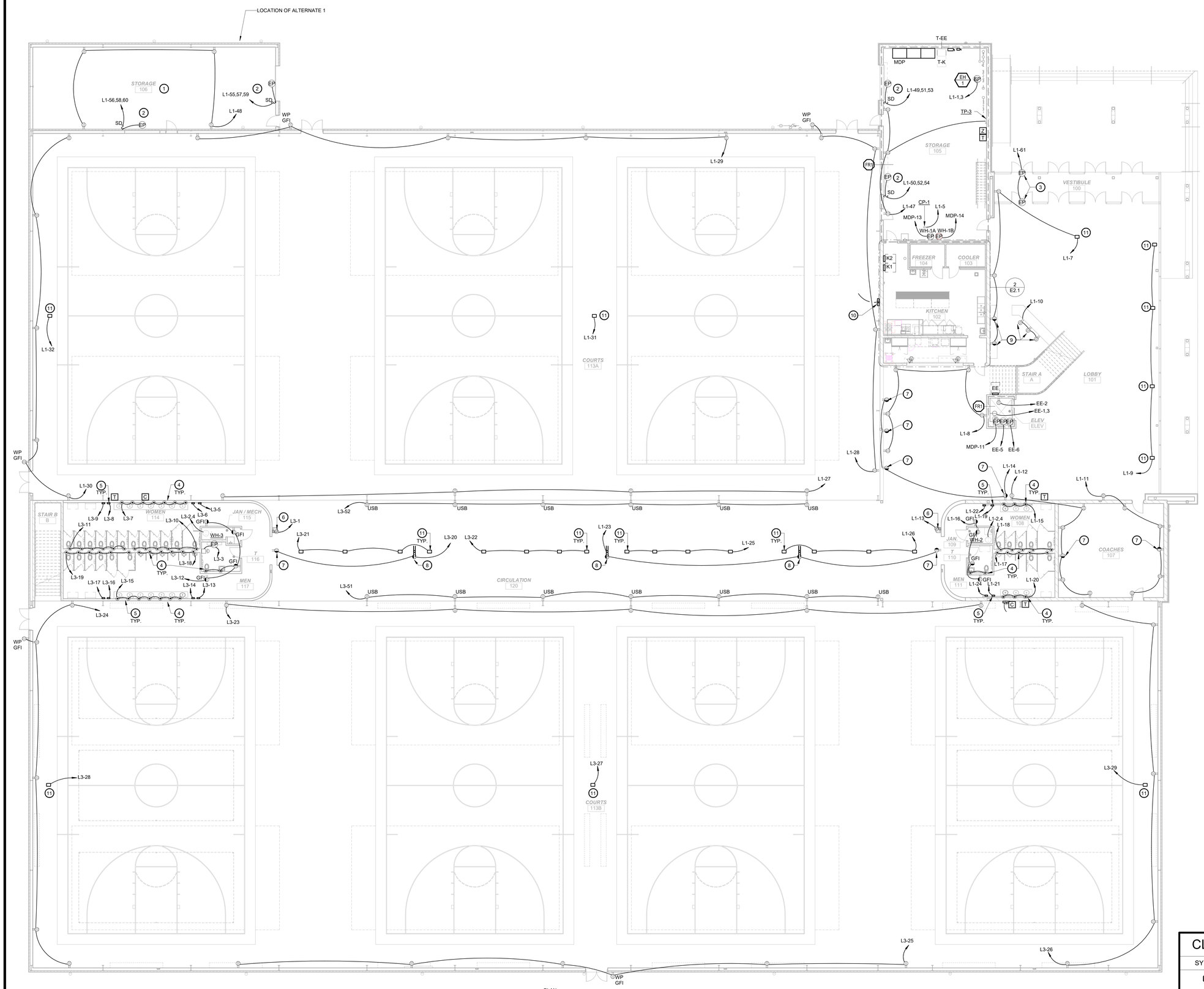
SHEET

E1.2



PLAN NORTH

POWER FLOOR PLAN

SCALE: 3/32" = 1'-0"

ELECTRICAL CONSTRUCTION TAG NOTES

1 (APPLIES TO THIS DRAWING ONLY)

1	ALL WORK THIS AREA BY ALTERNATE BID, INCLUDING ROUGH-INS WIRING, RACEWAY, CONNECTION TO GARAGE DOOR MOTORS. AS BASE BID, LABEL ALL BREAKERS ASSOCAITED WITH THIS AREA AS "SPARE". REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS AND PROVIDE BID ACCORDINGLY.
2	CONTRACTOR SHALL INSTALL POWER CONNECTION TO OVERHEAD DOOR OPENER AS REQUIRED BY MANUFACTURER.
3	CONTRACTOR SHALL INSTALL POWER CONNECTION TO ADA DOOR OPENER AS REQUIRED. COORDINATE ALL CONNECTIONS AT UNIT WITH MANUFACTURER REQUIREMENTS.
4	CONTRACTOR SHALL INSTALL JUNCTION BOX AT PLUMBING FIXTURE FOR CONNECTION BETWEEN TRANSFORMER AND FLUSH VALVE/ACTUATOR. COORDINATE BOX PLACEMENT WITH RESPECTIVE CONTRACTOR AND MANUFACTURER REQUIREMENTS. CONTRACTOR SHALL ROUTE (1) 3/4 INCH CONDUIT FROM JUNCTION BOX TO ABOVE CEILING FOR ROUTING OF POWER CABLING TO UNIT.
5	CONTRACTOR SHALL INSTALL POWER CONNECTION TO HAND DRYER AS REQUIRED BY MANUFACTURER. COORDINATE FINAL PLACEMENT OF UNIT WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION. FURNISH AND INSTALL GFI BREAKER IN PANEL FOR CONNECTION TO UNIT.
6	CONTRACTOR SHALL INSTALL RECEPTACLE AT SUITABLE HEIGHT FOR CONNECTION TO ELECTRIC WATER COOLER. COORDINATE DEVICE MOUNTING HEIGHT WITH RESPECTIVE CONTRACTOR AND MANUFACTURER REQUIREMENTS. FURNISH AND INSTALL GFI BREAKER IN PANEL FOR CONNECTION TO DEVICE.
7	CONTRACTOR SHALL INSTALL RECEPTACLE AT SUITABLE HEIGHT FOR CONNECTION TO WALL MOUNTED MONITOR. COORDINATE MOUNTING HEIGHT OF MONITOR WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION. DEVICE SHALL BE PLACED TO AVOID CONFLICT WITH WALL MOUNT BRACKET.
8	CONTRACTOR SHALL INSTALL RECEPTACLE AT SUITABLE HEIGHT FOR CONNECTION TO SUSPENDED DISPLAY. COORDINATE FINAL PLACEMENT OF ALL DISPLAYS WITH OWNER PRIOR TO ROUGH-IN.
9	CONTRACTOR SHALL INSTALL DUPLEX RECEPTACLE WITHIN CASEWORK. COORDINATE FINAL PLACEMENT OF CASEWORK WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION.
10	CONTRACTOR SHALL INSTALL JUNCTION BOX AND WIRING FOR GYM EQUIPMENT CONTROLLER AS REQUIRED BY MANUFACTURER. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY CONNECTIONS TO INTERCONNECT SYSTEM TO ALL ASSOCIATED DEVICES.
11	REFER TO 4-GANG FLOOR BOX DETAIL FOR REQUIREMENTS.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

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F-R-R = FIRE-RESISTANT-RATED
F-R-W = FIRE-RATED-WALL
FS = FIRE STOP

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POWER FLOOR PLAN

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PLAN NORTH

POWER MEZZANINE PLAN

SCALE: 3/32" = 1'-0"

ELECTRICAL CONSTRUCTION TAG NOTES

(1) (APPLIES TO THIS DRAWING ONLY)

1	CONTRACTOR SHALL INSTALL POWER CONNECTION TO BUILDING MOUNTED SIGN AS REQUIRED BY MANUFACTURER. COORDINATE MOUNTING HEIGHT OF SIGN WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION.
2	CONTRACTOR SHALL INSTALL RECEPTACLE AT SUITABLE HEIGHT FOR CONNECTION TO SCOREBOARD. COORDINATE SCOREBOARD INSTALLATION HEIGHT WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION.
3	CONTRACTOR SHALL INSTALL POWER CONNECTION TO BASKETBALL GOAL RETRACTION MOTOR AS REQUIRED BY MANUFACTURER. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY CONNECTIONS TO INTERCONNECT BASKETBALL GOAL WITH CONTROL PANEL LOCATED ON WALL.
4	CONTRACTOR SHALL INSTALL POWER CONNECTION TO BASKETBALL GOAL HEIGHT ADJUSTMENT MOTOR AS REQUIRED BY MANUFACTURER. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY CONNECTIONS TO INTERCONNECT BASKETBALL GOAL WITH CONTROL PANEL LOCATED ON WALL.
5	CONTRACTOR SHALL INSTALL POWER CONNECTION TO BASKETBALL GOAL SCOREBOARD AND LED LIGHTING AS REQUIRED BY MANUFACTURER. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY CONNECTIONS TO INTERCONNECT BASKETBALL GOAL WITH CONTROL PANEL LOCATED ON WALL.
6	CONTRACTOR SHALL INSTALL POWER CONNECTION TO RETRACTABLE VOLLEYBALL SYSTEM AS REQUIRED BY MANUFACTURER. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY CONNECTIONS TO INTERCONNECT SYSTEM WITH CONTROL PANEL LOCATED ON WALL.
7	CONTRACTOR SHALL INSTALL POWER CONNECTION TO HVLS FAN AS REQUIRED BY MANUFACTURER. CONTRACTOR SHALL RECEIVE CONTROLLER FOR FAN AND INSTALL IN LOCATION TO BE COORDINATED WITH ALL OTHER TRADES.
8	CONTRACTOR SHALL INSTALL POWER CONNECTION TO RETRACTABLE DIVIDER CURTAIN MOTOR(S) AS REQUIRED BY MANUFACTURER. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY CONNECTIONS TO INTERCONNECT SYSTEM WITH CONTROL PANEL LOCATED ON WALL.
9	CONTRACTOR SHALL INSTALL POWER CONNECTION TO RETRACTABLE BATTING CAGE MOTOR AS REQUIRED BY MANUFACTURER. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY CONNECTIONS TO INTERCONNECT SYSTEM WITH CONTROL PANEL LOCATED ON WALL.
10	CONTRACTOR SHALL INSTALL JUNCTION BOX AT PLUMBING FIXTURE FOR CONNECTION BETWEEN TRANSFORMER AND FLUSH VALVE/ACTUATOR. COORDINATE BOX PLACEMENT WITH RESPECTIVE CONTRACTOR AND MANUFACTURER REQUIREMENTS. CONTRACTOR SHALL ROUTE (1) 3/4 INCH CONDUIT FROM JUNCTION BOX TO ABOVE CEILING FOR ROUTING OF POWER CABLING TO UNIT.
11	CONTRACTOR SHALL INSTALL POWER CONNECTION TO HAND DRYER AS REQUIRED BY MANUFACTURER. COORDINATE FINAL PLACEMENT OF UNIT WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION. FURNISH AND INSTALL GFI BREAKER IN PANEL FOR CONNECTION TO UNIT.
12	CONTRACTOR SHALL INSTALL RECEPTACLE AT SUITABLE HEIGHT FOR CONNECTION TO SUSPENDED DISPLAY. COORDINATE FINAL PLACEMENT OF ALL DISPLAYS WITH OWNER PRIOR TO ROUGH-IN.
13	CONTRACTOR SHALL INSTALL RECEPTACLE AT SUITABLE HEIGHT FOR CONNECTION TO ELECTRIC WATER COOLER. COORDINATE DEVICE MOUNTING HEIGHT WITH RESPECTIVE CONTRACTOR AND MANUFACTURER REQUIREMENTS. FURNISH AND INSTALL GFI BREAKER IN PANEL FOR CONNECTION TO DEVICE.
14	POKE THRU FLOOR BOX.
15	CONTRACTOR SHALL INSTALL RECEPTACLE AT SUITABLE HEIGHT FOR CONNECTION TO HVAC TEMPERATURE CONTROLS PANEL. COORDINATE FINAL PLACEMENT OF HVAC TEMPERATURE CONTROL PANEL WITH OWNER PRIOR TO ROUGH-IN.
16	CONTRACTOR SHALL INSTALL RECEPTACLE IN KNEE WALL 10" ABOVE MEZZAINE FLOOR TO BTM. OF OUTLET.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

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POWER MEZZANINE PLAN

JOB NO.	22630
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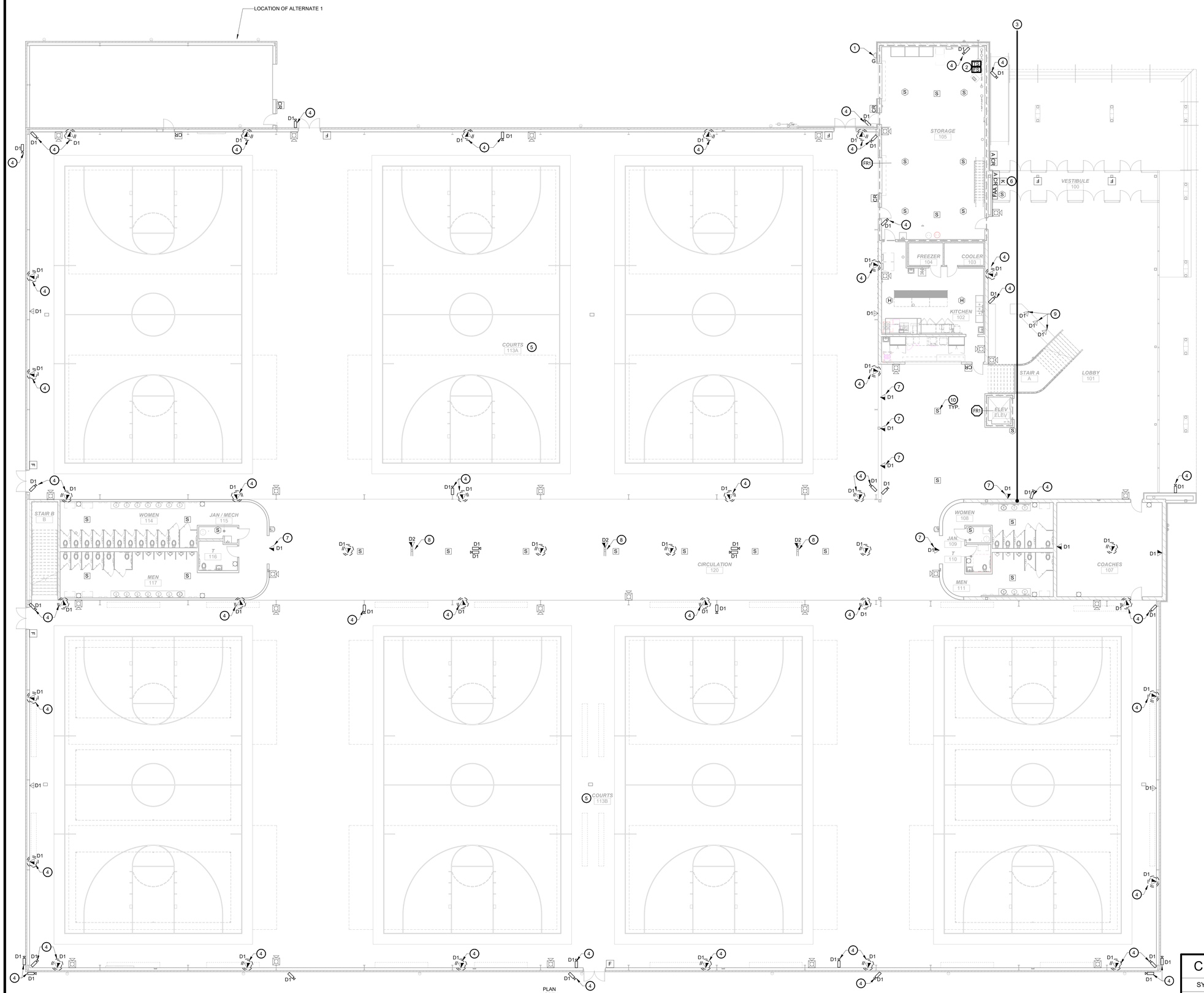

PLAN NORTH

SPECIAL SYSTEMS FLOOR PLAN

SCALE: 3/32" = 1'-0"

ELECTRICAL CONSTRUCTION TAG NOTES

(1) (APPLIES TO THIS DRAWING ONLY)

1	CONTRACTOR SHALL RECEIVE 120V BELL FOR ACTIVATION OF FIRE SPRINKLER SYSTEM FROM RESPECTIVE CONTARCTOR AND INSTALL ON EXTERIOR WALL OF BUILDING. COORDINATE PLACEMENT OF DEVICE WITH ALL OTHER TRADES TO AVOID CONFLICT.
2	FIRE ALARM CONTRACTOR SHALL PROVIDE AND INSTALL TAMPER SWITCHES AND FLOW SWITCHES AND INTEGRATE INTO BUILDING FIRE ALARM SYSTEM.
3	CONTRACTOR SHALL ROUTE UNDERGROUND TELECOMMUNICATIONS CONDUIT TO LOCATION AS INDICATED ON SITE PLAN. REFER TO SITE PLAN FOR CONTINUATION.
4	CONTRACTOR SHALL INSTALL JUNCTION BOX RECESSED IN WALL AT 10 FEET A.F.F. FOR INSTALLATION OF DEVICE.
5	ALL WALL MOUNTED DEVICES INSTALLED WITHIN SPACE SHALL HAVE PROTECTIVE WIRE GUARDS COMPATIBLE WITH DEVICE INSTALLED. CONTRACTOR SHALL FURNISH AND INSTALL WIRE GUARDS.
6	CONTRACTOR SHALL INSTALL JUNCTION BOX AND (1) 3/4 INCH CONDUIT TO ABOVE CEILING SPACE FOR FUTURE INSTALLATION OF SECURITY KEYPAD. JUNCTION BOX SHALL HAVE SINGLE GANG BLANK COVER PLATE INSTALLED.
7	CONTRACTOR SHALL INSTALL DATA JACK AT SUITABLE HEIGHT FOR CONNECTION TO WALL MOUNTED MONITOR. COORDINATE MOUNTING HEIGHT OF MONITOR WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION. DEVICE SHALL BE PLACED TO AVOID CONFLICT WITH WALL MOUNT BRACKET.
8	CONTRACTOR SHALL INSTALL DATA JACK AT SUITABLE HEIGHT FOR CONNECTION TO POLE MOUNTED MONITOR. COORDINATE MOUNTING HEIGHT AND LOCATION OF MONITOR WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION. DEVICE SHALL BE PLACED TO AVOID CONFLICT WITH MOUNTING BRACKET.
9	CONTRACTOR SHALL INSTALL DATA JACK ADJACENT TO RECEPTACLE LOCATED WITHIN CASEWORK. COORDINATE FINAL PLACEMENT OF CASEWORK WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION.
10	CONTRACTOR SHALL FURNISH AND INSTALL IP BASED SPEAKER TO SERVE AS INTERCOM PAGING SPEAKER. CONTRACTOR SHALL ROUTE (1) CAT 6 CABLE FROM SPEAKER TO NETWORK RACK AND TERMINATE AT REQUIRED TO PROVIDE A FULLY FUNCTIONAL SYSTEM UPON COMPLETION OF CONSTRUCTION.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

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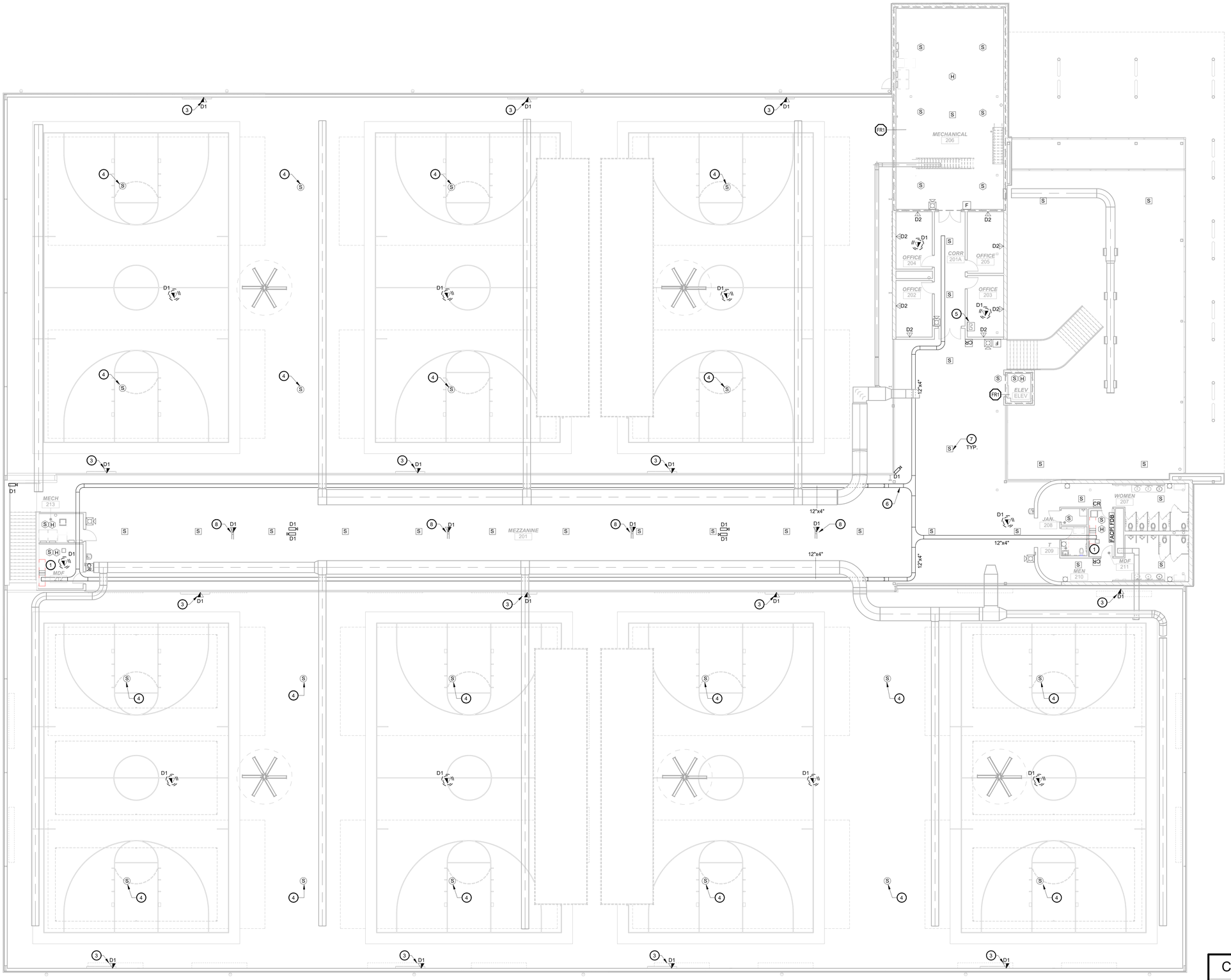

