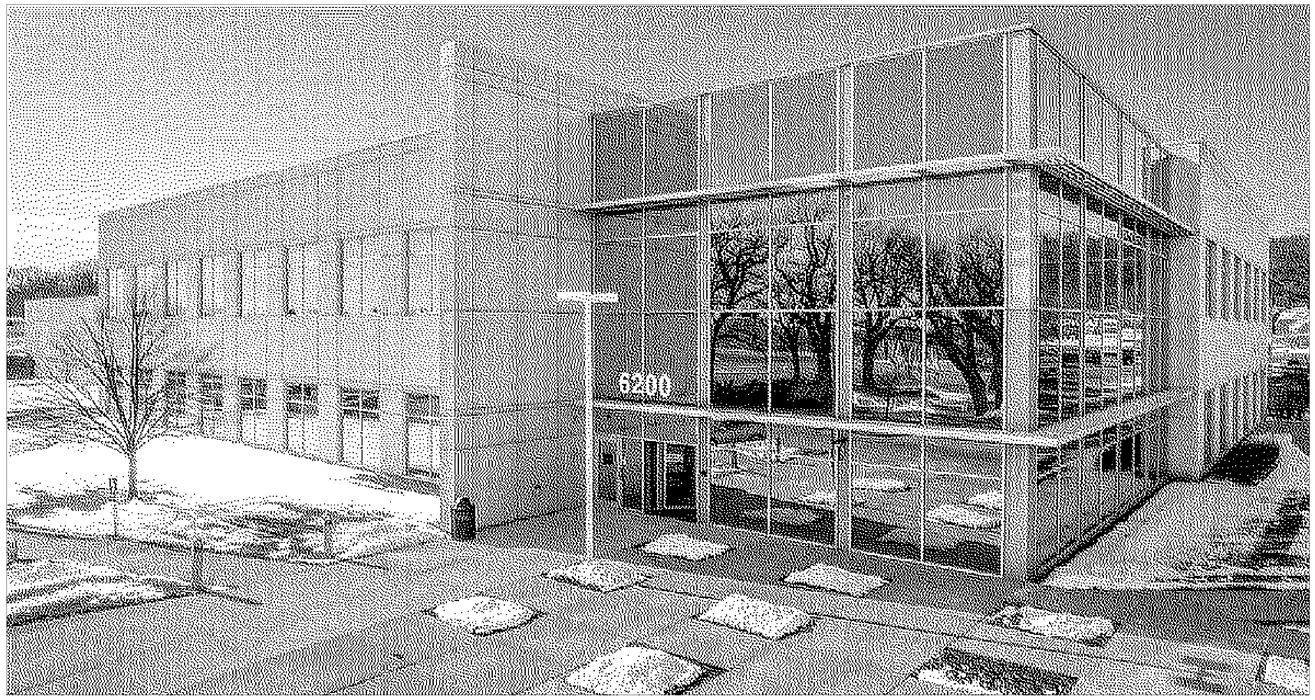
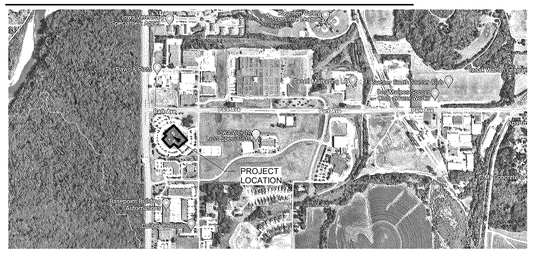
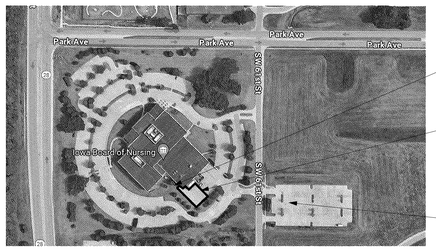


PROJECT LOCATION MAP





EXIST. GREASE INTERCEPTOR LOCATION

CONTRACTOR STAGING AREA AND TEMPORARY FACILITIES - COORDINATE FINAL LAYOUT WITH CONSTRUCTION MANAGER AND OWNER. PROVIDE TEMPORARY FENCING AS REQUIRED.

COORDINATE CONTRACTOR PARKING WITH CONSTRUCTION MANAGER AND OWNER.

SHEET INDEX

GENERAL DRAWINGS

SHEET NUMBER	SHEET NAME
G001	LIFE SAFETY AND CODE SUMMARY

CIVIL DRAWINGS

SHEET NUMBER	SHEET NAME
C01	CIVIL COVER SHEET
C02	DEMOLITION PLAN
C03	GRADING PLAN

STRUCTURAL DRAWINGS

SHEET NUMBER	SHEET NAME
S100	STRUCTURAL NOTES
S101	FOUNDATION AND FRAMING PLANS
S102	STRUCTURAL DETAILS

ARCHITECTURAL DRAWINGS

SHEET NUMBER	SHEET NAME
A000	GENERAL DRAWING INFORMATION
A001	DOOR AND FINISH INFORMATION
AD101	DEMO FLOOR PLANS
AD102	DEMO REFLECTED CEILING PLANS
AD103	DEMO PHOTOS
AD104	DEMO PHOTOS
A101	FLOOR PLAN
A102	REFLECTED CEILING PLANS
A201	EXTERIOR ELEVATIONS & WALL SECTIONS
A401	INTERIOR ELEVATIONS
A800	FURNITURE PLAN (REFERENCE ONLY)

MECHANICAL, PLUMBING, FIRE PROTECTION DRAWINGS

SHEET NUMBER	SHEET NAME
M000	MECHANICAL GENERAL NOTES & SYMBOLS
MD101	MECHANICAL DEMOLITION
M101	MECHANICAL HVAC PLAN
M301	MECHANICAL DETAILS
M501	MECHANICAL SCHEDULES
PD100	UNDER FLOOR PLUMBING DEMOLITION
PD101	PLUMBING DEMOLITION
P100	PLUMBING FOUNDATION PLAN
P101	PLUMBING PLAN
P301	PLUMBING DETAILS
P501	PLUMBING SCHEDULES
F101	FIRE PROTECTION PLAN

ELECTRICAL DRAWINGS

SHEET NUMBER	SHEET NAME
E000	ELECTRICAL GENERAL NOTES & SYMBOLS
ED101	ELECTRICAL POWER & SYSTEMS DEMO
ED102	ELECTRICAL LIGHTING DEMO
E101	ELECTRICAL POWER & SYSTEMS
E201	ELECTRICAL LIGHTING
E301	ELECTRICAL SCHEDULES
E302	ELECTRICAL PANEL SCHEDULES

All questions regarding these plans and specifications should be directed to:

Nate Stieler, AIA
Project Manager
nstieler@opnarchitects.com
(515) 309-6882

LICENSED PROFESSIONAL ARCHITECT
Terry Gebard, AIA, 05219
IOWA

I hereby certify these plans and specifications were prepared by me or under my direct personal supervision and that I am a duly licensed professional architect under the laws of the state of Iowa.

Signature:

Name: Terry Gebard, AIA

Iowa Registration No: 05219 **Renewal Date:** 6/30/2026

Sheets covered by this seal: Listed As "Architectural"

LICENSED PROFESSIONAL ENGINEER
Anthony J. Samuelson, P.E., 21984
IOWA

I hereby certify this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed professional engineer under the laws of the state of Iowa.

Signature:

Name: Anthony J. Samuelson, P.E.

Iowa Registration No: 21984 **Renewal Date:** 12/31/2025

Sheets covered by this seal: Listed As "Structural"

LICENSED PROFESSIONAL ENGINEER
JACOB CUNLIFFE, P.E., 20857
IOWA

I hereby certify this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed professional engineer under the laws of the state of Iowa.

Signature:

Name: JACOB CUNLIFFE, P.E.

Iowa Registration No: 20857 **Renewal Date:** 12/31/2025

Sheets covered by this seal: Listed As "Mechanical, Plumbing"

LICENSED PROFESSIONAL ENGINEER
ERIC HEYNEN, P.E., P24706
IOWA

I hereby certify this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed professional engineer under the laws of the state of Iowa.

Signature:

Name: ERIC HEYNEN, P.E.

Iowa Registration No: P24706 **Renewal Date:** 12/31/2025

Sheets covered by this seal: Listed As "Electrical"

LICENSED PROFESSIONAL ENGINEER
Paul J.D. Clausen, 23772
IOWA

I hereby certify this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed professional engineer under the laws of the state of Iowa.

Signature:

Name: Paul J.D. Clausen

Iowa Registration No: 23772 **Renewal Date:** 12/31/2025

Sheets covered by this seal: Listed As "Civil"

STATE OF IOWA - DEPARTMENT OF ADMINISTRATIVE SERVICES - 9411.00 - DAS 6200 PARK ALJ - WORKMAN'S COMP RENOVATION

6200 PARK AVE, DES MOINES, IA 50321

OPN ARCHITECTS
100 Court Ave. Suite 100, Des Moines, IA 50309
P: 515-309-0722 F: 515-309-0725 www.opnarchitects.com

ARCHITECT
OPN ARCHITECTS
100 COURT AVENUE
DES MOINES, IA 50309

CONSTRUCTION MANAGER
DCI GROUP
200 SE 6TH STREET, SUITE 200
DES MOINES, IA 50309

MECHANICAL ENGINEER/ BUILDER
KCL ENGINEERING
300 4TH STREET
WEST DES MOINES, IA 50265

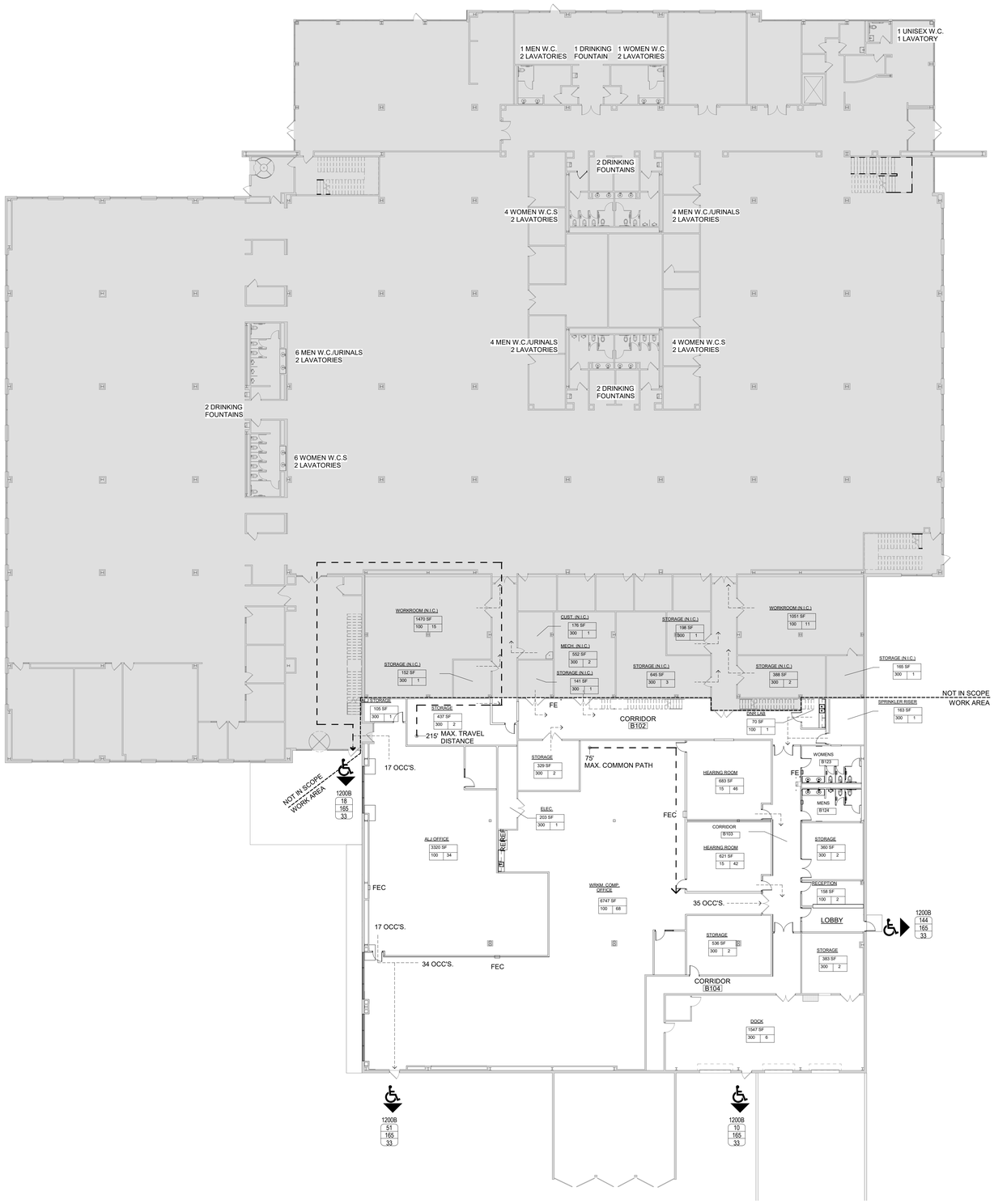
STRUCTURAL ENGINEER
RAKER RHODES ENGINEERING
4717 GRAND AVENUE
DES MOINES, IA 50312

ELECTRICAL ENGINEER/BUILDER
KCL ENGINEERING
300 4TH STREET
WEST DES MOINES, IA 50265

CIVIL ENGINEER
CIVIL ENGINEERING CONSULTANTS, INC
2400 86TH STREET, UNIT 12
DES MOINES, IA 50322

100% CONSTRUCTION DRAWING SET

PRINTED: 8/19/2024 2:10:32 PM



A1 LEVEL 1 OCCUPANCY PLAN
1/16" = 1'-0"

CODE PLAN LEGEND

- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- EXIT PATH
- ACCESSIBLE ENTRANCE
- EGRESS CAPACITY: 1200B (MARK), 50 (OCCUPANT LOAD), 166 (MAX. OCCUPANT LOAD), 33.25 (EGRESS WIDTH (INCH))
- AREA TAG: AREA NAME (AREA NAME), 500.00 SF (AREA SQUARE FEET), 100 (CALCULATED OCCUPANTS), 5 (OCCUPANT LOAD FACTOR)

APPLICABLE CODE INFORMATION

The project shall comply with the following codes:

2015 International Building Code, including State of Iowa amendments.
2015 International Fire Code
Iowa State Mechical Code (2021 International Mechanical Code and amendments)
Iowa State Electrical Code (2020 National Electrical Code and amendments)
Iowa State Plumbing Code (2021 Uniform Plumbing Code and amendments)
2012 International Energy Conservation Code
2015 International Existing Building Code
Accessility - State Building Code Chapter 302 - 2010 Americans with Disabilities Act; 2015 IBC and ANSI A117.1 - 2009 Edition

Building Characteristics

Project description:	Interior renovation of kitchen and storage space to offices, open office areas and hearing rooms; renovation of offices and mail room to accommodate new reception and public/employee entrance. Renovation also includes of single user toilet stalls to multi-user toilet stalls.
Building Area:	119,769 SF
Number of Stories:	2 (see below for detailed information)
Fully Sprinkled:	Yes - Equipped with fully automated sprinkler system
Fie Alarm:	Yes - Equipped with emergency voice/alarm communication system

IC Chapter 3 - Use and Occupancy Classification

Occupancy Group: B

IBC Chapter 5 - General Building Heights and Areas

Occupancy Group B
Number of Stories: 2 (4 max per IBC Table 504.4)
Building Area: 67,963 GSF Level 1 (Unlimited per IBC Section 507.5)

507 Unlimited Area Buildings

507.5 The area of a Group B, F, M or S building no more than two stories above grade plane shall not be limited where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.3.1.1 and is surrounded and adjoined by public ways or yards not less than 60 feet in width.

IBC Chapter 6 - Types of Construction

Construction Classification: Type IIB

Table 601 Fire Resistance Rating Required

Primary Structural Frame	0 HR
Bearing Walls	0 HR
Nonbearing Wall and Partition (Exterior)	0 HR
Nonbearing Wall and Partitions (Interior)	0 HR
Floor Construction and Secondary Members	0 HR
Roof Construction and Secondary Members	0 HR

Table 602 Fire Resistive Rating for Exterior Walls based on Fire Construction

Fire Separation Distance is greater than 30 FT = 0 HR

IBC Chapter 9 - Fire Protection Systems

903	Automatic Sprinkler Systems	Required/Provided
906	Portable Fire Extinguishers	Required/Provided

IBC Chapter 10 - Means of Egress (at Project Work Area only)

1004 Occupant Load (See Occupant Load Calculations table for details)

Level 1 214

1005 Means of Egress Sizing

1005.3.1 & 1005.3.2 Means of Egress Capacity Factors

Stairs N/A
Other Elements .2"/Occupant

		Egress Required	Egress Provided
Level 1 Egress Width	214 Occupants x .2"/Occupant =	42.8"	122"

1006 Number of Exits and Exit Access Doorways

1006.2.1 Common Path of Egress Travel Distance

	Maximum Allowed	Maximum Actual
Group B (With Sprinkler System)	100'	75'

1006.3.1 Minimum Number of Exits or Access to Exits Per Story

	Number Required	Number Provided
Level 1	2	4

1017 Exit Access Travel Distance

Table 1017.2 Exit Access Travel Distance

	Maximum Allowed	Maximum Actual
Group B (With Sprinkler System)	300'	215'

Iowa Administrative Code, Chapter 16, Division VII - Accessibility Requirements For Facilities Used by the General Public:

Accessibility within the building will be maintained.

PLUMBING FIXTURE ANALYSIS B - Business IBC 2015 Table 2902.1

	WOMEN		MEN			DR	SVC	OCCUPANT LOAD		
	WC	LAV	WC	LAV	UR	FNTN	SINK			
REQUIRED	2.68	2.05	2.68	2.05	-	1.68	1	TOTAL	168*	*(NOT INCL. 35 ALJ OFFICE/STORAGE OCC'S. SERVED BY EXIST FIXTURES)
								MEN	84	
PROVIDED	3	2	2	2	1	1	1	WOMEN	84	

Plumbing Fixture Requirements per 2015 Uniform Plumbing Code (UPC)

IBC 2015 Table 2902.1 Minimum Number of Required Plumbing Fixtures

Occupancy		W.C.	Lavs	DF	Other
B	M / F	1 per 25 for 50 1 per 50 after 50	1 per 40 for 80 1 per 80 after 80	1 per 100	1 Service Sink

For each urinal added in excess of the maximum required, one water closet may be deducted. The number of water closets shall not be reduced to less than two-thirds (2/3) of the minimum.

There shall be a minimum of one (1) drinking fountain per occupied floor in offices or public buildings.

NOTE: Existing additional fixtures located in other areas of Level 1:
15 W.C.s (women)
15 W.C.s/Urinals's (men)
1 W.C. (unisex)
8 Lavatories (women)
8 Lavatories (men)
1 Lavatory (unisex)
5 Drinking Fountains
2 Service Sinks

OCCUPANT LOAD CALCULATIONS

NAME	AREA	OCCUPANCY GROUP	O.L.F.	OCCUPANTS
Level 1				
HEARING ROOM	683 SF	ASSEMBLY	15	45.5
HEARING ROOM	621 SF	ASSEMBLY	15	41.4
STORAGE	536 SF	STORAGE	300	1.8
STORAGE	383 SF	STORAGE	300	1.3
LOBBY	158 SF	BUSINESS	0	
RECEPTION	158 SF	BUSINESS	100	1.6
STORAGE	360 SF	STORAGE	300	1.2
SPRINKLER RISER	163 SF	UTILITY	300	0.5
DNR LAB	70 SF	BUSINESS	100	0.7
STORAGE	329 SF	STORAGE	300	1.1
STORAGE	437 SF	STORAGE	300	1.5
ALJ STORAGE	105 SF	STORAGE	300	0.4
WRKM. COMP. OFFICE	6,747 SF	BUSINESS	100	67.5
ALJ OFFICE	3,320 SF	BUSINESS	100	33.2
DOCK	1,547 SF	STORAGE	300	5.2
ELEC.	203 SF	UTILITY	300	0.7
				203.4
Total Occupants				203.4

OPN ARCHITECTS
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P: 515-309-0722
www.opnarchitects.com

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Owner
STATE OF IOWA - DEPARTMENT OF ADMINISTRATIVE SERVICES
1305 E WALNUT ST
DES MOINES, IA 50319

Project
9411.00 - DAS 6200 PARK ALJ - WORKMAN'S COMP RENOVATION
6200 PARK AVE
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220 SE 6TH ST - SUITE 200
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WEST DES MOINES, IA 50265
P. 515-724-7938

Electrical Engineer
KCL ENGINEERING
300 4TH ST
WEST DES MOINES, IA 50265
P. 515-724-7938

Key Plan

Revision	Description	Date

OPN Project No.
24816000

Sheet Issue Date
100% CONSTRUCTION DRAWING SET 08/16/2024

Sheet Name
LIFE SAFETY AND CODE SUMMARY

Sheet Number
G001

SITE PLAN - MINOR MOD

6200 PARK AVENUE

6200 PARK AVENUE, DES MOINES, IA 50321

GENERAL NOTES

1. ONE WEEK PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY:
   A. OPN ARCHITECTS
   B. ALJ - WORKMAN'S COMP
   C. CIVIL ENGINEERING CONSULTANTS, INC.
   D. "ONE CALL" UTILITY LOCATE SERVICE
   E. DES MOINES WATER WORKS
2. ALL DIMENSIONS ARE TO BACK OF CURB, OUTSIDE OF BUILDING WALL, AND TO PROPERTY LINES.
3. LOCATIONS AND DIMENSIONS SHOWN ON PLANS FOR EXISTING FACILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING, ENGINEER DOES NOT GUARANTEE ACCURACY OF INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN. IT IS RESPONSIBILITY OF CONTRACTOR TO CONTACT ALL PUBLIC AND/OR PRIVATE UTILITIES SERVING AREA TO DETERMINE PRESENT EXTENT AND EXACT LOCATION OF FACILITIES BEFORE BEGINNING WORK.
4. CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT UTILITIES OR STRUCTURES AT SITE. IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO NOTIFY OWNERS OF UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK. CONTRACTOR SHALL NOTIFY PROPER UTILITY IMMEDIATELY UPON BREAKING OR DAMAGE TO ANY UTILITY LINE OR APPURTENANCE, OR INTERRUPTION OF SERVICE. HE SHALL NOTIFY PROPER UTILITY INVOLVED. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, CONTRACTOR SHALL NOTIFY ENGINEER SO CONFLICT MAY BE RESOLVED.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH URBAN STANDARD SPECIFICATIONS.
6. ALL DEBRIS SPILLED ON COUNTY R.O.W. AND ADJOINING PROPERTY SHALL BE REMOVED BY OWNER/CONTRACTOR IN TIMELY FASHION.
7. ALL SITEWORK, SODDING AND LANDSCAPING SHALL BE IN ACCORDANCE WITH CITY OF DES MOINES STANDARD SPECIFICATIONS UNLESS SPECIFIED OTHERWISE.
8. ANY AMENDMENTS OR CHANGES TO PROJECT SITE NOT MEETING WHAT IS SHOWN ON SITE PLAN NEED TO BE APPROVED WITH PERMIT AND DEVELOPMENT CENTER PRIOR TO INSTALLATION / CONSTRUCTION.
9. REQUIRED LANDSCAPING, BOTH EXISTING AND PROPOSED, SHALL BE MAINTAINED FOR LIFE OF CERTIFICATE OF OCCUPANCY.
10. ALL DISTURBED AREAS SHALL BE RESTORED BY SEEDING OR SODDING.
11. CONTACT CITY TRAFFIC AND TRANSPORTATION (283-4873) BEFORE CONSTRUCTION BEGINS AND COORDINATE WORK AS NECESSARY.
12. SITE SHALL BE MAINTAINED IN COMPLIANCE WITH ALL CITY CODES APPLICABLE ON DATE OF SITE PLAN APPROVAL.
13. ALL PLANTING BEDS SHALL INCLUDE NON-LIVING PERMEABLE MATERIALS SUCH AS MULCH, BUT NOT INCLUDING ROCK.

VICINITY MAP
1" = 500'

NORTH

GENERAL LEGEND

PROPOSED	EXISTING
PLAT BOUNDARY	LOT LINE
SECTION LINE	SANITARY/STORM MANHOLE
LOT LINE	WATER VALVE
CENTERLINE	FIRE HYDRANT
EASEMENT LINE	STORM SEWER SINGLE INTAKE
FLARED END SECTION	STORM SEWER DOUBLE INTAKE
DRAIN BASIN OR SEDIMENT RISER	STORM SEWER ROUND INTAKE
DRAIN BASIN WITH SOLID GRATE	FLARED END SECTION
WATER VALVE	DECIDUOUS TREE
FIRE HYDRANT ASSEMBLY	CONIFEROUS TREE
BLOW-OFF HYDRANT	SHRUB
SCOUR STOP MAT	POWER POLE
TURF REINFORCEMENT MAT	STREET LIGHT
STORM SEWER WITH SIZE	GUY ANCHOR
WATER SEWER WITH SIZE	ELECTRIC TRANSFORMER
WATER SERVICE	GAS METER
PROPOSED CONTOUR	TELEPHONE RISER
SILT FENCE	SIGN
ADDRESS	UNDERGROUND TELEVISION
RIPRAP	UNDERGROUND ELECTRIC
	UNDERGROUND GAS
	UNDERGROUND FIBER OPTIC
	UNDERGROUND TELEPHONE
	OVERHEAD ELECTRIC
	SANITARY SEWER WITH SIZE
	STORM SEWER WITH SIZE
	WATER MAIN WITH SIZE
	EXISTING CONTOUR
	TREELINE
	B.S.L. BUILDING SETBACK LINE
	P.U.E. PUBLIC UTILITY EASEMENT
	M.O.E. MINIMUM OPENING ELEVATION

SITE PLAN

☐ APPROVED ☐ APPROVED WITH CONDITIONS

IN ACCORDANCE WITH (SECTION 82-207(G.) 2000 DES MOINES MUNICIPAL CODE, AS AMENDED.

NO CHANGES TO THIS PLAN UNLESS APPROVED IN WRITING FROM THE PLANNING DIRECTOR OR NEW AMENDED DATED PLAN.

DATE PLANNING DIRECTOR

GENERAL USE
OFFICE / WAREHOUSE - MULTIPLE USER

UTILITIES
WATER SUPPLY: DES MOINES WATER WORKS.
SANITARY SEWER: CITY OF DES MOINES.
STORM SEWER: CITY OF DES MOINES.

Sheet List Table

Sheet Number	Sheet Title
01	COVER
02	DEMOLITION PLAN
03	GRADING PLAN

SUBMITTAL TABLE

SUBMITTAL DATE	SUBMITTAL NOTES
JULY 03, 2024	INITIAL SUBMITTAL
JULY 25, 2024	
AUGUST 01, 2024	
AUGUST 07, 2024	
AUGUST 13, 2024	

APPLICANT:
STATE OF IOWA
800 LINCOLN WAY
AMES, IA 50010-6415

PROPERTY OWNER:
AIRPORT DEVELOPMENT LC
KNAPP PROPERTIES
5000 WESTOWN PKWY STE 400
WEST DES MOINES, IA 50266-5921

PROJECT ADDRESS
6000 PARK AVENUE
DES MOINES, IOWA 50321

PROJECT MANAGER:
PAUL CLAUSEN, PE,
CIVIL ENGINEERING CONSULTANTS
2400 86TH STREET, #12
DES MOINES, IOWA 50322
PH. 515-276-4884 EXT. #217
EMAIL: CLAUSEN@CECLAC.COM

PROFESSIONAL LAND SURVEYOR:
CIVIL ENGINEERING CONSULTANTS, INC.
PH. JEFFERY A. GADDIS, PLS
2400 86TH STREET, SUITE 12
URBANDALE, IA 50322
PH. 515-276-4884 EXT. 221
EMAIL: GADDIS@CECLAC.COM

MUNICIPALITY PLANNER:
JILLIAN SOMMER
PERMIT and DEVELOPMENT CENTER
SITE PLANNING REVIEW
PHONE:(515) 283-4581
EMAIL: JLSommer@dmgov.org

LEGAL DESCRIPTION
LOT 1 AIRPORT COMMERCE PARK WEST PLAT 3 RECORDED IN BOOK 8401, PAGE 1-15 AT THE POLK COUNTY RECORDER'S OFFICE.

ZONING
PUD - AIRPORT COMMERCE PARK WEST

BULK REGULATIONS
PUD

BUILDING SETBACKS
- FRONT YARD: 50 FEET
- SIDE YARD: 20 FEET
- REAR YARD: 20 FEET TOTAL, 5 FEET MINIMUM, ONE SIDE

PARKING SETBACKS
- FRONT YARD: 15 FEET
- REAR & SIDE YARD: 5 FEET

NUMBER OF EMPLOYEES
SPECULATIVE SPACE. QUANTITY OF EMPLOYEES INDETERMINANT.

DEVELOPMENT SCHEDULE

SITE DEMO	JULY, 2024
SITE PAVING	AUGUST, 2024
PROJECT COMPLETE	SEPTEMBER, 2024

FLOOD ZONE CLASSIFICATION
ZONE 'X' ACCORDING TO FEMA FLOOD INSURANCE RATE MAPS.
COMMUNITY-PANEL NUMBER 19153C0340F
MAP REVISED: 2/1/2019

BENCHMARKS

CITY OF DES MOINES BENCHMARK #4412

BRASS TABLET ON SW CORNER TRAFFIC SIGNAL BASE AT THE NE CORNER OF PARK AVENUE & SW 56TH STREET

ELEVATION: (CITY OF DES MOINES DATUM) 57.328 FT

CITY OF DES MOINES BENCHMARK #4416

BRASS TABLET ON NE CORNER TRAFFIC SIGNAL BASE AT 5501 PARK AVENUE (NORTH SIDE).

ELEVATION: (CITY OF DES MOINES DATUM) 45.658 FT

Civil Engineering Consultants, Inc.
2400 86th Street . Unit 12 . Des Moines, Iowa 50322
515.276.4884 . Fax: 515.276.7084 . mail@ceclac.com
CEC

PUBLISH DATE: August 13, 2024

DATE OF SURVEY:	MARCH 23, 2020	
DESIGNED BY:		PC
DRAWN BY:		MEH

6200 PARK AVENUE
6200 PARK AVENUE, DES MOINES, IA 50321

COVER

SHEET 01 OF 03

E9249

PLOT BY : MARTIN HILL - 2024/08/13 - q:\E-FILES\E-9000\E9249_c3d drawings\construction documents\Site Plan Minor Mod\E9249 SP COVER.dwg (- ANSI EXPAND D (34.00 X 22.00 INCHES) - AUTOCAD PDF (GENERAL DOCUMENTATION).PC3 - GEC-XES TEST-CTB - PLOT SCALE = 1:1
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SCALE: 1"=10'

0' 2' 4' 6' 8' 10' 20'

1"=10' PRINTED ON 22"x34" SHEET
1"=20' PRINTED ON 11"x17" SHEET

NORTH

CEC
Civil Engineering Consultants, Inc.
2400 86th Street, Unit 12 . Des Moines, Iowa 50322
515.276.4884 . Fax: 515.276.7084 . mail@ccelac.com

PUBLISH DATE: August 13, 2024

DATE OF SURVEY: MARCH 23, 2020
DESIGNED BY: PC
DRAWN BY: MEH

6200 PARK AVENUE

6200 PARK AVENUE, DES MOINES, IA 50321

DEMOLITION PLAN

SHEET 02 OF 03

E4244

PLOT BY: MARTIN HILL - 2024/08/13 - q:\E-FILES\E-4000\E4244_Cad drawings\construction documents\Site Plan Minor Mod\E4244 SP DEMO.dwg - ANSI EXPAND D (34.00 X 22.00 INCHES) - AUTOCAD PDF (GENERAL DOCUMENTATION).PC3 - CEC-ANSI TEST.CTB - PLOT SCALE = 1:1
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CURB RAMP

NO SCALE

DETAIL: HANDICAP SIGNAGE

NOT TO SCALE

NOTES

1. CONTRACTOR SHALL INCLUDE PAVEMENT STRIPING.
2. PAVEMENT STRIPING SHALL MATCH EXISTING PAINT TYPE AND COLOR.

SCALE: 1"=10'

0' 2' 4' 6' 8' 10' 20'

1"=10' PRINTED ON 22"x34" SHEET
1"=20' PRINTED ON 11"x17" SHEET

NORTH

CEC
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515.276.4884 . Fax: 515.276.7084 . mail@ceclac.com

PUBLISH DATE: August 13, 2024

DATE OF SURVEY:	MARCH 23, 2020	
DESIGNED BY:		PC
DRAWN BY:		MEH

6200 PARK AVENUE

6200 PARK AVENUE, DES MOINES, IA 50321

GRADING PLAN

SHEET 03 OF 03

E9244

PLOT BY : MARTIN HILL - 2024/08/13 - q:\E-FILES\E-9000\9249_c3d drawings\construction documents\Site Plan Minor Mod\E9249 SP GRADING.dwg - ANSI EXPAND D (34.00 X 22.00 INCHES) - AUTOCAD PDF (GENERAL DOCUMENTATION).PC3 - CEC-XES TEST.CTB - PLOT SCALE = 1:1
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GP GENERAL PARAMETERS

GP1 STRUCTURAL DRAWINGS ARE A PORTION OF THE CONTRACT DOCUMENTS AND ARE INTENDED TO BE USED WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REQUIREMENTS FROM THESE DRAWINGS INTO THEIR SHOP DRAWINGS AND WORK.

GP2 VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION OF ANY ITEMS.

GP3 DRAWINGS SHALL BE COORDINATED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL OPENINGS, ELECTRICAL COMPONENTS, FLOOR DEPRESSIONS, ETC. NOT SHOWN ON DRAWINGS. COORDINATE LOCATION, SIZE AND REINFORCEMENT OF ALL OPENINGS WITH RESPECTIVE TRADES BEFORE FABRICATION. REPORT ANY DISCREPANCIES AND/OR INTERFERENCE PROBLEMS TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD.

GP4 THESE GENERAL NOTES SUPPLEMENT THE PROJECT SPECIFICATIONS. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE PROVIDED, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.

GP5 THE BUILDING IS NOT STRUCTURALLY STABLE UNTIL ALL CONNECTIONS, FRAMING, SHEAR WALLS, X-BRACING, AND EXTERIOR WALLS ARE COMPLETE AND HAVE ACHIEVED FINAL DESIGN STRENGTH. CONTRACTOR IS SOLELY RESPONSIBLE FOR MAINTAINING STRUCTURAL STABILITY OVERALL AND TO ALL PORTIONS OF THE BUILDING DURING DEMOLITION, ERECTION AND CONSTRUCTION. TEMPORARY GRAVITY AND LATERAL FORCE BRACING SYSTEMS THAT MAY BE REQUIRED WILL BE DESIGNED BY, AND AT THE EXPENSE OF, THE CONTRACTOR. STRUCTURAL DRAWINGS DO NOT NECESSARILY INDICATE ANY OR ALL REQUIRED TEMPORARY SUPPORT SYSTEMS. TEMPORARY BRACING SYSTEMS ARE NOT TO BE REMOVED UNTIL STRUCTURAL WORK IS COMPLETE OR CONTRACTOR DEEMS THE AREA UNDER CONSIDERATION TO BE STABLE.

GP6 CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.

GP7 RETAINING WALLS AND BASEMENT WALLS WHICH TIE TO UPPER SLABS SHALL NOT BE BACKFILLED UNTIL THE UPPER SLABS REACH FULL DESIGN STRENGTH, UNLESS ADEQUATE BRACING IS PROVIDED AT THE TOP OF THE WALL.

GP8 AS USED IN GENERAL NOTES AND THROUGHOUT STRUCTURAL DRAWINGS, THE TERM "CONTRACTOR" IS DEFINED TO INCLUDE ANY OR ALL OF THE FOLLOWING: GENERAL CONTRACTOR AND THEIR SUBCONTRACTORS, CONSTRUCTION MANAGER AND THEIR SUBCONTRACTORS, FABRICATORS, INSTALLERS, DELEGATED DESIGNERS/ENGINEERS AND ERECTORS.

FP FOUNDATION PARAMETERS

FP1 SIZE AND BOTTOM ELEVATIONS OF FOOTINGS HAVE BEEN ESTABLISHED BASED ON THE GEOTECHNICAL REPORT FILE NO. 08995094 PREPARED BY TERRACON AND DATED 08/09/1999. AS EXCAVATION PROGRESSES, UNANTICIPATED SOIL CONDITIONS MAY REQUIRE CHANGES. CONTACT STRUCTURAL ENGINEER OF RECORD FOR EVALUATION OF THESE CHANGES.

FP2 ALLOWABLE SOIL BEARING PRESSURE
CONTINUOUS FOOTINGS.. 2000 PSF
SQUARE FOOTINGS.. 2000 PSF

FP3 MINIMUM FOOTING DEPTH FOR FROST PROTECTION
(BELOW FINISHED GRADE)..................................... 42 IN.

FP5 GEOTECHNICAL ENGINEER IS SOLE JUDGE OF THE SUITABILITY OF UNDERLYING MATERIAL TO SUPPORT FOUNDATIONS. BEARING MATERIAL SHALL BE APPROVED BY GEOTECHNICAL ENGINEER BEFORE FOUNDATION INSTALLATION. DO NOT PROCEED WITHOUT APPROVAL.

FP6 PRIOR TO COMMENCING EARTHWORK, CONTRACTOR SHALL REVIEW AND BE FAMILIAR WITH ALL ASPECTS OF THE GEOTECHNICAL REPORT. CONTACT GEOTECHNICAL ENGINEER IF QUESTIONS OR DISCREPANCIES.

DP DESIGN PARAMETERS

DP1 THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE ICC INTERNATIONAL BUILDING CODE, 2021 EDITION.

DP2 UNIFORM LIVE LOADS:
TYPICAL ROOF (GOVERNED BY SNOW) — 24 PSF+DRIFT
TYPICAL HANDRAIL — 50 PLF

DP3 CONCENTRATED LIVE LOADS:
TYPICAL HANDRAIL — 200 LB

DP4 SNOW DESIGN PARAMETERS:
GROUND SNOW LOAD (P_g) — 30 PSF
FLAT ROOF SNOW LOAD (P_f) — 24 PSF
SNOW EXPOSURE FACTOR (C_e) — 1.0
SNOW LOAD IMPORTANCE FACTOR (I_s) — 1.0
SNOW LOAD THERMAL FACTOR (C_t) — 1.0
SNOW SLOPE FACTOR (C_s) — 1.0

DP5 EARTHQUAKE DESIGN PARAMETERS:
SEISMIC RISK CATEGORY — II
SEISMIC IMPORTANCE FACTOR (I_e) — 1.0
S_s — 0.062g
S_1 — 0.052g
SEISMIC SITE CLASS — D
S_{ds} — 0.066g
S_{d1} — 0.083g
SHORT-PERIOD SITE COEFFICIENT (F_a) — 1.6
LONG-PERIOD SITE COEFFICIENT (F_v) — 2.4
SEISMIC DESIGN CATEGORY — B
SEISMIC-FORCE-RESISTING SYSTEM:
NO MODIFICATIONS TO THE EXISTING LATERAL SYSTEMS
SEISMIC BASE SHEAR (V) N-S — N/A
SEISMIC BASE SHEAR (V) E-W — N/A
SEISMIC RESPONSE COEFFICIENT (C_s) N-S — N/A
SEISMIC RESPONSE COEFFICIENT (C_s) E-W — N/A
RESPONSE MODIFICATION FACTOR (R) N-S — N/A
RESPONSE MODIFICATION FACTOR (R) E-W — N/A
REDUNDANCY FACTOR (ρ) N-S — 1.0
REDUNDANCY FACTOR (ρ) E-W — 1.0
SEISMIC ANALYSIS PROCEDURE:
N/A

DP6 WIND DESIGN PARAMETERS:
BASIC WIND SPEED (V) (3 SECOND GUST) — 110 MPH
WIND RISK CATEGORY — II
WIND EXPOSURE CATEGORY — C
INTERNAL PRESSURE COEFFICIENT — +/-.18
BASIC DESIGN PRESSURE @ ROOF — 20 PSF (SERVICE)
NET WIND UPLIFT @ ROOF — 10 PSF (SERVICE)

DP7 ROOF RAIN LOAD PARAMETERS:
RAIN INTENSITY (i) — 3.5 IN. / HR.

DP8 ALLOWABLE WALL DEFLECTIONS:
EXTERIOR (CLADDING DESIGN) — L/360
(BRICK VENEER DESIGN) — L/600 ≤ 0.3"
INTERIOR — L/360

DP9 ALLOWABLE FRAMING DEFLECTIONS:
ROOF LIVE LOAD — L/360
ROOF TOTAL LOAD — L/240
FLOOR LIVE LOAD — L/360
FLOOR TOTAL LOAD — L/240

DP10 ASSUMED FUTURE CONSTRUCTION:
VERTICAL — NONE
HORIZONTAL — NONE

SU SUBMITTALS

SU1 GENERAL CONTRACTOR TO PROVIDE A SHOP DRAWING SUBMITTAL LOG ITEMIZING ALL PROPOSED SUBMITTALS FOR APPROVAL BY STRUCTURAL ENGINEER OF RECORD.

SU2 ALL SHOP DRAWINGS SHALL BE CHECKED BY THE FABRICATOR AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL TO THE STRUCTURAL ENGINEER OF RECORD. SHOP DRAWING REVIEW BY ENGINEER IS LIMITED TO VERIFYING GENERAL CONFORMANCE TO THE CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES FROM THE CONTRACT DOCUMENTS, DIMENSIONAL ERRORS, COORDINATION ERRORS, OR OMISSIONS IN SHOP DRAWINGS.

SU3 SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION REGARDING ALL STRUCTURAL ITEMS, INCLUDING THE FOLLOWING:
- CONCRETE MIX DESIGNS (5 DAYS BEFORE POUR, MIN.)
- CONCRETE REINFORCEMENT
- EMBEDDED STEEL ITEMS
- STRUCTURAL STEEL
- LT. GA. METAL STUDS

SU4 SHOP DRAWINGS SHALL INCLUDE CONNECTIONS AS WELL AS SIZE, SPACING, AND GRADE OF ALL MEMBERS. PLANS AND ANY DETAILING NECESSARY FOR DETERMINING FIT AND PLACEMENT SHALL ALSO BE INCLUDED.

SU5 IF SHOP DRAWINGS DIFFER FROM OR ADD TO THE DESIGN OF THE STRUCTURAL DRAWINGS, THEY SHALL BEAR THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN THE APPROPRIATE STATE. ANY CHANGES TO THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ARE SUBJECT TO REVIEW AND APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD.

SU6 DESIGN DRAWINGS, SHOP DRAWINGS, AND CALCULATIONS FOR THE DESIGN AND FABRICATION OF ITEMS THAT ARE DESIGNED BY THE CONTRACTOR, INCLUDING:
- LIGHT GA. METAL FRAMING
- WINDOW WALLS AND ALL OTHER GLAZING SYSTEMS
- TEMPORARY SHORING

SHALL BEAR THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN THE APPROPRIATE STATE AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION. CALCULATIONS SHALL BE INCLUDED FOR ALL CONNECTIONS TO THE STRUCTURE, CONSIDERING LOCALIZED EFFECTS ON STRUCTURAL ELEMENTS INDUCED BY THE CONNECTION LOADS.

SU7 ITEMS THAT ARE DESIGNED BY THE CONTRACTOR SHALL BE DESIGNED TO RESIST THE LIVE LOADS INDICATED IN STRUCTURAL NOTES, DEAD LOAD, SELF WEIGHT, ANY ADDITIONAL LOADING INDICATED ON PLANS AND DETAILS, SNOW DRIFT, AND A NET WIND UPLIFT.

SU8 ITEMS THAT ARE DESIGNED BY THE CONTRACTOR SHALL INCLUDE ANY RELEVANT TECHNICAL LITERATURE FROM MANUFACTURER. ALSO PROVIDE A CERTIFICATION FROM THE MANUFACTURER SHOWING THE PRODUCT IS IN COMPLIANCE WITH ALL APPLICABLE CODES AND STANDARDS.

SU9 THE CONTRACTOR SHALL COORDINATE SEISMIC RESTRAINTS OF MECHANICAL, PLUMBING, AND ELECTRICAL EQUIPMENT, MACHINERY, AND ASSOCIATED PIPING WITH THE STRUCTURE. ANY CONNECTIONS TO STRUCTURE SHALL CONFORM TO ASCE 7, CHAPTER 13 AND SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE APPROPRIATE STATE, AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION.

SU10 FIELD ENGINEERED DETAILS DEVELOPED BY THE CONTRACTOR THAT DIFFER FROM OR ADD TO THE STRUCTURAL DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN THE APPROPRIATE STATE AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO CONSTRUCTION.

SF STEEL FRAMING NOTES

SF1 STEEL FRAMING WORK SHALL COMPLY WITH CHAPTER 22 OF THE IBC.

SF2 STEEL FRAMING MATERIALS:
SF2.1 W-SECTIONS, CHANNELS
ASTM A992 — FY=50,000 PSI
SF2.2 TUBULAR STEEL
ASTM A500 GR C — FY=50,000 PSI
SF2.3 M-SECTIONS, S-SECTIONS, HP-SECTIONS
ASTM A572 — FY=50,000 PSI
SF2.4 ANGLES, PLATES
ASTM A572 — FY=50,000 PSI
SF2.5 PIPES
ASTM A53 GR B — FY=35,000 PSI
SF2.6 HEADED ANCHOR SHEAR STUDS
ASTM A108, GR C-1010 THRU C-1020
MIN. TENSILE STRENGTH — FY=65,000 PSI
MIN. YIELD STRENGTH — FY=65,000 PSI
SF2.7 ANCHOR RODS
ASTM F1554 — FY=36,000 PSI UNO
SF2.8 STEEL JOIST
SJI K-LH SERIES
SF2.9 WELDING ELECTRODES
E70XX

SF3 STEEL ERECTION SHALL COMPLY WITH ALL OSHA, STATE, LOCAL, AND INDUSTRY STANDARD REGULATIONS. IN ADDITION, AT THE END OF THE WORK DAY, ALL COLUMNS MUST BE FRAMED WITH BEAMS AND/OR GIRDERS IN TWO DIRECTIONS, OR ADEQUATELY GUYED OR BRACED IN BOTH DIRECTIONS. TEMPORARY GUYING/BRACING IS THE RESPONSIBILITY OF THE ERECTOR (DESIGN AND INSTALLATION).

