UNIVERSITY MEDICAL CENTER
TTUHSC DOCK EXPANSION

3601 4TH STREET
LUBBOCK, TX 79430

INDEX OF SHEETS

REGISTERED ARCHITECT
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21116
STATE OF TEXAS
09/05/2025

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UNIVERSITY MEDICAL CENTER
TTUHSC DOCK EXPANSION

CDG PROJ NO. 22421
DATE: 09/05/2025

GENERAL STRUCTURAL NOTES

**APPLY UNLESS NOTED ON STRUCTURAL DRAWINGS
IN CASE OF CONFLICT BETWEEN GSN, DETAILS AND
PLANS, THE GREATER REQUIREMENTS GOVERN.**

GENERAL

1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2021 INTERNATIONAL BUILDING CODE, INCLUDING AMENDMENTS, EXCEPT WHERE APPLICABLE CODES OR THE CONTRACT DOCUMENTS ARE MORE RESTRICTIVE.
2. THE SPECIFICATIONS AND REQUIREMENTS INDICATED ON THIS SHEET ARE INTENDED AS A BASIC SUMMARY OF THE MATERIAL, CONSTRUCTION AND INSPECTION REQUIREMENTS FOR THE PROJECT. ADDITIONAL, ARE GIVEN IN THE PROJECT SPECIFICATIONS. IN THE EVENT OF CONFLICT BETWEEN THE REQUIREMENTS INDICATED ON THIS SHEET AND THOSE IN THE PROJECT SPECIFICATIONS, THE MORE STRINGENT WILL GOVERN.
3. FOR LOCATIONS AND DIMENSIONS OF SLEEVES, CURB, OPENINGS AND DEPRESSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS, SEE ARCHITECTURAL, CIVIL, MECHANICAL DRAWINGS. CONTRACTOR SHALL VERIFY AND COORDINATE REQUIREMENT FOR AND LOCATION OF ABOVE ITEMS WHETHER SHOWN ON THE STRUCTURAL DRAWINGS OR NOT.
4. EMBEDDED ITEMS, SUCH AS PIPE SLEEVES, CONDUITS AND INSERTS SHALL BE IN PLACE BEFORE CONCRETE IS POURED. SEE ARCHITECTURAL, CIVIL, MECHANICAL DRAWINGS FOR ITEMS REQUIRING SLEEVES AND EMBEDMENTS IN CONCRETE WHICH ARE NOT SHOWN IN THE STRUCTURAL DRAWINGS.
5. ALL STRUCTURAL RELATED SHOP DRAWINGS SHALL BE SUBMITTED, REVIEWED & APPROVED BY THE ENGINEER OF RECORD PRIOR TO ERECTION/CONSTRUCTION.
6. STRUCTURAL DIMENSIONS AND OPENINGS CONTROLLED BY OR RELATED TO MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. STRUCTURAL DIMENSIONS RELATED TO OR CONTROLLED BY EXISTING STRUCTURES SHALL BE VERIFIED IN FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION WORK.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS, INCLUDING LOCATION AND DIMENSIONS OF ALL EXISTING CONSTRUCTION AND UTILITIES. CONTRACTOR SHALL NOTIFY ENGINEER IF THERE ARE CONFLICTS BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONSTRUCTION BEFORE PROCEEDING WITH WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXCAVATION SHORING TO PROTECT AND SUPPORT FOUNDATION UNDER EXISTING STRUCTURES.
8. THE STRUCTURES ARE DESIGNED FOR STABILITY IN THE FINAL CONDITION ONLY. PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED FOR STABILITY DURING CONSTRUCTION.
9. THE GENERAL NOTES AND TYPICAL DETAILS ARE GENERAL AND APPLY THE ENTIRE PROJECT EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY.

LOADING CRITERIA

1. **SUPERIMPOSED DEAD LOAD**
   A. ROOF.....NOT APPLICABLE
2. **LIVE LOADS**
   A. ROOF.....NOT APPLICABLE
3. **LATERAL LOADS**
   A. WIND LOADS
   - BASIC WIND SPEED: .....115 MPH
   - RISK CATEGORY: IV
   - EXPOSURE: .....B

   B. SEISMIC LOAD.....NOT APPLICABLE
4. **SNOW LOAD**.....NOT APPLICABLE

CAST-IN-PLACE CONCRETE

1. CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF ACI 301 AND ACI 318
2. PROVIDE CONCRETE (WITH TYPE IL CEMENT) HAVING THE FOLLOWING GENERAL CHARACTERISTICS:

CLASS	28-DAY STRENGTH (PSI)	SLUMP RANGE (IN)	MAX AGGREGATE SIZE (IN)	W/C RATIO	USAGE
A	4,000	3-5	1"	0.45 MAX	ALL FOOTINGS & INTERIOR SLAB ON GRADE

NOTE: THE READY MIX-CONCRETE SHOULD ARRIVE AT THE TARGET SLUMP AND THE CONTRACTOR SHOULD NOT BE ALLOWED TO ADD WATER TO THE MIXTURE.

3. MINIMUM STRENGTH FOR REMOVAL OF FORMS AND SHORING SHALL BE 75% OF SPECIFIED STRENGTH AT 28 DAYS.
4. EXCEPT AS OTHERWISE REQUIRED, ALL EXPOSED CONCRETE CORNERS AND EDGES SHALL HAVE 3/4" CHAMFERS.
5. NO ADMIXTURES SHALL BE USED WITHOUT APPROVAL. NO AIR ENTRAINMENT SHALL BE ALLOWED IN FLAT SLABS. ADMIXTURES CONTAINING CHLORIDES SHALL NOT BE USED. CONCRETE SHALL NOT BE IN CONTACT WITH ALUMINUM.
6. FLY ASH (POZZOLAN) IF PERMITTED SHALL NOT EXCEED 15% REPLACEMENT OF TOTAL CEMENT CONTENT USING A 1:1 REPLACEMENT FACTOR

REINFORCING STEEL

1. LATEST ACI CODE AND DETAILING MANUAL APPLY. ALL REINFORCING BARS DEFORMED UNLESS NOTED OTHERWISE.
2. ALL REINFORCING SHALL BE ASTM A-615 GRADE 60
3. CLEAR CONCRETE COVER TO REINFORCING ARE AS FOLLOWS:
4. CAST-IN-PLACE CONCRETE (NON-PRESTRESSED):
   A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.....3"
   B. EXPOSED TO EARTH OR WEATHER:
   - #6 AND LARGER.....2"
   - #5 AND SMALLER.....1 1/2"

   C. SLAB ON GRADE.....2" BELOW TOP OF SLAB
5. SLAB REINFORCING SHALL BE LAPPED A MINIMUM OF 16".
6. LAP REINFORCING BARS IN CONTINUOUS FOOTINGS 30 BAR DIAMETERS OR 24" MINIMUM. ALL HORIZONTAL REINFORCING IN CONTINUOUS FOOTINGS AND WALLS SHALL BE CONTINUOUS AROUND CORNERS OR HAVE CORNER BARS OF THE SAME SIZE AND SPACING AS THE HORIZONTAL BARS AND LAP A MINIMUM OF 30 BAR DIAMETERS OR 24" MINIMUM.
7. WHERE BARS ARE SHOWN SPLICED, THEY MAY RUN CONTINUOUS AT CONTRACTOR'S OPTION.

MASONRY

1. BLOCK UNITS: GRADE N-1, RUNNING BOND. PRISM STRENGTH = 1500 PSI. MORTAR TYPES, 1800 PSI. GROUT 2000 PSI. ALL CONSTRUCTION BELOW GRADE OR IN CONTACT WITH SOIL SHALL USE TYPE I-II CEMENT FOR MASONRY UNITS, GROUT AND MORTAR, OTHER CONDITIONS MAY BE TYPE II CEMENT. NO POZZOLAN WILL BE PERMITTED IN MORTAR.
2. MECHANICALLY VIBRATE GROUT IN VERTICAL CELLS IMMEDIATELY AFTER POURING AND AGAIN ABOUT 5 MINUTES LATER. MAXIMUM GROUT LIFT WITHOUT CLEANOUTS 5'-0". STAY EACH END OF EACH VERTICAL REBAR USING SINGLE WIRE AND LOOP TYPE TIES. MAXIMUM VERTICAL SPACING OF TIES 8'-0".
3. SEE FOUNDATION SHEET S2 FOR EXPANSION OR CONTROL JOINTS. LOCATE AT 25 FEET MAXIMUM O.C., BUT NOT LESS THAN 2'-0" FROM A BEARING PLATE OR FROM A JAMB OF AN OPENING WIDER THAN 4'-0".
4. MASONRY WALLS TO BE PARTIALLY GROUTED, GROUT REQUIRED: IN CELLS WITH REINFORCING, BOND BEAMS, LINTELS, AROUND EMBEDS AND OTHER LOCATIONS SPECIFICALLY CALLED FOR ON PLANS.
5. 8" WALL VERTICAL REINFORCING: LOCATE REINFORCING IN CENTER OF GROUT, AT CENTER OF WALL, CONTINUOUS FULL HEIGHT OF WALL AS FOLLOWS:
   A. (1) #5 AT ALL CORNERS, INTERSECTIONS, WALL ENDS, JAMBS, UNDER LINTELS, AND EACH SIDE OF EXPANSION OR CONTROL JOINTS.
   B. AS INDICATED IN THE DRAWINGS.
6. HORIZONTAL REINFORCING: (2) #5 BARS AT TOP OF WALLS.
7. WALLS NOTED ON PLANS AS "SOLID GROUTED" SHALL HAVE #4 HORIZONTAL REINFORCING AT 40" MAXIMUM (LADDER TYPE JOINT REINFORCEMENT NOT REQUIRED). PROVIDE (1) #6 BOND BEAMS AT FLOOR, ROOF AND TOP OF WALLS AND PARAPETS.
8. PROVIDE 1- #5 IN BED JOINT IMMEDIATELY BELOW OPENINGS IN BEARING WALLS, EXTENDING 24" BEYOND EACH JAMB, FOR ALL OPENINGS EXCEEDING 2'-0" IN SIZE.
9. WEDGE AND SLEEVE TYPE ANCHORS SHALL NOT BE PERMITTED IN MASONRY CONSTRUCTION WITHOUT PRODUCT ICC REPORT AND PREAPPROVAL.
10. LINTELS: OPEN END BLOCKS SHALL BE USED AT ALL SOLID GROUTED LINTEL SECTIONS. FOR REINFORCEMENT AND ADDITIONAL INFORMATION, SEE LINTEL SCHEDULE DETAIL.
11. MASONRY REINFORCING SHOP DRAWINGS SHALL BE PROVIDED TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

STRUCTURAL STEEL

1. FOR ALL STRUCTURAL STEEL FABRICATION AND CONSTRUCTION LATEST AISC HANDBOOKS AND CODES SHALL APPLY. ALL STEEL FABRICATION IS REQUIRED TO BE COMPLETED BY AN APPROVED STEEL FABRICATOR RECOGNIZED BY THE BUILDING DEPARTMENT.
2. PREFERRED SPECIFICATIONS PER AISC:

   STEEL

WIDE FLANGE MEMBERS	ASTM A992 - GRADE 50
C, MC CHANNEL MEMBERS	ASTM A992 - GRADE 50
STEEL PIPE	ASTM A53 - GRADE 50
STEEL TUBE	ASTM A500 - GRADE C - 50 KSI
OTHER STEEL SHAPES	ASTM A572 - GRADE 50
STEEL PLATE	ASTM A36 - 36 KSI

3. ANCHOR BOLTS, ASTM F1554 GRADE 36 UNO; HIGH STRENGTH BOLTS, A-325-X OR A-325- SC PER SCHEDULES. MINIMUM EMBEDMENT OF ALL BOLTS IN GROUT OR CONCRETE SHALL BE 8" INCLUDING BOLT HEAD OR 5" WITH A STD HOOK. WELDED ANCHORS AND SHEAR CONNECTORS SHALL BE ICC APPROVED.
4. UNLESS OTHERWISE NOTED MINIMUM CONNECTION SHALL BE: (2) 3/4" DIAMETER BOLTS OR 3/16" FILLET WELD 4" LONG, USING 1/4" CONNECTION MATERIAL AND DETAILED TO MINIMIZE BENDING IN THE CONNECTION.

WELDING

1. ALL CONSTRUCTION AND TESTING PER AMERICAN WELDING SOCIETY CODES AND RECOMMENDATIONS. ALL WELDING SHALL BE BY WELDERS HOLDING CURRENT VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN TYPE OF WELD CALLED FOR. WELDING RODS TO BE LOW HYDROGEN TYPE, E70 FOR STRUCTURAL STEEL AND E60 FOR METAL DECK AND LIGHT GAGE STEEL STUDS.
2. ALL BUTT WELDED SPLICES IN MATERIAL THICKER THAN 5/16" SHALL BE INSPECTED BY AN INDEPENDENT TESTING LABORATORY, TO CERTIFY CONNECTION AS MEETING OR EXCEEDING STRENGTH OF MATERIALS SPLICED.
3. ALL WELDING OF STRUCTURAL STEEL SHALL CONFORM TO THE "STRUCTURAL WELDING CODES-STEEL" AWS D1.1, CURRENT EDITION.
4. ALL WELDING OF LIGHT GAGE STEEL STUDS AND STEEL DECK SHALL CONFORM TO THE "STRUCTURAL WELDING CODES-SHEET STEEL" AWS D1.3, CURRENT EDITION.
5. WELDS INDICATED MAY BE MADE IN SHOP OR FIELD WITH APPROVAL.

STRUCTURAL OBSERVATIONS

1. JOB SITE OBSERVATIONS BY THE PROFESSIONAL ENGINEER OR HIS AUTHORIZED REPRESENTATIVE SHALL CONSIST OF VISUAL OBSERVATION OF MATERIALS, EQUIPMENTS OR CONSTRUCTION WORK FOR THE PURPOSE OF ASCERTAINING THAT THE WORK IS IN SUBSTANTIAL CONFORMANCE WITH THE CONTRACT DOCUMENTS AND WITHIN THE DESIGN INTENT. SUCH OBSERVATIONS SHALL NOT BE RELIED UPON BY OTHERS AS ACCEPTANCE OF THE WORK, NOR SHALL IT BE CONSTRUCTED TO RELIEVE THE CONTRACTOR IN ANY WAY FROM HIS OBLIGATIONS AND RESPONSIBILITY UNDER THE CONSTRUCTION CONTRACT. SPECIFICALLY BUT WITHOUT LIMITATIONS, OBSERVATIONS BY THE DESIGN PROFESSIONAL SHALL NOT REQUIRE THE DESIGN PROFESSIONAL TO ANSWER RESPONSIBILITY FOR THE MEANS AND METHODS OF CONSTRUCTION, NOR FOR SAFETY ON THE JOB SITE.
2. NOTIFY ENGINEER 48 HOURS IN ADVANCE WHEN A STRUCTURAL OBSERVATION IS REQUIRED. NOTIFY THE ENGINEER FOR THE FOLLOWING ITEMS:
   2.1 BEFORE PLACEMENT OF CONCRETE FOR FOUNDATIONS AND SLAB.
   2.2 AFTER FRAMING OF ROOF STRUCTURE BUT BEFORE PLACEMENT OF ROOFING MATERIAL.

SHOP DRAWINGS & SUBMITTALS

1. SHOP DRAWINGS SHALL BE PREPARED AND SUBMITTED FOR REVIEW TO THE STRUCTURAL ENGINEER FOR EACH STRUCTURAL BUILDING MATERIAL AS INDICATED IN THE STRUCTURAL GENERAL NOTES AND THE CONTRACT SPECIFICATIONS. SEE THE CONTRACT SPECIFICATION FOR SUBMITTAL PROCEDURE AND ADDITIONAL INFORMATION.
2. SHOP DRAWINGS SHALL USE DRAFTING LINE WORK AND LETTERING THAT IS CLEARLY LEGIBLE. SHOP DRAWINGS SHALL NOT CONTAIN REPRODUCTIONS OF THE CONTRACT DRAWINGS PLANS OR DETAILS.
3. SHOP DRAWINGS SHALL SHOW CLEAR AND COMPLETE INFORMATION FOR THE FABRICATION (DETAIL SHEETS AND/OR MATERIAL LIST) AND INSTALLATION.
4. ALLOW A MINIMUM OF (2) WEEKS FOR REVIEW OF EACH SET OF SHOP DRAWINGS.
5. THE CONTRACTOR SHALL REVIEW THE SHOP DRAWINGS SUBMITTED BY THE SUBCONTRACTOR AND COORDINATE SHOP DRAWINGS WITH ALL OTHER TRADES.
6. THE CONTRACTOR SHALL ANSWER ALL QUESTIONS OR CLARIFICATIONS BY THE SUBCONTRACTOR BEFORE SUBMITTING TO THE ENGINEER FOR REVIEW. ANY QUESTIONS THAT THE CONTRACTOR CANNOT ANSWER WITH THE INFORMATION ON THE DRAWINGS SHALL CLEARLY BE MARKED FOR THE ENGINEER FOR REVIEW.
7. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS, SEE NOTE 3 & 6 UNDER GENERAL NOTES.
8. REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS FOR GENERAL CONFORMANCE TO THE STRUCTURAL DRAWINGS. APPROVAL OF THE SHOP DRAWINGS BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR FOR ANY ERRORS IN DIMENSIONS OR MATERIALS INDICATED ON THE SHOP DRAWINGS.

STRUCTURAL MODIFICATIONS AND REPAIR

1. REFER TO AS-BUILT DRAWINGS AND SHOP DRAWINGS (IF AVAILABLE) OF THE EXISTING STRUCTURE FOR CONSTRUCTION WORK ASSOCIATED WITH THE EXISTING STRUCTURES. AS-BUILT CONDITIONS AND DIMENSIONS MUST BE FIELD VERIFIED BY CONTRACTOR.
2. ALL DEMOLITION, REMOVAL AND CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED WITH CONSIDERATION FOR EXISTING FACILITIES STRUCTURES, EQUIPMENTS, ETC.
3. UNLESS OTHERWISE NOTED ON PLANS, CUTTING EXISTING REINFORCING DUE TO DOWELS DRILLING, PIPING, CONDUITS OR OTHER PENETRATION THROUGH EXISTING CONCRETE STRUCTURE IS PROHIBITED. CONTRACTOR SHALL IDENTIFY EXISTING REINFORCING LOCATIONS BY NON-DESTRUCTIVE APPROACHES PRIOR TO DRILLING HOLES OR CUTTING OPENINGS.
4. EXISTING CONCRETE SURFACES THAT WILL COME IN CONTACT WITH NEW CONCRETE SHALL BE ROUGHENED TO 1/4" AMPLITUDE TO WITHIN 1" OF EDGE. BONDING AGENT SHALL BE APPLIED TO THE EXISTING CONCRETE SURFACES PRIOR TO THE NEW CONCRETE PLACEMENT.
5. ALL EXISTING CONDITIONS COULD NOT BE OBSERVED OR ACCOUNTED FOR. CONTRACTOR AND OWNER SHOULD ANTICIPATE SOME CHANGES WILL BE NECESSARY TO ACCOMMODATE UNFORSEEN EXISTING CONDITIONS. CONTIGENCIES SHOULD BE IN PLACE FOR THESE POSSIBILITIES.

SPECIAL INSPECTIONS

1. SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 17 OF THE IBC 2021 (INTERNATIONAL BUILDING CODE 2021) BY A SPECIAL INSPECTOR HIRED BY THE OWNER TO PERFORM THE SPECIAL INSPECTIONS LISTED BELOW. THE SPECIAL INSPECTOR SHALL BE QUALIFIED BY AN APPROVED AGENCY ACCORDING TO THE CITY'S BUILDING OFFICIAL TO PERFORM SPECIAL INSPECTIONS FOR WHICH THEY WILL BE UNDERTAKING. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS TO THE BUILDING OFFICIAL AND THE ARCHITECT. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN IF LEFT UNCORRECTED TO THE STRUCTURAL ENGINEER, ARCHITECT AND BUILDING DEPARTMENT.
2. WHEN INDICATED WITH A "X", THE FOLLOWING SHALL BE INSPECTED.

