BRANCH OFFICE #06850 - Omaha, NE **OWNER**: EDWARD JONES

k LAWRENCE GROUP

St. Louis 319 North 4th Street Suite 1000 St. Louis, Missouri 63102 (314) 231-5700

PROJECT CONTACTS

Construction Manager:	Rebekah Gray 314.515.5057 Rebekah.Gray@cushwake.com	
Leasing Coordinator:	Jacob Kalusniak 314.515.0537 Jacob.Kalusniak@cushwake.com	
Designer:	Tayler Pellhum 314.515.0107 Tayler.Pellhum@cushwake.com	
Building Owner/ Property Manager Contact:	Maddie Graeve 402.255.6527 Maddie.Graeve@npdodge.com	
Flooring Contact:	Interface Flooring Services Melanie Taylor 770.975.4801 edwardjones@interface.com https://edwardjones.guide.interface.com/global-produc	cts-standards
EDJ Logo Contact:	Metal Logos Deb Gorat 402-339-3264 deb@metallogos.com	
Brand Wall Reveal Contact:	Fry Reglet Jason Towns 1.800.237.9773 jasontowns@fryreglet.com	
Lighting Contact:	Villa Lighting Heater Wilks 314.633.0415 heather.wilks@villalighting.com	
Window Treatment Contact:	BB Commercial Solutions -Key Account Courtney Heaton 949-404-1148 Angela Carswell 949-404-1140 EDWARDJONES@BBCOMMERCIALCOLUTIONS.COM	Л
General Contractor:	To Be Determined	



GENERAL PROJECT NOTES

CONSTRUCTION MANAGER CODES.

MULTI-FA BRANCH CONCEPT:

PROJECT LOCATION

AREA OF WORK: EDWARD JONES (B) - BUSINESS PROFESSIONAL SERVICES

LOCATION MAP

SCALE: NOT TO SCALE

1. ALL ITEMS TO BE COMPLETED PER EDWARD JONES SPECIFICATIONS U.N.O.

2. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS; IF THERE ARE ANY CHANGES, REVISIONS, OR DISCREPANCIES, CONTACT

3. EXISTING AND NEW PARTITION DIMENSION MAX. TOLERANCE IS 4" UNLESS NOTED AS HOLD.

4. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL LOCAL. STATE, PROVINCIAL, NATIONAL, AND ALL OTHER APPLICABLE BUILDING

TRUE

NORTH

5. ALL NEW CONSTRUCTION AND MODIFICATIONS SHALL FULLY COMPLY WITH ADA AND BUILDING CODE ACCESSIBILITY REQUIREMENTS. 6. CONTRACTOR TO CONTACT CITY TO DETERMINE IF CHANGES ARE NEEDED TO COMPLY WITH ALL LOCAL, STATE, PROVINCIAL, AND/OR NATIONAL CODES, INCLUDING FIRE MARSHALL FOR SPRINKLER AND ALARM SYSTEMS. NOTIFY CONSTRUCTION MANAGER IF ANY DISCREPANCIES ARE FOUND OR REVISIONS ARE NEEDED.

7. CONTRACTOR MUST SATISFY ALL LANDLORD REQUIREMENTS AND ALL WORK IDENTIFIED ON TENANT'S FINAL PUNCH LIST

■ APPLICABLE CODES:

T1 DEMOLITION AND CONSTRUCTION FLOOR PLANS A1 A2 REFLECTED CEILING PLAN AND ELECTRICAL LAYOUT A3 FURNITURE AND FINISH FLOOR PLANS **INTERIOR ELEVATIONS & DOOR SCHEDULE** A4 PARTITION TYPES. MILLWORK SECTIONS & OFFICE DETAILS A5 A6 SPECIFICATIONS A7 SPECIFICATIONS **ELECTRICAL SHEETS** E0 ELECTRICAL COVER SHEET E1 ELECTRICAL DEMOLITION PLAN E2 LIGHTING PLAN E3 POWER PLAN

E4 ELECTRICAL ONE-LINE & SCHEDULES E5 ELECTRICAL SPECIFICATIONS E6 ELECTRICAL SPECIFICATIONS

PLUMBING SHEETS P1 PLUMBING DEMOLITION PLAN P2 PLUMBING PLAN

PLAN NORTH VS. TRUE NORTH PLAN NORTH IS BASED ON THE PREDOMINANT AXIS OF THE BUILDING GEOMETRY. FOR THIS PROJECT, PLAN NORTH POINTS TOWARDS THE TOP OF THE DRAWING AREA. ALL VIEWS IN THIS DRAWING SET USE PLAN NORTH AS IT'S ORIENTATION.

TRUE NORTH IS THE REAL-WORLD NORTH DIRECTION BASED ON SITE CONDITIONS. TRUE NORTH INFORMATION IS NOT USED OR PROVIDED FOR THESE DOCUMENTS.

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Project Team: GENERAL CONTRACTOR: To Be Determined

PROFESSIONAL ENGINEER: IMEG Consulting Engineers 7600 E Orchard Road, Suite 250-S Greenwood Village, CO 8011 Phone: 303.796.6000

Professional Seal:



Project Title:



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No.	Description	Date

Sheet Title:

Project Number: Sheet Number: 2024906.064 Drawn By: KBC ssue Date: October 07, 2024

CODE SUMMARY

2018 INTERNATIONAL BUILDING CODE

- 2018 INTERNATIONAL EXISTING BUILDING CODE
- 2017 NATIONAL ELECTRICAL CODE 2012 INTERNATIONAL FIRE CODE
- 2012 INTERNATIONAL MECHANICAL CODE
- 2018 INTERNATIONAL PLUMBING CODE

CONSTRUCTION TYPE: II-B - UNPROTECTED, NON-COMBUSTIBLE

OCCUPANCY GROUP: (B) BUSINESS

NUMBER OF STORIES: 1

■ SPRINKLER SYSTEM: NO

■ FIRE ALARM SYSTEM: YES

■ PROJECT AREA:

 ONE STORY BUILDING- EDJ ON LEVEL 1: 2,453 SF ■ OCCUPANT LOAD: • 2,453 SF / 150 = 17 OCCUPANTS

DRAWING INDEX

ARCHITECTURAL SHEETS COVER SHEET

MECHANICAL SHEETS M0 MECHANICAL COVER SHEET

M1 MECHANICAL DEMOLITION PLAN M2 MECHANICAL PLAN

M3 MECHANICAL & PLUMBING DETAILS M4 MECHANICAL & PLUMBING SCHEDULES

M5 MECHANICAL & PLUMBING SCHEDULES

M6 MECHANICAL & PLUMBING SPECIFICATIONS M7 MECHANICAL & PLUMBING SPECIFICATIONS

DEFERRED SUBMITTALS

IF THERE ARE MODIFICATIONS TO THE EXISTING FIRE SPRINKLER AND/OR FIRE ALARM SYSTEMS, DOCUMENTS SHALL BE SUBMITTED BY OTHERS AND BY WAY OF DEFERRED SUBMITTALS.

NOTE TO CONTRACTOR

IT IS THE CONTRACTOR'S RESPONSIBILITY TO THOROUGHLY REVIEW THE OWNER'S DESIGN INTENT DRAWINGS & NOTIFY THE ARCHITECT IMMEDIATELY WITH ANY MAJOR DISCREPENCIES. THE ARCHITECT SHALL IN NO WAY BE HELD RESPONSIBLE FOR ANY DIFFERENCES BETWEEN THE DESIGN INTENT AND ARCHITECT PROVIDED DRAWINGS.







CONSTRUCTION FLOOR PLAN SCALE: 1/8" = 1'-0"



- 1. DEMO/REWORK ANY DUCTWORK CONNECTED TO OTHER TENANTS OR COMMON AREAS OF THE BUILDING. TENANT SHOULD HAVE DEDICATED SYSTEM AND HVAC INFRASTRUCTURE.
- 2. DEMO EXISTING OUTLETS OVER 18" A.F.F.
- 3. DEMO ALL ABANDONED PIPING & VOICE/DATA WIRING
- REMOVE EXISTING ELECTRICAL POWER/EQUIPMENT AS SHOWN ON PLAN; PATCH AND REPAIR TO ACCEPT NEW FINISHES.
- 5. REMOVE ANY EXISTING IVORY/BEIGE OUTLET/SWITCH FACEPLATES AND SOCKETS; TO BE REPLACED WITH WHITE 6. REMOVE EXISTING FLOORING, WALL BASE, & FLOORING ADHESIVES THROUGHOUT. PATCH/REPAIR SUBFLOOR AND WALLS AS NEEDED TO ACCEPT NEW FINISHES. WOOD
- BASE TO BE SALVAGED FOR REUSE.
- INSTALLATION OF ALL NEW CEILING & LIGHTING AS SPECIFIED. REFER TO RCP ON SHEET A2. 8. DEMO ALL EXISTING WINDOW BLINDS/TREATMENTS THROUGHOUT. PATCH WALLS AND PREP AS NEEDED FOR NEW WINDOW TREATMENT INSTALLATION AS NOTED ON CONSTRUCTION PLAN.

DEMOLITION KEYED NOTES

- 1 REMOVE ALL EXISTING PARTITIONS/DOOR & FRAME/CASEWORK THROUGHOUT TENANT SPACE, AS SHOWN. PATCH AND REPAIR TO ACCEPT NEW FINISHES
- 2 REMOVE EXISTING SINK/ACCESSORIES AND INSTALL NEW AS SHOWN ON CONSTRUCTION PLAN. MODIFY EXISTING PLUMBING LINES AS NEEDED FOR NEW FIXTURE LOCATIONS **3** REMOVE EXISTING ANALOG THERMOSTAT
- 4 REMOVE EXISTING FLOOR OUTLETS; LEVEL, PATCH, PREP FLOOR FOR NEW FINISHES PER FINISH SCHEDULE
- ⁵ REMOVE EXISTING BUILT-IN: PREPARE FOR INSTALLATION OF NEW KITCHENETTE PER PARITION PLAN.

CONSTRUCTION NOTES

GENERAL CONDITIONS

1. SPACE TO BE DELIVERED IN AS-IS CONDITION. 2. SCOPE OF WORK SPECIFICALLY NOTED ON SHEETS A1-A5 TO SUPERCEDE GENERAL SPECIFICATIONS ON SHEETS A6-A7. CONTACT CONSTRUCTION MANAGER OF ANY DISCREPANCIES

CONCRETE / SUBFLOOR

1. ENSURE ALL FLOORING SUBSTRATES ARE CLEAN, DRY, SMOOTH, & LEVEL WITHIN 3/16" PER EVERY 10'-0", READY TO ACCEPT NEW FINISHES PER FINISH SCHEDULE 2. ROUTE NEW PLUMBING AS NEEDED PER PLANS, PREP SUBFLOOR FOR NEW FINISHES.

THERMAL & MOISTURE PROTECTION

1. INSTALL 4' LAY-IN BATT INSULATION ABOVE DROPPED CEILING AT ROOMS 102A-D.

PARTITIONS

1. VERIFY LOCATION OF ALL EXISTING DEMISING PARTITIONS. VERIFY THEY EXTEND TO THE DECK & ARE INSULATED; EXTEND & ADD INSULATION AS REQUIRED. 2. PATCH / REPAIR & PREP EXISTING PARTITIONS AS NEEDED FOR NEW FINISHES. ENSURE ALL PARTITIONS MATCH IN TEXTURE DOORS / WINDOWS

- 1. INSTALL NEW 3'-0" SOLID CORE WOOD DOORS WITH HM FRAMES THROUGHOUT AS SHOWN ON PLAN. SEE FINISH SCHEDULE ON SHEET A3 FOR SPECS.
- 2. INSTALL NEW ACCESSIBLE, LEVER-STYLE HARDWARE ON ALL INTERIOR DOORS THROUGHOUT. FINISH TO BE BRUSHED NICKEL
- 3. PROVIDE & INSTALL STOREROOM LOCKSET AT 104 & PRIVACY LOCKSET & DOOR CLOSER AT 105A AND 105B. 4. ENSURE EXISTING WINDOW FRAMES ARE IN GOOD CONDITION THROUGHOUT, REPAIR / TOUCH UP PAINT AS NEEDED.
- 5. PROVIDE & INSTALL NEW MANUAL ROLLER SHADES, WITH MATCHING FASCIA, ON ALL EXTERIOR WINDOWS. SEE FINISH SCHEDULE ON SHEET A3 FOR SPECS.

CEILING / FINISHES

- 1. REFER TO REFLECTED CEILING PLAN ON SHEET A2 FOR CEILING SCOPE OF WORK.
- 2. REFER TO FINISH PLAN AND SCHEDULE ON SHEET A3 FOR FINISH SCOPE OF WORK

CASEWORK

1. INSTALL NEW CASEWORK AS SHOWN ON PLAN AND IN KEYED NOTES

CONSTRUCTION PLAN KEYED NOTES

- (3) INSTALL THUMBTURN LOCKSET ON ENTRY DOOR. IF LOCAL CODE WILL NOT ALLOW, REFER TO SPECIFICATIONS FOR ALTERNATE. (5) INSTALL CASEWORK, ELECTRICAL, PLUMBING, APPLIANCES, AND FIXTURES AS SHOWN, INCLUDING HOOKUP TO EXISTING HOT WATER HEATER. REFER TO SHEET A4 FOR
- ELEVATIONS AND SPECIFICATIONS. OOR FRAME TO INCLUDE 18" CLEAR GLASS SIDE LIGHT AS SHOWN IN PLAN.
- $\langle 7 \rangle$ ENSURE WINDOW AND TRIM ARE CLEAN & IN LIKE NEW CONDITION; TOUCH UP WITH WHITE PAINT AS NEEDED. NEW PARTITION TO ALIGN WITH EXISTING COLUMN AS SHOWN ON PLAN.
- PAINT ELECTRICAL PANEL TO MATCH PARTITION.
- DOOR OPENER BASIS OF DESIGN: PROVIDE AND INSTALL $\langle 11 \rangle$ AUTOMATIC DOOR MFR: MOTION ACCESS OPENER AND PUSH MODEL: RAVEN, 18" LENGTH PLATES AT FRONT ENTRY COLOR: SILVER MOUNTING: TO BE MOUNTED ON INTERIOR SIDE OF DOOR. SEE BELOW FOR DOOR. PULL-SIDE RIGHT-HAND MOUNT BASIS OF DESIGN TO BE NOTE: FOR WARRANTY, PROVIDE BRANCH NUMBER, ADDRESS, INSTALLED. INSTALL RAVEN SERIAL NUMBER, MODEL NUMBER, AND INSTALLATION DUPLEX OUTLET ABOVE DATE. WEB: https://www.motionaccess.net/store/pc/ ENTRY DOOR (SEE SPEC MAR-Raven-Swing-Operator-207p2307.htm FOR REQUIREMENTS).

ALTERNATE SCOPE NOTES 🐼

- GC TO PROVIDE SEPARATE, BROKEN-OUT COST IN BID FOR ALTERNATES LISTED BELOW.
- (1) INSTALL/BLOW-IN INSULATION IF NOT IN PLACE. PATCH, REPAIR, & PREP PARTITIONS AS NEEDED FOR NEW FINISHES
- (TO BE 100% OUT-OF-POCKET TO THE FA) INSTALL MAGIC GLASS WALLS AND GLASS DOORS AS SPECIFIED BY THE FINANCIAL ADVISOR.

 \boxtimes

LANDLORD SCOPE OF WORK

FOR REFERENCE IN LEASE AGREEMENT (- NOT TO BE INCLUDED IN GC'S SCOPE) LANDLORD TO COMPLETE ALL INDICATED SCOPE OF WORK PRIOR TO DELIVERY OF SPACE OR ACCORDING TO LEASE TERMS. LANDLORD TO ENSURE ALL COMPLETED WORK IS DONE TO MEET ADA AND BUILDING CODE REQUIREMENTS.

A REPLACE EXISTING ENTRYWAY DOORS TO MEET ADA COMPLIANCY.

GRAPHIC LEGEND GENERAL DOOR NOTES c==== DEMO WALL NEW DOOR/ DOOR EXISTING WALL NEW WALL EXISTING DOOR/ 🔚 🛛 DOOR IDENTIFICATION NEW INSULATED WALL ***** EXISTING TENANT SEPARATION WALL PARTITION TYPE \longrightarrow DIRECTION. INDICATOR -SEE SHEET A4 NEW TENANT SEPARATION WALL **ELEVATION / DETAIL** $\begin{pmatrix} x \\ xx \end{pmatrix}$ SUPPLY REGISTER, FLOOR



INDICATOR

7. DEMO ALL EXISTING LAY-IN CEILING GRID/TILE, LAY-IN LIGHTING, GYPSUM CEILING, RECESSED DOWNLIGHTS, AND SPEAKERS THROUGHOUT TENANT SPACE, PREPARE FOR

Project Title:

PUSH PLATES BASIS OF DESIGN: MFR: MOTION ACCESS MODEL: (1) EXTERIOR MATRIX WIRELESS, 4 1/2" SQUARE, WALL-MOUNTED, AND (1) INTERIOR MATRIX WIRELESS. 4 1/2" SQUARE WALL-MOUNTED MOUNTING: 48" AFF FROM **CENTER OF PUSH PLATE** WEB: https://www.motionaccess.net/store/pc/ MAX-KIT-S1-Push-Plt-Kit-2-S1-2-SBT-1-R-205p2298.htm

HAND-ACTIVATED DOOR OPENING HARDWARE, HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE. HARDWARE SHALL BE CENTERED BETWEEN 30 AND 44 INCHES ABOVE THE FLOOR. LATCHING AND LOCKING DOORS THAT ARE HAND-ACTIVATED SHALL BE OPERABLE BY LEVER-TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS, U-SHAPED HANDLES OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE. LOCKED EXIT DOORS SHALL OPERATE IN EGRESS

. DOORS SHALL HAVE A MAXIMUM OPENING FORCE OF 5 LBF. THE FLOOR OR LANDING AT DOORS SHALL NOT BE MORE THAN 1/2 INCH LOWER THAN THE THRESHOLD OF THE DOORWAY. CHANGE IN LEVEL BETWEEN 1/4 INCH AND 1/2 INCH SHALL BE BEVELED WITH A SLOPE NO GREATER THAN ONE UNIT VERTICAL IN 2 UNITS HORIZONTAL (50-PERCENT SLOPE).



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Description	Date
	Description

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Project Number: Sheet Number 2024906.064 Drawn By: KBC Issue Date: October 07, 2024







BRANCH TO BE LOW-VOLTAGE PREWIRED GC TO CONTACT EDWARD JONES BRANCH INSTALL AT BRINSTALL@EDWARDJONES.COM WHEN PROJECT IS READY FOR LOW VOLTAGE PRE-WIRE.





- 2. INSTALL NEW 2'X2' ACOUSTICAL CEILING GRID & TILES THROUGHOUT. REFER TO PLAN FOR CEILING HEIGHTS. 3. EXISTING DRYWALL CEILING TO REMAIN IN 100A AND 100. PATCH AND REPAIR AS NEEDED TO ACCOMODATE NEW LAYOUT. INSTALL NEW DRYWALL CEILING IN 100 TO MATCH EXISTING. PAINT DRYWALL CEILING WHITE.
- 4. PROVIDE AND INSTALL ALL NEW COMMERCIAL GRADE, 2X4 AND 2X2 LAY-IN LED LIGHT FIXTURES AS SHOWN IN ACT CEILING. 5.
- PROVIDE AND INSTALL ALL NEW COMMERCIAL GRADE, 6" LED RECESSED DOWNLIGHTS IN 100A AND 100.
- 6. (2) NIGHT LIGHTS TO BE HARDWIRED AT 100 & 103. 7. INSTALL EMERGENCY LIGHTS AT EGRESS DOOR AS REQUIRED BY LOCAL CODES
- 8. NON-STANDARD CEILING AND LIGHTING TO BE SPECIFIED BY FA. PLEASE COORDINATE WITH CM. REBEKAH GRAY

CEILING KEYED NOTES

- (1) INSTALL COMMERCIAL WALL WASH LIGHT FIXTURE TO ILLUMINATE INTERIOR LOGO; TO BE SEPARATELY SWITCHED. SEE SHEET 9 FOR SPECIFICATIONS.
- (2) INSTALL NEW DRYWALL CEILING TO MATCH EXISTING IN ORDER TO ACCOMODATE NEW PARTITION LAYOUT. PAINT DRYWALL CEILING WHITE
- (3) EXISTING DRYWALL SOFFITS TO BE REMAIN AND BE PAINTED WHITE.

ALTERNATE CEILING KEYED NOTES

(1) NON-STANDARD LIGHTING ALTERNATE (TO BE 100% OUT-OF-POCKET TO THE FA): CONTRACTOR TO INSTALL SPECIALTY CEILING AND LIGHTING AS PROVIDED BY FINANCIAL ADVISOR, CONTRACTOR TO COORDINATE WITH CONSTRUCTION MANAGER FOR FINAL DESIGN AND SCOPE APPROVAL

CEILING GRAPHIC LEGEND

2x2 LED LAY-IN LIGHT FIXTURE 2x2 RETURN DIFFUSER 2x4 LED LAY-IN LIGHT FIXTURE \square 1x1 RETURN DIFFUSER 2X2 SUPPLY AIR GRILLE \square WALL WASH ELLIPTIPAR S222 \square CAN LIGHT FIXTURE -¢-1X1 SUPPLY AIR GRILLE \bigcirc EXHAUST FAN EXIT SIGN/EMERGENCY LIGHT 400 COMBO 2X2 ACOUSTICAL CEILING GRID & TILES: EX=EXISTING, REL=RELOCATE, N=NEW

OLYMPIA MICRO 60

MEP NOTES

MECHANICAL

- HVAC SYSTEM TO BE FULLY OPERATIONAL, IN GOOD CONDITION, AND PROPERLY BALANCED UPON COMPLETION OF WORK. BALANCE BOTH HEATING AND COOLING. SYSTEM TO BE DEDICATED TO EDJ SPACE. DUCTWORK TO BE ABANDONED OR RE-ROUTED AS NEEDED.
- INSTALL SUPPLY & RETURN GRILLES, INCLUDING DUCTWORK, AS REQUIRED FOR COMPLETE & BALANCED WORKING SYSTEM AND TO ACHIEVE ONE SUPPLY & ONE RETURN AT MINIMUM IN EACH ROOM. HVAC BALANCE SHEET TO BE SUBMITTED AT TIME OF INVOICE.
- PROVIDE & INSTALL DIGITAL PROGRAMMABLE THERMOSTATS IN PASSAGE 103 AS NECESSARY FOR ZONED SYSTEM FOR CONTROL OF 1) PRIVATE OFFICES/CONFERENCE ROOMS AND 2) OPEN BOA AREA/WELCOME AREA.
- CLEAN EXHAUST FAN, VENTED TO EXTERIOR, AND LIGHT FIXTURE IN TOILET 105A AND 105B AS REQUIRED BY LOCAL CODE; TO BE SEPARATELY SWITCHED.

ELECTRICAL

- BRANCH TO BE LOW VOLTAGE PRE-WIRED PER LOCAL CODES.
- PAINT ELECTRICAL PANEL TO MATCH PARTITION. VERIFY EXISTING ELECTRICAL PANEL MEETS EDJ SPECIFICATIONS: UPGRADE OR ADD SUB-PANEL
- AS REQUIRED. INSTALL NEW ELECTRICAL PER PLAN; NEW RECEPTACLES AND FACE PLATES TO BE WHITE. 5. REFER TO REFLECTED CEILING PLAN ON SHEET A2 FOR LIGHTING SCOPE OF WORK.

PLUMBING / RESTROOM

- EXISTING PLUMBING FIXTURES / ACCESSORIES IN TOILET 105B TO REMAIN. CLEAN TO LIKE NEW CONDITION.
- RELOCATE EXISTING SINK AND ACCESSORIES (MIRROR, SOAP DISPENSER, PAPER TOWEL DISPENSER, & TOILET PAPER DISPENSER) AS SHOWN ON PLAN TO MEET ACCESSIBILITY REQUIREMENTS. INSTALL NEW ADA COMPLIANT GRAB BARS. CLEAN TOILET TO LIKE NEW CONDITION. REFERENCE SCHEDULE AND ELEVATIONS ON SHEET A6 FOR INSTALLED DIMENSIONS AND SPECIFICATIONS.
- VERIFY EXISTING WATER HEATER IS IN GOOD WORKING ORDER, REPAIR OR REPLACE AS REQUIRED.

FIRE PROTECTION

- PROVIDE DESCRIPTION OF ANY LIFE SAFETY SYSTEM PROVIDED IN BUILDING AND ITS OPERATION. MODIFY EXISTING FIRE ALARMS AS REQUIRED BY LOCAL CODES.
- PROVIDE & INSTALL FIRE EXTINGUISHER IN BRANCH AS REQUIRED BY LOCAL CODES.

ELECTRICAL LAYOUT KEYED NOTES

- GC TO INSTALL DEDICATED OUTLET, ALL DATA GANG BOXES, AND PHONE BOARD PER DETAIL ON SHEET A7, FOR NEW BOC LOCATION. EMAIL PHOTO TO CONSTRUCTION MANAGER $\langle 1 \rangle$ TO CONFIRM WORK ASAP.
- $\langle 2 \rangle$ INSTALL DOOR CHIME AT ENTRY DOOR. CHIME TO BE LOCATED IN 103.
- $\langle 4 \rangle$ INSTALL FLOOR MOUNTED QUADPLEX & CONDUIT/PULL STRING FOR FUTURE TERMINAL HOOKUP.
- INSTALL OUTLETS AND SINGLE GANG BOXES AS SHOWN FOR FUTURE, FA-PROVIDED, WALL-MOUNTED TV. REFER TO PLAN AND TYPICAL DETAIL ON SHEET A5 FOR (٩) RECEPTACLE HEIGHTS, LOCATIONS, AND ADDITIONAL INFO FOR PULL-STRINGS AND BLOCKING IN WALL. FA TO SUPPLY AND INSTALL TV, TV WALL MOUNT, AND AV CABLING BETWEEN TV AND CPU



CONTRACTOR TO CONFIRM HVAC, LIGHTING, AND FIRE PROTECTION MEETS ALL APPLICABLE CODES AND EDWARD JONES STANDARDS ON SHEET A6-A7. NOTIFY



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ELECTRICAL GRAPHIC LEGEND

- \bigcirc DUPLEX RECEPTACLE
- DEDICATED SIMPLEX RECEPTACLE W/ ISOLATED GROUND TO BE MARKED WITH "D" & ORANGE
- RECESSED DUPLEX RECEPTACLE
- FB FLOOR BOX
- ELECTRICAL PANEL

- DOUBLE GANG PHONE/
- DATA BOX
- ▲ SINGLE GANG PHONE/DATA BOX
- SINGLE POLE SWITCH
- ³ 3-WAY SWITCH
- THERMOSTAT LOCATION
- JUNCTION BOX
- E EXISTING
- L LANDLORD'S RESPONSIBILITY

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(A5)

(A5)







FINISH SCHEDULE

I. NO.	PAINT	ACCENT	FLOORING	BASE	DOOR	FRAME/TRIM	CEILING	NOTES
100	P1	P2	LVT3	WD	BLDG STND	BLDG STND	BLDG STND	SEE NOTE "P2"
00A	P1		LVT3	WD	BLDG STND	BLDG STND	BLDG STND	
02A	P1	A5	CPT7	WD	D1	F1	BLDG STND	SEE NOTE "AX"
02B	P1	A5	CPT7	WD	D1	F1	BLDG STND	SEE NOTE "AX"
02C	P1	A5	CPT7	WD	D1	F1	BLDG STND	SEE NOTE "AX"
02D	P1	A5	CPT7	WD	D1	F1	BLDG STND	SEE NOTE "AX"
103	P1		LVT3	WD			BLDG STND	
104	P1		CPT7	WD	D1	F1	BLDG STND	
05A	P1		LVT3	WD	D1	F1	BLDG STND	
05B	P1		LVT3	WD	D1	F1	BLDG STND	
106	P1		LVT3	WD	D1	F1	BLDG STND	

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FINISH LEGEND **GC USE ONLY** CONTACT FOR FLOORING: INTERFACE SERVICES 314.378.3197 | edwardjones@interface.com

PAINT

- P1 GENERAL WALL PAINT MFR: SHERWIN WILLIAMS COLOR: SW 7005 PURE WHITE BRAND WALL PAINT
- P2 MFR: SHERWIN WILLIAMS COLOR: SW 7075 WEB GRAY
- ACCENT WALL PAINT A5 ACCEINT WALL PAINT MFR: SHERWIN WILLIAMS COLOR: SW 7065 ARGOS

DOOR PANELS

- DOOR FINISH TYPE: SLAB, PAINT READY SPECIES: WHITE BIRCH COLOR: SW 7006 EXTRA WHITE
- BLDG BUILDING STANDARD STND VERIFY SPEC WITH FA / LANDLORD
- FLOORING MFR: INTERFACE COLOR: METRO 191594 SIZE: 25CM X 1M INSTALL: ASHLAR
- STYLE: NATURAL WOODGRAINS COLOR: A00204 BEECH SIZE: 25CM X 1M
- WALL BASE
- PROFILE: PER FA COLOR: PAINTED SW 7006 EXTRA WHITE
- ADHESIVE ADHESIVE: 2000 PLUS ADHESIVE SPREAD RATE 35SY/GAL
- T-STRIP SCHLUTER BAR MFR: SCHLUTER SYS. STYLE: SCHIENE COLOR: BRUSHED STAINLESS STEEL
- WINDOW TREATMENT
- WINDOW TREATMENT WT-3 STYLE: MANUAL ROLLER SHADE COLOR: MOONMIST 3% OPENNESS
 - DOOR FRAMES

