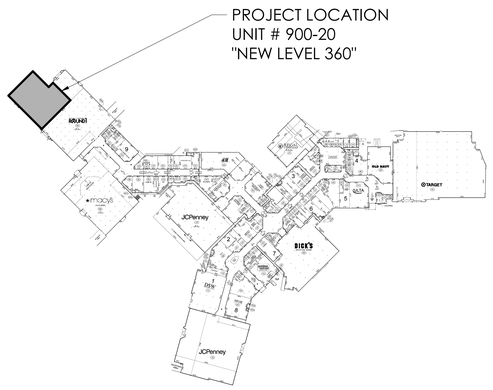
NEW LEVEL 360 - UNIT 900-20

SOUTH HILL MALL

3500 South Meridian Blvd

Puyallup, WA 98373

Approval of submitted plans is not an approval of omissions or oversight by this office or noncompliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable building codes and regulations of the local government.



SITE LOCATION PLAN — NO SCALE

3 Notes:
1. All wood blocking and plywood shall be Fire Retardant Treated and shall remain exposed for Building Inspector.
2. Contractor to pretest all exit and emergency lighting prior to requesting inspection.

CODE INFORMATION

1. APPLICABLE CODES:
   - International Building Code (IBC), 2018
   - International Mechanical Code (IMC), 2018
   - Uniform Plumbing Code, 2018
   - International Fuel Gas Code, 2018
   - International Fire Code, 2018
   - National Electric Code (NFPA 250-70), 2014
   - Washington State Energy Code, 2018
   - ICC/ANSI A117.1, 2009
   - Washington State Amendments (Building, Mechanical, Fire, Plumbing, Energy and Electrical), Current
2. TENANT AREA:
   - Unit #900-20 – 35,680 S.F.
3. CONSTRUCTION TYPE:
   - "2-B" (IBC T-601) – All steel column and beam framing system with metal roof decking. All wall, column, and roof materials are of non-combustible materials.
4. USE GROUP:
   - Covered Mall Building, as per IBC 402.0
   - Tenant Space Unit #900-20:
     'A3' Assembely, as per IBC 309.0 and an Achor Store as defined in IBC 402.8
5. OCCUPANCY:
   - Refer to sheet G-001 "Code Compliance Plan" for complete and comprehensive occupancy calculations.
6. EGRESS REQUIREMENTS:
   - Refer to sheet G-001 "Code Compliance Plan" for complete and comprehensive Egress calculations.
7. FIRE RESISTIVE CONSTRUCTION:
   - There are new and existing fire partition demising walls between this new tenant and the existing adjacent tenant of a minimum of 1 hour.
8. FIRE PROTECTION SYSTEMS:
   - The existing tenant space is protected with an automatic sprinkler system in accordance with NFPA 13. If there are to be any modifications to this system, this contractor shall be responsible for obtaining the services of a Washington certified sprinkler contractor, who will provide certified sprinkler shop drawing and calculations for all modifications.
9. PLUMBING REQUIREMENTS:
   - Refer to sheet G-001 "Code Compliance Plan" for complete and comprehensive plumbing calculations.
10. SPECIAL INSPECTIONS:
    - Special inspections shall be provided for this project by the owner and/or Tenant, but scheduled by the contractor.
    - The following items (as per IBC T-1704.3 and T-1704.4) require special inspections:
      1. Structural concrete over 2,500 PSI
      2. Structural steel fabrication
      3. Field welding
      4. Fire Resistive Joint Systems
      5. Penetration fire Stopping

GENERAL NOTES

1. THE WORK OF THESE CONTRACTS (LANDLORD AND TENANT) WITHIN AN EXISTING BUILDING SHELL CONSISTS, IN GENERAL AS FOLLOWS FOR A BASEBALL TRAINING FACILITY. AN OCCUPANCY PERMIT IS BEING REQUESTED FOR THIS WORK.
   A. LANDLORD - LIMITED DEMOLITION, DEMISING PARTITIONS, MECHANICAL AND ELECTRICAL WORK FOR SPRINKLER ROOM AND EGRESS ACCESS HALL.
   B. TENANT - COMPLETE INTERIOR BUILD-OUT INCLUDING BUT NOT LIMITED TO: ELECTRICAL, PLUMBING, MECHANICAL SYSTEMS, INTERIOR PARTITIONS AND FINISHES WITHIN UNIT 900-20.
2. REFERENCE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION ON ALL ASPECTS OF THE WORK. PROJECT SPECIFICATIONS ALSO REFERENCE MANY OTHER BUILDING AND INDUSTRY STANDARDS. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE STANDARDS, IN CONJUNCTION WITH THESE DRAWINGS AND SPECIFICATIONS. IF MORE STRINGENT OF AN ITEM IS LISTED IN THESE SPECIFICATIONS OR DRAWINGS, THEN THAT OF A REFERENCE STANDARD, THEN THAT ITEM MUST BE PROVIDED PER THE MORE STRINGENT REQUIREMENT. ANY DEVIATION OR OMISSION OF ANY WORK ITEM MUST MEET THE APPROVAL OF THE ARCHITECT PRIOR TO COMMENCEMENT OF THAT PORTION OF WORK.
3. ALL DIMENSIONS SHOWN ON THESE DRAWINGS ARE TO CENTERLINE OF COLUMN OR TO FACE OF EXTERIOR BUILDING AND INTERIOR WALLS. THESE DIMENSIONS HAVE BEEN TAKEN OFF FROM EXISTING CONSTRUCTION DRAWINGS AND HAVE NOT BEEN FIELD VERIFIED FOR EXACT ACCURACY.
4. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL WORK BY ALL TRADES FOR THIS PROJECT. THE GENERAL CONTRACTOR SHALL USE THE LANDLORDS CONSTRUCTION MANAGER AS THEIR FIRST POINT OF CONTACT WITH THE LANDLORD, DURING BIDDING, ALL INQUIRES MUST BE DIRECTED TO THE CONSTRUCTION MANAGER. AFTER AWARD OF CONTRACT, THE GENERAL CONTRACTOR MAY CONTACT THE ARCHITECT WHEN THE LANDLORD CONSTRUCTION MANAGER IS UNOBTAINABLE.
5. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION WORK SHOWN ON ALL DRAWINGS, AND SHALL COORDINATE WITH SUB-CONTRACTORS, AS REQUIRED. ALL SUB-CONTRACTORS SHALL REVIEW ALL DEMOLITION DRAWINGS, AND BE MADE AWARE THAT ADDITIONAL SELECTIVE DEMOLITION MAY BE SHOWN ON OTHER DRAWINGS.
6. FOR CONFLICTS WITHIN THE DRAWINGS AND/OR SPECIFICATIONS, THE GENERAL CONTRACTOR SHALL INCLUDE IN THEIR BIDS, ALL ITEMS INCLUDED WITHIN THESE DRAWINGS AND SPECIFICATIONS, EVEN IF IT IS FOUND TO BE CONTRADICTORY IN ANOTHER LOCATION WITHIN THESE DOCUMENTS. IF A CONFLICT IS FOUND, CONSULT WITH THE LANDLORDS CONSTRUCTION MANAGER FOR CLARIFICATION, EITHER IF FOUND DURING THE BIDDING, OR PRIOR TO THE COMMENCEMENT OF THAT CONFLICTING PORTION OF THE WORK.
7. WHERE THERE IS A DISCREPANCY ON THE CONTRACT DOCUMENTS WITH THE WORK, AND CONTRACTOR FAILED TO GET CLARIFICATION DURING THE BID PROCESS, THEN THE CONTRACTOR SHALL ASSUME IN HIS BID THE MOST STRINGENT OF THE ITEMS THAT ARE DISCREPANT.
8. ANY REFERENCE TO 'BY LANDLORD' SHALL CONSTITUTE THAT SUCH ITEM IS TO BE BY THIS CONTRACTOR. ANY REFERENCE TO 'BY TENANT' SHALL CONSTITUTE THAT SUCH ITEM IS TO BE BY A SEPARATE OTHER CONTRACTOR. ANY ITEM NOT LABELED AS 'EXISTING' OR 'EXG', SHALL BE CONSTRUED TO MEAN IT IS A NEW ITEM BY THIS CONTRACTOR. IN MANY REFERENCES, MOST NEW ITEMS ARE LABELED NEITHER; 'BY LANDLORD', NOR 'BY TENANT', BUT SHALL BE ASSUMED TO BE A NEW ITEM PERFORMED BY THIS CONTRACTOR.
9. THE TENANT CONTRACTOR SHALL PROVIDE THE FOLLOWING DEFERRED SUBMITTALS WHICH SHALL BE RENDERED BY A PROFESSIONAL DESIGNER.
   A. ELECTRICAL SYSTEMS
   B. FIRE ALARM SYSTEMS
   C. FIRE SPRINKLER SYSTEMS
   D. MECHANICAL SYSTEMS
   E. PLUMBING SYSTEMS
   F. STRUCTURAL STEEL
10. THE LANDLORD CONTRACTORS SHALL PROVIDE THE FOLLOWING DEFERED SUBMITTALS WHICH SHALL BE RENDERED BY A PROFESSIONAL DESIGNER.
    A. FIRE ALARM SYSTEMS
    B. FIRE SPRINKLER SYSTEMS

ARCHITECTURAL

No.	Name	Revision Date	No.
G-000	CODE INFORMATION AND DRAWING INDEX	01-25-23	3
G-001	CODE COMPLIANCE PLAN	01-25-23	2
G-002	RESPONSIBILITY SCHEDULE		
G-003	U.L. DETAILS		
D-100	FLOOR PLAN - DEMOLITION	11-29-22	1
A-101	FLOOR PLAN	01-25-23	3
A-102	ENLARGED PLANS AND SCHEDULES	01-25-23	2
A-200	CEILING PLAN	11-29-22	2
A-201	CEILING PLAN - MEP	01-25-23	3
A-300	ROOF PLAN	11-29-22	2
A-700	SCHEDULES AND DETAILS	01-25-23	3

Exit and Emergency Exit lighting; Test required. Contractor to pretest per code and request inspection; Contractor to provide light meter for testing.

PROVIDE INSPECTOR ENGINEERING DOCUMENTS FOR THE NETTING, NEW DOORS CUT INTO TILT PANELS ON SOUTH END, RESPONSE LETTER FROM MECHANICAL ENGINEER FOR VENTILATION, PROOF THAT TURF MEETS ALL SMOKE AND FLAME SPREAD REQUIREMENTS OF THE IBC

THE APPROVED CONSTRUCTION PLANS AND ALL ENGINEERING DOCUMENTS MUST BE POSTED ON THE JOB AT ALL INSPECTIONS IN A VISIBLE AND READILY ACCESSIBLE LOCATION.

FULL SIZED LEDGIBLE **COLOR** PLANS ARE REQUIRED TO BE PROVIDE BY THE PERMITTEE ON SITE FOR ALL INSPECTIONS MIN. PLAN SIZE 42 X 30

STRUCTURAL

No.	Name	Revision Date	No.
3. Structural			
S-100	STRUCTURAL SKETCHES	11-29-22	1

PLUMBING / MECHANICAL / ELECTRICAL

No.	Name	Revision Date	No.
6. Plumbing			
TP0.01	SCHEDULES - PLUMBING	10-5-2022	1
DP2.01	NOT USED	11-29-22	1
TP2.01	1st FLOOR PLAN - PLUMBING	11-29-22	2
7. Mechanical			
TM0.01	SCHEDULES - HVAC	11-29-22	2
TM0.015	SITE PLAN	10-5-2022	1
TM2.01	1st FLOOR PARTIAL PLAN - HVAC	10-5-2022	1
DM2.02	ROOF PARTIAL DEMO PLAN - HVAC	10-5-2022	1
TM2.02	ROOF PARTIAL PLAN - HVAC	10-5-2022	1

City of Puyallup Development Engineering APPROVED

See permit for additional requirements.

Linda Lian

02/08/2023
8:32:00 AM

In accordance to City Standard 04.03.04 a sewer sampling tee is required on all commercial development. See Standard Detail 04.03.04, attached in CityView.

The plumbing fixture worksheet that was submitted with this application provided a sewer FUW credit. However, a new submittal of this application PRCTI202221551 has changed the scope of work. Per the fourth submittal of application PRCTI202221551 there will be no demolition of plumbing fixtures. A confirmation letter dated 01/25/2023 is attached in CityView

BUILDING/PLUMBING/MECHANICAL PERMIT 2018 CODES

City of Puyallup Building REVIEWED FOR COMPLIANCE
DLeahy
02/22/2023
9:40:30 AM

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic

APPROVED PLAN
CITY OF PUYALLUP
PLANNING DIVISION

APPROVED BY: NComstock

DATE: 11/22/2022

CASE NO.: PRCTI20221551

CONDITIONS: N/A

FE Locations per fire code 75 feet maximum travel to 2A-10BC fire extinguishers. IFC section 906

DRAWING ABBREVIATIONS

&	AND	MAX	MAXIMUM
L	ANGLE	MBL	MARBLE
@	AT	MECH	MECHANICAL
℄	CENTER LINE	MFR(S)	MANUFACTURER(S)
#	POUND OR NUMBER	MH	MANHOLE
		MIN	MINIMUM
ACT	ACOUSTICAL CEILING TILE	MISC	MISCELLANEOUS
A.F.F	ABOVE FINISHED FLOOR	MO	MASONRY OPENING
ALUM	ALUMINUM	M.R.	MOISTURE RESISTANT
APPROX	APPROXIMATE(LY)	MTD	MOUNTED
ARCH	ARCHITECTURE(URAL)	MTG	MOUNTING
A/C	AIR CONDITIONING	MTL	METAL
BLDG	BUILDING	N/A	NOT APPLICABLE
BRG	BEARING	NIC	NOT IN CONTRACT
		NO.	NUMBER
CB	CATCH BASIN	NOM.	NOMINAL
C.J.	CONTROL JOINT	NTS	NOT TO SCALE
CLG	CEILING		
CMU	CONCRETE MASONRY UNIT	O.A.	OVERALL
COL	COLUMN	O.C.	ON CENTER
CONC	CONCRETE	O.H.	OVER HEAD
CONT	CONTINUOUS	OPH	OPPOSITE HAND
CPT	CARPET	OPP	OPPOSITE
C.T.	CERAMIC TILE		
CU FT	CUBIC FOOT	PDT.	PAINTED
CU YD	CUBIC YARD	PL.	PLATE
		PLAM	PLASTIC LAMINATE
DEPT.	DEPARTMENT	PNT	PAINT
DET.	DETAIL		
DF	DRINKING FOUNTAIN	R	RADIUS
DIA	DIAMETER	RD	ROOF DRAIN
DIM	DIMENSION	REINF	REINFORCE
DS	DOWN SPOUT	REQD	REQUIRED
DWG	DRAWING(S)	RL	ROOF LEADER
		RO	ROUGH OPENING
E.I.F.S.	EXT. INSULATION & FINISH SYSTEM	RTU	HVAC UNIT
E.J.	EXPANSION JOINT		
ELEC	ELECTRICAL	SC	SOLID CORE
EMER.	EMERGENCY	SCWD	SOLID CORE WOOD
EQ	EQUAL	SD	STORM DRAIN
E.W.C.	ELECTRIC WATER COOLER	SECT.	SECTION
EXG.	EXISTING	SQ	SQUARE
EXP	EXPANSION	SQ FT	SQUARE FOOT
EXT	EXTERIOR	SQ IN	SQUARE INCH
		SQ YD	SQUARE YARD
FD	FLOOR DRAIN	STD	STANDARD
FE	FIRE EXTINGUISHER	STL	STEEL
FEC	FIRE EXTINGUISHER CABINET	STRUCT	STRUCTURAL
FHC	FIRE HOSE CABINET	SUSP	SUSPENDED
FIN	FINISH		
F.R.T.	FIRE-RETARDENT TREATED	T	TEMPERED
FTG.	FOOTING	TC	TOP OF CURB
		T&G	TONGE AND GROOVE
GA	GAUGE(GAGE)	T.G.	TEMPERED GLASS
GALV	GALVANIZED	THK.	THICK
GB	GRAB BAR	THRU	THROUGH
GC	GENERAL CONTRACTOR	T.I.G.	TEMPERED INSULATED GLASS
GYP.	GYPSUM		
GYPBD.	GYPSUM WALLBOARD	TLT	TOILET
		T.O.M.	TOP OF MASONRY
H.B.	HOSE BIBB	T.O.S.	TOP OF STEEL
HC	HANDICAPPED ACCESSIBLE	TP	TOP OF PAVMENT
H.C.	HOLLOW CORE	TS	TUBE STEEL
HOL. MET.	HOLLOW METAL	TV	TELEVISION
HORIZ.	HORIZONTAL	T.W.	TOP OF WALL
HT	HEIGHT	TYP.	TYPICAL
HVAC	HEATING VENTILATING AIR CONDITIONING	U.G.	UNDERGROUND
		U.N.O.	UNLESS NOTED OTHERWISE
INFO.	INFORMATION	U.R.	URINAL
INSUL.	INSULATION		
INT.	INTERIOR	VCT	VINYL COMPOSIITE TILE
		VERT	VERTICAL
LAM	LAMINATE	V.I.F.	VERIFY IN FIELD
LAV	LAVATORY	VT	VINYL TILE
LB	POUND	V.T.R.	VENT THROUGH ROOF
		VWC	VINYL WALL COVERIN
		WH	WATER HEATER
		WWF	WELDED WIRE FABRIC
		WT	WEIGHT

ARCHITECT: RICK PARTIKA AIA
E: RPARTIKA@CAFAROCOMPANY.COM
P: 330-747-2661

BRIENEN STRUCTURAL ENGINEERS
ENGINEER: PAUL BRIENEN S.E.
E: PBRIENEN@BSE-PS.COM
P: (206) 397-0000

2

MacDONALD - MILLER FACILITY SOLUTIONS
17930 Intl. Blvd. Suite 120
SeaTac, WA 98188

PROJECT EXECUTIVE
JOE BRUCKER
E: joe.brucker@macmiller.com
P: 206-768-4140

1

COLUMN LINE
SEQUENCE NUMBER
DETAIL NUMBER
View Name
SCALE: 1/8" = 1'-0"
REFERENCING SHEET
COLUMN BUBBLE W/ SEQUENCE NO.
VIEW TITLE MARK
INTERIOR ELEVATION CALLOUT
MATERIAL TAG
KEYNOTE TAG
TOILET ROOM ACCESSORIES
WINDOW TYPE
DOOR NUMBER
WALL TYPE
REVISION NUMBER
ROOM NAME
ROOM NAME & NUMBER
ELEVATION / DWG. OR BLDG. SECTION/DWG.
CEILING TYPE CALLOUT
FINISH KEY
Acoustic Tile (AT-1) 16'-0"
CEILING TYPE
CEILING HEIGHT
DETAIL NUMBER
EXTERIOR ELEVATION CALLOUT
REFERENCING SHEET
Name
Elevation
ELEVATION DATUM

PRCTI20221551

1/30/2023 3:35:57 PM E:\Departments\AEC\OB_AE_WIP\South Hill Mall_NEW LEVEL 360_1\AUTO DESK\62-900-20 Architectural 6.rvt

Developer: CAFARO - Est. 1949 - Commercial & Industrial Real Estate Developers
5577 Youngstown - Warren Road
Niles, Ohio 44446
Phone: 330.747.2661

Seal: RICHARD PARTIKA STATE OF WASHINGTON REGISTERED ARCHITECT 9147

Architect: RPD RICK PARTIKA, AIA
5577 Youngstown - Warren Road
Niles, Ohio 44446
Phone: 330.747.2661
E-Mail: rpartika@cafarocompany.com

No.	Revision / Description	Date	Issued by
3	Bulletin 2	01-25-23	TGE
2	Bulletin 1	11-29-22	TGE
1	Addendum A	10-5-2022	TGE
	Issue Final	7-15-2022	TGE
	Issue For Permit	7-8-2022	Issued by

Sheet Title: CODE INFORMATION AND DRAWING INDEX

Project Information: NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3500 South Meridian Blvd
Puyallup, WA 98373

Project No.:	62-900-20
Date:	7-8-2022
Drawn By:	TGE
Checked By:	RP

G-000

Occupancy Schedule - Area A

Number	Name	Area	Occupancy	Occupants per SF	Code Occupants	Posted Occupancy
A-1	Weight Room / Training Area	3,489.15 SF	Assembly - Limited Occupancy	50 PER S.F.	70	70
A-2	Unisex ADA Toilet Room	88.89 SF	Business Areas	100 PER S.F.	1	1
A-3	Men's Toilet Rm	198.28 SF	Mercantile - Storage, Stock, shipping areas	300 PER S.F.	1	1
A-4	Janitor Closet	18.62 SF	Mercantile - Storage, Stock, shipping areas	100 PER S.F.	0	0
A-5	Office	77.08 SF	Business Areas	100 PER S.F.	1	1
A-6	Storage Room	561.05 SF	Mercantile - Storage, Stock, shipping areas	300 PER S.F.	2	2
A-7	Infield Training Area	9,657.15 SF	Assembly - Posted Occupancy	50 PER S.F.	193	128
A-8	Electrical Room	190.13 SF	Mercantile - Storage, Stock, shipping areas	300 PER S.F.	1	1
A-10	Toilet Room Entry	56.59 SF	Business Areas	100 PER S.F.	1	1
A-11	Unisex Toilet Room	28.39 SF	Business Areas	100 PER S.F.	0	0
A-12	Unisex Toilet Room	30.76 SF	Business Areas	100 PER S.F.	0	0
A-13	Circulation Area	550.94 SF	Assembly - Limited Occupancy	50 PER S.F.	11	11
Grand total: 12		14,947.05 SF			280	215

[193 Occ * 0.66 = 128 Occupants]

Occupancy Schedule - Area B

Number	Name	Area	Occupancy	Occupants	Code Occupants	Posted Occupancy
B-1	Circulation Area	3,367.61 SF	Assembly - Posted Occupancy	50 PER S.F.	67	67
B-2	Training Area	359.32 SF	Assembly - Posted Occupancy	50 PER S.F.	7	7
B-3	Batting Cage	1,443.00 SF	Assembly - Limited Occupancy	6	29	6
B-4	Batting Cage	1,716.00 SF	Assembly - Limited Occupancy	6	34	6
B-5	Batting Cage	2,023.13 SF	Assembly - Limited Occupancy	6	40	6
B-6	Pitching Area	4,186.94 SF	Assembly - Limited Occupancy	50 PER S.F.	84	56
B-7	Batting Cage	2,028.00 SF	Assembly - Limited Occupancy	6	41	6
B-8	Batting Cage	2,028.00 SF	Assembly - Limited Occupancy	6	41	6
B-9	Batting Cage	2,028.00 SF	Assembly - Limited Occupancy	6	41	6
B-10	Batting Cage	1,560.00 SF	Assembly - Limited Occupancy	6	31	6
B-11	Unoccupied	316.88 SF	Unoccupied	0	0	0
Grand total: 11		21,056.87 SF			415	173

[84 Occ * 0.66 = 56 Occupants]

PLUMBING REQUIREMENTS:
- Required plumbing fixtures facilities shall be determined as per IBC T-2902.1.
- Occupancy type A3 with 50% male and 50% female occupancy.
- Based on approved Posted Occupancy.

- Male ***194*** Occupants
  Female ***194*** Occupants
  Total ***388*** Occupants

- Required water closets
  Male ***194*** at 1 per 125 = 2 water closets
  Female ***194*** at 1 per 65 = 3 water closets
  Total Required 5 water closets

- Required lavatories
  Male ***194*** at 1 per 200 = 2 lavatory
  Female ***194*** at 1 per 200 = 2 lavatory
  Total Required 4 lavatories

- Required drinking fountains
  Total ***388 occupants*** at 1 for 1st 150 +1 for each **additional** 500 = 2

- Required service sinks
  Total 1 service sink

- Public toilet fixtures provided:
  Men 1 water closets, 2 urinals, 1 lavatories
  Women 2 water closets, 2 lavatories
  Unisex ADA 1 water closet, 1 lavatories
  Total 4 water closets, 2 urinals, 4 lavatories
  Substituting 1 urinal for 1 water closet leaving 3 water closets for women

One (1) existing ADA drinking fountain to remain
One (1) bottled water cooler to be provided

Service sinks to be provided 1

Exit Width Schedule

Area	Mark	Exit Width	Egress Capacity
A	20-1	68"	340
A	20-2	68"	340
A	20-3	34"	170
A	20-6	34"	170
4		204"	1,020
B	20-15	56"	280
B	99-1	34"	170
2		90"	450
Grand total		294"	1,470

EGRESS REQUIREMENTS:
1. Egress Requirements per IBC 1005.1.2, based upon code required occupants (not reduced posted occupants)

2. Area A:
- ***215*** posted Occupants x 0.2" per Occupant = ***43***" of Egress Required
- Actual Egress Provided = 204"
- Four (4) Egress locations provided

3. Area B
- ***173*** posted Occupants x 0.2" per Occupant = ***35***" of Egress Required
- Actual Egress Provided = 90"
- Two (2) Egress locations provided

4. Total Egress Width provided is 294"

Path of Travel Schedule

Area	Mark	Length	Time@Speed	Max Travel Distance
A	A1	84' - 0"	19.1 s@3.0 mph	250' - 0"
A	A2	47' - 6"	10.8 s@3.0 mph	250' - 0"
A	A3	124' - 0"	28.2 s@3.0 mph	250' - 0"
A	A4	96' - 6"	21.9 s@3.0 mph	250' - 0"
B	B-1	150' - 0"	34.0 s@3.0 mph	250' - 0"
B	B-3	180' - 6"	41.0 s@3.0 mph	250' - 0"
B	B-2	245' - 0"	55.6 s@3.0 mph	250' - 0"
B	B-4	177' - 6"	40.4 s@3.0 mph	250' - 0"

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic

REDUCED OCCUPANT LOADING APPROVED BY BUILDING OFFICIAL PER INFORMATION PROVIDED AT TIME OF PLAN REVIEW. AND IBC SECTION 1004.5 (EXCEPTION)

Occupancy Sign Schedule

Sign Number	Maximum Occupants
S-A1	70
S-A7	128
S-B2	7
S-B3	6
S-B4	6
S-B5	6
S-B6	56
S-B7	6
S-B8	6
S-B9	6
S-B10	6

Occupancy Placard Sign Schedule notes:
Signs shall be 4" x 4" mounted at 44" A.F.F. as shown on adjacent plan.
Signs shall indicatge maximum occupancy for this room as indicated.

CODE COMPLIANCE LEGEND

SYMBOL	DESCRIPTION
34" 226	SYMBOL INDICATES EXIT POINT, WITH TOP NUMBER INDICATING EGRESS WIDTH FOR THIS POINT, AND BOTTOM NUMBER INDICATING EGRESS CAPACITY FOR THIS POINT
	1 HOUR RATED FIRE BARRIER WALL (U. L. Design U419)
	2 HOUR RATED FIRE BARRIER WALL (NEW OR EXISTING)
	EXISTING CONSTRUCTION TO REMAIN
	NEW CONSTRUCTION
	COLUMN CENTERLINE
	EXIT DISCHARGE POINT AT END OF TRAVE DISTANCE
	ORIGIN OF MAXIMUM TRAVEL DISTANCE TO NEAREST EXIT DISCHARGE POINT

CODED NOTES THIS SHEET

#	DESCRIPTION
A6	EXISTING ACCESSIBLE DRINKING FOUNTAIN
A8	FIRE EXTINGUISHER - COORDINATE LOCATION WITH BUILDING OFFICIALS
A11	BOTTLED WATER COOLER

THE REQUIRED WIDTH OF 44" FOR PASSAGEWAYS AND/OR AISLES SHALL BE MAINTAINED FREE OF PROJECTIONS AND RESTRICTIONS.

REFER TO ADJACENT PLAN FOR EQUIPMENT LAYOUT.

PRCTI20221551

TWO DEMISING WALLS AND ADDED EXTERIOR EXIT DOORS UNDER SEPARATE PERMIT PRCTI20230029

Unit 900-30
Proposed Tenant
8,724.14 SF

Unit 900-99H
Egress Hall
576.86 SF

Unit 900-90S
Sprinkler Room
105.00 SF

Unit 900-20
New Level 360
35,950.00 SF

Unit 900
Round 1
52,034.00 SF

Batting Cage B-10
Circulation Area B-1
Batting Cage B-9
Pitching Area B-6
Batting Cage B-8
Batting Cage B-7
Batting Cage B-5
Batting Cage B-4
Batting Cage B-3
Training Area B-2
Infield Training Area A-7
Weight Room / Training Area A-1
Office A-5
Storage Room A-6
Men's Toilet Rm A-3
Unisex Toilet Room A-11
Unisex Toilet Room A-12
Unisex ADA Toilet Room A-2
Toilet Room Entry A-10
Electrical Room A-8
Circulation Area A-13
Unoccupied B-11

1 Hour Wall
1 Hour Wall (EX)
Opening
183' - 0" Area B
9' - 7 5/8"

THIS SET OF NEW DOORS REQUIRED FOR EXITING PURPOSES AND IS PART OF THIS PERMIT.

Code Compliance Plan
SCALE: 3/32" = 1'-0"

Developer:
CAFARO
- Est. 1949 -
Commercial & Industrial Real Estate Developers
5577 Youngstown - Warren Road
Niles, Ohio 44446
Phone: 330.747.2661

Seal:
REGISTERED ARCHITECT
RICHARD PARTIKA
STATE OF WASHINGTON

Architect:
RPID
RICK PARTIKA, AIA
5577 Youngstown - Warren Road
Niles, Ohio 44446
Phone: 330.747.2661
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Revision No.	Description	Date	Issued by
2	Bulletin 2	01-25-23	TGE
1	Bulletin 1	11-29-22	TGE
	Issue Final	7-15-2022	
	Issue for Permit	7-8-2022	

Sheet Title: CODE COMPLIANCE PLAN

Project Information:
NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3500 South Meridian Blvd
Puyallup, WA 98373

Project No.:	62-900-20
Date:	7-8-2022
Drawn By:	TGE
Checked By:	RP

G-001

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RESPONSIBILITIES SCHEDULE

NOTE: THE GENERAL CONTRACTOR SHALL VERIFY ALL ITEMS ON THIS SCHEDULE FOR ACCURACY PRIOR TO BEGINNING CONSTRUTION. ANY DISCREPANCIES SHALL BE REPORTED TO LANDLORD ARCHITECT IMMEDIATELY UPON DISCOVERY.

DESCRIPTION	CONDITION		ASSIGNMENTS				REMARKS
			LANDLORD		TENANT		
	EXISTING	NEW	FURNISH	INSTALL	FURNISH	INSTALL	
DIVISION 01000 - GENERAL							
-							
-							
-							
-							
DIVISION 02000 - EXISTING CONDITIONS							
Demolition of existing interior partitions	⊛				⊛	⊛	
Demolition of existing floor coverings	⊛		⊛	⊛			As required for construction of demising partitions
Demolition of existing floor coverings	⊛				⊛	⊛	
Saw-cut Tilt-up concrete wall panel for exterior doors		⊛	⊛	⊛			Sprinkler Room (99-3) and Egress Access Hall (99-2)
Saw-cut Tilt-up concrete wall panel for exterior door		⊛			⊛	⊛	Opening 20-15
DIVISION 03000 - CONCRETE							
Floor Slab in-fill at interior trenching	⊛	⊛			⊛	⊛	
Floor slab in-fill at exterior doors		⊛	⊛	⊛			Sprinkler Room and Egress Access Hall
Floor slab in-fill at exterior door		⊛			⊛	⊛	
-							
DIVISION 04000 - MASONRY							
-							
DIVISION 05000 - METALS							
-							
DIVISION 06000 - WOOD, PLASTIC, AND COMPOSITES							
-							
DIVISION 07000 - THERMAL AND MOISTURE PROTECTION							
Batt insulation and vapor barrier at exterior walls	⊛						
Cutting and patching of roof membrane	⊛	⊛			⊛	⊛	
-							
-							
DIVISION 08000 - OPENINGS							
Doors, frames and hardware		⊛	⊛	⊛			Sprinkler Room and Egress Access Hall
Doors, frames and hardware	⊛	⊛			⊛	⊛	
Clean, adjust and repair doors, frames and hardware	⊛				⊛	⊛	
-							
DIVISION 09000 - FINISHES							
Fire rated demising partitions		⊛	⊛	⊛			Sprinkler Room, Egress Acces Hall and Unit 900-30
Interior partitions		⊛			⊛	⊛	
Acoustic ceiling		⊛			⊛	⊛	
Floor coverings and accessories		⊛			⊛	⊛	
Painting exterior doors and frames		⊛	⊛	⊛			Sprinkler Room and Egress Access Hall
Painting of walls and doors		⊛			⊛	⊛	
-							
DIVISION 10000 - SPECIALTIES							
Fire protection specialties		⊛			⊛	⊛	
Toilet Room accessories		⊛			⊛	⊛	
Toilet partitions		⊛			⊛	⊛	
Interior signage		⊛			⊛	⊛	
-							
DIVISION 11000 - EQUIPMENT							
-							
DIVISION 12000 - FURNISHINGS							
Batting cages		⊛			⊛	⊛	
-							
-							
-							
DIVISION 14000 - CONVEYING EQUIPMENT							
-							

RESPONSIBILITIES SCHEDULE

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DESCRIPTION	CONDITION		ASSIGNMENTS				REMARKS
			LANDLORD		TENANT		
	EXISTING	NEW	FURNISH	INSTALL	FURNISH	INSTALL	
DIVISION 21000 - FIRE SUPPRESSION							
Raise Branch and mains to under side of structure	⊛	⊛	⊛	⊛			Unit 900-30, Sprinkler Room and Egress Access Hall
Modifications to Sprinkler System	⊛	⊛	⊛	⊛			At demising partitions and Egress Access Hall
Modifications to Sprinkler System	⊛	⊛			⊛	⊛	Unit 900-20
-							
DIVISION 22000 - PLUMBING							
Water meter, backflow device and service line		⊛			⊛	⊛	Serving Unit 900-20
2" insulated water line		⊛	⊛	⊛			Serving Unit 900-30
Toilet Room fixtures, supply, waste and vent lines	⊛	⊛			⊛	⊛	
Drinking fountain, supply, waste and vent lines		⊛			⊛	⊛	
Slop sink, supply, waste and vent lines		⊛			⊛	⊛	
DIVISION 23000 - (HVAC)							
Electric Unit Heaters		⊛	⊛	⊛			Sprinkler Room and Egress Access Hall
Toilet Room exhaust	⊛	⊛			⊛	⊛	
HVAC system	⊛	⊛			⊛	⊛	
-							
DIVISION 26000 - ELECTRICAL							
Power, general and egress lighting		⊛	⊛	⊛			Sprinkler Room and Egress Access Hall
Extend existing power conduits		⊛	⊛	⊛			Egress Access Hall into Unit 900-20
Service disconnects, meter and condutors		⊛			⊛	⊛	Mall Electric Room to Unit 900-20 Panels
Complete general power	⊛	⊛			⊛	⊛	
Complete general and egress lighting	⊛	⊛			⊛	⊛	
-							
DIVISION 27000 - COMMUNICATIONS							
Extend existing communication conduit	⊛	⊛	⊛	⊛			From Egress Access Hall into Unit 900-20
Complete data/phone systems		⊛			⊛	⊛	
-							
-							
DIVISION 28000 - ELECTRONIC SAFETY AND SECURITY							
Modifications to Fire Alarm System	⊛	⊛	⊛	⊛			Sprinkler Room and Egress Access Hall
Modifications to Fire Alarm System	⊛	⊛			⊛	⊛	
-							
-							
DIVISION 31000 - EARTHWORK							
Trenching and backfill - 4" water service line		⊛			⊛	⊛	
Trenching and backfill - interior plumbing		⊛			⊛	⊛	
-							
DIVISION 32000 - EXTERIOR IMPROVEMENTS							
Asphalt pavement repairs		⊛			⊛	⊛	
Concrete pavement repairs		⊛			⊛	⊛	
-							
DIVISION 33000 - UTILITIES							
4" Water service line from 12" main to Sprinkler Room		⊛			⊛	⊛	
-							

Notes to Schedule

1. References to Egress Access Hall is for hall labeled #900-90 on plans.
2. References to Sprinkler Room is Landlord room labeled #900-90S on plans.
3. Refer to Wall Type A on drawing A-101 for identification of Demising Partitions as referenced in Responsibilities Schedule above.

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic

PRCTI20221551

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Developer:
CAFARO
- Est. 1949 -
5577 Youngstown - Warren Road
Niles, Ohio 44446
Phone: 330.747.2661
Commercial & Industrial
Real Estate Developers

Seal:
REGISTERED ARCHITECT
RICHARD PARTIKA
STATE OF WASHINGTON

Architect:
RICK PARTIKA, AIA
5577 Youngstown - Warren Road
Niles, Ohio 44446
Phone: 330.747.2661
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Revision No.	Description	Date	Issued by
	Issue Final	7-15-2022	TGE
	Issue for Permit	7-8-2022	TGE

Sheet Title:
RESPONSIBILITY SCHEDULE

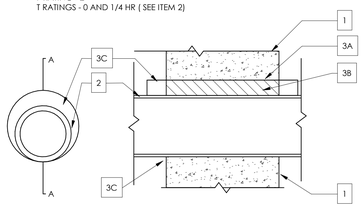
Project Information:
NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3500 South Meridian Blvd
Puyallup, WA 98373

Project No.:	62-900-20
Date:	7-8-2022
Drawn By:	TGE
Checked By:	RP

G-002

NOTE:
THIS PENTRATION ASSEMBLY TYPICAL WHEN PIPING PENTRATES A FIRE-RATED MASONRY OR CONCRETE WALL ASSEMBLY.

F RATING - 2
T RATINGS - 0 AND 1/4 HR (SEE ITEM 2)



1. **WALL ASSEMBLY** -- MIN. 5" THICK REINFORCED LEIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFED CONCRETE BLOCKS. MAXIMUM DIAMETER OF OPENING IS 20".

2. **THROUGH PENETRANTS** -- ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METTALIC PIPES, CONDUITS OR TUBING MAY BE USED:

   A. **STEEL PIPE** - 17-1/4" DIAMETER (OR SMALLER) 0.125" WALL THICKNESS (OR HEAVIER) STEEL PIPE. THE ANNULAR SPACE SHALL BE MIN 0" TO MAX 2-3/4". THE T RATING IS 0 HR. ID THE STEEL PIPE IS USED.

   B. **CONDUIT** - NOM. 4" DIAM. (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR STEEL CONDUIT. THE ANNULAR SPACE SHALL BE MIN. 0" TO MAX. 1/2". THE T RATING IS 1/4 HR. IF THE CONDUIT IS USED.

3. **FIRESTOP SYSTEM** -- THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING:

   A. **STEEL WIRE MESH** - NO. 8 STEEL WIRE MESH HAVING A MIN 1" LAP ALONG THE LONGITUDINAL SEAM. LENGTH OF STEEL WIRE MESH TO BE 4-3/4", CENTERED AND FORMED TO FIT PERIPHERY OF THROUGH OPENING.

   B. **PACKING MATERIAL** - MIN. 4.0" THICKNESS OF MIN. 3.5 PCF MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS IF FILL MATERIAL.

   C. **FILL VOID OR CAVIT MATERIAL*** - CAULK - MIN. 3/4" AND 1/2" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS FOR STEEL PIPE AND EMT, RESPECTIVLEY, FLUSH WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN PIPE AND CONCRETE, A MIN. 1/2" DIAM. BEAD OF FILL MATERIAL SHAL BE APPLIED AT THE CONCRETE/PIPE INTERFACE ON BOTH SURFACES OF WALL.
   THE RECTORSEAL CORP. -METACAULK 835+

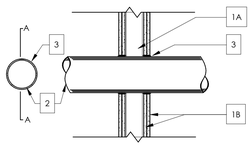
   *** BEARING THE UL CLASSIFICIATION MARKING.**

U.L. DESIGN No.WJ1018

SCALE: N.T.S.

NOTE:
THIS DETAIL IS TYPICAL WHEN PIPING PENTRATES A FIRE-RATED WALL ASSEMBLY.

F RATINGS - 1,2,3, AND 4 HR (SEE ITEMS 2 AND 3)
T RATINGS - 0,1,2,3, AND 4 HR (SEE ITEM 3)
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ. FT.
L RATING AT 400 F- LESS THAN 1 CFM/ SQ. FT.



SECTION A-A

1. **WALL ASSEMBLY** - THE 1,2,3 OR 4 HR. FIRE RATED GYPSUM WALLBOARD/STUD WALL ASEMBLY SHALL BE CONSTRCUTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE U.L. FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES.

   A. **STUDS** - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAX 2HR. FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. LUMBER SPACED 16" O.C. WITH NOM 2 BY 4 IN. LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN. 3-5/8" WIDE BY 1-3/8" DEEP CHANNELS SPACED MAX. 24" O.C.

   B. **WALLBOARD, GYPSUM *** - NOM. 1/2" OR 5/8" THICK, 4' WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTNER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE U.L. FIRE RESISTANCE DIRECTORY. MAX. DIAM OF OPENING IN WALLBOARD LAYERS IS 13-1/2".

2. **PIPE OR CONDUIT** - NOM 12" DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE, NOM. 12" DIAM. (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST IRON SOIL PIPE. NOM 12" DIAM (OR SMALLER) CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE PIPE, NOM. 6" DIAM. (OR SMALLER) STEEL CONDUIT, NOM. 4" DIAM. (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING, NOM. 6" DIAM. (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING OR NOM. 1" DIAM. (OR SMALLER) FLEXIBLE STEEL CONDUIT. WHEN COPPER PIPE IS USED, MAX. F RATING OF FIRESTOP SYSTEM (ITEM 3) IS 2 HR. STEEL PIPES OR CONDUITS LARGER THAN NOM. 4" DIAM. MAY BE USED ONLY IN WALLS CONSTRUCTED USING STEEL CHANNEL STUDS. A MAX. OF ONE PIPE OR CONDUIT IS PERMITTED IN THE FIRESTOP SYSTEM. PIPE OR CONDUIT TO BE INSTALLED NEAR CENTER OF STUD CAVITY WIDTH AND TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY.

3. **FILL, VOID OR CAVITY MATERIAL* - CAULK** - CAULK FILL MATERIAL INSTALLED TO COMPLETE FILL ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND GYSPUM WALLBOARD AND WITH A MIN. 1/4" DIAM. BEAD OF CAULK APPLIED TO PERIMETER OF PIPE OR CONDUIT AT ITS EGRESS FROM THE WALL. CAULK INSTALLED DYMMETRICALLY ON BOTH SIDES OF THE WALL ASSEMBLY. THE HOURLY F. RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED. AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T. RATING OF THE FIRESTOP SYSTEM SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE CONDUIT OR PIPE AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED. AS TABULATED BELOW.

MAX. PIPE/ CONDUIT DIAM., IN.	ANNULAR SPACE, IN.	F RATING, HR.	T RATING, HR.
1	0 TO 3/16	1 OR 2	0 + 1 OR 2
1	1/4 TO 1/2	3 OR 4	3 OR 4
4	0 TO 1-1/2	1 OR 2	0
6	1/4 TO 1/2	3 OR 4	0
12	3/16 TO 3/8	1 OR 2	0

+ WHEN COPPER PIPE IS USED, T RATING IS 0 HR.
MINNESOTA MINNING & MFG. CO - CP 25WB

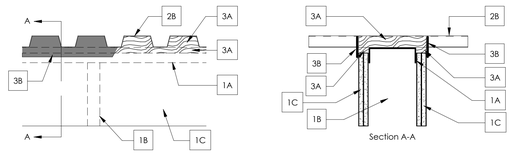
*** BEARING THE UL CLASSIFICATION MARKING.**

U.L. Design No. WL1001

SCALE: N.T.S.

NOTE:
THIS DETAIL IS TYPICAL HEAD OF WALL JOINT SYSTEM FOR FIRE-RATED WALL ASSEMBLY.

F RATINGS - 2 HR
NOMINAL JOINT WIDTH - 1 1/2 INCH
CLASS II MOVEMENT CAPABILITIES - 50% COMPRESSION OR EXTENSION



1. **WALL ASSEMBLY** - THE 1 OT 2 HR. FIRE RATED GYPSUM WALLBOARD/STEEL STUD WALL ASEMBLY SHALL BE CONSTRCUTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE U.L. FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES.

   A. **STEEL FLOOR AND CEILING RUNNERS** - FLOOR AND CEILING RUNNERS OF WALL ASSEMBLY SHALL CONSIST OF GALV STEEL CHANNELS SIZED TO ACCOMMODATE STEEL STUDS (ITEM 1B). FLANGE HEIGHT OF CEILING RUNNER SHALL BE MIN 1/4 IN. (6mm) GREATER THAN MAX EXTENDED JOINT WIDTH. CEILING RUNNER INSTALLED PERPENDICULAR TO DIRECTION OF FLUTED STEEL DECK AND SECURED TO VALLEYS WITH STEEL FASTENERS OR WELDS SPACED MAX 24 IN. (610mm) O.C.

   A1. **LIGHT GAUGE FRAMING*** - (XHLI) - SLOTTED CEILING RUNNER -- AS AN ALTERNATE TO THE CEILING RUNNER IN ITEM 1A, SLOTTED CEILING RUNNER TO CONSIST OF GALV STEEL CHANNEL WITH SLOTTED FLANGES SIZED TO ACCOMMODATE STEEL STUDS (ITEM 1B). SLOTTED CEILING RUNNER INSTALLED PERPENDICULAR TO DIRECTION OF FLUTED STEEL DECK AND SECURED TO VALLEYS WITH STEEL FASTENERS OR WELDS SPACED MAX 24 IN. (610mm) O.C.
   BRADY CONSTRUCTION INNOVATIONS INC, DBA SLIPTRACK SYSTEMS - SLP-TRK
   CALIFORNIA EXPANDED METAL PRODUCTS CO - CST
   CLARKDIETRICH BUILDING SYSTEMS - TYPE SLT, SLT-H
   CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV - SDT250, SDT300
   MARINO/WARE, DIV OF WARE INDUSTRIES INC - TYPE SLT
   METAL-LITE INC - THE SYSTEM
   OLMAR SUPPLY INC - STT250, STT300
   SCAFO STEEL STUD MANUFACTURING CO - SLOTTED TRACK
   TELLING INDUSTRIES L L C - TRUE-ACTION DEFLECTION TRACK

   A2. **LIGHT GAUGE FRAMING*** - (XHLI) - VERTICAL DEFLECTION CEILING RUNNER - WHEN THE NOM JOINT WIDTH IS LESS THAN OR EQUAL TO 3/4 IN. (19mm), VERTICAL DEFLECTION CEILING RUNNER MAY BE USED AS AN ALTERNATE TO THE CEILING RUNNERS IN ITEMS 1A AND 1A1. VERTICAL DEFLECTION CEILING RUNNER TO CONSIST OF GALV STEEL CHANNEL WITH SLOTTED VERTICAL DEFLECTION CLIPS MECHANICALLY FASTENED WITHIN RUNNER. SLOTTED CLIPS PROVIDED WITH STEP BUSHINGS FOR PERMANENT FASTENING OF STEEL STUDS. FLANGES SIZED TO ACCOMMODATE STEEL STUDS (ITEM 1B). VERTICAL DEFLECTION CEILING RUNNER INSTALLED PERPENDICULAR TO DIRECTION OF FLUTED STEEL DECK AND SECURED TO VALLEYS WITH STEEL FASTENERS OR WELDS SPACED MAX 24 IN. (610mm) O.C.
   THE STEEL NETWORK INC - VERTITRACK VTD250, VTD362. VTD400, VTD600, VTD800

   A3. **LIGHT GAUGE FRAMING*** - (XHLI) - NOTCHED CEILING RUNNER -- AS AN ALTERNATE TO THE CEILING RUNNERS IN ITEMS 1A THROUGH 1A2, NOTCHED CEILING RUNNERS TO CONSIST OF C-SHAPED GALV STEEL CHANNEL WITH NOTCHED RETURN FLANGES SIZED TO ACCOMMODATE STEEL STUDS (ITEM 1B). NOTCHED CEILING RUNNER INSTALLED PERPENDICULAR TO DIRECTION OF FLUTED STEEL DECK AND SECURED TO VALLEYS WITH STEEL FASTENERS OR WELDS 24 IN (610mm) O.C.
   OLMAR SUPPLY INC - TYPE SCR

   B. **STUDS** - STEEL STUDS TO BE MIN 3-1/2 IN. (69 mm) WIDE. STUDS CUT 3/4 IN. (19 mm) LESS IN LENGTH THAN ASSEMBLY HEIGHT WITH BOTTOM NESTING IN AND RESTING ON FLOOR RUNNER AND WITH TOP NESTING IN CEILING RUNNER WITHOUT ATTACHMENT. WHEN SLOTTED CEILING RUNNER (ITEM 1A1) IS USED, STEEL STUDS SECURED TO SLOTTED CEILING RUNNER WITH NO. 8 BY 1/2 IN. (13 mm) LONG WAFER HEAD STEEL SCREWS AT MIDHEIGHT OF SLOT ON EACH SIDE OF WALL. WHEN VERTICAL DEFLECTION CEILING RUNNER (ITEM 1A2) IS USED, STEEL STUDS SECURED TO SLOTTED VERTICAL DEFLECTION CLIPS, THROUGH THE BUSHINGS, WITH STEEL SCREWS AT MIDHEIGHT OF EACH SLOT. STUD SPACING NOT TO EXCEED 24 IN. (610 MM) OC.

   C. **GYPSUM BOARD*** - (CKNX)- MIN 5/8 IN. (16 mm) THICK GYPSUM BOARD SHEETS INSTALLED ON EACH SIDE OF WALL. WALL TO BE CONSTRUCTED AS SPECIFIED IN THE INDIVIDUAL WALL AND PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY, EXCEPT THAT A MAX 1-1/2 IN. (38 MM) GAP SHALL BE MAINTAINED BETWEEN THE TOP OF THE GYPSUM BOARD AND THE BOTTOM OF THE STEEL DECK UNITS AND THE TOP ROW OF SCREWS SHALL BE INSTALLED INTO THE STUDS 3-1/2 TO 4 IN. (89 TO 102 mm) BELOW THE LOWER SURFACE OF THE FLOOR OR ROOF.

2. **NONRATED HORIZONTAL ASSEMBLY** - THE NONRATED HORIZONTAL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS DESCRIBED BELOW:

   A. **SUPPORTS (NOT SHOWN)** - STRUCTURAL STEEL OR OTHER MEMBERS SUPPORTING THE STEEL DECK.

   B. **STEEL DECK** - MAX 3 IN. (76 mm) DEEP BY MIN 20 MSG STEEL DECK FLUTED MAX 12 IN. (305 mm) ON CENTER. WELDED OR MECHANICALLY FASTENED TO SUPPORTS (ITEM 2A).

   C. **CONCRETE (NOT SHOWN, OPTIONAL)** - STEEL DECK MAY BE TOPPED WITH REINFORCED CONCRETE. THICKNESS OF CONCRETE MAY VARY.