PLAN NORTH

SPECIAL SYSTEMS MEZZANINE PLAN

SCALE: 3/32" = 1'-0"

ELECTRICAL CONSTRUCTION TAG NOTES

(1) (APPLIES TO THIS DRAWING ONLY)

1	CONTRACTOR SHALL INSTALL SOUNDS SYSTEM HEAD END FOR NORTH PORTION OF FACILITY IN MDF RACK. REFER TO DETAILS FOR FURTHER REQUIREMENTS.
2	CONTRACTOR SHALL INSTALL SOUNDS SYSTEM HEAD END FOR SOUTH PORTION OF FACILITY IN MDF 112 RACK. REFER TO DETAILS FOR FURTHER REQUIREMENTS.
3	CONTRACTOR SHALL INSTALL DATA JACK FOR CONNECTION TO SCOREBOARD TO BE INSTALLED. COORDINATE DEVICE PLACEMENT HEIGHT WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION.
4	CONTRACTOR SHALL INSTALL SPEAKERS AT 28 FEET A.F.F. ACCORDING TO MANUFACTURER REQUIREMENTS. REFER TO DETAIL FOR ALL WIRING REQUIREMENTS.
5	CONTRACTOR SHALL FIELD COORDINATE PLACEMENT OF VOICE EVAC CONTROL PANEL IN OFFICE WITH OWNER PRIOR TO INSTALLATION.
6	CONTRACTOR SHALL FIELD COORDINATE ROUTING OF CABLE TRAY WITH ALL OTHER TRADES TO AVOID CONFLICT. ALL CABLE TRAY ROUTED THROUGH EXPOSED CEILING LOCATIONS SHALL HAVE INNER LINER INSTALLED WITHIN TRAY. ARCHITECT SHALL SELECT COLOR OF LINER.
7	CONTRACTOR SHALL INSTALL DATA JACK AT SUITABLE HEIGHT FOR CONNECTION TO POLE MOUNTED MONITOR. COORDINATE MOUNTING HEIGHT AND LOCATION OF MONITOR WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION. DEVICE SHALL BE PLACED TO AVOID CONFLICT WITH MOUNTING BRACKET.
8	CONTRACTOR SHALL FURNISH AND INSTALL IP BASED SPEAKER TO SERVE AS INTERCOM PAGING SPEAKER. CONTRACTOR SHALL ROUTE (1) CAT 6 CABLE FROM SPEAKER TO NETWORK RACK AND TERMINATE AT REQUIRED TO PROVIDE A FULLY FUNCTIONAL SYSTEM UPON COMPLETION OF CONSTRUCTION.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
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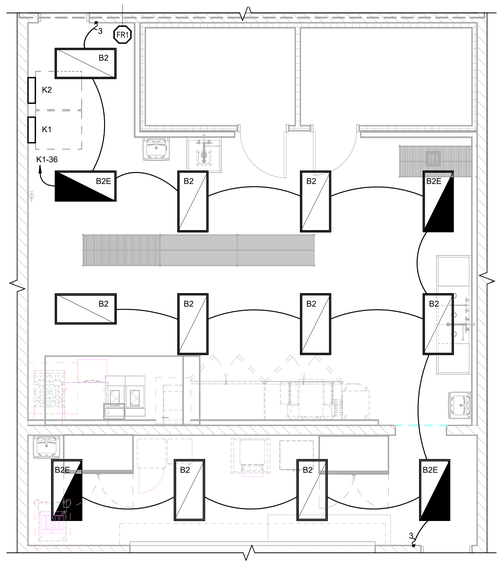
E1.6

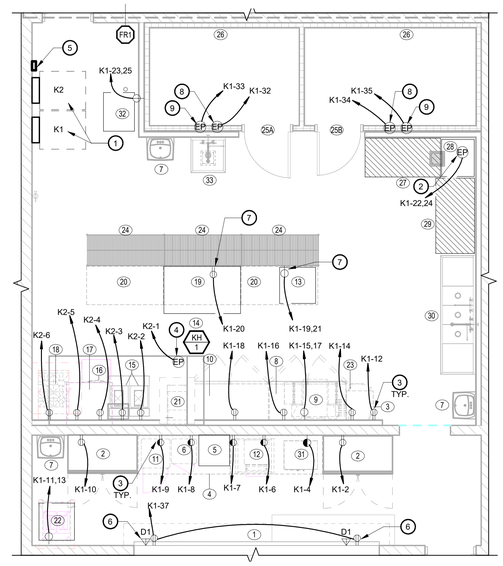
ELECTRICAL CONSTRUCTION TAG NOTES

1 (APPLIES TO THIS DRAWING ONLY)

1	ALL CIRCUITS BREAKERS FEEDING RECEPTACLES SHALL BE PROTECTED BY GFI BREAKER IN PANEL.
2	PROVIDE POWER CONNECTION AT SUITABLE LOCATION TO DISHWASHER. COORDINATE ALL FINAL CONNECTIONS WITH MANUFACTURER REQUIREMENTS PRIOR TO INSTALLATION. FURNISH AND INSTALL LOCKABLE CIRCUIT BREAKER IN PANEL TO SERVE AS DISCONNECTING MEANS.
3	RECEPTACLE SHALL BE INSTALLED AT SUITABLE HEIGHT FOR CONNECTION TO EQUIPMENT. REFER TO MANUFACTURER'S REQUIREMENTS AND CASEWORK ELEVATIONS.
4	PROVIDE POWER CONNECTION TO EXHAUST HOOD LIGHTING AND CONTROLS AS REQUIRED BY MANUFACTURER, COORDINATE FINAL CONNECTIONS WITH SHOP DRAWINGS. FURNISH AND INSTALL NECESSARY INTERCONNECTIONS WITHIN EXHAUST HOOD. SHUNT TRIP CONTROL CIRCUITY SHALL BE ROUTED THROUGH COIL ON CONTACTOR. CONTACTOR SHALL BE INSTALLED AHEAD OF PANEL K2.
5	FURNISH AND INSTALL CONTACTOR FOR INTERCONNECTION TO PANEL K2 TO SHUT DOWN ALL EQUIPMENT BELOW KITCHEN HOOD. CONTACTOR SHALL BE INSTALLED WITHIN NEMA 1 JUNCTION BOX.
6	COORDINATE FINAL LOCATION OF RECEPTACLE AND COMMUNICATION DEVICE WITH OWNER FOR POINT-OF-SALE UNIT.
7	DEVICES SHALL BE INSTALLED AS TOMBSTONE TYPE RECEPTACLES. REFER TO DETAIL FOR ADDITIONAL REQUIREMENTS.
8	PROVIDE POWER CONNECTION AT LOCATION AS REQUIRED BY MANUFACTURER TO LIGHTING.
9	PROVIDE POWER CONNECTION AS REQUIRED BY MANUFACTURER TO EVAPORATOR.



1 LIGHTING ENLARGED KITCHEN PLAN
1/4" = 1'-0"



2 POWER ENLARGED KITCHEN PLAN
1/4" = 1'-0"

KITCHEN EQUIPMENT SCHEDULE

ITEM NO.	EQUIPMENT CATEGORY	AMP	kW	VOLTS	PHASE	DIRECT	PLUG	NEMA	COMMENTS	ITEM NO.
1	FRONT COUNTER	-	-	-	-	-	-	-		1
2	GLASS DOOR BEVERAGE COOLER	8.8	1.1	120	1		X	5-15R		2
3	HOT DOG ROLLER	8.3	1.0	120	1		X	5-15R		3
4	STAINLESS WORK TABLE	-	-	-	-	-	-	-		4
5	DOUBLE HEATED PASS THRU	5.8	0.7	120	1		X	5-15R		5
6	COUNTER TOP HOT WELL	5.0	1.2	120	1		X	5-15R		6
7	HAND SINK	-	-	-	-	-	-	-		7
8	REFRIGERATED WORK TOP	2.5	0.3	120	1		X	5-15R		8
9	CONVEYOR OVEN	37.0	7.4	208	1		X	6-50R		9
10	FREEZER WORK TOP	7.8	1.0	120	1		X	5-15R		10
11	PIZZA WARMER	11.3	1.4	120	1		X	5-15R		11
12	NACHO CHIP WARMER	9.0	1.1	120	1		X	5-15R		12
13	TURBO CHEF OVEN	48.0	9.5	208	1		X	6-50R		13
14	HOOD (KH-1)									14
15	FRYER	6.0	0.7	120	1		X	5-15R		15
16	GRIDDLE	9.0	1.1	120	1		X	5-15R		16
17	REFRIGERATED EQUIPMENT STAND	2.5	0.3	120	1		X	5-15R		17
18	RANGE WITH CONVECTION OVEN BASE	2.5	0.3	120	1		X	5-15R		18
19	REFRIGERATED MAKE TABLE	5.8	0.7	120	1		X	5-15R		19
20	STAINLESS WORK TABLE	-	-	-	-	-	-	-		20
21	DUMP STATION	-	-	-	-	-	-	-		21
22	ICE CREAM MACHINE (EXISTING)	12.0	2.5	208	1		X	6-20R		22
23	DRAWER WARMER	3.8	0.5	120	1		X	5-15R		23
24	SHELVING	-	-	-	-	-	-	-		24
25A	WALK IN COOLER	15.0	4.3	208	3	X				25A
	LIGHTS	2.2	0.3	120	1	X				
	FAN	1.0	0.1	120	1	X				
25B	WALK IN FREZZER	15.0	4.3	208	3	X				25B
	LIGHTS	2.2	0.3	120	1	X				
	FAN	1.0	0.1	120	1	X				
26	SHELVING	-	-	-	-	-	-	-		26
27	CLEAN DISHTABLE W/ SHELF ABOVE	-	-	-	-	-	-	-		27
28	DISHMACHINE	78.0	13.0	208	1	X				28
29	SOILED DISHTABLE W/ SHELF ABOVE	-	-	-	-	-	-	-		29
30	3 COMPARTMENT SINK W/ SHELF ABOVE	-	-	-	-	-	-	-		30
31	POPCORN POPPER	20.0	2.4	120	1		X	5-30R		31
32	ICE MAKER/BIN	12.3	2.5	208	1	X				32
33	PREP SINK	-	-	-	-	-	-	-		33
34	MOP SINK	-	-	-	-	-	-	-		34
35	CONDIMENT/ TRASH CART	-	-	-	-	-	-	-		35

REMARKS:

General Notes:

1. THE INFORMATION ABOVE SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT AS TAGGED ACTUAL EQUIPMENT REQUIREMENTS SHALL TAKE PRESIDENCE OVER THE LISTED INFORMATION. CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT REQUIRED TO PLACE EQUIPMENT IN SERVICE. EQUIPMENT MANUFACTURER SHALL BE RESPONSIBLE FOR VARIATIONS IN ELECTRICAL FIELD CONNECTIONS DUE TO EQUIPMENT SUBSTITUTIONS - MODIFY OVERCURRENT, DISC. SW. WIRE SIZE ETC. AS NECESSARY.
2. THIS SCHEDULE INCLUDES, BUT IS NOT LIMITED TO, THE EQUIPMENT FOUND ON THIS PROJECT, COORDINATE WITH ALL TRADES AND PROVIDE MANUFACTURERS MINIMUM REQUIREMENTS TO ALL EQUIPMENT INSTALLED. THIS SCHEDULE IS NOT TO IMPLY QUANTITY OF EQUIPMENT, REFER TO CONSTRUCTION DOCUMENTS OF RESPECTIVE TRADE FOR LOCATION AND QUANTITIES.
3. REFER TO BUSSING DIAGRAM OF REFERENCED PANEL FOR CIRCUIT BREAKER SIZES.
4. STARTER/MOTOR SWITCH/DISCONNECT SHALL BE LOCATED ADJACENT TO UNIT IN ACCORDANCE WITH N.E.C. ARTICLE #110 & #440 - MAINTAIN WORKING CLEARANCES.
5. ALL FIELD WIRING TO UNITS SHALL BE PROPERLY SUPPORTED PER NEC AND ENCLOSURES SHALL BE PROPERLY RATED FOR THE INSTALLATION CONDITIONS. FIELD VERIFY PROPER BONDING TO GROUND.
6. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY EQUIPMENT SHIPPED LOOSE WITH UNIT, SUCH AS FAN SPEED CONTROLLERS - INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

CLASSIFIED ASSEMBLY LEGEND

SYMBOL	DESCRIPTION	REQUIRED WORK
FR1	1 HR. F-R-R ASSEMBLY	FS ALL PENETRATIONS, INSTALL AFD IN DUCTS/OPENINGS, & INSTALL MEMBRANE PENETRATIONS (RECESSED ITEMS) PER KBC SECTION 712

AFD = AUTOMATIC FIRE DAMPER
F-R-R = FIRE-RESISTANT-RATED
F-R-W = FIRE-RATED-WALL
FS = FIRE STOP

SHERMAN CARTER BARNHART ARCHITECTS

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ELECTRICAL ENLARGED PLANS

JOB NO.	22630
DATE	MAY 20, 2024
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No.	Description	Date

SHEET

E2.1

ELECTRICAL FEEDER SCHEDULE (AL)

FEEDER CODE	CONDUIT/WIRE DESCRIPTION	TEMP RATING	FEEDER CODE	CONDUIT/WIRE DESCRIPTION	TEMP RATING	FEEDER CODE	CONDUIT/WIRE DESCRIPTION	TEMP RATING
			200-3W	3"C-3#250MCM	75°C	800-4W	(3) SETS EA OF 4"C-4#400MCM	75°C
			200-4W	3"C-4#250MCM		800-3W-G	(3) SETS EA OF 4"C-3#400MCM, #3/0 GND	
			200-3W-G	3"C-3#250MCM, #4 GND		800-4W-G	(3) SETS EA OF 4"C-4#400MCM, #3/0 GND	
			200-4W-G	3"C-4#250MCM, #4 GND		1000-4W	(3) SETS EA OF 4"C-4#600MCM	
			225-3W	3"C-3#300MCM		1000-3W-G	(3) SETS EA OF 4"C-3#600MCM, #4/0 GND	
			225-4W	3"C-4#300MCM		1000-4W-G	(3) SETS EA OF 4"C-4#600MCM, #4/0 GND	
			225-3W-G	3"C-3#300MCM, #2 GND		1200-4W	(4) SETS EA OF 4"C-4#500MCM	
			225-4W-G	3"C-4#300MCM, #2 GND		1200-3W-G	(4) SETS EA OF 4"C-3#500MCM, #250 GND	
			250-4W	3"C-4#350MCM		1200-4W-G	(4) SETS EA OF 4"C-4#500MCM, #250 GND	
			250-3W-G	3"C-3#350MCM, #2 GND		1600-4W	(5) SETS EA OF 4"C-4#600MCM	
			250-4W-G	3"C-4#350MCM, #2 GND		1600-3W-G	(5) SETS EA OF 4"C-3#600MCM, #350 GND	
			300-3W-G	4"C-3#500MCM, #2 GND		1600-4W-G	(5) SETS EA OF 4"C-4#600MCM, #350 GND	
			300-4W-G	4"C-4#500MCM, #2 GND		2000-4W	(6) SETS EA OF 4"C-4#600MCM	
			400-3W	(2) SETS EA OF 3"C-3#250MCM		2000-3W-G	(6) SETS EA OF 4"C-3#600MCM, #400 GND	
			400-4W	(2) SETS EA OF 3"C-4#250MCM		2000-4W-G	(6) SETS EA OF 4"C-4#600MCM, #400 GND	
			400-3W-G	(2) SETS EA OF 3"C-3#250MCM, #1 GND		2500-4W	(6) SETS EA OF 4"C-4#600MCM	
			400-4W-G	(2) SETS EA OF 3"C-4#250MCM, #1 GND		2500-3W-G	(8) SETS EA OF 4"C-3#600MCM, #600 GND	
			450-3W-G	(2) SETS EA OF 3"C-3#300MCM, #1 GND		2500-4W-G	(8) SETS EA OF 4"C-4#600MCM, #600 GND	
			450-4W-G	(2) SETS EA OF 3"C-4#300MCM, #1 GND		3000-4W	(10) SETS EA OF 4"C-4#500MCM	
			500-3W-G	(2) SETS EA OF 3"C-3#350MCM, #1/0 GND		3000-3W-G	(10) SETS EA OF 4"C-3#500MCM, #600 GND	
			500-4W-G	(2) SETS EA OF 3"C-4#350MCM, #1/0 GND		3000-4W-G	(10) SETS EA OF 4"C-4#500MCM, #600 GND	
			600-3W-G	(2) SETS EA OF 4"C-3#500MCM, #2/0 GND		4000-4W	(12) SETS EA OF 4"C-4#600MCM	
			600-4W	(2) SETS EA OF 4"C-4#500MCM		4000-3W-G	(12) SETS EA OF 4"C-3#600MCM, #800 GND	
150-3W-G	2"C-3#3/0, #4 GND	75°C	600-4W-G	(2) SETS EA OF 4"C-4#500MCM, #2/0 GND		4000-4W-G	(12) SETS EA OF 4"C-4#600MCM, #800 GND	↑
150-4W-G	2"C-4#3/0, #4 GND		700-4W	(3) SETS EA OF 3"C-4#350MCM				
175-3W-G	2"C-3#4/0, #4 GND		700-3W-G	(3) SETS EA OF 3"C-3#350MCM, #2/0 GND				
175-4W-G	2-1/2"C-4#4/0, #4 GND	↑	700-4W-G	(3) SETS EA OF 3"C-4#350MCM, #2/0 GND	↑			

NOTE:
ALL FEEDS AT 150A AND ABOVE SHALL BE COMPACT STRANDED ALUMINUM CONDUCTORS EQUAL TO ALCAN. FEEDS FROM 125A AND LOWER SHALL STILL BE TRADITIONAL COPPER CONDUCTORS.
CONTRACTOR SHALL DERATE WIRING AS REQUIRED WHEN MORE THAN FOUR (4) CURRENT CARRYING CONDUCTORS ARE INSTALLED IN SINGLE RACEWAY PER NEC TABLE 310.15(B)(3)(a).