ITEM	REQ'D	REMARKS
CONCRETE - CONCRETE PLACEMENT	X	PERIODIC
CONCRETE - REBAR PLACEMENT	X	INSPECT FINAL PLACEMENT
CONCRETE - EXPANSION ANCHORS	X	PERIODIC
CONCRETE - EPOXY	X	PERIODIC
MASONRY - VERIFICATION OF PROPORTIONS OF SITE PREPARED MORTAR	X	PERIODIC
MASONRY - VERIFICATION OF MORTAR JOINT	X	PERIODIC
MASONRY - VERIFICATION OF LOCATION OF REBAR AND CONNECTORS	X	PERIODIC
MASONRY - SIZE AND LOCATION OF STRUCTURAL ELEMENTS	X	PERIODIC
MASONRY - SIZE AND LOCATION OF ANCHORS	X	PERIODIC
MASONRY - SIZE GRADE AND TYPE OF REBAR	X	PERIODIC
MASONRY - REBAR WELDING	X	PERIODIC
MASONRY - PROTECTION OF MASONRY DURING HOT (TEMPERATURE ABOVE 90 DEG.) AND COLD WEATHER (TEMPERATURE BELOW 40 DEG.)	X	PERIODIC
MASONRY - VERIFICATION OF CLEAN GROUT SPACE PRIOR TO GROUT PLACEMENT	X	PERIODIC
MASONRY - REBAR PLACEMENT	X	PERIODIC
MASONRY - GROUT PLACEMENT	X	PERIODIC
MASONRY - COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALE BE VERIFIED.	X	PERIODIC
STRUCTURAL STEEL, SHOP WELDING - FILLET WELDS PENETRATION WELDS	X	PERIODIC
STRUCTURAL STEEL, FIELD WELDING - PARTIAL OR FULL	X	CONTINUOUS

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STATE OF TEXAS
ROSS N. NIEMAN
6502
LICENSED PROFESSIONAL ENGINEER
09/05/2025

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602 INDIANA AVENUE
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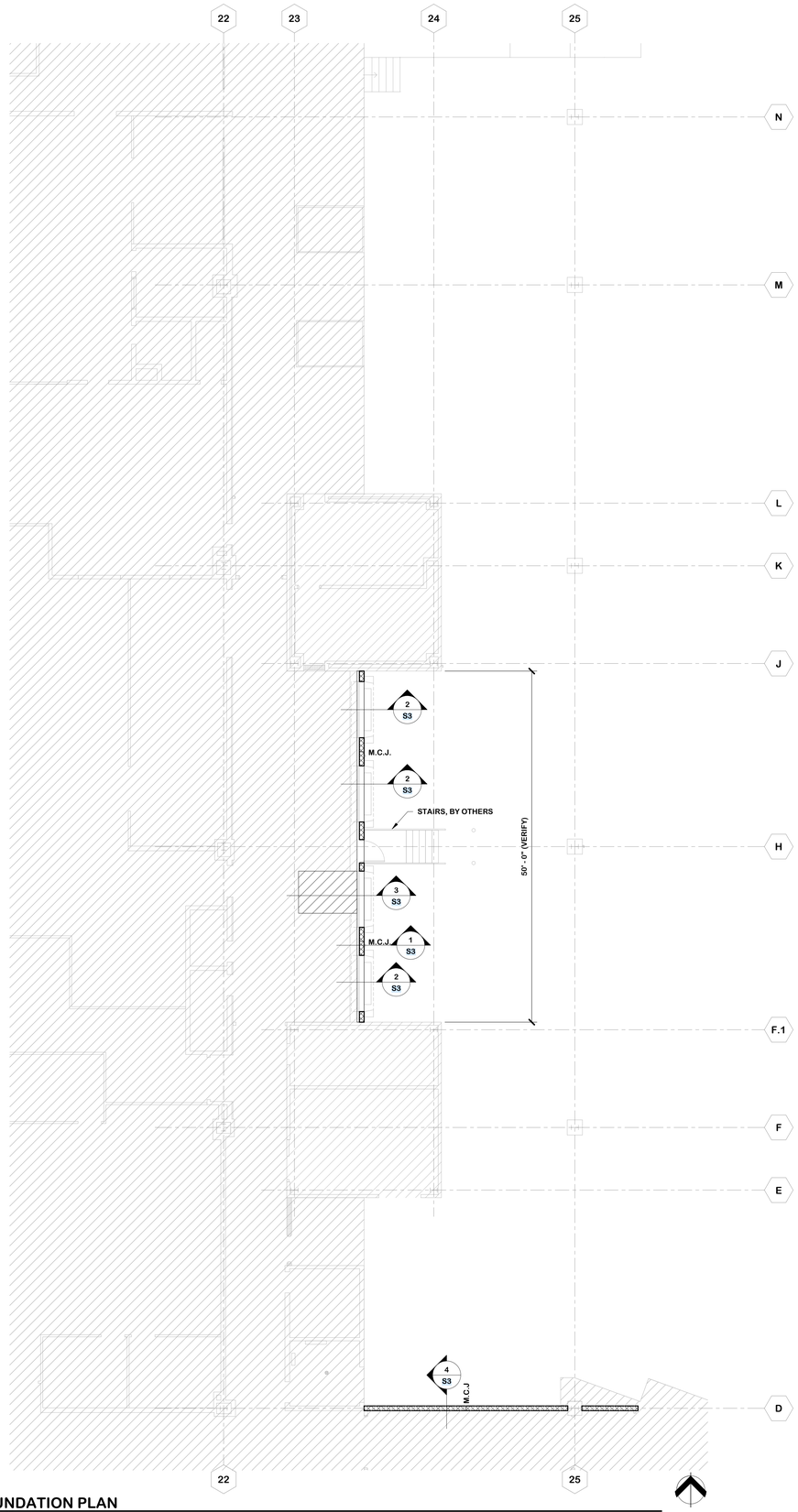
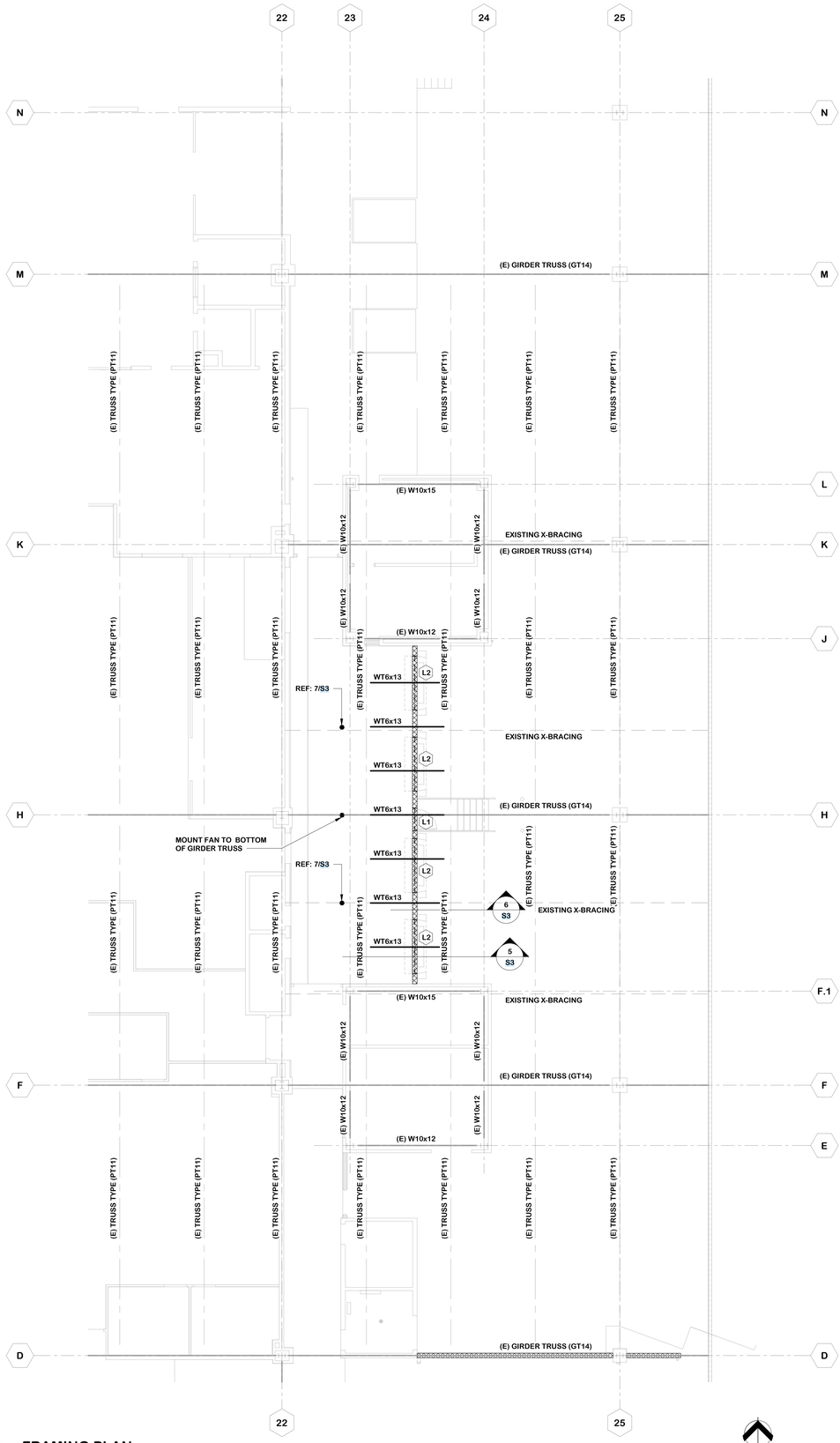
SHEET NO.
S1

1 OF 4



1 FOUNDATION PLAN

1/8" = 1'-0"



2 FRAMING PLAN

1/8" = 1'-0"

FOUNDATION NOTES

1. TOP OF EXISTING DOCK CONCRETE IS TAKEN AS ELEV = 100'-0".
2. M.C.J. = MASONRY CONTROL JOINT.

NORTH

NORTH

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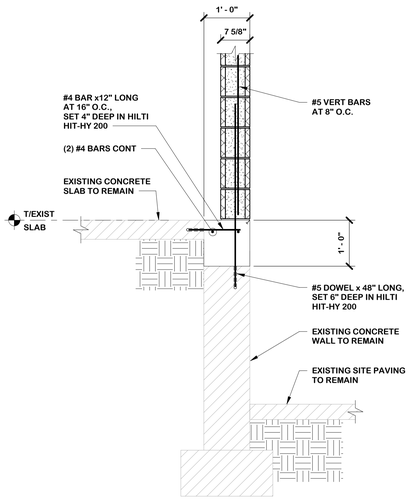
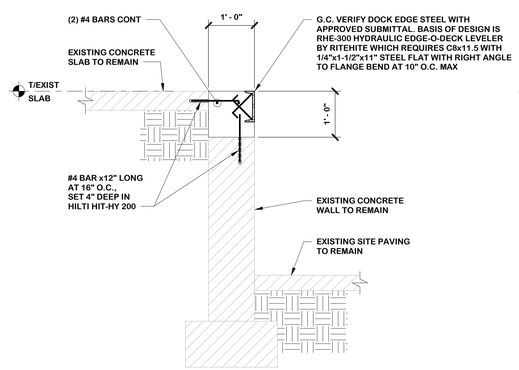
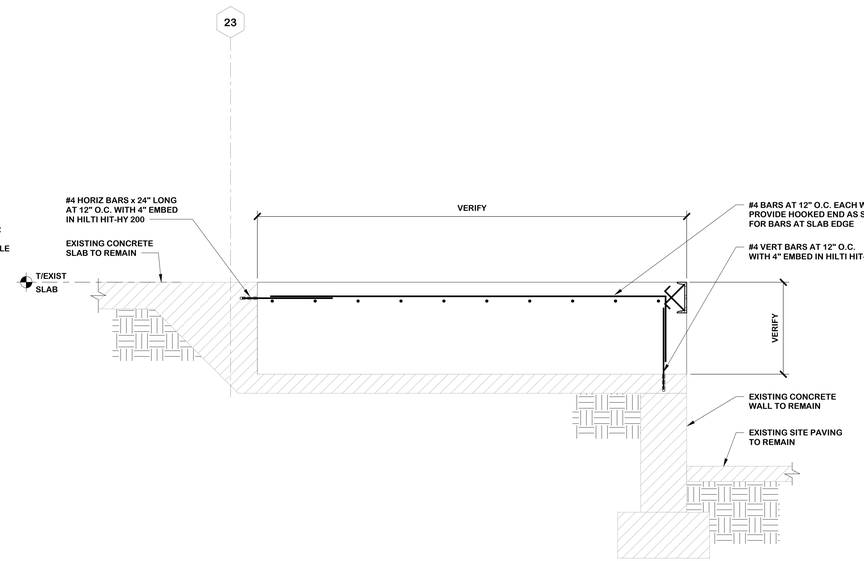
SHEET NO.
S2



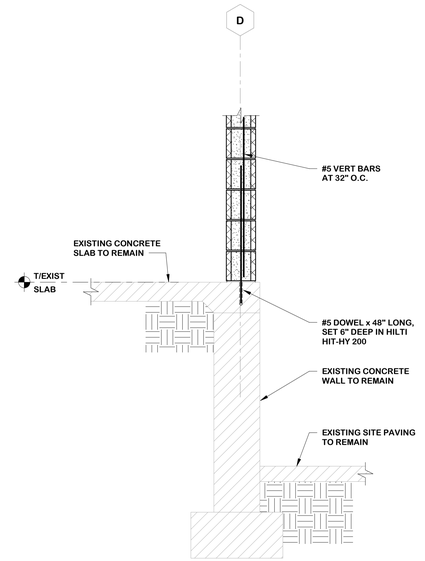
1 NEW CMU AT EXISTING DOCK WALL
3/4" = 1'-0"



2 NEW SLAB EDGE AT EXISTING DOCK WALL
3/4" = 1'-0"



3 NEW SLAB EDGE AT EXISTING DOCK WALL
3/4" = 1'-0"



4 NEW CMU WALL AT EXISTING DOCK WALL
3/4" = 1'-0"

5 FRAMING SECTION
3/4" = 1'-0"

6 FRAMING SECTION
3/4" = 1'-0"

7 STRUCTURE AT FAN MOUNTING LOCATIONS
3/4" = 1'-0"

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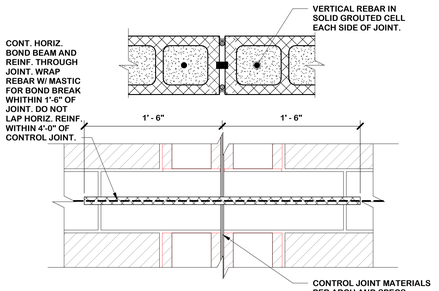
SHEET NO.
S3

3 OF 4



1 CMU CONTROL JOINT DETAIL

1 1/2" = 1'-0"

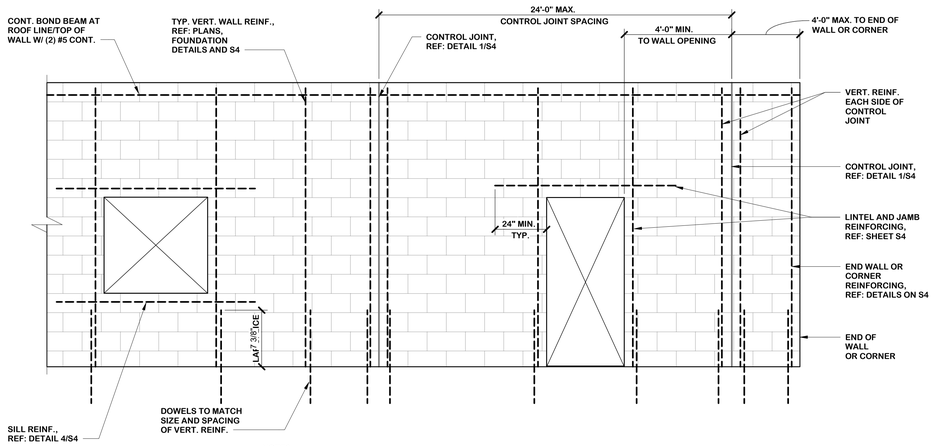
M400

LAP SPLICE LENGTHS				
BAR SIZE	LENGTHS (IN.)			
	SINGLE MAT		DOUBLE MAT	
	8" CMU		12" CMU	
	1500 PSI	2000 PSI	1500 PSI	2000 PSI
#3	18	18	18	18
#4	24	24	24	24
#5	30	30	30	30
#6	43	37	39	36
#7	59	51	49	43
#8	72	72	72	72
#9	81	81	81	81

1. LAP-SPLICE LENGTHS ARE CALCULATED PER IBC AND ACI 530
2. TABULATED VALUES ARE BASED ON GRADE 60 UNCOATED REINFORCING BARS.
3. FOR GRADE 40 REINFORCING BARS MULTIPLY THE TABULATED VALUES BY 0.67 (15" MIN. LAP).
4. MECHANICAL SPLICE REQUIRED FOR BARS GREATER THAN #9.

2 LAP-SPLICE FOR MASONRY REINFORCING

1 1/2" = 1'-0"



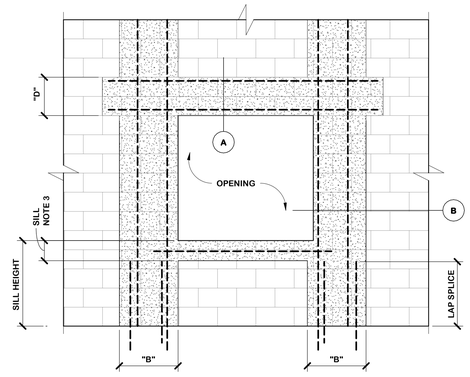
NOTES:

1. JAMB:
   1.1. FOR OPENING AT EXTERIOR WALL, EXTEND JAMB REINFORCING TO TOP OF WALL.
   1.2. FOR OPENING AT INTERIOR WALL, TERMINATE JAMB REINFORCING AT TOP OF LINTEL.
2. PROVIDE CONTROL JOINTS TO MEET SPACING REQUIREMENTS SHOWN AND AT LOCATIONS WHERE CHANGES IN WALL HEIGHT OCCUR, WHERE CHANGES IN WALL THICKNESS OCCUR, AND WHERE MOVEMENT JOINTS IN THE FLOOR ABOVE AND/OR BELOW OCCUR.
3. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS AT NON-LOADBEARING WALLS NOT SHOWN ON STRUCTURAL DRAWINGS.
4. SEE ARCHITECTURAL DRAWINGS FOR WALL OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS.

3 TYPICAL CMU WALL REINFORCING SCHEMATIC

1 1/2" = 1'-0"

CMU OPENING REINFORCING SCHEDULE							
8" WALLS							
MARK	"D"	HORIZ REINF	STIRRUPS	MIN. BRG	"B"	JAMB REINF.	JAMB TYPE
L1	16"	(1) #5, BOT.	N/A	0'-8"	8"	(1) #5 PER CELL	TYPE I
L2	24"	(1) #5, T ANDE	N/A	1'-4"	16"	(1) #5 PER CELL	TYPE I

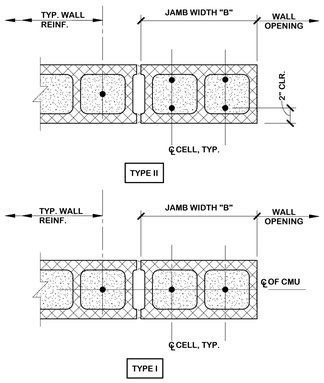


NOTES:

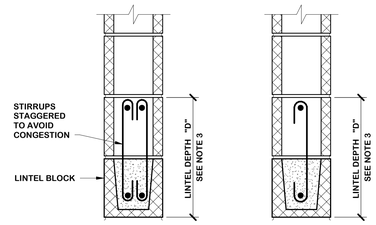
1. JAMB:
   1.1. FOR OPENING AT EXTERIOR WALL, EXTEND JAMB REINFORCING TO TOP OF WALL.
   1.2. FOR OPENING AT INTERIOR WALL, TERMINATE JAMB REINFORCING AT TOP OF LINTEL.
2. LINTEL:
   2.1. LINTELS SHALL BE CONSTRUCTED WITH U-BLOCKS AT THE BOTTOM AND DEPRESSED WEB BLOCKS ABOVE AND SHALL BE FULLY GROUTED.
   2.2. REINFORCING IN LINTELS SHALL EXTEND 48 BAR DIAMETERS OR 2'-0" MINIMUM EACH SIDE OF THE OPENINGS.
   2.3. SHORE LINTEL UNTIL GROUT REACHES DESIGN STRENGTH.
3. SILL:
   3.1. OPENING WIDTH < OR EQUAL TO 6'-0" AND SILL HEIGHT < OR EQUAL TO 3'-0": SILL REINFORCING NOT REQUIRED.
   3.2. OPENING WIDTH > 6'-0" OR SILL HEIGHT > 3'-0": PROVIDE REINFORCED LINTEL ACCORDING TO SCHEDULE.
4. MASONRY WALL CONTROL JOINTS SHALL NOT OCCUR WITHIN OR BETWEEN REINFORCED JAMB CELLS OR AT LINTEL.

4 CMU WALL REINFORCING SCHEDULE

1 1/2" = 1'-0"



B TYPICAL CMU JAMB SECTION



A TYPICAL CMU LINTEL SECTION

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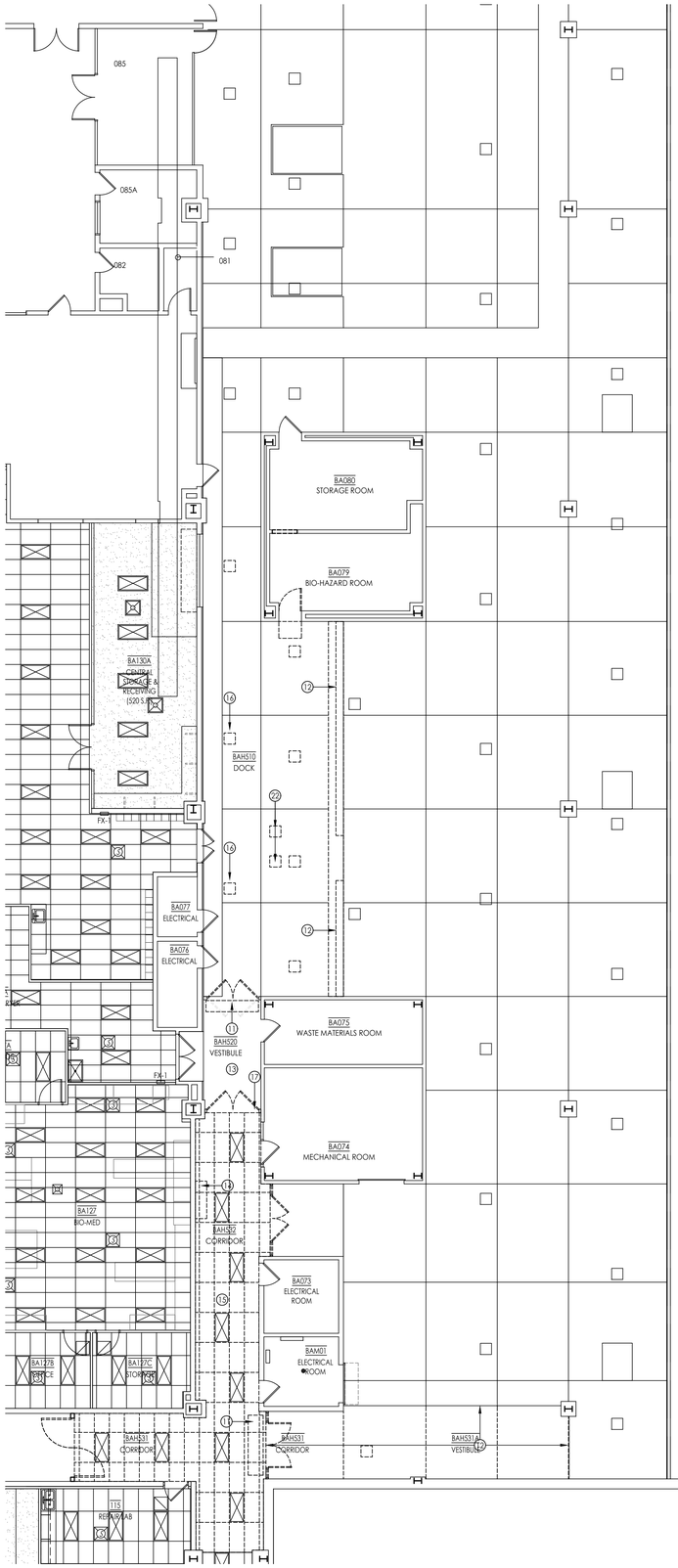
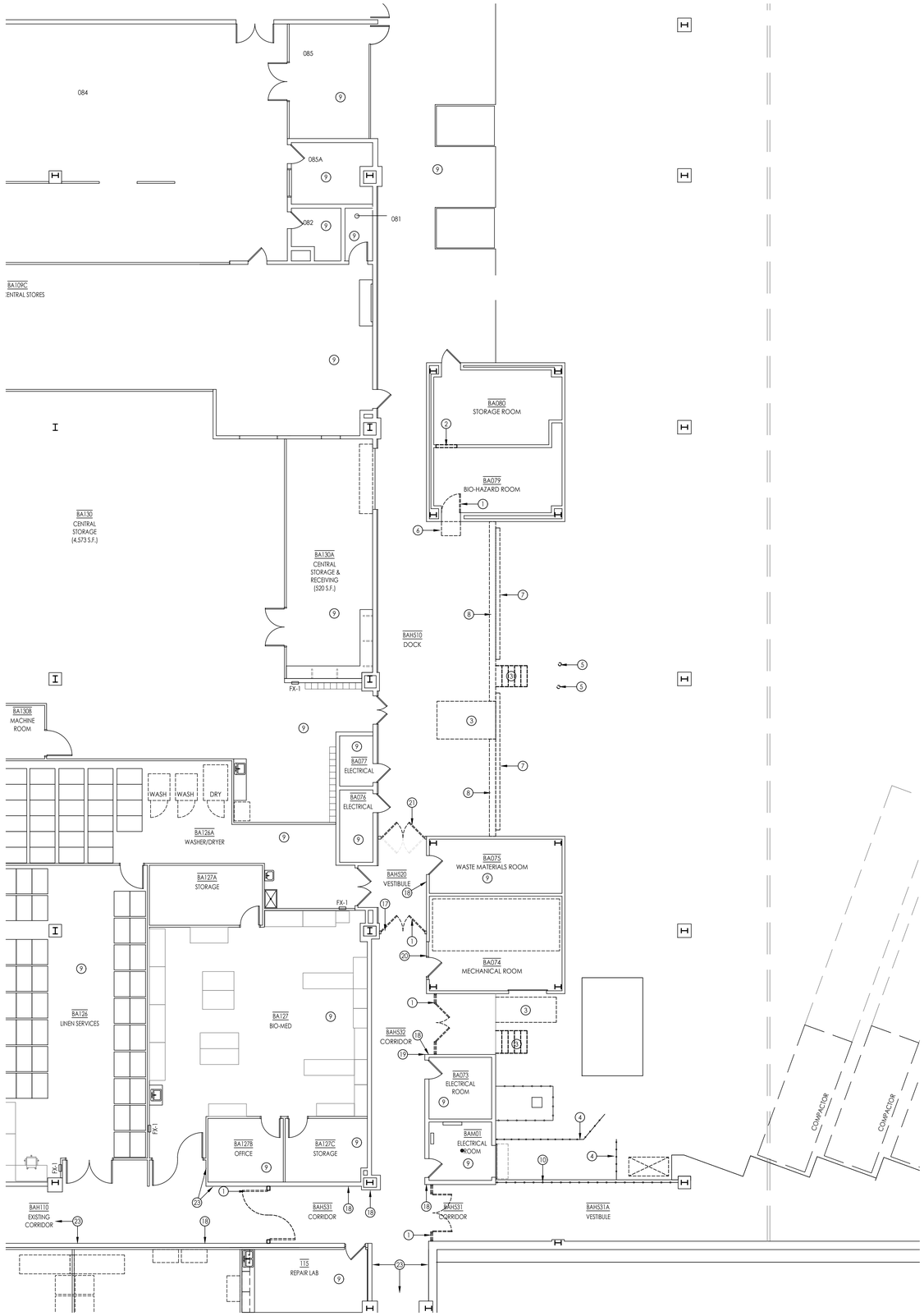
SHEET NO.
S4

4 OF 4





GENERAL NOTES

1). REFER TO MPE, LANDSCAPE, AND CIVIL SHEETS, WHERE APPLICABLE, FOR ADDITIONAL DEMOLITION INFORMATION.