SF4 DESIGN, FABRICATION, AND ERECTION SHALL BE IN ACCORDANCE WITH THE AISC STEEL CONSTRUCTION MANUAL, AISC 360-16 INCLUDING COMMENTARY, AND THE AISC 303-16.

SF5 ALL BOLTS FOR STEEL CONNECTIONS TO BE INSTALLED PER AISC 360 AND RCSC.
SF5.1 ALL BOLTS TO BE ASTM A325-N U.N.O.
SF5.2 BOLTS USED IN STEEL JOIST CONSTRUCTION MAY BE ASTM A307
SF5.3 ALL BOLTS SHALL BE INSTALLED SNUG-TIGHT U.N.O.
SF5.4 ALL BOLTS IN BRACED FRAME CONNECTIONS TO BE PRETENSIONED U.N.O.

SF6 WELDING SHALL CONFORM TO THE AWS CODES FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH A WELDED PROCEDURE SPECIFICATION (WPS) AS REQUIRED IN AWS D1.1 AND APPROVED BY THE STRUCTURAL ENGINEER. THE WPS VARIABLES SHALL BE WITHIN THE PARAMETERS ESTABLISHED BY THE FILLER-METAL MANUFACTURER.

SF7 WELDS SHALL BE MADE USING E70XX ELECTRODES AND SHALL BE 3/16" MINIMUM, U.N.O. ALL WELDING FOR STRUCTURAL STEEL CONNECTIONS TO BE PERFORMED BY CERTIFIED WELDERS IN ACCORDANCE WITH AWS D1.1.

SF8 FOR COMPLETE JOINT PENETRATION WELDS, WELDS SHALL BE MADE WITH FILLER METAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT 40° F.

SF9 WELDING TO JOIST WEB MEMBERS IS PROHIBITED. WELDING TO JOIST BOTTOM CHORDS IS PROHIBITED WITHOUT THE APPROVAL OF THE ENGINEER, WITH THE SOLE EXCEPTION OF JOIST BRIDGING. WALL PANEL BRACING, GIRDER BRACING, AND ALL OTHER WELDED ATTACHMENTS SHALL BE MADE TO JOIST TOP CHORDS. ATTACHMENTS MADE TO JOIST TOP CHORD SHALL BE MADE ONLY AT JOIST PANEL POINTS.

SF10 ALL STEEL BEAMS, COLUMNS AND BRACING SHALL RECEIVE A SINGLE COAT OF SHOP APPLIED PRIMER, WITH THE FOLLOWING EXCEPTIONS:
SF10.1 TOP FLANGE OF BEAMS RECEIVING HEADED STUDS SHALL NOT BE PRIMED.
SF10.2 GALVANIZED BEAMS SHALL NOT BE PRIMED.
SF10.3 STEEL THAT IS TO RECEIVE SPRAY-APPLIED FIREPROOFING (SEE ARCH. FOR LOCATIONS) SHALL NOT BE PRIMED OR SHALL BE PRIMED IN ACCORDANCE w/ ASTM E736 AND UL 263.

CN CONCRETE NOTES

CN1 CONCRETE WORK SHALL CONFORM TO CHAPTER 19 OF THE IBC.

CN2 WHERE NEW CONCRETE IS PLACED AGAINST EXISTING CONCRETE, THE EXISTING CONCRETE SURFACE SHALL BE CLEANED AND ROUGHENED TO A MINIMUM OF 1/4" AMPLITUDE.

CN3 ALL EXPOSED EDGES OF CONCRETE MEMBERS SHALL BE CHAMFERED 3/4" U.N.O.

CN4 CONCRETE FORMWORK:
CN4.1 SLEEVES, OPENINGS, CONDUIT, AND OTHER EMBEDDED ITEMS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO POURING CONCRETE. CONDUITS EMBEDDED IN SLABS SHALL NOT BE LARGER IN OUTSIDE DIMENSION THAN ONE THIRD OF THE THICKNESS OF THE SLAB AND SHALL NOT BE SPACED CLOSER THAN THREE DIAMETERS ON CENTER.
CN4.2 VERIFY ALL BLOCK OUTS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING REQUIREMENTS PRIOR TO POURING.

CN5 CONCRETE REINFORCEMENT:
CN5.1 DETAILING, FABRICATION, AND PLACEMENT OF REINFORCEMENT SHALL CONFORM TO ACI-315.
CN5.2 ALL REINFORCEMENT TO BE ASTM A615 GRADE 60 U.N.O. WELDED WIRE FABRIC TO BE ASTM A185 WITH WIRE CONFORMING TO ASTM A82. REINFORCING STEEL SHALL BE SECURELY TIED IN PLACE USING #16 ANNEALED IRON WIRE. REINFORCEMENT SHALL BE CONTINUOUS THROUGH ALL CONSTRUCTION JOINTS, U.N.O.
CN5.3 ALL CONTINUOUS REINFORCING SHALL BE SPLICED USING CLASS B TENSION SPLICES, U.N.O.
CN5.4 BARS IN BEAMS AND SLABS SHALL BE SUPPORTED ON WELL-CURED CONCRETE BLOCKS OR APPROVED METAL CHAIRS, AS SPECIFIED BY THE CRSI MANUAL OF STANDARD PRACTICE, MSP-1.
CN5.5 CONTINUE HORIZONTAL WALL BARS THROUGH PILASTERS, COLUMNS, INTERSECTING WALLS AND INTERSECTING FOUNDATIONS. REFER TO TYPICAL DETAILS FOR LAYOUT OF CORNER BARS AND BARS IN SMALL WALL SECTIONS. SLAB BARS SHALL BE HOOKED INTO WALLS OR HOOKED DOWELS SHALL BE PROVIDED TO MATCH SLAB REINFORCING. PROVIDE HOOKED DOWELS FROM FOOTINGS TO MATCH VERTICAL WALL REINFORCING.
CN5.6 ADD TWO DIAGONAL #5 BARS, FOUR FEET LONG, CENTERED, AT EACH CORNER OF FOUNDATION OR SLAB OPENING, U.N.O.
CN5.7 U.N.O., INSTALL WWF 1 1/2" FROM TOP OF ALL SLABS ON GRADE, TOPPING SLABS ON DECK, OR TOPPING SLABS ON PRECAST. LAP JOINTS TWO FULL MESHES BUT NOT LESS THAN 8". AT CONSTRUCTION JOINTS, LOCATE WWF AT MID DEPTH OF SLAB.

CN6 COVERAGE FOR REINFORCEMENT:
CN6.1 CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH .... 3"
CN6.2 CONCRETE EXPOSED TO EARTH AND WEATHER:
#6 THRU #18 BARS .... 2"
#5 BAR, W31 OR D31 WIRE AND SMALLER .... 1 1/2"
CN6.3 CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
SLABS, WALLS, JOISTS:
#14 AND # 18 ....1 1/2"
#11 BAR AND SMALLER ....3/4"
BEAMS, COLUMNS:
PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS .... 1 1/2"

CN7 CONCRETE COMPRESSIVE STRENGTHS SHALL BE VERIFIED BY STANDARD 28-DAY CYLINDER TESTS PER ASTM C39 AND SHALL BE AS FOLLOWS:
FOOTINGS... f'c = 3,000 PSI
SLABS ON GRADE .... f'c = 4,000 PSI

CN8 SPECIAL INSPECTOR SHALL BE NOTIFIED IF ANY WATER IS TO BE ADDED IN FIELD.

CN9 CONCRETE FOUNDATIONS:
CN9.1 ALL FOUNDATION EXCAVATIONS MUST BE REVIEWED AND APPROVED BY THE SOILS ENGINEER PRIOR TO PLACEMENT OF CONCRETE.
CN9.2 ACCURATELY SET AND SECURELY SUPPORT REINFORCING, DOWELS AND ANCHOR BOLTS PRIOR TO PLACEMENT OF CONCRETE. WET-STICKING OR FLOATING OF REINFORCING,DOWELS AND ANCHOR RODS IS NOT ALLOWED.
CN9.3 PROVIDE CONSTRUCTION JOINTS, INSERTS, SLEEVES, DOWELS, ANCHORS, ETC., AS SHOWN. ITEMS SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND ACCORDING TO USUAL ACCEPTED STANDARDS OF THE TRADE. ANCHOR RODS PER ASTM F1554 AS SHOWN.
CN9.4 ALL FOUNDATION COLD JOINTS SHALL BE KEYED. CONTINUOUS REINFORCING SHALL EXTEND ONE DEVELOPMENT LENGTH PLUS 6". LOCATE FOUNDATION COLD JOINTS AT EXPANSION JOINTS IN MASONRY VENEER WHEN POSSIBLE.
CN9.5 REINFORCING SHOWN ON DETAILS IS THE REQUIRED MINIMUM. AT CONTRACTOR'S OPTION AND EXPENSE, ADDITIONAL REINFORCING MAY BE PERMITTED TO ASSIST IN EASE OF CONSTRUCTABILITY ADDITIONAL REINFORCING MUST BE SUBMITTED FOR REVIEW ON SHOP DRAWINGS.

CN10 PROVIDE MINIMUM 6000 PSI NON-SHRINK, NON-METALLIC GROUT UNDER COLUMN BASE PLATES. GROUT SHALL NOT CONTAIN GYPSUM. COLUMN BASES TO BE GROUTED BEFORE PLACEMENT OF CONCRETE TOPPING ON STEEL FORMS.

CN11 MINIMUM 4" CONCRETE SLAB ON GRADE WITH WWF 6X6-W2.1 X W2.1, OVER VAPOR BARRIER, OVER A MINIMUM 6" COMPACTABLE, TRIMMABLE, GRANULAR FILL, TYP. U.N.O. ON DRAWINGS AND GEOTECHNICAL REPORT.

CN12 SLAB CONTROL JOINTS:
CN12.1 PROVIDE SLAB CONTROL JOINTS FOR THE FOLLOWING, U.N.O.:
• SLAB-ON-GRADE ....10' ± 2'
• PRECAST TOPPING SLABS (NON-COMPOSITE).........10' ± 2'
CN12.2 PROVIDE SLAB CONTROL JOINTS ON GRID LINE WHERE PRACTICAL.
CN12.3 MAINTAIN A SLAB CONTROL JOINT ASPECT RATIO OF APPROXIMATELY 1:1.

CN14 CONCRETE ACCESSORIES:
CN14.1 U.N.O., HEADED SHEAR STUDS TO BE NELSON HEADED ANCHORS WITH FLUXED ENDS OR APPROVED EQUIVALENT AND SHALL BE AUTOMATICALLY END WELDED BY UTILIZING THE MANUFACTURER'S STANDARD EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
CN14.2 U.N.O., DEFORMED BAR ANCHORS (D.B.A.) SHALL BE NELSON, TYPE D2L, OR APPROVED EQUIVALENT AND SHALL BE AUTOMATICALLY END WELDED BY UTILIZING THE MANUFACTURER'S STANDARD EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
CN14.3 U.N.O., EXPANSION BOLTS TO BE HILTI KWIK BOLT TZ OR APPROVED EQUIVALENT WITH EQUAL ICC TENSION AND SHEAR VALUES. EXPANSION ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DO NOT CUT REINFORCING IN NEW OR EXISTING CONCRETE DURING INSTALLATION.
CN14.4 U.N.O., EPOXY ANCHORS TO BE HILTI HIT-RE 500 V3 OR APPROVED EQUIVALENT WITH EQUAL ICC TENSION AND SHEAR VALUES. EPOXY ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DO NOT CUT REINFORCING IN NEW OR EXISTING CONCRETE DURING INSTALLATION.

CN17 EPOXY REPAIR ADHESIVE SHALL CONFORM TO ASTM C881 AND SHALL BE A TWO-COMPONENT, LIQUID EPOXY WITH NON-SAG CONSISTENCY AND A LONG POT LIFE. THE EPOXY ADHESIVE SHALL BE SUITABLE FOR USE IN DRY OR DAMP CONDITIONS. MINIMUM SHEAR STRENGTH SHALL BE 5,000 PSI; MINIMUM TENSILE STRENGTH SHALL BE 4,000 PSI. HOLE SIZES AND INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH THE APPROVED ICC REQUIREMENTS. DO NOT CUT REINFORCING IN NEW OR EXISTING CONCRETE DURING PLACEMENT.

CN19 EXPOSED CONCRETE:
CN19.1 WHERE SLAB ON GRADE, SLAB, OR TOPPING SLAB IS PERMANENTLY EXPOSED TO VIEW, SLAB SHALL BE WET CURED. SEE ARCH. FOR LOCATIONS. SEE SPECIFICATIONS FOR WET CURING INFORMATION.
CN19.4 CONCRETE MIXES USED FOR CONCRETE SURFACES PERMANENTLY EXPOSED TO VIEW SHALL NOT INCLUDE DELETERIOUS MATERIAL WHICH MAY CAUSE FINISHED SURFACE IRREGULARITIES.

CF COLD-FORMED STEEL STUDS (EXTERIOR WALLS)

CF1 COLD-FORMED STEEL WORK SHALL CONFORM WITH CHAPTER 22 OF THE IBC.

CF2 COLD-FORMED STEEL STUDS SHALL BE C-SHAPED STUDS FORMED FROM STRUCTURAL QUALITY STEEL HAVING A MINIMUM YIELD STRENGTH OF 33 KSI FOR 18 AND 20 GA. AND 50 KSI FOR 12, 14, AND 16 GA. AND CONFORM TO THE REQUIREMENTS OF ASTM A568 AND A1008. STUDS SHALL BE OF THE SIZE, GA., AND SPACING SHOWN ON THE DRAWINGS.

CF3 ALL COLD-FORMED STUDS, TRACK, BRIDGING, AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A GALVANIZED COATING MEETING THE REQUIREMENTS OF ASTM A653, G-60 GALVANIZED FINISH.

CF4 HORIZONTAL DEFLECTION OF THE WALL RESULTING FROM LATERAL LOAD (WIND LOAD, ETC.) SHALL NOT EXCEED **L/600**.

CF5 VERTICAL DEFLECTION OF THE WALL RESULTING FROM THE WEIGHT OF THE WALL EXTERIOR FACING MATERIAL SHALL NOT EXCEED **L/720** OR **1/4"**, WHICHEVER IS LESS.

CF6 LOAD BEARING STUDS SHALL HAVE HORIZONTAL STRAPPING ON BOTH FACES AT 4'-0" O.C. PROVIDE BRIDGING IN CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS ADEQUATE FOR DEVELOPMENT OF THE FULL MOMENT CAPACITY OF THE STUDS.

CF7 FOR LOAD BEARING STUDS, STUDS SHALL BE FULLY SEATED IN TRACK. TRACK SHALL BE OVERSIZED TO PROVIDE FULL STUD BEARING.

CF8 SCREWS SHALL BE ELCO DRIL-FLEX, HILTI KWIK-FLEX, OR AN APPROVED EQUIVALENT.

CF9 COLD-FORMED STEEL WELDING SHALL CONFORM WITH AWS D1.3.

CF10 COLD-FORMED SIZES SHOWN ARE FOR PRICING PURPOSES ONLY. FINAL DESIGN AND CONNECTIONS BY COLD-FORMED DESIGNER.

CF11 U.N.O., PROVIDE (1) 0.157" DIA. PAF @16" O.C. (1 1/4" EMBED) @ BOTTOM WALL TRACKS FOR WALLS ≤ 6". PROVIDE (2) 0.157" DIA. PAFS @ 16" O.C. (1 1/4" EMBED) @ BOTTOM WALL TRACKS FOR WALLS > 6".

SP SPECIAL INSPECTION

SP1 SPECIAL INSPECTION PROGRAM SHALL CONFORM TO CHAPTER 17 OF THE IBC.

SP2 THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR TO PERFORM THE REQUIRED TESTS AND SPECIAL INSPECTIONS WITH QUALIFICATIONS DESCRIBED PER IBC CHAPTER 17 AND THE PROJECT SPECIFICATIONS.

SP3 SPECIAL INSPECTION REPORTS SHALL BE FURNISHED TO BUILDING OFFICIAL, OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND CONTRACTOR.

SP4 SPECIAL INSPECTOR SHALL SUBMIT A FINAL REPORT STATING THAT THE STRUCTURAL WORK WAS, TO THE BEST OF THE SPECIAL INSPECTOR'S KNOWLEDGE, PERFORMED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.

SP5 SPECIAL INSPECTION PROGRAM:

VERIFICATION AND INSPECTION	FREQUENCY / TASK
STRUCTURAL STEEL - CONFORM TO AISC 360 REQUIREMENTS	
1. INSPECTION TASKS PRIOR TO WELDING:	
A. WELDER QUALIFICATION & CONTINUITY RECORDS	OBSERVE
B. WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE.	PERFORM
C. MANUFACTURER'S CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE.	PERFORM
D. MATERIAL IDENTIFICATION (TYPE/GRADE).	OBSERVE
E. WELDER IDENTIFICATION SYSTEM.	OBSERVE
F. FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY): • JOINT PREPARATION • DIMS. (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY & LOCATION) • BACKING TYPE & FIT (IF APPLICABLE)	OBSERVE
G. FIT-UP OF CJP GROOVE WELDS OF HSS, T, Y, & K-JOINTS WITHOUT BACKING (INCLUDING JOINT GEOMETRY): • JOINT PREPARATION • DIMS. (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY & LOCATION)	OBSERVE
H. CONFIGURATION & FINISH OF ACCESS HOLES.	OBSERVE
I. FIT-UP OF FILLET WELDS: • DIMS. (ALIGNMENT, GAPS AT ROOT) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY & LOCATION)	OBSERVE
2. INSPECTION TASKS DURING WELDING:	
A. CONTROL & HANDLING OF WELDING CONSUMABLES: • EXPOSURE CONTROL • PACKAGING	OBSERVE
B. NO WELDING OVER CRACKED TACK WELDS.	OBSERVE
C. ENVIRONMENTAL CONDITIONS: • WIND SPEED WITHIN LIMITS • PRECIPITATION & TEMP.	OBSERVE
D. WPS FOLLOWED: • SETTINGS ON WELDING EQPT. • TRAVEL SPEED • SELECTED WELDING MATERIALS • PREHEAT APPLIED • SHIELDING GAS TYPE/FLOW RATE • PROPER POSITION (F, V, H, OH) • INTERPASS TEMP. MAINTAINED (MIN / MAX)	OBSERVE
E. WELDING TECHNIQUES: • INTERPASS & FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	OBSERVE
F. PLACEMENT & INSTALLATION OF STEEL HEADED STUD ANCHORS.	PERFORM
3. INSPECTION TASKS AFTER WELDING:	
A. WELDS CLEANED.	OBSERVE
B. SIZE, LENGTH, & LOCATION OF WELDS.	PERFORM
C. WELDS MEET VISUAL ACCEPTANCE CRITERIA: • CRACK PROHIBITION • WELD SIZE • WELD / BASE-METAL FUSION • UNDERCUT • CRATER CROSS SECTION • POROSITY • WELD PROFILES	PERFORM
D. ARC STRIKES.	PERFORM
E. k-AREA.	PERFORM
F. WELD ACCESS HOLES IN ROLLED HEAVY SHAPS & BUILT-UP HEAVY SHAPES.	PERFORM
G. BACKING & WELD TABS REMOVED (IF REQ'D.).	PERFORM
H. REPAIR ACTIVITIES.	PERFORM
I. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER.	PERFORM
J. NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF EOR.	PERFORM
K. N.D.T. OF CJP WELDS & JOINTS SUBECT TO FATIGUE PER AISC 360.	PERFORM
4. INSPECTION TASKS PRIOR TO BOLTING:	
A. MFR. CERTS. AVAILABLE FOR FASTENER MATERIALS.	PERFORM
B. FASTENERS MARKED IN ACCORDANCE w/ ASTM RQMTS.	OBSERVE
C. CORRECT FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH, EXCLUDED THREADS).	OBSERVE
D. CORRECT BOLTING PROCEDURE SELECTED FOR JOINT DETAIL.	OBSERVE
E. CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION & HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE RQMTS.	OBSERVE
F. PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED & DOCUMENTED FOR FASTENER ASSEMBLIES & METHODS USED.	OBSERVE
G. PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS & OTHER FASTENER COMPONENTS.	OBSERVE
5. INSPECTION TASKS DURING BOLTING:	
A. FASTENER ASSEMBLIES PLACED IN ALL HOLES & WASHERS & NUTS ARE POSITIONED AS REQ'D.	OBSERVE
B. JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION.	OBSERVE
C. FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING.	OBSERVE
D. FASTENERS ARE PRETENSIONED IN ACCORDANCE w/ THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES.	OBSERVE
6. INSPECTION TASKS AFTER BOLTING:	OBSERVE
A. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNS.	PERFORM
CONCRETE	
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, & VERIFY PLACEMENT.	PERIODIC
2. REINFORCING BAR WELDING:	
A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706.	PERIODIC
B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16".	PERIODIC
C. INSPECT ALL OTHER WELDS.	CONT.
3. INSPECT ANCHORS CAST IN CONCRETE.	PERIODIC
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS:	
A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	CONT.
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	PERIODIC
5. VERIFY USE OF REQUIRED DESIGN MIX.	PERIODIC
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP & AIR CONTENT TESTS, AND DETERMINE CONCRETE TEMPERATURE.	CONT.
7. INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	CONT.
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE & TECHNIQUES.	PERIODIC
9. INSPECT PRESTRESSED/PRECAST CONCRETE FOR:	
A. APPLICATION OF PRESTRESSING FORCES.	CONT.
B. GROUTING OF BONDED PRESTRESSING TENDONS.	CONT.
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	PERIODIC
11. FOR PRECAST CONCRETE DIAPHRAGM CONNS. OR REINF. AT JOINTS CLASSIFIED AS MODERATE OR HIGH DEFORMABILITY ELEMENTS (MDE OR HDE) IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C,D, E, OR F, INSPECT SUCH CONNS. & REINF. IN THE FIELD FOR:	
A. INSTALLATION OF THE EMBEDDED PARTS.	CONT.
B. COMPLETION OF THE CONTINUITY OF REINF. ACROSS JOINTS.	CONT.
C. COMPLETION OF CONNECTIONS IN THE FIELD.	CONT.
12. INSPECT INSTALLATION TOLERANCES OF PRECAST CONCRETE DIAPHRAGM CONNS. FOR COMPLIANCE WITH ACI 550.5	PERIODIC
13. VERIFY OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST TENSIONED CONCRETE & PRIOR TO REMOVAL OF SHORES & FORMS FROM BEAMS & STRUCTURAL SLABS.	PERIODIC
14. INSPECT FORMWORK FOR SHAPE, LOCATION & DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	PERIODIC
SOILS	
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH & HAVE REACHED PROPER MATERIAL.	PERIODIC
3. PERFORM CLASSIFICATION & TESTING OF COMPACTED FILL MATERIALS.	PERIODIC
4. DURING FILL PLACEMENT, VERIFY USE OF PROPER MATERIALS AND PROCEDURES IN ACCORDANCE WITH THE PROVISIONS OF THE APPROVED GEOTECHNICAL REPORT. VERIFY DENSITIES & LIFT THICKNESSES DURING PLACEMENT & COMPACTION OF COMPACTED FILL.	CONT.
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE & VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	PERIODIC

PROGRAM FOOTNOTES
1. THE ITEMS INDICATED ABOVE SHALL BE INSPECTED IN ACCORDANCE WITH CHAPTER 17 OF THE IBC BY A CERTIFIED SPECIAL INSPECTOR FROM AN ESTABLISHED TESTING AGENCY. FOR MATERIAL SAMPLING AND TESTING REQUIREMENTS, REFER TO THE PROJECT SPECIFICATIONS & THE SPECIFIC STRUCTURAL NOTES SECTIONS. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING & INSPECTION REPORTS DIRECTLY TO THE ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR, & BUILDING OFFICIAL. ANY MATERIALS WHICH FAIL TO MEET THE PROJECT SPECIFICATIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. SPECIAL INSPECTION TESTING REQUIREMENTS APPLY EQUALLY TO ALL BIDDER DESIGNED COMPONENTS.
2. **CONT.** - CONTINUOUS SPECIAL INSPECTION. SPECIAL INSPECTOR IS PRESENT CONTINUOUSLY WHEN & WHERE THE WORK TO BE INSPECTED IS BEING PERFORMED. (IBC SECTION 202).
3. **PERIODIC** - PERIODIC SPECIAL INSPECTION. SPECIAL INSPECTOR IS INTERMITTENTLY PRESENT WHERE THE WORK TO BE INSPECTED HAS BEEN OR IS BEING PERFORMED. (IBC SECTION 202)
4. **OBSERVE** - SPECIAL INSPECTOR SHALL OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS (AISC 360 SECTION N5).
5. **PERFORM** - SPECIAL INSPECTOR SHALL PERFORM THESE TASKS FOR EACH JOINT, CONNECTION, ELEMENT OR MEMBER (AISC 360 SECTION N5).
6. **REQ'D** - SPECIAL INSPECTOR SHALL PERFORM THESE TASKS (TMS 602 TABLE 3)
7. SPECIAL INSPECTION IS NOT REQUIRED FOR WORK PERFORMED BY AN APPROVED FABRICATOR (IBC SECTION 1704.2.5).
7. ALL WELDS SHALL BE VISUALLY INSPECTED.
8. CJP WELDS SHALL BE TESTED ULTRASONICALLY OR BY SIMILAR APPROVED METHOD.
9. INSPECTION FOR PREFABRICATED CONSTRUCTION SHALL BE THE SAME AS IF THE MATERIAL USED IN THE CONSTRUCTION TOOK PLACE ON SITE. CONTINUOUS INSPECTION WILL NOT BE REQUIRED DURING PREFABRICATION IF THE APPROVED AGENCY CERTIFIES THE CONSTRUCTION AND FURNISHES EVIDENCE OF COMPLIANCE.

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Key Plan

Revision Description Date

OPN Project No.
24816000

Sheet Issue Date
100% CONSTRUCTION DRAWING SET **08/16/24**

Sheet Name
STRUCTURAL NOTES

Sheet Number
S100

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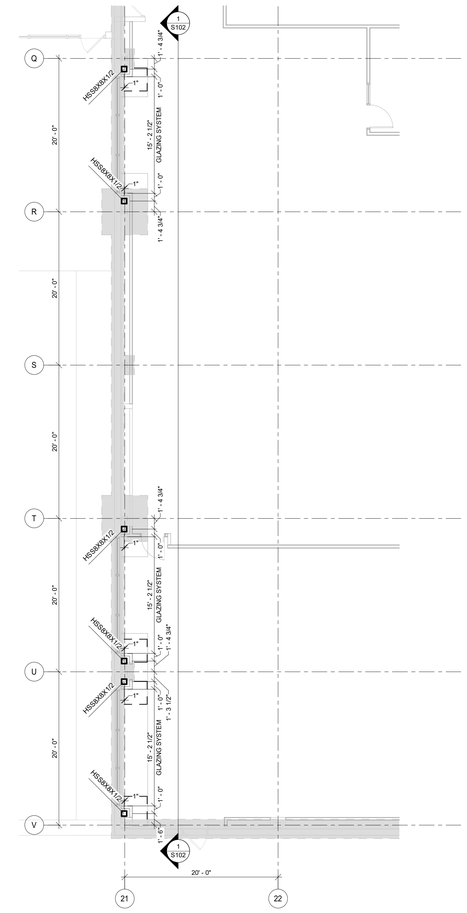
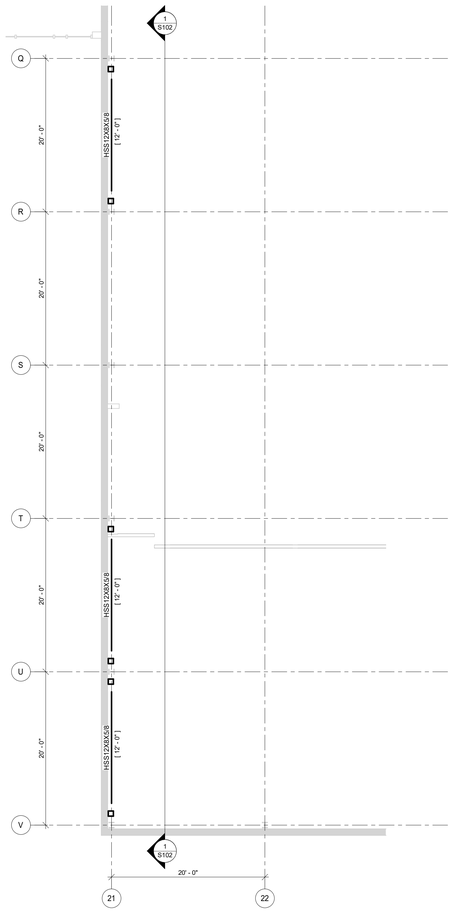


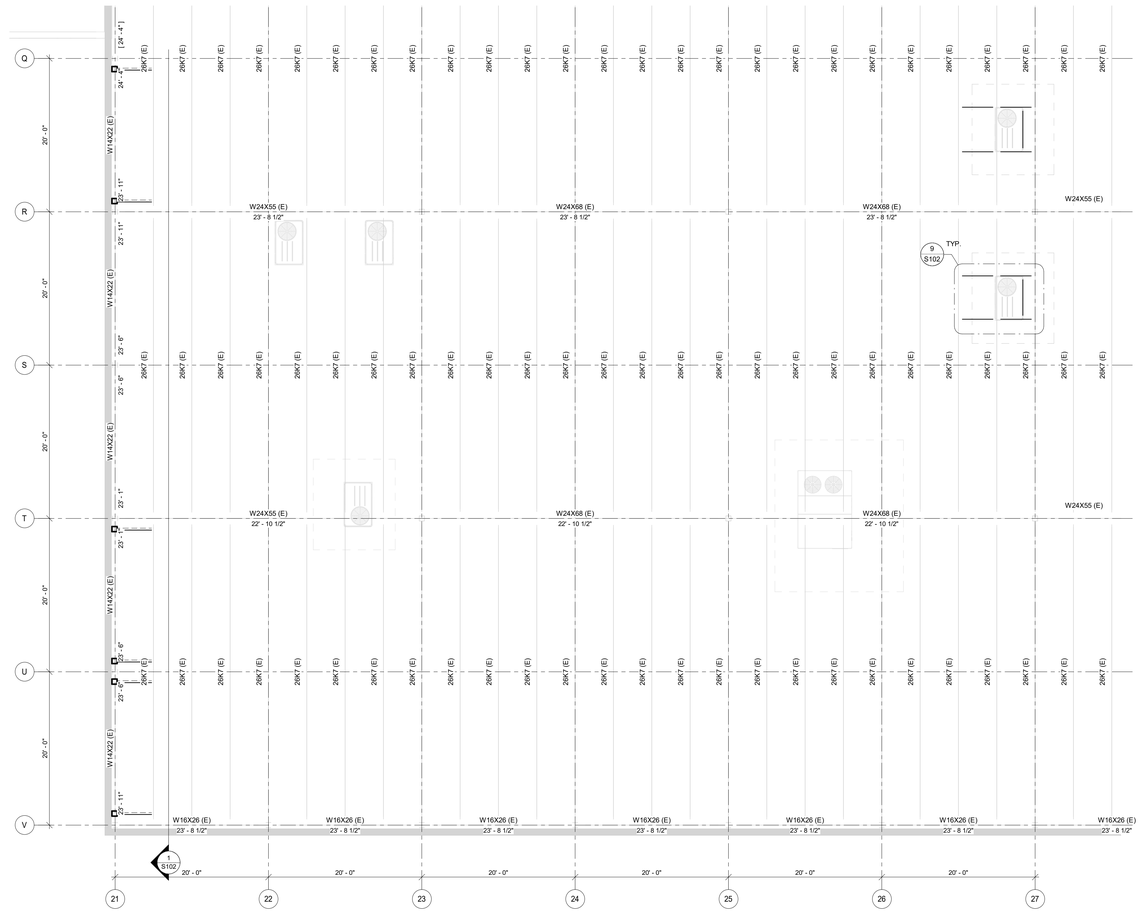
NORTH

A FOUNDATION PLAN
1/8" = 1'-0"



NORTH

B WINDOW HEAD FRAMING PLAN
1/8" = 1'-0"



NORTH

C WAREHOUSE ROOF FRAMING PLAN
1/8" = 1'-0"

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Key Plan

Revision	Description	Date

OPN Project No.
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Sheet Issue Date
100% CONSTRUCTION DRAWING SET **08/16/24**

Sheet Name
FOUNDATION AND FRAMING PLANS

Sheet Number
S101

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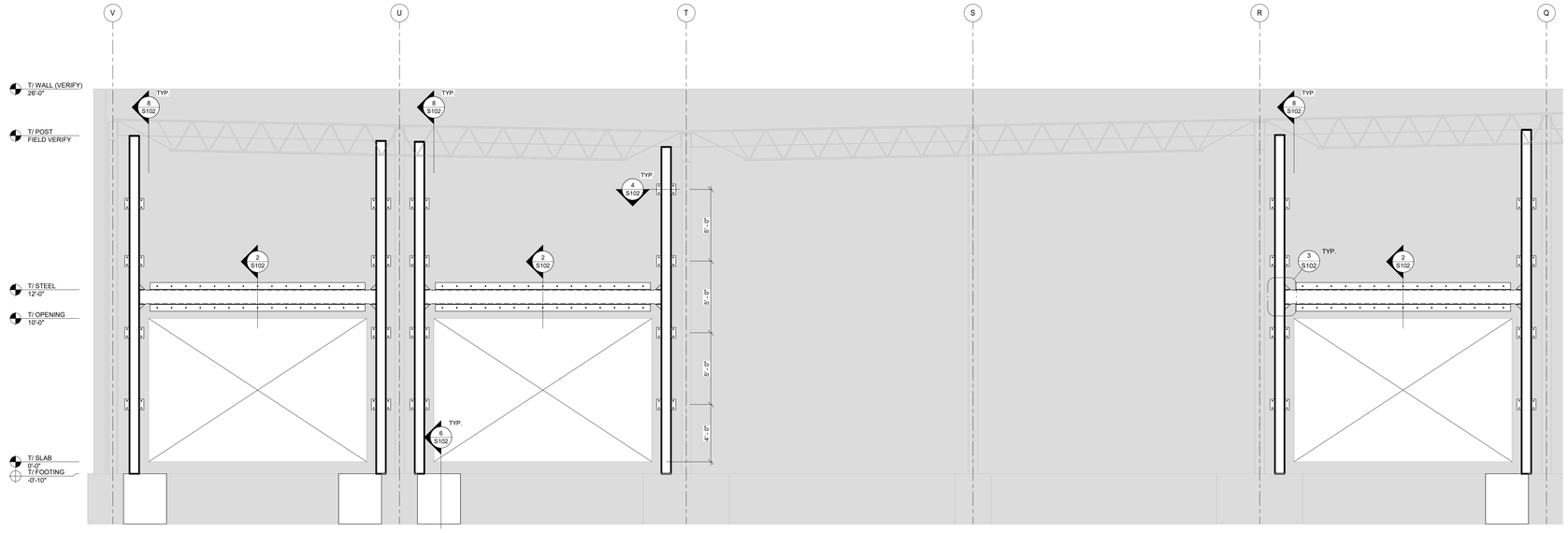
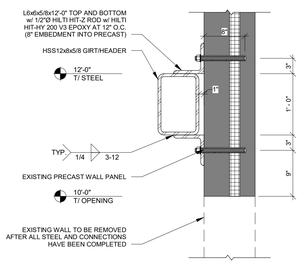
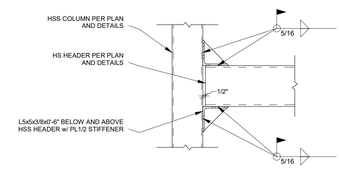


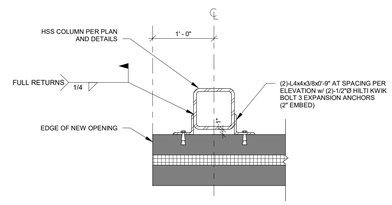
1 WALL FRAMING ELEVATION
1/4" = 1'-0"



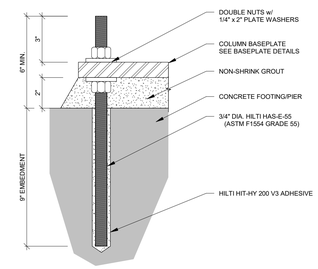
2 HEADER TO EXISTING PRECAST DETAIL
1" = 1'-0"



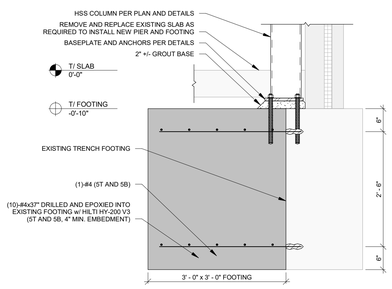
3 HEADER TO POST CONNECTION DETAIL
1" = 1'-0"



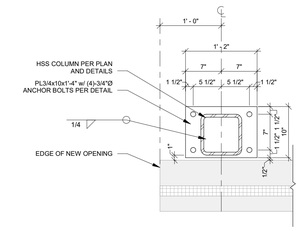
4 ANCHORAGE DETAIL
1" = 1'-0"



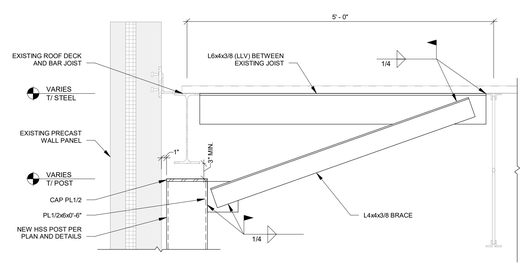
5 TYP. ANCHOR ROD SETTING DETAIL (POST-INSTALLED)
3" = 1'-0"



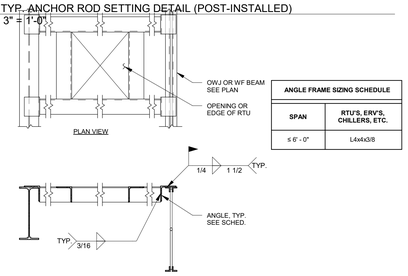
6 NEW FOOTING DETAIL
3/4" = 1'-0"



7 BASEPLATE DETAIL
1" = 1'-0"



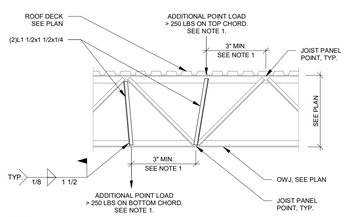
8 T/WALL DETAIL
1" = 1'-0"



ANGLE FRAME SIZING SCHEDULE	
SPAN	RTU'S, ERV'S, CHILLERS, ETC.
≤ 6' - 0"	L4x4x3/8

NOTES:
1. SEE GENERAL STRUCTURAL NOTES FOR DECK WELDS TO ANGLES.
2. CONTRACTOR IS RESPONSIBLE TO COORDINATE LOCATION OF OPENINGS w/ MEP AND ARCH DRAWINGS

9 TYP. ANGLE FRAME
3/4" = 1'-0"



NOTES:
1. ADDITIONAL ANGLE STRUTS SHOWN SHALL BE PROVIDED @ ALL POINT LOADS GREATER THAN 250 LBS. OCCURRING @ A LOCATION GREATER THAN 3" AWAY FROM JOIST PANEL POINT.
2. CONTRACTOR TO FIELD VERIFY REQ'D LOCATIONS WITH FINAL WEB LAYOUT.

10 TYP. POINT LOAD @ OWJ
1/2" = 1'-0"

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Key Plan

Revision	Description	Date

OPN Project No.
24816000

Sheet Issue Date
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Sheet Name
STRUCTURAL DETAILS

Sheet Number
S102

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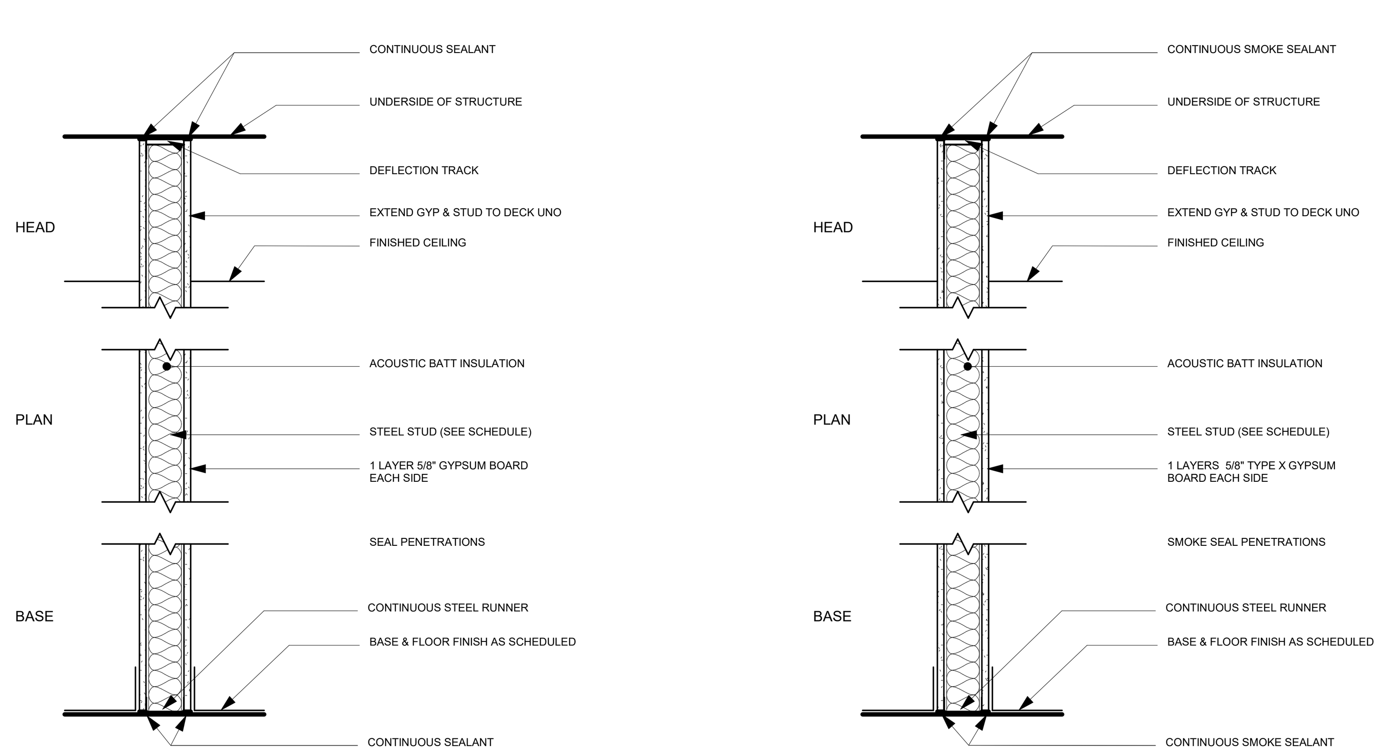


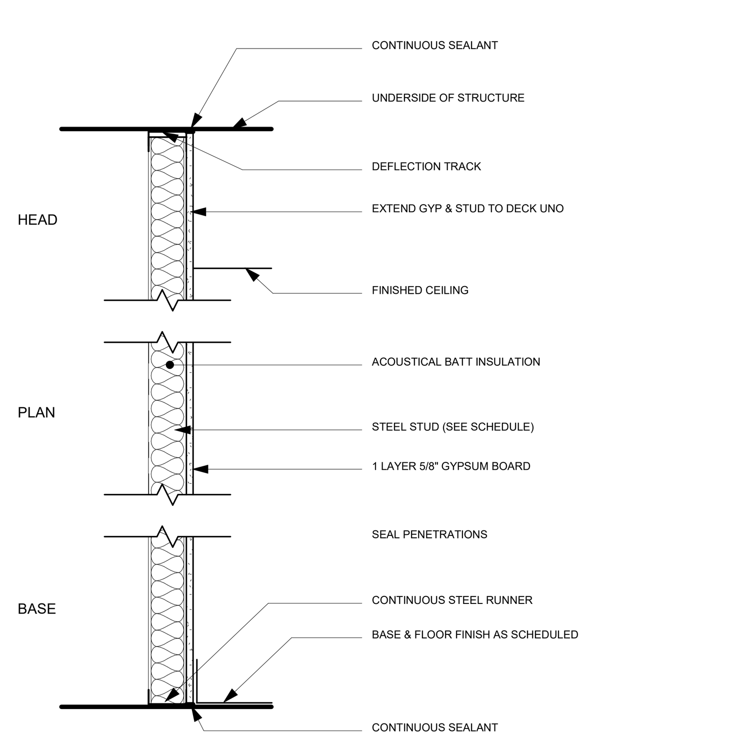
A1 STEEL FRAMED PARTITION

NON RATED / NON-LOAD BEARING

	WIDTH	STUD SIZE	UL DESIGN NUMBER
A1 c 0	4 7/8"	3 5/8"	N/A
A1 d 0	7 1/4"	6"	N/A

SMOKE RATED / NON-LOAD BEARING

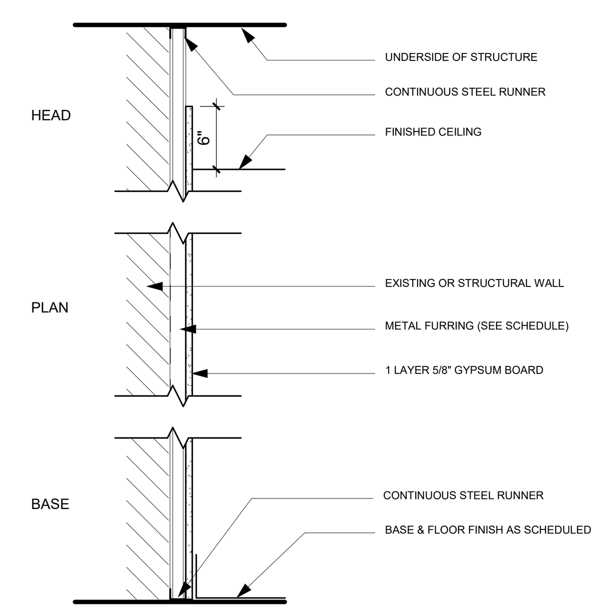
	WIDTH	STUD SIZE	UL DESIGN NUMBER
A1 c s	4 7/8"	3 5/8"	U465
A1 d s	7 1/4"	6"	U465



A2 STEEL FRAMED PARTITION

NON RATED / NON-LOAD BEARING

	WIDTH	STUD SIZE	UL DESIGN NUMBER
A2 a 0	2 1/4"	1 5/8"	N/A
A2 c 0	4 1/4"	3 5/8"	N/A
A2 d 0	6 5/8"	6"	N/A



C1 FURRED PARTITION

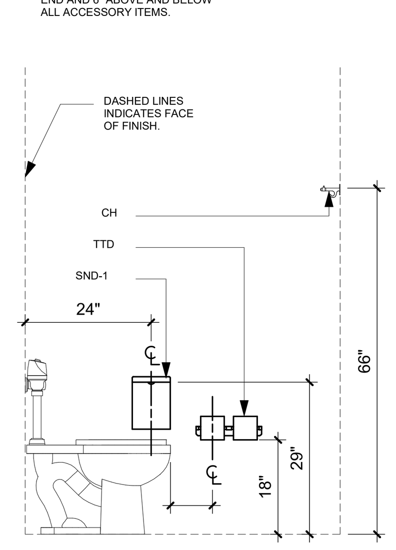
NON RATED / NON-LOAD BEARING

	WIDTH	STUD SIZE	UL DESIGN NUMBER
C1 j 0	1 1/2"	7/8"	N/A
C1 k 0	1 5/8"	1"	N/A
C1 l 0	2 1/8"	1 1/2"	N/A
C1 m 0	2 5/8"	2"	N/A
C1 n 0	3 5/8"	3"	N/A

DESIGNATION	DESCRIPTION	PROVIDED BY	INSTALLED BY
CH	COAT HOOK	GC	GC
GB-1	REAR GRAB BAR	GC	GC
GB-2	SIDE GRAB BAR	GC	GC
GB-3	VERTICAL GRAB BAR	GC	GC
MR	MIRROR (FRAMELESS) - 48" X 48"	GC	GC
SD	SOAP DISPENSER	OWNER	GC
SND-1	SANITARY NAPKIN DISPOSAL	GC	GC
SSS	STAINLESS STEEL SHELF - 24"	GC	GC
TD-1	TOWEL/TRASH COMBO, SALVAGED	GC	GC
TP	FLOOR MOUNTED TOILET PARTITION	GC	GC
TTD	TOILET TISSUE DISPENSER	OWNER	OWNER

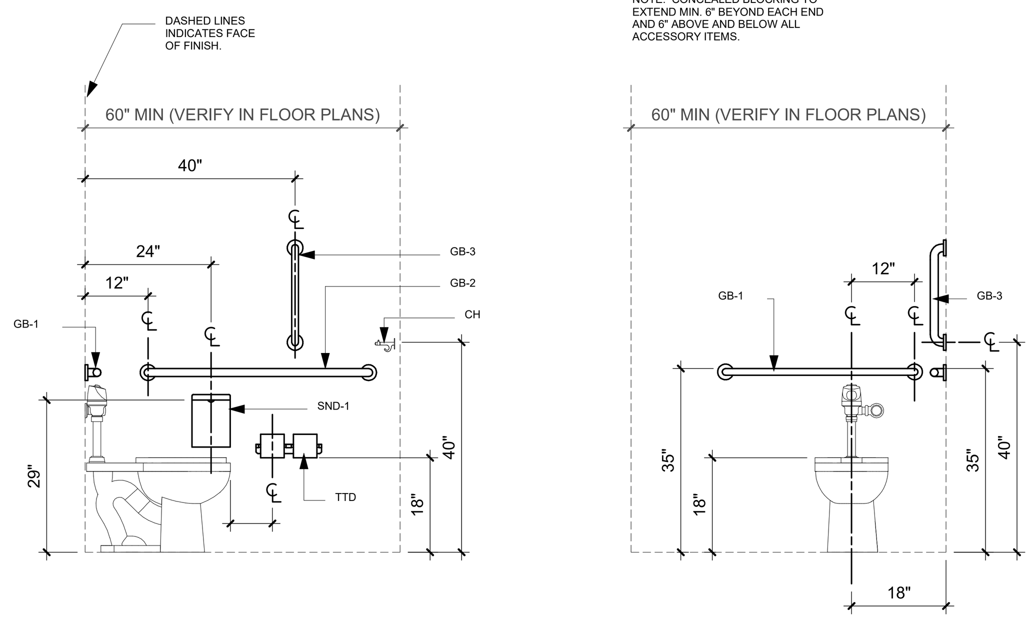
GENERAL INFORMATION - RESTROOM ACCESSORIES

NOTE: CONCEALED BLOCKING TO EXTEND MIN. 6" BEYOND EACH END AND 6" ABOVE AND BELOW ALL ACCESSORY ITEMS.