ELECTRICAL FEEDER SCHEDULE (CU)

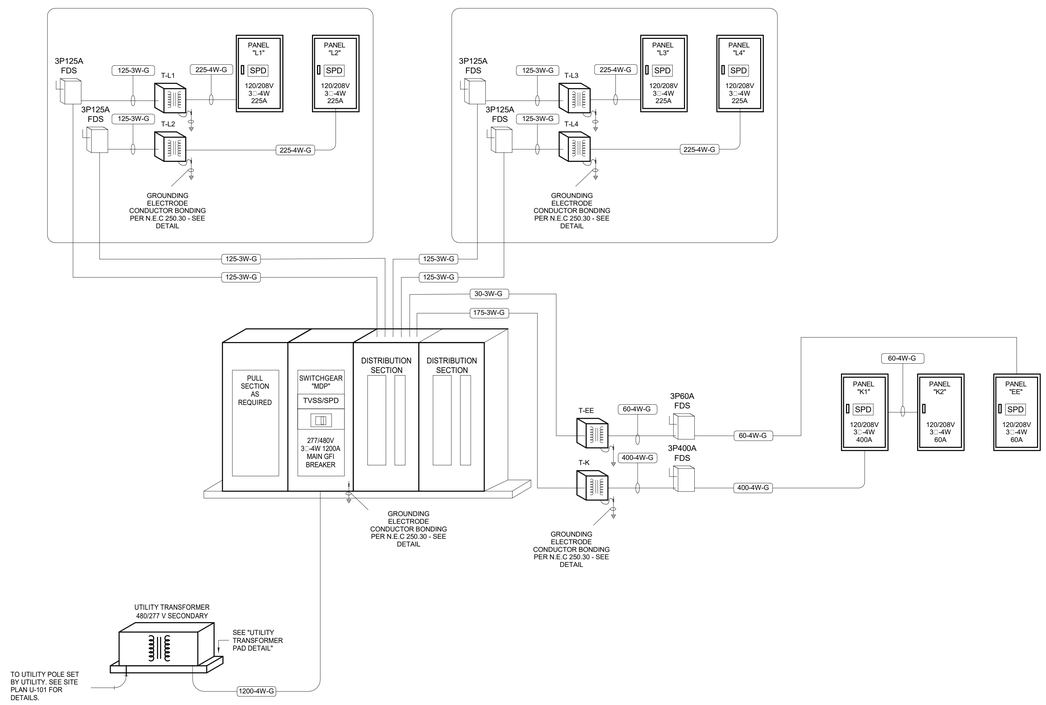
FEEDER CODE	CONDUIT/WIRE DESCRIPTION	TEMP RATING	FEEDER CODE	CONDUIT/WIRE DESCRIPTION	TEMP RATING	FEEDER CODE	CONDUIT/WIRE DESCRIPTION	TEMP RATING
* 20-2W-G	1/2"C-3#12	*60°C	200-3W	2-1/2"C-3#3/0	75°C	800-4W	(2) SETS EA OF 4"C-4#600MCM	75°C
* 20-3W-G	1/2"C-4#12		200-4W	2-1/2"C-4#3/0		800-3W-G	(2) SETS EA OF 4"C-3#600MCM, #1/0 GND	
* 30-2W-G	1/2"C-3#10		200-3W-G	2-1/2"C-3#3/0, #6 GND		800-4W-G	(2) SETS EA OF 4"C-4#600MCM, #1/0 GND	
* 30-3W-G	1/2"C-4#10		200-4W-G	2-1/2"C-4#3/0, #6 GND		1000-4W	(3) SETS EA OF 3"C-4#400MCM	
* 30-4W-G	1/2"C-4#10, #10 GND		225-3W	2-1/2"C-3#4/0,		1000-3W-G	(3) SETS EA OF 3"C-3#400MCM, #2/0 GND	
* 40-2W-G	1/2"C-2#8, #10 GND		225-4W	2-1/2"C-4#4/0,		1000-4W-G	(3) SETS EA OF 3"C-4#400MCM, #2/0 GND	
* 40-3W-G	3/4"C-3#8, #10 GND		225-3W-G	2-1/2"C-3#4/0, #4 GND		1200-4W	(3) SETS EA OF 4"C-4#600MCM	
* 40-4W-G	3/4"C-4#8, #10 GND		225-4W-G	2-1/2"C-4#4/0, #4 GND		1200-3W-G	(3) SETS EA OF 4"C-3#600MCM, #3/0 GND	
* 50-2W-G	3/4"C-2#6, #10 GND		250-4W	3"C-4#250MCM		1200-4W-G	(3) SETS EA OF 4"C-4#600MCM, #3/0 GND	
* 50-3W-G	3/4"C-3#6, #10 GND		250-3W-G	3"C-3#250MCM, #4 GND		1600-4W	(4) SETS EA OF 4"C-4#600MCM	
* 50-4W-G	3/4"C-4#6, #10 GND		250-4W-G	3"C-4#250MCM, #4 GND		1600-3W-G	(4) SETS EA OF 4"C-3#600MCM, #4/0 GND	
* 60-2W-G	3/4"C-2#4, #10 GND		300-3W-G	3"C-3#350MCM, #4 GND		1600-4W-G	(4) SETS EA OF 4"C-4#600MCM, #4/0 GND	
* 60-3W-G	3/4"C-3#4, #10 GND		300-4W-G	3"C-4#350MCM, #4 GND		2000-4W	(5) SETS EA OF 4"C-4#600MCM	
* 60-4W-G	1"C-4#4, #10 GND		400-3W	4"C-3#600MCM		2000-3W-G	(5) SETS EA OF 4"C-3#600MCM, #250 MCM GND	
* 80-2W-G	1"C-2#3, #8 GND		400-3W-G	4"C-3#600MCM, #3 GND		2000-4W-G	(5) SETS EA OF 4"C-4#600MCM, #250 MCM GND	
* 80-3W-G	1-1/4"C-3#3, #8 GND		400-4W	4"C-4#600MCM		2500-4W	(6) SETS EA OF 4"C-4#600MCM	
* 80-4W-G	1-1/4"C-4#3, #8 GND		400-4W-G	4"C-4#600MCM, #3 GND		2500-3W-G	(6) SETS EA OF 4"C-3#600MCM, #350 MCM GND	
* 100-3W	1-1/2"C-3#1		500-3W-G	(2) SETS EA OF 3"C-3#250MCM, #2 GND		2500-4W-G	(6) SETS EA OF 4"C-4#600MCM, #350 MCM GND	
* 100-4W	1-1/2"C-4#1		500-4W	(2) SETS EA OF 3"C-4#250MCM		3000-4W	(8) SETS EA OF 4"C-4#600MCM	
* 100-3W-G	1-1/2"C-3#1, #6 GND		500-4W-G	(2) SETS EA OF 3"C-4#250MCM, #2 GND		3000-3W-G	(8) SETS EA OF 4"C-3#600MCM, #400 MCM GND	
* 100-4W-G	1-1/2"C-4#1, #6 GND	↑	600-3W-G	(2) SETS EA OF 3-1/2"C-3#350MCM, #1 GND		3000-4W-G	(8) SETS EA OF 4"C-4#600MCM, #400 MCM GND	
125-3W-G	1-1/2"C-3#1, #6 GND	75°C	600-4W	(2) SETS EA OF 3-1/2"C-4#350MCM		4000-4W	(10) SETS EA OF 4"C-4#600MCM	
125-4W-G	1-1/2"C-4#1, #6 GND		600-4W-G	(2) SETS EA OF 3-1/2"C-4#350MCM, #1 GND		4000-3W-G	(10) SETS EA OF 4"C-3#600MCM, #500 MCM GND	
150-3W-G	1-1/2"C-3#1/0, #6 GND		700-4W	(2) SETS EA OF 4"C-4#500MCM		4000-4W-G	(10) SETS EA OF 4"C-4#600MCM, #500 MCM GND	↑
150-4W-G	1-1/2"C-4#1/0, #6 GND		700-3W-G	(2) SETS EA OF 4"C-3#500MCM, #1 GND				
175-3W-G	2"C-3#2/0, #6 GND		700-4W-G	(2) SETS EA OF 4"C-4#500MCM, #1 GND	↑			
175-4W-G	2"C-4#2/0, #6 GND	↑	800-3W	(2) SETS EA OF 4"C-3#600MCM				

* EQUIPMENT PROVISIONS FOR ELECTRICAL CONNECTIONS - TEMPERATURE LIMITIONS SHALL COMPLY WITH NEC ARTICLE 110.14 FOR CIRCUITS RATED 100A OR LESS. WIRE SIZES ARE BASED ON TYPE "THHN" COPPER CONDUCTORS, WITH NOT MORE THAN THREE CURRENT CARRYING CONDUCTORS IN RACEWAY - DERATE PER TABLE 310.15 AS APPLICABLE.
CONTRACTOR SHALL DERATE WIRING AS REQUIRED WHEN MORE THAN FOUR (4) CURRENT CARRYING CONDUCTORS ARE INSTALLED IN SINGLE RACEWAY PER NEC TABLE 310.15(B)(3)(a).

TAG:	XFMR "T-EE" (NEMA 1)
480V, 3-PHASE, DELTA PRIMARY	
208/120V, 3-PHASE, WYE SECONDARY	
15 KVA	
(SEE SPECIFICATIONS)	

TAG:	XFMR "T-L1, L2, L3, L4" (NEMA 1)
480V, 3-PHASE, DELTA PRIMARY	
208/120V, 3-PHASE, WYE SECONDARY	
75 KVA	
(SEE SPECIFICATIONS)	

TAG:	XFMR "T-K" (NEMA 1)
480V, 3-PHASE, DELTA PRIMARY	
208/120V, 3-PHASE, WYE SECONDARY	
112.5 KVA	
(SEE SPECIFICATIONS)	



SHERMAN CARTER BARNHART ARCHITECTS

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ELECTRICAL RISER DAIGRAM

JOB NO.	22630
DATE	MAY 20, 2024
DRAWN	Author
CHECKED	Checker

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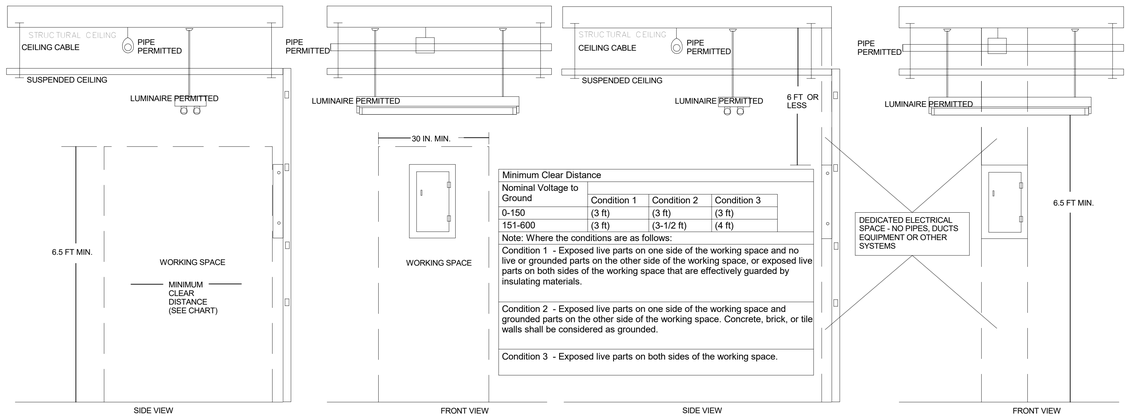
REVISIONS

No.	Description	Date

SHEET
E3.1



Minimum Clear Distance			
Nominal Voltage to Ground	Condition 1	Condition 2	Condition 3
0-150	(3 ft)	(3 ft)	(3 ft)
151-600	(3 ft)	(3-1/2 ft)	(4 ft)

Note: Where the conditions are as follows:

Condition 1 - Exposed live parts on one side of the working space and no live or grounded parts on the other side of the working space, or exposed live parts on both sides of the working space that are effectively guarded by insulating materials.

Condition 2 - Exposed live parts on one side of the working space and grounded parts on the other side of the working space. Concrete, brick, or tile walls shall be considered as grounded.

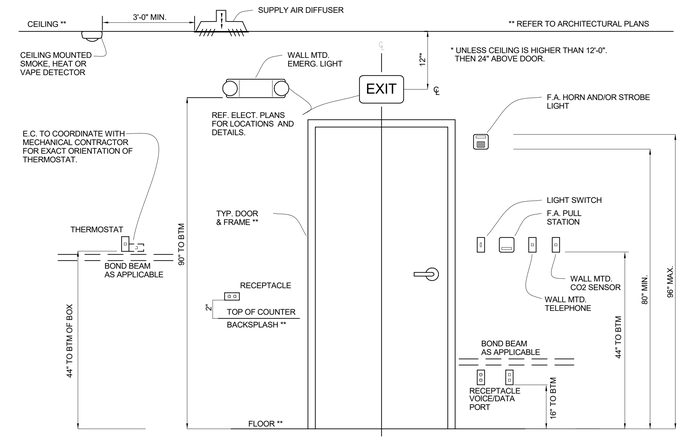
Condition 3 - Exposed live parts on both sides of the working space.

PANEL BOARD WORKING CLEARANCES

PANEL BOARD CONDUIT ACCESS SPACE

PANEL BOARD NEC CLEARANCES

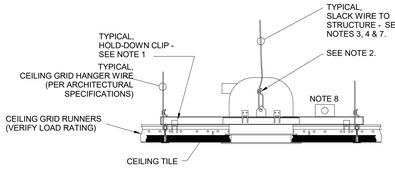
NO SCALE



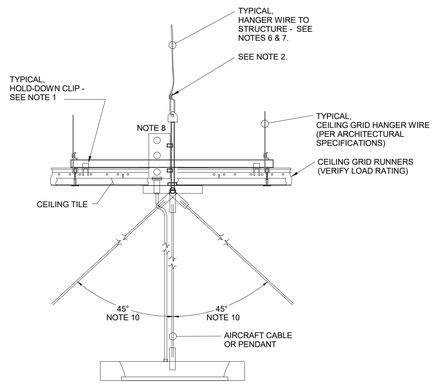
NOTE:
ALL DIMENSIONS ARE TO BOTTOM OF ELECTRICAL BOX FOR DEVICE UNLESS OTHERWISE NOTED. COORDINATE DEVICES WITH LOCATION ON STRUCTURAL BOND BEAMS - ADJUST ACCORDINGLY TO PREVENT CONFLICTS.

TYPICAL DEVICE MOUNTING HEIGHT DETAIL

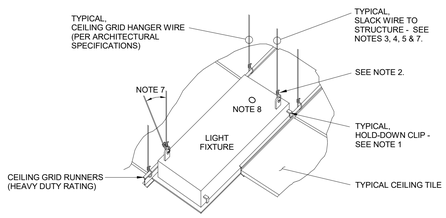
NO SCALE



(RECESSED DOWNLIGHT FIXTURE - SEE NOTE 9)



(SUSPENDED LIGHT FIXTURE - SEE NOTE 6)



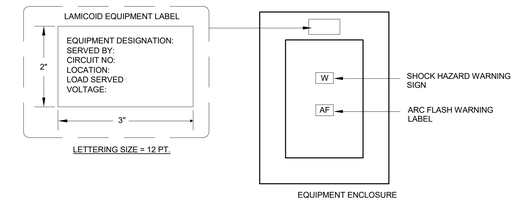
(RECESSED TROFFER LIGHT FIXTURE - SEE NOTE 9)

FIXTURE SUPPORT SYSTEM NOTES

1.	FIXTURES MUST BE POSITIVELY ATTACHED TO THE GRID BY AT LEAST TWO MECHANICAL CONNECTIONS EACH CAPABLE OF SUPPORTING THE WEIGHT OF THE FIXTURE.
2.	WRAPPED WITH A MINIMUM OF 3 TURNS WITHIN 3 INCHES OR LESS FROM ATTACHMENT POINT.
3.	FIXTURES AND ATTACHMENTS WEIGHING 10 LBS (4.5 KG) OR LESS REQUIRE TWO #12 GAUGE MINIMUM SLACK WIRE CONNECTED TO THE HOUSING AND CONNECTED TO THE STRUCTURE ABOVE. THIS WIRE SHALL BE DISTINGUISHABLE BY COLOR, TAGGING OR OTHER EFFECTIVE MEANS FROM OTHER SYSTEMS.
4.	FIXTURES WEIGHING GREATER THAN 10 LBS (4.5 KG) BUT LESS THAN OR EQUAL TO 56 LBS. (25 KG.) REQUIRE TWO #12 GAUGE MINIMUM SLACK WIRES CONNECTED TO THE FIXTURE HOUSING ON OPPOSITE DIAGONAL CORNERS AND CONNECTED TO THE STRUCTURE ABOVE. THIS WIRE SHALL BE DISTINGUISHABLE BY COLOR, TAGGING OR OTHER EFFECTIVE MEANS FROM OTHER SYSTEMS.
5.	FIXTURES WEIGHING 56 LBS (25 KG) AND GREATER REQUIRE INDEPENDENT SUPPORT FROM THE STRUCTURE BY APPROVED HANGERS.
6.	SUSPENDED FIXTURES SHALL BE DIRECTLY SUPPORTED FROM THE STRUCTURE ABOVE WITH HANGER WIRES SIZED FOR A LEAST 2 TIMES THE WEIGHT OF THE FIXTURE (#9 GAUGE MINIMUM) OR OTHER APPROVED ALTERNATE WITHOUT USING THE CEILING SUSPENSION SYSTEM FOR DIRECT SUPPORT PER ASTM E580 5.3.7. SLACK WIRE SHALL PASS THROUGH EACH PENDANT/CABLE HANGER.
7.	ATTACH SLACK WIRES TO FIXTURE HOUSING WITH EITHER BRACKETS/SELF-TAPPING SCREWS OR USE ON INTEGRAL HANGER CLIPS. SLACK WIRES SHALL BE INSTALLED NO MORE THAN 45 DEGREES FROM VERTICAL , ACCESSIBLE AND CLEAR OF OTHER OBSTRUCTIONS. FURNISH AND INSTALL ADDITIONAL SUPPORT(S) BETWEEN STRUCTURE IF SLACK WIRE(S) TO FIXTURE CAN NOT MAINTAIN THIS VERTICAL ALIGNMENT. ADDITIONAL SUPPORTS SHALL BE RATED FOR SUPPORT OF THE WEIGHT OF THE FIXTURE AND SHALL BE PROPERLY SECURED TO THE STRUCTURE.
8.	RIGID CONDUIT IS NOT PERMITTED FOR THE SUPPORT/ATTACHMENT OF FIXTURES.
9.	ILLUSTRATION DRAWN AND COMMUNICATED FOR FIXTURE WEIGHTS LESS THAN 56 LBS AND TO HEAVY DUTY GRID REQUIREMENTS. REFER TO ARCHITECTURAL GRID SPECIFICATIONS PRIOR TO INSTALLATION, APPLICABLE SEISMIC SPECIFICATIONS/CODES AND AHJ FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
10.	FIXTURES SHALL BE FREE TO SWING LATERALLY AT LEAST 45 DEGREES FROM VERTICAL IN ANY DIRECTION WITHOUT CONTACTING AN OBSTRUCTION. CLEAR DISTANCE FROM BUILDING COMPONENTS SHALL BE EQUAL TO 0.75 TIMES THE LENGTH OF THE SUSPENSION. CLEAR DISTANCE FROM ADJACENT FIXTURES SHALL BE EQUAL TO 1.5 TIMES THE LENGTH OF THE SUSPENSION.
11.	SURFACE MOUNTED FIXTURES SHALL BE POSITIVELY CLAMPED TO THE GRID. CLAMPING DEVICES FOR SURFACE MOUNTED FIXTURES SHALL HAVE SAFETY WIRES TO THE GRID OR THE STRUCTURE ABOVE.

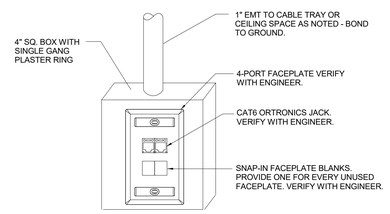
LIGHT FIXTURE SEISMIC SUPPORT DETAIL

NO SCALE



ELECTRICAL EQUIPMENT LABEL/IDENTIFICATION

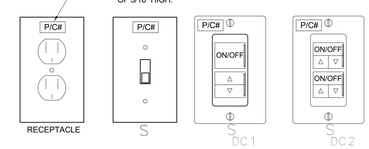
NO SCALE



GENERAL ADMINISTRATIVE TECHNOLOGY WALL OUTLET

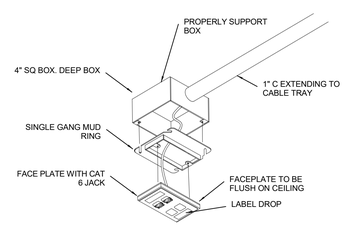
NO SCALE

NOTE:
REFER TO SPECIFICATIONS FOR COLOR SELECTION OF DEVICES AND COVER PLATES.



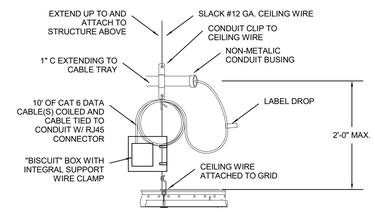
ELECTRICAL WIRING DEVICE IDENTIFICATION

NO SCALE



WAP DATA CONNECTION-DRYWALL LOCATION

NO SCALE



WAP/CCTV CAMERA DATA CONNECTION-LAY-IN CEILING LOCATION

NO SCALE

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
MATTHEW MORGAN
No. 37688
LICENSED PROFESSIONAL ENGINEER
2024-05-17

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OWENSBORO, KY 42301

ELECTRICAL DETAILS

JOB NO.	22630
DATE	MAY 20, 2024
DRAWN	DN
CHECKED	MM

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REVISIONS

No.	Description	Date

SHEET

E4.1

KEYED NOTES

1. INSTALL GROUNDED (NEUTRAL) CONDUCTOR SEE RISER DIAGRAM.

2. INSTALL GROUNDING ELECTRODE CONDUCTOR, SIZED BASED ON NEC TABLE 250-66 USE NO. 3/0.

3. INSTALL EQUIPMENT GROUNDING CONDUCTOR SIZED BASED ON NEC TABLE 250-122 USING THE FEEDER OVERCURRENT DEVICE SIZE. SEE RISER DIAGRAM FOR SIZES.

4. INSTALL EQUIPMENT GROUNDING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250-122 USING THE SEPARATELY DERIVED SYSTEM OVERCURRENT DEVICE SIZE. SEE RISER DIAGRAM FOR SIZES.

5. INSTALL GROUNDING ELECTRODE CONDUCTOR THAT IS SIZED BASED ON NEC 250.30, 250.64 AND TABLE 250-66 USING THE SEPARATELY DERIVED SYSTEM PHASE CONDUCTOR SIZE. SEE RISER DIAGRAM FOR SIZES.

6. INSTALL A CONCRETE-ENCASED MAIN GROUNDING ELECTRODE IN THE BUILDING FOUNDATION. LOCATE ELECTRODE IN THE BOTTOM ONE-THIRD OF THE FOUNDATION WITH AT LEAST 2 INCHES OF CONCRETE COVER.

