110 GRILL

PORTSMOUTH, NH



99 HANOVER STREET | PORSTMOUTH, NH | 03801

CODE REVIEW

INTERIOR FIT-UP

TENANT FIT-UP

GENERAL BUILDING LIMITATIONS FOR THE STATE OF NEW HAMPSHIRE AS PER REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC 2015).

THIS PORTION OF THE ANALYSIS IS FOR FIT UP OF A NEW 6,032 SF TENANT SPACE. THE INTENDED USE GROUP FOR THIS TENANT SPACE WILL BE ASSEMBLY USE (RESTAURANT).

AREA: 6,991 SF

ASSEMBLY (RESTAURANT) - A2

CHAPTER 10 - MEANS OF EGRESS TABLE 1004.1.2 - MAX. FLOOR AREA PER OCCUPANT

EGRESS OCCUPANCY - INTERIOR SQUARE FOOT CALCS

| Assembly - Unconcentrated | 15 NSF / OCC |
|---------------------------|---------------|
| Assembly - Booth Seating | 2 LF / OCC |
| Kitchen Commercial | 200 GSF / OCC |
| | |

| TOTAL | | = 209 Occupants |
|-------------------------|---------------------|-----------------|
| Back Bar | 254 GSF / 200 GSF | = 2 Occupants |
| Kitchen | 1,605 GSF / 200 GSF | = 8 Occupants |
| Booths | 120 LFT / 2 LF | = 60 Occupants |
| Non-Fixed Table Seating | 2,098 / 15 NSF | = 139 Occupants |
| | | |

PLUMBING - FACILITIES REQUIRED (PER GENDER)

| TOILETS | OCCUPANCY | REQUIRED | PROVIDED | OCC. ACCOMODATED | | |
|--------------|-------------|----------------|----------------|-------------------|--|--|
| 1012210 | 00001711101 | REGUIRES | TROVIDED | COCITIONINGBITTED | | |
| Men (1/75) | 120 Men | 2 | 3 | 150 | | |
| Women (1/75) | 120 Women | 2 | 4 | 300 | | |
| LAVS | | | | | | |
| 1/200 | | 1 (Per Gender) | 2 (Per Gender) | 400 | | |

1005 MEANS OF EGRESS SIZING

1005.1 -GENERAL ALL PORTIONS OF THE MEANS OF EGRESS SHALL BE SIZED IN ACCORDANCE WITH THIS SECTION. **EXCEPTION:** AISLES AND AISLE ACCESSWAYS IN ROOMS OR SPACES USED FOR ASSEMBLY

PURPOSES COMPLYING WITH SECTION 1029. 1005.3.2-OTHER EGRESS COMPONENTS

THE CAPACITY, IN INCHES, OF MEANS OF EGRESS COMPONENTS OTHER THAN STAIRWAYS SHALL BE CALCULATED BY MULTIPLYING THE OCCUPANT LOAD SERVED BY SUCH A COMPONENT BY A MEANS OF EGRESS FACTOR OF 0.2 INCHES PER OCCUPANT.

1007.1.1 - EXIT AND EXIT ACESS DOORWAY CONFIGURATION 1/3RD DIAGONAL (W/ SPRINKLER)

<u>1010.1.1 - SIZE OF DOORS</u> 32" MINIMUM CLEAR REQUIRED / DOOR

1017 EXIT ACESS TRAVEL DISTANCE

TABLE 1017.2 EXIT ACESS TRAVEL DISTANCE - 250'-0" (W/ SPRINKLER SYSTEM)

1018.0 - AISLES

1018.2 - AISLES IN ASSEMBLY SPACES: AISLES AND AISLE ACCESSWAYS SERVING A ROOM OR SPACE USED FOR ASSEMBLY PURPOSES SHALL COMPY

1029 ASSEMBLY 1029.1- GENERAL

A ROOM OR SPACE USED FOR ASSEMBLY PURPOSES THAT CONTAIN SEATS, TABLES, DISPLAYS, EQUIPMENT OR OTHER MATERIAL SHALL COMPLY WITH THIS SECTION.

1029.6.1.4-WITHOUT SMOKE PROTECTION LEVEL AISLES SHALL HAVE NOT LESS THAN 0.2 INCHES OF CLEAR AISLE PER OCCUPANT SERVED

1029.8-COMMON PATH OF EGRESS TRAVEL

THE COMMON PATH OF TRAVEL SHALL NOT EXCEED 30 FEET FROM ANY SEAT TO A POINT WHERE AN OCCUPANT HAS A CHOICE OF TWO PATHS OF EGRESS TRAVEL TO TWO EXITS

EXCEPTION 1: FOR AREAS SERVING LESS THAN 50 OCCUPANTS, THE COMMON PATH OF EGRESS TRAVEL

(NFPA 101 12.2.5.1.2 - A COMMON PATH OF TRAVEL SHALL BE PERMITTED FOR THE FIRST 20 FT FROM ANY POINT WHERE THE COMMON PATH SERVES ANY NUMBER OF OCCUPANTS, AND FOR THE FIRST 75 FT FROM ANY POINT WHERE THE COMMON PATH SERVES NOT MORE THAN 50 OCCUPANTS)

1029.9.1-MINMUM AISLE WIDTH

THE MINIMUM CLEAR WIDTH FOR AISLES SHALL COMPLY WITH ONE OF THE FOLLOWING 4. 42 INCHES FOR LEVEL AISLES HAVING SEATING ON BOTH SIDES EXCEPTION 1: 36 INCHES WHERE THE AISLE SERVES LESS THAN 50 SEATS. EXCEPTION 2: 30 INCHES WHERE THE AISLE DOES NOT SERVE MORE THAN 14 SEATS 5. 36 INCHES FOR LEVEL AISLES HAVING SEATING ON ONLY ONE SIDE

EACH END OF AN AISLE SHALL BE CONTINUOUS TO A CROSS AISLE **EXCEPTION 1:** DEAD END AISLE SHALL BE NOT GREATER THAN 20 FEET IN LENGTH.

AISLE ACCESSWAYS FOR SEATING AT TABLES SHALL COMPLY WITH 1029.12.1

<u>1029.12.1 - SEATING AT TABLES</u> WHERE SEATING IS LOCATED AT A TABLE OR COUNTER ADJACENT TO AN AISLE OR AISLE ACCESSWAY. THE

MEASUREMENT OF REQUIRED CLEAR WIDTH OF THE AISLE OR AISLE ACCESSWAY SHALL BE MADE TO A LINE 19 INCHES AWAY FROM AND PARALLEL TO THE EDGE OF THE TABLE OR COUNTER.

1029.12.1.1 - AISLE ACCESSWAY CAPACITY & WIDTH FOR SEATING AT TABLES

AISLE ACCESSWAY SHALL NOT HAVE LESS THAT 12 INCHES OF WIDTH PLUS 1/2 INCH OF WIDTH FOR EACH ADDITIONAL FOOT, OR FRACTION THEREOF, BEYOND 12 FEET OF AISLE ACCESSWAY LENGTH MEASURED FROM THE CENTER OF THE SEAT FARTHEST FROM AN AISLE.

1101-ACCESIBILITY

BUILDINGS AND FACILITIES SHALL BE DESIGNED AND CONSTRUCTED TO BE ACCESSIBLE IN ACCORDANCE WITH MA AAB 521 CMR AND ICC A117.1

(2010 ADA STANDARDS FOR ACCESSIBLE DESIGN SHALL ALSO BE MET.)

DESIGN TEAM

DEVELOPER

110 GRILL 4 LAN DRIVE, WESTFORD, MA (978) 692-9450

ARCHITECT

J.D. LaGRASSE & ASSOCIATES Inc. 1 ELM SQUARE ANDOVER, MA 01810 978-470-3675

STRUCTURAL ENGINEER

MEP

SHEET

NUMBER

01 GENERAL

05 ARCHITECTURAL

BLW ENGINEERS 311 GREAT ROAD, LITTLETON, MA (978) 486-4301

SHEET LIST

KITCHEN EQUIPMENT

SHEET NAME

SYMBOLS LEGEND, ABBREVIATIONS & GENERAL NOTES

UNITED RESTAURANT EQUIPMENT CO. INC. 1 EXECUTIVE PARK DRIVE, NORTH BILLERICA, MA (978) 439-5500

COVER SHEET

EGRESS PLAN

DEMOLITION PLAN

DEMO ELEVATIONS

CONSTRUCTION PLAN

ENLARGED PLANS I

ENLARGED PLANS II

ENLARGED PLANS III

ENLARGED PLANS IV

INTERIOR FINISH PLAN

EXTERIOR ELEVATIONS

INTERIOR ELEVATIONS

INTERIOR ELEVATIONS I

SCHEDULES & DIAGRAMS I SCHEDULES & DIAGRAMS II

FOODSERVICE EQUIPMENT PLAN

FOODSERVICE EQUIPMENT SCHEDULE

DETAILS I

DETAILS II

A502

A600

06 FOODSERVICE

REFLECTED CEILING PLANS

INTERIOR FURNITURE PLAN

EXTERIOR WALL SECTIONS

04 ARCHITECTURAL DEMOLITION

LOCUS PLAN

DATE ISSUED

06/17/2020

06/17/2020

04/27/2020

04/27/2020

06/17/2020

06/17/2020

06/17/2020

06/17/2020

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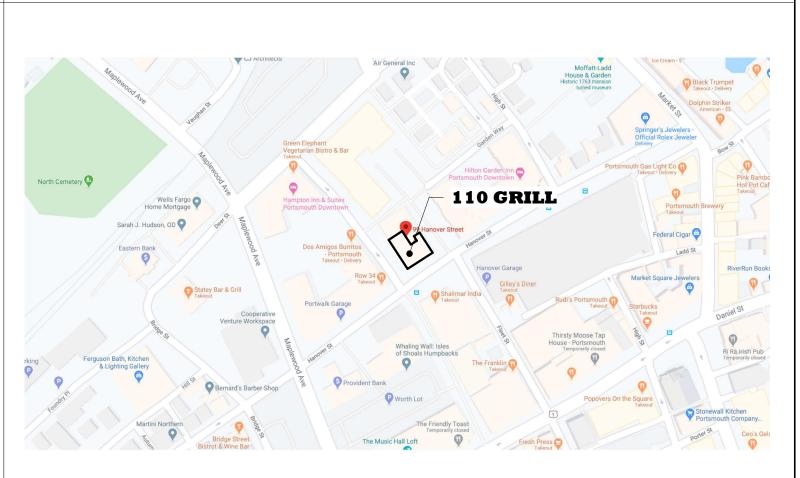
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DATE REVISED

06/25/2020

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REV-1

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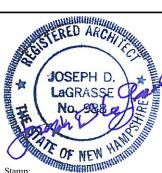
REV-2

REV-1

NOTES







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Revisions 06/17/2020

2196

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| • | EXISTING WALLS | | |
|---|----------------------------|------------|----------------|
| | WALLS TO BE DEMOLISHED | | |
| | NEW WALLS | | |
| | EXISTING DOOR TO REMAIN | | |
| | DOORS TO BE DEMOLISHED | | er |
| | DOOR & DOOR NUMBER | pared for: | tion: Approver |
| | | preg | loca |
| | | 1 | DI |

| NDOW & NDOW NUMBER | | | NEW WALLS |
|---|---|--|---|
| IILDING SECTION IMBER AND SHEET | E | X X | EXISTING DOOR TO REMAIN |
| IILDING ELEVATION MARK EVATION# / SHEET# | | <u>_</u> = = | DOORS TO BE DEMOLISHED |
| TAIL / SECTION MARK CTION # / SHEET # | | | DOOR & DOOR NUMBER |
| TERIOR ELEVATIONS IEET# / ELEV.# | | | |
| | | | |
| TTOM IN RE ROOVE | WC WD WDW WH WHCH WHTR WP WS | WALL CON WOOD WINDOW WALL HYD WHEELCH WATER HE WATERPR WEATHER WAINSCO | PRANT IAIR EATER OOF ISTRIP |

WWF

WEIGHT

WOOD WINDOW

WELDED WIRE FABRIC

| | ! | l | | |
|--|--|---|---|-----------------------------|
| ?? | BUILDING SECTION NUMBER AND SHEET | EX | | EXISTING DOOR |
| A200 X | BUILDING ELEVATION MARK ELEVATION# / SHEET# | | == | DOORS TO BE DEMOLISHED |
| (A) (A700) | DETAIL / SECTION MARK SECTION # / SHEET # | ? | | DOOR & DOOR NUMBER |
| A700 X | INTERIOR ELEVATIONS SHEET# / ELEV.# | | 7 | |
| | | | | |
| T TEMPERE T TOP T&B TOP AND B TDR TRENCH D TEL TELEPHON TEMP TEMPERA TG TONGUE 8 THRES THRESHO | BOTTOM DRAIN NE TURE & GROOVE | WC WD WDW WH WHCH WHTR WP WS | WALL COV WOOD WINDOW WALL HYD WHEELCH WATER HE WATERPR WEATHER | RANT AIR EATER OOF |

| | SOFFIT / CEILING CHANGE OR CABINETS ABOVE | | WINDOW TO BE DEMOLISHED | ===== | WALLS TO BE DEMOLISHED |
|-------------|--|---------------|--|-------------|---------------------------|
| | ENLARGED PLAN | ? | WINDOW & WINDOW NUMBER | | NEW WALLS |
| ? | REVISION CLOUD & NUMBER | ?? | BUILDING SECTION NUMBER AND SHEET | EX | EXISTING DOOR TO REMAIN |
| FD ⊗ | FLOOR DRAIN | A200 X | BUILDING ELEVATION MARK ELEVATION# / SHEET# | | DOORS TO BE DEMOLISHED |
| O RL | RAIN WATER LEADER | (A) (A700) | DETAIL / SECTION MARK SECTION # / SHEET # | ? | DOOR & DOOR NUMBER |
| \$ | SPOT ELEVATION | A700 X | INTERIOR ELEVATIONS SHEET# / ELEV.# | | |
| e elvivieun | DI V FAN | T TEMPERE | D | WC WALL COV | /FDING |
| S SINK/SUP | PLI FAIN | i IEWPERE | ט | WC WALL COV | EKING |

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TRANSF

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VERT

VEST

W/O

TOP OF WALL

TRANSFORMER TUBE SECTION

UNDERGROUND

UNLESS NOTED OTHERWISE

UNIT HEATER

UNFINISHED

VENTILATION

VERTICAL

VESTIBULE

WIDTH/WIDE

WITH

WITHOUT

WIDE FLANGE

WATER CLOSET

TELEVISION

TYPICAL

URINAL UNDERCUT

UTILITY

TOILET PAPER HOLDER

EXISTING WINDOW

TO REMAIN

 $\langle EX \rangle$

(A)— — — — COLUMN LINE

SCHED

SD

SH

SHT

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SUPV

SUSP

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SYM

STRUCT

SECT

SCHEDULE

SECTION

SHOWER

SIMILAR

SHEATHING

STANDPIPE

SQUARE

STREET

SURFACE MOUNTED

SLAB ON GRADE

SPECIFICATIONS

SQUARE YARD

COEFFICIENT

STANDARD

STEEL

STONE

STORAGE

STRUCTURAL

SUPERVISOR

SUSPENDED

SYMMETRICAL

SWITCH

STEEL STRUCTURE

STAINLESS STEEL

SOUND TRANSMISSION

SHEET

SMOKE DAMPER

SQUARE FOOT

LIGHT SWITCH

3-WAY SWITCH

LIGHT SWITCH

DUPLEX RECEPTACLE

208v RECEPTACLE

GROUND FAULT

RECEPTACLE

WATERPROOF

RECEPTACLE

PARTITION

PLUMBING

PLYWOOD

PRIMARY

PAINT

RADIUS

RISER

PRELIMINARY

PROJECTION

QUARRY TILE

RESILIENT BASE

ROOF DRAIN

RECESSED

REFERENCE

REQUIRED

RETAINING

ROOF HATCH

RAIN LEADER

ROUGH SLAB

ROUGH OPENING

REVISE

ROOM

REFRIGERATOR

REINFORCE/-ED/-ING

POLYVINYL CHLORIDE

PANEL

PLATE

PRECAST CONCRETE

PROPERTY LINE

PLASTIC LAMINATE

PC

PLAM

PLBG

PLW PNL PR

PRELIM

PROJ

PT

PVC

REF

REF

REINF

REQD

RET

REV

ON EMERGENCY BRANCH

w/ DIMMER

| 'LIGHT | E | EXHAUST FAN / LIGHT | A | 2'x4' FLORESCENT LIGHT FIXTURE | 404 | EMERGENCY LIGHT w/ ILLUMINATED SIGN |
|-----------------------|--------------------|-----------------------------|----------------|---|--------------|--|
| ECT PENDANT | (FE) | FIRE EXTINGUISHER | В | 2'x2' FLORESCENT LIGHT FIXTURE | [F] | FIRE ALARM PULL STATION |
| | ϕ | CEILING MOUNT SURFACE LIGHT | С | 8' INDIRECT LINEAR PENDANT | [F] | FIRE ALARM PULL STATION w/ HORN |
| FICAL CEILING ID | (S) | SMOKE DETECTOR | D | 6" RECESSED LIGHT FIXTURE | ĔF | FIRE ALARM PULL STATION w/ HORN & STROBE |
| i MARK AL / HEIGHT | $(ar{\mathbf{H}})$ | HEAT DETECTOR | - - | 6" RECESSED WALL WASH LIGHT FIXTURE | | FIRE ALARM HORN & STROBE |
| AIR | CO | CARBON MONOXIDE DETECTOR | lacktriangle | WALL MOUNTED LILUMINATED EXIT SIGN W/ DIRECTION | Ř | FIRE ALARM STROBE |
| I AIR | + | SPRINKLER HEAD | 4 → | EMERGENCY LIGHT | • | FIRE ALARM REMOTE INDICATOR |
| | | | | | | |

DEMO

DEPT

DF

DIA DIAG

DIFF DIM

DISP

DIST DIV DN DR

DWG

EF

EJT

ELEC

EMERG

ENCL

ENTR

EQ

EWC

EXF

EXC

EXH

EXP

EXT

EXIST

EQUIP

DEPTH OR DEEP

DRINKING FOUNTAIN

DEMOLITION

DEPARTMENT

DIAMETER

DIAGONAL

DIFFUSER

DIMENSION

DISPENSER

DIVISION

DRAWING

EACH FACE

ELEVATION

ELECTRICAL

ELEVATOR

EMERGENCY

ENCLOSURE

ENTRANCE

EQUIPMENT

EXISTING

EXTERIOR

EXPANSION

EXHAUST FAN

EXHAUST HOOD

EXCAVATE/-ED/-ION

ELECTRIC WATER COOLER

EQUAL

EXPANSION JOINT

DOWN

DOOR

DISTRIBUTION

FIRE ALARM

FACE BRICK

FLOOR DRAIN

FOUNDATION

FINISH

FIXTURE

FLASHING

FLEXIBLE

FACE OF

FOOT/FEET

FOOTING

FUTURE

GAUGE

GALVANIZED

HEIGHT/HIGH

HAND DRYER

HOSE BIB

GENERAL CONTRACTOR

GYPSUM WALL BOARD

GRAB BAR

GENERAL

GLASS

GRADE

FURRING

FLUORESCENT

FACE OF STUD

FIRE PROOFING

FLOOR

FIRE EXTINGUISHER

FBR

FD

FDN

FIN

FIXT

FLASH

FLUOR

FLEX

FO

FOS

FTG

FURR

FUT

GΑ

GALV GB

GC GEN

GL

GR GWB

SYMBOL LEGEND

SPECIAL RECEPTACLE

TELEPHONE / DATA

TELEPHONE / DATA

TELEPHONE / DATA

TO BE REMOVED

THERMOSTAT

ELECTRIC PANEL

CEILING MOUNTED

ILLUMINATED EXIT SIGN

ABBREVIATIONS

MATL

MAX

MC

MECH

MEMB

MEZZ

MFR

MISC

MO

MTL

MTD

MTR

MULL

NO

NOM

NRC

NTS

NT

OC

OD

OFF

OPER

OPNG

OPP

MONO

EXISTING

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HDCP

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INSUL

JAN

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LAV

LBS

LIN

LOC

LTG

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ID

HR

HGT

HANDICAP

HARDWARE

HORIZONTAL

HIGH POINT

HOT WATER

HARDWOOD

INTERCOM

INSULATION

JUNCTION BOX

POUNDS (WIEGHT)

LOCATION OR LOCATE

INTERIOR

JANITOR

JOIST

LONG

LINEAR

LAVATORY

LOW POINT

LIGHTING

LOUVER

JOINT

HANDRAIL

HEIGHT

HEATER

HOLLOW METAL

HEATING, VENTILATING,

& AIR CONDITIONING

INSIDE DIAMETER

HEADER

HEIGHT

CEILING MOUNTED

w/ DIRECTION

WALL MOUNTED

ILLUMINATED EXIT SIGN

LILLUMINATED EXIT SIGN

DUPLEX RECEPTACLE

EXISTING RECEPTACLE

RECEPTACLE

TO BE REMOVED

QUAD RECEPTACLE

DUPLEX RECEPTACLE

w/ ONE CONTROLLED

BY SWITCH

MIDDLE

MATERIAL

MAXIMUM

MECHANICAL

MEMBRANE

MEZZANINE

MANHOLE

MINIMUM

MIRROR

METAL

MOTOR

MULLION

NUMBER

NOMINAL

NOT TO SCALE

OUTSIDE DIAMETER

OVERFLOW ROOF DRAIN

ON CENTER

OVERHEAD

OPERATOR

OPENING

OPPOSITE

NOTE

OFFICE

MOUNTED

MEDICINE CABINET

MANUFACTURER

MISCELLANEOUS

NOT APPLICABLE

NOT IN CONTRACT

NOISE REDUCTION COEFFICIENT

MONOLITHIC

MASONRY OPENING

| 0 | VANITY LIGHT | E | EXHAUST FAN / LIGHT |
|-------------|-----------------------------------|--------------|-----------------------------|
| F | 4' INDIRECT LINEAR PENDANT | (FE) | FIRE EXTINGUISHER |
| | WIRING | | CEILING MOUNT SURFACE LIGHT |
| | ACOUSTICAL CEILING TILE GRID | (S) | SMOKE DETECTOR |
| X' - X" | CEILING MARK MATERIAL / HEIGHT | (H) | HEAT DETECTOR |
| | SUPPLY AIR | co | CARBON MONOXIDE DETECTOR |
| | RETURN AIR | + | SPRINKLER HEAD |
| | | | |

BASEMENT

BETWEEN

CABINET

CANTILEVER

CAPACITY

CATEGORY

CORNER GUARD

CONTROL JOINT

CASED OPENING

COMBINATION/-ED

CONNECT/-ED/-ION

CONSTRUCTION

CONTINUE/OUS

CONTRACT/OR

COORDINATE

CORRIDOR

CHAIR RAIL

CERAMIC TILE

COLD WATER

CABINET UNIT HEATER

CARPET

CENTER

CYLINDER

CENTER LINE

CEILING

COLUMN

CONCRETE

CONFERENCE

CLEAR

BUILT-UP ROOFING

CLOSED CIRCUIT TELEVISION

BTWN

BUR

CAB

CANTL

CCTV

CG CJT

CL CLG

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|---|---|---|
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| & @ # ° | And At Pound/ N Degree ANGLE | lumber |
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| I ADDOV | ADDDOX | |

| & @ # ° | And At Pou Deg ANG |
|--|--|
| ABV ACT ADDL ADJ AFF AHU ALT ALUM ANUN AP APC APROX ARCH AUTO | ABC ADI AD. ABC AIR ALT ALU ACC ARC COI APF ARC |
| BD BFE BIT BLDG BLKG BLKG | BOA BOT BITI BUI BLO BEL |

BO BOF BOT BR

BRG

PROXIMATE JTOMATIC TUMINOUS JILDING LOCKING BELOW BEAM **BOTTOM OF**

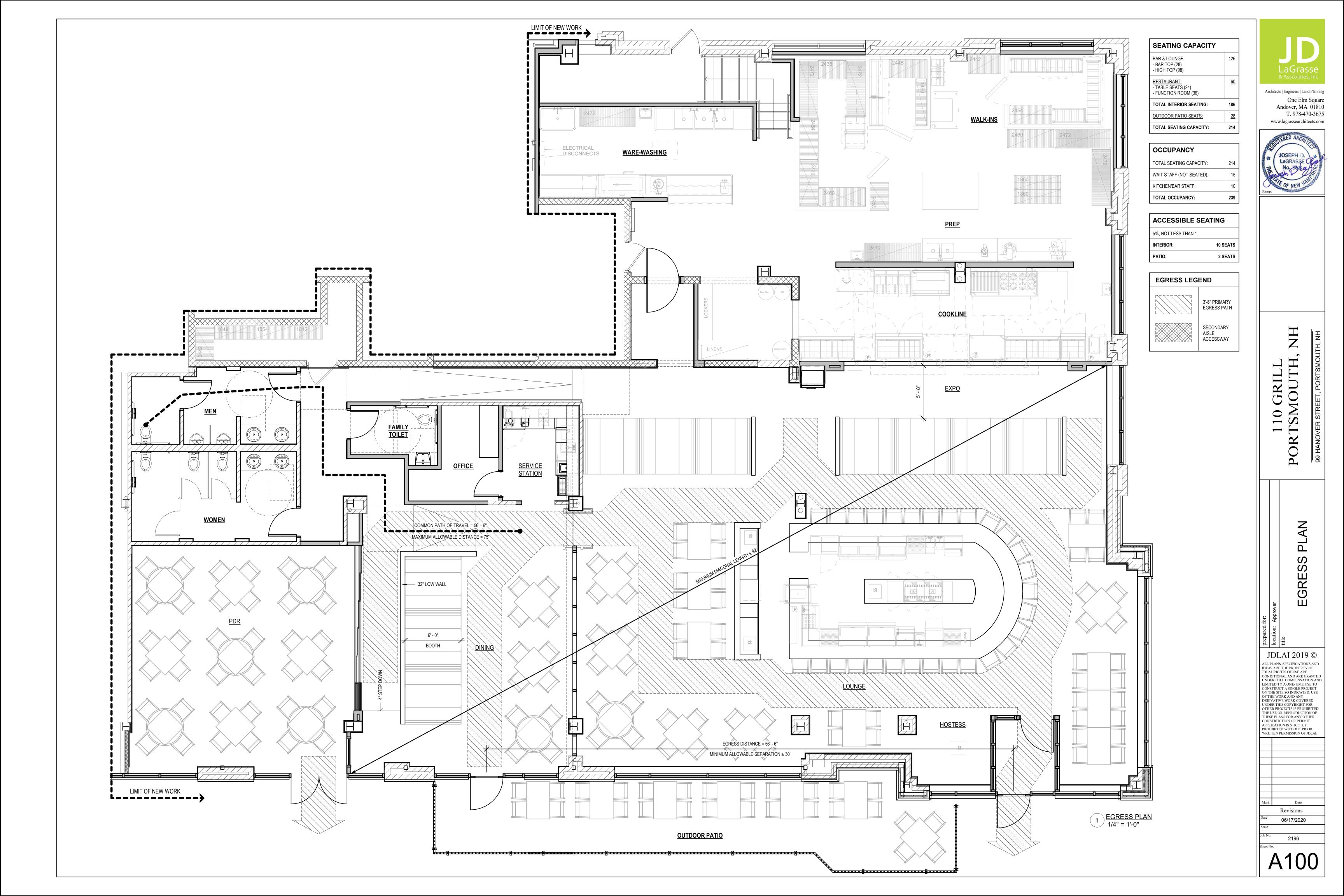
CEILING TILE H FLOOR G UNIT Mech. RAL PRECAST RCHITECTURAL/ architect OTTOM FOOTING ELEVATION