F1 FRAME FINISH PAINTED, SW 7006 EXTRA WHITE [BLDG] BUILDING STANDARD STND VERIFY SPEC WITH FA / LANDLORD

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GENERAL CARPET TILE LVT3 LUXURY VINYL TILE MFR: INTERFACE

INSTALL: RANDOM STAGGERED

- WOOD WALL BASE STYLE: 4" WOOD BASE

TRANSITION



2. G.C. TO COORDINATE KEYING WITH BUILDING MANAGEMENT AND TENANT. ALL SPECIAL LOCKING ARRANGEMENTS TO COMPLY WITH APPLICABLE BUILDING CODE REQUIREMENTS. 3. HAND-ACTIVATED DOOR OPENING HARDWARE, HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE. HARDWARE SHALL BE CENTERED BETWEEN 30 AND 44 INCHES ABOVE THE FLOOR, LATCHING AND LOCKING DOORS THAT ARE HAND-ACTIVATED SHALL BE OPERABLE BY LEVER-TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS, U-SHAPED HANDLES OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE. LOCKED EXIT DOORS SHALL OPERATE IN EGRESS DIRECTION 4. ALL MEANS OF EGRESS DOORS SHALL BE READILY OPENABLE FROM THE SIDE WHICH EGRESS IS TO BE MADE WITHOUT THE USE OF A SPECIAL KEY OR SPECIAL KNOWLEDGE OR

5. SECURITY CONTRACTOR RESPONSIBLE TO CONFIRM AND INSTALL NECESSARY EQUIPMENT SUCH THAT EMERGENCY MEANS OF EGRESS DOORS EQUIPPED WITH MAGNETIC LOCKS, KEY PAD, PUSH BUTTONS COMBINATION LOCKS OR OTHER SPECIAL LOCKING DEVICES SHALL, IN THE EVENT OF AN EMERGENCY, AUTOMATICALLY RELEASE AND OPEN IN

8. DOORS SHALL HAVE A MAXIMUM OPENING FORCE OF 5 LBF. THE FLOOR OR LANDING AT DOORS SHALL NOT BE MORE THAN 1/2 INCH LOWER THAN THE THRESHOLD OF THE DOORWAY. CHANGE IN LEVEL BETWEEN 1/4 INCH AND 1/2 INCH SHALL BE BEVELED WITH A SLOPE NO GREATER THAN ONE UNIT VERTICAL IN 2 UNITS HORIZONTAL (50-PERCENT

9. VERIFY FINAL DOOR & FRAME FINISHES WITH TENANT, TYPICAL. WHERE DOORS AND/OR FRAMES ARE PAINTED, USE SHERWIN WILLIAMS, ACRYLIC, PRO INDUSTRIAL B66-650 SERIES;

PAS	SAGE SET)		GROL	IP #4: (PRIVACY SET)		
)	BB1279 4.5X4.5 ND10S ATHENS 626 441 US26D 64 CHARCOAL TO MATCH DOORSTOP	HAGER SCHLAGE IVES GYLNN JOHNSON IVES	3 1 1 3 1	HINGES PRIVACY SET FLOOR MOUNT DOORSTOP DOOR SILENCERS DOOR CLOSER	BB1279 4.5X4.5 ND40S ATHENS 626 441 US26D 64 CHARCOAL TO MATCH DOORSTOP	HAGER SCHLAGE IVES GYLNN JOHNSON IVES
IT E	NTRY) MCK-12HD, CL, MK 4900, 628, AD	MCKINNEY ADAMS RITE	<u>GROU</u> 1' N	I <u>P #5:</u> (SLIDING DOOR WITH PAS ' DIAMETER 30" PULL HANDLE IO LOCKSET	SSAGE SET BY HAWORTH)
ЭB	4591, 628, AD AS REQUIRED, 626, RJ BF15747, US32D-316, RO UNIJ7500 7786, 689, RO 1715AK, PE E MEG'S STANDARD TO M	ADAMS RITE CORBIN RUSSWIN ROCKWOOD ROCKWOOD PEMKO	<u>GROU</u> 3 1 3 3	<u>P #6:</u> (CORRIDOR LOCKSET) HINGES CORRIDOR LOCKSET FLOOR MOUNT DOORSTOP DOOR SILENCERS	BB1279 4.5X4.5 ND73PD 441 US26D 64 CHARCOAL	HAGER SCHLAGE IVES GYLNN JOHNSON
BY	ALUMINUM DOOR SUPPL	MCKINNEY	GROU 1 2	<u>IP #7:</u> (POCKET) POCKET TRACK SYSTEM ACCESSIBLE DOOR PULLS		IVES
	V40XEB RIM CYLINDER CPS7500, 689, NO 1715AK, PE 2891AS, PE 346C, PE 345ANB, PE	DETEX BEST LOCKS NORTON PEMKO PEMKO PEMKO PEMKO	GROL 3 1 1 3 1	JP #8: (SINGLE DOOR WITH KEY HINGES KEYLESS LOCKSET FLOOR MOUNT DOORSTOP DOOR SILENCERS DOOR CLOSER	YLESS LOCKSET) BB1279 4.5X4.5 ND73PD 441 US26D 64 CHARCOAL TO MATCH DOORSTOP	HAGER SCHLAGE IVES GYLNN JOHNSON IVES



Drawn By:				
KBC				
ssue Date:				



October 07, 2024

2024906.064



RESTROOM DETAILS & ELEVATIONS 30X4 6'-4" FLUSH ACTIVATOR るふん ON WIDE (FD) SIDE, TYP. 32" CLR. XXXX (FD) **X ENLARGED RESTROOM PLAN** SCALE: 3/8" = 1'-0" TOILET PAPER DISPENSER SHALL BE INSTALLED UNDER THE GRAB BAR WITH THE OUTLET OF THE DISPENSER LOCATED 18" MIN. ABOVE THE FLOOR. THE DISPENSER SHALL BE 24" MIN. AND 42" MAX. FROM REAR WALL AND SHALL NOT PAINTED GYPSUM BOARD, TYP. -MIRROR 24x36 -60" MIN. CLEAR LAVATORY -SMOOTH HARD NON-ABSORBENT 36" MIN. MATERIAL UP TO 48" INSULATE EXPOSED PIPES -24" MIN. BASE AS SCHEDULE ∕15" MIN. 16"-18" LAVATORY NOTES: PROVIDE 8" MIN. KNEE CLEARANCE, AND 6" MAX. TOE CLEARANCE. RESTROOM ELEVATION 2 SCALE: 3/8" = 1'-0"

18" VERTICAL GRAB BAR -(AS REQUIRED)

SMOOTH HARD NON-ABSORBENT MATERIAL UP TO 48" SURFACE MOUNTED TOILET PAPER

BASE AS SCHEDULED -









RESTROOM ELEVATION

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



St. Louis	• GI	RO	UP
Suite 10 Suite 10 St. Louis (314) 23	500 5, Missouri 31-5700	i 63102	
Project Team: GENERAL CON To Be Det	NTRACTOR: termined		
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SPECIFICATIONS

GENERAL NOTES

- 1. THE FOLLOWING INFORMATION IS PROVIDED AS A GENERAL GUIDE. IN ALL CASES, IT IS PREFERRED THAT THE BUILDING STANDARD BE USED; OTHERWISE, USE THE INFORMATION PROVIDED BELOW AND ON THE DESIGN INTENT DRAWINGS, OFTEN REFERRED TO AS EXHIBIT A. IT IS THE INTENT THAT THESE MODIFICATIONS/ADDITIONS/IMPROVEMENTS WILL BE PERFORMED ON AN "AS NEEDED" BASIS, AT THE REASONABLE DISCRETION OF EDWARD D. JONES & CO., L.P. D/B/A EDWARD JONES, HEREIN AFTER REFERRED TO AS EDWARD JONES OR TENANT,
- 2. ANY DISCREPANCIES ON SHEETS 1-8 TO BE BROUGHT TO DESIGNERS ATTENTION IMMEDIATELY 3. ALL WORK SHOULD BE PERFORMED BY G.C. (GENERAL CONTRACTOR) PER CITY. STATE. PROVINCIAL. AND NATIONAL CODES (ALL REFERENCES TO "CODE" IN THIS DOCUMENT TO APPLY TO CITY, STATE, PROVINCIAL, AND/OR NATIONAL CODES AS APPLICABLE). ALL CONSTRUCTION WILL BE COMPLETED SO THAT AN
- OCCUPANCY PERMIT (OBTAINED BY THE G.C.) WILL BE GRANTED PRIOR TO LEASE COMMENCEMENT. 4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST ISSUED EDITION OF THE EDWARD JONES APPROVED EXHIBIT A INCLUDED WITH THE CONTRACT FOR SERVICES AT TIME OF BID AWARD.
- 5. EXHIBIT A IS INTENDED FOR DESIGN INTENT ONLY AND IS NOT AN OFFICIAL CONSTRUCTION DOCUMENT GENERAL CONTRACTOR (GC) TO OBTAIN ALL NECESSARY PERMIT DRAWINGS AS REQUIRED PER CODE: COST TO BE INCLUDED IN BID IF REQUIRED TO OBTAIN PERMITS. 6. GENERAL CONTRACTOR MUST PROVIDE ALL SUBCONTRACTORS ALL 11 SHEETS AT TIME OF BID AND/OR PRIOR
- TO ANY CONSTRUCTION. 7. ALL EXISTING ITEMS TO REMAIN IN BRANCH (AS SHOWN ON PLANS) MUST BE IN GOOD WORKING ORDER AND
- CONDITION, AND FREE OF MAJOR DEFECTS EDWARD JONES' INSTALLERS MUST BE NOTIFIED OF ANY CHANGES IN PLACEMENT OF EQUIPMENT, PHONES OUTLETS, OR FURNITURE. EDWARD JONES HAS AN ESTABLISHED RELATIONSHIP WITH NATIONAL VENDORS
- FOR FLOORING, PAINT, SIGNAGE, AND LOW VOLTAGE WIRING. 9. FURNITURE, EQUIPMENT, BOTTLED WATER COOLER (IF REQUIRED BY CODE), PHONE AND DATA WIRING & ALL TERMINATIONS TO BE PROVIDED BY THE TENANT.
- 10. THE SPACE SHOULD BE CLEANED AFTER CONSTRUCTION
- 11. WARRANTY DOCUMENTS SHALL BE PROVIDED TO THE BRANCH REAL ESTATE ONCE CONSTRUCTION IS
- COMPLETE. 12. UPON PROJECT COMPLETION, CLOSE OUT DOCUMENTS TO BE SUBMITTED WITH FINAL INVOICE INCLUDE:
- CONSTRUCTION DOCUMENTS, APPROVED CHANGE ORDERS, CERTIFICATE OF OCCUPANCY, LIEN WAIVER, FINAL PHOTOS OF SPACE, COMPLETED PUNCH LIST WITH ALL OUTSTANDING ITEMS COMPLETED, AND AN AIR BALANCE REPORT.

INTERIOR CONSTRUCTION SPECIFICATIONS

- 1. DEMOLITION
- a. DEMOLISH AND REMOVE FROM THE SITE ALL DEBRIS FROM THE AREAS AS SHOWN ON EXHIBIT A. LEAVE SPACE FREE OF ALL CONSTRUCTION DEBRIS
- b. REMOVE EXISTING FINISHES ONLY IN AREAS THAT ARE TO RECEIVE NEW FINISHES PER THE FINISH SCHEDULE SHOWN ON SHEET 4. ROOMS LISTED "NIC" OR "EXIST" SHALL REMAIN AS-IS UNLESS OTHERWISE NOTED ON FLOOR PLAN.
- c. LEAVE AND/OR PREPARE FLOOR TO ACCEPT NEW GLUE DOWN FLOORING PER FINISH SCHEDULE SURFACES THAT ARE TO ACCEPT NEW FLOORING ARE TO BE FREE OF ALL DEBRIS AND/OR RESINOUS DEPOSITS. FOR BRANCHES ON A SLAB FILL ALL FLOOR CUTS REMAINING FROM ANY PLUMBING OR OTHER TERMINATION WITH CONCRETE. DEMO ALL FLOOR OUTLETS, IF INDICATED ON SHEETS 1-8, AND PATCH AS REQUIRED. IF FLOOR HVAC VENTS ARE PRESENT IN A WALKWAY. PLEASE CONTACT PROJECT MANAGER FOR RELOCATION INSTRUCTIONS.

2. PARTITIONS

- A. ALL NEW WALLS WILL BE CONSTRUCTED OF 3 5/8 " METAL STUDS AT 16 " O.C. (WOOD STUDS ACCEPTABLE IF APPROVED BY BUILDING CODE/STANDARDS) AND 5/8 " DRYWALL MINIMUM, OR MATCH EXISTING TO REMAIN. B. ALL NEW AND EXISTING WALLS SHALL BE TAPED AND SMOOTH, READY FOR PAINT, LEVEL 5 FINISH.
- C. ALL PARTITIONS SURROUNDING OFFICES, 101, AND CONFERENCE ROOMS TO BE BUILT TO
- EXTEND 6" ABOVE CEILING GRID. D. ALL DEMISING WALLS TO BE BUILT TO DECK STRUCTURE ABOVE, FIRE SEALING ALL PENETRATIONS AS REQUIRED. IF PROPERTY UTILIZES A PLENUM RETURN FOR ENTIRE BUILDING, IT IS REQUIRED TO TAKE DEMISING WALLS TO HEIGHT OF ADJACENT TENANT'S WALLS AND INSTALL 2" X 4" 12-GAUGE WIRE
- SECURITY FENCING FROM TOP OF WALL TO DECK TO PROVIDE A SECURE DEMISING WALL. 1. VERIFY DEMISING WALLS ARE INSULATED AND EXTEND TO DECK; EXTEND AND PROVIDE INSULATION AS REQUIRED
- 2. PROVIDE AND INSTALL SOUND BATT INSULATION ABOVE CEILING ALONG NEW DEMISING PARTITION. IF ADJACENT TENANT IS A RESTAURANT OR NAIL SALON, CAULK ALL OUTLETS AND PENETRATIONS AS WELL AS FLOOR LINE AND CONNECTION AT DECK TO AVOID SMELL TRANSFER.
- 3. FINISH DEMISING WALL ON BOTH SIDES ONLY IF REQUIRED BY CODE, OR IF NOTED OTHERWISE ON PLANS. IT IS CONTRACTOR'S RESPONSIBILITY TO CONFIRM IF THIS IS REQUIRED DURING THE BIDDING PROCESS
- E. A MINIMUM OF 3" SOUND BATT INSULATION SHALL BE INSTALLED IN PARTITIONS AS INDICATED ON EXHIBIT A BETWEEN STUDS AND ABOVE CEILING WHERE THE WALL AND CEILING MEET. IF WALLS ARE EXISTING, USE BLOW-IN INSULATION.
- F. PROVIDE RUBBER MOLD/BREAK METAL AT WINDOW MULLION. CAULK ALL SEAMS. ALL WALLS THAT END AT EXTERIOR WALLS OR MULLIONS TO INCLUDE SOUND CAULK AND RUBBER GASKET AT POINT OF CONNECTION.

3. CEILING

- A. ACOUSTICAL CEILINGS: TILES TO BE FREE FROM STAINS, DIRT, CHIPS, AND BREAKS; ALL TILES TO BE SAME COLOR AND STYLE; GRID TO BE WHITE AND EVEN. FREE FROM HOLES (OR FILLED), AND SHOULD BE CLEAN. CONTIGUOUS AREAS MUST HAVE MATCHING TILE.
- B. MATCH EXISTING CEILING TILES AND GRID, OR BUILDING STANDARD, WHERE APPLICABLE. C. IF EXISTING GRID IS IN POOR CONDITION, OR COLOR OTHER THAN WHITE (AND NOT A BUILDING STANDARD),
- GRID TO BE REPLACED.
- D. IF INSTALLING NEW, PROVIDE AND INSTALL 2 X 2' COMMERCIAL GRADE ACOUSTICAL CEILING TILE AND GRID. STANDARD HEIGHT FOR NEW CEILING TO BE 9'-0 ". UNLESS NOTED ON PLANS.
- BASIS OF DESIGN:
- MFR: USG
- PRODUCT: OLYMPIA MICRO 4753, NRC .60, SIZE: 2' X 2'
- PROFILE: SHADOWLINE TAPERED
- GRID: D, USG DX FLAT GRID COLOR: WHITE
- OR COMPARABLE ALTERNATE
- E. DRYWALL CEILINGS: TO BE LEVEL, HAVE AN EVEN TEXTURE (MATCH EXISTING WHERE APPLICABLE), AND BE PAINTED WHITE (SEE PAINT SPEC).
- 4. FIRE PROTECTION
- A. PROVIDE AND INSTALL NEW SPRINKLER SYSTEM ONLY AS REQUIRED BY CODE. IF EXISTING, MODIFY SPRINKLER LAYOUT AS REQUIRED PER CODE. INCLUDE NECESSARY PERMITS AND INSPECTIONS. HEADS MUST BE CENTERED IN TILE.
- B. PROVIDE APPROPRIATE COVERAGE OF HEADS FOR PARTITION LAYOUT AS REQUIRED BY CODE PER PARTITION LAYOUT AS SHOWN ON EXHIBIT A. QUANTITY AND LOCATION OF HEAD TO COMPLY WITH APPLICABLE CODES.
- C. PROVIDE/MODIFY FIRE ALARM SYSTEM IF REQUIRED BY LOCAL CODE.
- D. PROVIDE DESCRIPTION OF ANY LIFE SAFETY SYSTEM PROVIDED IN BUILDING AND ITS OPERATION.
- E. PROVIDE AND INSTALL SMOKE DETECTORS AS REQUIRED BY CODE.
- F. PROVIDE AND INSTALL FIRE EXTINGUISHER: TO MEET ALL LOCAL CODES.

- TOILET/WASHROOM & PLUMBING (UNLESS COMMON FACILITIES PRESENT A. PROVIDE AND INSTALL RESTROOM LAYOUT AND FIXTURES AS SHOWN ON EXHIBIT A. WASHROOM TO BE BARRIER FREE / HANDICAP ACCESSIBLE AS REQUIRED BY ADA STANDARDS, BUILDING CODES, AND AS SHOWN ON PLANS. GC TO ADHERE TO ANY CODES WHICH MIGHT REQUIRE MODIFICATION OF EXISTING RESTROOM NOT SHOWN ON PLANS; CONTACT DESIGNER IF CODE REQUIREMENTS DIFFER FROM PLANS. B. RESTROOM TO HAVE (1) OF EACH OF THE FOLLOWING: TOILET, SINK, WATER HEATER (DEDICATED TO EDJ SPACE), GRAB BARS, TOILET PAPER HOLDER, PAPER TOWEL DISPENSER, SOAP DISPENSER, & MIRROR. PROVIDE & INSTALL ANY OTHER ACCESSORY AS NOTED ON PLANS OR REQ'D BY CODE.

- C. EXISTING RESTROOM FIXTURES TO REMAIN IF DETERMINED TO BE IN GOOD CONDITION (I.E. IN GOOD OPERATION AND FREE OF STAINS OR CRACKS). CLEAN AND RESET FIXTURES AS REQUIRED. D. SINK(S) (ONLY IF SHOWN ON EXHIBIT A) TO HAVE HOT AND COLD-WATER SERVICE. IF UNABLE TO INSTALL
- WATER HEATER ABOVE CEILING, INSTALL INSTA-HOT UNDER SINK. E. PROVIDE AND INSTALL EXHAUST FAN WITH ADEQUATE DUCTING & SEPARATELY SWITCHED AS REQUIRED.
- HVAC (UNLESS SHARED SYSTEM PRESENT)
- A. SYSTEM TO BE FULLY OPERATIONAL, IN GOOD CONDITION AND PROPERLY BALANCED UPON COMPLETION OF WORK. BALANCE BOTH HEATING AND COOLING. SYSTEM TO BE DEDICATED TO EDJ SPACE.
- HVAC BALANCE SHEET MUST BE SUBMITTED WITH INVOICE AT PROJECT COMPLETION. B. ALL DUCTING, DIFFUSERS, GRILLES, AND THERMOSTATS SHALL BE CLEAN, IN GOOD CONDITION AND PROPERLY FUNCTIONING. LOCATION TO BE REVISED AS NECESSARY PER NEW PARTITION LAYOUT. VERIFY THAT ALL ROOMS IN EDWARD JONES SPACE AS SHOWN ON SHEET 3/4/5 HAVE A MINIMUM OF (1) RETURN AND (1) SUPPLY GRILLE AND MEET TEMPERATURE REQUIREMENTS TO ENSURE A COMFORTABLE WORKING ENVIRONMENT
- C. IF SPACE IS BEING SUBDIVIDED, EDWARD JONES SPACE TO BE SEPARATELY CONTROLLED--SHARING OF THERMOSTAT WITH ADJACENT SPACES IS NOT ACCEPTABLE UNLESS IT IS AN OFFICE BUILDING THAT UTILIZES A PLENUM RETURN. IF SHARED SYSTEM EXISTS, THERMOSTAT MAY NOT BE LOCATED WITHIN
- EDWARD JONES LEASED SPACE. D. VERIFY THERMOSTAT IS LOCATED IN AN ACCESSIBLE AREA OF THE SPACE AS SHOWN ON FLOOR PLAN (TYPICALLY IN ROOM 101 OR 103)
- E. PROVIDE AND INSTALL A NEW WHITE-RODGERS 7-DAY PROGRAMMABLE THERMOSTAT, UNLESS OTHERWISE NOTED ON PLANS. PROVIDE APPROPRIATE STAT FOR UNIT SIZE AND TYPE. SET THERMOSTAT FOR M-F 8-5 HOURS OF OPERATION. LEAVE INSTRUCTIONS TAPED TO THERMOSTAT FOR FUTURE REFERENCE.
- F. HVAC SYSTEM SHOULD BE ABLE TO MAINTAIN 75 DEGREE F SUMMER AND 70 DEGREE F WINTER TEMPERATURES IN ACCORDANCE WITH THE ASHRAE DESIGN STANDARDS APPLICABLE TO THIS LOCATION. IF NECESSARY, A FORMAL INSPECTION TO VERIFY EQUIPMENT CONDITION SHOULD BE DONE.
- ROOM (USUALLY ROOM 104) OR AREA IT IS LOCATED IN, TO MAINTAIN CONSTANT TEMPERATURE REQUIRED. GRILL (HERCULES INDUSTRIES SB222 SOUND BOOTS OR SIMILAR).
- G. EDWARD JONES BOC (AS SHOWN ON EXHIBIT A) REQUIRES VENTILATION. INSTALL A SUPPLY GRILLE IN BOC H. IF BUILDING UTILIZES AN OPEN PELNUM SYSTEM, PROVIDE AND INSTALL SOUND BOOTS ON EACH RETURN
- LIGHTING (UNLESS BUILDING STANDARD APPLIES)
- A. IF T12 LIGHTING IS EXISTING UTILIZE BALLAST BYPASS LED LAMPS, PROVIDE AND INSTALL COMMERCIAL GRADE 2X2 LIGHT FIXTURES AT ONE FIXTURE PER EVERY 75 USABLE SF, SO AS TO ACCOMMODATE MINIMUM 50 FOOTCANDLES AT DESK LOCATIONS
- B. FOR NEW CONSTRICTION OR NEW LIGHTING REQUIRED THROUGHOUT, PROVIDE AND INSTALL COMMERCIAL GRADE 2X2 LED FIXTURES AT ONE FIXTURE PER EVERY 75 USABLE SF. IN PLACE TO ACCOMMODATE MINIMUM 50 FOOTCANDLES AT DESK LOCATIONS. BASIS OF DESIGN:

 - STYLE: 2X2 LED, WITH ANGLED DIFFUSER OUTPUT: W/40W, 4700 LUMENS, 3500K
- OR COMPARABLE ALTERNATE (CONTACT PROJECT MANAGER FOR APPROVAL).
- C. EDWARD JONES HAS ESTABLISHED A PREFERRED VENDOR ARRANGEMENT WITH VILLA LIGHTING. RECOMMENDED, BUT NOT REQUIRED, TO REQUEST QUOTE FROM VILLA LIGHTING.
- D. ALL NEW AND EXISTING LIGHTING SHOULD BE FULLY OPERATIONAL AND IN GOOD CONDITION E. EXIT AND/OR EMERGENCY LIGHTING TO BE INSTALLED AS REQUIRED PER CODE.
- F. A SWITCH SHOULD OCCUR AT MAIN ENTRANCE AND WIRED TO OPERATE LIGHTING IN 101 AND PASSAGE 103 AS SHOWN ON PLAN, UNLESS EXISTING. IF SPACE HAS MORE THAN ONE EGRESS DOOR, SWITCH SHOULD
- BE 3-WAY TO OPERATE AT BOTH ENTRANCES: EXCLUDING BRANCHES IN CA. G. PROVIDE AND INSTALL EXIT LIGHTING AT EGRESS DOORS AS REQUIRED BY CODE.
- H. IF EXISTING, VERIFY THAT ALL LENSES AND LAMPS ARE CONSISTENT IN COLOR, LENSES TO BE FREE OF ANY VISIBLE DAMAGE. STAINS, OR DISCOLORATION OF ANY KIND.
- I. IN ROOMS 101 AND 103, HARD WIRE ONE LIGHT FIXTURE TO REMAIN ON AT ALL TIMES IF NOTED IN SITE SPECIFIC NOTES ON SHEET 3. LIGHTS TO BE ORIENTED TO ALLOW ILLUMINATION OF INTERIOR COMMON AREAS FROM EXTERIOR DURING EVENING HOURS. (THIS ITEM TO BE ADJUSTED IN TITLE 24 REGIONS TO
- MEET LOCAL ENERGY REQUIREMENTS). SEE CONTRACTOR'S NOTES ON SHEET 3. J. PROVIDE AND INSTALL (1) COMMERCIAL LINEAR SLOT WALL WASH LED TO ILLUMINATE INTERIOR LOGO. NEW CEILING TILE REQUIRED. INSTALL IN CEILING 3'-0" AWAY FROM WALL AND CENTERED ON PARTITION ABOVE INTERIOR LOGO IN 101 AS DETAILED ON SHEET 4. PROVIDE A SEPARATE SWITCH FOR LIGHT: SWITCH TO BE INSTALLED AT ENTRY DOOR UNLESS OTHERWISE SHOWN. BASIS OF DESIGN:
 - PRODUCT: ELLIPTIPAR S222 WALL WASH
 - COLOR: MATTE WHITE

 - MOUNTING: FIXTURE TO BE CENTERED ON WALL LOGO. CLG HTS UP TO 9' TALL = 30" OFF FACE OF WALL
 - CLG HTS BETWEEN 9'-10' TALL = 33" OFF FACE OF WALL CLG HTS ABOVE 10' TALL 36" OFF FACE OF WALL

 - OR COMPARABLE ALTERNATE (CONTACT PROJECT MANAGER FOR APPROVAL).
- 8. DOORS (UNLESS BUILDING STANDARD APPLIES; SEE SHEET 3 FOR PAINT/STAIN INSTRUCTIONS. A. ALL DOORS TO BE INSTALLED CLEAR OF ANY OBSTRUCTIONS. B. ALL DOOR CLEARANCES TO BE MET AS SHOWN ON SHEET 3 AND PER ACCESSIBILITY REQUIREMENTS.
- C. ALL DOORS TO HAVE WALL OR FLOOR MOUNTED STOPS, CONSISTENT WITH THE SPACE. D. REUSE / RELOCATE EXISTING DOORS AS NOTED ON SHEETS 2 AND 3. ANY EXISTING DOORS BEING REUSED
- SHALL BE REPAIRED OR REPAINTED AS REQUIRED. REPAIRED DOORS SHALL BE APPROVED FOR REUSE BY EDWARD JONES' DESIGNER.
- E. ANY NEW DOOR SHALL BE NO LESS THAN 3'-0" W, UNLESS OTHERWISE NOTED ON SHEET 3. F. ANY NEW DOOR SHALL MATCH EXISTING HEIGHT AND STYLE OF EXISTING, REMAINING DOORS. DOORS CAN NOT BE UNDERCUT FOR ANY REASON. THE MAXIMUM GAP ALLOWED IS 1/2 * G. DOORS (BOTH INTERIOR AND EXTERIOR) AND OTHER WOODWORK SHOULD BE PAINTED OR STAINED TO
- STAIN AS LISTED IN THIS DOCUMENT ON SHEET 4.
- MATCH EXISTING BUILDING STANDARD WHERE REQUIRED. IF NO STANDARD IS ESTABLISHED, USE PAINT OR H. FINISHED DOORS WILL BE FREE FROM UNEVEN COLOR, DRIPS OR RUNS. ALL DOOR EDGES, INCLUDING TOP AND BOTTOM, TO BE FINISHED. I. EXTERIOR DOORS
- 1. ALL SUITE ENTRY DOORS, AND REAR DOORS LEADING TO BUILDING COMMON AREA, MUST HAVE CLOSERS, METAL PRY PLATES, AND THUMB-TURN DEADBOLT HARDWARE, ON OCCUPIED SIDE. COORDINATE WITH LANDLORD PRIOR TO INSTALLATION.
- 2. ALL REAR DOORS LEADING TO THE EXTERIOR, MUST HAVE CLOSER, METAL PRY PLATES, CYLINDER GUARD, AT LEAST ONE SECURITY HINGE WITH NON-REMOVABLE PIN (MCKINNEY TA2314 OR APPROVED EQUAL), DEADBOLT, AND PEEPHOLE INSTALLED AT 5'-0" A.F.F. NOTIFY PROJECT MANAGER IMMEDIATELY IF PROPERTY MANAGER WILL NOT ALLOW PEEPHOLE TO BE INSTALLED.