   BARE OR GALVANIZED REBARS THAT ARE MADE ELECTRICALLY CONTINUOUS. USE REINFORCING BARS NOT SMALLER THAN THE FOLLOWING BASED ON THE TOTAL LENGTH OF THE INTERCONNECTED AND PARALLELED REBARS:

TOTAL LENGTH	MINIMUM REBAR SIZE
40 FT	1/2" (#4 BAR)

7. EXTEND A #6 INSULATED GROUNDING CONDUCTOR TO EACH LOCATION AS INDICATED ON THE PLANS AND BOND RACK SYSTEM EQUIPMENT. COORDINATE WITH ARCHITECTURAL DRAWINGS AND SHOP DRAWINGS FOR REQUIREMENTS.

8. INSTALL A "MAIN GROUND ELECTRODE GROUND BAR" FOR SINGLE POINT GROUNDING. LOCATE AT AN ACCESSIBLE POINT NEAR THE SERVICE ENTRANCE EQUIPMENT. MAKE CONNECTIONS TO THE GROUND ELECTRODE CONDUCTOR USING IRREVERSIBLE CONNECTORS OR EXOTHERMIC WELDS. MAKE OTHER CONNECTIONS TO THE GROUND BAR USING TWO-HOLE COMPRESSION SPADE LUGS THAT MEET IEEE 837 REQUIREMENTS. LABEL EACH CONNECTION TO THE GROUND BAR.

9. INSTALL A COPPER GROUNDING BAR ON EACH TELECOM BACKBOARD. CONNECT TO THE "MAIN GROUNDING ELECTRODE GROUND BAR" USING 600V INSULATED #6 COPPER CABLE.

10. INSTALL NEUTRAL CONDUCTOR THAT IS NOT LESS THAN THE PHASE CONDUCTOR AMPACITY. SEE RISER DIAGRAM.

11. INSTALL BONDING JUMPER WIRE THAT IS SIZED BASED ON NEC TABLE 250-66 USING THE SERVICE OR SEPARATELY-DERIVED SYSTEM PHASE CONDUCTOR SIZE.

12. INSTALL IRREVERSIBLE COMPRESSION CONNECTOR WITH TAMPER- PROOF HARDWARE OR INSTALL EXOTHERMIC WELD.

13. BOND TO METAL PIPING SYSTEMS IN THE AREA SERVED BY THE SEPARATELY DERIVED SYSTEM.

14. 5/8" dia. x 10' LG. COPPER CLAD GROUND RODS SPACED @ 10' APART. DO NOT USE IF COUNTERPOISE IS INSTALLED.

15. BOND STRUCTURAL STEEL COLUMN TO THE CONCRETE-ENCASED MAIN GROUNDING ELECTRODE AT SERVICE ENTRANCE. USE COMPRESSION CONNECTORS THAT MEET IEEE 837 REQUIREMENTS OR USE EXOTHERMIC WELDS.

GENERAL GROUNDING NOTES

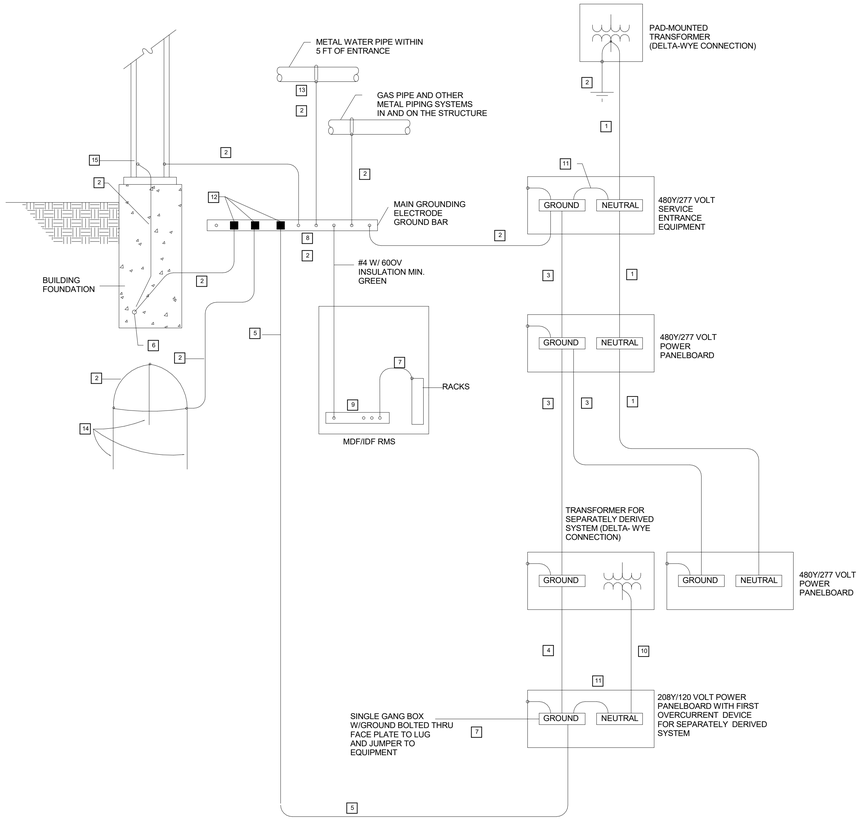
1. CONDUCTOR SIZES SHOWN ARE MINIMUM AND MAY BE LARGER THAN THE MINIMUM SIZES REQUIRED BY NEC.

2. INSTALL GROUNDING CONNECTIONS TO BUILDING STRUCTURE AND WATER PIPES AT LOCATIONS THAT ARE VISIBLE AND ACCESSIBLE FOR INSPECTION, MAINTENANCE, AND TESTING.

3. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC SERVICE ENTRANCE CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250-66 USING THE SERVICE PHASE CONDUCTOR SIZE.

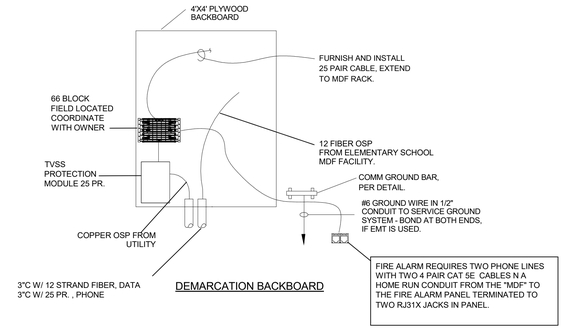
4. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC FEEDER CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250-122 USING THE FEEDER CIRCUIT OVERCURRENT DEVICE SIZE OR THE SEPARATELY DERIVED SYSTEM OVERCURRENT DEVICE SIZE.

5. BOND HOT AND COLD WATER PIPING SYSTEMS.



GROUNDING SYSTEM DIAGRAM

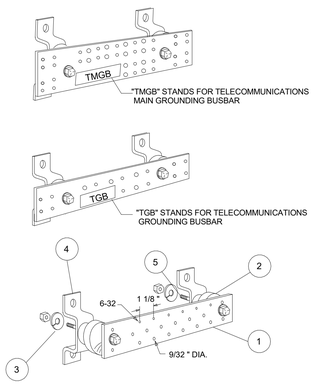
NO SCALE



DEMARCATION BACKBOARD

DEMARCATION BACKBOARD DETAIL

NO SCALE

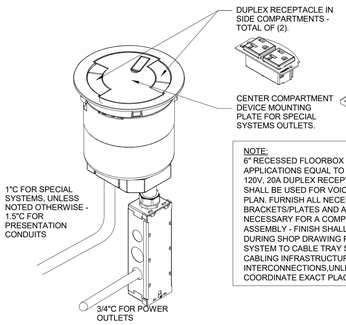


#	
1.	COPPER GROUND BAR, 1/4 "x4"x10" EQUAL TO HARGER TGBI SERIES.
2.	ISOLATED GROUNDING BUSBAR.
3.	5/8" LOCK WASHERS.
4.	WALL MOUNTING BRACKET.
5.	5/8-11 x 1" H.H.C.S. BOLTS.
6.	APPLY CONDUCTIVE ANTIOXIDANT (SODIUM PENTROX) TO CONNECTION SURFACES.

COMMUNICATIONS GROUND BAR DETAIL

NO SCALE

NOTE:
REFER TO ARCHITECTURAL FLOOR COVERING SPECIFICATION - APPLICATION OF ALL ASSOCIATED COMPONENTS SHALL BE COMPATIBLE WITH FLOOR SYSTEM - CONTRACTOR SHALL COORDINATE AS REQUIRED.



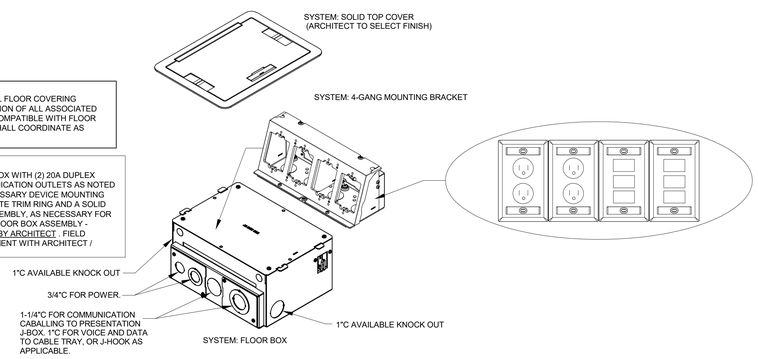
NOTE:
6" RECESSED FLOORBOX FOR ABOVE GRADE APPLICATIONS EQUAL TO WIREMOLD 6AT SERIES WITH (2) 120V, 20A DUPLEX RECEPTACLES AND THE REMAINDER SHALL BE USED FOR VOICE/DATA OUTLETS AS NOTED ON PLAN. FURNISH ALL NECESSARY DEVICE MOUNTING BRACKETS/PLATES AND A TOP COVER ASSEMBLY. AS NECESSARY FOR A COMPLETE FUNCTIONAL FLOOR BOX ASSEMBLY - FINISH SHALL BE SELECTED BY ARCHITECT DURING SHOP DRAWING PROCESS. EXTEND CONDUIT SYSTEM TO CABLE TRAY SYSTEM AS REQUIRED FOR CABLING INFRASTRUCTURE AND INTERCONNECTIONS,UNLESS OTHERWISE NOTED. FIELD COORDINATE EXACT PLACEMENT WITH ARCHITECT.

6" FLUSH FLOOR POKE-THRU BOX DETAIL

NO SCALE

NOTE:
REFER TO ARCHITECTURAL FLOOR COVERING SPECIFICATION - APPLICATION OF ALL ASSOCIATED COMPONENTS SHALL BE COMPATIBLE WITH FLOOR SYSTEM - CONTRACTOR SHALL COORDINATE AS REQUIRED.

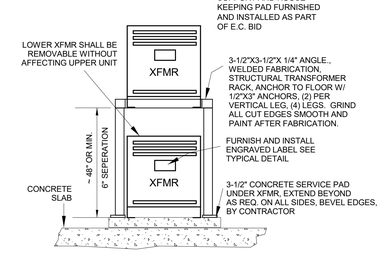
NOTE:
4-GANG, RECESSED FLOORBOX WITH (2) 20A DUPLEX RECEPTACLES AND COMMUNICATION OUTLETS AS NOTED ON PLAN. FURNISH ALL NECESSARY DEVICE MOUNTING BRACKETS/PLATES, CONCRETE TRIM RING AND A SOLID CAST ALUMINUM COVER ASSEMBLY, AS NECESSARY FOR A COMPLETE FUNCTIONAL FLOOR BOX ASSEMBLY - FINISH SHALL BE SELECTED BY ARCHITECT . FIELD COORDINATE EXACT PLACEMENT WITH ARCHITECT / OWNER.



4-GANG RECESSED FLOOR BOX DETAIL

NO SCALE

NOTE:
SUPPORT AND HOUSE KEEPING PAD FURNISHED AND INSTALLED AS PART OF E.C. BID



TRANSFORMER SUPPORT PAD AND LABELING (TYP)

NO SCALE

SHERMAN CARTER BARNHART ARCHITECTS

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ELECTRICAL DETAILS

JOB NO.	22630
DATE	MAY 20, 2024
DRAWN	DN
CHECKED	MM

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ARCHITECTS, PLLC

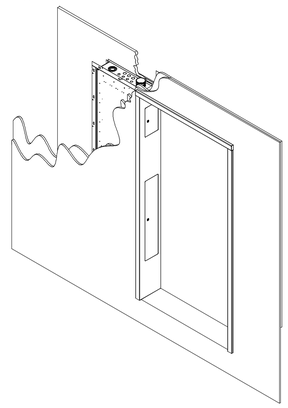
REVISIONS

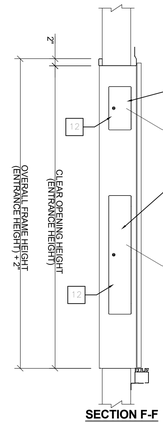
No.	Description	Date

SHEET

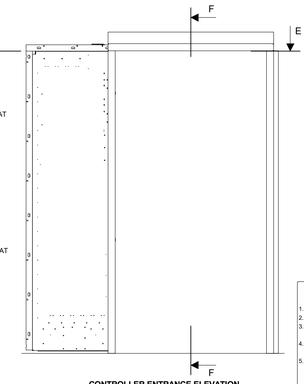
E4.2

ELECTRICAL CONTRACTOR NOTE:
3 PHASE POWER, 120V 15 AMP CIRCUIT, FIRE ALARM AND PHONE TO BE ROUTED TO THE TOP OF THE CONTROLLER AT THE CONTROLLER LANDING LEVEL.





SECTION F-F



CONTROLLER ENTRANCE ELEVATION
LEAVE OFF ENTIRE WALL AT FLOOR 2
FOR FRAME AND CONTROLLER INSTALLATION

THE FOLLOWING CONDITIONS MUST BE MET BEFORE INSTALLATION IS COMPLETED AND ARE NOT INCLUDED IN THE ELEVATOR CONTRACT

1. A PLUMB, PROPERLY VENTILATED HOISTWAY (ACCORDING TO CODE)
2. ADEQUATE SUPPORT FOR JACK, GUIDE RAIL BRACKETS, AND BUFFERS
3. HOISTWAY BARRICADES AND ALL CUTTING AND PATCHING TO INSTALL HOISTWAY ENTRANCES, SILLS, HALL FIXTURES, OIL, AND ELECTRIC LINES.
4. PIT LIGHTS (MINIMUM 200LUX/19FT. CANDLES) AND SWITCH, CONVENIENCE OUTLETS WITH GFCI PROTECTION PER NEC. PIT LADDER PER CAR (ACCORDING TO CODE) NOTE: MUST BE CLEAR OF ALL ELEVATOR EQUIPMENT
5. DEDICATED 120 VOLT, 15 AMP SERVICE, ALONG WITH TELEPHONE CIRCUIT WHEN REQUIRED TO TERMINALS OF EACH REQUIRED CONTROLLER FOR THE FOLLOWING:
   - CAR LIGHT AND ALARM CIRCUIT WITH GFCI PROTECTION PER NEC
   - GROUP CONTROL WHEN REQUIRED

   ACCESS TO THESE COMPONENTS WILL BE FROM INSIDE THE HOISTWAY.
   THIS WILL REQUIRE ELEVATOR REPRESENTATIVE TO BE ON SITE.
   NOTE: IF STANDBY POWER IS SUPPLIED TO ELEVATOR, CAR LIGHT AND ALARM CIRCUIT AND GROUP CONTROL SERVICE MUST BE STANDBY POWER BACKED
6. BRANCH CIRCUIT CONDUCTOR SIZING, MATERIALS, AND INSULATION (INCLUDING BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE) TO COMPLY WITH ALL LOCAL ELECTRICAL CODES.

SHORT CIRCUIT CURRENT RATING	
10,000	AMPS AT 600 VOLTS OR LESS

BREAKERS AND DISCONNECT PROVIDED BY ELEVATOR CIRCUIT BREAKER WITH SHUNT TRIP COIL PROVIDED IN CONTROLLER BY ELEVATOR.

NOTE: A FOURTH WIRE OF SAME SIZE AS THREE PHASE WIRES IS REQUIRED FOR GROUNDING PURPOSES TO MINIMIZE ELECTRICAL NOISE INTERFERENCE. THE GROUNDING WIRE MUST BE CONNECTED TO THE BUILDING ELECTRICAL SYSTEM GROUND. GENERAL CONTRACTOR MUST FORWARD POWER REQUIREMENTS TO ELECTRICAL CONTRACTOR

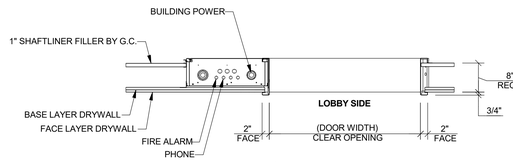
7. LEAVE OFF ENTIRE FRONT WALL AT ALL FLOORS WHERE ENTRANCE IS INCLUDED. SEE INSTALLATION PROCEDURES FOR FRAME-TO-WALL INTERFACE DETAILS TO ENSURE CONFORMANCE WITH LABELED ENTRANCE INTERFACE CONSTRUCTION. AT CONTROLLER FLOOR, LEAVE OUT ENTIRE WALL.
8. POCKETS IN CORRIDOR WALL FOR HALL FIXTURES.
   NOTE: MUST BE LOCATED AS DIRECTED BY ELEVATOR CONTRACTOR
9. SMOKE SENSORS (AS REQUIRED)
10. CONDUIT AND WIRING FROM HOISTWAY TO ELEVATOR MONITORING PANELS (FOR SECURITY, LIFE SAFETY, OR FIRE REQUIREMENTS)
11. ELEVATOR MEETS ASME A17.1 2010 CODE.
12. A PROPERLY VENTED HOISTWAY AND MAINTAINED BETWEEN 32°F (0°C) AND 104°F (40°C) WITH NON-CONDENSING HUMIDITY OF 10-95%

IF BATTERY OPERATION LOWERING IS PROVIDED, A MECHANICAL AUXILIARY CONTACT SHALL BE INSTALLED ON THE DISCONNECT SWITCH FOR EACH CAR THE AUXILIARY SHALL BE CONFIGURED AS SPST AT 1A 110VC (MIN). THE AUXILIARY CONTACT SHALL BE OPEN WHEN THE DISCONNECT SWITCH IS IN THE OPEN POSITION. IF A SHUNT TRIP CIRCUIT BREAKER IS PROVIDED, AN AUXILIARY CONTACT SHALL BE INSTALLED ON THE CIRCUIT BREAKER.

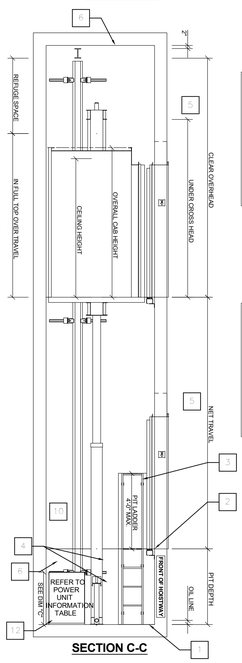
PRIMARY FIRE SERVICE LOCATED AT FLOOR: 1
ALTERNATE FIRE SERVICE LOCATION AT FLOOR: ;

A MEANS TO AUTOMATICALLY DISCONNECT THE MAIN LINE POWER SUPPLY TO THE ELEVATOR PRIOR TO THE APPLICATION OF WATER IN THE ELEVATOR HOISTWAY WILL BE FURNISHED BY THE ELECTRICAL CONTRACTOR THIS MEANS SHALL NOT BE SELF RESETTING.

TELEPHONE JUNCTION, FIRE ALARM SYSTEM CONDUIT AND WIRING TO CONTROLLER BY OTHERS, ACCESS TO THESE COMPONENTS WILL BE FROM INSIDE THE HOISTWAY. THIS WILL REQUIRE ELEVATOR MANUFACTURER REPRESENTATIVE TO BE ON SITE.



ENTRANCE PLAN VIEW E-E



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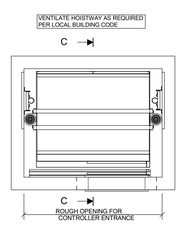
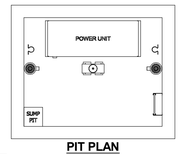
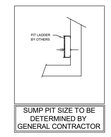


HOISTWAY PLAN



PIT PLAN



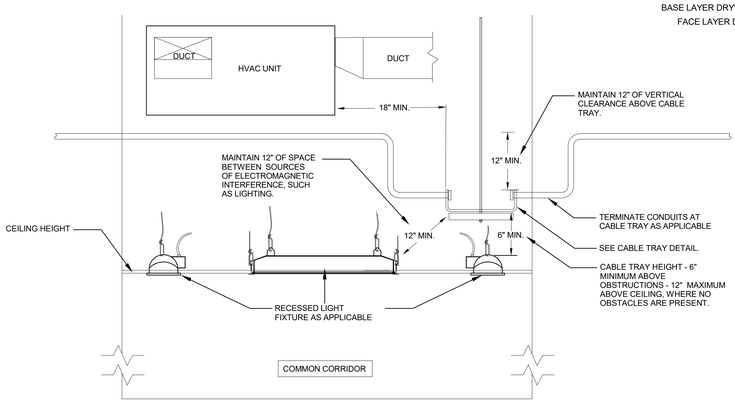
NOTE:
ITEMS ASSOCIATED WITH THE ELEVATOR SYSTEM ARE REPRESENTED SCHEMATICALLY IN REFERENCE TO PLAN VIEW DRAWINGS AND THE BELOW DETAIL. CONTRACTOR SHALL COORDINATE ALL ROUGH-INS AND CONNECTIONS WITH ELEVATOR SHOP DRAWINGS AND VENDOR FURNISHED EQUIPMENT. FIELD ADJUST PLACEMENT AS REQUIRED FOR COMPLIANCE WITH ELEVATOR, NEC AND LOCAL CODES.