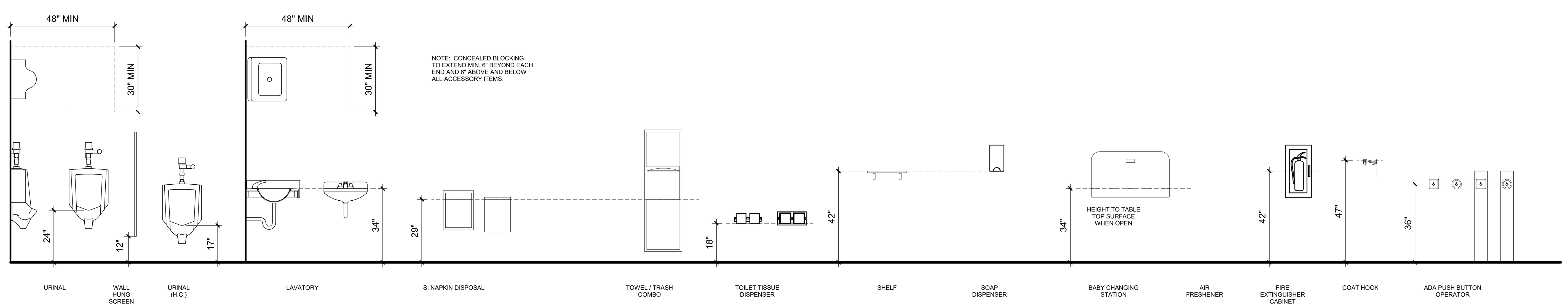
STANDARD TOILET ACCESSORIES MOUNTING LOCATIONS

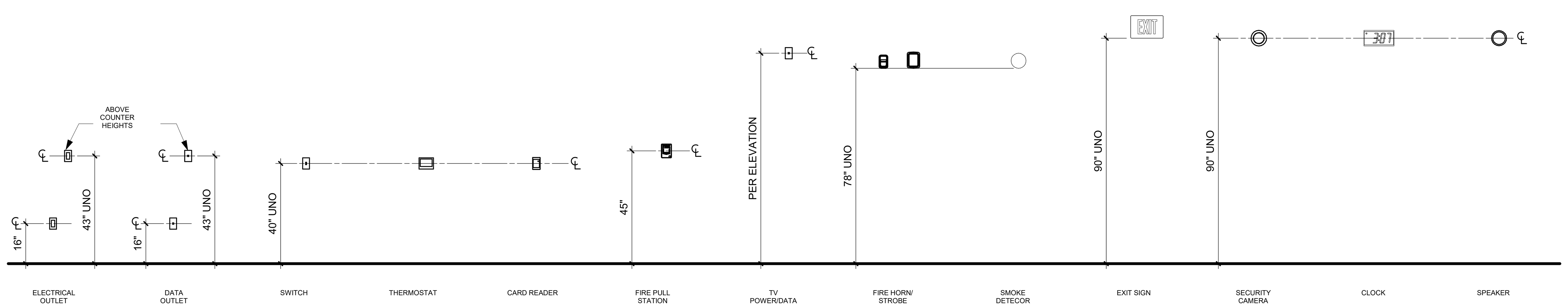
NOTE: CONCEALED BLOCKING TO EXTEND MIN. 6" BEYOND EACH END AND 6" ABOVE AND BELOW ALL ACCESSORY ITEMS.



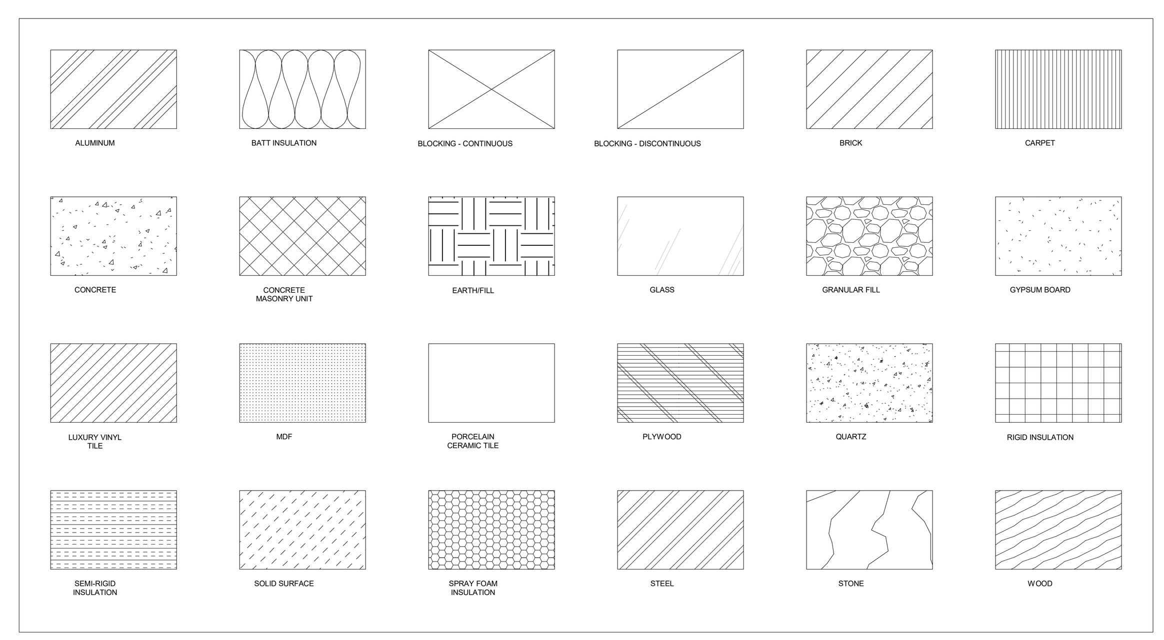
ACCESSIBLE TOILET ACCESSORIES MOUNTING LOCATIONS

NOTE: CONCEALED BLOCKING TO EXTEND MIN. 6" BEYOND EACH END AND 6" ABOVE AND BELOW ALL ACCESSORY ITEMS.



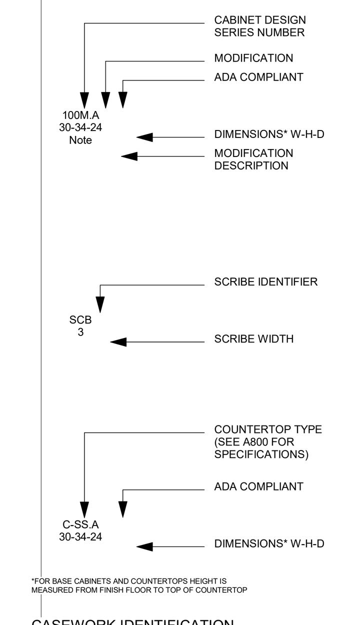


GENERAL INFORMATION - STANDARD MOUNTING HEIGHTS

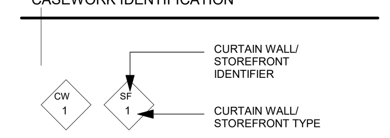


GENERAL INFORMATION - STANDARD ARCHITECTURAL MATERIAL DEFINITIONS

STANDARD SYMBOLS



CASEWORK IDENTIFICATION



CURTAIN WALL/
STOREFRONT IDENTIFICATION

GENERAL NOTES

1. REFER TO FLOOR PLANS FOR PARTITION TYPE LOCATIONS.
2. STEEL FRAME PARTITIONS ARE BASED ON DESIGN INFORMATION INCLUDED IN PRODUCT TECHNICAL INFORMATION OF THE STEEL STUD MANUFACTURER'S ASSOCIATION (SSMA) PUBLICATION DATED 2000 AND THE FOLLOWING PERFORMANCE CRITERIA:

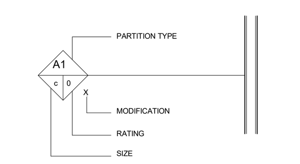
   A. LIMITING HEIGHT CRITERIA:
   - DEFLECTION OF L/360 AT ALL WALLS TO RECEIVE TILE.
   - DEFLECTION OF L/240 AT ALL OTHER WALLS AT 5 LBS. PER SQ. FT.

   B. THICKNESS - STEEL COMPONENTS:

GAUGE	DESIGN THICKNESS
25	0.0188
22	0.0283
20	0.0346
18	0.0451

3. MINIMUM GAUGE: IF LIMITING HEIGHT AS SCHEDULED IN PARTITION DETAILS EXCEEDS PROJECT CONDITIONS OR IF THE SELECTED STEEL STUD MANUFACTURER'S THICKNESS OF STEEL COMPONENTS VARIES FROM THE BASIS OF DESIGN AS SET FORTH ABOVE, PROVIDE MANUFACTURER'S STANDARD THICKNESS(GAUGE) THAT MEETS OR EXCEEDS LIMITING HEIGHT PERFORMANCE CRITERIA FOR STUD DEPTH AND SPACING INDICATED.
4. WOOD BLOCKING CONCEALED BY GYPSUM BOARD DOES NOT NEED TO BE FIRE TREATED.

PARTITION TYPE AND SYMBOL LEGEND

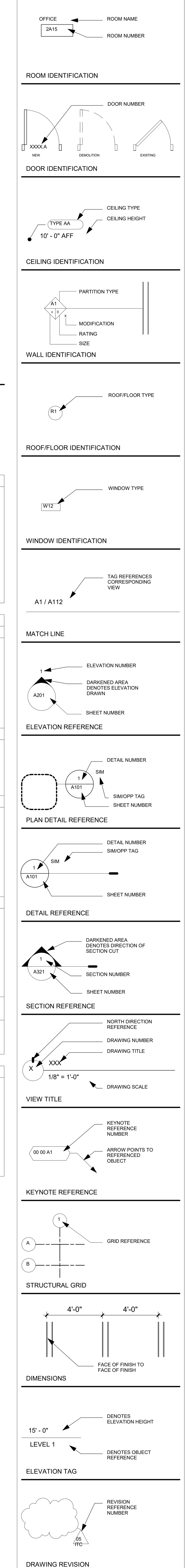


PARTITION TYPE	
	SYSTEM
A	STEEL FRAMED
B	SHAFT WALL
C	FURRED
D	MASONRY
E	SPECIAL FINISHES
T	TEMPORARY PARTITION

SIZE	
	STEEL STUD
a	1 5/8"
b	2 1/2"
c	3 5/8"
d	6"
e	7 1/4"
	SHAFT WALL STUD
f	2 1/2"
g	4"
h	6"
	STEEL FURRING
j	7/8" Hat Channel
k	1" Z
l	1 1/2" Z
m	2" Z
n	3" Z
	CONCRETE MASONRY UNIT
p	4"
q	6"
r	8"
s	10"
t	12"
	LIGHT GAUGE STRUCTURAL STEEL (SEE STRUCTURAL)
u	6"
v	12"

RATING	
0	NON-RATED
S	SMOKE
1	1 HOUR
2	2 HOUR
3	3 HOUR
4	4 HOUR

STANDARD SYMBOLS



STANDARD ABBREVIATIONS

#	NUMBER
ACM	ALUMINUM COMPOSITE METAL PANEL
ACP	ACOUSTICAL CEILING PANEL
AFF	ABOVE FINISH FLOOR
AWP	ACOUSTIC WALL PANEL
BAS	BUILDING AUTOMATION SYSTEM
BC	BOTTOM OF CURB
BM	BENCH MARK
BOC	BACK OF CURB
BOS	BOTTOM OF STEEL
BOW	BOTTOM OF WALL
BR	BUMPER GUARD/BUMPER RAIL
BRG	BEARING
BS	BOTTOM OF STAIR
C	CHANNEL
CC	CUBICLE CURTAIN
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CG	CORNER GUARD
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CK	CORK FLOORING
CL	CENTER LINE
CLG	CEILING
CLL	CONSTRUCTION LIMITS LINE
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
CONC	CONCRETE
CONT	CONTINUOUS
CPT	CARPET
CRK	CORK
DEMO	DEMOLISH / DEMOLITION
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DN	DOWN
DS	DOWNSPOUT
EC	ELECTRICAL CONTRACTOR
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
ELEV	ELEVATION
EPF	EPOXY FLOORING
EPT	EPOXY PAINT
EQ	EQUAL
EWC	ELECTRIC WATER COOLER
EX	EXISTING
FAF	FLUID APPLIED FLOORING
FD	FLOOR DRAIN
FF	FACTORY FINISH
FFE	FINISHED FLOOR ELEVATION
FOC	FACE OF CURB
FOF	FACE OF FINISH
FOG	FACE OF GLAZING
FRP	FIBER REINFORCED PANEL
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GHM	GALVANIZED HOLLOW METAL
GL	GLASS
GT	GROUT
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HORZ	HORIZONTAL
HM	HOLLOW METAL
HT	HEIGHT
HVAC	HEATING/VENTING/AIR CONDITIONING
ID	INSIDE DIAMETER
L	ANGLE
LB/LBS	POUND / POUNDS
LVT	LUXURY VINYL TILE
MAX	MAXIMUM
MB	MARKERBOARD
MC	MECHANICAL CONTRACTOR
MDF	MEDIUM DENSITY FIBERBOARD
MFR	MANUFACTURERS
MH	MANHOLE
MIL	MIL THICKNESS
MIN	MINIMUM
MO	MASONRY OPENING
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OA	OVERALL
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
OH	OVERHEAD
ORD	OVERFLOW ROOF DRAIN
OTS	OPEN TO STRUCTURE
PCT	PORCELAIN CERAMIC TILE
PL	PLATE
PLAM	PLASTIC LAMINATE
PP	POLYMER PANEL
PVC	POLY VINYL CHLORIDE
PT	PAINT
QT	QUARTZ
RAD	RADIUS
RAF	RESILIENT ATHLETIC FLOORING
RB	RESILIENT BASE
RD	ROOF DRAIN
REX	RESIN
REV	REVISION
RO	ROUGH OPENING
ROW	RIGHT-OF-WAY
RSF	RESILIENT SHEET FLOORING
RST	RESILIENT STAIR TREAD
RTF	RESILIENT TILE FLOORING
RUB	RUBBER
SC	SEALED CONCRETE
SF	SQUARE FEET
SIM	SIMILAR
SS	SOLID SURFACE
STN	STONE
ST STL	STAINLESS STEEL
SUSP	SUSPENDED
T	TILE
T&G	TONGUE AND GROOVE
TG	TEMPERED GLASS
TOC	TOP OF CURB
TOM	TOP OF MASONRY
TOS	TOP OF SLAB / TOP OF STEEL
TOW	TOP OF WALL
TP	TOILET PARTITION
TPF	TACKABLE PANEL FABRIC
TRZ	TERRAZZO
TS	TOP OF STAIR
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES, INC.
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VIF	VERIFY IN FIELD
WB	WALL BASE
WC	WALL COVERING
W/	WITH
W/O	WITHOUT
WD	WOOD
WGH	WALLGUARD HANDRAIL
WM	WALK-OFF MAT
WP	WALL PROTECTION
WT	WINDOW TREATMENT
WWF	WELDED WIRE FABRIC

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Key Plan

Revision	Description	Date

OPN Project No.
24816000

Sheet Issue Date
100% CONSTRUCTION DRAWING SET **08/16/2024**

Sheet Name
GENERAL DRAWING INFORMATION

Sheet Number
A000

PRINTED: 8/19/2024 2:10:34 PM

INTERIOR FINISH SPECIFICATION

ACOUSTIC CEILING PANEL:

ACP-1 (ACP-1.1, ACP-1.2)
MANUFACTURER: ARMSTRONG
STYLE: ULTIMA HUMIGARD PLUS
EDGE DETAIL: BEVELED TEGULAR
COLOR: WHITE
SIZE: 24" X 24"
GRID: 9/16
GRID COLOR: WHITE

BASE:

RB-1
MANUFACTURER: TARKETT TRADITIONAL
STYLE: 4" COVE
COLOR: 20 CHARCOCAL WG
APPLICATION: WALL BASE

CARPET:

CPT-1
MANUFACTURER: MOHAWK
STYLE: REFINED PASS BT582
COLOR: DAKOTA 989
SIZE: 24" X 24"
INSTALLATION: ASHLAR PATTERN
APPLICATION: OPEN OFFICES & RECEPTION

CORNER GUARD:

CG-1
MANUFACTURER: INPRO
STYLE: STAINLESS STEEL AS SPECIFIED IN SECTION 10 26 00
SIZE: 2" WINGS 4' HEIGHT
INSTALLATION: REFER TO FLOOR PLANS

COUNTERS / LAVATORIES:

SS-1
MANUFACTURER: STARON
COLOR: ASPEN ALDER AA625
SIZE: 1/2"
APPLICATION: COUNTERTOPS AT RESTROOMS, KITCHENETTE, & DNR LAB

SS-2
MANUFACTURER: CORIAN
COLOR: CAMEO WHITE
APPLICATION: INTEGRAL BOWLS

GROUT:

GT-1
MANUFACTURER: BOSTIK
COLOR: DELOREAN GRAY H160
APPLICATION: TO BE USED WITH T1 & T2

PAINT/ EPOXY PAINT:

PT-1/ EPT-1
MANUFACTURER: SHERWIN WILLIAMS
COLOR: SW 7029 AGREEABLE GRAY
FINISH: EGGSHELL
APPLICATION: PT-1 TYP. FIELD PAINT
EPT-1 TYP. RESTROOM FIELD PAINT

PT-2/ EPT-2
MANUFACTURER: SHERWIN WILLIAMS
COLOR: SW 6258 TRICORN BLACK
FINISH: EGGSHELL
APPLICATION: EPT-2 HOLLOW METAL DOORS AND FRAMES

PT-3
MANUFACTURER: SHERWIN WILLIAMS
COLOR: SW7006 EXTRA WHITE
FINISH: FLAT
APPLICATION: GYPSUM CEILINGS

PT-4
MANUFACTURER: SHERWIN WILLIAMS
COLOR: SW 9142 MOSCOW MIDNIGHT
FINISH: EGGSHELL
APPLICATION: ACCENT PAINT OPEN OFFICES & HEARING ROOMS

EPT-5
MANUFACTURER: SHERWIN WILLIAMS
COLOR: MATCH EXISTING BUILDING EXTERIOR
FINISH: EGGSHELL
APPLICATION: EXTERIOR FACE OF DOOR PANEL AND FRAME

PLASTIC LAMINATE:

PLAM-1
MANUFACTURER: PANOLAM BY NEVAMAR
TYPE: HPL
COLOR: CALM DISTINCTION VA6001
FINISH: ARP (T-)
APPLICATION: CASEWORK AT KITCHENETTE, DNR LAB & LOBBY COUNTERTOP

TILE:

FIELD TILE (T-1)
MANUFACTURER: ANATOLIA
TILE COLLECTION: FORM
COLOR: ICE
SIZE: 6"x6"
FINISH: MATTE/NATURAL

ACCENT TILE (T-2)
MANUFACTURER: ANATOLIA
TILE COLLECTION: GEOPHITE
COLOR: ICE
SIZE: 6"x6"
GROUT: GT-2
FINISH: MATTE/NATURAL

TOILET PARTITIONS:

TP-1
MANUFACTURER: PANOLAM BY NEVAMAR
PRODUCT: THIOLAM HIGH PRESSURE LAMINATES
MOUNTING: FLOOR ANCHORED / OVERHEAD BRACED - GAP FREE
THICKNESS: 1"
COLOR: CALM DISTINCTION VA6001
FINISH: ARP (T-)

WINDOW TREATMENT:

WT-1
MANUFACTURER: *LUTRON*
SYSTEM: *MANUAL ROLLER SHADES*
SHADE CLOTH: *MERMET E-SCREEN*
COLOR: WHITE/PEARL
OPENNESS FACTOR: 3%

WD-1:

WD-1
MANUFACTURER: VT INDUSTRIES
WOOD: HONDURAS MAHONGANY
COLOR: TIMBER
FINISH: TO MATCH EXISTING
APPLICATION: WOOD DOORS

ROOM FINISH SCHEDULE

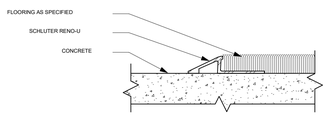
ROOM NUMBER	ROOM NAME	FLOOR FINISH	FLOOR BASE	WALL FINISH NORTH	WALL FINISH EAST	WALL FINISH SOUTH	WALL FINISH WEST	CEILING FINISH	REMARKS
003a	ELECTRIC	EXIST.	EXIST./RB-1	PT-1	EXIST.	EXIST.	EXIST./PT-1	EXIST.	1
150	RECEPTION	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACP-1	
152	LOBBY	SC-2	RB-1	PT-1	PT-1	PT-1	PT-1	ACP-1	
B102	CORRIDOR	EXIST./SC-2	EXIST./RB-1	EXIST./PT-1	PT-1	EXIST./PT-1	EXIST./PT-1	EXIST./ACP-1	1, 2
B103	CORRIDOR	SC-2	RB-1	PT-1	PT-1	PT-1	PT-1	EXIST./ACP-1/PT-3	
B104	CORRIDOR	EXIST.	EXIST./RB-1	EXIST./PT-1	EXIST.	EXIST.	EXIST.	EXIST./ACP-1	1, 2
B119	SPRINKLER RISER	EXIST.	EXIST./RB-1	EXIST.	EXIST.	EXIST./PT-1	EXIST.	EXIST.	
B121	DNR LAB	SC-1	RB-1	EPT-1	EPT-1	EPT-1	EPT-1	ACP-1	
B123	WOMENS	T-1	T-1	T-1/T-2/EPT-1	T-1/T-2/EPT-1	T-1/T-2/EPT-1	T-1/T-2/EPT-1	ACP-1	1
B124	MENS	T-1	T-1	T-1/T-2/EPT-1	T-1/T-2/EPT-1	T-1/T-2/EPT-1	T-1/T-2/EPT-1	ACP-1	1
B125	STORAGE	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS	
B126	RECEIVING/STORAGE ROOM	EXIST.	EXIST./RB-1	PT-1	EXIST.	EXIST.	EXIST.	EXIST./ACP-1	
B140	HEARING ROOM	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-4	ACP-1	
B142	HEARING ROOM	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-4	ACP-1	
B144	STORAGE	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACP-1	
B146	OFFICE	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	ACP-1	
B148	STORAGE	EXIST.	RB-1	PT-1	PT-1	PT-1	PT-1	ACP-1	
B150	ALJ OFFICE	CPT-1	RB-1	PT-1	PT-1/PT-4	PT-4	PT-1	ACP-1	1
B152	OFFICE	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	ACP-1	
B160	WRKM. COMP. OFFICE	CPT-1	RB-1	PT-1/PT-4	PT-1	PT-1	PT-1/PT-4	EXIST./ACP-1	1
B162	STORAGE	EXIST.	RB-1	PT-1	PT-1	PT-1	PT-1	ACP-1	
B164	STORAGE	EXIST.	RB-1	PT-1	PT-1	PT-1	PT-1	ACP-1	

ROOM FINISH SCHEDULE REMARKS:

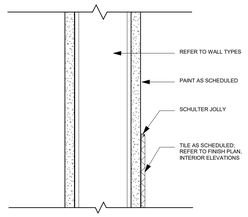
1. MULTIPLE WALL FINISHES - REFER TO FLOOR PLAN AND ELEVATIONS FOR LOCATIONS.
2. MULTIPLE WALL BASE FINISHES REFER TO ELEVATIONS FOR LOCATIONS.

NOTE:

SC-1: EXISTING CONCRETE, PROVIDE SEALED CONCRETE FINISH
SC-2: EXISTING CONCRETE, PROVIDE TRAFFIC COATING FINISH



N9 CARPET TO CONCRETE TRANSITION DETAIL
12" = 1'-0"



J9 SCHLUTER TRIM
3" = 1'-0"

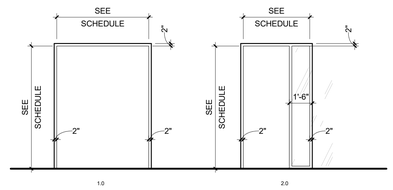
DOOR SCHEDULE

DOOR NUMBER	PANEL QUANTITY	PANEL TYPE	PANEL WIDTH	PANEL HEIGHT	PANEL MATERIAL	PANEL FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	FIRE RATING	REMARKS	HARDWARE SET	NOTES
152	1	HG	3'-0"	8'-0"	WD	WD-1	1.0	HM	EPT-2	-	1		REMOTE RELEASE
B102-C	2	EXIST.	3'-0"	8'-0"	HM	EPT-2	EXIST.	HM	EPT-2	-	2		
B103	2	E NL	3'-0"	8'-0"	HM	EPT-2	1.0	HM	EPT-2	-	1,3		EX. DOOR 02
B103-C	1	NL	3'-0"	8'-0"	WD	WD-1	1.0	HM	EPT-2	-	1		
B103-D	1	NL	3'-0"	8'-0"	WD	WD-1	1.0	HM	EPT-2	-			
B104	2	E NL	3'-0"	8'-0"	HM	EPT-2	1.0	HM	EPT-2	-	1,3		EX. DOOR 04
B119	1	E F	3'-0"	7'-0"	HM	EPT-2	1.0	HM	EPT-2	-	3		EX. DOOR 08
B121	1	E NL	3'-0"	8'-0"	HM	EPT-2	1.0	HM	EPT-2	-	3		EX. DOOR 06
B123	1	E F	3'-0"	8'-0"	HM	EPT-2	1.0	HM	EPT-2	-	3		EX. DOOR 09
B124	1	E F	3'-0"	8'-0"	HM	EPT-2	1.0	HM	EPT-2	-	3		EX. DOOR 10
B125	2	E NL	3'-0"	8'-0"	HM	EPT-2	1.0	HM	EPT-2	-	3		EX. DOOR 12
B125-D	1	EXIST.	3'-0"	7'-0"	HM	EPT-5	1.0	HM	EPT-5	-	4		
B126-C	1	FG	3'-0"	7'-0"	ALUM	ANOD	1.0	ALUM	ANOD	-	1		
B130-A	2	EXIST.	3'-0"	8'-0"	HM	EPT-2	EXIST.	HM	EPT-2	-	1, 4, 5		EX. DOOR & HDW
B130-B	1	NL	3'-0"	8'-0"	WD	WD-1	1.0	HM	EPT-2	-	1		
B144	1	E NL	3'-0"	8'-0"	HM	EPT-2	1.0	HM	EPT-2	-	3		EX. DOOR 03
B146	1	F	3'-0"	7'-0"	WD	WD-1	2.0	HM	EPT-2	-			
B152	1	F	3'-0"	7'-0"	WD	WD-1	2.0	HM	EPT-2	-			
B160	1	NL	3'-0"	8'-0"	WD	WD-1	1.0	HM	EPT-2	-	1		
B160-A	1	NL	3'-0"	8'-0"	WD	WD-1	1.0	HM	EPT-2	-	1		
B160-B	2	EXIST.	3'-0"	8'-0"	HM	EPT-2	EXIST.	HM	EPT-2	-	4		EX. DOOR & HDW
B160-C	1	FL	3'-0"	8'-0"	WD	WD-1	1.0	HM	EPT-2	-			
B162	1	E NL	3'-0"	7'-0"	HM	EPT-2	1.0	HM	EPT-2	-	3		EX. DOOR 18
B164	1	E NL	3'-0"	7'-0"	HM	EPT-2	1.0	HM	EPT-2	-			

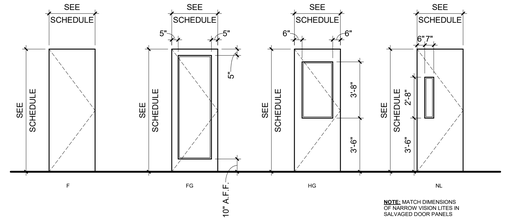
Grand total: 24

DOOR SCHEDULE REMARKS:

1. CARD READER.
2. EXISTING DOOR TO RECEIVE NEW HARDWARE
3. REINSTALL SALVAGED HM DOOR PANEL IN NEW FRAME AT NEW LOCATION
4. EXISTING HARDWARE TO REMAIN.
5. REPROGRAM DOOR TO ACCEPT NEW CARD READER. COORDINATE W/ OWNER.



DOOR FRAME ELEVATIONS



NOTE: MATCH DIMENSIONS OF NARROW VISION LITES IN SALVAGED DOOR PANELS

DOOR PANEL TYPES

DOOR & FRAME NOTES

1. SALVAGE HM DOOR PANELS AT DOORS TO BE DEMOLISHED. TYP. NOTIFY ARCHITECT IF DOORS ARE NOT IN GOOD ENOUGH CONDITION FOR REINSTALLATION. DELIVER UNUSED SALVAGED DOOR PANELS TO OWNER.
2. DEMOLISH HM DOOR FRAMES TO BE REMOVED. TYP.
3. PROVIDE ALL NEW HM DOOR FRAMES FOR REINSTALLATION OF SALVAGED DOORS. FIELD VERIFY & COORDINATE EXISTING DOOR HARDWARE W/ NEW FRAME PREP.
4. PREPARE SALVAGED DOOR PANELS FOR PAINT: REMOVE DEBRIS AND SAND SCRATCHES SMOOTH. SEE SCHEDULE.
5. PAINT HM DOORS AND FRAMES EPT-2.

FINISH NOTES

A. SCHLUTER EDGE TRIM TYP. AT ALL OUTSIDE CORNERS. JOINTS TO OCCUR AT UPPER MOST CONTINUOUS GROUT LINE.
B. SCHLUTER AT TOP OF TILE TO TRANSITION TO GYPSUM WALL BOARD
C. CENTER WALL TILE JOINT ON CENTER OF WALL
D. ALIGN ALL WALL TILE GROUT JOINTS WITH FLOOR TILE GROUT JOINTS

STANDARD ABBREVIATIONS

ACP	ACOUSTIC CEILING PANEL
CG	CORNER GUARD
CPT	CARPET
EPT	EPOXY PAINT
GT	GROUT
PNT	PAINT
PLAM	PLASTIC LAMINATE
RB	RESILIENT BASE
SC	SEALED CONCRETE
SS	SOLID SURFACE
TERR	TERRAZZO
T	TILE
TP	TOILET PARTITION
TF	TILE FLOORING
WD	WOOD
WT	WINDOW TREATMENT

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Key Plan

Revision	Description	Date

OPN Project No.
24016000

Sheet Issue Date
100% CONSTRUCTION DRAWING SET **08/16/2024**

Sheet Name
DOOR AND FINISH INFORMATION

Sheet Number
A001

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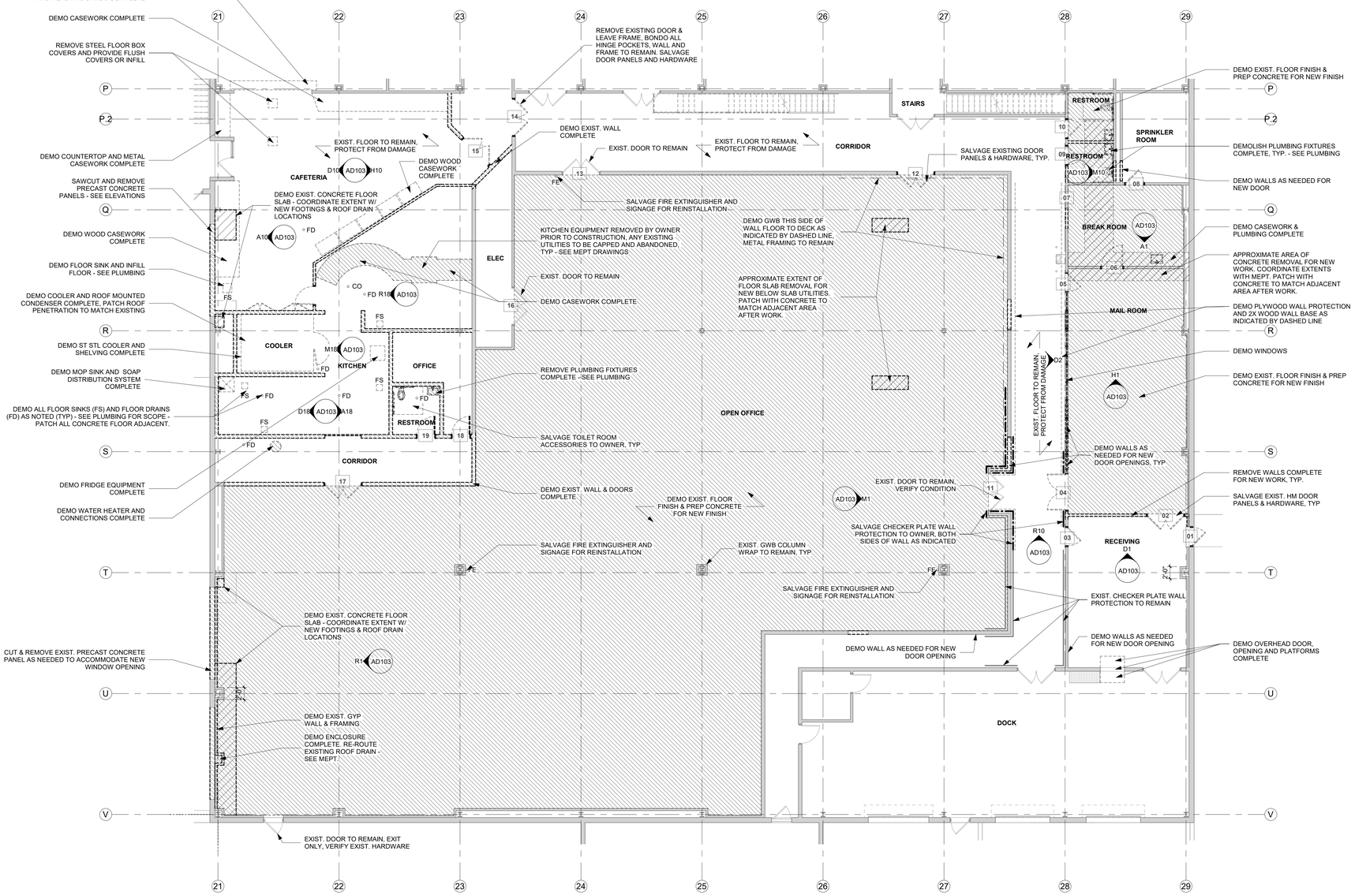

A2 LEVEL 1 DEMO FLOOR PLAN
1/8" = 1'-0"

GENERAL NOTES

1. IDENTIFICATION AND/OR ABATEMENT OF HAZARDOUS MATERIALS IS NOT PART OF THIS SCOPE OF WORK. IF ASBESTOS OR OTHER HAZARDOUS MATERIALS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY.
2. REMOVE LOOSE PAINT AND MISCELLANEOUS HANGING OBJECTS FROM WALLS AND CEILINGS AT ALL AREAS TO RECEIVE NEW FINISHES.
3. OPENING IN THE EXISTING STRUCTURE SMALLER THAN 12" IN ANY DIRECTION ARE NOT IDENTIFIED ON THESE DRAWINGS. SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROVIDING OPENINGS SMALLER THAN 12" AS REQUIRED FOR INSTALLATION OF THEIR WORK.
4. OPENINGS IN THE EXISTING STRUCTURE SHALL NOT BE MADE WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
5. PATCH AND REPAIR ALL EXISTING FLOOR SLABS AND WALL SURFACES DAMAGED FROM DEMOLITION OR PRIOR USE.
6. PATCH ALL AREAS OF ELECTRICAL AND MECHANICAL DEMOLITION THAT WILL NOT BE REUSED.
7. CONTRACTOR TO FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS. IN THE EVENT OF A DISCREPANCY BETWEEN THE DRAWINGS AND THE EXISTING CONDITIONS, NOTIFY THE ARCHITECT BEFORE PROCEEDING.
8. DO NOT REMOVE ANY ITEMS WHICH JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING. IF HIDDEN ELEMENTS OR DETERIORATED ELEMENTS ARE ENCOUNTERED, NOTIFY THE ARCHITECT IMMEDIATELY.
9. EXISTING BUILDING IS TO REMAIN WEATHER-TIGHT DURING ALL DEMOLITION ACTIVITIES.
10. REFER TO CONSULTANT DRAWINGS FOR ADDITIONAL DEMOLITION OF OTHER DISCIPLINES.
11. PROTECT ALL ADJACENT AREAS AND ITEMS "TO REMAIN" DURING DEMOLITION/CONSTRUCTION. REPAIR/REPLACE ALL ITEMS DAMAGED DURING CONSTRUCTION.
12. EXISTING BUILDING CONDITIONS SHOWN ON THESE DRAWINGS ARE DERIVED FROM DRAWINGS OF THE ORIGINAL BUILDING AND FROM LIMITED FIELD OBSERVATION.
13. INDICATED EXISTING BUILDING CONDITIONS ARE ASSUMED TO BE REPRESENTATIVE OF THE ACTUAL CONSTRUCTION OF THE BUILDING. LOCAL CONDITIONS MAY VARY.
14. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ADDITIONAL MEANS OF EGRESS AS NEEDED AS A RESULT OF CONSTRUCTION SEQUENCING AND/OR REGULATORY REQUIREMENTS.
15. SALVAGE ALL EXISTING DOORS PANELS INDICATED TO BE DEMOLISHED FOR REINSTALLATION IN NEW LOCATIONS. EXIST. FRAMES TO BE DEMOLISHED

DEMOLITION LEGEND

- INDICATES...
- INDICATES...
- INDICATES...
- AREA OF FINISH FLOORING REMOVAL
- AREA OF CONCRETE FLOOR DEMOLITION

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Key Plan

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Sheet Issue Date
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Sheet Name
DEMO FLOOR PLANS

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AD101

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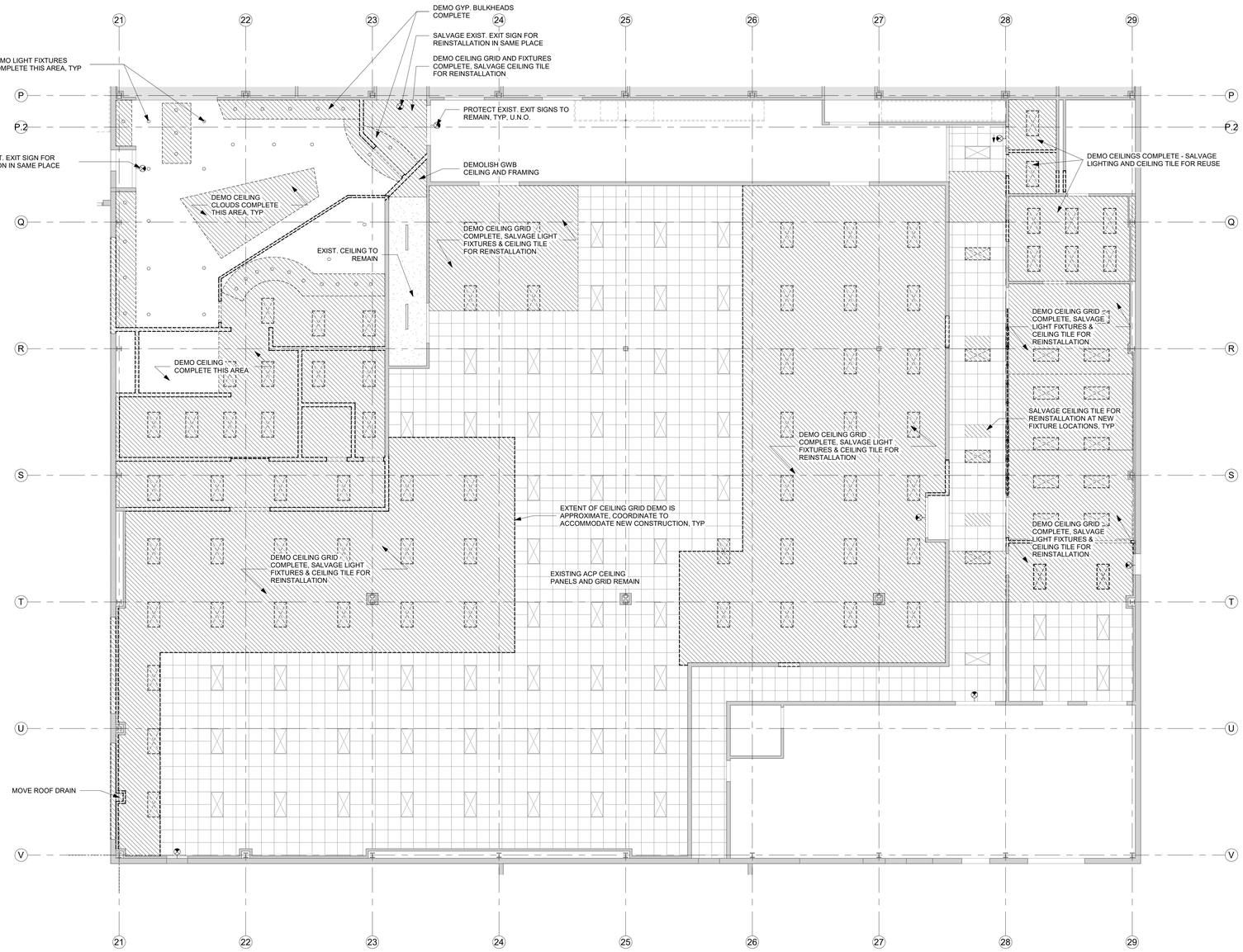

A2 LEVEL 1 DEMO REFLECTED CEILING PLAN
1/8" = 1'-0"

GENERAL NOTES

1. REMOVE AND SALVAGE ALL CEILING TILE AND LIGHTING FIXTURES FOR REINSTALLATION UNLESS NOTED OTHERWISE
2. IDENTIFICATION AND/OR ABATEMENT OF HAZARDOUS MATERIALS IS NOT PART OF THIS SCOPE OF WORK. IF ASBESTOS OR OTHER HAZARDOUS MATERIALS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY.
3. REFER TO SPECIFICATION FOR RECYCLING, CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL REQUIREMENTS.
4. REMOVE LOOSE PAINT AND MISCELLANEOUS HANGING OBJECTS FROM WALLS AND CEILINGS AT ALL AREAS TO RECEIVE NEW FINISHES.
5. OPENING IN THE EXISTING STRUCTURE SMALLER THAN 12" IN ANY DIRECTION ARE NOT IDENTIFIED ON THESE DRAWINGS. SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROVIDING OPENINGS SMALLER THAN 12" AS REQUIRED FOR INSTALLATION OF THEIR WORK.
6. OPENINGS IN THE EXISTING STRUCTURE SHALL NOT BE MADE WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
7. PATCH ALL AREAS OF ELECTRICAL AND MECHANICAL DEMOLITION THAT WILL NOT BE REUSED.
8. CONTRACTOR TO FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS. IN THE EVENT OF A DISCREPANCY BETWEEN THE DRAWINGS AND THE EXISTING CONDITIONS, NOTIFY THE ARCHITECT BEFORE PROCEEDING.
9. DO NOT REMOVE ANY ITEMS WHICH JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING. IF HIDDEN ELEMENTS OR DETERIORATED ELEMENTS ARE ENCOUNTERED, NOTIFY THE ARCHITECT IMMEDIATELY.
10. REFER TO CONSULTANT DRAWINGS FOR ADDITIONAL DEMOLITION OF OTHER DISCIPLINES.
11. PROTECT ALL ADJACENT AREAS AND ITEMS "TO REMAIN" DURING DEMOLITION/CONSTRUCTION. REPAIR/REPLACE ALL ITEMS DAMAGED DURING CONSTRUCTION.
12. EXISTING BUILDING CONDITIONS SHOWN ON THESE DRAWINGS ARE DERIVED FROM DRAWINGS OF THE ORIGINAL BUILDING AND FROM LIMITED FIELD OBSERVATION.
13. INDICATED EXISTING BUILDING CONDITIONS ARE ASSUMED TO BE REPRESENTATIVE OF THE ACTUAL CONSTRUCTION OF THE BUILDING. LOCAL CONDITIONS MAY VARY

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DEMO REFLECTED CEILING PLANS

Sheet Number
AD102

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EXIST. ACP CEILING PANELS AND GRID REMAIN - SEE RCP
SALVAGE ALL REMOVED TILES FOR REUSE AS NOTED. PROVIDE EXCESS TILES TO OWNER.