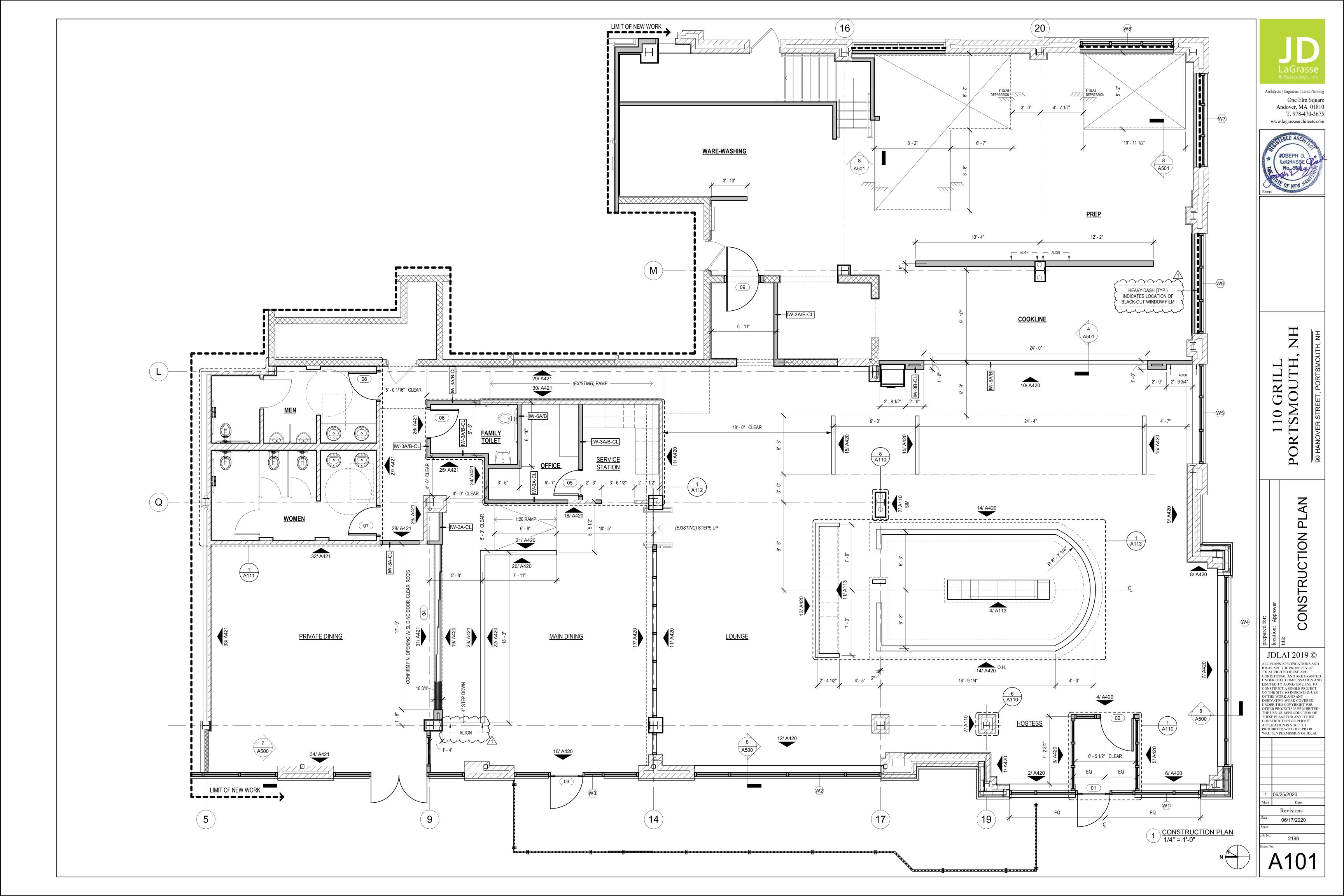
BOTTOM BRICK BEARING

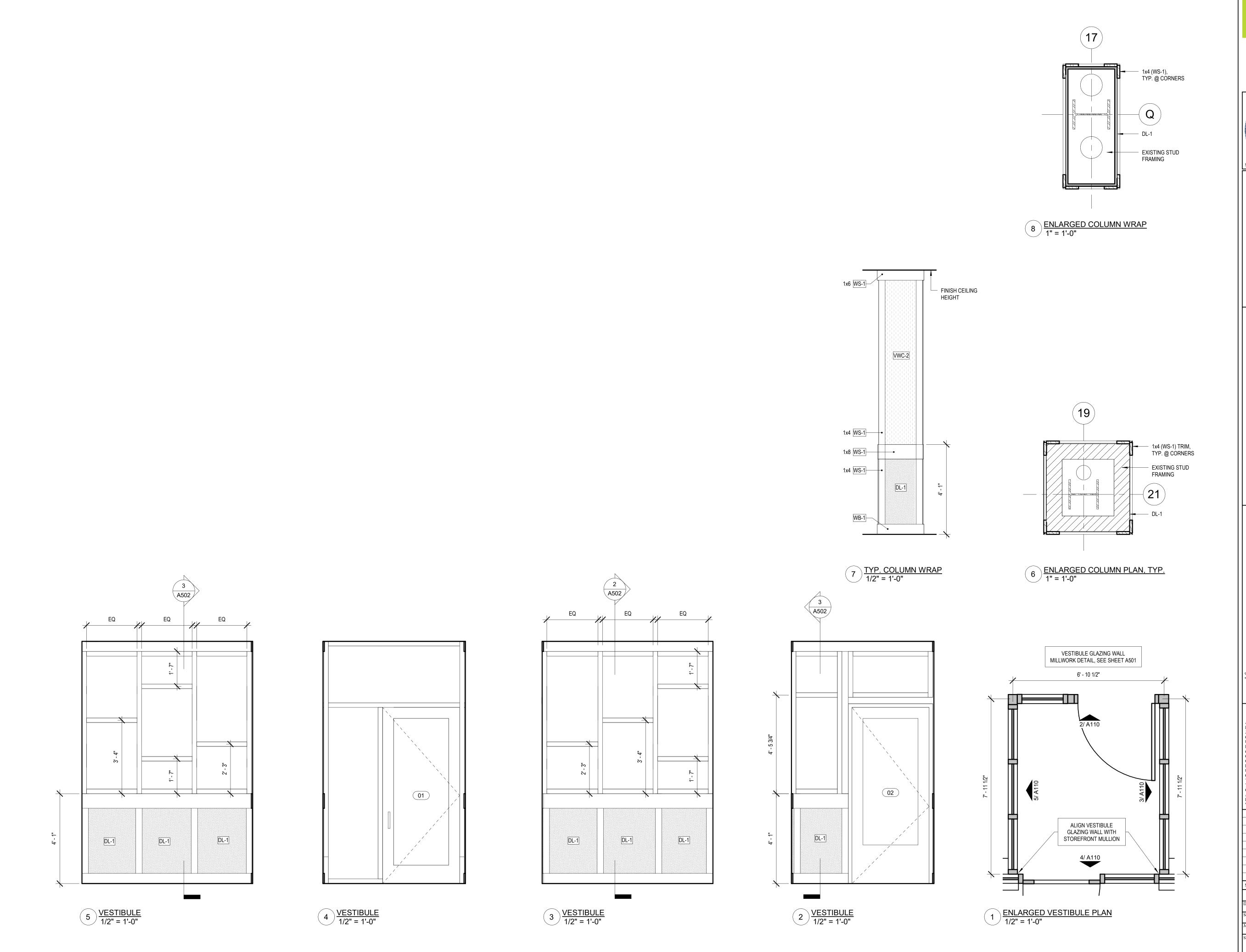
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06/17/2020

G001







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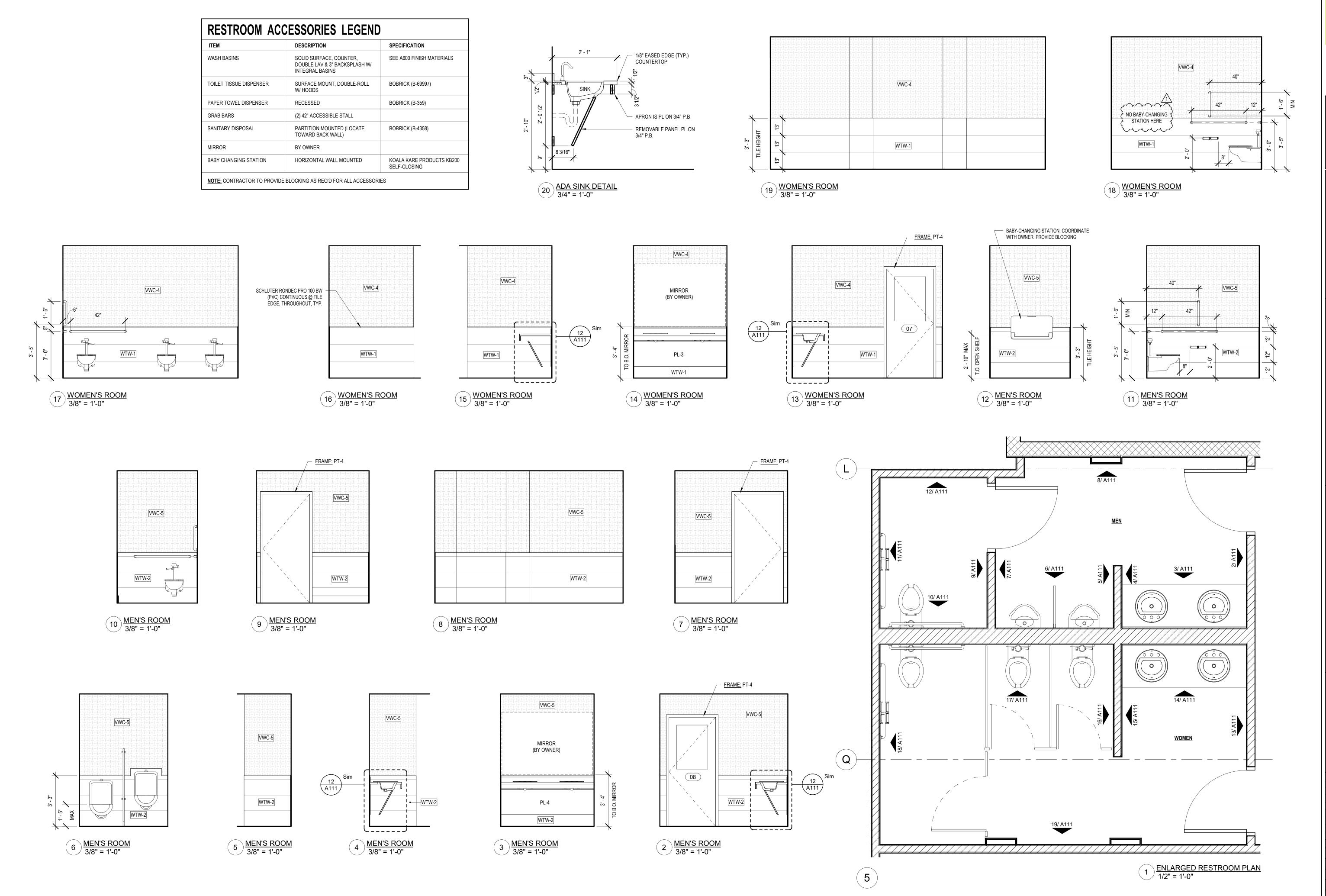
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2196

PLANS ENLARGED

POR

SMOUTH,



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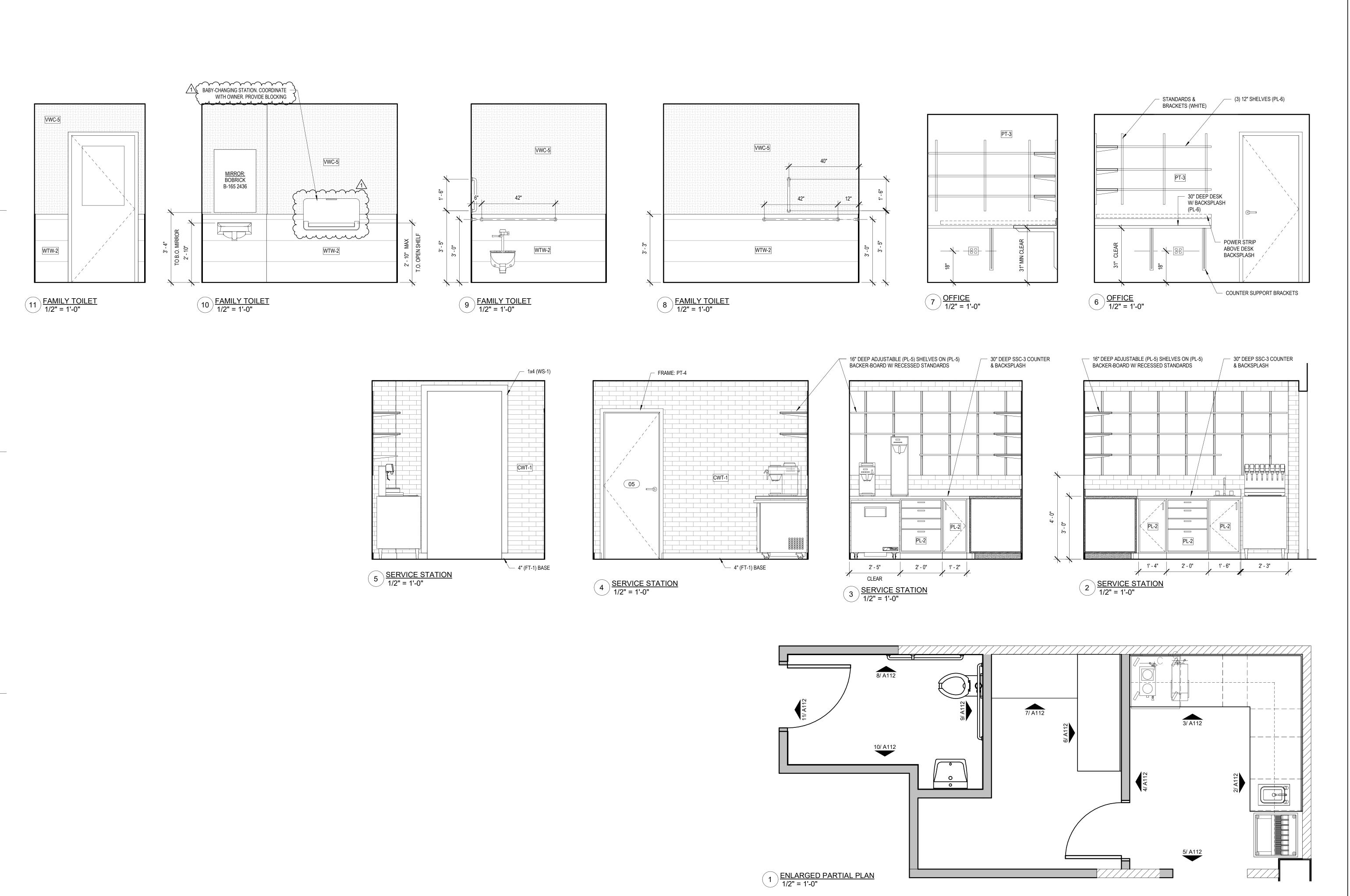
NH 10 GRILL SMOUTH,

ENLARGED PLANS

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1 06/25/2020 Mark Date Date Revisions 06/17/2020 As indicated 2196



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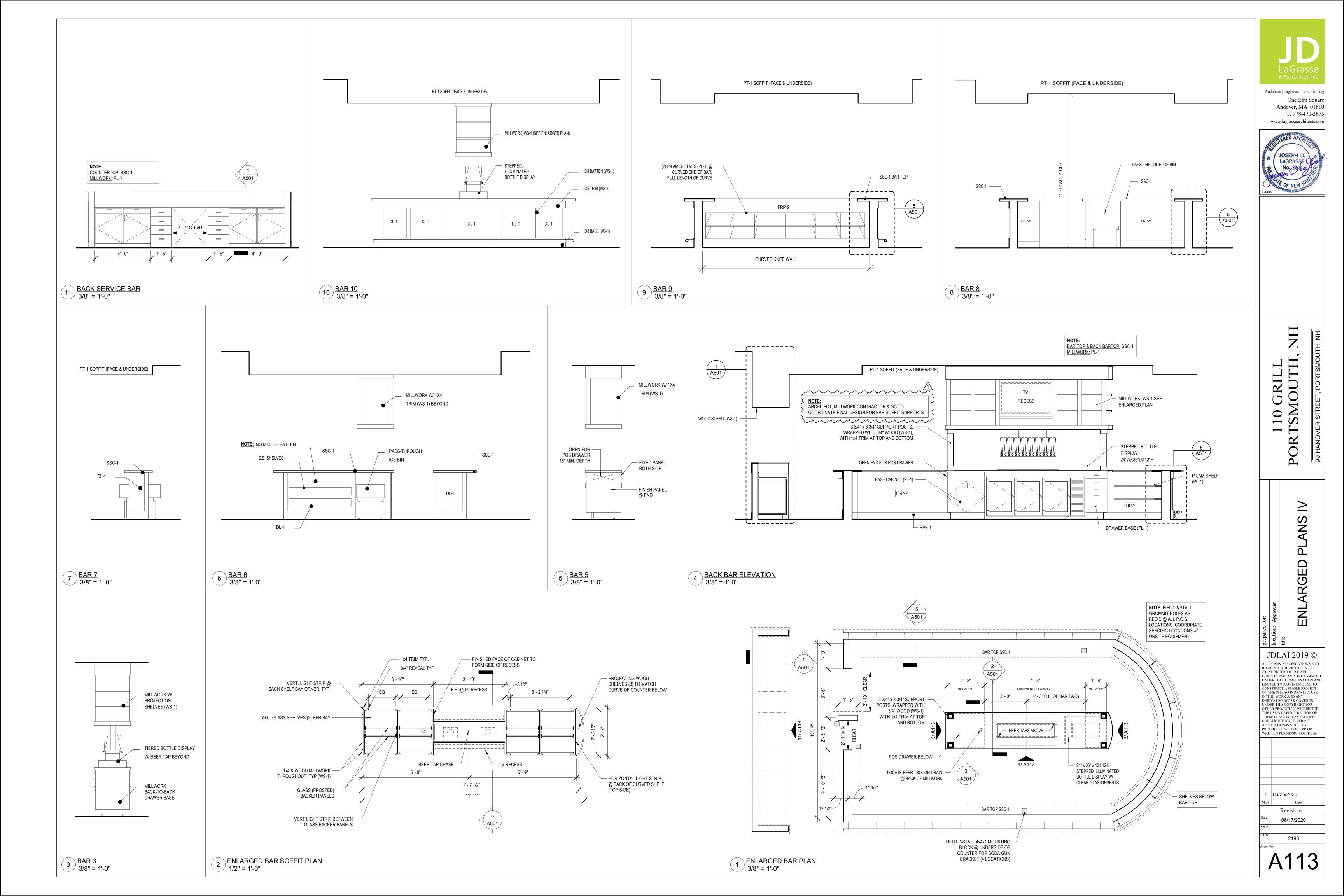
10 GRILL SMOUTH,

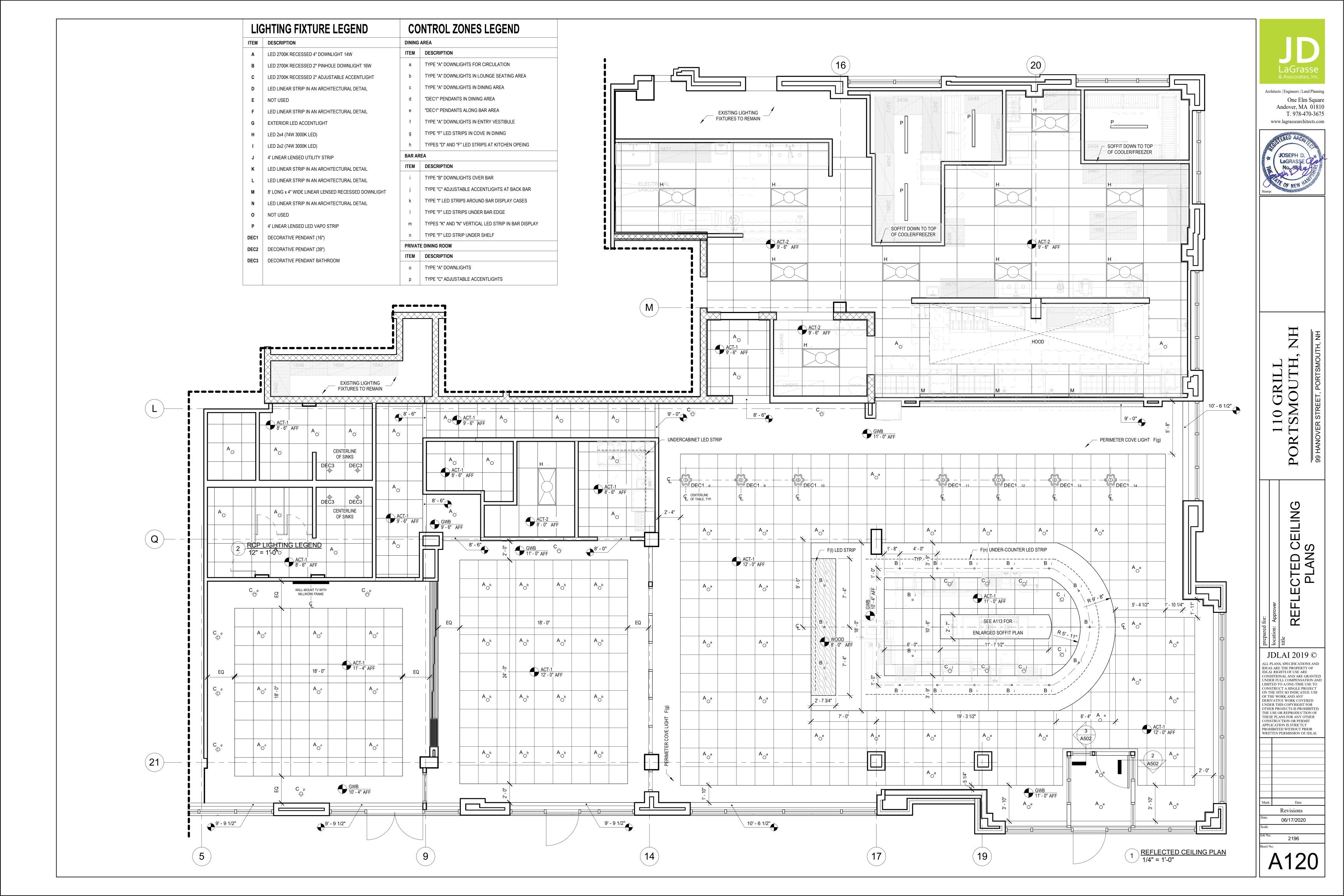
PLANS ENLARGED

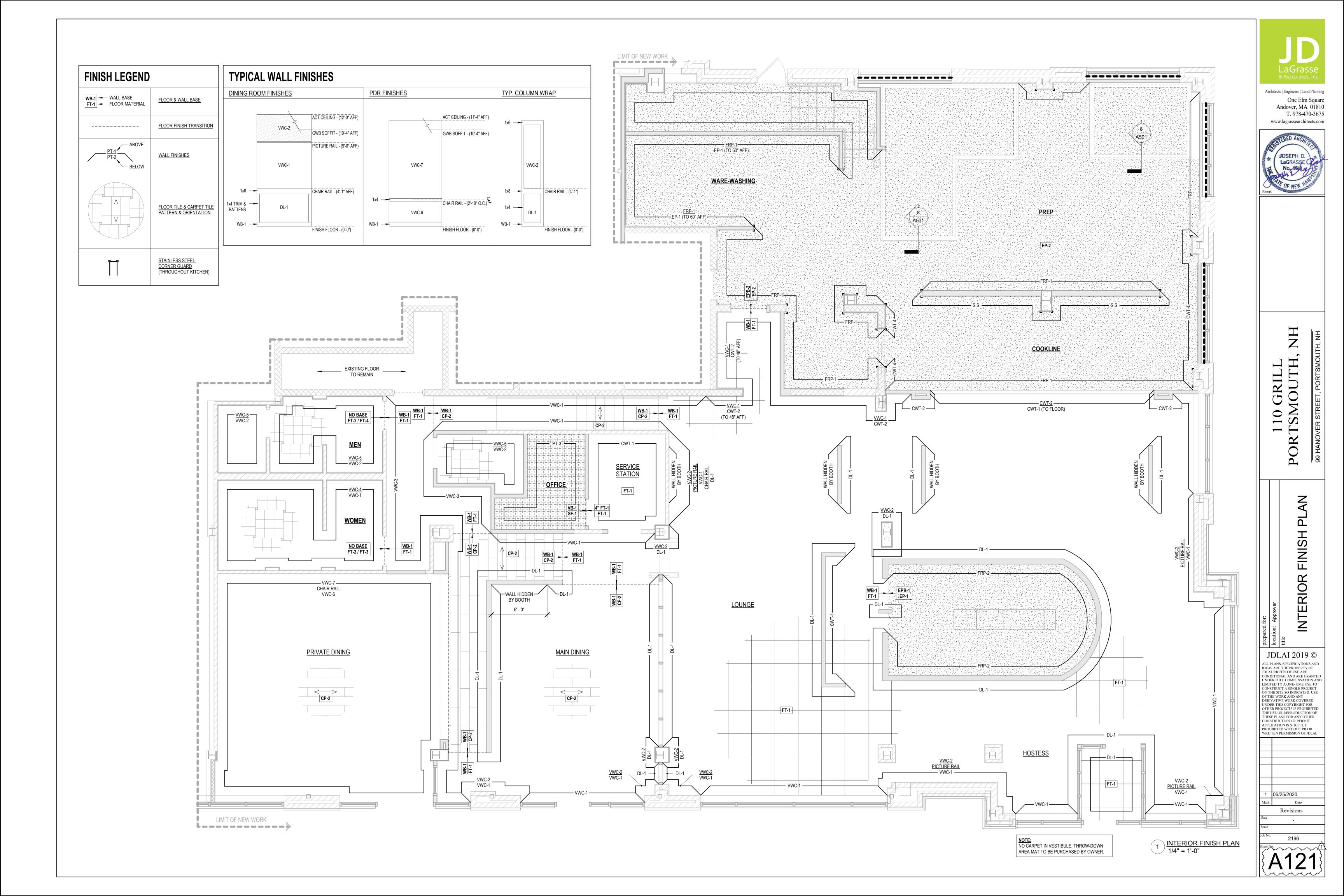
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1 06/25/2020 Mark Date Date Revisions 06/17/2020 1/2" = 1'-0" 2196