3. **JOINT SYSTEM - MAX SEPARATION BETWEEN BOTTOM OF STEEL DECK AND TOP OF WALL ASSEMBLY AT TIME OF INSTALLATION OF JOINT SYSTEMS IS 1 1/2 IN. (38 mm). JOINT SYSTEM IS DESIGNED TO ACCOMMODATE A MAX 50 PERCENT COMPRESSION OR EXTENSION FROM ITS INSTALLED WIDTH.** THE JOINT SYSTEM CONSISTS OF FORMING MATERIAL AND A FILL MATERIAL, AS FOLLOWS:

   A. **FORMING MATERIAL*** - NOM 4 PCF (64 kg/m³) DENSITY MINERAL WOOL BATT INSULATION CUT APPROX 25 PERCENT WIDER THAN THE FLUTES WITH A LENGTH APPROX EQUAL TO THE OVERALL THICKNESS OF THE WALL. MULTIPLE PIECES STACKED ON TOP OF EACH OTHER, AS NEEDED, AND THEN COMPRESSED 50 PERCENT IN THICKNESS AND INSERTED INTO THE FLUTES OF THE STEEL DECK ABOVE THE TOP OF THE CEILING RUNNER. THE MINERAL WOOL BATT INSULATION IS TO PROJECT BEYOND EACH SIDE OF THE CEILING RUNNER, FLUSH WITH WALL SURFACES. ADDITIONAL 1 1/4 IN. (32 mm) WIDE STRIPS OF NOM 4 PCF (64 kg/m³) MINERAL WOOL BATT INSULATION ARE TO BE CUT TO FILL THE GAP BETWEEN THE TOP OF THE GYPSUM BOARD AND BOTTOM OF THE STEEL DECK. THE STRIPS OF MINERAL WOOL ARE COMPRESSED 50 PERCENT AND TIGHTLY PACKED, CUT EDGE FIRST, INTO THE GAP BETWEEN THE TOP OF THE GYPSUM BOARD AND BOTTOM OF THE STEEL DECK ON BOTH SIDES OF THE WALL.
   ROCK WOOL MANUFACTURING CO - DELTA-BOARD
   ROCKWOOL - SAFE
   THERMAFIBER INC - TYPE SAF

   A1. **FORMING MATERIAL* - PLUGS** - (OPTIONAL, NOT SHOWN) PREFORMED MINERAL WOOL PLUGS, FORMED TO THE SHAPE FO THE FLUTED FLOOR UNITS, FRICTION FIT TO COMPLETELY FILL THE FLUTES ABOVE THE CEIILING CHANNEL. THE PLUGS SHALL PROJECT BEYOND EACH SIDE OF THE CEILING RUNNER, FLUSH WITH WALL SURFACES. ADDITIONAL FORMING MATERIAL, DESCRIBED IN ITEM 3A2, TO BE USED IN CONJUCTION WITH THE PLUGS TO FILL THE GAP BETWEEN THE TOP OF GYPSUM BOARD AND BOTTOM OF STEEL DECK.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP 777 SPEED PLUGS

   A2. **FORMING MATERIAL* - STRIPS** - (OPTIONAL) - NOM 1 1/4 IN. (16 OR 32 mm) WIDE PRECUT MINERAL WOOL STRIPS. THE STRIPS ARE COMPRESSED 50 PERCENT AND FIRMLY PACKED, CUT EDGE FIRST, INTO THE GAP BETWEEN THE TOP OF THE GYPSUM BOARD AND BOTTOM OF THE STEEL DECK ON BOTH SIDE OF THE WALL.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP 767 SPEED STRIPS

   B. **FILL, VOID OR CAVITY MATERIAL*** - MIN 1/16 IN. (1.6 mm) DRY THICKNESS(1/8 IN. OR 3.2 mm WET THICKNESS) OF FILL MATERIAL SPRAYED OR TROWELED ON EACH SIDE OF THE WALL TO COMPLETELY COVER MINERAL WOOL FORMING MATERIAL AND TO OVERLAP A MIN OF 1/2 IN (13 mm) ONTO GYPSUM BOARD AND STEEL DECK ON BOTH SIDES OF WALL.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CFS-SP WB FIRESTOP JOINT SPRAY

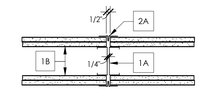
*** BEARING THE UL CLASSIFICATION MARKING**

U.L. Design CJ-D-0004

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

NOTE:
THIS DETAIL IS TYPICAL CONTROL JOINTS A FIRE-RATED WALL ASSEMBLY.

F RATINGS - 1AND 2 HR
NOMINAL JOINT WIDTH - 1/2 INCH
CLASS II OR III MOVEMENT CAPABILITIES - 100% COMPRESSION OR EXTENSION



1. **WALL ASSEMBLY** - THE 1 OT 2 HR. FIRE RATED GYPSUM WALLBOARD/STEEL STUD WALL ASEMBLY SHALL BE CONSTRCUTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE U.L. FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES.

   A. **STUDS** - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. LUMBER SPACED 16" O.C. STEEL STUDS TO BE MIN. 3-5/8" WIDE AND SPACED MAX. 24" O.C.
   B. **WALLBOARD, GYPSUM*** - WALLBOARD SHEETS TO BE INSTALLED TO A MIN TOTAL THICKNESS OF 5/8 OR 1-1/4 IN. ON EACH SIDE OF THE WALL FOR A 1 OR 2 HOUR RATED ASSEMBLIES, RESPECTIVELY. THE HOURLY FIRE RATING OF THE JOINT SYSTEM IS DEPENDENT ON THE HOURLY FIRE RATING OF THE WALL.

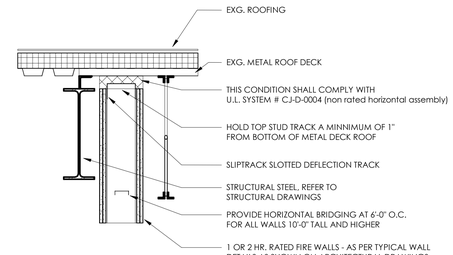
2. **JOINT SYSTEM** - MAX WIDTH OF JOINT (AT TIME OF INSTALLATION OF JOINT SYSTEM) IS 1/2 IN. (13mm) MEASURED BETWEEN THE FACE BOARDS OF THE GYPSUM ITEM 1B OR A MAX OF 1/4 IN. (6mm) MEASURED BETWEEN THE STUDS ITEM 1A. THE JOINT SYSTEM IS DESIGNED TO ACCOMMODATE A MAX 15 PERCENT COMPRESSION AND EXTENSION FROM ITS INSTALLED WIDTH.

   A. **MECHANICAL JOINT ASSEMBLY** - FIRE BARRIER MATERIAL ADHERED TO CORRUGATED METAL OR PLASTIC AND PROVIDED WITH FLANGES OF THE SAME MATERIAL. ASSEMBLY TO BE INSTALLED ON BOTH SIDES OF WALL IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS PROVIDED WITH THE PRODUCT.
   CALIFORNIA EXPANDED METAL PRODUCTS CO - FAS-093X, FAS 093X V
   TRIM-TEX INC - TRIM TEX-093X-V

   *** BEARING THE UL CLASSIFICATION MARKING**

U.L. Design WW-D-0172

SCALE: N.T.S



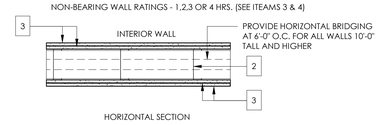
Detail - Typical Joint System @ Top of Rated Walls

SCALE: N.T.S.

NOTE:
THIS WALL ASSEMBLY TYPICAL FOR 1-HOUR FIRE-RATED BARRIER WALLS OR PARTITIONS OF TENANTS, OR 2-HOUR FIRE BARRIER WALLS AS SHOWN ON PLANS.

DESIGN NO. U419

NON-BEARING WALL RATINGS - 1,2,3 OR 4 HRS. (SEE ITEAMS 3 & 4)



HORIZONTAL SECTION

1. FLOOR AND CEILING RUNNERS (NOT SHOWN), CHANNEL SHAPED, FABRICATED FROM MIN. 20 MSG CORROSION - PROTECTED STEEL WITH MIN. 1" LENS, ATTACHED TO FLOOR AND CEILING WITH FASTNERS 24" O.C., MAX.

2. **STEEL** - STUDS CHANNEL SHAPED FROM MIN. 20 MSG CORROSION - PROTECTED STEEL, MIN. WIDTH AS INDICATED IN ITEM #4, STUDS SPACED AT MAX. OF 24" O.C.

3. **WALL BOARD, GYPSUM** - GYPSUM PANELS WITH BEVELED, SQUARE, OR TAPERED EDGES, APPLIED VERTICALLY OR HORIZONTALLY. VERTICAL JOINTS CENTERED OVER STUDS, AND STAGGERED ONE STUD CAVITY ON OPPOSITE SIDES OF THE STUDS. VERTICAL JOINTS IN MULTILAYER SYSTEMS SHALL BE STAGGERED ONE STUD CAVITY. HORIZONTAL EDGE JOINTS AND BUTT JOINTS ON OPPOSITE SIDES OF STUDS NEED NOT TO BE STAGGERED. HORIZONTAL EDGE JOINTS AND BUTT JOINTS IN MULTILAYER SYSTEMS SHALL BE STAGGERED A MIN. OF 12 INCHES. TOTAL GYPSUM THICKNESS SHALL BE AS FOLLOWS:

RATING	MIN. STUD DEPTH	# OF GYPBD. LAYERS
1 HR.	2 1/2"	1 LAYER 5/8"
2 HRS.	3 1/2"	2 LAYERS, 5/8" EACH
3 HRS.	6"	2 LAYERS, 3/4" EACH

U.S. GYSUM CO. - 5/8" THICK TYPE SCX,SHX,WRX,IP-X1,AR,C,WRC, OR IP-X2, 3/4" THICK TYPE IP-X3 OR ULTRACODE.

4. **FASTNERS (NOT SHOWN)** - TYPE S OR S-12 STEEL SCREWS USED TO ATTACH PANELS TO STUDS. SINGLE LAYER SYSTMES - 1" LONG FOR 5/8" THICK PANELS, SPACED 8" O.C. WHEN PANELS ARE APPLIED HORIZONTALLY, AND 12" O.C. WHEN APPLIED VERTICALLY. TWO LAYER SYSTEMS - FIRST LAYER, 1" LONG FOR 5/8" THICK PANELS, OR 1 1/4" LONG FOR 3/4" THICK PANELS, SPACED 16" O.C., SECOND LAYER, 1 5/8" LONG FOR 5/8" THICK PANELS, OR 2 1/4" LONG FOR 3/4" THICK PANELS, SPACED 16" O.C., WITH SCREWS OFFSET FROM 8" FROM FIRST LAYER.

5. **FURRING CHANNELS (OPTIONAL, NOT SHOWN)**

6. **JOINT TAPE AND COMPOUND (NOT SHOWN)** - VINYL OR CASEIN, DRY OR PREMIXED JOINT COMPOUND APPLIED IN TWO COATS TO JOINTS AND SCREW HEADS OF OUTER LAYERS, PAPER TAPE, NOM. 2" WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS OF OUTTER PANELS.

*** BEARING THE UL CLASSIFICATION MARKING**

U.L. Design No. U419

SCALE: N.T.S.

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic

PRCTI20221551

1/30/2023 3:37:27 PM E:\Departments\AEC\JOB_AE_WIP\South Hill Mall_NEW LEVEL 360_1 VAJTO DESK\62-900-20 Architectural 6.rvt

Developer:
CAFARO
- Est. 1949 -
Commercial & Industrial Real Estate Developers
5577 Youngstown - Warren Road
Niles, Ohio 44446
Phone: 330.747.2661

Seal:
REGISTERED ARCHITECT
RICHARD PARTIKA
STATE OF WASHINGTON

Architect:
RICK PARTIKA, AIA
5577 Youngstown - Warren Road
Niles, Ohio 44446
Phone: 330.652.1441
E-Mail: rpartika@cafarocompany.com

Revision No.	Description	Date	Issued by
	Issue Final	7-15-2022	TGE
	Issue for Permit	7-8-2022	TGE

Project Information:
NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3500 South Meridian Blvd
Puyallup, WA 98373

Sheet Title:
U.L. DETAILS

Project No.:	62-900-20
Date:	7-8-2022
Drawn By:	TGE
Checked By:	RP

G-003

CODED NOTES THIS SHEET	
#	DESCRIPTION
D1	EXISTING TILT-UP CONCRETE PANEL TO REMAIN
D2	EXISTING FULL HEIGHT METAL STUDS AND INSULATION WITH GYPSUM BOARD TO 12'-6" TO REMAIN
D3	EXISTING METAL STUD AND GYPSUM BOARD WALL TO REMAIN
D4	EXISTING DOOR AND FRAME TO REMAIN
D6	EXISTING SPRINKLER RISERS TO REMAIN
D10	SAW CUT NEW EXTERIOR OPENING - REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION
D11	SAW CUT NEW EXTERIOR OPENING - REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION - BY TENANT
D12	CUT NEW OPENING IN INTERIOR FURRING - REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION
D13	CUT NEW OPENING IN INTERIOR FURRING - REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION - BY TENANT
D14	EXISTING DOOR AND FRAME TO BE REMOVED AND OPENING IN-FILLED BY TENANT
D16	EXISTING PARTITION TO BE REMOVED COMPLETE
D17	EXISTING GAS WATER HEATER AND PIPING TO BE REMOVED, GAS LINE CAPPED ABOVE ROOF
D20	EXISTING RESTROOM FIXTURES, ACCESSORIES AND PARTITIONS TO BE REMOVED COMPLETE
D21	NEW OPENING (FINISHED OPENING - 6'-0" X 8'-0") IN EXISTING METAL STUD PARTITION BY TENANT
D22	EXISTING ELECTRICAL PANELS AND SUSPENDED TRANSFORMERS TO REMAIN
D23	EXISTING FLOOR COVERINGS TO BE REMOVED COMPLETE, INCLUDING BUT NOT LIMITED TO MASTIC AND THIN SET
D24	EXISTING PLUMBING FIXTURE TO BE RELOCATED AND/OR REPLACED AS REQUIRED FOR ADA - BY TENANT
D25	EXISTING MECHANICAL, ELECTRICAL AND FIRE ALARM SYSTEMS TO REMAIN AS-IS ALONG WITH FLOOR COVERINGS
D26	EXISTING SANITARY CLEAN OUT TO REMAIN
D27	EXISTING 4" SANITARY TO REMAIN
1 D28	EXISTING TRENCH DRAIN TO BE CONCRETE FILLED
D29	EXISTING OIL AND SAND INTERCEPTOR TO REMAIN - DISCHARGE LINE TO SEWER TO BE PLUGGED
D30	EXISTING FLOOR DRAIN (TIRE WASH) TO BE REMOVED AND CAPPED BELOW FLOOR.

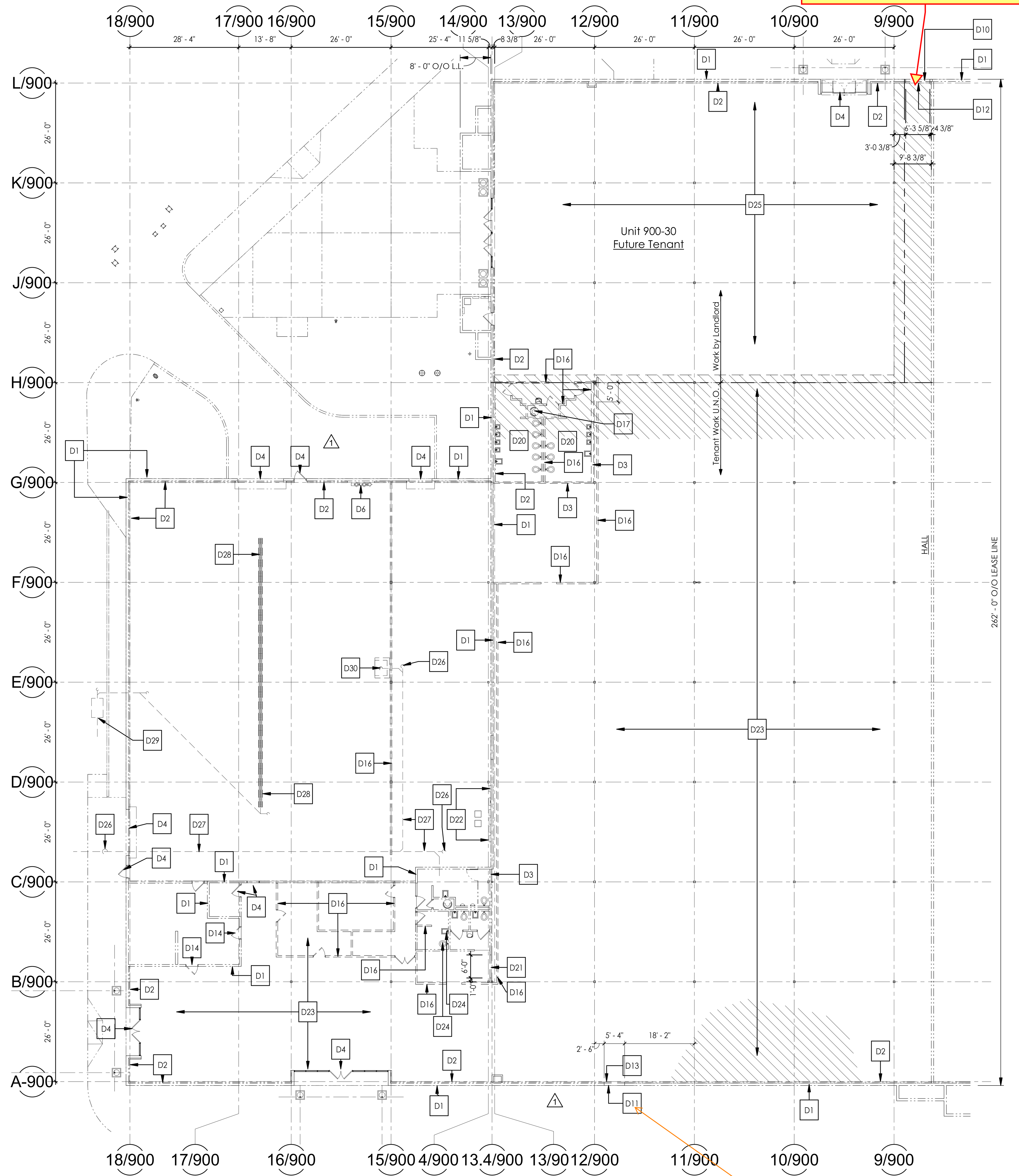
FLOOR DEMOLITION NOTES

1. GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL FLOOR PATCHING (IF ANY) REQUIRED BY PLUMBING AND ELECTRICAL CONTRACTORS. ALL CONCRETE PATCHES ARE TO PROVIDE A SMOOTH AND LEVEL (± 1/4" IN 10'-0") FLOOR.
2. GENERAL CONTRACTOR TO REMOVE ALL ELECTRICAL FLOOR DEVICES AS INDICATED AND PATCH FLOOR AS REQUIRED.
3. PROVIDE TEMPORARY SHORING AND MAINTAIN SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT UNEXPECTED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED. STRENGTHEN OR ADD NEW SUPPORTS WHEN REQUIRED DURING PROGRESS OF DEMOLITION.

GENERAL DEMOLITION NOTES:

1. REMOVE ALL ITEMS AS INDICATED ON DRAWINGS. ADDITIONAL DEMOLITION MAY ALSO BE INDICATED ON, CIVIL, ARCHITECTURAL AND ENGINEERING DRAWINGS.
2. GENERAL CONTRACTOR SHALL VISIT THE PROJECT SITE AND BE FAMILIAR WITH ALL ASPECTS OF THE EXISTING BUILDING AND DEMOLITION WORK REQUIRED PRIOR TO BIDDING. CONTRACTOR SHALL NOTIFY ARCHITECT AND CONSTRUCTION MANAGER IF THERE ARE FOUND TO BE ANY DISCREPANCIES WITH THESE DRAWINGS.
3. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS TO REVIEW EXISTING OR PREVIOUS MALL AND TENANT DRAWINGS AT THE TIME OF BIDDING. NOTE THESE DRAWINGS ARE NOT "AS BUILT" AND A FIELD VISIT IS REQUIRED.
4. CARE SHALL BE TAKEN DURING DEMOLITION SO AS NOT TO DAMAGE OR ALTER ANY EXISTING STRUCTURAL OR BUILDING MEMBERS THAT ARE TO REMAIN. THE ARCHITECT AND CONSTRUCTION MANAGER SHALL BE NOTIFIED IMMEDIATELY IF ANY DAMAGE OCCURS OR IS DISCLOSED DURING DEMOLITION.
5. IN ALL WALLS THAT ARE REMOVED,THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISCONNECTING AT SOURCE AND REMOVING / OR CAPPING ANY ELECTRICAL, PLUMBING, GAS LINES AND MECHANICAL DUCTWORK THAT IS DISCLOSED AND NOT SCHEDULED FOR REUSE. REROUTE AND CONTINUE ANY SYSTEM THAT MUST BE RETAINED FOR ADJACENT BUILDING AREAS THAT ARE NOT IN THIS CONTRACT.
6. GENERAL CONTRACTOR IS TO CO-ORDINATE ALL DEMOLITION OF EXISTING FLOORS, WALLS AND CEILINGS (THAT ARE TO REMAIN) WHERE NEW ELECTRICAL, MECHANICAL, OR PLUMBING DEVICES ARE TO BE INSTALLED. THIS SHALL INCLUDE THE REMOVAL OF ALL ITEMS NECESSARY TO INSTALL DEVICE, COMPLETE, ALONG WITH THE PATCHING BACK OF THE AFFECTED FLOOR, WALL, OR CEILING SURFACE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING FROM THE SITE, ALL RUBBLE AND DEBRIS CAUSED BY DEMOLITION, AND DISPOSING OF IT IN A PROPER MANNER IN ACCORDANCE WITH ALL LOCAL AND FEDERAL DISPOSAL REQUIREMENTS.
8. ANY PENETRATIONS THRU ROOF NOT BEING REUSED SHALL BE PROPERLY PATCHED TO MATCH EXISTING METAL DECK, INSULATION AND ROOF MEMBRANE.
9. PROVIDE TEMPORARY SHORING AND MAINTAIN SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT UNEXPECTED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED. STRENGTHEN OR ADD NEW SUPPORTS WHEN REQUIRED DURING PROGRESS OF DEMOLITION.
10. GENERAL CONTRACTOR TO ERECT TEMPORARY PROTECTION, SUCH AS WALKS, FENCES, RAILINGS, CANOPIES, AND COVERED PASSAGEWAYS, WHERE REQUIRED BY AUTHORITIES HAVING JURISDICTION, AND AS INDICATED.
    a. ALL INTERIOR OPENINGS TO BE PROTECTED WITH DUST-PROOF PARTITIONS FOR PROTECTION AGAINST DEBRIS CONTAMINATING ADJACENT SPACES OR TENANTS.
    b. ALL EXTERIOR OPENINGS TO BE PROTECTED WITH WATERPROOF ENCLOSURE TO PROTECT INTERIOR OF BUILDING FROM WEATHER ELEMENTS.
    c. PROTECT ADJACENT FACILITIES FROM DAMAGE DUE TO DEMOLITION ACTIVITIES.
    d. PROTECT EXISTING SITE IMPROVEMENTS, APPURTENANCES, AND LANDSCAPING, THAT IS SCHEDULED TO REMAIN.
    e. PROVIDE TEMPORARY BARRICADES AND OTHER PROTECTION REQUIRED TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN.
    f. PROVIDE PROTECTION TO ENSURE SAFE PASSAGE OF PEOPLE AROUND BUILDING DEMOLITION AREA AND TO AND FROM OCCUPIED PORTIONS OF ADJACENT BUILDINGS AND STRUCTURES.
    g. PROTECT WALLS, ROOFS, AND OTHER ADJACENT EXTERIOR CONSTRUCTION THAT ARE TO REMAIN AND THAT ARE EXPOSED TO BUILDING DEMOLITION OPERATIONS
11. GENERAL CONTRACTOR IS TO COORDINATE AND MOVE ALL ITEMS INDICATED AS SALVAGE TO LOCATION ON MALL PROPERTY AS DIRECTED BY PROPERTY MANAGER.
12. THE GENERAL CONTRACTOR IS TO MAINTAIN A MINIMUM OF 1 FOOT CANDLE OF ILLUMINATION, EMERGENCY LIGHTING AND EXIT LIGHTING AT EXIT DOORS IN THE WORK AREA DURING CONSTRUCTION, PER APPLICABLE CODES. THE WORK AREA WILL BE AN OPEN AREA, SO EXITS WILL BE READILY VISIBLE.

THIS DOOR WAY TO BE DONE UNDER ANOTHER PERMIT PRCTI20230029 FOR EXITING PURPOSES.



Floor Plan - Demolition

SCALE: 1/16" = 1'-0"

THIS DOOR WAY TO BE DONE UNDER THIS PERMIT FOR EXITING PURPOSES.

DEMOLITION NOTES - ELECTRICAL

1. ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE ALL ASSOCIATED CONDUIT AND WIRE IN THE AREA OF DEMOLITION. CIRCUITS TO EXISTING FIXTURES THAT ARE NOTED TO REMAIN SHALL BE MAINTAINED AND ALL WORK ASSOCIATED WITH MAINTAINING THE ELECTRICAL CONTINUITY OF THESE CIRCUITS SHALL BE PERFORMED BY THE ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR TO VERIFY IF EXISTING CONDUIT CAN BE REUSED FOR NEW CONSTRUCTION BY CONTACTING ARCHITECT OR CONSTRUCTION MANAGER PRIOR TO DEMOLITION PHASE.
2. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE ALL ELECTRICAL EQUIPMENT, DEVICES AND WIRING IN EXISTING WALLS AND CEILINGS THAT ARE TO BE DEMOLISHED. THE ELECTRICAL CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO MAINTAIN THE ELECTRICAL CONTINUITY OF ALL EXISTING CIRCUITS THAT ARE TO REMAIN IN USE BUT ARE AFFECTED BY DEMOLITION.
3. NOT ALL ELECTRICAL FIXTURES, EQUIPMENT AND DEVICES THAT ARE TO BE DISCONNECTED AND REMOVED ARE SHOWN ON THE DRAWINGS. THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE AND INCLUDE IN HIS BID ALL DEMOLITION OF ELECTRICAL WORK THAT IS REQUIRED FOR NEW CONSTRUCTION.
4. DISPOSAL OF ALL EQUIPMENT SHALL CONFORM TO ALL ENVIRONMENTAL PROTECTION AGENCY REQUIREMENTS.
5. ANY MALL AND/OR ADJACENT TENANT ELECTRICAL OR TELEPHONE CONDUITS OR WIRING WHICH RUNS THROUGH, ABOVE, OR BELOW THIS PROJECT SPACE SHALL REMAIN ACTIVE. IF AFFECTED BY DEMOLITION, REROUTE AND CONTINUE ANY ELECTRICAL SYSTEM THAT MUST BE RETAINED FOR THOSE ADJACENT AREAS.
6. ELECTRICAL CONTRACTOR SHALL DETERMINE CIRCUIT NUMBER OF ALL EXISTING DEVICES, FIXTURES, ETC. SHOWN ON THESE DRAWINGS AND FURNISH THE OWNER WITH A FULL SET OF AS-BUILT DRAWINGS INDICATING THE CIRCUIT NUMBERS.
7. ANY DEMOLITION WORK INVOLVING ANY UTILITY COMPANY SERVICE, TRANSFORMER, TROUGH, DMARC, METER, ETC., SHALL BE IN ACCORDANCE WITH, AND APPROVAL OF THAT UTILITY PROVIDER.
8. ALL EXISTING FIRE ALARM HORN / STROBE AND SECURITY ALARM HORN (BLUE) STROBE DEVICES (NOT SHOWN ON DEMOLITION PLANS) ARE TO REMAIN ACTIVE, REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
9. REFER TO ELECTRICAL DRAWING FOR ADDITIONAL SELECTED DEMOLITION ITEMS.

DEMOLITION NOTES - PLUMBING

1. THE PLUMBING CONTRACTOR SHALL DISCONNECT AND REMOVE ALL FIXTURES, SUPPLY AND WASTE PIPING IN EXISTING WALLS AND FLOORS THAT ARE TO BE DEMOLISHED. THE PLUMBING CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO MAINTAIN THE CONTINUITY OF ALL EXISTING PIPING THAT IS TO REMAIN IN USE BUT IS AFFECTED BY DEMOLITION.
2. NOT ALL PLUMBING FIXTURES, EQUIPMENT AND DEVICES THAT ARE TO BE DISCONNECTED AND REMOVED ARE SHOWN ON THE DRAWINGS. THE PLUMBING CONTRACTOR SHALL VISIT THE SITE AND INCLUDE IN HIS BID ALL DEMOLITION OF PLUMBING WORK THAT IS REQUIRED FOR NEW CONSTRUCTION.
3. DISPOSAL OF ALL EQUIPMENT SHALL CONFORM TO ALL ENVIRONMENTAL PROTECTION AGENCY REQUIREMENTS.
4. ANY MALL AND/OR ADJACENT TENANT PLUMBING PIPING WHICH RUNS THROUGH, ABOVE OR BELOW THIS PROJECT SPACE SHALL REMAIN ACTIVE. IF AFFECTED BY DEMOLITION, REROUTE AND CONTINUE ANY PIPING SYSTEM THAT MUST BE RETAINED FOR THIS PROJECT.
5. ALL EXISTING VENT PIPING IS TO BE REMOVED, EXCEPT FOR ANY VENTS THRU ROOF THAT MAY BE REUSED. PATCH ROOFS ACCORDINGLY AT ALL REMOVED VENTS. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
6. ALL EXISTING SANITARY LINES BELOW FLOOR ARE TO REMAIN UNLESS NOTED OTHERWISE.
7. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL SELECTED DEMOLITION ITEMS.
8. EXISTING WATER SERVICES TO BE REMOVED AS INDICATED. REMOVE ALL WATER LINES IN SPACE ASSOCIATED WITH REMOVED WATER SERVICES.
9. PLUMBING CONTRACTOR SHALL LOCATE AND RAISE ALL EXISTING FLOOR FIXTURES (CLEAN OUTS, DRAINS, ETC.) TO NEW FLOOR FINISH LEVEL IN AREAS RECEIVING NEW FLOOR FINISHES. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
10. PROVIDE CLEANOUT AT END OF EXISTING SANITARY LINE IF REMOVAL OF DRAINS CREATES A DEADEND CONDITION.
11. ANY DEMOLITION WORK INVOLVING ANY UTILITY COMPANY SERVICE LINES, METERS, ETC., SHALL BE IN ACCORDANCE WITH, AND APPROVAL OF THAT UTILITY PROVIDER.
12. ALL EXISTING STORM DRAINAGE LINES ABOVE CEILING ARE TO REMAIN.
13. ALL GAS, WATER AND DRAIN LINES SUPPLYING EQUIPMENT THAT IS TO BE REMOVED SHALL BE DISCONNECTED, REMOVED AND CAPPED BELOW FLOOR OR REMOVED COMPLETE AT ANY ROOFTOP EQUIPMENT.

City of Puyallup
Development & Permitting Services
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Building	Planning
Engineering	Public Works
Fire	Traffic

LEGEND TO PLANS

SYMBOL	DESCRIPTION
—··—··—	EXISTING WALL, PARTITION, OR ITEM TO REMAIN
— — —	WALL, PARTITION, OR ITEM TO BE REMOVED
———	NEW ITEM OR WALL
— – —	COLUMN CENTERLINE

THE GENERAL CONTRACTOR IS TO MAINTAIN A MINIMUM OF 1 FOOT CANDLE OF ILLUMINATION, EMERGENCY LIGHTING AND EXIT LIGHTING AT EXIT DOORS IN THE WORK AREA DURING CONSTRUCTION, PER APPLICABLE CODES. THE WORK AREA WILL BE AN OPEN AREA, SO EXITS WILL BE READILY VISIBLE.

PRCTI20221551

1/30/2023 3:36:14 PM E:\Departments\AEC\OB_AE_WIP\South Hill Mall_NEW LEVEL 360_1\AUTO DESK\62-900-20 Architectural 6.rvt

Developer:
CAFARO - Est. 194
Commercial & Industrial Real Estate Developers
5577 Youngstown - Warren Road
Niles, Ohio 44446
Phone: 330-747-2661

Seal:
REGISTERED ARCHITECT
9147
RICHARD PARTIKA
STATE OF WASHINGTON

Architect:
RP
RICK PARTIKA, AIA
5577 Youngstown - Warren Road
Niles, Ohio 44446
Phone: 330-747-2661
E-Mail: rpartika@cafarocompany.com

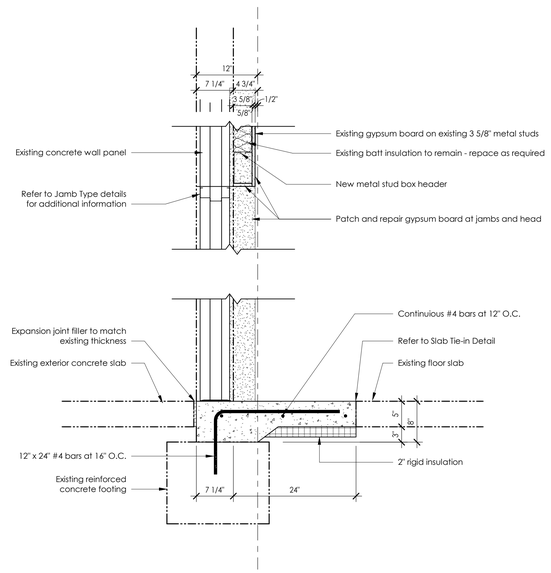
Revision No.	Description	Date	Issued by
1	Bulletin 1	11-29-22	TGE
	Issue Final	7-15-2022	TGE
	Issue For Permit	7-8-2022	

Sheet Title:
FLOOR PLAN - DEMOLITION

Project Information:
NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3500 South Meridian Blvd
Puyallup, WA 98373

Project No.:	62-900-20
Date:	7-8-2022
Drawn By:	TGE
Checked By:	RP

D-100



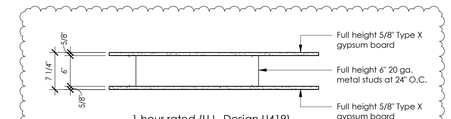
Detail - Head and Sill at Exterior Door

SCALE: 1" = 1'-0"

LEGEND TO PLANS	
SYMBOL	DESCRIPTION
	EXISTING WALL, PARTITION, OR ITEM TO REMAIN
	WALL, PARTITION, OR ITEM TO BE REMOVED
	NEW ITEM OR WALL
	COLUMN CENTERLINE

NOTE:
ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE FIELD VERIFIED

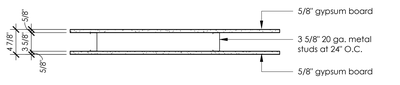
NOTE:
ALL WOOD BLOCKING AND PLYWOOD TO BE FIRE RETARDANT TREATED



1 hour rated (U.L. Design U419)
Finish gypsum board to Level 4 full height both sides.
Partitions are not to be primed or painted.

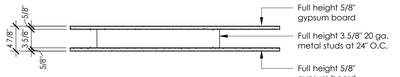
Wall Type A (Demising Partition by Landlord)

SCALE: 1" = 1'-0" **Covered under Permit No. PRCTI20230029**



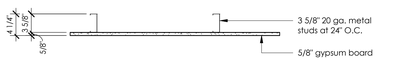
Wall Type B (by Tenant)

SCALE: 1" = 1'-0"



Wall Type C (by Tenant)

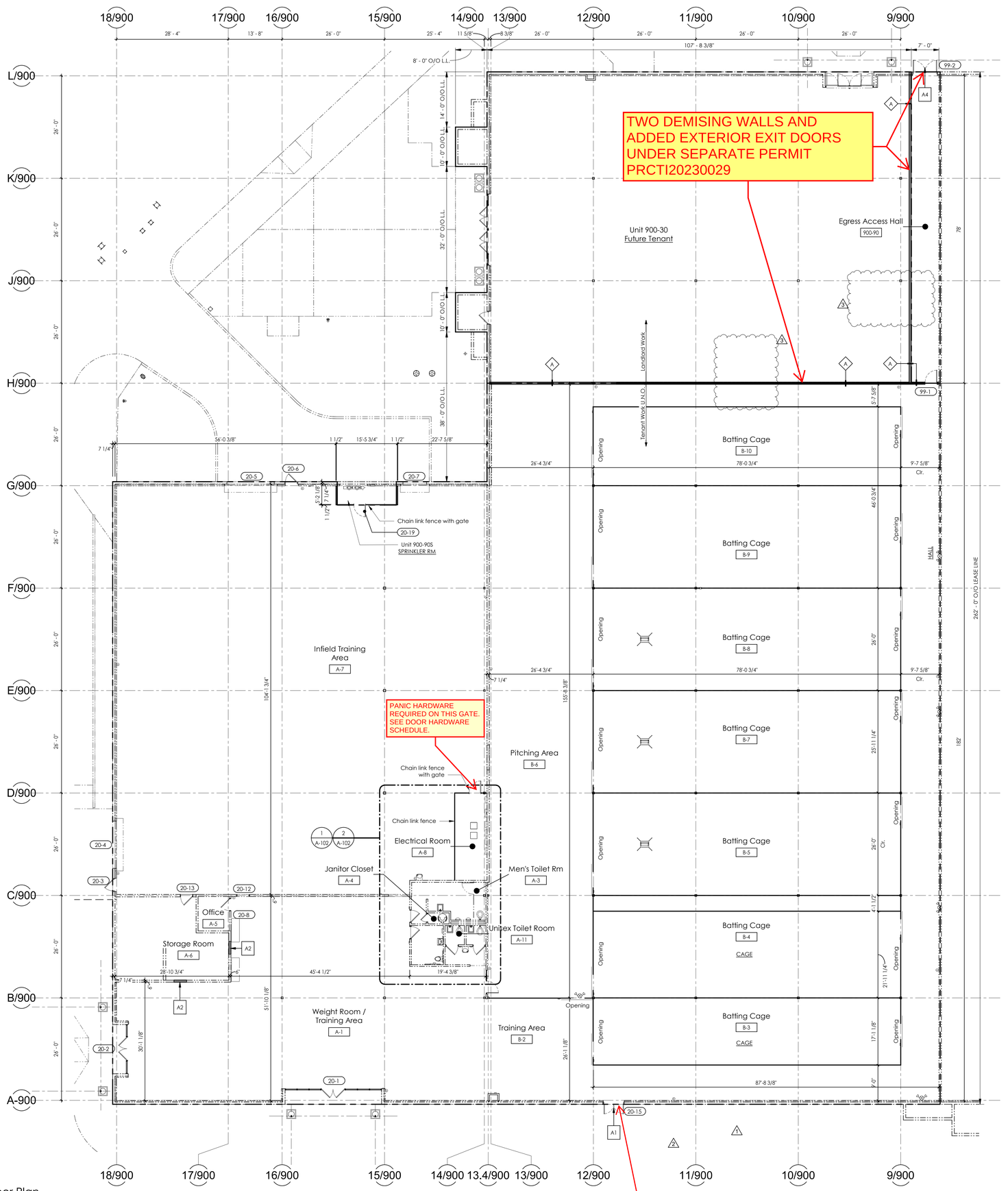
SCALE: 1" = 1'-0"



Wall Type D (by Tenant)

SCALE: 1" = 1'-0"

CODED NOTES THIS SHEET	
#	DESCRIPTION
A1	NEW EXTERIOR DOOR AND FRAME - BY TENANT
A2	METAL STUD AND GYPSUM BOARD IN-FILL (WALL TYPE B) - BY TENANT
A4	NEW EXTERIOR DOOR AND FRAME, PATCH GYPSUM BOARD JAMBS AND HEAD PER DETAIL ABOVE



Floor Plan

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

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Developer:
CAFARO
- Est. 1949 -
Commercial & Industrial Real Estate Developers
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Niles, Ohio 44446
Phone: 330.747.2661

Seal:
REGISTERED ARCHITECT
RICHARD PARTIKA
STATE OF WASHINGTON
9147

Architect:
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RICK PARTIKA, AIA
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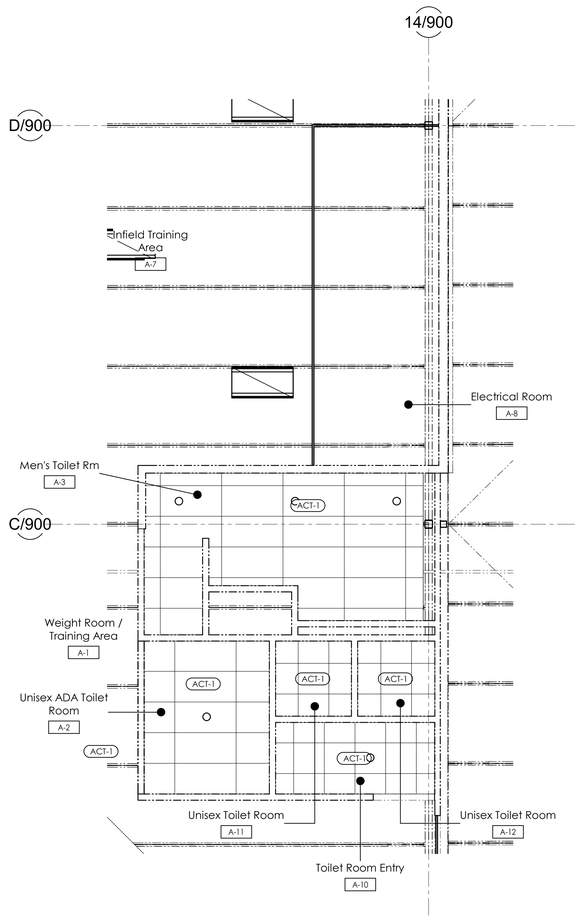
Revision No.	Description	Date	Issued by
	Issue for Permit	7-8-2022	TGE
	Issue Final	7-15-2022	TGE
1	Addendum A	10-5-2022	TGE
2	Bulletin 1	11-29-22	TGE
3	Bulletin 2	01-26-23	TGE

Sheet Title:
FLOOR PLAN

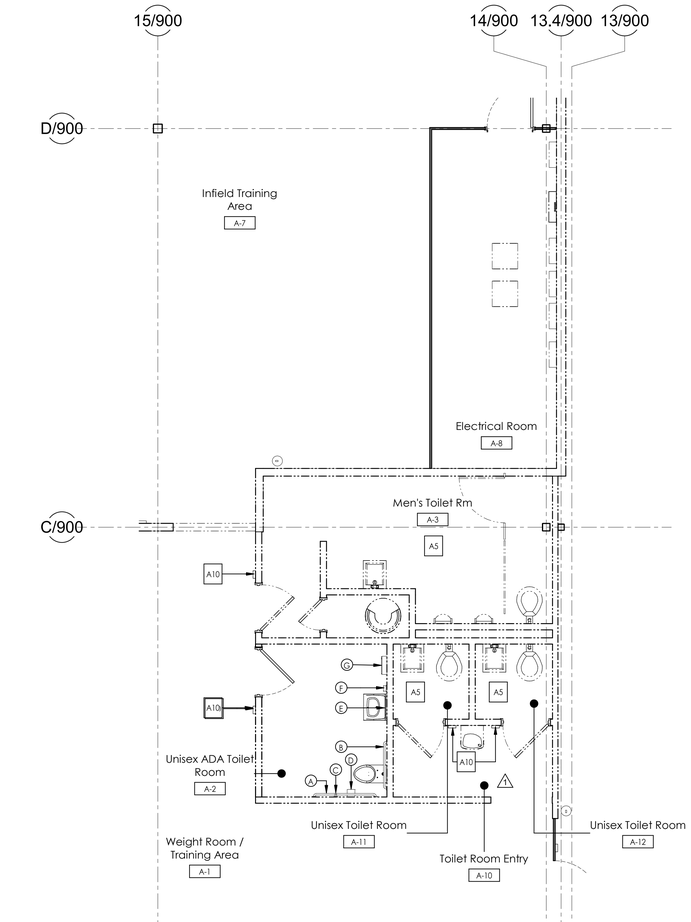
Project Information:
NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3500 South Meridian Blvd
Puyallup, WA 98373

Project No.:	62-900-20
Date:	7-8-2022
Drawn By:	TGE
Checked By:	RP

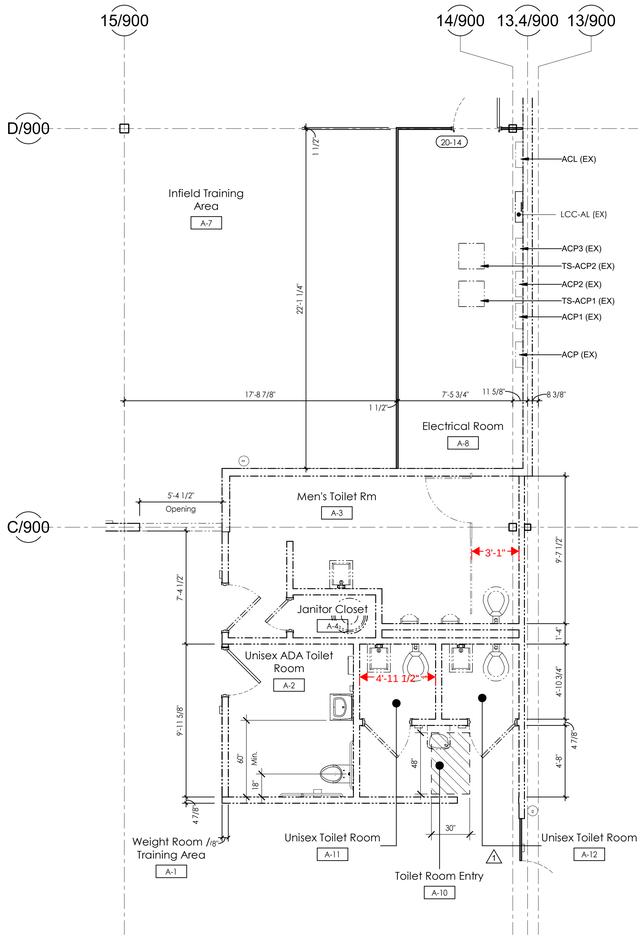
A-101



3 A-200 Enlarged Ceiling Plan (by Tenant)
SCALE: 1/4" = 1'-0"



2 A-101 Toilet Room Accessory Plan (by Tenant)
SCALE: 1/4" = 1'-0"



1 A-101 Enlarged Toilet Room Plan (by Tenant)
SCALE: 1/4" = 1'-0"

CODED NOTES THIS SHEET

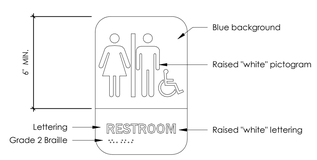
#	DESCRIPTION
A5	EXISTING TOILET ROOM FIXTURES AND ACCESSORIES TO BE CLEANED AND/OR REPLACED AS REQUIRED - BY TENANT
A10	RESTROOM SIGN, REFER TO ADJACENT NOTE FOR ADDITIONAL INFORMATION

Restroom Signage:
Contractor shall provide the following code compliant signs

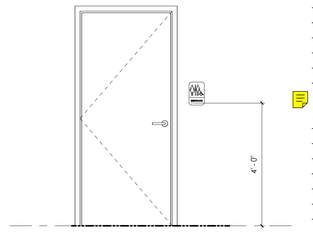
- One (1) Mens Toilet Room
- Two (2) Unisex Toilet Room
- One (1) Unisex ADA Toilet Room

Signs shall have a Blue background with White letters.

Signs shall be mounted on wall adjacent to door per ADA/ANSI requirements



Restroom Sign Detail
SCALE: 3" = 1'-0"



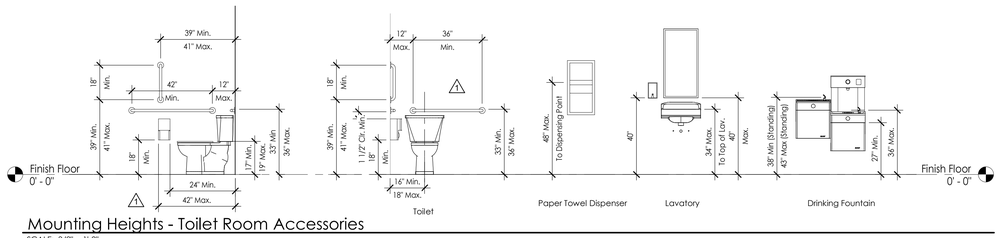
Restroom Sign Placement
SCALE: 1/2" = 1'-0"

TOILET ACCESSORY SCHEDULE

Mark	DESCRIPTION	MANUFACTURER	MODEL NO.	QTY.	REMARKS
A	1 1/4" Diameter Stainless Steel Grab Bars with Snap Flange	Bobrick Washroom Equipment, Inc.	B-5806 Series	1	
B	1 1/4" Diameter Stainless Steel Grab Bars with Snap Flange	Bobrick Washroom Equipment, Inc.	B-5806.99x36	1	
C	1 1/4" Diameter Stainless Steel Grab Bars with Snap Flange	Bobrick Washroom Equipment, Inc.	B-5806.99x18	1	
D	Surface-Mounted Multi-Roll Toilet Tissue Dispenser	Bobrick Washroom Equipment, Inc.	B-2888	1	
E	Glass Mirror with Stainless Steel Angle Frame	Bobrick Washroom Equipment, Inc.	B-2908-1836	1	
F	Classic Series Surface Mounted Soap Dispenser	Bobrick Washroom Equipment, Inc.	B-2111	1	
G	Surface-Mounted Paper Towel Dispenser And Waste Receptacle	Bobrick Washroom Equipment, Inc.	B-3699 ClassicSeries	1	

ACCESSORY NOTES:

1. ACCESSORIES NOTED ABOVE SHALL BE PROVIDED AND INSTALLED BY TENANT'S CONTRACTOR.
2. IT SHALL BE THE RESPONSIBILITY OF TENANT'S CONTRACTOR TO PROVIDE AND INSTALL ALL SUPPORTS IN WALLS FOR GRAB BARS.
3. ALL ACCESSORIES AND TOILET PARTITIONS TO BE STAINLESS STEEL



Mounting Heights - Toilet Room Accessories
SCALE: 3/8" = 1'-0"

NOTE:
ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE FIELD VERIFIED

NOTE:
ALL WOOD BLOCKING AND PLYWOOD TO BE FIRE RETARDANT TREATED

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2	Bulletin 2	01-25-23	TGE	TGE
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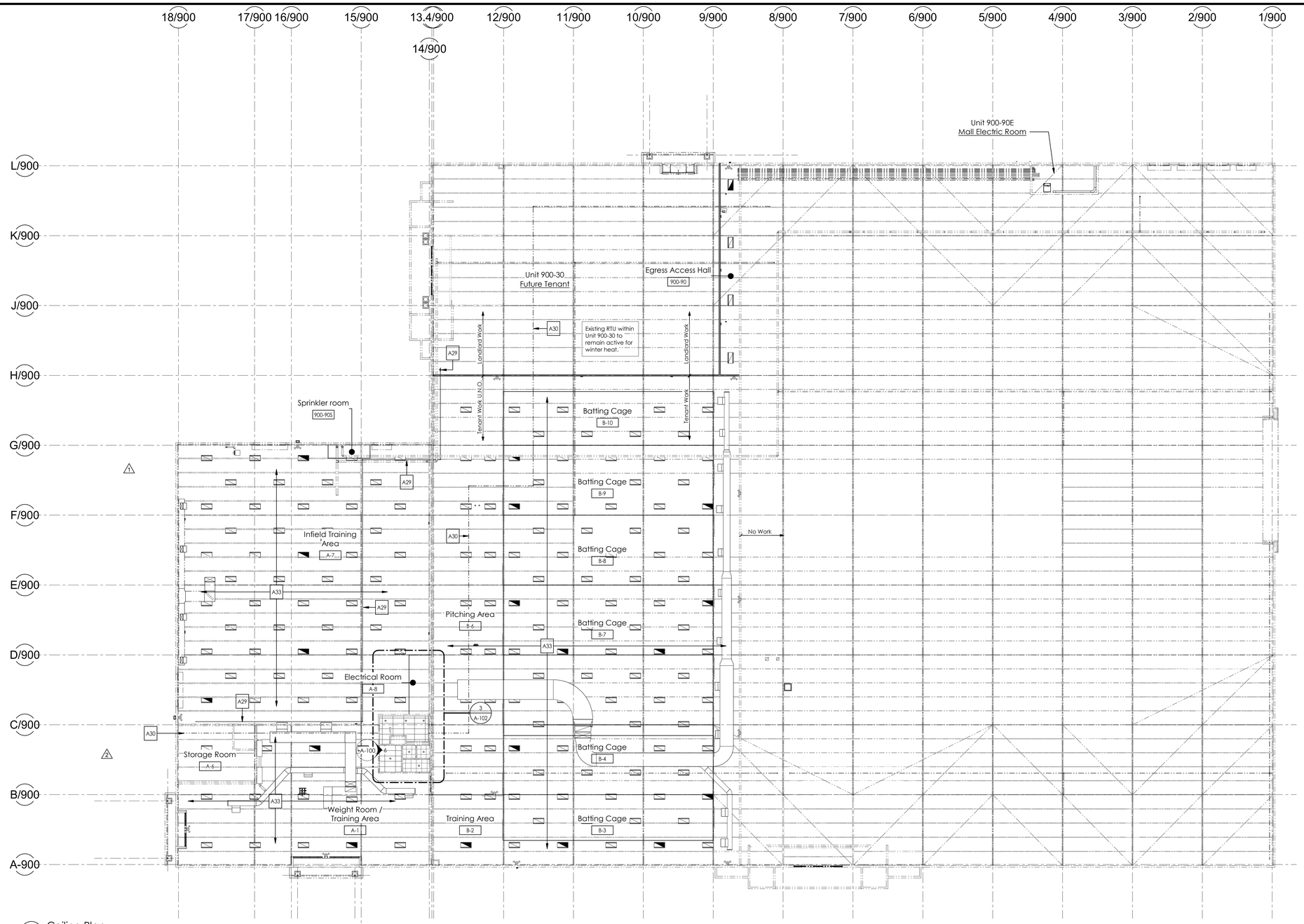
	Issue For Permit	7-8-2022	Date	Issued by
Revision No.	Description			

Sheet Title:
ENLARGED PLANS AND SCHEDULES

Project Information:
NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3500 South Meridian Blvd
Puyallup, WA 98373

Project No.: 62-900-20
Date: 7-8-2022
Drawn By: TGE
Checked By: RP

A-102



1 A-102 Ceiling Plan
SCALE: 1/16" = 1'-0"

GENERAL NOTES - FIRE SPRINKLER

1. EXISTING FIRE SPRINKLER SYSTEM IS TO REMAIN INTACT AND OPERATIONAL. AT LOCATIONS OF REMOVED CEILINGS, KEEP SPRINKLER HEADS TEMPORARILY INTACT UNTIL REDESIGNED BY CERTIFIED SPRINKLER DESIGNER.
2. EXISTING ZONED SPRINKLER AREAS TO REMAIN AS IS.
3. EXISTING SPRINKLER SYSTEM IS TO BE MODIFIED AS REQUIRED FOR NEW SPRINKLER ROOM, EGRESS ACCESS HALL AND DEMISING WALL CONSTRUCTION BY CERTIFIED SPRINKLER CONTRACTOR.
4. EXISTING SPRINKLER SYSTEM WITHIN NEW TENANT SPACE UNIT 900-20 IS TO BE MODIFIED BY TENANTS CERTIFIED SPRINKLER CONTRACTOR TO NEW LAYOUT OF THIS TENANT SPACE.
5. ANY MALL AND/OR TENANT FIRE SPRINKLER PIPING WHICH RUNS THROUGH THIS PROJECT SPACE SHALL REMAIN ACTIVE. IF AFFECTED BY DEMOLITION, REROUTE AND CONTINUE ANY PIPING SYSTEM THAT MUST BE RETAINED FOR THIS PROJECT.