F. PROVIDE AND INSTALL BARRIER-FREE UNDER-SINK PIPE PROTECTIVE COVER UNDER SINK IN 105.

- DEALER: VILLA LIGHTING (*SEE CONTACT INFO ON SHEET 1)

SPECS: L-MOUNT (ACT) OR P-MOUNT (DRYWALL), 3500K, 80+ CRI, NON-DIMMING

- 3. IF CODE DOES NOT ALLOW DEADBOLT, UTILIZE PANIC HARDWARE.
 - PANIC HARDWARE BASIS OF DESIGN:
 - PRODUCT: PHOENIX DOUBLE DEGENDER MODEL: DD-QR, QUICK RELEASE SECURITY BAR
 - NOTE: UL LISTED PANIC HARDWARE 2N43, CALL 913-723-3203 FOR LOCAL RETAILER.
- OR COMPARABLE ALTERNATE (CONTACT PROJECT MANAGER FOR APPROVAL) WASHINGTON/OREGON: INSTALL LATCH PADDLES ON EXTERIOR ENTRY DOORS.
- J. INTERIOR DOORS
- 1. NO INTERIOR DOOR CLOSERS TO BE INSTALLED UNLESS OTHERWISE NOTED ON SHEET 3. WHERE ALL NEW INTERIOR DOORS ARE REQUIRED, PROVIDE AND INSTALL COMMERCIAL-GRADE, WOOD
- DOORS WITH HOLLOW METAL FRAMES. BASIS OF DESIGN:
 - DOOR: PAINT-READY BIRCH WOOD, PAINTED/STAINED PER FINISH SPECS ON SHEET 4. ROOMS 102A, 102B, 104, 105, AND 106 TO BE SOLID CORE. ALL OTHERS MAY BE HOLLOW-CORE UNLESS NOTED OTHERWISE ON PLAN. REPLACE EXISTING AS REQUIRED. FRAME: HOLLOW METAL, PAINTED PER FINISH SPECS ON SHEET 4.
 - SIZE: 3'-0" W X 6'-8" H.
- 3. ALL DOOR HARDWARE TO BE HANDICAP ACCESSIBLE. REPLACE EXISTING, OR PROVIDE NEW. BASIS OF DESIGN:
 - STYLE: LEVER-STYLE, ADA-COMPLIANT
 - FINISH: MATCH EXISTING OR BUILDING STANDARD, IF APPLICABLE. IF NO STANDARD, NEW HARDWARE TO BE BRUSHED NICKEL
- 4. PRIVACY LOCKSET TO BE PROVIDED FOR ROOM 105 5. KEYLESS STOREROOM LOCKSET TO BE PROVIDED FOR ROOM 104:
 - BASIS OF DESIGN :
 - VENDOR: HOME DEPOT
 - MODEL: KWIKSET #909HFL720-15SMT COLOR: SATIN NICKEL
 - OR COMPARABLE ALTERNATE (CONTACT PROJECT MANAGER FOR APPROVAL).

9.FLOORING (UNLESS BUILDING STANDARD APPLIES)

- A. IF NEW CONSTRUCTION, GC REQUIRED TO COMPLETE MOISTURE TEST. IF MOISTURE READING IS ABOVE 95, NOTIFY INTERFACE FLOORING IMMEDIATELY.
- B. THE EDWARD JONES STANDARD CARPET, VINYL BASEBOARD, AND LUXURY VINYL PLANK SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS. INSTALL METHOD FOR CARPET IS DIRECT GLUE IN AN ASHLAR PATTERN. SEE MANUFACTURER'S INSTRUCTIONS FOR POST-INSTALLATION /CLEANING INSTRUCTIONS. LUXURY VINYL PLANK JOINTS TO BE STAGGERED 6"+ IN RANDOM PATTERN. WHEN INSTALLING, CONTRACTOR SHOULD MIX TILES FROM MULTIPLE BOXES.
- ADHESIVE: 2000 PLUS, SPREAD RATE: 35 SY/GAL C. PROVIDE A SMOOTH SURFACE FOR FLOORING INSTALLATION. IF FLOOR IS NOT LEVEL CONTACT DESIGNER IMMEDIATELY.
- D. PLEASE CONTACT INTERFACE SERVICES IMMEDIATELY AFTER AWARD OF CONTRACT TO COORDINATE FLOORING DELIVERY.
- 1. GC: CARPET MATERIAL MUST BE ORDERED FROM INTERFACE SERVICES. EDWARD JONES HAS A NATIONAL CONTRACT WITH INTERFACE SERVICES. COORDINATION AND PURCHASE, AND INSTALLATION OF ALL FLOORING AND FINISHES AS LISTED IN EXHIBIT A, WILL BE THE FULL RESPONSIBILITY OF THE GC. E. ALL CARPET TO BE INSTALLED PER CRI STANDARDS (CARPET & RUG INSTITUTE).
- F. INSTALL SCHLUTER TRANSITION STRIP (ANODIZED ALUMINUM) BETWEEN ANY DISSIMILAR FLOORS.
- G. CARPET TO BE VACUUMED WITH NO PROTRUDING YARN AT SEAMS. IF CARPET IS EXISTING TO REMAIN IN SPACE, GC TO HAVE CARPET PROFESSIONALLY CLEANED.
- H. A FULL BOX OF CARPET TILE SHALL BE LEFT IN STORAGE AREA OF EDWARD JONES SPACE. ALL REMAINING LUXURY VINYL PLANK SHOULD BE LEFT IN EDWARD JONES' STORAGE AREA.

10. PAINT

- A. ALL EXPOSED SURFACES IN AREAS INDICATED IN FINISH SCHEDULE ON SHEET 4, SHALL BE PRIMED AND PAINTED WITH SHERWIN WILLIAMS PAINT.
- B. FOR ALL REPAINT AND REMODEL. THE PRIME COATS NOTED BELOW MAY BE EXCLUDED UNLESS COATING A BARE SURFACE. FOLLOW ALL MANUFACTURERS' RECOMMENDED SURFACE PREPARATION.
- C. ASSUME ONE TRIP FOR TOUCH UP PAINT AFTER FLOORING INSTALLATION AND FURNITURE DELIVERY. REMAINING TOUCH UP PAINT TO BE LEFT IN THE STORAGE AREA OF EDWARD JONES SPACE, CLEARLY LABELED.
- D. IF THERE ARE ANY QUESTIONS REGARDING PAINT COLORS, PLEASE CONTACT EDWARD JONES BRANCH DESIGN- DESIGNER NAME AND PHONE NUMBER LISTED ON EXHIBIT A.
- E. EXACT SPECIFICATIONS MAY BE OBTAINED FROM SHERWIN WILLIAMS: 1-800-474-3794. F. REFER TO PAINT SELECTION SHEET 4. COLORS MAY INCLUDE SEVERAL, BUT NOT ALL, OF THE FOLLOWING:
- GYPSUM PARTITIONS (EXCEPT ACCENT WALLS & CEILINGS):
- TWO FINISH COATS OVER AN EXISTING FINISH OR PRIMER. SHERWIN WILLIAMS
 - PRIMER: SHERWIN-WILLIAMS PROMAR 200 ZERO VOC, INTERIOR LATEX PRIMER, BS28W02600.
 - 1ST & 2ND COATS: SHERWIN-WILLIAMS PROMAR 200 ZERO VOC EGGSHELL
 - A97-100 SERIES (IN ROLLER APPLICATIONS, USE ONLY A 1/2 " NAP SYNTHETIC COVER).
 - COLOR: INDICATED ON SHEET 4

GYPSUM PARTITIONS (ACCENT WALLS): (NOTE Ax, SHEET 4) TWO FINISH COATS OVER AN EXISTING FINISH OR A PRIMER.

- SHERWIN WILLIAMS:
- PRIMER: SHERWIN-WILLIAMS PROMAR 200 ZERO VOC, INTERIOR LATEX PRIMER. BS28W02600
- 1ST & 2ND COATS: SHERWIN-WILLIAMS COLOR ACCENTS INTERIOR PROMAR 200 ZERO VOC EGGSHELL WALL FINISH, Y38 SERIES.
- COLOR: INDICATED ON SHEET 4

GYPSUM CEILINGS: ONE FINISH COAT OVER AN EXISTING FINISH OR PRIMER.

- SHERWIN WILLIAMS PRIMER: SHERWIN-WILLIAMS PROMAR 200 ZERO VOC, INTERIOR LATEX PRIMER.
- BS28W02600. FINISH COAT: SHERWIN-WILLIAMS PROMAR 400 INTERIOR LATEX FLAT, B30W451
- COLOR: SW7005 PURE WHITE

INTERIOR WOOD DOORS, JAMBS & FRAMES (METAL OR WOOD) FOR PAINT ONLY: TWO FINISH COATS OVER A PRIMER

FOR STAIN: ONE COAT, UNLESS SECOND COAT IS NEEDED FOR A CONSISTENT FINISH THROUGHOUT.

- SHERWIN WILLIAMS:
- PRIMER: SHERWIN-WILLIAMS PROMAR 200 ZERO VOC, INTERIOR LATEX PRIMER, BS28W02600
- 1ST & 2ND COATS: SHERWIN-WILLIAMS PROCLASSIC WATERBORNE INTERIOR ACRYLIC SEMI-GLOSS ENAMEL, B31W51 SERIES
- COLOR: INDICATED ON SHEET 4



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October 07 2024	



October 07, 2024

SPECIFICATIONS

- SHERWIN WILLIAMS:
- STAIN: SHERWIN-WILLIAMS MINWAX PERFORMANCE SERIES TINTABLE WOOD STAIN
- COLOR: INDICATED ON SHEET 4.

EXTERIOR ONLY-METAL DOORS, JAMBS & FRAMES

- TWO FINISH COATS OVER A PRIMER.
- SHERWIN WILLIAMS:
- PRIMER: SHERWIN-WILLIAMS DTM ACRYLIC PRIMER/FINISH, B66W1 1ST & 2ND COATS: SHERWIN-WILLIAMS PROCLASSIC WATERBORNE INTERIOR
- ACRYLIC SEMI-GLOSS ENAMEL, B31W51 SERIES
- COLOR: INDICATED ON SHEET 4

12. ELECTRICAL

- a. ELECTRICAL TO INCLUDE OUTLETS AS SHOWN ON EXHIBIT A, INCLUDING DEDICATED OUTLET AS SHOWN ON PLAN.
- 1. GENERAL PURPOSE OUTLETS ALL OUTLETS TO BE PLACED AS SHOWN ON DRAWING.
- ONE (1) QUAD OUTLET AT FUTURE WORKSTATION LOCATION AND (2) QUAD OUTLETS AT BOA
- WORKSTATION AT ALL TERMINALS AND OTHER OFFICE EQUIPMENT AS SHOWN ON THE PLAN.
- 2. DEDICATED OUTLET DEFINITION: A DEDICATED OUTLET IS WIRED DIRECTLY TO THE MAIN POWER DISTRIBUTION PANEL THROUGH A DESIGNATED (DEDICATED) CIRCUIT BREAKER. THE DEDICATED OUTLETS ARE COLOR CODED TO DISTINGUISH THEM FROM GENERAL-PURPOSE OUTLETS. ONLY THE BOC SHOULD BE PLUGGED INTO THE DEDICATED OUTLET. THE TECHNICAL INFORMATION FOR THIS OUTLET IS AS FOLLOWS:
- ONE DEDICATED OUTLET (SIMPLEX, NOT DUPLEX) REQUIRED FOR THE BOC (SEE LEGEND ON SHEET 5 OF 8).
- OUTLET TO BE STANDARD 3-PRONG, 120 VOLT, 20 AMP, DEDICATED CIRCUIT.
- OUTLET TO BE SIMPLEX, ORANGE COLOR CODED RECEPTACLE (NEMA TYPE 5-15 R/IG OUTLET, GE5362-IG OR EQUIVALENT).
- ALL GROUNDS MUST HAVE SAME GROUND POTENTIAL.
- 3. RECESSED OUTLET
- LEVITON RECESSED ONE-GANG DUPLEX RECEPTACLE (15A-125VAC 2-POLE, 3-WIRE-NEMA 5-15R) -CAT NO. 689 TO INCLUDE ELECTRICAL BOX.
- CATALOG NO. 012-00689-00W; UPC NO. 07847731284 1
- IF ABOVE SPECIFICATION IS UNAVAILABLE, FIND COMPARABLE ALTERNATIVE
- b. ALL OUTLETS TO BE 110 VOLT STANDARD 3-PRONG OUTLETS THAT MEET STATE AND LOCAL REQUIREMENTS (NEMA TYPE 5-15R). THE GROUNDING CONDUCTORS FOR THE BUILDING'S CIRCUITS SHOULD BE REFERENCED TO THE POINT OF "ZERO CURRENT" WITHIN THE ELECTRICAL SUPPLY SYSTEM, WHICH IS WHERE THE NEUTRAL AND GROUND FOR THE SYSTEM ARE TIED TOGETHER. c. EXISTING OUTLETS CAN BE USED TO MEET THE REQUIREMENTS FOR GENERAL-PURPOSE OUTLETS ONLY.
- VERIFY EXISTING OUTLETS TO REMAIN ARE IN WORKING ORDER.
- d. NEW ELECTRICAL OUTLETS TO BE INSTALLED WHERE SHOWN ON PLANS AT 18 "A.F.F. UNLESS AN EXISTING DEVICE IS ALREADY WITHIN 36 " OF THE DESIRED LOCATION: EXCLUDING WORKSTATION LOCATIONS SHOWN ON SHEET 5.
- e. DEMO/REMOVE OUTLETS ABOVE 18 " A.F.F. UNLESS NOTED OTHERWISE ON PLANS.
- INSTALL OR REPLACE ALL OUTLET AND LIGHT COVERS/SOCKETS WITH WHITE THROUGHOUT. g. ALL COMPUTER EQUIPMENT FOR THIS OFFICE IS SENSITIVE TO HIGH ELECTROMAGNETIC INTERFERENCE
- (EMI). IT IS RECOMMENDED THAT THE AMBIENT EMI IN THE OFFICE DOES NOT EXCEED 2 MG. PLEASE NOTIFY DESIGNER IMMEDIATELY IF SITE IS LOCATED NEAR EXISTING POWER LINES, TRANSFORMERS, SUB-STATIONS, ETC.
- h. LANDLORD RESPONSIBLE FOR SETTING UP UTILITIES OR PROVIDING TEMPORARY ELECTRICAL IN SPACE THAT IS NEW CONSTRUCTION OR SPACE THAT IS BEING SUBDIVIDED. GENERAL CONTRACTOR IS RESPONSIBLE FOR ASSURING TEMPORARY POWER FOR ALL FINISH OUT WORK IF NOT ALREADY PROVIDED. ELECTRICAL CONTRACTOR TO VERIFY EXISTING ELECTRICAL PANEL WILL ACCOMMODATE EDWARD JONES
- REQUIREMENTS; UPGRADE AS REQUIRED. CONTRACTOR TO INSTALL 4'X4' MINIMUM BACKER BOARD OF FRT PLYWOOD AT BOC LOCATION. BOARD TO
- BE PAINTED TO MATCH THE WALL WHEN THE WALL IS SCHEDULED FOR PAINT PER THE FINISH SCHEDULE. CONFIRM WITH FIRE MARSHALL PRIOR TO PAINTING AND LEAVE RATING STAMP EXPOSED WHENEVER REQUIRED. BOARD TO BE INSTALLED AT 36 "A.F.F. TO THE BOTTOM AT THE LOCATION SHOWN ON THE PLAN. REFER TO SHEET 3 FOR LOCATION ON PLAN.
- ELECTRICIAN TO INSTALL 3/4 " CONDUIT & BOX WITH PULL STRING OR MUD RING (EXISTING WALL) AT ALL LOCATIONS (SEE SECTION 12 BELOW) WITH LOW VOLTAGE COMMUNICATION CONNECTIONS. INSTALL (1) SINGLE GANG BOX AT EACH LOCATION INDICATED ON THE DRAWING WITH A TRIANGLE (▼); UNLESS ADDITIONAL ARE SHOWN. DO NOT INSTALL A DOUBLE GANG BOX AT LOCATIONS WHERE (2) SYMBOLS ARE ADJACENT. REFER TO LEGEND AND PLANS ON EXHIBIT A FOR LOCATIONS OF DOUBLE GANG BOXES.

13. LOW VOLTAGE (ALSO KNOWN AS PHONE/DATA CABLING)

- LOW VOLTAGE WIRING (ALSO KNOWN AS PHONE/DATA CABLING) a. LOW VOLTAGE IMPLIES THE ACTUAL WIRE OR CABLE THAT IS RUN FROM THE BOC TO EACH PHONE, COMPUTER, PRINTER, AND FUTURE WORKSTATION LOCATION, WITH THE EXCEPTION OF THE DEMARC EXTENSION. LOW VOLTAGE WORK IS DONE BY EDWARD JONES BRANCH INSTALL DEPT. THROUGH A
- PREFERRED NATIONAL VENDOR. THIS WORK IS DONE AFTER THE SPACE IS TURNED OVER TO CLIENT. . IF LOW VOLTAGE WORK IS REQUIRED TO BE PERMITTED AND INSPECTED AS NOTED ON EXHIBIT A, GENERAL CONTRACTOR IS TO COORDINATE THE INSTALLATION WITH EDWARD JONES; CONTACT PROJECT MANAGER LISTED ON SHEET 1. NOTE THAT PRE-WIRE IS NOT STANDARD AND IS ONLY DONE WHEN REQUIRED VS. BEING DONE FOR CONVENIENCE. PREWIRE WILL BE REQUIRED IF CEILING HEIGHT IS OVER 9'-0" IN U.S. AND OVER 10'-0" IN CANADA; AND/OR IF INDICATED ON SHEET 3. IF A PREWIRE IS INDICATED ON SHEET 3, GC TO CONTACT EDWARD JONES BRANCH INSTALL AT BRINSTALL@EDWARDJONES.COM WHEN PROJECT IS READY FOR LOW VOLTAGE PRE-WIRE.
- NOTIFY LEASING COORDINATOR/PROJECT MANAGER OF LOW VOLTAGE REQUIREMENTS NEEDED IN ORDER TO OBTAIN CERTIFICATE OF OCCUPANCY.
- 1. ELECTRICAL BOXES 4X2-1/8D HANDY BOX MUST BE USED, PER DIAGRAM BELOW FOR ALL LOW
- VOLTAGE APPLICATIONS IN NEW WALLS AND CONCRETE WALLS. 2. MUD RINGS - MPLS METAL SINGLE GANG DRYWALL MOUNTING PLATE, PER DIAGRAM BELOW FOR ALL LOW VOLTAGE APPLICATIONS IN EXISTING WALLS.

- CONDUIT-DEMISED PREMISES
- RACEWAY LD10E16-A.
- THE SAME LOCATIONS.
- PLANS INDICATED BY TRIANGLE SYMBOL ON FLOOR PLANS.
- 1. 3/4" CONDUIT LOCATIONS
- (1) AT WELCOME AREA (ROOM 100) • (5) AT BOA WORK AREA (ROOM 101)
- (4) AT FA OFFICE (ROOM 102A-D)
- (4) AT BOC INTO DOUBLE GANG BOXES
- (2) AT PRINTER/WORK AREA
- 2. 1.25" CONDUIT LOCATIONS • (5) AT CONFERENCE (ROOM 106A-E)
- 3. 2" CONDUIT LOCATIONS
 - 4. ALL BOXES AND CONDUIT AT BOC LOCATION TO BE INSTALLED PER DETAIL. #6 GROUND WIRE MUST BE INSTALLED AND TERMINATED ON A BUSBAR FOR #6 WIRE MOUNTED ON THE BOTTOM CORNER OF THE BACK BOARD. THE BUSBAR SHOULD HAVE 4 TO 6 TERMINALS.
 - CONDUIT AND PHONE LINES FROM BUILDING SOURCE TO EXTENDED DEMARC (BOC) A. GENERAL CONTRACTOR TO INSTALL (2) 3/4 " CONDUIT FROM THE BUILDING SOURCE TO THE EXTENDED DEMARC LOCATION WITHIN THE BRANCH (BOC LOCATION SHOWN ON PLAN). ****IF DATA LINES ENTER BUILDING AT A DIFFERENT LOCATION THAN PHONE LINES, (1) CONDUIT WILL NEED TO COME FROM THE DATA SOURCE TO THE GROUNDED BOX AT THE BOC LOCATION. REMAINING CONDUIT
- SHOULD BE RUN IN FROM THE PHONE LINE SOURCE TO THE BOC LOCATION***** B. CONTACT BRANCH REAL ESTATE IMMEDIATELY IF THERE ARE ANY QUESTIONS REGARDING THE NUMBER OF PHONES LINES OR LOCATION OF DEMARC EXTENSION CONDUIT.

PULL STRINGS TO BE LEFT IN PLACE UNTIL ALL VENDORS HAVE COMPLETED WORK	
(1) 2" CONDUIT TO LEC DMARC BOX	
LE GANG PHONE BOX	

SINGLE GANG PHONE BOX WITH PULL STRING AND #6 GROUND WIRE BY GC (M-CO TO RUN (1) CAT5E LINE TO THIS LOCATION

ACTIVE SINGLE GANG PHONE BOX WITH PULL STRINGS BY GC. M-CO TO RUN REMAINING (4) CAT5E LINES TO THIS LOCATION)-

13. MISCELLANEOUS - (ONLY IF SHOWN ON SHEET 3) A. FIXED WINDOW

- 1. NEW INTERIOR WINDOW BETWEEN FA OFFICE AND BOA AREA TO BE A FIXED, 42 "W X 30"H AND INSTALLED AT 42" A.F.F., UNLESS NOTED OTHERWISE; FRAME TO MATCH DOOR FRAMES. 2. GLASS TO BE CLEAR. ¼ " TEMPERED STATIONARY PANEL. GLIDERS & MIRRORED WINDOWS NOT ALLOWED.
- B. FIREPLACES, STOVES, SHOWERS, TUBS
- LINES TO BE CAPPED.

14. EDWARD JONES STANDARD SIGNAGE A. FOR ORDERING & INSTALL INSTRUCTIONS, SEE CONTACT INFO ON SHEET 1

- B. EDJ LOGO
- EDJ LOGO LETTERING TO BE ORDERED BY CONTRACTOR, BUT WILL BE PAID FOR BY EDWARD JONES. ONLY INSTALLATION SHOULD BE INCLUDED IN CONTRACTOR'S SCOPE OF WORK.
- 2. LETTERING TO BE CENTERED ON PARTITION AS SHOWN ON FINISH PLAN ON SHEET 4. REFER TO SIGNAGE ELEVATION FOR MOUNTING HEIGHT. 3. CONTRACTOR TO USE PROVIDED TEMPLATE FOR ACCURATE ALIGNMENT, ALLOW AT LEAST 2" ON EITHER SIDE OF LETTERING. IF PARTITION SELECTED DOES NOT MATCH
- ELEVATION, NOTIFY DESIGNER IMMEDIATELY.
- C. BRAND WALL METAL REVEAL CONTRACTOR TO ORDER METAL REVEAL (EDJ-625-625) FROM FRY REGLET AND INSTALL PER MANUFACTURER INSTRUCTIONS. REFERENCE FINISH PLAN AND SIGNAGE ELEVATION ON SHEET 4.
- a. REVEAL AVAILABLE IN 10' STANDARD LENGTHS ONLY. REVEAL TO BE CENTERED IF WALL IS SLIGHTLY LONGER THAN 10', OR WILL REQUIRE MUTIPLE REVEALS SEAMED TOGETHER IF INDICATED TO BE LONGER. SEE FINISH PLAN ON SHEET 4. b. INSTALL END CAP CLIP WHERE APPLIES AT OPEN ENDS

A. CONDUIT STUB-UPS TO BE INSTALLED IN NEW WALLS WHERE PHONE/DATA/PRINTERS ARE SHOWN ON THE FLOOR PLAN (INDICATED BY TRIANGLE ▼) IF THE NEW CEILING IS DRYWALL, INSTALL CONDUIT FROM THE POINT OF CONNECTION (PHONES/DATA/PRINTER LOCATIONS INDICATED WITH ▼) AND STUB ABOVE CEILING WITH PULL STRING RUN TO THE POINT OF TERMINATION (CLIENT SERVER OR BOC).

B. CONFIRM ACTUAL LOCATIONS ON EXHIBIT A PRIOR TO INSTALLATION. EXISTING CONSTRUCTION--CONDUIT NOT TO BE DONE IF IT REQUIRES REMOVAL OF DRYWALL PARTITIONS OR CEILINGS , UNLESS PRIOR APPROVAL RECEIVED FROM EDJ DESIGNER. IF WIREMOLD PRODUCT IS REQUIRED, INSTALL PANDUIT

C. PROVIDE ONE SINGLE GANG BOX (ONE PER TRIANGLE) AND PULL STRING AT EACH CONDUIT LOCATION. LABEL PULL STRINGS AT POINT OF TERMINATION (BOC) WITH ROOM NUMBER OF POINT OF CONNECTION. D. IF WALLS ARE EXISTING AND CONDUIT IS NOT INSTALLED, PROVIDE PULL STRING AND CUT IN A NEW BOX AT

E. STANDARD STUB-UP QUANTITY: TEN (10) 3/4 " DIAMETER LOCATIONS, UNLESS NOTED OTHERWISE ON

- (2) AT INCOMING PHONE/DATA LINES TO BOC PER PLAN (ONE ACTIVE FOR PHONES AND ONE W/ #6 GROUND WIRE RUN FROM BOX TO ELECTRICAL PANEL TO GROUND BOX FOR DATA)

BOC REQUIREMENTS:



- 1. ALL GAS AND PLUMBING LINES TO THESE ELEMENTS/FIXTURES TO BE RENDERED INOPERABLE AND ALL
- 2. IF WOOD BURNING FIREPLACE EXISTING GC TO INSTALL COVER MADE FROM LUMBER AND DRYWALL THAT RESTS INSIDE THE OPENING AND DOES NOT DAMAGE THE FIREPLACE.