EXIST. DOOR TO REMAIN

REMOVE GWB AS NECESSARY FOR MODIFICATION OF EXTERIOR PRECAST WALL PANELS AND WINDOW INSTALLATION

DEMO DRYWALL ENCLOSER COMPLETE. RE-ROUTE EXISTING STORM DRAIN AS SHOWN ON DRAWINGS.

DEMO EXIST. FLOOR FINISH COMPLETE & PREP CONCRETE FOR NEW FINISH

R1 DEMO PHOTO 1

DEMO PORTION OF CEILING GRID COMPLETE. SALVAGE LIGHT FIXTURES & CEILNG TILE FOR REINSTALLATION - SEE PLANS.

EXIST. DOOR & ADA OPERATOR TO REMAIN

SALVAGE AND REINSTALL ADA OPERATOR ON NEW WALL.

SALVAGE CHECKER PLATE WALL PROTECTION TO OWNER.

SALVAGE FIRE EXTINGUISHER AND SIGNAGE FOR REINSTALLATION

DEMO GWB THIS SIDE OF WALL FLOOR TO DECK AS INDICATED ON PLANS, METAL FRAMING TO REMAIN

DEMO EXIST. FLOOR FINISH COMPLETE & PREP CONCRETE FOR NEW FINISH

M1 DEMO PHOTO 2

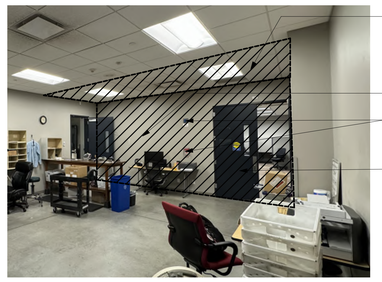
DEMO CEILING GRID COMPLETE, LIGHTING TO REMAIN IN SIMILIAR LOCATION. SALVAGE & PROTECT CEILING TILE FOR REINSTALLATION

DEMO WINDOWS COMPLETE

DEMO EXIST WALL BASE

DEMO CPT COMPLETE, PREP FLOOR FOR NEW FINISH

H1 DEMO PHOTO 3



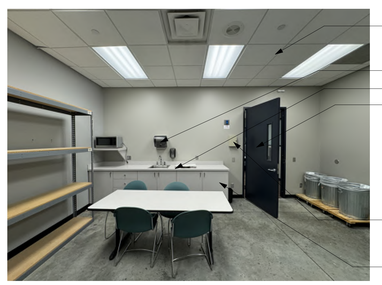
DEMO CEILING GRID COMPLETE, LIGHTING TO REMAIN IN SIMILIAR LOCATION. SALVAGE & PROTECT CEILING TILE FOR REINSTALLATION

DEMO EXIST. WALL

DEMO MAIL ROOM ISOLATION SYSTEM COMPLETE. PROVIDE STAINLESS STEEL COVERS AT ALL ABANDONED BOXES.

SALVAGE EXIST. DOOR, TYP

D1 DEMO PHOTO 4



DEMO CEILINGS COMPLETE - SALVAGE LIGHTING AND CEILING TILE FOR REUSE

SALVAGE PAPER & SOAP DISPENSER TO OWNER

DEMO EXIST.CASEWORK & PLUMBING COMPLETE

SALVAGE EXIST. DOOR

SALVAGE KEY CABINET TO OWNER

DEMO CASEWORK COMPLETE

A1 DEMO PHOTO 5

EXIST ACP TO REMAIN. SALVAGE LIGHT FIXTURES FOR REINSTALLATION - SEE RCP

SALVAGE ACTUATOR AND REINSTALL AT SAME LOCATION AFTER NEW FINISHES IN HALLWAY.

DEMO PLYWOOD WALL PANELS & CHECKER PLATE WALL PROTECTION COMPELTE, METAL FRAMING TO REMAIN - SEE DEMOLTION PLAN

DEMO 2x WOOD WALL BASE

EXIST. FLOOR TO REMAIN, PROTECT FROM DAMAGE

R10 DEMO PHOTO 6

SALVAGE RECESSED TRASH AND ELECTRIC HAND DRYER FOR REINSTALLATION IN NEW RESTROOMS - SEE PLANS.

SALVAGE MIRROR TO OWNER

REMOVE PLUMBING FIXTURES COMPLETE - SEE PLUMBING

DEMO FRP WALL PROTECTION COMPLETE, TYP

SALVAGE TOLIET ROOM ACCESSORIES TO OWNER, TYP

SALVAGE TOILET FIXTURE AND CARRIER COMPLETE FOR REINSTALLATION IN NEW RESTROOMS - SEE PLANS.

FLOOR DRAIN - SEE PLUMBING

M10 DEMO PHOTO 7

DEMO EXIST. GWB CEILING COMPLETE.

EXIST. WALL TO REMAIN

DEMO EXIST. WALL COMPLETE - SEE DEMO PLANS.

SALVAGE EXIST. DOOR

DEMO CASEWORK COMPLETE

H10 DEMO PHOTO 8

DEMO CEILING CLOUD & HARDWARE COMPLETE.

EXIST. WALL & DOOR TO REMAIN

SALVAGE PAPER DISPENSER TO OWNER

DEMO COUNTERTOP AND METAL CASEWORK COMPLETE

DEMO OVERHEAD COILING DOOR COMPLETE

REMOVE STEEL FLOOR BOX COVERS AND PROVIDE FLUSH COVERS OR INFILL

D10 DEMO PHOTO 9

DEMO GWB CEILING

DEMO WOOD CASEWORK COMPLETE

DEMO FLOOR SINK AND INFILL FLOOR - SEE PLUMBING

A10 DEMO PHOTO 10

DEMO CEILING COMPLETE

SALVAGE PAPER DISPENSER TO OWNER

DEMO EXISTING DOOR AND FRAME COMPELTE - SALVAGE EXIST. DOOR FOR REUSE.

DEMO CASEWORK COMPLETE

DEMO EXIST. WALL COMPLETE

KITCHEN EQUIPMENT REMOVED BY OWNER PRIOR TO CONSTRUCTION, ANY EXISTING UTILITIES TO BE CAPPED AND ABANDONED, TYP - SEE MEPT DRAWINGS

R18 DEMO PHOTO 11

DEMO METAL WALL PROTECTION COMPLETE, TYP

DEMO COOLER WALLS, DOOR, CEILING, DISPLAY AND ASSOCIATED ROOF CONDENSOR COMPLETE. PATCH ROOF AT REMOVED CONNECTION

M18 DEMO PHOTO 12

DEMO COOLER EQUIPMENT SEE MEPT DRAWINGS FOR UTILITY CONNECTIONS

DEMO COOLER WALL PANELS / SYSTEM COMPLETE.

DEMO RACKSYSTEM

H18 DEMO PHOTO 13

DEMO FRP WALL PROTECTION COMPLETE, TYP

SHELVING REMOVED BY OTHERS

EYEWASH SYSTEM REMOVED BY OTHERS

DEMO MOP SINK - SEE PLUMBING

COUNTER AND SINK REMOVED BY OTHERS

DEMO FLOOR SINK - SEE PLUMBING

EXIST. FLOOR DRAIN - SEE PLUMBING

D18 DEMO PHOTO 14

SHELVING REMOVED BY OTHERS

DEMO FRP WALL PROTECTION COMPLETE, TYP

DEMO PLYWOOD SHEATHING

COUNTER, SINK AND DISPOSAL REMOVED BY OTHERS

DEMO FLOOR SINK - SEE PLUMBING

A18 DEMO PHOTO 15

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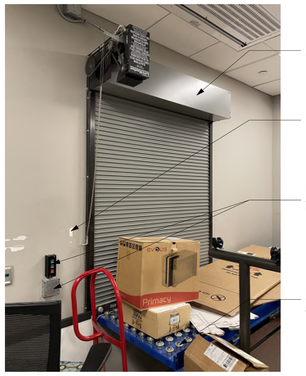


DEMO OVERHEAD COILING DOOR, PREP OPENING FOR NEW WALL INFILL

REPAIR WALL DAMAGE, PREP FOR NEW PAINT FINISH

DEMO OVERHEAD DOOR CONTROLS AND JUNCTION BOX COMPLETE, PROVIDE NEW COVERPLATE AT WALL

DEMO CONVEYING PLATFORM COMPLETE, PATCH FLOORING AT ANCHOR HOLES

P1 DEMO PHOTO 16
3" = 1'-0"

PREP OPENING FOR NEW WALL INFILL

DEMO CONVEYING PLATFORM COMPLETE, PATCH FLOORING AT ANCHOR HOLES

J1 DEMO PHOTO 17
3" = 1'-0"

SEE PLANS / ELEVATIONS FOR REMOVED PORTION OF EXISTING PRECAST PANELS FOR NEW WINDOW OPENINGS. PROTECT ADJACENT SERVICES FROM DAMAGE.

ABANDON EXISTING GREASE INTERCEPTOR, REMOVE MANHOLE RISERS & COVERS - SEE PLUMBING DRAWINGS FOR FULL SCOPE OF WORK

REPAIR SOIL & GRASS FROM GREASE INTERCEPTOR WORK

CONTRACTOR RESPONSIBLE TO PROVIDED SOD FOR PATCHING AND MAINTAIN WITH 2 WEEKS OF WATER BY CONTRACTOR. HOSE BIB IS LOCATED WITHIN COURTYARD FOR ACCESS.

CAP YARD CLEAN OUT, REPAIR AS NECESSARY

E1 DEMO PHOTO 18
3" = 1'-0"

DEMOLISH GREASE INTERCEPTOR VENT - SEE PLUMBING DRAWINGS FOR FULL SCOPE OF WORK

DEMO ENCLOSURE COMPLETE.

A1 DEMO PHOTO 19
3" = 1'-0"

DEMO MAIL ROOM ISOLATION SYSTEM COMPLETE - SEE MECHANICAL

DEMO OVERHEAD COILING DOOR, PREP OPENING FOR NEW WALL INFILL

P10 DEMO PHOTO 20
3" = 1'-0"

DEMO DOOR BELL COMPLETE, PATCH DRYWALL. CONTRACTOR TO ASSUME 15 TOTAL LOCATIONS FOR SIMILAR PATCHING.

J10 DEMO PHOTO 21
3" = 1'-0"

DEMOLISH SIGN AND INDICATOR COMPLETE, PROVIDE COVER PLATE

PAINT WALL BELOW AND INCLUDING ACCENT STRIPE (COLORS TO MATCH EXISTING) FOR THESE (3) PRECAST PANELS.

DEMOLISH EXISTING DOOR AND FRAME, PREP FOR NEW ALUMINUM ENTRANCE DOOR

DEMOLISH SIDEWALK COMPLETE, SEE CIVIL DRAWINGS FOR SCOPE

E10 DEMO PHOTO 22
3" = 1'-0"

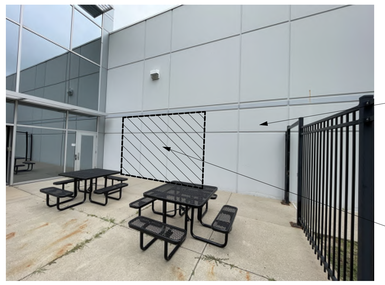
DEMOLISH SIDE WALK COMPLETE, PREP FOR NEW CONCRETE - SEE CIVIL DRAWINGS

EXISTING CONCRETE SIDEWALK TO REMAIN

A10 DEMO PHOTO 23
3" = 1'-0"

APPROXIMATE LOCATIONS OF NEW ROOF MOUNTED RTU ON PREMANUFACTURED CURBS. COORDINATE LOCATIONS WITH EXISTING STRUCTURAL - SEE MECHANICAL.
COORDINATE ALL ROOF WORK FOR CUTTING AND PATCHING WITH OWNERS REPRESENTATIVE.
PROVIDE CRICKETING ON SIDES OF UNITS AS REQUIRED TO MAINTAIN WATER FLOW TO ROOF DRAINS AROUND UNITS.

R18 DEMO PHOTO 28
3" = 1'-0"



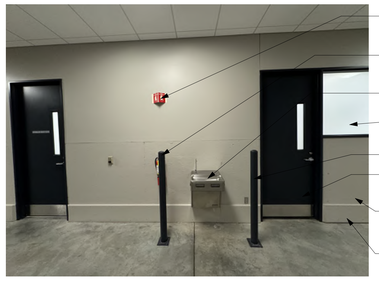
PAINT ENTIRE WALL THIS SIDE TO CORNER AFTER NEW WINDOWS INSTALLED. PAINT FROM BASE TO TOP OF WINODWS / PRECAST JOINT.

SEE PLANS / ELEVATIONS FOR REMOVED PORTION OF EXISTING PRECAST PANELS FOR NEW WINDOW OPENINGS. PROTECT ADJACENT SERVICES FROM DAMAGE.

N18 DEMO PHOTO 27
3" = 1'-0"

DEMO ROOF CONDENSOR ASSOCIATED WITH WALK IN COOLER COMPELTE. PATCH ALL ROOF PENTRATIONS.

J18 DEMO PHOTO 26
3" = 1'-0"



EXIST. SIGNAGE TO REMAIN

SALVAGE FIRE EXTINGUISHER FOR REINSTALLATION

SALVAGE DRINKING FOUNTAIN FOR REINSTALLATION

DEMO HM FRAME & GLAZING COMPLETE

EXIST. BOLLARDS TO REMAIN

SALVAGE HM DOOR

DEMO PLYWOOD WALL PROTECTION, METAL FRAMING TO REMAIN

DEMO 2X12 WOOD WALL BASE COMPLETE

E18 DEMO PHOTO 25
3" = 1'-0"

PAINT WALL BELOW ACCENT STRIPE THIS SIDE FROM CORNER TO JOINT NEAREST FENCED ENCLOSURE.

PAINT ENTIRE WALL THIS SIDE TO CORNER AFTER NEW WINDOWS INSTALLED. PAINT FROM BASE TO TOP OF WINODWS / PRECAST JOINT.

SEE PLANS / ELEVATIONS FOR REMOVED PORTION OF EXISTING PRECAST PANELS FOR NEW WINDOW OPENINGS. PROTECT ADJACENT SERVICES FROM DAMAGE.

A18 DEMO PHOTO 24
3" = 1'-0"

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Key Plan

Revision	Description	Date

OPN Project No.
24816000

Sheet Issue Date
100% CONSTRUCTION DRAWING SET **08/16/2024**

Sheet Name
DEMO PHOTOS

Sheet Number
AD104

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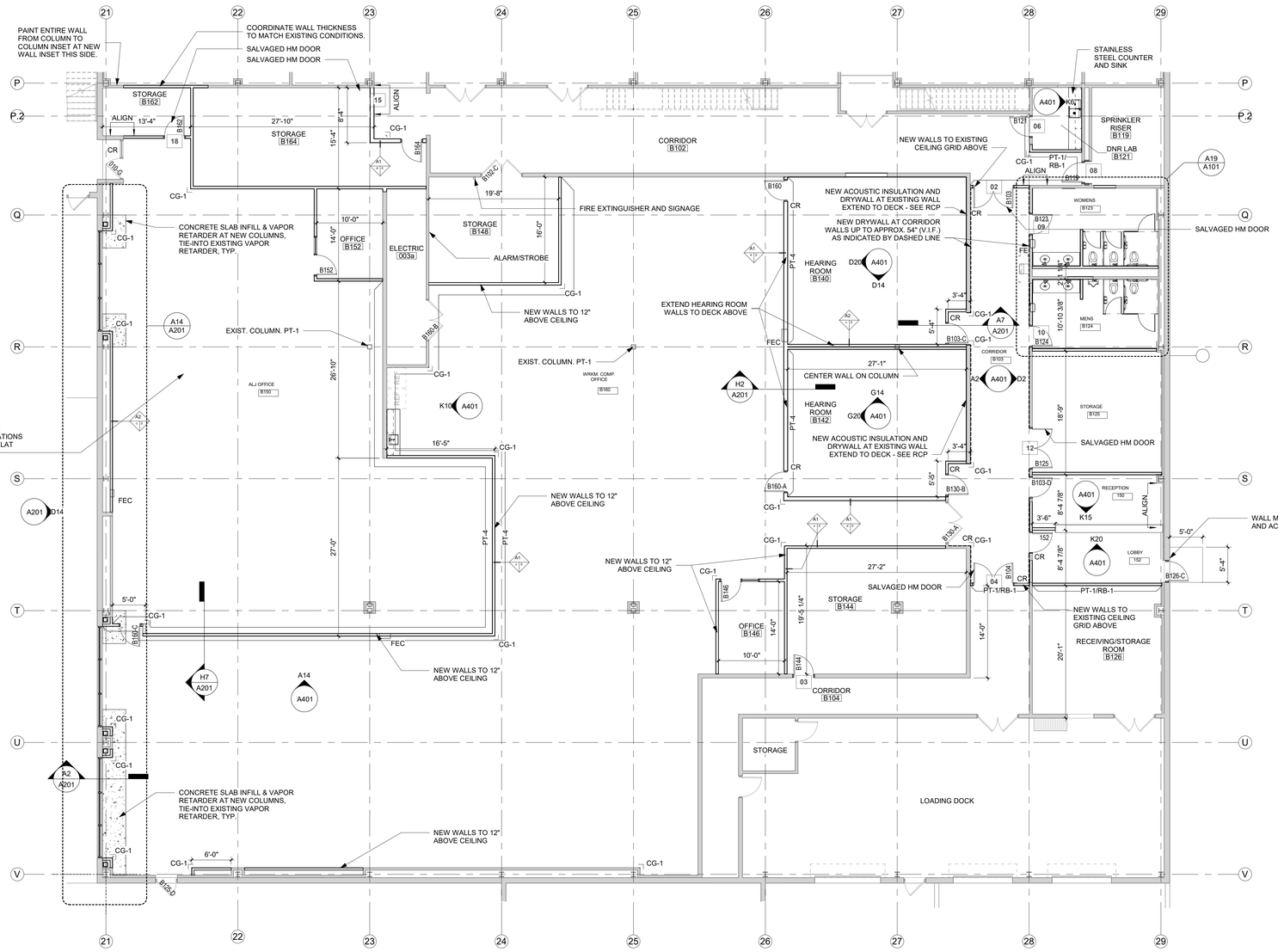
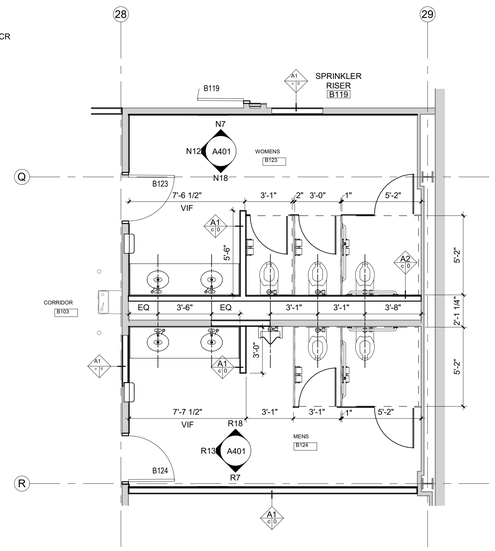


A2 LEVEL 1 FLOOR PLAN
1/8" = 1'-0"



A19 ENLARGED RESTROOM PLAN
1/4" = 1'-0"

GENERAL NOTES

1. DIMENSIONS ARE MEASURED FACE-OF-FINISH TO FACE-OF-FINISH OR ROUGH MASONRY OPENING UNLESS NOTED OTHERWISE - TYPICAL FOR ALL DRAWINGS.
2. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS - TYPICAL FOR ALL DRAWINGS.
3. IN THE EVENT OF A DISCREPANCY BETWEEN ARCHITECTURAL AND CONSULTANT DRAWINGS, NOTIFY ARCHITECT IMMEDIATELY PRIOR TO COMMENCING WORK - TYPICAL FOR ALL DRAWINGS.
4. ALL PENETRATIONS IN FIRE RATED FLOORS AND WALLS MUST BE SEALED WITH APPROPRIATE FIRESTOPPING SYSTEM.
5. PATCH AND REPAIR EXISTING FLOOR SLABS AND WALL SURFACES DAMAGED FROM DEMOLITION.
6. ALL WALLS TO BE A1 c UNLESS NOTED OTHERWISE.

NOTES:

1. OFFICE AND MEETING ROOM WALLS TO BE SOUND RATED, TYP.
2. SEE SHEET A001 FOR ROOM FINISHED, TYP.
3. SALVAGED DOORS TO BE REINSTALLED AS APPLICABLE. EXISTING DOOR CONDITIONS AND SALVAGABILITY TO BE EVALUATED BY DESIGN TEAM.
4. ALL NEW WALLS AND FRAMING TO EXTEND TO 12" ABOVE CEILING, U.N.O.

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Key Plan

Revision	Description	Date

OPN Project No.
24816000

Sheet Issue Date
100% CONSTRUCTION DRAWING SET 08/16/2024

Sheet Name
FLOOR PLAN

Sheet Number
A101

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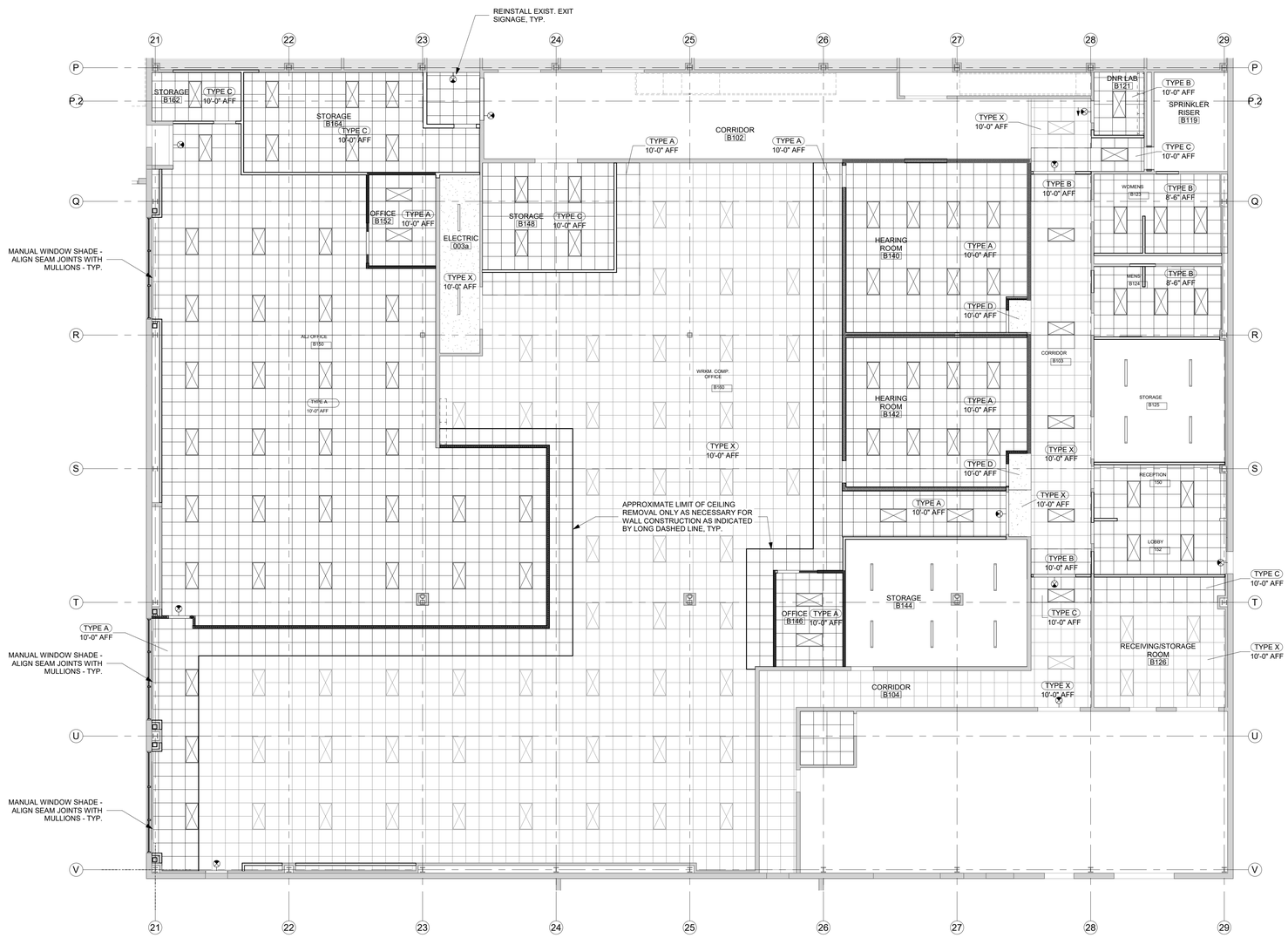

N A2 LEVEL 1 REFLECTED CEILING PLAN
1/8" = 1'-0"

GENERAL NOTES

1. CEILINGS ARE TYPE A AND INSTALLED TO MATCH EXISTING ELEVATION (10'-0") UNLESS NOTED OTHERWISE.
2. CEILING-MOUNTED FIXTURES, SPRINKLERS AND EQUIPMENT SHALL BE CENTERED IN CEILING PANELS OR GYPSUM BOARD SOFFITS AND EQUALLY SPACED UNLESS NOTED OTHERWISE
3. CENTER CEILING GRID IN ROOMS AS SHOWN UNLESS NOTED OTHERWISE.
4. CONCEALED SPRINKLER HEAD COVERS SHALL BE PAINTED BY MANUFACTURER TO MATCH ADJACENT SOFFIT/ACP UNLESS NOTED OTHERWISE.
5. COORDINATE LOCATIONS OF EXIT LIGHTS AND EMERGENCY LIGHTS SHOWN ON ARCHITECTURAL DRAWINGS. IN THE EVENT OF A DISCREPANCY, VERIFY WITH ARCHITECT PRIOR TO INSTALLATION.
6. CEILING FIXTURE DIMENSIONS ARE TAKEN FROM CENTERLINE OF FIXTURE UNLESS NOTED OTHERWISE.
7. REFER TO ARCHITECTURAL DRAWINGS (ELEVATIONS & REFLECTED CEILING PLANS) FOR ALL MECHANICAL AND ELECTRICAL DEVICE AND FIXTURE LOCATIONS & MOUNTING HEIGHTS. IF NOT CLEARLY SPECIFIED, CONTACT ARCHITECT FOR FURTHER CLARIFICATION. MECHANICAL & ELECTRICAL DRAWINGS ARE FOR FIXTURE TYPE REFERENCE ONLY.
8. PAINT ALL EXPOSED STRUCTURE, DECK, DUCTWORK, CONDUIT, ETC. IN AREAS NOTED TO BE OPEN TO STRUCTURE UNLESS NOTED OTHERWISE. PAINTING OF EXPOSED STRUCTURE TO BE DONE AFTER ALL UTILITIES ARE INSTALLED.

CEILING LEGEND

- BATT LINE DENOTES LOCATIONS OF ACOUSTIC PARTITIONS TO RECEIVE ACOUSTICAL BATT INSULATION AND SOUND SEALANT AT PERIMETER AND PENETRATIONS. REFER TO FLOOR PLANS FOR WALL TYPES.
- ACCESS PANEL
- RECTANGULAR FIXTURE
- LINEAR FIXTURE
- DOWN LIGHTS
- LINEAR PENDANT
- DOWN LIGHT PENDANTS
- UTILITY LIGHTS
- CEILING & WALL MOUNT EXIT SIGNS
- HVAC SUPPLY DIFFUSER
- HVAC RETURN DIFFUSER
- HVAC EXHAUST DIFFUSER
- HVAC SLOT DIFFUSER
- HVAC ROUND DIFFUSER
- PROJECTOR
- PROJECTOR SCREEN
- OCCUPANCY SENSOR
- SPEAKER
- MICROPHONE
- WIRELESS ACCESS POINT
- CEILING & WALL MOUNT CLOCK
- SMOKE DETECTOR
- CEILING & WALL MOUNT CAMERA
- DATA & POWER
- SPRINKLER

CEILING TYPES

A. ACP-1
SEE INTERIOR FINISH SPECIFICATION ON SHEET A001

B. ACP-1.1
NEW TILE OR EXISTING TILE FROM OWNER ATTIC STOCK (AVAILABLE ATTIC STOCK = APPROX. 240 TILES)

C. ACP-1.2
SALVAGED CEILING TILE

D. GYPSUM BOARD CEILING ON METAL STUD FRAMING

X. EXISTING CEILING TO REMAIN. VERIFY HEIGHT IN FIELD.

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Key Plan

Revision	Description	Date

OPN Project No.
24816000

Sheet Issue Date
100% CONSTRUCTION DRAWING SET 08/16/2024

Sheet Name
REFLECTED CEILING PLANS

Sheet Number
A102

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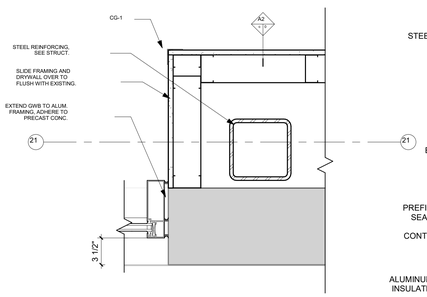
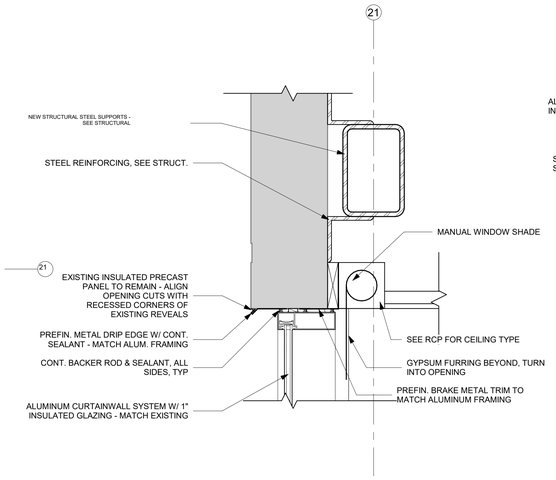


P2 SECTION DETAIL - CURTAINWALL JAMB
1 1/2" = 1'-0"



P6 SECTION DETAIL - CURTAINWALL HEAD
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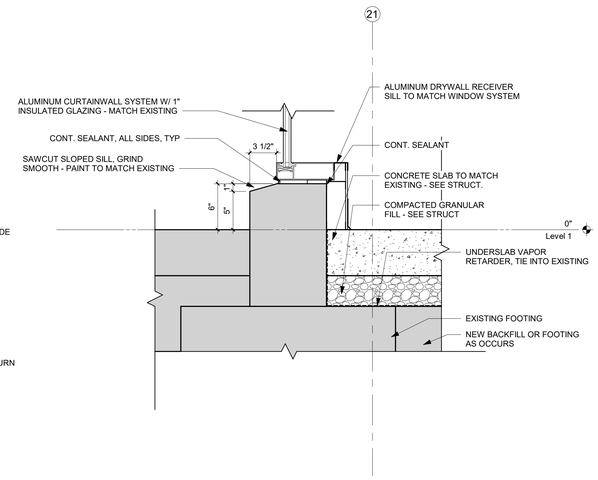

P11 SECTION DETAIL - CURTAINWALL CURB
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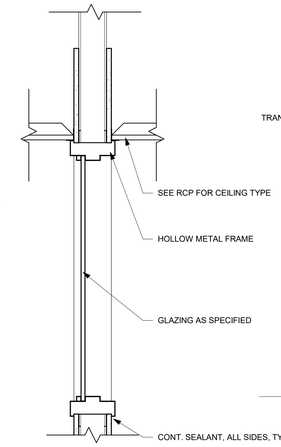
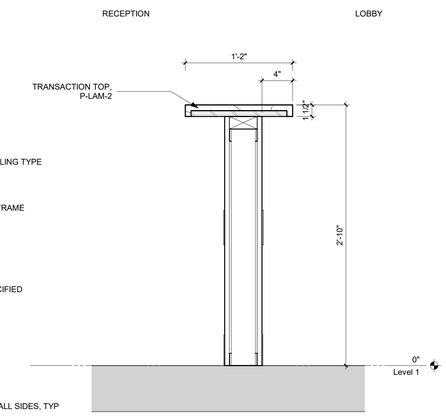
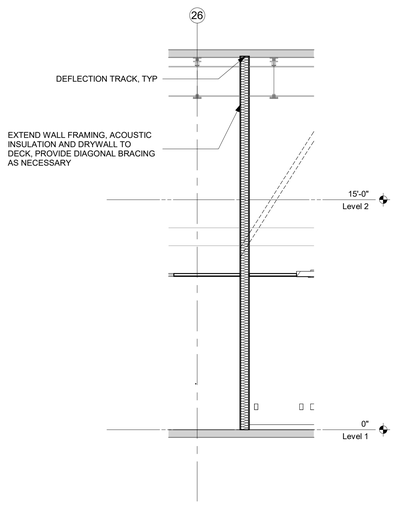


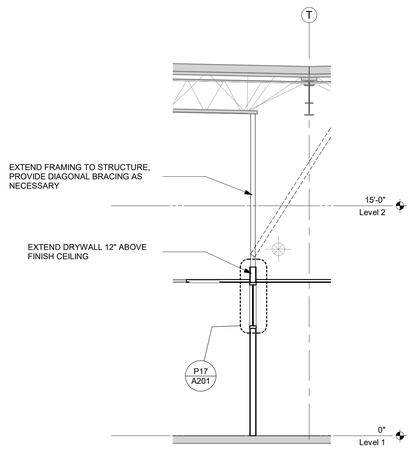
P17 SECTION DETAIL - CLERESTORY WINDOW
1 1/2" = 1'-0"



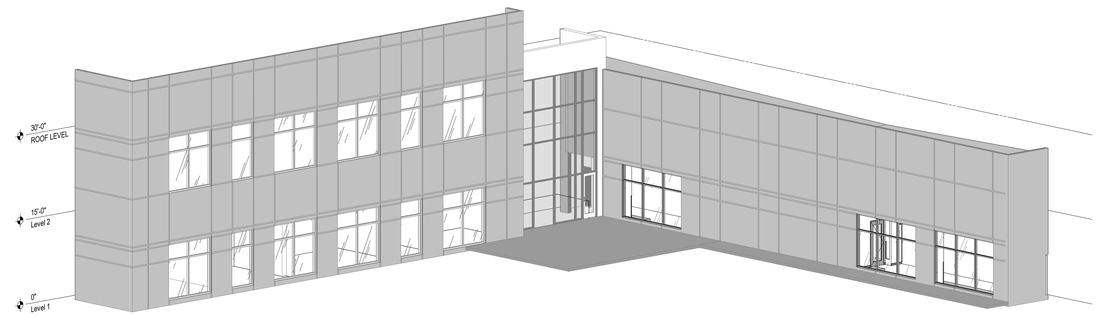
P20 SECTION DETAIL - RECEPTION WINDOW
1 1/2" = 1'-0"



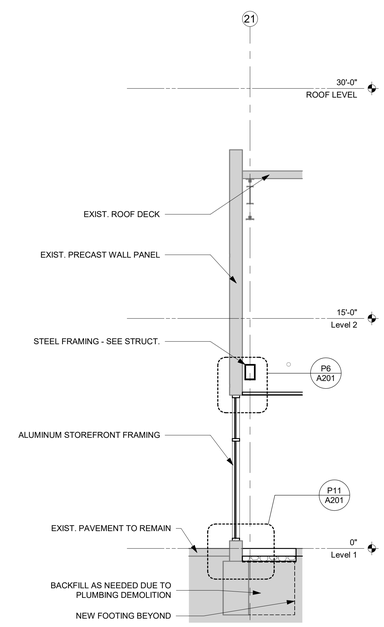
H2 WALL SECTION - HEARING ROOM WALLS, TYP
1/4" = 1'-0"



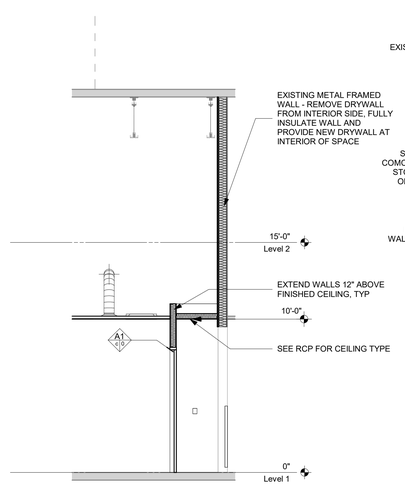
H7 WALL SECTION - DEMISING WALL @ OPEN OFFICES, TYP
1/4" = 1'-0"



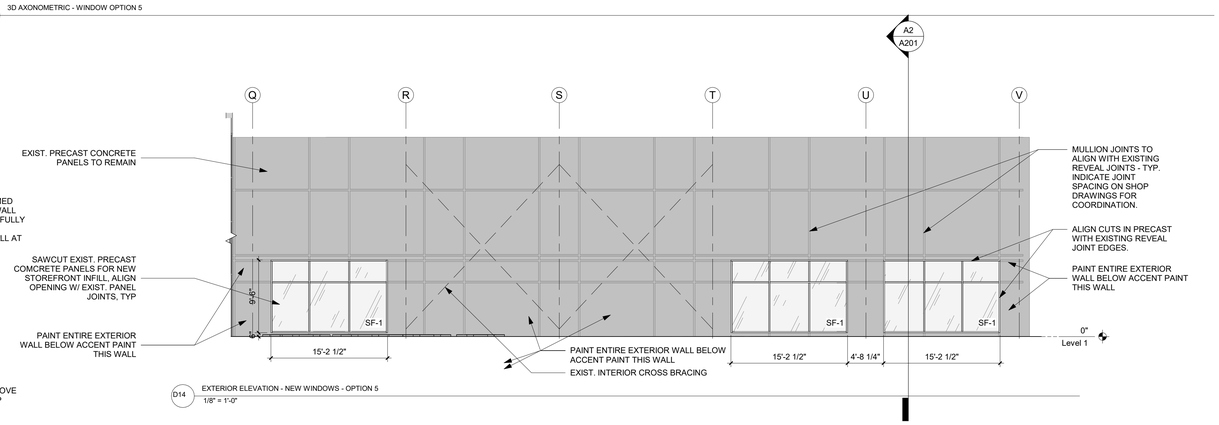
H12 3D AXONOMETRIC - WINDOW OPTION 5



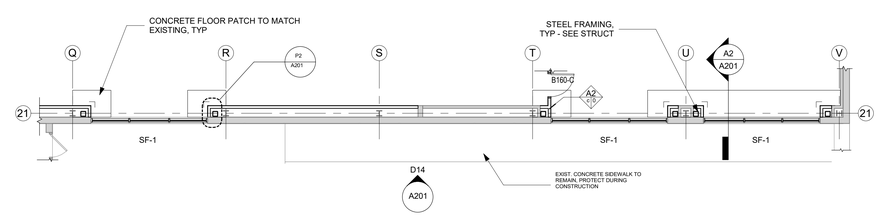
A2 EXTERIOR WALL SECTION - NEW STOREFRONT
1/4" = 1'-0"



A7 WALL SECTION - HEARING ROOM ENTRANCES, TYP
1/4" = 1'-0"



D14 EXTERIOR ELEVATION - NEW WINDOWS - OPTION 5
1/8" = 1'-0"



A14 ENLARGED FLOOR PLAN - NEW WINDOWS
1/8" = 1'-0"

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Key Plan

Revision	Description	Date

OPN Project No.
24816000

Sheet Issue Date
100% CONSTRUCTION DRAWING SET **08/16/2024**

Sheet Name
EXTERIOR ELEVATIONS & WALL SECTIONS

Sheet Number
A201

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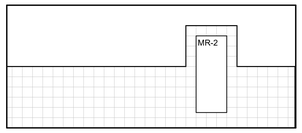
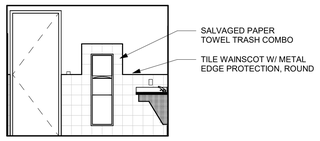
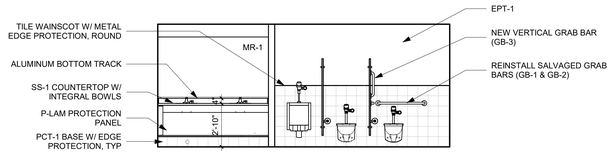


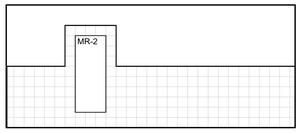
R7 INTERIOR ELEVATION - MENS RESTROOM - SOUTH
1/4" = 1'-0"



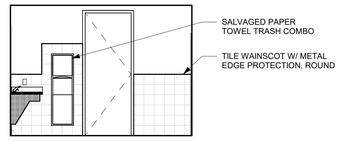
R13 INTERIOR ELEVATION - MENS RESTROOM - WEST
1/4" = 1'-0"



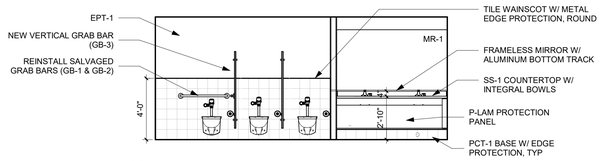
R18 INTERIOR ELEVATION - MENS RESTROOM - NORTH
1/4" = 1'-0"



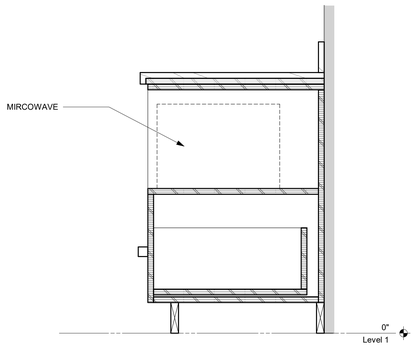
N7 INTERIOR ELEVATION - WOMENS RESTROOM - NORTH
1/4" = 1'-0"



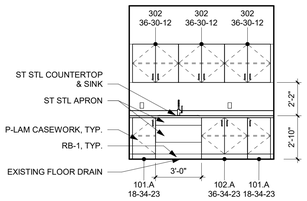
N12 INTERIOR ELEVATION - WOMENS RESTROOM - WEST
1/4" = 1'-0"



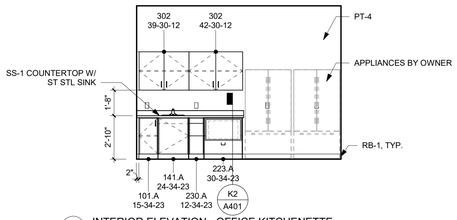
N18 INTERIOR ELEVATION - WOMENS RESTROOM - SOUTH
1/4" = 1'-0"



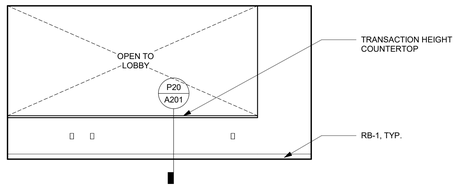
K2 Detail 8
1 1/2" = 1'-0"



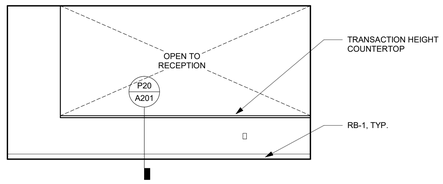
K6 INTERIOR ELEVATION - DNR LAB - EAST
1/4" = 1'-0"



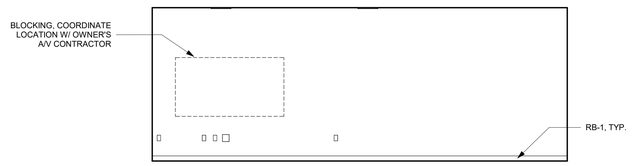
K10 INTERIOR ELEVATION - OFFICE KITCHENETTE
1/4" = 1'-0"



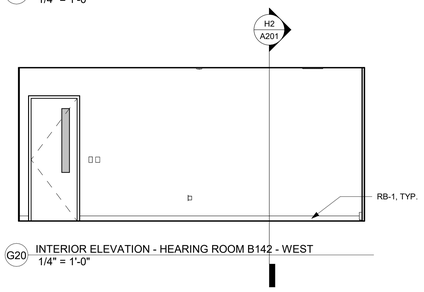
K15 INTERIOR ELEVATION - RECEPTION - SOUTH
1/4" = 1'-0"