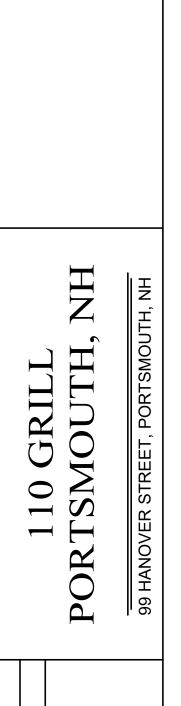


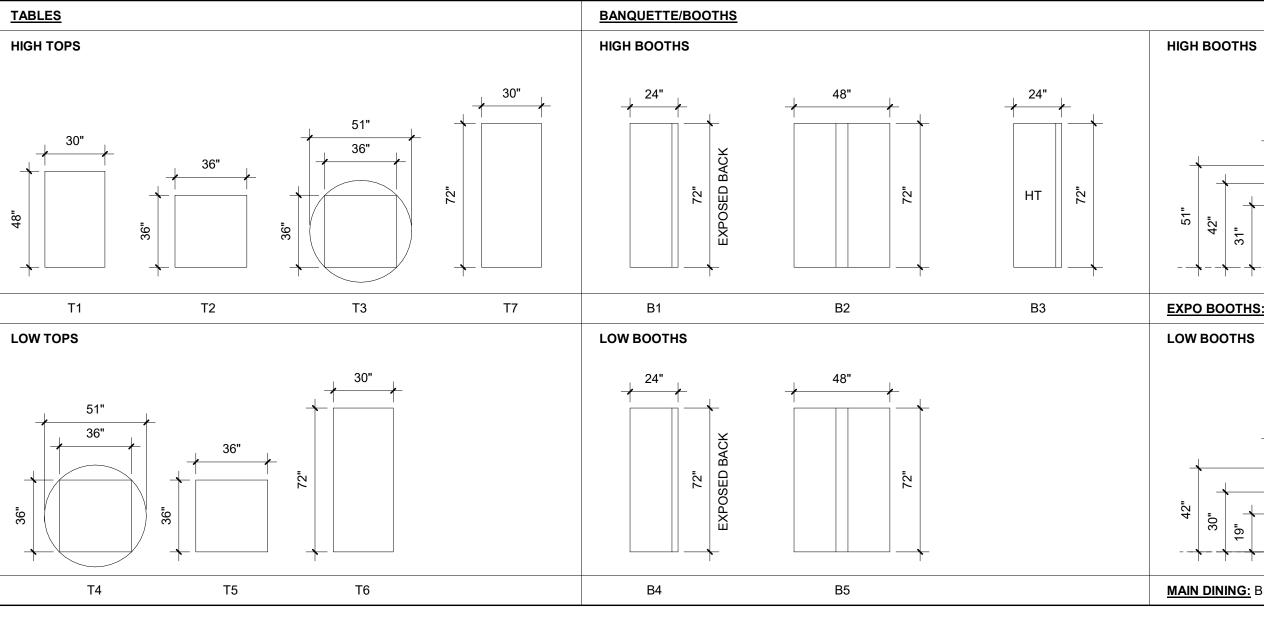
INTERIOR FURNITURE PLAN

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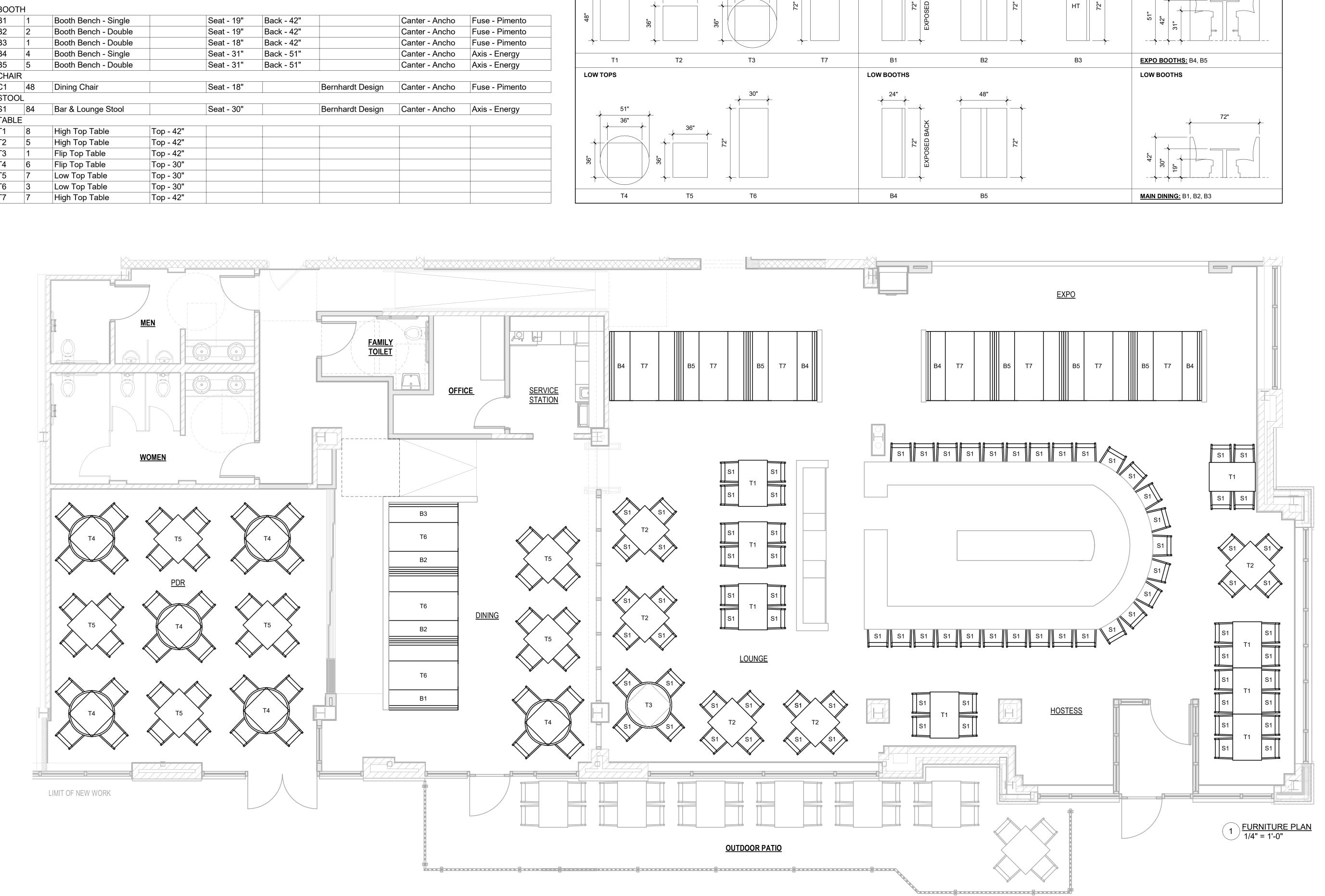
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1 06/25/2020 Revisions











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ELEVATIONS

EXTERIOR

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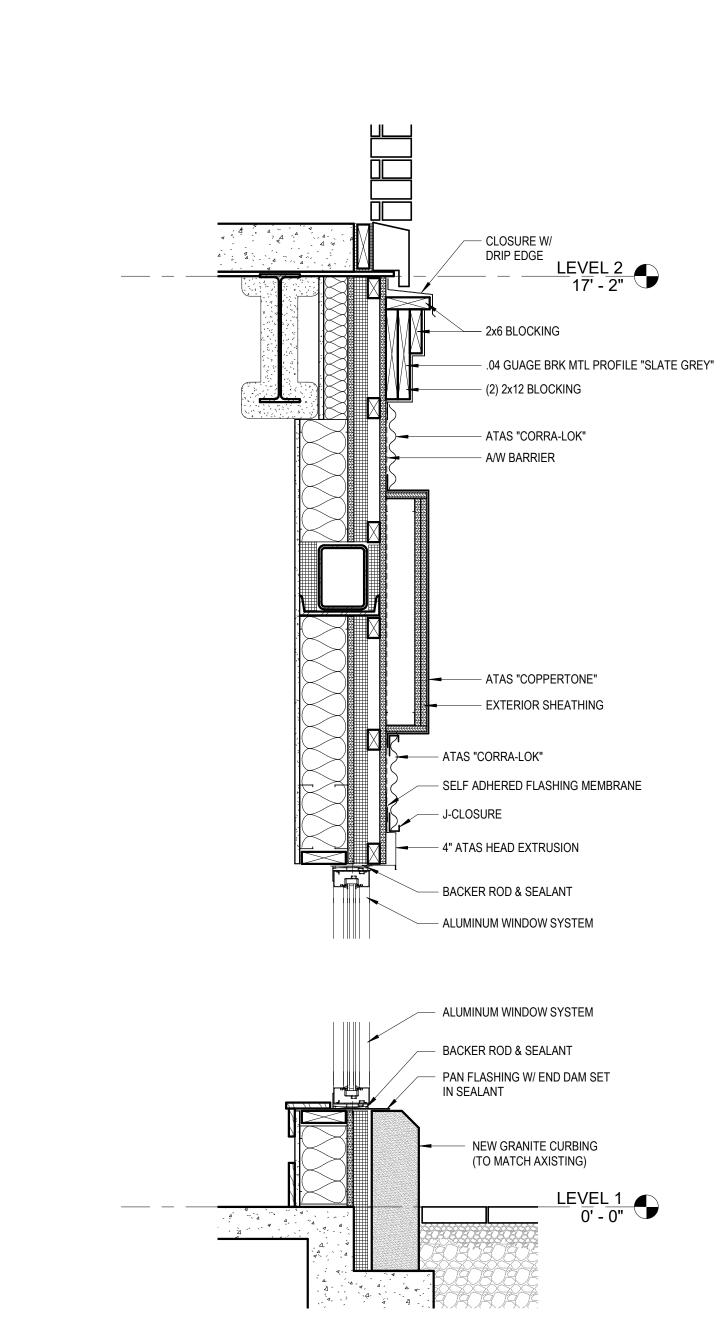
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2 07/13/2020 Date Revisions

07/08/20 1/4" = 1'-0"

2196

et No.



1 TYP. SECTION @ EXTERIOR WALL 1" = 1'-0"





110 GRILL PORTSMOUTH,

EXTERIOR WALL SECTIONS

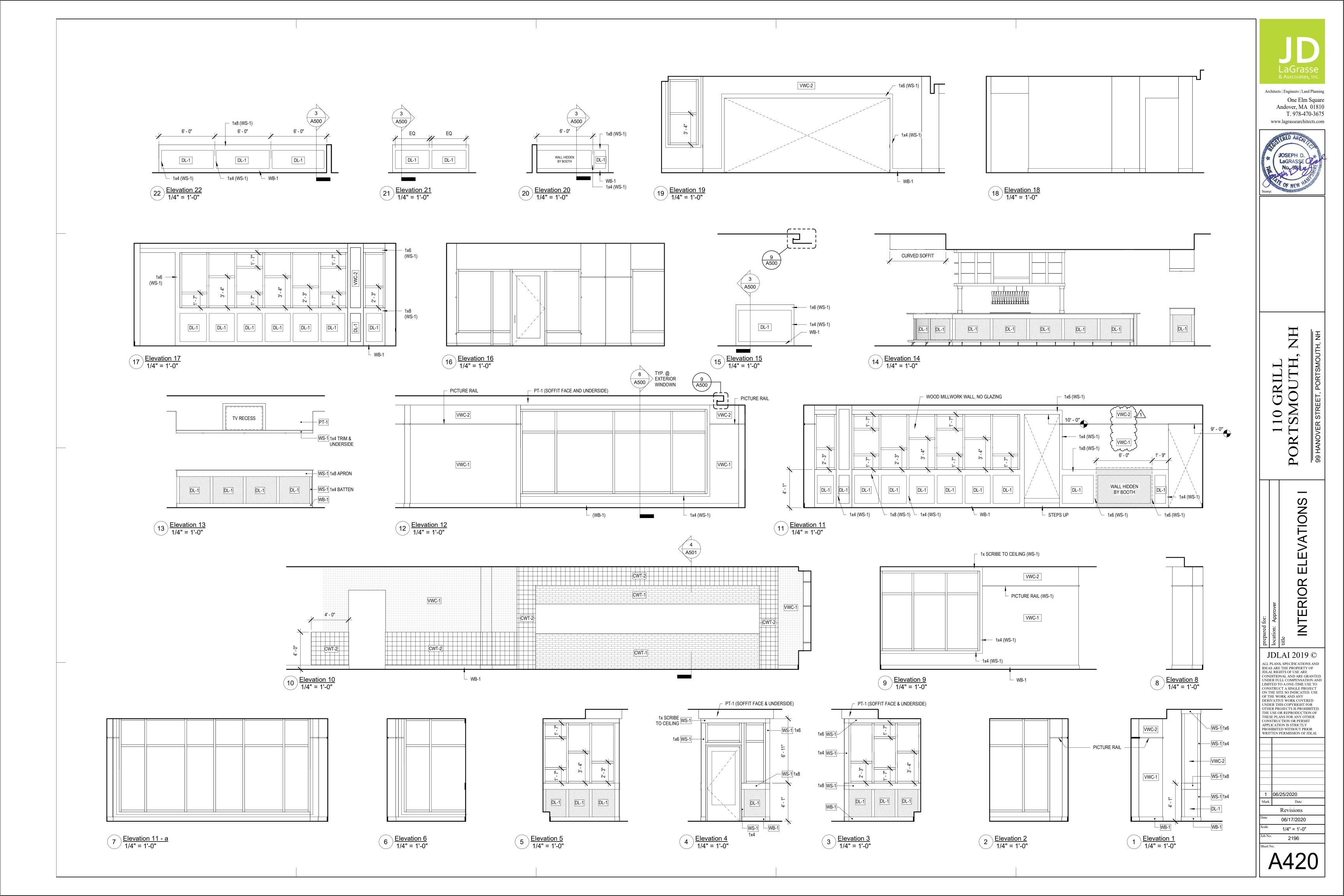
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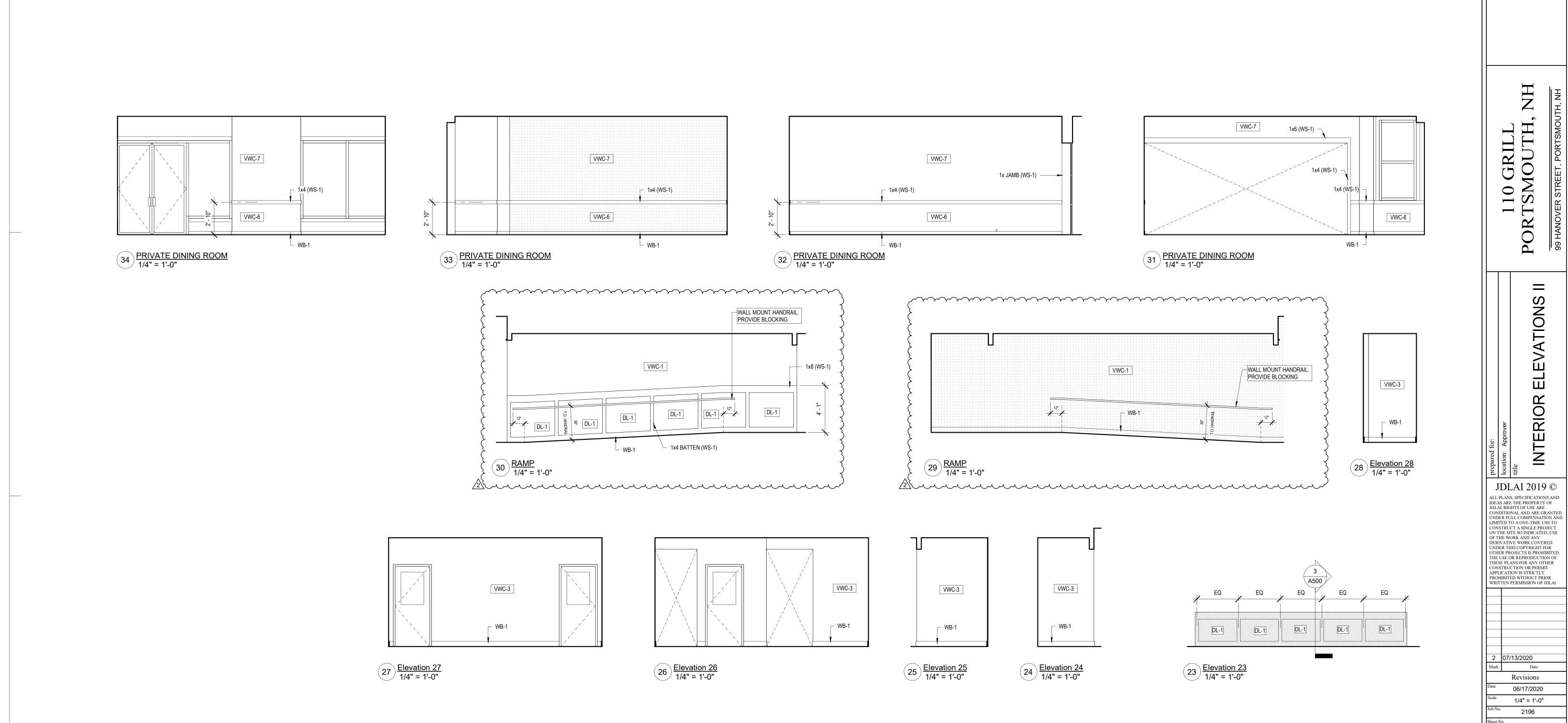
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2 07/13/2020

Date

Revisions 07/09/20 1" = 1'-0" 2196





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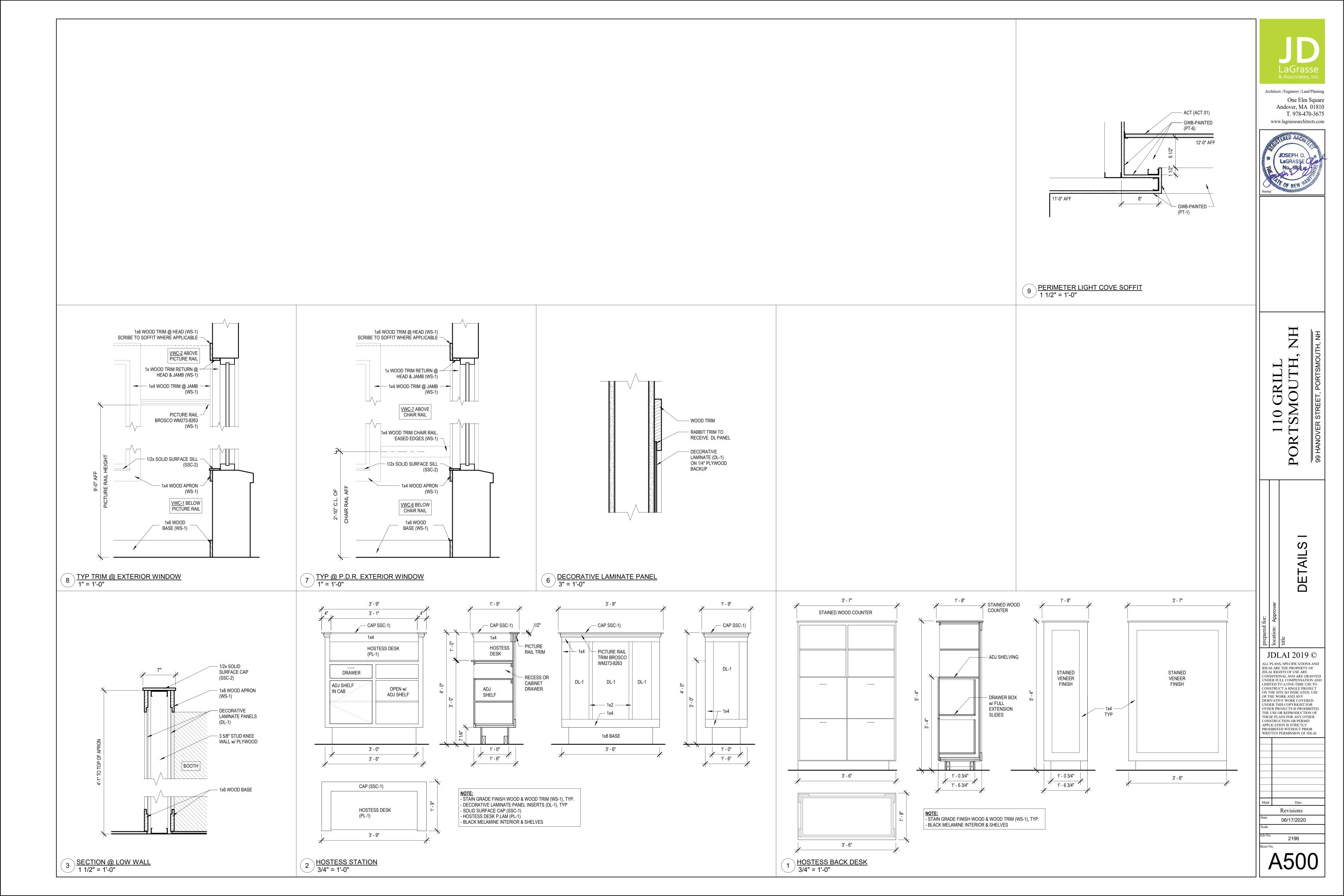
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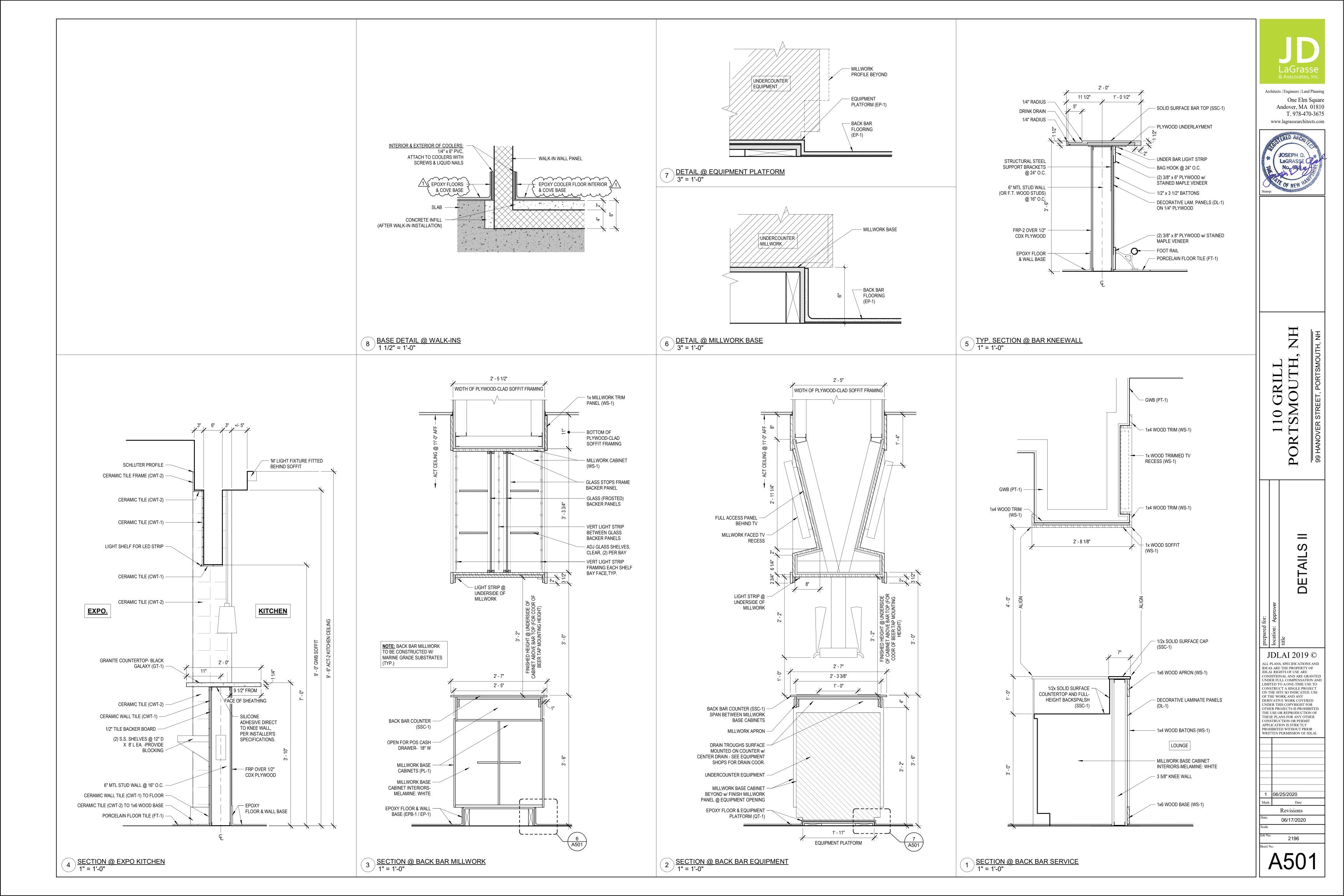
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Date

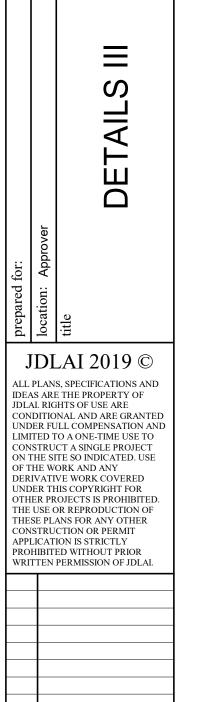
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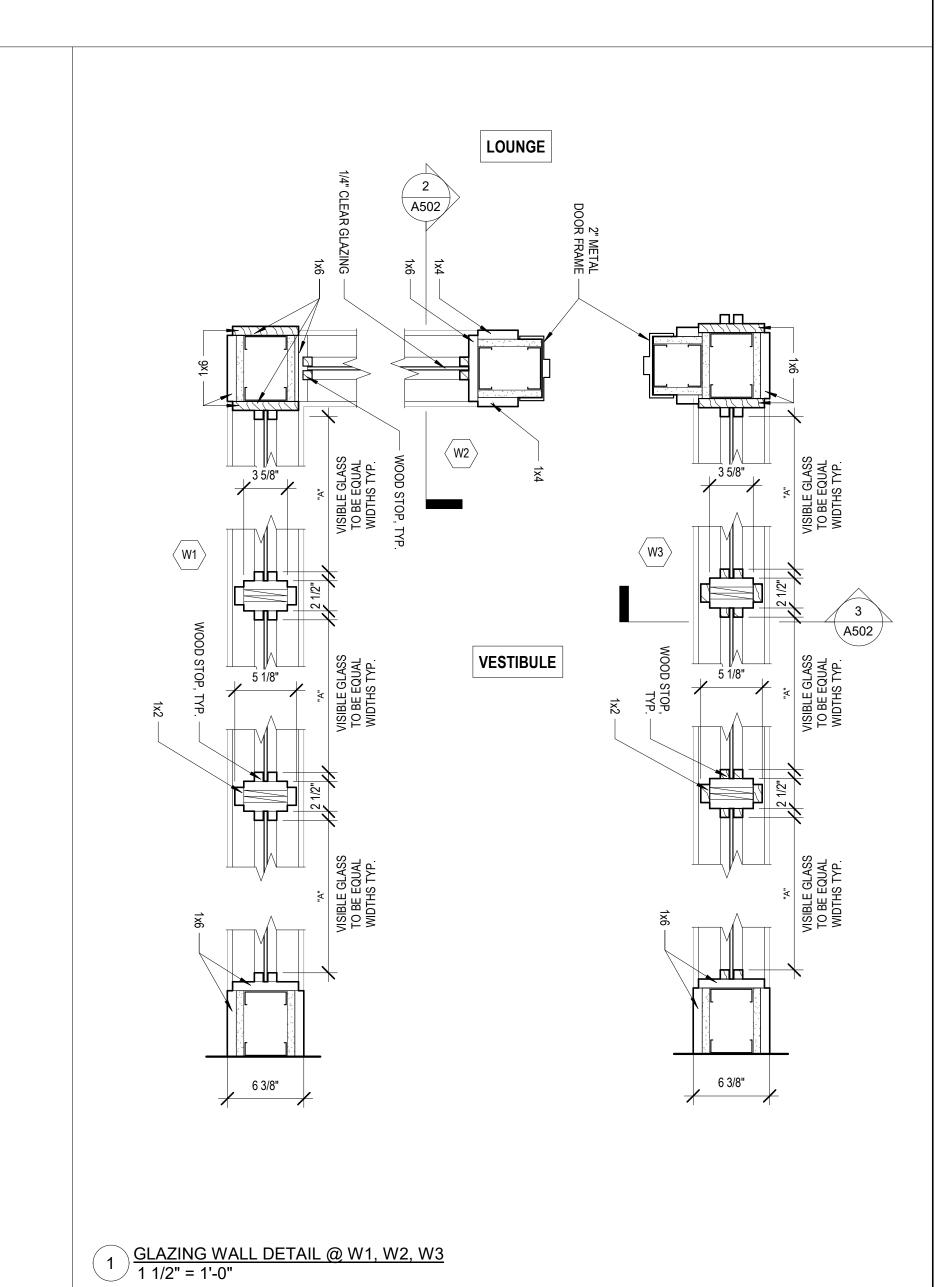