15. INTERIOR CASEWORK AND EQUIPMENT

- A. REFER TO SHEET 3 FOR CASEWORK SCOPE OF WORK. B. ALL CASEWORK TO BE MADE UP OF 3/4" PLYWOOD WITH PLASTIC LAMINATE ON ALL EXPOSED EDGES, AND MELAMINE INTERIOR. INTERIOR ADJUSTABLE SHELVING TO BE MADE UP OF 3/4" PLYWOOD WITH MATCHING MELAMINE ON ALL EXPOSED EDGES.
- C. CASEWORK TO INCLUDE SOFT-CLOSE HINGES AND DRAWER SLIDES.
- D. CABINET PULLS TO BE 3" BRUSHED NICKEL T-BAR PULLS: SKU #100292074'
- E. NEW CASEWORK TO MATCH EXISTING CASEWORK FINISHES, IF APPLICABLE. IF NO STANDARD IS IN PLACE, BASIS OF DESIGN CASEWORK TO BE PLASTIC LAMINATE BASE CABINETS, AND PLASTIC LAMINATE COUNTERTOP. BASIS OF DESIGN:
 - CABINET EXTERIOR : WILSONART, FRENCH LINEN 5016
 - CABINET INTERIOR : BLACK MELAMINE
 - COUNTERTOP: NEVAMAR, S-7024 CHALK WHITE
- OR COMPARABLE ALTERNATE (CONTACT PROJECT MANAGER FOR APPROVAL)
- ALL ELECTRICAL, PLUMBING, AND PLUMBING FIXTURES FOR KITCHENETTES AND COFFEE BARS TO BE PROVIDED AND INSTALLED BY CONTRACTOR. SEE SCHEDULE ON SHEET 7.
- G. ALL APPLIANCES FOR KITCHENETTES AND COFFEE BARS TO BE PROVIDED AND
- INSTALLED BY CONTRACTOR. SEE SCHEDULE ON SHEET 7.
- H. ALL CASEWORK TO BE BUILT TO COMPLY WITH ADA AND BUILDING ACCESSIBILITY CODE: CLIENT-FACING SERVICE COUNTERS (BOA DESK)
- SHALL COMPLY WITH SECTION 904, FOR EITHER PARALLEL OR FORWARD APPROACH CLEAR FLOOR SPACE COMPLYING WITH SECTION 305 SHALL BE POSITIONED IN FRONT OF THE ADA COUNTER.
- WORK COUNTERS
- SHALL COMPLY WITH SECTION 902 CLEAR FLOOR SPACE COMPLYING WITH 305, AND KNEE AND TOE CLEARANCE COMPLYING WITH 306.
- **KITCHENETTES**
- SHALL BE 34" HIGH MAX COUNTERS
- COMPLY WITH SECTIONS 305, 606, AND 808, AND PROVIDE EITHER PARALLEL OR FRONT APPROACH CLEARANCES AT SINKS AND ALL APPLIANCES



St. Louis 319 North 4th Street Suite 1000 St. Louis, Missouri 63102 (314) 231-5700

Project Team: GENERAL CONTRACTOR:

To Be Determined

PROFESSIONAL ENGINEER: **IMEG** Consulting Engineers 7600 E Orchard Road, Suite 250-S Greenwood Village, CO 80111 Phone: 303.796.6000

Professional Seal:

Project Title:



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Sheet Title:

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	ELECTRI	CAL SYMBOL LIST	
SYMBOL:	TAG:	DESCRIPTION:	SYMBOL
GB	<u>GB</u>	GROUND BUS	S
IBT	<u>IBT</u>	INTERSYSTEM BONDING TERMINATION	\$ ₆₀
Ē	<u>ECONN</u>	ELECTRICAL CONNECTION	s _t
U U	JB	JUNCTION BOX	S ₄
Ø	<u>FB-#</u>	FLOOR BOX - DUPLEX RECEPTACLE	D _F
Ø	<u>FB-#</u>	FLOOR BOX - DUAL COMPARTMENT	
ØVV	<u>FB-#</u>	FLOOR BOX - MULTI SERVICE	D _O
Ø _{sv}	<u>FB-#</u>	FLOOR - SERVICE FITTING	D ₃
RI V	<u>RI-TECH</u>	TECHNOLOGY OUTLET ROUGH-IN	
	RI-TECH-C	TECHNOLOGY ROUGH-IN, CEILING	
W/RI	RI-TECH-W	TECHNOLOGY ROUGH-IN, WALL PHONE	
TV	<u>RI-TV</u>	TV ANTENNA OUTLET ROUGH-IN	
	<u>WM-#</u>	MULTI OUTLET SYSTEM	
	WW-#	ELECTRICAL WIREWAY w/ DEVICES SHOWN	
	DEM		
DEM	<u>DEM</u> DPM	DIGITAL POWER METER	OC D
	ITDM	IMPULSE-TOTALIZING DEMAND	s _o
FEM	EEM	EXTERNAL ENERGY METER	S _{O2}
POM	PQM	POWER QUALITY METER	
	CPC		
ES	ES	EMERGENCY STOP, N.C. CONTACT	
EPO	<u>EPO</u>	EMERGENCY STOP, N.O. CONTACT	
LA	<u>FA-LA</u>	LAMP ANNUNCIATOR	SYMBOL
PB	<u>PB</u>	MOMENTARY PUSHBUTTON OPERATOR	
	<u>PANEL '###'</u>	PANELBOARD - RECESS MOUNT	
	<u>PANEL '###'</u>	PANELBOARD - SURFACE MOUNT	
	<u>MX-#/MS-#</u> / <u>CB-#/CS-#</u>	MANUAL SWITCH / STARTER / COMBINATION STARTER/ CIRCUIT BREAKER. REFER TO DISC/STA SCHEDULE	
	<u>IPP-#</u>	ISOLATED POWER PANEL	
MG	MG	MASTER GROUND STATION MODULE	⊢_ ⊖
PM	<u>PM</u>	OPERATING ROOM POWER MODULE	
RIM	RIM	REMOTE LINE ISOLATION MONITOR	
RAS	RAS	REMOTE ANNUNCIATOR STATION	\otimes
\mathbf{X}	<u>IPC-#</u>	INTEGRATED POWER CENTER	\otimes
\boxtimes	<u>TR-#/DTR-#</u>	TRANSFORMER. REFER TO	12 ↔
\mathbf{X}	<u>MPC-#</u>	PACKAGED POWER CENTER	1 _₽
	<u>CB-#</u>	CIRCUIT BREAKER - SURFACE MOUNTED. REFER TO DISC/STA SCHEDULE	
Π	<u>CB-#</u>	CIRCUIT BREAKER - FLUSH MOUNTED. REFER TO DISC/STA SCHEDULE	CO
	DS-#/FDS-#/DSS-#	DISCONNECT. REFER TO DISC/STA SCHEDULE	
	MD-SD-#	MOBILE DIAGNOSTICS SERVICE DISCONNECT. REFER TO DISC/STA SCHEDULE	ADDR:
BBBB	<u>BD-#</u>	BUSWAY	A.T.C. C.M.
Z	<u>BCS-#</u>	BUSS PLUG - COMBINATION STARTER. REFER TO DISC/STA SCHEDULE	E.C.
	<u>BP-#</u>	BUSS PLUG - CIRCUIT BREAKER. REFER TO DISC/STA SCHEDULE	F.P.C.
	BFP-#	BUSS PLUG - FUSIBLE DISCONNECT.	M.C.
₿h#	BD-REC-#	REFER TO DISC/STA SCHEDULE BUSSWAY RECEPTACLE UNIT. REFER TO DISC/STA SCHEDULE	P.C. T.C.C.

60 ^D	<u>SW-OC-D</u>	OCCUPANCY SENSOR - DUAL TECHNOLOGY				
OC D	<u>SW-OC-D-W</u>	OCCUPANCY SENSOR - DUAL TECHNOLOGY - WALL MOUNTED				
\$ ₀	<u>SW-OC-P-O</u>	SWITCH - OCCUPANCY SENSOR WALL SWITCH				
\$ _{O2}	<u>SW-OC-P-O2</u>	SWITCH - OCCUPANCY SENSOR AND DUAL SWITCH				
TC	<u>TC-#</u>	TIME SWITCH				
E	ELECTRIC	AL SYMBOL LIST				
SYMBOL:	TAG:	DESCRIPTION:				
		LINEAR LUMINAIRES				
		TROFFER				
\bigcirc		WALL SCONCE LUMINAIRE				
0		DOWNLIGHT LUMINAIRE				
$\langle \bigcirc$		AIMABLE OR WALL WASH LUMINAIRE				
	REFER TO	INDUSTRIAL LUMINAIRE				
ЧЧ	SCHEDULE	WALL BRACKET LUMINAIRE				
		POLE MOUNTED LUMINAIRE				
\otimes		SINGLE FACE EXIT SIGN				
\otimes		DOUBLE FACE EXIT SIGN				
▓৵		WALL/CEILING EMERGENCY EXIT SIGN				
		EMERGENCY UNIT				

ELECTRICAL SYMBOL LIST									
SYMBOL:	TAG:	DESCRIPTION:							
€ 0	REC-DUP-O	DUPLEX RECEPTACLE CONTROLLED BY OCCUPANCY							
o ≠	REC-QUAD-O	QUAD RECEPTACLE CONTROLLED BY							
ŧ	REC-DUP	OCCUPANCY DUPLEX RECEPTACLE, 125V							
₩	REC-DUP-GFI	DUPLEX GFI RECEPTACLE, 125V							
G	REC-DUP-GFI-R	GROUND FAULT DEVICE							
w⇔	REC-DUP-WP	DUPLEX GFI WEATHERPROOF RECEPTACLE 125V							
= ₩>	REC-TAMP-QUAD	QUAD RECEPTACLE, TAMPERPROOF, 125V							
-	REC-QUAD	QUAD RECEPTACLE, 125V							
₩	REC-QUAD-GFI	QUAD GFI RECEPTACLE, 125V							
_ =⊕	REC-QUAD-USB	QUAD RECEPTACLE, USB 125V							
₩ ₩	REC-QUAD-WP	QUAD GFI WEATHERPROOF RECEPTACLE, 125V							
$\bigcirc \bigcirc$	REC-DUP-PED	RECEPTACLE - PEDESTAL STYLE							
	REC-PED-QUAD	RECEPTACLE - PEDESTAL STYLE							
@ #	<u>REC-FB-#</u>	FLOOR BOX - POKE THRU, 125V							
" # [©]	REC-Z#	IEC PIN AND SLEEVE RECEPTACLE, 600V							
	<u>PP#</u>	POWER POLE							

	ELECTRICAL SYMBOL LIST											
.:	TAG:	DESCRIPTION:										
	<u>SW-1P</u>	SWITCH - SINGLE POLE										
	<u>SW-1P-060</u>	SWITCH - LOCAL TIMER - SPRING WOUND										
	<u>SW-1P-ADJ</u>	SWITCH - LOCAL TIMER - USER ADJUSTABLE										
	<u>SW-3W</u>	SWITCH - THREE WAY										
	<u>SW-4W</u>	SWITCH - FOUR WAY										
	<u>SW-D-FL</u>	DIMMER - FLUORESCENT BALLAST										
	SW-D-LED	DIMMER - LED										
	<u>SW-OD</u>	DIMMER - WALL DIMMER OCCUPANCY SENSOR										
	<u>SW-D-3W</u>	DIMMER - THREE WAY										
	<u>SW-LS</u>	DAYLIGHT LEVEL SENSOR										
	<u>SW-LS-3Z</u>	DAYLIGHT LEVEL SENSOR - 3 ZONE										
	<u>SW-LS-D</u>	DAYLIGHT LEVEL SENSOR - 1 ZONE DIMMING										
)	SW-LS-D-3Z	DAYLIGHT LEVEL SENSOR - 3 ZONE DIMMING										
	SW-LS-PC	PHOTOCELL										
	<u>SW-OC-D</u>	OCCUPANCY SENSOR - DUAL TECHNOLOGY										
	<u>SW-OC-D-W</u>	OCCUPANCY SENSOR - DUAL TECHNOLOGY - WALL MOUNTED										
	<u>SW-OC-P-O</u>	SWITCH - OCCUPANCY SENSOR WALL SWITCH										
	<u>SW-OC-P-O2</u>	SWITCH - OCCUPANCY SENSOR AND DUAL SWITCH										
	<u>TC-#</u>	TIME SWITCH										

CONTRACTOR ABBREVIATION KEY

DESCRIPTION.	
ASBESTOS ABATEMENT CONTRACTO CONSTRUCTION MANAGER ELECTRICAL CONTRACTOR FIRE PROTECTION CONTRACTOR GENERAL CONTRACTOR MECHANICAL CONTRACTOR PLUMBING CONTRACTOR TEMPERATURE CONTROLS CONTRAC	





EMERGENCY BRANCH LUMINAIRE

UNSWITCHED FOR NIGHT LIGHT, UNLESS NOTED 'SE'

ELECTRICAL INSTALLATION NOTES:

- 1. THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE ADA STANDARDS FOR ACCESSIBLE DESIGN. 2. CIRCUIT NUMBERS ARE SHOWN FOR CIRCUIT IDENTIFICATION. CIRCUITING SHALL AGREE
- WITH NUMBERING ON THE PANEL PROVIDED. COMMON NEUTRALS MAY NOT BE USED FOR BRANCH CIRCUITS. BALANCE THE LOAD ON PANEL AS EVENLY AS POSSIBLE BETWEEN EACH PHASE. 3. FLUSH MOUNT ALL LIGHTING CONTROL DEVICES AT +42" FROM FLOOR (CENTERLINE
- DIMENSION), EXCEPT WHERE OTHERWISE NOTED. DEVICES MAY BE SURFACE MOUNTED WHEN CONDUIT IS SPECIFIED EXPOSED. 4. FLUSH MOUNT ALL DUPLEX RECEPTACLES AND TECHNOLOGY OUTLETS AT +18" FROM
- FLOOR (CENTERLINE DIMENSION), EXCEPT WHERE OTHERWISE NOTED. RECEPTACLES AND OUTLETS MAY BE SURFACE MOUNTED WHEN CONDUIT IS SPECIFIED EXPOSED. 5. ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS SHALL BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPS.
- 6. CONNECTION FOR ELECTRIC WATER COOLERS (EWC) SHALL BE A JUNCTION BOX CONCEALED BEHIND WATER COOLER ACCESS PLATE OR BE A GFI RECEPTACLE LOCATED DIRECTLY BELOW AND CENTERED ON EWC. CONTRACTOR SHALL VERIFY TYPE OF EWC TO BE INSTALLED.
- 7. CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL CEILING MOUNTED DEVICES AND EQUIPMENT WITH LUMINAIRES, SPRINKLER, AND CEILING DIFFUSERS. CENTER ALL DEVICES IN CEILING TILE PATTERN. SMOKE DETECTORS AND OCCUPANCY/VACANCY SENSORS SHALL BE LOCATED NO CLOSER THAN 3 FEET TO AN AIR SUPPLY DIFFUSER OR RETURN GRILLE.
- 8. CONTRACTOR SHALL VERIFY ALL FURNITURE, MODULAR FURNITURE, AND EQUIPMENT LOCATIONS WITH ARCHITECTURAL PLANS, ELEVATIONS, AND REVIEWED SHOP DRAWINGS. PRIOR TO MAKING THE ACTUAL ELECTRICAL INSTALLATION, THIS CONTRACTOR SHALL ADJUST RECEPTACLES, OUTLETS, OR CONNECTION LOCATIONS TO ACCOMMODATE FURNITURE AND/OR EQUIPMENT.
- 9. ELECTRICAL AND TECHNOLOGY EQUIPMENT SHALL BE MOUNTED TO AVOID IMPEDANCE OF, OPERATION OF, AND/OR ACCESS TO ELECTRICAL AND MECHANICAL EQUIPMENT. ALL MOUNTING OF ELECTRICAL AND TELECOMMUNICATIONS EQUIPMENT, ON EQUIPMENT SUPPLIED BY ANOTHER CONTRACTOR, SHALL BE APPROVED IN ADVANCE BY THE OTHER CONTRACTOR.
- 10. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL OPENINGS SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS.
- 11. ALL WELDING SHALL BE ACCORDING TO AMERICAN WELDING SOCIETY STANDARDS. CONTRACTOR SHALL FURNISH TO THE ARCHITECT/ENGINEER CERTIFICATES QUALIFYING EACH WELDER, PRIOR TO START OF WORK. THE ARCHITECT/ENGINEER RESERVES THE RIGHT TO REQUIRE QUALIFYING DEMONSTRATION, AT THE CONTRACTOR'S EXPENSE, OF ANY WELDERS ASSIGNED TO THE JOB. 12. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL, TECHNOLOGY
- AUDIO/VISUAL, AND OTHER ELECTRICAL PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES, OTHER THAN SPRINKLERS. 13. ELECTRICAL IDENTIFICATION. REFER TO SPECIFICATION SECTION FOR COLOR/LABEL
- REQUIREMENTS FOR CONDUIT, BOX, CABLE/WIRE, AND EQUIPMENT.

ELECTRICAL RENOVATION NOTES:

- THESE NOTES APPLY TO ALL ELECTRICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, LIGHTING, POWER, FIRE ALARM, AND OTHER LOW VOLTAGE SYSTEMS. 1. EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD
- SURVEYS, EXISTING BUILDING DOCUMENTS, AND STAFF. VERIFY EXISTING CONDITIONS AND REPORT ANY CONFLICTS BEFORE PROCEEDING. 2. NOT ALL EXISTING EQUIPMENT, LUMINAIRES, AND CONDUIT ARE SHOWN. VERIFY EXISTING
- CONDITIONS AND REPORT ANY CONFLICTS WITH NEW WORK BEFORE STARTING WORK. 3. FIELD VERIFY THE AVAILABLE CLEARANCES FOR CABLE TRAY, BUSWAY AND CONDUITS BEFORE FABRICATION. RISES AND DROPS MAY BE NECESSARY BECAUSE OF EXISTING
- FIELD CONDITIONS. 4. EACH CONTRACTOR SHALL FIELD VERIFY ACCESSIBILITY TO THE AREA OF HIS/HER WORK AND SHALL NOTIFY THE GENERAL CONTRACTOR PRIOR TO BIDDING IF OTHER UTILITIES ARE REQUIRED TO BE REMOVED OR RELOCATED TO ALLOW ACCESS TO HIS/HER AREA OF
- WORK 5. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CUTTING, REMOVAL AND PATCHING OF ROOFS, WALLS, AND FLOORS ASSOCIATED WITH WORK BY ALL CONTRACTORS.
- CONTRACTORS SHALL NOTIFY THE GC OF AFFECTED AREAS PRIOR TO BIDDING. 6. GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF CEILINGS, CEILING TILES, AND CEILING GRIDS ASSOCIATED WITH AREAS OF WORK BY ALL CONTRACTORS. NOTIFY THE GENERAL CONTRACTOR OF AFFECTED AREAS PRIOR TO
- BIDDING. 7. WHERE EXISTING ELECTRICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, CONDUIT, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING ELECTRICAL SYSTEMS TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK.



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Project Title:



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No.	Description	Date

ELECTRICAL COVERSHEET

Project Number:	Sheet Number:

2024906.064 Drawn By: ARE





DEMOLITION GENERAL NOTES:

- 1. FOR DEVICES NOTED IN DASHED HEAVY LINE WEIGHT, REMOVE EXISTING DEVICE, CONDUIT AND ASSOCIATED WIRING BACK TO POINT OF ORIGIN, UNLESS OTHERWISE NOTED. RETAIN CIRCUIT CONTINUITY FOR REMAINING DEVICES IF REQUIRED. PATCH WALL AND FINISH TO MATCH NEW/EXISTING WALL SURFACE.
- 2. DISCONNECT AND REMOVE ALL EXISTING LIGHTING WITHIN THE REMODELED AREA UNLESS OTHER WISE NOTED AS EXISTING TO REMAIN ON LIGHTING PLAN OR RELOCATED. RELOCATED FIXTURES ARE NOTED WITH AN "R". SAVE AND PROTECT EXISTING CONDUIT AND CONDUCTORS FOR CONNECTION TO NEW LUMINAIRES. REFER TO NEW LIGHTING PLAN FOR ADDITIONAL INFORMATION.
- 3. DISCONNECT AND REMOVE ALL DEVICES AND ASSOCIATED CONDUIT AND CONDUCTORS FOR ALL ELECTRICAL DEVICES ON WALLS SCHEDULED TO BE REMOVED. RETAIN CIRCUIT CONTINUITY FOR REMAINING DEVICES IF REQUIRED. PATCH WALL AND FINISH TO MATCH NEW/EXISTING WALL SURFACE.



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No.	Description	Date

Sheet Title: LEVEL 01 ELECTRICAL DEMOLITION PLAN

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sue Date:	

SEPTEMBER 16, 2024





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LIGHTING GENERAL NOTES:

- 1. DEVICES SHOWN IN HEAVY LINE WEIGHT ARE NEW. DEVICES SHOWN IN LIGHT LINE WEIGHT ARE EXISTING TO REMAIN. DEVICES SHOWN WITH AN "R" ARE RELOCATED.
- 2. REFER TO ARCHITECTURAL PLANS FOR SPECIFIC LOCATIONS AND REQUIREMENTS FOR DEVICES.
- 3. REVIEW ENGINEERING DOCUMENTS IN CONJUNCTION WITH ARCHITECTURAL PLANS AND COORDINATE WORK TO INCLUDE REQUIREMENTS OF BOTH DISCIPLINES.

KEYNOTES (#)

- PROVIDE NEW 2'X2' RECESSED LED FIXTURE WITH A 0-10V DIMMING DRIVER, 3561 LUMENS, 26.92W. LITHONIA LIGHTING: STAKS 2X2 AL03 SWW7 DGA22.
- 2 PROVIDE NEW 6" RECESSED LED DOWNLIGHT FIXTURE WITH A 0-10V DIMMING DRIVER, 1500 LUMENS, 17.5W. LITHONIA LIGHTING: LDN6 35 15 L06 AR LSS MVOLT GZ10.
- 3 PROVIDE NEW 2'X4' RECESSED LED FIXTURE WITH A 0-10V DIMMING DRIVER, 4325 LUMENS, 31.5W. LITHONIA LIGHTING: STAKS 2X4 AL06 SWW7 DGA24.
- 4 PROVIDE A NEW 6" X 8" LOW PROFILE SEMI-RECESSED LED WALL WASH FIXTURE WITH A 0-10V DIMMING DRIVER, 1771 LUMENS, 16W, D. ELLIPTIPAR: S222 M028 * * M 0 835 TD.
- 5 FIRST RELAY SHALL CONTROL LIGHT FIXTURE AND SECOND RELAY SHALL CONTROL EXHAUST FAN. REFER TO POWER PLANS FOR ADDITIONAL INFORMATION.
- 6 PROVIDE NEW EXIT SIGNS TO BE CURRENT BUILDING STANDARD. COORDINATE WITH LANDLORD FOR EXACT MANUFACTURER AND TYPE PRIOR TO PURCHASING. NEW EXIT SIGNS SHALL BE APPROVED BY BUILDING MANAGEMENT AND ORDERED IMMEDIATELY TO ENSURE THE PROJECT WILL BE COMPLETED ON TIME. PROVIDE THE EXIT SIGN WITH EMERGENCY HEADS WHERE SHOWN ON THE PLAN.
- 7 PROVIDE A NEW EMERGENCY LIGHTING UNIT WITH A INTEGRAL 90 MINUTE EMERGENCY BATTERY PACK. CONNECT TO NON-SWITCHED SIDE OF LIGHTING CIRCUIT SERVING THIS AREA.



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Project Team GENERAL CONTRACTOR: To Be Determined



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Project Title:

IMEG Project No: 24000280.55



Sheet	Number:	

Project Number: 2024906.064 Drawn By: ARD





POWER GENERAL NOTES:

- 1. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION INCLUDING SPECIFIC LOCATIONS AND REQUIREMENTS FOR DEVICES.
- 2. DEVICES SHOWN IN LIGHT LINE WEIGHT ARE EXISTING TO REMAIN. DEVICES SHOWN IN HEAVY LINE WEIGHT ARE NEW.
- 3. REVIEW ENGINEERING DOCUMENTS IN CONJUNCTION WITH ARCHITECTURAL PLANS AND COORDINATE WORK TO INCLUDE REQUIREMENTS OF BOTH DISCIPLINES.
- 4. RECIRCUIT ALL EXISTING DEVICES, NOTED WITH A CIRCUIT DESIGNATION, TO NEW CIRCUIT AS INDICATED.

KEYNOTES (#)

- 1 PHONE COMPANY SERVICE TO BE INSTALLED AT BOC LOCATION PER DETAIL ON SHEET A10 AND PER SPECIFICATIONS ON 1ST DAY OF CONSTRUCTION OR AS CLOSE TO DAY 1 AS POSSIBLE. EMAIL PHOTO TO PROJECT MANAGER TO CONFIRM WORK ASAP.
- 2 INSTALL (1) DUPLEX OUTLET @ 60" AFF FOR FUTURE FA-PROVIDED WALL-MOUNTED TV. REFER TO PLAN AND TYPICAL DETAIL ON SHEET A6 FOR LOCATION ON THE WALL. CONTRACTOR TO INSTALL BLOCKING AND EDJ PROVIDED WALL-MOUNT AS NEEDED FOR EDJ PROVIDED WALL-MOUNTED TV.



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No.	Description	Da	ate

^{Sheet Title:} LEVEL 01 POWER PLAN

Sheet Number:

Project Number:	
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Drawn By:	
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GENERAL NOTES ONE-LINE:

- DISCREPANCIES EXIST, NOTIFY ENGINEER IMMEDIATELY.





(E) METERBOARD : 120/208V, 3PH, 4W.

PARTIAL ELECTRICAL ONE-LINE DIAGRAM

1. LIGHT LINE WEIGHT INDICATE EXISTING WORK TO REMAIN. HEAVY LINE WEIGHT INDICATES NEW WORK. NO NEW WORK IS REQUIRED IN THIS SCOPE OF WORK.

2. ELECTRICAL CONTRACTOR SHALL FIELD CONFIRM EXISTING ONE-LINE DIAGRAM. IF

3. CONTRACTOR SHALL PERFORM FIELD TESTING REQUIRED IN SECTION 260519, 3.04 FOR ALL EXISTING METER BOARD AND PANEL CONNECTIONS AND PANEL FEEDERS.

PANEL L14

	SII SOL	NGLE ID NE	TUB UTRAI	-				IS	C UN	MAIN VOLTS PHASE WIRE SCCF	N: 200 A ,MCB/ 72 S: 120/208 Wye E: 3 E: 4 R: EXISTING N	(VA		
	E	3	(C	VD %	G	WIRE SIZE N	E H	P	CPD AMPS	LOAD DESCR		CKT NO.	
0.39									1	20 A	R-TOILET 105A,105B		2	
	3.6	1.5							1	20 A	WATER HEATER		4	-
			3.6	1.44					1	20 A	R-PASSAGE 103, OFFIC	E 102C, ENTRY	6	
0									2	30 A	SPARE		8	-
	0	0											10	-
			1.2	1					1	20 A	SECURITY PANEL		12	-
0.72									1	20 A	R-OFFICE 102A,102B		14	
	0.18	0.6							1	20 A	R-TV'S OFFICE 102A,10)2B	16	
			1.44	0.9					1	20 A	R-OFFICE 102B		18	
0.9									1	20 A	R-OFFICE 102A		20	
	0.6	0							1	20 A	SPARE		22	_
			0	0					1	20 A	SPARE		24	_
0									1	20 A	SPARE		26	_
	0.36	0.54							1	20 A	R-EQUIP 100A		28	L
			0.18	0.63					1	20 A	L-WELCOME/ENTRY/P	ASSAGE	30	
0.93									1	20 A	Lighting		32	L
	0.72	0							1	20 A	SPARE		34	_
			1.08	0					1	20 A	SPARE		36	_
0									1	20 A	SPARE		38	_
	1.5	0.5							1	20 A	OPEN/CLOSE SIGN		40	-
			1.5	0.5					1	20 A	SECURITY CAMERAS		42	_
kVA	10.10) kVA	13.47	7 kVA										
52	85	.48	113	3.54										
LO	DAD SL	JMMA	RY											
ND F	ACTO	R ES	STIMA	TED D	EMAN	1D					TOTAL S*			
90.00	%		1.4	404 kV	A						TOTALO			
125.00)%		1.	95 kVA	4		тот	'AL (CON	NECTE	D LOAD:	32.63 kVA		
100.00)%		0.0	032 kV	A		тот	'AL I	ESTI	MATED	DEMAND LOAD:	29.073 kVA		
100.00)%			3 kVA			тот	AL (CON	NECTEI	D AMPS:	90.56 A		
92.96	%		10	.82 kV	A		тот	'AL I	ESTIN	MATED	DEMAND AMPS:	80.7 A		
%		11.8	867 kV	A										
HE SM	ALLE	ROF	ANY N	ONCO	INCID	ENT	HVA	AC L	OAD	S. THIS	CALC IS DONE AT	EACH PANEL]

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Project Team GENERAL CONTRACTOR: To Be Determined

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No.	Description	Date

Sheet Title: ELECTRICAL ONE-LINE AND SCHEDULE

oject Number:	Sheet Number:
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SECTION 26 0500 - COMMON ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. Provide all labor, materials, equipment and incidentals for completion of all electrical systems described here in. All electrical equipment and material shall be installed in accordance with requirements, governing authorities, and in a neat and workmen like manner by skilled and competent electricians in conformance with the standard practices of the electrical industry. All electrical systems shall be complete and operational to the benefit of the owner.

- 1. Good workmanship and appearance are considered equal to proper operation.
- 2. The contractor shall provide all foreseeable electrical equipment and accessories necessary, whether specifically stated or not, to make the required electrical systems complete and operational
- B. The electrical contractor shall comply with the requirements of the general conditions, supplemental general conditions of the project specifications, any base building specifications and building criteria, and all contract specifications and documents.
- C. Coordinate and order the progress of electrical work to conform to the owner's
- schedule and the progress of the work of the other trades. D. Apply for and pay for all permits, fees, licenses and inspections for this division of
- E. Provide temporary lighting and power as required.
- F. Visit the project before submitting a bid as no extras will be allowed for lack of knowledge of obvious existing conditions
- G. Drawings are diagrammatic in nature. Take all dimensions from architectural drawings, certified equipment drawings and from the structure itself before fabricating any work.
- 1.2 DEFINITIONS AND STANDARDS
- A. "Provide" means contractor is responsible for the furnishing and installation of. B. "Exposed" means where it can be seen after the building is completed such as in equipment rooms, unfinished areas, accessible tunnels, etc. Where conduit/equipment is accessible.
- C. "Concealed" means where it cannot be seen after the building is completed such as in spaces as chases, trenches, above ceilings, in walls and buried where conduit/wire is inaccessible when building is completed.
- D. Standards for materials: all materials shall be new except as otherwise stated, and shall conform with the current applicable industry standards, NEMA standards and underwriters' laboratories standards.
- E. Comply with the latest federal, state and local codes requirements, and ordinances, with the national electrical code of the national fire protection association, and with requirements of the power and telephone companies furnishing services to the project. The following is a brief list of applicable codes:
- 1. NFPA NO. 70 National Electrical Code, Latest Edition
- 2. NFPA NO. 72 Fire Alarm, Latest Edition
- 3. NFPA NO. 101 Life Safety Code, Latest Edition
- 4. IBC & UBC, Latest Edition
- 5. Local building codes, latest edition
- F. Provide testing of all electrical systems and components as required by all applicable building codes and ordinances, UL, NEMA, ANSI, ICEA, NECA, etc., and as recommended by the electrical equipment manufacturers.
- 1.3 SUBMITTALS

A. Shop drawings: submit shop drawings as required in division 1 for all materials and equipment. If the shop drawings deviate from the contract documents advise the engineer of the deviations via written format, accompanying the shop drawings. Include the reason for the deviation(s). Coordinate all required changes with the other trades affected. If the changes are occasioned by the contractor, the contractor shall pay any costs involved. Shop drawings shall include but are not limited to the following:

- 1. Product data for electrical identification.
- 2. Product data for boxes, enclosures and cabinets.
- 3. Product data for wiring devices.
- 4. Product data for lighting control devices
- 5. Product data for equipment wiring systems. 6. Product data and drawings for enclosed switches and circuit breakers.
- 7. Product data and drawings for panelboards.
- 8. Product data and drawings for transformers.
- 9. Product data for fuses.
- 10. Product data for lighting.
- 11. Product data, calculations and drawings for fire alarm system.
- 12. Test reports as required.
- 13. Certificates of operation as required.
- 1.4 WARRANTY

A. Provide a written warranty to the owner covering the entire electrical work excluding incandescent. fluorescent. and HID lamps, to be free from defective materials. equipment and workmanship for a period of one year after date of acceptance. All defective equipment or materials which appear during the warranty period shall be replaced or repaired by the electrical contractor in a timely fashion at no cost to the Owner.