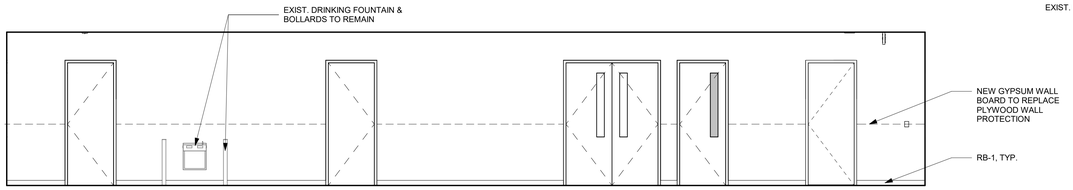
K20 INTERIOR ELEVATION - LOBBY - NORTH
1/4" = 1'-0"



G14 HEARING ROOM B142 NORTH
1/4" = 1'-0"



G20 INTERIOR ELEVATION - HEARING ROOM B142 - WEST
1/4" = 1'-0"



D2 INTERIOR ELEVATION - CORRIDOR B103 EAST
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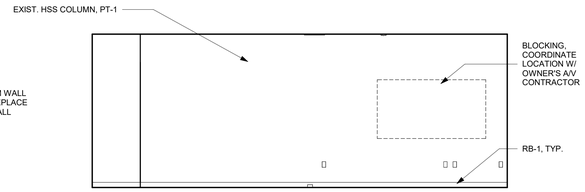
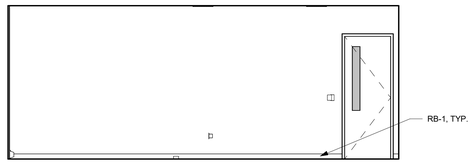
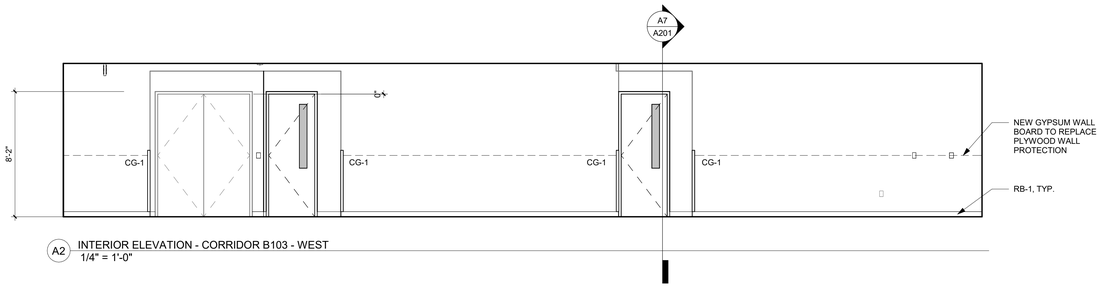


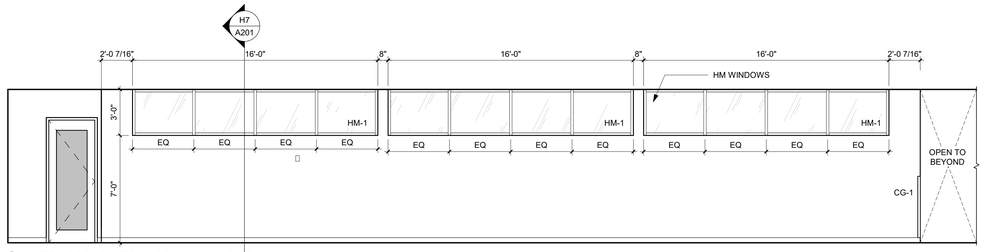
D14 HEARING ROOM B140 SOUTH
1/4" = 1'-0"



D20 INTERIOR ELEVATION - HEARING ROOM B140 - WEST
1/4" = 1'-0"



A2 INTERIOR ELEVATION - CORRIDOR B103 - WEST
1/4" = 1'-0"



A14 INTERIOR ELEVATION - OFFICE WINDOWS
1/4" = 1'-0"

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Key Plan

Revision	Description	Date

OPN Project No.
24816000

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Sheet Name
INTERIOR ELEVATIONS

Sheet Number
A401

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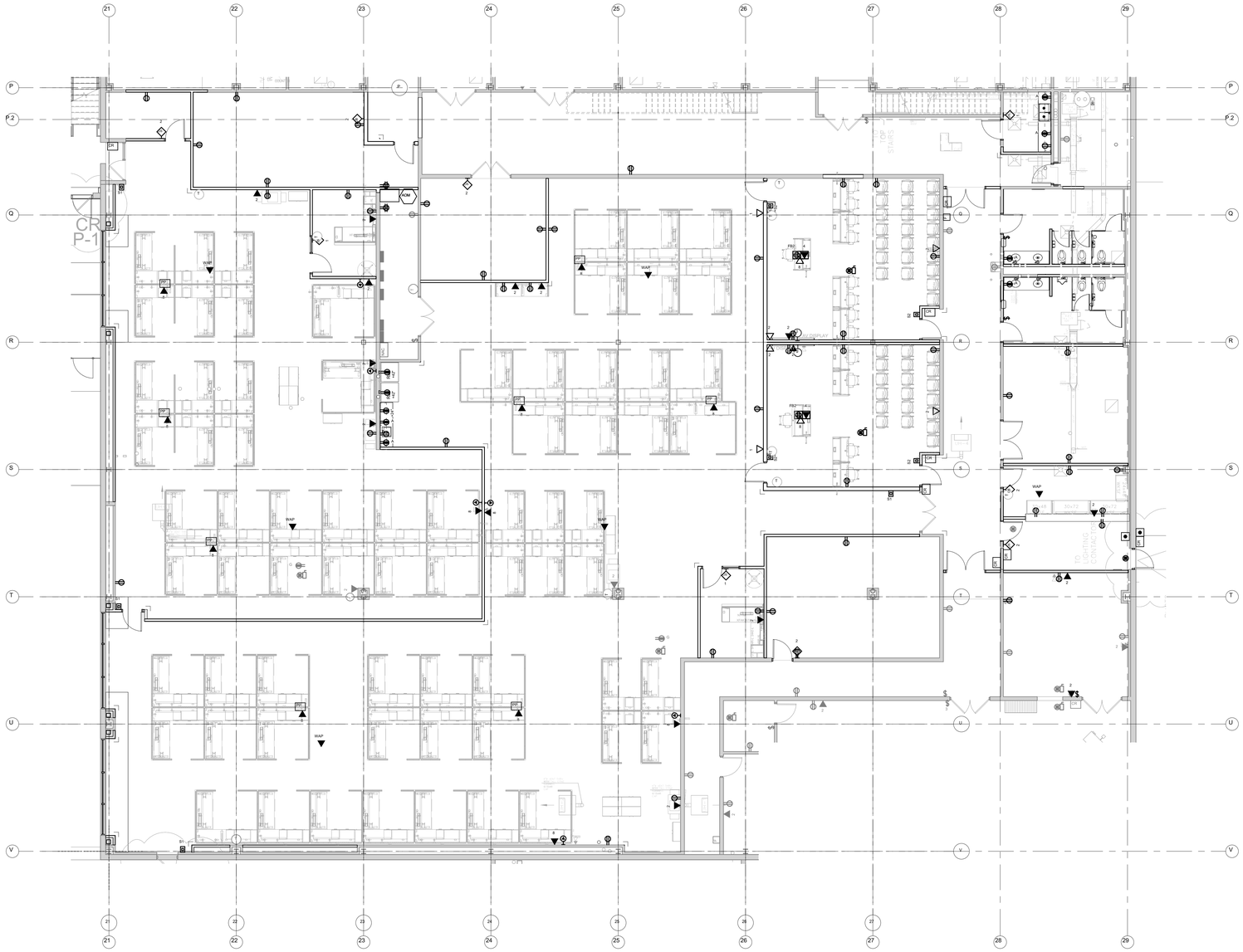

A2 LEVEL 1 FURNITURE FLOOR PLAN (FOR REFERENCE ONLY)
1/8" = 1'-0"

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100% CONSTRUCTION DRAWING SET **08/16/2024**

Sheet Name
FURNITURE PLAN (REFERENCE ONLY)

Sheet Number
A800

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PLUMBING - NOTES

1. COORDINATE WORK WITH ALL OTHER TRADES AS DESCRIBED IN MECHANICAL GENERAL NOTE #1.
2. PROVIDE A COMPLETE PLUMBING SYSTEM INCLUDING PIPE, INSULATION, HANGERS, SUPPORTS, EQUIPMENT, WATER HEATERS, FIXTURES, MIXING VALVES, VALVES, ACCESSORIES AND SPECIALTIES. INSTALL ALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. SIZE AND INSTALL PLUMBING SYSTEM PER PLUMBING CODE. COMPLY WITH ALL LOCAL AND STATE CODES AND OWNER'S REQUIREMENTS.
3. DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF PLUMBING SYSTEM.
4. EXISTING PLUMBING DISTRIBUTION AND EQUIPMENT SHOWN ARE BASED ON NON-DESTRUCTIVE SITE OBSERVATION AND AS-BUILT DOCUMENTS PROVIDED BY THE OWNER. FIELD VERIFY ALL EXISTING CONDITIONS INCLUDING LOCATING UNDER FLOOR PIPING AND PIPING CONCEALED IN BUILDING ASSEMBLIES WHERE WORK IS REQUIRED.
5. SEAL ALL WALL PIPE PENETRATIONS. PROVIDE THROUGH-PENETRATION FIRESTOPPING WHERE REQUIRED. REFER TO ARCHITECTURAL DRAWINGS FOR WALL, FLOOR, AND CEILING ASSEMBLY RATINGS.
6. CONTINUE PIPE INSULATION THROUGH WALL, FLOOR, AND CEILING PENETRATIONS UNBROKEN. SEAL AROUND PIPE INSULATION AT PENETRATIONS.
7. VERIFY WITH ENGINEER FOR ANY FIXTURES NOT TAGGED OR PIPED PRIOR TO ANY WORK. CONTRACTOR IS RESPONSIBLE FOR ALL PLUMBING FIXTURES SHOWN ON ARCHITECTURAL DRAWINGS; TAGGED OR NOT TAGGED ON PLUMBING / MECHANICAL DRAWINGS UNLESS SPECIFICALLY NOTED AS EXCLUDED FROM SCOPE.

FIRE PROTECTION - NOTES

1. COORDINATE WORK WITH ALL OTHER TRADES AS DESCRIBED IN MECHANICAL GENERAL NOTE #1.
2. LOCATE SPRINKLER HEADS TO PROVIDE SUFFICIENT COVERAGE IN INDIVIDUAL SPACES WITHOUT CONFLICT WITH LIGHTS, DIFFUSERS, AIR TERMINALS, AND OTHER CEILING ELEMENTS.
3. PROVIDE MANUAL DRAIN VALVES AT ALL LOW POINTS IN THE SYSTEM WHERE OFFSETS ARE REQUIRED TO AVOID COORDINATION CONFLICTS.
4. CENTER SPRINKLER HEADS WITHIN CEILING TILES OR AS INDICATED ON THE ARCHITECTURAL REFLECTED CEILING PLAN (RCP) UNLESS INDICATED OTHERWISE.
5. DO NOT INSTALL SPRINKLER MAINS SHALL THROUGH COMMUNICATION OR ELECTRICAL ROOMS. INSTALL SIDEWALL SPRINKLER HEADS IN COMMUNICATION AND ELECTRICAL ROOMS WITH NO PIPING INSIDE THE ROOM WHENEVER POSSIBLE.
6. DO NOT INSTALL SPRINKLER PIPING OR SPRINKLERS THAT ENCROACH ON THE REQUIRED CLEARANCE OF ANY OTHER EQUIPMENT. RELOCATE PIPING AND HEADS WHERE CLEARANCES ARE OBSTRUCTED.
7. INCLUDE COST TO REMOVE AND REPLACE ALL EXISTING PIPING IN OUTLINED SCOPE OF WORK AREA, AS THE EXISTING PIPING MAY CONFLICT WITH NEW DUCTWORK. NEW DUCTWORK HAS PRIORITY OVER NEW AND EXISTING SPRINKLER PIPING.

MECHANICAL – DEMOLITION NOTES

1. MECHANICAL DEMOLITION DRAWINGS SHOWING EXISTING CONDITIONS HAVE BEEN PREPARED BASED ON NON-DESTRUCTIVE FIELD OBSERVATION AND AS-BUILT DRAWINGS PROVIDED BY THE OWNER. FIELD VERIFY EXISTING SYSTEMS BEFORE BEGINNING WORK. NOTIFY ARCHITECT/ENGINEER IF EXISTING CONDITIONS ARE MATERIALLY DIFFERENT THAN THOSE SHOWN ON THE PLANS.
2. BE FAMILIAR WITH EXISTING MECHANICAL SYSTEMS THAT WILL BE AFFECTED BY THE DEMOLITION WORK. OBTAIN PERMISSION FROM THE OWNER'S REPRESENTATIVE TO SHUT OFF SERVICES OR SYSTEMS THAT AFFECT AREAS BEYOND THE LIMITS OF THE IMMEDIATE DEMOLITION AREA. INFORM THE OWNER'S REPRESENTATIVE OF THE REASON FOR AND DURATION OF THE SHUTDOWN. MINIMIZE IMPACT TO OTHER AREAS. PROCEED WITH THE SHUT-DOWN AFTER PERMISSION FROM THE OWNER IS GRANTED.
3. REMOVE PIPING, HANGERS, DUCTWORK, GRILLES, REGISTERS, DIFFUSERS, ETC. THAT ARE INDICATED TO BE REMOVED IN A TIMELY MANNER IN ACCORDANCE WITH THE GENERAL DEMOLITION SPECIFICATIONS. COORDINATE WITH THE OWNER AND OTHER CONTRACTORS.
4. UNLESS EQUIPMENT TO BE REMOVED IS NOTED AS OWNER'S SALVAGE, DISPOSE OF EQUIPMENT AND/OR MATERIALS INDICATED TO BE REMOVED PROMPTLY.
5. REMOVE ALL ABANDONED PIPING AND DUCTWORK THAT IS EXPOSED OR ACCESSIBLE WITHOUT WALL OR CEILING DEMOLITION. REFER TO ARCH PLANS FOR CEILINGS TO BE REMOVED.
6. REPAIR OR REPLACE TELECOMMUNICATIONS FACILITIES OR EQUIPMENT FOUND TO BE DAMAGED OR NON-FUNCTIONAL AFTER SUBSTANTIAL COMPLETION.

HVAC - NOTES

1. COORDINATE WORK WITH ALL OTHER TRADES AS DESCRIBED IN MECHANICAL GENERAL NOTE #1.
2. PROVIDE A COMPLETE HVAC SYSTEM, INCLUDING SUPPLY, RETURN, EXHAUST, AND VENTILATION DUCTWORK; MECHANICAL EQUIPMENT, SUPPORTS, HANGERS, DIFFUSERS, GRILLES, REGISTERS, AND ALL APPURTENANCES. INSTALL ALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. INSTALL SYSTEM TO MEET ALL CITY AND STATE CODES AND REQUIREMENTS.
3. DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF DUCT SYSTEM. INDICATED DUCT LOCATIONS, CONFIGURATIONS, AND ARRANGEMENTS WERE USED TO SIZE DUCTS AND CALCULATE FRICTION LOSS FOR AIR-HANDLING EQUIPMENT SIZING AND FOR OTHER DESIGN CONSIDERATIONS. INSTALL DUCT SYSTEMS AS INDICATED UNLESS DEVIATIONS TO LAYOUT ARE APPROVED BY ARCHITECT/ENGINEER.
4. ALL DUCT DIMENSIONS INDICATED ARE INTERIOR FREE AREA DUCT DIMENSIONS AND DO NOT INCLUDE INSULATION REQUIREMENTS.
5. SEAL ALL WALL AND FLOOR DUCT PENETRATIONS. PROVIDE FIRE CAULKING ASSEMBLIES FOR PENETRATIONS OF RATED ASSEMBLIES. REFER TO ARCHITECTURAL DRAWINGS FOR ASSEMBLY RATINGS.
6. CONTINUE DUCT AND PIPE INSULATION THROUGH WALLS, FLOORS, AND CEILING PENETRATIONS UNBROKEN, EXCEPT WHERE FIRE OR FIRE/SMOKE DAMPERS ARE INSTALLED IN DUCTWORK. SEAL AROUND DUCT INSULATION AT WALL PENETRATIONS.

MECHANICAL ABBREVIATIONS

ABSOR	ABSORPTION	FT	FINTUBE
ACU	AIR CONDITIONING UNIT	FTG	FOOTING
AD	ACCESS DOOR OR AREA DRAIN	GA	GAGE
AFF	ABOVE FINISHED FLOOR	GAL	GALLON
AFG	ABOVE FINISHED GRADE	GALV	GALVANIZED
AHU	AIR HANDLING UNIT	GC	GENERAL CONTRACTOR
AV	AIR VENT	GI	GREASE INTERCEPTOR
BOT	BOTTOM	GW	GREASE WASTE
BTU	BRITISH THERMAL UNIT	GPH	GALLONS PER HOUR
BTUH	BTU PER HOUR	GPM	GALLONS PER MINUTE
BV	BALL VALVE	HR	HOUR
CA	COMPRESSED AIR	HTG	HEATING
CB	CATCH BASIN	HB	HOSE BIBB
CENT	CENTRIFUGAL	ISP	INTERNAL STATIC PRESSURE
CFM	CUBIC FEET PER MINUTE	JR	JANITOR RECEPTOR
CI	CAST IRON	LAV	LAVATORY
CL	CENTER LINE	LDBT	LEAVING DRY BULB TEMPERATURE
COND	CONDENSATE		
CO	CLEAN OUT	LWT	LEAVING WATER TEMPERATURE
CONC	CONCRETE		
CONTR	CONTRACTOR	LWBT	LEAVING WET BULB TEMPERATURE
CP	CONDENSATE PUMP/CIRC. PUMP		
CU	COPPER	MB	MOP BASIN
CUH	CABINET UNIT HEATER	MBH	1000 BTUH
CWP	CIRCULATING WATER PUMP	MC	MECHANICAL CONTRACTOR
DDC	DIRECT DIGITAL CONTROLS	MECH	MECHANICAL
DN	DOWN	MH	MANHOLE
DR	DRAIN	NTS	NOT TO SCALE
DS	DOWNSPOUT	OA	OUTSIDE AIR
EA	EXHAUST AIR	OD	OVERFLOW ROOF DRAIN
EAT	EXHAUST AIR TEMPERATURE	PC	PLUMBING CONTRACTOR
EC	ELECTRICAL CONTRACTOR	PSI	POUNDS PER SQUARE INCH
EDBT	ENTERING DRY BULB TEMPERATURE	PRV	POWER ROOF VENTILATOR
		PRV	PRESSURE REDUCING VALVE
EEW	EMERGENCY EYE WASH	PV	PRESSURE VENT
EF	EXHAUST FAN	PVC	POLYVINYL CHLORIDE
EJ	EXPANSION JOINT	RA	RETURN AIR
EQUIP	EQUIPMENT	RD	ROOF DRAIN
ESE	EMERGENCY SHOWER/EYEWASH	RH	RELATIVE HUMIDITY
EST	EXTERNAL STATIC PRESSURE	RTU	ROOF TOP UNIT
EWBT	ENTERING WET BULB TEMPERATURE	RV	RELIEF VALVE
		RVT	ROOF VENT TERMINATION
EWC	ELECTRIC WATER COOLER	SK	SINK
EWT	ENTERING WATER TEMPERATURE	SA	SUPPLY AIR
		SH	SHOWER
EX	EXISTING	SO	STORM OVERFLOW
EXH	EXHAUST	SSE	SPLIT SYSTEM EVAPORATOR
EXP	EXPANSION	SSC	SPLIT SYSTEM CONDENSER
FAI	FRESH AIR INTAKE	ST	STORM
FCU	FAN COIL UNIT	TCC	TEMPERATURE CONTROL CONTRACTOR
FD	FLOOR DRAIN		
FDC	FIRE DEPARTMENT CONNECTION	TYP	TYPICAL
FLEX	FLEXIBLE	UH	UNIT HEATER
FLR	FLOOR	UR	URINAL
FPM	FEET PER MINUTE	UV	UNIT VENTILATOR
FPS	FEET PER SECOND	VA	VENTILATION AIR
FS	FLOOR SINK	VTR	VENT THROUGH ROOF
FSEC	FOOD SERVICE EQUIPMENT CONSULTANT	WB	WALL BOX – CONDENSATE
		WC	WATER CLOSET
		WHA	WATER HAMMER ARRESTOR
		WH	WATER HEATER

MECHANICAL - GENERAL NOTES

1. COORDINATE MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. BEGIN INSTALLATION AND ROUGH-IN AFTER COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION IS COMPLETE. COORDINATE BUILDING STRUCTURE, ARCHITECTURAL ASSEMBLIES, SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR REWORK ASSOCIATED WITH FAILURE TO COORDINATE.
2. INCORPORATE MECHANICAL SPECIFICATIONS, DRAWINGS, STATE AND LOCAL CODES, AND OWNER STANDARDS INTO WORK.
3. WARNING - CALL 48 HOURS BEFORE YOU DIG: LAW REQUIRES ANYONE DOING ANY EXCAVATION, FENCING, PLANTING OR DRILLING TO CALL 48 HOURS IN ADVANCE. HAND DIG WITHIN 18 INCHES OF ANY LOCATE MARK OR FLAG. ONE CALL 811.
4. REFER TO ARCHITECTURAL SPECIFICATIONS FOR THROUGH-PENETRATION FIRESTOPPING AND TO ARCHITECTURAL CODE PLAN FOR FIRE RATED WALLS, FLOORS, AND CEILINGS. EACH TRADE IS RESPONSIBLE TO FIRESTOP PENETRATIONS THROUGH RATED ASSEMBLIES.
5. EACH TRADE IS RESPONSIBLE FOR MAKING PENETRATIONS WHERE REQUIRED IN EXISTING WALLS, FLOORS, CEILINGS, AND ROOFS. MAKE PENETRATIONS NEAT. PATCH, CONCEAL, OR CAULK OVERCUT.
6. COVER EXPOSED WALL PENETRATIONS WITH ESCUTCHEONS OR SHEET METAL AS APPROPRIATE.
7. CAULK ALL CONCEALED AND EXPOSED PIPING AND DUCT WALL PENETRATIONS TO PREVENT NOISE TRANSFER BETWEEN SPACES.
8. CREATE OPENINGS IN THE BUILDING THAT ARE REQUIRED TO REMOVE EXISTING ITEMS AND TO BRING IN NEW EQUIPMENT. PATCH ALL OPENINGS CREATED AND FINISHED WITH MATERIALS TO MATCH EXISTING CONDITIONS. INCLUDE THIS WORK IN BID.

IOWA ONE CALL
1-800-292-8989
CALL - BEFORE - YOU - DIG

GENERAL NOTE:

UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN SHOWN BASED UPON INFORMATION OBTAINED FROM FIELD LOCATIONS BY UTILITY COMPANIES, AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS ALSO POSSIBLE THAT THERE MAY BE OTHER UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES IN EXISTENCE THAT ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF EACH INDIVIDUAL PARTY REFERENCING THIS PLAN TO DETERMINE THE EXACT LOCATION AND TYPE OF UNDERGROUND FACILITIES ON THE SITE. HAND EXCAVATE AT CRITICAL POINTS AS NECESSARY TO VERIFY LOCATIONS, SIZES, ELEVATIONS, FLOW LINES, ETC. IF A PROBLEM OR INTERFERENCE EXISTS, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING.

PIPING LEGEND - PLUMBING

CW	DOMESTIC COLD WATER
HW	DOMESTIC HOT WATER
DSW	DOMESTIC SOFT WATER
GW	GREASE WASTE
G	NATURAL GAS
GV	NATURAL GAS VENT
RHW	RECIRCULATING HOT WATER
SAN	SANITARY
ST	STORM
SO	STORM OVERFLOW
P	TRAP PRIMER
V	VENT

PIPE FITTINGS

SINGLE LINE	DOUBLE LINE
ELBOW	ELBOW
ELBOW - DOUBLE BRANCH	ELBOW - DOUBLE BRANCH
ELBOW - OUTLET DOWN	ELBOW - OUTLET DOWN
ELBOW - OUTLET UP	ELBOW - OUTLET UP
ELBOW - LONG RADIUS	ELBOW - LONG RADIUS
ELBOW - SHORT RADIUS	ELBOW - SHORT RADIUS
45° ELBOW	45° ELBOW
TEE - VENT	TEE - VENT
TEE - SANITARY	TEE - SANITARY
TEE - OUTLET DOWN	TEE - OUTLET DOWN
TEE - OUTLET UP	TEE - OUTLET UP
TEE - SIDE OUTLET DOWN	TEE - SIDE OUTLET DOWN
TEE - SIDE OUTLET UP	TEE - SIDE OUTLET UP
CROSS - VENT	CROSS - VENT
CROSS - SANITARY	CROSS - SANITARY
LATERAL	LATERAL
TEE - SINGLE SWEEP "COMBO WYE"	TEE - SINGLE SWEEP "COMBO WYE"
REDUCER - CONCENTRIC	REDUCER - CONCENTRIC
REDUCER - ECCENTRIC	REDUCER - ECCENTRIC
CAPPED CONNECTION	CAPPED CONNECTION
FLANGED CONNECTION	FLANGED CONNECTION

PLUMBING ACCESSORY LEGEND

HB	HOSE BIBB
RH	ROOF HYDRANT
CO	CLEAN OUT
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
#" VTR	VENT THRU ROOF (# DENOTES PIPE DIAMETER)
RD / ORD	ROOF DRAIN / OVERFLOW ROOF DRAIN
RD	COMBO ROOF/OVERFLOW DRAIN
LT	LAMB TONGUE
	BACKFLOW PREVENTER
	VALVE - BALL / SHUT-OFF
	CHECK VALVE

NOTE: ALL SYMBOLS MAY NOT APPLY TO THIS PROJECT

GENERAL SYMBOLS

	EXISTING = HALFTONE LINEWORK
	NEW = DARK LINEWORK
	DEMO = DASHED DARK LINEWORK
	BELOW GRADE = LONG DASHED DARK LINEWORK
	NEW CONNECTION POINT
	POINT OF DISCONNECT
#	KEYNOTE
XXX / X	EQUIPMENT IDENTIFICATION TAG
SIM 1 A101	DETAIL DRAWING REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE
SIM 1 A101	SECTION CUT REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE
A101 Ref	INTERIOR ELEVATION DRAWING REFERENCE TAG

H.V.A.C. / DUCTWORK SYMBOLS

RECT.	RND.	OVAL	
			SUPPLY (SA), OUTSIDE (OA), VENTILATION (VA) AIR DUCT (UP / DOWN / SECTION)
			RETURN (RA) AIR DUCT (UP / DOWN / SECTION)
			EXHAUST (EA) AIR DUCT (UP / DOWN / SECTION)
10/6 SA			RECTANGULAR DUCT (WIDTH / HEIGHT / SYSTEM)
	10 Ø SA		ROUND DUCT (DIAMETER / SYSTEM)
		10/6 Ø SA	FLAT OVAL DUCT (WIDTH / HEIGHT / SYSTEM)
			SUPPLY DIFFUSER
			SUPPLY REGISTER OR GRILLE
			LINEAR SLOT DIFFUSER
			RETURN REGISTER OR GRILLE
			EXHAUST REGISTER OR GRILLE
AD			DUCT ACCESS DOOR
			DUCT END CAP
			TURNING VANES
			VAV TERMINAL UNIT
			FLEXIBLE DUCTWORK
R			ELEVATION CHANGE (RISE OR DROP)
			HIGH EFF. TAKE OFF FITTING w/ VOLUME DAMPER
BD			BACKDRAFT DAMPER
			OPPOSED BLADE DAMPER
			PARALLEL BLADE DAMPER
			VOLUME DAMPER
FD			FIRE DAMPER
SD			SMOKE DAMPER
FSD			FIRE/SMOKE DAMPER
M			MOTORIZED ACTUATOR
T			THERMOSTAT
S			EXISTING HVAC EMERGENCY SHUTDOWN SWITCH/LIGHT
			SIDE WALL DIFFUSER
			ROUND DIFFUSER
			EXTERIOR LOUVER
X-# / #x#/CFM			FIXTURE IDENTIFICATION TAG / NECK SIZE / CFM

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Key Plan

Revision	Description	Date

OPN Project No.
24816000

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Sheet Name
MECHANICAL GENERAL NOTES & SYMBOLS

Sheet Number
M000

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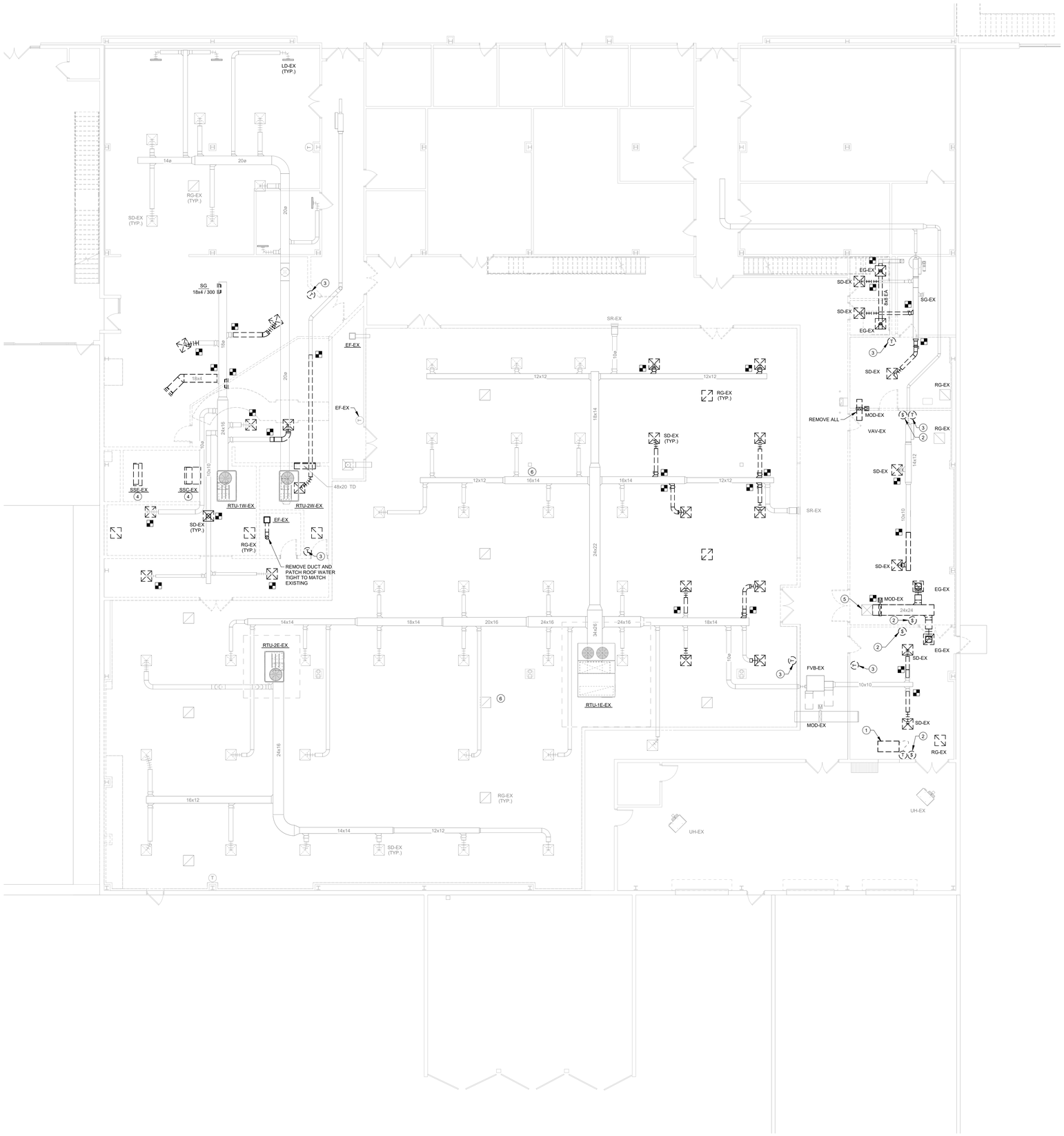

1 MECHANICAL DEMOLITION PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. REFER TO M000 FOR GENERAL NOTES & SYMBOLS.

B. PATCH WALLS, ROOFS, AND/OR FLOOR WHERE DUCTS, GRILLES, PIPES, OR EQUIPMENT ARE REMOVED. PAINT OR FINISH TO MATCH ORIGINAL CONSTRUCTION.

C. WHERE DUCTWORK IS REMOVED, REMOVE ALL ASSOCIATED SUPPORTS.

D. WHERE EQUIPMENT IS REMOVED, REMOVE ALL ASSOCIATED SUPPORTS, DUCTWORK, PIPING, AND CONTROLS.

E. WHERE CONTROLS ARE REMOVED, REMOVE ALL ASSOCIATED WIRING AND/OR PNEUMATIC TUBING. PATCH WALL OPENINGS AND PAINT OR FINISH TO MATCH ORIGINAL CONSTRUCTION. IN WALLS THAT CANNOT BE PATCHED, INSTALL STAINLESS STEEL COVER PLATE. ABANDON PNEUMATIC TUBING IN WALLS.

KEYNOTES (#)

1 REMOVE EXISTING AIR CURTAIN ALONG WITH ASSOCIATED APPURTENANCES. SALVAGE AIR CURTAIN, THERMOSTAT AND ELECTRICAL DISCONNECT FOR OWNER.

2 REMOVE EXISTING EMERGENCY HVAC SYSTEM SHUTDOWN BUTTON AND ASSOCIATED STROBE LIGHT ALONG WITH ASSOCIATED APPURTENANCES.

3 REMOVE AND RELOCATE TEMPERATURE CONTROLS THERMOSTAT ASSOCIATED WITH THIS SPACE. PROVIDE NEW WIRING FOR NEW LOCATION. REFER TO M101 FOR NEW LOCATION.

4 REMOVE EXISTING WALK-IN COOLER REFRIGERATION SYSTEM ALONG WITH ASSOCIATED APPURTENANCES. PATCH ROOF PENETRATIONS WATER TIGHT AND MATCH EXISTING ROOF.

5 REMOVE EXISTING EXHAUST FAN ON ROOF ALONG WITH ASSOCIATED POWER AND CONTROLS. CAP REMAINING ROOF CURB PER DETAIL 5/M301.

6

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Key Plan

Revision	Description	Date

OPN Project No.
24816000

Sheet Issue Date
100% CONSTRUCTION DRAWING SET 8/16/24

Sheet Name
MECHANICAL DEMOLITION

Sheet Number
MD101

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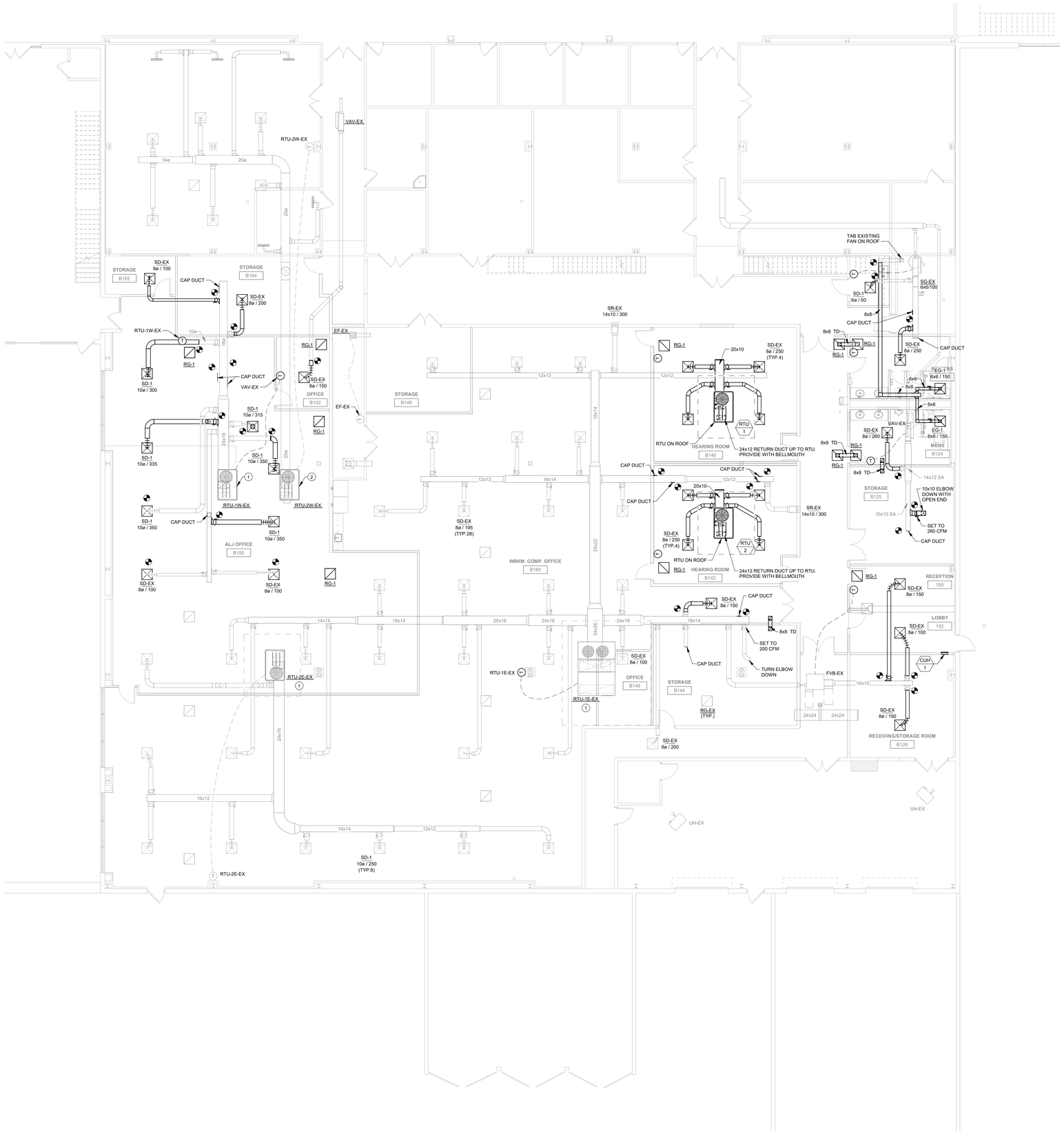

1 MECHANICAL HVAC PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. REFER TO M000 FOR GENERAL NOTES & SYMBOLS.

B. REFER TO M301 FOR MECHANICAL DETAILS.

C. REFER TO M501 FOR MECHANICAL SCHEDULES.

D. BRANCH DUCT SIZES TO AIR TERMINALS SHALL MATCH NECK SIZE OF GRILLE, REGISTER, OR DIFFUSER UNLESS NOTED OTHERWISE.

E. MAXIMUM FLEXIBLE DUCT LENGTH TO DIFFUSERS SHALL BE 60", WITH MAXIMUM OF ONE 90 DEGREE ELBOW.

KEYNOTES (#)

1 SERVICE AND INSPECT THIS RTU ACCORDINGLY TO ENSURE IT IS IN GOOD RUNNING CONDITION. ADJUST SETPOINTS AND SETBACKS ACCORDINGLY. TAB NEW DIFFUSER AIRFLOW AS SHOWN ON PLAN.

2 THIS RTU SHALL REMAIN AS IS AND OPERATIONAL. SERVICE AND INSPECT ACCORDINGLY TO ENSURE IT IS IN GOOD RUNNING CONDITION.

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OPN Project No
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Sheet Name
MECHANICAL HVAC PLAN

Sheet Number
M101

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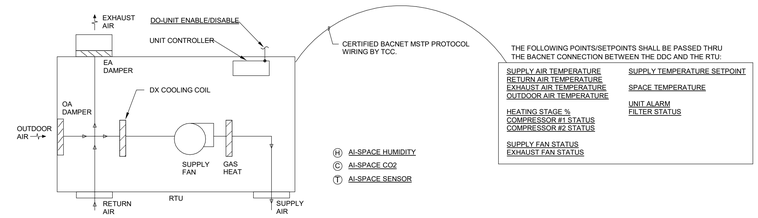


THE FOLLOWING POINTS/SETPOINTS SHALL BE PASSED THRU THE BACNET CONNECTION BETWEEN THE DDC AND THE RTU:

SUPPLY AIR TEMPERATURE	SUPPLY TEMPERATURE SETPOINT
RETURN AIR TEMPERATURE	
EXHAUST AIR TEMPERATURE	SPACE TEMPERATURE
OUTDOOR AIR TEMPERATURE	
HEATING STAGE %	UNIT ALARM
COMPRESSOR #1 STATUS	FILTER STATUS
COMPRESSOR #2 STATUS	
SUPPLY FAN STATUS	
EXHAUST FAN STATUS	

CONTROL SEQUENCE

-ROOFTOP UNIT SHALL BE CONTROLLED BY THE LOCAL MICROPROCESSOR CONTROLLER. CONTROLLER SHALL MODULATE DEHUMIDIFICATION, REHEAT, AND GAS HEAT AS REQUIRED TO MEET SPACE TEMPERATURE AND HUMIDITY SETPOINTS. UNIT SHALL BE ENABLED THRU THE DDC; SETPOINTS AND OTHER INFORMATION SHALL PASS THRU THE BACNET MSTP CONNECTION.
-SPACE TEMPERATURE AND HUMIDITY SETPOINTS SHALL BE RESET BASED ON OUTSIDE AIR TEMPERATURE. WHEN O.A. TEMPERATURE IS ABOVE 60°FTHEN TEMPERATURE AND HUMIDITY SETPOINTS SHALL BE 70°F/60% RH, WHEN O.A. TEMPERATURE IS BELOW 50°F THEN TEMPERATURE AND HUMIDITYSETPOINTS SHALL BE 74°F/50% RH. SETPOINTS BETWEEN SHALL BE A LINEAR VALUE BETWEEN 70°F AND 74°F, AND 50% RH AND 60% RH.
-UNIT SHALL BE ENABLED/DISABLED BASED ON A TIME OF DAY SCHEDULE.

VENTILATION

-UNIT SHALL INCLUDE SPACE CO2 SENSOR FOR MONITORING OF PPM OF CO2 IN THE SPACE.
-OUTDOOR AIR DAMPER SHALL DEFAULT TO MINIMUM POSITION DURING OCCUPANCY AND SHALL MODULATE OPEN WHENEVER SPACE CO2 PPM EXCEEDS 700 PPM CO2.

INTERLOCKS

-THE UNIT SHALL BE HARDWIRED TO SHUTDOWN ON ACTIVATION OF THE FIRE ALARM SYSTEM. WIRING SHALL BE BY EC.

-OUTDOOR AIR AND EXHAUST DAMPERS SHALL CLOSE WHEN UNIT IS DISABLED/OFF.

-UNIT SHALL SHUTDOWN IF ANY PORTION OF THE AUTO RESET LOW LEVEL TEMPERATURE FALLS BELOW 38°F. UPON RESET, UNIT SHALL ENABLE WITHOUT EXTERNAL INPUT.

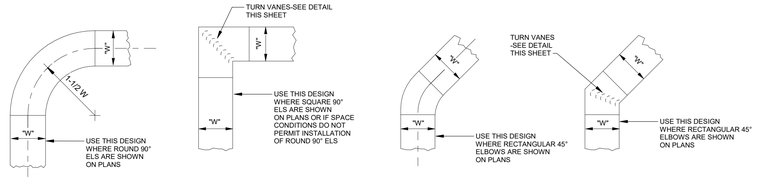
ALARMS

AN ALARM SHALL BE GENERATED AT THE DDC IF ANY OF THE FOLLOWING OCCUR:
- THE RTU CONTROLLER INDICATES A GENERAL ALARM.
- DISCHARGE TEMPERATURE FALLS BELOW 50°F(ADJ.) FOR MORE THAN 10 MIN(ADJ.).
- FILTER STATUS INDICATES A FILTER ALARM.

TRENDS

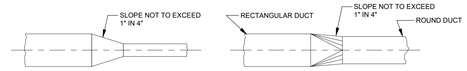
-ALL POINTS SHALL BE HISTORICALLY TRENDED. TREND POINTS AT 15 MIN. INTERVALS OVER A MINIMUM 90 DAY PERIOD OF TIME.

8 ROOFTOP UNITS (RTU-1 / RTU-2)
NOT TO SCALE

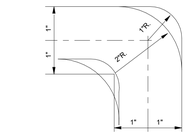


ROUND OF 90° ELBOW | SQUARE 90° ELBOW | ROUND OF 45° ELBOW | SQUARE 45° ELBOW

CONSTRUCTION OF 90° ELBOW | CONSTRUCTION OF 45° ELBOW



TYPICAL RECTANGULAR TRANSITION | TYPICAL RECTANGULAR TO ROUND TRANSITION

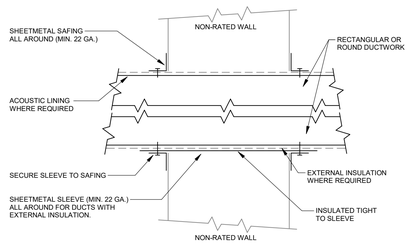


DETAIL OF TURN VANES

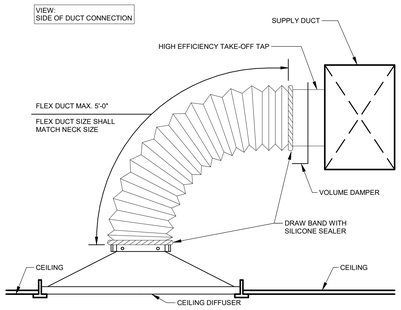
INSTALLATION NOTES

1. ALL DUCTS SHALL BE CONSTRUCTED AND ERECTED IN A NEAT AND WORKMAN LIKE MANNER.
2. DUCTS SHALL BE CONSTRUCTED OF THE WEIGHTS, GAGES AND MATERIAL AS SPECIFIED.
3. THE DIMENSION SHOWN FOR ALL DUCTS SHOWN IN PLAN GIVE THE WIDTH FIRST AND THEN THE HEIGHT.
4. DUCT RISERS SHOULD BE SUPPORTED BY ANGLES AT EVERY FLOOR.
5. TURNING VANES SHALL BE INSTALLED IN ALL ABRUPT ELBOWS TO PREVENT TURBULENCE.
6. DUCTS SHALL BE SECURELY ATTACHED TO THE BUILDING CONSTRUCTION IN AN APPROVED MANNER.
7. DIVERGING TRANSITION PIECES SHALL BE MADE AS GRADUAL AS POSSIBLE.
8. INSTALL FIRE DAMPERS IN ACCORDANCE TO ALL APPLICABLE REQUIREMENTS INCLUDING UL 555.
9. ACCESS PANELS SHALL BE PLACED BEFORE AND/OR AFTER EQUIPMENT INSTALLED IN THE DUCT.
10. DUCT AREA SHALL NOT BE DECREASED MORE THAN 10 PERCENT WHEN OBSTRUCTIONS CANNOT BE AVOIDED, AND THEN A STREAMLINED FITTING SHALL BE USED.
11. FLEXIBLE FABRIC CONNECTIONS (OR EQUAL) SHALL BE USED ON BOTH INLETS AND OUTLETS OF ALL FANS.
12. JOINTS AND SEAMS OF SUPPLY DUCTS SHALL BE FASTENED SECURELY AND MADE AIR TIGHT.