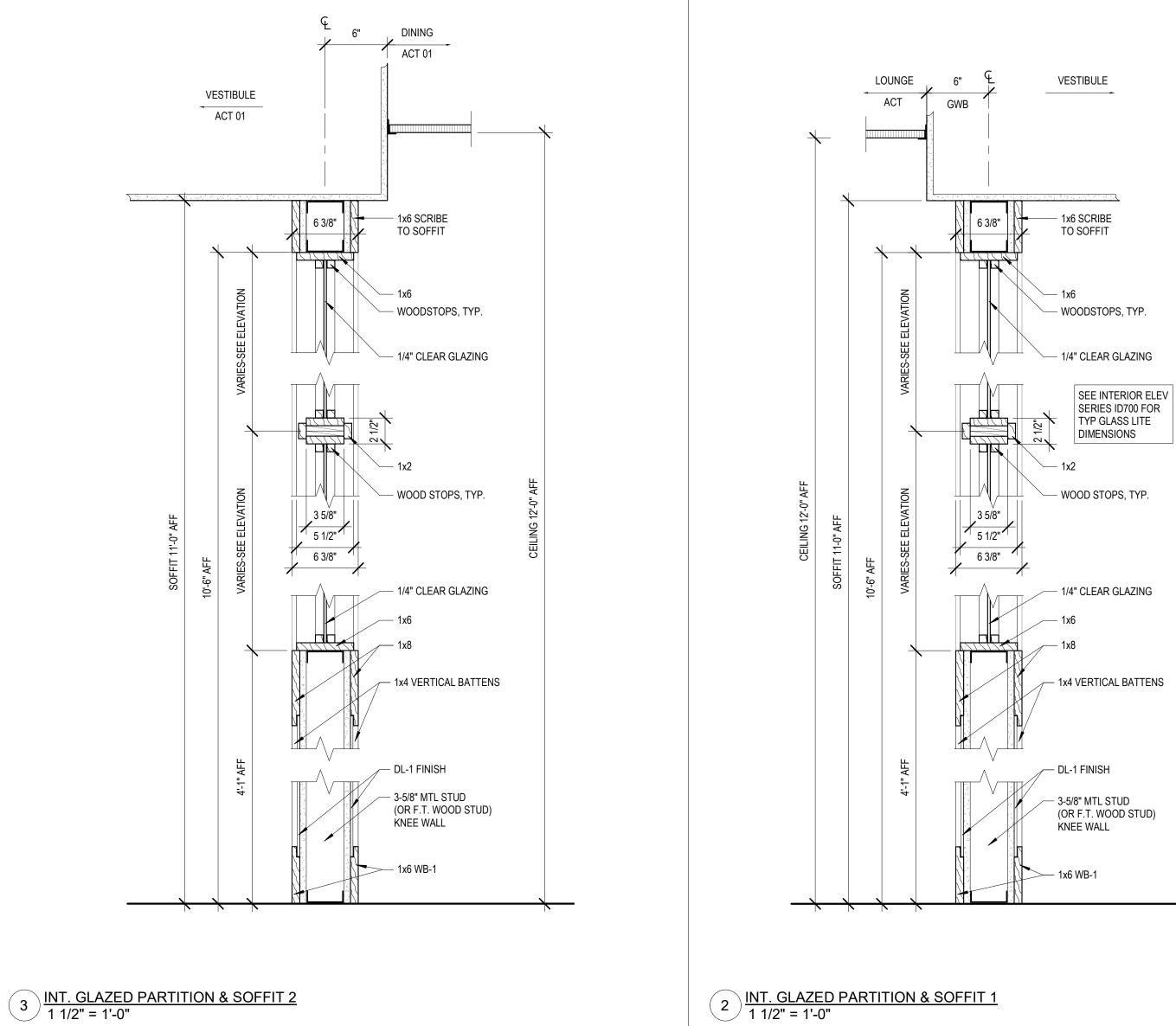


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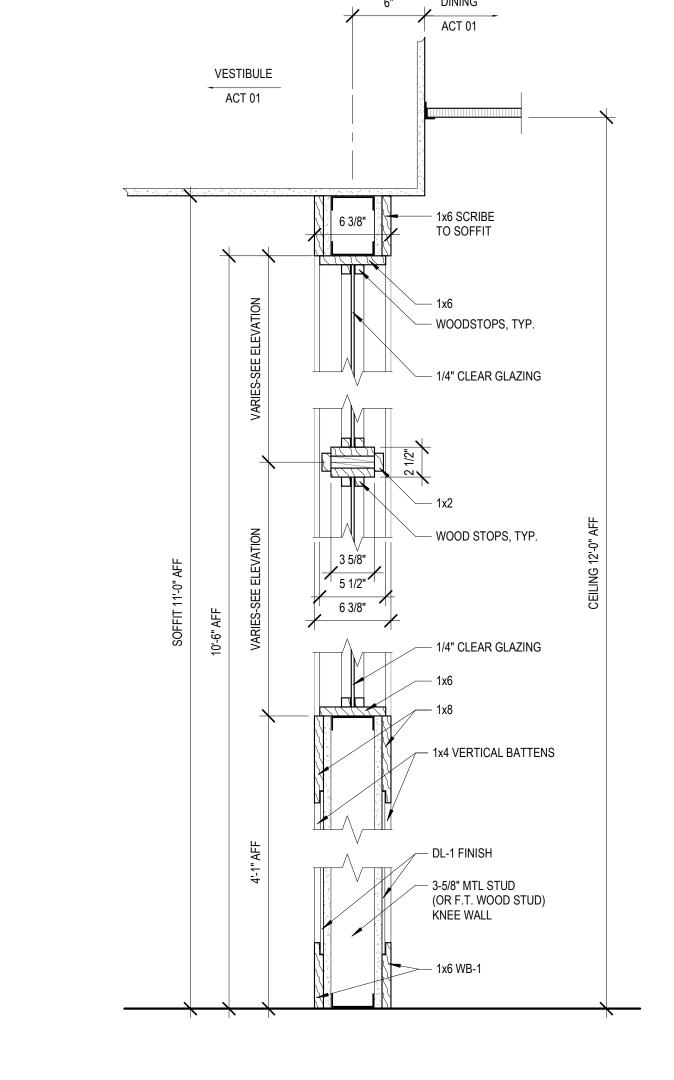
Revisions 06/17/2020

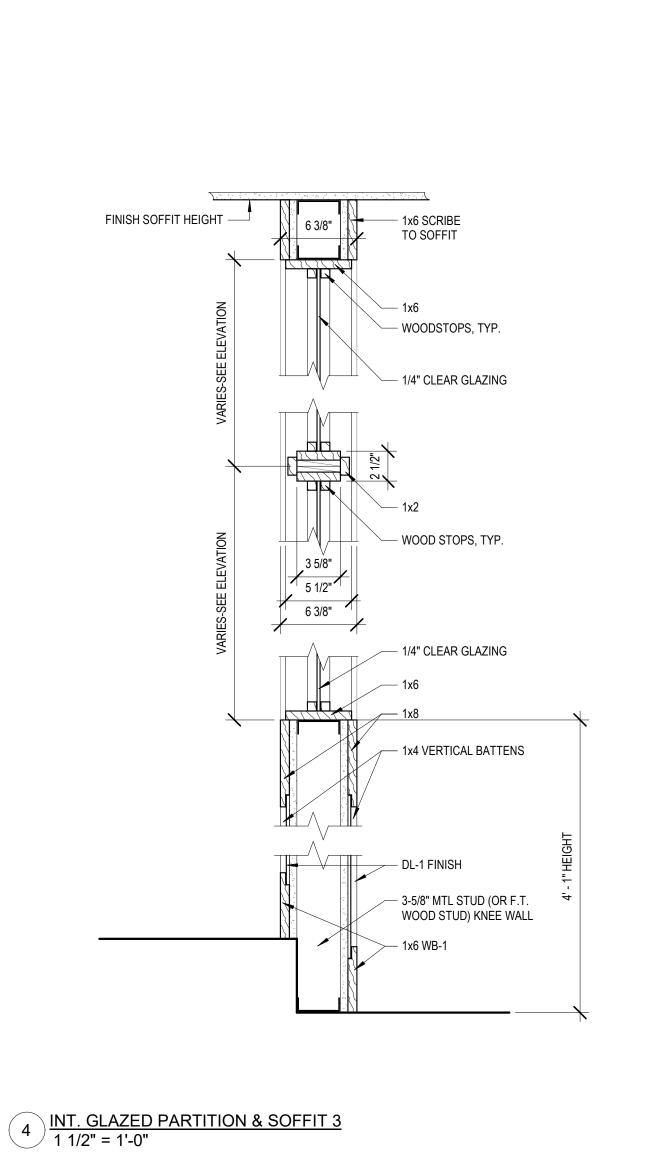
A502





2 INT. GLAZED PARTITION & SOFFIT 1 1 1/2" = 1'-0"





| | | | ROOM FIN |
|----------------------------|---|---|----------|
| CEILING | | | |
| ITEM | DESCRIPTION | SPECIFICATION | |
| ACT-1 PUBLIC AREAS | ACT HOLD-DOWN CLIPS TO BE INSTALLED @ VESTIBULE | USG FROST PANEL, 2x2 EDGE: FL COLOR- TAUPE 107 USG CENTRICITEE DXT GRID, COLOR- TAUPE 107 | |
| ACT-2 BACK OF HOUSE | ACT | USG SHEETROCK CLIMA PLUS 3270 GRID= ARMSTRONG PRELUDE XL 7300 15/16 OR KEMLITE-GLASSBOARD CEILING PANEL 2x4 WHITE SMOOTH w/ SURFASEAL | |
| WD-1 BACK BAR SOFFIT | 1x WOOD -STAINED | MATCH SHERWIN WILLIAMS SW 3119 BURNISHED WALNUT | |

| ТЕМ | DESCRIPTION | SPECIFICATION | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|
| VWC-1 LOUNGE, DINING | VINYL WALL COVERING | TAILORED SILK | ALT: LANARK WALLCOVERING LYRIC L2-LY-09 CABARET | | | | | | |
| VWC-2 LOUNGE, DINING | VINYL WALL COVERING | LANARK WALLCOVERING SOVELLE L2-NV-03 GRANITE | | | | | | | |
| VWC-3 HALL & VESTIBULE | VINYL WALL COVERING | LANARK WALLCOVERING WIRED L2-W1-09 COPPER | | | | | | | |
| VWC-4 W ROOM | VINYL WALL COVERING | LANARK WALLCOVERING CODE R2-CX-03 NETWORK | | | | | | | |
| VWC-5 M ROOM | VINYL WALL COVERING | LANARK WALLCOVERING CODE R2-CX-28 VIRTUAL | | | | | | | |
| VWC-6 PDR WAINSCOT | VINYL WALL COVERING | LANARK WALLCOVERING BELVEDERE LV-BL-03 PASHA | | | | | | | |
| VWC-7 PDR UPPER WALL | VINYL WALL COVERING | LANARK WALLCOVERING CARTA R2-CA-17 CHAMPAGNE | | | | | | | |
| WTW-1 w room | WALL TILE GROUT: WAINSCOT WHITER THAN 44 BRIGHT WHITE | PORCELANOSA TILE WALL NACARE BLANCO GLOSS V141000 SCHLUTER- RONDEC PRO 100 BV | 011 13"x26" w/ V (PVC) CONTINUOUS @ TILE EDGE | | | | | | |
| WTW-2 M ROOM | WALL TILE GROUT: 52 TOAS WAINSCOT ALMOND | TED DALTILE COLORBODY PORCELAINE KIMONA SILK P321 RICE PAPER 12"x24" w/ BULLNOSE TRIM 3"x12" | | | | | | | |
| CWT-1 EXPO KITCHEN, SERVICE | CERAMIC GROUT: 17 MARB WALL TILE BEIGE | LE DALTILE RITTENHOUSE SQUARE MATTE ELEMENTAL TAN 0766 3"x6" | NOTE: SCHLUTER STRIP TO BE USED AT ALL OUTSIDE CORNERS & EDGES | | | | | | |
| CWT-2 EXPO KITCHEN | CERAMIC GROUT: WALL TILE 46 QUARRY RED | AMERICAN OLEAN WALL TILE-BRIGHT QO74 CHILI PEPPER 6"x6" | NOTE: SCHLUTER STRIP TO BE USED AT ALL OUTSIDE CORNERS & EDGES | | | | | | |
| CWT-4 KITCHEN | CERAMIC GROUT: 90 LIGHT WALL TILE PEWTER | AMERICAN OLEAN WALL TILE-BRIGHT 0025 ICE WHITE 3" x 6" | | | | | | | |
| CWT-5 MALL INT. WAINSCOT [NOT USED] | CERAMIC GROUT: 90 LIGHT WALL TILE PEWTER | DALTILE IMAGICA VISION ID95, 8" x 48" | | | | | | | |
| FRP-1 KITCHEN | FIBERGLASS REINFORCED PANELS | 4x8 PANELS, STIPPLED WHITE CLASS-A | | | | | | | |
| FRP-2 BACK OF KNEW WALL | FIBER-REINFORCED PLASTIC | 4x8 PANELS, STIPPLED BLACK CLASS-A | | | | | | | |
| PT-1 SOFFITS (FACE & UNDERSIDE) | PAINT | SHERWIN WILLIAMS SW 7549 STUDIO TAUPE SATIN FINISH | | | | | | | |
| PT-2 KITCHEN DOOR FRAMES | PAINT | SHERWIN WILLIAMS SW 7550 RESORT TAN SEMI-GLOSS | | | | | | | |
| PT-3 OFFICE WALLS | PAINT | SHERWIN WILLIAMS SW 7102 WHITE FLOUR SATIN FINISH | | | | | | | |
| PT-4 INTERIOR DOOR FRAMES (EXCLUDING KITCHEN) | PAINT | SHERWIN WILLIAMS SW 7675 SEALSKIN SEMI-GLOSS | | | | | | | |
| РТ-5 аст матсн | PAINT | SHERWIN WILLIAMS SW 7549 STUDIO TAUPE FLAT FINISH | | | | | | | |
| PT-6 SOFFIT COVE | PAINT | CEILING WHITE | | | | | | | |

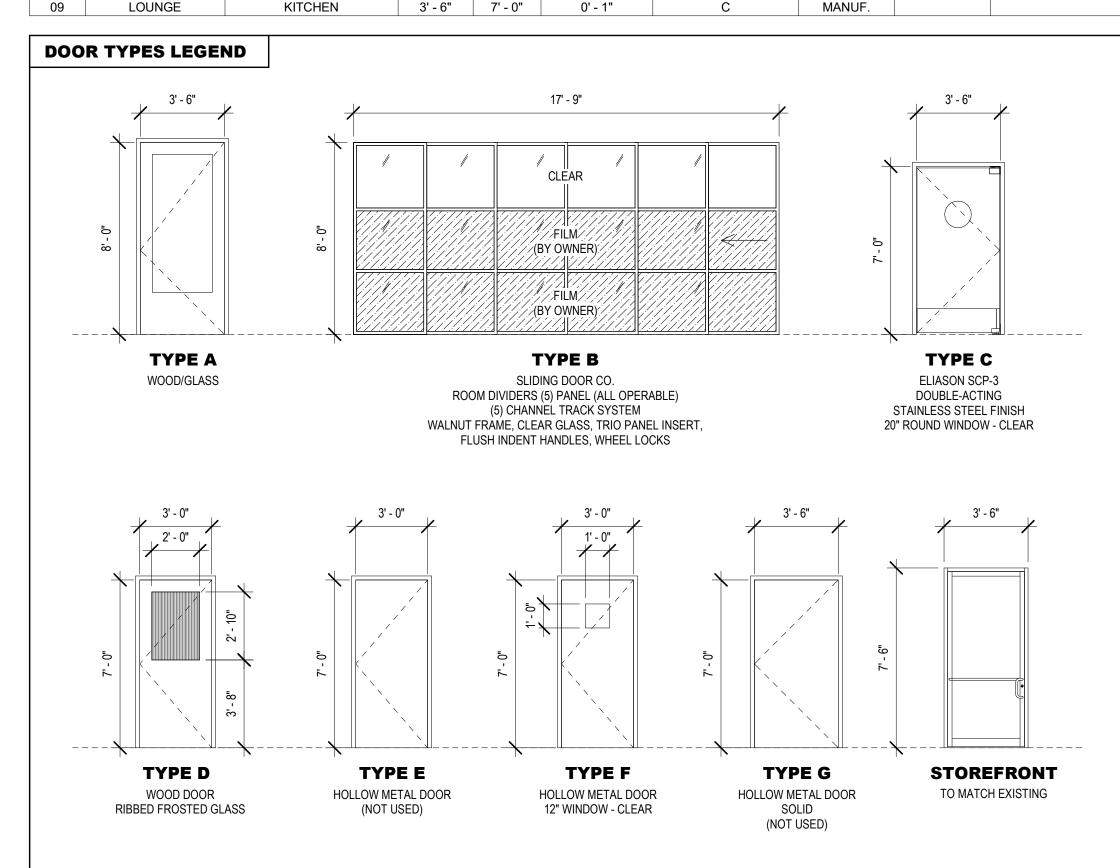
| SOFFIT COVE | | | |
|------------------------------------|--------------------------------|---|---|
| WALL BASE | | | |
| ITEM | DESCRIPTION | SPECIFICATION | |
| WB-1 | 1x6 WOOD -STAINED | MATCH SHERWIN WILLIAMS SW 3119 BURNISHED WALNUT | |
| FT-1 SERVICE | PORCELAIN TILE GROUT: 35 MOCHA | STONEPEAK-PLANE COPPER PLANE-HONED-30"x30" CUT TO 4" (SEE ELEVATIONS) | GROUT COLORS BASED ON LATICRETE OPTIONS |
| QT-1 BACK BAR | QUARRY TILE GROUT: 35 MOCHA | METROPOLITAN CERAMICS QUARRYBASICS 108 CHESTNUT BROWN 8x8 | (NOT USED) |
| QT-2 KITCHEN, WALKINS, STAFF | QUARRY TILE GROUT: 35 MOCHA | METROPOLITAN CERAMICS QUARRYBASICS 107 BOULEVARD 8x8 | (NOT USED) |
| VB-1 EQUIP PLATFORM | VINYL BASE | JOHNSONITE WALL BASE 80-FAWN | |
| EPB-1 BACK BAR | 6" EPOXY BASE | STONHARD STONCLAD UR/STONKOTE HT4 CHARCOAL | |
| EPB-2 B.O.H. | 6" EPOXY BASE | STONHARD STONCLAD UR/STONKOTE HT4 MUSHROOM | |

| MISC FINISHES | | |
|---|--|--|
| ITEM | DESCRIPTION | SPECIFICATION |
| SSC-1 MAIN BAR TOP & BAR ISLAND TOP | SOLID SURFACE COUNTER | AVONITE K3-8320 NEW CALDRON HIGH GLOSS POLISH |
| SSC-2, SILLS & CAPS | SOLID SURFACE COUNTER 1/2" THICKNESS | AVONITE- K3-8495 GOLDMINE HIGH GLOSS POLISH |
| SSC-3 SERVICE COUNTERS | SOLID SURFACE COUNTER | CORIAN CANYON |
| SSC-4 W ROOM COUNTER | SOLID SURFACE COUNTER | CORIAN VENARO WHITE W/ WHITE UNDER SINK BASINS, 3" BACKSPLASH |
| SSC-5 M ROOM COUNTER | SOLID SURFACE COUNTER | CORIAN SAGEBRUSH w/ WHITE UNDERM SINK BASINS, 3" BACKSPLASH |
| DL-1 WAINSCOT, BAR KNEE WALL | DECORATIVE LAMINATE | ADVANCED TECHNOLOGY MIRROFLEX STRUCTURES N562 ANTIQUE BRONZE |
| GT-1 EXPO COUNTER | GRANITE | FIRST CLASS MARBLE & GRANIT GRANITE, POLISHED BLACK GALAXY, 1 1/4" THICKNES EDGES |
| EP-2 DISH ROOM WALLS TO 48" AFF | EPOXY WALL SYSTEM (TO BE CONFIRMED) | STONHARD STONCLAD/STONKOTE MUSHROOM |
| PL-1 | PLASTIC LAMINATE | WILSONART |
| BACKBAR MILLWORK | | 4846-60 MORRO ZEPHYR |
| PL-2 SERVICE AREA MILLWORK | PLASTIC LAMINATE | WILSONART 4796-60 BURNISHED CHESTNUT |
| PL-3 W ROOM TOILET PARTITIONS | PLASTIC LAMINATE | WILSONART 4878-38 PEWTER MESH |
| PL-4 M ROOM TOILET PARTITIONS | PLASTIC LAMINATE | FORMICA P. LAM 6212-58 WHEAT STRAND |
| PL-5 SERVICE AREA SHELVES/BACKER BD | PLASTIC LAMINATE | WILSONART- 4861K-07 GOLD ALCHEMY STANDARDS & BRACKETS: TITANIUM or ALUMINUM |
| PL-6 OFFICE MILLWORK | PLASTIC LAMINATE | WILSONART- 4943-38 CLASSIC LINEN |
| | | STANDARDS & BRACKETS: WHITE |
| WS-1 | TYPICAL | MATCH SHERWIN WILLIAMS SW 3119 BURNISHED WALNUT |
| WOOD TRIM THROUGHOUT | WOOD STAIN | |

| ITEM | DESCRIPTION | SPECIFICATION | | | | |
|-----------------------|---|--|--|--|--|--|
| CP-1 VESTIBULE | WALK-OFF MAT | J+J / INVISION RUNWAY (7000) 1419/VIP PASS | | | | |
| CP-2 LOUNGE PDR | CARPET | J+J FLOORING GROUP SMOLDER (2483) COMBUST - 12"x48" ASHLAR ORIENTATION | | | | |
| FT-1 | PORCELAIN TILE | STONEPEAK-PLANE | | | | |
| | GROUT: 35 MOCHA | COPPER PLANE-HONED-30"x30" | | | | |
| FT-2 | PORCELAIN TILE | CROSSVILLE | | | | |
| FIELD M/W TOILET | GROUT: 35 MOCHA | NOTORIOUS NTR05 UNPOLISHED/UPS 12x12 | | | | |
| FT-3 ACCENT | PORCELAIN TILE | DALTILE VERANDA DECO D P513 3x3 CORNER | | | | |
| W TOILET | GROUT: 35 MOCHA | OR | | | | |
| | | DECO P512 3x3 CORNER | | | | |
| FT-4 | PORCELAIN TILE | DALTILE VERANDA | | | | |
| ACCENT M TOILET | GROUT: 35 MOCHA | DECO E P514 3x3 CORNER | | | | |
| QT-1 BACK BAR | QUARRY TILE | METROPOLITAN CERAMICS QUARRYBASICS 108 CHESTNUT BROWN 8x8 | | | | |
| DACK DAK | GROUT: 35 MOCHA | 100 CHESTNOT BROWN 0X0 | | | | |
| QT-2 KITCHEN, | QUARRY TILE | METROPOLITAN CERAMICS QUARRYBASICS 107 BOULEVARD 8x8 | | | | |
| WALKINS, STAFF | GROUT: 35 MOCHA | 101 BOOLEVIALD OXO | | | | |
| SF-1 OFFICE | SHEET FLOORING | ARMSTRONG CONNECTION CORLON 88712 LIMESTONE | | | | |
| | GROUT COLORS BASED ON LATICRETE OPTIONS | | | | | |
| EP-1 BACK BAR | EPOXY FLOORING | STONHARD STONCLAD UR/STONKOTE HT4 CHARCOAL | | | | |
| EP-2 B.O.H. | EPOXY FLOORING & WALL SYSTEM | STONHARD STONCLAD UR/STONKOTE HT4 MUSHROOM | | | | |

"SECOND COAT-WIPE ON STAIN, WOODSONG II, AMERICAN WALNUT, "SCRUB IN, THEN WIPE QUICKLY"
"TOP COATS-ML CAMPBELL CLEAR LACQUER, SATIN, APPLIED AS NECESSARY.

| | DOOR SCHEDULE | | | | | | | | | | | | |
|-----|---------------|----------------|------------|---------|-------------|------------|--------|---|------------|--|--|--|--|
| TAG | FROM | HARDWARE | FRAME TYPE | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 01 | EXTERIOR | VESTIBULE | 3' - 6" | 8' - 0" | | STOREFRONT | AL/GL | 8 | STOREFRONT | | | | |
| 02 | VESTIBULE | LOUNGE | 3' - 6" | 8' - 0" | 0' - 1 3/4" | Α | WD/GL | 1 | HM | | | | |
| 03 | MAIN DINING | EXTERIOR | 3' - 6" | 8' - 0" | | STOREFRONT | AL/GL | 7 | STOREFRONT | | | | |
| 04 | MAIN DINING | PRIVATE DINING | 17' - 9" | 8' - 0" | | В | WD/GL | | | | | | |
| 05 | SERVICE | OFFICE | 2' - 8" | 7' - 0" | 0' - 1 3/4" | F | HM | 2 | НМ | | | | |
| 06 | HALL | FAMILY TOILET | 3' - 0" | 7' - 0" | 0' - 1 3/4" | D | WD/GL | 3 | HM | | | | |
| 07 | HALL | WOMEN'S TOILET | 3' - 0" | 7' - 0" | 0' - 1 3/4" | D | WD/GL | 3 | НМ | | | | |
| 08 | HALL | MEN'S TOILET | 3' - 0" | 7' - 0" | 0' - 1 3/4" | D | WD/GL | 3 | НМ | | | | |
| 09 | LOUNGE | KITCHEN | 3' - 6" | 7' - 0" | 0' - 1" | С | MANUF. | | | | | | |