- 1.5 CLOSE OUT SUBMITTALS
- A. Operation and maintenance manuals: submit number as required by division 1, typed and hard bound to Architect for approval prior to scheduling any system demonstration for the owner and fifteen (15) days prior to final observation. Books shall be arranged in sequence to match the specification sections.
- PART 2 PRODUCTS 2.1 GENERAL
 - A. All equipment and materials shall be new unless noted otherwise and acceptable for installation only if labeled or listed as defined in NFPA 70, article 100, by UL or by a recognized testing laboratory where standards have been established and acceptable to the authority having jurisdiction. Labeled or listed equipment shall be installed in accordance with any instructions or labeling provided with the equipment.
 - B. Make provisions for safe delivery and secure storage of all materials.
 - C. Should the contractor wish to have products considered other than those specified, contractor must submit those items as required in division 1. Contractor will be required to submit the total savings (anticipated savings) to the Owner.
- PART 3 EXECUTION 3.1 GENERAL
 - A. Provide all core drilling, channeling, cutting, patching, sleeves, etc. As required for installation of electrical equipment. Seal holes, fireproofing where necessary, and refinish all repair work to original condition where damaged by electrical work. 1. Coordinate core drill locations with structural prior to work.
 - 2. Coordinate UG site utilities with appropriate utility company prior to work.
 - B. Provide branch circuits to equipment provided by others and to mechanical
 - equipment and make all connections. Temperature control equipment wiring and connections shall be provided by the mechanical contractor.
 - D. Heater units in all motor starters shall be sized for approximately one hundred fifteen percent (115%) of full load motor current. Check and coordinate all thermal protective devices with the equipment they protect.
 - E. Provide for each motor, one-half (1/2) horsepower and below, a horsepower rated disconnect switch and thermal overload protection unless internally provided with the motor. Thermal overload switches for single phase motors shall be Allen-Bradley bulletin 600 or acceptable.
 - F. Carefully coordinate all electrical work with all other applicable divisions.
- END OF SECTION 26 0500

REMODELING

PART 4 - GENERAL 4.1 SUMMARY

PART 5 - EXECUTION 5.1 DEMOLITION

5.2 COORDINATION

5.3 OUTAGES

END OF SECTION 26 0510

CABLES

PART 6 - GENERAL

6.1 SUMMARY PART 7 - PRODUCTS PART 8 - EXECUTION 8.3 CONNECTIONS

END OF SECTION 26 0519

C. Provide safety switches and/or thermal overload switches as required.

SECTION 26 0510 - DEMOLITION FOR

A. This section includes selective demolition for existing spaces.

- A. Field check all existing conditions prior to bidding and include an allowance for the removal and relocation of existing conduits, wires, devices, fixtures, or other equipment as indicated or as required to coordinate and adapt new and existing electrical systems to all other work required on this project. No extras will be allowed for alterations of a foreseeable nature required to achieve the end result as indicated on the drawings.
- B. Where the reuse of existing conduits, outlets, junction boxes, etc., is permissible, make certain that the wiring for them is continuous from outlet to outlet and that all splices and insulations are in good condition. Provide modifications to assure that circuits, or system shall not pass through outlets or junction boxes which may be rendered inaccessible by changes to be made to the project. Existing conduits, wire, devices, etc., which shall be removed shall become the property of the owner unless otherwise noted.
- C. Connect new work to existing in a manner that will assure proper raceway grounding throughout in conformance with the national electrical code.
- D. Remodel work, cutting and patching: this contractor shall perform all cutting, channeling, chasing, drilling, etc., as required to install or remove electrical equipment in areas of remodeling. This work shall be performed so as to minimize damage to portions of wall finishes, surfaces, plastering, or the structures which are to be reused, resurfaced, plastered, or painted under other divisions of these specifications.
- A. Carefully coordinate with the required remodeling work, cutting and patching etc., performed by other trades. Remove or relocate existing electrical conduits, wires, devices, fixtures and other equipment as necessary.
- A. All outages on portions of existing electrical systems shall be minimized and shall be at a time and of a duration as accepted by the owner.

SECTION 26 0519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND

- A. This Section includes the following:
- 1. Building wires and cables rated 600 V and less.
- 2. Connectors, splices, and terminations rated 600 V and less.
- 7.1 CONDUCTORS AND CABLES
- A. Manufacturers offering products that may be incorporated into the Work include, but
- are not limited to, the following: 1. General Cable Corporation
- 2. Senator Wire & Cable Company
- 3. Southwire Company
- B. Copper Conductors: Comply with NEMA WC 70.
- C. Multiconductor Cable: Comply with NEMA WC 70 for metal-clad cable, Type MC with ground wire.
- 7.2 CONNECTORS AND SPLICES
- A. Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.
- 8.1 CONDUCTOR MATERIAL APPLICATIONS
- A. Minimum size no. 12 AWG except for control or signal circuits, which may be no. 14 AWG or smaller. Increase conductor size as necessary to limit branch circuit voltage drop to 3% and service/feeder voltage drop to 2%.
- B. All conductors shall be copper; solid conductor for no.12 AWG and smaller, stranded for no. 10 AWG and larger.
- C. All wiring shall be as follows:
- 1. Service entrance, exposed feeders, and feeders concealed in ceilings, walls and partitions: type THHN, THWN or XHHW, single conductors in raceway. 2. Feeders concealed in concrete and below slabs-on-grade: type THHN-THWN,
- single conductors in raceway. 3. Branch circuits concealed in ceilings, walls, and partitions, and concealed in concrete or below slabs-on-grade: type THHN-THWN, single conductors in
- racewav. 4. Cord drops and portable appliance connections: type SO, hard service cord.
- 5. Fire alarm circuits: type THHN-THWN, in raceway or power-limited, fireprotective, signaling circuit cable, type NPLFP or PLFP.
- 6. Class 1 control circuits: type THHN-THWN, in raceway. 7. Class 2 control circuits: type THHN-THWN, in raceway or power-limited cable, concealed in building finishes.
- 8.2 INSTALLATION OF CONDUCTORS AND CABLES
- A. Wiring for control systems shall be installed in conjunction with mechanical and
- miscellaneous equipment B. Install conductor at each outlet, with at least 6 inches of slack to allow for connection
- to device.
- A. Splices for No. 6 AWG and smaller shall be made with twist-on wire connectors. B. Splices for No. 4 AWG and larger shall be made with solderless or compression type
- CU/ALR lugs.
- 8.4 FIELD QUALITY CONTROL
- A. Testing: perform the following field quality-control testing: 1. Torque test conductor connections and terminations to manufacturer's
 - ecommended values
- 2. Perform continuity test on all power and equipment branch circuit conductors. Verify proper phasing connections.
- 3. Insulation test: measure the insulation of feeder conductors. Measurements shall be taken between conductors, and conductors and ground. Resistance shall be 1,000,000 ohms or more when tested at 500 volts by megger without circuit
- B. Cables will be considered defective if they do not pass tests and inspections.

SECTION 26 0526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 9 - GENERAL

- 9.1 SUMMARY
- A. Conduit systems, supports, cabinets, equipment, transformers, fixtures, the grounded circuit conductor, etc. Shall be properly grounded in accordance with the current issue of the national electrical code. Provide all bonding jumpers and wire, grounding bushings, clamps, etc. As required for complete grounding.
- B. Connections shall be either bolted-pressure-type, compression type or exothermicwelded type.
- PART 10 PRODUCTS
- 10.1 CONDUCTORS
- A. Grounding conductor material: Copper 10.2 GROUNDING ELECTRODES
- A. Ground Rods: Copper Clad Steel 3/4 inch by 10 foot
- PART 11 EXECUTION
- 11.1 APPLICATIONS
 - A. Conductors: Install solid conductor for No. 8 AWG and smaller, and stranded conductors for No. 6 AWG and larger unless otherwise indicated.
 - B. Ground all communications equipment. C. Underground Grounding Conductors: Install bare tinned-copper conductor, No. 2 AWG minimum. Bury at least 24" below grade or below frost line, whichever is
- 11.2 GROUNDING AT THE SERVICE
- A. Bond the electrical service neutral at service entrance equipment per the current issue of the national electrical code utilizing main cold water pipe, building steel, driven ground rod, concrete encased electrode as applicable. Route grounding electrode conductors to provide the shortest and most direct path to the ground electrode system
- 11.3 GROUNDING SEPARATELY DERIVED SYSTEMS
- A. Generator: Install grounding electrode(s) at the generator location. The electrode shall be connected to the equipment grounding conductor and to the frame of the generator.
- B. Provide grounding electrode conductor for separately derived system(s) in accordance with the latest edition of the NEC. This includes, and is not limited to, transformer secondaries which must be bonded to building steel and/or cold water line entry
- 11.4 EQUIPMENT GROUNDING A. Provide a separate equipment grounding conductor in all feeder and branch circuits and all flexible and nonmetallic raceways.
- 11.5 INSTALLATION
- A. Grounding Conductors: Route along shortest and straightest paths possible unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage. Conductors shall not make more than a 90 degree bend with a minimum bending radius of 12 inches

END OF SECTION 26 0526

SECTION 26 0529 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 12 - GENERAL

- 12.1 SUMMARY
 - A. Provide hangers and supports for equipment, raceways and cables, including weight of wire in raceways. All systems cabling shall be supported by bridal rings or similar means
- PART 13 PRODUCTS
 - 13.1 SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS
 - A. Steel Slotted Support Systems: Comply with MFMA-4, factory-fabricated components for field assembly.
 - B. Material: Cold-formed steel, with corrosion-resistant coating acceptable to Authorities Having Jurisdiction and of type adequate to carry the loads of equipment, raceways and cables, including weight of wire in raceway.
 - C. Metal Items for Use Outdoors or in Damp Locations: Hot-dip galvanized steel.
 - D. Slotted-Steel Channel Supports: Flange edges turned toward web, and 9/16 inch
 - diameter slotted holes at a maximum of 2 inches o.c., in webs.
 - E. Channel Thickness: Selected to suite structural loading.
 - F. Fittings and Accessories: Products of the same manufacturer as channel supports. G. Raceway and Cable Supports, 120 Volts and Above: Manufactured clevis hangers, riser clamps, straps, threaded C-clamps with retainers, ceiling trapeze hangers, wall brackets, and spring-steel clamps or click-type hangers.
- H. Cable Supports below 120 Volts: Bridle rings installed a maximum of 4 feet on center. PART 14 - EXECUTION
 - 14.1 APPLICATION

 - A. Maximum Support Spacing and Minimum Hanger Rod Size for Raceway: Space supports for conduit as required by NFPA 70. Minimum rod size shall be 1/4 inch in diameter
- END OF SECTION 26 0529

SECTION 26 0533 - RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

PART 15 - GENERAL

15.1 SUMMARY A. Section includes metal conduits, tubing, fittings, surface raceway, and boxes. PART 16 - PRODUCTS

- 16.1 METAL CONDUITS, TUBING, AND FITTINGS A. EMT: Comply with ANSI C80.3 and UL 797.
- B. FMC: Comply with UL 1; zinc-coated steel.
- C. LFMC: Flexible steel conduit with PVC jacket and complying with UL 360.

A. Listing and Labeling: Nonmetallic conduits, tubing, and fittings shall be listed and

labeled as defined in NFPA 70, by a qualified testing agency, and marked for

B. RNC: Type EPC-40-PVC, complying with NEMA TC 2 and UL 651 unless otherwise

A. Surface metallic raceways shall be limited to only areas specifically noted and of size

A. General Requirements for Boxes, Enclosures, and Cabinets: Boxes, enclosures, and

B. Sheet Metal Outlet and Device Boxes: Comply with NEMA OS 1 and UL 514A. Four

cabinets installed in wet locations shall be listed for use in wet locations.

inch square or octagonal, zinc-coated sheet steel type.

D. Fittings for RNC: Comply with NEMA TC 3; match to conduit or tubing type and

- D. Fittings for Metal Conduit: Comply with NEMA FB 1 and UL 514B.
- 1. Fittings for EMT:
- a. Material: Steel b. Type: Setscrew or compression.

C. LFNC: Comply with UL 1660.

indicated

material

16.3 SURFACE RACEWAYS

16.4 BOXES

16.2 NONMETALLIC CONDUITS, TUBING, AND FITTINGS

intended location and application.

E. Fittings for LFNC: Comply with UL 514B.

and type specified on the drawings.

C. Floor boxes: As specified on the drawings.

PART 17 - EXECUTION

17.1 RACEWAY APPLICATION

- A. All conductors shall be enclosed by conduit sized in accordance with chapter 9, table 4 of the national electrical code. Minimum size 1/2 inch. All conduits shall be concealed in finished areas.
- B. Galvanized rigid metal conduit (RMC) and intermediate metal conduit (IMC) shall be utilized for above and below grade applications in accordance with Articles 344 and 342 of the National Electrical Code. All couplings shall be threaded.
- C. Electrical metallic tubing (EMT) shall be utilized for all dry, above grade or above floor feeders and branch circuit homerun applications in accordance with Article 358 of the National Electrical Code. Couplings shall be steel set screw type.
- D. Metal-clad cable (MC) with separate ground conductor shall be permitted for all concealed, above grade or above floor branch circuit applications excluding homeruns in accordance with Article 330 of the National Electrical Code. Connectors shall be listed for application of service indicated.
- E. Flexible metal conduit shall be utilized for all connections to vibrating equipment such as motors (minimum of 2'-0", maximum of 6'-0"), connections to lay-in type light fixtures or in remodel areas specifically noted for "fishing" in existing walls or nonaccessible ceilings.
- F. Rigid nonmetallic conduit (PVC) shall be utilized for above and below grade applications in accordance with Article 352 of the National Electric Code. Connections to be made by the use of a suitable solvent-type cement.
- G. Surface metallic raceways shall be limited to only areas specifically noted and of size and type specified on the drawings.
- H. All conduits exposed or concealed shall be routed parallel or perpendicular with the building walls. Support conduit as required by the latest edition of the National Electrical Code.
- I. Provide expansion type fittings for all conduits, which cross expansion joints. 17.2 BOXES
 - A. Outlet boxes shall be located so that transmission of sound through common walls
- will not occur. B. Enclosures exposed to weather or damp locations shall be weatherproof type.
- C. Provide covers set to come flush with finished walls.
- D. Pull boxes and junction boxes: junction boxes and pull boxes will be provided as required. Size of boxes shall be in accordance with the current national electrical
- code requirements. 1. Enclosures shall be NEMA type suitable for the surrounding area and conditions.
- E. Floor boxes: Provide covers set to come flush with finished surface.

END OF SECTION 26 0533

SECTION 26 0553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 18 - GENERAL

- 18.1 SUMMARY
 - A. Section includes identification for conductors, raceways, equipment, and underground warning tape.
- PART 19 PRODUCTS
 - 19.1 POWER RACEWAY IDENTIFICATION MATERIALS
 - Self-Adhesive Vinyl Labels for Raceways Carrying Circuits at 600 V or Less: Preprinted, flexible label laminated with a clear, weather and chemical-resistant coating.
 - 19.2 CONDUCTOR IDENTIFICATION AND MATERIALS
 - A. Conductors 8 AWG and smaller shall be factory color coded. Conductors 6 AWG and larger may be color coded by field painting or color taping a 6-inch length of exposed
 - B. Wiring for control systems shall be color-coded in accordance with the wiring diagrams furnished with the equipment.
 - C. Conductor identification shall be as follows:
- 120/208V System 277/480V System

Phase A Black Brown

Phase B Red Orange

Phase C Blue Yellow Neutral White Gray

Ground Green Green

Isolated Ground Green w/ Yellow Stripe Green w/ Yellow Stripe

- Switch Leg Pink Purple
 - 1. Color-Coding Conductor Tape: Colored, self-adhesive vinyl tape not less than 3 mils thick by 1 inch wide.
 - 19.3 UNDERGROUND-LINE WARNING TAPE
 - A. Provide detectable underground line warning tape for all underground electrical service (power, communications, etc.) System raceways.
 - B. Printing on tape shall be permanent and shall not be damaged by burial operations. Tape material and ink shall be chemically inert, and not subject to degrading when exposed to acids, alkalis, and other destructive substances commonly found in soils. 19.4 EQUIPMENT IDENTIFICATION LABELS
 - A. Provide engraved nameplates for all electrical cabinets, enclosures, panelboards, distribution equipment, electrical equipment, boxes, etc. Nameplates shall be engraving stock, melamine plastic laminate, minimum 1/8 inch thick for signs up to 20 square inches and 1/4 inch thick for larger sizes with black letters on a white face or as required by code or Owner.
- PART 20 EXECUTION
- 20.1 GENERAL INSTALLATION
 - A. Location: Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment.
 - B. Self-Adhesive Identification Products: Clean surfaces before application, using materials and methods recommended by manufacturer of identification device.
 - C. Attach signs and plastic labels that are not self-adhesive type with mechanical fasteners appropriate to the location and substrate.
 - D. Underground-Line Warning Tape: During backfilling of trenches install continuous underground-line warning tape directly above line at 6 to 8 inches below finished grade. Use multiple tapes where width of multiple lines installed in a common trench exceeds 16 inches overall.

END OF SECTION 26 0553



St. Louis 319 North 4th Street Suite 1000 St. Louis, Missouri 63102 (314) 231-5700

GENERAL CONTRACTOR: To Be Determined

Project Team



IMEG Project No: 24000280.55

Professional Seal:

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No.	Description	Date

ELECTRICAL **SPECIFICATIONS**

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SECTION 26 0933 - LIGHTING CONTROL SYSTEMS

PART 21 - GENERAL

21.1 SUMMARY

- A. Performance statement: this specification section and the accompanying lighting design documents describe the minimum material quality, required features, and operational requirements of the lighting control system. These documents do not convey every wire that must be installed and every equipment connection that must be made. Based on the performance required of the system, as presented in these documents, the contractor and system manufacturer/vendor are solely responsible for determining all equipment, wiring, and programming required for a complete and operational system.
- B. Provide an integrated lighting controls system consisting of panels, power supplies, controllers, sensors, relays, switches, devices, wiring, etc., necessary to perform the lighting control sequence of operation, as defined on the plans and specifications. Contractor is responsible for confirming that all components and luminaires interoperate as a single system.
- C. The following control types and features are acceptable: acceptable control locations are shown on the drawings.
- 1. Line voltage control: control equipment consists of traditional line voltage wiring devices and equipment such as switches, dimmers, and combination occupancy/vacancy sensor switches, etc.
- 2. Distributed control: control equipment is located in the space/zone being controlled; not reliant on centralized controllers. All locations shall have the ability to be networked for remote control and monitoring, but network connections are not required.
- 3. Centralized control: control equipment is in a central location serving multiple spaces/zones and provides time-based schedule and remote control.
- D. Manufacturer shall be engaged in the manufacture of lighting control equipment, whose products have been in satisfactory use for not less than (5) years. All components are to be factory pre-tested. Comply with NEC and NEMA as applicable. Panels and devices are to be UL listed. All assemblies are to be in compliance with FCC emissions standards.
- 21.2 SUBMITTALS
- A. Submit shop drawing product data including all devices, hardware, software, product specification, finishes, dimensions, installation instructions, warranty system software requirements, and roles and responsibilities in installation and commissioning. Provide floor plans showing location and coverage of devices. Submit a list of devices and equipment that will be installed for each sequence of operation. Submit project specific control wiring diagrams showing all equipment, devices, wiring, communication interfaces and programming instructions for each. Coordinate integration with mechanical or other trades.
- B. Submit emergency, operation, and maintenance data including schedule for routine maintenance, inspection, and calibration of devices, and recommended schedule for recalibration of sensors.
- 21.3 COMMISSIONING
- A. Commissioning of a system or systems specified in this section is part of the construction process. Documentation and testing of these systems, as well as training of the Owner's operation and maintenance personnel, is required in cooperation with the Owner's Representative. Refer to Division 01 for detailed commissioning requirements.
- 21.4 WARRANTY
- A. Manufacturer shall warrant products under normal use and service to be free from defects in the materials and workmanship for a period of two (2) years from date of commissioning
- B. Occupancy, vacancy, daylight sensors and controls shall have a five (5) year warranty from date of Substantial Completion.

PART 22 - PRODUCTS

- 22.1 COLOR
 - A. All switch, lighting controls, and coverplate covers shall be the same, unless indicated otherwise
- 22.2 COVERPLATES
- A. All switches and lighting controls shall be complete with coverplates that match material and color of wiring device coverplates in the space. Where devices are ganged, the coverplate shall be ganged style for the number of devices used. Install nameplate identification as indicated in 26 05 53. Plate screws shall be metal with head color matching the wall plate finish.
- 22.3 WALL SWITCHES
- A. Single pole switch: Single throw, 120/277-volt, 20-amp, maintained contact. Toggle handle and back wired.
- B. Push button door jamb switch: 120V 3A Single pole, momentary, metal pushbutton, with jamb box and cover plate. Light on when door is open.
- C. Key lock single pole switch: Single throw 120/277-volt, 20-amp maintained contact. Side and back wired. Provide key to owner.
- D. Weatherproof single pole switch: Single throw, 120/2077-volt, 20-amp maintained contact. Toggle handle, side and back wired. Provide with weatherproof coverplate.
- 22.4 INDOOR OCCUPANCY AND VACANCY SENSORS
- A. Wall or ceiling mounted, solid-state units with a separate power supply/relay unit: sensor contacts rated for UL 773A, relay unit dry contacts rated for 20A driver load at 120 and 277 VAC for 13-amp tungsten at 120VAC, and for 1 ph at 120VAC. Power supply to sensor shall be 24VDC, 150-mA, Class 2 power source.
- B. Ceiling mounted dual-technology type: coverage pattern to suit specific area, frequency greater than 40 KHz, adjustable sensitivity and time delay, controls all circuits in area, unless noted otherwise.
- C. Dual-technology type wall switch: 120/277VAC load rating of 0-800W for ballast, LED, or tungsten, adjustable time delay, coverage of minor motion in 12' x 15' pattern. Single or multi-relay as shown on plans.
- D. Ceiling mounted PIR type: coverage pattern to suit specific area, adjustable sensitivity and time delay. Sensor shall control all luminaires in the area unless otherwise noted.
- E. PIR wall switch occupancy sensor: adjustable sensitivity and time delay, no minimum load requirements, manual or auto-on operation. Single or multi-relay as shown on
- F. Ceiling or wall mounted ultrasonic type: frequency greater than 32 KHz solid state, adjustable sensitivity and time delay, temperature and humidity resistant receivers. Sensor shall control all circuits in the area, unless noted otherwise.
- 22.5 DAYLIGHTING CONTROLS
- A. Standalone Interior photo sensors with dimming control of number of zones indicated in the daylight zone. Range of 10 to 200 FC. Adjustable deadband and time delay. Coordinate with luminaire control type. Sensor shall detect changes in ambient light level and provide triggering of lighting groups as noted in Lighting Sequence of Operations. Ceiling or wall mounted for range and viewing angle with linear output.
- 22.8 DISTRIBUTED LIGHTING CONTROL
- A. Contractor is responsible for verifying that the selected manufacturer is capable of furnishing the complete system specified herein. All occupancy sensors, photocells, switches, and timers shall be provided with system and designed to operate on a system network. Supplemental power packs shall be provided as required for multiple control devices. Relay modules mounted in NEMA enclosure with physically separate voltage compartments. Dimmable relay modules shall be provided where indicated. Relay modules shall be labeled with room number.
- B. System shall include server/central station with operating software, data network, and BACnet IP communication. Communication protocol shall be compatible with the building automation system. System server/central station shall provide programmable operation of connected lights, capable of time and sequence scheduling, timed out and blink light operation, and monitoring and reporting. Lighting control system manufacturer shall be responsible to assure coordination. Network hub shall contain processor and astronomic time clock and shall be fed from an equipment emergency circuit at a minimum.

loads to lighting control devices. 23.3 SUPPORT SERVICES the owner. upon by owner.

PART 23 - EXECUTION

23.1 PREPARATION

23.2 INSTALLATION

- each component
- 23.4 COMMISSIONING
- END OF SECTION 26 09 33

SECTION 26 2726 - WIRING DEVICES

PART 30 - GENERAL 30.1 SUMMARY A. This section includes receptacles, GFCI receptacles, snap switches, dimmers, and occupancy sensors. PART 31 - PRODUCTS 31.1 RECEPTACLES A. Receptacles shall be 20-amp Pass & Seymour PS5362 series specification grade, or equal. GFCI and exterior receptacles shall be Pass & Seymour 2095TRWR series, or equal and if required, provide WP in use metal type cover. Provide device color as directed by the Architect, or to match base building standards, whichever is applicable. B. Provide special purpose outlets as required for equipment provided by others. 31.2 SNAP SWITCHES

- 31.3 DIMMERS
- 31.4 OCCUPANCY SENSORS
- 31.5 DEVICE PLATES
- PART 32 EXECUTION 32.1 INSTALLATION

 - block or brick construction:

 - 3. Telephone outlets: Long axis vertical at 1'-6" AFF to center.

 - construction.

 - receptacles to the left.
- END OF SECTION 26 2726

SECTION 26 2813 - FUSES

- PART 33 PRODUCTS
- 33.1 MANUFACTURERS
- for each size shall be provided. 33.2 SPARE FUSE CABINET

- PART 34 EXECUTION 34.1 INSTALLATION

 - removing fuse.
- B. Install spare-fuse cabinet(s). END OF SECTION 26 2813

percent spare capacity.

A. Schedule a pre-construction meeting with the controls representative, installing contractor, Architect/Engineer, and Owner to explain the proposed lighting control centralized, wireless, and distributed systems

B. Verify surfaces are ready to receive work. Verify field dimensions and physical size of all equipment. Verify required utilities are available and ready for use. Beginning installation means installer accepts existing conditions.

A. Install in accordance with manufacturer's instructions and shop drawings. B. All wiring shall be in conduit except Class II that maintains 150mm spacing from RFI/EMI sources. All branch load circuits shall be live tested before connecting the

C. Coordinate all remote test switch locations with the architect.

A. Provide factory-authorized technician to confirm proper installation and operation of system. System shall be functionally tested by a factory-authorized technician. Refer to Lighting Sequence of Operations and verify all programming and scheduling with

1. Confirm sensor placement, sensitivity, deadband, and time/delay settings. 2. Confirm schedules and time controls are configured as specified and agreed

3. Make adjustments as required after furniture and equipment is installed in each

B. Provide factory-authorized technician to train owner's personnel in the operation, maintenance, and management of the lighting control system.

C. Manufacturer shall provide system one-line, system layout drawings with number and type of control stations and sensors, communication line, and network or BMS/BAS interface unit, drawings for each panel, panel wiring schedules, typical diagrams for

A. Refer to Section 01 09 00 for verification tests, commissioning requirements, and required reports. Verification testing is part of the commissioning process. Training is required in cooperation with the owner's representative.

A. AC quiet operating type switches shall be 120/277V, 20-amp, Pass & Seymour CS20AC1 series, or equal. Provide device color as directed by the Architect, or to match base building standards, whichever is applicable.

A. Lutron C•L series, slide type rated for load served.

B. Lutron Nova T series, slide type for 0-10V dimming.

A. PIR wall switch sensors shall be Watt Stopper PW-100, or equal. B. Dual technology wall switch sensors shall be Watt Stopper DW-100, or equal

A. Device plates shall be high abusive nylon, color to match device, or to match base building standards, whichever is applicable.

A. Mount devices in accordance with the following schedule except where otherwise noted on the drawings or in areas with counters, baseboard heaters or in areas of

1. Convenience receptacles: Long axis vertical at 1'-6" AFF to center.

2. Light switches: Latch side of door at 3'-6" AFF to center.

4. *Except in areas with counters, baseboard heaters, or in areas of block or brick

B. Install ground pin of vertically mounted receptacles up, and on horizontally mounted

C. ADA mounting heights take precedence over scheduled mounting heights.

A. Fuses shall be as manufactured by bussmann rejection type "fusetron" or approved equal. Control fuses shall be bussmann one-time nonrenewable.