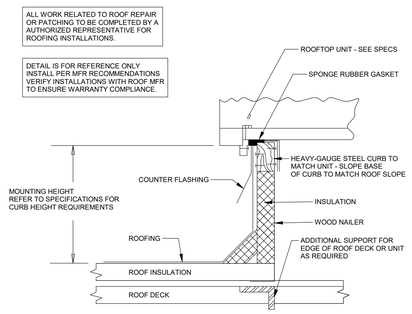
1 DETAILS OF THE LOW VELOCITY DUCT LAYOUT
NOT TO SCALE



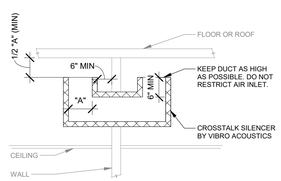
3 DUCT PENETRATION THROUGH NON-FIRE RATED WALL DETAIL
NOT TO SCALE



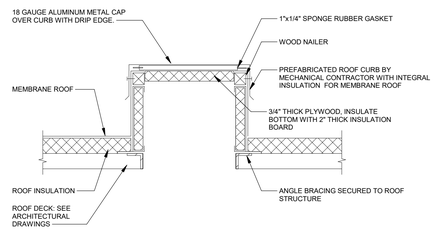
2 TYPICAL DIFFUSER CONNECTION DETAIL
NOT TO SCALE



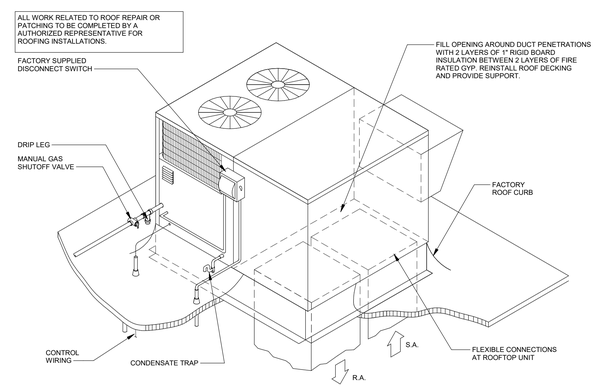
7 NEW ROOFTOP EQUIPMENT CURB DETAIL
NOT TO SCALE



6 TRANSFER DUCT DETAIL
NOT TO SCALE



5 EXISTING CURB CAP DETAIL
NOT TO SCALE



4 GAS FIRED ROOFTOP UNIT DETAIL
NOT TO SCALE

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Key Plan

Revision	Description	Date

OPN Project No.
24816000

Sheet Issue Date
100% CONSTRUCTION DRAWING SET 8/16/24

Sheet Name
MECHANICAL DETAILS

Sheet Number
M301

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ROOFTOP UNIT SCHEDULE

REFERENCE	RTU-1 / RTU-2
MANUFACTURER	TRANE
MODEL #	PRECEDENCE
SERVES	SEE PLAN
APPROXIMATE WEIGHT W/ CURB & ACCESSORIES (LBS)	867
DIMENSIONS W/ CURB, HOOD & ACCESSORIES - L x W x H (INCHES)	5.82x3.69x3.02
FAN PERFORMANCE	
SUPPLY FAN	
AIRFLOW (CFM)	1,000
ESP (IN. W.C.)	1.00
MOTOR HP (QUANTITY)	0.75
MOTOR BHP	0.54
COOLING PERFORMANCE	
COIL TYPE	DX
REFRIGERANT	R410A
EFFICIENCY (EER/IEER)	13/17.5
AMBIENT DRY BULB AIR TEMP (°F)	95
EAT - DB / WB (°F)	78/65
LAT - DB / WB (°F)	57/54
NET TOTAL CAPACITY (MBH)	31.95
NET SENSIBLE CAPACITY (MBH)	23.07
NUMBER OF COMPRESSORS	1
1ST STAGE COMPRESSOR TYPE	SCROLL
REHEAT	
TYPE	HOT GAS
CONTROL	MODULATING
EAT - DB / WB (°F)	57/54
LAT - DB / WB (°F)	52.39/52.39
LEAVING COIL DB (°F)	72.91
MOISTURE REMOVAL (GPH)	1.01
HEATING PERFORMANCE	
TYPE	NATURAL GAS
CONTROL	MODULATING
EAT - DB (°F)	55
LAT - DB (°F)	99.7
INPUT (MBH)	57
OUTPUT (MBH)	48
TURNDOWN	1:1
UNIT OPERATING PRESSURE (IN. W.C.)	7 TO 14
ELECTRICAL DATA	
VOLTAGE - PH	208 - 3
MCA	24
MOCP	30
DISCONNECT	BY EC
NOTES	1 THROUGH 11

NOTES:

1. PROVIDE UNIT WITH SINGLE POINT POWER CONNECTION AND POWERED CONVENIENCE OUTLET.
2. REFER TO CONTROL DRAWINGS FOR ADDITIONAL DETAILS.
3. PROVIDE WITH 2" MERV 8 PLEATED THROWAWAY FILTER.
4. UNIT SUPPLY FANS IS VARIABLE SPEED. PROVIDE FAN MOTORS RATED FOR VFD APPLICATION.
5. PROVIDE GAS REGULATOR TO REGULATE DOWN FROM 2 PSI TO OPERATING PRESSURE. REFER TO MFR RECOMMENDATIONS FOR OPERATING PRESSURE.
6. PROVIDE UNIT WITH OUTDOOR AND EXHAUST LOW-LEAK DAMPERS; DAMPERS TO BE HARDWIRED TO CLOSE WHEN UNIT IS OFF.
7. MCA INCLUDES ELECTRIC PREHEAT FOR ENERGY RECOVERY WHEEL DEFROST. PROVIDE SCR MODULATING CONTROL FOR ELECTRIC PREHEAT.
8. UNIT TO OPERATE AS VARIABLE SPEED, SINGLE ZONE, AIR HANDLING UNIT. REQUIRES TRANE ZONE SENSOR. REFER TO CONTROL DRAWINGS FOR DETAILS.
9. PROVIDE UNIT WITH PREMANUFACTURERED ROOF CURB, BOTTOM OF UNIT TO MINIMUM 14-INCHES ABOVE TOP OF ROOFING. VERIFY & COORDINATE WITH ROOF CONSTRUCTION AND INSULATION
10. PROVIDE FACTORY DIGITAL DISPLAY PROGRAMMABLE ZONE SENSOR.
11. PROVIDE UNIT WITH CO2 SENSOR AND DEMAND CONTROL VENTILATION PROGRAMMING.

DUCT INSULATION SCHEDULE

DUCT TYPE	HVAC EQUIPMENT	DUCT DETAILS	PRESSURE CLASS	INSULATION TYPE	INSULATION THICKNESS
SUPPLY AIR & VENTILATION AIR...	FROM ROOF TOP UNITS	RECTANGULAR GALVANIZED STEEL	+3 INCH WG	LINED	1 INCH
RETURN AIR DUCT	TO ROOF TOP UNITS	RECTANGULAR GALVANIZED STEEL	-2 INCH WG	LINED	1 INCH
EXHAUST AIR DUCT	FROM EXHAUST FANS	N/A	N/A	N/A	N/A
TRANSFER DUCT	N/A	RECTANGULAR GALVANIZED STEEL	-1/2 INCH WG	LINED	N/A
FLEXIBLE DUCTS (UL-181, CLASS 1)	TO DIFFUSERS	2-PLY VINYL, HELICAL STEEL WIRE W/VAPOR BARRIER	+1 INCH WG	FIBROUS-GLASS INSULATION (R-...	1-3/4 INCH

NOTES:

1. ALL EXTERIOR DUCTWORK DOUBLE WALL AND WRAPPED WITH 2" RIGID BOARD DUCT WRAP AND PROTECTED WITH ALUMINUM JACKET FOR WATER TIGHT ENCLOSURE.
2. ALL DUCTWORK SHALL BE CONSTRUCTED AND ERECTED IN ACCORDANCE WITH 2021 INTERNATIONAL MECHANICAL CODE.

GRILLES REGISTERS AND DIFFUSERS SCHEDULE

REFERENCE	MATERIAL	MARGIN (IN)	INLET (IN)	FACE (IN)	DAMPER	MFR	MODEL	NOTES
SD-1 (CEILING DIFFUSER)	STEEL	LAY-IN	SEE DWG	24 x 24	NO	TITUS	OMNI	1,2
RG-1 (RETURN GRILLE)	ALUMINIUM	1 1/4"	SEE DWG	24 x 24	NO	TITUS	PAR-AA	1,2,3
EG-1 (EXHAUST GRILLE)	ALUMINIUM	1 1/4"	SEE DWG	24 x 24	NO	TITUS	OMNI	1,2

NOTES:

1. REFER TO ARCH DRAWINGS FOR FINAL CEILING TYPE FOR MOUTING TYPE.
2. PROVIDE WITH WHITE FINISH. COORDINATE COLOR SELECTION WITH ARCHITECT.
3. PROVIDE THIN LINE RETURN DISSIPATER.

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Sheet Name
MECHANICAL SCHEDULES

Sheet Number
M501

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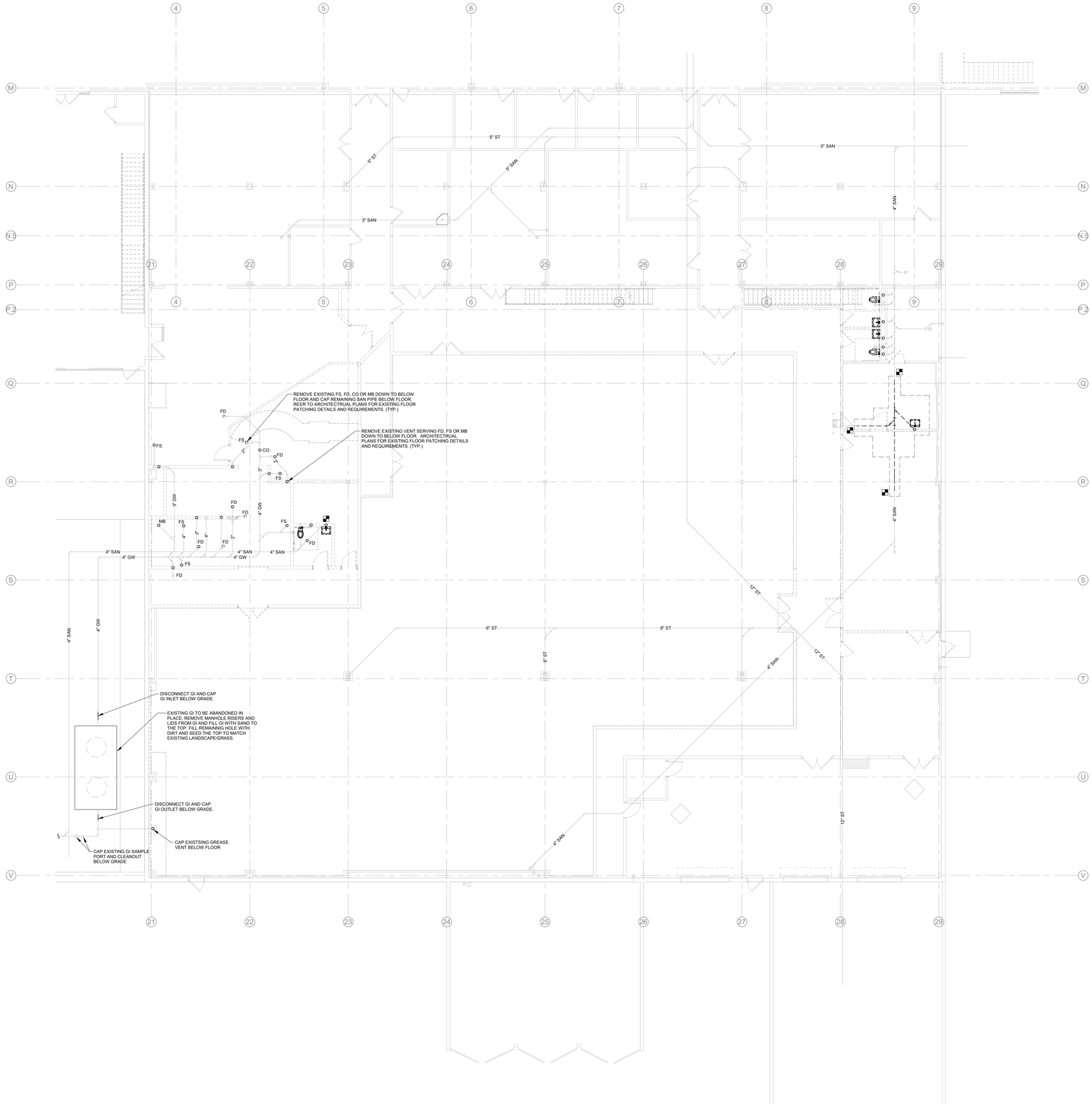

1 PLUMBING DEMOLITION FOUNDATION PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. REFER TO M000 FOR GENERAL NOTES & SYMBOLS.

B. PATCH WALLS, ROOFS, AND/OR FLOOR WHERE PIPES OR EQUIPMENT ARE REMOVED. PAINT OR FINISH TO MATCH ORIGINAL CONSTRUCTION.

C. NOTIFY DES MOINES WASTEWATER RECLAMATION AUTHORITY (WRA) OF DECOMMISSIONING OF THE EXISTING GREASE INTERCEPTOR PRIOR TO STARTING ANY WORK.

D. WHERE PIPING, EQUIPMENT, AND PLUMBING FIXTURES ARE REMOVED, REMOVE ALL VALVES, SUPPORTS, INSULATION, AND APPURTENANCES. REMOVE PIPING BACK TO MAINS AND CAP. DO NOT LEAVE DEAD LEGS LONGER THAN 12".

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100% CONSTRUCTION DRAWING SET **8/16/24**

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UNDER FLOOR PLUMBING DEMOLITION

Sheet Number
PD100

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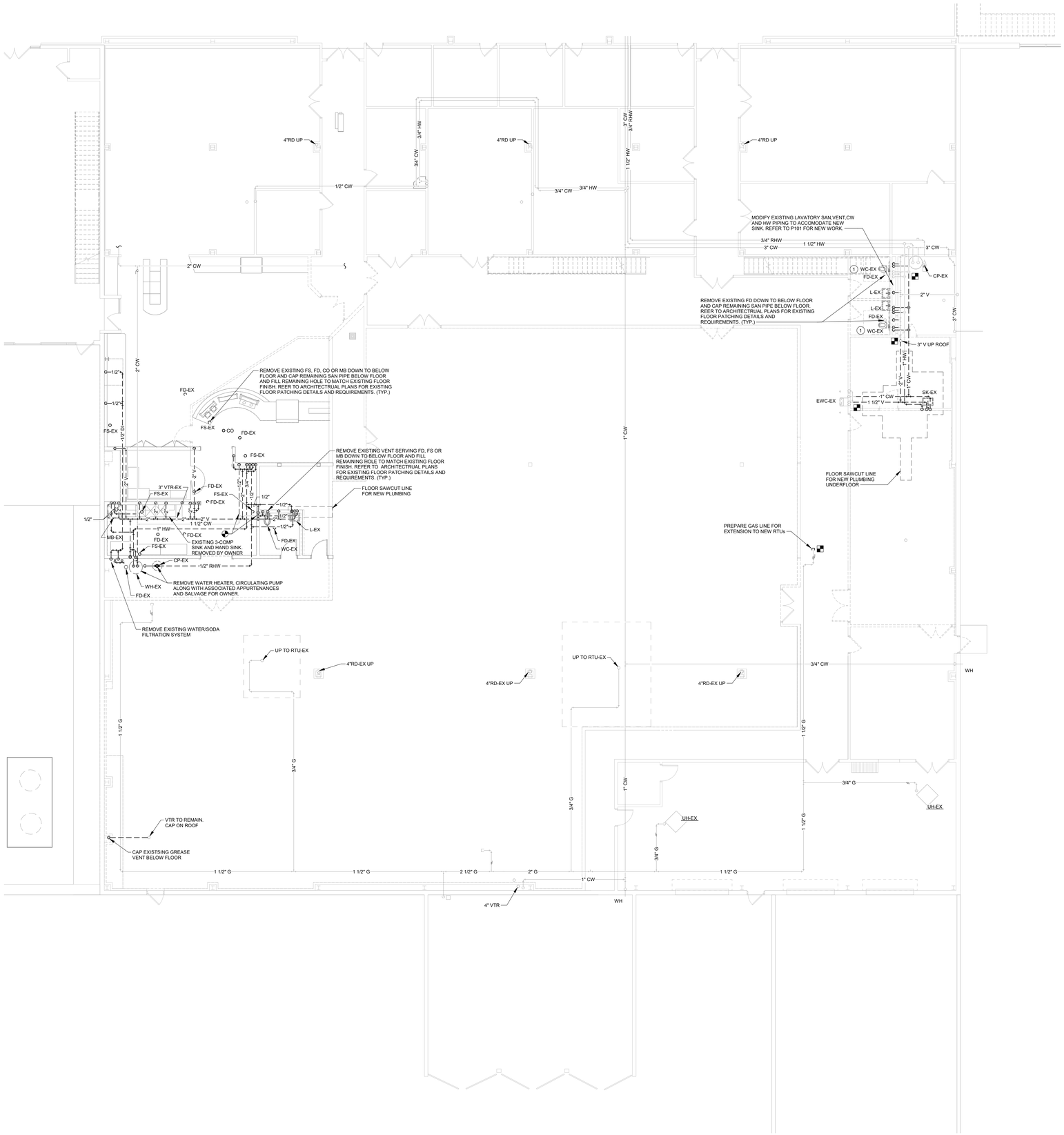

1 PLUMBING DEMOLITION PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. REFER TO M000 FOR GENERAL NOTES & SYMBOLS.

B. PATCH WALLS, ROOFS, AND/OR FLOOR WHERE PIPES OR EQUIPMENT ARE REMOVED. PAINT OR FINISH TO MATCH ORIGINAL CONSTRUCTION.

C. NOTIFY DES MOINES WASTEWATER RECLAMATION AUTHORITY (IWRA) OF DECOMMISSIONING OF THE EXISTING GREASE INTERCEPTOR PRIOR TO STARTING ANY WORK.

D. WHERE PIPING, EQUIPMENT, AND PLUMBING FIXTURES ARE REMOVED, REMOVE ALL VALVES, SUPPORTS, INSULATION, AND APPURTENANCES. REMOVE PIPING BACK TO MAINS AND CAP. DO NOT LEAVE DEAD LEGS LONGER THAN 12".

KEYNOTES (#)

1 REMOVE EXISTING WATER CLOSET, SEAT AND FLUSH VALVE AND REUSE IN NEW LOCATION.

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Key Plan

Revision	Description	Date

OPN Project No.
24816000

Sheet Issue Date
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Sheet Name
PLUMBING DEMOLITION

Sheet Number
PD101

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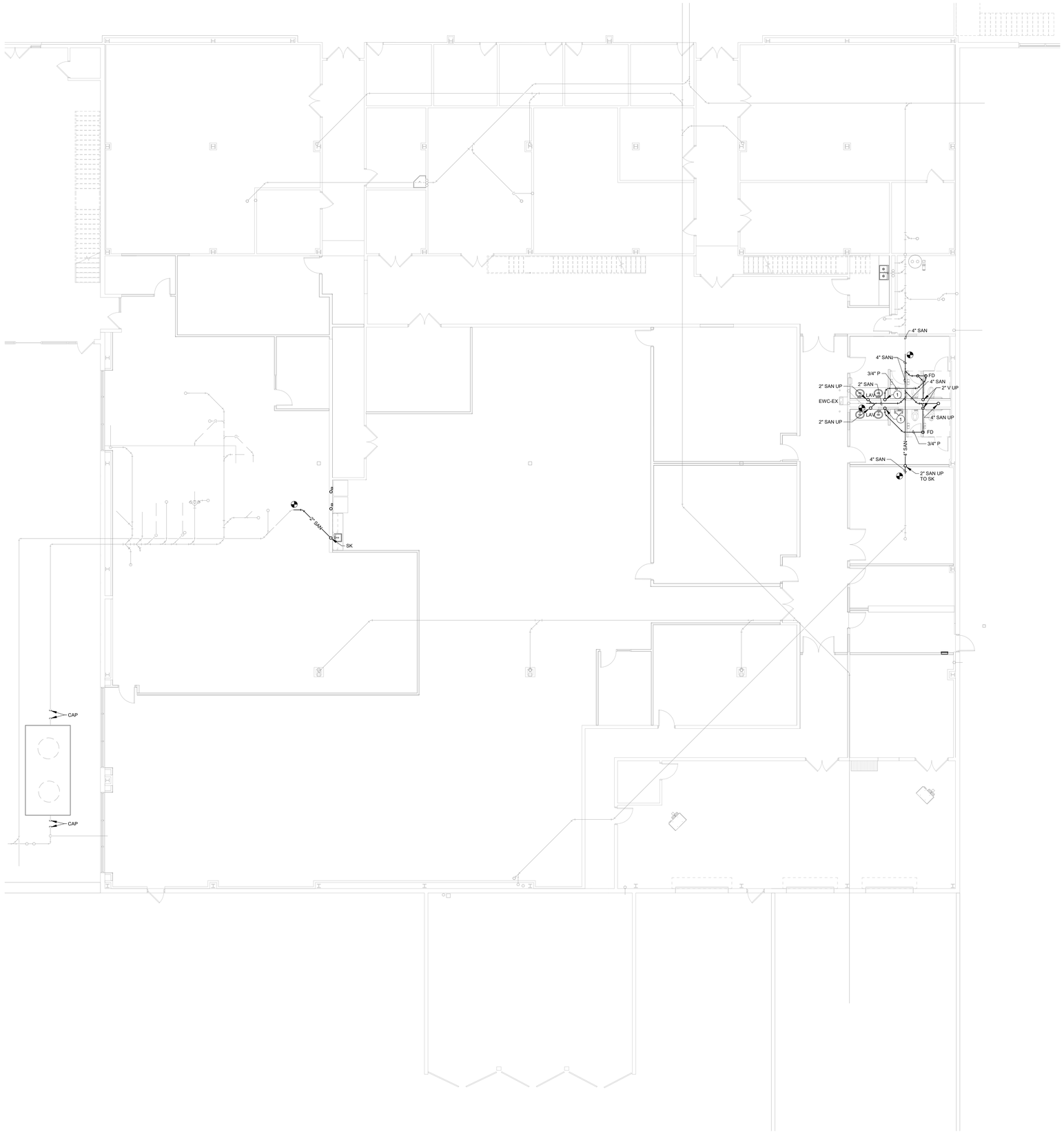

1 PLUMBING FOUNDATION PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. REFER TO M000 FOR GENERAL NOTES & SYMBOLS.

B. REFER TO P301 FOR PLUMBING DETAILS.

C. REFER TO P501 FOR PLUMBING SCHEDULES.

D. REFER TO PLUMBING FIXTURE ROUGH-IN SCHEDULE FOR BRANCH PIPE SIZING TO INDIVIDUAL PLUMBING FIXTURES.

E. COORDINATE PIPE ROUTING WITH DUCTWORK. DUCTWORK HAS PRIORITY OVER PRESSURE PIPING.

F. BRANCH PIPING SHALL BE TAKEN OFF THE TOP OF MAIN PIPING.

KEYNOTES (#)

1 ROUTE TRAP PRIMER LINE TO FLOOR DRAIN.

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Revision	Description	Date

OPN Project No
24816000

Sheet Issue Date
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Sheet Name
PLUMBING FOUNDATION PLAN

Sheet Number
P100

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GENERAL NOTES:

A. REFER TO M000 FOR GENERAL NOTES & SYMBOLS.

B. REFER TO P301 FOR PLUMBING DETAILS.

C. REFER TO P501 FOR PLUMBING SCHEDULES.

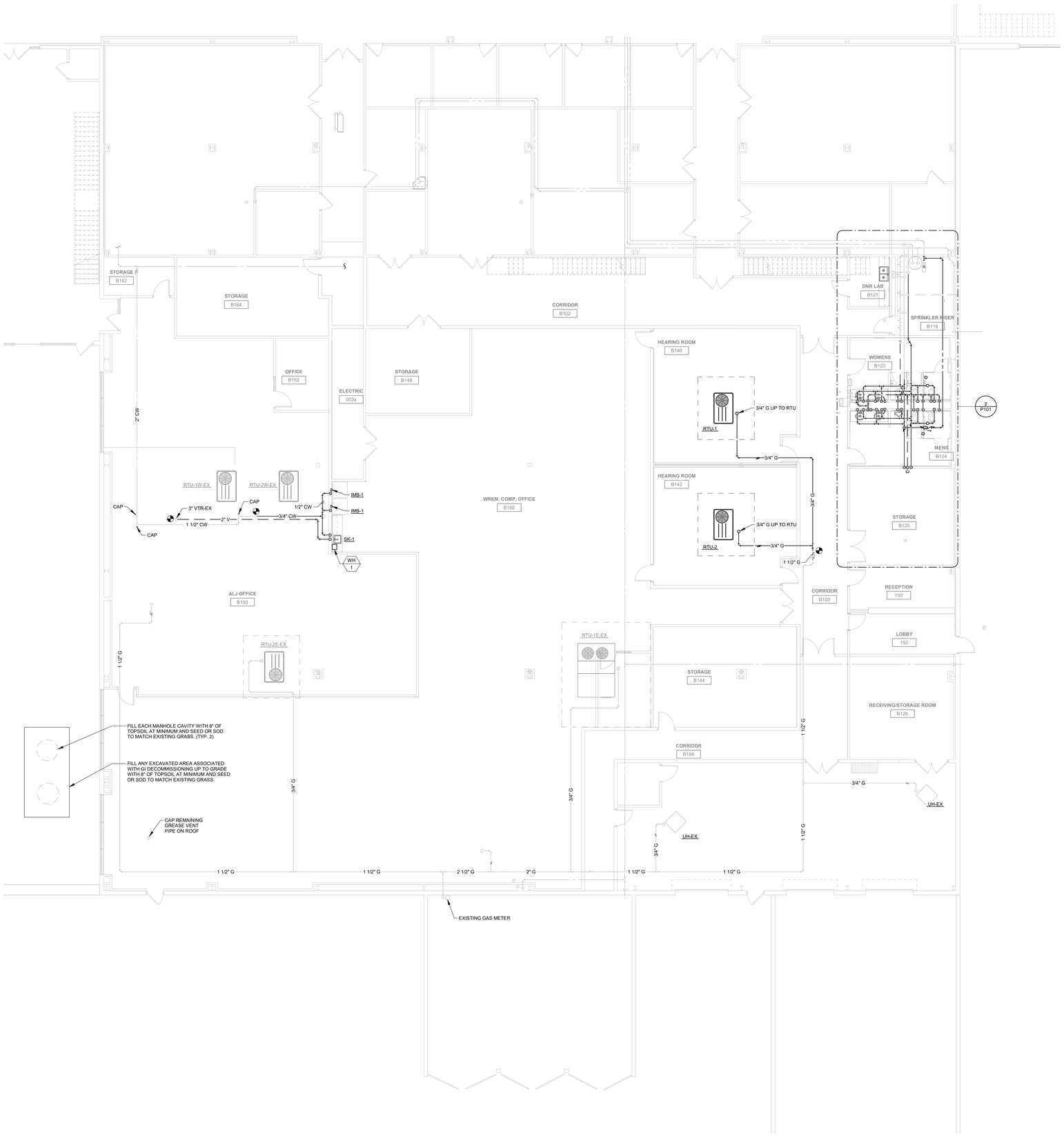
D. REFER TO PLUMBING FIXTURE ROUGH-IN SCHEDULE FOR BRANCH PIPE SIZING TO INDIVIDUAL PLUMBING FIXTURES.

E. COORDINATE PIPE ROUTING WITH DUCTWORK. DUCTWORK HAS PRIORITY OVER PRESSURE PIPING.

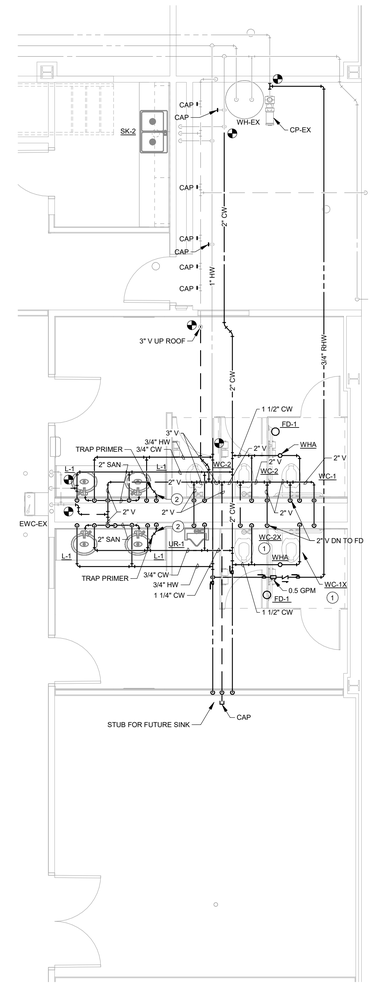
F. BRANCH PIPING SHALL BE TAKEN OFF THE TOP OF MAIN PIPING.

KEYNOTES (#)

1 INSTALL USED WATER CLOSET, SEAT AND FLUSH VALVE.
2 ROUTE TRAP PRIMER LINE TO FLOOR DRAIN.



1 PLUMBING PLAN
1/8" = 1'-0"



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

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Key Plan

Revision	Description	Date

OPN Project No
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Sheet Name
PLUMBING PLAN

Sheet Number
P101

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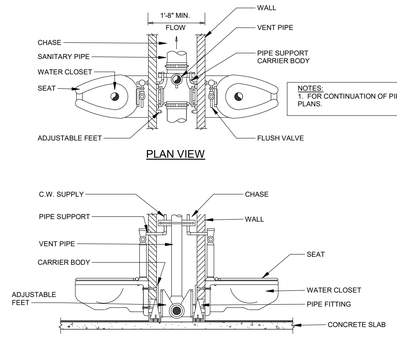
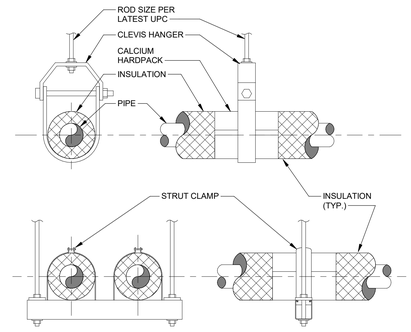
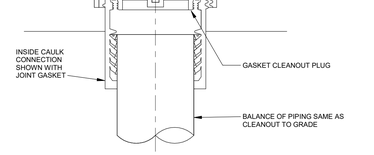


NOTES:
1. FOR CONTINUATION OF PIPING, SEE PLANS.

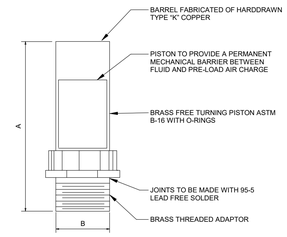
1 BACK-TO-BACK WALL HUNG WATER CLOSET DETAIL
NOT TO SCALE



7 PIPE SUPPORT
N.T.S.

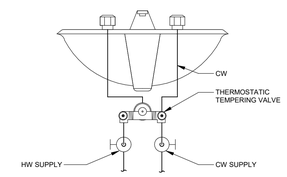


2 FLOOR CLEANOUT DETAIL
NOT TO SCALE

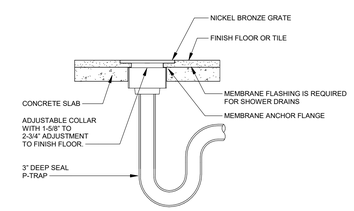


SIZE	SYMBOL	FIXTURE UNIT RATINGS	A SIZE	B SIZE
1/2"	A	1 - 11	5"	1/2"
3/4"	B	12 - 32	5"	3/4"
1"	C	33 - 60	7"	1"
1-1/4"	D	61 - 113	7"	1-1/4"
1-1/2"	E	114 - 154	9"	1-1/2"
2"	F	155 - 330	9"	2"

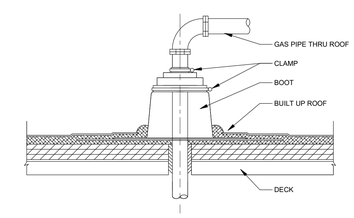
6 WATER SHOCK ARRESTOR DETAIL
NTS



4 POINT-OF-USE MIXING VALVE DETAIL
NOT TO SCALE



3 FLOOR DRAIN DETAIL
NOT TO SCALE



INSTALL PER MANUFACTURER'S INSTRUCTION

5 GAS PIPE THRU ROOF DETAIL
NOT TO SCALE

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Revision	Description	Date

OPN Project No.
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Sheet Issue Date
100% CONSTRUCTION DRAWING SET **8/16/24**

Sheet Name
PLUMBING DETAILS

Sheet Number
P301

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PLUMBING FIXTURE SCHEDULE

REFERENCE	MFR	MODEL	DESCRIPTION	TRIM
IMB-1	GUY GRAY	BIM875QTSAB	ICE MAKER OUTLET BOX - 20-GAUGE G90 GALVANIZED ENCLOSURE, 1/2" FIP INLET, 1/4" OD OUTLET QUARTER TURN BRASS BALL VALVE WITH FACEPLATE.	INSTALL BFP-2 DOWNSTREAM OF ICE MAKER OUTLET BOX.
L-1	N/A	N/A	INTEGRAL TO COUNTERTOP BY OTHERS. PROVIDE TRIM AS SHOWN.	DELTA "591-T1250", ADA COMPLIANT, BATTERY POWERED SENSOR TYPE FAUCET, WITH OFFSET GRID STRAINER AND TRAP, TRUEBRO "102W, 105" CW, HW, AND WASTE PIPE GUARDS AND ESCUTCHEONS. MAXIMUM FIXTURE FLOW TO BE 0.5 GPM. PROVIDE POWERS "LFE480" POINT OF USE MIXING VALVE UNDER FIXTURE. MIXING VALVE MUST MEET ASSE 1070 AND UPC 2009 REQUIREMENTS. PROVIDE WITH 1/4 TURN, 3/8" BRASS STOPS. ...
SK-1	ELKAY	ECTRU	ADA, SINGLE BOWL, UNDERMOUNT, 18-GAUGE STAINLESS STEEL, COMPLETELY UNDERCOATED, 19" SIDE TO SIDE x 18" FRONT TO BACK, 16" x 11-1/2" x 5-1/2" DEEP BOWL. OFF-CENTERED REAR DRAIN OPENING. VERIFY FINAL DIMENSIONS FROM ARCH ELEVATION AND MILWORK DRAWINGS. COORDINATE ALL REQUIRED HOLES FOR TRIM AND INDICATE IN...	SLOAN "EAF-700-P-ISM", ADA, HARD WIRED, SINGLE HOLE, DECK MOUNT, RIGID GOOSENECK SENSOR TYPE FAUCET WITH 6" REACH, 1.5 GPM LAMINAR FLOW SPRAY INSERT, AND INTEGRAL SPOUT TEMPERATURE MIXER. PROVIDE POWERS "LFLM495" POINT OF USE MIXING UNDER FIXTURE. MIXING VALVE MUST MEET ASSE 1070 AND UPC 2009 REQUIREMENTS. PROVIDE WITH 1/4 TURN STOPS AND 3/8" RISERS.
SK-2	ELKAY	EFRU	DOUBLE BOWL, UNDERMOUNT, 18-GAUGE STAINLESS STEEL, COMPLETELY UNDERCOATED, 29" SIDE TO SIDE x 22" FRONT TO BACK, EACH BOWL 11 1/2" x 16" x 7 5/8" DEEP. VERIFY FINAL DIMENSIONS FROM ARCH ELEVATION AND MILWORK DRAWINGS. COORDINATE ALL REQUIRED HOLES FOR TRIM AND INDICATE IN SUBMITTAL. REMOVABLE STAINLESS STEEL BASKET...	DELTA "9182", BRASS CONSTRUCTION, CHROME-PLATED FINISH, SINGLE HANDLE GOOSENECK FAUCET, SWIVEL SPOUT, 9 3/8" REACH, 1.8 GPM AERATOR, TWO FUNCTION WAND OPERATION, 20" BRAIDED HOSE, ONE HOLE FAUCET. PROVIDE WITH 1/4 TURN, 3/8" BRASS STOPS.
TP-1	SIOUX CHIEF	695 SERIES	MECHANICAL TRAP PRIMER. BRASS-PLATED CAP AND BODY. UPC/ASSE LISTED. ACTIVATION WITH 10 PSIG PRESSURE DROP WITH FACTORY SET WATER RELEASE. 1/2" FIP INLET AND 1/2" MIP OUTLET.	SIOUX CHIEF 695-Y WYE SPLITTER OR 695-D DISTRIBUTOR WITH BRASS, COPPER, NO-LEAD BODY AND BRASS BRANCH PIPING. CONTRACTOR TO VERIFY REQUIRED MODEL AND NUMBER OF BRANCHES TO PRIME NEARBY TRAPS.
UR- 1 (ADA)	KOHLER	K-4991	WALL-MOUNT, SIPHON JET WITH SHIELDS, WHITE, VITREOUS CHINA, REMOVABLE STAINLESS STEEL STRAINER, 3/4" TOP SPUD. FLOOR MOUNTED CARRIER WITH BEARING PLATE, ADA COMPLIANT MOUNTING HEIGHT.	SLOAN ROYAL "186" OR APPROVED EQUAL, 1.0 GPF MANUAL FLUSH VALVE WITH VANDAL RESISTANT CAP.
WC-1X (WALL/ADA)	EXISTING	EXISTING	REUSE EXISTING WALL HUNG WATER CLOSET, SEAT AND FLUSH VALVE.	PROIVE NEW WATER CLOSET CARRIER. REFER TO SPECIFICATION SECTION 22 40 00.
WC-2X (WALL)	EXISTING	EXISTING	REUSE EXISTING WALL HUNG WATER CLOSET, SEAT AND FLUSH VALVE.	PROIVE NEW WATER CLOSET CARRIER. REFER TO SPECIFICATION SECTION 22 40 00.
WC-1 (WALL/ADA)	KOHLER	K-84325	WALL MOUNTED 1.6 GPF, WHITE VITREOUS CHINA, ELONGATED BOWL, SIPHON JET TOILET, BOLT CAPS, 1 1/2" TOP SPUD. ADA COMPLIANT BOWL HEIGHT.	SLOAN "8111-MC" OR APPROVED EQUAL, BATTERY POWERED, 1.6 GPF EXPOSED SENSOR OPERATED FLUSH VALVE WITH VANDAL RESISTANT CAP AND OVERRIDE BUTTON. CHURCH 295SSCT WHITE OPEN FRONT SELF-SUSTAINING HEAVY SEAT, INJECTION MOLDED PLASTIC, STAINLESS STEEL POSTS, ESCUTCHEON.
WC-2 (WALL)	KOHLER	K-84325	WALL MOUNTED 1.6 GPF, WHITE VITREOUS CHINA, ELONGATED BOWL, SIPHON JET TOILET, BOLT CAPS, 1 1/2" TOP SPUD. STANDARD BOWL HEIGHT.	SLOAN "8111-MC" OR APPROVED EQUAL, BATTERY POWERED, 1.6 GPF EXPOSED SENSOR OPERATED FLUSH VALVE WITH VANDAL RESISTANT CAP AND OVERRIDE BUTTON. CHURCH 295SSCT WHITE OPEN FRONT SELF-SUSTAINING HEAVY SEAT, INJECTION MOLDED PLASTIC, STAINLESS STEEL POSTS, ESCUTCHEON.
WCO-1	ZURN	Z1446	WALL CLEANOUT TEE, GAS AND WATERTIGHT ABS TAPERED THREAD PLUG, AND ROUND, SMOOTH STAINLESS STEEL WALL ACCESS COVER WITH SECURING SCREW.	NA

NOTES:

1. REFER TO PLUMBING FIXTURE ROUGH-IN SCHEDULE FOR MINIMUM CONNECTION SIZES.

PLUMBING FIXTURE ROUGH-IN SCHEDULE

FIXTURE	CW	HW	VENT	WASTE	NOTES
FLOOR DRAIN	-	-	2"	4"	1
LAVATORY	1/2"	1/2"	1 1/4"	1 1/4"	1,2
SINK	1/2"	1/2"	1 1/2"	1 1/2"	1,2
URINAL (FLUSH VALVE)	3/4"	-	1 1/2"	2"	1
WATER CLOSET (FLUSH VALVE)	1"	-	2"	4"	1

NOTES:

1. ALL SIZES SHOWN ARE MINIMUM CONNECTION SIZES, REFER TO DRAWINGS FOR FINAL SIZES.
2. ALL VERTICAL WASTE RISERS TO FIXTURES AND ALL BELOW FLOOR WASTE SIZES SHALL BE A MINIMUM OF 2".

WATER HEATER

REFERENCE	WH-1
MANUFACTURER	EEMAX
MODEL #	EMT2.5
SERVES	SK-1
DIMENSIONS (WxDxH)	11x11x17
GALLONS	2.5
RECOVERY GPH 60°F RISE	19
KW	1.44
DELIVERY WATER TEMP (°F)	110
VOLTAGE/PH	120/1
NOTES	1,2,3,4

NOTES:

1. PROVIDE WITH ASME RATED T&P RELIEF VALVE.
2. UNIT TO MEET REQUIREMENTS OF IECC 2012.
3. PROVIDE WITH PLUG-IN CONNECTION. RECEPTICLE UNDER SINK BY EC.
4. INSTALL PER MANUFACTUERS RECOMMENDATIONS.

PLUMBING PIPING AND INSULATION SCHEDULE

SYSTEM	SIZE RANGE (INCHES)	LOCATION	PIPE MATERIAL (NOTE 1)	JOINT TYPE (NOTE 1)	VALVE TYPES (NOTE 3)	INSULATION TYPE (NOTE 2)	INSULATION THICKNESS (INCHES)	JACKET (NOTE 4)	NOTES
DOMESTIC COLD WATER	3/4 - 1 1/4	ABOVE GROUND	TYPE L COPPER	SOLDER/PRESSURE SEAL	BRONZE BALL W/ SS TRIM	MINERAL FIBER / ELASTOMERIC	1/2	PVC	5
DOMESTIC COLD WATER	3/4 - 1 1/4	IN WALL CAVITY	PEX	METAL INSERT		MINERAL FIBER / ELASTOMERIC	1/2	--	
DOMESTIC COLD WATER	1 1/2 - 2	ABOVE GROUND	TYPE L COPPER	SOLDER/PRESSURE SEAL	BRONZE BALL W/ SS TRIM	MINERAL FIBER / ELASTOMERIC	1	PVC	5
DOMESTIC HOT WATER	3/4 - 1 1/4	ABOVE GROUND	TYPE L COPPER	SOLDER/PRESSURE SEAL	BRONZE BALL W/ SS TRIM	MINERAL FIBER / ELASTOMERIC	1	PVC	5
DOMESTIC HOT WATER	3/4 - 1 1/4	IN WALL CAVITY	PEX	METAL INSERT		MINERAL FIBER / ELASTOMERIC	1	--	
DOMESTIC HOT WATER	1 1/2 - 2	ABOVE GROUND	TYPE L COPPER	SOLDER/PRESSURE SEAL	BRONZE BALL W/ SS TRIM	MINERAL FIBER	1 1/2	--	5
DOMESTIC HOT WATER	2 1/2 - 8	ABOVE GROUND	TYPE L COPPER	GROOVED		MINERAL FIBER	1 1/2	PVC	5
DOMESTIC HOT WATER CIRC	3/4 - 1 1/4	ABOVE GROUND	TYPE L COPPER	SOLDER/PRESSURE SEAL	BRONZE BALL W/ SS TRIM	MINERAL FIBER / ELASTOMERIC	1	PVC	5
DOMESTIC HOT WATER CIRC	3/4 - 1 1/4	IN WALL CAVITY	PEX	METAL INSERT		MINERAL FIBER / ELASTOMERIC	1	--	
SANITARY DRAIN (GRAVITY)	1 1/2 - 8	BELOW GROUND	SCH 40 PVC DWV / CI	SOLVENT / HUB & SPIGOT	N/A	--	--	--	
SANITARY VENT PIPING	1 1/4 - 4	BELOW GROUND	SCH 40 PVC DWV / CI	SOLVENT / HUB & SPIGOT	N/A	--	--	--	
SANITARY DRAIN (GRAVITY)	1 1/2 - 8	ABOVE GROUND	SCH 40 PVC DWV / CI	SOLVENT / NO HUB	N/A	--	--	--	
SANITARY VENT PIPING	1 1/4 - 6	ABOVE GROUND	SCH 40 PVC DWV / CI	SOLVENT / NO HUB	N/A	MINERAL FIBER	1	--	5,6

NOTES:

1. ALL PIPING UTILIZED FOR POTABLE WATER SHALL MEET NSF 14, 61 AND 372. PUSH TO CONNECT / PUSH ON TYPE JOINTS ARE NOT ALLOWED. REFER TO SPECIFICATIONS FOR FURTHER JOINT AND MATERIAL REQUIREMENTS.
2. REFER TO SPECIFICATIONS FOR FURTHER INSULATION REQUIREMENTS. INSULATION R-VALUE SHALL MEET INTERNATIONAL ENERGY CODE 2015 REQUIREMENTS.
3. ALL VALVES UTILIZED IN POTABLE WATER SYSTEMS SHALL MEET NSF 61 AND 372. REFER TO SPECIFICATIONS FOR FURTHER VALVE REQUIREMENTS.
4. EXPOSED PIPING MOUNTED BELOW 10'-0" ABOVE FLOOR SHALL HAVE PVC JACKET.
5. INSULATION APPLIED TO PIPING THAT IS LOCATED IN RETURN AIR PLENUMS SHALL MEET ASTM E 84 25/50 FLAME AND SMOKE SPREAD RATING AND COMPLY WITH NFPA STANDARD 90A.
6. VENT PIPING SHALL BE INSULATED A MINIMUM OF 5'-0" FROM EXTERIOR WALL OR ROOF PENETRATION.