GENERAL CEILING NOTES

1. ALL SPRINKLER HEADS, LIGHT FIXTURES, AND OTHER CEILING ITEMS SHALL BE ADJUSTED AS REQUIRED. SEE DETAIL ON SHEET A-102 FOR LOCATIONS.
2. GYPSUM WALLBOARD CONTROL JOINTS SHALL BE LOCATED A MINIMUM OF 40'-0" O.C., TYPICAL FOR ALL NEW WALLS AND CEILINGS. CONTROL JOINTS SHALL BE STANDARD JOINTS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL CEILING DEVICES THAT ARE SHOWN ON THESE CEILING PLANS, OR THAT WHICH MAY BE SHOWN ON FIRE PROTECTION, MECHANICAL, OR ELECTRICAL CEILING PLANS. IF ANY CONFLICTS ARE DISCOVERED DURING CONSTRUCTION, NOTIFY THE CONSTRUCTION MANAGER OR ARCHITECT IMMEDIATELY PRIOR TO CONTINUING WORK.
4. PRIOR TO PAINTING, PATCH AND REPAIR ALL GYPSUM WALLBOARD ABOVE EXISTING ACOUSTIC TILE CEILINGS THAT HAVE BEEN REMOVED, AND PATCH AND REPAIR ALL GYPSUM WALLBOARD AT ALL GYPSUM WALLBOARD AND METAL STUD BULKHEADS THAT ARE TO REMAIN.
5. ALL DIMENSIONS SHOWN ON CEILING PLAN ARE BASED OFF OF EXISTING DRAWINGS. PLEASE NOTIFY ARCHITECT OR CONSTRUCTION MANAGER WHEN THERE IS A DISCREPANCY THAT AFFECTS THE LAYOUT OF ANY NEW CEILINGS, BULKHEADS, OR DEVICES.
6. AT ALL AREAS WHERE EXISTING CEILING GRID IS TO REMAIN, CONTRACTORS ARE RESPONSIBLE TO REPAIR ANY GRID THAT WAS DAMAGED WHILE PERFORMING WORK ABOVE THE GRID.

CODED NOTES THIS SHEET

#	DESCRIPTION
A29	2" WATER LINE (INSULATED) FROM WITHIN 24" OF NEW WATER SERVICE TO UNIT 900-30 WITH 2" SHUT OFF VALVE AND CAP BOTH ENDS, SUSPEND AT BOTTOM OF STRUCTURE
A30	EXISTING 2 1/2" WATER SERVICE LINE - REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
A33	EXISTING EXPOSED METAL DECK AND STRUCTURE - FINISH BY TENANT

NOTE:
ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE FIELD VERIFIED

NOTE:
ALL WOOD BLOCKING AND PLYWOOD TO BE FIRE RETARDANT TREATED

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Developer:
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1	Addendum A	10-5-2022	TGE
	Issue Final	7-15-2022	TGE
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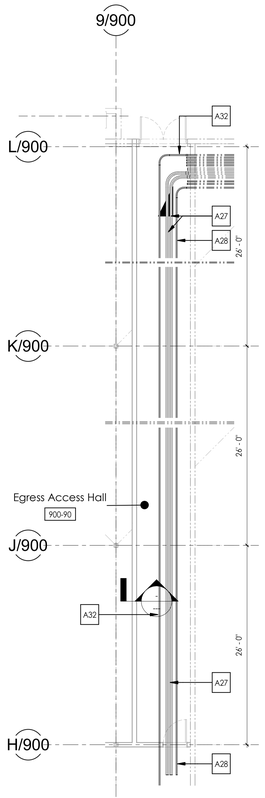
Sheet Title:
CEILING PLAN

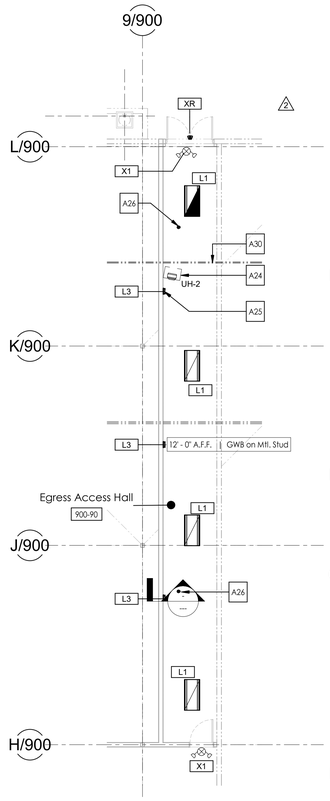
Project Information:
NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3500 South Meridian Blvd
Puyallup, WA 98373

Project No.:	62-900-20
Date:	7-8-2022
Drawn By:	TGE
Checked By:	RP

A-200



4 A-201 Enlarged Conduit Plan - Access Hall
SCALE: 1/8" = 1'-0"

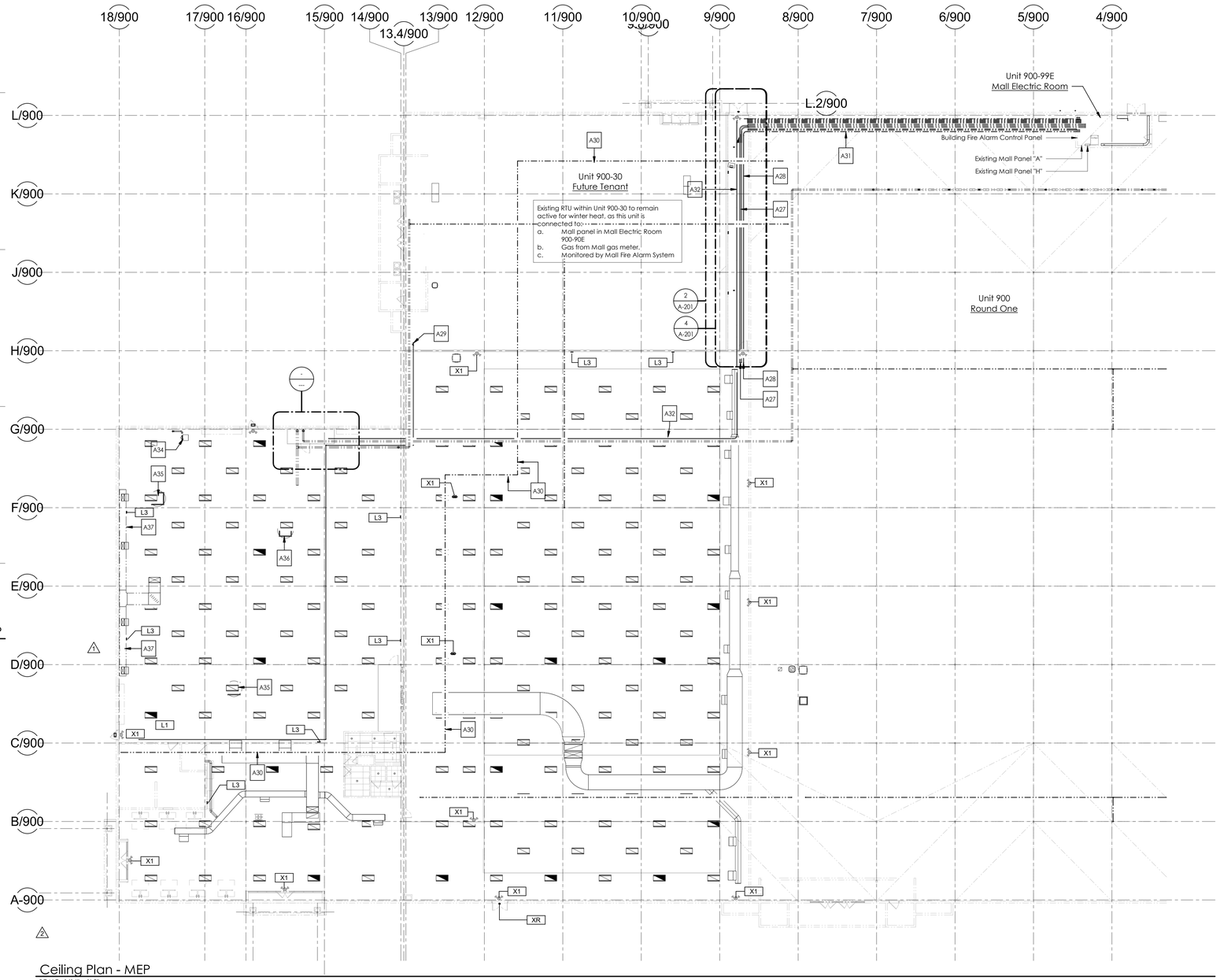


2 A-201 Enlarged Ceiling Plan - Access Hall - MEP
SCALE: 1/8" = 1'-0"

3 **Note:**
1. Contractor to pretest all exit and emergency lighting prior to requesting inspection.

Exit and Emergency Exit lighting; Test required. Contractor to pretest per code and request inspection; Contractor to provide light meter for testing.

3 Sprinkler Room plan deleted



1 2 Ceiling Plan - MEP
SCALE: 1/16" = 1'-0"

Mall Unit Heater Schedule

Mark	Manufacturer	Model	KW	Voltage	Total Heating Capacity	Type Comments
UH-2	Markel	P3P5105CAIN	5 W	480 V / 3Ø / 60 Hz	17,100.0 Btu/h	Integral thermostat

Light Fixture Schedule

Type	Manufacturer	Model	Lamp	Voltage	Type Comments
L1	Lithonia	CPHB 12LM MVOLT 50K	T5	MULTI	Pendant hung @ 17'-0"
L2	JUNO	JSF 13IN 18LM 40K WH	LED	MULTI	Surface mounted
L3	Lithonia	ELM2L	LED	<varies>	Emercency Light
X1	Lithonia	ECBG LED M6	LED	MULTI	Integrated Exit / Unit combos, Green, integrated LED light bar
XR	Compass Lighting	CORD	LED	<varies>	Exit Discharge Light

2

Notes:
Fire Protection:
- Tenants Sprinkler Contractor to modify existing Fire Protection Sprinkler System as required for new layout in Unit 900-20.
- Landlords Sprinkler Contractor to modify existing Fire Protection Sprinkler System as required for new Sprinkler Room, Egress Access Hall and demising walls.

Plumbing:
- Refer to Plumbing drawings for complete scope of tenants work.
- Landlords Plumbing Contractor to install 2" insulated water line from new meter location to Unit 900-30. Coordinate meter location with Tenant's Plumbing drawings.

Mechanical:
- Refer to Mechanical drawings for complete scope of tenants work.
- Landlords mechanical work limited to Unit Heaters in Egress Access Hall and Sprinkler Room.

Fire Alarm:
- Tenant's Fire Alarm Contractor to modify (reuse, add and reprogram) existing building Fire Alarm System as required for Unit 900-20.
- Landlords Fire Alarm Contractor to modify (reuse, add and reprogram) existing building Fire Alarm System as required for Unit 900-30, Sprinkler Room and Egress Access Hall.

1

CODED NOTES THIS SHEET

#	DESCRIPTION
A24	ELECTRIC UNIT HEATER TO BE POWERED FROM EXISTING PANEL 'H' AND SUSPENDED AT 12'-0" A.F.F.
A25	ACCESS HALL LIGHTING (GENERAL AND EGRESS) TO BE POWERED FROM EXISTING PANEL 'H'
A26	OCCUPANCY SENSOR FOR HALL GENERAL LIGHTING CONTROL SUSPENDED AT 12'-0" A.F.F.
A27	EXTEND TWO (2) 3 1/2" CONDUITS INTO UNIT 900-20
A28	EXTEND ONE (1) 2" DATA CONDUIT INTO UNIT 900-20
A29	2" WATER LINE (INSULATED) FROM WITHIN 24' OF NEW WATER SERVICE TO UNIT 900-30 WITH 2" SHUT-OFF VALVE AND CAP BOTH ENDS, SUSPEND AT BOTTOM OF STRUCTURE
A30	EXISTING 2 1/2" WATER SERVICE LINE - REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
A31	EXISTING SPARE POWER AND DATA CONDUITS
A32	EXTEND ONE (1) 2" CONDUIT TO SPRINKLER ROOM
A34	EXISTING GAS UNIT HEATER TO BE REMOVED BY TENANT - REFER TO MECHANICAL DRAWINGS
A35	EXISTING EXHAUST FAN TO REMAIN
A36	EXISTING FRESH AIR FAN TO REMAIN
A37	EXISTING MAKEUP AIR SUPPLY DUCT TO REMAIN, MODIFIED AND/OR REMOVED - BY TENANT

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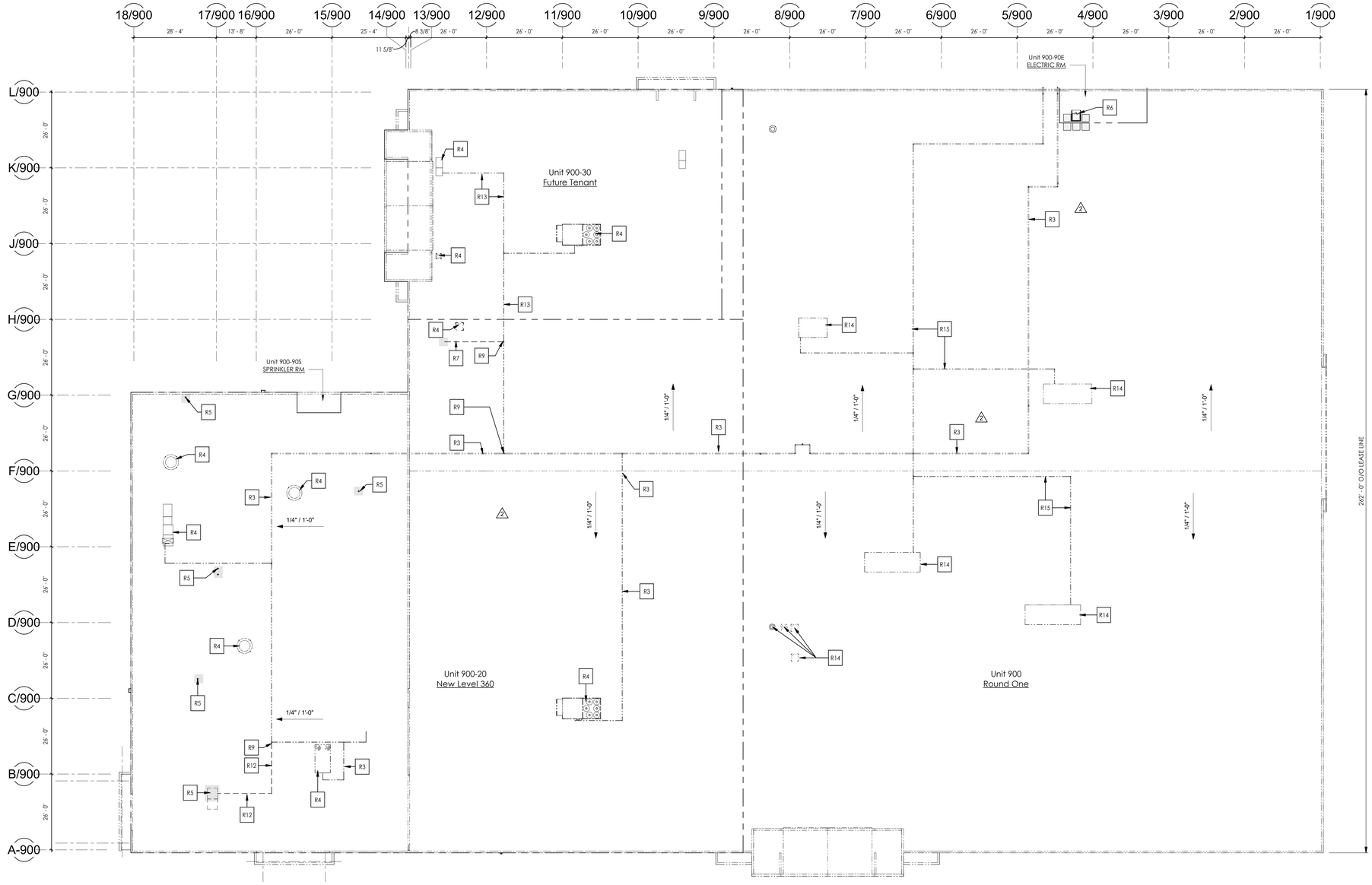
Sheet Title:
CEILING PLAN - MEP

Project Information:
NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3500 South Meridian Blvd
Puyallup, WA 98373

Project No.:	62-900-20
Date:	7-8-2022
Drawn By:	TGE
Checked By:	RP

A-201



Roof Plan

SCALE: 1/16" = 1'-0"

CODED NOTES THIS SHEET	
#	DESCRIPTION
R3	EXISTING GAS PIPING TO REMAIN
R4	EXISTING MECHANICAL EQUIPMENT TO REMAIN, REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
R5	EXISTING MECHANICAL EQUIPMENT TO BE REMOVE BY TENANT, REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
R6	EXISTING ROOF ACCESS HATCH
R7	EXISTING GAS LINE OVER DOWN TO BE REMOVED, PATCH ROOF AS REQUIRED
R9	TENANT TO CUT AND CAP EXISTING GAS LINE, REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
R12	EXISTING GAS LINE TO BE REMOVED BY TENANT, REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
R13	EXISTING GAS LINE TO REMAIN FOR UNIT 900-30
R14	EXISTING UNIT 900 MECHANICAL EQUIPMENT TO REMAIN
R15	EXISTING UNIT 900 GAS LINE TO REMAIN

LEGEND TO ROOF PLANS	
SYMBOL	DESCRIPTION
	EXISTING WALL, PARTITION, OR ITEM TO REMAIN
	WALL, PARTITION, OR ITEM TO BE REMOVED
	NEW ITEM OR WALL
	COLUMN CENTERLINE
	AREA OF ROOF PATCH - METAL DECK, INSULATION AND MEMBRANE AS REQUIRED

NOTE:
ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE FIELD VERIFIED

NOTE:
ALL WOOD BLOCKING AND PLYWOOD USED ON EXTERIOR OF BUILDING TO BE FIRE RETARDANT TREATED EXTERIOR GRADE

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1	Addendum A	10-5-2022	TGE
2	Bulletin 1	11-29-22	TGE

Sheet Title:
ROOF PLAN

Project Information:
NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3300 South Meridian Blvd
Puyallup, WA 98375

Project No.:	62-900-20
Date:	7-8-2022
Drawn By:	TGE
Checked By:	RP

A-300

NOTES TO DOORS & FRAMES

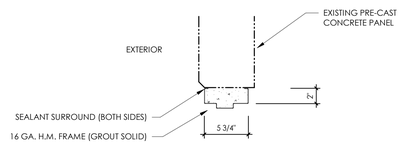
1. ALL EGRESS DOORS SHALL BE READILY OPENABLE FROM THE SIDE FROM WHICH EGRESS IS MADE WITHOUT THE USE OF A KEY, OR SPECIAL KNOWLEDGE, OR EFFORT.
2. DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES SHALL BE INSTALLED 34" MIN. AND 48" MAX ABOVE THE FINISHED FLOOR.
3. THE MAXIMUM FORCE FOR PUSHING OR PULLING OPEN A DOOR SHALL BE 5 LBF.
4. ALL LOCKSET, PRIVACY SET, AND PASSAGE SET LOCKS SHALL BE LEVER-TYPE HANDLES COMPLYING WITH ALL HANDICAP ACCESSIBILITY REQUIREMENTS. ALL OPERATING DEVICES ON DOORS 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.
5. THRESHOLDS AT DOORS SHALL NOT EXCEED 1/2" WITH NO MORE THAN 1/4" BEING A DIRECT VERTICAL CHANGE. CHANGES IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.
6. ALL GLASS IN DOORS SHALL BE SAFETY GLAZING IN ACCORDANCE WITH IBC 2406.1 AND PASS THE TEST REQUIREMENTS OF CPSC 16 CFR 1201.
7. IF A DOOR HAS A CLOSER, THEN THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGRESS, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.
8. PAINT ALL METAL DOORS AND FRAMES TO MATCH ADJACENT WALL SURFACE.
9. FRONT AND REAR DOORS TO BE LOCKED AT ALL TIMES DURING CONSTRUCTION.
10. EXTERIOR INTERCHANGEABLE CONSTRUCTION CORES TO BE REMOVED AT TURNOVER.
11. ALL HARDWARE SHALL BE HEAVY-DUTY GRADE.

Door Schedule - Unit 900-20

					Frame					Door					Hardware								
No.	Existing	Width	Height	Thickness	From	To	Material	Finish Key	Type	Material	Finish Key	Type	Glass	Fire Rating	Hardware Group	Butt Hinges	Closer	Cylinder (Exterior)	Door Stop	Lockset	Panic Hardware	Storeroom Lockset	Threshold	Weatherstripping	Comments
20-1	Yes	6' - 0"	7' - 0"	1 3/4"	Retail Sales	Exterior	ALUMINUM	EXISTING	1	ALUMINUM	EXISTING	E	EXISTING	---	5						•				Clean and adjust as required for proper operation
20-2	Yes	6' - 0"	7' - 0"	1 3/4"	Retail Sales	Exterior	ALUMINUM	EXISTING	1	ALUMINUM	EXISTING	E	EXISTING	---	5						•				Clean and adjust as required for proper operation
20-3	Yes	3' - 0"	7' - 0"	1 3/4"	Infield Training Area	Exterior	Hol. Mtl.	P-3	2	Hol. Mtl.	P-3	A	N/A	---	6										Clean and adjust as required for proper operation
20-4	Yes	12' - 0"	12' - 0"	1/2"	Infield Training Area	Exterior	---	EXISTING	4	Insulated Mtl	EXISTING	C	EXISTING	---	6										Clean and adjust as required for proper operation
20-5	Yes	12' - 0"	12' - 0"	1/2"	Infield Training Area	Exterior	---	EXISTING	4	Insulated Mtl	EXISTING	C	EXISTING	---	6										Clean and adjust as required for proper operation
20-6	Yes	3' - 0"	7' - 0"	1 3/4"	Infield Training Area	Exterior	Hol. Mtl.	P-1	2	Hol. Mtl.	P-1	A	N/A	---	5						•				Clean and adjust as required for proper operation
20-7	Yes	6' - 0"	8' - 0"	1/2"	Infield Training Area	Exterior	---	EXISTING	5	Insulated Mtl	EXISTING	D	EXISTING	---	6										Clean and adjust as required for proper operation
20-8	Yes	3' - 0"	7' - 0"	1 3/4"	Retail Sales	Office	Hol. Mtl.	P-3	2	Hol. Mtl.	P-3	A	N/A	---	6										Clean and adjust as required for proper operation
20-9	Yes	3' - 0"	7' - 0"	1 3/4"	Retail Sales	Men's Toilet Rm	Hol. Mtl.	P-3	3	Hol. Mtl.	P-3	A	N/A	---	6										Clean and adjust as required for proper operation
20-10	Yes	2' - 0"	7' - 0"	1 3/4"	Janitor Closet	Men's Toilet Rm	Hol. Mtl.	P-3	3	Hol. Mtl.	P-3	A	N/A	---	6										Clean and adjust as required for proper operation
20-12	Yes	3' - 0"	7' - 0"	0"	Infield Training Area	Weight Room / Training Area	Hol. Mtl.	P-3	2	Hol. Mtl.	P-3	72	N/A	---	6						•				Clean and adjust as required for proper operation
20-13	Yes	3' - 0"	7' - 0"	1 3/4"	Infield Training Area	Storage Room	Hol. Mtl.	P-3	3	Hol. Mtl.	P-3	A	N/A	---	4		•	•				•			
20-14	No	3' - 0"	7' - 0"	1 3/4"	Electrical Room	Infield Training Area	Mtl. Pipe	P-3	3	Chain Link	P-3	A	N/A	---	2	•	•	•	•		•				
20-15	No	5' - 0"	7' - 0"	1 3/4"	Circulation Area	Exterior	Hol. Mtl.	P-1	2	Insulated Mtl.	P-1	B	N/A	---	3		•	•			•		•	•	
20-18	Yes	3' - 0"	7' - 0"	1 3/4"	Weight Room / Training Area	Unisex ADA Toilet Room	Hol. Mtl.	P-3	3	Hol. Mtl.	P-3	B	N/A	---	6						•				Door swing to be revised
20-19	No	3' - 0"	7' - 0"	1 3/4"	Sprinkler room	Infield Training Area	Mtl. Pipe	P-3		Chain Link	P-3	A	N/A		2	•	•	•	•		•				

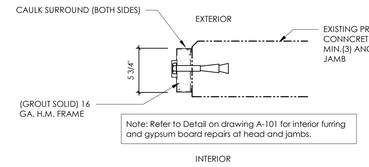
Mall Door Schedule

					Frame					Door					Hardware								
No.	Existing	Width	Height	Thickness	From	To	Material	Finish Key	Type	Material	Finish Key	Type	Glass	Fire Rating	Hardware Group	Continuous Hinge	Closer	Cylinder (Exterior)	Lockset	Door Stop	Crash Stop	Panic Hardware	Threshold	Weatherstripping	COMMENTS
99-1	No	3' - 0"	7' - 0"	1 3/4"	Circulation Area	Egress Access Hall	Hol. Mtl.	P-1	3	Insulated Mtl.	P-1	A	N/A	1 Hr.	7	•	•	•		•	•	•	•	•	
99-2	No	6' - 0"	7' - 0"	1 3/4"	Egress Access Hall	Exterior	Hol. Mtl.	P-1	2	Insulated Mtl.	P-1	B	N/A	---	3	•	•	•			•	•	•	•	



KAWNEER 451 VG SERIES.
REFER TO ENTRANCE PLAN DETAILS.

1



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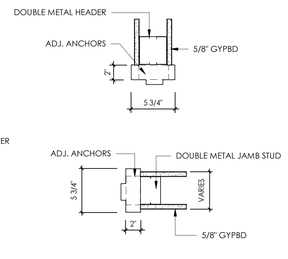

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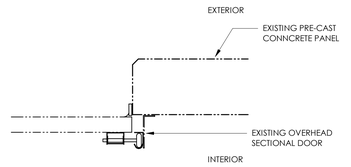

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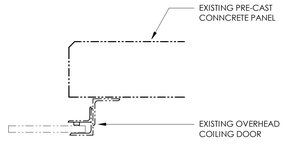

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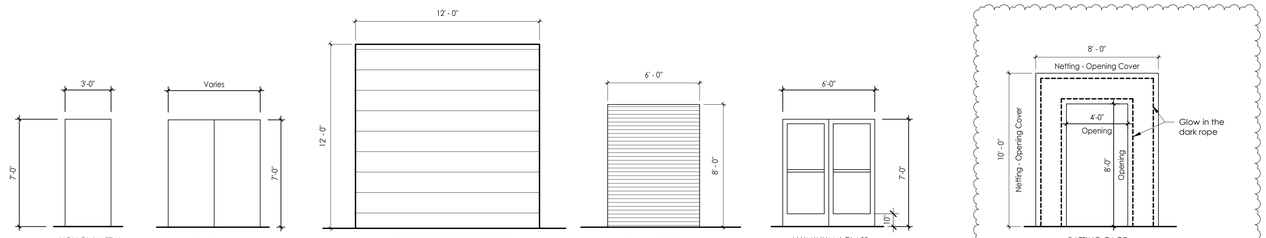
Door Frame Types

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



By inspection the ¼ inch cord is not a substantial distinguishable finish to recognize as an exit access. Provide a clear and readily distinguishable finish.

Excerpt of 1010 IBC – 2018 Means of egress doors shall be readily distinguishable from the adjacent construction and finishes such that the doors are easily recognizable as doors. Mirrors or similar reflecting materials shall not be used on means of egress doors. Means of egress doors shall not be concealed by curtains, drapes, decorations or similar materials.

Door Types

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

ROOM FINISH SCHEDULE

			FLOOR			BASE			WALLS			CEILING				
NO.	NAME	AREA	FLOOR MATERIAL	FLOOR FINISH	FLOOR CLASS FINISH	BASE MATERIAL	BASE FINISH	BASE CLASS FINISH	WALL MATERIAL	WALL FINISH	WALL CLASS FINISH	CEILING MATERIAL	CEILING FINISH	CEILING CLASS FINISH	HEIGHT	COMMENTS
A-1	Weight Room / Training Area	3,489.15 SF	Concrete	Exposed Concrete	--	4" Vinyl Cove	B-1	C	Gypsum Board/ Paint	P-3	C	Steel Structure	Exposed Structure	--	19' - 0"	
A-2	Unisex ADA Toilet Room	88.89 SF	VCT	Viny Tile	Pill Test	4" Vinyl Cove	B-1	C	Gypsum Board/ Paint	P-3	C	Acoustic Tile	ACT-1	B	8' - 0"	
A-3	Men's Toilet Rm	198.28 SF	Concrete	Viny Tile	Pill Test	4" Vinyl Cove	B-1	C	Gypsum Board/ Paint	P-3	C	Acoustic Tile	ACT-1	B	10' - 0"	
A-4	Janitor Closet	18.62 SF	Concrete	Exposed Concrete		N/A	N/A	--	Gypsum Board/ Paint	N/A	C	Steel Structure	Exposed Structure	--	10' - 0"	
A-5	Office	77.08 SF	Concrete	Viny Tile	Pill Test	4" Vinyl Cove	B-1	C	Gypsum Board/ Paint	P-3	C	Exposed Concrete	P-3	--	10' - 0"	
A-6	Storage Room	561.05 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	Gypsum Board/ Paint	P-3	C	Steel Structure	Exposed Structure	--	19' - 0"	
A-7	Infield Training Area	9,657.15 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	Gypsum Board/ Paint	P-3	C	Steel Structure	Exposed Structure	--	19' - 0"	
A-8	Electrical Room	190.13 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	Gypsum Board/ Paint	P-3	C	Steel Structure	Exposed Structure	--	19' - 0"	
A-10	Toilet Room Entry	56.59 SF	VCT	Viny Tile	Pill Test	4" Vinyl Cove	B-1	C	Gypsum Board/ Paint	P-3	C	Acoustic Tile	ACT-1	B	8' - 0"	
A-11	Unisex Toilet Room	28.39 SF	VCT	Viny Tile	Pill Test	4" Vinyl Cove	B-1	C	Gypsum Board/ Paint	P-3	C	Acoustic Tile	ACT-1	B	10' - 0"	
A-12	Unisex Toilet Room	30.76 SF	VCT	Viny Tile	Pill Test	4" Vinyl Cove	B-1	C	Gypsum Board/ Paint	P-3	C	Acoustic Tile	ACT-1	B	8' - 0"	
A-13	Circulation Area	550.94 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	N/A	N/A	--	Steel Structure	Exposed Structure	--	8' - 0"	
B-1	Circulation Area	3,367.61 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	N/A	N/A	--	Steel Structure	Exposed Structure	--	8' - 0"	
B-2	Training Area	359.32 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	N/A	N/A	--	Steel Structure	Exposed Structure	--	19' - 0"	
B-3	Batting Cage	1,443.00 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	N/A	N/A	--	Steel Structure	Exposed Structure	--	19' - 0"	
B-4	Batting Cage	1,716.00 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	N/A	N/A	--	Steel Structure	Exposed Structure	--	19' - 0"	
B-5	Batting Cage	2,023.13 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	N/A	N/A	--	Steel Structure	Exposed Structure	--	8' - 0"	
B-6	Pitching Area	4,186.94 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	N/A	N/A	--	Steel Structure	Exposed Structure	--	19' - 0"	
B-7	Batting Cage	2,028.00 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	N/A	N/A	--	Steel Structure	Exposed Structure	--	19' - 0"	
B-8	Batting Cage	2,028.00 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	N/A	N/A	--	Steel Structure	Exposed Structure	--	19' - 0"	
B-9	Batting Cage	2,028.00 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	N/A	N/A	--	Steel Structure	Exposed Structure	--	19' - 0"	
B-10	Batting Cage	1,560.00 SF	Concrete	Exposed Concrete	--	N/A	N/A	--	N/A	N/A	--	Steel Structure	Exposed Structure	--	19' - 0"	
B-11	Unoccupied	316.88 SF													8' - 0"	

FINISH LEGEND

Key	Description	Manufacturer	Model / Color	Comments
ACT-1	Acoustic Ceiling Tile 24 x 48	TBD	TBD	
B-1	4" Vinyl Cove Base	TBD	TBD	
P-1	Paint	Sherwin Williams	Match Exterior Wall Color	
P-2	Paint	Sherwin Williams	SW-6868 / Real Red	
P-3	Paint	TBD	TDB	
VCT-1	Vinyl Floor Tile	TBD	TBD	

City of Puyallup
Development & Permitting Services
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PRCTI20221551

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Developer: CAFARO - Est. 1949 -
Commercial & Industrial Real Estate Developers
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Seal: REGISTERED ARCHITECT RICHARD PARTIKA STATE OF WASHINGTON

Architect: RPD
RICK PARTIKA, AIA
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Niles, Ohio 44446
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3	Bulletin 2	01-26-23	TGE	
2	Bulletin 1	11-29-22	TGE	
1	Addendum A	10-5-2022	TGE	
	Issue Final	7-15-2022	TGE	
	Issue For Permit	7-8-2022	Issued by	
Revision No.	Description	Date		

Sheet Title: SCHEDULES AND DETAILS

Project Information: NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3300 South Meridian Blvd
Puyallup, WA 98373

Project No.:	62-900-20
Date:	7-8-2022
Drawn By:	TGE
Checked By:	RP

A-700

Project Information:	
NEW LEVEL 360 - UNIT 900-20	
SOUTH HILL MALL	
3500 South Meridian Blvd Puyallup, WA 98373	
Project No.:	62-900-20
Date:	7-8-2022
Drawn By:	BB
Checked By:	PB

S-100

Sheet Title: STRUCTURAL SKETCHES

Revision No.	Description	Date	Issued By
1	Bulletin 1	11-29-22	TGF

Architect:
RICK PARTIKA, AIA
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Phone: 330-747-2641
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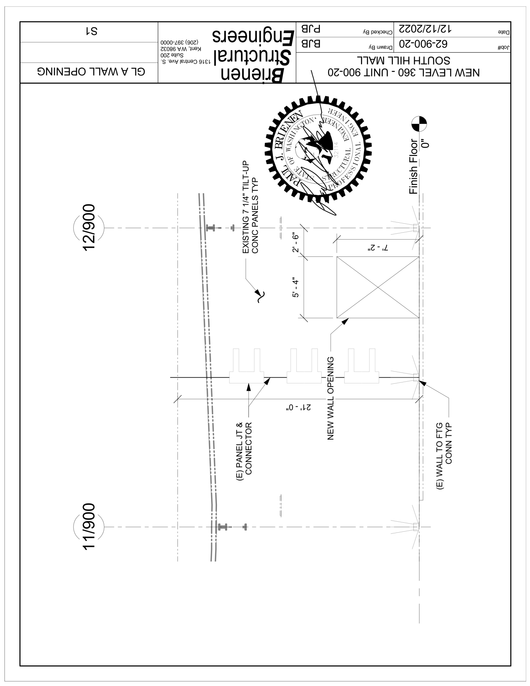
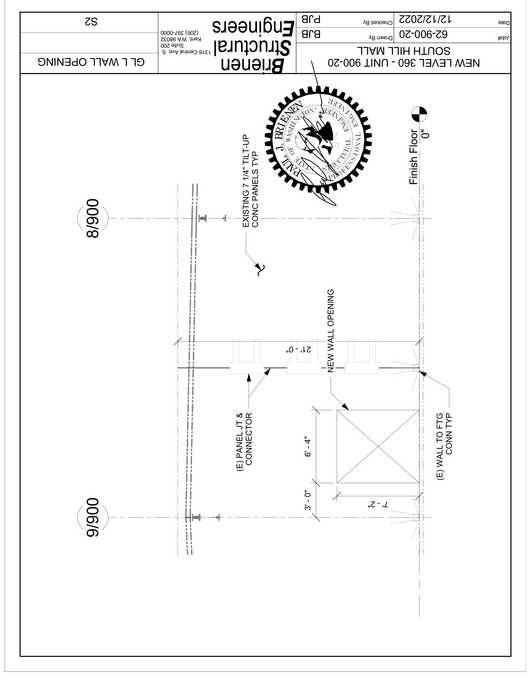
Seal:

Developer:
CAFARO
- Est. 1949 -
Commercial & Industrial
Real Estate Developers
5577 Youngstown - Warren Road
Niles, Ohio 44446
Phone: 330-747-2641





City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building
Planning
Engineering
Public Works
Fire
Traffic

PRCTI20221551

J:\7222\239 New Level 360_BIM\03 - Engineering\DWG\Shts\BlueBIM\P-SCH01 - PLUMBING.dwg

PLUMBING PIPING MATERIAL SCHEDULE

LOCATION	PIPING	SIZE	MATERIAL (FOOTNOTE)	JOINT
ABOVE GROUND	DOMESTIC WATER	1/2" AND LARGER	COPPER TYPE L (a)	PRESSED MECH JOINT
	SANITARY WASTE	1-1/2" TO 4"	PVC DWV SCH 40 FOAM CORE (b, c, d)	2 STEP SOLVENT WELD
	SANITARY VENT	1-1/2" TO 4"	PVC DWV SCH 40 FOAM CORE (b, c, d)	2 STEP SOLVENT WELD

FOOTNOTES:

(a) PRESSURE LIMIT OF 200 PSI
(b) FOLLOW PROJECT ACCOUSTICAL REQUIREMENTS. (PVC MAY BE USED INSIDE MECHANICAL SPACES & RESTROOM CHASES)
(c) FOLLOW PROJECT & JURISDICTIONAL FLAME / SMOKE SPREAD FIRESTOPPING REQUIREMENTS
(d) DWV STACKS / WET COLUMNS FOR FUTURE TENANT CONNECTIONS & PIPING LOCATED WITHIN OPEN CEILINGS / TENANT WORK SPACES MUST BE CAST IRON ONLY

PIPING INSULATION SCHEDULE

PIPING TYPE	PIPE SIZE	INSULATION TYPE	INSULATION THICKNESS	CONDUCTIVITY RANGE
COLD WATER OVERHEAD AND EXPOSED TO SIGHT	ALL	FIBERGLASS	1/2"	0.21 - 0.27
COLD WATER WITHIN WALLS	NOT REQUIRED			

- ALL HOT WATER PIPING INSULATION SHALL MEET THE REQUIREMENTS OF THE WASHINGTON STATE ENERGY CODE, 2018 EDITION, TABLE C403.10.3
- ALL PIPING INSULATION AND COVERINGS SHALL HAVE AN ASTM FLAME SPREAD RATING OF 25 OR LESS AND AN ASTM SMOKE DEVELOPED RATING OF 50 OR LESS.
- ELASTOMERIC INSULATIONS WHICH MEET THESE RATINGS MAY BE USED AS A SUBSTITUTE FOR FIBERGLASS.
- PROVIDE A VAPOR BARRIER COVERING ON ALL ROOF DRAIN, RAIN LEADER, AND COLD WATER PIPING INSULATION.
- INSULATE THE OVERFLOW DRAIN BODY AND PIPE 10 FEET DOWN STREAM FROM THE DRAIN.
- PROVIDE A COVERING FOR ALL INSULATION EXPOSED TO SIGHT WITHIN THE BUILDING.
- PROVIDE AN INCOMPRESSIBLE INSULATED PAD WITH A MINIMUM THERMAL RESISTANCE OF R-10 UNDER ALL ELECTRIC WATER HEATERS IN UNCONDITIONED SPACES OR ON CONCRETE FLOOR.

WATER METER SCHEDULE

SYMBOL	LOCATION	SYSTEM	SERVICE TYPE	MANUFACTURER & MODEL NO.	SIZE	MAX DESIGN PRESSURE LOSS	CAPACITY	NOTES
WM-1	WATER ENTRY ROOM	DOMESTIC WATER	DOMESTIC WATER SERVICE METER	MASTER METER ULTRASONIC MULTI JET SERIES	1-1/2"	10 PSI	42 GPM	1, 2, 3

NOTES:
1. STAINLESS STEEL CONSTRUCTION.
2. BATTERY POWERED.
3. PROVIDE WITH ENCODER.

PLUMBING GENERAL ABBREVIATIONS

ABBV	FULL NAME	ABBV	FULL NAME	ABBV	FULL NAME
AAV	AIR ADMITTANCE VALVE	DN	DOWN	NTS	NOT TO SCALE
ABV	ABOVE	DS	DOWNSPOUT	OFD	OVER FLOW DRAIN
AFF	ABOVE FINISHED FLOOR	DWG	DRAWING	POC	POINT OF CONNECTION
AP	ACCESS PANEL	E	EXISTING	PRV	PRESSURE REDUCING VALVE
BEL	BELOW	ELEV	ELEVATION	PVC	POLYVINYL CHLORIDE
BFP	BACKFLOW PREVENTER	ET	EXPANSION TANK	RD	ROOF DRAIN
BOP	BOTTOM OF PIPE	EWH	ELECTRIC WATER HEATER	RPBA	REDUCED PRESSURE BACKFLOW ASSY
BV	BALL VALVE	F	FIRE	TOG	TOP OF GRATE
BWV	BACK WATER VALVE	FCO	FLOOR CLEAN OUT	UG	UNDER GROUND
CB	CATCH BASIN	FD	FLOOR DRAIN	UNO	UNLESS NOTED OTHERWISE
CFF	CAP FOR FUTURE	FU	FIXTURE UNIT	VTR	VENT THRU ROOF
CI	CAST IRON	GI	GREASE INTERCEPTOR	W/	WITH
CL	CENTER LINE	GPM	GALLONS PER MINUTE	WCO	WALL CLEAN OUT
CO	CLEAN OUT	GWH	GAS WATER HEATER	WH	WALL HYDRANT
CPVC	CPVC MATERIAL	HB	HOSE BIBB	WHA	WATER HAMMER ARRESTOR
DCBP	DOUBLE CHECK BACKFLOW PREVENTER	HP	HIGH PRESSURE	WM	WATER METER
DCVA	DOUBLE CHECK VALVE ASSEMBLY	IE	INVERT ELEVATION	YH	YARD HYDRANT
DEMO	DEMOLISH	MH	MANHOLE		
DFU	DRAINAGE FIXTURE UNIT	NIC	NOT IN CONTRACT		

PLUMBING SYMBOL LEGEND

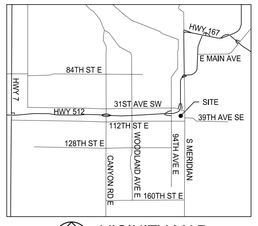
SYMBOL	DESCRIPTION	ABBV	SYMBOL	DESCRIPTION	ABBV
	BALANCING VALVE	BALV		GAS COCK	GC
	GATE VALVE	GV		VERTICAL EXPANSION TANK	VET
	GLOBE VALVE	GLV		TEMPERATURE GAUGE	TG
	BALL VALVE - FULL PORTED	BV		THERMOMETER	THERM
	SILENT CHECK VALVE	CV		BALL VALVE W/ 3/4" HOSE ADAPTOR	BV W/ HA
	REDUCED PRESS. BACKFLOW PREVENTER	RPBP		CONCENTRIC REDUCER	CR
	BACKFLOW PREVENTER	BFP		TWO-WAY CONTROL VAVLE	2WAY
	UNION	UNION		THREE-WAY CONTROL VALVE	3WAY
	STRAINER	STRN		POINT OF CONNECTION	P.O.C.
	PRESSURE RELIEF VALVE	PTV		PIPE BREAK - PIG TAIL	
	PRESSURE REDUCING VALVE	PRV	6" CWWS	PIPE - SIZE & ABBREVIATION	
	PRESSURE / TEMPERATURE PORT	P/T		PIPE - SIZE & ABBREVIATION WITH INSULATION	
	PRESSURE GAUGE	PG		PUMP CIRCULATION	
	SOLENOID VALVE	SV		ROOF DRAIN (RISER)	RD
	PIPE - HEAT TRACE			OVER-FLOW DRAIN (RISER)	OD
	HOSE BIB	HB		60° OFFSET FOR SUDS	60° OFST
	SUB-METER WATER FLOW	MTR		EXPANSION THERMAL	EXP
	WATER HAMMER ARRESTOR	WHA		DOMESTIC PEX MANIFOLD	MFLD
	FLEX PIPE			PLUMBING TRAP	TRAP
	VENT THROUGH ROOF	VTR	FLTR-1	PLUMBING FIXTURE N.I.C. TAG	
	FLOOR CLEANOUT		WC-1	PLUMBING FIXTURE TAG	
	WALL CLEANOUT		WTR-1	PLUMBING EQUIPMENT TAG	
	FLOOR DRAINS		1/2% SLOPE	1/16" PER FOOT PIPE SLOPE	
	FLOOR SINKS		1%SLOPE	1/8" PER FOOT PIPE SLOPE	
	ROOF, OVERFLOW, AND COMBINATION DRAINS		2% SLOPE	1/4" PER FOOT PIPE SLOPE (TYP. UNO)	

PLUMBING SYSTEM LEGEND

LINE TYPE & ABBR	FULL NAME
ØAV	ACID
ØAW	ACID WASTE
ØBEVG	BEVERAGE
	BEVERAGE CONDUIT
ØDCW	DOMESTIC WATER
ØDCW-UG	DOMESTIC COLD WATER
ØPDCW-HP	DOMESTIC COLD WATER (UNDERGROUND)
ØSP-W	DOMESTIC COLD WATER - HIGH PRESSURE
ØDHW	DOMESTIC FILTERED WATER
ØDHW-140	DOMESTIC HOT WATER
ØDHW-160	DOMESTIC HOT WATER 140
ØDHWC	DOMESTIC HOT WATER 160
ØDHWC-140	DOMESTIC HOT WATER CIRC
ØDHWC-160	DOMESTIC HOT WATER CIRC 140
ØDHW-HP	DOMESTIC HOT WATER CIRC 160
ØDHW-HP	DOMESTIC HOT WATER - HIGH PRESSURE
ØDTW	DOMESTIC HOT WATER CIRC - HIGH PRESS
ØDTWC	DOMESTIC TEMPERED WATER
	DOMESTIC TEMPERED WATER CIRC
ØFLU-CPVC	FLUE
	FLUE VENT - CPVC
ØCOMB-CPVC	GAS
	COMBUSTION AIR - PVC
ØAR	GAS, MEDICAL
ØCO2	ARGON
ØHE	CARBON DIOXIDE
ØIA	HELIUM
ØIA-IN	INSTRUMENT AIR
ØLA	INSTRUMENT AIR INTAKE
ØLA-IN	LAB AIR
ØMA	LAB AIR INTAKE
ØMA-IN	MEDICAL AIR
ØMVAC	MEDICAL AIR INTAKE
ØMVAC-E	MEDICAL VACUUM
ØN2	MEDICAL VACUUM EXHAUST
ØN2O	NITROGEN
ØO2	NITROUS OXIDE
ØWAGD	OXYGEN
ØWAGD-E	WASTE ANESTHETIC GAS DISPOSAL
	WASTE ANESTHETIC GAS DISPOSAL EXHAUST

LINE TYPE & ABBR	FULL NAME
ØNG-H	GAS, NATURAL
ØNG-L	NATURAL GAS HIGH PRESSURE
ØNG-M	NATURAL GAS LOW PRESSURE
ØNG-M-2PSI	NATURAL GAS MEDIUM PRESSURE
ØNG-M-2PSI	NATURAL GAS 2PSI
ØNGV	NATURAL GAS SPSI
ØNGV	NATURAL GAS VENT
	NATURAL GAS CONDUIT
ØGD	SANITARY SEWER
ØGW	GARAGE DRAIN
ØGW-UG	GREASE WASTE
ØW	GREASE WASTE (UNDERGROUND)
ØAV	INDIRECT WASTE
ØAV	LAB VENT
ØPSS	LAB WASTE
ØPW	PUMPED SANITARY SEWER
ØAV	PUMPED WASTE
ØV	VACUUM WASTE
ØV	VENT
ØSS	WASTE
	SANITARY SEWER
ØFTDR	STORM
ØORL	FOOTING DRAIN
ØRL	OVERFLOW RAIN LEADER
ØPSD	RAIN LEADER
ØSD	PUMPED STORM DRAIN
	STORM DRAIN
ØDI	NON-POTABLE
ØAV	DEIONIZED WATER
ØNPCW	IRRIGATION WATER
ØAV	NON POTABLE COLD WATER
ØNPHW	NON POTABLE FILTERED WATER
ØNPHW-140	NON POTABLE HOT WATER
ØNPHWC	NON POTABLE HOT WATER 140
ØNPHWC-140	NON POTABLE HOT WATER CIRC
ØAV	NON POTABLE HOT WATER CIRC 140
ØAV	NON POTABLE TEMPERED WATER
ØRO	NON POTABLE TEMPERED WATER CIRC
ØRO-DI	REVERSE OSMOSIS WATER
ØTP	REV. OSMOSIS/DEIONIZED WATER
ØTP-FJS	TRAP PRIMER
	TRAP PRIMER UNDERGROUND

ALL ABANDONED PIPING MUST BE REMOVED.