B. Low-voltage fuses: Dual-element fuses accurately rated, of the correct voltage and capacity to protect the equipment or circuits shall be provided. All fuses shall be

properly coordinated and shall be of the same manufacturer. One set of spare fuses

A. If required, wall mount size as required for storage of spare fuses specified with 15

A. Install fuses in fusible devices. Arrange fuses so rating information is readable without

SECTION 26 2816 - ENCLOSED SWITCHES AND **CIRCUIT BREAKERS**

PART 35 - GENERAL

35.1 SUMMARY

- A. Section Includes:
- 1. Fusible switches Nonfusible switches.
- 3. Molded-case circuit breakers (MCCBs).
- 35.2 ACTION SUBMITTALS
- A. Product Data: For each type of enclosed switch, circuit breaker, accessory, and component indicated. Include dimensioned elevations, sections, weights, and manufacturers' technical data on features, performance, electrical characteristics, ratings, accessories, and finishes.
- Enclosure types and details for types other than NEMA 250, Type 1.
- 2. Current and voltage ratings.
- 3. Short-circuit current ratings (interrupting and withstand, as appropriate).
- 4. Detail features, characteristics, ratings, and factory settings of individual overcurrent protective devices, accessories, and auxiliary components.
- PART 36 PRODUCTS
 - 36.1 PRODUCTS A. Enclosed switches and circuit breakers shall be as manufactured by Eaton Corp.
 - Cutler-Hammer, General Electric Co., Siemens Energy and Automation, Inc., or Square D Co. Manufacturer of switches and circuit breakers shall be same as panelboards.
 - B. Circuit breakers shall be molded-case, thermal-magnetic type, with interrupting capacity to meet available fault currents. Circuit breakers rated 250 amps and larger shall have adjustable magnetic trip setting.
 - C. Switch and fuse units shall be complete with rejection type fuses, dead front when closed, with fuses inaccessible until completely cleared from contact with the mains. Switches shall be heavy duty, horsepower rated and shall have quick-make and quick-break mechanism, with external operating handle, and interrupting capacity to meet available fault currents.
 - D. Provide enclosed switches for motor overcurrent protection, and provide enclosed switches or circuit breakers for overcurrent protection of all other equipment as required by the current issue of the national electrical code.
 - 36.2 ENCLOSURES

A. NEMA type suitable for the surrounding area and conditions

- PART 37 EXECUTION
 - 37.1 INSTALLATION
 - A. Install individual wall-mounted switches and circuit breakers with tops at 74 inches above finished floor, unless otherwise indicated. Install enclosures so they are rigidly supported and squarely aligned.
 - B. Install fuses in fusible devices.
 - 37.2 IDENTIFICATION
 - A. Comply with requirements in Division 26 Section "Identification for Electrical Systems.
 - 1. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs.
 - B. Label each enclosure with engraved metal or laminated-plastic nameplate and mount with corrosion resistant screws
 - 37.3 CONNECTIONS A. Install equipment grounding connections for switches and circuit breakers with ground
 - continuity to main electrical ground bus B. Install power wiring. Install wiring between switches and circuit breakers, and control and indication devices.
 - C. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those
 - specified in UL 486A and 486B. D. Do not use switch or circuit breaker enclosure as pull box. All conductors entering
 - E. Tests and Inspections: After installing enclosed switches and circuit breakers and after electrical circuitry has been energized, demonstrate product capability and compliance with requirements.
 - 37.4 CLEANING

A. On completion of installation, inspect interior and exterior of enclosures. Remove paint splatters and other spots, dirt, and debris. Vacuum dirt and debris; do not use compressed air to assist in cleaning. Touch up scratches and marred finish to match original finish.

END OF SECTION 26 2816

SECTION 26 5100 - INTERIOR & EXTERIOR LIGHTING

PART 38 - GENERAL

- 38.1 SUMMARY
 - A. This Section includes the following:
 - 1. LED luminaires, lamps, and drivers.
 - 2. Emergency egress lighting units.
 - 3. Exit signs.
- 38.2 SUBMITTALS
 - A. Provide a submittal for each type of luminaire, arranged in order of type designation Include data on features, accessories, remote drivers, finishes, and the following:
 - 1. Physical description of lighting fixture including dimensions.
 - 2. Emergency lighting units including battery and charger
 - 3. Remote drivers as designed.
 - 4. Input Wattage.
 - 5. Life (in hours) and energy-efficiency data of source.
 - 6. Photometric data, in IES format, based on laboratory tests of each lighting fixture type, outfitted with lamps, drivers, and accessories identical to those indicated for the luminaire as applied in this Project.
 - Dimming type.
- 8. Poles.
- 38.3 EXTRA STOCK
- A. Provide extra stock to owner including 5% of field-replaceable LED light engines or modules, 3% lenses, and 5% LED drivers, 10% LED lamps, minimum one (1) of each size and type for all.
- 38.4 DELIVERY
 - A. Deliver products to site. Protect luminaire finishes, lenses, and trims from damage during storage and installation. Do not remove protective films until construction cleanup withing each area is complete. Handle site lighting poles carefully to prevent breakage and damage to finish.
- 38.5 WARRANTY
 - A. The warranty period begins at the date of Substantial Completion. Provide LED light engines and drivers with a five (5) year warranty. Provide Emergency lighting units and exit signs with a three (3) year non-prorated warranty. Provide emergency units and exit sign batteries with sealed lead acid or lead calcium cell, requiring no maintenance or replacement for ten (10) years under normal conditions. Provide Emergency LED driver with five (5) year warranty. Provide emergency inverter and battery, sealed nickel cadmium, with five (5) year non-prorated warranty. Provide automatic load control relay (ALCR) with five (5) year warranty. Provide exterior finish on poles with three (3) year warranty. Provide LED LIGHT ENGINE with three (3) year warranty and any DRIVER with five (5) year warranty.

PART 39 - PRODUCTS

- 39.1 MANUFACTURERS
 - A. Subject to compliance with requirements in Division 1, provide products by the manufacturers specified on the drawings or provide products from manufacturers with similar construction, installation, Wattage usage, dimming type, dimensions, certifications, finishes, CRI, CCT, and photometric characteristics. Contractor will be required to submit the total savings (anticipated savings) to the Owner.
 - B. Lamps shall be manufactured by Osram/Sylvania, Phillips, G.E., or as noted on the luminaire/lamp schedule.

39.2 PRODUCTS

- A. Illuminated exit signs shall conform to local code requirements.
- B. Interior emergency power supply units shall be self-contained, modular, batteryinverter unit factory-mounted within luminaire body and shall comply with UL 924 C. Color temperature for LEDs shall be as specified in the drawings. Provide light source color consistency within a maximin 3-step McAdam ellipse. Rated life shall be minimum of 50,000 hours at L80. LED chips shall be wired so that failure of one chip
- does not prohibit operation of the remainder of the chip array. Luminaire delivered lumens is defined as the absolute lumens per the manufacturer's LM-79-08 test D. Provide Solid state drivers with integral heat sink. Driver shall have overheat, short-
- circuit and overload protection, power factor 0.90 or above, and maximum total harmonic distortion of 10%. Dimming shall control light output in a continuous curve from 100% to 10% unless noted otherwise. Driver shall have a minimum of 50,000 hours rated life. Driver shall be field replaceable without removal of the luminaire. Class A sound rating; inaudible in a 27 dBA ambient.
- E. Provide lensed troffers with hinged frames with latches and 0.125-inch thick virgin acrylic lenses. Prismatic lenses shall have depth of no less than 0.080", KSH12 or equal. Other lenses as scheduled. Confirm ceiling and wall type for recessed luminaires and furnish trim and accessories necessary to permit proper installation in each system. Where fire-rated ceiling or wall assemblies are specified, furnish and install listed enclosures around luminaires that maintain the system rating. For suspended luminaires, coordinate power feed and suspension canopies with ceiling type and architectural RCP for proper fit and location. Verify suspension length prior to submittal. Painted reflector surfaces shall have a minimum reflectance of 90%. All painted components shall be painted after fabrication.
- F. Exterior luminaires shall be listed for wet or damp location as scheduled. Provide ingress protection (IP) rating when scheduled. Provide low temperature LED drivers, with reliable starting to -20°F.
- G. LED Lamps used with dimming shall be verified for compatibility with dimmer manufacturer prior to ordering.
- H. Lighting poles shall be Square Round straight tapered steel aluminum lighting pole with embedded anchor transformer base.
- I. Wind Load: 100 MPH velocity, with 1.3 gust factor with luminaires and brackets mounted

PART 40 - EXECUTION

- 40.1 INSTALLATION
- A. Pole/bollard mounting: comply with AASHTO LTS-3 for pole or other support structures, brackets, arms, appurtenances, base, and anchorage foundation.
- 1. Pole/support structure base shall be anchor type with hold-down or anchor bolts, leveling nuts and bolt covers.
- 2. Concrete foundations shall be constructed according to division 3 "cast-in-place concrete" and structural engineer requirements.
- B. Securely fasten luminaires to the listed and labeled ceiling framing member by mechanical means such as bolts, screws, rivets or listed clips identified for use with the type of ceiling framing members. Provide a minimum of two (2) #12 gauge wires located on diagonal corners of luminaires. The architectural ceiling framing system may be used in lieu of independent support with prior written approval by the ceiling system manufacturer and AJH. Luminaires and wiring installed in fire-rated ceiling assemblies shall be independently supported for all applications.
- C. Set luminaires level, plumb, and square with ceiling and walls.. Install lamps in each luminaire without integral lamping.
- D. Adjust aimable luminaires to obtain lighting levels on objects and areas as directed to obtain desired lighting levels.
- The Contractor shall provide temporary construction lighting per the requirements of Division 1. The project luminaires shown on the construction documents shall not be used for temporary construction purposes without providing a plan for Owne approval that addresses energy and luminaire operating hours.
- 40.2 FIELD QUALITY CONTROL
 - A. Inspect each installed luminaire for damage. Replace damaged luminaires and components. Verify normal operation of each luminaire after installation. Interrupt the electrical supply to verify proper operation of the emergency lighting. If luminaires are malfunctioning, then repair or replace components and retest until luminaire operates properly.
 - B. Properly protect luminaires from construction dust and debris until all other trades have completed their work. Clean luminaires internally and externally after installation per manufacturer's recommendations. Touch up luminaire and pole finish at completion of work.
- C. Ensure all wiring, cords, and accessories have been properly trimmed or tucked away so as not to be seen through lenses.
- D. Replace any failed lamps and light engine modules or arrays at completion of work. 40.3 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: Include lighting equipment and luminaires in emergency operation, normal operation, and maintenance manuals

END OF SECTION 26 5100



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GENERAL CONTRACTOR: To Be Determined

Project Team



Professional Seal:

Project Title:

IMEG Project No: 24000280.55

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No.	Description	Date

ELECTRICAL SPECIFICATIONS

Sheet Number

2024906.064 Drawn By: Issue Date:

SEPTEMBER 16, 2024

Project Number:



INFORMATION IS AVAILABLE IN A SCHEDULE, MATERIAL LIST, OR SYMBOL LIST INDICATES AN EXISTING SYSTEM'S POINT OF CONNECTION/REMOVAL

CONTRACTOR ABBREVIATION KEY

ABBR:	DESCRIPTION:
A.T.C.	ASBESTOS ABATEMENT CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
F.P.C.	FIRE PROTECTION CONTRACTOR
G.C.	GENERAL CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
T.C.C.	TEMPERATURE CONTROLS CONTRACTOR

	MECHANICAL ABBREVIATION KEY
ABBR:	DESCRIPTION:
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
С	COMMON
со	CLEANOUT
CD-E	CEILING DIFFUSER - EXISTING
CFSD	CONTROL/FIRE/SMOKE DAMPER
DPG (0-2")	DIFFERENTIAL PRESSURE GAUGE (RANGE)
DPS	DIFFERENTIAL PRESSURE SWITCH
EA	EXHAUST/RELIEF AIR
ECFSD	EXISTING CONTROL FIRE SMOKE DAMPER
EFD	EXISTING FIRE DAMPER
EFSD	EXISTING FIRE SMOKE DAMPER
EP	ELECTRICAL TO PNEUMATIC VALVE
ESD	EXISTING SMOKE DAMPER
FD	FIRE DAMPER
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FSD	FIRE/SMOKE DAMPER
MA	MIXED AIR
MV	MIXING VALVE
NC	NEW CONNECTION
N.C.	NORMALLY CLOSED
NIC	NOT IN CONTRACT
N.O.	NORMALLY OPEN
OA	OUTSIDE AIR
PS	PRESSURE SWITCH
RA	RETURN AIR
SA	SUPPLY AIR
SD	SMOKE DAMPER
TAB	TERMINAL AIR BOX
TD	TRANSFER DUCT
TYP	TYPICAL
UC-1	DOOR UNDERCUT BY OTHERS (1" TYPICAL)
UNO	UNLESS NOTED OTHERWISE



DESCRIPTION: PROJECT MANAGER MECHANICAL ELECTRICAL

MECHANICAL SYMBOL LIST

NOT ALL SYMBOLS MAY APPLY

DESCRIPTION:
CONDENSER WATER RETURN
CONDENSER WATER SUPPLY
CHILLED WATER SUPPLY
DRAIN
NATURAL GAS HEATING WATER RETURN
HEATING WATER SUPPLY
PIPE CAP
PITCH PIPE IN DIRECTION
DIRECTION OF FLOW IN PIPE
UNION/FLANGE
SHUTOFF VALVE NORMALLY OPEN
SHUTOFF VALVE NORMALLY CLOSED
BALANCING VALVE (NUMBER INDICATES GPM)
AUTOMATIC BALANCING VALVE
MIXING VALVE
CONTROL VALVE (THREE-WAY)
CHECK VALVE
METER
DIRECTION OF AIR FLOW
FLEXIBLE DUCT
MANUAL VOLUME DAMPER
RISE IN DIRECTION OF AIR FLOW
DROP IN DIRECTION OF AIR FLOW
DUCT CAP
DUCT DOWN
DUCT UP
SUPPLY/OUTSIDE AIR DUCT SECTION
RETURN AIR DUCT SECTION
EXHAUST/RELIEF AIR DUCT SECTION
4-WAY DIFFUSER WITH BLANKOFF IN ONE DIRECTION
AIR TERMINAL PROPERTIES SYMBOL NECK SIZE/CFM
TERMINAL AIR BOX (REFER TO SCHEDULE)
TERMINAL AIR BOX w/REHEAT COIL (REFER TO SCHEDULE)
FAN POWERED TERMINAL AIR BOX w/REHEAT COIL (REFER TO SCHEDULE)
OPPOSED BLADE DAMPER (REFER TO SCHEDULE)
PARALLEL BLADE DAMPER (REFER TO SCHEDULE)
HUMIDISTAT SENSOR
HUMIDISTAT / SENSOR
CARBON MONOXIDE SENSOR
OCCUPANCY SENSOR
OCCUPANCY SENSOR

PRESSURE SENSOR/MONITOR PRESSURE SENSOR (DUCT MOUNTED) THERMOSTAT/SENSOR

TEMPERATURE SENSOR

CONTACT PERSONS:

- **PERSON:**
- ASHLEE DOWNHAM ANDY NACHTRAB

ASHLEE DOWNHAM

MECHANICAL GENERAL NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, VENTILATION AND TEMPERATURE CONTROL.

- 1. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, DUCTWORK, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT ALWAYS REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING
- CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR
- PHYSICALLY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES. 3. COORDINATE ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES FOR ALL TRADES. BRING ANY INTERFERENCES
- OR CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OR EQUIPMENT ORDERS. REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER
- ACCESS. 5. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST OR
- EXPENSE TO OTHERS. 6. EACH CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ELECTRICAL CHANGES REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF
- DESIGN. 7. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL, TECHNOLOGY AUDIO/VISUAL, AND OTHER MECHANICAL PLANS FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES, OTHER THAN SPRINKLERS.
- 8. EACH CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY THEIR ACTIONS TO WALLS, FLOORS, CEILINGS, AND ROOFS. THE CONTRACTOR WHOSE WORK CAUSES DAMAGE IS RESPONSIBLE FOR PATCHING TO MATCH ORIGINAL CONSTRUCTION, FIRE RATING, AND FINISH
- 9. IN AREAS WITH DRYWALL CEILINGS COORDINATE LOCATIONS OF ACCESS PANELS WITH THE GC FOR ACCESS TO VALVES, DUCTWORK ACCESSORIES, DAMPERS, ETC. COORDINATE PANEL TYPE AND COLOR WITH ARCHITECT. NOTIFY THE GC OF THE REQUIRED ACCESS PANELS PRIOR TO BIDDING.
- 10. SEAL ALL FLOOR, WALL, AND ROOF PENETRATIONS AIRTIGHT WHERE CONDUITS, PIPING, AND DUCTS PENETRATE. PENETRATIONS THROUGH EXTERIOR WALLS AND ROOF SHALL BE SEALED AIRTIGHT WITH WATERPROOFING MATERIALS RECOMMENDED BY MANUFACTURER FOR OUTDOOR USE.
- 11. CAULK ALL PIPE AND DUCT PENETRATIONS OF FULL HEIGHT NON-FIRE RATED WALL, PARTITION, FLOOR, AND ROOF ASSEMBLIES. THIS IS ESSENTIAL TO PREVENT NOISE TRANSMISSION FROM ONE ROOM TO ANOTHER AND TO PROVIDE THE DESIRED NC LEVELS WITHIN ROOMS.
- 12. WHERE PIPES AND DUCTS ARE SHOWN TO PENETRATE FLOORS, PROVIDE SLEEVED OPENINGS WITH THE TOP EDGE RAISED ABOVE FLOOR SURFACE IN ACCORDANCE WITH ALL RELEVANT SPEC SECTIONS. SEAL SLEEVE PERIMETER TO BE WATERTIGHT.
- 13. EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY AMONG DIFFERENT MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PADS, PIPING, DUCTWORK, ETC.
- 14. DO NOT BLOCK TUBE PULL OR EQUIPMENT SERVICE CLEARANCES. 15. MAINTAIN MINIMUM 3'-6" CLEARANCE IN FRONT OF ALL ELECTRICAL PANELS, MOTOR
- STARTERS, SWITCHES, AND DISCONNECTS. 16. PROVIDE CONCRETE EQUIPMENT PAD FOR ALL FLOOR MOUNTED EQUIPMENT. PAD SHALL EXTEND MINIMUM 6" BEYOND ALL SIDES OF EQUIPMENT.
- 17. DO NOT SUPPORT EQUIPMENT, PIPING, OR DUCTWORK FROM METAL DECKING OR OTHER NON-STRUCTURAL BUILDING ELEMENTS. ANCHORS EMBEDDED IN CONCRETE SHALL BE CRACKED CONCRETE APPROVED IN ACCORDANCE WITH SPECIFICATIONS.
- 18. ALL NEW DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS.

	MECHANICAL SHEET INDEX
M0	MECHANICAL COVERSHEET
M1	MECHANICAL DEMOLITION PLAN
M2	MECHANICAL PLAN
M3	MECHANICAL AND PLUMBING DETAILS
M4	MECHANICAL AND PLUMBING SCHEDULES
M5	MECHANICAL AND PLUMBING SCHEDULES
M6	MECHANICAL AND PLUMBING SPECIFICATIONS
M7	MECHANICAL AND PLUMBING SPECIFICATIONS
P1	PLUMBING DEMOLITION PLAN
P2	PLUMBING PLAN
GRAND TOTAL: 10	

VENTILATION GENERAL NOTES:

1. ALIGN TEMPERATURE SENSORS WITH LIGHT SWITCHES AND WHEN IN CLOSE PROXIMITY TO EACH OTHER.

- 2. PROVIDE ACCESS DOORS AT ALL DUCT MOUNTED EQUIPMENT. 3. EXISTING AIR INLET AND OUTLET CFM SHOWN ON DRAWINGS ARE FROM EXISTING DRAWINGS, AND ARE FOR REFERENCE ONLY. CONTRACTOR SHALL USE PRE-BALANCE
- VALUES, AND NOT EXISTING CFM SHOWN ON DRAWINGS. 4. CONTRACTOR MAY REUSE PORTIONS OF EXISTING DUCT PROVIDED SIZES AND PRESSURE CLASSES ARE CORRECT, DUCT IS THOROUGHLY CLEANED AND FREE OF DEFECTS, AND ALL TRANSVERSE JOINTS, LONGITUDINAL SEAMS, AND DUCT WALL PENETRATIONS ARE SEALED AS SPECIFIED FOR NEW DUCTWORK.

TAB POST-CONSTRUCTION NOTES:

- 1. AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE, TESTING, ADJUSTING (TAB) AND BALANCING CONTRACTOR SHALL REBALANCE AIR HANDLING UNITS AND EXHAUST FANS AS REQUIRED TO ACHIEVE THE NEW AIRFLOW VALUES SHOWN ON THE CONSTRUCTION DRAWINGS.
- 2. AREAS SERVED BY THIS EQUIPMENT WHICH WERE NOT RENOVATED SHALL BE RE-BALANCED TO THE AIRFLOW RATES MEASURED BEFORE THE RENOVATION OCCURRED (REFER TO THE FINAL PRE- DEMOLITION REPORT). 3. IF DUCT TRAVERSE LOCATION AS MARKED ON THE DRAWINGS IS INACCESSIBLE FOR
- MEASUREMENT, THE TAB CONTRACTOR SHALL PERFORM THE TRAVERSE AT AN ALTERNATE LOCATION OR SHALL TAKE MULTIPLE DUCT TRAVERSES AND/OR GRILLE READINGS AS REQUIRED TO DETERMINE THE FLOW RATE. IN THE EVENT TRAVERSES ARE TAKEN AT AN ALTERNATE LOCATION(S), TAB CONTRACTOR SHALL INCLUDE A DRAWING THAT SHOWS THE LOCATIONS WHERE THE ACTUAL MEASUREMENTS WERE TAKEN. 4. A DUCT STATIC PRESSURE READING SHALL BE TAKEN AT EACH LOCATION WHERE A DUCT
- TRAVERSE READING IS TAKEN AND SHALL BE INCLUDED IN THE FINAL POST-CONSTRUCTION TAB REPORT.
- 5. TAB CONTRACTOR SHALL COMPILE AND SUBMIT COPIES OF THE FINAL POST-CONSTRUCTION TAB REPORT AS REQUIRED BY SECTION 23 05 93.
- 6. THE FINAL POST CONSTRUCTION REPORT SHALL INCLUDE ALL ITEMS REQUIRED IN THE SPECIFICATIONS.

MECHANICAL RENOVATION NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, VENTILATION, PIPING AND TEMPERATURE CONTROL.

- 1. EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD SURVEYS COMPLETED BY OTHERS, EXISTING BUILDING DOCUMENTS, AND STAFF. VERIFY EXISTING CONDITIONS AND REPORT ANY CONFLICTS BEFORE PROCEEDING.
- 2. NOT ALL EXISTING DUCTWORK AND PIPING IS SHOWN. VERIFY EXISTING CONDITIONS BEFORE STARTING WORK. NOTIFY ENGINEER OF ANY CONFLICTS WITH NEW WORK. 3. FIELD VERIFY THE AVAILABLE CLEARANCES FOR DUCTWORK AND PIPING BEFORE FABRICATION. RISES AND DROPS MAY BE NECESSARY BECAUSE OF EXISTING FIELD CONDITIONS
- 4. EACH CONTRACTOR SHALL FIELD VERIFY ACCESSIBILITY TO THE AREA OF HIS/HER WORK AND SHALL NOTIFY THE GENERAL CONTRACTOR PRIOR TO BIDDING IF OTHER UTILITIES ARE REQUIRED TO BE REMOVED OR RELOCATED TO ALLOW ACCESS TO HIS/HER AREA OF WORK.
- 5. EACH CONTRACTOR SHALL CUT AND PATCH ROOFS, WALLS, AND FLOORS ASSOCIATED WITH HIS WORK. 6. EACH CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF CEILINGS,
- CEILING TILES, AND CEILING GRIDS ASSOCIATED WITH AREAS OF WORK BY ALL CONTRACTORS. NOTIFY THE GENERAL CONTRACTOR OF AFFECTED AREAS PRIOR TO BIDDING.
- 7. WHERE EXISTING MECHANICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, PIPING, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING MECHANICAL SYSTEMS TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK. 8. PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING CONSTRUCTION. MAINTAIN ACCESS TO EXISTING MECHANICAL INSTALLATIONS THAT
- REMAIN ACTIVE. 9. OBTAIN PERMISSION FROM OWNER BEFORE SHUTTING DOWN ANY SYSTEM FOR ANY
- REASON. MAINTAIN SERVICE TO ALL COMPONENTS THAT ARE TO REMAIN UNTIL NEW SYSTEMS ARE INSTALLED 10. MAINTAIN EXISTING SYSTEM IN SERVICE UNTIL NEW SYSTEM IS COMPLETE AND READY FOR TIE IN AND SWITCHOVER. DRAIN SYSTEM ONLY TO MAKE SWITCHOVERS AN
- CONNECTIONS. OBTAIN PERMISSION FROM OWNER BEFORE PARTIALLY OR COMPLETELY DRAINING SYSTEM. MAKE CHANGEOVER TO NEW SYSTEMS WITH MINIMUM OUTAGE. 11. DISCONNECT AND REMOVE MECHANICAL DEVICES AND EQUIPMENT SERVING EQUIPMENT THAT HAS BEEN REMOVED.



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Project Team GENERAL CONTRACTOR: To Be Determined



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No.	Description	Date

MECHANICAL **COVERSHEE**

Project Number:	Sheet Number:



Issue Date: **SEPTEMBER 16, 2024**

2024906.064 Drawn By:





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SHEET NOTES - MECHANICAL:

A. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES IN EXISTING CONDITIONS.

B. CONTRACTOR SHALL VERIFY FUNCTIONALITY OF EXISTING HVAC UNITS. CONTRACTOR SHALL PERFORM ANY REQUIRED MAINTENANCE ON UNITS, INCLUDING BUT NOT LIMITED TO, FILTER REPLACEMENT, COIL CLEANING, COIL COMBING, REFRIGERANT CHARGE, GREASE BEARINGS AND BELT ADJUSTMENT/ REPLACEMENT PRIOR TO THE COMPLETION OF CONSTRUCTION. NOTIFY ENGINEER AND ARCHITECT OF ANY DEFICIENCIES.

KEYNOTES (#)

REMOVE SUPPLY DIFFUSER. REMOVE ASSOCIATED SUPPLY DUCTWORK BACK TO VAV BOX AS INDICATED. TYPICAL.

REMOVE RETURN GRILLE. TYPICAL.

REMOVE TRANSFER DUCT. TYPICAL.

4 RELOCATE THERMOSTAT. REFER TO NEW MECHANICAL PLAN FOR INFORMATION.

5 THERMOSTAT TO REMAIN AS-IS. TYPICAL.

RELOCATE EXHAUST FAN. REMOVE ASSOCIATED DUCTWORK. REFER TO NEW MECHANICAL PLAN FOR MORE INFORMATION. TYPICAL.

7 VAV BOX TO REMAIN AS-IS. TYPICAL.



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Sheet Title:
MECHANICAL
DEMOLITION PLAN

Sheet Number:

Project Number: 2024906.064 Drawn By: ABN Issue Date:

SEPTEMBER 16, 2024











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SHEET NOTES - MECHANICAL:

A. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES IN EXISTING CONDITIONS.

B. CONTRACTOR SHALL VERIFY FUNCTIONALITY OF EXISTING HVAC UNITS. CONTRACTOR SHALL PERFORM ANY REQUIRED MAINTENANCE ON UNITS, INCLUDING BUT NOT LIMITED TO, FILTER REPLACEMENT, COIL CLEANING, COIL COMBING, REFRIGERANT CHARGE, GREASE BEARINGS AND BELT ADJUSTMENT/ REPLACEMENT PRIOR TO THE COMPLETION OF CONSTRUCTION. NOTIFY ENGINEER AND ARCHITECT OF ANY DEFICIENCIES.

KEYNOTES (#)

PROVIDE NEW SUPPLY DIFFUSER, SD-#. BALANCE TO CFM INDICATED. REFER TO DIFFUSER CONNECTION DETAIL AND GRD SCHEDULE FOR MORE INFORMATION. TYPICAL.

PROVIDE NEW RETURN GRILLE, RG-#. REFER GRD SCHEDULE FOR MORE INFORMATION. TYPICAL.

NEW LOCATION FOR EXISTING THERMOSTAT. CONTRACTOR SHALL MODIFY CONTROL WIRING AS NEEDED.

REFER TO EXISTING EQUIPMENT BALANCE SCHEDULE FOR SUPPLY AND OUTSIDE AIRFLOW BALANCES OF EXISTING RTU.

REFER TO EXISTING VAV BOX SCHEDULE FOR BALANCE AIRFLOWS. TYPICAL.

NEW ROUND DUCT TAP CONNECTION. REFER TO ROUND DUCT TAP CONNECTION DETAIL FOR MORE INFORMATION. TYPICAL.

NEW LOCATION FOR EXISTING EXHAUST FAN. ROUTE 6" EXHAUST DUCT OUT THROUGH EXTERIOR WALL AND TERMINATE WITH RAINHOOD. COVER RAINHOOD WITH 1/2" WIRE MESH. CONTRACTOR SHALL MODIFY DUCTWORK AS NEEDED. BALANCE EXHAUST FAN TO 75 CFM. TYPICAL.

8 UNDERCUT DOOR BY 1" FOR TRANSFER AIR. TYPICAL.

NEW 45 DEGREE TAKE-OFF FITTING. REFER TO BRANCH CONNECTIONS DETAIL FOR MORE INFORMATION.