ELEVATOR DETAIL TAGGED NOTES:

1. SINGLE RECEPTACLE IN NEMA 4 ENCLOSURE, TO SERVE SUMP PUMP. COORDINATE LOCATION WITH SUMP PIT, M.C. AND ELEVATOR INSTALLER. CONNECT TO ELEVATOR PANEL "60MLO" - 3#12 AWG IN CONDUIT.
2. GFI DUPLEX RECEPTACLE IN NEMA 4 ENCLOSURE. COORDINATE LOCATION WITH PIT LADDER AND ELEVATOR INSTALLER. CONNECT TO PANEL "60MLO" - 3#12 AWG IN CONDUIT.
3. PIT LIGHT SWITCH IN NEMA 4 ENCLOSURE - MOUNT @42" ABOVE SEAL PLATE. COORDINATE LOCATION WITH PIT LADDER AND ELEVATOR INSTALLER. CONNECT TO PANEL "60MLO" - 3#12 AWG IN CONDUIT.
4. TWO (2) WALL MOUNT PIT LIGHTS - PHOENIX LIGHTING OR EQUAL CAT. #VA W CW PPC. FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. COORDINATE LOCATIONS WITH ELEVATOR INSTALLER. CONNECT TO PANEL "EE" - 3#12 AWG IN CONDUIT.
5. SMOKE DETECTORS TO SUPPORT ELEVATOR RECALL. LOCATE IN EACH LOBBY A MAXIMUM OF 15' FROM DOOR(S). INTERLOCK THROUGH THE FIRE ALARM SYSTEM, WHEN AVAILABLE, OTHERWISE USING DRY CONTACTS.
6. SMOKE AND HEAT DETECTOR TO SUPPORT ELEVATOR RECALL SHALL BE INSTALLED AT TOP OF SHAFT AND IN PIT, INTERLOCK WITH ELEVATOR CONTROLS THROUGH FIRE ALARM SYSTEM.
7. DEDICATED ELEVATOR SERVICE PANEL (60MLO) WITH LOCKABLE COVER, TO SERVE ASSOCIATED AND AUXILIARY CIRCUITS FOR ELEVATOR SHAFT. INCLUDE THE FOLLOWING BRANCH CIRCUITS:

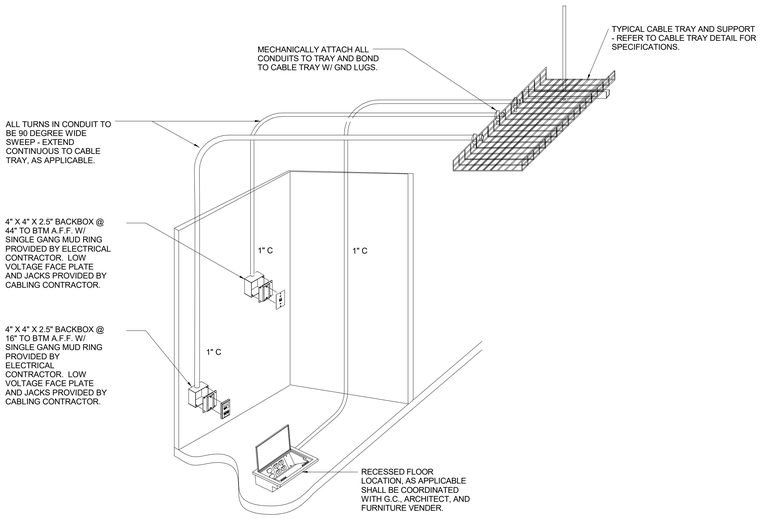
1P20A - ELEVATOR CAB LIGHTS, CONTROL POWER AND OR VENTILATION (LOCK OUT CLIP ON BREAKER)
1P20A - SHAFT PIT GFI RECEPTACLE
1P20A - SHAFT PIT LIGHTING
1P20A - PIT SUMP PUMP

8. NOT-USED
9. TELEPHONE CONNECTION LOCATED AS REQUIRED AND COORDINATED WITH ELEVATOR INSTALLER. EXTEND REQUIRED PHONE CABLING AND CONDUIT TO TELEPHONE EQUIPMENT OF BUILDING AND TERMINATE.
10. LIGHTING FIXTURE WITH WIREGUARD OR LENS - OPEN UNPROTECTED LAMPS SHALL NOT BE PERMITTED.
11. FIRE ALARM SYSTEM RECALL INTERFACE AND SHUNT TRIP POWER SOURCE SUPERVISION. FURNISH AND INSTALL ALL FIELD INTERLOCK WIRING BETWEEN SHUNT TRIP AND INITIATION DEVICES WITHIN SHAFT.
12. CONTRACTOR SHALL FURNISH AND INSTALL ALL FIELD WIRING CONNECTIONS TO THE ELEVATOR CONTROLLER AS REQUIRED FOR A COMPLETE OPERATIONAL SYSTEM. ALL CONNECTIONS SHALL COMPLY WITH CODE AND REQUIREMENTS OF THE ELEVATOR INSTALLER. COORDINATE ALL CONNECTIONS WITH ELEVATOR EQUIPMENT SUPPLIED BY VENDOR.



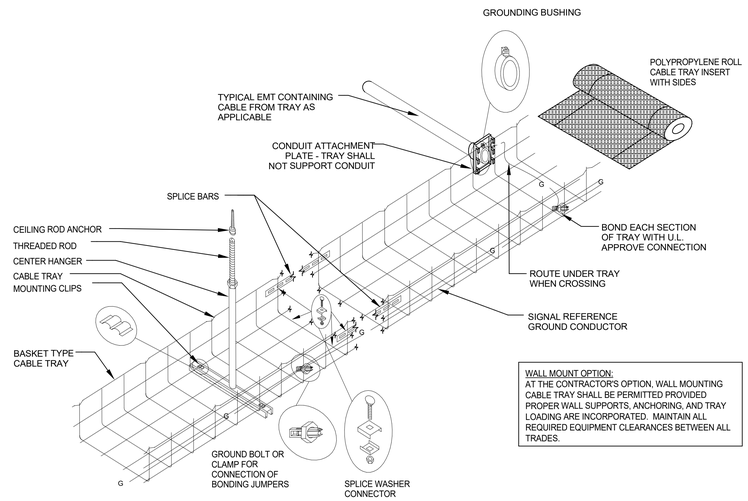
MINIMUM CABLE TRAY CLEARANCES

NO SCALE



STANDARD COMMUNICATIONS - RACEWAYS TERMINATED AT CABLE TRAY

NO SCALE



WALL MOUNT OPTION:
AT THE CONTRACTOR'S OPTION, WALL MOUNTING CABLE TRAY SHALL BE PERMITTED PROVIDED PROPER WALL SUPPORTS, ANCHORING, AND TRAY LOADING ARE INCORPORATED. MAINTAIN ALL REQUIRED EQUIPMENT CLEARANCES BETWEEN ALL TRADES.

CABLE TRAY SYSTEM/SUPPORT/BONDING DETAIL

NO SCALE

CABLE TRAY SYSTEM SPECIFICATIONS

1. CABLE TRAY SHALL BE U.L. LABELED & SHALL BE EQUAL TO CABLOFIL, FLEX-TRAY, EZ-TRAY, B-LINE OR APPROVED EQUAL .
2. CABLE TRAY SHALL BE 2" X 4" MESH CONFIGURATION STEEL CONSTRUCTION IN STANDARD 10FT LENGTHS. F URNISH & INSTALL CENTER HANGERS, DIVIDERS IN TRAY FOR DIFFERENT SYSTEMS, SPLICE BARS/HARDWARE KITS, AND DROP OUT ACCESSORIES WITH WIDE RADIUS BENDS AS APPLICABLE FOR CONNECTION TO NETWORK EQUIPMENT. FIELD COORDINATE LENGTH AND EXACT PLACEMENT OF HANGERS.
3. CABLE TRAY SHALL BE SIZED BASED ON 4" SIDEWALL HEIGHT - WIDTH SHALL BE AS REQUIRED TO ACCOMMODATE THE CURRENT DESIGN CABLE QUANTITIES PLUS 50% ADDITIONAL FUTURE LOADING. FILL RATIO SHALL BE TAKEN AT 50% PER NEC 392.22. WEIGHT OF SPAN (LOAD/FOOT) OF CABLE TRAY AND SUPPORT INTERVALS SHALL BE PER MANUFACTURER RECOMMENDATIONS AND NEMA STANDARDS.
4. ALL TRAY FITTINGS SHALL BE CONSTRUCTED ON-SITE USING A SIDE ACTION BOLT CUTTER & FASTENED USING SPLICE WASHERS WITH 1/4" BOLTS & NUTS - USE SPLICE BARS WITH SLICE WASHERS TO JOIN SECTIONS OF TRAY.
5. CABLE TRAY SHALL BE ELECTROPLATED ZINC GALVANIZED FINISH APPLIED AFTER FABRICATION.
6. CONDUITS FOR COMMUNICATIONS (DATA/PHONE/ & TV CABLING, ETC) SHALL BE MECHANICALLY ATTACHED TO CABLE TRAY & HAVE A GROUND BUSHING WITH BONDING JUMPER TO GROUNDING BOLTS ATTACHED TO TRAY.
7. #6 SIGNAL REFERENCE GROUND CONDUCTOR SHALL EXTEND THE FILL LENGTH OF THE TRAY AND BOND ALL TRAY SECTIONS, JOINTS, CONDUITS, DATA RACKS AND TELEPHONE BOARDS.
8. MAINTAIN ELECTRICAL CONTINUITY TO GROUND OF ALL CABLE TRAY - WHERE TRAY RUNS ARE NOT CONTINUOUS, BONDING JUMPERS SHALL BE EMPLOYED IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS.
9. CABLE TRAY SHALL BE ROUTED ALONG CORRIDOR CEILING SPACE, AT APPROX. 1 FT MINIMUM TO BTM ABOVE THE CEILING - TRANSITION AS NECESSARY TO AVOID CONFLICTS WITH DUCTWORK, PIPING, ETC. FIELD COORDINATE LOCATIONS OF HANGERS TO AVOID CONFLICTS. INSTALLATION SHALL COMPLY WITH NEC ARTICLE 392.
10. FURNISH AND INSTALL FIRESTOP TRIPLE PATHWAY DEVICE EQUAL TO SPECIFIED TECHNOLOGIES INC. #EZD333FW AT ALL FIRE WALL PENETRATIONS FOR CABLE ROUTING - REFER TO ARCHITECTURAL DRAWINGS FOR ALL FIRE WALL LOCATIONS.
11. WHERE CABLE TRAY SYSTEM PASSES THROUGH AN AREA OF EXPOSED CEILING SPACE, FURNISH AND INSTALL A POLYPROPYLENE CABLE TRAY INSERT - COORDINATE WIDTH AND DEPTH WITH CABLE TRAY DIMENSIONS. COORDINATE COLOR WITH CEILING FINISH IN THE EXPOSED AREA (BLACK OR WHITE).

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
MATTHEW MORGAN
No. 37688
LICENSED PROFESSIONAL ENGINEER
2024-05-17

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OWENSBORO INDOOR SPORTS FACILITY
500 WEST THIRD STREET
OWENSBORO, KY 42301

ELECTRICAL DETAILS

JOB NO.	22630
DATE	MAY 20, 2024
DRAWN	DN
CHECKED	MM

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REVISIONS

No.	Description	Date

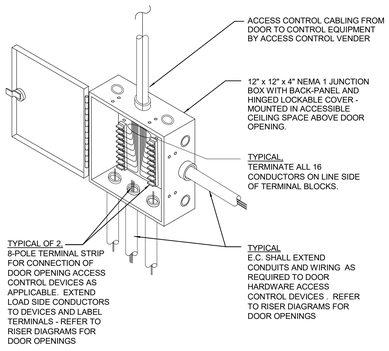
SHEET
E4.3

DOOR DETAIL

LEGEND	
DETAIL SYMBOL	(APPLIES TO THIS DRAWING ONLY)
PS	LOCK POWER SUPPLY (BY DOOR HARDWARE VENDER)
EPT	EPT - ELECTRIC POWER TRANSFER (FRAME TO DOOR) (BY DOOR HARDWARE VENDER)
ACP	ACCESS CONTROL PANEL BY ELECTRICAL CONTRACTOR.
ES	ELECTRIC STRIKE (BY DOOR HARDWARE VENDER)
DPS	DOOR POSITION SWITCH FURNISHED WITH ACCESS CONTROL SYSTEM.
CR	CARD READER
ADO	AUTO-DOOR OPENER (BY DOOR HARDWARE VENDER)
ADP	AUTO-DOOR OPENER PUSH BUTTON (BY DOOR HARDWARE VENDER)

ELECTRICAL SERVICE NOTES

#	(APPLIES TO THIS DRAWING ONLY)
1	115VAC, 60HZ, 5A SERVICE REQUIRED.
2	RACEWAY STUB-UP TO CLEAR ACCESSIBLE SPACE WITH L.V. CONTROL WIRING.
3	TO ACCESS CONTROL SYSTEM HEAD-END WITH LOW VOLTAGE POWER AND CONTROL WIRING AS REQUIRED BY SYSTEM.



ACCESS CONTROL DOOR JUNCTION BOX (JB12) DETAIL

NO SCALE

DOOR OPENING ELECTRIFIED HARDWARE SCHEDULE

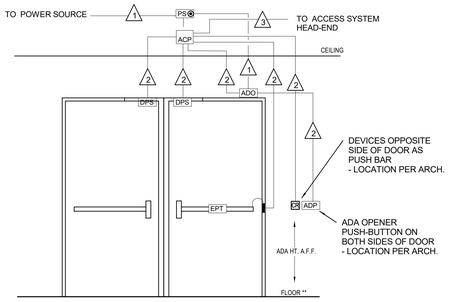
DOOR OPENING (REFER TO ARCH. DRAWINGS AND SPECIFICATIONS)	DOOR SYSTEM DEVICE: 12X12X6 JUNCTION BOX	CREDENTIAL READER	ELECTRIC STRIKE	DOOR HARDWARE POWER SUPPLY	ELECTRIC PANIC/EXIT DEVICE	FRAME TO DOOR POWER TRANSFER	DOOR POSITION SWITCH(ES)	AUTOMATIC DOOR OPERATOR	AUTOMATIC DOOR ACTUATOR	KEYED SWITCH	RISER DIAGRAM	DOOR SYSTEM SEQUENCE OF OPERATION
E100A	X (A)	X (C)		X	X	X (D)	X (B,D)	X (E)	X (E)	X	R1	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087000
E100B							X (B,D)				R6	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087000
E100C							X (B,D)				R6	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087001
E100D							X (B,D)				R6	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087002
E105B	X	X (C)		X	X	X (D)	X (D)			X	R5	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087004
E113A							X (B,D)				R6	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087004
E113B							X (B,D)				R6	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087004
E113C							X (B,D)				R6	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087004
E113D							X (B,D)				R6	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087004
E113E							X (B,D)				R6	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087004
100A	X (A)	X (C)		X	X	X (D)	X (B,D)	X (E)	X (E)	X	R2	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087005
102A	X	X (C)	X	X			X (D)				R4	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087006
105C	X	X (C)	X	X			X (D)				R4	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087009
201	X (A)	X (C)	X	X			X (D)				R3	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087004
211A	X	X (C)	X	X			X (D)				R4	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087010
211B	X	X (C)	X	X			X (D)				R4	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087011
212	X	X (C)	X	X			X (D)				R4	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087012
106 (ALT.)	X	X (C)	X	X			X (D)				R4	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087013
E106 (ALT.)	X	X (C)	X	X			X (D)				R4	REFER TO DOOR HARDWARE SPECIFICATION SECTION 087015

GENERAL NOTES:

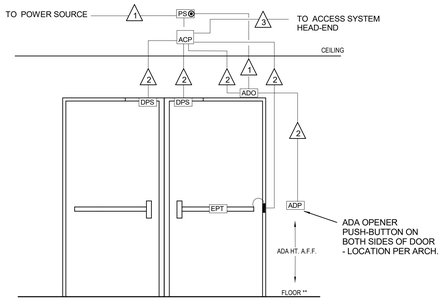
1. REFER TO ARCHITECTURAL DRAWINGS FOR DOOR SCHEDULE, DOOR NUMBERS AND ADDITIONAL INFORMATION.
2. REFER TO SPECIFICATION SECTION 087100 FOR ADDITIONAL SYSTEM REQUIREMENTS.
3. DETAILS AND RISER DIAGRAMS ARE SCHEMATIC IN NATURE - THE FINAL DESIGN AND APROVAL OF THIS SYSTEM SHALL BE THE ACCESS CONTROL CONTRACTOR'S RESPONSIBILITY AND SHALL INCLUDE THE EQUIPMENT SHOWN ON THE DRAWINGS, SPECIFICATIONS, AS WELL AS ANY ADDITIONAL EQUIPMENT REQUIRED TO MEET CODE AND COMPLETE THE SYSTEM. FIELD COORDINATE ALL DIMENSIONS, EXACT PLACEMENT, AND MOUNTING HEIGHTS WITH ARCHITECTURAL ELEVATIONS. COORDINATE ALL WORK WITH DOOR HARDWARE, DOOR FRAME AND THE FACILITY STRUCTURAL CONFIGURATION.
4. ALL RACEWAYS FOR SECURITY/ACCESS CONTROLS SHALL BE GROUNDED .
5. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL ROUGH-INS, RACEWAYS AND POWER REQUIREMENTS AT THE DOOR.
6. DOOR J-BOXES SHALL BE INSTALLED ABOVE ACCESSIBLE CEILING SYSTEM. EXTEND CONDUITS INTO DOOR FRAME AS INDICATED ON RISER DIAGRAMS - SEAL RACEWAY PENETRATIONS , AS APPLICABLE.
7. IT IS INTENDED THAT RACEWAY/WIRING BE CONCEALED WHEN POSSIBLE. DOOR FRAMES SHALL BE UTILIZED WHEN POSSIBLE TO CONCEAL WIRING. WHEN SURFACE RACEWAY CAN NOT BE AVOIDED IT SHALL BE MINIMIZED, BE 2-PIECE METAL AND BE PAINT TO MATCH ADJACENT SURFACES. NO SURFACE/EXPOSED RACEWAY SHALL BE INSTALLED OUTDOORS. REFER TO RISER DIAGRAMS.
8. FURNISH AND INSTALL GROMMETS FOR OPEN WIRE PULLING FOR ELECTRIFIED HARDWARE ITEMS MOUNTED TO HOLLOW METAL FRAMES.
9. ALL COMPONENTS, WIRING AND TERMINATIONS SHALL COMPLY WITH MANUFACTURER'S RECOMMENDATIONS. CABLE LENGTHS SHALL NOT EXCEED 400FT FROM SSDP TO DOOR OPENING. FIELD VERIFY CABLE RUN LENGTHS AND COORDINATE ACTUAL WIRE SIZES TO ENSURE VOLTAGE DROP IS IN COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS.
10. PRIOR TO THE INSTALLATION OF THE DOOR FRAMES; THE ELECTRICAL CONTRACTOR, ACCESS CONTROL INSTALLER, AND HARDWARE INSTALLER SHALL HAVE A PRE-INSTALLATION MEETING ON SITE AND MOCK-UP THE REQUIREMENTS FOR EACH OPENING, TO ENSURE A COORDINATE INSTALLATION.
11. DETAILS AND DOOR RISERS ARE DIAGRAMMATIC - ACTUAL INSTALLATION REQUIREMENTS WILL DIFFER. E.C. SHALL REVIEW ALL CONTRACT DOCUMENTS PRIOR TO BIDDING AND INCLUDE IN THE BID ALL LABOR AND MATERIAL AS REQUIRED TO INSTALL AND INTER-CONNECT DEVICES FURNISHED BY THE HARDWARE VENDER AS IT RELATES TO ELECTRICAL POWER AND CONTROLS OF INDICATED DOORS.