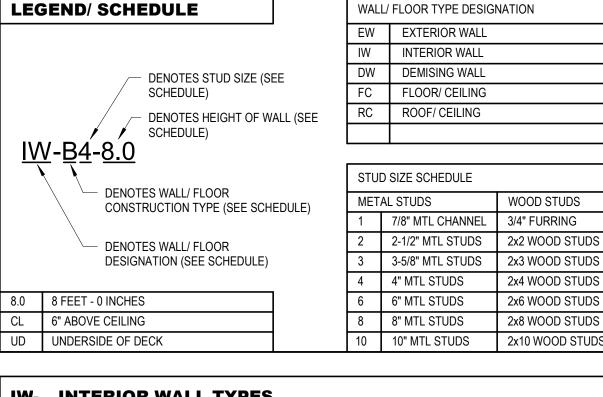
DOOR HARWARE

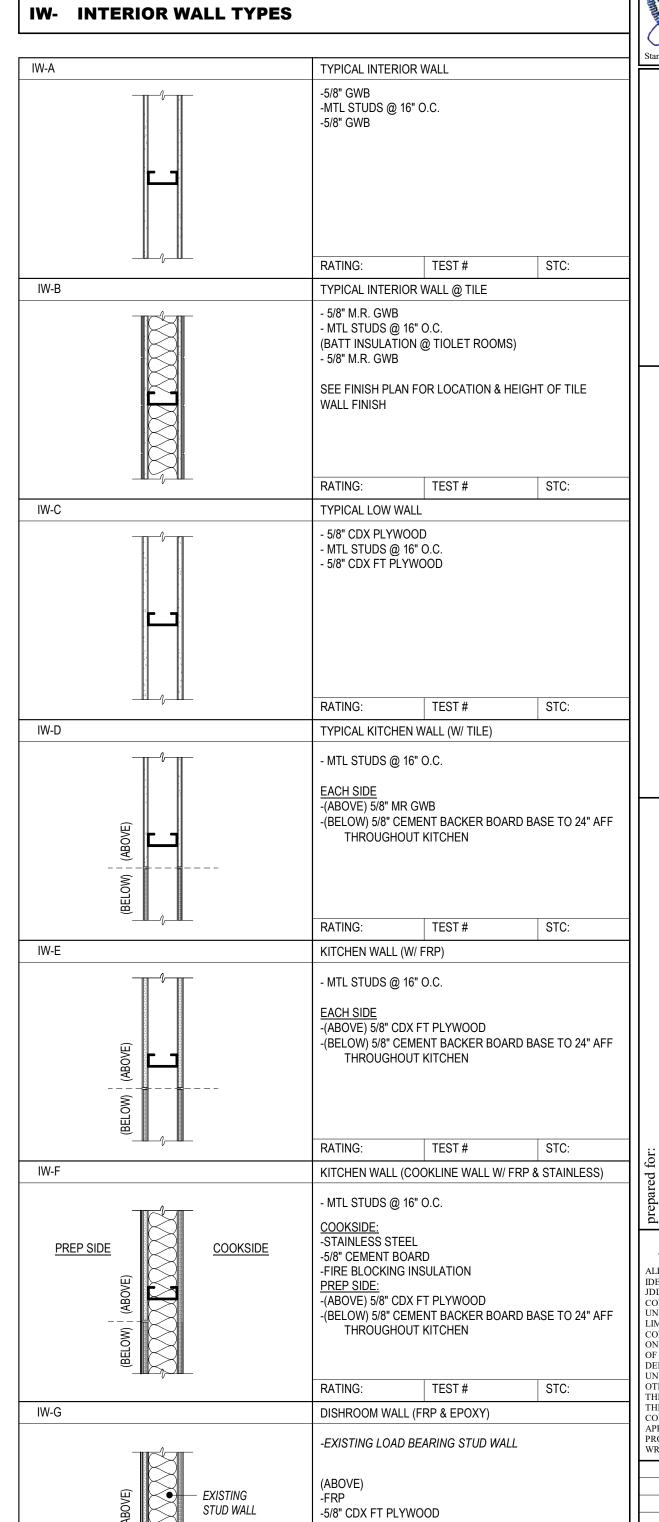
-ALL WOOD DOORS TO BE FLUSH, SOLID CORE, STAIN GRADE U.N.O. FINISH TO BE WS-1

EXISTING EXTERIOR STOREFRONT DOORS: EXTERIOR DOOR POST-STOP. INCLUSION TO BE DETERMINED ON A SITE-SPECIFIC BASES

- -ALL DOOR HARDWARE SHALL BE OF ACCESSIBLE TYPE. PASSAGE: PULL HANDLE - ROCKWOOD OVALTEK RM240 16", PUSH PLATE - RM1020, 1 1/2 PAIR HINGES, CLOSER, SILENCER. FINISH OF US32D- SATIN CHROMIUM PLATED. OFFICE: (ALWAYS LOCKED FROM OUTSIDE) 1 1/2 PAIR HINGES, CYLINDER LOCK & LEVER HAND SET, WALLSTOP, FINISH OF US32D- SATIN CHROMIUM PLATED. CLOSER.
- RESTROOMS: PULL HANDLE ROCKWOOD OVALTEK RM2410 16", PUSH PLATE- RM1020, 1 1/2 PAIR HINGES, CLOSER, SILENCER. FINISH OF US32D- SATIN CHROMIUM PLATED.

 STORAGE: (ALWAYS LOCKED FROM OUTSIDE) 1 1/2 PAIR HINGES, CYLINDER LOCK & LEVER HAND SET, WALL STOP, FINISH OF US32D- SATIN CHROMIUM PLATED.
- 5. TOILET: (PRIVACY FUNCTION) 1 1/2 PAIR HINGES, CLOSER, CYLINDER LOCK & LEVER HAND SET, DOOR SILENCERS, WALL STOP, COAT HOOK FINISH OF US32D- SATIN CHROMIUM PLATED. **EXISTING EXTERIOR DOORS**:
- 6. EXTERIOR SERVICE DOOR: (ALWAYS LOCKED FROM EXT) DOOR BELL, PEEP HOLE, 1.5 PAIR BALL BEARING HINGES (STAINLESS STEEL), PANIC EGRESS HARDWARE, HEAVY-DUTY CLOSER (TOP JAMB
- MOUNTED) w/ HOLD-OPEN OPTION, WEATHER STRIPPING (NEOPRENE BULB TYPE JAMB AND HEAD, NYLON BRUSH TYPE AT SILL), ALUMINUM THRESHOLD. RESTAURANT PATIO DOOR: POWER OPENER, KAWNEER 12" 'ARCHITECTS CLASSIC' PULL HANDLE, INTERIOR HORIZONTAL MID-HEIGHT PUSH BAR, ADAMS RITE DEAD LATCH (W/ 'DOGGING' ACTION)
- AND LATCH PADDLE DEVICE, HEAVY-DUTY CLOSER (TOP JAMB MOUNTED) w/ HOLD-OPEN OPTION. EXTERIOR RESTAURANT DOORS: KAWNEER 12" 'ARCHITECTS CLASSIC' PULL HANDLE, INTERIOR HORIZONTAL MID-HEIGHT PUSH BAR, ADAMS RITE DEAD LATCH (W/ 'DOGGING' ACTION) AND LATCH
- PADDLE DEVICE, HEAVY-DUTY CLOSER (TOP JAMB MOUNTED) w/ HOLD-OPEN OPTION.





(BELOW) -EPOXY

RATING:

MEP/SP CONTRACTORS ARE REQUIRED, IN COMPLIANCE W/ ALL APPLICABLE CODES, TO RESTORE THE FIRE RESISTENCE RATINGS OF FLOORS, WALLS, FLOOR/CEILING, ROOF/CEILING ASSEMBLIES OR FIRE-RESISTANCE-RATED DUCT ENCLOSURES WHEN AN OPENING IS MADE TO ACCOMODATE PENETRATIONS FOR MECHANICAL,

* ALL WOOD BLOCKING & MILLWORK STUDS / STRUCTURAL RIBS TO BE FIRE-TREATED WOOD.

ELECTRICAL, PLUMBING, COMMUNICATION SYSTEMS AND VENTILATION DUCTS.

-5/8" CEMENT BOARD

TEST#

STC:



Architects | Engineers | Land Planning One Elm Square Andover, MA 01810

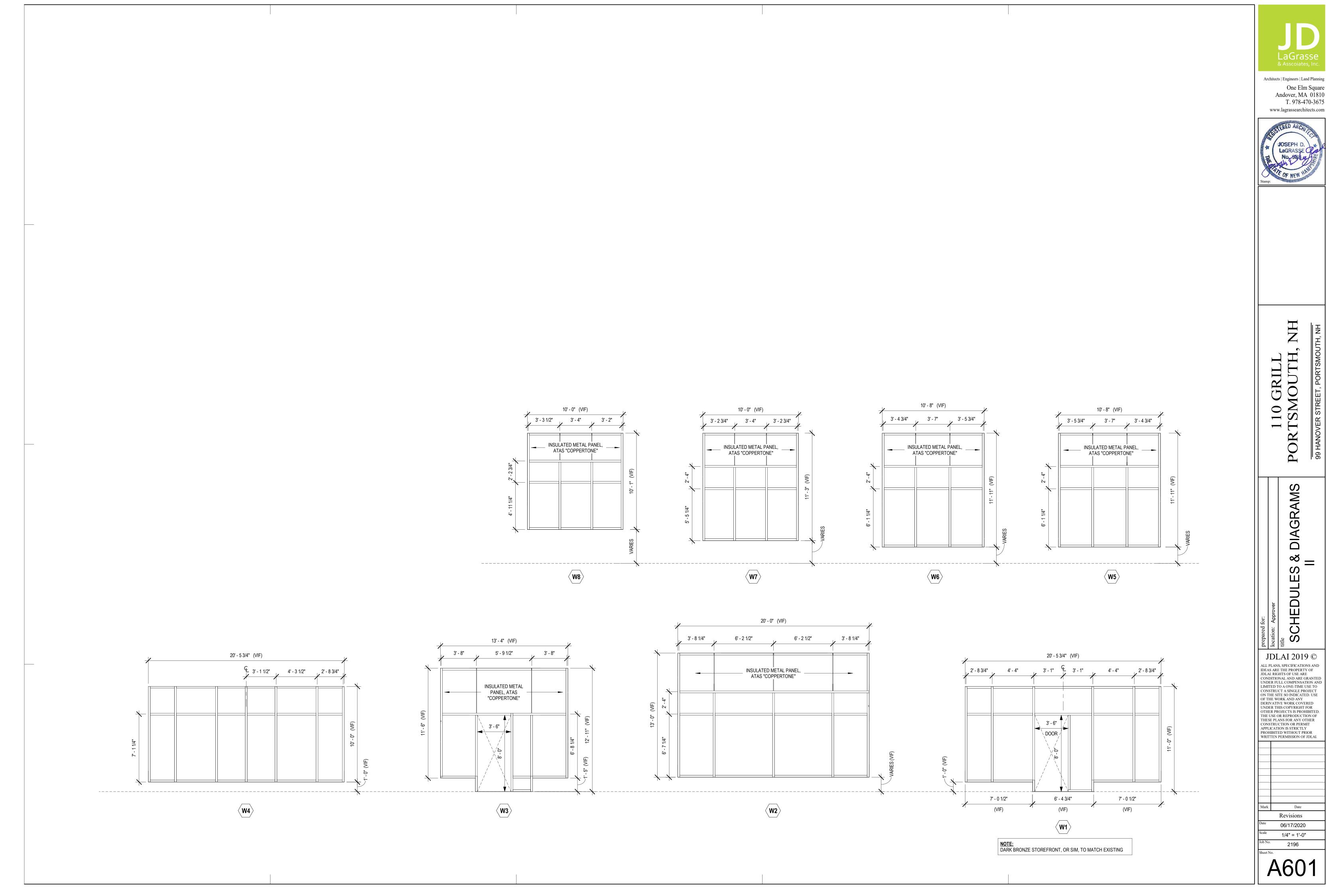


DIAGRAM ∞ __ CHEDULE

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S & DIAGRAMS

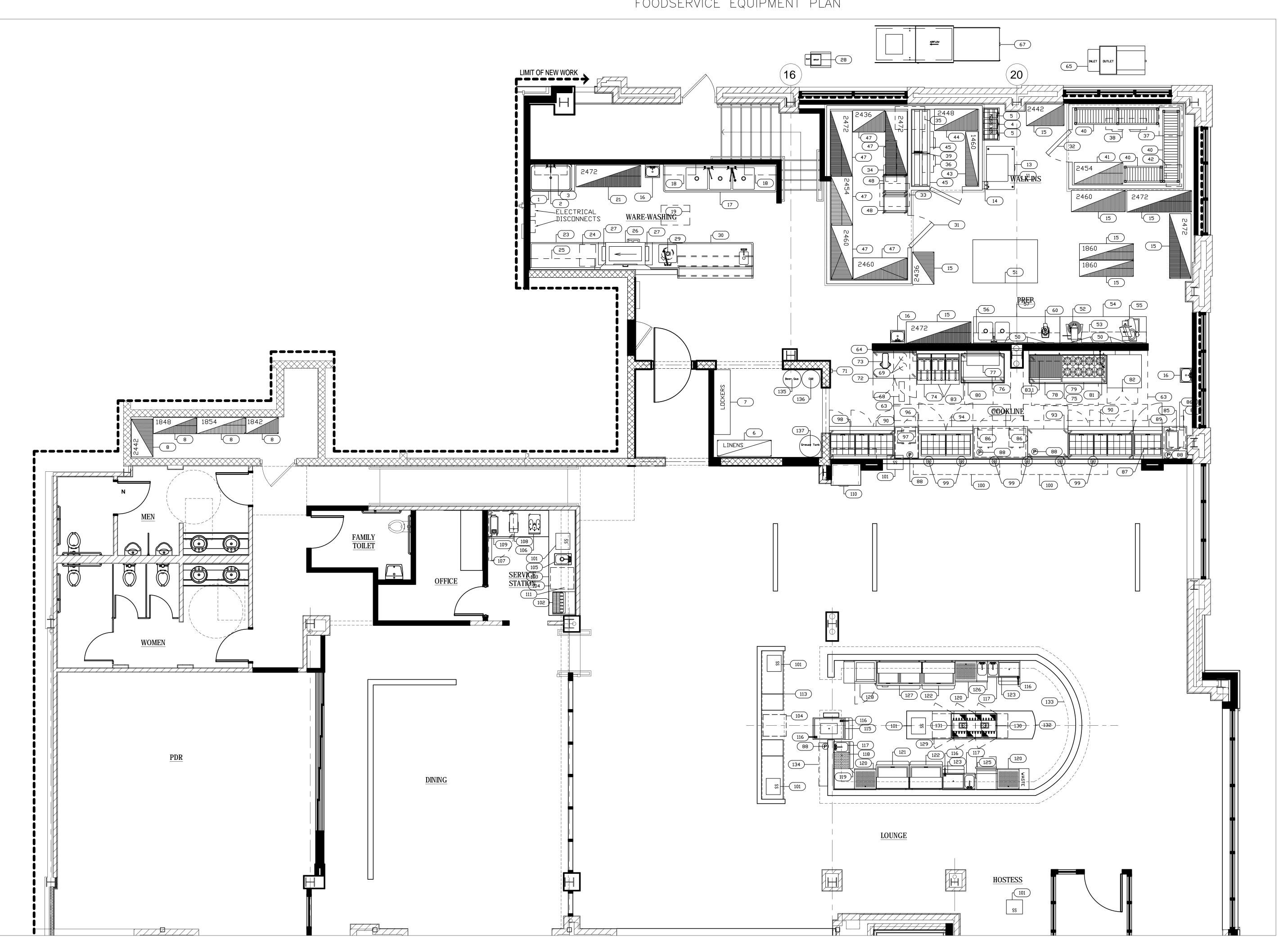
SCHEDULES JDLAI 2019 ©

Date

Revisions 06/17/2020 1/4" = 1'-0"

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General Notes

1. These plans are provided for the purpose of indicating foodservice equipment locations and requirements only and are not to be construed by the general contractor or subcontractor as to relieve them from their responsibility of complying with all applicable local mechanical codes. Refer to architectural drawings, mechanical, and electrical drawings for the balance of work not in kitchen equipment contract.

2. It shall be the responsibility of the owner and/or his assigned coordinator to insure that the food service equipment contractor receives copies of all addendum and changes to architectural documents which are made prior to and during construction. 3. General Contractor shall provide

the necessary wall backing for all wall mounted equipment (shelving, pot racks, ETC.), as indicated on foodservice equipment drawing. 4. 6" deep floor depression for walk—ins to be provided by the general contractor. Bottom of floor depression must be smooth and

level (not rough). 5. Penetrations through ceilings, walls, and roof shall be made and sealed by general contractor.

6. Electrical contractor will do all rough ins + final connections. Furnish all trim, accessories, disconnects, switches, relays, etc. as required.

7. Plumbing contractor will do all rough ins + final connections. Furnish all trim, accessories, valves, pressure regulators, p—traps, grease traps, backflow devices, etc.

8. Kitchen Equipment Contractor will furnish + install the dishwasher fan + roof curb, main cooking hood, stainless steel wall panels, exhaust fan + roof curb, supply fan/heater + roof curb and electrical control panel for fans. 9. Kitchen Equipment Contractor will furnish + install kitchen exhaust grease duct, associated make up air duct, and dishwasher

exhaust duct.

5/28 Layout Changes

Date

United Restaurant Equipment Co., Inc. 1 Executive Park Drive North Billerica, MA 01862 Tel: 978-439-5500 Fax: 978-262-9999

Revision/Issue

Project:

110 Grill Portsmouth 103 Hanover St, Portsmouth, NH 03801

110 Portsmouth 05/06/2020

1/4" = 1'-0"

FOODSERVICE EQUIPMENT PLAN

| | EQUIPMENT | | | PLUMBING ELECTRICAL | | | | | | | | | | |
|----------|-----------|---|-----------------|---------------------|---------------------|-------------------|--------------|----------|-------------|-------|------|---------------|---------------------|---|
| ItemNo | Quantity | Category | Cold Water (in) | Hot Water (in) | Indirect Waste Size | Direct Waste Size | Gas Size(in) | Gas MBTU | Voltage | Phase | Amps | EC HEIGHT AFF | ConnectionType | Equipment Remarks |
| 2 | | MOP SINK MOP SINK FAUCET | 1/2" | 1/2" | | VERIFY | | | | | | | | BY OTHERS |
| 3 | 1 | CHEM SHELF | | | | | | | | | | | | G.C TO PROVIDE WALL BLOCKING + HANG |
| 5 | | SODA BAG 'N BOX RACK SODA CARBONATOR | 1/2" | | | | | | 115 | 1 | 4 | 72" | CORD & PLUG 5-15P | BY OTHERS |
| 6 | | LINEN STORAGE | 1/2 | | | | | | 113 | | 4 | 12 | COND & FLOG 3-13F | BY OTHERS |
| 7 | | LOCKERS | | | | | | | | | | | | BY OTHERS |
| 8 | | SHELVING /LIQUOR STORAGE SPARE NUMBER | | | | | | | | | | | | |
| 11 | | ICE MAKER | 3/8" | | 1/2" | | | | 208 | 1 | 14 | 76" | DIRECT | PLUMB THROUGH #14 FILTER |
| 13 | | ICE BIN FOR ICE MACHINES | | | 3/4" | | | | | | | - | | |
| 14 | | WATER FILTER FOR ICE MAKER | 3/8" | | | | | | | | | | | BY OTHERS |
| 15 16 | | DRY STORAGE HAND SINK W/ SPLASH GUARDS | 1/2" | 1/2" | | 1-1/2" | | | | | | | | |
| | | | (2) | (2) | | (3) | | | | | | | | |
| 17 | | 3 COMPARTMENT SINK | 1/2" | 1 | | 1-1/2" | | | | | | | | |
| 18 | | WALL SHELF | | | | * | | | | | | | | G.C TO PROVIDE WALL BLOCKING + HANG |
| 19 20 | | GREASE TRAP SPARE NUMBER | | | | T T | | | | | | | | P.E. TO SIZE AND LOCATE. PROVIDED BY P.C. |
| 21 | LOT | DISHROOM SHELVING | | | | | | | | | | | | |
| | | CLEAN DISHTABLE | | | | | | | | | | | | |
| 24 2S | | BOOSTER HEATER WALL SHELF | | 3/4" | | | | | 208 | 3 | 125 | 12" | DIRECT | BY OTHERS. G.C TO PROVIDE WALL BLOCKING + HANG |
| 26 | | DISHWASHER | | 3/4" | 1-1/2" | | | | 208 | 3 | 49 | 60" | DIRECT | BY OTHERS - VERIFY SPECS. PLUMB THROUGH BOOSTER |
| 27 | 2 | VENT RISERS FOR DISHWASHER | | | | | | | | | | | | E-C TO PROVIDE AND INSTALL RELAY |
| 28 | | EXHAUST FAN FOR DISHWASHER (ROOF) | | | | | | | 11 S | 1 | 7 | VIF | DIRECT | |
| 29 | 1 | DISPOSER | 1/2" | | | 2" | | | 208 | 3 | 7 | 24" | DIRECT | E.C. TO WIRE DISPOSER + CONTROLS |
| 30 | 1 | SOILED DISHTABLE | (2) 1/2" | (2) 1/2" | * | 1-1/2" | | | | | | | | WASTE PRE-RINSE SINK THROUGH DISPOSER WASTE DUMP SINK THROUGH GREASE TRAP G.C. TO PROVIDE WALL BLOCKING |
| 31 | 1 | KEG COOLER | | | | | | | 115 | 1 | 4 | 84" | DIRECT | |
| 32 | | WALK-IN COOLER / FREEZER COMBO KEG REFRIGERATOR CONDENSER (VIF) | | | | | | | 115 208 | 3 | 8 | 84" VIF | DIRECT DIRECT | |
| 34 | | KEG REFRIGERATOR BLOWER COIL | | | 3/4" | | | | 115 | 1 | 2 | 84" | DIRECT | P.C. TO PLUMB BLOWER DRAIN TO FLOOR DRAIN |
| 3S | 1 | FREEZER CONDENSER (VIF) | | | | | | | 208 | 3 | 10 | VIF" | DIRECT | |
| 36 | 1 | FREEZER BLOWER COIL | | | 3/4" | | | | 208 | 1 | 10 | 84" | DIRECT | E.C. WIRE THROUGH DEFROST TIMER. P.C. TO PLUMB BLOWER DRAIN TO FLOOR DRAIN VERIFY FINAL LOCATION |
| 37 | 1 | REFRIGERATOR CONDENSER (VIF) | | | | | | | 208 | 3 | 8 | VIF" | DIRECT | |
| 38 | | REFRIGERATOR BLOWER COIL | | | 3/4" | | | | 115 | 1 | 2 | 84" | DIRECT 5 45B | P.C. TO PLUMB BLOWER DRAIN TO FLOOR DRAIN |
| 39 40 | | HEAT TAPE KEG RACKS | | | | | | | 115 | | 4 | 72" | CORD & PLUG 5-15P | |
| 41 | | WIRE SHELVING | | | | | | | | | | | | |
| 42 43 | 1 | DRAUGHT BEER SYSTEM WIRE SHELVING | | | | | | | 208 | 1 | 15 | 100" | DIRECT | |
| 44 | | WIRE SHELVING | | | | | | | | | | **** | | |
| 4S 46 | | DUNNAGE RACK SPARE NUMBER | | | | | | | | | | | | |
| | LOT | COOLER SHELVING | | | | | | | | | | | | |
| 48 | | PAN RACK | | | | | | | | | | | | C C TO BROWNE WAY STOCKING - 11775 |
| 50 51 | | UTENSIL RACKS WORK TABLE | | <u> </u> | | | | | | | | | | G.C TO PROVIDE WALL BLOCKING + HANG |
| 52 | | MIXER | | | | | | | 115 | 1 | 6 | 48" | CORD & PLUG 5-15P | |
| S3 | | WALL SHELF | | | | | | | | | | | | G.C TO PROVIDE WALL BLOCKING + HANG |
| 54 | | WORK TABLE FOOD SLICER | | | | | | | 115 | 1 | 2 | 48" | CORD & PLUG 5-15P | |
| 55 56 | | WALL SHELF | | | | | | | 115 | 1 | 2 | 40 | COND & PLUG 5-15P | G.C TO PROVIDE WALL BLOCKING + HANG |
| 57 | | WORK TABLE W/ PREP SINKS | 1/2" | 1/2" | (2) 1-1/2" | | | | | | | | | |
| 60 | | FOOD PROCESSOR | | | | | | | 115 | 1 | 7 | 48" | CORD & PLUG S-15P | |
| 63 | | EXHAUST HOOD STAINLESS STEEL WALL PANELS | | | | | | | 115 | 1 | 5 | 100" | DIRECT | WIRE THROUGH #68 CONTROL PANEL. |
| 64 6S | | EXHAUST FAN (ROOF) | | | | | | | 208 | 3 | 16 | VIF | DIRECT | WIRE THROUGH #68 CONTROL PANEL. |
| | | SUPPLY FAN/HEATER (ROOF) | | | | | 1" | 325 | 208 | | 10 | VIF | DIRECT | WIRE THROUGH #68 CONTROL PANEL. VERIFY LOCATION |
| | 1 | CONTROL PANEL | | | | | | | * | | | 100" | | SEE WIRING DIAGRAM. PROVIDE INTERNET CONNECTION. |
| 68 | | FIRE SUPPRESSION SYSTEM | | | | | * | | | | | | | P.C. TO INSTALL GAS VALVE PROVIDED BY UNITED. |
| 68 | | FIRE SUPPRESSION SYSTEM CARBON MONOXIDE DETECTION SYSTEM | | | | | * | | | * | | | | E.C. TIE IN TO FIRE ALARM SUPPLIED BY P.C. PER CODE. |