2). ON ALL WALLS SCHEDULED TO REMAIN TO BE REWORKED OR RECEIVE NEW FINISH, CONTRACTOR SHALL REMOVE ANY EXISTING EQUIPMENT, DECORATIONS, DEVICES, ETC., AND SALVAGE FOR REINSTALLATION AS DIRECTED BY OWNER. CONTRACTOR IS TO PATCH BACK ANY HOLES OR ABANDONED ANCHORS AND RETEXTURE WALLS IF NECESSARY, AND PREP FOR NEW FINISH AS SCHEDULED.

3). NOTIFY ARCHITECT OF ANY DISCREPANCIES WITH EXISTING OR NEW CONDITIONS.

4). CONTRACTOR SHALL PATCH AND REPAIR WALLS, FLOOR, AND CEILINGS AT ALL INTERSECTIONS WHERE WALLS ARE REMOVED OR WHERE DEVICES, EQUIPMENT, ACCESSORIES, ETC., ARE REMOVED. PREP WALLS TO RECEIVE NEW FINISH. NEW CONSTRUCTION SHOULD MATCH ADJACENT FINISHES AND MATERIALS AND PROVIDE SMOOTH AND COMPLETE TRANSITION.

5). ALL ITEMS INDICATED TO BE SALVAGED ARE TO BE VERIFIED WITH THE OWNER. IF OWNER DECLINES SALVAGE, CONTRACTOR SHALL REMOVE ITEMS FROM THE SITE AND DISPOSE OF THEM PROPERLY.

6). ALL ABANDONED PIPING, CONDUIT, WIRING, ETC. IS TO BE REMOVED BACK TO THE SOURCE, I.E. FURTHER JOINT WHERE NOTHING ELSE IS SERVED OFF OF THE SAME FEED.

KEYED NOTES

DESIGNATED BY: (#)

1. REMOVE EXISTING DOOR(S), FRAME, AND SURROUNDING WALL IN ITS ENTIRETY.
2. REMOVE A PORTION OF THE EXISTING WALL TO ACCOMMODATE NEW WORK. REFER TO NEW PLANS.
3. REMOVE EXISTING EQUIPMENT. PATCH BACK AS SCHEDULED.
4. REMOVE EXISTING FENCING AND GATE.
5. REMOVE EXISTING STEEL BOLLARD
6. REMOVE EXISTING CONCRETE RAMP.
7. REMOVE EXISTING DOCK BUMPERS.
8. REMOVE EXISTING METAL EDGE TRIM & CONCRETE 12" BACK, 8" DEEP TO ACCOMMODATE REMOVAL OF ANCHOR BOLTS. PATCH BACK EDGE OF DOCK TO ACCOMMODATE NEW CMU WALL. REFER TO STRUCTURAL.
9. NO WORK IN THIS AREA.
10. REMOVE EXISTING GUARDRAILS.
11. REMOVE AIR CURTAIN. REFER TO MPE. PATCH BACK HOLES IN WALLS.
12. REMOVE STUCCO SOFFIT CEILING AND SUSPENSION SYSTEM IN THIS AREA TO ACCOMMODATE NEW WORK. ENSURE REMAINING SYSTEM OUTSIDE OF THIS AREA REMAINS SECURED AND SUPPORTED TO STRUCTURE ABOVE.
13. REMOVE HARD CEILING AND SUSPENSION SYSTEM.
14. REMOVE EXISTING HEATER UNIT TO BE RELOCATED. REFER TO MPE.
15. REMOVE EXISTING LAY-IN CEILING AS NOTED. LIGHTS SCHEDULED TO REMAIN.
16. REMOVE EXISTING LIGHT FIXTURES AND PATCH BACK STUCCO SOFFIT TO MATCH EXISTING.
17. REMOVE WALL/FRAMING UP TO WITHIN 4" OF LOWER LAY-IN CEILING. WRAP THE BOTTOM OF THE WALL WITH PAINTED STEEL TRIM AS INDICATED.
18. REMOVE ABANDONED DOOR CONTROLS/EQUIPMENT. PATCH HOLES IN WALLS.
19. REMOVE EXISTING WALL COVERINGS AND PATCH BACK DAMAGED WALL. PREP FOR NEW FINISHES AS SCHEDULED.
20. REPAIR DAMAGED DOOR FRAME (BENT) AND DAMAGED WALL. OPEN UP THE WALL AND INSTALL NEW SUPPLEMENTAL METAL STUD FRAMING AND REPLACE GYPSUM BOARD WITH NEW ABUSE-RESISTANT GYPSUM BOARD. PREPARE WALL SURFACE FOR NEW SCHEDULED FINISHES.
21. REPAIR EXISTING SWINGING DOORS AND REPAIR/PREP FRAME FOR NEW DOORS AS SCHEDULED.
22. REMOVE EXISTING MECHANICAL GRILLES AND PATCH BACK STUCCO SOFFIT. CLEAN SURROUNDING MATERIAL AND PREP FOR NEW PAINTED FINISH. REFER TO MPE.
23. REMOVE ALL EXISTING WALL PROTECTION PANELING/WALL BASE/WALL BUMPERS/ETC. DOWN THIS CORRIDOR TO DOUBLE EGRESS DOORS AND PREP WALLS TO RECEIVE FINISHES AS SCHEDULED. REFER TO ID SHEETS FOR EXTENT OF NEW FINISHES.

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SHEET NO.
A1
1 OF 3

40/A1 DEMOLITION REFLECTED CEILING PLAN

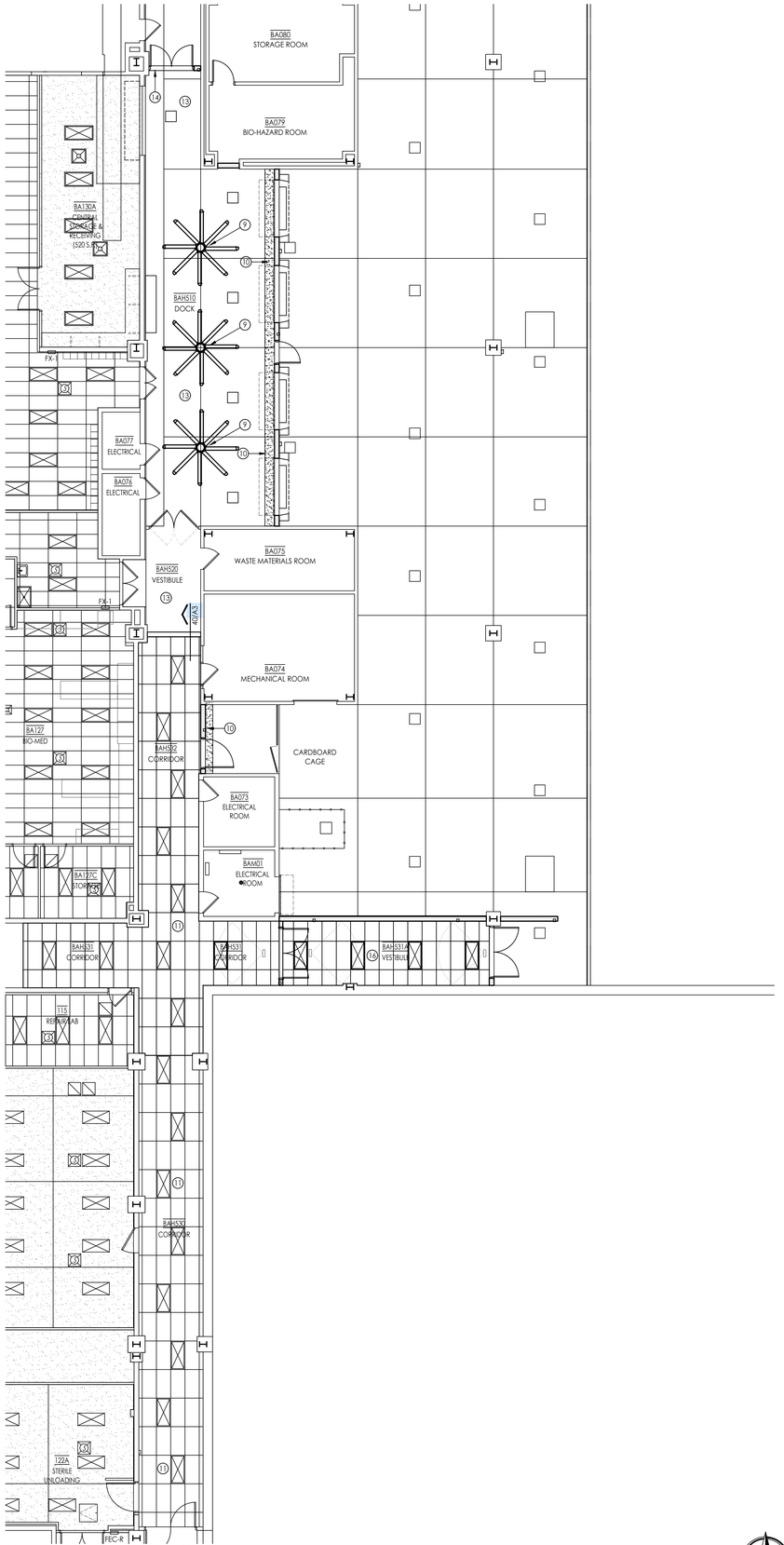
SCALE: 1/8" = 1'-0"

NORTH

25/A1 DEMOLITION FLOOR PLAN

SCALE: 1/8" = 1'-0"

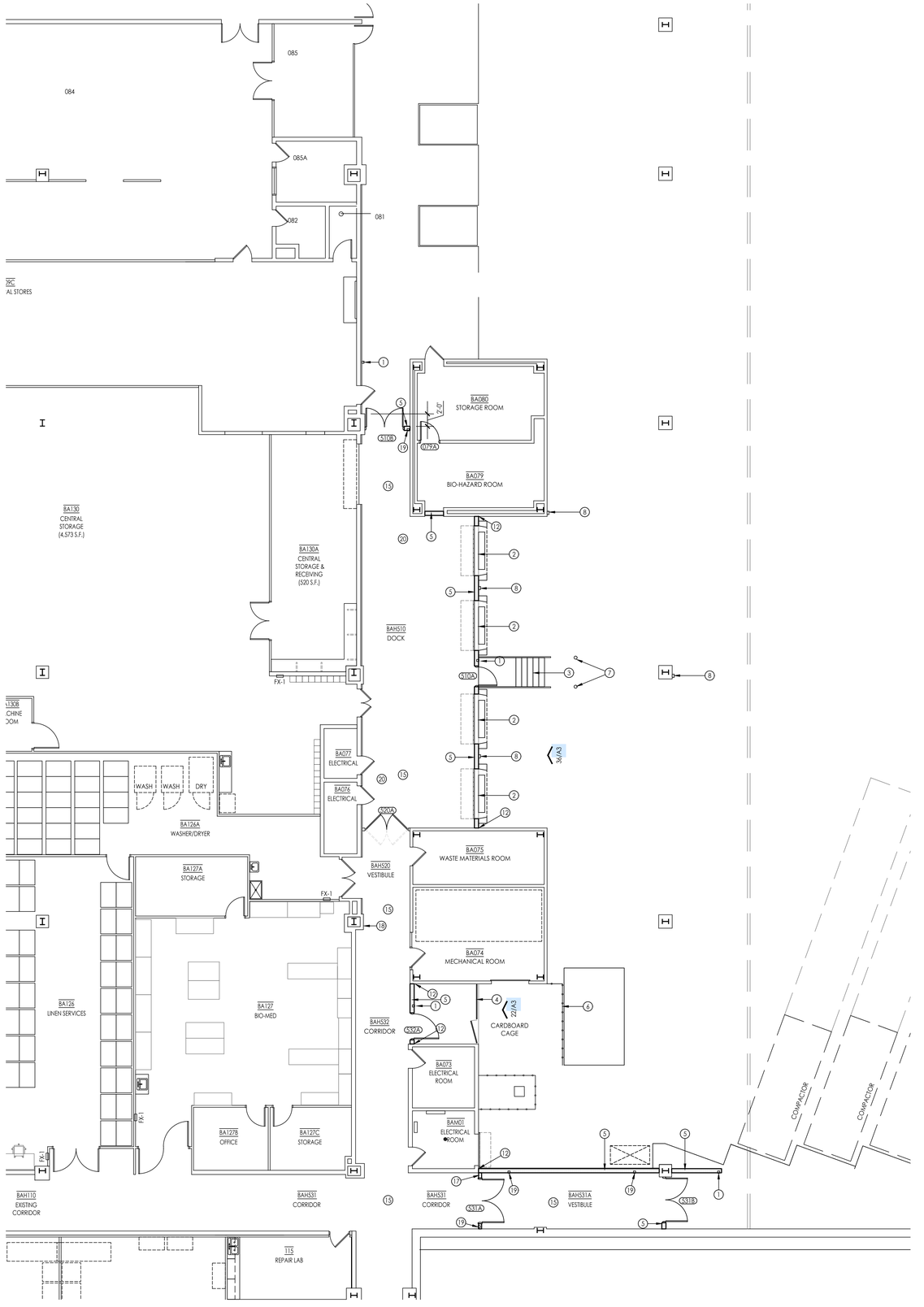
NORTH



40/A2 REFLECTED CEILING PLAN

SCALE: 1/8" = 1'-0"

NORTH



25/A2 ANNOTATED FLOOR PLAN

SCALE: 1/8" = 1'-0"

NORTH

GENERAL NOTES

1). ON ALL WALLS SCHEDULED TO REMAIN. PATCH ANY EXISTING HOLES, CRACKS, OR OTHERWISE DAMAGED AREAS AND RE-TEXTURE AND PAINT AS SCHEDULED.

2). THE STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS ARE SUPPLEMENTARY TO THE ARCHITECTURAL DRAWINGS. SHOULD THERE BE A DISCREPANCY BETWEEN THE ARCHITECTURAL DRAWINGS AND THE CONSULTANT DRAWINGS, SUCH DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND THE CONTRACTOR SHALL RECEIVE INSTRUCTION PRIOR TO INSTALLATION OR PERFORMANCE OF SAID WORK. ANY WORK PERFORMED IN CONFLICT WITH THE DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE.

3). REFER TO PROJECT MANUAL FOR ROOM FINISH SCHEDULE.

4). ALL NEW WALLS TO RECEIVE FULL BATT INSULATION FROM FLOOR TO THE FULL HEIGHT OF THE WALL, INCLUDING ABOVE CEILING.

5). ALL WALLS ARE TO BE PARTITION TYPE 'P1' UNLESS NOTED OTHERWISE.

6). CONTRACTOR SHALL PATCH BACK ANY DISTURBED DIRECT-APPLIED FIREPROOFING IN THE AREA REQUIRED FOR NEW CONSTRUCTION. MATCH REQUIRED APPLIED THICKNESS TO MAINTAIN PROPER RATING OF STRUCTURAL COMPONENTS.

KEYED NOTES

DESIGNATED BY: —(#)

1. TAP BADGE ACCESS PANEL. (FLUSH MOUNTED AT NEW WALL LOCATIONS).
2. NEW MOTORIZED 8'-0" X 8'-0" OVERHEAD COILING DOOR AS SPECIFIED. NEW DOCK SEALS (EQUAL TO RITEHITE PERFORMER SERIES), BUMPERS, AND HYDRAULIC DOCK LEVELER (EQUAL TO RITEHITE RHE-300 EDGE-O-DOCK).
3. PREFABRICATED ALUMINUM. STAIR AND PLATFORM WITH GUARDRAILS AND HANDRAILS. 60" x 72" LANDING PLATFORM WITH 48" CLEAR STAIR WIDTH. (EQUAL TO UPSIDE INNOVATIONS APEX SYSTEM).
4. GALVANIZED STEEL GATE AND GUARDRAIL. REFER TO ELEVATION.
5. 8" CMU WALL, FINISHED AS SCHEDULED ON INTERIOR. PAINT ALL EXTERIOR SURFACES WITH TWO COATS OF ROMABIO TEXTURED MASONRY PAINT. SUBMIT COLOR TO MATCH EXISTING TO ARCHITECT FOR APPROVAL.
6. NEW 7' GALVANIZED 2" x 9 GA. CHAIN LINK FENCE. SET SCHEDULE 40 FENCE POSTS AT 3'-0" O.C. MAX WITH FOUR BOLT SURFACE MOUNTED SLEEVE MOUNTS WITH 4' EMBEDMENT WEDGE OR EPOXY ANCHORS.
7. NEW 6" STEEL, BOLT DOWN BOLLARDS AS SCHEDULED.
8. NEW DOCK COMMUNICATIONS LIGHTS EQUAL TO RITEHITE TRAFFIC STYLE LIGHT COMMUNICATION SYSTEM WITH THREE-POSITION TOGGLE SWITCH INSIDE CONTROLS. PROVIDE WITH APPLICABLE INTERIOR AND EXTERIOR INSTRUCTIONS SIGNS
9. OWNER PURCHASED, CONTRACTOR INSTALLED - 10' BIG ASS FAN. REFER TO ELECTRICAL AND STRUCTURAL.
10. PATCH BACK STUCCO SOFFIT CEILING, FINISH AS SCHEDULED.
11. IN EXISTING CORRIDORS, (WEST TO PATCH BACK WHERE WALL AND DOORS WERE REMOVED AND SOUTH TO EXISTING DOUBLE EGRESS DOORS) INSTALL NEW VINYL COATED CEILING TILE AS SCHEDULED. RE-SUPPORT EXISTING CEILING GRID TO ENSURE SUPPORT AT 4' O.C.E.W. AND REPLACE ANY DAMAGED COMPONENTS.
12. PATCH ADJACENT CMU AND CONCRETE WALLS AT EXTERIOR OF BUILDING. PAINT WALLS BACK TO NEAREST OUTSIDE CORNER. INSTALL 3/4" EXPANSION JOINT WITH BACKER ROD AND SEALANT ON BOTH SIDES OF NEW CMU WALL INFILL. PRIME AND PAINT NEW CMU WALL AS SCHEDULED AND/OR TO MATCH EXISTING AT EXTERIOR.
13. CLEAN ALL EXISTING STUCCO SOFFIT INSIDE THE NEW INTERIOR SPACE AND PREPARE FOR NEW PAINTED FINISH. SMOOTH OUT ANY ROUGH OR PATCHED IN AREAS FOR A UNIFORM, FLAT, TEXTURED SURFACE. USE APPROPRIATE PRIMER AND PAINT ALL SURFACES INCLUDING ACCESS DOORS/PANELS.
14. CUT AND REWORK CEILING DUCT ACCESS PANELS ON EITHER SIDE OF NEW WALL. PROVIDE NEW ATTACHMENTS ON EITHER SIDE. IF PANELS ARE NOT ABLE TO BE MODIFIED AS-IS, PROVIDE NEW PANELS TO MATCH EXISTING AND SIZED APPROPRIATELY FOR THE SPACE.
15. USE A MECHANICALLY ABRASIVE PROCESS TO PREPARE THE SLAB FOR NEW EPOXY FLOORING. ALL SURFACES SHOULD BE THOROUGHLY CLEANED, SHOT BLASTED, AND LEVELED TO PROVIDE UNIFORM SURFACE FOR NEW EPOXY FLOORING SYSTEM. REFER TO ID SHEETS FOR LIMITS OF NEW FLOORING. TIE INTO EXISTING FLOORING SYSTEMS CLEANLY WHERE APPROPRIATE.
16. NEW CEILING GRID AND VINYL COATED GYPSUM CEILING TILES AS SCHEDULED. INSTALL TO MATCH EXISTING CORRIDOR HEIGHT OR HIGHER IF ABLE.
17. 6" METAL STUD FRAMED WALL TO STRUCTURE ABOVE WITH 5/8" FIBER-FACED GYPSUM BOARD ON EACH SIDE. FINISH AS SCHEDULED.
18. FLUSH OUT WALL WITH BACKER PANEL FOR SMOOTH FINISH TRANSITION TO WALL TILE.
19. FLUSH MOUNTED WAVE-TO-OPEN CONTROLLER FOR DOOR POWER OPERATORS. INSTALL CONDUIT AND BACKBOX INSIDE CMU WALL WHERE APPLICABLE.
20. CLEAN ALL INTERIOR CONCRETE AND TILE WALLS AND PREP AND REPAINT ALL EXISTING STEEL DOORS AND FRAMES.