VICINITY MAP
NO SCALE

PLUMBING GENERAL NOTES

1. THIS PROJECT WAS DESIGNED UNDER THE 2018 EDITION OF THE UNIFORM PLUMBING CODE WITH WASHINGTON STATE AMENDMENTS. MATERIALS, METHODS AND INSTALLATION SHALL COMPLY WITH THESE PROVISIONS.
2. STATIC WATER PRESSURE TO FIXTURES SHALL NOT EXCEED 80 PSIG (608.2).
3. DESIGNED MAXIMUM DCW VELOCITIES SHALL NOT EXCEED 8 FPS & DHW SHALL NOT EXCEED 5 FPS (610.6 and 610.12).
4. PRESSURE LOSSES FOR IN-LINE DEVICES HAVE BEEN INCLUDED IN THE ABOVE PRESSURE CALCULATIONS (610.2).
5. WATER SIZING IS AS PER APPENDIX A (Table 103.1)
6. THESE PLANS ARE SCHEMATIC AND DO NOT SHOW EXACT ROUTING OR EVERY OFFSET WHICH MAY BE REQUIRED. THE PLUMBING CONTRACTOR IS TO COORDINATE WITH ALL OTHER TRADES AND IS TO VERIFY ALL CLEARANCES BEFORE COMMENCING WORK.
7. ALL PIPE SIZES NOTED ON DRAWINGS ARE MINIMUMS.
8. SLOPE ALL RAIN LEADER, STORM, AND WASTE PIPING AT 2% UNLESS OTHERWISE NOTED ON DRAWINGS. OBTAIN APPROVAL FROM CODE AUTHORITY BEFORE INSTALLING WASTE PIPING AT LESS THAN 2 (EVEN IF LESSER SLOPE IS INDICATED ON DRAWINGS).
9. HANGERS AND SUPPORTS FOR PIPING SHALL BE IN ACCORDANCE WITH SECTION 313 AND TABLES 313.3 AND 313.6 OF THE 2018 UNIFORM PLUMBING CODE WITH WASHINGTON STATE AMENDMENTS.
10. PIPING PENETRATIONS OF FIRE RATED WALLS OR FLOORS SHALL BE SLEEVED AND FIRE STOPPED WITH LISTED MATERIALS SO AS TO MAINTAIN THE INTEGRITY AND RATING OF THE FLOOR OR WALL.
11. FOR EXACT ROUGH-IN LOCATIONS AND ELEVATIONS OF PLUMBING FIXTURES REFER TO ARCHITECTURAL DRAWINGS.
12. PROVIDE STOPS OR ANGLE VALVES AT ALL FIXTURES
13. PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS.
14. PROVIDE DIELECTRIC CONNECTIONS BETWEEN DISSIMILAR METALS.
15. CLEANOUTS SHALL BE INSTALLED SO THEY ARE EASILY ACCESSIBLE.
16. PLUMBING EQUIPMENT, VALVES AND TRAP PRIMERS SHALL BE LOCATED IN EASILY ACCESSIBLE LOCATIONS, UNLESS SHOWN ON ARCHITECTURAL DRAWINGS, REQUIRED ACCESS PANELS SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR AND INSTALLED BY THE GENERAL CONTRACTOR.
17. FLOORS SHALL SLOPE TO FLOOR DRAINS WHERE DRAINAGE OCCURS ON A REGULAR BASIS. PLUMBER TO COORDINATE WITH GENERAL CONTRACTOR FOR EXACT ELEVATION OF DRAIN. (EXAMPLES TOILET ROOMS, KITCHENS AND LAUNDRY ROOMS)
18. THE PLUMBER SHALL PROVIDE AND LOCATE ALL REQUIRED FLOOR, WALL, AND FOOTING SLEEVES.
19. HEAT TRACING OF PIPING, WHERE INDICATED, SHALL BE PROVIDED AND INSTALLED BY THE PLUMBING CONTRACTOR. THE PLUMBING CONTRACTOR IS TO COORDINATE THE HEAT TRACE WIRING SUPPLY WITH THE ELECTRICAL CONTRACTOR.
20. TRENCHING, BACKFILLING, AND COMPACTING FOR UNDERGROUND PIPING SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR UNLESS STATED OTHERWISE IN CONTRACT DOCUMENTS.
21. PIPING BURIED IN THE SLAB TO HAVE A PROTECTIVE SLEEVE.
22. PROVIDE EARTHQUAKE RESTRAINT FOR PLUMBING PIPING AND EQUIPMENT IN ACCORDANCE WITH SECTION 1613 OF THE 2018 IBC AND ASCE 7.
23. LIMITATION OF HOT WATER TEMPERATURE TO PLUMBING FIXTURES SHALL BE IN ACCORDANCE WITH CHAPTER 4 OF THE 2018 EDITION OF THE UNIFORM PLUMBING CODE WITH WASHINGTON STATE AMENDMENTS.
24. VENTS FROM FLOOR MOUNTED FIXTURES SHALL RISE VERTICALLY TO AT LEAST 6" ABOVE THE FLOOD RIM OF THE FIXTURE, UNLESS STRUCTURAL CONDITIONS PROHIBIT A CONTINUOUS VENT. WHERE A "FLAT VENT" IS USED, IT SHALL BE INSTALLED WITH DRAINAGE FITTINGS AND SLOPE BACK TO THE FIXTURE AT STANDARD 2% SLOPE.
25. WATER CONNECTIONS TO MECHANICAL EQUIPMENT, STEAM PRODUCING EQUIPMENT, DISHWASHERS THAT INJECT DETERGENT INTO THE WATER LINE, CARBONATORS, OR ANY OTHER CONDITION WHERE CROSS CONNECTION OF THE MAIN WATER SYSTEM MAY OCCUR, A REDUCED PRESSURE BACKFLOW PREVENTER ASSEMBLY AND ASSOCIATED DRAIN PIPING MUST BE PROVIDED.
26. WATER DISINFECTION TEST SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 609.9 OF THE 2018 PLUMBING CODE PRIOR TO FINAL APPROVAL OF PLUMBING PERMIT
27. ALL ITEMS IN THE DOMESTIC WATER DISTRIBUTION SYSTEM MUST SHOW COMPLIANCE WITH NSF-61 LEAD FREE REQUIREMENTS. DOCUMENTATION MUST BE AVAILABLE ON SITE.

2 GENERAL SHEET LIST - PLUMBING

SHEET NUMBER	SHEET NAME	SHEET NUMBER	SHEET NAME
TP0.01	SCHEDULES - PLUMBING		
TP1.01	FOUNDATION PARTIAL PLAN - PLUMBING		
TP2.01	1ST FLOOR PARTIAL PLAN - PLUMBING		

LEGAL DESCRIPTION

PARCEL NUMBER: 6021590090
SITE ADDRESS: 3500 S MERIDIAN STE 900 PUYALLUP, WA 98373

1 PLUMBING SCOPE OF WORK

NEW SCOPE:
PROVIDE NEW TEE OFF WATER MAIN, WITH WATER METER AND STUB OUT FOR NEW LEVEL 360 TENANT, PROVIDE NEW 2" CAPPED LINE OFF WATER MAIN WITH SHUT OFF VALVE FOR FUTURE UNIT 900-30 TENANT/METER. ALL OTHER TENANT IMPROVEMENT WORK WILL BE FUTURE PROJECT SCOPE, UNDER A SEPERATE PERMIT.

CONTACT LIST REFERENCE ONLY

TITLE	NAME	COMPANY	PHONE NUMBER	EMAIL
PROJECT ENGINEER	JORDAN CROWE	MACDONALD MILLER	206-769-3836	JORDAN.CROWE@MACMILLER.COM
PROJECT EXECUTIVE	JOE BRUCKER	MACDONALD MILLER	206-303-7165	JOE.BRUCKER@MACMILLER.COM

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic

PRCTI20221551

Wednesday, January 25, 2023 1:06:45 PM

MacDonald-Miller
FACILITY SOLUTIONS
7717 Detroit Avenue SW, Seattle, WA 98106
Phone: 206-763-9400 Fax: 206-767-6773
www.macmiller.com
WA Lic No: MACDOFS808RU

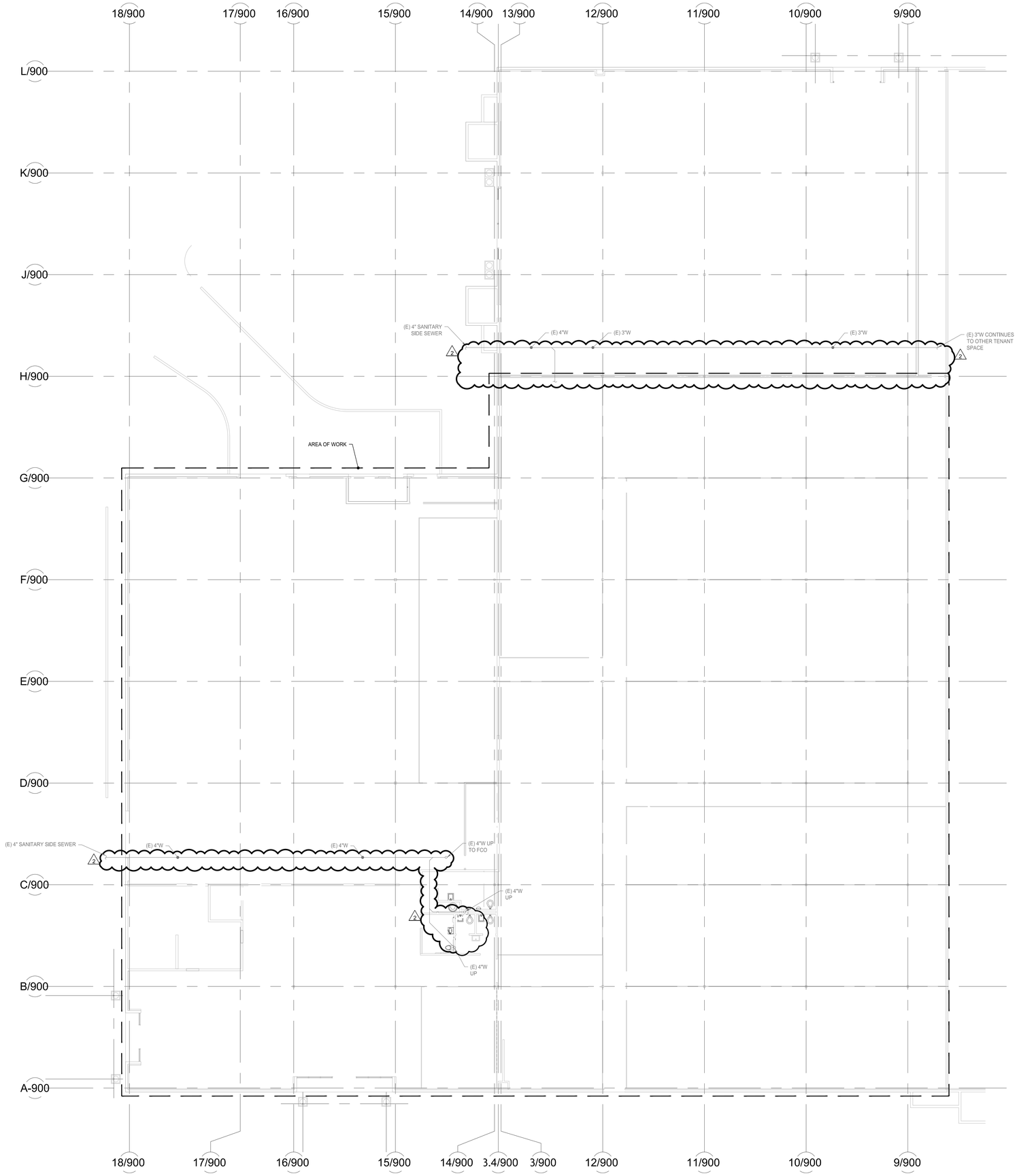
DAVID L. JACQUES
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER
01/25/2023

REVISIONS:	DATE
PERMIT COMMENTS #2	1-25-23
PERMIT COMMENTS	11-29-22

NEW LEVEL 360
NEW LEVEL 360 - SOUTH HILL MALL
3500 S MERIDIAN SUITE 900
PUYALLUP, WA 98373

SCHEDULES
PLUMBING
ISSUED FOR PERMIT

ENGINEER: J CROWE
LAST REVISED: 1-25-23
CHECKED BY: D JACQUES
DATE PLOTTED: 1-25-23
CAD: S MCPHERSON
ISSUE DATE:
DRAWING NUMBER: D-4106-72225239-00
SHEET NUMBER: TP0.01



A Commercial - Tenant Improvement/Remodel that involves plumbing of any sort the applicant is required to show the location of the sewer lateral as it exits the building. [First Floor Plumbing Sheet TP2.01

A Commercial - Tenant Improvement/Remodel that involves plumbing of any sort the applicant is required to verify if a sewer sampling tee exist on the sewer lateral as required for each commercial unit or space. See Standard Detail 04.03.04 [First Floor Plumbing Sheet TP2.01

All commercial development must have a sampling tee installed on their sewer lateral. See Standard Detail 04.03.04

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

PRCTI20221551

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DAVID L. JACQUES
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER
01/25/2023

REVISIONS:	DATE
PERMIT COMMENTS #2	1-25-23
PERMIT COMMENTS	11-29-22

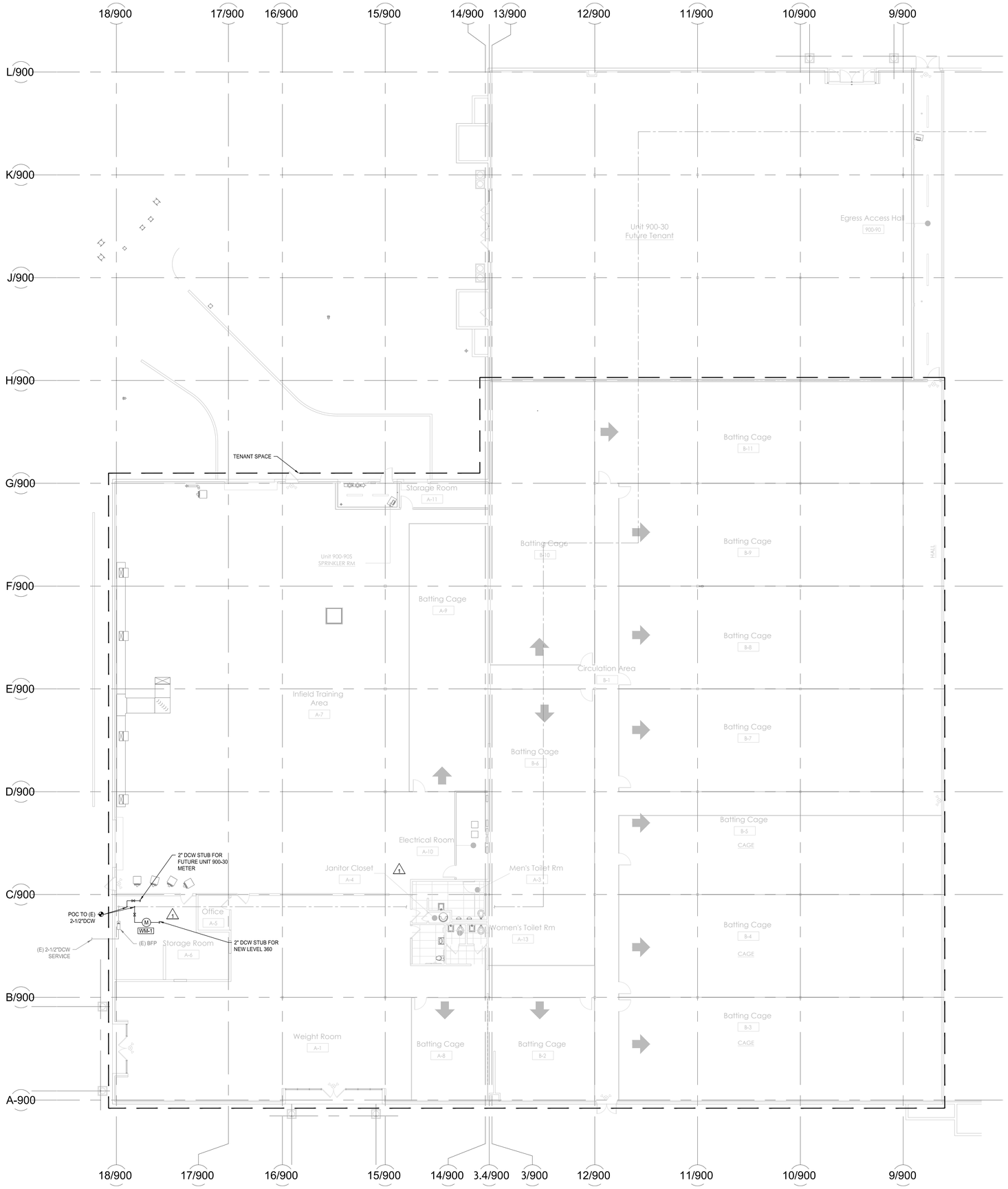
NEW LEVEL 360
NEW LEVEL 360 - SOUTH HILL MALL
3500 S MERIDIAN SUITE 900
PUYALLUP, WA 98373

FOUNDATION PLAN
PLUMBING
ISSUED FOR PERMIT

ENGINEER: J CROWE	LAST REVISED: 1-25-23
CHECKED BY: D JACQUES	DATE PLOTTED: 1-25-23
CAD: S MCPHERSON	ISSUE DATE:

DRAWING NUMBER: D-4106-72225239-00
SHEET NUMBER: TP1.01

N
3/32" = 1'-0"



City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
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PRCTI20221551

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DAVID L. JACQUES
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER

01/25/2023

REVISIONS:	DATE
PERMIT COMMENTS #2	1-25-23
PERMIT COMMENTS	11-29-22

NEW LEVEL 360
NEW LEVEL 360 - SOUTH HILL MALL
3500 S MERIDIAN SUITE 900
PUYALLUP, WA 98373

1ST FLOOR PLAN
PLUMBING
ISSUED FOR PERMIT

ENGINEER: J CROWE	LAST REVISED: 1-25-23
CHECKED BY: D JACQUES	DATE PLOTTED: 1-25-23
CAD: S MCPHERSON	ISSUE DATE:

DRAWING NUMBER: D-4106-72225239-00
SHEET NUMBER: TP2.01

N
3/32" = 1'-0"

Wednesday, January 25, 2023 1:08:23 PM

HVAC SYMBOL LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
BARE RECTANGULAR SHEETMETAL	14x12 SA	FLEX DUCT	14ø 14ø
SOUNDLINE SHEETMETAL (GENERAL NOTES)	14x12 SA-SL	EQUIPMENT FLEX ROUND CONNECTOR	24ø
SHEETMETAL W/ INSULATION (GENERAL NOTES)	14x12 SA-W	EQUIPMENT FLEX RECTANGULAR CONNECTOR	24x24
BARE ROUND SHEETMETAL	12ø SA	SUPPLY DUCT UP/DOWN	
ROUND SHEETMETAL W/ INSULATION (GENERAL NOTES)	12ø SA-W	EXHAUST DUCT UP/DOWN	
BARE OVAL SHEETMETAL	14x12ø SA	RETURN DUCT UP/DOWN	
OVAL SHEETMETAL W/ INSULATION (GENERAL NOTES)	14x12ø SA-W	SUPPLY AIR TERMINAL RECTANGULAR AND SQUARE	
EXAMPLE OF EXISTING	14x12 SA	RETURN AIR TERMINAL RECTANGULAR AND SQUARE	
EXAMPLE OF DEMO		EXHAUST AIR TERMINAL RECTANGULAR AND SQUARE	
EXAMPLE OF NEW	14x12 SA	RADIAL AIR TERMINAL	
EXAMPLE OF FUTURE (N.I.C.)	14x12 SA	SUPPLY AIR SLOT DIFFUSER	
EXPOSED QUALITY SHEETMETAL	14x12 SA-Q	RETURN AIR SLOT DIFFUSER	
CLEANROOM QUALITY DUCTWORK	14x12 SA-C	EXHAUST AIR SLOT DIFFUSER	
DUCTBOARD (1" FIBERGLASS)	14x12 SA-DB	POINT OF CONNECTION	
CONTINUATIION OF ROUND DUCT		CENTER LINE	℄
CONTINUATION OF RECTANGULAR DUCT		THERMOSTAT	T
AIR FLOW IN SYMBOL		CARBON MONOXIDE SENSOR	CO
AIR FLOW OUT SYMBOL		NITROGEN DIOXIDE SENSOR	NO2
MECHANICAL EQUIPMENT TAG	AHU-001	OTHER SENSOR	S
KEYED NOTE	1	ELECTRICAL SWITCH	$
ACCESS DOORS		MITERED ELBOW WITH TURNING VANES	
RATED ENCLOSURE			

NOTE: SIZE REFLECTS ACTUAL SHEET METAL DIMENSION AND DOES NOT ACCOUNT FOR INSULATION OR LINING

AIR TERMINAL SCHEDULE

TAG	MANUFACTURER & MODEL NUMBER	SIZE	TYPE	NOTES
A SIZE CFM	SHOEMAKER 904	AS NOTED	DOUBLE DEFLECTION SIDEWALL DIFFUSER	
B SIZE CFM	SHOEMAKER 905-DW	AS NOTED	RETURN AIR SURFACE MOUNT GRILLE	

EXHAUST FAN SCHEDULE

UNIT NO.	AREA SERVED	MFG & MODEL NO.	TYPE	CFM	ESP	RPM	FLA	FEG	BHP	HP	VOLT/PH	BDD	WT LBS	NOTES
EF-1	MEN'S / WOMEN'S RESTROOM	GREENHECK GB-180-4	ROOF CENTRIFUGAL	1500	0.25	544				1/4	120/1	Y		EXISTING
EF-5	**MEN'S / WOMEN'S RESTROOM**	**GREENHECK GB-70-4**	**ROOF CENTRIFUGAL**	**200**	**0.25**	**1274**				**1/4**	**120/1**	**Y**		**EXISTING**
~~EF-6~~	~~BATTERY ROOM~~	~~GREENHECK GB-90-4~~	~~ROOF CENTRIFUGAL~~	~~500~~	~~0.25~~	~~951~~				~~1/4~~	~~120/1~~	~~Y~~		DEMO
EF-7	**INFIELD TRAINING**	**GREENHECK LB-42-10**	**LOW SILHOUETTE**	**11000**	**0.25**	**302**				**1**	**460/3**	**Y**		**EXISTING**
EF-8	**INFIELD TRAINING**	**GREENHECK LB-36-7**	**LOW SILHOUETTE**	**3300**	**0.25**	**331**				**3/4**	**460/3**	**Y**		**EXISTING**
~~EF-9~~	~~RECREATION/TRAINING~~	~~GREENHECK GB-120-4~~	~~ROOF CENTRIFUGAL~~	~~600~~	~~0.25~~	~~755~~				~~1/4~~	~~120/1~~	~~Y~~		DEMO
EF-10	**MEN'S / WOMEN'S RESTROOM**	**GREENHECK GB-140-4**	**ROOF CENTRIFUGAL**	**850**	**0.25**	**458**				**1/4**	**120/1**	**Y**		**EXISTING**
~~EF-11~~	~~AUTO EXHAUST~~	~~CAR-MON 14F~~	~~CAR-MON~~	~~800~~	~~1.8~~	~~-~~				~~1-1/2~~	~~460/3~~	~~N~~		DEMO
~~EF-13~~	~~LIGHT CANOPY~~	~~BSQ-14-4~~	~~INLINE CENTRIFUGAL~~	~~1400~~	~~0.25~~	~~821~~				~~1/4~~	~~120/1~~	~~N~~		DEMO
~~EF-14~~	~~AIR COMPRESSOR~~	~~GREENHECK GB-140-4~~	~~ROOF CENTRIFUGAL~~	~~1000~~	~~0.25~~	~~751~~				~~1/4~~	~~120/1~~	~~Y~~		DEMO

NOTES:
1. POWER WIRING AND DISCONNECT SWITCH BY ELECTRICAL CONTRACTOR.

GAS FIRED RADIANT HEATER SCHEDULE

UNIT NO.	AREA SERVED	MFG & MODEL NO.	CFM	HP	MBH INPUT	MBH OUTPUT	VOLT/PH	AMPS	FLUE SIZE	WT LBS	NOTES
~~GFRH-1~~	~~AUTO CENTER~~	~~REZNOR RIRH--1-25~~			~~25~~		~~115/1~~			~~25~~	DEMO
~~GFRH-2~~	~~AUTO CENTER~~	~~REZNOR RIRH--1-25~~			~~25~~		~~115/1~~			~~25~~	DEMO
~~GFRH-3~~	~~AUTO CENTER~~	~~REZNOR RIRH--1-25~~			~~25~~		~~115/1~~			~~25~~	DEMO
~~GFRH-4~~	~~AUTO CENTER~~	~~REZNOR RIRH--1-25~~			~~25~~		~~115/1~~			~~25~~	DEMO
~~GFRH-5~~	~~AUTO CENTER~~	~~REZNOR RIRH--1-25~~			~~25~~		~~115/1~~			~~25~~	DEMO
~~GFRH-6~~	~~AUTO CENTER~~	~~REZNOR RIRH--1-25~~			~~25~~		~~115/1~~			~~25~~	DEMO
~~GFRH-7~~	~~AUTO CENTER~~	~~REZNOR RIRH--1-25~~			~~25~~		~~115/1~~			~~25~~	DEMO
~~GFRH-8~~	~~AUTO CENTER~~	~~REZNOR RIRH--1-25~~			~~25~~		~~115/1~~			~~25~~	DEMO
~~GFRH-9~~	~~AUTO CENTER~~	~~REZNOR RIRH--1-25~~			~~25~~		~~115/1~~			~~25~~	DEMO
~~GFRH-10~~	~~AUTO CENTER~~	~~REZNOR RIRH--1-25~~			~~25~~		~~115/1~~			~~25~~	DEMO

NOTES:

GAS FIRED UNIT HEATER SCHEDULE

UNIT NO.	AREA SERVED	MFG & MODEL NO.	CFM	HP	MBH INPUT	MBH OUTPUT	VOLT/PH	AMPS	FLUE SIZE	WT LBS	NOTES
~~GFUH-1~~		~~REZNOR FE-100~~	~~1250~~	~~1/30~~	~~100~~	~~80~~	~~115/1~~			~~100~~	DEMO
~~GFUH-2~~		~~REZNOR FE-100~~	~~1250~~	~~1/30~~	~~100~~	~~80~~	~~115/1~~			~~100~~	DEMO
~~GFUH-3~~		~~REZNOR FE-50~~	~~650~~	~~1/40~~	~~50~~	~~40~~	~~115/1~~			~~85~~	DEMO
~~GFUH-4~~		~~REZNOR FE-50~~	~~650~~	~~1/40~~	~~50~~	~~40~~	~~115/1~~			~~85~~	DEMO
~~GFUH-5~~		~~REZNOR FE-75~~	~~980~~	~~1/35~~	~~75~~	~~60~~	~~115/1~~			~~95~~	DEMO
~~GFUH-6~~		~~REZNOR FE-75~~	~~980~~	~~1/35~~	~~75~~	~~60~~	~~115/1~~			~~95~~	DEMO
GFUH-7		REZNOR FE-165	2200	1/20	165	132	115/1			150	EXISTING
GFUH-8		REZNOR FE-165	2200	1/20	165	132	115/1			150	EXISTING

NOTES:

PROPELLER FAN SCHEDULE

UNIT NO.	AREA SERVED	MFG & MODEL NO.	TYPE	CFM	ESP	RPM	WATTS	VOLT/PH	BDD	WT LBS	NOTES
~~PF-1~~	~~AUTO CENTER~~	~~EMERSON HG 1052~~	~~PROP~~	~~19800~~	~~-~~	~~245~~	~~72~~	~~120/1~~			DEMO
~~PF-2~~	~~AUTO CENTER~~	~~EMERSON HG 1052~~	~~PROP~~	~~19800~~	~~-~~	~~245~~	~~72~~	~~120/1~~			DEMO
~~PF-3~~	~~AUTO CENTER~~	~~EMERSON HG 1052~~	~~PROP~~	~~19800~~	~~-~~	~~245~~	~~72~~	~~120/1~~			DEMO
~~PF-4~~	~~AUTO CENTER~~	~~EMERSON HG 1052~~	~~PROP~~	~~19800~~	~~-~~	~~245~~	~~72~~	~~120/1~~			DEMO
~~PF-5~~	~~AUTO CENTER~~	~~EMERSON HG 1052~~	~~PROP~~	~~19800~~	~~-~~	~~245~~	~~72~~	~~120/1~~			DEMO
~~PF-6~~	~~AUTO CENTER~~	~~EMERSON HG 1052~~	~~PROP~~	~~19800~~	~~-~~	~~245~~	~~72~~	~~120/1~~			DEMO
~~PF-7~~	~~AUTO CENTER~~	~~EMERSON HG 1052~~	~~PROP~~	~~19800~~	~~-~~	~~245~~	~~72~~	~~120/1~~			DEMO
~~PF-8~~	~~AUTO CENTER~~	~~EMERSON HG 1052~~	~~PROP~~	~~19800~~	~~-~~	~~245~~	~~72~~	~~120/1~~			DEMO
~~PF-9~~	~~AUTO CENTER~~	~~EMERSON HG 1052~~	~~PROP~~	~~19800~~	~~-~~	~~245~~	~~72~~	~~120/1~~			DEMO
~~PF-10~~	~~AUTO CENTER~~	~~EMERSON HG 1052~~	~~PROP~~	~~19800~~	~~-~~	~~245~~	~~72~~	~~120/1~~			DEMO

NOTES:
1. POWER WIRING AND DISCONNECT SWITCH BY ELECTRICAL CONTRACTOR.

MECHANICAL GENERAL ABBREVIATIONS

ABBV	FULL NAME	ABBV	FULL NAME	ABBV	FULL NAME
AC	AIR CONDITIONING UNIT	FCU	FAN COIL UNIT	NOM	NOMINAL
AFF	ABOVE FINISHED FLOOR	FD	FIRE DAMPER	NTS	NOT TO SCALE
AHU	AIR HANDLING UNIT	FLA	FULL LOAD AMPS	OBD	OPPOSED BLADE DAMPER
AL	ALUMINUM	FOB	FLAT ON BOTTOM	OD	OUTSIDE DIMENSION
BAS	BUILDING AUTOMATION SYSTEM	FOT	FLAT ON TOP	POC	POINT OF CONNECTION
BDD	BACK DRAFT DAMPER	FSD	FIRE SMOKE DAMPER	PRV	PRESSURE REDUCING VALVE
BI	BLACK IRON	GALV	GALVANIZED	PVC	POLYVINYL CHLORIDE
BOD	BOTTOM OF DUCT	GC	GENERAL CONTRACTOR	REQ'D	REQUIRED
BOTT	BOTTOM	GENX	GENERATOR EXHAUST	RPBA	REDUCED PRESSURE BACKFLOW ASSY
BTU	BRITISH THERMAL UNITS	GLVNL	GALVANNEAL	RTU	ROOFTOP UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR	GPM	GALLONS PER MINUTE	SA	SUPPLY AIR
CAT1	CATEGORY ONE VENT	GREASE	GREASE DUCT	SD	SMOKE DAMPER
CAT4	CATEGORY FOUR VENT	GWB	GYPSUM WALL BOARD	SL	SOUND LINED
CFM	CUBIC FEET PER MINUTE	HP	HORSE POWER, HEAT PUMP	SM	SHEET METAL
CPVC	CPVC MATERIAL	HVAC	HEATING, VENTILATION AND AIR COND.	SP	STATIC PRESSURE
DB	DUCTBOARD	HX	HEAT EXCHANGER	SS	STAINLESS STEEL
DDC	DIRECT DIGITAL CONTROLS	ID	INSIDE DIMENSION	SUSP	SUSPENDED
DEMO	DEMOLISH	LAT	LEAVING AIR TEMPERATURE	T	THERMOSTAT
DIFF	DIFFUSER	LBS	POUNDS	TOD	TOP OF DUCT
DMPR	DAMPER	LWT	LEAVING WATER TEMPERATURE	TV	TURNING VANES
DN	DOWN	MAT	MIXED AIR TEMPERATURE	TYP	TYPICAL
E	EXISTING	MBH	ONE THOUSAND BTUH	UNO	UNLESS NOTED OTHERWISE
EAT	ENTERING AIR TEMPERATURE	MCA	MINIMUM CIRCUIT AMPACITY	VAV	VARIABLE AIR VOLUME
EC	EGGCRATE	MD	MOTORIZED DAMPER	VD	VOLUME DAMPER
EER	ENERGY EFFICIENCY RATIO	MIN	MINIMUM	VFD	VARIABLE FREQUENCY DRIVE
EF	EXHAUST FAN	M-M	MACDONALD-MILLER	W	DUCT INSULATION WRAP
ELEV	ELEVATION	NC	NORMALLY CLOSED	W/	WITH
ESP	EXTERNAL STATIC PRESSURE	NIC	NOT IN CONTRACT	WELD	WELDED
EWT	ENTERING WATER TEMPERATURE	NO	NORMALLY OPEN	Ø	VOLTAGE PHASE & DUCT DIAMETER

HVAC SYSTEM ABBREVIATIONS

ABBV	FULL NAME	ABBV	FULL NAME	ABBV	FULL NAME
COMB-GALV	COMBUSTION AIR	EA AL	EXHAUST ALUMINUM	OA	OUTSIDE AIR
SA	SUPPLY AIR LP	EA SS	EXHAUST SS 304	OA-KOOL	OUTSIDE AIR KOOLDUCT
SA-KOOL	SUPPLY AIR LP KOOLDUCT	EA AL WELD	EXHAUST ALUMINUM WELDED	RLF	RELIEF AIR
SA AL	SUPPLY AIR LP ALUMINUM	EA GALV WELD	EXHAUST GALV WELDED	RA	RETURN AIR
SA SS	SUPPLY AIR LP SS 304 2B	EA GLVNL WELD	EXHAUST GALVANNEAL WELDED	DB	DUCTBOARD
SA AL WELD	SUPPLY AIR LP ALUMINUM WELDED	EA SS WELD	EXHAUST SS 304 WELDED	FLU-CAT1	FLUE VENT - CATEGORY 1
SA GALV WELD	SUPPLY AIR MP GALV WELDED	EA BI GREASE	EXHAUST GREASE BLACK IRON WELD	FLU-CAT4	FLUE VENT - CATEGORY 4
SA GLVNL WELD	SUPPLY AIR MP GALVANNEAL WELD	EA GALV GREASE	EXHAUST GREASE GALV WELDED	FLU-CPVC	FLUE VENT - CPVC MATERIAL
SA SS WELD	WELDED SUPPLY AIR LP SS 304 2B	EA GALV GREASE	EXHAUST GREASE SS 304 WELDED	FLU-SS	FLUE VENT - SHOP BUILT SS 304
EA	EXHAUST AIR	MUA	MAKE-UP AIR	FLU-GALV	FLUE VENT - SHOP BUILT GALV

PACKAGED GAS/ELEC AIR CONDITIONING UNIT SCHEDULE

UNIT NO.	MFG & MODEL NO.	NOM TONS	GAS HEAT MBH INPUT	GAS HEAT MBH OUTPUT	SUPPLY FAN CFM	SUPPLY FAN ESP	SUPPLY FAN HP	OSA CFM	RELIEF FAN CFM	RELIEF FAN HP	RELIEF FAN #	EER/ SEER	IPLV	ELECTRICAL VOLT/PH	ELECTRICAL MCA	WT LBS	NOTES
RTU-1	**MCQUAY CUR160EN30**	**16**	**300**	**241.2**	**7000**	**0.8**	**5**	**3000**	**-**	**1/2**	**-**			**460/3**	**47**	**2400**	**EXISTING, 1-3**
RTU-2	**MCQUAY CUR351EH**	**35**	**400**	**327.2**	**16000**	**0.9**	**15**	**5520**	**12000**	**5**	**2**			**460/3**	**120**	**4730**	**EXISTING, 1-3**
RTU-3	MCQUAY CUR351EH	35	400	327.2	16000	0.9	15	2675	12000	5	2			460/3	120	4730	EXISTING, 1-3

NOTES:
1. ENTHALPY CONTROLLED ECONOMIZER
2. SPRING RETURN OUTSIDE AIR DAMPERS
3. ROOF CURB

GAS MAKE-UP AIR UNIT SCHEDULE

UNIT NO.	AREA SERVED	MFG & MODEL NO.	FAN CFM	FAN ESP	FAN VOLT/PH	FAN HP	MBH INPUT	MBH OUTPUT	WT LBS	NOTES
MUAU-1	**INFIELD TRAINING**	**REZNOR RPAK-2**	**3300**	**1.5**	**480/3**	**7-1/2**	**800**	**616**	**1405**	**EXISTING, 1, 2, 3**

NOTES:
1. 100% OUTSIDE AIR
2. ROOF CURB
3. EXISTING UNIT WAS DESIGNED FOR 10,000 CFM. BALANCE TO 3,300 CFM.

GAS FIRED ENTRANCE HEATER SCHEDULE

UNIT NO.	AREA SERVED	MFG & MODEL NO.	CFM	HP	MBH INPUT	MBH OUTPUT	VOLT/PH	AMPS	FLUE SIZE	WT LBS	NOTES
GFEH-1		REZNOR RXE-225	2400	1	225	173.25	460/3			800	ABANDON IN PLACE
GFEH-2		REZNOR RXE-175	1600	1/2	175	134.75	115/1			700	EXISTING
GFEH-3		REZNOR RXE-175	1600	1/2	175	134.75	115/1			700	EXISTING
GFEH-4		REZNOR RXE-175	1600	1/2	175	134.75	115/1			700	EXISTING

NOTES:
1. 100% RETURN AIR.
2. ROOF CURB

GRAVITY INTAKE HOOD SCHEDULE

UNIT NO.	MANUFACTURER & MODEL NO.	OUTSIDE DIMENSION	THROAT DIMENSION	CURB CAP DIMENSION	HEIGHT	DAMPER	INTAKE CFM	PRESSURE DROP (IN)	WEIGHT (LBS)	NOTES
IH-1	GREENHECK FHI	67"X84"	36"X48"		33"		11000			EXISTING, 1,2

NOTES:
1. WITH ROOF CURB, BIRDSCREEN, AND 120V MOTORIZED DAMPER
2. DAMPER INTERLOCKED TO OPEN WHEN EF-7 (SUMMER VENTILATION IS ENERGIZED)

SEQUENCE OF OPERATION

PACKAGED GAS / ELECTRIC AIR CONDITIONING UNITS (RTU-1 AND RTU-2)

SERVES: WORKOUT AREAS
CONTROL TYPE: STAND-ALONE
OCCUPIED HOURS: 7:00AM TO 6:00 PM MONDAY THROUGH FRIDAY (ADJUSTABLE)
COOLING SETPOINT: 80° (ADJ.)
COOLING SETPOINT (UNOCCUPIED): 85° (ADJ.)
HEATING SETPOINT: 60°(ADJ.)
HEATING SETPOINT (UNOCCUPIED): 55° (ADJ.)

OCCUPIED MODE: THE SUPPLY FAN RUNS CONTINUOUSLY, THE OUTSIDE AIR DAMPER IS OPEN TO THE MINIMUM POSITION AND THE ECONOMIZER AND MECHANICAL COOLING OPERATE IN SEQUENCE TO MAINTAIN THE OCCUPIED COOLING SETPOINT. THE UNIT STAGES THE GAS HEAT AS NEEDED TO MAINTAIN THE OCCUPIED ROOM HEATING SETPOINT. WHEN THE UNIT IS IN THE HEATING POSTURE, THE OUTSIDE AIR DAMPER REMAINS IN THE MINIMUM POSITION

UNOCCUPIED MODE: SUPPLY FAN IS OFF, THE OUTSIDE AIR DAMPER IS CLOSED AND COOLING/HEATING IS DISABLED. FAN SHALL RUN AND COOLING/HEATING ENABLED TO MAINTAIN UNOCCUPIED SPACE COOLING AND HEATING SETPOINTS (WHILE OUTSIDE AIR DAMPER REMAINS CLOSED) AS NOTED BELOW FOR NIGHT SETBACK AND NIGHT SETUP.

NIGHT SETBACK: WHEN THE SPACE TEMPERATURE FALLS BELOW THE UNOCCUPIED TEMPERATURE SETPOINT, THE FAN AND HEAT ARE CYLCED AS NEEDED TO BRING THE SPACE UP TO THE NIGHT SETPOINT TEMPERATURE. THE OUTSIDE AIR DAMPER REMAINS CLOSED DURING THIS MODE.

NIGHT SETUP: WHEN THE SPACE TEMPERATURE RISES ABOVE THE UNOCCUPIED TEMPERATURE SETPOINT, THE FAN IS CYCLED, AND THE ECONOMIZER AND MECHANICAL COOLING ARE MODULATED TO RETURN THE SPACE TO THE UNOCCUPIED SETPOINT.

MAKEUP AIR UNIT (MUAU-1)

SERVES: INFIELD TRAINING
CONTROL TYPE: STAND-ALONE
OCCUPIED HOURS: 7:00AM TO 6:00 PM MONDAY THROUGH FRIDAY (ADJUSTABLE)
DISCHARGE AIR TEMPERATURE SETPOINT: 60° (ADJ.)
CO2 CONCENTRATION SETPOINT: 1,000 PPM (ADJ)

OCCUPIED MODE: THE SUPPLY FAN RUNS AS NECESSARY TO SATISFY THE CO2 CONCENTRATION SETPOINT. WHEN THE CO2 CONCENTRATION RISES ABOVE SETPOINT, THE FAN SHALL BE ENERGIZED AND THE GAS HEAT SHALL STAGE AS NECESSARY TO MAINTAIN DISCHARGE AIR TEMPERATURE SETPOINT. IF CO2 CONCENTRATION IS BELOW SETPOINT, THE SUPPLY FAN SHALL BE OFF.

UNOCCUPIED MODE: SUPPLY FAN IS OFF, THE OUTSIDE AIR DAMPER IS CLOSED AND HEATING IS DISABLED.

EXHAUST FAN (EF-8)

SERVES: INFIELD TRAINING
CONTROL TYPE: STAND-ALONE
OCCUPIED HOURS: 7:00AM TO 6:00 PM MONDAY THROUGH FRIDAY (ADJUSTABLE)

OCCUPIED MODE: INTERLOCK OPERATION WITH MUAU-1. WHEN SUPPLY FAN FOR MUAU-1 IS ENERGIZED, EF-8 SHALL BE ENERGIZED.

UNOCCUPIED MODE: FAN SHALL BE OFF.

Mechanical Engineer is using exception 1 of WSEC section C403.3.5.1 in lieu of DOAS for this space per his comment letter.

HVAC GENERAL NOTES - 2018 WA STATE

1. THESE PLANS ARE SCHEMATIC AND DO NOT SHOW EXACT ROUTING OR EVERY OFFSET WHICH MAY BE REQUIRED. THE HVAC CONTRACTOR IS TO COORDINATE WITH ALL OTHER TRADES AND IS TO VERIFY ALL CLEARANCES BEFORE COMMENCING WORK.
2. MATERIALS, METHODS, AND INSTALLATION SHALL COMPLY WITH THE PROVISIONS OF THE 2018 EDITIONS OF THE INTERNATIONAL MECHANICAL CODE, INTERNATIONAL BUILDING CODE, INTERNATIONAL FIRE CODE 2018 WSEC, AND LOCAL CODES AND ORDINANCES.
3. DUCT CONSTRUCTION AND HANGING SHALL COMPLY WITH CHAPTER 6 OF THE 2018 IMC AND WITH CURRENT SMACNA STANDARDS. EARTHQUAKE BRACE ALL DUCTS 28" DIA AND LARGER WHICH ARE SUSPENDED MORE THAN 12" BELOW STRUCTURAL SYSTEM.
4. JOINTS OF MEDIUM AND HIGH VELOCITY DUCT SYSTEMS SHALL BE SEALED WITH GASKETS OR LISTED MASTIC TYPE DUCT SEALANT.
5. DUCTS SHALL BE INSULATED AS INDICATED ON PLANS, PER 2018 WASHINGTON STATE ENERGY CODE, COMMERCIAL PROVISIONS
   - DUCT WRAP, WHERE INDICATED, SHALL BE 0.75 LB/CU FT FIBERGLASS DUCT INSULATION WITH A FACTORY APPLIED REINFORCED ALUM. FOIL VAPOR BARRIER.
   - SOUND LINING, WHERE INDICATED, SHALL BE 1" 1.5 LB/CU FT FIBERGLASS DUCT LINING COATED TO PREVENT FIBER EROSION AT VELOCITIES UP TO 6000 FPM.
   - DUCT BOARD, WHERE INDICATED, SHALL BE 1" RIGID FRK FACED EI 475 FIBERGLASS DUCT BOARD SYSTEM, UL 181 LISTED AS A CLASS 1 AIR DUCT.
   - SUPPLY DUCT WHICH CONVEYS SUPPLY AIR AT TEMPERATURES LESS THAN 55 DEG F OR GREATER THAN 105 DEG F WHEN LOCATED IN CONDITIONED SPACE SHALL BE INSULATED WITH A MINIMUM OF R-3.3 , WHEN LOCATED IN UNCONDITIONED SPACE R-6 AND WHEN LOCATED OUTSIDE THE BUILDING R-8 (CLIMATE ZONE 4) OR R-12 (CLIMATE ZONE 5) PER WSEC C403.10.1 AND TABLE C403.10.1.2. DUCTWORK EXPOSED TO VIEW WITHIN A ZONE THAT SERVES THAT ZONE IS NOT REQUIRED TO BE INSULATED.
   - OUTSIDE AIR DUCT INSULATION INSIDE THE BUILDING SHALL BE INSULATED PER C403.10.1 AND TABLE C403.10.1.1 AS FOLLOWS:
     IF >= 2800 CFM INSULATE TO R-16 UPSTREAM OF AUTOMATIC SHUTOFF DAMPERS AND R-8 (CLIMATE ZONE 4C) OR R-12 (CLIMATE ZONE 5B) DOWNSTREAM OF AUTOMATIC SHUTOFF DAMPERS.
     IF < 2800 CFM INSULATE TO R-7.
6. FLEX DUCTS SHALL CONSIST OF A REINFORCED VAPOR BARRIER, 1 1/2" FIBERGLASS INSULATION, AND NON-PERFORATED INTERIOR LINER WITH WIRE HELIX. DUCT SHALL BE A UL 181 LISTED CLASS 1 AIR DUCT. FLEX DUCTS SHALL ONLY BE USED WHERE SHOWN AND SHALL NOT EXCEED 12' IN LENGTH UNLESS NOTED OTHERWISE.
7. PROVIDE EARTHQUAKE RESTRAINT FOR HVAC EQUIPMENT IN ACCORDANCE WITH SECTION 1613 OF THE 2018 IBC.
8. PROVIDE FIRE DAMPERS, SMOKE DAMPERS AND FIRE/SMOKE DAMPERS WHERE INDICATED ON PLANS AND AS REQUIRED BY SECTION 717.5 OF THE 2018 IBC. PROVIDE CEILING FIRE DAMPERS WHERE INDICATED ON PLANS AND AS REQUIRED BY SECTION 717.6.2.1 OF THE 2018 IBC. INSTALL FIRE DAMPERS SMOKE DAMPERS AND FIRE/SMOKE DAMPERS IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS, THE TERMS OF THEIR LISTING, AND THE REQUIREMENTS OF THE CODE.
9. PIPING PENETRATIONS OF FIRE RATED WALLS OR FLOORS SHALL BE SLEEVED AND FIRE STOPPED WITH LISTED MATERIALS SO AS TO MAINTAIN THE INTEGRITY AND RATING OF THE FLOOR OR WALL.
10. PROVIDE RETURN DUCT SMOKE DETECTOR AUTOMATIC SHUT DOWN OF ALL NEW HEATING, COOLING, OR VENTILATION EQUIPMENT MOVING IN EXCESS OF 2000 CFM IN ACCORDANCE WITH SECTION 606 OF THE 2018 IMC. POWER AND INTERLOCK WIRING WITH THE BUILDING FIRE ALARM SYSTEM IS BY THE ELECTRICAL CONTRACTOR. BAS TO MONITOR FIRE ALARM CONTROL PANEL AND SHUT DOWN ALL FAN TERMINAL UNITS DURING ANY BUILDING FIRE ALARM EVENT, IN ACCORDANCE WITH 2018 IMC 606.2.2.
11. HVAC EQUIPMENT, VALVES AND DAMPERS SHALL BE LOCATED IN EASILY ACCESSIBLE LOCATIONS. UNLESS SHOWN ON ARCHITECTURAL DRAWINGS, REQUIRED ACCESS PANELS SHALL BE PROVIDED AND INSTALLED BY THE GENERAL CONTRACTOR. MINIMUM ACCESS DOOR SIZE FOR VALVES AND DAMPERS TO BE 18" X 18".
12. WITHIN 90 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE, RECORD DRAWINGS OF THE ACTUAL INSTALLATION TO BE PROVIDED TO THE BUILDING OWNER. RECORD DRAWINGS SHALL INCLUDE AS A MINIMUM THE LOCATION AND PERFORMANCE DATA ON EACH PIECE OF EQUIPMENT, GENERAL CONFIGURATION OF DUCT AND PIPE DISTRIBUTION SYSTEM, INCLUDING SIZES, AND THE TERMINAL AIR AND WATER DESIGN FLOW RATES.
13. OPERATING AND MAINTENANCE MANUALS TO BE PROVIDED TO THE BUILDING OWNER THAT INCLUDE: SUBMITTAL DATA, NAMES AND ADDRESSES OF AT LEAST ONE SERVICE AGENCY, HVAC CONTROLS SYSTEM MAINTENANCE AND CALIBRATION INFORMATION AND A COMPLETE OPERATIONAL NARRATIVE FOR EACH SYSTEM.
14. COMMISSIONING IS REQUIRED ON THIS PROJECT IN ACCORD WITH 2018 WASHINGTON STATE ENERGY CODE (WSEC), COMMERCIAL PROVISIONS AND SECTION C408.
15. A COMPLETE REPORT OF TEST PROCEDURES AND RESULTS SHALL BE PREPARED AND FILED WITH THE OWNER
16. MATERIALS WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL BE LISTED AND LABELED AS HAVING A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723, EXCEPT AS NOTED IN SECTION 602.2.1 OF THE 2018 IMC.

LEGAL DESCRIPTION

PARCEL NUMBER: 6021590090
SITE ADDRESS: 3500 S MERIDIAN STE 900

LEGAL DESCRIPTION:

CONTACT LIST

TITLE	NAME	COMPANY	PHONE NUMBER	EMAIL
PROJECT DESIGN ENGINEER	KEVIN KRUEGER	MACDONALD MILLER	206-768-4284	KEVIN.KRUEGER@MACMILLER.COM
PROJECT EXECUTIVE	JOE BRUCKER	MACDONALD MILLER	206-768-4140	JOE.BRUCKER@MACMILLER.COM
SPECIAL PROJECTS COORDINATOR	RYAN MILLER	MACDONALD MILLER	206-519-4378	RYAN.MILLER@MACMILLER.COM
SHEETMETAL SUPERINTENDENT	NATHAN WAAGEN	MACDONALD MILLER	206-768-3942	NATHAN.WAAGEN@MACMILLER.COM

DRAWING SHEET INDEX - HVAC

SCOPE OF WORK

DEMO EXISTING GAS FIRED RADIANT HEATERS, GAS FIRED UNIT HEATERS, PROPELLER FANS, EXHAUST FANS, DUCT AND DIFFUSERS PER PLANS
INSTALL NEW DUCT AND DIFFUSERS PER PLANS
AIR BALANCE (3) ZONES.

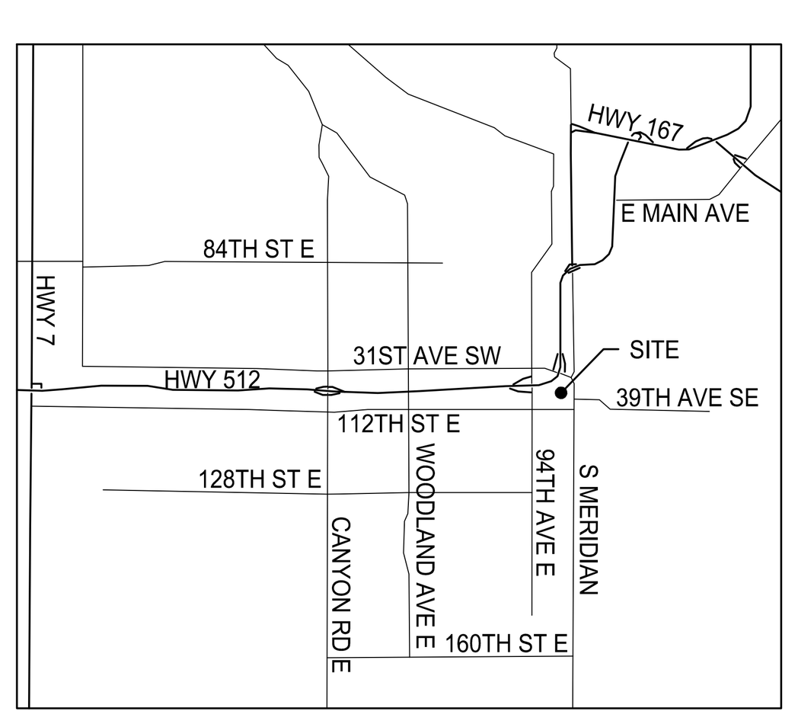
CODE COMPLIANCE

MUAU-1 (DOAS SYSTEM) MEETS EXCEPTION 1 OF C403.3.5.1 FOR OCCUPIED SPACES SERVED BY EQUIPMENT LESS THAN 5,000 CFM THAT INCLUDES DEMAND CONTROL VENTILATION CONFIGURED TO REDUCE OUTDOOR AIR BY AT LEAST 50% BELOW DESIGN MINIMUM VENTILATION RATES WHEN THE ACTUAL OCCUPANCY OF THE SPACE IS LESS THAN DESIGN OCCUPANCY.