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STATE OF IOWA - DEPARTMENT OF ADMINISTRATIVE SERVICES
1305 E WALNUT ST
DES MOINES, IA 50319

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9411.00 - 6200 PARK ALJ WORKMAN'S COMP RENOVATION
6200 PARK AVE
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Key Plan

Revision	Description	Date

OPN Project No.
24816000

Sheet Issue Date
100% CONSTRUCTION DRAWING SET 8/16/24

Sheet Name
PLUMBING SCHEDULES

Sheet Number
P501

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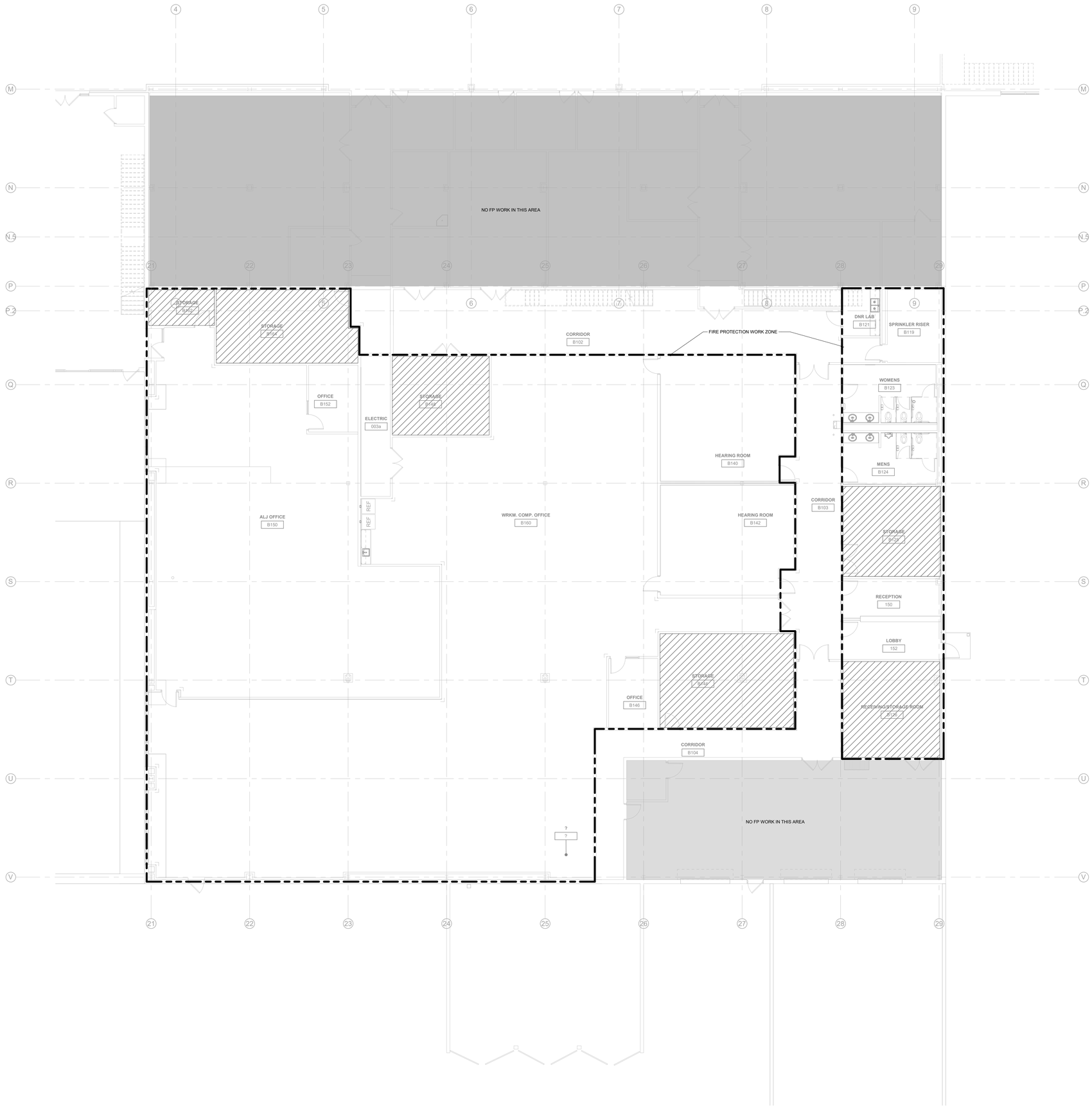

1 FIRE PROTECTION PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. REFER TO M000 FOR GENERAL NOTES & SYMBOLS.

B. MODIFY FIRE PROTECTION PIPING AND SPRINKLER LOCATIONS ACCORDING TO NEW CEILING LAYOUT. REFER TO ARCHITECTURAL PLANS FOR REFLECTED CEILING LAYOUT IN COMPLIANCE WITH NFPA 13 STANDARD.

C. ANY PIPE SIZES INDICATED ARE ESTIMATES ONLY. FINAL SIZES SHALL BE DETERMINED BY HYDRAULIC CALCULATIONS.

D. REFER TO ARCHITECTURAL DRAWINGS FOR REFLECTED CEILING PLANS.

E. DUCTWORK HAS PRIORITY OVER SPRINKLER PIPING. COORDINATE PIPE ROUTING AND ELEVATIONS WITH DUCTWORK. RELOCATE SPRINKLER PIPING AS REQUIRED.

F. SPRINKLERS SHALL GENERALLY BE CONCEALED TYPE IN SPACES WITH FINISHED CEILINGS. SPRINKLERS IN SPACES WITH EXPOSED CEILINGS SHALL BE UPRIGHT.

G. SPRINKLER IN ELECTRICAL AND I.T. ROOMS SHALL BE SIDEWALL. DO NOT ROUTE PIPING OVER ELECTRICAL AND I.T. ROOMS.

H. IN REMODELED SPACES, REMOVE ALL EXISTING PIPING, HANGERS, AND SPRINKLERS TO ALLOW FOR INSTALLATION OF NEW DUCTWORK AND PIPING. INSTALL NEW PIPING AND SPRINKLERS.

FIRE PROTECTION ZONES LEGEND

— — —	ZONE OUTLINE
	LIGHT HAZARD
	ORDINARY GROUP 1

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Sheet Name
FIRE PROTECTION PLAN

Sheet Number
F101

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BUILDING EQUIPMENT COORDINATION NOTES - ELECTRICAL

1. REFER TO EQUIPMENT CONNECTION SCHEDULE FOR COORDINATION DETAILS BETWEEN MECHANICAL AND ELECTRICAL SYSTEMS.
2. PROVIDE AND INSTALL ELECTRICAL SYSTEMS UNDER THIS CONTRACT MEETING THE REQUIREMENTS OF THE SPECIFIED MECHANICAL, FIRE PROTECTION, AND PLUMBING SYSTEMS. REFERENCE THE ENTIRE PROJECT DOCUMENTS, MANUALS, SCHEDULES, DETAILS, AND NOTES.
3. PROVIDE ELECTRICAL CONNECTIONS AND ACCESSORIES INCLUDING STARTERS, DISCONNECTS, CONTROL WIRING, ETC. AS REQUIRED FOR THE BUILDING MECHANICAL EQUIPMENT. INFORMATION HEREIN AND ON THE DRAWINGS IS FOR GENERAL DESCRIPTION AND ESTIMATING PURPOSES ONLY. VERIFY VOLTAGE, AMPERAGE, PHASE, INRUSH, ETC. FOR EACH ITEM OF EQUIPMENT BEFORE PROCEEDING WITH INSTALLATION. INSTALL EQUIPMENT PER WIRING DETAILS AND INSTRUCTIONS FURNISHED BY THE SUPPLIERS OF THE EQUIPMENT TO PROVIDE PROPER OPERATION.
4. REVIEW MECHANICAL EQUIPMENT SHOP DRAWINGS FOR COMPLIANCE AND COORDINATION WITH ELECTRICAL CONNECTIONS. NOTIFY ENGINEER IF CHANGES TO ELECTRICAL CONNECTIONS, WIRING, AND BREAKER REQUIREMENTS ARE NECESSARY TO ACCOMMODATE EQUIPMENT BEING SUPPLIED.
   a. DO NOT RELEASE ELECTRICAL DISTRIBUTION EQUIPMENT UNTIL ALL MECHANICAL EQUIPMENT REQUIRING ELECTRICAL INFRASTRUCTURE HAS BEEN SUBMITTED AND APPROVED. MAKE COORDINATION ADJUSTMENTS TO BREAKER SIZES AND SIMILAR CHANGES TO ELECTRICAL EQUIPMENT PRIOR TO SUBMITTAL RELEASE. COORDINATE SCHEDULING OF SHOP DRAWINGS WITH ALL TRADES.
5. PROVIDE DISCONNECTS RATED FOR EQUIPMENT AS REQUIRED AND AS INDICATED WITHIN EQUIPMENT CONNECTION SCHEDULE. COORDINATE DISCONNECT MOUNTING TO ALLOW EQUIPMENT REMOVAL WITHOUT DISCONNECT REMOVAL AND TO MINIMIZE WIRING WORK REQUIRED.
6. PROVIDE HEAVY DUTY TYPE DISCONNECTS RATED FOR THE INSTALLED ENVIRONMENT. PROVIDE MINIMUM NEMA 3R RATED DISCONNECTS FOR EXTERIOR INSTALLATIONS OR AS NOTED.
7. VERIFY LOCATIONS OF ALL EQUIPMENT. REFER TO MECHANICAL, PLUMBING, AND ARCHITECTURAL DRAWINGS AND COORDINATE WITH THE ASSOCIATED SUB-CONTRACTOR. ADJUST ELECTRICAL INSTALLATION AS REQUIRED.

CODE NOTES - ELECTRICAL

1. PROVIDE ELECTRICAL INSTALLATION IN ACCORDANCE WITH ALL STATE CODES.
2. THE CURRENT ADOPTED EDITION OF THE ELECTRICAL CODE IS THE STANDARD FOR THE ELECTRICAL INSTALLATION. VERIFY WITH LOCAL OFFICIALS WHEN PERMITS ARE OBTAINED. NOTIFY DESIGN TEAM OF ANY DISCREPANCIES BETWEEN THE PROJECT MANUAL OR DRAWINGS AND THE GOVERNING CODE.
3. INSTALLATION SHALL FOLLOW REQUIREMENTS OF THE ADAAG --AMERICANS WITH DISABILITIES ACT.
4. REFER TO PROJECT MANUAL AND PROJECT CODE REVIEW SHEET FOR LIST OF APPLICABLE CODES.

DEMOLITION AND RENOVATION NOTES - ELECTRICAL

1. ELECTRICAL DEMOLITION DRAWINGS SHOWING EXISTING CONDITIONS HAVE BEEN PREPARED BASED ON FIELD OBSERVATION AND ORIGINAL DRAWINGS. FIELD VERIFY EXISTING CONDITIONS BEFORE WORK BEGINS. ADDITIONAL COMPONENTS MAY EXIST WHICH ARE NOT SHOWN. BECOME FAMILIAR WITH EXISTING ELECTRICAL SYSTEM WHICH WILL BE AFFECTED BY THE DEMOLITION WORK.
2. PROVIDE EQUIPMENT, LABOR, AND MATERIALS TO REMOVE ELECTRICAL FACILITIES AND CLEAR THE AREA TO RECEIVE THE NEW WORK PROVIDED UNDER THIS CONTRACT.
3. IN OCCUPIED AREAS BEYOND THE DEMOLITION SCOPE, KEEP EXISTING SYSTEMS NOT AFFECTED BY PROJECT SCOPE OPERATIONAL THROUGH THE DURATION OF THE PROJECT. OBTAIN PERMISSION FROM OWNER'S REPRESENTATIVE TO SHUT OFF SERVICES OR SYSTEMS WHICH MAY AFFECT OTHER AREAS BEYOND THE LIMITS OF THE DEMOLITION AREA. INFORM OWNER'S REPRESENTATIVE OF THE REASON FOR AND DURATION OF THE SHUTDOWN AND ENSURE THAT THE SHUTDOWN IS MADE WITH AS LITTLE INCONVENIENCE TO OTHER AREAS AS POSSIBLE.
4. REMOVE CONDUITS, BOXES, ETC., AS REQUIRED BY WALL, CEILING, AND ADJACENT COMPONENTS DEMOLITION. REMOVE EXISTING WIRE UNLESS OTHERWISE NOTED.
5. INSTALL NEW CONDUCTORS FOR NEW CIRCUITS IN REMODELED AREAS UNLESS SPECIFICALLY NOTED OTHERWISE. RETAIN EXISTING CONDUITS IN GOOD CONDITION WHERE APPROVED BY ENGINEER OR AS INDICATED.
6. IDENTIFY DISCONNECTED BRANCH CIRCUIT LOCATION OR ITEM SERVED BEFORE DISCONNECTION. UPDATE PANEL/EQUIPMENT DIRECTORY ACCORDINGLY.
7. MAINTAIN CIRCUITS SERVING AREAS BEYOND THE DEMOLITION AREA. EXTEND NEW WIRING AND BYPASS DEMOLISHED DEVICES TO MAINTAIN EXISTING CIRCUITS.
8. KEEP EXISTING SYSTEMS OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. DO NOT CUT EXISTING TELECOMMUNICATION WIRING, CABLES OR CONDUIT. CONTRACTORS WHO CUT IN-SERVICE CABLES ARE RESPONSIBLE FOR ALL DOWNTIME AND COSTS TO REPAIR.
9. INSTALL BLANK COVER PLATES OVER OPENING AT REMOVED DEVICE LOCATIONS. THIS INCLUDES BUT IS NOT LIMITED TO, CLOCKS, RECEPTACLES, SWITCHES, JUNCTION BOXES, ETC.
10. PROVIDE CUTTING AND PATCHING OF EXISTING MATERIALS AS REQUIRED FOR THE PROPER COMPLETION OF THE DEMOLITION WORK AND THE INSTALLATION OF THE NEW WORK.
11. MAINTAIN FULL FUNCTIONAL AND AESTHETIC INTEGRITY OF DEVICES IDENTIFIED TO BE REMOVED AND RELOCATED, AND HANDLE WITH APPROPRIATE CARE TO ALLOW FOR REINSTALLATION. REPLACE DEVICES DAMAGED DURING DEMOLITION WITH NEW AT CONTRACTOR'S EXPENSE.
12. EQUIPMENT AND SYSTEM THAT ARE REMOVED REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE NOTED. DISPOSE OF ALL MATERIALS NOT SALVAGED BY THE OWNER.
13. REMOVE AND REINSTALL CEILING TILES REQUIRED FOR THE WORK BEING DONE UNDER THIS CONTRACT. REPLACE CEILING TILES DAMAGED DURING CONSTRUCTION TO MATCH EXISTING.

DEVICE INSTALLATION AND MATERIALS - ELECTRICAL

1. PROVIDE NORMAL WIRING DEVICES AS GRAY UNLESS OTHERWISE NOTED.
2. PROVIDE DEVICES COVER PLATES AS STAINLESS STEEL. MATCH WIRING DEVICES COLOR.
3. PROVIDE GFCI TYPE RECEPTACLES AT ALL LOCATIONS REQUIRED BY THE NEC.
4. INSTALL WALL MOUNTED RECEPTACLES AT +18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.
5. INSTALL WALL MOUNTED LIGHT SWITCHES AT +48" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. EXCEPTION; INSTALL DEVICES ABOVE AN OBSTRUCTED HIGH FORWARD REACH OBSTACLE GREATER THEN 20 INCHES IN DEPTH AT +42".
6. INSTALL ABOVE COUNTERTOP RECEPTACLES +8" ABOVE COUNTERTOP OR AS OTHERWISE INDICATED.
7. AT A COMMON COUNTERTOP, INSTALL ALL RECEPTACLES AND SWITCHES AT THE SAME HEIGHT UNLESS OTHERWISE SPECIFICALLY INDICATED.

INSTALLATION NOTES - ELECTRICAL

1. BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BID.
2. INCREASE CONDUCTOR SIZES ON 20A 120V-1 PHASE CIRCUITS EXCEEDING 100 FEET TO CENTER OF LOAD TO ACCOUNT FOR VOLTAGE DROP.
3. RACEWAYS AND BOXES ARE SHOWN DIAGRAMMATICALLY ONLY AND INDICATE GENERAL AND APPROXIMATE LOCATIONS. LAYOUTS DO NOT ALWAYS SHOW THE TOTAL NUMBER OF RACEWAYS OR BOXES FOR THE CIRCUITS REQUIRED, NOR ARE THE LOCATIONS OF INDICATED RUNS INTENDED TO SHOW THE ACTUAL ROUTING OF THE RACEWAYS.
4. LIGHT FIXTURES, SWITCHES, DEVICES, ETC. ARE SHOWN IN PREFERRED LOCATION. MODIFY CONDUIT, HANGERS, CIRCUITING, ETC. TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
5. PROVIDE A DEDICATED GREEN INSULATED GROUND CONDUCTOR TO ALL DEVICES. DO NOT USE CONDUIT SYSTEM AS THE ONLY EQUIPMENT GROUNDING METHOD.
6. DO NOT INSTALL BOXES BACK-TO-BACK ON OPPOSITE SIDES OF THE SAME WALL. MAINTAIN MINIMUM OF 6" DISTANCE BETWEEN BOXES WHEREVER APPLICABLE.
7. BALANCE PANEL LOADS DURING INSTALLATION. CIRCUIT NUMBERING SHOWN ON PLANS MAY BE ADJUSTED TO ACCOMMODATE.
8. PROVIDE TYPED PANEL DIRECTORY AT PROJECT COMPLETION FOR NEW PANELS AND EXISTING PANELS WITH CIRCUITS MODIFIED AS A RESULT OF THIS PROJECT. USE OWNER'S CURRENT ROOM NUMBERS AND EQUIPMENT NAMES.
9. CONTRACTOR IS RESPONSIBLE FOR OPENINGS IN WALLS, FLOORS, CEILINGS, AND ROOFS THAT ARE REQUIRED TO COMPLETE THEIR SCOPE OF WORK. SEAL PENETRATIONS IN ACCORDANCE WITH THE RATING OF THE AFFECTED ASSEMBLY. REFER TO ARCHITECTURAL CODE PLAN FOR RATED WALLS, FLOORS, AND CEILINGS.

INSTALLATION NOTES - LIGHTING

1. UNLESS NOTED OTHERWISE, CONNECT ALL EMERGENCY BATTERY FIXTURES WITH AN UN-SWITCHED LEG OF THE LIGHTING CIRCUIT THAT SERVES THE FIXTURES SPACE. MAINTAIN NORMAL SWITCHING SCHEME OF EMERGENCY FIXTURES UNDER NORMAL OPERATION. INSTALL PER EMERGENCY FIXTURE OR TRANSFER DEVICE INSTRUCTIONS.
2. VERIFY CEILING TYPE (IE. GRID, GYP) WITH ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO RELEASE OF LIGHTING FIXTURE EQUIPMENT PACKAGE. ADJUST FIXTURE TYPE, CONSTRUCTION, FLANGE, OR OTHER COORDINATION DETAILS AS REQUIRED FOR CEILING TYPE.
3. LIGHTING CONTROLS SENSORS ARE SHOWN ON PLANS AT SUGGESTED LOCATIONS ONLY. VERIFY LOCATIONS WITH MANUFACTURER GUIDELINES AND INSTALLATION RECOMMENDATIONS. ADJUST LOCATIONS AS REQUIRED TO MEET MANUFACTURER GUIDELINES.
4. PROVIDE LIGHTING CONTROLS AS A COMPLETE SYSTEM AND INCLUDE MATERIAL AND INSTALLATION FOR ALL POWER PACKS, ACCESSORIES, CONTROLLERS, AND WIRING REQUIRED FOR OPERATION.

ELECTRICAL ABBREVIATIONS

A	DEVICE MOUNTED +8" ABOVE COUNTER TOP (VERIFY LOCATION)	NIC	NOT IN CONTRACT
AFF	ABOVE FINISHED FLOOR	NM	NONMETALLIC
ATS	AUTOMATIC TRANSFER SWITCH	NTS	NOT TO SCALE
C	CEILING	OC	ON CENTER
CB	CIRCUIT BREAKER	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CT	CURRENT TRANSFORMER	OFOI	OWNER FURNISHED, OWNER INSTALLED
E	EXISTING ITEM TO REMAIN	R	EXISTING ITEM TO BE REMOVED
EC	ELECTRICAL CONTRACTOR	RR	EXISTING ITEM TO BE REMOVED AND RELOCATED
EM	EMERGENCY LIGHT FIXTURE	RN	EXISTING ITEM TO BE REMOVED AND REPLACED WITH NEW
ER	NEW LOCATION OF EXISTING ITEM	SCCR	SHORT CIRCUIT CURRENT RATING
F	ROUGH IN FOR FUTURE DEVICE	T	TAMPER PROOF DEVICE
FAAP	FIRE ALARM ANNUNCIATOR PANEL	TCC	TEMPERATURE CONTROL CONTRACTOR
FACP	FIRE ALARM CONTROL PANEL	TV	TELEVISION
FSD	FIRE SMOKE DAMPER	TYP	TYPICAL
G	GROUND FAULT CIRCUIT INTERRUPTER	UPS	UNINTERRUPTIBLE POWER SUPPLY
GND	GROUND	V	VOLTS
KVA	KILO-VOLT-AMPERES	VA	VOLT-AMPERES
KW	KILOWATTS	WG	WIREGUARD COVER
MC	MECHANICAL CONTRACTOR	WP	WEATHERPROOF DEVICE
MCB	MAIN CIRCUIT BREAKER	WR	WEATHER RESISTANT DEVICE
MDP	MAIN DISTRIBUTION PANEL	+24"	INDICATES MOUNTING HEIGHT CENTER LINE OF DEVICE TO FINISHED FLOOR
MLO	MAIN LUGS ONLY		
N	NEW DEVICE IN EXISTING LOCATION		

GENERAL NOTES - ELECTRICAL

1. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. BEGIN INSTALLATION AND ROUGH-IN ONLY AFTER PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION IS COMPLETE. COORDINATE WITH BUILDING STRUCTURE, ARCHITECTURE, MECHANICAL SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, EQUIPMENT ACCESS/CLEARANCE, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR REWORK OF INSTALLED EQUIPMENT RESULTING FROM INSUFFICIENT COORDINATION.
2. ELECTRICAL DRAWINGS ARE ONLY A PORTION OF THE COMPLETE SET OF PLANS AND CONTRACT DOCUMENTS. THE ELECTRICAL SCOPE OF WORK IS DEFINED BY THE COMPLETE SET OF CONTRACT DOCUMENTS. THIS INCLUDES BUT IS NOT LIMITED TO REFERENCING; ARCHITECTURAL PLANS FOR DIMENSIONS AND DETAILS; EQUIPMENT PLANS FOR ROUGH-IN REQUIREMENTS, MECHANICAL PLANS FOR EQUIPMENT SIZES AND LOCATIONS.

TECHNOLOGY RESPONSIBILITY MATRIX

PROVISION RESPONSIBILITIES DEFINED	OFOI	OFCI	CFCI	CFOI
COMMUNICATIONS - TELECOM SYSTEMS:				
ROUGH-IN, PATHWAYS AND SLEEVES			●	
RACKS, FRAMES AND ENCLOSURES	●			
CABLE MANAGEMENT	●			
UNINTERRUPTIBLE POWER SUPPLIES (RACK MOUNT)	●			
PLYWOOD BACKBOARDS	●			
COPPER BACKBONE CABLING			●	
OPTICAL FIBER BACKBONE CABLING			●	
COAXIAL BACKBONE CABLING	N/A	N/A	N/A	N/A
COPPER HORIZONTAL CABLING			●	
OPTICAL FIBER HORIZONTAL CABLING			●	
COAXIAL HORIZONTAL CABLING	N/A	N/A	N/A	N/A
DATA COMMUNICATIONS SWITCHES AND HUBS	●			
DATA COMMUNICATIONS WIRELESS ACCESS POINTS	●			
VOICE COMMUNICATIONS SWITCHING AND ROUTING EQUIPMENT	●			
COMMUNICATIONS - AUDIO-VISUAL SYSTEMS:				
ROUGH-IN, PATHWAYS AND SLEEVES			●	
PROJECTOR(S)	●			
FLAT PANEL DISPLAY(S)	●			
MULTI-TOUCH DISPLAY(S)	●			
DISPLAY TECHNOLOGY MOUNTING HARDWARE	●			
MEDIA PLAYER(S)	●			
HEAD-END EQUIPMENT	●			
COMMUNICATIONS - DISTRIBUTED SYSTEMS:				
ROUGH-IN, PATHWAYS AND SLEEVES			●	
MASTER ANTENNA / COMMUNITY ANTENNA TELEVISION DISTRIBUTION	N/A	N/A	N/A	N/A
PUBLIC ADDRESS SYSTEM	N/A	N/A	N/A	N/A
SOUND MASKING / SPEECH PRIVACY SYSTEM	●			
INTERCOMMUNICATIONS SYSTEM	●			
WIRED / WIRELESS CLOCK SYSTEM	●			
NURSE CALL / CODE BLUE SYSTEM	N/A	N/A	N/A	N/A
DISTRIBUTED ANTENNA SYSTEM	N/A	N/A	N/A	N/A
SECURITY - ACCESS CONTROL:				
ROUGH-IN, PATHWAYS AND SLEEVES			●	
SECURITY MANAGEMENT SYSTEM - HEAD END COMPONENTS	●			
SECURITY MANAGEMENT SYSTEM - FIELD DEVICES	●			
SECURITY MANAGEMENT SYSTEM - ELECTRIFIED DOOR HARDWARE			●	
SECURITY MANAGEMENT SYSTEM - ALL CABLING	●			
SECURITY - VIDEO INTERCOM:				
ROUGH-IN, PATHWAYS AND SLEEVES			●	
DOOR STATION(S)	●			
HEAD END EQUIPMENT AND COMPONENTS	●			
SECURITY - VIDEO SURVEILLANCE:				
ROUGH-IN, PATHWAYS AND SLEEVES			●	
CAMERA(S)	●			
HEAD END EQUIPMENT AND COMPONENTS	●			
SECURITY - INTRUSION DETECTION:				
ROUGH-IN, PATHWAYS AND SLEEVES	N/A	N/A	N/A	N/A
FIELD DEVICES (MOTION DETECTORS, GLASS BREAKS, DOOR SWITCHES)	N/A	N/A	N/A	N/A
HEAD END EQUIPMENT AND COMPONENTS	N/A	N/A	N/A	N/A
SAFETY - FIRE DETECTION AND ALARM:				
ROUGH-IN, PATHWAYS AND SLEEVES			●	
INITIATING FIELD DEVICES (SMOKE, MANUAL PULL, MONITOR MODULES)			●	
NOTIFICATION APPLIANCES (HORNS, STROBES, SPEAKERS)			●	
MISCELLANEOUS DEVICES (RELAYS, TEST STATION, ANNUNCIATOR)			●	

● OFOI OWNER FURNISHED & OWNER INSTALLED
● OFCI OWNER FURNISHED & CONTRACTOR INSTALLED
● CFCI CONTRACTOR FURNISHED & CONTRACTOR INSTALLED
● CFOI CONTRACTOR FURNISHED & OWNER INSTALLED

GENERAL NOTE:
A. MATRIX IS NOT INTENDED TO BE EXHAUSTIVE TO COVER ALL MATERIALS NECESSARY FOR SCOPE AND SHOULD ONLY BE USED TO QUICKLY IDENTIFY SYSTEMS AND RELATED INFRASTRUCTURE INSIDE AND OUTSIDE THE BID OF THIS PROJECT . ANY ITEMS FURNISHED OR INSTALLED BY THE BIDDING CONTRACTOR SHALL COVER ALL REQUIRED APPURTENANCES NECESSARY FOR A COMPLETE SYSTEM. THIS SHALL INCLUDE BUT NOT BE LIMITED TO, EQUIPMENT, ACCESSORIES, TERMINATIONS, TERMINATION COMPONENTS, ALL FINAL CORDAGE CONNECTIVITY, SOFTWARE, PROGRAMMING, AND THE LABOR TO INSTALL.

LIGHTING SYMBOLS

- a — RECESSED LIGHT FIXTURE, LETTER INDICATES SWITCH LEG (TYPICAL), SHADING INDICATES EMERGENCY LIGHT (TYPICAL)
- ROUND LIGHT FIXTURE - SURFACE MOUNTED
- PENDANT MOUNTED LIGHT FIXTURE
- ROUND APERTURE RECESSED DOWNLIGHT FIXTURE, ARROW INDICATES WALLWASH
- SURFACE MOUNTED STRIP FIXTURE
- LINEAR PENDANT MOUNTED FIXTURE
- INDUSTRIAL STRIP LIGHT FIXTURE
- EMERGENCY LIGHT FIXTURE, WALL MOUNT, +96" OR AS NOTED
- EMERGENCY LIGHT FIXTURE, CEILING MOUNT
- EXIT SIGN, WALL MOUNT +96", SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
- EXIT SIGN, CEILING MOUNT, SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
- COMBINATION EXIT SIGN & EMERGENCY LIGHT, WALL MOUNT +96", SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
- COMBINATION EXIT SIGN & EMERGENCY LIGHT, CEILING MOUNT, SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
- EXTERIOR LIGHT FIXTURE, WALL MOUNT +10', OR AS NOTED
- INTERIOR LIGHT FIXTURE, WALL MOUNT
- EXTERIOR POLE MOUNTED LIGHT FIXTURE, REFER TO LIGHT FIXTURE SCHEDULE
- BOLLARD LIGHT FIXTURE
- EXTERIOR FLOOD LIGHT FIXTURE, REFER TO LIGHT FIXTURE SCHEDULE
- EMERGENCY REMOTE HEAD LIGHT FIXTURE, REFER TO LIGHT FIXTURE SCHEDULE
- $ a — SINGLE POLE SWITCH, WALL MOUNT +48", OR AS NOTED, LETTER INDICATES SWITCH LEG
- $ b (3) — THREE WAY SWITCH, WALL MOUNT +48", OR AS NOTED, LETTER INDICATES SWITCH LEG
- e (S1) — LIGHTING CONTROLS LOW VOLTAGE SWITCH, WALL MOUNT +48", OR AS NOTED, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
- c (1) — OCCUPANCY SENSOR, WALL MOUNT +48" OR AS NOTED, NUMBER INDICATES TYPE, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
- a (2) — OCCUPANCY SENSOR, CEILING MOUNT, NUMBER INDICATES TYPE, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
- (2) — DAYLIGHTING SENSOR, CEILING MOUNT, NUMBER INDICATES TYPE, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
- LIGHTING CONNECTION, REFER TO LIGHTING FIXTURE SCHEDULE FOR FIXTURE DESCRIPTION

TELECOMMUNICATION SYMBOLS

- # — DATA CABLING, RUN BACK TO IDF. INSTALL LOOPS PER DRAWINGS. INSTALL AT +18" AFF, UNLESS OTHERWISE NOTED.
- WAP — WIRELESS ACCESS POINT - TWO (2) CATEGORY 6A CABLES
- FLOOR MOUNTED OUTLET IN A MULTI-GANG FLOORBOX WITH SINGLE GANG OPENING, PROVIDED BY OTHERS
- CAM — CEILING MOUNTED OUTLET (FOR CEILING MOUNTED SECURITY CAMERA)
- DATA CABLING, RUN BACK TO AV RACK. INSTALL LOOPS PER DRAWINGS. COORDINATE LOCATIONS WITH AV CONTRACTOR AND OWNER.
- (S) — EMERGENCY ANNOUNCEMENT SPEAKER. MATCH EXISTING SYSTEM TYPE AND INSTALL.

ACCESS CONTROL SYMBOLS

- CR — PROXIMITY CARD READER, +44" OR AS NOTED, 1" CONDUIT WITH PULL STRING TO ABOVE ACCESSIBLE CEILING. COORINDATE LOCATION AND INSTALL WITH OWNER.
- D1 — DOOR POSITION SWITCH - FLUSH MOUNTED, DOUBLE POLE DOUBLE THROW (DPDT)
- E1 — ELECTRIC STRIKE - FLUSH MOUNTED
- EL — ELECTRIFIED EXIT DEVICE (PANIC HARDWARE)
- AUTOMATIC DOOR OPERATOR - WALL MOUNTED +46", OR AS NOTED

DEVICES TO BE RECESSED IN WALL AT ALL LOCATIONS WHERE POSSIBLE

GENERAL SYMBOLS

- CONDUIT SLEEVE
- CONDUIT UP, REFER TO TAG ON DRAWING FOR SIZE
- CONDUIT DOWN, REFER TO TAG ON DRAWING FOR SIZE
- J — JUNCTION BOX, CEILING OR FLOOR MOUNTED.
- J — JUNCTION BOX, WALL MOUNTED, ELEVATION AS NOTED.
- # — KEYNOTE
- XXX / X — EQUIPMENT IDENTIFICATION TAG. REFER TO EQUIPMENT CONNECTION SCHEDULE
- 1 / A101 SIM — DETAIL DRAWING REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE; SHEET REFERENCE
- 1 / A101 SIM — SECTION CUT REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE; SHEET REFERENCE
- A101 Ref — INTERIOR ELEVATION DRAWING REFERENCE TAG

POWER SYMBOLS

- DUPLEX RECEPTACLE, CEILING MOUNT
- DUPLEX RECEPTACLE, TAMPER-RESISTANT, WALL MOUNT +18", OR AS NOTED
- G — DUPLEX GFCI RECEPTACLE, TAMPER-RESISTANT, WALL MOUNT +18", OR AS NOTED "G" INDICATES PROTECTION INCLUDED IN DEVICE. SHADING INDICATES DEVICE PROTECTED BY EITHER UPSTREAM GFCI DEVICE OR CIRCUIT BREAKER
- EWC — DUPLEX RECEPTACLE, MOUNTED WITHIN WATER COOLER HOUSING, VERIFY HEIGHT. CONNECT TO GFCI, CIRCUIT BREAKER OR REMOTE WALL DEVICE. SHADING INDICATES GFCI PROTECTED DEVICE
- W — DUPLEX GFCI WEATHER RESISTANT RECEPTACLE WITH WEATHER-PROOF IN-USE COVER, TAMPER-RESISTANT, WALL MOUNT +24", OR AS NOTED
- QUADRAPLEX RECEPTACLE, TAMPER-RESISTANT, WALL MOUNT +18", OR AS NOTED
- G — QUADRAPLEX GFCI RECEPTACLE, TAMPER-RESISTANT, WALL MOUNT +18", OR AS NOTED "G" INDICATES PROTECTION INCLUDED IN DEVICE. SHADING INDICATES DEVICE PROTECTED BY EITHER UPSTREAM GFCI DEVICE OR CIRCUIT BREAKER
- FB# — DUPLEX RECEPTACLE IN FLOORBOX, TAMPER-RESISTANT. REFER TO SCHEDULE.
- FB# — QUADRUPLEX RECEPTACLE IN FLOORBOX, TAMPER-RESISTANT. REFER TO SCHEDULE.
- FB# 1 — FLOOR BOX, COMBINATION POWER AND DATA ENCLOSURE. QUANTITY OF CABLES AS NOTED. DEVICES AS NOTED. REFER TO SCHEDULE.
- WHIP — SPECIAL RECEPTACLE, WALL MOUNT +18", OR AS NOTED. FURNITURE WHIP CONNECTION FOR OFFICE FURNITURE. VERIFY EXACT CONNECTION WITH OWNER.
- EQUIPMENT CONNECTION, REFER TO ELECTRICAL EQUIPMENT CONNECTION SCHEDULE FOR CONNECTION TYPE. REFER TO PANEL SCHEDULES FOR GFCI PROTECTION WHERE REQUIRED
- EQUIPMENT CONNECTION, WALL MOUNT +18", OR AS NOTED, REFER TO ELECTRICAL EQUIPMENT CONNECTION SCHEDULE FOR CONNECTION TYPE. REFER TO PANEL SCHEDULES FOR GFCI PROTECTION WHERE REQUIRED
- JUNCTION BOX, WITH PULL STRING, WALL MOUNT, REFER TO PLAN OR DETAIL FOR MOUNTING HEIGHT
- HAND DRYER, WALL MOUNT, REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT.
- GROUND BAR
- WHIP / PP — POWER POLE RACEWAY, WHIP INSTALLATION FOR OFFICE FURNITURE. VERIFY EXACT CONNECTION WITH OWNER.
- SAFETY DISCONNECT SWITCH
- PANELBOARD - SURFACE MOUNTED
- PANELBOARD - RECESSED IN WALL
- DISTRIBUTION PANELBOARD/SWITCHBOARD - SURFACE MOUNTED AS NOTED.
- CORD REEL, CEILING MOUNTED - REFER TO DETAIL

FIRE DETECTION AND ALARM SYMBOLS

- F — MANUAL FIRE ALARM PULL STATION
- FAA — FIRE ALARM ANNUNCIATOR PANEL
- FACP — FIRE ALARM CONTROL PANEL + EMERGENCY COMMUNICATIONS PANEL
- H — HORN
- COMBINATION HORN WITH STROBE
- COMBINATION SPEAKER WITH STROBE
- STROBE

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Revision	Description	Date

OPN Project No.
24816000

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Sheet Name
ELECTRICAL GENERAL NOTES & SYMBOLS

Sheet Number
E000

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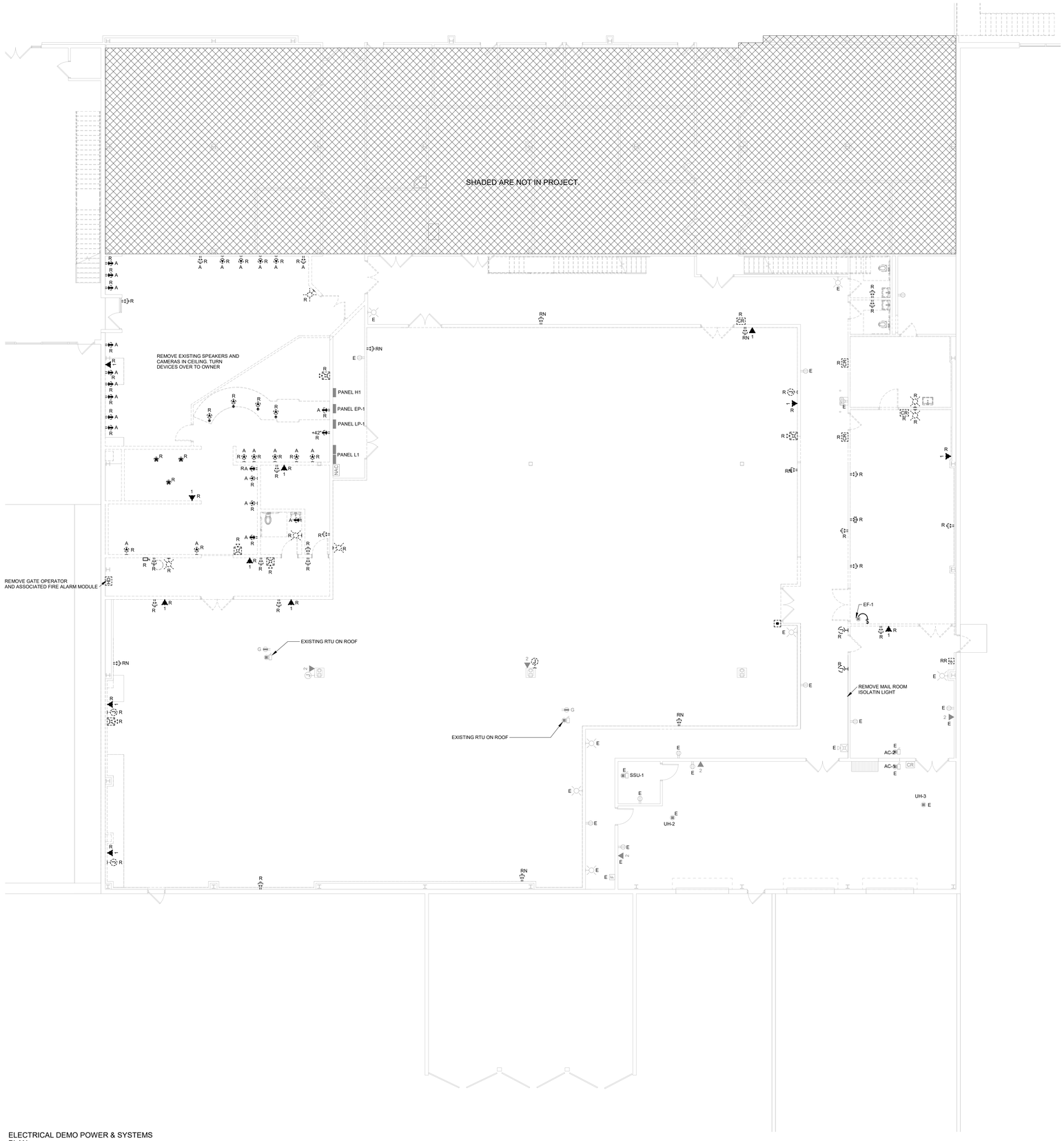

1 ELECTRICAL DEMO POWER & SYSTEMS PLAN
1/8" = 1'-0"

ELECTRICAL DEMOLITION NOTES

A. DEMOLITION DRAWINGS PRESENT LAYOUT OF EXISTING CONDITIONS AND MAJOR MECHANICAL/ELECTRICAL ITEMS. THEY ARE NOT TO BE CONSTRUED AS COMPLETE IN REPRESENTATION OF ACCESSORIES AND INCIDENTALS TO BE REMOVED, REPLACED, OR REWORKED. NOR SHOULD ACCESSIBILITY BE INFERRED. THE CONTRACTOR IS RESPONSIBLE TO FAMILIARIZE THEMSELVES WITH THE BUILDING AND EXISTING CONDITIONS, PRIOR TO THE SUBMITTING OF A BID FOR THIS PROJECT.

B. REMOVE ELECTRICAL FACILITIES AND CLEAR THE AREA TO RECEIVE THE NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.

C. THIS ELECTRICAL DEMOLITION DRAWING SHOWING EXISTING CONDITIONS HAS BEEN PREPARED BASED ON FIELD OBSERVATION AND ORIGINAL DRAWINGS. ADDITIONAL COMPONENTS MAY EXIST WHICH DO NOT SHOW, AND SUCH ITEMS SHALL BE DEALT WITH IN A MANNER SIMILAR TO THOSE ITEMS WHICH DO SHOW. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS.

D. CONDUITS, BOXES, ETC., SHALL BE REMOVED AS REQUIRED BY WALL AND CEILING DEMOLITION AND REMOVALS. WIRING SHALL BE REMOVED. ALL WIRING FOR THE REMODELED AREAS SHALL BE NEW UNLESS SPECIFICALLY NOTED OTHERWISE. ALL BRANCH CIRCUITS TO BE DISCONNECTED SHALL BE IDENTIFIED AS TO LOCATION OR ITEM SERVED BEFORE DISCONNECTING. CIRCUITS SERVING AREAS BEYOND THE IMMEDIATE DEMOLITION AREA SHALL BE MAINTAINED.

E. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH EXISTING ELECTRICAL SYSTEM WHICH WILL BE AFFECTED BY THE DEMOLITION WORK. CONTRACTOR SHALL OBTAIN PERMISSION FROM OWNER'S REPRESENTATIVE TO SHUT OFF SERVICES OR SYSTEMS WHICH MAY AFFECT OTHER AREAS BEYOND THE LIMITS OF THE IMMEDIATE DEMOLITION AREA. SUCH PERMISSION WILL BE GRANTED ONLY AFTER OWNER'S REPRESENTATIVE IS INFORMED OF THE REASON FOR AND DURATION OF THE SHUTDOWN AND IS SATISFIED THAT THE SHUTDOWN CAN BE MADE WITH AS LITTLE INCONVENIENCE TO OTHER AREAS AS POSSIBLE.

F. PANELBOARDS. DISCONNECTS, FIXTURES, WIRING DEVICES, SIGNAL DEVICES, ETC., SHOWN ON PLANS SHALL BE REMOVED UNLESS NOTED OTHERWISE. REMOVAL SHALL BE DONE IN A TIMELY MANNER IN ACCORDANCE WITH THE GENERAL DEMOLITION WORK. COORDINATE WITH THE OWNER AND OTHER CONTRACTORS.