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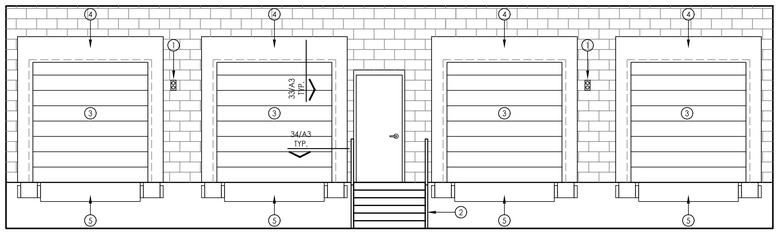
SHEET NO.
A2

2 OF 3



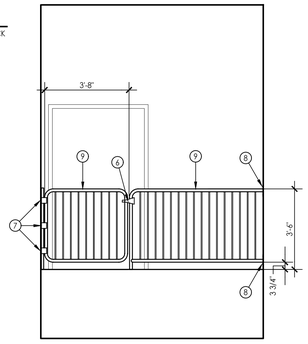
36/A3 ELEVATION

SCALE: 1/4" = 1'-0" LOADING DOCK

KEYED NOTES

DESIGNATED BY: ⟵○

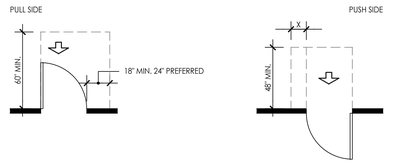
1. DOCK LIGHTS AS SCHEDULED.
2. PREFAB STAIR PLATFORM WITH GUARDRAILS AND HANDRAILS.
3. MOTORIZED OVERHEAD COILING DOOR. 8'-0" X 8'-0".
4. DOCK SEAL EQUAL TO RITEHITE PERFORMER SERIES DOCK SEAL.
5. DOCK BUMPERS AND LEVELER AS SCHEDULED.
6. GATE LATCH
7. GATE HINGES
8. ANCHOR BOLTED GATE PLATE
9. GALVANIZED STEEL GUARDRAIL. 1 1/2" GALVANIZED STEEL PIPE FRAME WITH 1/2" DIAMETER VERTICAL RODS SPACED 4" O.C.



22/A3 ELEVATION

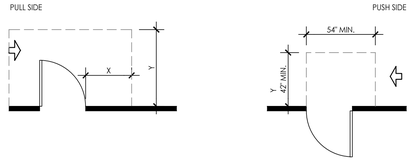
SCALE: 3/8" = 1'-0" CARDBOARD CAGE

REQUIRED MINIMUM MANEUVERING CLEARANCES AT DOORS



NOTE: X = 12 IN. IF DOOR HAS BOTH A CLOSER AND A LATCH

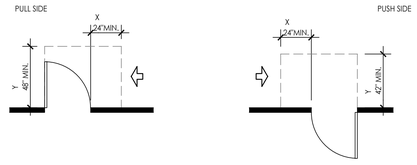
FRONT APPROACHES - SWINGING DOORS



NOTE: X = 36 IN. MINIMUM IF Y = 60"
X = 42 IN. MINIMUM IF Y = 54"

NOTE: Y = 48 IN. MINIMUM IF DOOR HAS BOTH A LATCH AND CLOSER

HINGE SIDE APPROACHES - SWINGING DOORS



NOTE: Y = 54 IN. MINIMUM IF DOOR HAS CLOSER

NOTE: Y = 48 IN. MINIMUM IF DOOR HAS CLOSER

LATCH SIDE APPROACHES - SWINGING DOORS

NOTES:

1). ALL DOORS IN ALCOVES SHALL COMPLY WITH THE CLEARANCES FOR FRONT APPROACHES

2). DIMENSIONS ARE FROM EDGE OF DOOR LEAF

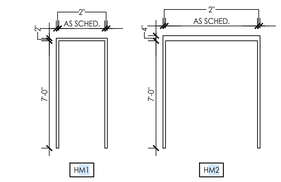
DOOR SCHEDULE

DOOR MARK	OPENING	DOOR TYPE	PAIR	DOOR MATERIAL	FIRE RATING	FRAME TYPE	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	REMARKS
079A	3'-0" x 7'-0"	A	-	ST	-	HM1	23/A3	24/A3	30/A3	-
510A	3'-0" x 7'-0"	A	-	ST	-	HM2	28/A3	29/A3	30/A3	TAP BADGE.
510B	6'-0" x 7'-0"	A	PR	ST	-	HM2	28/A3	29/A3 - 35/A3	30/A3	TAP BADGE.
520A	6'-0" x 7'-0" *	B	PR	PL	-	EX	-	-	-	* FIELD VERIFY FRAME DIMENSIONS. NEW DOORS IN EXISTING FRAME
531A	7'-0" x 7'-0"	A	PR	ST	-	HM1	23/A3	24/A3	30/A3	MOTION ACTIVATED
531B	7'-0" x 7'-0"	A	PR	ST	-	HM2	28/A3	29/A3 - 35/A3	30/A3	TAP BADGE. MOTION ACTIVATED
532A	4'-0" x 7'-0"	A	-	ST	-	HM2	28/A3	29/A3	30/A3	TAP BADGE.

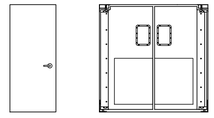
ST = STEEL
HM = HOLLOW METAL

FRAME TYPES

HM = HOLLOW METAL

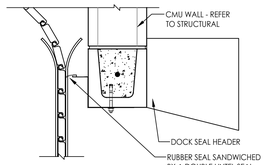


DOOR TYPES



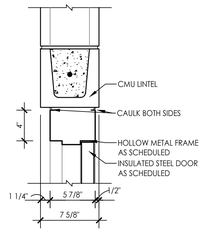
A — STEEL INSULATED EXTERIOR DOOR PAINT FINISH

B — INDUSTRIAL GRADE TRAFFIC/ IMPACT DOOR EQUAL TO CHASE DURULITE



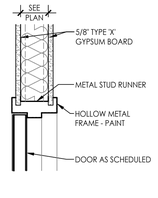
33/A3 HEAD DETAIL

SCALE: 1 1/2" = 1'-0"



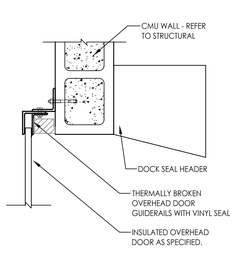
28/A3 HEAD DETAIL

SCALE: 1 1/2" = 1'-0"



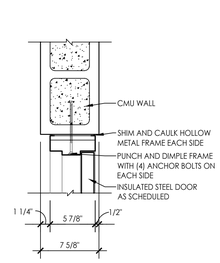
23/A3 HEAD DETAIL

SCALE: 1 1/2" = 1'-0"



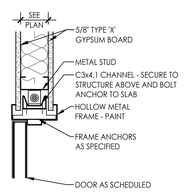
34/A3 JAMB DETAIL

SCALE: 1 1/2" = 1'-0"



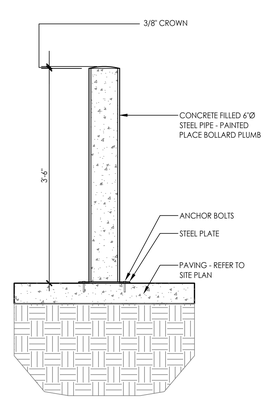
29/A3 JAMB DETAIL

SCALE: 1 1/2" = 1'-0"



24/A3 JAMB DETAIL

SCALE: 1 1/2" = 1'-0"

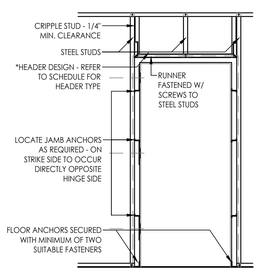


19/A3 BOLLARD DETAIL

SCALE: 1" = 1'-0"

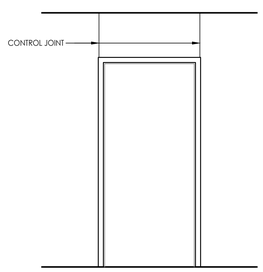
INTERIOR FRAMING HEADER SCHEDULE

- AT OPENINGS 3'-6" WIDE OR LESS STUD RUNNER IS SUFFICIENT FOR HEADER
- AT OPENINGS > 3'-6" AND < 8'-0" USE A 6" BOX BEAM HEADER
- AT OPENINGS > 8'-0" AND < 10'-0" USE AN 8" BOX BEAM HEADER
- AT OPENINGS > 10'-0" CONSULT WITH ARCHITECT



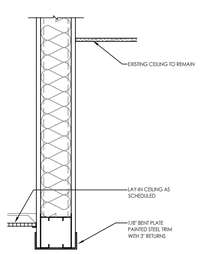
14/A3 TYPICAL DOOR OPENING FRAMING

SCALE: NOT TO SCALE



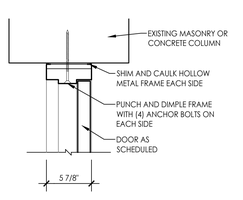
04/A3 TYPICAL CONTROL JOINT DETAIL

SCALE: NOT TO SCALE



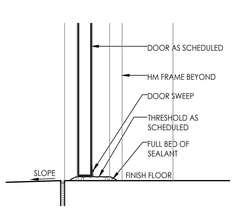
40/A3 RCP DETAIL

SCALE: 1" = 1'-0"



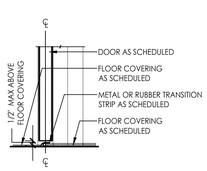
35/A3 JAMB DETAIL

SCALE: 1 1/2" = 1'-0"



30/A3 SILL DETAIL

SCALE: 1 1/2" = 1'-0"



25/A3 SILL DETAIL

SCALE: 1 1/2" = 1'-0"

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PROJECT NO. 22421
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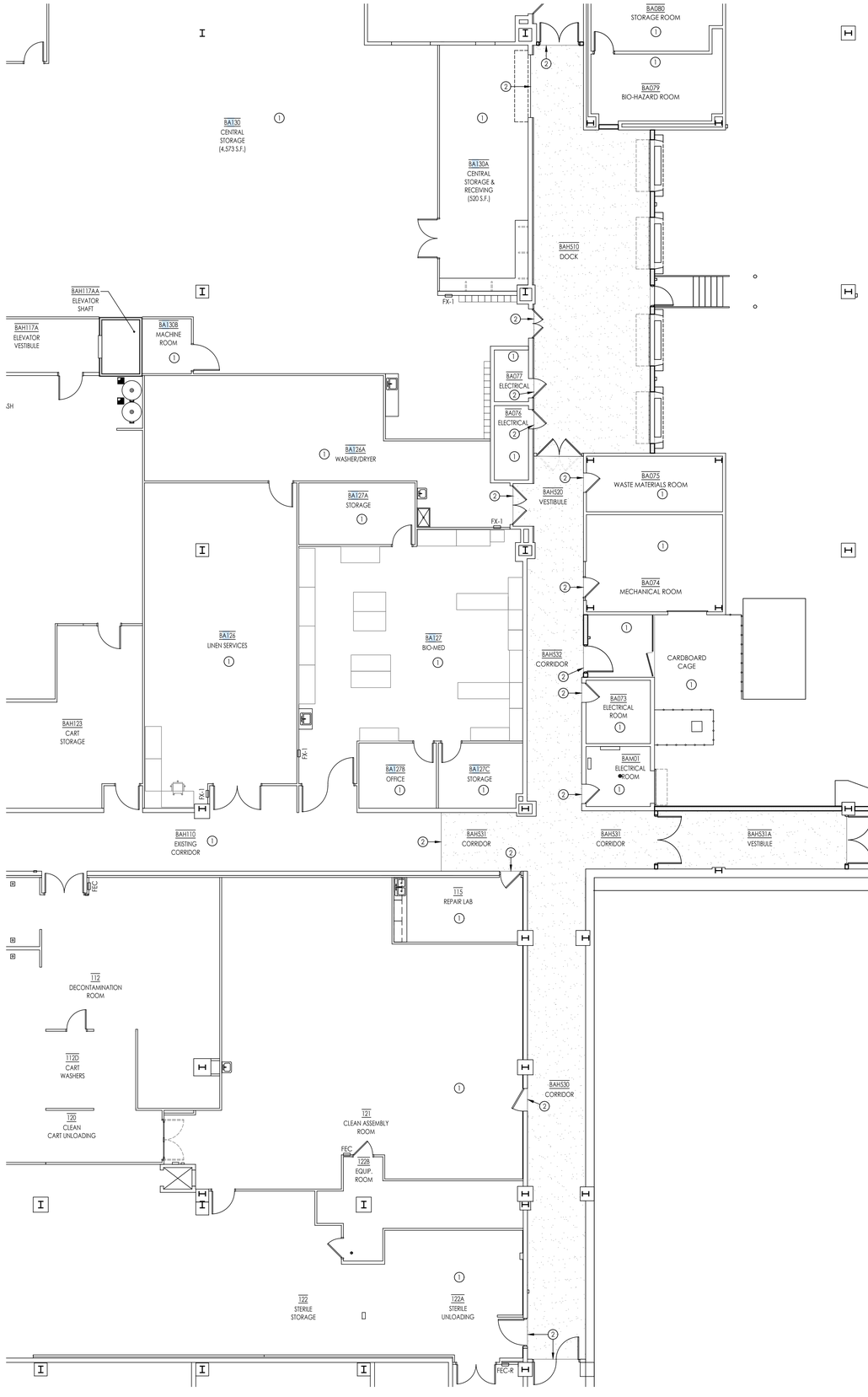
SHEET NO.
A3
3 OF 3



GENERAL NOTES

1). REFER TO THE PROJECT MANUAL AND FINISH SCHEDULE FOR ADDITIONAL INFORMATION. SHOULD THERE BE A DISCREPANCY BETWEEN THE DOCUMENTS, SUCH DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND THE CONTRACTOR SHALL RECEIVE INSTRUCTION PRIOR TO INSTALLATION OR PERFORMANCE OF SAID WORK. WORK PERFORMED IN CONFLICT WITH THE DRAWINGS OR SCHEDULE SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE.

2). ALL WORK IS TO BE PERFORMED ACCORDING TO MANUFACTURER'S RECOMMENDED METHODS.

3). FIELD VERIFY ALL DIMENSIONS NEW OR EXISTING PRIOR TO CONSTRUCTION AND ADJUST WHERE REQUIRED TO PROVIDE A PROPER AND COMPLETE INSTALLATION. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WITH EXISTING OR NEW CONDITIONS.

4). REPAIR EXISTING WALLS AND FLOORS AS SCHEDULED TO REMAIN AND REFINISH AS INDICATED.

5). PROVIDE SMOOTH TRANSITION WHERE NEW CONSTRUCTION INTERSECTS WITH EXISTING CONDITIONS. IN ALL AREAS ADJACENT TO NEW CONSTRUCTION, REPAIR/REFINISH AND INSTALL NEW WALL BASE, PAINT, ETC., WHERE NECESSARY TO AVOID PATCHES OR INCONSISTENT FINISHES.

6). INCLUDE ALL TRIM, INSIDE/OUTSIDE CORNER, CONNECTOR, AND END CAP PIECES FOR COMPLETE INSTALLATION OF FINISHES.

7). A PRE-INSTALLATION MEETING WITH THE ARCHITECT IS REQUIRED PRIOR TO THE INSTALLATION OF TILE, VINYL FLOORING, AND WALL PROTECTIVE PRODUCTS.

KEYED NOTES

DESIGNATED BY: (#)

1. NO WORK IN THIS AREA.
2. PROVIDE SEAMLESS AND LEVEL TRANSITION BETWEEN NEW AND EXISTING FLOOR FINISHES AT THIS LOCATION.

FLOOR FINISH LEGEND

EB1 EPOXY BROADCAST

25/ID1 FLOOR FINISH PLAN

SCALE: 1/8" = 1'-0"

NORTH

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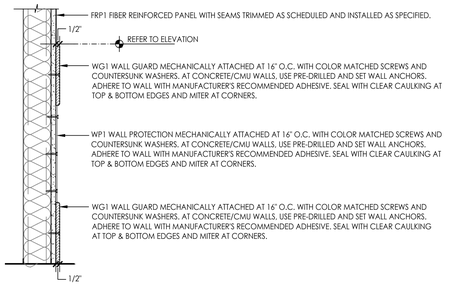
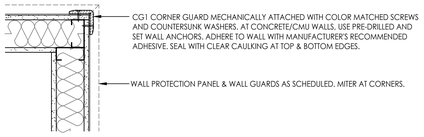
ID1

1 OF 2



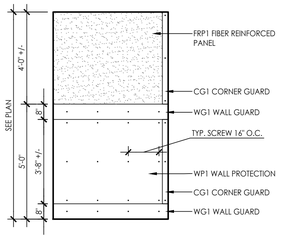
32/ID2 TYP WALL PROTECTION

SCALE: 1-1/2" = 1'-0"



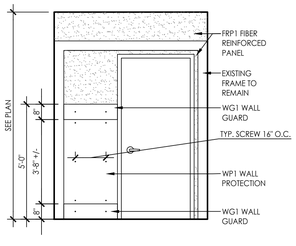
33/ID2 TYP CORNER GUARD

SCALE: 1-1/2" = 1'-0"



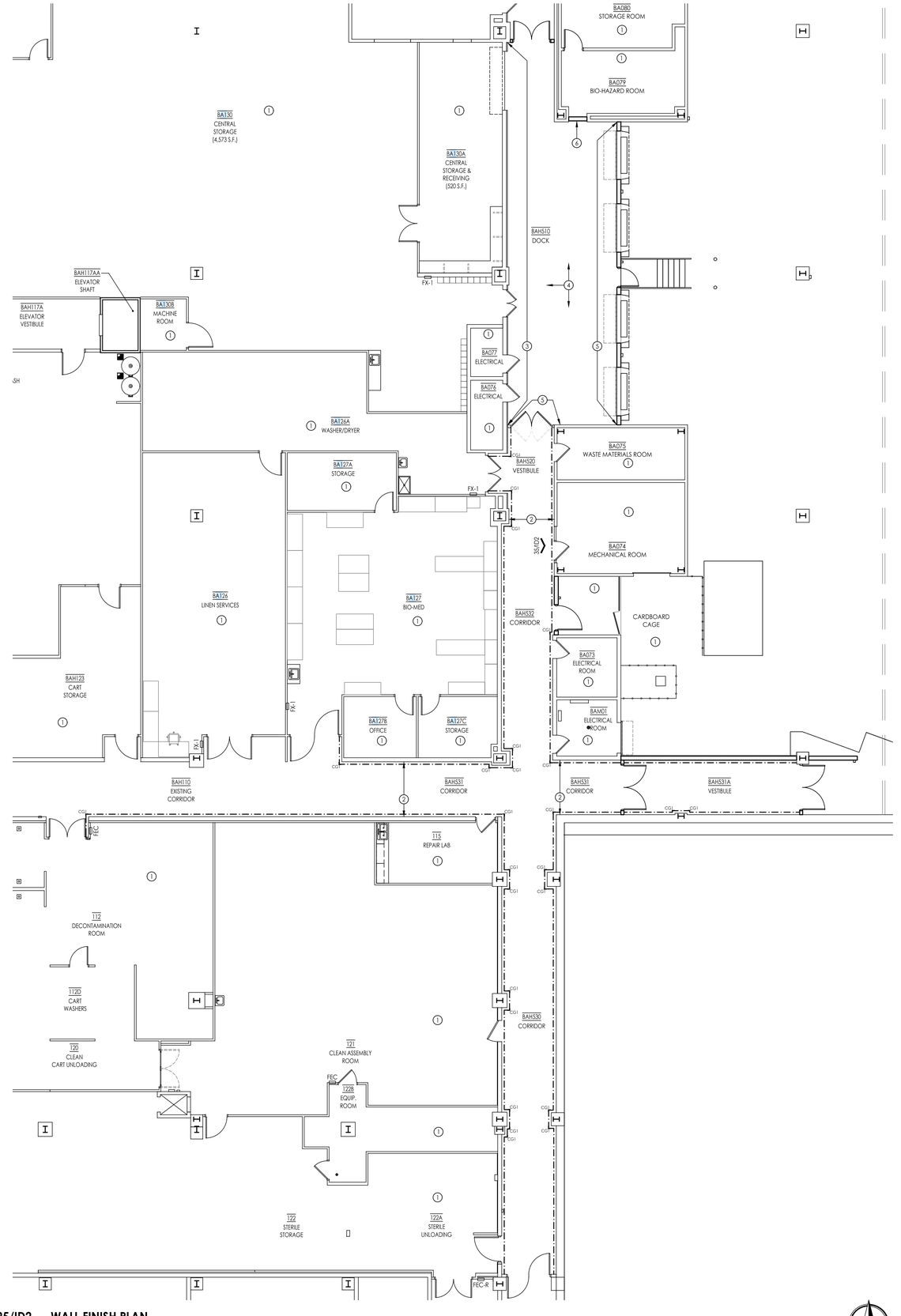
34/ID2 TYP WALL PROTECTION

SCALE: 3/8" = 1'-0"



35/ID2 ELEVATION

SCALE: 3/8" = 1'-0"



25/ID2 WALL FINISH PLAN

SCALE: 1/8" = 1'-0"

NORTH

GENERAL NOTES

1). REFER TO THE PROJECT MANUAL AND FINISH SCHEDULE FOR ADDITIONAL INFORMATION. SHOULD THERE BE A DISCREPANCY BETWEEN THE DOCUMENTS, SUCH DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND THE CONTRACTOR SHALL RECEIVE INSTRUCTION PRIOR TO INSTALLATION OR PERFORMANCE OF SAID WORK. WORK PERFORMED IN CONFLICT WITH THE DRAWINGS OR SCHEDULE SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE.

2). ALL WORK IS TO BE PERFORMED ACCORDING TO MANUFACTURER'S RECOMMENDED METHODS.

3). FIELD VERIFY ALL DIMENSIONS NEW OR EXISTING PRIOR TO CONSTRUCTION AND ADJUST WHERE REQUIRED TO PROVIDE A PROPER AND COMPLETE INSTALLATION. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WITH EXISTING OR NEW CONDITIONS.

4). REPAIR EXISTING WALLS AND FLOORS AS SCHEDULED TO REMAIN AND REFINISH AS INDICATED.

5). PROVIDE SMOOTH TRANSITION WHERE NEW CONSTRUCTION INTERSECTS WITH EXISTING CONDITIONS. IN ALL AREAS ADJACENT TO NEW CONSTRUCTION, REPAIR/REFINISH AND INSTALL NEW WALL BASE, PAINT, ETC., WHERE NECESSARY TO AVOID PATCHES OR INCONSISTENT FINISHES.

6). INCLUDE ALL TRIM, INSIDE/OUTSIDE CORNER, CONNECTOR, AND END CAP PIECES FOR COMPLETE INSTALLATION OF FINISHES.

7). A PRE-INSTALLATION MEETING WITH THE ARCHITECT IS REQUIRED PRIOR TO THE INSTALLATION OF TILE, VINYL FLOORING, AND WALL PROTECTIVE PRODUCTS.

8). WHERE DISSIMILAR WALL PROTECTION MATERIALS JOIN, SEAL WITH CLEAR CAULKING.