NOTES:

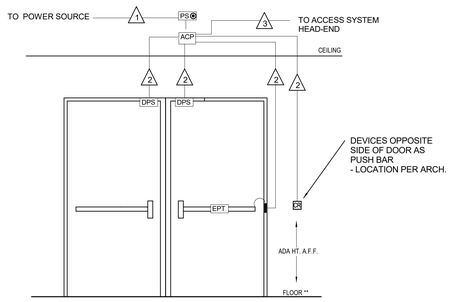
A. DOUBLE DOOR OPENING, REQUIRES A SINGLE ACCESS CONTROL JUNCTION BOX
B. DOUBLE DOOR OPENING, BOTH LEAFS ARE TO INCLUDE DOOR POSITION SWITCH
C. COORDINATE WITH OWNER'S ACCESS CONTROL VENDOR FOR LOCATION AND ROUGH-IN REQUIREMENTS FOR CARD READER. RACEWAY ROUGH-IN AT DOOR BY E.C.
D. COORDINATE WITH HARDWARE SHOP DRAWINGS, HARDWARE COMPONENTS INCLUDE WIRING HARNESSES
E. COORDINATE WITH HARDWARE SHOP DRAWINGS AND ELECTRICAL CONTRACTOR FOR POWER REQUIREMENTS



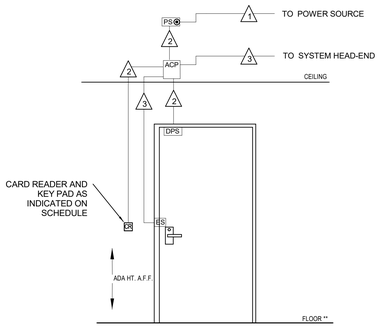
1 DOOR CONTROL DIAGRAM (R1)



2 DOOR CONTROL DIAGRAM (R2)



3 DOOR CONTROL DIAGRAM (R3)



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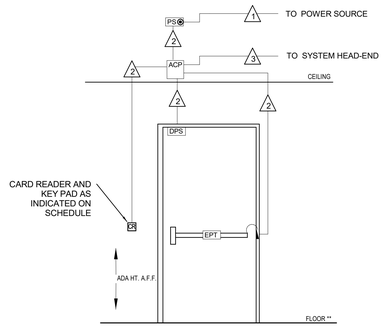
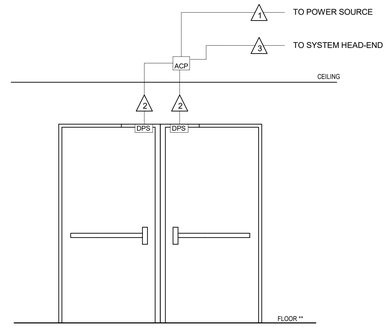


5 DOOR CONTROL DIAGRAM (R5)



6 DOOR CONTROL DIAGRAM (R6)

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY MATTHEW MORGAN No. 37688 LICENSED PROFESSIONAL ENGINEER 2024-05-17

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500 WEST THIRD STREET
OWENSBORO, KY 42301

ELECTRICAL DETAILS

JOB NO.	22630
DATE	MAY 20, 2024
DRAWN	Author
CHECKED	Checker

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REVISIONS

No.	Description	Date

SHEET

E4.4

AMP-1 COURT 113A PA SYSTEM			
QTY	MANUFACTURER	EQUIPMENT NUMBER	DESCRIPTION
MAIN EQUIPMENT			
1	LOWELL	D8P-ID-3	DEVICE PANEL FOR UPPER/FIXED POSITION
2	LOWELL	10KLVC-DB	ZONED VOLUME CONTROL (LOADED IN DEVICE PANEL)
1	LOWELL	DBB-4	BLANK DECORA FILLER PANEL
1	RADIO DESIGN LABS	DB-BT1A	BLUE TOOTH RECEIVER, FORMAT A (LOADED IN DEVICE PANEL)
1	RADIO DESIGN LABS	DB-XLR3F	XLR WALL PLATE (LOADED IN DEVICE PANEL)
1	RADIO DESIGN LABS	DB-CIJ3	CONSUMER INPUT JACKS
1	TOA CORPORATION	A-848D	480W MIXER /DIGITAL AMP - RACK MOUNTED
1	TOA CORPORATION	WTU-M9800-AM-WM1	WIRELESS TUNER MODULE
1	RADIO DESIGN LABS	TX-TPR2A	FORMAT A RECEIVER
1	RADIO DESIGN LABS	PS-24AS	POWER SUPPLY
2	TOA CORPORATION	YW-4500 Q	M-BAND REMOTE ANTENNA
1	TOA CORPORATION	T-01S	BALANCED OUTPUT MODULE
SPEAKERS			
8	SOUNDTUBE ENTERTAINMENT	HP890i	8" PENDANT SPEAKER
LOOSE EQUIPMENT			
1	TOA CORPORATION	WM-5265-AM-M1	HAND HELD WIRELESS MIC
1	TOA CORPORATION	WM-D5300	BODY PACK TRANSMITTER
1	TOA CORPORATION	YP-M5000H	HEAD WORN MICROPHONE

AMP-2 COURTS 113B PA SYSTEM			
QTY	MANUFACTURER	EQUIPMENT NUMBER	DESCRIPTION
MAIN EQUIPMENT			
1	LOWELL	D8P-ID-3	DEVICE PANEL FOR UPPER/FIXED POSITION
2	LOWELL	10KLVC-DB	ZONED VOLUME CONTROL (LOADED IN DEVICE PANEL)
1	LOWELL	DBB-4	BLANK DECORA FILLER PANEL
1	RADIO DESIGN LABS	DB-BT1A	BLUE TOOTH RECEIVER, FORMAT A (LOADED IN DEVICE PANEL)
1	RADIO DESIGN LABS	DB-XLR3F	XLR WALL PLATE (LOADED IN DEVICE PANEL)
1	RADIO DESIGN LABS	DB-CIJ3	CONSUMER INPUT JACKS
1	TOA CORPORATION	A-848D	480W MIXER /DIGITAL AMP - RACK MOUNTED
1	TOA CORPORATION	WTU-M9800-AM-WM1	WIRELESS TUNER MODULE
1	RADIO DESIGN LABS	TX-TPR2A	FORMAT A RECEIVER
1	RADIO DESIGN LABS	PS-24AS	POWER SUPPLY
2	TOA CORPORATION	YW-4500 Q	M-BAND REMOTE ANTENNA
1	TOA CORPORATION	T-01S	BALANCED OUTPUT MODULE
SPEAKERS			
12	SOUNDTUBE ENTERTAINMENT	HP890i	8" PENDANT SPEAKER
LOOSE EQUIPMENT			
1	TOA CORPORATION	WM-5265-AM-M1	HAND HELD WIRELESS MIC
1	TOA CORPORATION	WM-D5300	BODY PACK TRANSMITTER
1	TOA CORPORATION	YP-M5000H	HEAD WORN MICROPHONE

COURTS 113A - ASSISTED LISTENING SYSTEM COMPONENTS

MANUFACTURER	CATALOG NO.	QUANTITY	DESCRIPTION	NOTES
LISTEN TECHNOLOGIES	LT-800-072-01	1	STATIONARY RF TRANSMITTER	A
LISTEN TECHNOLOGIES	LA-326	1	UNIVERSAL RACK MOUNTING KIT	
LISTEN TECHNOLOGIES	LA-122	1	UNIVERSAL ANTENNA KIT	
LISTEN TECHNOLOGIES	LR-4200-072	12	INTELLIGENT DSP RF RECEIVER	A
LISTEN TECHNOLOGIES	LA-401	12	UNIVERSAL EAR SPEAKER	B
LISTEN TECHNOLOGIES	LA-430	3	INTELLIGENT EARPHONE/NECK LOOP LANYARD	B
LISTEN TECHNOLOGIES	LA-380-01	1	INTELLIGENT 12-UNIT CHARGING/CARRYING CASE	B
LISTEN TECHNOLOGIES	LA-304	1	ASSISTIVE LISTENING NOTIFICATION SIGNAGE KIT	
LISTEN TECHNOLOGIES	LA-901	1	LISTEN DISINFECTING WIPES	B

SPECIAL NOTES:

A ITEM SHALL BE INSTALLED IN RACK AS INDICATED ON DRAWINGS.

B ITEM SHALL BE STORED ON EQUIPIMENT SHELF LOCATED INSIDE RACK DURING NON-USE.

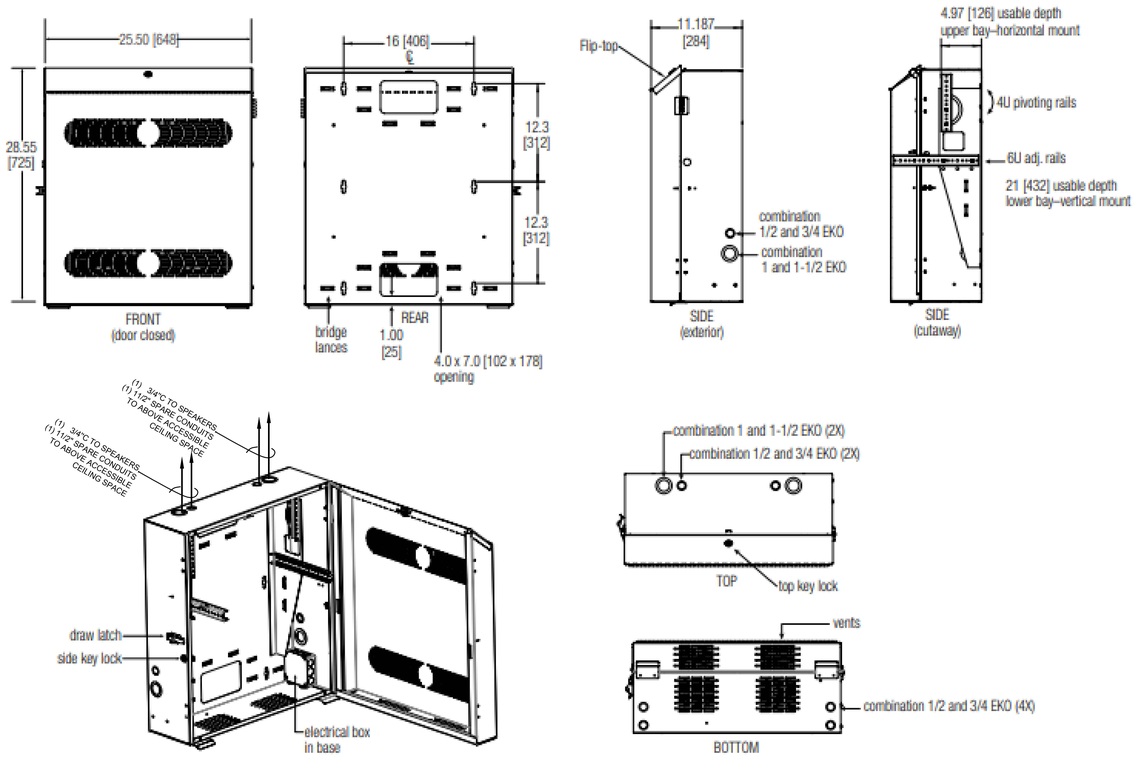
COURTS 113B - ASSISTED LISTENING SYSTEM COMPONENTS

MANUFACTURER	CATALOG NO.	QUANTITY	DESCRIPTION	NOTES
LISTEN TECHNOLOGIES	LT-800-072-01	1	STATIONARY RF TRANSMITTER	A
LISTEN TECHNOLOGIES	LA-326	1	UNIVERSAL RACK MOUNTING KIT	
LISTEN TECHNOLOGIES	LA-122	1	UNIVERSAL ANTENNA KIT	
LISTEN TECHNOLOGIES	LR-4200-072	16	INTELLIGENT DSP RF RECEIVER	A
LISTEN TECHNOLOGIES	LA-401	16	UNIVERSAL EAR SPEAKER	B
LISTEN TECHNOLOGIES	LA-430	4	INTELLIGENT EARPHONE/NECK LOOP LANYARD	B
LISTEN TECHNOLOGIES	LA-380-01	1	INTELLIGENT 12-UNIT CHARGING/CARRYING CASE	B
LISTEN TECHNOLOGIES	LA-304	2	ASSISTIVE LISTENING NOTIFICATION SIGNAGE KIT	
LISTEN TECHNOLOGIES	LA-901	1	LISTEN DISINFECTING WIPES	B

SPECIAL NOTES:

A ITEM SHALL BE INSTALLED IN RACK AS INDICATED ON DRAWINGS.

B ITEM SHALL BE STORED ON EQUIPIMENT SHELF LOCATED INSIDE RACK DURING NON-USE.



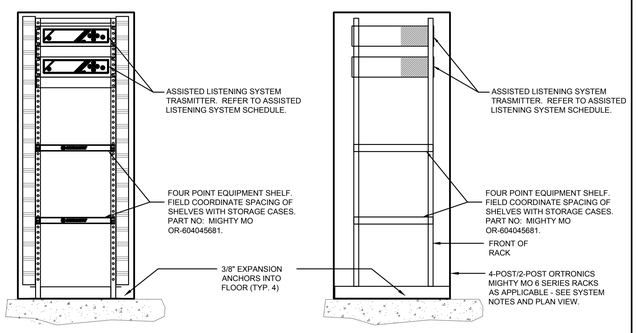
LOWELL RCCD-4636

NO SCALE

CABLING/WIRE LEGEND

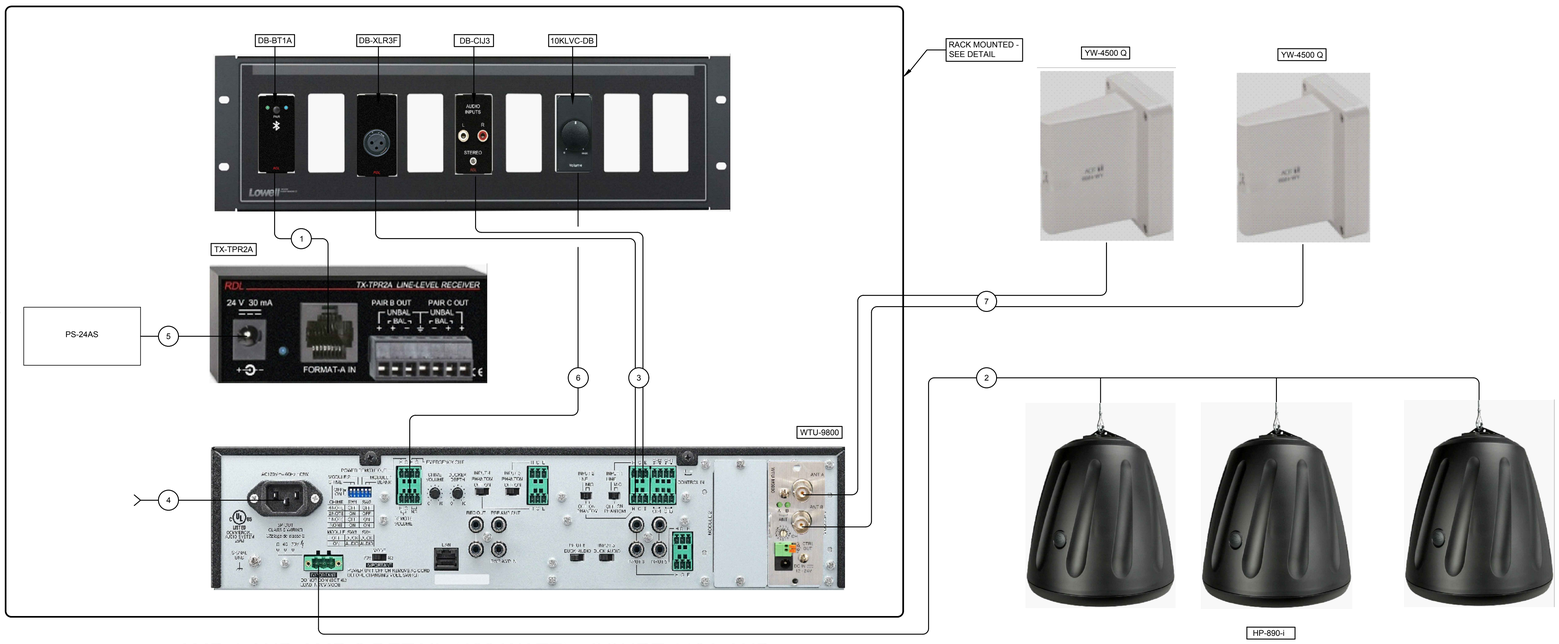
(APPLIES TO THIS DRAWING ONLY)

#	
1	CAT 5 CABLE.
2	12/2 (ADL 122) SPEAKER WIRE.
3	22/2 SHIELDED WIRE (AMERICAN DATA LINK 222S) MIC/LINE WIRE.
4	120VAC, 20AMP DEDICATED CIRCUIT.
5	24VDC WIRE.
6	18/2 SHIELDED WIRE (AMERICAN DATA LINK 182S) MIC/LINE WIRE.
7	RG-6U CATV ANTENNA CABLING



TYPICAL 2-POST RACK CONFIGURATION DETAIL

NO SCALE



AMP-1 AND AMP-2 DETAIL (480 WATT) - COURT 113A AND COUT 113B PA SYSTEMS

NO SCALE

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY MATTHEW MORGAN No. 37688 LICENSED PROFESSIONAL ENGINEER 2024-05-17

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OWENSBORO INDOOR SPORTS FACILITY

500 WEST THIRD STREET
OWENSBORO, KY 42301

ELECTRICAL DETAILS

JOB NO.	22630
DATE	May 17, 2024
DRAWN	MSE
CHECKED	TG / MRM

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REVISIONS

No.	Description	Date

SHEET

E4.5

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NO.	LAMP	VOLTAGE	INPUT WATTS	MOUNTING	FINSIH	REMARKS	NOTES
A1	LITHONIA OR EQUAL	IBE L48 2200LM SDG80 MD MVOLT GZ10 40K 80CRI	LED 22000LM	120/277	166	AIR CRAFT CABLE AS NOTED	STANDARD	HIGH BAY LIGHT FIXTURE	
B1	LITHONIA OR EQUAL	CPANL 2X4 4000LM	LED 4000LM	120/277	37	RECESSED	STANDARD	2X4 LAY-IN TROFFER	
C1	LITHONIA OR EQUAL	CLX	LED 4000LM	120/277	26	AIR CRAFT CABLE 9'-0" AFF U.O.N	STANDARD	4' LINEAR SUSPENDED	
D1	MARK ARCHITECHTURAL OR EQUAL	SL4L 4 FLP 80CRI 40K 400LMF	LED 1600LM	120/277	14	RECESSED	STANDARD	4' LINEAR RECESSED	
EX1	LITHONIA OR EQUAL	HPC3 22-S 6D 96L			4	MULTI MOUNT		WALL MOUNTED EXIT SIGN	B
EX2	LITHONIA OR EQUAL				4	STEM MOUNT		STEM MOUNTED EXIT SIGN	B
F1	BARBICAN OR EQUAL	HPC3 22-S 6D 48L ACM SCDL UNV 1200LM 4000K 90CRI S010V10	LED 4800LM	120/277	48	AIR CRAFT CABLE 9'-0" AFF U.O.N	ARCHITECT TO SELECT	4' STRIGHT PENDANT	
F2	BARBICAN OR EQUAL	HPC3 22-X 6D 48L ACM SCDL UNV 1200LM 4000K 90CRI S010V11	LED 4800LM	120/277	64	AIR CRAFT CABLE 9'-0" AFF U.O.N	ARCHITECT TO SELECT	X WELD PENDANT	
F3	BARBICAN OR EQUAL	HPC3 22-C 6D 48L ACM SCDL UNV 1200LM 4000K 90CRI S010V12	LED 4800LM	120/277	48	AIR CRAFT CABLE 9'-0" AFF U.O.N	ARCHITECT TO SELECT	90 DEGREE CURVE PENDANT	
G1	CORONET OR EQUAL	LS1 STFU 4 40 CUST 1100LM/FT UNV DB FELT AC FL NA NA CAN-X SJ-BLK	LED 4400LM	120/277	44	AIR CRAFT CABLE AS NOTED	ARCHITECT TO SELECT	UP/DOWN PENDANT WITH SOUND DAMPANING MATTERIAL	
H1	LITHONIA OR EQUAL	WF6 4LO20 SWW5 90CRI MVOLT 40K	LED	120/277	15	RECESSED	STANDARD	6" ROUND DOWN LIGHT	
J1	LITHONIA OR EQUAL	EVO6CC	LED	120/277	45	PENDENT MOUNT 7'-7" AFF	ARCHITECT TO SELECT	6" CAN PENDANT	
K1	LITHONIA OR EQUAL	OLVTWM	LED	120/277	15	WALL MOUNT COORD.	STANDARD	WALL MOUNTED VAPOR TIGHT	
J1 MAYBE	CORONET OR...			120/277					

GENERAL NOTES:

1. ALL LAMPS SHALL BE 4100K, 85 CRI UNLESS NOTED OTHERWISE.
2. "NL" INDICATES NON-SWITCHED NIGHT LIGHT (24/7 OPERATION).
3. MANUFACTURER SHALL FURNISH 10% SPARES FOR OWNER STOCK OF ALL BALLAST AND LAMP TYPES USED FOR THE INTERIOR LIGHTING PACKAGE, WITH A MINIMUM OF (3) FOR EACH TYPE.
4. PRIOR APPROVAL REQUIRED A MINIMUM OF 10 DAYS PRIOR TO BID - EQUALS TO BE LISTED BY ADDENDA.
5. OTHER LIGHT FIXTURES MANUFACTURERS THAT ARE CONSIDERED AS EQUALS FOR GENERAL LIGHTING REQUIREMENTS ARE:
   A. COOPER LIGHTING AND SUB-PRODUCT LINES AS SUPPLIED BY ENGINEERED LIGHTING SALES
   B. HUBBELL LIGHTING AND SUB-PRODUCT LINES AS SUPPLIED BY LUMENATION
   C. ACUITY BRAND AND SUB-PRODUCT LINES AS SUPPLIED BY LHI LIGHTING SALES

   ALL LIGHT FIXTURES SHALL BE SUBJECT TO SHOP DRAWING REVIEW BY ARCHITECT AND ENGINEER FOR ACCEPTANCE AS TO ENERGY EFFICIENCY, APPEARANCE, STYLE, PERFORMANCE, AND OVER ALL SERVICEABILITY.

SPECIAL NOTES:

A. EMERGENCY SWITCHING UNIT SHALL FAIL TO "ON" POSITION FOR FAIL SAFE.
B. CONTRACTOR SHALL FIELD COORDINATE DIRECTION ARROWS OF ALL EXIT SIGNS, AS APPLICABLE TO PATH OF EGRESS FOR PUNCH-OUT TYPE ARROWS.