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Professional Seal:

Project Title:

IMEG Project No: 24000280.55



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Project Number:





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VINCE STRUCTURE FLEXIBLE DUCT. SUSPEND ELBOW MARD DUCT. SUSPEND ELBOW MARD DUCT. DRAW BANDS SNUG, HARD DUCT. DRAW BANDS SNUG, HARD DUCT. DRAW BANDS SNUG, FLEXIBLE DUCT. DRAW BANDS SNUG, MINIMUM STRAIGHT DICT DIFFUSER DIFFUSER	<text><text><text><text><text></text></text></text></text></text>
 Intered 1. TO ATTACH FLEX DUCT TO THE HARD DUCT, TAPE THE INNER LINER TO THE HARD DUCT THEN ATTACH WITH TWO NYLON TIE WRAPS; ONE FOR THE INNER LINER AND ONE FOR THE OUTER SHELL FOLD THE OUTER SHELL INSIDE ITSELF SO IT HAS NEAT EDGES PRIOR TO TIE WRAPPING. 2. DURABLE ELBOW SUPPORT ACCEPTABLE MANUFACTURER AND MODEL: HART AND COOLEY - SMARTFLOW, THERMAFLEX- FLEXFLOW, TITUS - FLEXRIGHT, OR APPROVED EQUAL. DIFFUSER CONNECTION DETAIL (WARDS) - FLEXRIGHT, OR APPROVED EQUAL. DIFFUSER CONNECTION DETAIL (WARDS) - FLEXRIGHT, OR APPROVED EQUAL. 	Project Title:
	PPP
	<form></form>

		GRILLE	:5, REGI5	IERS, & I	DIFFUSEI	43 SCH	EDULE			PLUMBING FIXTURE AND EQUIPMENT SCHEDULE																
EQUIP TAG	TY	/PE	FACE SIZE IN. MO	JNTING TYPE DAI	MPER REQUIRED	MATERIAL MA	ANUFACTURER & M	ODEL PLAN INFO	SPECIFIC NOTES	PLAN	FIXTURE		MANUFACTURER	SERIES	TRIM	SERIES	SUPPLIES	TRAP /	DRAIN	CW	HW /	WASTE VE	NT WA	ATER	NOTEO	
SD-1 LC	OUVER FACE CEILING	G DIFFUSER	24" x 24"	TILE CLG	YES	STEEL KRU	JEGER 1400	NECK / CFM		CODE		ICC/ANSI A117.1						WASTE			TEPID		CONSI		NOTES	/ REMARKS
RG-1 PE	ERFORATED FACE CE	EILING RETURN GRILLE	24" x 24"	TILE CLG	SEE NOTES	STEEL KRU	JEGER 6490/6690	NECK / CFM*	1, 2, 3			COMPLIANT #	ZURN	75340	MOEN	0/82 PC	W/STOPS	OFESET	GRID	1/2"	1/2"	1 1/2" 1 1	/2" 0.5			1 2
G	ENERAL NOTES:											YES - ANSI A117.1	2011	20040	MOEN	540210	W/31013		GRID	1/2	1/2	1 1/2 1	12 0.5			1, 2
1.	SEE PLANS FOR NEC	CK SIZE								SK-1	SS SINK SINGLE	COMPLIANT		\/T3322TA2PA1			W/STOPS	OFESET		1/2"	1/2"	2" 1 1	/2" 1.5	GPM		1 2
2.	ALL GRDs REQUIRIN	IG DAMPERS SHALL BE E	QUIPPED WITH A R	EMOTE BALANCIN	G DAMPER THAT I	S ADJUSTABLE	THROUGH THE GR	RD FACE OR ANOTHER	APPROVED				GLAGIER BAT			7831.I4-XI	Wordro	P-TRAP	ERADU	172	172	2	12 1.0			1, 2
	LOCATION UNLESS SUPPLIED FROM AN ACCESSIBLE TAKE-OFF WITH LOCKING DAMPER. FACE DAMPERS SUCH AS INTEGRAL OBDS ARE NOT ACCEPTABLE.							Ξ.	WC-1	WATER CLOSET	YES - ANSI A117.1	PROFLO	PF1401T/PF9312			W/STOPS			1/2"		4" 2	" 1.1	GAL	W/OPEN FRO	ONT NO LID SEAT	
3.	3. VERIFY GRD FINISH AND CLG/WALL/SILL/FLOOR MOUNTING TYPE WITH ARCHITECT FOR EACH APPLICATION PRIOR TO ORDERING.										FM. PA TANK	COMPLIANT											PER	FLUSH	WaterSe	ense LISTED
4.	4. PROVIDE 4-WAY THROW FOR DIFFUSERS UNLESS OTHERWISE SHOWN ON PLANS.									WMV-1	THERMAL MIXING		WATTS	LFUSG-B						3/8"	3/8"		-		INSTALL DO	 OWNSTREAM OF
5.	5. PROVIDE MANUFACTURERS ROUND TO RECTANGULAR ADAPTIVE COLLAR FOR DIFFUSERS AND GRILLES AS REQUIRED, MATCH DUCT SIZE AND TYPE										VALVE, FIXTURE		ZURN	ZW3870XLT											FIXTU	JRE STOPS
6.	MATERIAL SHALL BE	E STEEL UNLESS OTHERV	ISE INDICATED OF	SPECIFIED. MAT	ERIAL SHALL BE S	UITABLE FOR II	NSTALLED ENVIRO	NMENT. FOR WET																		
	LOCATIONS SUCH AS	S LOCKER ROOMS, REST	ROOMS, SHOWER F	ROOMS, KITCHENS	s, pool rooms, e	TCPROVIDE	ALUMINUM IN LIEU	OF THE STEEL NOTED	D.	LEGEND:	CH = CHILD HEIGHT, CM = CE	EILING MOUNTED, CP = CH	HROME PLATED, CT = COUN	TERTOP, FM = FLO	OOR MOUNTED, F	V = FLUSH VALV	E, PA = PRESSU	RE ASSIST, SS	S = STAINLESS	STEEL,						
7.	WHERE MULTIPLE D	DIFFUSERS ARE LOCATED	IN A SINGLE ROOM	1; FACE SIZES SHA	ALL BE THE SAME	UNLESS NOTED	D OTHERWISE.				TP = PROVIDE TRAP PRIMER	(TP-1) ADJACENT TO FIX	TURE, WM = WALL MOUNTED) (PROVIDE WITH	A FLOOR MOUNT	ED CONCEALED	CARRIER), UCT	= UNDER COU	NTERTOP							
8.	AFTER INSTALLATIO	N, ADJUST DIFFUSERS, F	EGISTERS AND GR	RILLES TO AIR PAT	TERNS INDICATED), OR AS DIREC	CTED, BEFORE STA	RTING AIR BALANCING	i.		S [.]															
9.	9. CONTRACTOR SHALL ENSURE ALL NEW GRD'S PROVIDED MATCH THOSE WHICH ARE EXISTING IN TERMS OF FINISH AND VISUAL APPEARANCE.									1 WHERE FIXTURE/EQUIPMENT		GIVEN THESE ARE FOR REF		WRITTEN							PI UMBING FIXT		-NT AND AS	SOCIATED AC	CCESSORIES	
* \	* WHERE CFM IS INDICATED ON PLANS FOR RETURN AND TRANSFERS, BALANCE TO AIRFLOW INDICATED.								SPECIFICATION REQUIREMENTS AND SCHEDULE NOTES HOLD PRESIDENCE. THE MORE STRIGENT SHALL ADDLY																	
SI	SPECIFIC NOTES:																	NS FOR FIXTURE								
1.	1. PROVIDE DAMPER FOR A DUCTED RETURN/TRANSFER AIR SYSTEM THAT REQUIRES AIR BALANCE AT RETURN/TRANSFER OPENINGS AS INDICATED BY								ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER ANY VALUES WITHIN THIS SCHEDULE.																	
	AIRFLOW (CFMs) ON DRAWINGS.								3. THE MINIMUM WASTE/VENT PIPE SIZE FOR BURIED PIPE SHALL BE 2".																	
2.	AS IDENTIFIED ON T	THE PLANS PROVIDE 12"x2	24" FACE FOR 10"x2	2" NECKS, PROVIE	DE 24"x24" FACE F	OR 22"x22" NEC	KS				4. ALL ACCESIBLE FIXTURES SH	HALL COMPLY WITH ICC/A	ANSI A117.1 (ADA), REFEREN	CE ARCH DWGS I	FOR SPECIFIC LOO	CATIONS. SEE N	OTES.									
3.	PROVIDE BACKPAN	WHERE CONNECTED TO	DUCT OR SOUND B	OOT; WHERE NO	DUCT OR SOUND	BOOT IS PRESE	ENT PROVIDE PERF	FORATED PANEL ONLY			5. ALL FIXTURES AND EQUIPME	NT SHALL BE INSTALLED) PER THE MANUFACTURER'S	S WRITTEN INSTA	ALLATION INSTRUC	CTIONS.										
										SPECIFIC NOTES	<u>S:</u>															
		DUCTWORK	INSULAT	ION (WR	AP & LIN	ER) SCH	IEDULE				1. AUTOMATIC-TYPE ELECTRON	NIC SENSOR TRIM, BATTE										_				
			EXP	OSED	СО	NCEALED					2. PROVIDE WITH ASSE 1070 RA	ATED THERMAL MIXING V	/ALVE (WMV-1) LOCATED DO	WNSTREM OF FIX	XTURE STOPS UNL	ESS SERVED FF	OM AN ASSE 10	70 RATED GRO	OUP-FIXTURE 1	THERMAL MI	IIXING VALV	E.				
SYSTEM	LOCATION	NOTE 1	RECTANGULAR	ROUND / OVAL	RECTANGULA	R ROUND /	OVAL	I R-VALUE SPECIFI	CNOTES																	
		MAIN	1-1/2" LINER	1-1/2" LINER	1-1/2" LINER	1-1/2" LII	NER R	2-6																		
UPPLY AIR	INDOOR	MAIN TO TERMINAL	1-1/2" LINER		1-1/2" LINER	2" WR/	AP R	R-6								PLUMBI	NG INSU	ILATION	N SCHE	DULE						
		TERMINAL TO GRD	1-1/2" LINER		1-1/2" LINER	2" WR/	AP R	R-6					SYSTEM							EMPERATU	JRE RANGE		PIPE SI	ZES		
		MAIN	1" LINER	1" LINER	1" LINER	1" LINE	ER R	R-6														<1" 1" to 1-1	/4" 1-1/2" to 3	" 4" to 6"	8" and Larger	
ETURN AIR	INDOOR	BRANCH	1" LINER		1" LINER	1-1/2" W	RAP R	8-6				DOI	MESTIC COLD WATER	FLE	XIBLE ELASTOME	RIC OR GLASS FI	BER PREFORME	ED PIPE INSUL	ATION			1/2" 1/2"	1"	1"	1"	1
						I						DOMESTIC HOT WATE	ER AND DOMESTIC HOT WAT	ER RECIRC	GLASS FIBER OR	MINERAL FIBER	PREFORMED PI	PE INSULATIO	N 1	41 TO 200 D	DEG F	1-1/2" 1-1/2"	2"	2"	2"	
																				< 140 DEG	ĞΕ	1" 1"	1-1/2"	1-1/2"	1-1/2"	
	GENERAL NOTES:																									
	1) MINIMUM R-VALUE	BASED ON 2018 IECC RE	QUIREMENTS.											<u>GEN</u>	IERAL NOTES:											
	2) DUCT SIZES SHOW	VN ARE INSIDE CLEAR DIN	IENSIONS. LINER,	WHERE USED, WII	LL NEED TO BE FA	CTORED INTO	THE DUCT SIZE.							1) FC				ONDITIONS OF				E, INCREASE TI	ICKNESS OF	INSULATION	N BY 1/2".	
3) THE INSULATION THICKNESS GIVEN MEETS OR EXCEEDS THE REQUIRED R-VALUE FOR THE BASIS OF DESIGN (JOHNS MANVILLE). INSTALLED PRODUCT SHALL MEET OR EXCEED THE LISTED R-VALUE; INSULATION THICKNESS AND CORRESPONDING DUCT SIZE (FOR LINER) SHALL BE INCREASED FOR ALTERNATES THAT CANNOT MEET THIS THICKNESS TO PERFORMANCE CONDITION.							2) FOR FIFTING EXPOSED TO THE OUTSIDE AWIDIENT CONDITIONS PROVIDE PROTECTIVE JACKET (SEE SPECIFICATIONS).																			
								3) ALL INSULATION EXPOSED TO UV CONDITIONS SHALL BE PROTECTED IN ACCORDANCE WITH THE MANUFACTURERS WRITTEN INSTRUCTIONS.																		
											4) M		CONDUCTIVITY	"k" VALUE FOR F	-LEXIBLE ELAS	STOMERIC SHA	LL BE 0.27 A	AT 75 DEG. -	F							
4) R-VALUES FOR WRAP SHALL BE SHOWN USING THEIR INSTALLED CONDITION RATING AS NOTED ON THE MANUFACTURER'S SPECIFICATION SHEET.									5) MINIMUM THERMAL CONDUCTIVITY "k" VALUE FOR GLASS FIBER SHALL BE 0.23 AT 75 DEG. F																	
4) R-VALUES FOR WRAP SHALL BE SHOWN USING THEIR INSTALLED CONDITION RATING AS NOTED ON THE MANUFACTURER'S SPECIFICATION SHEET.														SPE	<u>CIFIC NOTES:</u>											
									-			-					CONTENT ON A									
	6) FLEXIBLE DUCT SH	HALL BE AS NOTED IN THE	E "AIR DUCT ACCES	SORIES" SPECIFIC	CATION.									1) Pr			G SYSTEM ON A	LL EXISTING S	YIEMS IHAI A	RE OPERAT			UN.			
	6) FLEXIBLE DUCT SH7) DUCT WRAP IS ALL	HALL BE AS NOTED IN THE	E "AIR DUCT ACCES OR BOARD; CONTRA	SORIES" SPECIFIC	CATION.									1) Pr	ROVIDE PIPE INSU		SYSTEM ON A	LL EXISTING S	YIEMS THAT A	REOPERAT	HONAL DUR	ING INSTALLAT	ON.			

DEFINITIONS:

EXPOSED DUCT: DUCT THAT IS EXPOSED TO VIEW IN OCCUPIED OR UNOCCUPIED SPACES THAT ARE CONDITIONED.

CONCEALED DUCT: DUCT THAT IS CONCEALED IN CHASES, SHAFTS, CEILING PLENUMS OR OTHER ASSEMBLY WITHIN THE INSULATED BUILDING ENVELOPE. MAIN DUCT: DUCT FROM THE AIR HANDLING UNIT TO FINAL TERMINAL TAKEOFF.

MAIN TO TERMINAL DUCT: THIS IS A BRANCH DUCT; TYPICALLY THE DUCT FROM THE MAIN TAKEOFF TO THE TERMINAL (VAV BOX OR EQUIVALENT).

TERMINAL TO GRD DUCT: THIS IS A BRANCH DUCT DOWNSTREAM OF THE TERMINAL (VAV BOX, HEAT PUMP, FAN COIL OR EQUIVALENT).

OUTSIDE AIR TEMPERED: TEMPERED OUTSIDE AIR IS AIR THAT IS HEATED OR COOLED TO WITHIN 10 DEG F OF THE SPACE/SURROUNDING TEMPERATURE. INDOOR: DUCT LOCATIONS WITHIN THE INSULATED BUILDING ENVELOPE.

EXISTING VAV BOX SCHEDULE

NOTES: 1.CFMS LISTED FOR VAV BOXES ARE FOR DIFFUSERS WITHIN THE SCOPE OF WORK THAT ARE CONNECTED TO THE VAV BOX. CONTRACTOR SHALL PRE-BALANCE DIFFUSERS THAT ARE OUTSIDE THE SCOPE OF WORK WHICH ARE CONNECTED TO THE VAV BOX AND RECORD THOSE CFMS. AFTER CONSTRUCTION IS COMPLETE, CONTRACTOR SHALL RE-BALANCE 2.SENSOR TYPES: 1 - SENSOR ONLY, 2 - SENSOR WITH ADJUSTMENT, 3 - SENSOR WITH OVERRIDE, 4 - SENSOR WITH ADJUSTMENT AND OVERRIDE.

TAG					
NAME	AREA SERVED	CFM	CONTROL	SENSOR TYPE (NOTE 2)	NOTES
(E) VAV-1	OFFICE 102A	340	T-STAT	3	NOTES 1, 2
(E) VAV-2	OFFICE 102B	360	T-STAT	3	NOTES 1, 2
(E) VAV-3	WELCOME 100, ENTRY 100A, OFFICE 102C, PASSAGE 103A, EQUIP/SUPP 104	1585	T-STAT	3	NOTES 1, 2
(E) VAV-4	PASSAGE 103A, TOILET 105A, 105B, OPEN 106,	395	T-STAT	3	NOTES 1, 2
(E) VAV-5	OFFICE 102D	320	T-STAT	3	NOTES 1, 2

	EXISTING E		T BALANCIN	IG SCHEDULE	
UNIT	AREA SERVED	NOMINAL TONNAGE	SUPPLY AIRFLOW (CFM)	OUTSIDE AIR AIRFLOW (CFM)	NOTES
(E) RTU	EDJ SRE SUITE	7.5	3000	220	1
NOTES:	1. REFER TO SPECIFIC	ATIONS FOR BALA	NCING ITEMS REQUIREI	D. PROVIDE ALL ITEMS IN FI	NAL REPORT



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No.	Description	Date

MECHANICAL AND PLUMBING <u>SCHEDULES</u> Project Number:

Sheet Number:

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Unit:	
UNIT	
(E) RTU	
(E) RTU	тот
SPECIFIC NOTE	<u>:S:</u>
	1. TOT/

IMC 2018 VENTILATION RATE PROCEDURE CALCULATIONS - EXISTING UNIT EVALUATION

(E) RTU

(_,)																
				OCCUPANT		OCCUPANT			BREATHING	TABLE 6-2 ZONE	TOTAL SUPPLY		SYSTEM			
				OUTDOOR	AREA	DENSITY		OVER-VENTILATION	ZONE	AIR	AIR TO ZONE AT	ZONE	VENTILATION	ACTUAL OSA CFM	MINIMUM	MINIMUM OUTSIDE
ROOM	ROOM NAME	ZONE TYPE	AREA	AIRFLOW	OUTDOOR	PEOPLE	OCCUPANT	PERCENTAGE	OUTDOOR	DISTRIBUTION	CONDITION	VENTILATION	EFFICIENCY	REQUIRED AT	PERCENTAGE	AIRFLOW AT UNIT
NUMBER			SQ FT	RATE	AIRFLOW RATE	PER 1000	QUANTITY		AIRFLOW RATE	EFFECTIVENESS	ANALYZED	EFFICIENCY	NOTE 2	UNIT FOR ZONE	AIRFLOW AT	AT UNIT FOR SCOPE
				CFM/PER	CFM/SQ FT	SQ FT			CFM	(Ez)	CFM - NOTE 1	(Evz)	(Ev)		UNIT	
100A	ENTRY	Main entry lobbies	82	5.0	0.06	10	1	0%	9	0.8	160	1.00	0.97	9	-	-
100	WELCOME	Main entry lobbies	637	5.0	0.06	5	6	0%	70	0.8	870	0.97	0.97	72	-	-
102A	OFFICE	Office space	283	5.0	0.06	5	1	0%	24	0.8	340	0.98	0.97	25	-	-
102B	OFFICE	Office space	296	5.0	0.06	5	1	0%	25	0.8	360	0.98	0.97	26	-	-
102C	OFFICE	Office space	196	5.0	0.06	5	1	0%	17	0.8	240	0.98	0.97	17	-	-
102D	OFFICE	Office space	264	5.0	0.06	5	1	0%	22	0.8	320	0.98	0.97	23	-	-
103A	PASSAGE	Corridors	242	0.0	0.06	0	0	0%	15	0.8	290	1.01	0.97	15	-	-
104	EQUIP/SUPP	Occupiable storage rooms for dry materials	142	5.0	0.06	2	0	0%	10	0.8	170	1.00	0.97	10	-	-
105A	TOILET	Corridors	72	0.0	0.06	0	0	0%	4	0.8	75	1.00	0.97	4	-	-
105B	TOILET	Corridors	40	0.0	0.06	0	0	0%	2	1.0	75	1.04	0.97	2	-	-
106	OPEN	Storage rooms	72	0.0	0.12	0	0	0%	9	1.0	100	0.98	0.97	9	-	-
											2000		0.07	214	70/	214
IR SCOPE OF WORK	AREA										3000	-	0.97	214	/%	214
PLY AIR AT CONDIT	ION ANALYZED USES T	HE MAXIMUM AIRFLOW PROVIDED TO THE	ZONE DU	IRING THE HE	EATING OR COOLIN	NG MODE, WH	HICHEVER IS T	THE CURRENT CONDIT	ION BEING ANAL	YZED.			TOTAL - L	Init Outside Airflow Bal	ance Setpoint [cfm]	220
						,										

PPLY ENTILATION EFFICIENCY IS EQUAL TO THE LOWEST ZONE VENTILATION EFFICIENCY OF ALL ROOMS SERVED BY THE UNIT AREA UNDER THE CURRENT SCOPE OF WORK.

TOTAL - Unit Supply Airflow Balance Setpoint [cfm] 3000 100.00% Scope - Percentage of Unit Flow 220 Scope Associated - Unit Outside Airflow Balance Setpoint [cfm] Unit Meets IMC Requirements Yes

	NCE
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Project Team GENERAL CONTRACTOR: To Be Determined

Professional Seal:



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No.	Description	Date

Sheet Title: MECHANICAL AND PLUMBING SCHEDULES Project Number: Sheet Number:

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SECTION 22 0010 - COMMON PLUMBING REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Work shall consist of furnishing all labor and materials necessary for the installation of complete and operating plumbing systems.
- B. All plumbing work shall comply with current state and local building codes as required by the authorities having jurisdiction, the International Plumbing Code, the International Fuel Gas Code, the International Mechanical Code, the International Fire Code, applicable publications of the National Fire protection Association (NFPA) such as NFPA 54 (the National Fuel Gas Code), and appropriate ASHRAE standards.
- C. The contractor shall comply with the requirements of the general conditions, supplemental general conditions of the project specifications, all contract documents, and any base building specifications and building criteria included in this project.
- D. Drawings are diagrammatic in nature. Take all dimensions from architectural drawings, certified equipment drawings, and from the structure itself before fabricating any work.
- E. The drawings indicate the location, type and sizes of various utilities within the site where known. Any relocation or remodeling required must be approved by the architect before proceeding. Investigate all utilities such as gas and water and make arrangements with the proper authority to pay for any charges associated with connecting those utilities.
- F. Good workmanship and appearance are considered equal to proper operation.
- G. Make provisions for safe delivery and secure storage of all materials.
- H. Obtain and arrange for all permits and approvals required for the execution of the work and pay all associated fees.
- I. All equipment and products to be thoroughly cleaned at the completion of the work with all stickers, marking and the like shall be removed. Remove all rubbish, debris, scraps and the like from the job site.

1.2 WARRANTY

A. The plumbing contractor shall provide to the owner a one (1) year (from the date of final acceptance) warranty of all plumbing equipment and systems provided under this contract. All defective equipment or materials which appear during the warranty period shall be replaced or repaired by the contractor in a timely fashion.

PART 2 - PRODUCTS

- 2.1 GENERAL
 - A. The contractor shall provide all equipment and accessories necessary whether specifically stated or not to make the required plumbing systems complete and operational.
 - B. All equipment provided shall be new except as otherwise stated on the drawings. All equipment provided shall be acceptable for installation by the authority having jurisdiction.
 - C. The equipment schedules on the drawings and throughout these specifications provide manufacturer and model information. This serves as the standard of quality for equipment by different manufacturers. The specification allows for different manufacturers to be used for the equipment. However, refer to the architectural specifications for substitutions by manufacturers other than those listed in the specifications. Where no equipment specification is provided, the scheduled equipment manufacturer shall serve as the basis of design and any substitutions shall meet the quality standard set by the basis of design.
 - D. Contractor to be responsible for any changes and costs to accommodate any equipment except the manufacturer listed in the equipment schedules, drawing notes and/or called out within the specifications. If no schedules are included on the drawing than the first named in the specification is the standard of design.

2.2 IDENTIFICATION

- A. Provide pipe and equipment identification in accordance with ANSI A13.1 and or the building standards.
- 2.3 MISCELLANEOUS SPECIALTIES
- A. Sleeves and Sleeve Seals:
- 1. Where piping passes through new masonry or concrete walls or concrete floors, provide pipe sleeves. Sleeves shall be constructed out of galvanized steel, cast iron or PVC. Set sleeves in forms prior to concrete placement. Sleeves in floors shall extend 2" above the finished floor elevation. Where located in exterior walls, provide water stop in sleeve.
- 2. Piping which passes through a rated wall shall be provided with a UL detail suitable for pipe material and size. Sleeve shall only be required if the UL detail requires the sleeve. Where sleeves are required as noted above, provide a UL detail that utilizes a sleeve.
- B. Escutcheons:
- 1. Where new pipe passes through a finished wall, provide a chrome plated escutcheon. Escutcheon shall be constructed in one piece.
- C. Access Doors
- Where noted, provide the type and size of access door to fully access the item that is located with the wall or cavity. Provide fire rated doors where installed in fire rated assemblies.

PART 3 - EXECUTION

3.1 GENERAL

- A. Obtain and arrange for all permits and approvals required for the execution of the work and pay all associated fees.
- B. Provide all core drilling, channeling, cutting, patching, trenching and backfill as required for installation of plumbing equipment and or mechanical equipment. Seal holes, fireproofing where necessary, and refinish all repair work to original condition where damaged by mechanical work.
- C. All equipment and products to be thoroughly cleaned at the completion of the work with all stickers, markings, and the like removed. Remove all rubbish, debris, scraps and the like from the job site.

3.2 FLUSHING AND CLEANING

- A. Before final connections are made in the piping systems, systems shall be blown out with air and then completely washed out with cleaning compounds compatible with final fluid to avoid contamination. The systems shall then be flushed for the complete removal of all foreign materials. Furnish all temporary connections, valves, etc., required for this purpose.
- B. After flushing, sterilize the domestic water system in accordance with AWWA standard C651- (current edition), disinfecting water mains, and all subsequent addenda. After minimum contact period, flush the system with clean water until the residual chlorine is no greater than the city water. Submit to the architect, written certification that sterilization has been performed and include a copy in operation and maintenance manuals. Provide a test analysis by the state health department of a random water sample, if requested by the architect.

END OF SECTION 22 0010

SECTION 22 0716 - PLUMBING INSULATION

PART 1 - GENERAL 1.1 SUMMARY

A. Section includes insulation for plumbing piping. PART 2 - PRODUCTS

2.1 INSULATION

- Insulation shall be provided on all pressurized plumbing lines, cooling coil condensate drain lines, all horizontal storm drainage lines and those sanitary drainage lines indicated to have electric heat trace.
- 2.2 PROTECTIVE SHIELDING GUARDS A. Description: Manufactured plastic wraps for covering plumbing fixture hot- and coldwater supplies and trap and drain piping. Comply with Americans with Disabilities Act (ADA) and ANSI A117.1 requirements. Truebro or equivalent.
- 2.3 FIELD APPLIED JACKETS
- A. PVC Jacket: High-impact-resistant, UV-resistant PVC complying with ASTM D 1784, Class 16354-C; thickness as scheduled; roll stock ready for shop or field cutting and forming. Thickness is indicated in field-applied jacket schedules.
- B. Aluminum Jacket: Comply with ASTM B 209, Alloy 3003, 3005, 3105, or 5005, Temper H-14. 1. Sheet and roll stock ready for shop or field sizing.
- 2. Finish and thickness are indicated in field-applied jacket schedules.
- and Kraft paper. 4. Factory-Fabricated Fitting Covers:
- a. Same material, finish, and thickness as jacket.
- elbows
- c. Tee covers.
- d. Flange and union covers.
- e. End caps.
- f. Beveled collars.
- g. Valve covers.
- available

PART 3 - EXECUTION

- 3.1 GENERAL INSTALLATION
- A. PIPING INSULATION SCHEDULE: See schedule on drawings for insulation requirements
- B. Protective Shielding Guards: Install protective shielding guards on all lavatories, sinks and other applicable plumbing fixtures as required to comply with the requirements of Americans with Disabilities Act (ADA) and ANSI A117.1.
- C. Field-Applied Jackets:
- 1. All fittings shall be provided with PVC jackets.
- 2. Provide PVC or Aluminum jackets as and where noted. Conform to building color coding for PVC jackets.

3.2 DOMESTIC COLD WATER PIPE, VALVES AND FITTINGS:

- A. Insulate with UL, Approved, flame resistant, white vapor barrier jacketed, glass fiber snap-on insulation per piping insulation schedule. Insulate valves and fittings with glass fiber blanket insulation and premolded pvc covers (covers to be UL 25/50 rated). Where the use of PVC covers in plenums, etc., is restricted by various codes valves and fittings shall be insulated by wrapping with blanket insulation. Cover blankets to same depth as the pipe insulation with insulating cement, troweled smooth. The contractor and manufacturer are responsible to be certain the code authority will approve any product to be installed on the project. Maximum k-value shall be 0.24 btu-in/hr-sq ft/degrees.
- B. Domestic hot water piping and fittings.
- 1. All hot water supply lines and circulating water lines insulate with UL Approved, flame resistant, white all service jacketed, glass fiber snap-on pipe insulation 1" thick. Insulate fittings with glass fiber blanket insulation and premolded PVC covers. Maximum k-value shall be 0.24 btu-in/hr-sq ft/degrees.
- C. Accessible fixtures
- 500RHS, or equivalent. END OF SECTION 22 0716

SECTION 22 1116 - DOMESTIC WATER PIPING AND SPECIALTIES

PART 1 - GENERAL

- 1.1 SUBMITTALS
 - A. Submittal requirements shall be as identified in Specification Section 22 0010 Common Plumbing Requirements.
 - 1.2 QUALITY ASSURANCE
 - A. Potable-water piping and components shall comply with NSF 14 and NSF 61. Plastic piping components shall be marked with "NSF-pw.