KEYED NOTES

DESIGNATED BY: (#)

1. NO WORK IN THIS AREA.
2. REPAIR/PATCH WALL FINISHES DISTURBED BY CONSTRUCTION IN THIS AREA AS SCHEDULED.
3. PROTECT EXISTING TILE DURING CONSTRUCTION AT THIS LOCATION. CLEAN AND RESTORE EXISTING WALL TILE AND GROUT.
4. THOROUGHLY CLEAN EXISTING WALLS.
5. PAINT CMU WALL P1 AT THIS LOCATION AS SCHEDULED.
6. PAINT PATCHED-IN AREA P1 AT THIS LOCATION AS SCHEDULED.

WALL FINISH LEGEND

- CG1 CORNER GUARD AS SCHEDULED
- FRP1 FIBER REINFORCED PANEL + WG1 WALL GUARD + WP1 WALL PROTECTION + WG1 WALL GUARD
- FRP1 FIBER REINFORCED PANEL

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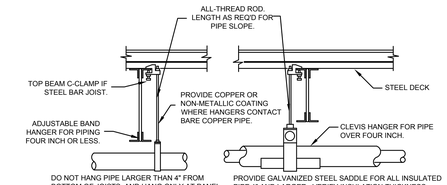
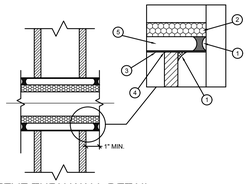
2 OF 2



COMMENTS:

1. PROVIDE UPPER ATTACHMENT AS REQUIRED FOR CASES NOT SHOWN HERE. DO NOT INSTALL HANGER INSIDE INSULATION OR OTHERWISE PENETRATE VAPOR BARRIER. DO NOT HANG ONE PIPE FROM ANOTHER EXCEPT IN CHASES. TRAPEZE HANGERS MAY BE USED FOR MULTIPLE PARALLEL PIPES. SLOPE ALL WATER PIPING SLIGHTLY TOWARD DRAINABLE LOCATIONS. HANGER SPACING FOR PIPE SIZE: COPPER: 2"=6' 1½"=6' 1¼"=7' 1"=6' ¾"=6' ½"=5'. CAST IRON: 10' AND ONE NEAR ALL JOINTS. STEEL: 3"=12' 2½"=11' 2"=10' 1½"=9' 1"=7' ¾"=6' ½"=5'. LOCATE HANGERS AS CLOSE AS POSSIBLE TO TURNS AND TEES OF PIPE. PROVIDE SUPPLEMENTARY STEEL STRUTS BETWEEN JOISTS IF REQUIRED. LOCATE HANGERS TO TAKE LOAD OFF OF EQUIPMENT CONNECTIONS. ANCHOR WATER PIPE AGAINST SWAYING DUE TO CHANGES IN WATER VELOCITY. PROVIDE SEISMIC BRACING AS REQUIRED BY LOCAL AUTHORITIES. CHAINS OR PERFORATED STRAP IRON OR STEEL IS NOT ACCEPTABLE. DO NOT SUSPEND PIPE FROM JOIST BRACING MEMBERS. REFER TO CODES AND SPECIFICATIONS FOR FURTHER INFORMATION.

PIPE HANGER DETAIL
NO SCALE



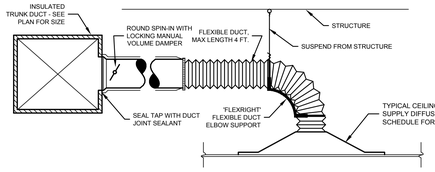
PIPE SLEEVE THRU WALL DETAIL
NO SCALE

PIPE SLEEVE THRU WALL DETAIL GENERAL NOTES

1. CAULK CONTINUOUS WITH 3M # 2000 FIRE PROOF 1/2" BEAD (MADE BY 3M COMPANY.)
2. CONTINUOUS INSULATION THROUGH WALL PENETRATION FOR PIPING THAT REQUIRES INSULATION.
3. 16 GA. PIPE MINIMUM FOR SLEEVES.
4. HOLES WILL BE CORED (DRY OR WET NO HAMMER DRILL PENETRATION. PENETRATIONS WILL FIT SNUG TO SLEEVE.
5. MAX. 1/4" ANNULAR SPACE BETWEEN INSULATION AND PIPE FOR NON INSULATED LINES FOR EXAMPLE (AIR, GAS, VAC, ELEC.)

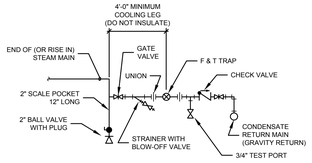
MECHANICAL GENERAL NOTES

1. THESE DRAWINGS HAVE BEEN PRODUCED WITH LIMITED INFORMATION ABOUT THE EXISTING BUILDING AND THE EXISTING MECHANICAL SYSTEMS. THE EXISTING INFORMATION MAY BE LIMITED TO SITE SURVEYS PERFORMED BY THE ENGINEER AND/OR EXISTING AS-BUILT DRAWINGS. THE EXISTING MECHANICAL SYSTEMS SHOWN ON THE DRAWINGS ARE DETAILED WITH THE BEST ACCURACY KNOWN BY THE ENGINEER AT THE TIME OF THE PROJECT, AND MAY NOT REFLECT THE ACTUAL EXISTING CONDITIONS ON SITE. THE CONTRACTOR SHALL ADJUST THE NEW INSTALLATION AS NEEDED TO ADAPT TO THE ACTUAL CONDITIONS, AND SHALL NOTIFY THE ARCHITECT OF ANY MAJOR DISCREPANCIES.
2. VERIFY THE EXACT LOCATION OF ALL EXISTING EQUIPMENT, DUCTWORK, PIPING, DIFFUSERS, AND GRILLES AT JOBSITE. CONTRACTOR SHALL WALK THE SITE AND BECOME FAMILIAR WITH ALL EXISTING SYSTEMS AND INSTALLATIONS. CONTRACTOR SHALL TAKE CARE TO PROTECT ALL OPERATIONAL SYSTEMS. ANY EXISTING SYSTEMS THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR.
3. FOR ALL ITEMS SHOWN TO BE REMOVED, REMOVE ALL ASSOCIATED ITEMS INCLUDING HANGERS, SUPPORTS, DUCT RUNOUTS, PIPE RUNOUTS, ELECTRICAL WIRING, CONTROL WIRING, ECT. THE OVERALL INTENT OF THE DEMOLITION SHALL BE TO CLEAN UP THE EXISTING AREA AS MUCH AS POSSIBLE OF OLD ITEMS THAT ARE NO LONGER BEING UTILIZED FOR THE NEW SCOPE OF WORK.
4. CONTRACTOR SHALL COORDINATE ALL MECHANICAL DISCONNECTIONS AND INTERRUPTIONS WITH BUILDING OWNER. ANY SHUT DOWNS OF EXISTING SYSTEMS THAT ARE REQUIRED SHALL BE COORDINATE WITH THE BUILDING OWNER MINIMUM 7 DAYS IN ADVANCE, AND SHALL BE DONE TO MINIMIZE THE DISTURBANCE TO THE BUILDING OCCUPANTS.
5. VERIFY EXACT SCHEDULE AND PHASING OF PROJECT WITH THE ARCHITECT.
6. THE BUILDING OWNER SHALL RETAIN THE FULL RIGHTS OF SALVAGE FOR ALL MECHANICAL EQUIPMENT INDICATED TO BE REMOVED. THE CONTRACTOR SHALL COORDINATE WITH OWNER ON ALL SALVAGED ITEMS. THE CONTRACTOR SHALL DELIVER THESE PIECES OF EQUIPMENT TO A LOCATION AS DIRECTED BY THE OWNER. FOR ALL ITEMS THAT THE OWNER DOES NOT SALVAGE, THE CONTRACTOR SHALL DISPOSE OF OFF SITE AS REQUIRED.
7. SEAL PENETRATIONS THROUGH FLOORS, WALLS, CEILINGS AND ROOFS WHERE MECHANICAL COMPONENTS ARE REMOVED AND WHERE THE EXISTING PENETRATION IS NOT USED FOR THE NEW INSTALLATION. REPAIR DAMAGED SURFACES TO MATCH ADJACENT AREAS OR AS INDICATED ON THE ARCHITECTURAL DRAWINGS. INSTALL PERMANENT CAPS WHERE DUCTWORK AND PIPING IS REMOVED AND THE EXISTING TAPS ARE NOT USED FOR THE NEW INSTALLATION.
8. INSPECT EXISTING EQUIPMENT TO REMAIN TO VERIFY THAT EQUIPMENT IS OPERATING PROPERLY. NOTIFY OWNER OF DAMAGED AND/OR MALFUNCTIONING COMPONENTS.
9. REMOVAL, RECOVERY, RECYCLING, AND DISPOSAL OF REFRIGERANT, CONTAINED IN ANY EXISTING MECHANICAL EQUIPMENT TO BE REMOVED, SHALL BE PERFORMED IN STRICT ACCORDANCE WITH CURRENT EPA GUIDELINES.
10. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW THESE PLANS AND SPECIFICATIONS IN ADDITION TO THE RELATED PLUMBING, ELECTRICAL, STRUCTURAL, ARCHITECTURAL, AND CIVIL ENGINEERING DRAWINGS TO BECOME FAMILIAR WITH THE ENTIRE SCOPE OF THE PROJECT. IN ADDITION, THE CONTRACTOR MUST COORDINATE WITH THE OWNER OR OWNER'S REPRESENTATIVE TO FULLY UNDERSTAND ALL REQUIREMENTS WHICH MAY NOT BE SPECIFIED HEREIN AND WHICH THE OWNER MAY CONSIDER PART OF THIS CONTRACT. DURING THE COURSE OF CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO WORK CLOSELY WITH ALL ACCOMPANYING CONTRACTORS AND TRADESMEN IN ORDER TO ENSURE A SMOOTH RUNNING AND CAREFULLY COORDINATED INSTALLATION.
11. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ALL APPLICABLE CODES AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, NATIONAL, CITY, STATE, AND ANY LOCAL ORDINANCES WHICH MAY BE IN EFFECT. ALL MATERIALS, INSTALLATION PROCEDURES, AND SYSTEM LAYOUTS SHALL BE APPROVED BY ALL APPLICABLE CODE ENFORCEMENT AUTHORITIES HAVING JURISDICTION, AND IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PAY FOR ALL NECESSARY PERMITS AND APPROVALS FOR THIS WORK.
12. THE CONTRACTOR SHALL PROVIDED ALL NECESSARY COMPONENTS FOR A COMPLETE AND FULLY OPERATIONAL SYSTEM FOR THE BUILDING DESIGN MATERIALS, EQUIPMENT OR LABOR NOT INDICATED, BUT WHICH CAN BE REASONABLY INFERRED TO BE NECESSARY FOR A COMPLETE INSTALLATION SHALL BE PROVIDED. THE DRAWINGS AND SPECIFICATIONS DO NOT UNDERTAKE TO INDICATE EVERY ITEM OF MATERIAL, EQUIPMENT OR LABOR REQUIRED TO PRODUCE A SAFE, COMPLETE AND PROPERLY OPERATING SYSTEM.
13. THE DRAWING SHEETS SHALL BE PRINTED USING THE CORRECT PAPER SIZE IN ORDER FOR ANY SCALED ITEMS TO BE ACCURATE. HOWEVER, THE CONTRACTOR SHALL NOT RELY ON THE SCALED DRAWINGS FOR EXACT MEASUREMENTS. THE LOCATIONS, ARRANGEMENT AND EXTENT OF EQUIPMENT, PIPING, DUCTWORK, AND ITEMS RELATED TO THE INSTALLATION OF THE MECHANICAL WORK SHOWN ARE APPROXIMATE. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE.
14. ANY DISCREPANCIES OR INADEQUACIES WITHIN THESE BID DOCUMENTS OR BETWEEN THESE BID DOCUMENTS AND THE RELATED PLUMBING, FIRE PROTECTION, ELECTRICAL, STRUCTURAL, ARCHITECTURAL, INTERIOR, AND CIVIL ENGINEERING DRAWINGS, OR BETWEEN THESE BID DOCUMENTS AND FIELD CONDITIONS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. SHOULD THE CONTRACTOR REQUIRE FURTHER CLARIFICATION, AN RFI SHALL BE SUBMITTED FOR CLARIFICATION. WHERE CONFLICTS DO EXIST, THE PROJECT ENGINEER OF RECORD, THROUGH THE ARCHITECT, SHALL HAVE SOLE DISCRETION AND RIGHT TO PROVIDE INTERPRETATION OF INTENT OF THE CONTRACT DOCUMENTS AS REQUIRED. THIS INTERPRETATION SHALL SERVE TO DIRECT THE CONTRACTOR IN ACCORDANCE WITH THE IMPLIED INTENT OF THE CONSTRUCTION DOCUMENTS WITHOUT ADDITIONAL COST TO THE PROJECT.
15. THE CONTRACTOR SHALL PROVIDE THE BUILDING OWNER WITH A COMPLETE SET OF "AS BUILT" DRAWINGS,SHOWING ALL FIELD MODIFICATIONS THAT DEVIATE FROM THE CONSTRUCTION SET OF PLANS AT THE COMPLETION OF THE PROJECT.
16. DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ALL MECHANICAL UNITS WITH NEW AIR FILTERS THROUGHOUT THE CONSTRUCTION DURATION TO PROTECT THE EQUIPMENT FROM DEBRIS. PROVIDE A NEW SET OF FILTERS UPON TESTING AND BALANCING, AND ANOTHER NEW SET OF FILTERS FOR OWNER'S FIRST FILTER CHANGE AFTER OCCUPANCY.
17. DURING CONSTRUCTION, ALL OPEN ENDED DUCTS AND PIPES SHALL BE COVERED TO PREVENT DEBRIS FROM GETTING INSIDE. THE CONTRACTOR SHALL ALSO PROVIDE TEMPORARY HEATING INSIDE THE BUILDING IF REQUIRED TO AVOID FREEZING OF WATER PIPING SYSTEMS.
18. HANDLE AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURERS AND SUPPLIER'S RECOMMENDATIONS AND IN A MANNER TO PREVENT DAMAGE TO MATERIALS DURING STORAGE AND HANDLING. REPLACE DAMAGED MATERIALS AS NEEDED AT NO ADDITIONAL COST TO THE OWNER. EQUIPMENT AND MATERIALS SHALL NOT BE INSTALLED UNTIL SUCH TIME AS THE ENVIRONMENTAL CONDITIONS OF THE JOB SITE ARE SUITABLE TO PROTECT THE EQUIPMENT OR MATERIALS. EQUIPMENT OR MATERIALS DAMAGED, OR WHICH ARE SUBJECTED TO THESE ELEMENTS, ARE UNACCEPTABLE AND SHALL BE REMOVED FROM THE PREMISES AND REPLACED.
19. ORDER OF PRECEDENCE SHALL BE OBSERVED IN LAYING OUT THE PIPE, DUCTWORK, MATERIAL, AND CONDUIT IN ORDER TO FIT THE MATERIAL INTO THE SPACE ABOVE THE CEILING AND IN THE CHASES AND WALLS. THE FOLLOWING ORDER SHALL GOVERN:
    1. ITEMS AFFECTING THE VISUAL APPEARANCE OF THE INSIDE OF THE BUILDING SUCH AS LIGHTING FIXTURES, DIFFUSERS, GRILLES, OUTLETS, PANELBOARDS, ETC. COORDINATE ALL ITEMS TO AVOID CONFLICTS AT THE SITE.
    2. LINES REQUIRING GRADE TO FUNCTION SUCH AS SEWERS, ROOF DRAINS AND CONDENSATE DRAINS.
    3. LARGE DUCTS AND PIPES WITH CRITICAL CLEARANCES.
    4. FIRE SPRINKLER LINES, CONDUIT, WATER LINES, AND OTHER LINES WHOSE ROUTING IS NOT CRITICAL AND WHOSE FUNCTION WOULD NOT BE IMPAIRED BY BENDS AND OFFSETS.
20. ROUTE DUCTS AND PIPES PARALLEL AND PERPENDICULAR TO THE BUILDING STRUCTURE UNLESS OTHERWISE SHOWN ON PLANS. INSTALL ALL DUCTS AND PIPING AS HIGH AS POSSIBLE WITHIN THE AVAILABLE SPACE. MECHANICAL EQUIPMENT, DUCTS, AND PIPES SHALL BE INDEPENDENTLY SUPPORTED FROM THE BUILDING STRUCTURE. INSTALL DUCTS AND PIPES TO ALLOW FOR THE REMOVAL OF ALL CEILING TILES. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES AND LIGHT FIXTURES. COORDINATE AS REQUIRED TO AVOID CONFLICTS.
21. LOCATE ALL THERMOSTATS, HUMIDISTATS, CONTROLLERS, AND SENSORS AT 48" A.F.F. UNLESS NOTED OTHERWISE. MOUNT AT MINIMUM OF SIX INCHES FROM WALL CORNERS. COORDINATE THE MOUNTING LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION. PROVIDE LABEL AT EACH THERMOSTAT INDICATED THE UNIT MARK. MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL ALL THERMOSTATS AND INSTALL ALL THERMOSTAT WIRING. ELECTRICIAN TO PROVIDE BACK BOX WITH CONDUIT UP TO ACCESSIBLE CEILING AT ALL THERMOSTAT/SENSOR LOCATIONS
22. MAINTAIN MINIMUM 10'-0" SEPARATION BETWEEN OUTSIDE AIR INTAKES AND ALL EXHAUST FANS, FLUES, AND PLUMBING VENTS.
23. PROVIDE P-TRAP AND CONDENSATE DRAIN LINE AT ALL UNITS, REFER TO DETAILS AND SPECIFICATIONS. CONDENSATE DRAINS SHALL BE ROUTED TO THE NEAREST APPROVED MOP SINK, FLOOR SINK, FLOOR DRAIN, OR OTHER APPROVED RECEPTOR WITH AN INDIRECT CONNECTION AS SHOWN ON PLANS. CONDENSATE SHALL NOT BE ALLOWED TO DRAIN ONTO ANY WALKWAY AREA THAT WOULD CAUSE A NUISANCE.
24. REFRIGERANT PIPING IS SHOWN FOR DIAGRAMMATIC PURPOSES ONLY. CONTRACTOR SHALL COORDINATE EXACT ROUTING OF PIPING AT JOBSITE. PROVIDE ALL REQUIRED OFFSETS AND ELBOWS AS REQUIRED FOR A COMPLETE OPERATIONAL SYSTEM. THE CONTRACTOR SHALL OBSERVE THE UNIT MANUFACTURER'S MAXIMUM LINE LENGTH REQUIREMENTS.
25. CONTRACTOR SHALL FIELD VERIFY EXACT ROUTING OF DUCTWORK AT JOBSITE WITH ALL FIELD CONDITIONS PRIOR TO DUCT FABRICATION. ROUTE DUCTS AS SHOWN, PROVIDE OFFSETS AS REQUIRED, AND CHANGE DUCT SIZES IF REQUIRED WHILE MAINTAINING EQUAL FREE AREA IN DUCT. CONTRACTOR SHALL UTILIZE THE STRAIGHTEST DUCT ROUTING PATH POSSIBLE TO MINIMIZE UNNECESSARY PRESSURE DROP WITHIN THE SYSTEM.
26. WHEREVER THE MANUAL BALANCING DAMPERS ARE RENDERED INACCESSIBLE BEHIND NON-REMOVABLE CEILINGS OR FURRINGS, OR OTHER CONSTRUCTION THAT IS NOT EASILY REMOVABLE TO PERMIT ACCESS TO THE DAMPERS, THE DAMPERS SHALL BE EQUAL TO YOUNG REGULATOR NO. 1200 RIGHT ANGLE WORM GEAR REGULATOR, FLEX SHAFT, AND 301-FS CONCEALED DAMPER REGULATOR WITH PRIMER COVER PLATE FOR FIELD PAINTING TO MATCH CEILING.
27. ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS. NO ALLOWANCE HAS BEEN MADE FOR INTERNAL LINER OR EXTERNAL WRAP.
28. ALL DUCT AND PIPE PENETRATIONS THROUGH WALLS, CEILINGS, FLOORS, AND ROOFS SHALL BE FULLY SEALED APPROPRIATELY. INSTALL SLEEVES FOR PIPING PENETRATIONS FOR RATED WALLS AND FLOORS. INSTALL CHROME PLATED ESCUTCHEONS FOR PIPING PENETRATIONS OF WALLS, CEILINGS, AND FLOORS THAT ARE OPENLY VISIBLE TO BUILDING OCCUPANTS.
29. ALL MECHANICAL EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURE'S INSTRUCTIONS WITH PROPER SUPPORTS OR MOUNTING DEVICES. MAINTAIN MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES AROUND EQUIPMENT AT A MINIMUM. PROVIDE VIBRATION ISOLATION FOR ALL MOVING PIECES OF EQUIPMENT. DO NOT ROUTE PIPING, DUCTWORK, CONTROL WIRE, ETC. THROUGH THE SERVICE CLEARANCE AREAS. UNITS LOCATED IN ATTICS, MEZZANINES, OR DECKED AREAS SHALL HAVE A 3' WIDE BY 6' TALL CLEAR WALKWAY TO EACH UNIT. COORDINATE THESE REQUIREMENTS WITH ALL TRADES IN THE FIELD. ALL MECHANICAL EQUIPMENT SHALL BE LABELED WITH A PERMANENT 2" TALL LABEL WITH 1" TALL TEXT. BLACK LABEL WITH WHITE TEXT, OR WHITE LABEL WITH BLACK TEXT
30. ANY COST INCURRED AS A RESULT OF VALUE ENGINEERING OR DEVIATIONS FROM THE BASIS OF DESIGN INDICATED IN THE CONTRACT DOCUMENTS (E.G. ELECTRICAL MODIFICATIONS TO ACCOMMODATE ALTERNATE EQUIPMENT SELECTIONS, DESIGN RELATED EXPENSES FOR REQUIRED DRAWING MODIFICATIONS, ETC.) SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NO INCREASE IN CONTRACT COST WILL BE GRANTED UNLESS APPROVED IN WRITING BY THE OWNER. CONTRACT DOCUMENTS ARE DEFINED TO INCLUDE ALL DISCIPLINES AND DIVISIONS OF THE CONTRACT.
31. EXPOSED DUCTWORK SHALL HAVE PAINT GRIP FINISH, AND PAINTED AS DIRECTED BY ARCHITECT.
32. PIPING SHALL NOT BE ROUTED THROUGH ELECTRICAL OR I.T. ROOMS, OR DIRECTLY ABOVE ELECTRICAL PANELS OR ELECTRICAL EQUIPMENT.
33. ANY PORTIONS OF DUCTWORK VISIBLE THROUGH AIR DISTRIBUTION DEVICES IN FINISHED AREAS SHALL BE PAINTED FLAT BLACK.
34. ALL RETURN AND EXHAUST GRILLES THAT ARE LOUVERED BLADE TYPE SHALL BE INSTALLED WITH THE BLADES ORIENTED IN THE ANGLE THAT ALLOWS FOR THE LEAST AMOUNT OF VISIBILITY THROUGH THE GRILLE BY THE BUILDING OCCUPANTS.
35. PROVIDE ACCESS PANELS IN NON-ACCESSIBLE CEILINGS TO ALLOW ADEQUATE ROOM FOR MAINTENANCE OF MECHANICAL EQUIPMENT AND FIRE DAMPERS. PROVIDE LABEL ON ACCESS DOOR INDICATED THE EQUIPMENT.
36. KITCHEN GREASE EXHAUST DUCTS: GREASE DUCTS SHALL BE DOUBLE WALL WITH ZERO CLEARANCE TO COMBUSTIBLES, REFER TO SPECIFICATIONS. ALL HORIZONTAL GREASE DUCTS SHALL SLOPE BACK TO THE HOOD AT 1/4" PER FOOT. ALL ELBOWS SHALL BE 1.5 DIAMETER SMOOTH RADIUS SMOOTH ELBOWS. GREASE DUCTS SHALL HAVE ACCESS DOORS IN ALL LOCATIONS REQUIRED BY NFPA 96.