| | EQUIPMENT PLUMBING ELECTRICAL | | | | | | | | | | | | | | |
|------------|-------------------------------|--|-----------------|----------------|---------------------|-------------------|--------------|----------|-------------|---|---------|---------------|----------------|--|---|
| ItemNo | Quantity | Category | Cold Water (in) | Hot Water (in) | Indirect Waste Size | Direct Waste Size | Gas Size(in) | Gas KBTU | Voltage | Phase | | EC HEIGHT AFF | ConnectionType | NEMA | Equipment Remarks |
| 71 | 1 | ROOM TEMPERATURE SENSOR | | | | | | | * | | | 60" | DIRECT | | WIRE THROUGH #68 CONTROL PANEL |
| 72 | 1 | WORKTOP FREEZER | | | | | | | 115 | 1 | 7 | + | CORD & PLUG | + | DV OTHERS |
| 73 | 1 | MIXER KITCHEN AID | | | | | | | 115 | 1 | 4 | 48" | CORD & PLUG | 5-15P | BY OTHERS UNITED TO SUPPLY GAS HOSE KIT. 2 115V CONNECTION. |
| 74 | 1 | FRYER BATTERY, GAS | | | | | 1" | 240 | 115 | 1 | 7+6 | 24" | CORD & PLUG | 5-15P | 7A FILTER + 6A CONTROLS. SHUNT AS REQUIRED |
| 75 | 1 | EQUIPMENT STAND, REFRIGERATED | | | | | | | 115 | 1 | 11 | 24" | CORD & PLUG | 5-15P | SHUNT AS REQUIRED |
| 76 | 1 | GRIDDLE | | | | | 3/4" | 120 | 200 | | 47 | 6211 | DIDECT | | UNITED TO SUPPLY GAS HOSE KIT |
| 77 78 | 1 | CHEESEMELTER, ELECTRIC CHARBROILER | | 1 | | | 3/4" | 120 | 208 | 1 | 17 | 63" | DIRECT | | SHUNT AS REQUIRED. UNITED TO SUPPLY GAS HOSE KIT |
| 79 | 1 | HOTPLATE | | | | | 3/4" | | | | | | | | UNITED TO SUPPLY GAS HOSE KIT |
| 80 | 1 | EQUIPMENT STAND, REFRIGERATED | | | | | | | 115 | 1 | 6 | 24" | CORD & PLUG | 5-15P | SHUNT AS REQUIRED |
| 81 | 1 | POT / KETTLE FILLER FAUCET | 1/2" | | | | 2/4 | 45 | 445 | 4 | | 2011 | 0000 0 01110 | F 455 | SUMMER AS DESCRIPTION OF THE SUMMER AS LIGHT |
| 82 83 | 1 | CONVECTION OVEN WALL SHELF | | | | | 3/4 | 45 | 115 | 1 | 8 | 38 | CORD & PLUG | 5-15P | SHUNT AS REQUIRED. UNITED TO SUPPLY GAS HOSE KIT G.C TO PROVIDE WALL BLOCKING + HANG |
| 83.1 | 1 | WALL SHELF | | | | | | | | | | | | | G.C TO PROVIDE WALL BLOCKING + HANG |
| 84 | 1 | WORK TABLE | | | | | | | | | | | | | |
| 85 | 1 | COUNTERTOP WARMER | | - | | | | | 115 | 1 | 10 | - | CORD & PLUG | | |
| 86 87 | ئ 1 | MICROWAVE OVEN WALL SHELF | | | | | | | 208 | _1_ | 17 | 24" | CORD & PLUG | 6-20P | G.C TO PROVIDE WALL BLOCKING + HANG |
| | 5 | TICKET PRINTER | | | | | | | 115 | 1 | 2 | 24" | CORD & PLUG | 5-15P | d.e to Frovide Wall blocking + Hand |
| 89 | 1 | MEGA TOP SANDWICH / SALAD PREP REF | | | | | | | 115 | 1 | 4 | | CORD & PLUG | | |
| 90 | 2 | MEGA TOP SANDWICH / SALAD PREP REF | | | | | | | 115 | _1 | 6 | 24" | CORD & PLUG | 5-15P | |
| 91 | 1 | SPARE NUMBER | | | | | | | | | | | | | |
| 92 93 | 1 | WORK TABLE REFRIGERATED WORK TOP | | - | | | | | 115 | 1 | 3 | 24" | CORD & PLUG | 5-15P | |
| 94 | 1 | MEGA TOP SANDWICH PREPREF | | | | | | | 115 | 1 | 6 | + | CORD & PLUG | 1 | |
| 95 | 1 | SPARE NUMBER | | | | | | | | | | | | | |
| 96 | 1 | WORK TABLE | | | | | | | 445 | 1 | 40 | 2.41 | 6600 6 01116 | 5 205 | |
| 97 98 | 1 | MICROWAVE OVEN WALL SHELF | | | | | | | 115 | 1 | 18 | 24" | CORD & PLUG | 5-20P | G.C TO PROVIDE WALL BLOCKING + HANG |
| | 6 | HEAT LAMPS | | | | | | | 115 | 1 | 3 | 96" | DIRECT | | UNITED TO SUPPLY LAMPS + 2 EA. 8' TRACKS /W CONNECTOR 1 LIVE END |
| 100 | 2 | DISPLAY SHELF | | | | | | | | | | | | | G.C TO PROVIDE WALL BLOCKING + HANG |
| | 6 | POINT OF SALE SYSTEM | | | | | | | 115 | _1_ | 4 | | CORD & PLUG | | DATA+POWER |
| 102 103 | 2 | SODA DISPENSER MILLWORK COUNTER | | 1 | 3/4" | | | | 115 | 1 | 3 | VIF | CORD & PLUG | 5-15P | BY OTHERS |
| 103 | 3 | GLASS DOLLY | | | | | | | | | | | | | BY OTHERS |
| 105 | 2 | DROP-IN SINK | | 1/2" | 4 | 1-1/2" | | | | | | | | | |
| 106 | 1 | ESPRESSO MACHINE | 1/4" | | 1/2" | | | | 115 | 1 | 15 | 48" | CORD & PLUG | 5-15P | BY OTHERS. FILTERED WATER. VERIFY REQUIREMENTS. |
| 107 | 1 | COFFEE BREWER | 1/4" | | | | | | 120/ 220 | 1 | 15 | 48" | CORD & PLUG | 5-15P | BY OTHERS. FILTERED WATER. VERIFY REQUIREMENTS. |
| 108 | 1 | ICED TEA BREWER | 1/4" | | | | | | 115 | 1 | 14 | 48" | CORD & PLUG | 5-15P | BY OTHERS. FILTERED WATER. VERIFY REQUIREMENTS. |
| 109 | 1 | UNDERCOUNTER REFRIGERATOR | | | | - | | | 115 | 1 | 2 | - | CORD & PLUG | ļ | |
| 110 | 1 | BUILT-IN WARMING DRAWER | | | | | | | 115 | 1 | 8 | 24" | CORD & PLUG | 5-15P | DV OTUEDS |
| 111 112 | 1 | MILLWORK WALL SHELVES SPARE NUMBER | | | | | | | | | | | | | BY OTHERS |
| 113 | 1 | MILLWORK COUNTER | | | | | | | | | | | | | BY OTHERS |
| 115 | 1 | PASS-THRU ICE BIN | | | 1/2" | | | | | | | | | | |
| 116 | 4 | SODA GUN | | a 1= ·· | | | | | | , | | | | | BY OTHERS |
| 117 118 | 3 1 | DUMP SINK W/ SPLASH GUARDS DRAINBOARD | 1/2" | 1/2" | 1-1/2" 1" | | | | | | | | | | |
| 119 | 1 | CORNER ANGLE FILLER | | | | | | | | | | | | | |
| | 3 | GLASS RACK | | | 1" | | | | | | | | | | |
| 121 | 1 | RED WINE COOLER | | | | | | | 115 | 1 | 5 | | CORD & PLUG | | |
| 122 123 | 2 | GLASS CHILLER ICE BIN | | | 1/2" | | | | 115 | 1 | 4 | 24" | CORD & PLUG | 5-15P | |
| 124 | 1 | SPARE NUMBER | | | +/- | | | | | | - | | | | |
| 125 | 1 | GLASSWASHER | | 1/2" | 2" | | | | 115 | 1 | 16 | 24" | CORD & PLUG | 5-20P | BY OTHERS |
| 126 | 1 | HAND SINK | 1/2" | 1/2" | | 1-1/2" | | | 445 | - | | 2411 | 6000 6 01116 | F 45D | |
| 127 128 | 1 | BOTTLE COOLER BACK BAR COOLER | | | | | | | 115 115 | 1 | 9 | - | CORD & PLUG | | |
| 129 | 1 | ISLAND COOLER | | <u> </u> | | | | | 115 | 1 | 7 | | CORD & PLUG | | |
| 130 | 1 | BEER TOWER HEAD | | | | | | | | | | | | | |
| 131 | | DRAIN TROUGH FOR DRAUGHT BEER | | | (2) 3/4" | | | | | | | | | | P.C TO INSTALL DRAIN |
| 132 133 | | MILLWORK BAR ISLAND MILLWORK BAR | | | | | | | | | | | | 1 | BY OTHERS BY OTHERS |
| | 2 | WALL SHELF | | | | | | | | | | | | | G.C TO PROVIDE WALL BLOCKING + HANG |
| 134 | | 1 | | - | | | † | | | /ERIF | <u></u> | | | | |
| 134 135 | 1 | BEER GAS | | | | | | | v | LNIF | | | | ļi | BY OTHERS VERIFY |

General Notes

- 1. These plans are provided for the purpose of indicating foodservice equipment locations and requirements only and are not to be construed by the general contractor or subcontractor as to relieve them from their responsibility of complying with all applicable local mechanical codes. Refer to architectural drawings, mechanical, and electrical drawings for the balance of work not in kitchen equipment contract. 2. It shall be the responsibility of the owner and/or his assigned coordinator to insure that the food service equipment contractor receives copies of all addendum and changes to architectural documents which are made prior to and during construction. 3. General Contractor shall provide
- the necessary wall backing for all wall mounted equipment (shelving, pot racks, ETC.), as indicated on foodservice equipment drawing.
- 4. 6" deep floor depression for walk—ins to be provided by the general contractor. Bottom of floor depression must be smooth and level (not rough).
- 5. Penetrations through ceilings, walls, and roof shall be made and sealed by general contractor.
- 6. Electrical contractor will do all rough ins + final connections. Furnish all trim, accessories, disconnects, switches, relays, etc. as required.
- 7. Plumbing contractor will do all rough ins + final connections.
 Furnish all trim, accessories, valves, pressure regulators, p—traps, grease traps, backflow devices, etc.
- 8. Kitchen Equipment Contractor will furnish + install the dishwasher fan + roof curb, main cooking hood, stainless steel wall panels, exhaust fan + roof curb, supply fan/heater + roof curb and electrical control panel for fans. 9. Kitchen Equipment Contractor will furnish + install kitchen exhaust grease duct, associated make up air duct, and dishwasher exhaust duct.

| 1. | Layout Changes | 5/28 |
|-----|----------------|------|
| No. | Revision/Issue | Date |

United Restaurant Equipment Co., Inc. 1 Executive Park Drive North Billerica, MA 01862 Tel: 978-439-5500 Fax: 978-262-9999

Project:

110 Grill Portsmouth 103 Hanover St, Portsmouth, NH 03801

110 Portsmouth

1/4" = 1'-0"

TRIFAB® VG (VERSAGLAZE®)

TRIFAB® VG 450, 451 & 451T (THERMAL) FRAMING SYSTEMS & TRIFAB® 451UT (ULTRA THERMAL) FRAMING SYSTEM



Design + Performance Versatility with Unmatched Fabrication Flexibility



Trifab® VersaGlaze® is built on the proven and successful Trifab® platform – with all the versatility its name implies. There are enough framing system choices, fabrication methods, design options and performance levels to please the most discerning building owner, architect and installer. The 4.5" depth Trifab® VersaGlaze® Framing System family is available with non-thermal, thermal and ultra-thermal performance levels. The ultra-thermal Trifab® 451UT Framing System, is designed for the most demanding thermal performance and employs a dual Isolock® thermal break.

AESTHETICS

Trifab® VersaGlaze® Framing Systems offer designers a choice of front-, center-, back- or multi-plane glass applications. Structural silicone

glazing (SSG) and weatherseal glazing options further expand designers' choices, allowing for a greater range of possibilities for specific project requirements and architectural styles. All systems have a 4-1/2" frame depth; Trifab® VersaGlaze® 450 has 1-3/4" sightlines, while Trifab® VersaGlaze® 451/451T and Trifab® 451UT have 2" sightlines.

With seamless incorporation of Kawneer entrances or windows, including GLASSvent® visually frameless ventilators, Trifab® framing can be used on almost any project. These framing systems can also be packaged with Kawneer curtain walls and overhead glazing, thereby providing a full range of proven, and tested, quality products for the owner, architect and installer from a single-source supplier.

ECONOMY

Trifab® VersaGlaze® 450/451/451T/451UT Framing Systems offer a variety of fabrication choices to suit your project:

- Screw Spline for economical continuous runs utilizing two-piece vertical members that provide the option to pre-assemble units with controlled shop labor costs and smaller field crews for handling and installation. (available for all systems)
- Shear Block for punched openings or continuous runs using tubular moldings with shear block clips that provide tight joints for transporting large pre-assembled multi-lite units. (available for 450/451/451T systems)
- Stick for fast, easy field fabrication. Field measurements and material cuts can be done when metal is on the jobsite. (available for 450/451/451T systems)
- Pre-glazed The combination of screw spline construction with pre-glazing in the shop accelerates installation and reduces field labor time while minimizing disruption to the surrounding area or existing tenants. Making it an exceptional choice for new or retrofit applications, particularly in urban areas or where space is limited. (available for 451/451T/451UT framing)



Brighton Landing
Cambridge, Massachusetts
ARCHITECT
ADD Inc., Cambridge, Massachusetts
GLAZING CONTRACTOR
Ipswich Bay Glass Company,Inc., Rowley, Massachusetts
PHOTOGRAPHER
© Gordon Schenck, Jr.

All systems can be flush glazed from either the inside or outside. The weatherseal option provides an alternative to SSG vertical mullions for Trifab® VersaGlaze® 450/451/451T. This ABS/ASA rigid polymer extrusion allows complete inside glazing and creates a flush glass appearance on the building exterior without the added labor of scaffolding or swing stages. Additionally, high-performance flashing options are engineered to eliminate perimeter sill fasteners and associated blind seals.

FOR THE FINISHING TOUCH

Architectural Class I anodized aluminum and painted finishes in fluoropolymer (AAMA 2605) and solvent-free powder coatings (AAMA 2604) offer a variety of color choices.

PERFORMANCE

Kawneer's Isolock® thermal break technology creates a composite section, prevents dry shrinkage and is available on Trifab® VersaGlaze® 451T. For even greater thermal performance, a dual Isolock® thermal break is used on Trifab® 451UT.

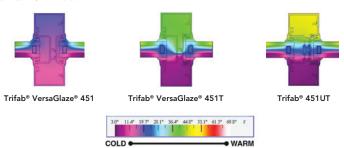




Trifab® 451UT uses a dual Isolock® thermal break (right) and features a new highperformance sill design, which incorporates a screw-applied end dam (left), ensuring positive engagement and tight joints between the sill flashing and end dam.

U-factor, CRF values and STC ratings for Trifab® framing systems vary depending upon the glass plane application. Project-specific U-factors can be determined for each individual project. (See the Kawneer Architectural Manual or Kawneer.com for additional information.)

Thermal simulations showing temperature variations from exterior/cold side to interior/warm side.



PERFORMANCE TEST STANDARDS

| Air Infiltration | ASTM E283 |
|------------------|-----------------------|
| Water | AAMA 501, ASTM E331 |
| Structural | ASTM E330 |
| Thermal | AAMA 1503 |
| Thermal Break | AAMA 505, AAMA TIR-A8 |
| Acoustical | AAMA 1801, ASTM E1425 |









SSG





ront

Center

ack

Weatherseal

Multi-Plane



EC 97911-231 FEATURES

Features

- Trifab® VG 451/451T is 4-1/2" (114.3) deep with a 2" (50.8) sightline
- Front Center, Back or Multi-Plane glass applications
- Flush glazed from either the inside or outside
- · Screw Spline, Shear Block, Stick or Continuous Head and Sill fabrication
- · Screw Spline Pre-Glazed option
- · SSG / Weatherseal option
- IsoLock® lanced and debridged thermal break option with Trifab® VG 451T
- Infill options up to 1-1/8" (28.6) thickness
- Permanodic[®] anodized finishes in seven choices
- Painted finishes in standard and custom choices

Optional Features

- Acoustical rating per AAMA 1801 and ASTM E 1425
- Project specific U-factors (See Thermal Charts)
- Integrates with Versoleil® SunShade Outrigger System and Horizontal Single Blade System
- Profit\$Maker® Plus die sets available

Product Applications

- Storefront, Ribbon Window, Punched Openings or Pre-Glazed
- Single-span
- Integrated entrance framing allowing Kawneer standard entrances or other specialty entrances to be incorporated
- Kawneer windows or GLASSvent® Windows for Storefront Framing are easily incorporated

For specific product applications, consult your Kawneer representative.



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Laws and building and safety codes governing the design and use of Kawneer products, such as glazed entrance, window, and curtain wall products, vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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INDEX

3

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| PICTORIAL VIEWS | 5-10 |
|---|--------------|
| CENTER | 11-25 |
| CENTER (LARGE MISSLE IMPACT) | 26-28 |
| FRONT | 29-44 |
| BACK | 45-52 |
| MULTI-PLANE | 53-59 |
| AIR/VAPOR BARRIER TIE-IN OPTION | 60 |
| CHARTS (WIND LOAD, DEADLOAD, END REACTION & THE | RMAL) 61-109 |

Metric (SI) conversion figures are included throughout these details for reference. Numbers in parentheses () are millimeters unless otherwise noted.

The following metric (SI) units are found in these details:

m - meter

cm - centimeter

mm - millimeter

s - second

Pa – pascal

MPa - megapascal



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Laws and building and safety codes governing the design and use of Kawneer products, such as glazed entrance, window, and curtain wall products, vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

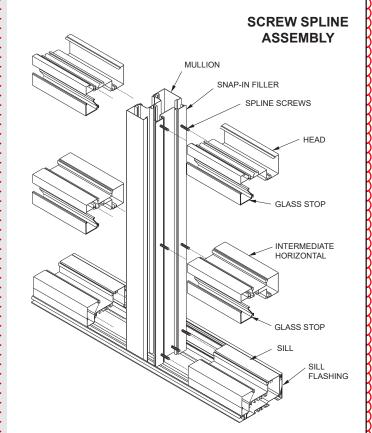
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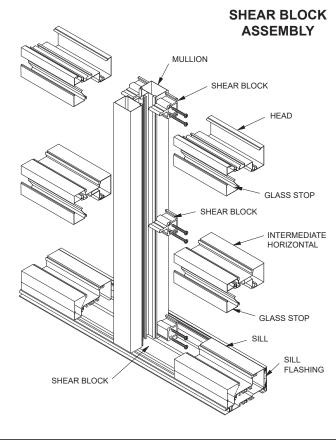
EC 97911-231

The split vertical in the **Screw Spline** system allows a frame to be installed from unitized assemblies. Screws are driven through the back of the verticals into splines extruded in the horizontal framing members. The Individual units are then snapped together to form a complete frame.

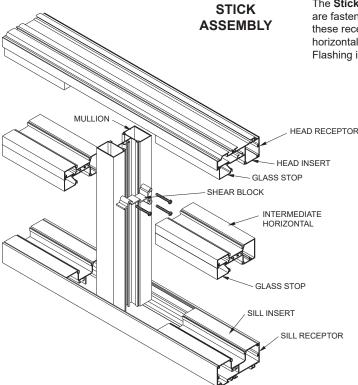


The **Shear Block** system of fabrication allows a frame to be preassembled as a single unit. Horizontals are attached to the verticals with shear blocks.

PICTORIAL VIEW (CENTER)



The **Stick** system allows on-site construction. Head and sill receptors are fastened to the surround. Vertical mullions are then installed in these receptors and are held in place by snap-in inserts. Intermediate horizontal members are attached to the verticals with shear blocks. Flashing is not required.



NOTE:

If the end reaction of the mullion (mullion spacing (ft.) times height (ft.) times specified wind load (psf) divided by two) is more than 500 lbs., the optional mullion anchors must be used. (See page 16)



EC 97911-231 INDEX (CENTER)

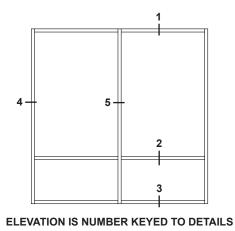


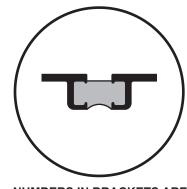
BASIC FRAMING DETAILS (CENTER - Outside Glazed - Stops Down)

EC 97911-231

Laws and building and safety codes governing the design and use of Kawneer products, such as glazade afratneroe, window, and ourtain wall products, vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Additional information and CAD details are available at www.kawneer.com

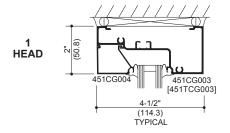


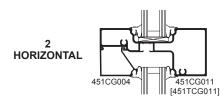


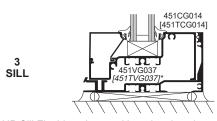
NUMBERS IN BRACKETS ARE THERMALLY BROKEN MEMBERS

SCREW SPLINE

451CG001 451CG001 [451TCG001] [451TCG001] 5 VERTICAL **JAMB**

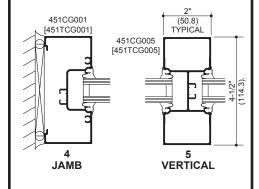


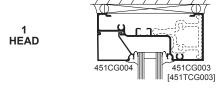


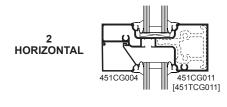


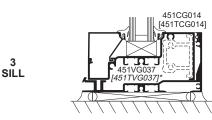
* HP Sill Flashing shown with optional gasket.

SHEAR BLOCK



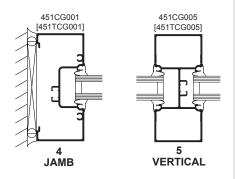


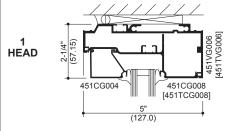


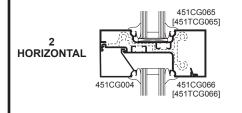


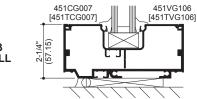
* HP Sill Flashing shown with optional gasket.

STICK









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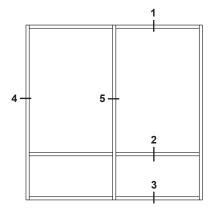
Trifab® VG 451/451T Framing System

EC 97911-231

BASIC FRAMING DETAILS (CENTER - Inside Glazed - Stops Down)

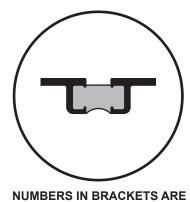
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Additional information and CAD details are available at www.kawneer.com

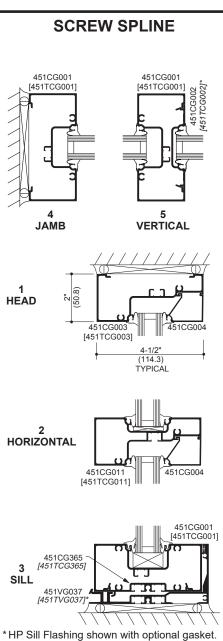


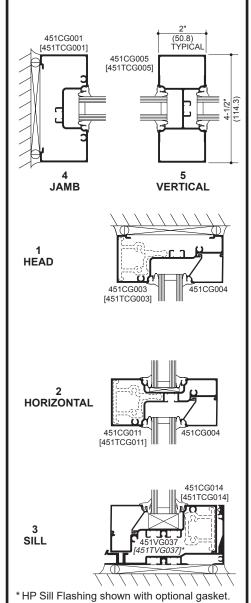
ELEVATION IS NUMBER KEYED TO DETAILS

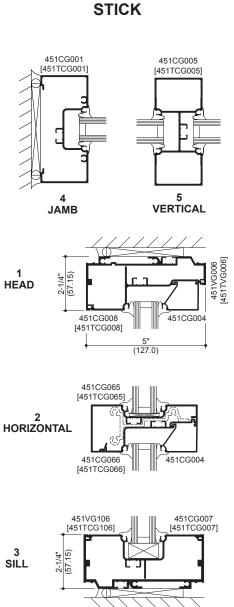
SHEAR BLOCK



NUMBERS IN BRACKETS ARE THERMALLY BROKEN MEMBERS







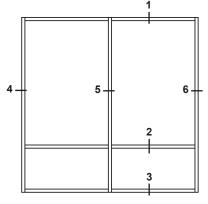


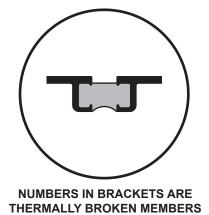
kawneer.com ADMC040EN

PRE-GLAZED FRAMING DETAILS (CENTER - Outside Glazed - Stops Up)

EC 97911-231

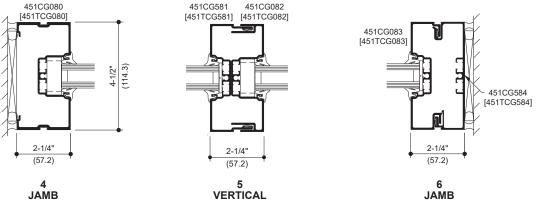
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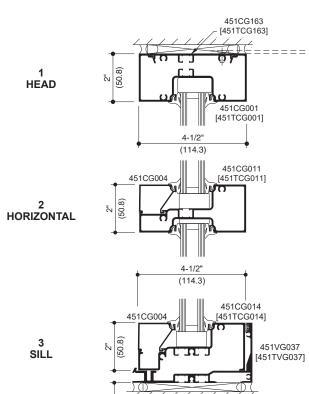




ELEVATION IS NUMBER KEYED TO DETAILS

SCREW SPLINE







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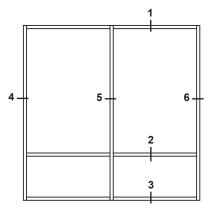
Laws and building and safety codes governing the design and use of Kawneer products, such as glazade antrannee, window, and ourtain wall products, vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

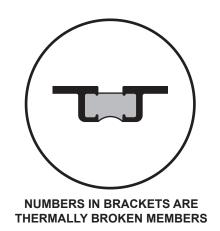
PRE-GLAZED FRAMING DETAILS (CENTER - Inside Glazed - Stops Down)

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EC 97911-231

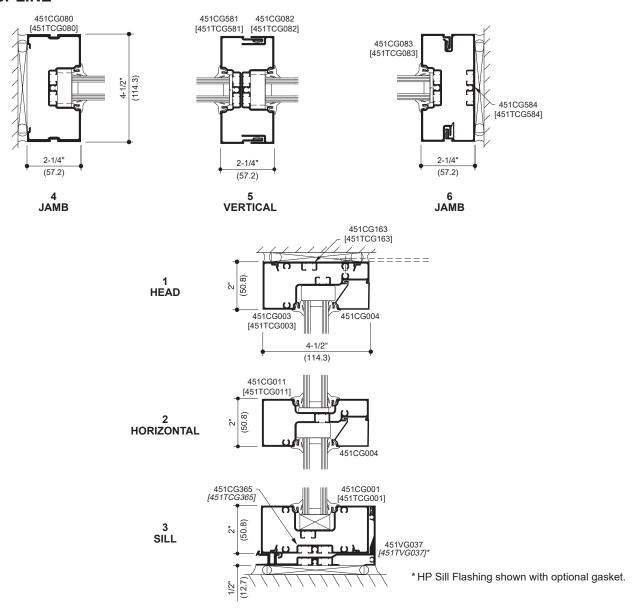
Additional information and CAD details are available at www.kawneer.com





ELEVATION IS NUMBER KEYED TO DETAILS

SCREW SPLINE

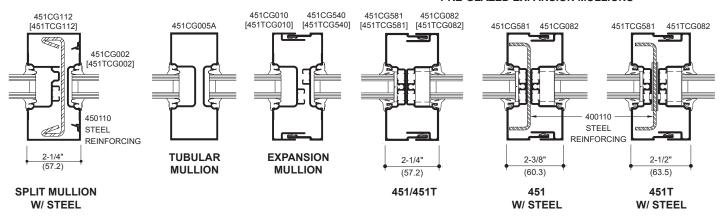


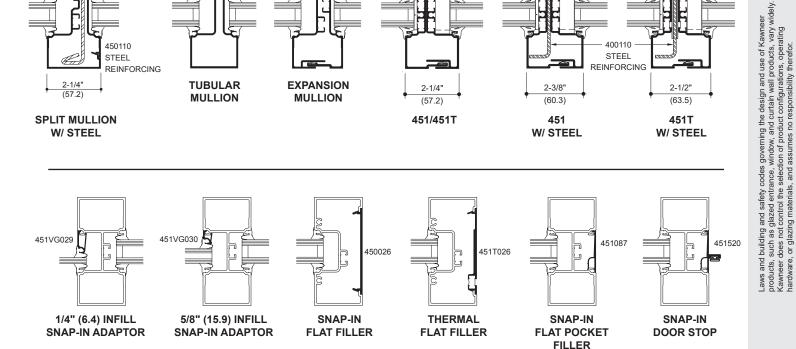
ADMC040EN

MISCELLANEOUS FRAMING (CENTER)

Additional information and CAD details are available at www.kawneer.com

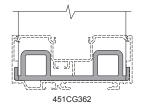
PRE-GLAZED EXPANSION MULLIONS







THERMAL POCKET FILLERS

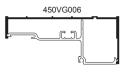


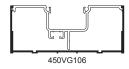
MULLION ANCHOR

NOTE:

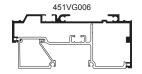
If the end reaction of the mullion (mullion spacing (ft.) times height (ft) times specified wind load (psf), divided by two) is more than 500 LBS., the optional mullion anchor must be used. Consult Application Engineering.