 - B. All fittings shall be Lead Free (ASTM listed) and shall be made with corrosionresistant materials. Manufacturer shall provide upon request third party certification tested in accordance with EN ISO 6509 regarding dezincification corrosion resistance
 - and stress corrosion cracking.

PART 2 - PRODUCTS

- 2.1 PIPING AND JOINT MATERIALS
- 2.2 VALVES AND DOMESTIC WATER SPECIALTIES A. Ball Valves - Bronze: Two-piece, full-port, bronze ball valves with bronze trim. Valve shall be rated to 150 psig SWP and 600 psig CWP. Body shall be ASTM B61, B62 or B584 bronze with a chrome-plated brass ball. All components shall be "Dezincification Resistant" and certified "Lead-Free."
 - B. Ball Valves Iron: Class 125 iron ball valves. Valve shall be rated to 200 psig CWP. Body shall be ASTM A 126 gray iron with a stainless steel ball and stem. All components shall be certified "Lead-Free."
- C. Butterfly Valves: Iron single-flange butterfly valves with EPDM seat and aluminumbronze disc. Valve shall be rated to 200 psig CWP. Body shall be ASTM A 126 cast iron of ASTM A 536 ductile iron with a stainless steel stem, EPDM seat and aluminum bronze disc. All components shall be certified "Lead-Free."
- D. Domestic Hot Water Balancing: Provide CircuitSolver by ThermOmegaTech. Drain Valves: Ball-valve-type hose-end drain valves shall be rated to 400 psig CWP. Body shall be copper alloy with a chrome-plated brass ball with a threaded outlet with
- brass chain attached cap.
- F. Check Valves Bronze: Class 150 bronze swing check valves with bronze disc. Valve shall be rated to 300 psig CWP. Body shall be ASTM B61, B62 or B584 bronze. All components shall be "Dezincification Resistant" and certified "Lead-Free."

- 3. Moisture Barrier for Outdoor Applications: 3-mil-thick, heat-bonded polyethylene
- b. Preformed 2-piece or gore, 45- and 90-degree, short- and long-radius
- h. Field fabricate fitting covers only if factory-fabricated fitting covers are not
- Insulation of pipes under accessible lavatories: insulate angle stop assemblies and drain lines with foam insert covered with 1/8" minimum abrasive resistant exterior cover with fasteners located out of sight, Brocar trap wrap kit 500R and

A. Hard Copper Tube: ASTM B 88, Type L water tube, drawn temper.

- G. Pressure Gauges: Shall be direct-mounted dial-type with a cast aluminum or drawn steel case. Provide 4-1/2 inch nominal diameter units. Accuracy shall be plus or minus 1 percent of middle half of scale range. Scale shall be 0 to 100 psi for domestic water
- H. Thermometers: Shall be direct-mounted light-activated Deg F adjustable angle thermometers with 9-inch plastic case. Display shall be digital. Where unit is mounted in a ceiling plenum or other dark location provide dial type thermometer. Scale shall be 0 to 150 Deg F for domestic cold water and 0 to 250 Deg F for domestic hot water.
- I. Strainers: Y-pattern strainers shall be 125 psig pressure rated. Body shall be bronze for NPS 2 and smaller; cast iron for NPS 2-1/2 and larger. All components shall be certified "Lead-Free."
- J. Pressure and Temperature Taps: Shall be brass or stainless steel with core inserts and gasketed with a threaded cap. Include extended stem on units to be installed in insulated piping. Thread size shall be NPS 1/2. Core insert shall be EPDM self-sealing
- K. Backflow Preventers: Backflow preventers are a basis-of-design product; subject to compliance with requirements, provide product indicated on drawings.
- . Water Pressure-Reducing Valves: Pressure-reducing valves are a basis-of-design product; subject to compliance with requirements, provide product indicated on drawings. Valves shall be made of bronze and pressure rated for 150 psig. Valves shall be rated to ASSE 1003.
- M. Temperature-Actuated Water Mixing Valves: Mixing valves are a basis-of-design product; subject to compliance with requirements, provide product indicated on drawings. Valves shall be made of bronze and pressure rated for 125 psig. Valves shall be rated to ASSE 1017 for master mixers and ASSE 1070 for point of use valves.
- N. Outlet Boxes: Icemaker/coffee machine or washing machine outlet boxes are a basisof-design product; subject to compliance with requirements, provide product indicated on drawings. Boxes and face plate shall be plastic and fire-rated if installed in a rated assembly. Provide with integral ball valves and water hammer arrestors. All components shall be certified "Lead-Free."
- O. Hose Bibbs: Hose bibbs are a basis-of-design product; subject to compliance with requirements, provide product indicated on drawings. Hose bibbs shall be bronze (chrome plated if indicated) with garden-hose thread and provided with a vacuum breaker. Provide with loose key and integral wall flange.
- P. Water-Hammer Arresters: Water-hammer arresters are a basis-of-design product; subject to compliance with requirements, provide product indicated on drawings. Water-hammer arresters shall be ASSE 1010 listed metal bellows type. All components shall be certified "Lead-Free."
- Q. Trap-seal Primer Valves: Trap-seal primer valves are a basis-of-design product; subject to compliance with requirements, provide product indicated on drawings. Trap-seal valves shall be ASSE 1018 listed bronze type. All components shall be certified "Lead-Free."
- R. Flexible Connectors: Stainless-Steel-Hose Flexible Connectors: Corrugatedstainless-steel tubing with stainless-steel wire-braid covering and ends welded to inner tubing. All components shall be certified "Lead-Free". Working-Pressure Rating: Minimum 200 psig. End Connections NPS 2 and Smaller: Threaded steel-pipe nipple. End Connections NPS 2-1/2 and Larger: Flanged steel nipple.
- S. Dielectric Fittings: Assembly of copper alloy and ferrous materials with separating nonconductive insulating material. Include end connections compatible with pipes to be joined. Dielectric Nipples and Couplings complying with IAPMO PS 66. Electroplated steel nipple complying with ASTM F 1545. Pressure Rating and Temperature: 300 psig at 225 deg F. Lining shall be inert and noncorrosive, propylene.
- PART 3 EXECUTION
- 3.1 PIPING SCHEDULE
- A. Below Grade
- 1. NPS 2 and smaller:
 - a. Hard or soft copper tube, ASTM B 88, Type K; wrought-copper, solder-joint fittings; and brazed joints.
 - 2. NPS 2-1/2 to NPS 4:
 - a. Push-on-joint, ductile-iron pipe; standard or compact pattern, push-on-joint; and gasketed joints.
- B. Aboveground
- 1. NPS 2 and smaller:
- a. Hard copper tube, ASTM B 88, Type L; wrought-copper, solder-joint fittings; and brazed joints.
- b. Hard copper tube, ASTM B 88, Type L; copper pressure-seal-joint fittings;
- and pressure-sealed joints. c. Hard copper tube, ASTM B 88, Type L; extruded-tee connections and brazed
- 2. NPS 2-1/2 to NPS 4:
- a. Hard copper tube, ASTM B 88, Type L; wrought-copper, solder-joint fittings; and brazed joints.
- b. Hard copper tube, ASTM B 88, Type L; copper pressure-seal-joint fittings;
- and pressure-sealed joints.
- c. Hard copper tube, ASTM B 88, Type L; grooved-joint, copper-tube appurtenances; and grooved joints.
- C. Flanges and Unions: Flanges and unions may be used for aboveground piping joints unless otherwise indicated
- D. Transition and Special Fittings: Transition and special fittings with pressure ratings at least equal to piping rating may be used unless otherwise indicated.
- 3.2 VALVE SCHEDULE
- A. Where specific valve types are not indicated, the following requirements apply:
- 1. Shutoff Duty and Throttling Duty: Use ball valves for piping NPS 2 and smaller. Use butterfly or ball valves with flanged ends for piping NPS 2-1/2 and larger.
- 2. Hot-Water Circulation Piping, Balancing Duty: CircuitSolver.
- 3. Drain Duty: Hose-end drain valves.
- 4. Check Duty: Use bronze check valves for piping NPS 2 and smaller. Use iron check valves for NPS 2-1/2 and larger.
- B. Use check valves to maintain correct direction of domestic water flow to and from equipment.
- C. Iron grooved-end valves may be used with grooved-end piping.
- END OF SECTION 22 1116

SECTION 22 1316 - SANITARY WASTE AND **VENT PIPING AND SANITARY SEWER SPECIALTIES**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes piping materials for sanitary sewer and vent systems as well as specialties associated with the sanitary sewer system.
- PART 2 PRODUCTS

2.1 PIPING MATERIALS

- indicated
- PART 3 EXECUTION
 - 3.1 PIPING INSTALLATION

 - drawings.

 - iurisdiction
- END OF SECTION 22 1316

EQUIPMENT

PART 1 - GENERAL 1.1 SUBMITTALS

PART 2 - PRODUCTS

A. Hubless, Cast Iron soil pipe and fittings. Comply with ASTM A888 or CISPI 301. 1. CISPI, Hubless-Piping Couplings: Comply with ASTM C 1277 and CISPI 310. Products shall be Stainless-steel corrugated shield with stainless-steel bands and tightening devices; and ASTM C 564, rubber sleeve with integral, center pipe

B. Copper Tube and Fittings:

1. Hard Copper Tube: ASTM B 88, Type L, water tube, drawn temper. Copper Pressure Fittings: Copper Fittings: ASME B16.18, cast-copper-alloy or ASME B16.22, wrought-copper, solder-joint fittings. Furnish wrought-copper fittings if

2. Solder: ASTM B 32, lead free with ASTM B 813, water-flushable flux. C. Floor drains, floor sinks as scheduled or equivalent products

A. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations to layout are approved on coordination

B. Install piping in concealed locations unless otherwise indicated and except in equipment rooms and service areas.

C. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise

D. Install piping above accessible ceilings to allow sufficient space for ceiling panel

E. Install piping at indicated slopes.

F. Install soil and waste drainage and vent piping at the following minimum slopes unless otherwise indicated

1. Sanitary Drain: 2 percent (1/4 inch per foot) downward in direction of flow for piping NPS 3 and smaller; 1 percent (1/8 inch per foot) downward in direction of flow for piping NPS 4 and larger.

2. Vent Piping: 1 percent (1/8 inch per foot) down toward vertical fixture vent or toward vent stack.

G. Install cast-iron soil piping according to CISPI's "Cast Iron Soil Pipe and Fittings Handbook," Chapter IV, "Installation of Cast Iron Soil Pipe and Fittings."

H. Hanger rod and spacing as required by the IPC for the size of pipe being installed. I. Test sanitary drainage and vent piping according to procedures of authorities having

SECTION 22 4000 - PLUMBING FIXTURES AND

A. Submittal requirements shall be as identified in Specification Section 22 0010 Common Plumbing Requirements.

2.1 COMMERCIAL FIXTURES (LAVATORIES, SINKS, URINALS, WATER CLOSETS) A. Basis-of-Design Product: Subject to compliance with requirements, provide product

1. American Standard

2. Crane Plumbing LLC

3. Elkay Manufacturing Co (stainless steel sinks only)

4. Gerber Plumbing Fixture LLC

5. Just Manufacturing Co (stainless steel sinks only) 6. Kohler Co

7. Toto USA, Inc.

CLOSETS)

8. Zurn Industries, LLC

2.2 COMMERCIAL FIXTURE TRIM (TRIM FOR LAVATORIES, SINKS, URINALS, WATER

A. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings or comparable product by one of the following:

1. Chicago Faucets

2. Danze, Inc.

3. Grohe America, Inc.

4. Kohler Co

5. Sloan Valve Company

6. Speakman Company

7. Zurn Industries, LLC

2.3 COMMERCIAL MOP SERVICE BASINS

A. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings or comparable product by one of the following:

1. Acorn Engineering Company

2. Crane Plumbing - Fiat Products

3. Florestone Products Co

3.1 EXAMINATION

PART 3 - EXECUTION

A. Examine roughing-in of water supply and sanitary drainage and vent piping systems to verify actual locations of piping connections before fixture installation. Examine counters, walls and floors for suitable conditions where fixtures will be installed.

3.2 INSTALLATION

sinks

A117 1

A. Lavatory, Sink and Mop Service Basin Installation:

1. Install lavatories and sinks level and plumb according to roughing-in drawings. 2. Install supports, affixed to building substrate, for wall-mounted lavatories and

3. Install accessible wall-mounted lavatories and sinks at handicapped/elderly mounting height for people with disabilities or the elderly, according to ICC/ANSI

4. Set floor-mounted sinks in leveling bed of cement grout.

5. Install water-supply piping with stop on each supply to each sink faucet. Install stops in locations where they can be easily reached for operation.

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GENERAL CONTRACTOR: To Be Determined

Project Team

7600 E Orchard Road, Suite 250-S Greenwood Village, CO 80111 Phone: 303.796.6000 IMEG Project No: 24000280.55

Professional Seal:

Project Title:

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No.	Description	Date

MECHANICAL AND PLUMBING **SPECIFICATIONS** Project Number:

2024906.064 Drawn By:



	3.1 GENERAL INSTALLATION REQUIREMENTS		G. Leakage: Class
masonry or concrete walls or concrete floors, Il be constructed out of galvanized steel, cast	A. Install insulation materials, accessories, and finishes with smooth, straight, and even surfaces; free of voids throughout the length of piping including fittings, valves, and	2.10	FLANGE CONNEC
prior to concrete placement. Sleeves in floors floor elevation. Where located in exterior walls,	specialties. B. Install insulation materials, forms, vapor barriers or retarders, jackets, and thicknesses required for each item of pipe system as specified in insulation system		B. Material: Galvar
ed wall shall be provided with a UL detail	schedules.		C. Gage and Shap
s are required as noted above, provide a UL	C. Install accessories compatible with insulation materials and suitable for the service. Install accessories that do not corrode, soften, or otherwise attack insulation or jacket	2.11	TURNING VANES
	D. Install insulation with longitudinal seams at top and bottom of horizontal runs.		A. Manufactured T steel; support w
finished wall, provide a chrome plated constructed in one piece.	E. Install multiple layers of insulation with longitudinal and end seams staggered.	2.12	DUCT-MOUNTED A
	3.2 PIPING AND DUCT INSULATION SCHEDULES		A. Duct-Mounted A
l size of access door to fully access the item ty. Provide fire rated doors where installed in	A. All piping and duct insulation shall comply with the type and insulation thickness noted in the schedule included on the drawings.		Doors and Pane
	B. Piping Insulation Schedule - For Piping Exposed to the outside ambient conditions, increase thickness of insulation by 1/2".	2.13	DUCT ACCESS PA
	END OF SECTION 23 0713		B. Panel and Fram
approvals required for the execution of the	SECTION 23 3000 - DUCTS AND ACCESSORIES		C. Fasteners: Stair
tting, patching, trenching and backfill as	PART 1 - GENERAL		D. Gasket: Comply minimum 2000
equipment. Seal holes, fireproofing where to original condition where damaged by	1.1 SUMMARY		E. Minimum Press
ughly cleaned at the completion of the work	A. Section Includes:	2.14	FLEXIBLE DUCTS
shall be removed. Remove all rubbish, debris,	 Single-wall rectangular ducts and fittings. Single-wall round ducts and fittings. 		A. Insulated, Flexic latex adhesive s
	3. Sheet metal materials.		1. Pressure R
ne piping systems, systems shall be blown out ut with cleaning compounds compatible with	4. Duct liner.		2. Maximum A
systems shall then be flushed for the complete h all temporary connections, valves, etc.,	5. Sealants and gaskets.		3. Temperatur
	 6. Hangers and supports. 7. Manual volume dampers. 		4. Insulation F thickness).
	8. Fire dampers.		B. Flexible Duct Co
NG, ADJUSTING AND	9. Combination fire and smoke dampers.		1. Clamps: Sta with a worn
	10. Corridor Dampers	2.15	GRILLES, REGISTE
	12. Turning vanes.	PART 3 - E	A. Refer to schedu
the systems shall be part of this contract,	13. Duct-mounted access doors.	3.1	
e balancing contractor shall be AABC certified, jistered professional engineer.	14. Flexible connectors.		A. Drawing plans,
ard AABC, NEBB or TABB forms.	15. Flexible ducts.		to size ducts an design consider
	PART 2 - PRODUCTS		are approved or
	2.1 SINGLE-WALL RECTANGULAR DUCTS AND FITTINGS		B. Install ducts acc and Flexible" ur
	A. General Fabrication Requirements: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" based on indicated static-pressure class	3.2	DUCT SEALING
its, engage a TABB or NEBB certified building engineer and landlord/owner for any	unless otherwise indicated.		A. Seal ducts for d "Duct Schedule"
lists.	A. General Fabrication Requirements: Comply with SMACNA's "HVAC Duct	3.3	HANGER AND SUF
r flow rates within the following tolerances: Plus	Construction Standards - Metal and Flexible," Chapter 3, "Round, Oval, and Flexible Duct," based on indicated static-pressure class unless otherwise indicated.		A. Comply with SM
tor regiraulation systems shall be tested	2.3 SHEET METAL MATERIALS	3.4	DUCT SCHEDULE
s listed.	A. General Material Requirements: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" for acceptable materials, material thicknesses, and		A. Supply Ducts:
er and engineer for review.	duct construction methods unless otherwise indicated. Sheet metal materials shall be free of pitting, seam marks, roller marks, stains, discolorations, and other		1. Ducts Conr
	2.4 DUCT LINER		a. Pressu b. Minimu
ANICAL INSULATION	A. Fibrous-Glass Duct Liner: Comply with ASTM C 1071, NFPA 90A, or NFPA 90B; and with NAIMA AH124. "Eibrous Glass Duct Liner Standard."		c. SMACI
	2.5 HANGERS AND SUPPORTS		d. SMACI
essories for duct lining requirements.	A. Hanger Rods for Noncorrosive Environments: Cadmium-plated steel rods and nuts.		2. Ducts Conr
g duct services:	B. Strap and Rod Sizes: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Table 5-1, "Rectangular Duct Hangers Minimum Size," and Table		SMACI
loor air.	5-2, "Minimum Hanger Sizes for Round Duct."		b. SMACI
n unconditioned space.	603.		3. Ducts Conr
Swing TW/Ce equipment that is not factory	2.6 MANUAL VOLUME DAMPERS		a. Pressu
owing HVAC piping systems:	2.7 FIRE DAMPERS		b. Minimu
	A. Type: Dynamic; rated and labeled according to UL 555 by an NRTL.		d. MACN
	 B. Closing rating in ducts up to 4-inch wg static pressure class and minimum 2000-fpm velocity. 	3.5	ACCESSORY INST
ors	C. Fire Rating: 1-1/2 hours.		A. Install duct acce Construction St
	2.8 COMBINATION FIRE AND SMOKE DAMPERS	2.0	"Fibrous Glass
al or glass fibers bonded with a thermosetting	 A. Type: Dynamic; rated and labeled according to UL 555 and UL 555S by an NRTL. B. Closing rating in ducts up to 4-inch wg static pressure class and minimum 2000-fpm 	3.0	A. Install in accord
ory-applied FSP jacket.	velocity.		B. Check location
vith requirements, provide one of the following:	 C. Fire Rating: 1-1/2 nours. D. Frame: Hat-shaped, 0.094-inch-thick, galvanized sheet steel, with welded. 		C. Ceiling-Mounted
Duct Wrap.	interlocking, gusseted or mechanically attached corners and mounting flange.		fittings, and acc design requirem
l Duct Wrap.	E. Heat-Responsive Device: Electric resettable device and switch package, factory installed, rated.		drop. Make final lay-in ceiling pa
Nrap.	F. Blades: Roll-formed, horizontal, interlocking, 0.063-inch-thick, galvanized sheet steel.		Arcnitectural ref with installation,
ervice Duct Wrap. ulation Type I. 850 deg F Materials: Mineral or	G. Leakage: Class II.2.9 CORRIDOR DAMPERS		D. Install diffusers
setting resin. Comply with ASTM C 547, Type I,	A. Type: Dynamic; rated and labeled according to UL 555 and UL 555C by an NRTL.		∟. Provide balanci despite whether assembly
ce with requirements, provide one of the	B. Closing rating in ducts up to 4-inch wg static pressure class and minimum 2000-fpm velocity.		F. Install diffusers,
κ	C. Fire Rating: 1-1/2 hours.		Service and mai
gree Pipe Insulation	D. Frame: Hat-shaped, 0.094-inch-thick, galvanized sheet steel, with welded, interlocking, gusseted or mechanically attached corners and mounting flange		9.Install and sup
ley-K.	E. Heat-Responsive Device: Electric resettable device and switch package, factory		1. GRDs weig suspension
Pipe Insulation	installed, rated. F. Blades: Roll-formed, horizontal, interlocking, 0.063-inch-thick, galvanized sheet steel		the main ru
			∠. GRDS Welg addition to t terminal are

kage: Class II. E CONNECTORS scription: Add-on or roll-formed, factory-fabricated, slide-on transverse flange nectors, gaskets, and components. erial: Galvanized steel. ge and Shape: Match connecting ductwork NG VANES nufactured Turning Vanes for Metal Ducts: Curved blades of galvanized sheet el; support with bars perpendicular to blades set; set into vane runners suitable for t mounting. MOUNTED ACCESS DOORS ct-Mounted Access Doors: Fabricate access panels according to SMACNA's AC Duct Construction Standards - Metal and Flexible"; Figures 7-2, "Duct Access ors and Panels," and 7-3, "Access Doors - Round Duct." ACCESS PANEL ASSEMBLIES eled according to UL 1978 by an NRTL. el and Frame: Minimum thickness 0.0428-inch stainless steel. teners: Stainless steel. Panel fasteners shall not penetrate duct wall. sket: Comply with NFPA 96; grease-tight, high-temperature ceramic fiber, rated for imum 2000 deg F. imum Pressure Rating: 10-inch wg, positive or negative. LE DUCTS ulated, Flexible Duct: UL 181, Class 1, aluminum laminate and polyester film with x adhesive supported by helically wound, spring-steel wire; fibrous-glass lation; polyethylene vapor-barrier film. Pressure Rating: 10-inch wg positive and 1.0-inch wg negative. Maximum Air Velocity: 4000 fpm. Temperature Range: Minus 20 to plus 210 deg F. Insulation R-value: R-6 minimum installed performance (1-5/8 inch minimum thickness). kible Duct Connectors: Clamps: Stainless-steel band with cadmium-plated hex screw to tighten band with a worm-gear action in sizes 3 through 18 inches, to suit duct size. ES. REGISTERS AND DIFFUSERS er to schedule for requirements for grilles, registers and diffusers. NSTALLATION wing plans, schematics, and diagrams indicate general location and arrangement uct system. Indicated duct locations, configurations, and arrangements were used ize ducts and calculate friction loss for air-handling equipment sizing and for other ign considerations. Install duct systems as indicated unless deviations to layout approved on Shop Drawings and Coordination Drawings. all ducts according to SMACNA's "HVAC Duct Construction Standards - Metal

Flexible" unless otherwise indicated. SEALING

al ducts for duct static-pressure, seal classes, and leakage classes specified in ct Schedule" Article contained within this specification according to SMACNA's AC Duct Construction Standards - Metal and Flexible."

R AND SUPPORT INSTALLATION

nply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," apter 5, "Hangers and Supports."

Ducts Connected to Fan Coil Units, Furnaces, Heat Pumps, and Terminal Units: a. Pressure Class: Positive 2-inch wg.

b. Minimum SMACNA Seal Class: A.

c. SMACNA Leakage Class for Rectangular: 12.

d. SMACNA Leakage Class for Round: 12.

Ducts Connected to Constant-Volume Air-Handling Units:

a. Pressure Class: Positive [2-inch wg] [3-inch wg] < Insert value>.Minimum SMACNA Seal Class: A.

b. SMACNA Leakage Class for Rectangular: 6.

c. SMACNA Leakage Class for Round: 6.

Ducts Connected to Variable-Air-Volume Air-Handling Units:

a. Pressure Class: Positive [3-inch wg] [4-inch wg] < Insert value>.

b. Minimum SMACNA Seal Class: A.

c. SMACNA Leakage Class for Rectangular: 3.

d. MACNA Leakage Class for Round: 3.

SORY INSTALLATION

all duct accessories according to applicable details in SMACNA's "HVAC Duct nstruction Standards - Metal and Flexible" for metal ducts and in NAIMA AH116, prous Glass Duct Construction Standards," for fibrous-glass ducts.

S, REGISTERS AND DIFFUSER INSTALLATION

all in accordance with manufacturer's instructions.

eck location of outlets and inlets and make necessary adjustments in position to form with architectural features, symmetry, and lighting arrangement.

ling-Mounted Outlets and Inlets: Drawings indicate general arrangement of ducts, ngs, and accessories. Air outlet and inlet locations have been indicated to achieve ign requirements for air volume, noise criteria, airflow pattern, throw, and pressure . Make final locations where indicated, as much as practical. For units installed in in ceiling panels, locate units in the center of panel. Coordinate exact location with hitectural reflected ceiling plan. Where architectural features or other items conflict installation, notify Architect for a determination of final location.

all diffusers to ductwork with air tight connection.

vide balancing dampers on duct take-off to diffusers, and grilles and registers, pite whether dampers are specified as part of the diffuser, or grille and register

all diffusers, registers, and grilles with airtight connections to ducts and to allow vice and maintenance of dampers, air extractors, and fire dampers.

nt ductwork visible behind air outlets and inlets matte black. Refer to Division stall and support all GRDs per manufacturer's recommendations.

GRDs weighing less than 20 pounds shall be positively attached to ceiling suspension main runners or to cross runners with the same carrying capacity as the main runners.

GRDs weighting greater than 20 pounds, but not more than 56 pounds, in addition to the above, shall have two No. 12 gauge hangers connected from the terminal or service to the ceiling hangers or to the structure above. These wires mav be slack.

3. GRDs weighing greater than 56 pounds shall be supported directly from the

structure above by approved hangers. H. Forward GRD Ak factors to Testing, Adjusting and Balancing Contractor.



St. Louis 319 North 4th Street Suite 1000 St. Louis, Missouri 63102 (314) 231-5700

GENERAL CONTRACTOR: To Be Determined

Project Team



Professional Seal:

Project Title:

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No.	Description	Date

MECHANICAL AND PLUMBING **SPECIFICATIONS** Project Number:

2024906.064 Drawn By:





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SHEET NOTES - PLUMBING:

A. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES IN EXISTING CONDITIONS.

KEYNOTES (#)

REMOVE SINK. REMOVE ASSOCIATED CW, HW, SANITARY WASTE AND VENT PIPING BACK TO ASSOCIATED ACTIVE MAINS AND CAP.

REMOVE LAVATORY. REMOVE ASSOCIATED CW, HW, SANITARY WASTE AND VENT PIPING BACK TO ASSOCIATED ACTIVE MAINS AND CAP. REFER TO NEW PLUMBING PLAN FOR MORE INFORMATION.

REMOVE WATER CLOSET. DISCONNECT ASSOCIATED CW, SANITARY WASTE AND VENT PIPING AND MAINTAIN FOR RE-CONNECTION. REFER TO NEW PLUMBING PLAN FOR MORE INFORMATION.



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Project Team GENERAL CONTRACTOR: To Be Determined

Professional Seal:

Project Title:



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<u> </u>	B	Data
No.	Description	Date

Sheet Title: PLUMBING DEMOLITION PLAN

Project Number: Sheet Number: 2024906.064 Drawn By:

ABN Issue Date: SEPTEMBER 16, 2024 25

todesk Docs://_Edward Jones TI Projects R23/MEP23_24000280.55_EdJ SRE Omaha NE_C







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SHEET NOTES - PLUMBING:

A. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES IN EXISTING CONDITIONS.

KEYNOTES (#)

PROVIDE 1/2" CW AND HW PIPING DOWN IN WALL TO NEW LAVATORY, L-#. CONNECT NEW 1/2" HW PIPING TO EXISTING HW PIPING FROM EXISTING WATER HEATER OF EQUAL OR LARGER SIZE. CONTRACTOR SHALL FIELD VERIFY EXACT POINT OF CONNECTION. REFER TO MIXING VALVE DETAIL AND PLUMBING FIXTURE AND EQUIPMENT SCHEDULE FOR MORE INFORMATION.

ROUTE 1/2" CW AND HW PIPING DOWN IN WALL TO NEW SINK, SK-1. REFER TO MIXING VALVE DETAIL AND PLUMBING FIXTURE AND EQUIPMENT SCHEDULE FOR MORE INFORMATION.

PROVIDE NEW WATER CLOSET, WC-#. RE-CONNECT TO EXISTING CW, SANITARY WASTE AND VENT PIPING. CONTRACTOR SHALL MODIFY PIPING AS REQUIRED. REFER TO PLUMBING FIXTURE AND EQUIPMENT SCHEDULE FOR MORE INFORMATION.



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Project Team GENERAL CONTRACTOR: To Be Determined



Professional Seal:

Project Title:



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