NEW LEVEL 360 VENTILATION CALCULATIONS

RM NO.	NAME	TYPE	AREA	OCCUPANCY DEFAULT # / 1000 FT²	OCCUPANCY DEFAULT	OCCUPANCY ACTUAL	ASHRAE 62.1 CFM/ PERSON	ASHRAE 62.1 CFM / FT²	ASHRAE 62.1 E_z	ASHRAE 62.1 REQUIRED CFM	DESIGN CFM
A-1	WEIGHT ROOM	HEALTH CLUB / WEIGHT ROOM	3295	10	33	35	20	0.06	0.8	1122	1125
A-5	OFFICE	OFFICE	68	5	1	1	5	0.06	0.8	11	15
A-6	STORAGE ROOM	STORAGE ROOM	531	-	-	-	-	0.12	0.8	80	80
A-7	INFIELD TRAINING	HEALTH CLUB / WEIGHT ROOM	7915	10	80	80	20	0.06	0.8	2594	3300
A-8	BATTING CAGE	HEALTH CLUB / WEIGHT ROOM	500	10	5	4	20	0.06	0.8	138	140
A-9	BATTING CAGE	HEALTH CLUB / WEIGHT ROOM	1358	10	14	10	20	0.06	0.8	352	355
A-11	STORAGE ROOM	STORAGE ROOM	145	-	-	-	-	-	-	N/A	25
			13812			130					5040
B-1	CIRCULATION AREA	CORRIDORS	2754	-	-	-	-	0.06	0.8	207	210
B-2	BATTING CAGE	HEALTH CLUB / WEIGHT ROOM	675	10	7	7	20	0.06	0.8	226	230
B-3	BATTING CAGE	HEALTH CLUB / WEIGHT ROOM	2112	10	22	22	20	0.06	0.8	708	710
B-4	BATTING CAGE	HEALTH CLUB / WEIGHT ROOM	2115	10	22	22	20	0.06	0.8	709	710
B-5	BATTING CAGE	HEALTH CLUB / WEIGHT ROOM	1621	10	17	17	20	0.06	0.8	547	550
B-6	BATTING CAGE	HEALTH CLUB / WEIGHT ROOM	1848	10	19	19	20	0.06	0.8	614	615
B-7	BATTING CAGE	HEALTH CLUB / WEIGHT ROOM	1855	10	19	19	20	0.06	0.8	614	615
B-8	BATTING CAGE	HEALTH CLUB / WEIGHT ROOM	1842	10	19	19	20	0.06	0.8	613	615
B-9	BATTING CAGE	HEALTH CLUB / WEIGHT ROOM	1980	10	20	20	20	0.06	0.8	649	650
B-10	BATTING CAGE	HEALTH CLUB / WEIGHT ROOM	1854	10	19	19	20	0.06	0.8	614	615
900-90	EGESS ACCESS HALL	CORRIDOR	309	-	-	-	-	-	-		SEE NOTE 1
			18965			164					5520

NOTES
1. EGRESS ACCESS HALL PROVIDED WITH NATURAL VENTILATION PER 2018 WSMC SECTION 401. HALLWAY IS 309 SQUARE FEET AND DOORS PROVIDE 42 SQUARE FEET OF OPENABLE AREA (13.6% OF THE FLOOR AREA BEING VENTILATION - MIN 4% REQUIRED BY CODE)



N VICINITY MAP
NO SCALE

City of Puyallup
Development & Permitting Services
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Building	Planning
Engineering	Public Works
Fire	Traffic

PRCTI20221551

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Phone: 206-763-9400 www.macmiller.com

GEORGE M. GRAHAM STATE OF WASHINGTON 53332 REGISTERED PROFESSIONAL ENGINEER
1/24/2023

	REVISIONS:	DATE
3	PERMIT REVISION SET	01-23-23
2	PERMIT REVISION SET	11-29-22
1	PERMIT SET	09-12-22

NEW LEVEL 360
NEW LEVEL 360 - SOUTH HILL MALL
3500 S MERIDIAN SUITE 900
PUYALLUP, WA 98373

SCHEDULES
HVAC

ISSUED FOR PERMIT

ENGINEER: K KRUEGER
LAST REVISED: 01-23-23
CHECKED BY: G GRAHAM
DATE PLOTTED: 01-23-23
CAD: M HAGBERG
ISSUE DATE:
DRAWING NUMBER: D-4106-72225239-00
SHEET NUMBER:

TM0.01

DPD STAMP

J:\72225239 New Level 360 -BUDO - Engineering\DWG\Mod\72225239TM_01.dwg

HIGHWAY 512

HIGHWAY 512

SOUTH HILL MALL

449'-3"

324'-9"

152'-1"

331'-4"

319'-2"

432'-9"

489'-9"

563'-9"

94TH AVE E

39TH AVE SW

City of Puyallup
Development & Permitting Services
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Engineering	Public Works
Fire	Traffic

PRCTI20221551

N

NTS

Monday, September 12, 2022 5:48:39 PM

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www.macmiller.com
WA Lic No: MACDOFS980RU

ANDREW M. GRATTON
REGISTERED PROFESSIONAL ENGINEER
STATE OF WASHINGTON
53332

1/24/2023

	DATE

	DATE	REVISIONS:
	09-12-22	

	REVISIONS:
1	PERMIT SET

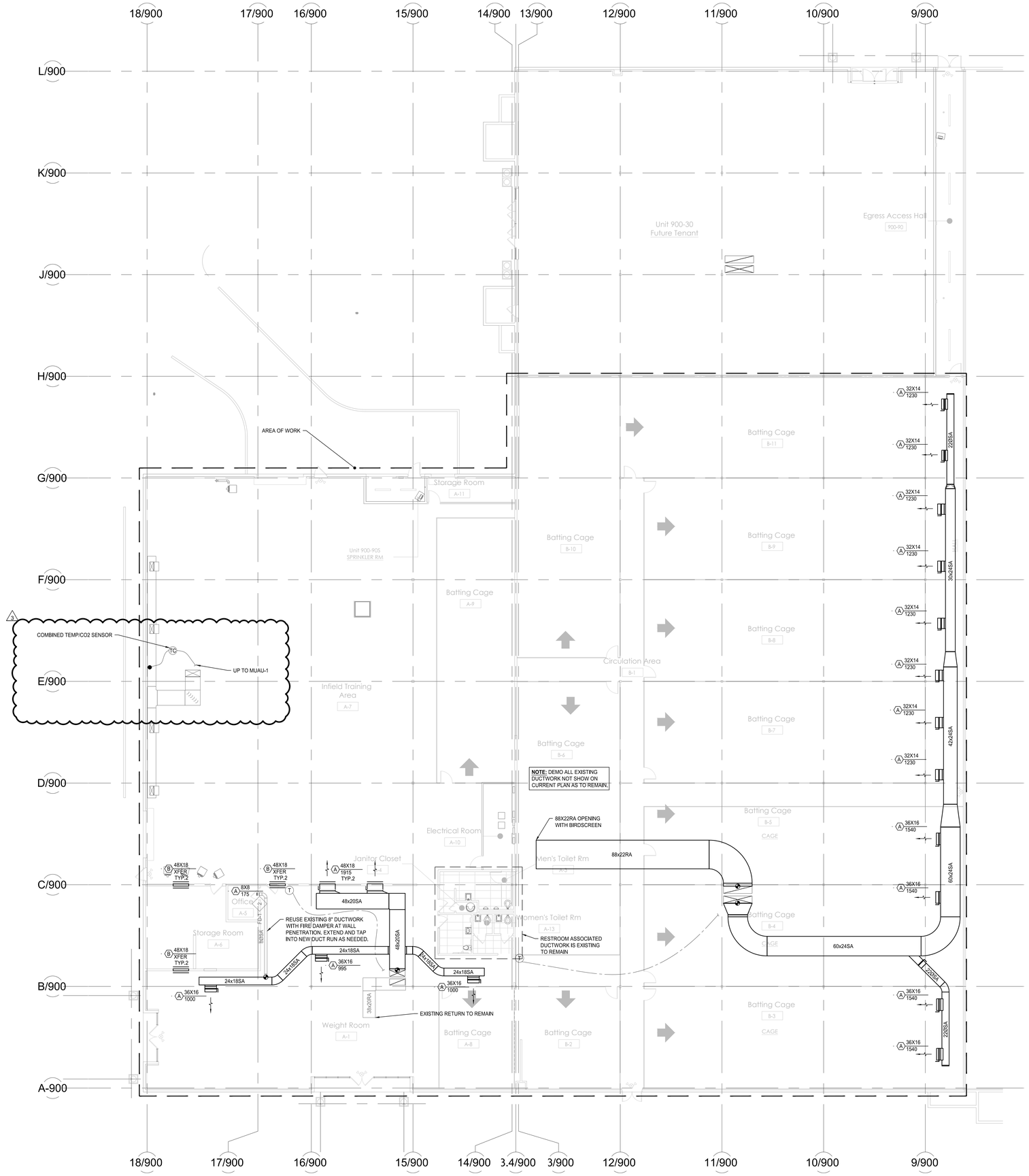
NEW LEVEL 360
NEW LEVEL 360 - SOUTH HILL MALL

2500 S MERIDIAN SUITE 900
PUYALLUP, WA 98373

SITE PLAN

ISSUED FOR PERMIT

ENGINEER: K KRUEGER
LAST REVISED: 08-24-22
CHECKED BY: G GRAHAM
DATE PLOTTED: 08-24-22
CAD: M HAGBERG
ISSUE DATE:
DRAWING NUMBER: D-4106-72225239-00
SHEET NUMBER: TM0.01S



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Development & Permitting Services
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Engineering	Public Works
Fire	Traffic

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Monday, January 23, 2023 4:02:03 PM

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GEORGE M. GRAHAM — STATE OF WASHINGTON — 53332 — REGISTERED PROFESSIONAL ENGINEER

1/24/2023

2	PERMIT REVISION SET	01-23-23
1	PERMIT REVISION SET	11-29-22
0	PERMIT SET	09-12-22
	REVISIONS:	DATE

REVISIONS: DATE

NEW LEVEL 360
NEW LEVEL 360 - SOUTH HILL MALL
3500 S MERIDIAN SUITE 900
PUYALLUP, WA 98373

1ST FLOOR PARTIAL PLAN
HVAC
ISSUED FOR PERMIT

ENGINEER: K KRUEGER
LAST REVISED: 01-23-23
CHECKED BY: G GRAHAM
DATE PLOTTED: 01-23-23
CAD: M HAGBERG
ISSUE DATE:
DRAWING NUMBER: D-4106-72225239-00
SHEET NUMBER: TM2.01

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3/32" = 1'-0"

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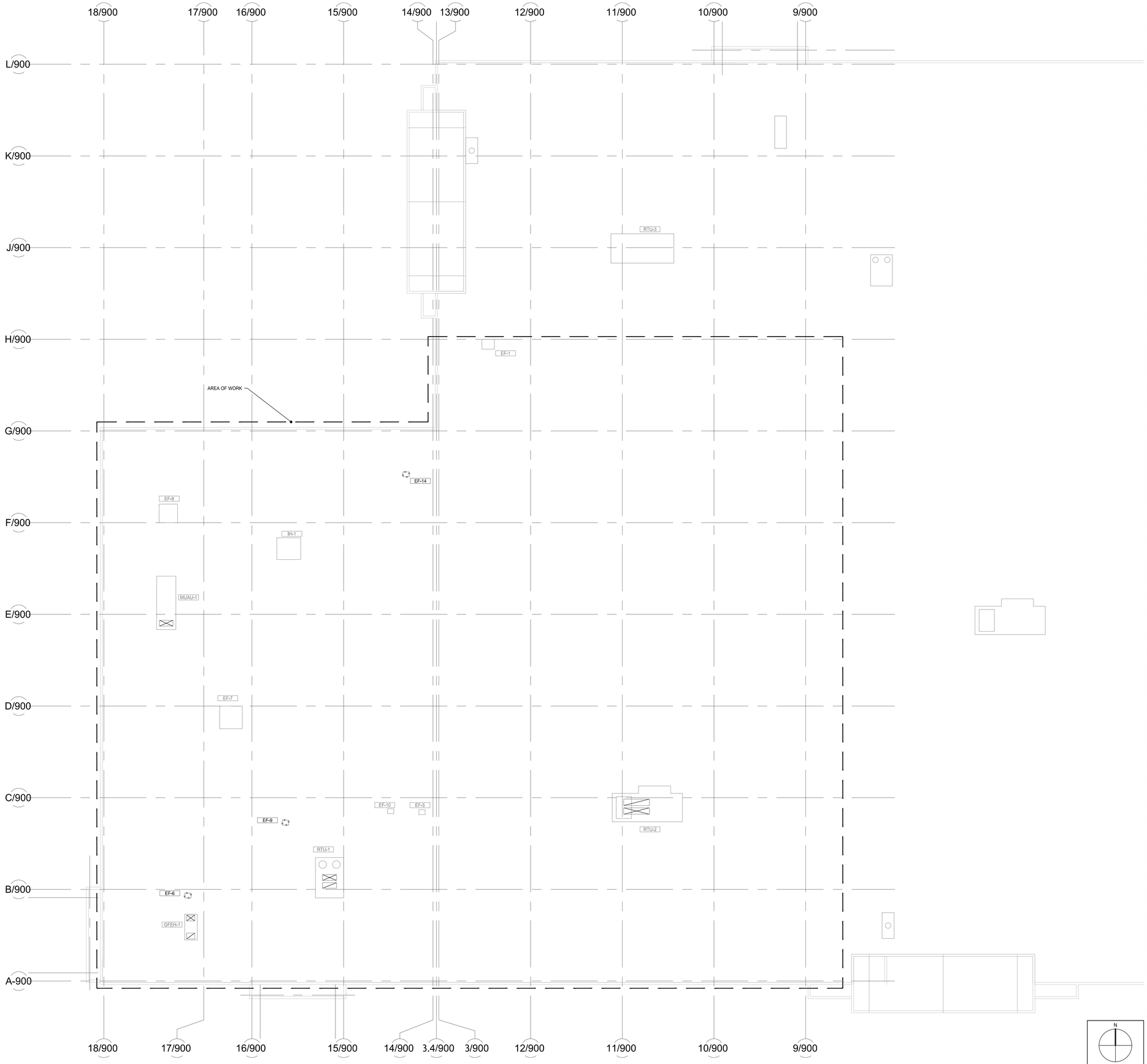

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GEORGE M. GRAHAM
STATE OF WASHINGTON
93332
REGISTERED
PROFESSIONAL ENGINEER

1/24/2023

REVISIONS:	DATE
PERMIT SET	09-12-22
REVISIONS:	DATE

NEW LEVEL 360
NEW LEVEL 360 - SOUTH HILL MALL
3500 S MERIDIAN SUITE 900
PUYALLUP, WA 98373

ROOF PARTIAL DEMO PLAN
HVAC
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ENGINEER: K KRUEGER	LAST REVISED: 08-24-22
CHECKED BY: G GRAHAM	DATE PLOTTED: 08-24-22
CAD: M HAGBERG	ISSUE DATE:

DRAWING NUMBER: D-4106-72225239-00

SHEET NUMBER: DM2.02

N
3/32" = 1'-0"

City of Puyallup
Development & Permitting Services
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Engineering | Public Works
Fire | Traffic

Monday, September 12, 2022 4:00:21 PM

PRCTI20221551

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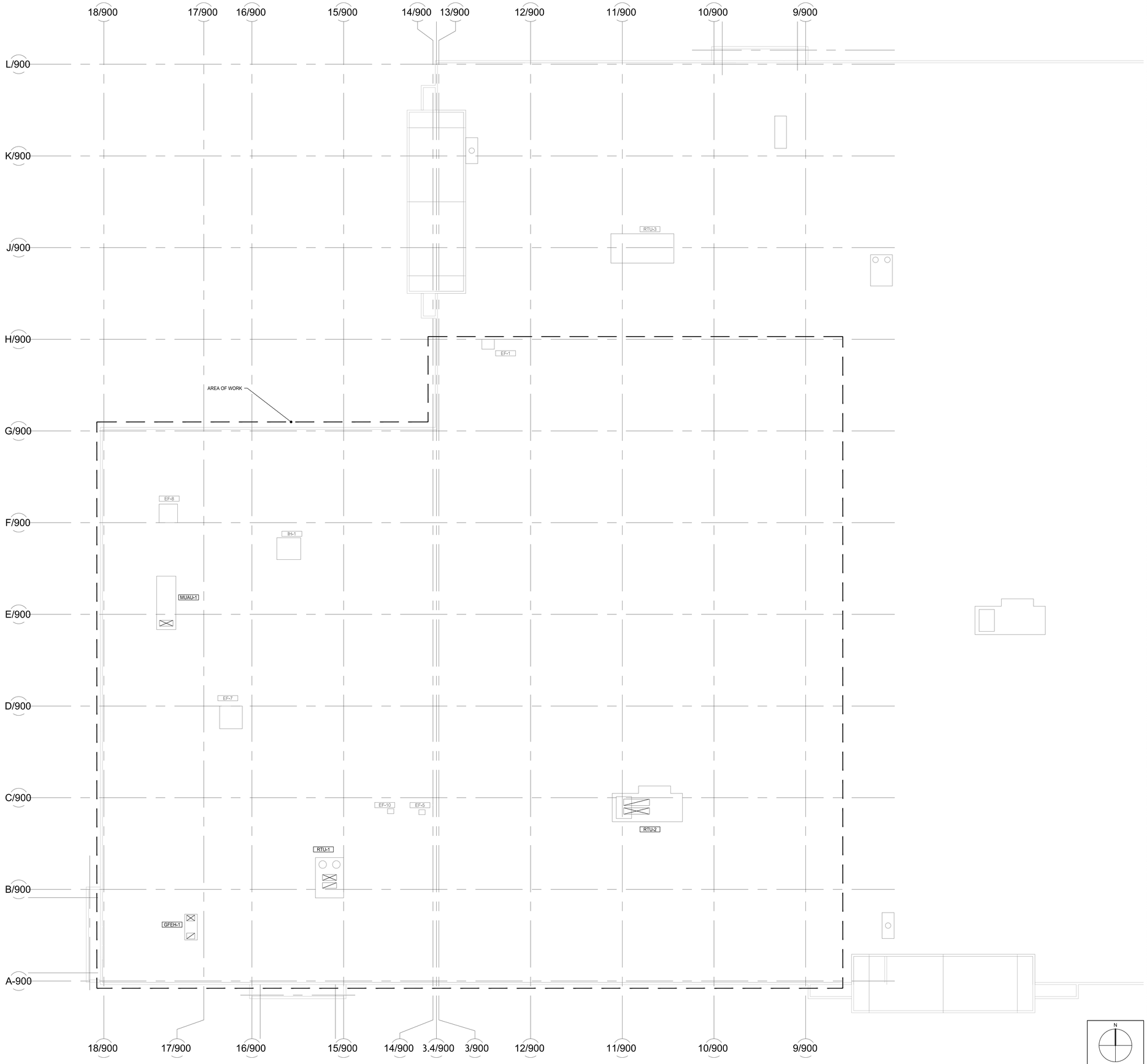

City of Puyallup
Development & Permitting Services
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Building	Planning
Engineering	Public Works
Fire	Traffic

Monday, September 12, 2022 3:58:50 PM

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GEORGE M. GRAHAM
STATE OF WASHINGTON
23332
REGISTERED
PROFESSIONAL ENGINEER

1/24/2023

	DATE

	DATE	REVISIONS:
	09-12-22	

	REVISIONS:
1	PERMIT SET

NEW LEVEL 360
NEW LEVEL 360 - SOUTH HILL MALL

3500 S MERIDIAN SUITE 900
PUYALLUP, WA 98373

ROOF PARTIAL PLAN
HVAC
ISSUED FOR PERMIT

ENGINEER: K KRUEGER
LAST REVISED: 08-24-22
CHECKED BY: G GRAHAM
DATE PLOTTED: 08-24-22
CAD: M HAGBERG
ISSUE DATE:
DRAWING NUMBER: D-4106-72225239-00
SHEET NUMBER: TM2.02

N
3/32" = 1'-0"

IF SHEET IS LESS THAN 30"x42"
IT IS A REDUCED PRINT
SCALE REDUCED ACCORDINGLY

GENERAL SYMBOLS

- SHEET NOTE
- LIGHT LINE INDICATES BACKGROUND
- LIGHT LINE INDICATES EXISTING WORK
- HEAVY LINE INDICATES NEW WORK
- MATCHLINE OR PROPERTY LINE
- LIGHT LINE WITH HEAVY X INDICATES EXISTING WORK TO BE REMOVED
- EXISTING WORK TO BE ABANDONED

DETAILS

SECTION IDENTIFICATION
- INDICATES DIRECTION OF CUTTING PLANE
- LETTER INDICATED SECTION
- SHEET NUMBER WHERE SECTION IS DRAWN

DETAIL IDENTIFICATION
- NUMBER INDICATES DETAIL
- SHEET NUMBER WHERE DETAIL IS DRAWN

ELEVATION IDENTIFICATION
- NUMBER INDICATES ELEVATION
- SHEET NUMBER WHERE ELEVATION IS DRAWN

RACEWAYS

- CONDUITS CONCEALED IN CONSTRUCTION IN FINISHED AREAS, EXPOSED IN UNFINISHED AREAS
- CONDUIT CONCEALED IN OR UNDER FLOOR SLAB

RACEWAYS - INDICATORS

- CONDUIT STUB. TERMINATE WITH BUSHING OR CAP IF UNDERGROUND
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- 2"C 4#1 + 1#6 GND OR 4#1 + 1#6 GND — INDICATES TRADE SIZE 2" OR 53MM CONDUIT WITH (4) #1 AWG AND (1) #6 AWG GROUND
- (2) 2"C 4#1 + 1#6 GND OR (2) 4#1 + 1#6 GND — INDICATES (2) TRADE SIZE 2" OR 53MM CONDUITS WITH (4) #1 AWG AND (1) #6 AWG GROUND CONDUCTORS IN EACH CONDUIT
- L211/1,3 — HOMERUN TO PANELBOARD. NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. (EXAMPLE: HOMERUN TO PANEL L211 CKTS. #1 AND #3)

RACEWAYS - BOXES AND BUSWAYS

- P2 — POWER POLE WITH DEVICES INDICATED IN THE SPECIFICATIONS AND ON THE DRAWINGS, "P" INDICATES TYPE, "2" INDICATES CIRCUIT
- T — TELECOM POLE WITH DEVICES INDICATED IN THE SPECIFICATIONS AND ON THE DRAWINGS, "T" INDICATES TYPE
- TP2 — TELECOM/POWER POLE WITH DEVICES INDICATED IN THE SPECIFICATIONS AND ON THE DRAWINGS, "TP" INDICATES TYPE, "2" INDICATES POWER CIRCUIT
- PB — PULL BOX - SIZE AS INDICATED OR REQUIRED
- CABLETRAY SIZE AS INDICATED
- BUSWAY FEEDING UP
- BUSWAY FEEDING DOWN

POWER

- AxBxC — JUNCTION BOX, "AxBxC" INDICATES DIMENSION OF JUNCTION BOX IN EITHER INCHES OR CENTIMETERS
- EQUIPMENT CONNECTION
- MOTOR CONNECTION, SIZE AND VOLTAGE AS INDICATED
- COMBINATION MOTOR STARTER AS SCHEDULED
- FUSED DISCONNECT SWITCH
- UNFUSED DISCONNECT SWITCH
- ENCLOSED C.B. CURRENT RATING AS NOTED, 30A-3P UNLESS NOTED
- CONDUIT SEAL
- MCC — MOTOR CONTROL CENTER (SIZED TO SCALE)
- PANELBOARD (SIZED TO SCALE)
- T — TRANSFORMER (SIZED TO SCALE)

OUTLETS AND RECEPTACLES

- DUPLEX RECEPTACLE
  LETTER DESIGNATOR:
  G = GROUND FAULT CIRCUIT INTERRUPTER
  WP = WITH RAINTIGHT WHILE-IN-USE COVER
- DUPLEX RECEPTACLE ON EMERGENCY/STANDBY CIRCUIT
- DOUBLE DUPLEX RECEPTACLE
- DOUBLE DUPLEX RECEPTACLE ON EMERGENCY/STANDBY CIRCUIT
- EQUIPMENT CONNECTION

DIAGRAM

- ST — SHUNT TRIP
- GF — GROUND FAULT ALARM
- G — GENERATOR
- GROUND
- UPS STATION BATTERY
- FUSED DISCONNECT SWITCH
- POWER TRANSFORMER
- DELTA CONNECTION
- WYE
- GROUNDED WYE
- ZERO SEQUENCE CT
- (3) 400:5A — CT TRANSFORMER
  SUBSCRIPT INDICATES:
  (3) = QUANTITY
  400:5A = RATIO
- (3) — PT TRANSFORMER
  SUBSCRIPT INDICATES: QUANTITY
- XX — MEDIUM VOLTAGE DRAWOUT BREAKER
- AIC — AVAILABLE FAULT CURRENT
- NAME / AMPS / POLE — AUTOMATIC TRANSFER SWITCH
- SURGE ARRESTOR
- SPD — SURGE PROTECTIVE DEVICE
- XX — FEEDER CALLOUT
- CIRCUIT BREAKER
- CIRCUIT BREAKER DRAWOUT
- CONTACT, NORMALLY CLOSED (N.C.)
- CONTACT, NORMALLY OPEN (N.O.)
- PUSHBUTTON, NORMALLY CLOSED (N.C.)
- PUSHBUTTON, NORMALLY OPEN (N.O.)
- DISCONNECT SWITCH
- ELECTRICAL UNIT HEATER
- WALL CONNECTION
- SEPARABLE CONNECTOR
- CONDUIT SEAL

EXTERIOR SITE

- UNDERGROUND DUCTS INDICATE TYPE, SIZE AND NUMBER OF DUCTS BY SECTION OR MANHOLE DETAILS (SECTION LINE = BOTTOM)
- T — GROUND ROD
  SUBSCRIPT INDICATES:
  T = TEST WELL
- HH4 — HANDHOLE - NUMBER NOTED
- MH MH — MANHOLE

LIGHTING

- LUMINAIRE: DRAWN TO APPROXIMATE SHAPE AND TO SCALE OR LARGE ENOUGH FOR CLARITY
- EXIT LIGHTING LUMINAIRE, ARROWS AND EXIT FACE AS INDICATED ON DRAWINGS (MOUNTING HEIGHTS TO BE DETERMINED BY PROJECT SPECIFICATIONS)
- SURFACE MOUNTED LUMINAIRE (SIZED TO SCALE)
- WALL MOUNTED LUMINAIRE (SIZED TO SCALE)
- XXX / XXX, a/2 / a/2 — STANDARD DESIGNATIONS FOR ALL LIGHTING FIXTURES
  XXX OR XX–X = LUMINAIRE TYPE, REFER TO LUMINAIRE SCHEDULE
  "2" = CIRCUIT NUMBER
  "a" = PANEL
- +48 — MOUNTING HEIGHT
  INTERIOR = AFF
  EXTERIOR = AFG
- EMERGENCY LIGHT FIXTURE (SIZED TO SCALE)

ABBREVIATIONS

A	AMPS
AC	ALTERNATING CURRENT
ADA	AMERICANS WITH DISABILITIES ACT
AHU	AIR HANDLING UNIT
AIC	AMPS INTERRUPTING CAPACITY
AFF	ABOVE FINISHED FLOOR TO C OF DEVICE OR OUTLET BOX
AP	ACCESS PANEL
ARCH	ARCHITECTURAL
ATS	AUTOMATIC TRANSFER SWITCH
BLDG	BUILDING
BRKR	BREAKER
C	CONDUIT; CABLE; COIL
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLG.	CEILING
C.O.	CONDUIT ONLY
COL	COLUMN
CONC	CONCRETE
CONTR	CONTRACTOR
CR	CONTROL RELAY
CS	CONTROL SWITCH
CT	CURRENT TRANSFORMER
CTL	CONTROL
CU	COPPER
DC	DIRECT CURRENT
DDC	DIRECT DIGITAL CONTROL
DET	DETAIL
DIA	DIAMETER
DIAG	DIAGRAM
DISC.	DISCONNECT
DN	DOWN
DWG	DRAWING
EA	EACH
EF	EXHAUST FAN
EL	ELEVATION
ELEC	ELECTRICAL
EMERG	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EOL	END OF LINE DEVICE
EWC	ELECTRIC WATER COOLER
EXP	EXPOSED
EXIST.	EXISTING
FA	FIRE ALARM
FACC	FIRE ALARM CONTROL CONSOLE
FACP	FIRE ALARM CONTROL PANEL
FDR	FEEDER
FIN	FINISHED
FIO	FURNISHED AND INSTALLED BY OWNER
FIXT	FIXTURE
FLEX	FLEXIBLE
FLR	FLOOR
FLUOR	FLUORESCENT
FOIC	FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR
FT	FEET; FOOT
FU	FUSE
FUT	FUTURE
GALV	GALVANIZED
GEC	GROUND ELECTRODE CONDUCTOR
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTING
GND	GROUND
H	HIGH (DIM)
HH	HANDHOLE
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HZ	HERTZ
I/O	INPUT/OUTPUT PANEL
IAC	INTERLOCKED ARMORED CABLE
IC	INTERRUPTING CAPACITY
ID	INSIDE DIAMETER
IN	INCH
INST	INSTANTANEOUS
J-BOX	JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILS
KVA	KILOVOLT AMPS
KW	KILOWATT
L	LONG
LAB	LABORATORY
LC	LIGHTING CONTACTOR
LT	LIGHT
LTG	LIGHTING
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE; METAL HALIDE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTG	MOUNTING
MTR	MOTOR
MTS	MANUAL TRANSFER SWITCH
MVA	MEGAVOLT-AMPS
N.C.	NORMALLY CLOSED
NEUT	NEUTRAL
NIC	NOT IN CONTRACT
N.O.	NORMALLY OPEN
NO.	NUMBER
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
PA	PUBLIC ADDRESS
PAR	PARALLEL
PC	PHOTO-ELECTRIC CELL; PULL CHAIN; PERSONAL COMPUTER
PF	POWER FACTOR
PH	PHASE
PL	PROPERTY LINE
PNL	PANEL; PANELBOARD
POC	POINT OF CONNECTION
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PWR	POWER
QTY	QUANTITY
R	RADIUS; RISER
REC	RECEPTACLE
RECEP	RECEPTACLE
RGS	RIGID GALVANIZED STEEL CONDUIT
RM	ROOM
RQMTS	REQUIREMENTS
SECT	SECTION
SFD	SMOKE FIRE DAMPER
SHLD	SHIELDED
SHT	SHEET
SPEC	SPECIFICATION
SQ	SQUARE
STD	STANDARD
STL	STEEL
STR	STRANDED
SUBST	SUBSTATION
SURF	SURFACE
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
T	TRANSFORMER
TB	TERMINAL BLOCK
TC	TERMINAL CABINET
TEL	TELEPHONE
TEMP	TEMPORARY; TEMPERATURE
TP	TWISTED PAIR
TSP	TWISTED SHIELDED PAIR
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UH	UNIT HEATER
UV	UNIT VENTILATOR
V	VOLT(S)
VA	VOLT-AMPERES
VS	VERTICAL SCALE
W	WATT(S), WIRE(DIM)
W/	WITH
W/O	WITHOUT
WF	WATER FLOW ALARM
WP	WEATHERPROOF
WT	WATER-TIGHT
XFER	TRANSFER
XFMR	TRANSFORMER
XMTR	TRANSMITTER
Z	ZONE; IMPEDANCE
#	NUMBER
Ø	PHASE

COMMUNICATIONS:

- TVx — COMBINATION TELEPHONE/DATA WALL OUTLET
  X = NUMBER OF PORTS
- DATA WALL OUTLET

SWITCHES

- $ — SINGLE POLE TOGGLE SWITCH
- $a — SWITCH CONTROL (LOWER CASE)
- $D — DIMMER SWITCH
- $3 — 3-WAY SWITCH
- $LV — LOW VOLTAGE SWITCH
- $OS — OS SENSOR SWITCH

DRAWING INDEX

DRAWING NUMBER	DRAWING TITLE
E0.01	SYMBOLS AND ABBREVIATIONS
E0.02	ELECTRICAL SPECIFICATIONS
E0.03	ELECTRICAL SPECIFICATIONS AND GENERAL NOTES
E1.01	FLOOR PLAN - POWER - DEMO
E1.02	FLOOR PLAN - LIGHTING - DEMO
E2.01	FLOOR PLAN - POWER & SYSTEM - REMODEL
E2.02	FLOOR PLAN - LIGHTING - REMODEL
E5.01	ENLARGED ELECTRICAL ROOMS
E5.02	ONE-LINE DIAGRAM
E6.01	PANEL SCHEDULES (EXISTING)
E6.02	PANEL SCHEDULES (REVISED)
E6.03	LUMINAIRE AND MECHANICAL EQUIPMENT SCHEDULE
E7.01	ELECTRICAL DETAILS

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SHEET TITLE: SYMBOLS AND ABBREVIATIONS

DATE	09/20/2022
SCALE	NTS
ENGR	JSM-MJW
DRWN	NHH
CHKD	MJW
APPR	JSM
JOB	22025

E0.01

SHEET 01 OF 13

PRCTI20221551

IF SHEET IS LESS THAN 30"x42"
IT IS A REDUCED PRINT
SCALE REDUCED ACCORDINGLY

DIVISION 26 -- ELECTRICAL

SECTION 260010 - ELECTRICAL PROVISIONS

PART 1 - GENERAL

A. SECTION INCLUDES
1. THE WORK UNDER THIS DIVISION INCLUDES FURNISHING MATERIALS, EQUIPMENT, LABOR, SUPERVISION, TOOLS AND ITEMS NECESSARY FOR THE CONSTRUCTION, INSTALLATION, CONNECTION, TESTING AND OPERATION OF ELECTRICAL WORK FOR THIS PROJECT, AS SHOWN ON THE DRAWINGS AND DEFINED IN THIS DIVISION OF THE SPECIFICATIONS.
2. THE GENERAL CONDITIONS, SUPPLEMENTARY CONDITIONS AND SPECIAL CONDITIONS ARE A PART OF THIS CONTRACT AND APPLY TO THIS SECTION AS FULLY AS IF REPEATED HEREIN.

B. CODES, REGULATIONS, AND ORDINANCES
1. WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE LATEST ADOPTED EDITION OF APPLICABLE CODES, REGULATIONS, ORDINANCES, AND LOCAL AMENDMENTS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
a) INTERNATIONAL BUILDING CODE.
b) INTERNATIONAL FIRE CODE.
c) WASHINGTON STATE ENERGY CODE.
d) NATIONAL ELECTRICAL CODE (NEC), NFPA 70.
e) WASHINGTON ADMINISTRATIVE CODE, CHAPTER 296 24 WAC - GENERAL SAFETY AND HEALTH STANDARDS.
f) WASHINGTON ADMINISTRATIVE CODE, CHAPTER 296-46B WAC - ELECTRICAL SAFETY STANDARDS, ADMINISTRATION, AND INSTALLATION.
g) THE AMERICANS WITH DISABILITIES ACT (ADA).
h) NFPA 99.
i) NATIONAL ELECTRICAL SAFETY CODE, IEEE C2.
j) ELECTRICAL SAFETY IN THE WORKPLACE, NFPA 70E
k) EXAMINATION OF DRAWINGS AND SPECIFICATIONS: EXAMINE THE DRAWINGS AND SPECIFICATIONS IN THEIR ENTIRETY PRIOR TO PERFORMING THE WORK. EXAMINE DRAWINGS AND SPECIFICATIONS FOR WORK NOT IN COMPLIANCE WITH CODES, ORDINANCES, AND REGULATIONS. AFTER SIGNING THE CONSTRUCTION CONTRACT, NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR WORK DISCOVERED TO BE IN CONFLICT WITH CODES, ORDINANCES, OR REGULATIONS. IF THE AUTHORITY HAVING JURISDICTION, THE ARCHITECT, ENGINEER, OR OWNER DISCOVERS THAT THE CONTRACTOR HAS INSTALLED NONCOMPLIANT WORK, THE CONTRACTOR SHALL CORRECT THE INSTALLED WORK AT NO COST TO THE ARCHITECT, ENGINEER, OR OWNER AND SHALL REIMBURSE THE ARCHITECT, ENGINEER, AND OWNER FOR TIME SPENT IN THE IDENTIFICATION AND CORRECTION OF THE WORK.

C. PERMITS: OBTAIN PERMITS AND INSPECTIONS AND PAY FEES REQUIRED BY NATIONAL, STATE AND LOCAL AUTHORITIES. MAKE ARRANGEMENTS FOR INSPECTIONS BY THE ARCHITECT, OWNER AND OTHER AUTHORITY AS REQUIRED. SUBMIT 3 COPIES OF CERTIFICATES OF COMPLIANCE TO THE ARCHITECT.

D. QUALIFICATIONS: USE SUFFICIENT NUMBER OF QUALIFIED, COMPETENT, JOURNEYMEN AND SUPERVISORS IN THE EXECUTION OF THE WORK TO ENSURE COMPLETE, FUNCTIONING INSTALLATION COMPLIANT WITH THE CONTRACT DOCUMENTS. IN THE ACCEPTANCE OF INSTALLED WORK, NO PAYMENT WILL BE MADE FOR LACK OF SKILL ON THE PART OF THE WORKMEN.

E. COORDINATION: COORDINATE THE WORK. COORDINATE MATERIALS. COORDINATE CONSTRUCTION METHODS. COORDINATE FINISHES. COORDINATE ELECTRICAL WORK WITH THE WORK OF OTHER TRADES. FAILURE TO COORDINATE WORK WILL BE CONSIDERED SUFFICIENT CAUSE FOR WORK TO BE REMOVED AND REINSTALLED AT CONTRACTOR'S EXPENSE, AS DIRECTED BY ARCHITECT.

F. UTILITY INTERRUPTIONS: MAINTAIN UTILITIES TO EXISTING AREAS AND EQUIPMENT NOT SCHEDULED FOR DEMOLITION. COORDINATE UTILITY INTERRUPTIONS WITH THE OWNER.

G. DEMOLITION: VERIFY AND DOCUMENT EXISTING CONDITIONS PRIOR TO STARTING DEMOLITION.
1. VERIFY EXISTING CONDITIONS ABOVE ACCESSIBLE CEILINGS.
2. VERIFY EXISTING CONDITIONS IN PLENUM SPACES.
3. VERIFY EXISTING CONDITIONS IN OTHER SPACES NOT CLASSIFIED ABOVE.

I. SAFETY: COMPLY WITH FEDERAL, STATE, AND LOCAL SAFETY REGULATIONS. PROTECT CONSTRUCTION PERSONNEL, OWNER'S PERSONNEL, AND THE PUBLIC FROM CONSTRUCTION HAZARDS AT ALL TIMES.

J. DESIGN INTENT: DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS, FITTINGS, JUNCTION BOXES, PULL BOXES, CONDUCTORS, CONTROL DEVICES, CONDUITS, AND ACCESSORIES. PROVIDE SUCH ITEMS AS THEY ARE NEEDED TO PROVIDE A COMPLETE, USABLE SYSTEM IN ACCORDANCE WITH CODES, ORDINANCES, AND REGULATIONS. DRAWINGS ARE SHOWN IN SMALL SCALES. VERIFY ACTUAL FIELD CONDITIONS AND MEASUREMENTS PRIOR TO SELECTING EQUIPMENT AND MATERIALS.

PART 2 - PRODUCTS

A. MATERIALS SHALL BE NEW AND EACH TYPE OF MATERIAL FURNISHED SHALL BE OF THE SAME MAKE AND SHALL BE THE STANDARD PRODUCTS OF MANUFACTURERS, REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND SHALL BE THE MANUFACTURER'S LATEST STANDARD DESIGN.

B. PROVIDE MATERIALS AND EQUIPMENT TESTED AND LISTED BY UNDERWRITERS LABORATORIES OR OTHER TESTING LABORATORY RECOGNIZED BY THE AUTHORITY HAVING JURISDICTION. PROVIDE VISIBLE LABELS SHOWING CONFORMANCE WITH THIS PROVISION.

PART 3 - EXECUTION

A. FIRE STOPPING: PROVIDE FIRE STOPPING FOR ALL PENETRATIONS OF RATED FLOOR AND WALL ASSEMBLIES.

B. CUTTING AND PATCHING: KEEP CUTTING AND PATCHING TO THE MINIMUM AMOUNT REQUIRED TO PERFORM THE WORK. MAKE CUTS IN EXISTING CONSTRUCTION ONLY WHERE REQUIRED TO PERFORM THE WORK. MAKE CUTS PARALLEL TO OR AT RIGHT ANGLES TO WALLS, CEILINGS, AND FLOORS. MAKE CUTS ONLY AS LARGE AS IS NECESSARY TO PHYSICALLY PERFORM THE WORK. PATCH AND FINISH ALL SURFACES DAMAGED OR ALTERED IN THE PERFORMANCE OF THE WORK. PROVIDE MATERIALS MATCHING ORIGINAL CONSTRUCTION AND FINISH UNLESS OTHERWISE SHOWN. USE PERSONNEL HAVING THE SPECIFIC TRAINING AND SKILL LEVEL TO EXACTLY MATCH ORIGINAL CONSTRUCTION. THE OWNER WILL BE THE SOLE JUDGE AS TO THE ACCEPTABILITY OF THE WORK.

C. STRUCTURAL CUTTING: DO NOT CUT STRUCTURAL MEMBERS UNLESS SPECIFICALLY SHOWN.

D. CORE DRILLING: VERIFY THERE ARE NO OBSTRUCTIONS SUCH AS REBAR, CONDUIT, PIPE, POST TENSIONING CABLES PRIOR TO CORE DRILLING. WHERE OBSTRUCTION IS FOUND, VERIFY A NEARBY LOCATION AND REPOSITION THE WORK TO AVOID THE OBSTRUCTION.

E. SHIPPING, HANDLING, AND RECEIVING: SHIP AND HANDLE MATERIALS AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS AND AS REQUIRED TO PROTECT MATERIALS AND EQUIPMENT FROM DAMAGE. PAY ENTIRE COST FOR SHIPPING AND HANDLING THE MATERIALS AND EQUIPMENT FROM THEIR POINTS OF MANUFACTURING TO THEIR POINTS OF INSTALLATION. REPLACE DAMAGED EQUIPMENT AND MATERIALS AT NO ADDITIONAL COST TO THE OWNER.

F. CLEAN UP: REMOVE DEBRIS, CUTTINGS, CRATES, CARTONS, EXCESS MATERIALS, AND OTHER CONSTRUCTION BY-PRODUCTS FROM THE AREA OF WORK AS THE WORK IS BEING PERFORMED. SWEEP FLOORS, DISPOSE REFUSE, AND STORE CONSTRUCTION MATERIALS AT THE END OF EACH WORK SHIFT.

SECTION 260050 - BASIC ELECTRICAL MATERIALS AND METHODS

PART 1 - GENERAL

A. SECTION INCLUDES
1. THE WORK OF THIS SECTION INCLUDES SUPPORTS, ANCHORS, FASTENERS, VIBRATION ISOLATORS, SEALING, AND FIRESTOPPING.

PART 2 - EXECUTION

A. SLEEVES AND SEALING OF ELECTRICAL PENETRATIONS THROUGH FIRE RESISTIVE FLOORS, WALLS, AND PARTITIONS
1. SLEEVES AND SEALING THROUGH FIRE RESISTIVE FLOORS, WALLS, AND PARTITIONS:
a) FIRESTOPPING OF ELECTRICAL PENETRATIONS (E.G. TUBING, CONDUIT, AND WIRING) THROUGH FIRE RESISTIVE FLOORS, WALLS, AND PARTITIONS IS PROVIDED UNDER THIS SECTION.
b) PROVIDE SLEEVES FOR ELECTRICAL PENETRATIONS THROUGH FIRE RESISTIVE FLOORS, WALLS, AND PARTITIONS. SLEEVES SHALL BE OF THE SAME MATERIAL AND THICKNESS AS WAS USED WHEN THE FIRESTOPPING MATERIAL WAS TESTED IN ACCORDANCE WITH THE STANDARD SPECIFIED IN THIS SECTION.
c) THE ANNULAR SPACE BETWEEN THE SLEEVE OR CORED OPENING AND THE ELECTRICAL PENETRATIONS SHALL BE THE SAME DIMENSIONS AS THE ANNULAR SPACE USED WHEN THE FIRESTOPPING MATERIAL WAS TESTED IN ACCORDANCE WITH THE STANDARD SPECIFIED IN THIS SECTION.

B. SLEEVES AND SEALING OF ELECTRICAL PENETRATIONS THROUGH NON-FIRE RESISTIVE FLOORS, WALLS, AND PARTITIONS
1. SIZE OF SLEEVE OR CORED OPENING: UNLESS SPECIFIED OTHERWISE, THE ANNULAR CLEAR SPACE OF APPROXIMATELY 1/4 INCH FOR BARE CONDUIT SLEEVES; 1/2 INCH FOR SEALED SLEEVES.
2. EXISTING INTERIOR CONSTRUCTION:
a) PROVIDE SLEEVES FOR CONDUIT PASSING THROUGH FLOORS, ROOFS, AND WALLS THAT ARE NOT CONCRETE OR CONCRETE MASONRY UNIT.
b) CORE DRILL OR SAW CUT CONCRETE WHERE CONDUIT PENETRATES EXISTING CONCRETE WALLS AND ABOVE GRADE CONCRETE FLOOR SLABS. SLEEVES ARE NOT REQUIRED.
(1) FOR FLOOR SLABS, PROVIDE A GALVANIZED SHEET METAL DAM AROUND OPENING ON TOP OF FLOOR WHERE CONDUIT PENETRATES CONCRETE FLOOR SLABS EXCEPT WHEN CONDUIT IS LOCATED IN A FINISHED AREA. SHEET METAL DAMS SHALL BE WATER-TIGHT WELDED CONSTRUCTION; WELDED AREAS SHALL BE SEALED WITH CORROSION RESISTANT COATING; DAMS SHALL BE SEALED AND ANCHORED TO FLOOR WATER-TIGHT; MINIMUM 1 INCH PROJECTION ABOVE FLOOR; AND SHALL HAVE A MINIMUM 1/2 INCH FLANGE WIDTH ON FLOOR OR SPIGOT END WITH 3/16 INCH BEAD.
c) CORE DRILL OR SAW CUT WALLS WHERE CONDUIT PENETRATES CONCRETE MASONRY UNIT WALLS. PROVIDE SLEEVES AND GROUT IN PLACE.

SECTION 260520 - WIRE AND CABLE (600 VOLTS AND LESS)

PART 1 - GENERAL

A. SECTION INCLUDES
1. THE WORK OF THIS SECTION INCLUDES BUILDING WIRE AND CABLE, WIRING CONNECTORS, AND CONNECTIONS.

B. REFERENCES
1. NECA (NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION) - STANDARD OF INSTALLATION.
2. NETA ATS (INTERNATIONAL ELECTRICAL TESTING ASSOCIATION) - ACCEPTANCE TESTING SPECIFICATIONS FOR ELECTRICAL POWER DISTRIBUTION EQUIPMENT AND SYSTEMS.
3. NFPA 70 (NATIONAL FIRE PROTECTION ASSOCIATION) - NATIONAL ELECTRICAL CODE.
4. UL 44 (UNDERWRITERS LABORATORIES) - THERMOSET-INSULATED WIRES AND CABLES.
5. UL 83 (UNDERWRITERS LABORATORIES) - THERMOPLASTIC-INSULATED WIRES AND CABLES.
6. UL 489A-489B (UNDERWRITERS LABORATORIES) - WIRE CONNECTORS.
7. UL 489C (UNDERWRITERS LABORATORIES) - SPLICING WIRE CONNECTORS.

C. SYSTEM DESCRIPTION
1. SYSTEM INCLUDES CONDUCTORS FOR WIRING ELECTRICAL POWER, LIGHTING, AND CONTROL CIRCUITS. PROVIDE CONDUCTORS, CONDUITS, BOXES, CONDUIT BODIES, FITTINGS, WIRING DEVICES, TERMINATIONS, SPLICES, CONNECTIONS, IDENTIFICATION, AND TESTING.

D. SUBMITTALS
1. PRODUCT DATA: SUBMIT FOR BUILDING WIRE AND EACH CABLE ASSEMBLY TYPE.
a) SHOW INSULATION TYPE, CONDUCTOR MATERIAL, CONDUCTOR STRANDS, VOLTAGE, AMPACITY, AND UL LISTING.

PART 2 - PRODUCTS

A. GENERAL
1. CONDUCTORS SHALL BE COPPER.
2. CONDUCTORS FOR INSTALLATION IN A CABLE TRAY SHALL BE UL LISTED AND MARKED FOR CABLE TRAY USE.
3. PROVIDE STRANDED CONDUCTOR FOR FEEDERS AND BRANCH CIRCUITS 10 AWG AND SMALLER.
4. PROVIDE STRANDED CONDUCTORS FOR CONTROL CIRCUITS.
5. POWER AND LIGHTING CIRCUITS SHALL NOT BE SMALLER THAN 12 AWG.
6. CONTROL CIRCUITS SHALL NOT BE SMALLER THAN 16 AWG.
7. PROVIDE 12 AWG CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS NOT EXCEEDING 50 FEET IN CONDUCTOR LENGTH.
8. PROVIDE 10 AWG CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 50 FEET BUT NOT EXCEEDING 100 FEET IN CONDUCTOR LENGTH.
9. WIRE COLORING SHALL BE INTEGRAL TO THE JACKET OR INSULATION FOR WIRES 6 AWG AND SMALLER. FOR WIRES 4 AWG AND LARGER, PROVIDE COLORED TAPE OR COLORED SHRINK-TO-FIT SLEEVES.
10. WIRE COLORS, 120/208 VOLT THREE-PHASE SYSTEMS:
a) A-PHASE SHALL BE BLACK.
b) B-PHASE SHALL BE RED.
c) C-PHASE SHALL BE BLUE.
d) NEUTRAL SHALL BE WHITE.
e) EQUIPMENT GROUND: GREEN.
f) ISOLATED GROUND: GREEN WITH YELLOW TRACER.
11. WIRE COLORS, 277/480 VOLT THREE-PHASE SYSTEMS:
a) A-PHASE SHALL BE BROWN.
b) B-PHASE SHALL BE ORANGE.
c) C-PHASE SHALL BE YELLOW.
d) NEUTRAL SHALL BE GREY.
e) EQUIPMENT GROUND: GREEN.
12. NEUTRAL CONDUCTORS: WHEN TWO OR MORE NEUTRALS ARE LOCATED IN ONE CONDUIT, INDIVIDUALLY IDENTIFY EACH WITH PROPER CIRCUIT NUMBER USING SHRINK-TO-FIT WIRE SLEEVE.
13. BRANCH CIRCUIT CONDUCTORS: INSTALL THREE- AND FOUR-WIRE HOME RUNS WITH EACH PHASE UNIQUELY COLOR CODED.
14. FEEDER CIRCUIT CONDUCTORS: UNIQUELY COLOR CODE EACH PHASE.
15. EQUIPMENT GROUND CONDUCTORS:
a) FOR 6 AWG AND SMALLER: GREEN.
b) FOR 4 AWG AND LARGER: IDENTIFY WITH GREEN TAPE OR SHRINK-TO-FIT SLEEVES AT BOTH ENDS AND AT VISIBLE POINTS INCLUDING JUNCTION BOXES.

B. BUILDING WIRE
1. PRODUCT DESCRIPTION: NFPA 70 TYPE XHHW, UL 44 THERMOSET INSULATED CONDUCTORS AND NFPA 70 TYPE THHN/THWN, UL 83 THERMOPLASTIC INSULATED CONDUCTORS.
2. APPLICATION:
a) FEEDERS: NFPA 70; TYPE XHHW.
b) BRANCH CIRCUITS 2 AWG AND LARGER: NFPA 70; TYPE XHHW.
c) BRANCH CIRCUITS SMALLER THAN 2 AWG: NFPA 70; TYPE THHN/THWN OR XHHW.

C. SPLICING WIRE CONNECTORS, SPRING TYPE
1. PRODUCT DESCRIPTION: UL 486C SPLICING WIRE CONNECTORS.
2. MANUFACTURERS:
a) 3M PERFORMANCE PLUS.
b) SUBSTITUTIONS: APPROVED EQUAL.
3. CONSTRUCTION: SPRING STEEL, CORROSION RESISTANT COATING WITH FLAME RETARDANT, POLYPROPYLENE AND THERMOPLASTIC ELASTOMERIC INSULATOR.
4. OPERATING TEMPERATURE: RATED FOR USE UP TO 105 DEGREES C.
5. VOLTAGE RATING: 600 VOLTS WHEN USED AS BUILDING WIRE SPLICES. 1000 VOLTS WHEN USED FOR SIGNS AND LUMINAIRES.
6. FLAMMABILITY: UL 94 V-2.
7. COLOR: MANUFACTURER'S STANDARD COLORS, CODED BY WIRE SIZE AND QUANTITY APPLICATION.
8. USE RESTRICTION: CONDUCTORS 16 AWG TO 8 AWG, IN RECEPTACLE, SWITCH, AND ROTATING EQUIPMENT TERMINATION BOXES ONLY.

PART 3 - EXECUTION

A. EXISTING WORK
1. REMOVE EXPOSED ABANDONED WIRE AND CABLE, INCLUDING ABANDONED WIRE AND CABLE ABOVE ACCESSIBLE CEILING FINISHES. PATCH SURFACES WHERE REMOVED CABLES PASS THROUGH BUILDING FINISHES.
2. DISCONNECT ABANDONED CIRCUITS AND REMOVE CIRCUIT WIRE AND CABLE. REMOVE ABANDONED BOXES WHEN WIRE AND CABLE SERVICING BOXES IS ABANDONED AND REMOVED. INSTALL BLANK COVER FOR ABANDONED BOXES NOT REMOVED.
3. PROVIDE ACCESS TO EXISTING WIRING CONNECTIONS REMAINING ACTIVE AND REQUIRING ACCESS. MODIFY INSTALLATION OR INSTALL ACCESS PANEL.
4. EXTEND EXISTING CIRCUITS USING MATERIALS AND METHODS AS SPECIFIED.
5. CLEAN AND REPAIR EXISTING WIRE AND CABLE REMAINING OR IS WIRE AND CABLE TO BE REINSTALLED.