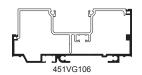
Mullion Anchor not used with Lightwieght Receptor.





OPTIONAL LIGHTWEIGHT CAN RECEPTORS





OPTIONAL UNEQUAL LEG CAN RECEPTORS

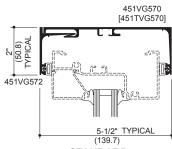
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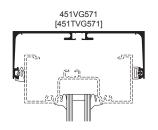


EC 97911-231

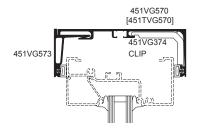
Additional information and CAD details are available at www.kawneer.com



STANDARD HEAD COMPENSATING RECEPTOR (EXTERIOR INSTALLED)

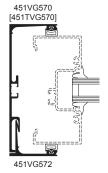


ONE PIECE HEAD COMPENSATING RECEPTOR

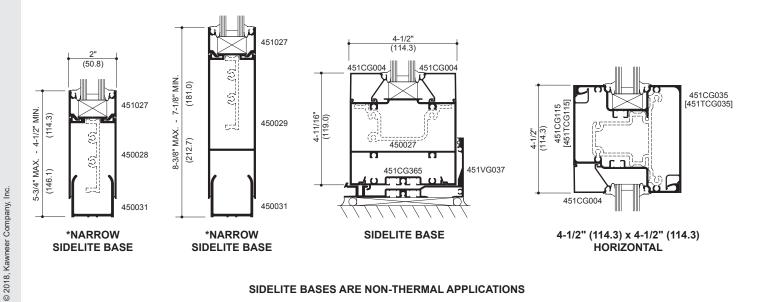


MISCELLANEOUS FRAMING (CENTER)

HEAVY WEIGHT HEAD COMPENSATING RECEPTOR (EXTERIOR INSTALLED)



JAMB COMPENSATING RECEPTOR (EXTERIOR INSTALLED)

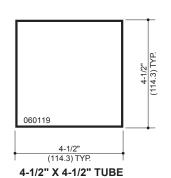


SIDELITE BASES ARE NON-THERMAL APPLICATIONS

*NARROW SIDELITE BASES REQUIRE THE USE OF NON-THERMAL 2-PIECE VERTICALS ONLY.

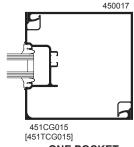
NOTE: SIDELITE BASES SHOWN ARE FOR USE WITH SCREW SPLINE AND SHEAR BLOCK SYSTEMS ONLY.





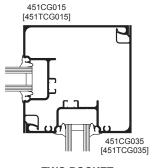
CORNERS (CENTER)

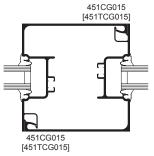
450017 450017

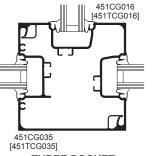


TWO PIECE NO POCKET CORNER

ONE POCKET CORNER



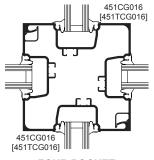


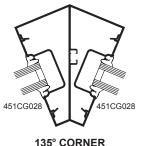


TWO POCKET 90° CORNER

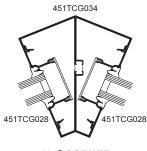
TWO POCKET CORNER POST

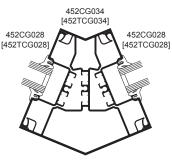
THREE POCKET 90° CORNER





451CG034



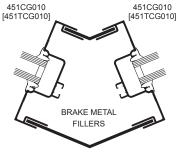


FOUR POCKET 90° CORNER

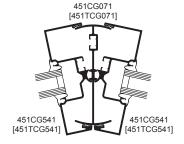
135° CORNER (NON-THERMAL)

135° CORNER (THERMAL)

135° CORNER



451CG071 [451TCG071] 451CG541 451CG541 [451TCG541] [451TCG541]



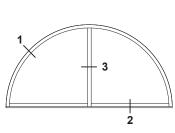
VARIABLE DEGREE **BRAKE METAL CORNER**

155° TO 180° PIVOT MULLION (OUTSIDE CORNER)

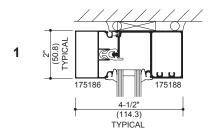
155° TO 180° PIVOT MULLION (INSIDE CORNER)

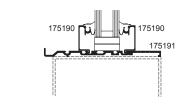
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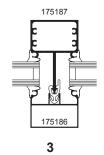
Additional information and CAD details are available at www.kawneer.com



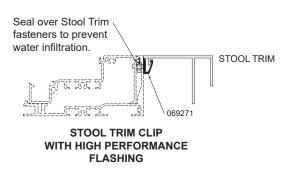


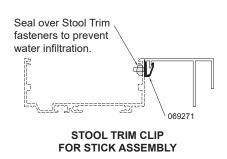


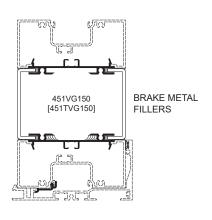




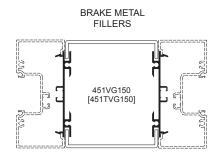
CURVING & TRIM DETAILS







BRAKE METAL ADAPTOR AT HORIZONTAL



BRAKE METAL ADAPTOR AT VERTICAL



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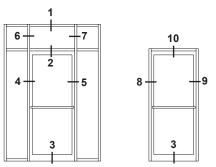
ENTRANCE FRAMING (CENTER)

Additional information and CAD details are available at www.kawneer.com

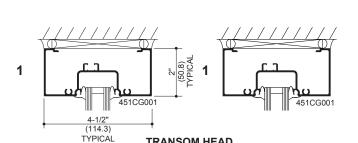
Trifab® VG 451 FRAMING INCORPORATING KAWNEER® "190" DOORS. DOOR FRAMING NON-THERMAL ONLY

NOTE: OTHER TYPES OF KAWNEER DOORS MAY BE USED WITH THIS FRAMING SYSTEM.

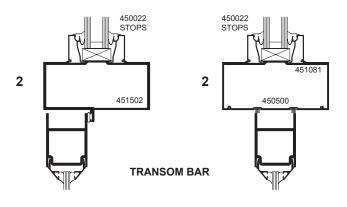
SEE ENTRANCE DETAILS FOR ADDITIONAL INFORMATION.

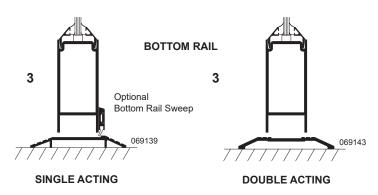


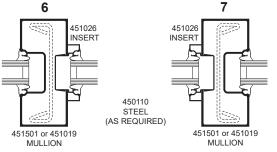
ELEVATIONS ARE NUMBER KEYED TO DETAILS



TRANSOM HEAD

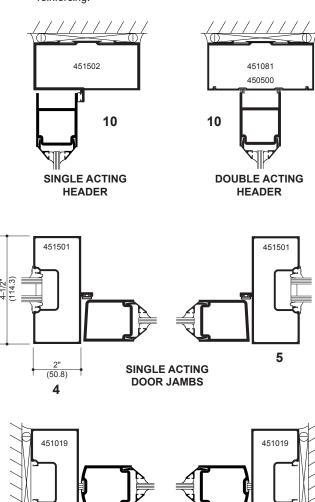






TRANSOM JAMBS

Transom area for both double or single acting doors with glass surround. Jambs above transom bar are routed out to accept glass holding insert with or without steel reinforcina.



DOUBLE ACTING

DOOR JAMBS



8

9

ENTRANCE FRAMING (CENTER - Open Back)

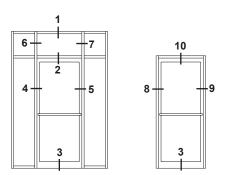
EC 97911-231

Additional information and CAD details are available at www.kawneer.com

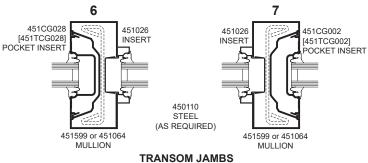
Trifab® VG 451 FRAMING INCORPORATING KAWNEER® "190" DOORS.

DOOR FRAMING NON-THERMAL ONLY

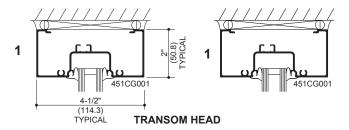
NOTE: OTHER TYPES OF KAWNEER DOORS MAY BE USED WITH THIS FRAMING SYSTEM. SEE ENTRANCE DETAILS FOR ADDITIONAL INFORMATION.

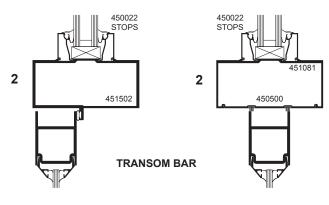


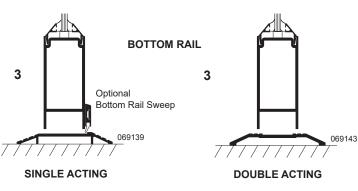
ELEVATIONS ARE NUMBER KEYED TO DETAILS

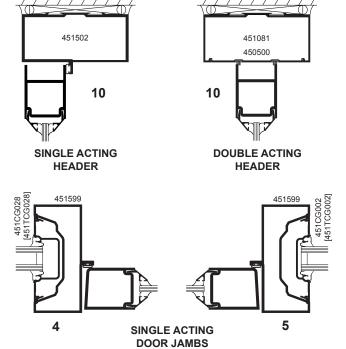


Transom area for both double or single acting doors with glass surround. Jambs above transom bar are routed out to accept glass holding insert with or without steel reinforcing.

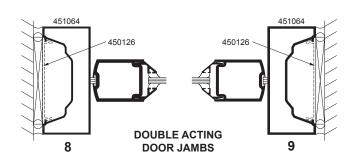








NOTE: Sidelite mullions must be oriented to provide at least one (1) deep vertical pocket per lite to facilitate glazing.





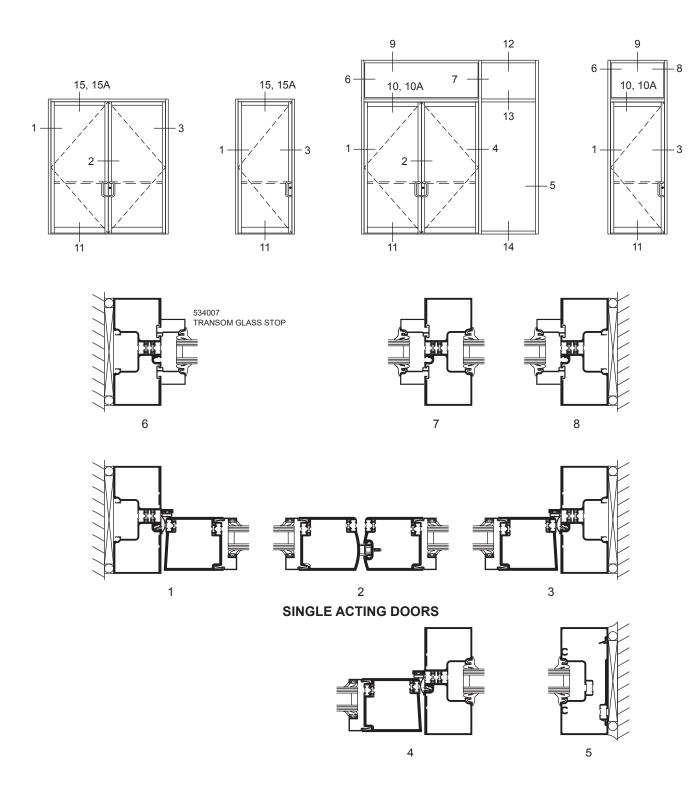
250T/350T/500T INSULPOUR® THERMAL ENTRANCES

EC 97911-231

Additional information and CAD details are available at www.kawneer.com

NOTE:

- 1. SERIES 250T NARROW STILE DOORS ARE DETAILED, MEDIUM STILE 350T DOORS AND WIDE STILE 500T DOORS ALSO MAY BE USED.
- 2. TRIFAB® VG 451T CENTER, 2" x 4-1/2" (50.8 x 114.3) FRAMING IS DETAILED WITH THE DOORS FOR REFERENCE. OTHER KAWNEER FRAMING SERIES OR CURTAIN WALL SYSTEMS MAY BE USED.





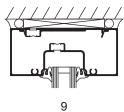
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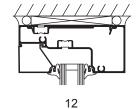
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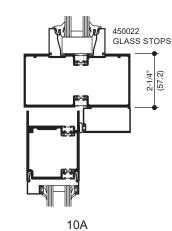
Additional information and CAD details are available at www.kawneer.com

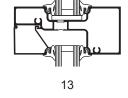


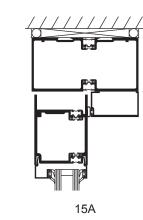
SINGLE ACTING DOORS



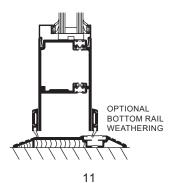
COC WITH SINGLE ACTING OFFSET ARM



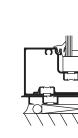




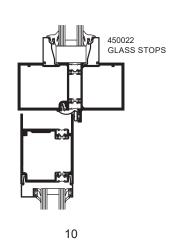
(57.2)

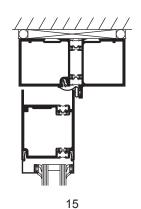


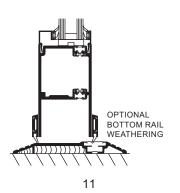
CONSEALED OVERHEAD CLOSER



14







SURFACE OVERHEAD CLOSER

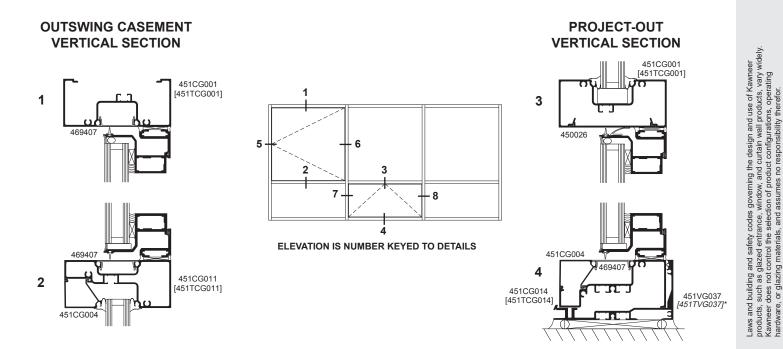


ADMC040EN

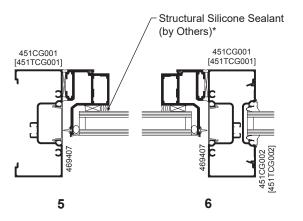
GLASSvent®WINDOW for STOREFRONT FRAMING (CENTER)

EC 97911-231

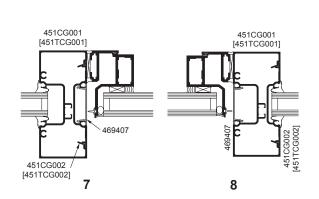
Additional information and CAD details are available at www.kawneer.com



OUTSWING CASEMENT HORIZONTAL SECTION



PROJECT-OUT HORIZONTAL SECTION



NOTE: Black spacer is recommended when 1" (25.4) insulating glass is used.

* INSTALLER NOTE: Installer is responsible for all required compatibility review and approvals with the Structural Silicone Manufacturer and the Insulating Glass Unit Manufacturer.



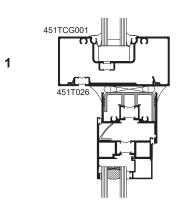
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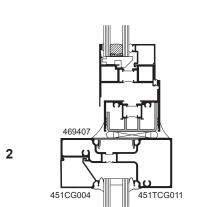
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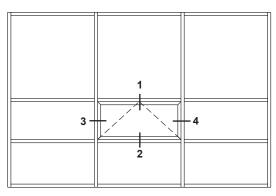
Additional information and CAD details are available at www.kawneer.com

PROJECT-OUT VERTICAL SECTION





8225TL THERMAL WINDOWS SHOWN NOTE: OTHER VENT TYPES CAN BE ACCOMMODATED, CONSULT YOUR KAWNEER REPRESENTATIVE FOR OTHER OPTIONS

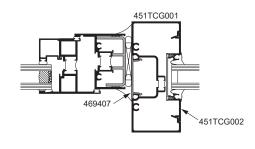


ELEVATION IS NUMBER KEYED TO DETAILS

PROJECT-OUT HORIZONTAL SECTION







4





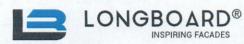














info@longboardproducts.com



longboardproducts.com



1.800.604.0343

Product Specification Information: 07 46 16 Aluminum Siding 07 42 93 Linear Metal Soffits 09 54 23 Linear Metal Ceilings 07 00 00 Thermally Broken Sub-structure

Siding Installation Guidelines

07 46 16 Longboard® Siding 4" V-Groove Planks

















INTRODUCTION

INSTALLATION GUIDELINES

NOTE: These instructions are prepared for persons experienced in the field of soffit and siding installation and assume a foundational working knowledge of the tools and application process. Longboard is a rear ventilated rain screen (RVRS) cladding system which meets the requirements of Part 9 of the building code, when installed according to these instructions. Typically Longboard® does not require traditional rainscreen, please check with the Authority Having Jurisdiction to verify local rainscreen requirements. It is highly recommended that Longboard be installed by an experienced professional.

This manual must be read in conjunction with project drawings and specifications, applicable building codes, and relevant compliance documents. The details in this manual provide guidance on how to comply with Longboard®'s installation requirements and need to be reviewed by all parties who are responsible for installing Longboard® products on a project. This manual is subject to periodic reexamination and revision. For information on the current status of these documents please check the Longboard® website, www.longboardproducts.com. The reader is responsible for ensuring that they are using the most up-to-date information.

BEST PRACTICES:

- Use appropriate PPE (personal protective equipment). The cutting of metal increases the risk of eye
 injury and hearing loss. USE EYE AND HEARING PROTECTION.
- · Plan your install for best yield/finish appearance.
- With Longboard® woodgrains, understand the repeating pattern to ensure a satisfactory install.
- Do not install over pressure treated material without adequate barrier protection.
- Keep courses straight and level, and in line with adjacent walls. Throughout installation, check the
 panels' horizontal alignment every few rows to ensure the siding is installed straight and level on
 the wall and for panel alignment around corners and above doors and windows.
- Siding is only as straight and stable as its substrate. In re-siding: strapping or removal of original cladding may be necessary. Only install over a flat substrate or a suitable cladding sub-structure.
- A proper amount of care, as with any prefinished product, will result in a premium quality installation and a lifetime of maintenance free enjoyment.

KEEPING IT STRAIGHT AND LEVEL

- · Keep in mind, siding is only as straight and stable as what lies under it.
- Throughout installation, check the panels' horizontal alignment every few rows to make sure the siding is hanging straight and level on the wall. Also check for panel alignment around corner posts and above doors and windows.



ATTENTION

UPON DELIVERY:

Check the delivery is complete and all materials have arrived in good condition. Inspect product prior to installation. Longboard® is not responsible for the installation of blemished or damaged product.

WATER-RESISTIVE BARRIER

WATER-RESISTIVE BARRIER

Prior to siding, make sure the water-resistive barrier is properly installed according to the manufacturers' instructions.

IBC Code Reference: "1403.2 Weather protection. Exterior walls shall provide the building with a weather resistant exterior wall envelope. The exterior wall envelope shall include flashing, as described in Section 1405.3. The exterior wall envelope shall be designed and constructed in such a manner as to prevent the accumulation of water within the wall assembly by providing a water-resistive barrier behind the exterior veneer, as described in Section 1404.2, and a means for draining water that enters the assembly to the exterior. Protection against condensation in the exterior wall assembly shall be provided in accordance with the International Energy Conservation Code.

Exceptions:

- 1. A weather-resistant exterior wall envelope shall not be required over concrete or masonry walls designed in
- accordance with Chapters 19 and 21, respectively.
- 2. Compliance with the requirements for a means of drainage, and the requirements of Sections 1404.2 and 1405.3, shall not be required for an exterior wall envelope that has been demonstrated through testing to resist wind-driven rain, including joints, penetrations and intersections with dissimilar materials, in accordance with ASTM E 331 under the following conditions..."

FLASHING

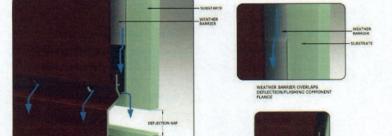
IBC Code Reference: "1405.3 Flashing. Flashing shall be installed in such a manner so as to prevent moisture from entering the wall or to redirect it to the exterior. Flashing shall be installed at the perimeters of exterior door and window assemblies, penetrations and terminations of exterior wall assemblies, exterior wall intersections with roofs, chimneys, porches, decks, balconies and similar projections and at built-in gutters and similar locations where moisture could enter the wall. Flashing with projecting flanges shall be installed on both sides and the ends of copings, under sills and continuously above projecting trim."



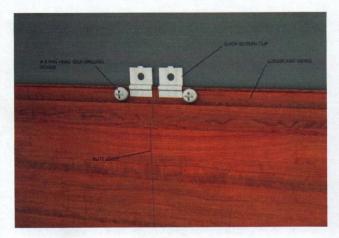
EXPANSION & CONTRACTION

EXPANSION/CONTRACTION & TRIMS:

- Longboard® is aluminum, and will expand and contract ¼" every 24' in all directions when exposed to a temperature change of 30 degrees C (54 F).
- · Lengthwise, each panel MUST terminate into a minimum of one trim.
- Typical trims used are: Starter Strip, J-Track around windows & doors, Corners, Finishing Cap/ Finishing Base at the top of walls & underside of windows and Flat Cap/Base or U Cap/Base for expansion trims in the field.
- Install Longboard® 2 ½" Perforated Vent Strip where soffit venting is required, as per local code requirements.
- Longboard® perforated vent provides 84 inches of Net Vent Area per 12' stock length.
 21 lineal ft. = 1 sq. ft. of NVA.
- It is imperative that Longboard® panels are cut to fit to the midpoint coverage of trim pieces. This will allow for both expansion and contraction without bottoming out or contracting out. Do not fasten Longboard panels and trims together as this will not allow for free movement.
- Perpendicular to the panels, Longboard® Siding & Soffit must be broken up using an expansion trim (Finishing Cap/Finishing Base or Flat Cap/Base or U Cap/Base) or through-wall flashing at every floor elevation or a maximum of 24' to accommodate expansion/contraction and floor compression.
- Horizontal/Compression Joints are required for multi-story installations locate joints at floor lines. Joints are flashed minimum ½" (12.7 mm) breaks. Do not caulk.
- Wood framed buildings of three or more floors require a compression joint or through-wall flashing at each floor.
- Steel framed buildings (including reinforced concrete core with LGMF exterior walls) of more than three floors (or 45 feet/14 m) require a compression joint every 25 feet (7.62) m at a floor line.
- Staggered butt-joints are acceptable, with only one butt-joint per row between two trims. Hard fasten each panel through the flange, with a self-tapping screw each side of the butt-joint. This will keep the butt-joint tight while allowing free movement of expansion/contraction via the Quick-Screen™ clips and into the pocket of the trims. Use touch-up pens (light & dark) to paint cut ends of exposed aluminum.



DEFLECTION/FLASHING COMPONENT - FLASHING FUNCTION



CUTTING

CUTTING & REPEAT PATTERNS:

- Cut Longboard® using standard wood cutting tools such as a miter saw & table saw with a carbide blade for non-ferrous metals. 60-80 tooth blades are recommended.
- Cut face up whenever possible: Longboard® is a prefinished material. A reasonable amount of care is critical to obtain the desired results and to prevent marring and scratching.
- All Longboard® Siding and Soffit panels & trims are produced a minimum of 1" longer than the spec'd length, allowing the trimming of taped ends on woodgrain colour installations. Always cut off taped ends as trims will not cover the unfinished ends.
- · Use touch-up pens (light & dark) to paint cut ends of any visible aluminum.
- Longboard® woodgrains have a repeat pattern every 2'-4', depending on the species. Longboard® is delivered in boxes of 8 pcs of 6" profile or 12 pcs of 4" profile with sets of two pieces taped together at each end, for a total of 4 or 6 sets. Each set has a "piece A" and a "piece B" (from a wood pattern perspective) where these pieces are created from a different area of the pattern and are distinct from each other, however each will have the same repeat distance. To eliminate grain mirroring it is recommended to install a "piece A" then a "piece B" then an offset "piece A" then an offset "piece B" and continue mixing the pieces up the wall.

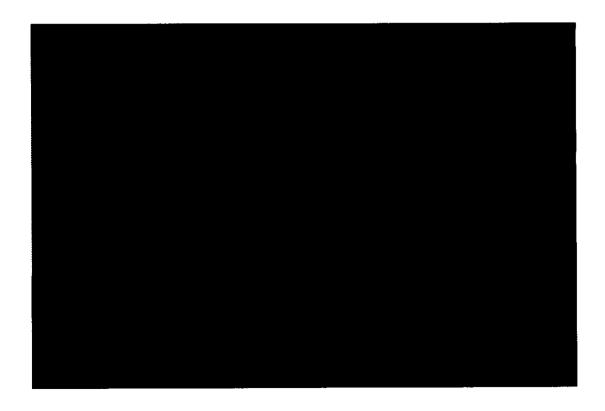


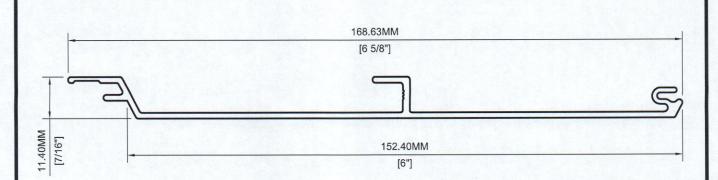
FASTENING

INSTALLING & FASTENING

INSTALLING & FASTENING:

- Install trims first, hard fastening with #8 self-drilling corrosion resistant exterior screws (supplied by others) directly through the flange. Use included Quick-Screen™ clips for Starter Strip and Finishing Base or any horizontal trim, to maintain the rear ventilation plane, but still hard fasten for attachment.
- Longboard® panels are installed using Quick-Screen™ clips @ 32" o.c. (standard requirement), included with each siding/soffit order. The clips create the rear ventilation plane and allow for thermal expansion/contraction. Secure tight using appropriate length, #8 corrosion resistant exterior screws (supplied by others) suitable for the application and climate. Screws allow the installer to "back off" the screw and shim tight to address any substrate discrepancies. It is good practice to install one hard fastener at the midpoint of each panel, through the flange, to prevent migration of the cladding.
- 1 Box of 4" V Groove Includes: 135 Clips
- 1 box of 6" V Groove or Channel Includes: 90 Clips
- · Each 12' length of Vent Strip Includes: 5 Clips
- If less than 32" spacing is required, additional clips can be purchased through your dealer.
- Hard fasten any butt-joints (see expansion/contraction).
- Snap in any Finishing Cap, Flat Cap and/or U Cap to complete installation.





These drawings are published as an information guide only. These CAD drawings are intended as templates to assist the designer, they do not contain the full detail required for construction and must be read in conjunction with the installation instructions on www.longboardproducts.com. You should obtain architectural, engineering or other technical advice to assess the suitability of these drawings to the requirements of your particular project.

Mayne Coatings Corp. and Longboard products accepts no liability in respect to the use of these drawings.