LIGHTING CONTROL NARRATIVE

ROOM NUMBER	ROOM TITLE	MANUAL ON	MANUAL OFF	DIMMING	OVERRIDE SWITCH	MULTI ZONE SWITCH	KEY SWITCH	TIME CLOCK ON	TIME CLOCK OFF	OCCUPANCY SENSOR ON	OCCUPANCY SENSOR OFF	PHOTOCONTROL SWITCHING	PLUG LOAD CONTROLLER	EXTERIOR PHOTOCELL ON/OFF	WIRING DIAGRAM REFERENCE	SEQUENCE OF OPERATIONS	NOTES
-	EXTERIOR							X	X					X	MANF. DIAG.	1	
-	SITE							X	X					X	MANF. DIAG.	1	
101	LOBBY					X		X	X	X	X				MANF. DIAG.	2	
102	CORRIDOR							X	X	X	X				MANF. DIAG.	3	
103	CONFERENCE	X	X	X		X					X				MANF. DIAG.	4	
104	OFFICE	X	X	X							X		X		MANF. DIAG.	5	
105	TOILET									X	X				MANF. DIAG.	6	
106	STORAGE									X	X				MANF. DIAG.	7	
107	MDF	X	X												MANF. DIAG.	8	
108	PARTY ROOM	X	X	X							X				MANF. DIAG.	5	
109	PARTY ROOM	X	X	X							X				MANF. DIAG.	5	
110	FAMILY TOILET									X	X				MANF. DIAG.	6	
111	JANITOR									X	X				MANF. DIAG.	7	
112	MEN RESTROOM									X	X				MANF. DIAG.	6	
113	WOMEN RESTROOM									X	X				MANF. DIAG.	6	
114	KITCHEN	X	X								X				MANF. DIAG.	9	
115	CONCESSIONS					X		X	X	X	X				MANF. DIAG.	2	
116	SOCCER FIELD					X		X	X	X	X				MANF. DIAG.	2	
117	COURT					X		X	X	X	X				MANF. DIAG.	2	
118	MECH/ELEC. ROOM	X	X												MANF. DIAG.	8	
167	LOBBY					X		X	X	X	X				MANF. DIAG.	2	
230	INFO/TICKETS					X		X	X	X	X				MANF. DIAG.	2	

SEQUENCE OF OPERATIONS

1. TIME CLOCK ON/OFF: U.O.N., Lights shall be programmed to operate at astronomic Dusk to Dawn ON/OFF Control. EXTERIOR PHOTOCELL ON/OFF: If exterior Natural lighting is detected to be less than 5 f.c., lighting shall be turned on.
2. MULTIZONE SWITCH: Lighting shall be able to be turned "ON" and "OFF" at Graphics Wall Pod to be installed at Information Desk. TIME CLOCK ON/OFF: Lighting shall be programmed to be turned ON and OFF at times to be determined by the Owner. OCCUPANCY SENSOR ON/OFF: After hours, lighting shall be turned ON by Occupancy Sensor integral to the fixture. After all occupants leave, all lighting shall be turned off 20 minutes after all occupants leave.
3. TIME CLOCK ON/OFF: Lighting shall be programmed to be turned ON and OFF at times to be determined by the Owner. OCCUPANCY SENSOR ON/OFF: After hours, lighting shall be turned ON by Occupancy Sensor integral to the fixture. After all occupants leave, all lighting shall be turned off 20 minutes after all occupants leave.
4. MANUAL ON: Occupant enters turns lights on manually at wall switch. MANUAL OFF: Occupant may turn lights off at wall switch upon exit of space. MULTI-ZONE DIMMING: Occupant may dim multiple zones from the wall switch to preferred levels. OCCUPANCY SENSOR OFF: All lights automatically shut off 20 minutes after all occupants exit.
5. MANUAL ON: Occupant enters turns lights on manually at wall switch. MANUAL OFF: Occupant may turn lights off at wall switch upon exit of space. DIMMING: Occupant may dim lighting from the wall switch to preferred levels. OCCUPANCY SENSOR OFF: All lights automatically shut off 20 minutes after all occupants exit.
6. OCCUPANCY SENSOR ON: Occupant enters lights and fan turn on automatically. OCCUPANCY SENSOR OFF: All lights automatically shut off 20 minutes after all occupants exit; fan shall turn off after 30 minutes.
7. OCCUPANCY SENSOR ON: Occupant enters lights turn on automatically. OCCUPANCY SENSOR OFF: All lights automatically shut off 20 minutes after all occupants exit.
8. MANUAL ON/OFF: Standard wall switch.
9. MANUAL ON: Occupant enters turns lights on manually at wall switch. MANUAL OFF: Occupant may turn lights off at wall switch upon exit of space. OCCUPANCY SENSOR OFF: All lights automatically shut off 20 minutes after all occupants exit.

ELECTRICAL MECHANICAL EQUIPMENT CONNECTION SCHEDULE

MARK	DESCRIPTION	VOLTAGE/PHASE	ELECRICAL DATA					CONDUCTORS				LOCAL DISCONNECTING MEANS				STARTERS (PER UNIT)				REMARKS AND NOTES
			LOAD	UNITS	MCA	MOCP	SCCR (KA)	CONDUIT	LINE	NEU	GND	N.F.D.S. SIZE	F.D.S. SIZE	FUSE SIZE	ENCL NEMA	MAGNETIC SIZE	COMBINATION SIZE	MANUAL SIZE	ENCL NEMA	
EH-1	ELECTRIC HEATER	208/1	5	kVA	24	30		1/2"	#4	#4	#4	2P30								B
EH-2	ELECTRIC HEATER	120/1	630	VA	5.25	15		1/2"	#12	#12	#12	1P30			1					A
EH-3	ELECTRIC HEATER	120/1	630	VA	5.25	15		1/2"	#12	#12	#12	1P30			1					A
HVLS-1	HIGH VOLUME LOW SPEED FAN	480/3	2.6	kVA	3.125	15		1/2"	#12	#12	#12									C
HVLS-2	HIGH VOLUME LOW SPEED FAN	480/3	2.6	kVA	3.125	15		1/2"	#12	#12	#12									C
HVLS-3	HIGH VOLUME LOW SPEED FAN	480/3	2.6	kVA	3.125	15		1/2"	#12	#12	#12									C
HVLS-4	HIGH VOLUME LOW SPEED FAN	480/3	2.6	kVA	3.125	15		1/2"	#12	#12	#12									C
HVLS-5	HIGH VOLUME LOW SPEED FAN	480/3	2.6	kVA	3.125	15		1/2"	#12	#12	#12									C
KEF-1	KITCHEN EXHAUST FAN	208/3	3.7	kVA	10.4	15	5	1/2"	#12	#12	#12									D, E
KH-1	KITCHEN HOOD	120/1	1200	kVA	10	20		1/2"	#12	#12	#12									F, G, H
RTU-K	ROOF TOP UNIT KITCHEN	480/3	14.1	kVA	17.0	20		1/2"	#12	#12	#12	3P30			3R					A, I
RTU-1	ROOF TOP UNIT	480/3	50.1	kVA	60.3	90	10	1-1/4"	#3	#3	#8	3P100			3R					A, I
RTU-2	ROOF TOP UNIT	480/3	8.4	kVA	10.1	15	5	1/2"	#12	#12	#12	3P30			3R					A
RTU-3	ROOF TOP UNIT	480/3	131.5	kVA	158.2	175	10	2-1/2"	#3	#3	#6	3P200			3R					A, I
RTU-4	ROOF TOP UNIT	480/3	131.5	kVA	158.2	175	10	2-1/2"	#3	#3	#6	3P200			3R					A, I
SV-1	GAS SOLINOID VALVE	120/1	250	VA	-	15		1/2"	#12	#12	#12									J
CP-1	CIRCULATION PUMP	120/1	250	VA	-	15		1/2"	#12	#12	#12									J
WH-1A	WATER HEATER	480/3	12.2	kW	14.7	30		1/2"	#10	#10	#10	3P30A			1					A
WH-1B	WATER HEATER	480/3	12.2	kW	14.7	30		1/2"	#10	#10	#10	3P30A			1					A
WH-2	WATER HEATER	208/1	5.0	kW	24	30		1/2"	#10	#10	#10	2P30A			1					A
WH-3	WATER HEATER	208/1	5.0	kW	24	30		1/2"	#10	#10	#10	2P30A			1					A

GENERAL NOTES:

1. THE INFORMATION ABOVE SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT AS TAGGED ACTUAL EQUIPMENT REQUIREMENTS SHALL TAKE PRESIDENCE OVER THE LISTED INFORMATION. CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT REQUIRED TO PLACE EQUIPMENT IN SERVICE. EQUIPMENT MANUFACTURER SHALL BE RESPONSIBLE FOR VARIATIONS IN ELECTRICAL FIELD CONNECTIONS DUE TO EQUIPMENT SUBSTITUTIONS - MODIFY OVERCURRENT, DISC. SW, WIRE SIZE ETC, AS NECESSARY.
2. THIS SCHEDULE INCLUDES, BUT IS NOT LIMITED TO, THE EQUIPMENT FOUND ON THIS PROJECT, COORDINATE WITH ALL TRADES AND PROVIDE MANUFACTURERS MINIMUM REQUIREMENTS TO ALL EQUIPMENT INSTALLED. THIS SCHEDULE IS NOT TO IMPLY QUANTITY OF EQUIPMENT, REFER TO CONSTRUCTION DOCUMENTS OF RESPECTIVE TRADE FOR LOCATION AND QUANTITIES.
3. REFER TO BUSSING DIAGRAM OF REFERENCED PANEL FOR CIRCUIT BREAKER SIZES.
4. STARTER/MOTOR SWITCH/DISCONNECT SHALL BE LOCATED ADJACENT TO UNIT IN ACCORDANCE WITH N.E.C. ARTICLE #110 & #440 - MAINTAIN WORKING CLEARANCES.
5. ALL FIELD WIRING TO UNITS SHALL BE PROPERLY SUPPORTED PER NEC AND ENCLOSURES SHALL BE PROPERLY RATED FOR THE INSTALLATION CONDITIONS. FIELD VERIFY PROPER BONDING TO GROUND.
6. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY EQUIPMENT SHIPPED LOOSE WITH UNIT, SUCH AS FAN SPEED CONTROLLERS - INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

SPECIAL NOTES:

A ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL NON-FUSED ELECTRICAL DISCONNECT ADJACENT TO UNIT.

B UNIT PROVIDED WITH FACTORY WIRED ELECTRICAL DISCONNECT SWITCH WITH SINGLE-POINT ELECTRICAL CONNECTION.

C UNIT SHALL BE INTEGRATED INTO THE FIRE ALARM SYSTEM TO STOP OPERATION OF UNIT UPON ACTIVATION OF THE FIRE ALARM SYSTEM.

D UNIT PROVIDED WITH, NEMA 3R, NON-FUSED ELECTRICAL DISCONNECT SWITCH WITH SINGLE-POINT ELECTRICAL CONNECTION.

E ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL PILOT LIT SWITCH. . UNIT SHALL BE CONTROLLED BY PILOT LIT SWITCH. SWITCH SHALL BE LIT WHEN FAN IN OPERATION

F UNIT PROVIDED WITH MOUNTED UTILITY CABINET WITH PRE-WIRED ELECTRICAL TERMINAL BOX, VFD FOR EXHAUST FAN, FIRE SUPPRESSION SYSTEM, AND ELECTRICAL CONTROL PANEL WITH ALL NECESSARY COMPONENTS FOR PROPER SYSTEM OPERATION. CABINET SHALL BE LOCATED ON THE LEFT END OF THE HOOD. CABINET SHALL CONTROL HOOD, EXHAUST FAN, AND RTU-K. PROVIDE SWITCHES ON FRONT OF CONTROL PANEL FOR LIGHT AND MANUAL OVERRIDE FOR THE EXHAUST FAN. CONTRACTOR SHALL MAKE ALL NECCESSARY CONNECTIONS BETWEEN CABINET AND DEVICES FOR A FULLY FUNCTIONING SYSTEM.

G ELECTRICAL CONTRACTOR SHALL PROVIDE 120V, 15A POWER TO HOOD CONTROL PANEL. CONTROL PANEL POWER MUST NOT BE RUN THROUGH SHUNT TRIP BREAKER.

H ELECTRICAL CONTRACTOR SHALL PROVIDE 120V POWER TO GAS VALVE.

I FIRE ALARM CONTRACTOR SHALL FURNISH A DUCT SMOKE DETECTOR FOR THE RETURN AIR DUCT. DUCT SMOKE DETECTORS SHALL BE COMPATIBLE WITH FIRE ALARM SYSTEM. MECHANICAL CONTRACTOR SHALL RECEIVE DUCT SMOKE DETECTORS FROM FIRE ALARM CONTRACTOR AND INSTALL IN DUCTWORK IN AN ACCESSIBLE LOCATION AND ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE. DUCT SMOKE DETECTORS SHALL BE INTERLOCKED WITH HVAC UNIT AND FIRE ALARM SYSTEM TO SHUT DOWN THE UNIT OPERATION AND INITIATE A GENERAL ALARM CONDITION WHEN SMOKE IS SENSED IN THE DUCT.

J ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL LOAD RATED SWITCH ADJACENT TO UNIT TO ACT AS LOCAL DISCONNECT MEANS.

VENTILATION EQUIPMENT CONNECTION SCHEDULE

MARK	DESCRIPTION	VOLTAGE/PHASE	ELECRICAL DATA					CONDUCTORS				UNIT OPERATION CONTROL				REMARKS AND NOTES
			LOAD	UNITS	MCA	MOCP	SCCR (KA)	CONDUIT	LINE	NEU	GND	LTG OCC SENSOR	SWITCH	TSTAT	CONT	
EF-1	GREENHECK-SQ-130	120/1	691	W	7.2	15.0		1/2"	#12	-	#12				X	A
EF-2	GREENHECK-SQ-130	120/1	691	W	7.2	15.0		1/2"	#12	-	#12				X	A
EF-3	CSP-A125	120/1	20	W	0.2	15.0		1/2"	#12	-	#12			X		B
EF-4	CSP-A125	120/1	20	W	0.2	15.0		1/2"	#12	-	#12			X		B

REMARKS:

General Notes:

1. THE INFORMATION ABOVE SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT AS TAGGED ACTUAL EQUIPMENT REQUIREMENTS SHALL TAKE PRESIDENCE OVER THE LISTED INFORMATION. CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT REQUIRED TO PLACE EQUIPMENT IN SERVICE. EQUIPMENT MANUFACTURER SHALL BE RESPONSIBLE FOR VARIATIONS IN ELECTRICAL FIELD CONNECTIONS DUE TO EQUIPMENT SUBSTITUTIONS - MODIFY OVERCURRENT, DISC. SW, WIRE SIZE ETC, AS NECESSARY.
2. THIS SCHEDULE INCLUDES, BUT IS NOT LIMITED TO, THE EQUIPMENT FOUND ON THIS PROJECT, COORDINATE WITH ALL TRADES AND PROVIDE MANUFACTURERS MINIMUM REQUIREMENTS TO ALL EQUIPMENT INSTALLED. THIS SCHEDULE IS NOT TO IMPLY QUANTITY OF EQUIPMENT, REFER TO CONSTRUCTION DOCUMENTS OF RESPECTIVE TRADE FOR LOCATION AND QUANTITIES.
3. REFER TO BUSSING DIAGRAM OF REFERENCED PANEL FOR CIRCUIT BREAKER SIZES.
4. STARTER/MOTOR SWITCH/DISCONNECT SHALL BE LOCATED ADJACENT TO UNIT IN ACCORDANCE WITH N.E.C. ARTICLE #110 & #440 - MAINTAIN WORKING CLEARANCES.
5. ALL FIELD WIRING TO UNITS SHALL BE PROPERLY SUPPORTED PER NEC AND ENCLOSURES SHALL BE PROPERLY RATED FOR THE INSTALLATION CONDITIONS. FIELD VERIFY PROPER BONDING TO GROUND.
6. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY EQUIPMENT SHIPPED LOOSE WITH UNIT, SUCH AS FAN SPEED CONTROLLERS - INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

Special Notes:

A UNIT FURNISHED WITH FACTORY WIRED, NON-FUSED ELECTRICAL DISCONNECT SWITCH.

B UNIT FURNISHED WITH FACTORY WIRED, PLUG TYPE DISCONNECT.

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
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No. 37688
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2024-05-17

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500 WEST THIRD STREET
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ELECTRICAL SCHEDULES

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SHERMAN CARTER BARNHART ARCHITECTS, PLLC

REVISIONS

No.	Description	Date

SHEET

E5.1

Branch Panel: EE

Location: STAIR A A
Supply From: T-EE
Mounting: Surface
Enclosure: Type 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10000
Mains Type: MCB
Mains Rating: 60 A
MCB Rating: 60A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
EE-1	SUMP PUMP	20 A	2	750 VA	180 VA					1	20 A	PIT RECEPTACLE	EE-2
EE-3	--	--	--			750 VA	30 VA			1	20 A	Other	EE-4
EE-5	CAB LIGHTING	20 A	1					31924 VA	31924 VA	1	20 A	ELEVATOR CONTROL PANEL	EE-6
EE-7	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	EE-8
EE-9	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	EE-10
EE-11	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	EE-12
			Total Load:	930 VA		780 VA		63848 VA					
			Total Amps:	8 A		7 A		532 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	1500 VA	125.00%	1875 VA		
Other	30 VA	80.00%	24 VA	**Total Conn. Load:**	65558 VA
Power	63848 VA	100.00%	63848 VA	**Total Est. Demand:**	65927 VA
Receptacle	180 VA	100.00%	180 VA	**Total Conn.:**	182 A
				Total Est. Demand:	183 A

Notes:

Switchboard: MDP

Location: STORAGE 105
Supply From:
Mounting:
Enclosure:
Volts: 480/277 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 14000
Mains Type: MCB
Mains Rating: 1200 A
MCB Rating: 1200 A

Notes:

CKT	Circuit Description	# of Poles	Trip Rating	Load	Remarks
MDP-1	T-K	3	175 A	75621 VA	
MDP-2	T-L1	3	125 A	47664 VA	
MDP-3	T-L2	3	125 A	45690 VA	
MDP-4	T-L3	3	125 A	39693 VA	
MDP-5	T-L4	3	125 A	47680 VA	
MDP-6	RTU-3	3	175 A	131500 VA	
MDP-7	RTU-4	3	175 A	131500 VA	
MDP-8	RTU-1	3	90 A	50100 VA	
MDP-9	RTU-2	3	15 A	8400 VA	
MDP-10	RTU-K	3	20 A	14100 VA	
MDP-11	ELEVATOR MOTOR	3	70 A	31924 VA	
MDP-12	T-EE	3	50 A	65558 VA	
MDP-13	WH-1	3	20 A	12000 VA	
MDP-14	WH-2	3	20 A	12000 VA	
MDP-15	HVLS-1	3	20 A	2600 VA	
MDP-16	HVLS-2	3	20 A	2600 VA	
MDP-17	HVLS-3	3	20 A	2600 VA	
MDP-18	HVLS-4	3	20 A	2600 VA	
MDP-19	HVLS-5	3	20 A	2600 VA	
MDP-20	Spare	1	20 A	0 VA	
				726017 VA	
				873 A	

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	338407 VA	100.00%	338407 VA		
Heating	5000 VA	100.00%	5000 VA	**Total Conn. Load:**	726017 VA
Lighting	3540 VA	125.00%	4425 VA	**Total Est. Demand:**	688940 VA
Motor	109614 VA	107.28%	117595 VA	**Total Conn.:**	873 A
Other	14270 VA	80.00%	11416 VA	**Total Est. Demand:**	829 A
Power	160907 VA	100.00%	160907 VA		
Receptacle	97420 VA	55.13%	53710 VA		

Notes:

Branch Panel: K1

Location: KITCHEN 102
Supply From: T-K
Mounting: Surface
Enclosure: Type 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10000
Mains Type: MCB
Mains Rating: 400 A
MCB Rating: 200 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
K1-1	KEF-1	20 A	3	1233 VA	1100 VA					1	20 A	BEVERAGE COOLER (GFI BRKR)	K1-2
K1-3	--	--	--			1233 VA	2400 VA			1	30 A	POPCORN POPPER (GFI...	K1-4
K1-5	--	--	--					1233 VA	1100 VA	1	20 A	CHIP WARMER (GFI BREAKER)	K1-6
K1-7	HEATED PASS THRU (GFI BRKR)	20 A	1	700 VA	1200 VA					1	20 A	HOT WELL (GFI BREAKER)	K1-8
K1-9	PIZZA WARMER (GFI BREAKER)	20 A	1			14000 VA	180 VA			1	20 A	BEVERAGE COOLER (GFI BRKR)	K1-10
K1-11	ICE CREAM MACHINE (GFI BRKR)	20 A	2					1250 VA	1000 VA	1	20 A	HOT DOG ROLLER (GFI...	K1-12
K1-13	--	--	--	1250 VA	500 VA					1	20 A	DRAWER WARMER (GFI...	K1-14
K1-15	CONVEYOR OVEN (GFI...	50 A	2			3700 VA	300 VA			1	20 A	FRIG WORK TOP (GFI BREAKER)	K1-16
K1-17	--	--	--					3700 VA	1000 VA	1	20 A	FREEZER WORK TOP (GFI BRKR)	K1-18
K1-19	TURBO CHEF OVEN (GFI...	50 A	2	4750 VA	700 VA					1	20 A	FRIG MAKE TABLE (GFI...	K1-20
K1-21	--	--	--			4750 VA	6000 VA			2	80 A	DISHMACHINE (GFI BREAKER)	K1-22
K1-23	ICE MACHINE (GFI BREAKER)	20 A	2					1250 VA	6000 VA	--	--	--	K1-24
K1-25	--	--	--	1250 VA	1433 VA					3	20 A	COOLER	K1-26
K1-27	FREEZER	20 A	3			1433 VA	1433 VA			--	--	--	K1-28
K1-29	--	--	--					1433 VA	1433 VA	--	--	--	K1-30
K1-31	--	--	--	1433 VA	300 VA					1	20 A	COOLER LIGHTS	K1-32
K1-33	COOLER FAN	20 A	1			100 VA	300 VA			1	20 A	FREEZER LIGHTS	K1-34
K1-35	FREEZER FAN	20 A	1					100 VA	481 VA	1	20 A	KITCHEN LIGHTING	K1-36
K1-37	Receptacle	20 A	1	360 VA	0 VA					1	20 A	Spare	K1-38
K1-39	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	K1-40
K1-41	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	K1-42
K1-43	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	K1-44
K1-45	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	K1-46
K1-47	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	K1-48
K1-49	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	K1-50
K1-51	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	K1-52
K1-53	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	K1-54
			Total Load:	17410 VA		37630 VA		20581 VA					
			Total Amps:	145 A		318 A		176 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	9500 VA	125.00%	11875 VA		
Power	26081 VA	100.00%	26081 VA	**Total Conn. Load:**	75621 VA
Receptacle	40040 VA	62.49%	25020 VA	**Total Est. Demand:**	62976 VA
				Total Conn.:	210 A
				Total Est. Demand:	175 A