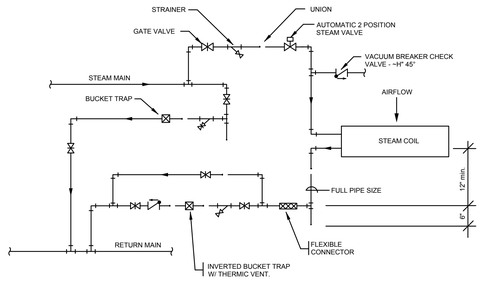


SUPPLY AIR DIFFUSER MOUNTING DETAIL
NO SCALE

NOTE: CONNECTIONS OF FLEX DUCT INNER CORE SHALL BE MADE WITH S.S. WORM DRIVE CLAMPS. OUTER INSULATION SHALL BE FITTED OVER CORE CONNECTION AND SECURED WITH S.S. CLAMP.



TYPICAL DRIP TRAP (30# LOW PRESSURE) ASSEMBLY (EOM)
NO SCALE



STEAM COIL PIPING DIAGRAM
NO SCALE

MECHANICAL LEGEND

GENERAL SYMBOLS

- XXX-## — MECHANICAL EQUIPMENT MARK (SEE ABBREVIATION LIST AND SCHEDULES)
- (X) — KEYED NOTE
- CONNECT TO EXISTING
- (X) — REVISION NUMBER
- (T) THERMOSTAT; (H) HUMIDISTAT; (S) SENSOR; (C) CONTROLLER; (F) FAN CONTROLLER
- (H) HEATER CONTROLLER; (CO2) CARBON DIOXIDE SENSOR; (P) ROOM PRESSURE SENSOR; (SP) STATIC PRESSURE SENSOR; (DP) DIFFERENTIAL PRESSURE SENSOR
- X / M-XXX — DETAIL REFERENCE: INDICATES THE DETAIL NUMBER; INDICATES THE DRAWING SHEET
- X / M-XXX — SECTION REFERENCE: INDICATES THE SECTION NUMBER; INDICATES THE DRAWING SHEET

PIPE SYMBOLS

- ELBOW DOWN
- ELBOW UP
- TEE UP
- TEE DOWN
- EXXX — EXISTING LINE (XX = SYSTEM)
- DEMOXX — DEMO LINE (XX = SYSTEM)
- D — CONDENSATE DRAIN LINE
- S — REFRIGERANT SUCTION LINE
- L — REFRIGERANT LIQUID LINE
- S/L — REFRIGERANT SUCTION AND LIQUID LINE (SHOWN SINGLE LINE FOR CLARITY)
- S/S/L — REFRIGERANT SUCTION, LIQUID, AND HOT GAS LINES (SHOWN SINGLE LINE FOR CLARITY)
- CWS — CHILLED WATER SUPPLY LINE
- CWR — CHILLED WATER RETURN LINE
- HWS — HEATING WATER SUPPLY LINE
- HWR — HEATING WATER RETURN LINE
- # STM — STEAM LINE (PSI)
- SCR — STEAM CONDENSATE RETURN LINE
- BALL VALVE
- FLOW DIRECTION

DUCT SYMBOLS

- DIFFUSER/ GRILLE LABEL: X.# AIR DISTRIBUTION MARK; X" NECK SIZE; ### AIRFLOW - CFM (IF NO CFM IS LISTED, THEN BALANCING IS NOT REQUIRED FOR THAT DEVICE)
- ROUND DUCT CONNECTION TO DIFFUSER/ GRILLE: DIFFUSER/ GRILLE; FLEXIBLE DUCT; ROUND DUCT RUNOUT; SPIN-IN DUCT TAP WITH MBD; MAIN DUCT
- RECTANGULAR DUCT CONNECTION TO DIFFUSER/ GRILLE: DIFFUSER/ GRILLE; ROUND FLEX DUCT (NOT SHOWN) FROM BOTTOM OF DUCT TO DIFFUSER/ GRILLE; RECTANGULAR DUCT RUNOUT; 45° ANGLE TAP (MBD IF SHOWN); MAIN DUCT
- M — MOTORIZED DAMPER
- FD — 1.5 HOUR FIRE DAMPER (VERTICAL)
- FSD — 1.5 HOUR COMBINATION FIRE SMOKE DAMPER (VERTICAL)
- FD — 1.5 HOUR FIRE DAMPER (HORIZONTAL)
- FSD — 1.5 HOUR COMBINATION FIRE SMOKE DAMPER (HORIZONTAL)
- EXISTING DUCTWORK
- EXISTING DIFFUSER/ GRILLE
- DEMO DUCTWORK
- DEMO DIFFUSER/ GRILLE
- SUPPLY AIRFLOW DIRECTION
- RETURN, EXHAUST, OR TRANSFER AIRFLOW DIRECTION
- SUPPLY DIFFUSER WITH PATTERN
- RETURN OR EXHAUST GRILLE
- RETURN GRILLE WITH LINED BOOT
- SUPPLY DUCT - CROSS SECTION
- EXHAUST DUCT - CROSS SECTION
- RETURN DUCT - CROSS SECTION
- X x X — RECTANGULAR DUCT (WIDTH" X HEIGHT")
- X"Ø — ROUND DUCT (DIAMETER")
- X / X — FLAT OVAL DUCT (MAJOR AXIS" X MINOR AXIS")
- X x X — EXTERIOR RECTANGULAR DUCT
- X"Ø — DOUBLE WALL SPIRAL ROUND DUCT
- X / X — DOUBLE WALL SPIRAL FLAT OVAL DUCT
- MANUAL BALANCING DAMPER
- DUCT TRANSITION, 45° ANGLE
- DUCT TRANSITION, 45° ANGLE RECTANGULAR TO ROUND
- MITERED ELBOW WITH TURNING VANES
- MITERED ELBOW WITHOUT TURNING VANES
- RADIUS ELBOW, 1.5 x DIAMETER RADIUS

MECHANICAL ABBREVIATIONS

AC	AIR CONDITIONER	FCU	FAN COIL UNIT	NC	NOISE CRITERIA
AFF	ABOVE FINISHED FLOOR	FCU	FURNACE AND COIL UNIT	NEC	NATIONAL ELECTRICAL CODE
AHJ	AUTHORITY HAVING JURISDICTION	FD	FIRE DAMPER	NEMA	NATIONAL ELECTRICAL MANUFACTURERS
AHU	AIR HANDLING UNIT	FDD	FABRIC DUCT DIFFUSER	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	FPB	FAN POWERED BOX	NTS	NOT TO SCALE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	FPM	FEET PER MINUTE		
		FT	FEET	OA	OUTSIDE AIR
B	BOILER			OBD	OPPOSED BLADE DAMPER
BAS	BUILDING AUTOMATION SYSTEM	GPM	GALLON PER MINUTE	OHP	OUTDOOR HEAT PUMP
BTU	BRITISH THERMAL UNIT	GUH	GAS-FIRED UNIT HEATER	OU	OUTDOOR UNIT
BOD	BOTTOM OF DUCT				
BOP	BOTTOM OF PIPE	H	HUMIDIFIER	P	PUMP
BTUH	BRITISH THERMAL UNIT PER HOUR	HP	HEAT PUMP	PD	PRESSURE DROP
BHP	BRAKE HORSEPOWER	HP	HORSEPOWER	PH	PHASE
		HRB	HEAT RECOVERY BOX	PH	PATIO HEATER
C	CHILLER	HSPF	HEATING SEASONAL PERFORMANCE FACTOR	PVC	POLY VINYL CHLORIDE
CD	CONDENSATE DRAIN	HVAC	HEATING, VENTILATION, AND AIR CONDITIONING	PRV	PRESSURE REDUCING VALVE
CFM	CUBIC FEET PER MINUTE	HVLS	HIGH VOLUME LOW SPEED FAN	PSI	POUNDS PER SQUARE INCH
CH	CEILING HEATER	HWP	HEATING WATER PUMP		
CO	CARBON MONOXIDE	HWS	HEATING WATER SUPPLY	RA	RETURN AIR
CO2	CARBON DIOXIDE	HWR	HEATING WATER RETURN	RH	RELATIVE HUMIDITY (%)
COP	COEFFICIENT OF PERFORMANCE			RH	RADIANT HEATER
CRP	CONDENSATE RETURN PUMP	IBC	INTERNATIONAL BUILDING CODE	RH	RANGE HOOD
CT	COOLING TOWER	IMC	INTERNATIONAL MECHANICAL CODE	RH	ROOF HOOD
CU	CONDENSING UNIT	IHP	INDOOR HEAT PUMP	RPM	REVOLUTIONS PER MINUTE
CV	CONSTANT VOLUME	IN	INCHES	RTU	ROOFTOP UNIT
CWP	CHILLED WATER PUMP	INWC	INCHES OF WATER COLUMN	RV	RETURN AIR VALVE
CWS	CHILLED WATER SUPPLY	IU	INDOOR UNIT		
CWR	CHILLED WATER RETURN			S	SUCTION (REFRIGERANT)
		KEF	KITCHEN EXHAUST FAN	SA	SUPPLY AIR
D	DRAIN	KEH	KITCHEN EXHAUST HOOD	SCR	STEAM CONDENSATE RETURN
dB	DECIBEL (SOUND)	KSF	KITCHEN SUPPLY FAN	SEER	SEASONAL ENERGY EFFICIENCY RATIO
DB	DRY BULB	KW	KILOWATT	SP	STATIC PRESSURE
DDC	DIRECT DIGITAL CONTROL			SQFT	SQUARE FEET
DEMO	DEMOLITION	L	LOUVER	S.S.	STAINLESS STEEL
DOAS	DEDICATED OUTSIDE AIR UNIT	L	LIQUID (REFRIGERANT)	STM	STEAM
DP	DIFFERENTIAL PRESSURE	LAT	LEAVING AIR TEMPERATURE	SV	SUPPLY AIR VALVE
DX	DIRECT EXPANSION	LBS	POUNDS		
		LWT	LEAVING WATER TEMPERATURE	T	TEMPERATURE
EA	EXHAUST AIR				
EAT	ENTERING AIR TEMPERATURE	M	MOTORIZED	UH	UNIT HEATER
ECM	ELECTRONICALLY COMMUTATED MOTOR	MAX	MAXIMUM		
EER	ENERGY EFFICIANTCY RATIO	MAU	MAKEUP AIR UNIT	V	VOLTS
EF	EXHAUST FAN	MBD	MANUAL BALANCING DAMPER	VAV	VARIABLE AIR VOLUME
ELEC	ELECTRICAL	MBH	THOUSAND BTUH	VFD	VARIABLE FREQUENCY DRIVE
EOM	END OF MAIN (STEAM TRAP)	MCA	MINIMUM CURRENT AMPACITY	VRF	VARIABLE REFRIGERANT FLOW
ESP	EXTERNAL STATIC PRESSURE	MIN	MINIMUM		
EUH	ELECTRIC UNIT HEATER	MOCP	MAXIMUM OVER CURRENT PROTECTION	WB	WET BULB
EV	EXHAUST AIR VALVE	MS	MINI SPLIT UNIT	WSHP	WATER SOURCE HEAT PUMP
EWT	ENTERING WATER TEMPERATURE			W/	WITH
EX	EXISTING			WO	WITHOUT

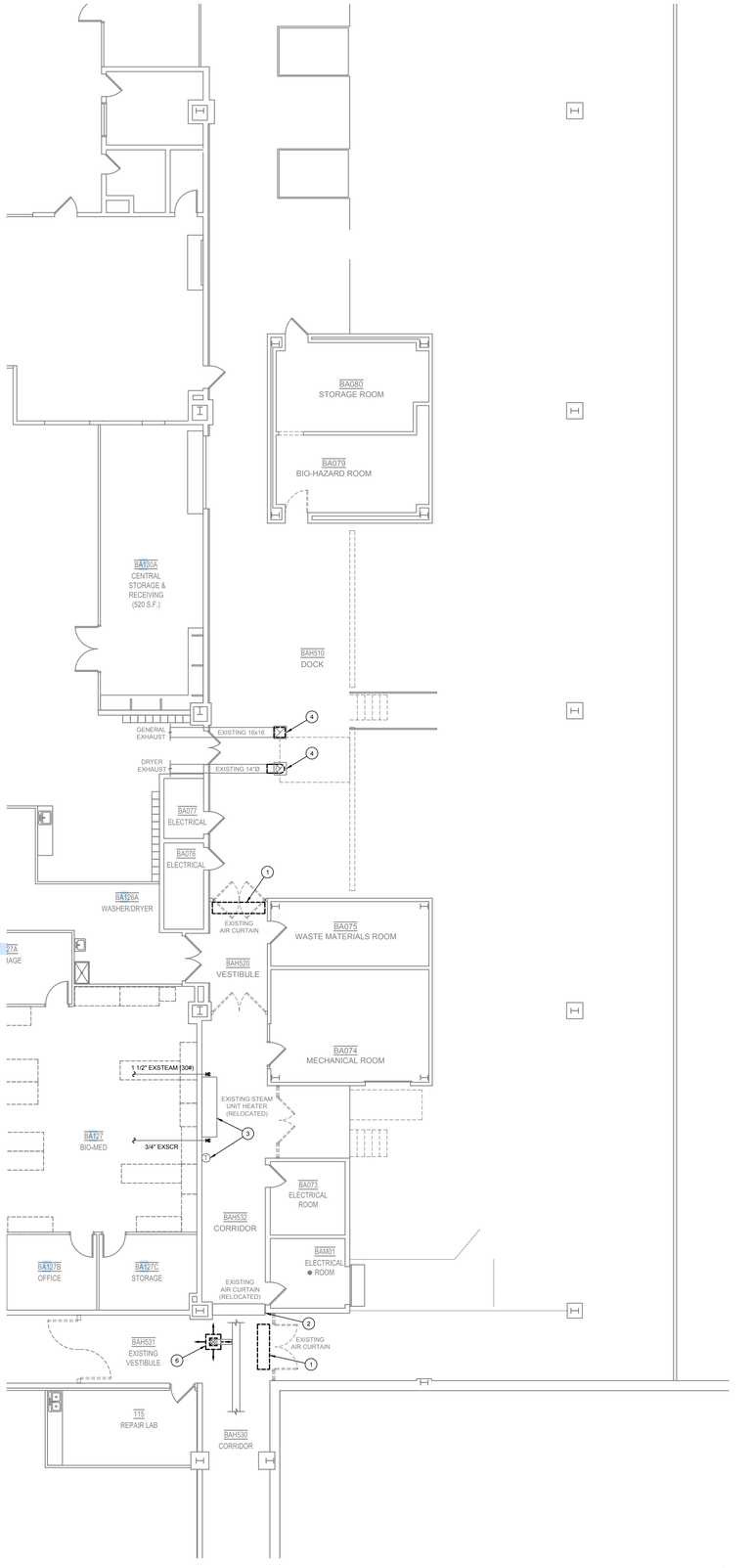
ELECTRIC CEILING HEATER SCHEDULE

MARK	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	KW	CFM	DIMENSIONS	ELEC. DATA VOLTS/ PHASE
CH-1	BERKO	FFD1657	5	300	2' X 2'	277/1
CH-2	BERKO	FFDH657	5	300	2' X 2'	277/1

NOTES:
A. CEILING HEATERS SHALL MOUNT RECESSED INTO A 2'x2' T-BAR CEILING GRID.
B. PROVIDE WALL MOUNTED THERMOSTAT.
C. PROVIDE DISCONNECT SWITCH.

AIR DISTRIBUTION SCHEDULE

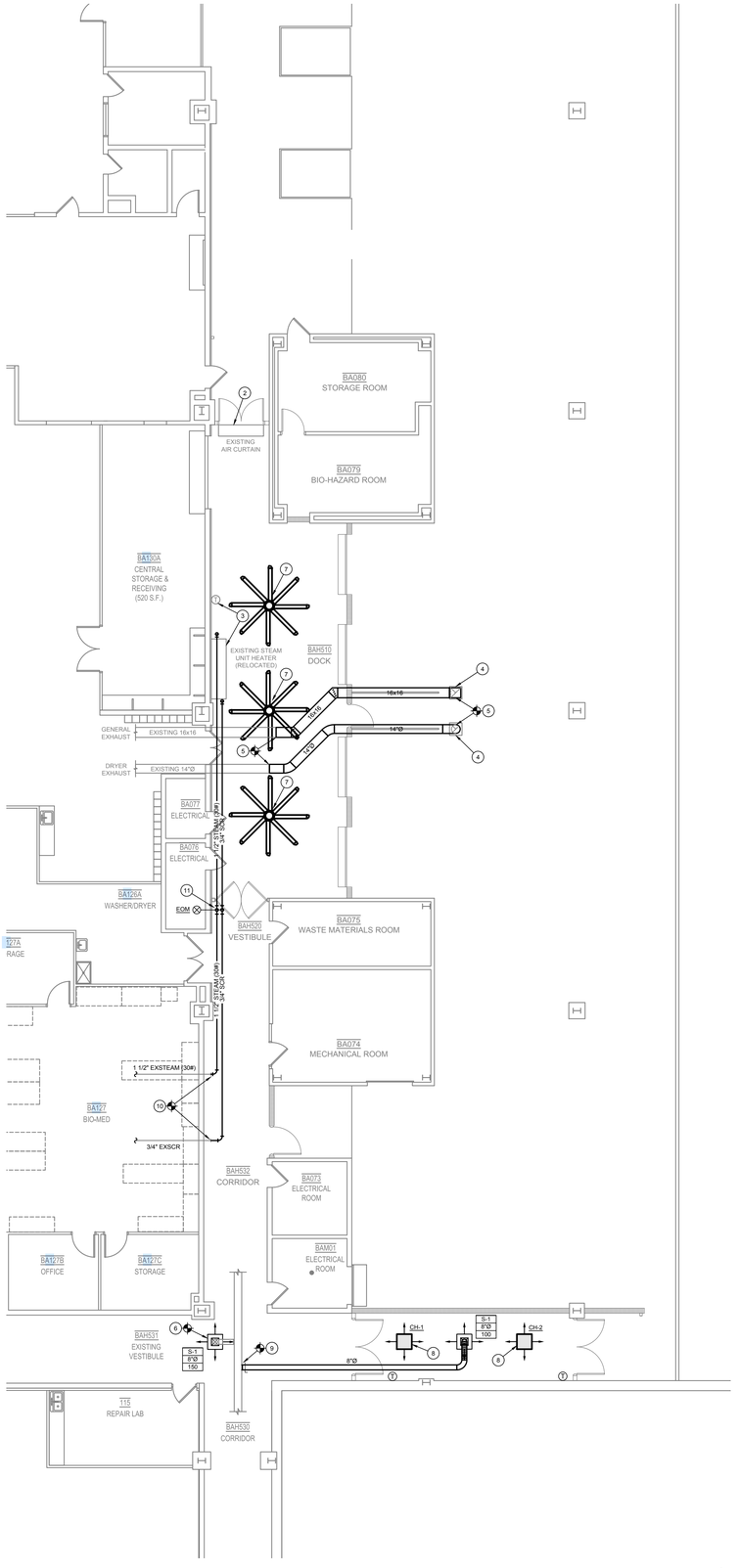
| MARK | TYPE | BASIS OF DESIGN MANUFACTURER | BASIS OF DESIGN MODEL | FACE SIZE | LOCATION | FRAME (NOTE C) | FINISH | MATERIAL | MAX NC | MAX PD | DAMPER |



1/M2 FLOOR PLAN - MECHANICAL DEMOLITION

SCALE: 1/8" = 1'-0"

NORTH



2/M2 FLOOR PLAN - MECHANICAL

SCALE: 1/8" = 1'-0"

NORTH

GENERAL NOTES

A. REFER TO SHEET M0 FOR ALL APPLICABLE GENERAL NOTES.

FIRE SPRINKLER SYSTEM

A. REFER TO ARCHITECTURAL PHASING PLAN FOR PHASING REQUIREMENTS OF PROJECT.

B. VERIFY EXACT LOCATION OF ALL EXISTING FIRE SPRINKLER HEADS, PIPING, AND ALL ASSOCIATED ITEMS AT THE JOBSITE.

C. THE EXISTING BUILDING IS PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM. MODIFY EXISTING SYSTEM TO ACCOMMODATE NEW FLOOR PLAN. FIRE SPRINKLER SYSTEM INSTALLED ACCORDING TO THE REQUIREMENTS OF NFPA-13 AND ALL APPLICABLE LOCAL CODES. CONTRACTOR SHALL VERIFY EXISTING SYSTEM SIZES AND LOCATIONS AND MODIFY/EXTEND EXISTING SYSTEM AS REQUIRED FOR A COMPLETE SYSTEM.

D. FOR SPRINKLER HEADS LOCATED IN LAY-IN CEILINGS: PROVIDE CONCEALED HEADS LOCATED IN CENTER OF CEILING TILES.

E. FIRE SPRINKLER LINES LOCATED IN UNHEATED SPACES SHALL UTILIZE A DRY TYPE SPRINKLER SYSTEM.

F. CONTRACTOR SHALL TAKE CARE TO PROTECT ALL OPERATIONAL SYSTEMS. ANY EXISTING SYSTEMS THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR.

G. CONTRACTOR SHALL COORDINATE ALL FIRE SPRINKLER SYSTEM DISCONNECTIONS AND INTERRUPTIONS WITH BUILDING OWNER. VERIFY EXACT SCHEDULE WITH OWNER.

H. ALL FIRE SPRINKLER PIPING SHALL BE SCHEDULE 40 STEEL PIPE PER TTUHSC STANDARDS. FLEXIBLE PIPING AND/OR FLEXIBLE HEADS ARE NOT ALLOWED.