B. INSTALLATION
1. REPLACE WIRE AND CABLE DAMAGED DURING INSTALLATION WITH NEW.
2. WIRING INSIDE OF ENCLOSURES: INSTALL WIRING PARALLEL TO ENCLOSURE WALLS OF PANEL BOARDS, SWITCHBOARDS, EQUIPMENT, AND BOXES.
3. PROVIDE WIRE LABELS.
4. DEDICATED NEUTRAL: PROVIDE DEDICATED NEUTRAL CONDUCTORS FOR 120 V AND 277 V CIRCUITS.
5. CONCEALED DRY INTERIOR LOCATIONS: USE ONLY BUILDING WIRE, TYPE THHN/THWN OR XHHW INSULATED, SINGLE CONDUCTORS IN RACEWAY.
6. EXPOSED DRY INTERIOR LOCATIONS: USE ONLY BUILDING WIRE, TYPE THHN/THWN OR XHHW INSULATED, SINGLE CONDUCTORS IN RACEWAY.
7. WET OR DAMP INTERIOR LOCATIONS: USE ONLY BUILDING WIRE, TYPE THHN/THWN OR XHHW INSULATED, SINGLE CONDUCTORS IN RACEWAY.
8. PULL CONDUCTORS INTO RACEWAY AT SAME TIME.
9. USE MANUFACTURER-APPROVED PULLING COMPOUND OR LUBRICANT WHERE NECESSARY, EXCEPT DO NOT USE PULLING COMPOUND OR LUBRICANT FOR HOSPITAL ISOLATION PANELS. COMPOUND USED SHALL NOT DETERIORATE CONDUCTORS OR INSULATION.
10. PULL WIRE IN ACCORDANCE WITH THE WIRE MANUFACTURER'S RECOMMENDED PULLING TENSIONS AND SIDE WALL PRESSURE VALUES.
11. PULLING MEANS/METHODS SHALL NOT DAMAGE CABLES OR RACEWAYS.
12. CLEAN CONDUCTOR SURFACES BEFORE INSTALLING LUGS AND CONNECTORS.
13. 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-486B.
14. WIRING AT OUTLETS: INSTALL CONDUCTOR AT EACH OUTLET, WITH AT LEAST 6 INCHES OF SLACK. PROVIDE PIGTAILS AT OUTLETS; BRANCH CIRCUIT CONTINUITY SHALL NOT DEPEND ON CONNECTIONS ON THE OUTLET.
15. INSTALL STRANDED CONDUCTORS FOR FEEDERS AND BRANCH CIRCUITS 10 AWG AND SMALLER. IF, HOWEVER, SPECIAL CONDITIONS REQUIRE STRANDED CONDUCTORS IN LIEU OF SOLID, THEN INSTALL CRIMP ON LOCKING (BARBED) FORK TERMINALS FOR DEVICE TERMINATIONS. DO NOT PLACE BARE STRANDED CONDUCTORS DIRECTLY UNDER SCREWS.

C. FIELD QUALITY CONTROL
1. REMOVE AND REPLACE DEFECTIVE CONDUCTORS, SPLICES, AND TERMINATIONS UNTIL TEST RESULTS MEET THE SPECIFIED REQUIREMENTS.

SECTION 260530 - RACEWAY AND BOXES

PART 1 - GENERAL

A. SECTION INCLUDES
1. THE WORK OF THIS SECTION INCLUDES THE FOLLOWING.
a) CONDUIT.
b) TUBING.
c) WIREWAYS.
d) OUTLET BOXES.
e) PULL AND JUNCTION BOXES.

B. REFERENCES
1. ANSI C80.1 (AMERICAN NATIONAL STANDARDS INSTITUTE) - RIGID STEEL CONDUIT, ZINC COATED.
2. ANSI C80.3 (AMERICAN NATIONAL STANDARDS INSTITUTE) - ELECTRICAL METALLIC TUBING, ZINC COATED.
3. NEMA FB 1 (NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION) - FITTINGS, CAST METAL BOXES, AND CONDUIT BODIES FOR CONDUIT AND CABLE ASSEMBLIES.
4. NEMA OS 1 (NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION) - SHEET-STEEL OUTLET BOXES, DEVICE BOXES, COVERS, AND BOX SUPPORTS.
5. NEMA WD 1 (NATIONAL ELECTRICAL PROTECTION ASSOCIATION) - GENERAL PURPOSE WIRING DEVICES.
6. NEMA WD 6 (NATIONAL ELECTRICAL PROTECTION ASSOCIATION) - WIRING DEVICES - DIMENSIONAL REQUIREMENTS.
7. NEMA 250 (NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION) - ENCLOSURES FOR ELECTRICAL EQUIPMENT (1000 VOLTS MAXIMUM).
8. UL 1 (UNDERWRITERS LABORATORIES) - FLEXIBLE METAL CONDUIT.
9. UL 6 (UNDERWRITERS LABORATORIES) - ELECTRICAL RIGID METAL CONDUIT - STEEL.
10. UL 360 (UNDERWRITERS LABORATORIES) - LIQUID-TIGHT FLEXIBLE STEEL CONDUIT.
11. UL 514A (UNDERWRITERS LABORATORIES) - METALLIC OUTLET BOXES.
12. UL 514B (UNDERWRITERS LABORATORIES) - CONDUIT, TUBING AND CABLE FITTINGS.
13. UL 797 (UNDERWRITERS LABORATORIES) - ELECTRICAL METALLIC TUBING - STEEL.
14. UL 870 (UNDERWRITERS LABORATORIES) - WIREWAYS, AUXILIARY GUTTERS AND ASSOCIATED FITTINGS.

C. SYSTEM DESCRIPTION
1. RACEWAY AND BOXES LOCATED AS INDICATED ON DRAWINGS, AND AT OTHER LOCATIONS REQUIRED FOR SPLICES, TAPS, WIRE PULLING, EQUIPMENT CONNECTIONS, AND COMPLIANCE WITH REGULATORY REQUIREMENTS. RACEWAY AND BOXES ARE SHOWN IN APPROXIMATE LOCATIONS UNLESS DIMENSIONED. PROVIDE RACEWAY TO COMPLETE WIRING SYSTEM.
2. CONNECTIONS TO EQUIPMENT USING FLEXIBLE CONDUIT AND WIRE CONNECTIONS.
3. WET AND DAMP LOCATIONS ABOVE GRADE: PROVIDE RIGID STEEL CONDUIT, ELECTRICAL METALLIC TUBING. PROVIDE CAST METAL OUTLET, JUNCTION, AND PULL BOXES. PROVIDE FLUSH MOUNTING OUTLET BOX IN FINISHED AREAS.
4. CONCEALED DRY LOCATIONS: PROVIDE RIGID STEEL, ELECTRICAL METALLIC TUBING. PROVIDE SHEET-METAL BOXES. PROVIDE FLUSH MOUNTING OUTLET BOX IN FINISHED AREAS. PROVIDE HINGED ENCLOSURE FOR LARGE PULLBOXES.
5. EXPOSED DRY LOCATIONS: PROVIDE RIGID STEEL ELECTRICAL METALLIC TUBING. PROVIDE SHEET-METAL BOXES. PROVIDE FLUSH MOUNTING OUTLET BOX IN FINISHED AREAS. PROVIDE HINGED ENCLOSURE FOR LARGE PULLBOXES.

D. DESIGN REQUIREMENTS
1. MINIMUM RACEWAY SIZE: 1/2 INCH, 3/4 INCH FOR HOMERUNS, UNLESS OTHERWISE SPECIFIED.

E. SUBMITTALS
1. PRODUCT DATA:
a) FLEXIBLE METAL CONDUIT.
b) RACEWAY FITTINGS (STEEL ONLY).
c) CONDUIT BODIES.
d) WIREWAY.
e) PULL AND JUNCTION BOXES.
2. MANUFACTURER'S INSTALLATION INSTRUCTIONS: FOR ADHESIVES AND WIREWAY, SUBMIT INSTRUCTIONS FOR STORAGE, HANDLING, PROTECTION, EXAMINATION, PREPARATION, AND INSTALLATION OF THE PRODUCT.

F. CLOSEOUT SUBMITTALS
1. PROJECT RECORD DOCUMENTS:
a) RECORD ACTUAL ROUTING OF CONDUITS OF 1-1/2 INCH TRADE SIZE AND LARGER.
b) RECORD ACTUAL LOCATIONS AND MOUNTING HEIGHTS OF OUTLET, PULL, AND JUNCTION BOXES.
c) RECORD ACTUAL LOCATIONS, SIZES, AND CONFIGURATIONS OF EQUIPMENT CONNECTIONS.

G. DELIVERY, STORAGE, AND HANDLING
1. PROTECT CONDUIT FROM CORROSION AND ENTRANCE OF DEBRIS BY STORING ABOVE GRADE. PROVIDE APPROPRIATE COVERING.

H. COORDINATION
1. COORDINATE INSTALLATION OF OUTLET BOXES FOR EQUIPMENT CONNECTED UNDER SECTION 262726.
2. COORDINATE MOUNTING HEIGHTS, ORIENTATION AND LOCATIONS OF OUTLETS MOUNTED ABOVE COUNTERS, BENCHES, AND BACKSPLASHES.
3. DETERMINE CONNECTION LOCATIONS AND REQUIREMENTS.
4. SEQUENCE ROUGH-IN OF ELECTRICAL CONNECTIONS TO COORDINATE WITH INSTALLATION OF EQUIPMENT.

PART 2 - PRODUCTS

A. FLEXIBLE METAL CONDUIT
1. PRODUCT DESCRIPTION: UL 1, INTERLOCKED STEEL CONSTRUCTION.
2. FITTINGS: NEMA FB 1.

B. ELECTRICAL METALLIC TUBING (EMT)
1. PRODUCT DESCRIPTION: ANSI C80.3 AND UL 797; GALVANIZED TUBING.
2. FITTINGS AND CONDUIT BODIES: NEMA FB 1.
a) STEEL.
b) COMPRESSION TYPE.
c) INSULATED THROAT.
d) LISTED AS RAINPROOF.

C. METALLIC CONDUIT BODIES
1. PRODUCT DESCRIPTION: UL 514B.

F. OUTLET BOXES
1. SHEET METAL OUTLET BOXES: NEMA OS 1, GALVANIZED STEEL.
a) LUMINAIRE AND EQUIPMENT SUPPORTING BOXES: RATED FOR WEIGHT OF EQUIPMENT SUPPORTED; FURNISH 1/2 INCH MALE FIXTURE STUDS WHERE REQUIRED.
2. WALL PLATES FOR FINISHED AREAS: CONFORM TO THE REQUIREMENTS OF SECTION 262726.
3. WALL PLATES FOR UNFINISHED AREAS: FURNISH GASKETED COVER.

G. PULL AND JUNCTION BOXES
1. SHEET METAL BOXES: NEMA OS 1, GALVANIZED STEEL.
2. HINGED ENCLOSURES:
a) PROVIDE CONTINUOUS STEEL HINGES ON BOXES 24 INCHES TALL BY 24 INCHES WIDE.
b) PROVIDE CONTINUOUS STEEL HINGES ON BOXES HAVING COVERS LARGER THAN 576 SQUARE INCHES IN SURFACE AREA.
c) PROVIDE CONTINUOUS STEEL HINGES ON BOXES HAVING COVERS WEIGHING MORE THAN 10 POUNDS.
3. CAPTIVE COVER HARDWARE: PROVIDE CAPTIVE HARDWARE FOR BOXES WHICH TO BE INSTALLED WITH THE BOX OPENING FACING DOWNWARD OR WHERE DROPPING THE HARDWARE HAVE THE POTENTIAL TO PRESENT A SAFETY OR EQUIPMENT HAZARD.

PART 3 - EXECUTION

A. EXAMINATION
1. VERIFY EQUIPMENT IS READY FOR ELECTRICAL CONNECTION, FOR WIRING, AND TO BE ENERGIZED.
2. VERIFY OUTLET LOCATIONS AND ROUTING AND TERMINATION LOCATIONS OF RACEWAY PRIOR TO ROUGH-IN.

B. INSTALLATION
1. INSTALL RACEWAY AND BOXES IN ACCORDANCE WITH NECA "STANDARD OF INSTALLATION."
2. EQUIPMENT CONNECTIONS:
a) MAKE CONDUIT CONNECTIONS TO EQUIPMENT USING FLEXIBLE CONDUIT. USE LIQUIDTIGHT FLEXIBLE CONDUIT WITH WATERTIGHT CONNECTORS IN DAMP OR WET LOCATIONS.
b) CONNECT HEAT PRODUCING EQUIPMENT USING WIRE AND CABLE WITH INSULATION SUITABLE FOR TEMPERATURES ENCOUNTERED.
c) INSTALL RECEPTACLE OUTLET TO ACCOMMODATE CONNECTION WITH ATTACHMENT PLUG.
d) INSTALL CORD AND CAP FOR FIELD-SUPPLIED ATTACHMENT PLUG.
e) INSTALL SUITABLE STRAIN-RELIEF CLAMPS AND FITTINGS FOR CORD CONNECTIONS AT OUTLET BOXES AND EQUIPMENT CONNECTION BOXES.
f) INSTALL DISCONNECT SWITCHES, CONTROLLERS, CONTROL STATIONS, AND CONTROL DEVICES TO COMPLETE EQUIPMENT WIRING REQUIREMENTS.
g) INSTALL TERMINAL BLOCK JUMPERS TO COMPLETE EQUIPMENT WIRING REQUIREMENTS.
h) INSTALL INTERCONNECTING CONDUIT AND WIRING BETWEEN DEVICES AND EQUIPMENT TO COMPLETE EQUIPMENT WIRING REQUIREMENTS.
3. PENETRATE FIREWALLS AND FIRE-RATED FLOORS WITH RIGID GALVANIZED STEEL CONDUIT. EXTEND A MINIMUM OF SIX INCHES BEYOND THE FIREWALL. PROVIDE FIRESTOPPING. GROUND AND BOND RACEWAY AND BOXES.
4. FASTEN RACEWAY AND BOX SUPPORTS TO STRUCTURE AND FINISHES.
5. IDENTIFY RACEWAY AND BOXES.
6. ARRANGE RACEWAY AND BOXES TO MAINTAIN HEADROOM AND PRESENT NEAT APPEARANCE.

C. INSTALLATION - RACEWAY
1. RACEWAY ROUTING IS SHOWN IN APPROXIMATE LOCATIONS UNLESS DIMENSIONED. ROUTE TO COMPLETE WIRING SYSTEM.
2. ARRANGE RACEWAY SUPPORTS TO PREVENT MISALIGNMENT DURING WIRING INSTALLATION.
3. SUPPORT RACEWAY USING COATED STEEL OR MALLEABLE IRON STRAPS, LAY-IN ADJUSTABLE HANGERS, CLEVIS HANGERS, AND SPLIT HANGERS.
4. GROUP RELATED RACEWAY; SUPPORT USING CONDUIT RACK ATTACHED TO STRUCTURE. CONSTRUCT RACK USING STEEL CHANNEL; PROVIDE SPACE ON EACH FOR 25 PERCENT ADDITIONAL RACEWAYS.
5. DO NOT SUPPORT RACEWAY WITH WIRE OR PERFORATED PIPE STRAPS. REMOVE WIRE USED FOR TEMPORARY SUPPORTS.
6. DO NOT ATTACH RACEWAY TO CEILING SUPPORT WIRES OR OTHER PIPING SYSTEMS.
7. INSTALL RMC AND EMT FOR GENERAL WIRING. FLEXIBLE CONDUIT MAY BE USED ONLY FOR INSTALLATION WITHIN EXISTING WALLS.
8. INSTALL FLEXIBLE CONDUIT FOR CONNECTION TO MOTORS, TRANSFORMERS AND VIBRATING EQUIPMENT, WITH ENOUGH LENGTH TO PROVIDE AT LEAST A NINETY DEGREE BEND IN THE FLEXIBLE CONDUIT. USE LIQUID-TIGHT METALLIC CONDUIT IN WET, DAMP OR EXTERIOR LOCATIONS.
9. CONSTRUCT WIREWAY SUPPORTS FROM STEEL CHANNEL.
10. ROUTE EXPOSED RACEWAY PARALLEL AND PERPENDICULAR TO WALLS.
11. ROUTE RACEWAY INSTALLED ABOVE ACCESSIBLE CEILINGS PARALLEL AND PERPENDICULAR TO WALLS.
12. MAINTAIN CLEARANCE BETWEEN RACEWAY AND PIPING FOR MAINTENANCE PURPOSES.
13. MAINTAIN 12 INCH CLEARANCE BETWEEN RACEWAY AND SURFACES WITH TEMPERATURES EXCEEDING 104 DEGREES F.
14. CUT CONDUIT SQUARE USING SAW OR PIPECUTTER; DE-BURR CUT ENDS.
15. BRING CONDUIT TO SHOULDER OF FITTINGS; FASTEN SECURELY.
16. INSTALL CONDUIT HUBS TO FASTEN CONDUIT TO CAST BOXES.
17. INSTALL NO MORE THAN EQUIVALENT OF THREE 90 DEGREE BENDS BETWEEN CONDUIT BODIES AND BOXES. INSTALL CONDUIT BODIES TO MAKE SHARP CHANGES IN DIRECTION, AS AROUND BEAMS. USE HYDRAULIC ONE-SHOT BENDER TO FABRICATE OR INSTALL FACTORY ELBOWS FOR BENDS IN METAL CONDUIT 2 INCH TRADE SIZE AND LARGER.
18. AVOID MOISTURE TRAPS; INSTALL JUNCTION BOX WITH DRAIN FITTING AT LOW POINTS IN CONDUIT SYSTEM.
19. INSTALL FITTINGS TO ACCOMMODATE EXPANSION AND DEFLECTION WHERE RACEWAY CROSSES SEISMIC, CONTROL AND EXPANSION JOINTS.
20. INSTALL PULL STRING OR CORD IN EACH EMPTY RACEWAY EXCEPT SLEEVES AND NIPPLES.
21. INSTALL CAPS TO PROTECT INSTALLED CONDUIT AGAINST ENTRANCE OF DIRT AND MOISTURE.
22. CLOSE ENDS AND UNUSED OPENINGS IN WIREWAY.
23. PROVIDE INSULATED THROAT BOX CONNECTORS WHERE RACEWAY TERMINATES AT SHEET STEEL IN BOXES, PANELS, SWITCHBOARDS, AND EQUIPMENT. CONNECTOR MATERIAL SHALL MATCH RACEWAY.

D. INSTALLATION - BOXES
1. INSTALL BOXES USED FOR EQUIPMENT AND LUMINAIRE ATTACHMENT DIRECTLY TO STRUCTURE OR TO SUPPORTS PROVIDED UNDER SECTION 260050. DO NOT USE SUPPORTS FOR NON-ELECTRICAL EQUIPMENT OR SYSTEMS FOR ELECTRICAL SYSTEM ATTACHMENT.
2. INSTALL WALL MOUNTED BOXES AT ELEVATIONS TO ACCOMMODATE MOUNTING HEIGHTS SPECIFIED IN DRAWINGS FOR OUTLET DEVICE. USE 4 INCH SQUARE BOXES FOR RECEPTACLES.
3. ADJUST BOX LOCATION UP TO 10 FEET PRIOR TO ROUGH-IN TO ACCOMMODATE INTENDED PURPOSE.
4. ORIENT BOXES TO ACCOMMODATE WIRING DEVICE ORIENTATION..
5. INSTALL PULL BOXES AND JUNCTION BOXES ABOVE ACCESSIBLE CEILINGS AND IN UNFINISHED AREAS ONLY.
6. INACCESSIBLE CEILING AREAS: INSTALL OUTLET AND JUNCTION BOXES NO MORE THAN 6 INCHES FROM CEILING ACCESS PANEL OR FROM REMOVABLE RECESSED LUMINAIRE.
7. DO NOT INSTALL FLUSH MOUNTING BOX BACK-TO-BACK IN WALLS; INSTALL WITH MINIMUM 6 INCHES SEPARATION IN NON-ACOUSTICAL RATED WALLS. FOR ACOUSTICAL RATED WALLS, COMPLY WITH ARTICLE “ACOUSTICAL REQUIREMENTS” IN THIS SECTION.
8. SECURE FLUSH MOUNTING BOX TO INTERIOR WALL AND PARTITION STUDS. ACCURATELY POSITION TO ALLOW FOR SURFACE FINISH THICKNESS.
9. INSTALL STAMPED STEEL BRIDGES TO FASTEN FLUSH MOUNTING OUTLET BOX BETWEEN STUDS.
10. INSTALL FLUSH MOUNTING BOX WITHOUT DAMAGING WALL INSULATION OR REDUCING ITS EFFECTIVENESS.
11. INSTALL ADJUSTABLE STEEL CHANNEL FASTENERS FOR HUNG CEILING OUTLET BOX.
12. DO NOT FASTEN BOXES TO CEILING SUPPORT WIRES OR OTHER PIPING SYSTEMS.
13. SUPPORT BOXES INDEPENDENTLY OF CONDUIT.
14. INSTALL GANG BOX WHERE MORE THAN ONE DEVICE IS MOUNTED TOGETHER. DO NOT USE SECTIONAL BOX.
15. INSTALL GANG BOX WITH PLASTER RING FOR SINGLE DEVICE OUTLETS.

E. INTERFACE WITH OTHER PRODUCTS
1. INSTALL CONDUIT TO PRESERVE FIRE RESISTANCE RATING OF PARTITIONS AND OTHER ELEMENTS, USING MATERIALS AND METHODS IN ACCORDANCE WITH SECTION 260050.
2. LOCATE OUTLET BOXES TO ALLOW LUMINAIRES POSITIONED AS INDICATED ON DRAWINGS.
3. ALIGN ADJACENT WALL MOUNTED OUTLET BOXES FOR SWITCHES, THERMOSTATS, AND SIMILAR DEVICES.

F. ADJUSTING
1. ADJUST FLUSH-MOUNTING OUTLETS TO MAKE FRONT FLUSH WITH FINISHED WALL MATERIAL.
2. INSTALL KNOCKOUT CLOSURES IN UNUSED OPENINGS IN BOXES.
3. COOPERATE WITH UTILIZATION EQUIPMENT INSTALLERS AND FIELD SERVICE PERSONNEL DURING CHECKOUT AND STARTING OF EQUIPMENT TO ALLOW TESTING AND BALANCING AND OTHER STARTUP OPERATIONS. PROVIDE PERSONNEL TO OPERATE ELECTRICAL SYSTEM AND CHECKOUT WIRING CONNECTION COMPONENTS AND CONFIGURATIONS.

G. CLEANING
1. CLEAN INTERIOR OF BOXES TO REMOVE DUST, DEBRIS, AND OTHER MATERIAL.
CLEAN EXPOSED SURFACES AND RESTORE FINISH.

SECTION 26 24 16 - PANEL BOARDS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. THE WORK OF THIS SECTION INCLUDES PANEL BOARDS AND MOLDED CASE CIRCUIT BREAKERS.

1.02 REFERENCES

A. ANSI/NETA ATS (INTERNATIONAL ELECTRICAL TESTING ASSOCIATION) - STANDARD FOR ACCEPTANCE TESTING SPECIFICATIONS FOR ELECTRICAL POWER DISTRIBUTION EQUIPMENT AND SYSTEMS.

B. ANSI/NETA ETT (INTERNATIONAL ELECTRICAL TESTING ASSOCIATION) - STANDARD FOR CERTIFICATION OF ELECTRICAL TESTING TECHNICIANS.

1 / E0.02 ELECTRICAL SPECIFICATIONS
SCALE: NTS

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

PERMIT SET

REVISION	BY

Wood Harbinger
929 108th Ave NE,
Suite 1000
Bellevue, WA 98004
425.628.6000
woodharbinger.com

NORTHSTAR electrical
grounded in experience
918 S Horton St, Ste 808
Seattle, WA 98134-1952
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MATTHEW J. WOO
STATE OF WASHINGTON
40454
REGISTERED PROFESSIONAL ENGINEER

NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3500 South Meridan Blvd - Puyallup, WA 98373

ELECTRICAL SPECIFICATIONS
SHEET TITLE

DATE	09/20/2022
SCALE	NTS
ENGR	JSM-MJW
DRWN	NHH
CHKD	MJW
APPR	JSM
JOB	22025

E0.02

SHEET 02 OF 13

PRCTI20221551

IF SHEET IS LESS THAN 30"x42" IT IS A REDUCED PRINT SCALE REDUCED ACCORDINGLY

C. NECA 1 (NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION) - GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING.

D. NECA 407 (NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION) - INSTALLING AND MAINTAINING PANEL BOARDS.

E. NEMA AB 3 (NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION) - MOLDED-CASE CIRCUIT BREAKERS AND THEIR APPLICATIONS.

F. NEMA PB 1 (NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION) - PANEL BOARDS.

G. NEMA PB 1.1 (NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION) - INSTRUCTIONS FOR SAFE INSTALLATION, OPERATION AND MAINTENANCE OF PANEL BOARDS RATED 600 VOLTS OR LESS.

H. NEMA 250 (NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION) - ENCLOSURES FOR ELECTRICAL EQUIPMENT (1000 VOLTS MAXIMUM).

I. UL 67 (UNDERWRITERS LABORATORIES) - PANEL BOARDS.

J. UL 489 (UNDERWRITERS LABORATORIES) - MOLDED-CASE CIRCUIT BREAKERS, MOLDED-CASE SWITCHES, AND CIRCUIT-BREAKER ENCLOSURES.

K. UL 1699 (UNDERWRITERS LABORATORIES) - ARC-FAULT CIRCUIT INTERRUPTERS.

1.03 SUBMITTALS

A. PRODUCT DATA:
1. FEATURES.
2. PERFORMANCE.
3. ELECTRICAL CHARACTERISTICS.
4. RATINGS.

B. SHOP DRAWINGS:
1. OUTLINE AND SUPPORT POINT DIMENSIONS.
2. VOLTAGE.
3. MAIN BUS AMPACITY.
4. INTEGRATED SHORT CIRCUIT AMPERE RATING.
5. CIRCUIT BREAKER AND FUSIBLE SWITCH ARRANGEMENT AND SIZES.

C. CALCULATIONS: SUBMIT THE FOLLOWING ITEMS PRIOR TO OR COINCIDENT WITH PRODUCT DATA SUBMITTALS FOR ELECTRICAL EQUIPMENT AND OVERCURRENT PROTECTIVE DEVICES SPECIFIED IN THIS SECTION.
1. SUBMIT PROTECTIVE DEVICE COORDINATION STUDY.
2. SUBMIT FAULT CURRENT ANALYSIS.
3. SUBMIT ARC FLASH HAZARD ANALYSIS.
4. SUBMIT STUDY AND ANALYSIS ALL NEW POWER DISTRIBUTION EQUIPMENT, EXISTING UPSTREAM POWER DISTRIBUTION SWITCHBOARDS, BACKUP GENERATOR SWITCHBOARD AND FEEDERS.

1.04 CLOSEOUT SUBMITTALS

A. FIELD QUALITY CONTROL TEST REPORTS: SUBMIT TEST REPORTS IN ACCORDANCE WITH SECTION 26 00 10.
1. PROCEDURES USED.
2. TEST AND INSPECTION RESULTS THAT COMPLY WITH SPECIFICATIONS.
3. TEST AND INSPECTION RESULTS THAT FAILED TO COMPLY AND CORRECTIVE ACTION TAKEN TO ACHIEVE RESULTS THAT COMPLY WITH SPECIFICATIONS.

B. PROJECT RECORD DOCUMENTS: RECORD ACTUAL LOCATIONS OF PANEL BOARDS AND RECORD ACTUAL CIRCUITING ARRANGEMENTS.

C. OPERATION AND MAINTENANCE DATA:
1. SPARE PARTS LISTING.
2. SOURCE AND CURRENT PRICES OF REPLACEMENT PARTS AND SUPPLIES.
3. RECOMMENDED MAINTENANCE PROCEDURES AND INTERVALS.

1.05 MAINTENANCE MATERIALS

A. FURNISH 2 OF EACH PANEL BOARD KEY. PANEL BOARDS KEYED ALIKE [TO OWNER'S CURRENT KEYING SYSTEM].

PART 2 - PRODUCTS

2.01 PANEL BOARDS

A. MANUFACTURERS:
1. EATON CUTLER-HAMMER.
2. SUBSTITUTIONS: NOT PERMITTED.

B. PRODUCT DESCRIPTION: NEMA PB 1 AND UL 67, CIRCUIT BREAKER TYPE PANEL BOARD.

C. PHASE, NEUTRAL AND GROUND BUSES: SILVER PLATED COPPER, RATINGS AS SHOWN. ALUMINUM IS PROHIBITED. PROVIDE FIELD CONVERTIBLE MAINS THAT ALLOW TOP OR BOTTOM FEED. NEUTRAL AND GROUND BUSSES SHALL HAVE THE SAME QUANTITY OF LOAD SIDE TERMINATION POINTS AVAILABLE AS FOR THE MAXIMUM NUMBER OF CIRCUITS THAT THE PANEL IS CAPABLE OF REGARDLESS OF THE CIRCUIT LAYOUT IN THIS PROJECT.

D. MAIN TERMINALS: PROVIDE MAIN CIRCUIT BREAKER OR MAIN LUGS AS SHOWN ON DRAWINGS.

E. SHORT CIRCUIT RATING: SHORT CIRCUIT RATINGS SHOWN ON DRAWINGS ARE THE MINIMUM, FULLY RATED VALUE. FULLY RATED EQUIPMENT AND OVERCURRENT PROTECTIVE DEVICES SHALL BE PROVIDED. THE USE OF SERIES RATINGS IS PROHIBITED.

F. ENCLOSURE: SIZED TO FIT IN THE SPACE SHOWN, WITH REQUIRED CLEARANCES. NEMA 250, TYPES AS FOLLOWS.
1. INTERIOR LOCATIONS: TYPE 1 CABINET.
2. OUTDOOR OR WET LOCATIONS: TYPE 3R UNLESS OTHERWISE SHOWN.

G. CABINET FRONT: SURFACE OR FLUSH MOUNTED AS SHOWN, DOOR-IN-DOOR TYPE WITH INNER AND OUTER DOORS HINGED. OUTER DOOR SHALL BE FASTENED TO ENCLOSURE USING MACHINE SCREWS. HINGES SHALL BE CONCEALED TYPE FOR PANEL BOARDS INSTALLED IN FINISHED AREAS. INNER DOOR SHALL BE EQUIPPED WITH FLUSH LOCKING CLAMPS AND METAL CIRCUIT DIRECTORY FRAME. LOCKS SHALL BE KEYED ALIKE. FOR SURFACE_MOUNTED FRONTS, MATCH BOX DIMENSIONS; FOR FLUSH_MOUNTED FRONTS, OVERLAP BOX. FINISH IN MANUFACTURER'S STANDARD GRAY ENAMEL.

H. SKIRTS: PROVIDE WHERE SHOWN. SAME GAGE AND FINISH AS PANEL BOARD FRONT WITH FLANGES FOR ATTACHMENT TO PANEL BOARD, WALL, AND CEILING OR FLOOR.

I. SERVICE EQUIPMENT LABEL: IF THE PANEL BOARD IS USED AS SERVICE EQUIPMENT, PROVIDE SE LISTED AND LABELED EQUIPMENT WITH ONE OR MORE MAIN SERVICE DISCONNECTING AND OVERCURRENT PROTECTIVE DEVICES.

2.02 MOLDED CASE CIRCUIT BREAKERS

A. PRODUCT DESCRIPTION: NEMA AB 1 AND UL 489, BOLT-ON TYPE CIRCUIT BREAKERS WITH INTEGRAL TRIP UNITS IN EACH POLE AND COMMON TRIP HANDLE FOR ALL POLES. NOTE: SQUARE D I_LINE BREAKERS ARE CONSIDERED THE EQUIVALENT OF BOLT_ON FOR THE PURPOSES OF THIS PARAGRAPH.

B. RATINGS: CIRCUIT BREAKERS SHALL BE 100 PERCENT RATED. USE OF 80 PERCENT RATED CIRCUIT BREAKERS IS NOT PERMITTED.

C. TRIP UNITS: PROVIDE TRIP UNITS BASED ON THE FOLLOWING FRAME AND AMPERAGE RATINGS.
1. 0 TO 100 AMPERES: FIXED THERMAL AND FIXED INSTANTANEOUS FUNCTIONS.
2. 250 AMP FRAME: INTERCHANGEABLE TRIP UNITS WITH ADJUSTABLE INVERSE TIME OVERCURRENT AND ADJUSTABLE INSTANTANEOUS TRIP FUNCTIONS.
3. 400 AMP FRAME AND HIGHER: PROVIDE ELECTRONIC TRIP CIRCUIT BREAKER WITH ELECTRONIC SENSING, TIMING, AND TRIPPING CIRCUITS WITH ADJUSTMENTS FOR THE FOLLOWING SETTINGS.
a. LONG TIME I^2T AND I^4T DELAY.
b. SHORT TIME FLAT AND I^2T DELAY.
c. LONG TIME, SHORT TIME AND INSTANTANEOUS PICKUP CURRENT.

D. MANUFACTURER: TO MATCH PANEL BOARD IN WHICH THEY ARE MOUNTED.

E. CIRCUIT BREAKER ACCESSORIES: TRIP UNITS, TOGGLE LOCKS, AUXILIARY SWITCHES, ETC., AS INDICATED ON DRAWINGS OR SCHEDULES.

2.03 METERS

A. MULTIFUNCTION DIGITAL-METERING MONITOR: MICROPROCESSOR-BASED DIGITAL METER

B. SYSTEM CONFIGURATION:
1. USER PROGRAMMABLE FOR 3-PHASE 3-WIRE, 3-PHASE 4-WIRE SYSTEMS.
2. VOLTAGE INPUTS SHALL BE RATED FOR 600 VOLTS.
3. CURRENT INPUTS SHALL BE RATED FOR 5 AMPERE INSTRUMENT TRANSFORMER SECONDARY CIRCUITS WITH WITHSTAND RATINGS OF NOT LESS THAN 15 AMPERES CONTINUOUS, 50 AMPERES AT 10 SECONDS PER HOUR, AND 500 AMPERES AT 1 SECOND PER HOUR.

C. SETUP: PROGRAMMABLE MEASUREMENT, RECORDING, ANALYSIS, AND COMMUNICATION PARAMETERS STORED IN NON-VOLATILE MEMORY AND RETAINED IN THE EVENT OF POWER INTERRUPTION.

D. SAMPLING RATE: 128 SAMPLES PER CYCLE MINIMUM.

E. ACCURACY:
1. THE POWER METER SHALL COMPLY WITH ANSI C12.20 CLASS 0.2 AND IEC 62053-22 CLASS 0.5S FOR ACTIVE ENERGY AND REVENUE METERS.
2. THE POWER METER SHALL BE ACCURATE TO 0.15 PERCENT OF READING + 0.015 PERCENT OF FULL SCALE FOR POWER. VOLTAGE AND CURRENT SHALL BE ACCURATE TO 0.075 PERCENT OF READING PLUS 0.025 PERCENT OF FULL SCALE. POWER FACTOR METERING SHALL BE ACCURATE TO 0.002 FROM 0.5 LEADING TO 0.5 LAGGING. FREQUENCY METERING SHALL BE ACCURATE 0.01 HZ AT 45-67 HZ AND 350-450HZ.
3. THESE ACCURACIES SHALL BE MAINTAINED FOR BOTH LIGHT AND FULL LOADS.
4. NO ANNUAL CALIBRATION SHALL BE REQUIRED TO MAINTAIN THIS ACCURACY.

F. REAL-TIME METERING: FURNISH METER WITH THE FOLLOWING MEASUREMENT AND RECORDING FEATURES.
1. VOLTAGE (LINE TO LINE PER PHASE, LINE TO LINE 3-PHASE AVERAGE, LINE TO NEUTRAL PER PHASE, 3-PHASE AVERAGE, AND PERCENT UNBALANCED).
2. CURRENT (PER PHASE LINE CURRENT, 3-PHASE AVERAGE, AND PERCENT UNBALANCED).
3. APPARENT POWER (PER-PHASE, 3-PHASE TOTAL).
4. REAL POWER (PER-PHASE, 3-PHASE TOTAL).
5. REACTIVE POWER (PER-PHASE, 3-PHASE TOTAL).
6. TRUE POWER FACTOR (PER-PHASE, 3-PHASE TOTAL).
7. DISPLACEMENT POWER FACTOR (PER-PHASE, 3-PHASE TOTAL).
8. FREQUENCY.

G. ENERGY METERING: FURNISH METER WITH THE FOLLOWING ENERGY MEASUREMENTS.
1. ACCUMULATED ENERGY (REAL KWH, REACTIVE KVARH, APPARENT KVAH).
2. INCREMENTAL ENERGY (REAL KWH, REACTIVE KVARH, APPARENT KVAH).
3. CONDITIONAL ENERGY (REAL KWH, REACTIVE KVARH, APPARENT KVAH).
4. REACTIVE ENERGY BY QUADRANT

H. POWER QUALITY MEASUREMENT AND ANALYSIS: FURNISH METER WITH THE FOLLOWING POWER QUALITY FEATURES.
1. TOTAL HARMONIC DISTORTION (THD), VOLTAGE AND CURRENT.
2. INDIVIDUAL HARMONICS, VOLTAGE AND CURRENT TO THE 63RD HARMONIC.
3. WAVEFORM RECORDING.
4. DISTURBANCE (DIPS AND SWELLS) MONITORING.

I. DEMAND READINGS:
1. DEMAND CURRENT CALCULATIONS(PER-PHASE, 3-PHASE AVG, NEUTRAL):
a. PRESENT.
b. RUNNING AVERAGE.
c. LAST COMPLETED INTERVAL.
d. PEAK.
2. DEMAND REAL POWER CALCULATIONS(3-PHASE TOTAL):
a. PRESENT.
b. RUNNING AVERAGE.
c. LAST COMPLETED INTERVAL.
d. PREDICTED.
e. PEAK.
f. COINCIDENT WITH PEAK KVA DEMAND
g. COINCIDENT WITH KVAR DEMAND
3. DEMAND REACTIVE POWER CALCULATIONS (3-PHASE TOTAL):
a. PRESENT.
b. RUNNING AVERAGE.
c. LAST COMPLETED INTERVAL.
d. PREDICTED.
e. PEAK.
f. COINCIDENT WITH PEAK KVA DEMAND.
g. COINCIDENT KW DEMAND.
4. DEMAND APPARENT POWER CALCULATIONS (3-PHASE TOTAL):
a. PRESENT.
b. RUNNING AVERAGE.
c. LAST COMPLETED INTERVAL.
d. PREDICTED.
e. PEAK.
f. COINCIDENT WITH PEAK KVA DEMAND.
g. COINCIDENT KW DEMAND.
5. AVERAGE POWER FACTOR CALCULATIONS, DEMAND COINCIDENT (TRUE),(3-PHASE TOTAL):
a. LAST COMPLETED INTERVAL
b. COINCIDENT WITH KW PEAK
c. COINCIDENT WITH KVAR PEAK
d. COINCIDENT WITH KVA PEAK
6. POWER ANALYSIS VALUES
a. THD - VOLTAGE, CURRENT (3-PHASE, PER-PHASE, NEUTRAL)
b. DISPLACEMENT POWER FACTOR (PER-PHASE, 3-PHASE)
c. FUNDAMENTAL VOLTAGE, MAGNITUDE AND ANGLE (PER-PHASE)
d. FUNDAMENTAL CURRENTS, MAGNITUDE AND ANGLE (PER-PHASE)
e. FUNDAMENTAL REAL POWER (PER-PHASE, 3-PHASE)
f. FUNDAMENTAL REACTIVE POWER (PER-PHASE)
g. HARMONIC POWER (PER-PHASE, 3-PHASE)
h. PHASE ROTATION
i. UNBALANCE (CURRENT AND VOLTAGE)
j. HARMONIC MAGNITUDES AND ANGLES FOR CURRENT AND VOLTAGES (PER PHASE) UP TO THE 63RD HARMONIC.

J. MINIMUM AND MAXIMUM VALUES: METER SHALL RECORD MONTHLY DATE, TIME, MINIMUM VALUE, MAXIMUM VALUE, AND PHASE FOR THE FOLLOWING PARAMETERS.
1. VOLTAGE L-L
2. VOLTAGE L-N
3. CURRENT PER PHASE
4. VOLTAGE L-L UNBALANCE
5. VOLTAGE L-N UNBALANCE
6. TRUE POWER FACTOR
7. DISPLACEMENT POWER FACTOR
8. REAL POWER TOTAL
9. REACTIVE POWER TOTAL
10. APPARENT POWER TOTAL
11. THD VOLTAGE L-L
12. THD VOLTAGE L-N
13. THD CURRENT
14. FREQUENCY

K. TIME SYNCHRONIZATION: GPS, EXTERNAL PULSE.

L. COMMUNICATIONS: FURNISH METER WITH THE FOLLOWING COMMUNICATION PORTS AND PROTOCOLS.
1. ETHERNET PORT WITH MODBUS TCP PROTOCOL.
2. EMBEDDED WEB SERVER.
3. ETHERNET TO RS-485 GATEWAY.

M. MOUNTING: DISPLAY AND CONTROL UNIT FLUSH OR SEMI-FLUSH MOUNTED.

2.04 METERING TRANSFORMERS

A. CURRENT TRANSFORMERS: ANSI C57.13; 5 AMPERE SECONDARY, PRIMARY/SECONDARY RATIOS USED, BURDEN AND ACCURACY CONSISTENT WITH CONNECTED METERING AND RELAY DEVICES, 60 HERTZ.

PART 3 - EXECUTION

3.01 EXAMINATION

A. RECEIVE, INSPECT, HANDLE, AND STORE PANEL BOARDS IN ACCORDANCE WITH TO NECA 407 AND NEMA PB 1.1.

B. EXAMINE PANEL BOARDS BEFORE INSTALLATION. REJECT PANEL BOARDS THAT ARE DAMAGED OR RUSTED OR HAVE BEEN SUBJECTED TO WATER SATURATION.

C. EXAMINE ELEMENTS AND SURFACES TO RECEIVE PANEL BOARDS FOR COMPLIANCE WITH INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK.

D. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

3.02 INSTALLATION

A. INSTALL PANEL BOARDS IN ACCORDANCE WITH NECA 407 AND NEMA PB 1.1.

B. INSTALL PANEL BOARDS PLUMB, SQUARE AND LEVEL.

C. INSTALL RECESSED PANEL BOARDS FLUSH WITH WALL FINISHES.

D. HEIGHT: 6 FEET TO TOP OF PANEL BOARD; INSTALL PANEL BOARDS TALLER THAN 6 FEET WITH BOTTOM NO MORE THAN 4 INCHES AND NO LESS THAN 2 INCHES ABOVE FLOOR.

E. INSTALL FILLER PLATES FOR UNUSED SPACES IN PANEL BOARDS.

F. PROVIDE TYPED CIRCUIT DIRECTORY FOR EACH PANEL BOARD. REVISE DIRECTORY TO REFLECT CIRCUITING CHANGES TO BALANCE PHASE LOADS. DESIGNATE SPECIFIC EQUIPMENT OR AREAS SERVED WITH EACH CIRCUIT WITH SUFFICIENT DETAIL TO ALLOW EACH CIRCUIT TO BE DISTINGUISHED FROM ALL OTHERS IN ACCORDANCE WITH NEC ARTICLE 408.4.

G. INSTALL ENGRAVED PLASTIC NAMEPLATES.

H. INSTALL SPARE CONDUITS OUT OF EACH RECESSED PANEL BOARD TO ACCESSIBLE LOCATION [ABOVE CEILING] [BELOW FLOOR]. MINIMUM SPARE CONDUITS: 5 EMPTY 1 INCH. IDENTIFY EACH AS SPARE.

I. GROUND AND BOND PANEL BOARD ENCLOSURE.

J. FOR PANEL BOARDS INSTALLED IN HEALTH CARE FACILITIES, CONNECT EQUIPMENT GROUND BARS OF PANELS IN ACCORDANCE WITH NEC ARTICLE 517.

3.03 INSTALLATION - METERING

A. INSTALL METERS AND INSTRUMENT TRANSFORMERS.

B. SET USER-PROGRAMMABLE PARAMETERS INCLUDING, BUT NOT LIMITED TO ELECTRICAL MEASUREMENT VALUES, INSTRUMENT TRANSFORMER RATIOS, COMMUNICATION SETTINGS, DATA RECORDING SETTINGS, TIME SYNCHRONIZATION SETTINGS, AND SYSTEM CONFIGURATION SETTINGS.

C. TEST CONTINUITY OF WIRING AND CONNECTIONS BETWEEN METERS AND THE DDC SYSTEM.

3.04 FIELD QUALITY CONTROL

A. ENGAGE THE SERVICES OF AN INDEPENDENT ELECTRICAL TESTING ORGANIZATION IN ACCORDANCE WITH SECTION 26 00 10 TO PERFORM THE FOLLOWING INSPECTIONS AND TESTS.

B. PERFORMANCE OF ACCEPTANCE CHECKS AND TESTS. PERFORM IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND INCLUDE THE FOLLOWING VISUAL AND MECHANICAL INSPECTIONS AND ELECTRICAL TESTS, PERFORMED IN ACCORDANCE WITH ANSI/NETA ATS.

C. PANEL BOARDS:
1. COMPARE EQUIPMENT NAMEPLATE DATA WITH CONTRACT DOCUMENTS.
2. INSPECT PHYSICAL, ELECTRICAL, AND MECHANICAL CONDITION.
3. VERIFY ANCHORAGE, REQUIRED AREA CLEARANCES, AND CORRECT ALIGNMENT.
4. INSPECT ALL DOORS, PANELS, AND SECTIONS FOR PAINT, DENTS, SCRATCHES, FIT, AND MISSING HARDWARE.
5. VERIFY THAT CIRCUIT BREAKER SIZES AND TYPES ARE AS SPECIFIED.
6. INSPECT ALL BOLTED ELECTRICAL CONNECTIONS FOR HIGH RESISTANCE USING LOW-RESISTANCE OHMMETER. PERFORM ANY NECESSARY CORRECTIONS.
7. CONFIRM CORRECT OPERATION AND SEQUENCING OF ELECTRICAL AND MECHANICAL INTERLOCK SYSTEMS.
8. INSPECT INSULATORS FOR EVIDENCE OF PHYSICAL DAMAGE OR CONTAMINATED SURFACES.
9. VERIFY CORRECT BARRIER INSTALLATION.
10. EXERCISE ALL ACTIVE COMPONENTS.
11. INSPECT ALL MECHANICAL INDICATING DEVICES FOR CORRECT OPERATION.
12. CLEAN PANEL BOARD.
13. PERFORM INSULATION-RESISTANCE TESTS ON EACH BUS SECTION PHASE TO PHASE AND PHASE TO GROUND.
14. PERFORM PHASING CHECK ON SWITCHBOARD TO ENSURE CORRECT BUS PHASING FROM EACH SOURCE.
15. PROVIDE ARC FLASH LABELS PER ARC FLASH HAZARD ANALYSIS ON ALL NEW POWER DISTRIBUTION EQUIPMENT.

D. MOLDED CASE CIRCUIT BREAKERS:
1. COMPARE NAMEPLATE DATA WITH THE DRAWINGS AND SPECIFICATIONS.
2. INSPECT PHYSICAL AND MECHANICAL CONDITION.
3. PERFORM CONTACT-RESISTANCE TESTS ON EACH BREAKER.
4. PERFORM INSULATION-RESISTANCE TESTS PHASE TO PHASE, PHASE TO GROUND, AND ACROSS OPEN POLES.
5. ADJUST BREAKERS FOR FINAL SETTINGS IN ACCORDANCE WITH SECTION 26 05 73.
6. DETERMINE THE FOLLOWING SETTINGS BY PRIMARY CURRENT INJECTION FOR ALL CIRCUIT BREAKERS RATED 100 AMPERES AND HIGHER.
a. LONG-TIME MINIMUM PICKUP CURRENT.
b. LONG-TIME DELAY.
c. SHORT-TIME PICKUP AND DELAY.
d. INSTANTANEOUS PICKUP.
e. GROUND FAULT PICKUP AND DELAY.

E. METERS:
1. VISUAL AND MECHANICAL INSPECTION.
a. COMPARE EQUIPMENT NAMEPLATE DATA WITH SPECIFICATIONS AND APPROVED SHOP DRAWINGS.
b. INSPECT PHYSICAL AND MECHANICAL CONDITION.
c. VERIFY TIGHTNESS OF ELECTRICAL CONNECTIONS.
2. ELECTRICAL TESTS.
a. MEASURE ACCURACY OF CURRENT METER FUNCTION AT 10, 50, AND 100 PERCENT OF FULL SCALE.
b. MEASURE ACCURACY OF VOLTAGE METER FUNCTION AT THE SYSTEM NOMINAL VOLTAGE SETTING (208 OR 480 VAC, AS APPLICABLE).
c. MEASURE ACCURACY OF POWER FACTOR AT 0.5 LEADING AND LAGGING.
d. MEASURE ACCURACY OF POWER FACTOR AT UNITY (1.0).
e. MEASURE ACCURACY OF APPARENT POWER, REAL POWER, AND REACTIVE POWER AT 50 AND 100 PERCENT OF FULL SCALE (AS DETERMINED BY THE CURRENT TRANSFORMER PRIMARY CURRENT SETTING.
f. MEASURE ACCURACY OF DEMAND FUNCTIONS AT 100 PERCENT OF FULL SCALE.
g. VERIFY DATA LOGGING FUNCTIONS.
h. ELECTRICALLY CONFIRM THAT CURRENT TRANSFORMER AND VOLTAGE TRANSFORMER SECONDARY CIRCUITS ARE CONNECTED AND FUNCTIONAL.
3. TEST RESULTS:
a. COMPARE MEASURED ACCURACY WITH MANUFACTURER'S PUBLISHED TOLERANCES.
b. REMOVE AND PROVIDE NEW METERS NOT MEETING MANUFACTURER'S PUBLISHED TOLERANCES.

F. INSTRUMENT TRANSFORMERS:
1. VISUAL AND MECHANICAL INSPECTION.
a. COMPARE EQUIPMENT NAMEPLATE DATA WITH SPECIFICATIONS AND APPROVED SHOP DRAWINGS.
b. INSPECT PHYSICAL AND MECHANICAL CONDITION.
c. VERIFY CORRECT CONNECTION.
d. VERIFY TIGHTNESS OF ACCESSIBLE ELECTRICAL CONNECTIONS.
e. VERIFY THAT ALL REQUIRED GROUNDING AND SHORTING CONNECTIONS PROVIDE GOOD CONTACT.
f. VERIFY CORRECT PRIMARY AND SECONDARY FUSE SIZES FOR POTENTIAL TRANSFORMERS.
2. ELECTRICAL TESTS - CURRENT TRANSFORMERS.
a. MEASURE SECONDARY WINDING INSULATION-RESISTANCE.
b. VERIFY AND RECORD WINDING POLARITY.
c. MEASURE TRANSFORMER RATIO.
d. CAUTION: CHANGES OF CONNECTION, INSERTION, AND REMOVAL OF INSTRUMENTS, RELAYS, AND METERS SHALL BE PERFORMED IN SUCH A MANNER THAT SECONDARY CIRCUITS OF ENERGIZED CURRENT TRANSFORMERS ARE NOT OPENED.
3. ELECTRICAL TESTS - VOLTAGE (POTENTIAL) TRANSFORMERS, WHERE APPLICABLE.
a. MEASURE PRIMARY AND SECONDARY WINDING INSULATION-RESISTANCE.
b. VERIFY AND RECORD WINDING POLARITY.
c. MEASURE TRANSFORMER RATIO.

G. PREPARE AND SUBMIT REPORT OF FINDINGS.

3.05 ADJUSTING

A. SET FIELD-ADJUSTABLE CIRCUIT-BREAKER TRIP RANGES.

B. MEASURE STEADY STATE LOAD CURRENTS AT EACH PANEL BOARD FEEDER; REARRANGE CIRCUITS IN PANEL BOARD TO BALANCE PHASE LOADS TO WITHIN 20 PERCENT OF EACH OTHER. MAINTAIN PROPER PHASING FOR MULTI-WIRE BRANCH CIRCUITS.

END OF SECTION

ELECTRICAL GENERAL NOTES

1.THE FOLLOWING NOTES APPLY TO ALL ELECTRICAL DRAWINGS. ADDITIONAL NOTES MAY BE INDICATED ON THE INDIVIDUAL DRAWINGS.

2.PROVIDE TEMPORARY CONSTRUCTION POWER, LIGHTING AND SYSTEMS FOR CONSTRUCTION AREA PER CONTRACT.