Notes:
FEED THROUGH LUGS TO PANEL K2

Branch Panel: K2

Location: KITCHEN 102
Supply From: K1
Mounting: Surface
Enclosure: Type 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10000
Mains Type: MCB
Mains Rating: 60 A
MCB Rating: 60 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
K2-1	KH-1	20 A	1	500 VA	700 VA					1	20 A	FRYER (GFI BREAKER)	K2-2
K2-3	FRYER (GFI BREAKER)	20 A	1			700 VA	1100 VA			1	20 A	GRIDDLE (GFI BREAKER)	K2-4
K2-5	Receptacle	20 A	1					300 VA	300 VA	1	20 A	RANGE (GFI BREAKER)	K2-6
K2-7	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	K2-8
K2-9	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	K2-10
K2-11	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	K2-12
K2-13	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	K2-14
K2-15	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	K2-16
K2-17	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	K2-18
			Total Load:	1200 VA		1800 VA		600 VA					
			Total Amps:	11 A		16 A		5 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	500 VA	100.00%	500 VA		
Receptacle	3100 VA	100.00%	3100 VA	**Total Conn. Load:**	3600 VA
				Total Est. Demand:	3600 VA
				Total Conn.:	10 A
				Total Est. Demand:	10 A

Notes:

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
MATTHEW MORGAN
No. 37688
LICENSED PROFESSIONAL ENGINEER
2024-05-17

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OWENSBORO INDOOR SPORTS FACILITY

500 WEST THIRD STREET
OWENSBORO, KY 42301

ELECTRICAL SCHEDULES

JOB NO.	22630
DATE	MAY 20, 2024
DRAWN	DN
CHECKED	MM

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ARCHITECTS, PLLC

REVISIONS

No.	Description	Date

SHEET

E5.2

Branch Panel: L1

Location: MECHANICAL 206
Supply From: T-L1
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10000
Mains Type: MCB
Mains Rating: 225 A
MCB Rating: 225 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
L1-1	EH-1	30 A	2	2500 VA	2250 VA					2	30 A	WH-2A	L1-2
L1-3	--	--	--			2500 VA	2250 VA			--	--	--	L1-4
L1-5	CP-1	20 A	1					127 VA	1000 VA	1	20 A	FIRE ALARM	L1-6
L1-7	RECEPTACLE	20 A	1	1080 VA	1080 VA					1	20 A	Receptacle	L1-8
L1-9	FLOOR BOX RECEP.	20 A	1			1440 VA	540 VA			1	20 A	Receptacle	L1-10
L1-11	Receptacle	20 A	1					1080 VA	1080 VA	1	20 A	Receptacle	L1-12
L1-13	WATER COOLER (GFI BREAKER)	20 A	1	180 VA	720 VA					1	20 A	Receptacle	L1-14
L1-15	IR SENSORS	20 A	1			150 VA	820 VA			1	20 A	Receptacle	L1-16
L1-17	IR SENSORS	20 A	1					250 VA	250 VA	1	20 A	IR SENSORS	L1-18
L1-19	HAND DRYER	20 A	1	1100 VA	150 VA					1	20 A	IR SENSORS	L1-20
L1-21	HAND DRYER	20 A	1			1100 VA	1100 VA			1	20 A	HAND DRYER	L1-22
L1-23	TV Receptacle	20 A	1					540 VA	1100 VA	1	20 A	HAND DRYER	L1-24
L1-25	FLOOR BOX RECEP.	20 A	1	1440 VA	1440 VA					1	20 A	FLOOR BOX RECEP.	L1-26
L1-27	Receptacle	20 A	1			720 VA	900 VA			1	20 A	Receptacle	L1-28
L1-29	Receptacle	20 A	1					900 VA	1080 VA	1	20 A	Receptacle	L1-30
L1-31	GYM FLOOR BOX	20 A	1	360 VA	360 VA					1	20 A	GYM FLOOR BOX	L1-32
L1-33	Receptacle	20 A	1			1080 VA	1080 VA			1	20 A	Receptacle	L1-34
L1-35	Receptacle	20 A	1					1080 VA	1080 VA	1	20 A	Receptacle	L1-36
L1-37	WATER COOLER (GFI BREAKER)	20 A	1	180 VA	820 VA					1	20 A	Receptacle	L1-38
L1-39	HAND DRYER	20 A	1			1100 VA	1100 VA			1	20 A	HAND DRYER	L1-40
L1-41	IR SENSORS	20 A	1					150 VA	250 VA	1	20 A	IR SENSORS	L1-42
L1-43	IR SENSORS	20 A	1	250 VA	150 VA					1	20 A	IR SENSORS	L1-44
L1-45	HAND DRYER	20 A	1			1100 VA	1100 VA			1	20 A	HAND DRYER	L1-46
L1-47	Receptacle	20 A	1					740 VA	720 VA	1	20 A	Receptacle	L1-48
L1-49	OH DOOR STORAGE	20 A	3	267 VA	267 VA					3	20 A	OH DOOR STORAGE	L1-50
L1-51	--	--	--			267 VA	267 VA			--	--	--	L1-52
L1-53	--	--	--					267 VA	267 VA	--	--	--	L1-54
L1-55	OH DOOR STORAGE	20 A	3	267 VA	267 VA					3	20 A	OH DOOR STORAGE	L1-56
L1-57	--	--	--			267 VA	267 VA			--	--	--	L1-58
L1-59	--	--	--					267 VA	267 VA	--	--	--	L1-60
L1-61	ADA DOOR OPERATOR	20 A	1	1000 VA	528 VA					1	20 A	Lighting	L1-62
L1-63	Lighting	20 A	1			1000 VA	829 VA			1	20 A	LIGHTING	L1-64
L1-65	LIGHTING	20 A	1					1828 VA	0 VA	1	20 A	Spare	L1-66
L1-67	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	L1-68
L1-69	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	L1-70
L1-71	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	L1-72
			Total Load:	14579 VA		18860 VA		14321 VA					
			Total Amps:	122 A		158 A		119 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	127 VA	100.00%	127 VA		
Heating	5000 VA	100.00%	5000 VA	**Total Conn. Load:**	47664 VA
Lighting	888 VA	125.00%	1110 VA	**Total Est. Demand:**	41397 VA
Motor	800 VA	125.00%	1000 VA	**Total Conn.:**	132 A
Other	5308 VA	80.00%	4247 VA	**Total Est. Demand:**	115 A
Power	15681 VA	100.00%	15681 VA		
Receptacle	22140 VA	72.58%	16070 VA		

Notes:

Branch Panel: L2

Location: MECHANICAL 206
Supply From: T-L2
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10000
Mains Type: MCB
Mains Rating: 225 A
MCB Rating: 225 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
L2-1	EF-2	20 A	1	690 VA	20 VA					1	20 A	EF-4	L2-2
L2-3	EH-2	20 A	1			630 VA	630 VA			1	20 A	EH-3	L2-4
L2-5	GOAL HIGHT MOTOR	20 A	1					1200 VA	1200 VA	1	20 A	GOAL LIFT MOTOR	L2-6
L2-7	GOAL SHOT CLOCK AND LTG	20 A	1	1000 VA	1650 VA					1	20 A	VOLLY BALL LIFT MOTOR	L2-8
L2-9	GOAL HIGHT MOTOR	20 A	1			1200 VA	1200 VA			1	20 A	GOAL LIFT MOTOR	L2-10
L2-11	GOAL SHOT CLOCK AND LTG	20 A	1					1000 VA	1650 VA	1	20 A	VOLLY BALL LIFT MOTOR	L2-12
L2-13	GOAL HIGHT MOTOR	20 A	1	1200 VA	1200 VA					1	20 A	GOAL LIFT MOTOR	L2-14
L2-15	GOAL SHOT CLOCK AND LTG	20 A	1			1000 VA	1650 VA			1	20 A	VOLLY BALL LIFT MOTOR	L2-16
L2-17	GOAL HIGHT MOTOR	20 A	1					1200 VA	1200 VA	1	20 A	GOAL LIFT MOTOR	L2-18
L2-19	GOAL SHOT CLOCK AND LTG	20 A	1	1000 VA	1650 VA					1	20 A	VOLLY BALL LIFT MOTOR	L2-20
L2-21	GOAL HIGHT MOTOR	20 A	1			1200 VA	1200 VA			1	20 A	GOAL LIFT MOTOR	L2-22
L2-23	GOAL SHOT CLOCK AND LTG	20 A	1					1000 VA	1650 VA	1	20 A	VOLLY BALL LIFT MOTOR	L2-24
L2-25	GOAL HIGHT MOTOR	20 A	1	1200 VA	1200 VA					1	20 A	GOAL LIFT MOTOR	L2-26
L2-27	GOAL SHOT CLOCK AND LTG	20 A	1			1000 VA	1650 VA			1	20 A	VOLLY BALL LIFT MOTOR	L2-28
L2-29	BATTING CAGE NET	20 A	1					1560 VA	670 VA	1	20 A	DIVIDER CURTAIN	L2-30
L2-31	BATTING CAGE NET	20 A	1	1560 VA	670 VA					1	20 A	DIVIDER CURTAIN	L2-32
L2-33	FLOOR BOX RECEP.	20 A	1			180 VA	240 VA			1	20 A	FLOOR BOX RECEP.	L2-34
L2-35	KICKWALL RECEPTACLE	20 A	1					900 VA	900 VA	1	20 A	KICKWALL RECEPTACLE	L2-36
L2-37	FLOOR BOX RECEP.	20 A	1	240 VA	240 VA					1	20 A	FLOOR BOX RECEP.	L2-38
L2-39	FLOOR BOX RECEP.	20 A	1			240 VA	240 VA			1	20 A	FLOOR BOX RECEP.	L2-40
L2-41	TV Receptacle	20 A	1					360 VA	360 VA	1	20 A	MDF RECEPTACLE	L2-42
L2-43	MDF RECEPTACLE	20 A	3	500 VA	720 VA					1	20 A	DEMARC RECEPTACLE	L2-44
L2-45	--	--	--			500 VA	720 VA			1	20 A	Receptacle	L2-46
L2-47	--	--	--					500 VA	500 VA	1	20 A	EXTERIOR SIGN	L2-48
L2-49	SCOREBOARD	20 A	1	180 VA	180 VA					1	20 A	SCOREBOARD	L2-50
L2-51	SCOREBOARD	20 A	1			180 VA	180 VA			1	20 A	SCOREBOARD	L2-52
L2-53	SCOREBOARD	20 A	1					180 VA	180 VA	1	20 A	SCOREBOARD	L2-54
L2-55	Spare	20 A	1	0 VA	540 VA					1	20 A	ROOF RECEPTACLE	L2-56
L2-57	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	L2-58
L2-59	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	L2-60
L2-61	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	L2-62
L2-63	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	L2-64
L2-65	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	L2-66
L2-67	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	L2-68
L2-69	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	L2-70
L2-71	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	L2-72
			Total Load:	15640 VA		13840 VA		16210 VA					
			Total Amps:	133 A		115 A		137 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	1970 VA	100.00%	1970 VA		
Motor	34760 VA	101.19%	35173 VA	**Total Conn. Load:**	45690 VA
Power	1880 VA	100.00%	1880 VA	**Total Est. Demand:**	46103 VA
Receptacle	7080 VA	100.00%	7080 VA	**Total Conn.:**	127 A
				Total Est. Demand:	128 A

Notes:

Branch Panel: L3

Location: MECH 213
Supply From: T-L3
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10000
Mains Type: MCB
Mains Rating: 225 A
MCB Rating: 225 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
L3-1	WATER COOLER (GFI BREAKER)	20 A	1	180 VA	2250 VA					2	30 A	WH-2B	L3-2
L3-3	ADULT CHANGING STATION	20 A	1			500 VA	2250 VA			--	--	--	L3-4
L3-5	HAND DRYER	20 A	1					1100 VA	1100 VA	1	20 A	HAND DRYER	L3-6
L3-7	IR SENSORS	20 A	1	350 VA	1100 VA					1	20 A	HAND DRYER	L3-8
L3-9	HAND DRYER	20 A	1			1100 VA	300 VA			1	20 A	IR SENSORS	L3-10
L3-11	IR SENSORS	20 A	1					300 VA	820 VA	1	20 A	Receptacle	L3-12
L3-13	HAND DRYER	20 A	1	1100 VA	1100 VA					1	20 A	HAND DRYER	L3-14
L3-15	IR SENSORS	20 A	1			350 VA	1100 VA			1	20 A	HAND DRYER	L3-16
L3-17	HAND DRYER	20 A	1					1100 VA	300 VA	1	20 A	IR SENSORS	L3-18
L3-19	IR SENSORS	20 A	1	300 VA	360 VA					1	20 A	TV Receptacle	L3-20
L3-21	FLOOR BOX RECEP.	20 A	1			1440 VA	1440 VA			1	20 A	FLOOR BOX RECEP.	L3-22
L3-23	Receptacle	20 A	1					900 VA	1080 VA	1	20 A	Receptacle	L3-24
L3-25	Receptacle	20 A	1	1080 VA	900 VA					1	20 A	Receptacle	L3-26
L3-27	GYM FLOOR BOX	20 A	1			360 VA	360 VA			1	20 A	GYM FLOOR BOX	L3-28
L3-29	GYM FLOOR BOX	20 A	1					360 VA	720 VA	1	20 A	WATER COOLER (GFI BREAKER)	L3-30
L3-31	TV Receptacle	20 A	1	360 VA	240 VA					1	20 A	FLOOR BOX RECEP.	L3-32
L3-33	FLOOR BOX RECEP.	20 A	1			240 VA	240 VA			1	20 A	FLOOR BOX RECEP.	L3-34
L3-35	FLOOR BOX RECEP.	20 A	1					240 VA	240 VA	1	20 A	FLOOR BOX RECEP.	L3-36
L3-37	FLOOR BOX RECEP.	20 A	1	240 VA	240 VA					1	20 A	FLOOR BOX RECEP.	L3-38
L3-39	KICKWALL RECEPTACLE	20 A	1			180 VA	900 VA			1	20 A	KICKWALL RECEPTACLE	L3-40
L3-41	IDF RECEPTCALE	20 A	1					360 VA	500 VA	3	20 A	UPS RECEP	L3-42
L3-43	LIGHTING	20 A	1	1190 VA	500 VA					--	--	--	L3-44
L3-45	LIGHTING	20 A	1			4708 VA	500 VA			--	--	--	L3-46
L3-47	LIGHTING	20 A	1					549 VA	942 VA	1	20 A	LIGHTING	L3-48
L3-49	LIGHTING	20 A	1	1896 VA	1632 VA					1	20 A	LIGHTING	L3-50
L3-51	USB RECEP	20 A	1			1260 VA	1080 VA			1	20 A	USB RECEP	L3-52
L3-53	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	L3-54
L3-55	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	L3-56
L3-57	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	L3-58
L3-59	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	L3-60
L3-61	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	L3-62
L3-63	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	L3-64
L3-65	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	L3-66
L3-67	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	L3-68
L3-69	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	L3-70
L3-71	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	L3-72
			Total Load:	12965 VA		16215 VA		10611 VA					
			Total Amps:	111 A		138 A		88 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	2652 VA	125.00%	3315 VA		
Motor	1500 VA	125.00%	1875 VA	**Total Conn. Load:**	39693 VA
Other	9378 VA	80.00%	7503 VA	**Total Est. Demand:**	36985 VA
Power	13017 VA	100.00%	13017 VA	**Total Conn.:**	110 A
Receptacle	14040 VA	85.61%	12020 VA	**Total Est. Demand:**	103 A

Notes:

Branch Panel: L4

Location: MECH 213
Supply From: T-L4
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10000
Mains Type: MCB
Mains Rating: 225 A
MCB Rating: 225 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
L4-1	EF-1	20 A	1	690 VA	20 VA					1	20 A	EF-3	L4-2
L4-3	GOAL HIGHT MOTOR	20 A	1			1200 VA	1200 VA			1	20 A	GOAL LIFT MOTOR	L4-4
L4-5	GOAL SHOT CLOCK AND LTG	20 A	1					1000 VA	1650 VA	1	20 A	VOLLY BALL LIFT MOTOR	L4-6
L4-7	GOAL HIGHT MOTOR	20 A	1	1200 VA	1200 VA					1	20 A	GOAL LIFT MOTOR	L4-8
L4-9	GOAL SHOT CLOCK AND LTG	20 A	1			1000 VA	1650 VA			1	20 A	VOLLY BALL LIFT MOTOR	L4-10
L4-11	GOAL HIGHT MOTOR	20 A	1					1200 VA	1200 VA	1	20 A	GOAL LIFT MOTOR	L4-12
L4-13	GOAL SHOT CLOCK AND LTG	20 A	1	1000 VA	1650 VA					1	20 A	VOLLY BALL LIFT MOTOR	L4-14
L4-15	GOAL HIGHT MOTOR	20 A	1			1200 VA	1200 VA			1	20 A	GOAL LIFT MOTOR	L4-16
L4-17	GOAL SHOT CLOCK AND LTG	20 A	1					1000 VA	1650 VA	1	20 A	VOLLY BALL LIFT MOTOR	L4-18
L4-19	GOAL HIGHT MOTOR	20 A	1	1200 VA	1200 VA					1	20 A	GOAL LIFT MOTOR	L4-20
L4-21	GOAL SHOT CLOCK AND LTG	20 A	1			1000 VA	1650 VA			1	20 A	VOLLY BALL LIFT MOTOR	L4-22
L4-23	GOAL HIGHT MOTOR	20 A	1					1200 VA	1200 VA	1	20 A	GOAL LIFT MOTOR	L4-24
L4-25	GOAL SHOT CLOCK AND LTG	20 A	1	1000 VA	1650 VA					1	20 A	VOLLY BALL LIFT MOTOR	L4-26
L4-27	GOAL HIGHT MOTOR	20 A	1			1200 VA	1200 VA			1	20 A	GOAL LIFT MOTOR	L4-28
L4-29	GOAL SHOT CLOCK AND LTG	20 A	1					1000 VA	1650 VA	1	20 A	VOLLY BALL LIFT MOTOR	L4-30
L4-31	GOAL HIGHT MOTOR	20 A	1	1200 VA	1200 VA					1	20 A	GOAL LIFT MOTOR	L4-32
L4-33	GOAL SHOT CLOCK AND LTG	20 A	1			1000 VA	1650 VA			1	20 A	VOLLY BALL LIFT MOTOR	L4-34
L4-35	DIVIDER CURTAIN	20 A	1					670 VA	1560 VA	1	20 A	BATTING CAGE NET	L4-36
L4-37	DIVIDER CURTAIN	20 A	1	670 VA	1560 VA					1	20 A	BATTING CAGE NET	L4-38
L4-39	DIVIDER CURTAIN	20 A	1			670 VA	180 VA			1	20 A	SCOREBOARD	L4-40
L4-41	SCOREBOARD	20 A	1					180 VA	180 VA	1	20 A	SCOREBOARD	L4-42
L4-43	Receptacle	20 A	1	180 VA	180 VA					1	20 A	Receptacle	L4-44
L4-45	SCOREBOARD	20 A	1			180 VA	180 VA			1	20 A	SCOREBOARD	L4-46
L4-47	SCOREBOARD	20 A	1					180 VA	0 VA	1	20 A	Spare	L4-48
L4-49	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	L4-50
L4-51	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	L4-52
L4-53	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	L4-54
L4-55	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	L4-56
L4-57	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	L4-58
L4-59	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	L4-60
L4-61	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	L4-62
L4-63	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	L4-64
L4-65	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	L4-66
L4-67	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	L4-68
L4-69	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	L4-70
L4-71	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	L4-72
			Total Load:	15800 VA		16360 VA		15520 VA					
			Total Amps:	132 A		137 A		129 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	710 VA	100.00%	710 VA		
Motor	5130 VA	107.60%	5520 VA	**Total Conn. Load:**	47680 VA
Power	40400 VA	100.00%	40400 VA	**Total Est. Demand:**	48070 VA
Receptacle	1440 VA	100.00%	1440 VA	**Total Conn.:**	132 A
				Total Est. Demand:	133 A

Notes:

SHERMAN CARTER BARNHART ARCHITECTS

STATE OF KENTUCKY
MATTHEW MORGAN
No. 37688
LICENSED PROFESSIONAL ENGINEER
2024-05-17

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OWENSBORO INDOOR SPORTS FACILITY

500 WEST THIRD STREET
OWENSBORO, KY 42301

ELECTRICAL SCHEDULES

JOB NO.	22630
DATE	MAY 20, 2024
DRAWN	DN
CHECKED	MM

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REVISIONS

No.	Description	Date

SHEET

E5.3