KEYED NOTES

1. REMOVE EXISTING AIR CURTAIN SHOWN DASHED, ALL SUPPORTS, POWER WIRING, CONTROLS, AND ALL OTHER ASSOCIATED ITEMS.
2. EXISTING 6' AIR CURTAIN TO BE RELOCATED AND REUSED. CLEAN UNIT AS MUCH AS POSSIBLE. PROVIDE ANY NEW COMPONENTS NEEDED FOR A COMPLETELY OPERATIONAL SYSTEM. INTERLOCK DOOR SWITCH WITH NEW DOORS TO POWER AIR CURTAIN ON WHEN DOORS ARE OPENED.
3. EXISTING STEAM UNIT HEATER TO BE RELOCATED AND REUSED. RELOCATE THERMOSTAT AS SHOWN. EXTEND OR MODIFY EXISTING STEAM AND CONDENSATE RETURN PIPING TO NEW LOCATION AS SHOWN. VERIFY EXISTING PIPE SIZES AND ROUTING IN FIELD. PROVIDE ANY NEW COMPONENTS NEEDED FOR A COMPLETELY OPERATIONAL SYSTEM.
4. EXISTING EXHAUST GRILLE MOUNTED IN UNDERSIDE OF DOCK CEILING TO BE RELOCATED. CLEAN GRILLE AS MUCH AS POSSIBLE AND RE-INSTALL AT NEW LOCATION AS SHOWN.
5. EXTEND EXISTING EXHAUST DUCT WITH INTERSTITIAL SPACE AS SHOWN TO NEW LOCATION OF EXHAUST GRILLE. NEW DUCTWORK SHALL MATCH EXISTING DUCT SIZE AND MATERIAL. VERIFY IN FIELD.
6. REMOVE AND REPLACE EXISTING SUPPLY DIFFUSER WITH NEW. RE-CONNECT EXISTING DUCT RUNOUT, AND MAINTAIN EXISTING AIRFLOW.
7. NEW HVLS FAN PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. LOCATE NEW CONTROLLERS AS DIRECTED BY OWNER.
8. NEW ELECTRIC CEILING HEATER. LOCATE THERMOSTAT AS SHOWN.
9. CONNECT NEW SUPPLY DUCT TO EXISTING MAIN DUCT, PROVIDE TAP AND M.B.D.
10. CONNECT NEW 30# STEAM AND CONDENSATE RETURN LINES TO EXISTING LINES, AND ROUTE TO NEW UNIT HEATER LOCATION. LINE SIZES SHOWN ARE APPROXIMATE AND SHALL BE USED FOR BIDDING PURPOSES ONLY. FIELD VERIFY EXISTING LINE SIZES, NEW LINE SIZES SHALL MATCH EXISTING SIZES.
11. ROUTE STEAM AND CONDENSATE RETURN LINES UP INTO HIGHER INTERSTITIAL SPACE. PROVIDE END OF MAIN (EOM) TRAP ASSEMBLY AT LOW POINT. SLOPE ALL NEW STEAM PIPING BACK TO THIS TRAP.

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TTUHSC DOCK EXPANSION

3601 4TH STREET
LUBBOCK, TX 79430

REVISIONS:

PROJECT NO. 22421
DATE: 09/04/2025

SHEET NO.
M2

2 OF 2

EXISTING PANEL "KPA"

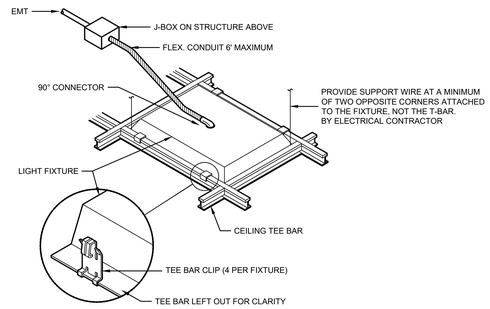
MOUNTING SURFACE — **MAINS** 400A MLO
208/120 **VOLTS** 3 **PHASE** 4 **WIRE + GR.** — **BUS** 400 **AMPS.**

DESCRIPTION	LOAD / PHASE A	LOAD / PHASE B	LOAD / PHASE C	BKR	CKT NO.	NOTES	CKT NO.	BKR	LOAD / PHASE A	LOAD / PHASE B	LOAD / PHASE C	DESCRIPTION
EXISTING				20	1		2	20				EXISTING
EXISTING				20	3		4	20				EXISTING
EXISTING				20	5		6	20				EXISTING
EXISTING				20	7		8	20				EXISTING
EXISTING				20	9		10	20				EXISTING
EXISTING				20	11		12	20				EXISTING
EXISTING				20	13		14	20				EXISTING
EXISTING				20	15		16	20				EXISTING
EXISTING				20	17		18	20				EXISTING
EXISTING				20	19		20	20				EXISTING
EXISTING				20	21		22	20				EXISTING
EXISTING				20	23		24	20				EXISTING
EXISTING				20	25		26					
EXISTING				20	27		28					EXISTING
EXISTING				20	29		30					
EXISTING				20	31		32	20				EXISTING
EXISTING				20	33		34	20				EXISTING
EXISTING				20	35		36	20				EXISTING
EXISTING				20	37		38	20				EXISTING
EXISTING				20	39		40	20				EXISTING
EXISTING				20	41		42	20				EXISTING
EXISTING				20	43		44	20	864			**HVLS FAN**
EXISTING					45		46	20		864		**HVLS FAN**
					47		48	20			864	**HVLS FAN**
					49		50	20				**SPARE**
EXISTING					51		52	20				**SPARE**
					53		54	20			500	**DOCK LIGHTS**
					55		56	20	1200			**DOCK LEVEL**
EXISTING					57		58	20		1200		**DOCK LEVEL**
					59		60	20			800	**RECEPTACLE**

CONNECTED LOAD: 6,292

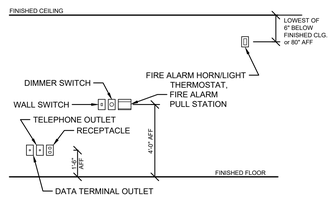
PHASE A:	2064	**AMPS**	17
PHASE B:	2064	**AMPS**	17
PHASE C:	2164	**AMPS**	18

NOTES:



NOTE: TYPICAL FOR ALL LIGHT FIXTURES

LAY-IN LIGHT FIXTURE DETAIL
NO SCALE



NOTE: VERIFY ALL HEIGHTS WITH ARCHITECT

WIRING DEVICE MOUNTING HEIGHTS - TYPICAL
NO SCALE

LIGHT FIXTURE SCHEDULE

MARK	REFERENCE IMAGE	MANUFACTURER	MODEL	DESCRIPTION	MOUNTING	FINISH	TYPE	VOLTS	WATTS	LUMENS	TEMP(°K)	DIMMING	NOTES
A		ACUITY	ENVX-2X4-HRG-4800LM-80CRI-40K-MIN10-MVOLT	CURVED LENS RECESSED 2'X4' PANEL	RECESSED	WHITE	LED	277	40	4800	4000	0-10V	
AE		ACUITY	ENVX-2X4-HRG-4800LM-80CRI-40K-MIN10-MVOLT-E10WLCP	CURVED LENS RECESSED 2'X4' PANEL WITH EMERGENCY BATTERY	RECESSED	WHITE	LED	277	40	4800	4000	0-10V	
B		LITHONIA	CNY LED ALO SWW2 UVOLT PE PIR DDB M2	10" SQUARE CANOPY LIGHT FIXTURE	SURFACE	DARK BRONZE	LED	277	75 MAX	SELECTABLE	SELECTABLE	N/A	
BE		LITHONIA	CNY LED ALO SWW2 UVOLT PE PIR DDB M2 - CNYEK E7WC M12	10" SQUARE CANOPY LIGHT FIXTURE WITH EMERGENCY BATTERY	SURFACE	DARK BRONZE	LED	277	75 MAX	SELECTABLE	SELECTABLE	N/A	
C		EELP	DL 40" HDLED	LOADING DOCK ARM LIGHT	WALL	YELLOW	LED	120	18	900		N/A	COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN
X		LITHONIA	LE S 1 R ELN SD	SINGLE FACED EXIT SIGN WITH EMERGENCY BATTERY	SURFACE	MATTE BLACK, BRUSHED ALUMINUM FACE	LED	277	2	N/A	N/A	N/A	

LIGHT FIXTURE SCHEDULE GENERAL NOTES

A. COORDINATE/CONFIRM ALL FIXTURE FINISHES WITH ARCHITECT DURING SUBMITTAL STAGE.

B. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LIGHT FIXTURE LOCATIONS.

ELECTRICAL SYMBOL SCHEDULE

A	2x4 RECESSED LIGHT FIXTURE
AE	2x4 RECESSED LIGHT FIXTURE WITH BATTERY BACK-UP
A	2x2 SURFACE MOUNT LIGHT FIXTURE
AE	2x2 RECESSED LIGHT FIXTURE WITH BATTERY BACK-UP
A	SURFACE MOUNTED LIGHT FIXTURE
AE	SURFACE MOUNTED LIGHT FIXTURE WITH BATTERY BACK-UP
A	WALL MOUNTED LIGHT FIXTURE
A	WALL MOUNTED LIGHT FIXTURE WITH BATTERY BACK-UP
A	WALL PACK LIGHT FIXTURE
AE	WALL PACK LIGHT FIXTURE WITH BATTERY BACK-UP
E	EMERGENCY FIXTURE
K	EXIT SIGN - NUMBER OF FACES INDICATED BY SHADING
$	SPST WALL SWITCH
$3	THREE-WAY SWITCH
$4	FOUR-WAY SWITCH
P2	POWER PACK
	DUPLEX RECEPTACLE - 20A, 125V, 2P, 3W, GROUNDING
J	JUNCTION BOX
	DISCONNECT SWITCH
	STARTER/DISCONNECT SWITCH
	CIRCUIT RUN TO PANELBOARD - NUMBER OF WIRES SHOWN
	CIRCUIT INDICATOR
	SURFACE MOUNTED LIGHTING AND APPLIANCE PANELBOARD
S	CEILING MOUNTED SPEAKER
	WALL MOUNTED SPEAKER
	FIRE ALARM PULL STATION
	FIRE ALARM AUDIBLE/STROBE UNIT
	FIRE ALARM STROBE UNIT
SD	FIRE ALARM SMOKE DETECTOR
CD	COMBINATION CARBON MONOXIDE/SMOKE DETECTOR
	SECURITY CAMERA

ELECTRICAL ABBREVIATIONS

ABOVE COUNTER	AC	KILOVOLT	kV
ABOVE FINISHED FLOOR	AFF	KILOVOLT AMP	kVA
ALTERNATING CURRENT	AC	KILOWATT	kW
AMERICAN NATIONAL STANDARDS INSTITUTE	ANSI	KILOWATT HOUR	kWH
AMERICAN SOCIETY FOR TESTING AND MATERIALS	ASTM		
AMERICAN WIRE GAUGE	AWG	LIQUIDTIGHT FLEXIBLE METAL CONDUIT	LFMC
AMPERE	AMP	LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT	LFNC
AMPHOUR	AH	LOW VOLTAGE	LV
AMPERE INTERRUPTING CAPACITY	AIC	LUMEN	LM
ARC FAULT CIRCUIT INTERRUPTER	AFCI	LUMENS PER WATT	LPW
AUTHORITY HAVING JURISDICTION	AHJ		
AUTOMATIC TRANSFER SWITCH	ATS	MAIN CIRCUIT BREAKER	MCB
		MAIN LUGS ONLY	MLO
BATTERY	BAT		
BUILDING AUTOMATION SYSTEM	BAS	MINIMUM	MIN
		MINIMUM CIRCUIT AMPS	MCA
CEILING	C	MOTOR CONTROL CENTER	MCC
COAXIAL CABLE	COAX		
COLOR RENDERING INDEX	CRI	NATIONAL ELECTRICAL CODE	NEC
COMMUNICATIONS	COMM	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION	NEMA
CONDUIT	C	NATIONAL FIRE CODE	NFC
CONTROL	CTRL	NATIONAL FIRE PROTECTION ASSOCIATION	NFPA
COPPER	CU	NOTIFICATION APPLIANCE CIRCUIT	NAC
CURRENT TRANSFORMER.	CT		
		PANELBOARD	PB
DECIBEL (SOUND)	dB	PHASE	PH
DEMOLITION	DEMO	POLY VINYL CHLORIDE	PVC
DIRECT CURRENT	DC	POWER FACTOR	PF
DOUBLE POLE, DOUBLE THROW	DPDT	PUBLIC ADDRESS	PA
DOUBLE POLE, SINGLE THROW	DPST		
		RECEPTACLE	RECEPT
ELECTRIC	ELEC	RIGID GALVANIZED STEEL	RGS
ELECTRICAL METALLIC TUBING	EMT	RIGID NONMETALLIC CONDUIT	RNC
ELECTRICAL NONMETALLIC TUBING	ENT		
		SINGLE PHASE	1 Ø
FIRE ALARM ANNUNCIATOR PANEL	FAAP	SINGLE POLE, DOUBLE THROW	SPDT
FIRE ALARM CONTROL PANEL	FACP	SINGLE POLE, SINGLE THROW	SPST
FLEXIBLE METALLIC CONDUIT	FMC	SWITCHBOARD	SWBD
FOOTCANDLE	FC		
FULL LOAD AMPS	FLA	THREE PHASE	3 Ø
		TELEPHONE TERMINAL BOARD	TTB
GAUGE	GA		
GROUND	GND	UNINTERRUPTIBLE POWER SUPPLY	UPS
GROUND FAULT CIRCUIT INTERRUPTER	GFCI		
		VARIABLE FREQUENCY DRIVE	VFD
HORSEPOWER	HP	VOLT, VOLTS, VOLTAGE	V
		VOLT AMPERE	VA
INTERMEDIATE METAL CONDUIT	IMC		
INTERNATIONAL BUILDING CODE	IBC	WEATHERPROOF	WP

ELECTRICAL GENERAL NOTES

1. THESE DRAWINGS HAVE BEEN PRODUCED WITH LIMITED INFORMATION ABOUT THE EXISTING BUILDING AND THE EXISTING ELECTRICAL SYSTEMS. THE EXISTING INFORMATION MAY BE LIMITED TO SITE SURVEYS PERFORMED BY THE ENGINEER AND/OR EXISTING AS-BUILT DRAWINGS. THE EXISTING ELECTRICAL SYSTEMS SHOWN ON THE DRAWINGS ARE DETAILED WITH THE BEST ACCURACY KNOWN BY THE ENGINEER AT THE TIME OF THE PROJECT, AND MAY NOT REFLECT THE ACTUAL EXISTING CONDITIONS ON SITE. THE CONTRACTOR SHALL ADJUST THE NEW INSTALLATION AS NEEDED TO ADAPT TO THE ACTUAL CONDITIONS, AND SHALL NOTIFY THE ARCHITECT OF ANY MAJOR DISCREPANCIES.
2. VERIFY THE EXACT LOCATION OF ALL EXISTING EQUIPMENT, LIGHT FIXTURES, PANELBOARDS, DISCONNECTS, DEVICES, CONDUITS AND WIRING AT JOBSITE. CONTRACTOR SHALL WALK THE SITE AND BECOME FAMILIAR WITH ALL EXISTING SYSTEMS AND INSTALLATIONS. CONTRACTOR SHALL TAKE CARE TO PROTECT ALL OPERATIONAL SYSTEMS. ANY EXISTING SYSTEMS THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR.
3. FOR ALL ITEMS SHOWN TO BE REMOVED, REMOVE ALL ASSOCIATED ITEMS INCLUDING HANGERS, SUPPORTS, CONDUIT, ELECTRICAL WIRING, CONTROL WIRING, ECT. THE OVERALL INTENT OF THE DEMOLITION SHALL BE TO CLEAN UP THE EXISTING AREA AS MUCH AS POSSIBLE OF OLD ITEMS THAT ARE NO LONGER BEING UTILIZED FOR THE NEW SCOPE OF WORK.
4. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL DISCONNECTIONS AND INTERRUPTIONS WITH BUILDING OWNER. ANY SHUT DOWNS OF EXISTING SYSTEMS THAT ARE REQUIRED SHALL BE COORDINATE WITH THE BUILDING OWNER MINIMUM 7 DAYS IN ADVANCE, AND SHALL BE DONE TO MINIMIZE THE DISTURBANCE TO THE BUILDING OCCUPANTS.
5. VERIFY EXACT SCHEDULE AND PHASING OF PROJECT WITH THE ARCHITECT.
6. THE BUILDING OWNER SHALL RETAIN THE FULL RIGHTS OF SALVAGE FOR ALL ELECTRICAL EQUIPMENT INDICATED TO BE REMOVED. THE CONTRACTOR SHALL COORDINATE WITH OWNER ON ALL SALVAGED ITEMS. THE CONTRACTOR SHALL DELIVER THESE PIECES OF EQUIPMENT TO A LOCATION AS DIRECTED BY THE OWNER. FOR ALL ITEMS THAT THE OWNER DOES NOT SALVAGE, THE CONTRACTOR SHALL DISPOSE OF OFF SITE AS REQUIRED.
7. SEAL PENETRATIONS THROUGH FLOORS, WALLS, CEILINGS AND ROOFS WHERE ELECTRICAL COMPONENTS ARE REMOVED AND WHERE THE EXISTING PENETRATION IS NOT USED FOR THE NEW INSTALLATION. REPAIR DAMAGED SURFACES TO MATCH ADJACENT AREAS OR AS INDICATED ON THE ARCHITECTURAL DRAWINGS.
8. INSPECT EXISTING EQUIPMENT TO REMAIN TO VERIFY THAT EQUIPMENT IS OPERATING PROPERLY. NOTIFY OWNER OF DAMAGED AND/OR MALFUNCTIONING COMPONENTS.
9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW THESE PLANS AND SPECIFICATIONS IN ADDITION TO THE RELATED PLUMBING, MECHANICAL, STRUCTURAL, ARCHITECTURAL, AND CIVIL ENGINEERING DRAWINGS TO BECOME FAMILIAR WITH THE ENTIRE SCOPE OF THE PROJECT. IN ADDITION, THE CONTRACTOR MUST COORDINATE WITH THE OWNER OR OWNER'S REPRESENTATIVE TO FULLY UNDERSTAND ALL REQUIREMENTS WHICH MAY NOT BE SPECIFIED HEREIN AND WHICH THE OWNER MAY CONSIDER PART OF THIS CONTRACT. DURING THE COURSE OF CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO WORK CLOSELY WITH ALL ACCOMPANYING CONTRACTORS AND TRADESMEN IN ORDER TO ENSURE A SMOOTH RUNNING AND CAREFULLY COORDINATED INSTALLATION.
10. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ALL APPLICABLE CODES AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, NATIONAL, CITY, STATE, AND ANY LOCAL ORDINANCES WHICH MAY BE IN EFFECT. ALL MATERIALS, INSTALLATION PROCEDURES, AND SYSTEM LAYOUTS SHALL BE APPROVED BY ALL APPLICABLE CODE ENFORCEMENT AUTHORITIES HAVING JURISDICTION, AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PAY FOR ALL NECESSARY PERMITS AND APPROVALS FOR THIS WORK.
11. THE CONTRACTOR SHALL PROVIDED ALL NECESSARY COMPONENTS FOR A COMPLETE AND FULLY OPERATIONAL SYSTEM FOR THE BUILDING OWNER. MATERIALS, EQUIPMENT OR LABOR NOT INDICATED, BUT WHICH CAN BE REASONABLY INFERRED TO BE NECESSARY FOR A COMPLETE INSTALLATION SHALL BE PROVIDED. THE DRAWINGS AND SPECIFICATIONS DO NOT UNDERTAKE TO INDICATE EVERY ITEM OF MATERIAL, EQUIPMENT OR LABOR REQUIRED TO PRODUCE A SAFE, COMPLETE AND PROPERLY OPERATING SYSTEM.
12. THE DRAWING SHEETS SHALL BE PRINTED USING THE CORRECT PAPER SIZE IN ORDER FOR ANY SCALED ITEMS TO BE ACCURATE. HOWEVER, THE CONTRACTOR SHALL NOT RELY ON THE SCALED DRAWINGS FOR EXACT MEASUREMENTS. THE LOCATIONS, ARRANGEMENT AND EXTENT OF EQUIPMENT, LIGHT FIXTURES, DEVICES AND ITEMS RELATED TO THE INSTALLATION OF THE ELECTRICAL WORK SHOWN ARE APPROXIMATE. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE.
13. ANY DISCREPANCIES OR INADEQUACIES WITHIN THESE BID DOCUMENTS OR BETWEEN THESE BID DOCUMENTS AND THE RELATED PLUMBING, FIRE PROTECTION, MECHANICAL, STRUCTURAL, ARCHITECTURAL, INTERIOR, AND CIVIL ENGINEERING DRAWINGS, OR BETWEEN THESE BID DOCUMENTS AND FIELD CONDITIONS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. SHOULD THE CONTRACTOR REQUIRE FURTHER CLARIFICATION, AN RFI SHALL BE SUBMITTED FOR CLARIFICATION. WHERE CONFLICTS DO EXIST, THE PROJECT ENGINEER OF RECORD, THROUGH THE ARCHITECT, SHALL HAVE SOLE DISCRETION AND RIGHT TO PROVIDE INTERPRETATION OF INTENT OF THE CONTRACT DOCUMENTS AS REQUIRED. THIS INTERPRETATION SHALL SERVE TO DIRECT THE CONTRACTOR IN ACCORDANCE WITH THE IMPLIED INTENT OF THE CONSTRUCTION DOCUMENTS WITHOUT ADDITIONAL COST TO THE PROJECT.
14. THE CONTRACTOR SHALL PROVIDE THE BUILDING OWNER WITH A COMPLETE SET OF "AS BUILT" DRAWINGS SHOWING ALL FIELD MODIFICATIONS THAT DEVIATE FROM THE CONSTRUCTION SET OF PLANS AT THE COMPLETION OF THE PROJECT.
15. HANDLE AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S AND SUPPLIER'S RECOMMENDATIONS AND IN A MANNER TO PREVENT DAMAGE TO MATERIALS DURING STORAGE AND HANDLING. REPLACE DAMAGED MATERIALS AS NEEDED AT NO ADDITIONAL COST TO THE OWNER. EQUIPMENT AND MATERIALS SHALL NOT BE INSTALLED UNTIL SUCH TIME AS THE ENVIRONMENTAL CONDITIONS OF THE JOB SITE ARE SUITABLE TO PROTECT THE EQUIPMENT OR MATERIALS. EQUIPMENT OR MATERIALS DAMAGED, OR WHICH ARE SUBJECTED TO THESE ELEMENTS, ARE UNACCEPTABLE AND SHALL BE REMOVED FROM THE PREMISES AND REPLACED.
16. ORDER OF PRECEDENCE SHALL BE OBSERVED IN LAYING OUT THE PIPE, DUCTWORK, MATERIAL, AND CONDUIT IN ORDER TO FIT THE MATERIAL INTO THE SPACE ABOVE THE CEILING AND IN THE CHASES AND WALLS. THE FOLLOWING ORDER SHALL GOVERN:
17. 1. ITEMS AFFECTING THE VISUAL APPEARANCE OF THE INSIDE OF THE BUILDING SUCH AS LIGHTING FIXTURES, DIFFUSERS, GRILLES, OUTLETS, PANELBOARDS, ETC. COORDINATE ALL ITEMS TO AVOID CONFLICTS AT THE SITE.
18. 2. LINES REQUIRING GRADE TO FUNCTION SUCH AS SEWERS, ROOF DRAINS AND CONDENSATE DRAINS.
19. 3. LARGE DUCTS AND PIPES WITH CRITICAL CLEARANCES.
20. 4. FIRE SPRINKLER LINES, CONDUIT, WATER LINES, AND OTHER LINES WHOSE ROUTING IS NOT CRITICAL AND WHOSE FUNCTION WOULD NOT BE IMPAIRED BY BENDS AND OFFSETS.
21. ROUTE CONDUIT PARALLEL AND PERPENDICULAR TO THE BUILDING STRUCTURE UNLESS OTHERWISE SHOWN ON PLANS. INSTALL ALL CONDUIT AS HIGH AS POSSIBLE WITHIN THE AVAILABLE SPACE. ELECTRICAL EQUIPMENT AND CONDUIT SHALL BE INDEPENDENTLY SUPPORTED FROM THE BUILDING STRUCTURE. INSTALL CONDUIT TO ALLOW FOR THE REMOVAL OF ALL CEILING TILES. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES AND LIGHT FIXTURES. COORDINATE AS REQUIRED TO AVOID CONFLICTS.
22. ALL CONDUIT PENETRATIONS THROUGH WALLS, CEILINGS, FLOORS, AND ROOFS SHALL BE FULLY SEALED APPROPRIATELY.
23. ANY COST INCURRED AS A RESULT OF VALUE ENGINEERING OR DEVIATIONS FROM THE BASIS OF DESIGN INDICATED IN THE CONTRACT DOCUMENTS (E.G. ELECTRICAL MODIFICATIONS TO ACCOMMODATE ALTERNATE EQUIPMENT SELECTIONS, DESIGN RELATED EXPENSES FOR REQUIRED DRAWING MODIFICATIONS, ETC.) SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NO INCREASE IN CONTRACT COST WILL BE GRANTED UNLESS APPROVED IN WRITING BY THE OWNER. CONTRACT DOCUMENTS ARE DEFINED TO INCLUDE ALL DISCIPLINES AND DIVISIONS OF THE CONTRACT.
24. ALL DOWNSTREAM DEVICES NOT BEING REMOVED AS PART OF THIS PROJECT SHALL REMAIN ACTIVE. THIS INCLUDES BUT NOT LIMITED TO RECEPTACLES, LIGHTS, FIRE ALARM, DATA, AND COMMUNICATION OUTLETS/WIRING. CONTRACTOR SHALL CARE TO PROTECT AND MAINTAIN ALL EXISTING SYSTEMS AND DEVICES.
25. ALL ELECTRICAL DEVICES SHOWN DASHED, OR ON DASHED WALLS, ALONG WITH ALL WIRING AND CONDUIT ASSOCIATED WITH DEVICE SHALL BE REMOVED BACK TO POINT OF ORIGIN UNLESS NOTED OTHERWISE. CONTRACTOR SHALL REMOVE ALL ABANDONED DEVICES, CONDUIT AND ASSOCIATED WIRING ABOVE CEILING.
26. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO EARTHWORK.
27. COORDINATE WITH THE UTILITY SERVICE PROVIDERS FOR ALL REQUIREMENTS FOR DELIVERING POWER AND COMMUNICATION UTILITIES.
28.
29. VERIFY EXACT LOCATION OF ALL ELECTRICAL EQUIPMENT WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION.
30. VERIFY AND COORDINATE EXACT LOCATION OF ALL LIGHT FIXTURE LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECTURAL REFLECTED CEILING PLAN.
31. ANY OUTLET, SWITCH, RECEPTACLE, FIXTURE OR PANEL MAY BE RELOCATED WITHIN A TEN (10) FOOT RADIUS OF THE INDICATED LOCATION WITHOUT ADDITIONAL CHARGE TO OWNER.
32. PROVIDE AN UN-SWITCHED HOT (BALLAST/DRIVER) TO ALL EMERGENCY FIXTURES ROUTED THRU LIGHTING CONTROLS TO PROVIDE EMERGENCY OPERATION.
33. THE ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXACT POWER REQUIREMENTS FOR OWNER FURNISHED EQUIPMENT PRIOR TO ROUGH-IN. TERMINATE AS DIRECTED BY EQUIPMENT NAME PLATES. COORDINATE EXACT LOCATION FOR INSTALLATIONS WITH OWNER PRIOR TO ROUGH-IN. NOTIFY ENGINEER IF ALTERNATE POWER IS REQUIRED
34. PROVIDE DEDICATED NEUTRAL WIRE FOR EACH 120V CIRCUIT BREAKER.
35. WHERE GFCI PROTECTION IS REQUIRED BY CODE AND CONNECTION IS LOCATED BEHIND EQUIPMENT. CONTRACTOR SHALL PROVIDE GFCI CIRCUIT BREAKER IN LIEU OF GFCI OUTLET.
36. DATA/TELEPHONE/TV OUTLETS SHALL BE INSTALLED WITH 3/4" CONDUIT EXTENDED TO AN ACCESSIBLE POINT ABOVE CEILING AND PROVIDED WITH PULL STRING. COORDINATE ALL TELEPHONE, TV AND DATA LOCATIONS WITH OWNER. PROVIDE INSULATED BUSHING ON BOTH ENDS OF CONDUIT.
37. ALL SWITCHES, RECEPTACLES, DISCONNECTS, FACEPLATES, AND PANELS SHALL BE PROVIDED WITH A LABEL(NON-REMOVABLE) INDICATING PANEL AND CIRCUIT NUMBER SERVING DEVICE AS REQUIRED BY NFPA AND TDH. "RED" FOR EMERGENCY POWER AND "BLACK" FOR NORMAL POWER. LABEL SHALL BE APPROVED BY UMC PERSONNEL AND ARCHITECT
38. THE NEW FIRE ALARM DEVICES SHALL MATCH THE EXISTING TTUHSC FCI FIRE ALARM EQUIPMENT AND SHALL BE U.L. LISTED FOR USE WITH THE EXISTING FIRE ALARM EQUIPMENT. ALL NEW DEVICES SHALL MATCH THE EXISTING FUNCTIONALITY OF THE EXISTING EQUIPMENT AND SHALL MATCH IN APPEARANCE.
39. EXISTING FCI FIRE ALARM CONTROL PANEL IS LOCATED BETWEEN POD A AND POD B ON TTUHSC'S SIDE OF THE BUILDING. FIELD VERIFY EXACT LOCATION OF FIRE ALARM CONTROL PANEL.
40. PROVIDE UPGRADES TO THE EXISTING EQUIPMENT AS NECESSARY TO SUPPORT THE NUMBER AND TYPE OF NEW DEVICES AS REQUIRED. THIS SHALL INCLUDED BUT NOT BE LIMITED TO ADDING MODULES, EXPANDERS, POWER SUPPLIES OR COMPLETE REPLACEMENT OF THE EQUIPMENT AS REQUIRED.
41. ALL WIRING, CLASSIFICATION AND CONNECTIONS SHALL MATCH THE EXISTING CLASS AND STYLE OF WIRING.
42. ALL SPEAKER WIRING, CLASSIFICATION AND CONNECTIONS SHALL MATCH THE EXISTING CLASS AND STYLE OF WIRING.