3.ALL DETAILS AND DIMENSIONS ASSOCIATED WITH THESE DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO PERFORMING WORK THAT RELIES ON THIS INFORMATION.

4.THE DRAWINGS DO NOT SHOW COMPLETE DETAILS OF THE BUILDING CONSTRUCTION. REFER TO THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND OTHER DRAWINGS FOR THOSE DETAILS WHICH MAY AFFECT OR BE AFFECTED BY THE EXECUTION OF THIS WORK.

5.DRAWINGS ARE DIAGRAMMATIC AND SHOW ONLY APPROXIMATE LOCATIONS AND ROUTING OF DUCTS, CONDUITS, CABLE TRAYS, PATHWAYS, RACEWAYS, DEVICES, AND EQUIPMENT. TAKE MEASUREMENTS FROM BUILDING OR SITE AND VERIFY WITH DRAWINGS. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, JUNCTION BOXES, AND ACCESSORIES THAT MAY BE REQUIRED.

6.DRAWINGS INDICATE CONNECTION FOR EQUIPMENT TO BE FURNISHED BY THE OWNER OR AS THE WORK OF OTHER TRADES. VERIFY LOCATION OF EQUIPMENT, ROUGH-IN LOCATIONS AND TYPE OF CONNECTIONS PRIOR TO PREPARATION OF SHOP DRAWINGS OR SUBMITTALS, AND PRIOR TO INSTALLATION OF SERVICE CONNECTIONS. DO NOT INTERFERE WITH ACCESS FOR MAINTENANCE AND REMOVAL OR REPLACEMENT OF EQUIPMENT.

7.RACEWAY AND BOX LAYOUT ARE SHOWN AS DIAGRAMMATIC INDICATING GENERAL ARRANGEMENT. LOCATE CONDUITS TO AVOID INTERFERENCE WITH BUILDING STRUCTURAL MEMBERS, EQUIPMENT, AND BUILDING OPENINGS; PROVIDE ACCESS IN ACCORDANCE WITH NFPA REQUIREMENTS.

8.COORDINATE ELECTRICAL WORK WITH ALL TRADES AND FINISH CONDITIONS THAT WOULD AFFECT OR BE AFFECTED BY THE ELECTRICAL WORK. PROVIDE RACEWAYS, DEVICES, FITTINGS AND ACCESSORIES TO COORDINATE THE WORK.

9.THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF PHASING AND INSTALLATION OF ALL NEW WORK WITH THE WORK OF ALL OTHER TRADES. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE FOR ANY ADDITIONAL WORK WHICH MAY BE CAUSED BY THE IMPROPER SEQUENCING OF CONSTRUCTION ACTIVITIES.

10.COORDINATE EQUIPMENT POWER CONNECTION REQUIREMENTS AND ELECTRICAL CHARACTERISTICS WITH APPROVED EQUIPMENT. COORDINATE ANY VARIATION IN ELECTRICAL CHARACTERISTICS FROM SCHEDULED VALUES. ANY INCREASE IN ELECTRICAL POWER CONSUMPTION OR CHANGES TO ELECTRICAL CHARACTERISTICS (E.G. VOLTAGE) SHALL BE SUBJECT TO APPROVAL.

11.COORDINATE THE LOCATION OF ALL WORK AS REQUIRED TO PROVIDE CLEARANCES OVER LIGHTING LUMINAIRES AND OTHER CEILING MOUNTED DEVICES AS REQUIRED FOR REMOVAL AND MAINTENANCE ACCESS.

12.PROVIDE ALL RACEWAY SLEEVES AND PENETRATION SEALS AS REQUIRED FOR THE INSTALLATION OF ALL ELECTRICAL SYSTEMS.

13.COORDINATE THE LAYOUT OF ALL EQUIPMENT, PANELS, PULL BOXES, RACEWAY, AND ACCESSORIES SO THEY FIT INTO THE SPACE ALLOTTED. PROVIDE SERVICE ACCESS AND CLEARANCES AS INDICATED ON DRAWINGS, AS REQUIRED BY CODES, AND AS RECOMMENDED BY THE MANUFACTURER FOR THE INSTALLATION, REMOVAL, ENTRY, SERVICING AND MAINTENANCE OF EQUIPMENT (WHICHEVER IS GREATER) PRIOR TO INSTALLATION, COORDINATE LAYOUT OF EQUIPMENT, CONDUIT, AND ACCESSORIES WITH ALL OTHER TRADES TO AVOID BLOCKING SERVICE OR REPLACEMENT ACCESS FOR ALL NEW AND EXISTING EQUIPMENT AND EQUIPMENT INSTALLED BY OTHERS.

14.DRAWINGS SHOW EQUIPMENT CONNECTIONS WITH AN EQUIPMENT CALLOUT SYMBOL. PROVIDE CODE REQUIRED DISCONNECT AND CIRCUITING SHOWN ON THE DRAWINGS. REFER TO THE MOTOR EQUIPMENT AND WIRING SCHEDULE FOR ADDITIONAL REQUIREMENTS.

15.REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS OF DEVICES IN FINISHED AREAS. LOCATE DEVICES AT HEIGHTS INDICATED ON ARCHITECTURAL ELEVATIONS. LOCATE DEVICES SO THAT THEY DO NOT CONFLICT WITH GENERAL CONSTRUCTION (E.G. WAINSCOT, DOOR HARDWARE), AND THE WORK OF OTHER TRADES.

16.REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF CEILING MOUNTED ITEMS. INSTALL CEILING MOUNTED ITEMS IN THE CENTER OF CEILING TILES (WITH REINFORCEMENT), IN THE CENTER OF ROOMS, OR WHERE INDICATED ON ARCHITECTURAL DRAWINGS. WHERE LOCATION OF ITEMS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, OBTAIN DIRECTION FROM ARCHITECT PRIOR TO ROUGH-IN AND INSTALLATION.

17.ALL EXISTING RACEWAYS THAT REMAIN ABOVE THE CEILING IN THE AREA OF WORK SHALL BE SUPPORTED PER THE CURRENT EDITION ON THE NEC.

18.DO NOT CORE DRILL OR DRILL THROUGH BEAMS, COLUMNS OR SHEAR WALLS UNLESS INDICATED ON STRUCTURAL DRAWINGS OR AS APPROVED BY THE STRUCTURAL ENGINEER.

19.PROVIDE DEDICATED NEUTRAL CONDUCTORS FOR EACH 120 VOLT AND 277 VOLT CIRCUIT. (SHARED NEUTRALS ARE NOT PERMITTED).

20.PROVIDE A SEPARATE INSULATED EQUIPMENT GROUNDING CONDUCTOR WITH EACH FEEDER AND IN BRANCH CIRCUIT RACEWAY.

21.FURNISH RECORD DRAWINGS, SHOW LOCATION OF EQUIPMENT AND SIZE OF CONDUITS, RACEWAYS, PATHWAYS, DUCTS, AND CABLE TRAYS. LOCATE LUMINAIRES, LIGHTING SWITCHES, EQUIPMENT DISCONNECT SWITCHES, RECEPTACLES, AND OTHER EQUIPMENT AND DEVICES. KEEP RECORD DRAWINGS CONTINUOUSLY UPDATED DURING PROGRESS OF PROJECT AND READY FOR REFERENCE. MAKE AVAILABLE AT THE SITE FOR REVIEW.

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1 E0.03 ELECTRICAL SPECIFICATIONS AND GENERAL NOTES
SCALE: NTS

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3500 South Meridian Blvd - Puyallup, WA 98373

SHEET TITLE: ELECTRICAL SPECIFICATIONS AND GENERAL NOTES

DATE	09/20/2022
SCALE	NTS
ENGR	JSM-MJW
DRWN	NHH
CHKD	MJW
APPR	JSM
JOB	22025

E0.03

SHEET 03 OF 13

PRCTI20221551

IF SHEET IS LESS THAN 30"x42" IT IS A REDUCED PRINT SCALE REDUCED ACCORDINGLY

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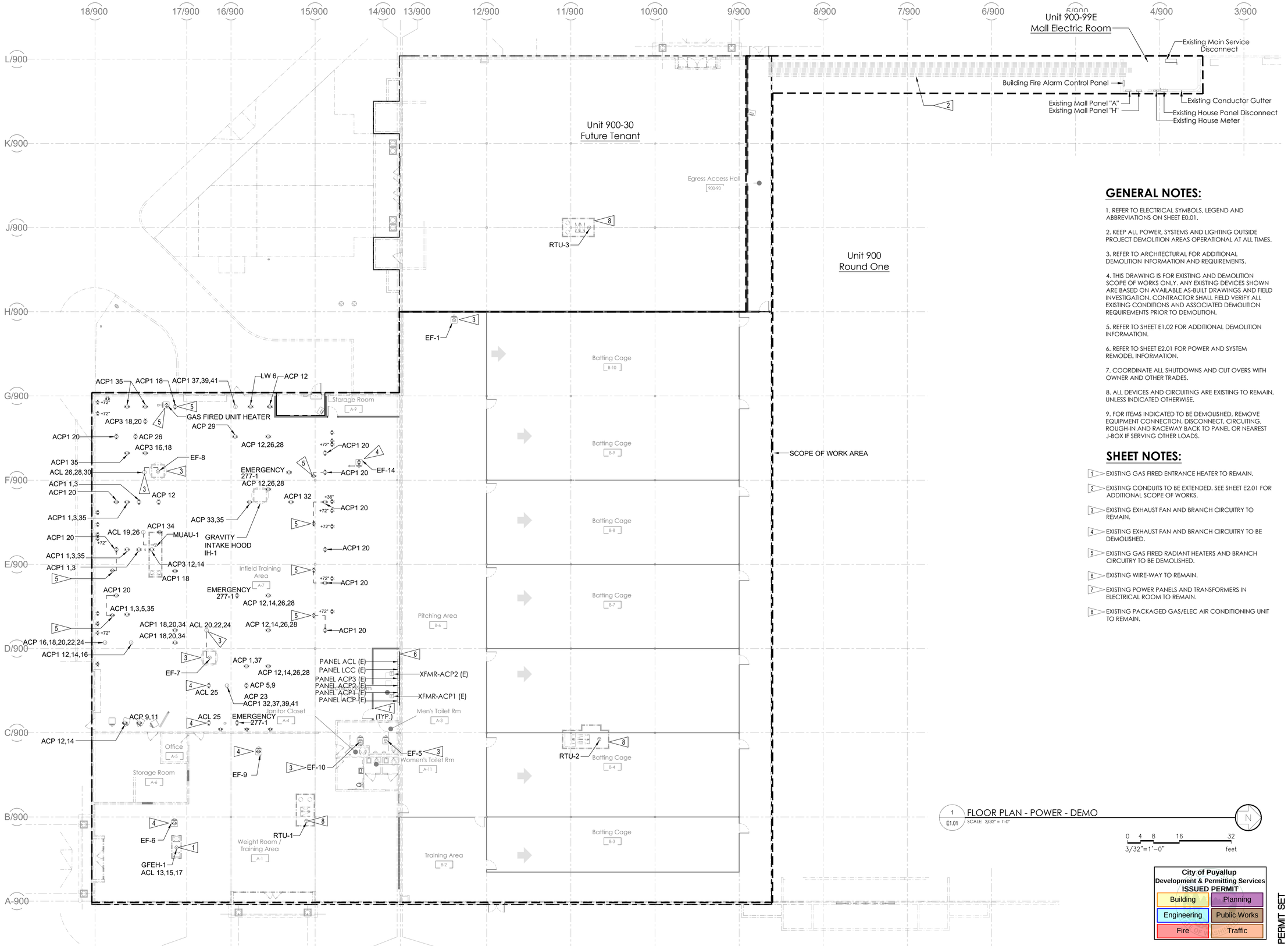

GENERAL NOTES:

1. REFER TO ELECTRICAL SYMBOLS, LEGEND AND ABBREVIATIONS ON SHEET E0.01.

2. KEEP ALL POWER, SYSTEMS AND LIGHTING OUTSIDE PROJECT DEMOLITION AREAS OPERATIONAL AT ALL TIMES.

3. REFER TO ARCHITECTURAL FOR ADDITIONAL DEMOLITION INFORMATION AND REQUIREMENTS.

4. THIS DRAWING IS FOR EXISTING AND DEMOLITION SCOPE OF WORKS ONLY. ANY EXISTING DEVICES SHOWN ARE BASED ON AVAILABLE AS-BUILT DRAWINGS AND FIELD INVESTIGATION. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND ASSOCIATED DEMOLITION REQUIREMENTS PRIOR TO DEMOLITION.

5. REFER TO SHEET E1.02 FOR ADDITIONAL DEMOLITION INFORMATION.

6. REFER TO SHEET E2.01 FOR POWER AND SYSTEM REMODEL INFORMATION.

7. COORDINATE ALL SHUTDOWNS AND CUT OVERS WITH OWNER AND OTHER TRADES.

8. ALL DEVICES AND CIRCUITING ARE EXISTING TO REMAIN, UNLESS INDICATED OTHERWISE.

9. FOR ITEMS INDICATED TO BE DEMOLISHED, REMOVE EQUIPMENT CONNECTION, DISCONNECT, CIRCUITING, ROUGH-IN AND RACEWAY BACK TO PANEL OR NEAREST J-BOX IF SERVING OTHER LOADS.

SHEET NOTES:

1. EXISTING GAS FIRED ENTRANCE HEATER TO REMAIN.
2. EXISTING CONDUITS TO BE EXTENDED. SEE SHEET E2.01 FOR ADDITIONAL SCOPE OF WORKS.
3. EXISTING EXHAUST FAN AND BRANCH CIRCUITRY TO REMAIN.
4. EXISTING EXHAUST FAN AND BRANCH CIRCUITRY TO BE DEMOLISHED.
5. EXISTING GAS FIRED RADIANT HEATERS AND BRANCH CIRCUITRY TO BE DEMOLISHED.
6. EXISTING WIRE-WAY TO REMAIN.
7. EXISTING POWER PANELS AND TRANSFORMERS IN ELECTRICAL ROOM TO REMAIN.
8. EXISTING PACKAGED GAS/ELEC AIR CONDITIONING UNIT TO REMAIN.

1 E1.01 FLOOR PLAN - POWER - DEMO
SCALE: 3/32" = 1'-0"

0 4 8 16 32
3/32"=1'-0" feet

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SHEET TITLE: FLOOR PLAN - POWER - DEMO

DATE	09/20/2022
SCALE	NTS
ENGR	JSM-MJW
DRWN	NHH
CHKD	MJW
APPR	JSM
JOB	22025

E1.01

SHEET 04 OF 13

PRCTI20221551

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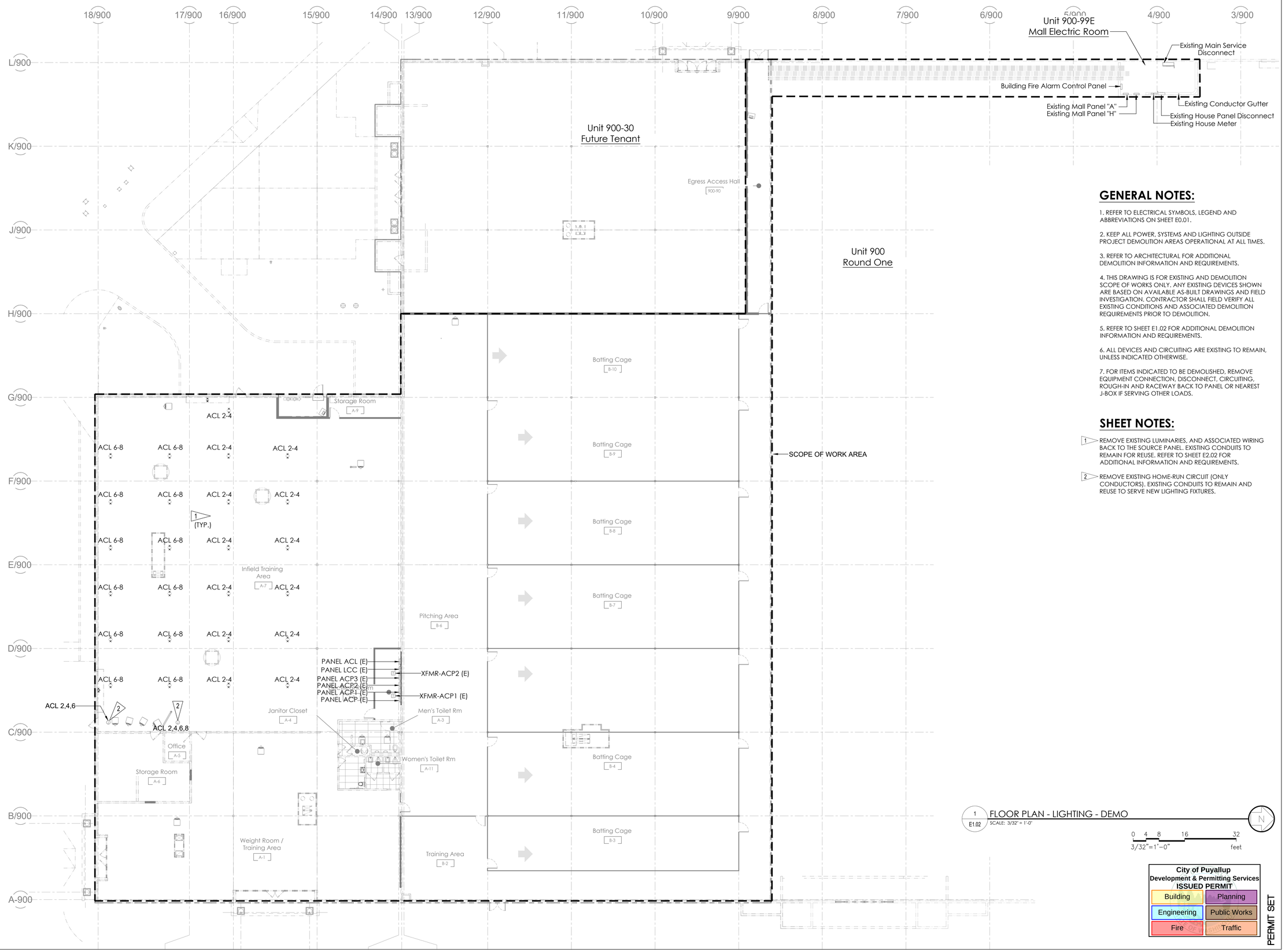

GENERAL NOTES:

1. REFER TO ELECTRICAL SYMBOLS, LEGEND AND ABBREVIATIONS ON SHEET E0.01.

2. KEEP ALL POWER, SYSTEMS AND LIGHTING OUTSIDE PROJECT DEMOLITION AREAS OPERATIONAL AT ALL TIMES.

3. REFER TO ARCHITECTURAL FOR ADDITIONAL DEMOLITION INFORMATION AND REQUIREMENTS.

4. THIS DRAWING IS FOR EXISTING AND DEMOLITION SCOPE OF WORKS ONLY. ANY EXISTING DEVICES SHOWN ARE BASED ON AVAILABLE AS-BUILT DRAWINGS AND FIELD INVESTIGATION. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND ASSOCIATED DEMOLITION REQUIREMENTS PRIOR TO DEMOLITION.

5. REFER TO SHEET E1.02 FOR ADDITIONAL DEMOLITION INFORMATION AND REQUIREMENTS.

6. ALL DEVICES AND CIRCUITING ARE EXISTING TO REMAIN, UNLESS INDICATED OTHERWISE.

7. FOR ITEMS INDICATED TO BE DEMOLISHED, REMOVE EQUIPMENT CONNECTION, DISCONNECT, CIRCUITING, ROUGH-IN AND RACEWAY BACK TO PANEL OR NEAREST J-BOX IF SERVING OTHER LOADS.

SHEET NOTES:

1. REMOVE EXISTING LUMINARIES, AND ASSOCIATED WIRING BACK TO THE SOURCE PANEL. EXISTING CONDUITS TO REMAIN FOR REUSE. REFER TO SHEET E2.02 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

2. REMOVE EXISTING HOME-RUN CIRCUIT (ONLY CONDUCTORS). EXISTING CONDUITS TO REMAIN AND REUSE TO SERVE NEW LIGHTING FIXTURES.

1 / E1.02 FLOOR PLAN - LIGHTING - DEMO
SCALE: 3/32" = 1'-0"

0 4 8 16 32
3/32"=1'-0" feet

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MATTHEW J. WOO
STATE OF WASHINGTON
40454
REGISTERED PROFESSIONAL ENGINEER

NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3500 South Meridan Blvd – Puyallup, WA 98373

SHEET TITLE: FLOOR PLAN - LIGHTING - DEMO

DATE	09/20/2022
SCALE	NTS
ENGR	JSM-MJW
DRWN	NHH
CHKD	MJW
APPR	JSM
JOB	22025

E1.02

SHEET 05 OF 13

PRCTI20221551

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Unit 900-99E
Mall Electric Room

Unit 900-30
Future Tenant

Egress Access Hall
900-90

Unit 900
Round One

RTU-3

EF-1

Batting Cage
8-10

ACP1/2

ACP24

Storage Room
A-9

ACP1/2

ACP1/4

ACP1/4

ACP3/11

ACP3/11

EF-8

ACP22

ACP1/6

ACP1/2,4,6

Batting Cage
8-8

ACP1/6

IH-1

ACP20

MUAU-1

ACP18

Infield Training Area
A-7

ACP20

ACP3/7

Pitching Area
B-6

EF-7

ACP18

ACP1/6

Batting Cage
B-7

1 E5.01

Electrical Room
A-8

ACP3/26,28,30

Janitor Closet
A-4

ACP3/30

EF-10

Men's Toilet Rm
A-3

ACP16,18,20,22,24

ACP16

ACP1/12

ACP1/14

Office

ACP2/2

ACP2/6

ACP2/28

ACP1/16

ACP2/2,6

ACP2/12

EF-5

Women's Toilet Rm
A-11

ACP1/17

Storage Room
A-6

ACP2/12,16

ACP2/26

ACP1/12

ACP1/17

ACP2/28

ACP2/16

ACP1/15

ACP1/15

ACP2/26,28,30

ACP8

RTU-1

Weight Room/
Training Area
A-1

GFEH

ACP/6,8,14

ACP8

+84"

ACP/6

+84"

ACP8

ACP1/12

Batting Cage
B-3

Training Area
B-2

ACP/17,19,21

RTU-2

Batting Cage
B-4

ACP/39

+96"

ACP/37

ACP/39

+96"

SCOPE OF WORK AREA

ACP/35

ACP/33,35,37

ACP/39

+96"

ACP/33

ACP/39

+96"

ACP/40

ACP/34,36,39,40

ACP/39

+96"

+96"

ACP/36

ACP/36

ACP/39

+96"

+96"

ACP/34

ACP/39

+96"

+96"

2 E5.01

SHEET NOTES:

1. EXISTING (2) 3 1/2" POWER CONDUITS TO BE RE-USED
2. EXTEND (2) 3 1/2" POWER CONDUITS AND PROVIDE NEW CONDUCTOR TO SERVE NEW 400A PANEL IN THE ELECTRICAL ROOM A10.
3. EXISTING (1) 2" COMMUNICATION CONDUIT TO BE RE-USED
4. EXTEND (1) 2" COMMUNICATION CONDUIT TO NEW WALL MOUNTED PATCH PANEL IN ELECTRICAL ROOM A-10 TO SERVE NEW DATA DEVICES.
5. COORDINATE AND PROVIDE WALL MOUNTED (12) PORT CAT-6 UTP PATCH PANEL AND CABLE MANAGEMENT FOR TERMINATION OF COMMUNICATION OUTLET JACK CABLES. PROVIDE LABELING, TESTING AND COPY OF TEST RESULTS.
6. COORDINATE AND PROVIDE WALL MOUNTED (2) STRAND MULTI-MODE FIBER WITH LC-TYPE CONNECTORS PATCH PANEL AND CABLE MANAGEMENT FOR TERMINATION OF FIBER COMMUNICATION BACKBONE CABLE. PROVIDE LABELING, TESTING AND COPY OF TEST RESULTS.
7. COORDINATE AND PROVIDE FEEDERS (CONDUIT AND CONDUCTORS). DISCONNECT SWITCHES TO ACCOMMODATE EXISTING MECHANICAL EQUIPMENT NEW INSTALLATION REQUIREMENTS. REFER TO SHEET E6.03 FOR EQUIPMENT SCHEDULE AND E6.02 FOR PANEL SCHEDULE.
8. RECEPTACLE SHALE BE MOUNTED ABOVE CONCRETE.

1 E2.01 FLOOR PLAN - POWER - REMODEL
SCALE: 3/32" = 1'-0"

0 4 8 16 32
3/32"=1'-0" feet

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SOUTH HILL MALL
3500 South Meridan Blvd - Puyallup, WA 98373

SHEET TITLE
FLOOR PLAN - REMODEL
- POWER & SYSTEM

DATE	09/20/2022
SCALE	NTS
ENGR	JSM-MJW
DRWN	NHH
CHKD	MJW
APPR	JSM
JOB	22025

E2.01

SHEET 06 OF 13

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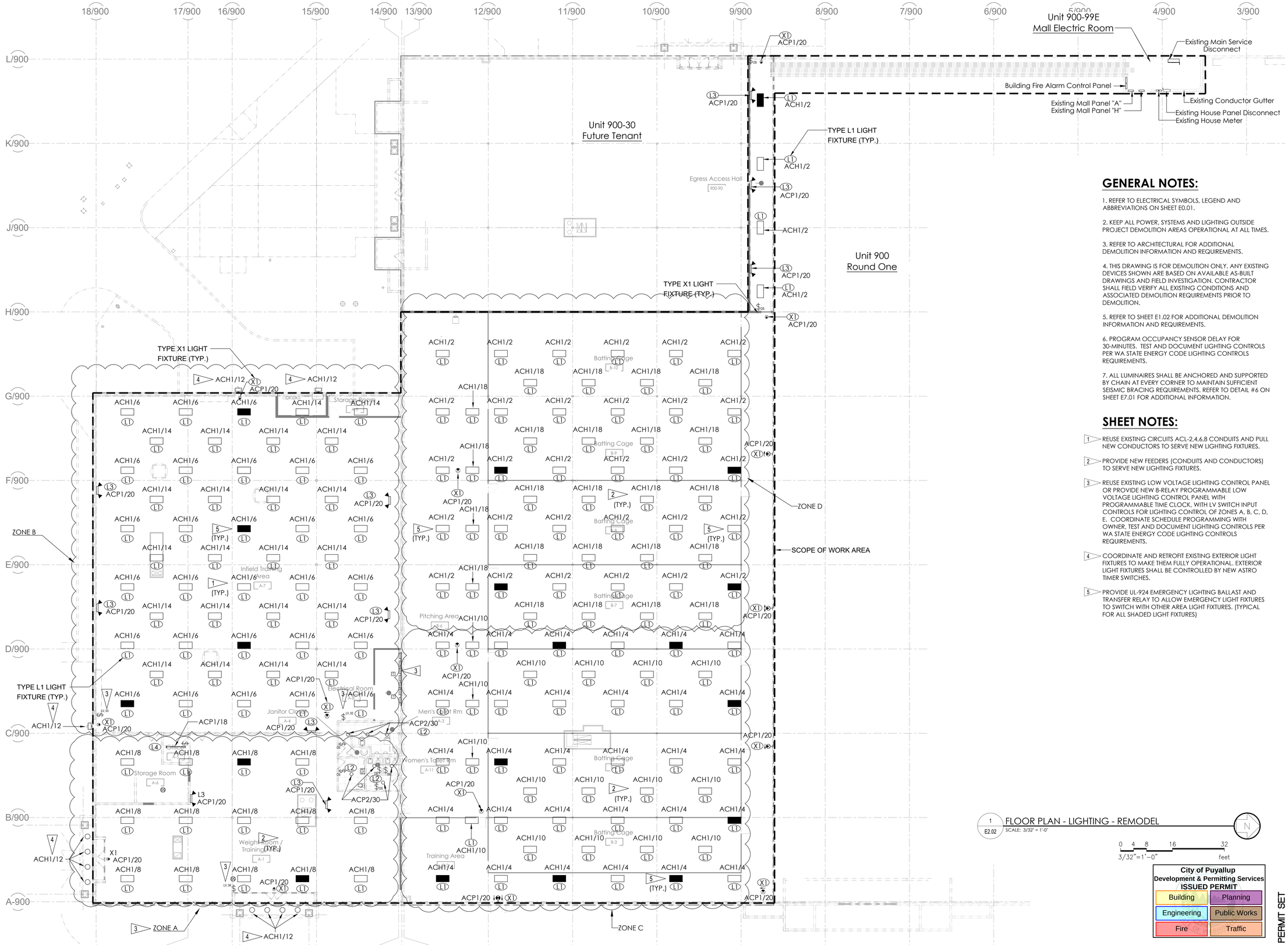

GENERAL NOTES:

1. REFER TO ELECTRICAL SYMBOLS, LEGEND AND ABBREVIATIONS ON SHEET E0.01.

2. KEEP ALL POWER, SYSTEMS AND LIGHTING OUTSIDE PROJECT DEMOLITION AREAS OPERATIONAL AT ALL TIMES.

3. REFER TO ARCHITECTURAL FOR ADDITIONAL DEMOLITION INFORMATION AND REQUIREMENTS.

4. THIS DRAWING IS FOR DEMOLITION ONLY. ANY EXISTING DEVICES SHOWN ARE BASED ON AVAILABLE AS-BUILT DRAWINGS AND FIELD INVESTIGATION. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND ASSOCIATED DEMOLITION REQUIREMENTS PRIOR TO DEMOLITION.

5. REFER TO SHEET E1.02 FOR ADDITIONAL DEMOLITION INFORMATION AND REQUIREMENTS.

6. PROGRAM OCCUPANCY SENSOR DELAY FOR 30-MINUTES. TEST AND DOCUMENT LIGHTING CONTROLS PER WA STATE ENERGY CODE LIGHTING CONTROLS REQUIREMENTS.

7. ALL LUMINAIRES SHALL BE ANCHORED AND SUPPORTED BY CHAIN AT EVERY CORNER TO MAINTAIN SUFFICIENT SEISMIC BRACING REQUIREMENTS. REFER TO DETAIL #6 ON SHEET E7.01 FOR ADDITIONAL INFORMATION.

SHEET NOTES:

1. REUSE EXISTING CIRCUITS ACL-2,4,6,8 CONDUITS AND PULL NEW CONDUCTORS TO SERVE NEW LIGHTING FIXTURES.
2. PROVIDE NEW FEEDERS (CONDUITS AND CONDUCTORS) TO SERVE NEW LIGHTING FIXTURES.
3. REUSE EXISTING LOW VOLTAGE LIGHTING CONTROL PANEL OR PROVIDE NEW 8-RELAY PROGRAMMABLE LOW VOLTAGE LIGHTING CONTROL PANEL WITH PROGRAMMABLE TIME CLOCK, WITH LV SWITCH INPUT CONTROLS FOR LIGHTING CONTROL OF ZONES A, B, C, D, E. COORDINATE SCHEDULE PROGRAMMING WITH OWNER. TEST AND DOCUMENT LIGHTING CONTROLS PER WA STATE ENERGY CODE LIGHTING CONTROLS REQUIREMENTS.
4. COORDINATE AND RETROFIT EXISTING EXTERIOR LIGHT FIXTURES TO MAKE THEM FULLY OPERATIONAL. EXTERIOR LIGHT FIXTURES SHALL BE CONTROLLED BY NEW ASTRO TIMER SWITCHES.
5. PROVIDE UL-924 EMERGENCY LIGHTING BALLAST AND TRANSFER RELAY TO ALLOW EMERGENCY LIGHT FIXTURES TO SWITCH WITH OTHER AREA LIGHT FIXTURES. (TYPICAL FOR ALL SHADED LIGHT FIXTURES)

1 / E2.02 FLOOR PLAN - LIGHTING - REMODEL
SCALE: 3/32" = 1'-0"

0 4 8 16 32
3/32"=1'-0" feet

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SHEET TITLE: FLOOR PLAN - REMODEL - LIGHTING

DATE	09/20/2022
SCALE	NTS
ENGR	JSM-MJW
DRWN	NHH
CHKD	MJW
APPR	JSM
JOB	22025

E2.02

SHEET 07 OF 13

PRCTI20221551

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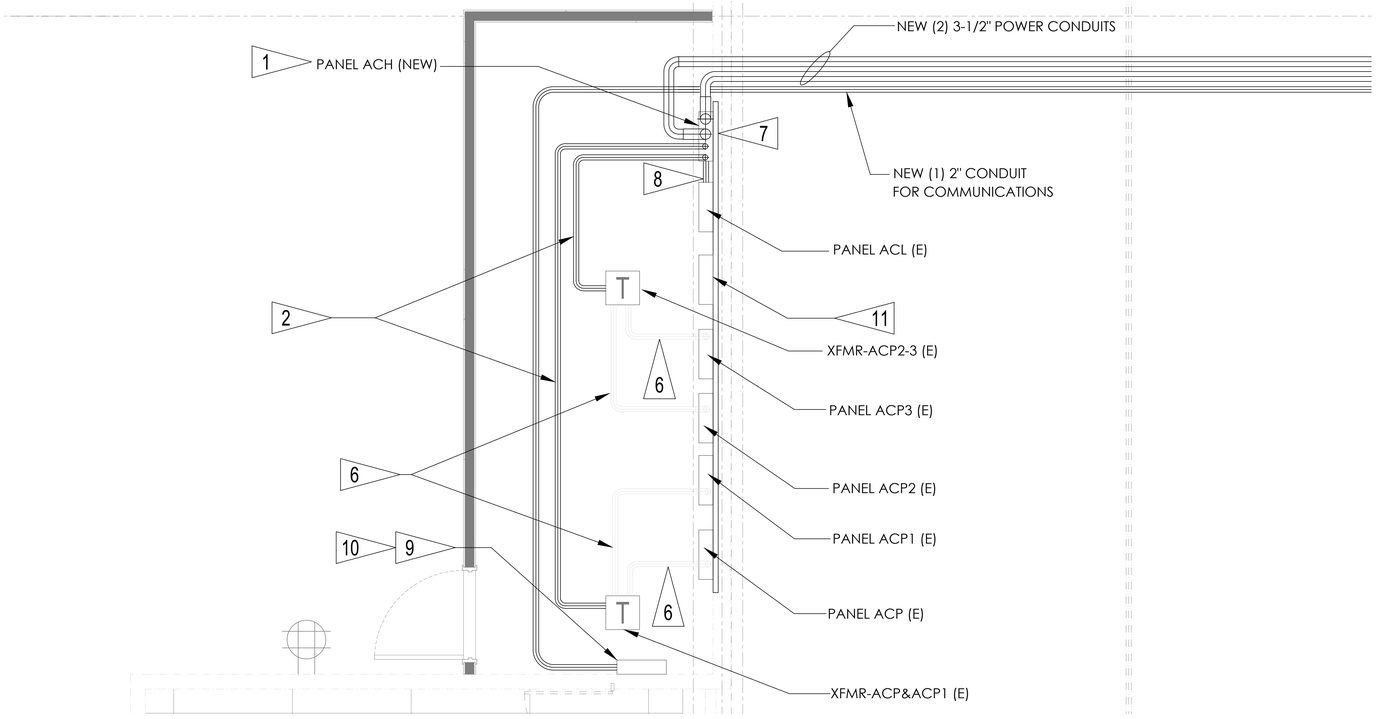
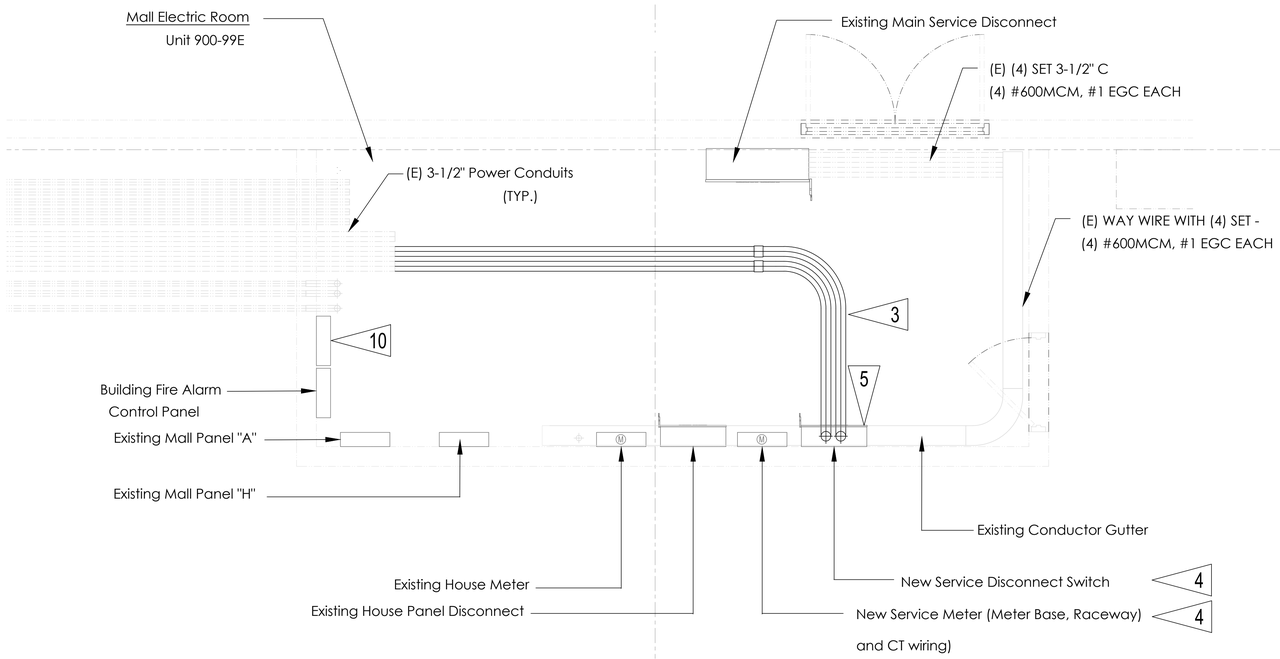


1 / E5.01 ENLARGED ELECTRICAL ROOM A-10
SCALE: 1/2" = 1'-0"

0 1 2 4 6
1/2"=1'-0" feet

SHEET NOTES:

1. PROVIDE NEW 400A 480Y/277V, 3PH-4W PANEL IN THE ELECTRICAL ROOM A10.
2. PROVIDE NEW FEEDER CONDUITS AND CONDUCTORS TO FEED THE 2 EXISTING 75KVA TRANSFORMER IN THE ELECTRICAL ROOM A10.
3. PROVIDE NEW FEEDER CONDUITS AND CONDUCTORS FROM THE NEW SERVICE DISCONNECT TO THE EXISTING (2) 3 1/2" CONDUITS IN THE MALL ELECTRICAL ROOM.
4. PROVIDE NEW 400A SERVICE DISCONNECT SWITCH AND SERVICE METER.
5. NEW FEEDER TO TAP IN EXISTING SERVICE FEEDER AT WIRE GUTTER.
6. EXISTING FEEDERS TO REMAIN.
7. EXISTING WIRE-WAY TO BE RE-USED
8. PROVIDE NEW FEEDER CONDUIT AND CONDUCTOR TO FEED EXISTING ACL PANEL.
9. COORDINATE AND PROVIDE WALL MOUNTED (12) PORT CAT-6 UTP PATCH PANEL AND CABLE MANAGEMENT FOR TERMINATION OF COMMUNICATION OUTLET JACK CABLES. PROVIDE LABELING, TESTING AND COPY OF TEST RESULTS.
10. COORDINATE AND PROVIDE WALL MOUNTED (2) STRAND MULTI-MODE FIBER WITH LC-TYPE CONNECTORS PATCH PANEL AND CABLE MANAGEMENT FOR TERMINATION OF FIBER COMMUNICATION BACKBONE CABLE. PROVIDE LABELING, TESTING AND COPY OF TEST RESULTS.
11. REUSE EXISTING LOW VOLTAGE LIGHTING CONTROL PANEL OR PROVIDE NEW 8-RELAY PROGRAMMABLE LOW VOLTAGE LIGHTING CONTROL PANEL WITH PROGRAMMABLE TIME CLOCK, WITH LV SWITCH INPUT CONTROLS FOR LIGHTING CONTROL OF ZONES a, A, B, C, D, E. COORDINATE SCHEDULE PROGRAMMING WITH OWNER, TEST AND DOCUMENT LIGHTING CONTROLS PER WA STATE ENERGY CODE LIGHTING CONTROLS REQUIREMENTS.



2 / E5.01 ENLARGED UNIT 900-99E MALL ELECTRICAL ROOM
SCALE: 1/2" = 1'-0"

0 1 2 4 6
1/2"=1'-0" feet

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SHEET TITLE: ENLARGED ELECTRICAL ROOMS

DATE	09/20/2022
SCALE	NTS
ENGR	JSM-MJW
DRWN	NHH
CHKD	MJW
APPR	JSM
JOB	22025

E5.01

SHEET 08 OF 13

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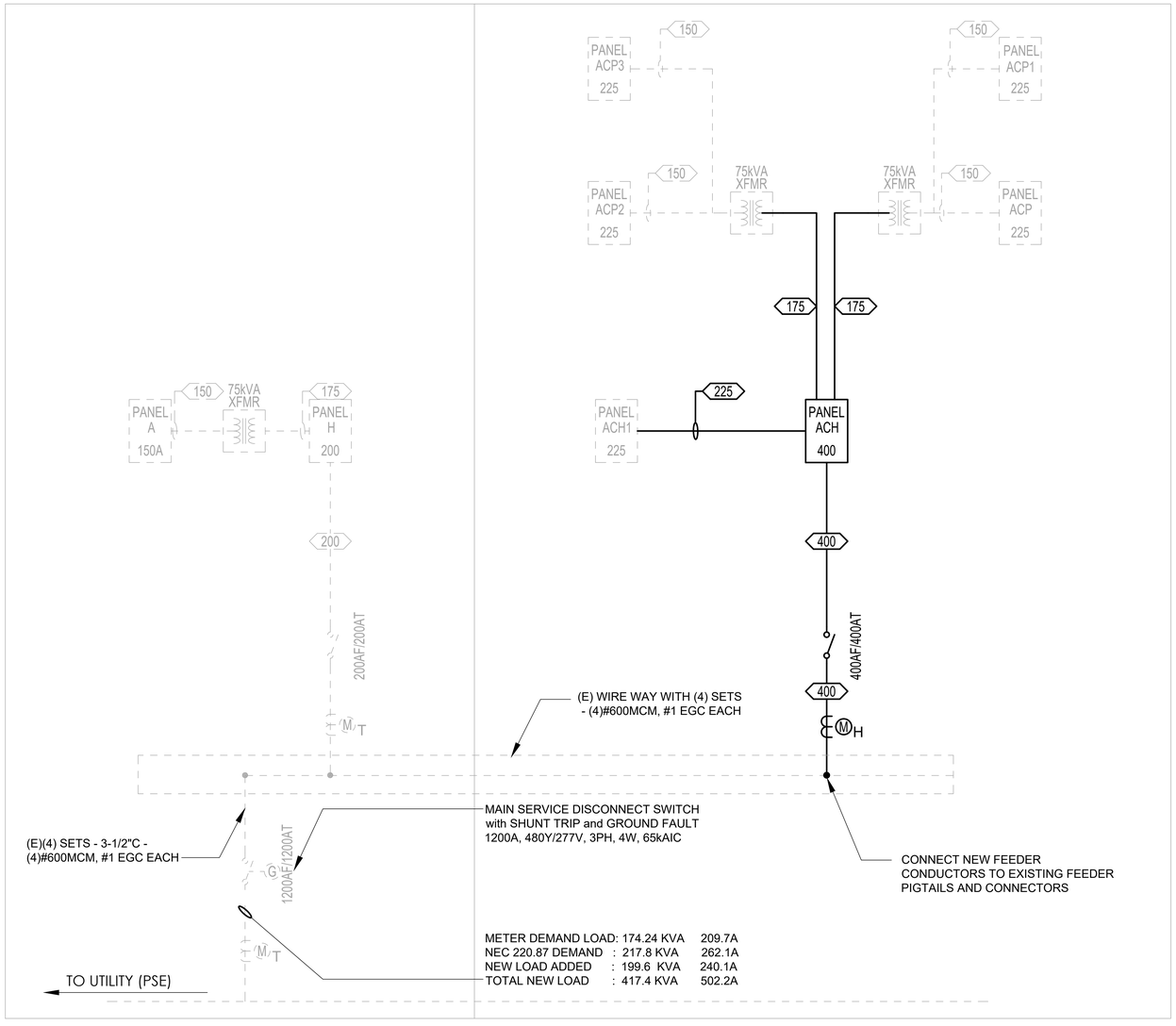

PANEL DESIGNATION

EXAMPLE DESIGNATION: ACP1

SUFFIX
1 = FIRST IN SEQUENCE
2 = SECOND IN SEQUENCE

VOLTAGE
L = 277Y/480V
P = 120Y/208V

LEGEND

- EXISTING
- TENANT IMPROVEMENT (TI) SCOPE OF WORK
- FUTURE TI SCOPE OF WORK

COPPER FEEDER SCHEDULE

AMPACITY (AMPS)	SYMBOL ID.	FEEDER 3 PHASE, 4 WIRE	RACEWAY	SYMBOL ID.	FEEDER 3 PHASE, 3 WIRE	RACEWAY
20	20	4#12, 1#12 G	3/4"	20N	3#12, 1#12 G	3/4"
30	30	4#10, 1#10 G	3/4"	30N	3#10, 1#10 G	3/4"
40	40	4#8, 1#10 G	1"	40N	3#8, 1#10 G	1"
50	50	4#6, 1#10 G	1"	50N	3#6, 1#10 G	1"
60	60	4#4, 1#10 G	1.5"	60N	3#4, 1#10 G	1.5"
70	70	4#4, 1#8 G	1.5"	70N	3#4, 1#8 G	1.5"
100	100	4#2, 1#8 G	1.5"	100N	3#2, 1#8 G	1.5"
125	125	4#1, 1#6 G	2"	125N	3#1, 1#6 G	1.5"
150	150	4#1/0, 1#6 G	2"	150N	3#1/0, 1#6 G	1.5"
175	175	4#2/0, 1#6 G	2"	175N	3#2/0, 1#6 G	2"
200	200	4#3/0, 1#6 G	2.5"	200N	3#3/0, 1#6 G	2"
225	225	4#4/0, 1#4 G	2.5"	225N	3#4/0, 1#4 G	2"
250	250	4#250 kcmil, 1#4 G	3"	250N	3#250 kcmil, 1#4 G	2.5"
300	300	4#350 kcmil, 1#4 G	3"	300N	3#350 kcmil, 1#4 G	3"
400	400	4#600 kcmil, 1#2 G	4"	400N	3#600 kcmil, 1#2 G	3.5"
500	500	2 SETS 4#250 kcmil, 1#1/0 G	(2) 3"	500N	2 SETS 3#250 kcmil, 1#1/0 G	(2) 2.5"
600	600	2 SETS 4#350 kcmil, 1#1/0 G	(2) 3"	600N	2 SETS 3#350 kcmil, 1#1/0 G	(2) 3"
800	800	2 SETS 4#600 kcmil. 1#1/0 G	(2) 4"	800N	2 SETS 3#600 kcmil, 1#1/0 G	(2) 3.5"
1000	1000	3 SETS 4#500 kcmil, 1#2/0 G	(3) 3.5"	1000N	3 SETS 3#500 kcmil, 1#2/0 G	(3) 3"
1200	1200	4 SETS 4#350 kcmil, 1#3/0 G	(4) 3"	1200N	4 SETS 3#350 kcmil, 1#3/0 G	(4) 3"
1600	1600	4 SETS 4#600 kcmil, 1#4/0 G	(4) 4"	1600N	4 SETS 3#600 kcmil, 1#4/0 G	(4) 3.5"
2000	2000	5 SETS 4#600 kcmil, 1#250 kcmil G	(5) 4"	2000N	5 SETS 3#600 kcmil, 1#250kcmil G	(5) 3.5"
2500	2500	6 SETS 4#600 kcmil, 1#350 kcmil G	(6) 4"	2500N	6 SETS 3#600 kcmil, 1#350 kcmil G	(6) 3.5"
3000	3000	8 SETS 4#500 kcmil, 1#500 kcmil G	(8) 3.5"	3000N	8 SETS 3#500 kcmil, 1#500 kcmil G	(8) 3.5"
4000	4000	10 SETS 4#600 kcmil, 1#600 kcmil G	(10) 4"	4000N	10 SETS 3#600 kcmil, 1#600 kcmil G	(10) 3.5"

NOTES:
1. ALL FEEDERS ARE COPPER WITH THHN/THWN INSULATION.
2. FOR FEEDERS WITH AN "SL" SUFFIX, DELETE THE GROUND CONDUCTOR.