G. ABBREVIATIONS:
- E - EXISTING ITEM TO REMAIN
- ER - NEW LOCATION OF EXISTING ITEM
- N - NEW ITEM IN EXISTING LOCATION
- R - EXISTING ITEM TO BE REMOVED, PATCH AND/OR COVER
- RN - REPLACE EXISTING WITH NEW
- RR - EXISTING ITEM TO BE REMOVED AND RELOCATED

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ELECTRICAL POWER & SYSTEMS DEMO

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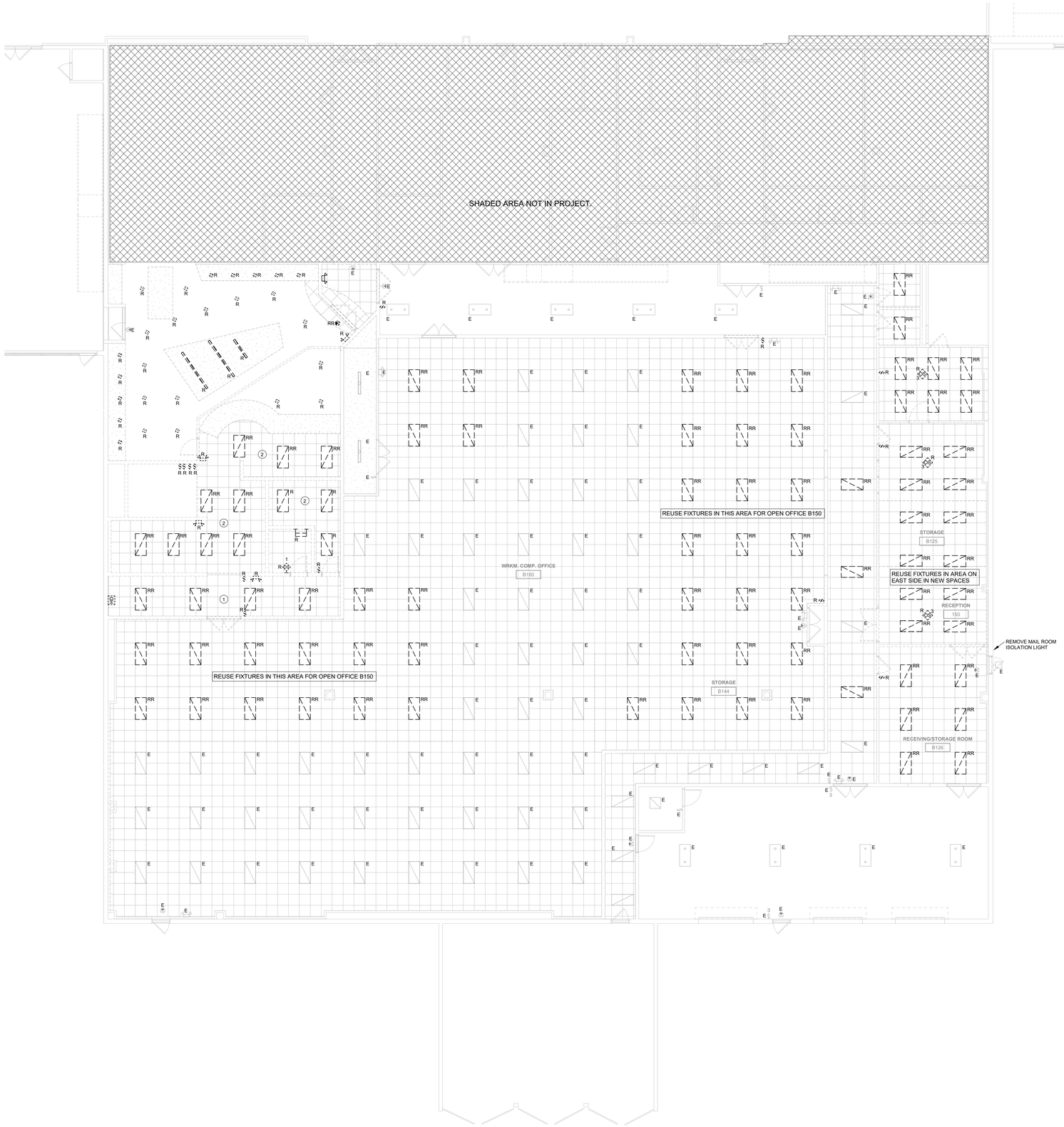

1 ELECTRICAL DEMO LIGHTING PLAN
1/8" = 1'-0"

ELECTRICAL DEMOLITION NOTES

A. DEMOLITION DRAWINGS PRESENT LAYOUT OF EXISTING CONDITIONS AND MAJOR MECHANICAL/ELECTRICAL ITEMS. THEY ARE NOT TO BE CONSTRUED AS COMPLETE IN REPRESENTATION OF ACCESSORIES AND INCIDENTALS TO BE REMOVED, REPLACED, OR REWORKED. NOR SHOULD ACCESSIBILITY BE INFERRED. THE CONTRACTOR IS RESPONSIBLE TO FAMILIARIZE THEMSELVES WITH THE BUILDING AND EXISTING CONDITIONS, PRIOR TO THE SUBMITTING OF A BID FOR THIS PROJECT.

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- RN - REPLACE EXISTING WITH NEW
- RR - EXISTING ITEM TO BE REMOVED AND RELOCATED

KEYNOTES (#)

1 REUSE FIXTURES IN THIS AREA FOR OPEN STORAGE B148.
2 REUSE FIXTURES IN THIS AREA FOR OPEN STORAGE B164 & B162.

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Revision	Description	Date

OPN Project No.
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ELECTRICAL LIGHTING DEMO

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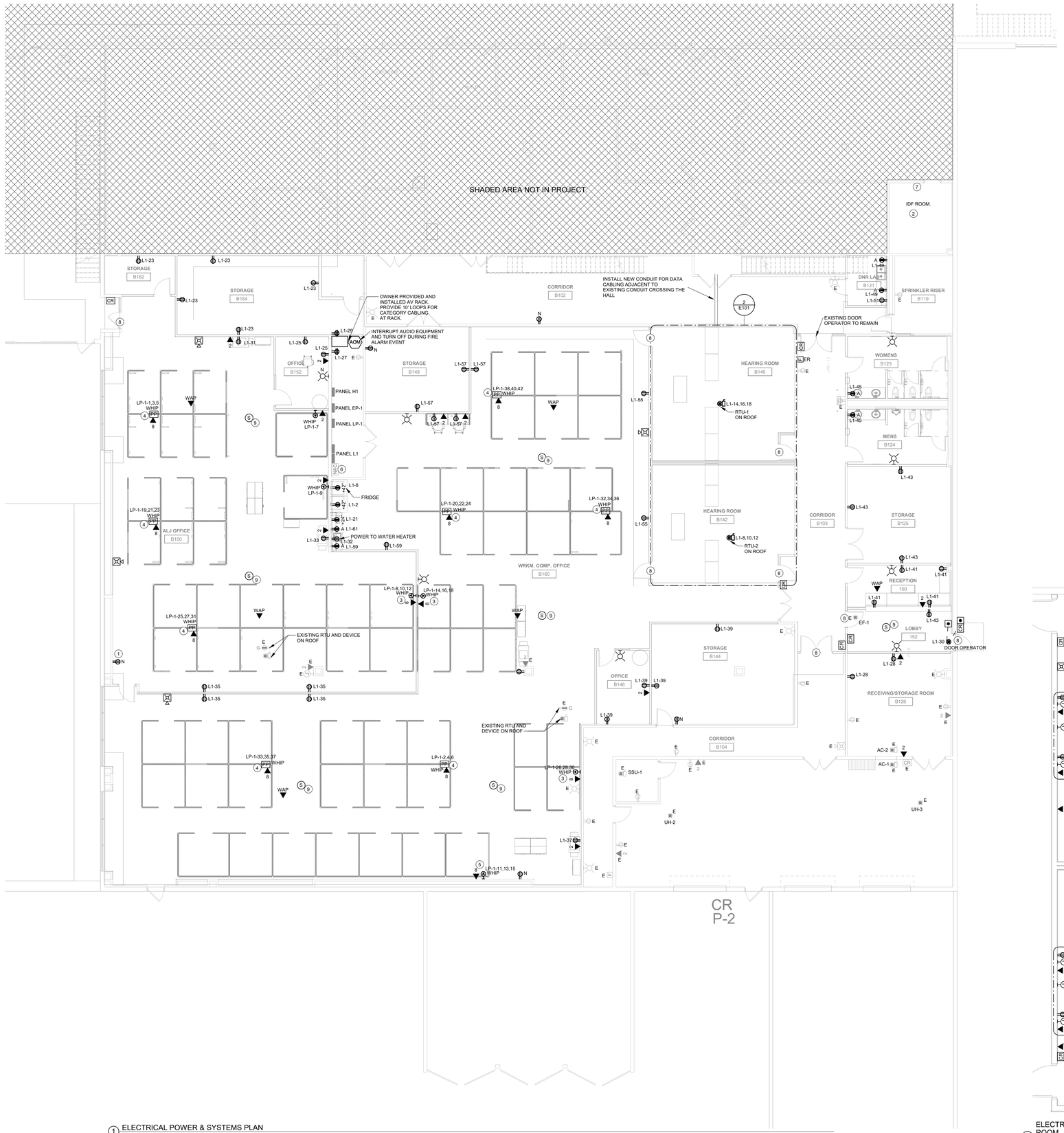
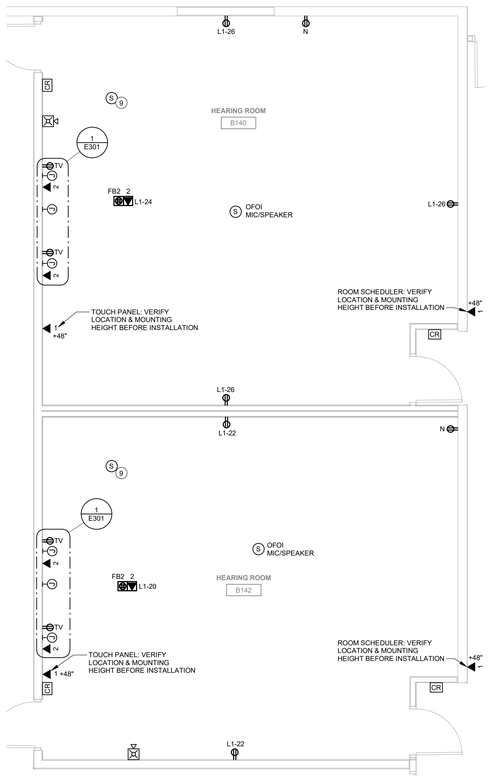


1 ELECTRICAL POWER & SYSTEMS PLAN
1/8" = 1'-0"



2 ELECTRICAL ENLARGED HEARING ROOM
1/4" = 1'-0"

POWER GENERAL NOTES

A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

B. COORDINATE ELECTRICAL REQUIREMENTS FOR MECHANICAL UNITS WITH MECHANICAL CONTRACTOR AND FINAL MECHANICAL SHOP DRAWINGS.

C. PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. COORDINATE FIRE RATED WALL PENETRATIONS AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATING.

TECH GENERAL NOTES

A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

B. PROVIDE PENETRATIONS REQUIRED FOR ROUTING CABLING AND RACEWAYS THROUGH THE BUILDING. COORDINATE FIRE RATED WALL PENETRATIONS AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATING.

C. PROVIDE J-HOOKS, BRIDLE RINGS AND OTHER ACCESSORIES REQUIRED TO SUPPORT ALL TELECOMMUNICATIONS AND SECURITY MANAGEMENT SYSTEM CABLING.

KEYNOTES (#)

1 CONNECT NEW DEVICE TO EXISTING CIRCUITED LOCATED IN EXISTING LOCATION.

2 PROVIDE 15' LOOPS OF DATA CABLING ABOVE THE CEILING IN DATA CLOSET. BUNDLE AND LABEL EACH LOOP. COORDINATE INSTALL WITH OWNER. TERMINATION AND FINAL INSTALL WILL BE COMPLETED BY OWNER.

3 FURNITURE SYSTEM WHIP CONNECTION POINT VIA WALL MOUNTED CONNECTION JUCTION BOX. COORDINATE LOCATION WITH FURNITURE PROVIDER. INSTALL (3) 120V 20A-1P CIRCUITS. (3) #12 HOT, (3) #12 NEUTRAL, (1) #12 EGC, AND (1) #12 ISOLATED EGC. INSTALL (8) DATA LOOPS ABOVE CEILING. LOOPS TO INCLUDE THE FOLLOWING (4) 25' LOOPS, (2) 35' LOOPS, AND (2) 45' LOOPS. BUNDLE AND TAG SEPERATELY FOR EACH LOOP.

4 FURNITURE SYSTEM WHIP CONNECTION POINT VIA CEILING MOUNTED CONNECTION. POWER POLES PROVIDED WITH FURNITURE UNIT. PROVIDE CONDUCTORS DOWN POWER POLE TO FURNITURE CONNECTION POINT. COORDINATE LOCATION WITH FURNITURE PROVIDER. INSTALL (3) 120V 20A-1P CIRCUITS. (3) #12 HOT, (3) #12 NEUTRAL, (1) #12 EGC, AND (1) #12 ISOLATED EGC. INSTALL (8) DATA LOOPS ABOVE CEILING. LOOPS TO INCLUDE THE FOLLOWING (4) 25' LOOPS, (2) 35' LOOPS, AND (2) 45' LOOPS. BUNDLE AND TAG SEPERATELY FOR EACH LOOP.

5 FURNITURE SYSTEM WHIP CONNECTION POINT VIA WALL MOUNTED CONNECTION JUCTION BOX. COORDINATE LOCATION WITH FURNITURE PROVIDER. INSTALL (3) 120V 20A-1P CIRCUITS. (3) #12 HOT, (3) #12 NEUTRAL, (1) #12 EGC, AND (1) #12 ISOLATED EGC. INSTALL (8) DATA LOOPS ABOVE CEILING. LOOPS TO INCLUDE THE FOLLOWING (2) 35' LOOPS, (2) 45' LOOPS, (2) 55' LOOPS, AND (2) 70' LOOPS. BUNDLE AND TAG SEPERATELY FOR EACH LOOP.

6 EXISTING NOTIFIER FIRE ALARM SYSTEM. FIRE ALARM PANEL IS NFS2-640/E INSTALLED NEAR THE FRONT ENTRACE IN THE BUILDING. INSTALL NEW DEVICES ON EXISTING SYSTEM.

7 EXTEND EXISTING 120V CIRCUIT FOR ACCESS CONTROL PANEL TO NEW PANEL. COORDINATE LOCATION AND INSTALLATION WITH OWNER.

8 INSTALL (2) 1/2" FLEXIBLE CONDUITS TO THE DOOR FRAME ON BOTH SIDES OF THE DOOR FOR PATHWAYS TO THE STRIKE AND HINGE FOR OWNER PROVIDED ACCESS CONTROL INTEGRATION.

9 INSTALL EMERGENCY ANNOUNCEMENT SYSTEM IN RENOVATED AREA. INSTALL SPEAKERS AND EXTEND EXISTING SYSTEM. VERIFY LOCATION AND VOLUME LEVELS WITH OWNER.

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Key Plan

Revision	Description	Date

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ELECTRICAL POWER & SYSTEMS

Sheet Number
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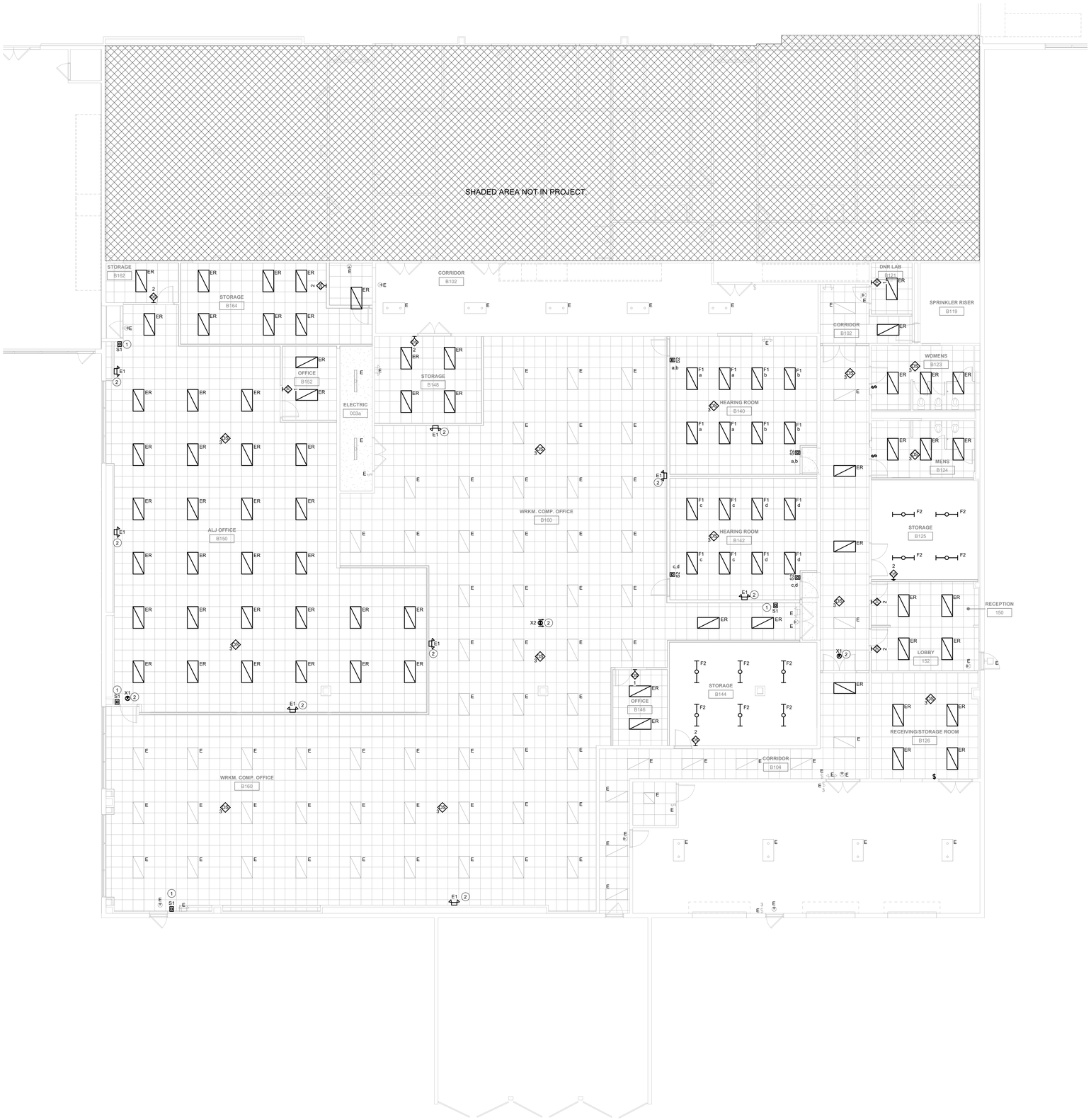

1 ELECTRICAL LIGHTING PLAN
1/8" = 1'-0"

LIGHTING GENERAL NOTES

A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

KEYNOTES (#)

1 REWIRE FIXTURES IN SPACES AS NECESSARY FOR THE NEW SWITCH LOCATIONS SO THE ENTIRE SPACE SWITCHES ON/OFF WITH NEW SWITCHES.

2 PROVIDE POWER TO EMERGENCY FIXTRUES FROM CONSTANT HOT LIGHTING CIRCUIT IN SPACE.

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Sheet Name

ELECTRICAL LIGHTING

Sheet Number

E201

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FLOORBOX SCHEDULE

SCHEDULE NOTES:

1. ALL FLOORBOXES SHALL BE UL OR SIMILARLY LISTED, AND SHALL MEET OR EXCEED UL SCRUB WATER EXCLUSION REQUIREMENTS.

2. REFER TO ARCHITECTURAL DOCUMENTS INCLUDING FLOOR FINISH PLANS, FURNITURE PLANS, AND STRUCTURAL PLANS FOR EXACT INSTALLATION LOCATION, DETAILS AND COORDINATION REQUIREMENTS. IF ARCHITECTURAL DRAWINGS DO NOT CLARIFY EXACT INSTALL LOCATION, AND ISSUE AND RFI FOR ARCHITECT TO SPECIFICALLY CLARIFY PRIOR TO BOX ROUGH-IN.

3. UNLESS OTHERWISE NOTED. ALL FLOOR BOXES SHALL BE INSTALLED PER MANUFACTURER INSTALLATION GUIDELINES WITH COVERPLATE FLUSH WITH FINISHED FLOOR. COORDINATE COVER SELECTION TYPE AND INSTALLATION ROUGH-IN REQUIREMENTS WITH ARCHITECTURAL FINISH AND GRADING PLANS.

4. REFER TO SYSTEMS DRAWINGS AND DETAILS FOR ADDITIONAL REQUIREMENTS REGARDING A/V CABLES,DEVICES, AND INSTALLATION.

TYPE	MANUFACTURER	MODEL	DESCRIPTION	FLOOR TYPE / BOX STYLE	DEVICE QUANTITIES			APPROVED EQUALS
					DUPLEX RECEPTACLES	DATA JACKS	A/V	
FB2	LEGRAND WIREMOLD	EFB6####	6 GANG RECESSED SQUARE FLOOR BOX. DIE CAST ALUMINUM POWDER COAT FINISH COVER PLATE. ARCHITECT TO SELECT BOX FINISH FROM MANUFACTURER STANDARD DURING SUBMITTAL PROCESS. CONFIGURABLE INTERNAL DEVICE MODULES. AUTO CLOSE CABLE MANAGEMENT EGRESS DOORS. INSTALL (1) 3/4" CONDUIT FOR POWER AND (1) 1" FOR DATA CABLING AND (1) 1 1/2" FOR AV. ACCEPTS STANDARD SINGLE GANG DEVICES. INCLUDE WITH ALL REQUIRED ACCESSORIES, FACEPLATES, AND APPURTENANCES FOR COMPLETE INSTALLATION OF DEVICES AS SCHEDULED.	WOOD, CONCRETE / RECESSED	2	2	OFOI	HUBBELL, OR AS PRE-APPROVED BY ENGINEER

EQUIPMENT CONNECTION SCHEDULE

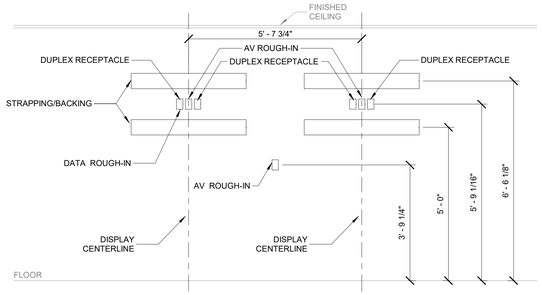
GENERAL NOTES:

1. INCLUDE AUXILLIARY CONTACTS AND LOW-VOLTAGE WIRING TO AUXILLIARY EQUIPMENT THAT RUNS IN TANDEM WITH EQUIPMENT, (I.E. 120V DAMPERS WITH 480V MOTORS).

ABBREVIATIONS:

1	NEMA 1 ENCLOSURE	INT	INTEGRAL WITH EQUIPMENT FROM FACTORY
3R	NEMA 3R ENCLOSURE	MMS	MANUAL MOTOR STARTER WITH FUSES
4	NEMA 4 ENCLOSURE	NFD	NON-FUSED DISCONNECT SWITCH, HEAVY...
4X	NEMA 4X ENCLOSURE	RD	RETURN AIR DUCT DETECTOR
BO	PROVIDED BY OTHERS	RSR	NORMALLY OPEN
CB	CIRCUIT BREAKER IN PANEL	SD	SUPPLY AIR DUCT DETECTOR
CSD	COMBINATION STARTER/DISCONNECT	SSP	START/STOP PUSHBUTTON WITH PILOT
CP	CORD AND PLUG PROVIDED WITH UNIT	SS	START/STOP PUSHBUTTON
ECB	ENCLOSED CIRCUIT BREAKER	ST	SHUNT TRIP
FAR	FIRE ALARM SHUTDOWN RELAY	TOR	TIME DELAY OFF RELAY
FDS	FUSED DISCONNECT SWITCH, HEAVY DUTY	TS	TOGGLE SWITCH WITH PLUG FUSE
GF	GROUND FAULT CIRCUIT INTERRUPTION	VFD	VARIABLE FREQUENCY DRIVE
HOA	HAND-OFF-AUTO		

TAG	ELECTRICAL CHARACTERISTICS		ELECTRICAL CHARACTERISTICS			DISCONNECT				REMARKS
	VOLTAGE	PHASE	MOTOR HP	KW	MCA	TYPE	SIZE (AMPS)	NEMA RATING	FUSE SIZE (AMPS)	
RTU-1	208 V	3			24	INT				RTU PROVIDED WITH INTEGRAL DISCONNECT AND MAINTENANCE RECEPTACLE.
RTU-2	208 V	3			24	INT				RTU PROVIDED WITH INTEGRAL DISCONNECT AND MAINTENANCE RECEPTACLE.



NOTES:

A. PROVIDE SINGLE GANG JUNCTION BOX FOR ALL AV ROUGH-IN AND DATA LOCATIONS. CABLING IS BY OWNER AND WILL BE FISHED THROUGH THE WALL TO ACCESSIBLE CEILING.
B. PROVIDE SHEET METAL STRAPPING MIN 45" WIDE BY 6" TALL OR 1/2" PLYWOOD BACKING 45" WIDE BY 24" TALL CENTERED ON DISPLAY.
C. COORDINATE EXACT LOCATION OF ROUGH-INS WITH OWNER PRIOR TO INSTALLATION.
D. DISPLAY, MOUNT, AND INSTALLATION IS BY OWNER.

DISPLAY ROUGH-IN DETAIL - H366

1 DISPLAY ROUGH-IN DETAIL - H366
NOT TO SCALE

LIGHTING CONTROLS SCHEDULE

NOTES:

1. ALL DEVICES SHALL BE U.L. OR SIMILARLY LISTED.
2. ALL DEVICES PROVIDED WITH MANUFACTURER LIMITED 5 YEAR WARRANTY.
3. PROVIDE LIGHTING CONTROLS WITH MANUFACTURER COMPLIANT POWER PACKS AND LOW VOLTAGE ROOM CONTROLLERS IN QUANTITY REQUIRED TO INSTALL A COMPLETE AND OPERATIONAL SYSTEM. MANUFACTURER OR MANUFACTURERS REP TO PROVIDE DEVICE QUANTITIES, LAYOUTS AND TYPICAL WIRING DETAILS DURING SHOP SUBMITTAL PROCESS. PROVIDE DIMMING COMPATIBLE DEVICES WHERE DIMMING CONTROLS ARE SHOWN. COORDINATE DIMMING TYPE WITH LIGHTING FIXTURES SHOWN. REFER TO LUMINAIRE SCHEDULE FOR FIXTURE DIMMING TYPE.
4. WHERE WIRELESS LIGHTING CONTROLS ARE PROVIDED. POWERPACKS SHALL BE PROVIDED AND INSTALLED WITHIN MANUFACTURER RECOMENDED DISTANCES TO ENSURE CONTROLLER OPERATION.
5. INSTALL LOW VOLTAGE POWER PACKS AND ROOM CONTROLLERS ABOVE NEARBY ACCESSIBLE CEILING TILES OR IN MECHANICAL/STORAGE SPACES ADJACENT TO CONTROLLED FIXTURES. DO NOT INSTALL POWERPACKS EXPOSED IN COMMON SPACES OR IN INACCESSIBLE LOCATIONS.
6. PROVIDE FACTORY AUTHORIZED REPRESENTATIVE TO DEMONSTRATE TYPICAL INSTALLATION AND COMMISSIONING OF EQUIPMENT.
7. WHERE APPROVED EQUAL MANUFACTURER PRODUCTS SENSOR COVERAGE OR LOAD RATINGS DIFFER FROM BASIS OF DESIGN, CONTRACTOR AND MANUFACTURER ARE RESPONSIBLE FOR PROVIDING ADDITIONAL DEVICES AS NECCESARY TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.
8. ETD'S AND ALL EMERGENCY LIGHTING CONTROLS COMPONENTS SHALL BE TESTED AND LISTED AS COMPATIBLE BY MANUFACTURER WITH NORMAL LIGHTING CONTROLS IN ALL AREAS.
9. UNLESS INDICATED OTHERWISE, LIGHTING CONTROL SCHEMES/OPERATION SHALL BE AS FOLLOWS:

CORRIDORS, VESTIBULES, COMMON SPACES:	SENSORS PROGRAMMED FOR OCCUPANCY MODE, AUTOMATIC ON/OFF OPERATION, 20 MINUTES MINNIMUM, 30 MINUTES MAXIMUM. DIMMING CONTROL OF FIXTURES WITHIN DAYLIGHT ZONES SHALL BE BY ALWAYS ON DAYLIGHT SENSOR.
ALL OTHER SPACES	SENSORS PROGRAMMED FOR VACANCY MODE, MANUAL ON/AUTOMATIC OFF OPERATION 20 MINUTES MINNIMUM, 30 MINUTES MAXIMUM.DIMMING CONTROL OF FIXTURES WITHIN DAYLIGHT ZONES SHALL BE BY ALWAYS ON DAYLIGHT SENSOR.

DESIGNED BY: BC

TYPE	DESCRIPTION	ELECTRICAL	MOUNTING	SENSOR TYPE	COVERAGE	APPROVED MANUFACTURERS
S1	SINGLE ZONE CONTROL LIGHT SWITCH. NON-DIMMING LIGHTING CONTROL. LIGHTING CONTROLS NETWORK COMPATIBLE DEVICE. ROOM CONTROLLER COMPATIBLE. ENABLING MULTI-ZONE SWITCHING CONTROL AND MULTI-SOURCE DIMMING. PROVIDED WITH MANUFACTURER DECORATIVE WALLPLATE. DEVICE FINISH MATCHING WIRING DEVICES SPEC.	LOW VOLTAGE	WALL SWITCH / SINGLE GANG	N/A	N/A	HUBBELL, CRESTRON, ACUITY, WATTSTOPPER, AS APPROVED BY ENGINEER.
S2	TWO ZONE CONTROL LIGHT SWITCH. DIMMING LIGHTING CONTROL. LIGHTING CONTROLS NETWORK COMPATIBLE DEVICE. ROOM CONTROLLER COMPATIBLE. ENABLING MULTI-ZONE SWITCHING CONTROL AND MULTI-SOURCE DIMMING. PROVIDED WITH MANUFACTURER DECORATIVE WALLPLATE. DEVICE FINIS	120/277V / 0-10V DIMMING	WALL SWITCH / SINGLE GANG	N/A	N/A	LUTRON, ACUITY, CRESTRON, WATTSTOPPER, AS APPROVED BY ENGINEER.
OS 1	WALL SWITCH OCCUPANCY SENSOR. DEVICE FINISH MATCHING WIRING DEVICES SPEC. RATED FOR MIN 1/6 HP MOTOR. INTEGRAL AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION. 8-30 MINUTE TIMER SETTINGS.	120V / 0-10V DIMMING	WALL SWITCH / SINGLE GANG	DUAL-TECH	1000 SQ FT / 180 DEG	HUBBELL, CRESTRON, ACUITY, GREENGATE, AS APPROVED BY ENGINEER.
OS 2	WALL SWITCH OCCUPANCY SENSOR. DEVICE FINISH MATCHING WIRING DEVICES SPEC. RATED FOR MIN 1/6 HP MOTOR. INTEGRAL AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION. 8-30 MINUTE TIMER SETTINGS.	120V	WALL SWITCH / SINGLE GANG	DUAL-TECH	1000 SQ FT / 180 DEG	HUBBELL, CRESTRON, ACUITY, WATTSTOPPER, GREENGATE, AS APPROVED BY ENGINEER.
OS 3	CEILING MOUNTED OCCUPANCY/VACANCY SENSOR. WHITE FINISH. AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION. 8-30 MINUTE TIMER SETTINGS. INDOOR USE.	LOW VOLTAGE	CEILING / 8'-12" MH	DUAL-TECH	2000 SQ FT / 360 DEG	HUBBELL, CRESTRON, ACUITY, WATTSTOPPER, GREENGATE, AS APPROVED BY ENGINEER.

LIGHTING FIXTURE SCHEDULE

NOTES:

1. ALL FIXTURES SHALL BE U.L. OR SIMILARLY LISTED.
2. INCLUDE A MINIMUM 5 YEAR WARRANTY FOR LIGHTING FIXTURES, WHERE NOT OTHERWISE SPECIFIED.
3. REFER TO ARCHITECTURAL DOCUMENTS FOR EXACT MOUNTING LOCATIONS, DETAILS, AND CONFIGURATIONS OF ALL LUMINAIRES. IF ARCHITECTURAL DRAWINGS DO NOT CLARIFY EXACT MOUNTING LOCATION OR DETAIL, ISSUE AN RFI FOR ARCHITECT TO SPECIFICALLY CLARIFY PRIOR TO FIXTURE ROUGH-IN.
4. VERIFY COMPATIBILITY OF LIGHT FIXTURES WITH CEILING MATERIAL, ADJACENT CONSTRUCTION, AND ADJACENT FINISHES PRIOR TO SHOP DRAWINGS SUBMITTAL NOTIFY THE ARCHITECT OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.
5. CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS HARDWARE NECESSARY TO INSTALL AND SUPPORT THE LUMINAIRES.
6. AIM AND TARGET ADJUSTABLE INTERIOR AND EXTERIOR LIGHT FIXTURES UNDER THE OBSERVATION AND IN COMPLIANCE WITH RECOMMENDATIONS OF THE ARCHITECT. INCLUDE LABOR AND MATERIAL COSTS MADE NECESSARY BY THIS REQUIREMENT.
7. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND FILLING OUT ALL UTILITY REBATE FORMS FOR OWNER.

DESIGNED BY: BC

TYPE	MANUFACTURER	MODEL	DESCRIPTION	FINISH	LUMENS	CRI	SOURCE-CCT	VOLTAGE	LOAD-VA	APPROVED EQUALS
E1	DUAL-LITE	LZ-2-I-03L	EMERGENCY LIGHT, WALL OR CEILING MOUNTED, THERMOPLASTIC HOUSING, 2 LED ADJUSTABLE LAMP HEADS, LEAD-CALCIUM MAINTENANCE FREE BATTERY, SELF-DIAGNOSTICS	WHITE	-	-	LED	277 V	2 VA	SURE-LITES, LIGHTALARMS, LITHONIA, EMERGENSEE
F1	FINELITE	HPR-SL-ANR-2X4-H-940-DCO-96LG-277V-SC-FC-10%-C1-96LG	RECESSED TROFFER 2X4, ANGLED NARROW RAIL, BACK-LIT, 5000 LUMEN OUTPUT, L70 OF 100,000+ HRS	WHITE	5000	90	4000K LED	120 V	40 VA	AS APPROVED BY ENGINEER
F2	LITHONIA	CLX-L48-4000LM-SEF-RDL-40K-90CRI	4' LINEAR UTILITY STRIP FIXTURE, 4000LM, 40K, 90CRI, WHITE FINISH, CABLE MOUNTED TO BE ADJACENT TO BOTTOM OF JOIST.	WHITE	3000	80	4000K LED	120 V	42 VA	COOPER, CURRENT, CREE, HE WILLIAMS
X1	DUAL-LITE	SE-S-R-W-E-I	EXIT SIGN, UNIVERSAL MOUNTING. SINGLE FACE, BATTERY BACKUP, SELF-DIAGNOSTIC	WHITE	-	-	RED LED	120 V	5 VA	SURE-LITES, LIGHTALARMS, LITHONIA, EMERGENSEE
X2	DUAL-LITE	SE-D-R-W-E-I	EXIT SIGN, UNIVERSAL MOUNTING. DUAL FACE, BATTERY BACKUP, SELF-DIAGNOSTIC	WHITE	-	-	RED LED	120 V	5 VA	SURE-LITES, LIGHTALARMS, LITHONIA, EMERGENSEE

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Key Plan

Revision	Description	Date

OPN Project No.
24816000

Sheet Issue Date
100% CONSTRUCTION DRAWING SET 8/16/24

Sheet Name
ELECTRICAL SCHEDULES & DETAILS

Sheet Number
E301

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ALL PANELS ARE EXISTING. REUSE EXISTING BREAKERS AS APPLICABLE FOR NEW BRANCH CIRCUITS

BRANCH PANEL: EP-1

LOCATION: ELECTRIC 003a
SUPPLY FROM:
MOUNTING: SURFACE
ENCLOSURE: TYPE 1
VOLTAGE: 120/208 WYE
PHASES: 3
WIRES: 4
SCCR RATING: EXISTING
MAINS TYPE: MCB
MAINS RATING: 225 A
MCB RATING: 225 A

NOTES:

CIRCUIT DESCRIPTION	P		AMP	CKT NO	A		B		C		CKT NO	AMP		P	CIRCUIT DESCRIPTION
(E) E.F. MAIL ROOM	1	--	20 A	1	0	0					2	20 A	--	1	(E) Y4V1 ROOFTOP UNIT
(E) E.F. MAIL ROOM	1	--	20 A	3			0	0			4	20 A	--	1	(E) Y4V1 ROOFTOP UNIT
(E) E.F. MAIL ROOM	1	--	20 A	5					0	0	6	20 A	--	1	(E) Y4V1 ROOFTOP UNIT
(E) VAV S. CORRIDOR	1	--	20 A	7	0	0					8	20 A	--	1	(E) AIR CURTAIN MAIL ROOM
(E) VAV S. CORRIDOR	1	--	20 A	9			0	0			10	20 A	--	1	(E) AIR CURTAIN MAIL ROOM
(E) VAV S. CORRIDOR	1	--	20 A	11					0	0	12	20 A	--	1	(E) AIR CURTAIN MAIL ROOM
(E) TRASH COMPACTOR	1	--	20 A	13	0	0					14	20 A	--	1	(E) Y4C1 ROOFTOP UNIT
(E) TRASH COMPACTOR	1	--	20 A	15			0	0			16	20 A	--	1	(E) Y4C1 ROOFTOP UNIT
(E) TRASH COMPACTOR	1	--	20 A	17					0	0	18	20 A	--	1	(E) Y4C1 ROOFTOP UNIT
(E) MEZZANINE HEATER	1	--	20 A	19	0	0					20	20 A	--	1	(E) DOCK LIGHTING
(E) MEZZANINE HEATER	1	--	20 A	21			0				22				
(E) MEZZANINE HEATER	1	--	20 A	23					0		24				
				25							26				
				27							28				
				29							30				
				31							32				
				33							34				
				35							36				
(E) TRANSFORMER LP-1	1	--	20 A	37	0						38				
(E) TRANSFORMER LP-1	1	--	20 A	39			0				40				
(E) TRANSFORMER LP-1	1	--	20 A	41					0		42				
					0 VA		0 VA		0 VA						
					0 A		0 A		0 A						

LEGEND:
"G" INDICATES GFCI TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP
"F" INDICATES RED LOCK-ON HASP, "E" INDICATES EXISTING CIRCUIT

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
				TOTAL CONN. LOAD:	0 VA
				TOTAL EST. DEMAND:	0 VA
				TOTAL CONN.:	0 A
				TOTAL EST. DEMAND:	0 A

NOTES:

BRANCH PANEL: H1

LOCATION: ELECTRIC 003a
SUPPLY FROM:
MOUNTING: SURFACE
ENCLOSURE: TYPE 1
VOLTAGE: 480/277 WYE
PHASES: 3
WIRES: 4
SCCR RATING: EXISTING
MAINS TYPE: MCB
MAINS RATING: 200 A
MCB RATING: 200 A

NOTES:

CIRCUIT DESCRIPTION	P		AMP	CKT NO	A		B		C		CKT NO	AMP		P	CIRCUIT DESCRIPTION
				1	0	0					2				
(E) EWH-1	3	--	20 A	3			0	0			4	20 A	--	3	(E) XFMR T1
				5					0	0	6				
				7	0	--					8	--	--	1	SPACE
(E) RTU-1	3	--	20 A	9			0	--			10	--	--	1	SPACE
				11					0	--	12	--	--	1	SPACE
				13	0	--					14	--	--	1	SPACE
(E) RTU-2	3	--	20 A	15			0	--			16	--	--	1	SPACE
				17					0	--	18	--	--	1	SPACE
(E) LIGHTING	1	--	20 A	19	0	--					20	--	--	1	SPACE
(E) LIGHTING	1	--	20 A	21			0	--			22	--	--	1	SPACE
SPACE	1	--	--	23					--	--	24	--	--	1	SPACE
SPACE	1	--	--	25	--	--					26	--	--	1	SPACE
SPACE	1	--	--	27			--	--			28	--	--	1	SPACE
SPACE	1	--	--	29					--	--	30	--	--	1	SPACE
SPACE	1	--	--	31	--	--					32	--	--	1	SPACE
SPACE	1	--	--	33			--	--			34	--	--	1	SPACE
SPACE	1	--	--	35					--	--	36	--	--	1	SPACE
SPACE	1	--	--	37	--	--					38	--	--	1	SPACE
SPACE	1	--	--	39			--	--			40	--	--	1	SPACE
SPACE	1	--	--	41					--	--	42	--	--	1	SPACE
					0 VA		0 VA		0 VA						
					0 A		0 A		0 A						

LEGEND:
"G" INDICATES GFCI TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP
"F" INDICATES RED LOCK-ON HASP, "E" INDICATES EXISTING CIRCUIT

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
				TOTAL CONN. LOAD:	0 VA
				TOTAL EST. DEMAND:	0 VA
				TOTAL CONN.:	0 A
				TOTAL EST. DEMAND:	0 A

NOTES:

BRANCH PANEL: L1

LOCATION: ELECTRIC 003a
SUPPLY FROM:
MOUNTING: SURFACE
ENCLOSURE: TYPE 1
VOLTAGE: 120/208 WYE
PHASES: 3
WIRES: 4
SCCR RATING: EXISTING
MAINS TYPE: MLO
MAINS RATING: 225 A
MCB RATING: 225 A

NOTES:

CIRCUIT DESCRIPTION	P		AMP	CKT NO	A		B		C		CKT NO	AMP		P	CIRCUIT DESCRIPTION
(E) RECEPTACLE	1	--	20 A	1	0	1200					2	20 A	G	1	FRIDGE (GFCI BREAKER)
(E) RECEPTACLE	1	--	20 A	3			0	0			4	20 A	--	1	(E) LIGHTING
(E) RECEPTACLE	1	--	20 A	5					0	1200	6	20 A	G	1	FRIDGE (GFCI BREAKER)
(E) RECEPTACLE	1	--	20 A	7	0	2306					8				
(E) RECEPTACLE	1	--	20 A	9			0	2306			10	30 A		3	RTU-2
(E) RECEPTACLE	1	--	20 A	11					0	2306	12				
(E) RECEPTACLE	1	--	20 A	13	0	2306					14				
(E) RECEPTACLE	1	--	20 A	15			0	2306			16	30 A		3	RTU-1
(E) RECEPTACLE	1	--	20 A	17					0	2306	18				
(E) RECEPTACLE	1	--	20 A	19	0	360					20	20 A		1	RECEPTACLE
MICROWAVE (GFCI BREAKER)	1	G	20 A	21			1600	360			22	20 A		1	RECEPTACLE
RECEPTACLE	1		20 A	23					900	360	24	20 A		1	RECEPTACLE
RECEPTACLE	1		20 A	25	360	540					26	20 A		1	RECEPTACLE
RECEPTACLE	1		20 A	27			360	360			28	20 A		1	RECEPTACLE
RECEPTACLE	1		20 A	29					360	192	30	20 A		1	DOOR OPERATOR
RECEPTACLE	1		20 A	31	180	180					32	20 A	G	1	WATER HEATER
RECEPTACLE	1		20 A	33			180				34				
RECEPTACLE	1		20 A	35					720		36				
RECEPTACLE	1		20 A	37	180						38				
RECEPTACLE	1		20 A	39			720				40				
RECEPTACLE	1		20 A	41					720		42				
RECEPTACLE	1		20 A	43	720						44				
RECEPTACLE	1		20 A	45			360				46				
				47							48				
RECEPTACLE	1		20 A	49	360						50				
RECEPTACLE	1		20 A	51			180				52				
(E) LIGHTING	1	--	20 A	53					0		54				
RECEPTACLE	1		20 A	55	360						56				
RECEPTACLE	1		20 A	57			900				58				
RECEPTACLE	1		20 A	59					360		60				
RECEPTACLE	1		20 A	61	180						62				
(E) COOLER & HEATER	1	--	20 A	63			0				64				
SPACE	1	--	--	65					--		66				
SPACE	1	--	--	67	--						68				
SPACE	1	--	--	69			--				70				
SPACE	1	--	--	71					--		72				
SPACE	1	--	--	73	--	--					74	--	--	1	SPACE
SPACE	1	--	--	75			--	--			76	--	--	1	SPACE
SPACE	1	--	--	77					--	--	78	--	--	1	SPACE
SPACE	1	--	--	79	--	--					80	--	--	1	SPACE
SPACE	1	--	--	81			--	--			82	--	--	1	SPACE
SPACE	1	--	--	83					--	--	84	--	--	1	SPACE
					9,231 VA		9,631 VA		9,423 VA						
					77 A		81 A		79 A						

LEGEND:
"G" INDICATES GFCI TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP
"F" INDICATES RED LOCK-ON HASP, "E" INDICATES EXISTING CIRCUIT

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
POWER	14,026 VA	100.00%	14,026 VA		
RECEPTACLE	14,260 VA	85.06%	12,130 VA	TOTAL CONN. LOAD:	28,286 VA
				TOTAL EST. DEMAND:	26,156 VA
				TOTAL CONN.:	79 A
				TOTAL EST. DEMAND:	73 A

NOTES:

BRANCH PANEL: LP-1

LOCATION: ELECTRIC 003a
SUPPLY FROM:
MOUNTING: SURFACE
ENCLOSURE: TYPE 1
VOLTAGE: 120/208 WYE
PHASES: 3
WIRES: 4
SCCR RATING: EXISTING
MAINS TYPE: MCB
MAINS RATING: 225 A
MCB RATING: 225 A

NOTES:

CIRCUIT DESCRIPTION	P		AMP	CKT NO	A		B		C		CKT NO	AMP		P	CIRCUIT DESCRIPTION
FURNITURE FEED	1		20 A	1	360	360					2	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	3			360	360			4	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	5					360	360	6	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	7	360	360					8	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	9			360	360			10	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	11					360	360	12	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	13	360	360					14	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	15			360	360			16	20 A		1	FURNITURE FEED
SPARE	1	--	20 A	17					0	360	18	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	19	360	360					20	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	21			360	360			22	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	23					360	360	24	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	25	360	360					26	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	27			360	360			28	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	29					360	360	30	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	31	360	360					32	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	33			360	360			34	20 A		1	FURNITURE FEED
FURNITURE FEED	1		20 A	35					360	360	36	20 A		1	FURNITURE FEED
SPARE	1	--	20 A	37	0	360					38	20 A		1	FURNITURE FEED
SPARE	1	--	20 A	39			0	360			40	20 A		1	FURNITURE FEED
				41						360	42	20 A		1	FURNITURE FEED
					4,680 VA		4,680 VA		4,320 VA						
					39 A		39 A		36 A						

LEGEND:
"G" INDICATES GFCI TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP
"F" INDICATES RED LOCK-ON HASP, "E" INDICATES EXISTING CIRCUIT

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
RECEPTACLE	13,680 VA	86.55%	11,840 VA		
				TOTAL CONN. LOAD:	13,680 VA
				TOTAL EST. DEMAND:	11,840 VA
				TOTAL CONN.:	38 A
				TOTAL EST. DEMAND:	33 A

NOTES:

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Key Plan

Revision	Description	Date

OPN Project No
24816000

Sheet Issue Date
100% CONSTRUCTION DRAWING SET **8/16/24**

Sheet Name
ELECTRICAL PANEL SCHEDULES

Sheet Number
E302