WIRE AND CONDUIT SIZING CHART

BREAKER	15	20	25	30	35	40	45	50	60	70	80	90	100	125	150	175	200	225	300	400
PHASE	#12	#12	#10	#10	#8	#8	#6	#6	#6	#4	#4	#2	#2	#1	#1/0	#2/0	#3/0	#4/0	#350 KCMIL	#500 KCMIL
NEUTRAL	#12	#12	#10	#10	#8	#8	#6	#6	#6	#4	#4	#2	#2	#1	#1/0	#2/0	#3/0	#4/0	#350 KCMIL	#500 KCMIL
GROUND	#12	#12	#10	#10	#10	#10	#10	#10	#10	#8	#8	#8	#8	#6	#6	#6	#6	#4	#4	#3
CONDUIT	3/4"	3/4"	3/4"	3/4"	1"	1"	1"	1"	1"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/2"	2"	2"	2"	2-1/2"	3"	4"

NOTES:
1. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, ALL CONDUCTORS AND CONDUIT SHALL BE SIZED FROM THIS CHART.
2. ALL 120V LIGHTING AND POWER CIRCUITS OVER 75' SHALL BE #10 THHN.
3. LOCAL DISCONNECT SIZES SHALL BE BASED ON CIRCUIT BREAKER RATING/SIZE.

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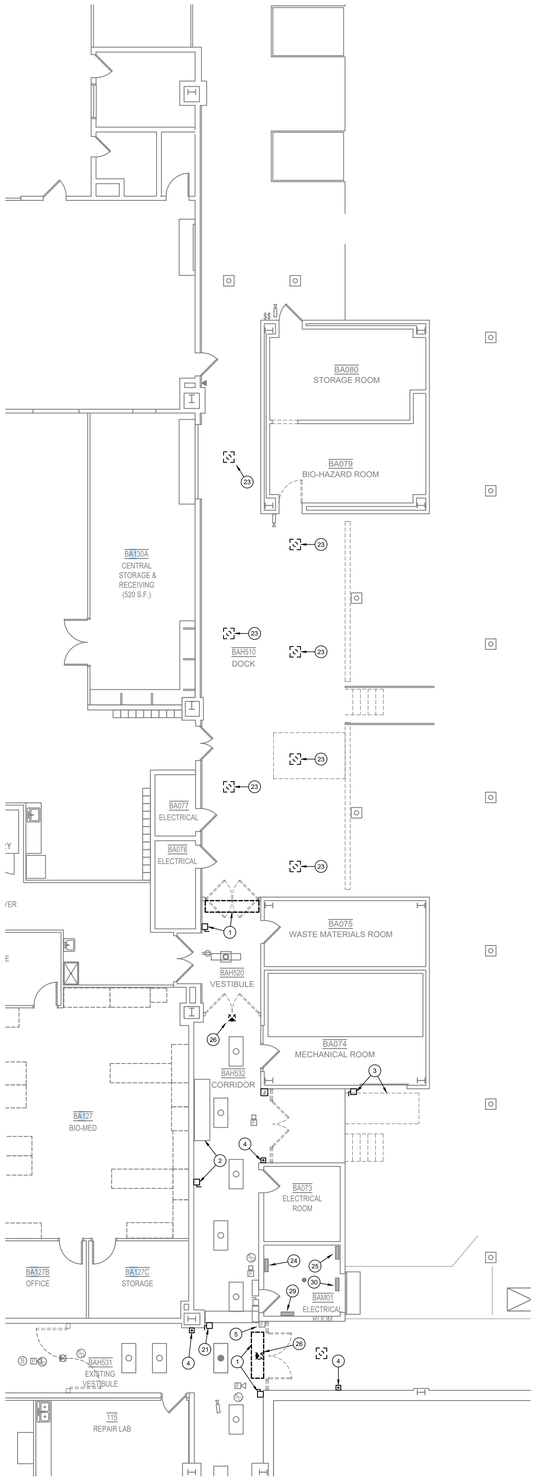
REVISIONS:

PROJECT NO. 22421
DATE: 09/04/2025

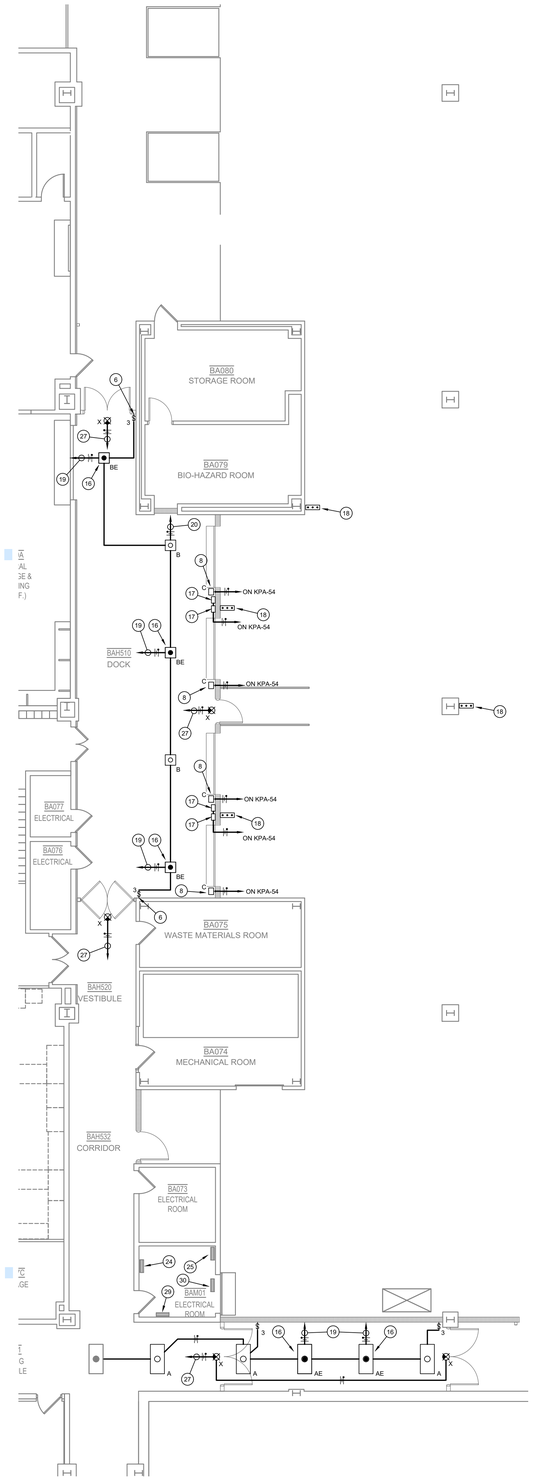
SHEET NO.
E1
1 OF 2



1/E2 FLOOR PLAN - ELECTRICAL DEMOLITION

SCALE: 1/8" = 1'-0"

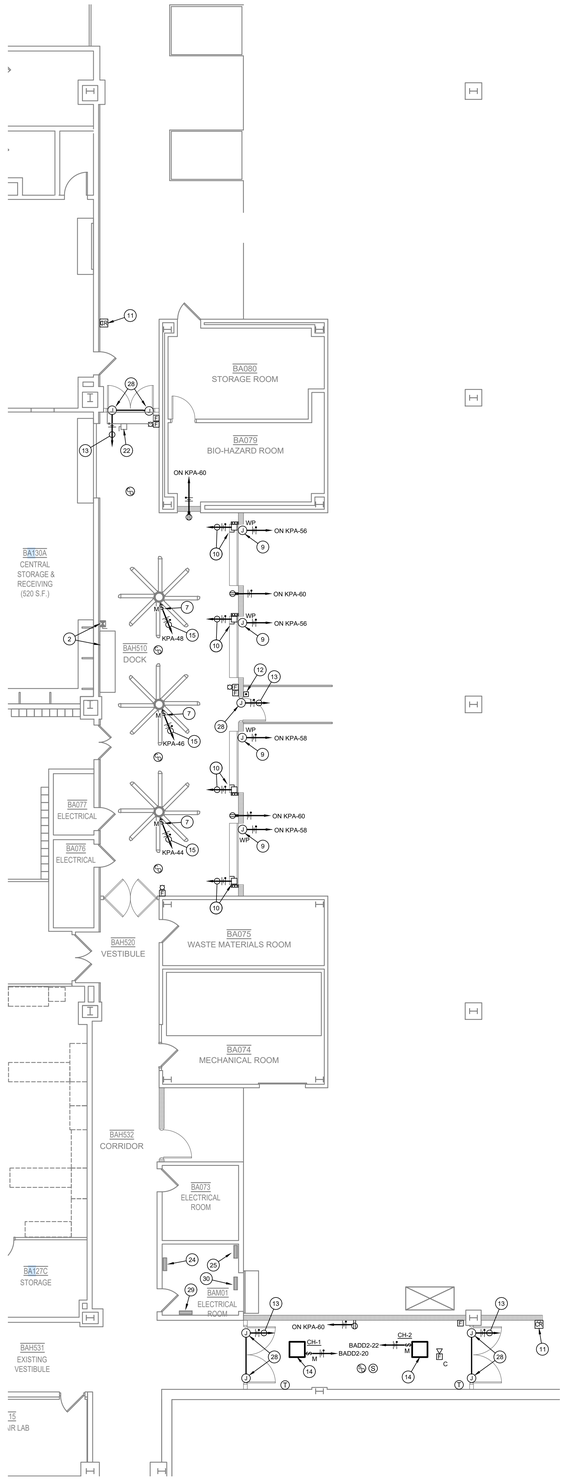
NORTH



2/E2 FLOOR PLAN - LIGHTING

SCALE: 1/8" = 1'-0"

NORTH



3/E2 FLOOR PLAN - POWER/COMMUNICATION

SCALE: 1/8" = 1'-0"

NORTH

GENERAL NOTES

A. REFER TO SHEET E0 FOR ALL GENERAL NOTES APPLICABLE TO THIS SHEET.

KEYED NOTES

1. EXISTING AIR CURTAIN TO BE DEMOLISHED. ALL ASSOCIATED ELECTRICAL SHALL BE REMOVED BACK TO ORIGIN.
2. EXISTING STEAM HEATER TO BE RELOCATED. ASSOCIATED ELECTRICAL DISCONNECT SHALL BE RELOCATED. EXTEND AND CONNECT TO EXISTING CIRCUIT AS EXISTING.
3. EXISTING LIFT SHALL BE DEMOLISHED. ALL ASSOCIATED ELECTRICAL SHALL BE REMOVED BACK TO ORIGIN.
4. EXISTING REQUEST TO EXIT SHALL BE DEMOLISHED.
5. EXISTING FIRE ALARM PULL STATION SHALL BE RELOCATED TO NEW DOOR.
6. PROVIDE NEW LIGHT SWITCH TO CONTROL EXISTING LIGHTING.
7. NEW 120V HVLS FAN PROVIDED BY OWNER AND INSTALLED BY ELECTRICAL CONTRACTOR. LOCATE NEW CONTROLLERS AS DIRECTED BY OWNER. THE ELECTRICAL CONTRACTOR SHALL PROVIDE EMERGENCY SHUT DOWN RELAY AND INTERFACE TO THE FIRE ALARM CONTROL SYSTEM FOR UNIT SHUTDOWN UPON FIRE SPRINKLER SYSTEM ACTIVATION .
8. WALL MOUNTED DOCK LIGHT. MOUNT AS DIRECTED BY MANUFACTURER. COORDINATE ALL SPACE REQUIREMENTS WITH ALL WALL MOUNTED EQUIPMENT PRIOR TO INSTALLATION.
9. DOCK LEVELER. COORDINATE ALL ELECTRICAL REQUIREMENTS WITH MANUFACTURER TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
10. DISCONNECT SWITCH AND WALL MOUNTED SWITCH TO SERVE OVERHEAD DOOR. EXTEND (2) #12 AWG + #12 GND IN 3/4" CONDUIT TO NEW 20A-1P CIRCUIT BREAKER IN EXISTING PANEL "BAADD" (BAADD - 81, 82, 83, 84). PROVIDE ALL LABOR AND MATERIAL REQUIRED TO FULLY CONNECT FOR A COMPLETE AND OPERATIONAL SYSTEM. COORDINATE ALL REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN.
11. PROVIDE BACKBOX AND PATHWAY TO SERVE CARD READER. COORDINATE REQUIREMENTS WITH SECURITY PERSONNEL.
12. PROVIDE BACKBOX AND PATHWAY TO SERVE AUTOMATIC DOOR/MAG LOCKS.
13. PROVIDE 120V CONNECTION AND PATHWAYS TO SERVE SECURE DOOR. PROVIDE 20A-1P CIRCUIT BREAKER IN PANEL "BAEE2". (CIRCUIT BAEE2-42)
14. 277V, 5KW HEATER. PROVIDE (2) #10 AWG + #10 GND IN 3/4" CONDUIT TO NEW 30A-1P CIRCUIT BREAKER IN PANEL "BADD2". (CIRCUITS BADD2 - 20, 22)
15. (2) #12 AWG + #12 GND IN 3/4" CONDUIT TO NEW 20A-1P CIRCUIT BREAKER IN EXISTING PANEL "KPA". CIRCUIT SHALL BE ROUTED THROUGH EMERGENCY SHUTDOWN RELAYS FOR HVLS FAN SHUTDOWN UPON FIRE ALARM ACTIVATION.
16. PROVIDE LIGHT FIXTURE WITH UL LISTED 924 RELAY FOR LIGHT/EMERGENCY CONTROL.
17. DOK LOK LIGHT COMMUNICATIONS SYSTEM. COORDINATE MOUNTING LOCATION AND HEIGHT WITH ARCHITECTURAL ELEVATIONS AND ALL WALL MOUNTED EQUIPMENT PRIOR TO ROUGH-IN. PROVIDE 3/4" CONDUIT AND CONTROL WIRE ASSOCIATED WALL MOUNTED TRAFFIC LIGHT SYSTEMS.
18. WALL MOUNTED EXTERIOR TRAFFIC LIGHT SYSTEM. PROVIDE 3/4" CONDUIT WITH CONTROL WIRE TO DOK LOK CONTROLLER. REFER TO KEYED NOTE #17.
19. (2) #12 AWG + #12 GND IN 3/4" CONDUIT TO ADJACENT CORRIDOR EMERGENCY CIRCUIT.
20. (2) #12 AWG + #12 GND IN 3/4" CONDUIT TO ADJACENT CORRIDOR NORMAL LIGHTING CIRCUIT.
21. EXISTING AIR CURTAIN TO BE REMOVED AND RELOCATED. EXTEND ALL EXISTING ELECTRICAL AS REQUIRED TO RECONNECT FOR A COMPLETE AND OPERATIONAL SYSTEM AS EXISTING.
22. NEW LOCATION OF RELOCATED AIR CURTAIN. EXTEND ALL EXISTING ELECTRICAL AS REQUIRED TO RECONNECT FOR A COMPLETE AND OPERATIONAL SYSTEM AS EXISTING.
23. EXISTING LIGHT FIXTURE AND ASSOCIATED WIRE AND CONDUIT TO BE REMOVED. ALL EXISTING LIGHTS SHOWN TO REMAIN SHALL MAINTAIN ALL POWER AND SWITCHING AS EXISTING. RECONNECT AS REQUIRED.
24. EXISTING PANEL "KPA" TO REMAIN. REMOVE (3) 20A-3P CIRCUIT BREAKERS (KPA - 44-60) PROVIDE WITH NEW 20A-1P CIRCUIT BREAKERS. REFER TO PANEL SCHEDULE.
25. EXISTING PANEL "BADD2"
26. EXISTING EXIT SIGN TO BE REMOVED. EXTEND ELECTRICAL CIRCUIT TO NEW EXIT FIXTURE AND RECONNECT AS EXISTING.
27. (2) #12 AWG + #12 GND IN 3/4" CONDUIT TO EXISTING EXIT SIGN ELECTRICAL CIRCUIT. RECONNECT AS EXISTING.
28. JUNCTION BOX TO SERVE DOOR ACCESS CONTROL POWER AND COMMUNICATION. COORDINATE ADDITIONAL REQUIREMENTS WITH SECURITY CONTRACTOR AND DOOR FRAME MANUFACTURER.
29. EXISTING PANEL "BAEE2"
30. EXISTING PANEL "BAAD2"

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REVISIONS:

PROJECT NO. 22421
DATE: 09/04/2025

SHEET NO.
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2 OF 2