1 E5.02 ONE-LINE DIAGRAM
SCALE: NTS

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SOUTH HILL MALL
3500 South Meridian Blvd – Puyallup, WA 98373

SHEET TITLE: ONE-LINE DIAGRAM

DATE	09/20/2022
SCALE	NTS
ENGR	JSM-MJW
DRWN	NHH
CHKD	MJW
APPR	JSM
JOB	22025

E5.02

SHEET 09 OF 13

IF SHEET IS LESS THAN 30"x42" IT IS A REDUCED PRINT SCALE REDUCED ACCORDINGLY

PANEL NAME: ACP (EXISTING) (NOTE #1) — PANEL SCHEDULE — MFGR:
LOCATION: — 208Y/120 VOLT SECTION: 1 OF 1 — CAT #
FED FROM: — 3 PHASE, 4 WIRE SURFACE MOUNT PNL
10 kAIC SYM — 225 AMP MAIN CB — 225 AMP BUS — CU BUS — 100% NEUTRAL

CKT. NO.	CIRCUIT DESCRIPTION	CB AMPS	POL	kVA	P H	kVA	CB AMPS	POL	CIRCUIT DESCRIPTION	Ckt No.
1	**AUTO LIFT (NOTE #2)**	30/	2	0.00	a	0.00	20/	2	**TIRE MATCHER (NOTE #2)**	2
3	**-**	-		0.00	b	0.00	-		**-**	4
5	**AUTO LIFT (NOTE #2)**	30/	2	0.00	c	0.00	20/	1	**AUTO RECEPTACLE (NOTE #2)**	6
7	**-**	-		0.00	a	0.00	20/	1	**ALIGNMENT MACHINE (NOTE #2)**	8
9	**AUTO LIFT (NOTE #2)**	30/	2	0.00	b	0.00	20/	1	**ALIGNMENT MACHINE (NOTE #2)**	10
11	**-**	-		0.00	c	0.00	20/	1	**LIGHT REELS (NOTE #2)**	12
13	**TIRE MATCHER (NOTE #2)**	20/	2	0.00	a	0.00	20/	1	**LIFT RECEPTACLES (NOTE #2)**	14
15	**-**	-		0.00	b	0.00	20/	1	**ELECTRIC WATER COOLER (NOTE #2)**	16
17	**SPIN BALANCE (NOTE #2)**	20/	3	0.00	c	0.00	20/	1	**AUTO RECEPTACLES (NOTE #2)**	18
19	**-**	-		0.00	a	0.00	20/	1	**AUTO RECEPTACLES (NOTE #2)**	20
21	**-**	-		0.00	b	0.00	20/	1	**AUTO RECEPTACLES (NOTE #2)**	22
23	**SPIN BALANCE (NOTE #2)**	20/	3	0.00	c	0.00	20/	1	**AUTO RECEPTACLES (NOTE #2)**	24
25	**-**	-		0.00	a	0.00	20/	1	**CAR-MON STORAGE REEL (NOTE #2)**	26
27	**-**	-		0.00	b	0.00	20/	1	**LIFT RECEPTACLES (NOTE #2)**	28
29	**AUTO LIFT (NOTE #2)**	30/	2	0.00	c	0.00	20/	1	**BATTERY CHARGERS/ TEST (NOTE #2)**	30
31	**-**	-		0.00	a	0.00	20/	1	**BATTERY CHARGERS/ TEST (NOTE #2)**	32
33	**AUTO LIFT (NOTE #2)**	30/	2	0.00	b	0.00	20/	1	SPARE	34
35	**-**	-		0.00	c	0.00	20/	1	SPARE	36
37	**AUTO LIFT (NOTE #2)**	30/	2	0.00	a	0.00	20/	1	SPARE	38
39	**-**	-		0.00	b	0.00	20/	1	SPARE	40
41	SPARE	20/	1	0.00	c	0.00	20/	1	SPARE	42

LOAD SUM	CONN LOAD		FACTOR	CALC LOAD	
LIGHTING	0.00	kVA	125%	0.00	kVA
RECEPTACLES	0.00	kVA	50%>10kVA	0.00	kVA
ALL MOTORS	0.00	kVA	100%	0.00	kVA
LRGST MOTOR	0.00	kVA	125%	0.00	kVA
KITCHEN	0.00	kVA	100%	0.00	kVA
MISCELLANEOUS	0.00	kVA	100%	0.00	kVA
NON-COINCIDENT	0.00	kVA	0%	0.00	kVA
TOTAL	0.00	**kVA**		0.00	**kVA**
	0.0	**AMPS**		0.0	**Amps**

NOTES
1. **EXISTING PANEL.**
2. **EXISTING LOAD WILL BE DEMOED AND CIRCUIT BREAKER TO BECOME SPARE. CONTRACTOR TO VERIFY AND AS-BUILD PANEL SCHEDULE.**

PANEL NAME: ACP 1 (EXISTING) (NOTE #2) — PANEL SCHEDULE — MFGR:
LOCATION: — 208Y/120 VOLT SECTION: 1 OF 1 — CAT #
FED FROM: — 3 PHASE, 4 WIRE SURFACE MOUNT PNL
10 kAIC SYM — 225 AMP MAIN CB — 225 AMP BUS — CU BUS — 100% NEUTRAL

CKT. NO.	CIRCUIT DESCRIPTION	CB AMPS	POL	kVA	P H	kVA	CB AMPS	POL	CIRCUIT DESCRIPTION	Ckt No.
1	**REEL LIGHTS (NOTE #1)**	20/	1	0.00	a	0.00	20/	1	**BATTERY CHARGERS (NOTE #1)**	2
3	**LIFT RECEPTACLES (NOTE #1)**	20/	1	0.00	b	0.00	20/	1	**BATTERY CHARGERS (NOTE #1)**	4
5	**CAR-MON STORAGE REELS (NOTE #1)**	20/	1	0.00	c	0.00	20/	1	**CONV. RECEPTACLE (NOTE #1)**	6
7	**CONV. RECEPTACLES (NOTE #1)**	20/	1	0.00	a	0.00	20/	1	**OVERHEAD DOOR (NOTE #1)**	8
9	**COMP. AIR DRYER (NOTE #1)**	20/	1	0.00	b	0.00	20/	1	**OVERHEAD DOOR (NOTE #1)**	10
11	**EXTERIOR SIGN (NOTE #1)**	20/	1	0.00	c	0.00	20/	1	**OVERHEAD DOOR (NOTE #1)**	12
13	**EXTERIOR SIGN (NOTE #1)**	20/	1	0.00	a	0.00	20/	1	**WALL FAN (NOTE #1)**	14
15	**CORNICE LIGHTS (NOTE #1)**	20/	1	0.00	b	0.00	20/	1	**WALL FAN (NOTE #1)**	16
17	**CORNICE LIGHTS (NOTE #1)**	20/	1	0.00	c	0.00	20/	1	**GFUH #1-6 (NOTE #1)**	18
19	**DISPLAY (NOTE #1)**	20/	1	0.00	a	0.00	20/	1	**GFRH #1-10 (NOTE #1)**	20
21	**VAC TABLE (NOTE #1)**	20/	1	0.00	b	0.00	20/	1	**SALES FLOORS END CAP (NOTE #1)**	22
23	**CORNICE LIGHTS (NOTE #1)**	20/	1	0.00	c	0.00	20/	1	**EF #5 (NOTE #3)**	24
25	**DUST COLLECTION (NOTE #1)**	20/	1	0.00	a	0.00	20/	1	**EF #9 & #10 (NOTE #3)**	26
27	**CARPENTRY/PNEUMATIC (NOTE #1)**	20/	1	0.00	b	0.00	20/	1	**EF #6 & #14 (NOTE #1)**	28
29	**WALL CORNICE LIGHTS (NOTE #1)**	20/	1	0.00	c	0.00	20/	1	**CONTROL CIRCUIT (NOTE #1)**	30
31	**WALL CORNICE LIGHTS (NOTE #1)**	20/	1	0.00	a	0.00	20/	1	**WIRELESS ACCESS CAB (NOTE #1)**	32
33	**EXTERIOR ENTRANCE EXIT SIGN (NOTE #1)**	20/	1	0.00	b	0.00	20/	1	**TRU RECEPTACLES (NOTE #1)**	34
35	**LIFT RECEPTACLES (NOTE #1)**	20/	1	0.00	c	0.00	20/	1	**EF #13 (NOTE #1)**	36
37	**OVERHEAD DOORS (NOTE #3)**	20/	3	0.00	a	0.00	20/	1	**WALL FAN EMS CONTROL POWR (NOTE #1)**	38
39	**OVERHEAD DOORS (NOTE #3)**	-		0.00	b	0.00	20/	1	SPARE	40
41	**OVERHEAD DOORS (NOTE #3)**	-		0.00	c	0.00	20/	1	**WALL FAN (NOTE #1)**	42

LOAD SUM	CONN LOAD		FACTOR	CALC LOAD	
LIGHTING	0.00	kVA	125%	0.00	kVA
RECEPTACLES	0.00	kVA	50%>10kVA	0.00	kVA
ALL MOTORS	0.00	kVA	100%	0.00	kVA
LRGST MOTOR	0.00	kVA	125%	0.00	kVA
KITCHEN	0.00	kVA	100%	0.00	kVA
MISCELLANEOUS	0.00	kVA	100%	0.00	kVA
NON-COINCIDENT	0.00	kVA	0%	0.00	kVA
TOTAL	0.00	**kVA**		0.00	**kVA**
	0.0	**AMPS**		0.0	**Amps**

NOTES
1. **EXISTING LOAD TO BE REMOVED AND CIRCUIT BREAKER TO BECOME SPARE. CONTRACTOR TO VERIFY AND AS-BUILD PANEL SCHEDULE.**
2. **EXISTING PANEL.**
3. **EXISTING LOAD TO REMAIN AND REFED FROM OTHER PANELS.**

PANEL NAME: ACP 2 (EXISTING) (NOTE #1) — PANEL SCHEDULE — MFGR:
LOCATION: — 208Y/120 VOLT SECTION: 1 OF 1 — CAT #
FED FROM: — 3 PHASE, 4 WIRE SURFACE MOUNT PNL
10 kAIC SYM — 225 AMP MAIN CB — 225 AMP BUS — CU BUS — 100% NEUTRAL

CKT. NO.	CIRCUIT DESCRIPTION	CB AMPS	POL	kVA	P H	kVA	CB AMPS	POL	CIRCUIT DESCRIPTION	Ckt No.
1	**TRACK LIGHTS (NOTE #2)**	20/	1	0.00	a	0.00	20/	1	**PC & CRT RECEPTACLES (NOTE #2)**	2
3	**TRACK LIGHTS (NOTE #2)**	20/	1	0.00	b	0.00	20/	1	**OIL LEVEL CONTROL PANEL (NOTE #2)**	4
5	**TRACK LIGHTS (NOTE #2)**	20/	1	0.00	c	0.00	20/	1	**CASH REGISTERS (NOTE #2)**	6
7	**RECIRCULATION PUMP (NOTE #2)**	20/	1	0.00	a	0.00	20/	1	**CASH REGISTERS (NOTE #2)**	8
9	**WASH ROOM RECEPTACLE (NOTE #2)**	20/	1	0.00	b	0.00	20/	1	**COLUMN RECEPTACLE (NOTE #2)**	10
11	**REFRIGERATOR (NOTE #2)**	20/	1	0.00	c	0.00	20/	1	**SOUND DISPLAY (NOTE #2)**	12
13	**CONV. RECEPTACLE (NOTE #2)**	20/	1	0.00	a	0.00	20/	1	**AUTO COMPUTERS (NOTE #2)**	14
15	**TIME CLOCK (NOTE #2)**	20/	1	0.00	b	0.00	30/	1	**HAND DRYERS (NOTE #2)**	16
17	**ELEC. WATER COOLER (NOTE #2)**	20/	1	0.00	c	0.00	30/	1	**HAND DRYERS (NOTE #2)**	18
19	**REGISTERS FAN & FITNESS (NOTE #2)**	20/	1	0.00	a	0.00	30/	1	**HAND DRYERS (NOTE #2)**	20
21	**CASH REGISTERS (NOTE #2)**	20/	1	0.00	b	0.00	30/	1	**HAND DRYERS (NOTE #2)**	22
23	**DISPLAY RECEPTACLES (NOTE #2)**	20/	1	0.00	c	0.00	20/	1	**REGISTERS IN PAINTS (NOTE #2)**	24
25	**COLUMN RECEPTACLES (NOTE #2)**	20/	1	0.00	a	0.00	20/	1	**CRT-TOOLS (NOTE #2)**	26
27	**DISPLAY RECEPTACLES (NOTE #2)**	20/	1	0.00	b	0.00	20/	1	**COLUMN RECEPTACLES (NOTE #2)**	28
29	**DISPLAY RECEPTACLES (NOTE #2)**	20/	1	0.00	c	0.00	20/	1	**LIGHTS-TOOLS (NOTE #2)**	30
31	**DISPLAY RECEPTACLES (NOTE #2)**	20/	1	0.00	a	0.00	20/	1	**DISPLAY RECEPTACLES (NOTE #2)**	32
33	**TRACK LIGHTING (NOTE #2)**	20/	1	0.00	b	0.00	20/	1	**REGISTERS (NOTE #2)**	34
35	**TRACK LIGHTING CHIROPRACTIC PAD (NOTE #2)**	20/	1	0.00	c	0.00	20/	1	SPARE	36
37	**TRACK LIGHTING TREADMILL PAD (NOTE #2)**	20/	1	0.00	a	0.00	20/	1	SPARE	38
39	SPARE	20/	1	0.00	b	0.00	20/	1	SPARE	40
41	SPARE	20/	1	0.00	c	0.00	20/	1	SPARE	42

LOAD SUM	CONN LOAD		FACTOR	CALC LOAD	
LIGHTING	0.00	kVA	125%	0.00	kVA
RECEPTACLES	0.00	kVA	50%>10kVA	0.00	kVA
ALL MOTORS	0.00	kVA	100%	0.00	kVA
LRGST MOTOR	0.00	kVA	125%	0.00	kVA
KITCHEN	0.00	kVA	100%	0.00	kVA
MISCELLANEOUS	0.00	kVA	100%	0.00	kVA
NON-COINCIDENT	0.00	kVA	0%	0.00	kVA
TOTAL	0.00	**kVA**		0.00	**kVA**
	0.0	**AMPS**		0.0	**Amps**

NOTES
1. **EXISTING PANEL**
2. **EXISTING LOAD TO BE DEMOED AND CIRCUIT BREAKER TO BECOME SPARE. CONTRACTOR TO VERIFY AND AS-BUILD PANEL SCHEDULE.**

PANEL NAME: ACP 3 (EXISTING) (NOTE #1) — PANEL SCHEDULE — MFGR:
LOCATION: — 208Y/120 VOLT SECTION: 1 OF 1 — CAT #
FED FROM: — 3 PHASE, 4 WIRE SURFACE MOUNT PNL
10 kAIC SYM — 225 AMP MAIN CB — 225 AMP BUS — CU BUS — 100% NEUTRAL

CKT. NO.	CIRCUIT DESCRIPTION	CB AMPS	POL	kVA	P H	kVA	CB AMPS	POL	CIRCUIT DESCRIPTION	Ckt No.
1	WHAT'S NEW & MTS (NOTE #2)	20/	1	0.00	a	0.00	20/	1	**ELECTRIC WATER COOLER (NOTE #2)**	2
3	PADLOCKS-HAND BOXES (NOTE #2)	20/	1	0.00	b	0.00	30/	2	**AUTO LIFT (NOTE #2)**	4
5	METERS-AUTO PNEUMATICS (NOTE #2)	20/	1	0.00	c	0.00	-		**AUTO LIFT (NOTE #2)**	6
7	COMPRESSOR RACK (NOTE #2)	20/	1	0.00	a	0.00	30/	2	**AUTO LIFT (NOTE #2)**	8
9	WEST SIDE EXTERIOR SIGN (NOTE #2)	20/	1	0.00	b	0.00	-		**AUTO LIFT (NOTE #2)**	10
11	WEST SIDE EXTERIOR SIGN (NOTE #2)	20/	1	0.00	c	0.00	30/	2	**AUTO LIFT (NOTE #2)**	12
13	WEST SIDE EXTERIOR SIGN (NOTE #2)	20/	1	0.00	a	0.00	-		**AUTO LIFT (NOTE #2)**	14
15	WEST SIDE EXTERIOR SIGN (NOTE #2)	20/	1	0.00	b	0.00	30/	2	**AUTO LIFT (NOTE #2)**	16
17	SPARE (NOTE #2)	20/	1	0.00	c	0.00	-		**AUTO LIFT (NOTE #2)**	18
19	ACCUTINTER & COMPUTER (NOTE #2)	20/	1	0.00	a	0.00	30/	2	**AUTO LIFT->(SPARE 2/13/12) (NOTE #2)**	20
21	TENT CORNICE (NOTE #2)	20/	1	0.00	b	0.00	-		**AUTO LIFT->(SPARE 2/13/12) (NOTE #2)**	22
23	CHIP LIGHTS-PAINT-AIRCLEANERS (NOTE #2)	20/	1	0.00	c	0.00	20/	1	SPARE	24
25	GARAGE DOOR OPENERS/WTR SOFTNER (NOTE #2)	20/	1	0.00	a	0.00	20/	1	SPARE	26
27	SLEEPING BAGS/TENTS-LIGHTS (NOTE #2)	20/	1	0.00	b	0.00	20/	1	SPARE	28
29	EXERCISE MACHINES (NOTE #2)	20/	1	0.00	c	0.00	20/	1	SPARE	30
31	SPACE			0.00	a	0.00			SPACE	32
33	SPACE			0.00	b	0.00			SPACE	34
35	SPACE			0.00	c	0.00			SPACE	36
37	SPACE			0.00	a	0.00			SPACE	38
39	SPACE			0.00	b	0.00			SPACE	40
41	SPACE			0.00	c	0.00			SPACE	42

LOAD SUM	CONN LOAD		FACTOR	CALC LOAD	
LIGHTING	0.00	kVA	125%	0.00	kVA
RECEPTACLES	0.00	kVA	50%>10kVA	0.00	kVA
ALL MOTORS	0.00	kVA	100%	0.00	kVA
LRGST MOTOR	0.00	kVA	125%	0.00	kVA
KITCHEN	0.00	kVA	100%	0.00	kVA
MISCELLANEOUS	0.00	kVA	100%	0.00	kVA
NON-COINCIDENT	0.00	kVA	0%	0.00	kVA
TOTAL	0.00	**kVA**		0.00	**kVA**
	0.0	**AMPS**		0.0	**Amps**

NOTES
1. **EXISTING PANEL.**
2. **EXISTING LOAD TO BE REMOVED AND CIRCUIT BREAKER TO BECOME SPARE. CONTRACTOR TO VERIFY AND AS-BUILD PANEL SCHEDULE.**

PANEL NAME: ACL (EXISTING) (NOTE #1) — PANEL SCHEDULE — MFGR:
LOCATION: — 480Y/277 VOLT SECTION: 1 OF 1 — CAT #
FED FROM: — 3 PHASE, 4 WIRE SURFACE MOUNT PNL
10 kAIC SYM — 225 AMP MAIN CB — 225 AMP BUS — CU BUS — 100% NEUTRAL

CKT. NO.	CIRCUIT DESCRIPTION	CB AMPS	POL	kVA	P H	kVA	CB AMPS	POL	CIRCUIT DESCRIPTION	Ckt No.
1	**LTS. AUTO SALES (NOTE #3)**	20/	1	0.00	a	0.00	20/	1	**LTS. AUTO SERV. (NOTE #2)**	2
3	**NIGHT & AUTO SALES LTS. (NOTE #3)**	20/	1	0.00	b	0.00	20/	1	**LTS. AUTO SERV. (NOTE #2)**	4
5	**STOCK PARTS LTS. (NOTE #3)**	20/	1	0.00	c	0.00	20/	1	**LTS. AUTO SERV. (NOTE #2)**	6
7	**TIRE STOCK ROOM (NOTE #3)**	20/	1	0.00	a	0.00	20/	1	**LTS. AUTO SERV. (NOTE #2)**	8
9	SPARE	20/	1	0.00	b	0.00	20/	1	SPARE	10
11	SPARE	20/	1	0.00	c	0.00	20/	1	SPARE	12
13	GFEH #1	15/	3	0.00	a	0.00	20/	1	**ERH #1, 2, &3 (NOTE #3)**	14
15	GFEH #1	-		0.00	b	0.00	20/	1	SPARE	16
17	GFEH #1	-		0.00	c	0.00	20/	1	SPARE	18
19	MUAU #1	15/	3	0.00	a	0.00	15/	3	EF #7	20
21	MUAU #1	-		0.00	b	0.00	-		EF #7	22
23	MUAU #1	-		0.00	c	0.00	-		EF #7	24
25	EF #11	15/	3	0.00	a	0.00	15/	3	EF #8	26
27	EF #11	-		0.00	b	0.00	-		EF #8	28
29	EF #11	-		0.00	c	0.00	-		EF #8	30
31	SPACE			0.00	a	0.00			SPACE	32
33	SPACE			0.00	b	0.00			SPACE	34
35	SPACE			0.00	c	0.00			SPACE	36
37	SPACE			0.00	a	0.00			SPACE	38
39	SPACE			0.00	b	0.00			SPACE	40
41	SPACE			0.00	c	0.00			SPACE	42

LOAD SUM	CONN LOAD		FACTOR	CALC LOAD	
LIGHTING	0.00	kVA	125%	0.00	kVA
RECEPTACLES	0.00	kVA	50%>10kVA	0.00	kVA
ALL MOTORS	0.00	kVA	100%	0.00	kVA
LRGST MOTOR	0.00	kVA	125%	0.00	kVA
KITCHEN	0.00	kVA	100%	0.00	kVA
MISCELLANEOUS	0.00	kVA	100%	0.00	kVA
NON-COINCIDENT	0.00	kVA	0%	0.00	kVA
TOTAL	0.00	**kVA**		0.00	**kVA**
	0.0	**AMPS**		0.0	**Amps**

NOTES
1. **EXISTING PANEL**
2. **EXISTING LOAD AND ASSOCIATED CONDUCTORS TO BE REMOVED. REUSE EXISTING CIRCUIT BREAKER AND CONDUITS TO SERVE NEW LOAD.**
3. **EXISTING LOAD TO BE DEMOED AND CIRCUIT BREAKER TO BECOME SPARE. CONTRACTOR TO VERIFY AND AS-BUILD PANEL SCHEDULE.**

1 E6.01 PANEL SCHEDULES
SCALE: NTS

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic

PRCTI20221551

PERMIT SET

REVISION	BY

929 108th Ave NE, Suite 1000
Bellevue, WA 98004
425.628.6000
woodharbinger.com
Wood Harbinger
NORTHSTAR electrical grounded in experience
918 S Horton St, Ste 808
Seattle, WA 98134-1952
(206) 329-1596 phone
(206 866-0075) fax

MATTHEW J. WOOD — STATE OF WASHINGTON — 40454 — REGISTERED PROFESSIONAL ENGINEER

NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3500 South Meridan Blvd - Puyallup, WA 98373

SHEET TITLE: PANEL SCHEDULES

DATE	09/20/2022
SCALE	NTS
ENGR	JSM-MJW
DRWN	NHH
CHKD	MJW
APPR	JSM
JOB	22025

E6.01

SHEET 10 OF 13

IF SHEET IS LESS THAN
30"x42"
IT IS A REDUCED PRINT
SCALE REDUCED ACCORDINGLY

PANEL NAME: ACP (REVISED) (NOTE #1) — PANEL SCHEDULE — MFGR:
LOCATION: — 208Y/120 VOLT SECTION: 1 OF 1 — CAT #
FED FROM: — 3 PHASE, 4 WIRE SURFACE MOUNT PNL
10 kAIC SYM — 225 AMP MAIN CB — 225 AMP BUS — CU BUS — 100% NEUTRAL

CKT NO.	CIRCUIT DESCRIPTION	CB AMPS	POL	kVA	P H	kVA	CB AMPS	POL	CIRCUIT DESCRIPTION	Ckt No.
1	SPARE	20/	1	0.00	a	0.00	20/	1	SPARE	2
3	SPARE	20/	1	0.00	b	0.00	20/	1	SPARE	4
5	SPARE	20/	1	0.00	c	**0.18**	20/	1	**RECEPTACLES (NOTE #3)**	6
7	SPARE	20/	1	0.00	a	**0.72**	20/	1	**RECEPTACLES (NOTE #3)**	8
9	SPARE	20/	1	0.00	b	0.00	20/	1	SPARE	10
11	SPARE	20/	1	0.00	c	0.00	20/	1	SPARE	12
13	SPARE	20/	1	0.00	a	**0.00**	20/	1	**RECEPTACLES (NOTE #3)**	14
15	SPARE	20/	1	0.00	b	**0.72**	20/	1	**RECEPTACLES (NOTE #3)**	16
17	**RECEPTACLE (NOTE #4)**	**20/**	**1**	**0.72**	c	**0.36**	20/	1	**RECEPTACLES (NOTE #3)**	18
19	**RECEPTACLE (NOTE #4)**	**20/**	**1**	**0.72**	a	**0.36**	20/	1	**RECEPTACLES (NOTE #3)**	20
21	**RECEPTACLE (NOTE #4)**	**20/**	**1**	**0.72**	b	**0.18**	20/	1	**RECEPTACLES (NOTE #3)**	22
23	SPARE	20/	1	0.00	c	**0.72**	20/	1	**RECEPTACLES (NOTE #3)**	24
25	SPARE	20/	1	0.00	a	0.00	20/	1	SPARE	26
27	SPARE	20/	1	0.00	b	0.00	20/	1	SPARE	28
29	SPARE	20/	1	0.00	c	0.00	20/	1	SPARE	30
31	SPARE	20/	1	0.00	a	0.00	20/	1	SPARE	32
33	**RECEPTACLES - BATTING CAGE (NOTE #4)**	**20/**	**1**	**0.72**	b	0.00	20/	1	SPARE	34
35	**RECEPTACLES - BATTING CAGE (NOTE #4)**	**20/**	**1**	**0.72**	c	0.00	20/	1	SPARE	36
37	**RECEPTACLES - BATTING CAGE (NOTE #4)**	**20/**	**1**	**0.72**	a	0.00	20/	1	SPARE	38
39	**RECEPTACLES - TV (NOTE #4)**	**20/**	**1**	**1.26**	b	**0.72**	20/	1	**RECEPTACLES (NOTE #2)**	40
41	SPARE	20/	1	0.00	c	0.00	20/	1	SPARE	42

LOAD SUM	CONN LOAD		FACTOR	CALC LOAD	
LIGHTING	0.00	kVA	125%	0.00	kVA
RECEPTACLES	0.90	kVA	50%>10kVA	0.90	kVA
ALL MOTORS	0.00	kVA	100%	0.00	kVA
LRGST MOTOR	0.00	kVA	125%	0.00	kVA
KITCHEN	0.00	kVA	100%	0.00	kVA
MISCELLANEOUS	8.64	kVA	100%	8.64	kVA
NON-COINCIDENT	0.00	kVA	0%	0.00	kVA
TOTAL	9.54	**kVA**		9.54	**kVA**
	26.5	**AMPS**		26.5	**Amps**

NOTES
1. **EXISTING PANEL.**
2. **NEW LOAD ADDED AT EXISTING SPARE CB.**
3. **NEW LOAD ADDED AT EXISTING SPARE CB AFTER EXISTING LOAD REMOVED**
4. **PROVIDE NEW CIRCUIT BREAKER TO FEED NEW LOAD**

PANEL NAME: ACP1 (REVISED) (NOTE #1) — PANEL SCHEDULE — MFGR:
LOCATION: — 208Y/120 VOLT SECTION: 1 OF 1 — CAT #
FED FROM: — 3 PHASE, 4 WIRE SURFACE MOUNT PNL
10 kAIC SYM — 225 AMP MAIN CB — 225 AMP BUS — CU BUS — 100% NEUTRAL

CKT NO.	CIRCUIT DESCRIPTION	CB AMPS	POL	kVA	P H	kVA	CB AMPS	POL	CIRCUIT DESCRIPTION	Ckt No.
1	SPARE	20/	1	0.00	a	**1.44**	20/	1	**RECEPTACLE (NOTE #3)**	2
3	SPARE	20/	1	0.00	b	**1.44**	20/	1	**RECEPTACLE (NOTE #3)**	4
5	SPARE	20/	1	0.00	c	**1.44**	20/	1	**RECEPTACLE (NOTE #3)**	6
7	SPARE	20/	1	0.00	a	0.00	20/	1	SPARE	8
9	SPARE	20/	1	0.00	b	0.00	20/	1	SPARE	10
11	SPARE	20/	1	0.00	c	**1.44**	20/	1	**RECEPTACLE (NOTE #3)**	12
13	**ROOF RECEPTACLE (NOTE #3)**	20/	1	**0.18**	a	**0.18**	20/	1	**OFFICE RECEPTACLE (NOTE #3)**	14
15	**RECEPTACLE STORAGE ROOM (NOTE #3)**	20/	1	**0.18**	b	**0.36**	20/	1	**OFFICE RECEPTACLE (NOTE #3)**	16
17	**RECEPTACLE STORAGE ROOM (NOTE #3)**	20/	1	**0.18**	c	**0.03**	20/	1	**OFFICE LIGHT (NOTE #3)**	18
19	SPARE	20/	1	0.00	a	**0.10**	20/	1	**EGRESS LIGHTING (NOTE #3)**	20
21	SPARE	30/	2	0.00	b	0.00	20/	1	SPARE	22
23	-	-		0.00	c	0.00	20/	1	SPARE	24
25	SPARE	20/	1	0.00	a	0.00	20/	1	SPARE	26
27	SPARE	20/	1	0.00	b	0.00	20/	1	SPARE	28
29	SPARE	20/	1	0.00	c	0.00	20/	1	SPARE	30
31	SPARE	50/	3	0.00	a	0.00	20/	1	SPARE	32
33	-	-		0.00	b	0.00	20/	1	SPARE	34
35	-	-		0.00	c	0.00	20/	1	SPARE	36
37	SPARE	30/	3	0.00	a	0.00	50/	3	SPARE	38
39	-	-		0.00	b	0.00	-		-	40
41	-	-		0.00	c	0.00	-		-	42

LOAD SUM	CONN LOAD		FACTOR	CALC LOAD	
LIGHTING	0.00	kVA	125%	0.00	kVA
RECEPTACLES	0.54	kVA	50%>10kVA	0.54	kVA
ALL MOTORS	0.00	kVA	100%	0.00	kVA
LRGST MOTOR	0.00	kVA	125%	0.00	kVA
KITCHEN	0.00	kVA	100%	0.00	kVA
MISCELLANEOUS	6.43	kVA	100%	6.43	kVA
NON-COINCIDENT	0.00	kVA	0%	0.00	kVA
TOTAL	6.97	**kVA**		6.97	**kVA**
	19.4	**AMPS**		19.4	**Amps**

NOTES
1. **EXISTING PANEL.**
2. **NEW LOAD ADDED ON SPARE CIRCUIT BREAKER.**
3. **NEW LOAD ADDED ON EXISTING CIRCUIT BREAKER AFTER EXISTING LOAD REMOVED**

PANEL NAME: ACP2 (REVISED) (NOTE #1) — PANEL SCHEDULE — MFGR:
LOCATION: — 208Y/120 VOLT SECTION: 1 OF 1 — CAT #
FED FROM: — 3 PHASE, 4 WIRE SURFACE MOUNT PNL
10 kAIC SYM — 225 AMP MAIN CB — 225 AMP BUS — CU BUS — 100% NEUTRAL

CKT NO.	CIRCUIT DESCRIPTION	CB AMPS	POL	kVA	P H	kVA	CB AMPS	POL	CIRCUIT DESCRIPTION	Ckt No.
1	SPARE	20/	1	0.00	a	**0.36**	20/	1	**RECEPTACLE (NOTE #4)**	2
3	SPARE	20/	1	0.00	b	**0.72**	20/	1	**RECEPTACLE (NOTE #4)**	4
5	SPARE	20/	1	0.00	c	**0.36**	20/	1	**RECEPTACLE (NOTE #4)**	6
7	SPARE	20/	1	0.00	a	**0.72**	20/	1	**RECEPTACLE (NOTE #4)**	8
9	SPARE	20/	1	0.00	b	**0.72**	20/	1	**RECEPTACLE (NOTE #4)**	10
11	SPARE	20/	1	0.00	c	**1.50**	**30/**	**1**	**RESROOM HAND DRYER (NOTE #3)**	12
13	SPARE	20/	1	0.00	a	0.00	20/	1	SPARE	14
15	SPARE	20/	1	0.00	b	**1.50**	**30/**	**1**	**RESROOM HAND DRYER (NOTE #3)**	16
17	SPARE	20/	1	0.00	c	0.00	30/	1	SPARE	18
19	SPARE	20/	1	0.00	a	0.00	30/	1	SPARE	20
21	SPARE	20/	2	0.00	b	0.00	30/	1	SPARE	22
23	-	-		0.00	c	0.00	20/	1	SPARE	24
25	SPARE	20/	1	0.00	a	**0.36**	20/	1	**RESROOM RECEPTACLES (NOTE #4)**	26
27	SPARE	20/	2	0.00	b	**0.36**	20/	1	**RESROOM RECEPTACLES (NOTE #4)**	28
29	-	-		0.00	c	**0.50**	20/	1	**RESTROOM LIGHTS AND EF'S (NOTE #4)**	30
31	SPARE	40/	3	0.00	a	**0.25**	20/	1	**EF-1 (NOTE #4)**	32
33	-	-		0.00	b	0.00	15/	2	SPARE	34
35	-	-		0.00	c	0.00	-		-	36
37	SPARE	40/	3	0.00	a	0.00	100/	3	SPARE	38
39	-	-		0.00	b	0.00	-		-	40
41	-	-		0.00	c	0.00	-		-	42

LOAD SUM	CONN LOAD		FACTOR	CALC LOAD	
LIGHTING	0.00	kVA	125%	0.00	kVA
RECEPTACLES	7.35	kVA	50%>10kVA	7.35	kVA
ALL MOTORS	0.00	kVA	100%	0.00	kVA
LRGST MOTOR	0.00	kVA	125%	0.00	kVA
KITCHEN	0.00	kVA	100%	0.00	kVA
MISCELLANEOUS	0.00	kVA	100%	0.00	kVA
NON-COINCIDENT	0.00	kVA	0%	0.00	kVA
TOTAL	7.35	**kVA**		7.35	**kVA**
	20.4	**AMPS**		20.4	**Amps**

NOTES
1. **EXISTING PANEL**
2. **NOT USED**
3. **PROVIDE NEW CIRCUIT BREAKER TO SERVE NEW LOAD**
4. **NEW LOAD ADDED AT EXISTING CIRCUIT BREAKER AFTER REMOVING EXISTING LOAD.**

PANEL NAME: ACP3 (REVISED) (NOTE #1) — PANEL SCHEDULE — MFGR:
LOCATION: — 208Y/120 VOLT SECTION: 1 OF 1 — CAT #
FED FROM: — 3 PHASE, 4 WIRE SURFACE MOUNT PNL
10 kAIC SYM — 225 AMP MAIN CB — 225 AMP BUS — CU BUS — 100% NEUTRAL

CKT NO.	CIRCUIT DESCRIPTION	CB AMPS	POL	kVA	P H	kVA	CB AMPS	POL	CIRCUIT DESCRIPTION	Ckt No.
1	**LIGHTING CONTROLS (NOTE #2)**	20/	1	**0.50**	a	0.00	20/	1	EXISTING J-BOX	2
3	SPARE	20/	1	0.00	b	**0.18**	**20/**	**1**	**ROOF RECEPTACLE (NOTE #4)**	4
5	SPARE	20/	1	0.00	c	0.00	20/	2	EXISTING J-BOX	6
7	**DED. RECEPTACLE EAST WALL BY PANELS (NOTE #2)**	20/	1	**0.72**	a	0.00	-		-	8
9	SPARE	20/	1	0.00	b	**0.50**	**20/**	**2**	**HVAC CONTROLS (NOTE #4)**	10
11	**DED. RECEPTACLE NE WALL (NOTE #2)**	20/	1	**0.72**	c	0.00	-		-	12
13	SPARE	20/	1	0.00	a	**0.50**	**20/**	**3**	**ROLL UP DOORS (NOTE #4)**	14
15	SPARE	20/	1	0.00	b	0.50	-		-	16
17	SPARE	20/	1	0.00	c	0.50	-		-	18
19	SPARE	20/	1	0.00	a	0.00	20/	1	SPARE	20
21	SPARE	20/	1	0.00	b	0.00	20/	1	SPARE	22
23	SPARE	20/	1	0.00	c	**0.50**	**20/**	**1**	**HVAC CONTROLS TRANSFORMER (NOTE #3)**	24
25	SPARE	20/	1	0.00	a	0.00	20/	1	SPARE	26
27	SPARE	20/	1	0.00	b	0.00	20/	1	SPARE	28
29	SPARE	20/	1	0.00	c	**0.36**	**20/**	**1**	**DED. RECEPTACLE OUTSIDE RESTROOMS (NOTE #3)**	30
31	SPACE			0.00	a	0.00			SPACE	32
33	SPACE			0.00	b	0.00			SPACE	34
35	SPACE			0.00	c	0.00			SPACE	36
37	SPACE			0.00	a	0.00			SPACE	38
39	SPACE			0.00	b	0.00			SPACE	40
41	SPACE			0.00	c	0.00			SPACE	42

LOAD SUM	CONN LOAD		FACTOR	CALC LOAD	
LIGHTING	0.00	kVA	125%	0.00	kVA
RECEPTACLES	3.04	kVA	50%>10kVA	3.04	kVA
ALL MOTORS	0.00	kVA	100%	0.00	kVA
LRGST MOTOR	0.00	kVA	125%	0.00	kVA
KITCHEN	0.00	kVA	100%	0.00	kVA
MISCELLANEOUS	1.94	kVA	100%	1.94	kVA
NON-COINCIDENT	0.00	kVA	0%	0.00	kVA
TOTAL	4.98	**kVA**		4.98	**kVA**
	13.8	**AMPS**		13.8	**Amps**

NOTES
1. **EXISTING PANEL**
2. **NEW LOAD ADDED AT EXISTING CIRCUIT BREAKER.**
3. **NEW LOAD ADDED AT SPARE CIRCUIT BREAKER.**
4. **PROVIDE NEW CIRCUIT BREAKER TO SERVE NEW LOAD**

PANEL NAME: ACH1 (REVISED) (NOTE #1) — PANEL SCHEDULE — MFGR:
LOCATION: — 480Y/277 VOLT SECTION: 1 OF 1 — CAT #
FED FROM: — 3 PHASE, 4 WIRE SURFACE MOUNT PNL
10 kAIC SYM — 225 AMP MAIN CB — 225 AMP BUS — CU BUS — 100% NEUTRAL

CKT NO.	CIRCUIT DESCRIPTION	CB AMPS	POL	kVA	P H	kVA	CB AMPS	POL	CIRCUIT DESCRIPTION	Ckt No.
1	SPARE	20/	1	0.00	a	**2.99**	20/	1	**LIGHTING RELAY 1 + RIB COIL (NOTE #2)**	2
3	SPARE	20/	1	0.00	b	**2.64**	20/	1	**LIGHTING RELAY 2 + RIB COIL (NOTE #2)**	4
5	SPARE	20/	1	0.00	c	**2.50**	20/	1	**LIGHTING RELAY 3 + RIB COIL (NOTE #2)**	6
7	SPARE	20/	1	0.00	a	**1.40**	20/	1	**LIGHTING RELAY 4 (NOTE #2)**	8
9	SPARE	20/	1	0.00	b	**1.41**	20/	1	**LIGHTING RIB/ RELAY 2 (NOTE #5)**	10
11	SPARE	20/	1	0.00	c	0.00	20/	1	**OUTDOOR LIGHTS (NOTE #5)**	12
13	**GFEH-1 (NOTE #3)**	15/	3	**0.64**	a	**1.94**	20/	1	**LIGHTING RIB/ RELAY 3 (NOTE #6)**	14
15	-	-		**0.64**	b	0.00	20/	1	SPARE	16
17	-	-		**0.64**	c	**2.11**	20/	1	**LIGHTING RIB/ RELAY 1 (NOTE #5)**	18
19	**MUAU-1 (NOTE #4)**	**20/**	**3**	**3.10**	a	**0.58**	20/	3	**EF-7 (NOTE #3)**	20
21	-	-		**3.10**	b	**0.58**	-		**EF-7**	22
23	-	-		**3.10**	c	**0.58**	-		**EF-7**	24
25	**EF-11 (NOTE #3)**	20/	3	**3.10**	a	**0.44**	20/	3	**EF-8 (NOTE #3)**	26
27	-	-		**0.44**	b	**0.44**	-		**EF-8**	28
29	-	-		**0.44**	c	**0.44**	-		**EF-8**	30
31	SPACE			0.00	a	0.00			SPACE	32
33	SPACE			0.00	b	0.00			SPACE	34
35	SPACE			0.00	c	0.00			SPACE	36
37	SPACE			0.00	a	0.00			SPACE	38
39	SPACE			0.00	b	0.00			SPACE	40
41	SPACE			0.00	c	0.00			SPACE	42

LOAD SUM	CONN LOAD		FACTOR	CALC LOAD	
LIGHTING	15.00	kVA	125%	18.74	kVA
RECEPTACLES	0.00	kVA	50%>10kVA	0.00	kVA
ALL MOTORS	12.38	kVA	100%	12.38	kVA
LRGST MOTOR	0.00	kVA	125%	0.00	kVA
KITCHEN	0.00	kVA	100%	0.00	kVA
MISCELLANEOUS	1.91	kVA	100%	1.91	kVA
NON-COINCIDENT	0.00	kVA	0%	0.00	kVA
TOTAL	29.29	**kVA**		33.04	**kVA**
	35.2	**AMPS**		39.7	**Amps**

NOTES
1. **RENAME EXISTING PANEL ACL TO ACH1**
2. **EXISTING LIGHTING LOAD AND ASSOCIATED CONDUCTORS REMOVED. REUSE EXISTING CIRCUIT BREAKER AND CONDUITS TO SERVE NEW LIGHTING LOADS.**
3. **EXISTING LOAD TO REMAIN. SEE E6.03 FOR EQUIPMENT SCHEDULE.**
4. **PROVIDE NEW CB TO SERVE EXISTING LOAD TO REMAIN.**
5. **NEW LOAD AT SPARE CIRCUIT BREAKER.**
6. **NEW LOAD AT EXISTING CIRCUIT BREAKER.**

PANEL NAME: ACH (NEW) (NOTE #1) — PANEL SCHEDULE — MFGR:
LOCATION: — 480Y/277 VOLT SECTION: 1 OF 1 — CAT #
FED FROM: — 3 PHASE, 4 WIRE SURFACE MOUNT PNL
10 kAIC SYM — 400 AMP MAIN CB — 400 AMP BUS — CU BUS — 100% NEUTRAL

CKT NO.	CIRCUIT DESCRIPTION	CB AMPS	POL	kVA	P H	kVA	CB AMPS	POL	CIRCUIT DESCRIPTION	Ckt No.
1	PANEACP & ACP1 VIA 75KVA XFMR	175/	3	4.42	a	3.41	175/	3	PANEL ACP2 & ACP3 VIA 75KVA XFMR	2
3	-	-		6.30	b	4.48	-		-	4
5	-	-		5.79	c	4.44	-		-	6
7	SPACE			0.00	a	11.10	225/	3	PANEL ACH1	8
9	SPACE			0.00	b	8.81	-			10
11	SPACE			0.00	c	9.38	-			12
13	RTU-2	150/	3	33.24	a	13.02	60/	3	RTU-1	14
15	-	-		33.24	b	13.02	-		-	16
17	-	-		33.24	c	13.02	-		-	18
19	SPACE			0.00	0	0.00			SPACE	20
21	SPACE			0.00	0	0.00			SPACE	22
23	SPACE			0.00	0	0.00			SPACE	24
25	SPACE			0.00	a	0.00			SPACE	26
27	SPACE			0.00	b	0.00			SPACE	28
29	SPACE			0.00	c	0.00			SPACE	30
31	SPACE			0.00	a	0.00			SPACE	32
33	SPACE			0.00	b	0.00			SPACE	34
35	SPACE			0.00	c	0.00			SPACE	36
37	SPACE			0.00	a	0.00	30/	3	SPD	38
39	SPACE			0.00	b	0.00	-		-	40
41	SPACE			0.00	c	0.00	-		-	42

LOAD SUM	CONN LOAD		FACTOR	CALC LOAD	
LIGHTING	15.00	kVA	125%	18.74	kVA
RECEPTACLES	11.83	kVA	50%>10kVA	10.92	kVA
ALL MOTORS	12.38	kVA	100%	12.38	kVA
LRGST MOTOR	0.00	kVA	125%	0.00	kVA
KITCHEN	0.00	kVA	100%	0.00	kVA
MISCELLANEOUS	157.70	kVA	100%	157.70	kVA
NON-COINCIDENT	0.00	kVA	0%	0.00	kVA
TOTAL	196.91	**kVA**		199.74	**kVA**
	236.8	**AMPS**		240.3	**Amps**

NOTES
1. **NEW PANEL**

1 / E6.02 PANEL SCHEDULES
SCALE: NTS

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Seattle, WA 98134-1952
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MATTHEW J. WOOD — STATE OF WASHINGTON — 10454 — REGISTERED PROFESSIONAL ENGINEER

NEW LEVEL 360 – UNIT 900-20
SOUTH HILL MALL
3500 South Meridan Blvd – Puyallup, WA 98373

SHEET TITLE: PANEL SCHEDULES (REVISED)

DATE	09/20/2022
SCALE	NTS
ENGR	JSM-MJW
DRWN	NHH
CHKD	MJW
APPR	JSM
JOB	22025

E6.02

SHEET 11 OF 13

IF SHEET IS LESS THAN
30"x42"
IT IS A REDUCED PRINT
SCALE REDUCED ACCORDINGLY

LUMINAIRE SCHEDULE

TYPE	DESCRIPTION	LAMP	INPUT WATTS	VOLTS	MANUFACTURE/ CATALOG NUMBER	MOUNTING
L1	14" LED HIGH BAY	12342LM 5000K 80CRI	88	120-277	LITHONIA CPHB 12LM MVOLT 50K	PENDANT HUNG @17' AFF.
L2	JUNO SLIMFORM LED SURFACE MOUNT DOWNLIGHT - ROUND	1800LM 4000K 90CRI	20	120-277	JUNO JSF 13IN 18LM 40K 90CRI MVOLT ZT WH	SURFACE MOUNT
L3	CONTEMPORARY COMMERCIAL LED EMERGENCY LIGHT AIMABLE OPTIC	220LM 5000K	2.4	120-277	LITHONIA ELM2L	CEILING/WALL MOUNT
L4	MPS MULTIPURPOSE LINEAR	4500LM 4000K	31.6	120-277	COLUMBIA LIGHTING MPSx-40ML-CW-EDU	CEILING/WALL MOUNT
X1	INTEGRATED EXIT/UNIT COMBOS GREEN, INTEGRATED LED LIGHT BAR		3	120-277	LITHONIA ECBG LED M6	CEILING/WALL MOUNT

MECHANICAL EQUIPMENT COORDINATION

PLAN MARK	DESCRIPTION	KVA/HP/W	VOLTS	PHASE	PANEL	WIRE & CONDUIT	DISCONNECT SIZE	FUSE (AMPS)	STARTER (COMB'N)	STARTER (NEMA SIZE)	COMMENTS
EF-1	EXHAUST FAN	1/4 HP	120	1	ACP2	1/2"C, 2 #12, 1 #12 EGC					PROVIDE MOTOR RATED SNAP SWITCH
EF-5	EXHAUST FAN	1/4 HP	120	1	ACP2	1/2"C, 2 #12, 1 #12 EGC					PROVIDE MOTOR RATED SNAP SWITCH
EF-7	EXHAUST FAN	1 HP	460	3	ACH1	3/4"C, 3 #12, 1 #12 EGC	30A	*			
EF-8	EXHAUST FAN	3/4 HP	460	3	ACH1	3/4"C, 3 #12, 1 #12 EGC	30A	*			
EF-10	EXHAUST FAN	1/4 HP	120	1	ACP2	3/4"C, 2 #12, 1 #12 EGC					PROVIDE MOTOR RATED SNAP SWITCH
RTU-1	PACKAGED GAS/ELEC AIR CONDITIONING UNIT	39.06 KVA	460	3	ACH	1-1/2"C, 4 #4, 1 #10 EGC	60A	*			
RTU-2	PACKAGED GAS/ELEC AIR CONDITIONING UNIT	99.72 KVA	460	3	ACH	2"C, 4 #1/0, 1 #6 EGC	200A	*			
GFEH-1	GAS FIRE ENTRANCE HEATER	1 HP	460	3	ACH1	3/4"C, 3 #12, 1 #12 EGC	30A	*			
MUAU-1	GAS MAKE-UP AIR UNIT	7-1/2 HP	480	3	ACH1	3/4"C, 3 #12, 1 #12 EGC	30A	*			

KEYNOTES: (*) SIZE FUSE PER MANUFACTURERS NAMEPLATE RECOMMENDATION.
GENERAL NOTES: COORDINATE AND PROVIDE NEW FEEDERS (CONDUIT AND CONDUCTORS), DISCONNECT SWITCHES TO ACCOMMODATE EXISTING MECHANICAL EQUIPMENT NEW INSTALLATION REQUIREMENTS.

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MATTHEW J. WASHINGTON
STATE OF WASHINGTON
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REGISTERED
PROFESSIONAL ENGINEER

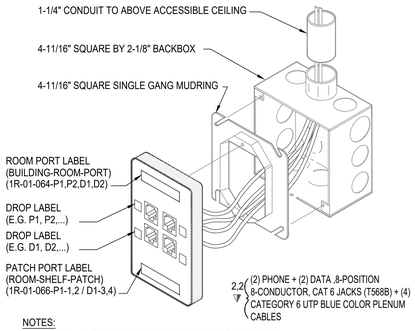
NEW LEVEL 360 - UNIT 900-20
SOUTH HILL MALL
3500 South Meridian Blvd - Puyallup, WA 98373

SHEET TITLE
LUMINAIRE AND MECHANICAL EQUIPMENT SCHEDULE

DATE	09/20/2022
SCALE	NTS
ENGR	JSM-MJW
DRWN	NHH
CHKD	MJW
APPR	JSM
JOB	22025

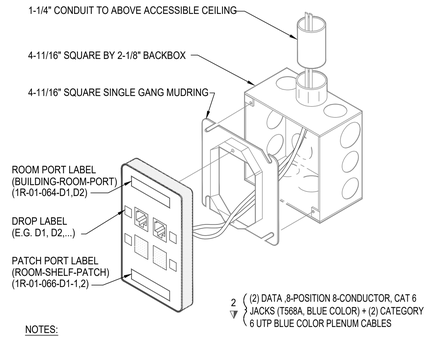
E6.03

IF SHEET IS LESS THAN 30"x42" IT IS A REDUCED PRINT SCALE REDUCED ACCORDINGLY



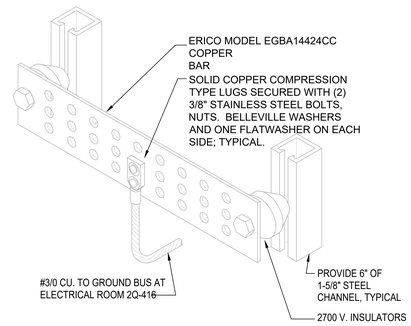
NOTES:
1. 2 PHONE + 2 DATA OUTLETS ARE SHOWN. OTHER DATA/ TELEPHONE JACK CONFIGURATIONS SIMILAR.
2. PROVIDE DEDICATED 1-1/4" CONDUIT TO ABOVE ACCESSBLE CEILING FOR EACH OUTLET BACKBOX LOCATION.
3. PHONE JACKS ON TOP ROW, DATA JACKS ON BOTTOM ROW.

1 TYPICAL PHONE/DATA COMMUNICATIONS OUTLET DETAIL
SCALE: NONE

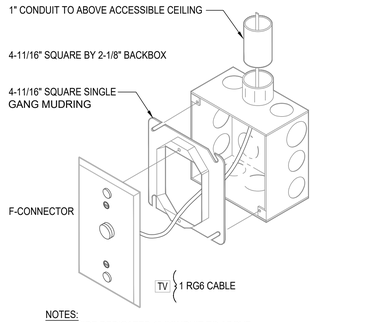


NOTES:
1. TWO DATA OUTLET IS SHOWN. OTHER DATA JACK CONFIGURATIONS SIMILAR.
2. PROVIDE DEDICATED 1-1/4" CONDUIT TO ABOVE ACCESSBLE CEILING FOR EACH OUTLET BACKBOX LOCATION.
3. DATA JACKS ON TOP ROW, BLANK COVERS ON BOTTOM ROW.

2 TYPICAL DATA COMMUNICATIONS OUTLET DETAIL
SCALE: NONE

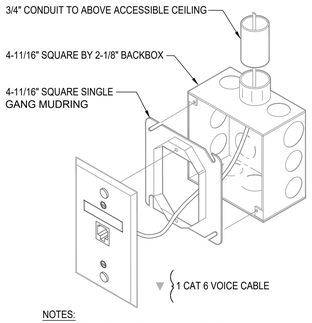


3 COMMUNICATION GROUND BAR CONNECTION DETAIL
SCALE: NONE



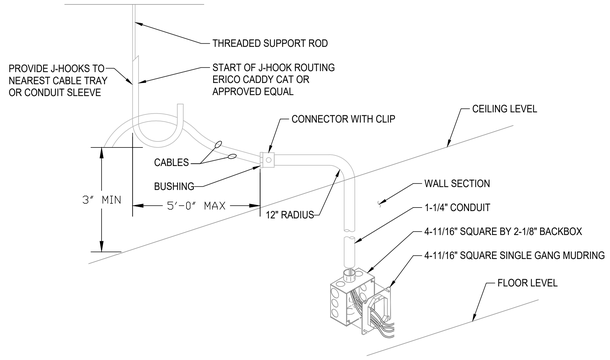
NOTES:
1. PROVIDE DEDICATED 1" CONDUIT TO ABOVE ACCESSBLE CEILING FOR EACH CATV OUTLET BACKBOX LOCATION.

4 TYPICAL CATV OUTLET DETAIL
SCALE: NONE

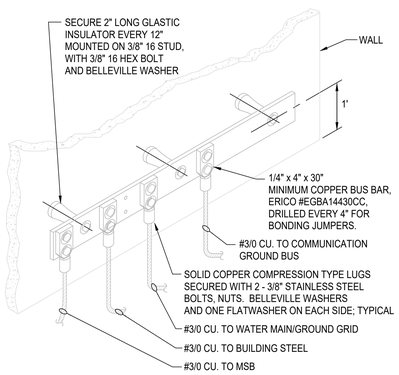


NOTES:
1. PROVIDE DEDICATED 3/4" CONDUIT TO ABOVE ACCESSBLE CEILING FOR EACH PHONE OUTLET BACKBOX LOCATION.

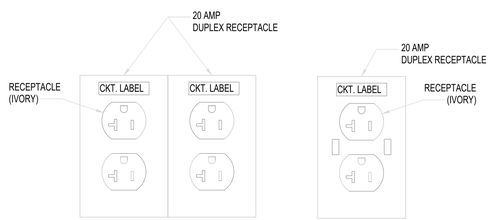
5 TYPICAL WALL PHONE OUTLET DETAIL
SCALE: NONE



6 TELECOMMUNICATIONS RACEWAY AND OUTLET BOX DETAIL
SCALE: NONE



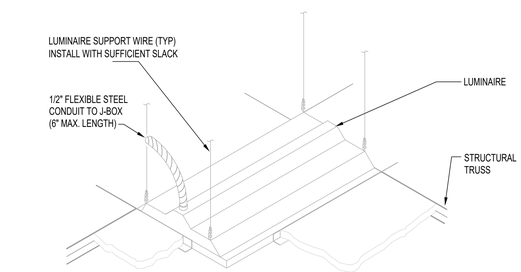
7 MAIN GROUND BAR CONECTION DETAIL
SCALE: NONE



NOTES:
1. PROVIDE (2) 20 AMP DUPLEX RECEPTACLES.

NOTES:
1. PROVIDE 20 AMP DUPLEX RECEPTACLE.

4 TYPICAL RECEPTACLE DETAIL
SCALE: NONE



6 TYPICAL LUMINAIRE INSTALLATION DETAIL
SCALE: NONE

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1 E7.01 ELECTRICAL DETAILS
SCALE: NTS

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SHEET TITLE: ELECTRICAL DETAILS

DATE	09/20/2022
SCALE	NTS
ENGR	JSM-MJW
DRWN	NHH
CHKD	MJW
APPR	JSM
JOB	22025

E7.01

SHEET 13 OF 13

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