For complete installation instructions refer to the appropriate documentation at www.longboardsuppliers.com/installation

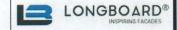
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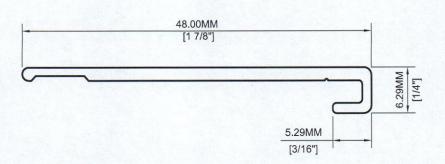
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6in V-GROOVE
SIDING & SOFFIT PANEL





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007

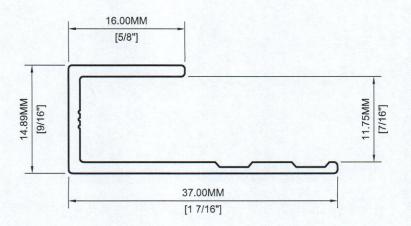
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DRAWING TITLE:

WIDE STARTER STRIP

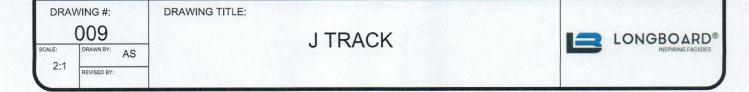


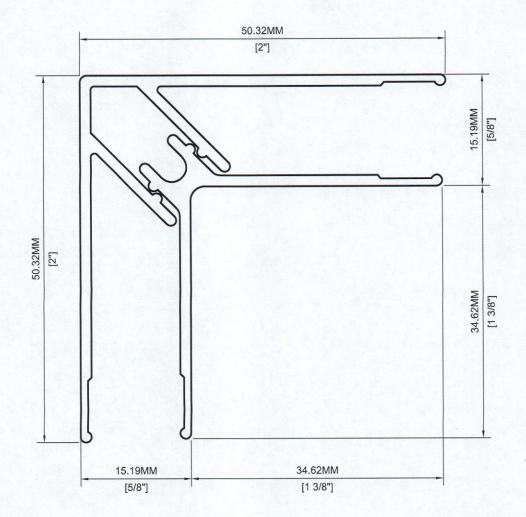


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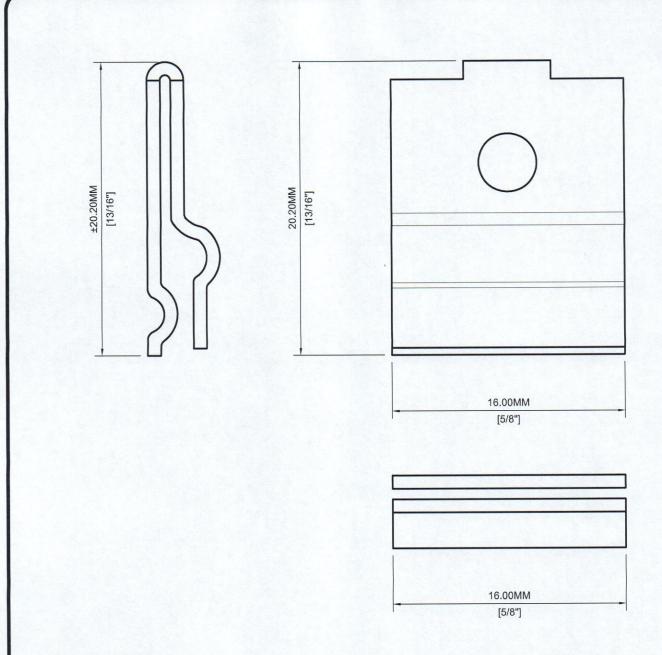
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DRAWING TITLE:

INSIDE & OUTSIDE CORNER

LONGBOARD®
INSPIRING FACADES



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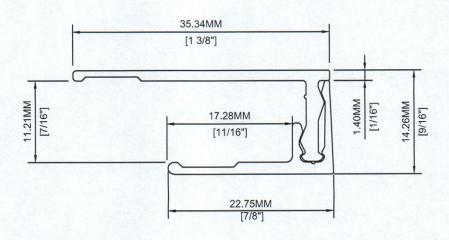
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QUICK SCREEN CLIP

LONGBOARD®
INSPIRING FACADES



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DRAWING TITLE:

For complete installation instructions refer to the appropriate documentation at www.longboardsuppliers.com/installation

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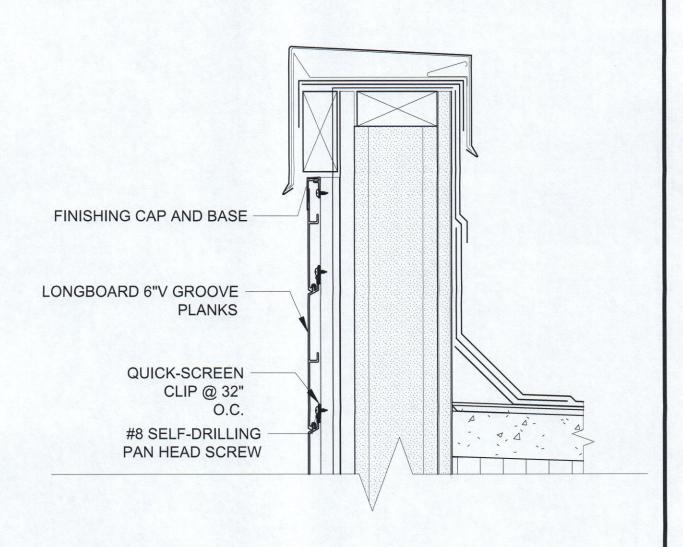
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REVISED FINISHING CAP AND BASE FEBRUARY 2019

LONGBOARD®



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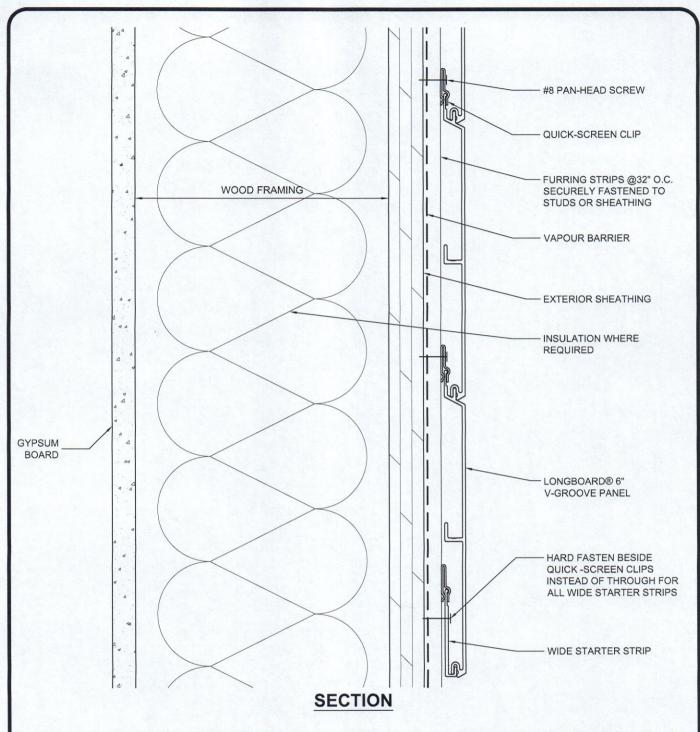
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JH

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SECTION DETAIL FOR LONGBOARD @
INSPRING FACADES

INSPRING FACADES



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For complete installation instructions refer to the appropriate documentation at www.longboardsuppliers.com/installation

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6" V-GROOVE PANEL HORIZONTAL APPLICATION





WOODGRAIN OPTIONS

Our woodgrain options are divided into four categories based on the consistency of the wood grain pattern.

MODERATE



NATIONAL



LIGHT CHERRY

DARK CHERRY



WESTERN CEDAR



DARK NATIONAL WALNUT



LIGHT NATIONAL WALNUT

CONSIDERABLE



TABLE WALNUT





WEATHERED GREY



SAND DRIFT

WOODGRAIN OPTIONS

Our woodgrain options are divided into four categories based on the consistency of the wood grain pattern.

CONSISTENT



DARK ACACIA



DARK BAMBOO





LIGHT BAMBOO



DARK FIR



LIGHT FIR



DARK KNOTTY PINE



LIGHT OAK



DARK WALNUT



ITALIAN ROSEWOOD



WHITE OAK

2

^{*} Please check www.longboardproducts.com for the most up to date colour offerings*

TAS ATAS International, Inc. Sustainable Building Envelope Technology

Achieve the sleek, architectural appearance of corrugated panels with no exposed fasteners.

MODERN CORRUGATED APPEARANCE

CORRALLOK**-

The corrugated panel upgrade: Corra-Lok™



Smooth

Finally, there is a panel with the beauty of a corrugated line without the unsightly fasteners!

Features

APPLICATION

- Wind-Lok® interlock increases strength of panel design
- Applications include commercial roofs, walls, mansards and equipment screens with a recommended minimum slope of 4:12
- Ease of installation
- Concealed fastener system
- Mix and match capabilities
- Custom extruded trim designs
- Horizontal or vertical installations
- Available with perforations

LONGEVITY

- Fire resistant will not burn or support combustion
- May be an insurance advantage
- Will not warp, crack, rot or peel
- 30 Year Limited Warranty
- Resistant to high wind, torrential rain, heavy snow and ice loads
- High quality and time proven painting and pretreatment technologies
- **PVDF** Coating System

PERFORMANCE STANDARDS

- Tested in accordance with ASTM E 84 Flame Spread
- Easily integrated into drainage plane wall construction for energy performance



Specifications

Corra-Lok* SKU: MFC160

Cauge

.032, .040*, .050 aluminum 24, 22 ga. metallic coated steel 24, 22* ga. 55% Al-Zn alloy coated steel with acrylic coating 16* oz copper

Panel Width 16 5/8"

Panel Length

Cut to customer specifications with a minimum of 6'-0", maximum to transportation limitations and/or product and project design considerations

Panel Height 7/8"

Texture Smooth, Embossed

Finish Kynar 500° PVDF or Hylar 5000° PVDF

Colors Choice of 31 standard colors

Anodized Clear, Dark Bronze

Accessories

A complete line of trims available in matching colors, gauge, and finish or as specified

"Subject to minimum quantities and lead time inquire for availability.







Corra-Lok Design Advantages

Corra-Lok panels have a positive panel-to-panel interlock and can be combined with Metafor, Rigid Wall II, and the Multi-Purpose system for the ability to create interesting patterns and breaks. The fasteners are hidden by the adjacent panel.

Wind-Lok™

Integral lock and seam design guards against wind-driven rain and wind uplift. Positive locking feature makes it virtually impossible for panels to disengage.



SPECIFICATION DATA SHEET

1. PRODUCT NAME

CORRA-LOK[™] MFC160

2. MANUFACTURER

ATAS INTERNATIONAL, INC. Website: www.atas.com
Email: info@atas.com
Corporate Headquarters:
Allentown, PA 18106
Phone: (610) 395-8445
Fax: (610) 395-9342
Western Facility:

Mesa, AZ 85204 Phone: (480) 558-7210 Fax: (480) 558-7217

3. PRODUCT DESCRIPTION

Basic Uses:

Corra-Lok is a 16 5/8" wide by 7/8" deep structural panel that provides dramatic shadow lines with its 2 3/4" wide corrugations. Typical applications include walls, equipment screens, mansards and roofing. The system utilizes concealed fasteners to offer uninterrupted vertical or horizontal sight lines.

Composition & Materials:

Standard Offerings: Corra-Lok panels are roll-formed from .032 and .050 aluminum; 22 and 24 gauge metallic coated steel and 24 gauge 55% Al-Zn alloy coated steel with acrylic coating.

Special Offerings: 22 gauge 55% Al-Zn alloy coated steel with acrylic coating; .040 aluminum; 16 oz. copper; .0197 classic & terne coated stainless steel may be specified, subject to minimum quantities and lead time.

Sizes:

Corra-Lok panels have a 16 5/8" wide nominal coverage. Panel lengths are cut to customer specifications, with a minimum of 6' and a maximum to transportation limitations and/or product and project design considerations.

Colors & Finishes:

A choice of over 30 stock colors is available in a Kynar 500° PVDF or Hylar 5000° PVDF finish. (Request color chart or chips). Custom colors available. An anodized finish is available in Clear Satin or Dark Bronze. Texture is smooth or embossed. Perforations are available.

4. TECHNICAL DATA

Kynar 500° PVDF or Hylar 5000° PVDF based finishes tested by paint supplier for.

 Dry Film Thickness: ASTM D 1005, ASTM D 1400, ASTM D 4138 or ASTM D 5796

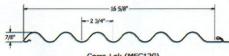
- Specular Gloss: ASTM D 523
- Pencil Hardness: ASTM D 3363
- T-Bend Flexibility: ASTM D 4145
- · Mandrel Bend Flexibility: ASTM D 522
- · Impact Resistance: ASTM D 2794
- · Adhesion: ASTM D 3359
- · Water Immersion Resistance: ASTM D 870
- · Abrasion Resistance: ASTM D 968
- Acid Resistance: ASTM D 1308
- Acid Rain Resistance (Kesternich): ASTM G 87 or DIN 50018
- · Salt Spray: ASTM B 117
- Cyclic Salt Spray: ASTM D 5894 and ASTM D 5487
- Humidity Resistance: ASTM D 2247
- Accelerated Weathering: ASTM D 822 and ASTM G 155, ASTM G 151 or ASTM G 153
- Color Retention, Florida Exposure: ASTM D 2244
- Chalking Resistance: ASTM D 4214
- Cleveland Condensing Cabinet: ASTM D 4585
- Cure Test, MEK Resistance: ASTM D 5402
- Alkali Resistance, Sodium Hydroxide: ASTM D 1308. Procedure 7.2
- · Flame Spread Rating: ASTM E 84
- Organic coatings meet requirements of AAMA 2605 when applied to aluminum.

Panel testing/ratings:

- Galvanized Steel: ASTM A 653
- 55% Al-Zn alloy Coated Steel: ASTM A 792
- Aluminum: ASTM B 209
- Copper. ASTM B 370
- · Coil Coating: ASTM A 755
- · Field Tested and Approved.
- · Load Tables available upon request.

5. INSTALLATION

Corra-Lok panels have a positive panel-to-panel interlock. Recommended minimum slope is 4:12. Installation manuals and hands-on training via seminars are available through ATAS. Visit www. atas.com for more information.







6. AVAILABILITY & COST

Availability:

Corra-Lok panels are available through ATAS product distributors. A complete line of related components and trim accessories is available to complete the wall system. In addition, a complete line of rainware and perimeter roof edge trims can be supplied by ATAS to complement the wall system. Flat sheet and/or coil stock is available in matching color for fabrication of related components by the installing contractor.

Cost:

Contact ATAS product distributors for current pricing.

7. WARRANTY

Products coated with a fluoropolymer, Kynar 500° PVDF or Hylar 5000° PVDF finish carry a limited warranty against chalking and fading.

8. MAINTENANCE

Corra-Lok panels are virtually maintenance free. Surface residue may be easily removed by conventional cleaning methods. For painted products, minor scratches should be touched up with a matching paint, available from the manufacturer.

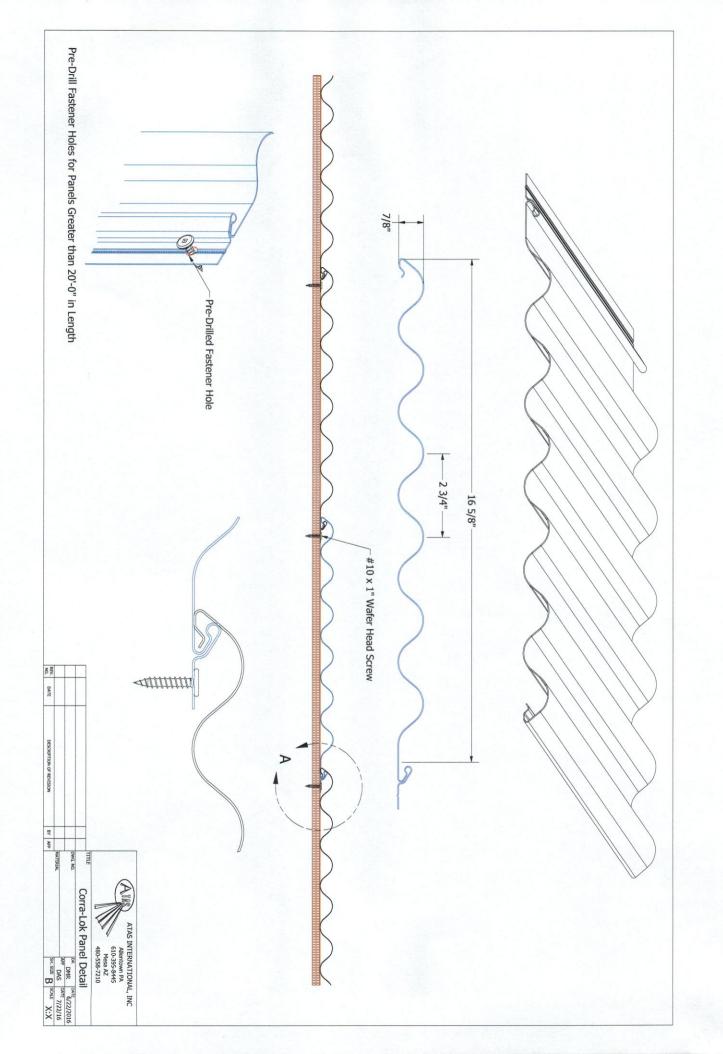
9. TECHNICAL SERVICES

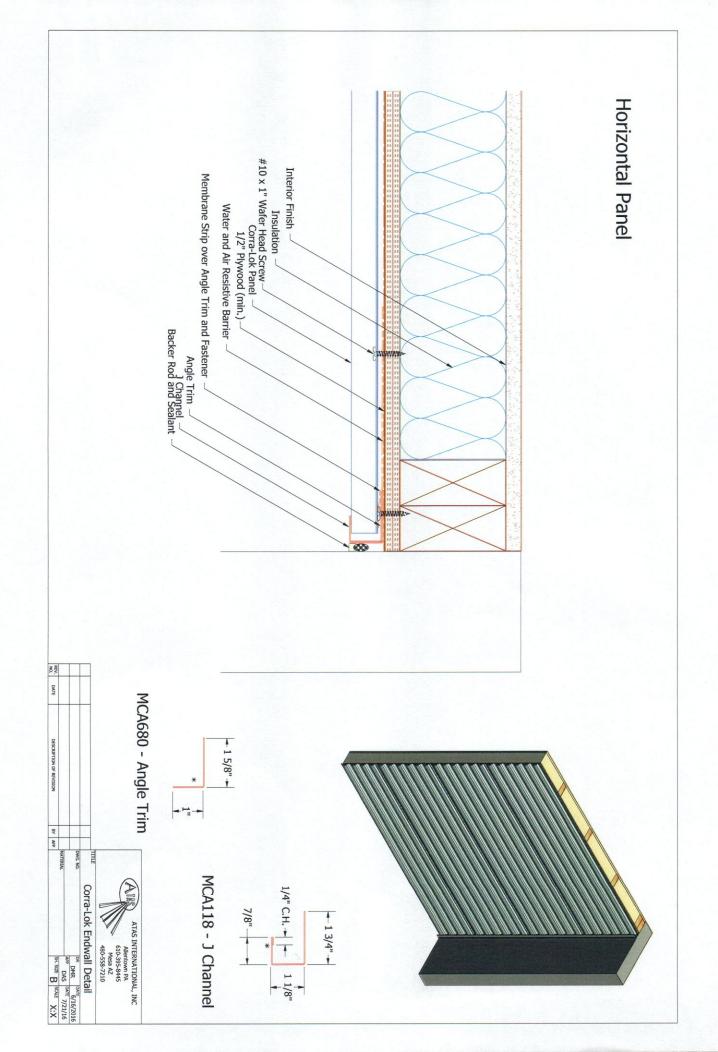
Complete technical information and literature are available at www.atas.com. ATAS will assist with design ideas and shop drawings.

10. FILING SYSTEM

- www.atas.com
- Additional product information is available from the manufacturer upon request.









ATAS International, Inc. Sustainable Building Envelope Technology

Allentown, PA | Mesa, AZ | Maryville, TN 800.468.1441 610.395.8445 info@atas.com www.atas.com





STANDARD COLORS (PVDF Finish) PVDF resin based coatings provide high-performance durability for exterior and interior applications. These coatings are designed to resist fading, chalking, and abrasion.

Meets the requirement of AAMA 2605-13 and AAMA 620-02.

| PREMIUM FINISH (Antique Patina (24) | Hartford Green (27) | Medium Bronze (03) | Classic Bronze (01) | Black (02) |
|---|--|---|---------------------|----------------------|
| PVDF FI | • | + | * | • |
| PREMIUM FINISH (PVDF FinIsh) PVDF resin based coatings, as noted above, with premium pigmentation to obtain metallic or deep color for desired aesthetics. Antique Patina (24) Champagne (31) Coppertone (23) Titanium (35) | Patina Green (12) | Hemlock Green (30) | Teal (19) | Forest Green (11) |
| noted above | • | | • | • |
| with premium pigmentation to obtain the control of | Mission Red (08) | Redwood (07) | Boysenberry (25) | Chocolate Brown (04) |
| ain metallico | • | | • | • |
| r deep color for desired aesthetics. Titanium (35) | Almond (36) | Concord Cream (05) | Rawhide (15) | Sierra Tan (09) |
| | • | • | | • |
| Silversmith (28) | Siam Blue (14) | Slate Blue (21) | Regal Blue (18) | Sandstone (06) |
| | • | • | • | • |
| Brite Red (17) | Dove Grey (13) | Slate Grey (20) | Charcoal Grey (62) | Rocky Grey (16) |
| • | • | | 3. | • |
| ▶ 22 ga. steel, .050 & .063 ♣ 22 ga. steel, .050 & .063 aluminum ● .050 aluminum ■ .050 & .063 aluminum Please inquire for custom materials and colors | Additional Stock Materials Availability Key: • 22 ga. steel | Stock Materials ALL Standard & Premium Finish Colors are available in: 24 ga. steel .032 aluminum .040 aluminum | Bone White (26) | Ascot White (10) |
| ā | | ë i | | |



SPECIFICATION DATA SHEET

1. PRODUCT NAME

FLAT SHEET AND COIL

2. MANUFACTURER

ATAS INTERNATIONAL, INC. Website: www.atas.com Email: info@atas.com Corporate Headquarters: Allentown, PA 18106 Phone: (610) 395-8445 Western Facility: Mesa, AZ 85204

3. PRODUCT DESCRIPTION

Aluminum or metallic coated steel with PVDF finish used to produce flat sheets and coils.

Aluminum alloy ASTM B 209 Alloy 3003 H14 or 3105 H24, or Metallic coated steel ASTM A 653 structural steel SS 50 (SS 37 for 48" width) with G90 coating or ASTM A 792 Structural Steel grade 50 (grade 37 for 48" width) with AZ50 coating. Materials are pretreated, primed and coated with a full strength 70% PVDF coating system, consisting of nominal 1.0 mil total dry film thickness (.2 mil primer with a .8 mil top coat). Reverse side is coated with a wash coat of .4 to .5 mil dry film thickness. Galvanized materials are pretreated with a high-performance zinc phosphate system.

Masking, a strippable polymer film, can be applied as a protective covering for handling during fabrication and installation of materials, if requested. The polymer masking must be removed immediately after installation and should not be exposed to continued periods of direct sunlight or extreme heat.

Basic Use: Architectural sheet metal applications in general building construction, such as metal roofing, metal walls, mansard applications, fascias, soffits, ceilings, storefronts, copings, gravel stops, specialty accent details, etc.

Materials:

Gauges Available:

Aluminum - .032, .040, .050, .063 and .080 thicknesses.

Metallic coated steel - 29, 24 and 22 gauge. Sheet Sizes - Up to 60" width by length required.

Texture - Smooth and embossed available.

Limitations:

All ATAS materials are pre-finished and, therefore, care should be taken during fabrication and installation of materials. Fabrication and installation of materials should conform to standards established by the architectural sheet metal community. During the fabrication and/or forming of the materials, proper bend radii must be used. Minor scratches should be touched-up immediately, utilizing an air dry coating furnished by ATAS. For damage other than minor scratches, such as dents, deep abrasions, or scratches that have damaged base materials, the actual unit should be replaced. All metal shavings, chips, and dust must be removed from material immediately.

4. TECHNICAL DATA

Applicable Standards

Aluminum

Aluminum materials conform to ASTM B 209, alloy 3003 H14 or 3105 H14. Painted aluminum conforms to performance requirements of AAMA 2605.

Finish: 70% PVDF

| Color Name | | Steel Gauge | | | Aluminum | | | |
|---------------------------|----|-------------|----|----|----------|--------|--------------|------|
| & Number | | 29 | 24 | 22 | .032 | .040 | .050 | .063 |
| Classic Bronze 0° | | | | • | • | | | • |
| Black | | | • | | • | | | |
| Medium Bronze | | | • | • | • | • | • | • |
| Chocolate Brown | 04 | | • | | • | | • | |
| Concord Cream | 05 | | • | | • | • | • | |
| Sandstone | 06 | | • | • | • | | • | |
| Redwood | 07 | | • | | • | • | • | |
| Mission Red | 08 | | • | | • | • | • | |
| Sierra Tan | 09 | | • | | • | | • | |
| Ascot White | 10 | | • | | • | | • | • |
| Forest Green | 11 | | • | | • | • | • | |
| Patina Green | 12 | | • | | • | • | • | |
| Dove Grey | 13 | | • | | • | • | • | • |
| Siam Blue | 14 | | • | | • | • | • | |
| Rawhide | 15 | | • | | • | • | • | |
| Rocky Grey | 16 | | • | | • | • | • | |
| Regal Blue | 18 | | • | | • | • | • | |
| Teal | 19 | | • | | • | \sim | • | |
| Slate Grey | 20 | • | • | • | ٠ ۶ | • | λ · · | |
| Slate Bibe | 21 | | • | | . (| ىبى |) . | |
| Boysenberry | 25 | | • | | • | • | • | |
| Bone White | 26 | • | • | • | • | • | • | • |
| Hartford Green | 27 | | • | | • | • | • | |
| Char Brown (Low Gloss) | | • | | | | | | |
| Hemlock Green | 30 | | • | | • | • | • | |
| Almond | 36 | | • | | • | • | • | |
| Charcoal Grey | | | • | | • | • | • | |
| Acrylic Coated Galvalume® | | | • | | | | | |
| Mill Finish - Aluminum | | | | | • | • | • | • |
| Premium Finish | | | | | | | | |
| Brite Red | | | • | | • | \sim | • | |
| Coppertone | | | • | | . 6 | • | ? | |
| Antique Patina | | | • | | • | مبد | | |
| Silversmith | | | • | • | • | • | • | |
| Champagne | | | • | | • | • | | |
| Titanium | | | • | | • | • | • | |
| Clear Satin Anodized | | | | | • | • | • | |
| Dark Bronze Anodized 7 | | | | | • | • | | |

Available Material and Thickness

Non-stock colors and gauges are available with minimum quantities and longer lead time.

Visit ATAS' web site for specialty trend colors in gauges and widths not shown on this chart.

NOTE: Other standard colors may be available in .063 aluminum, .080 aluminum, 29 ga. metallic coated steel, and 22 ga. metallic coated steel; subject to minimum quantity, coating surcharge and longer lead time.

Metallic Coated Steel

Both Galvanized Steel and 55% Al-Zn alloy coated Steel meet general requirements of the construction industry. Galvanized Steel materials conform to ASTM A 653, with a G90 coating. 55% Al-Zn alloy coated Steel materials conform to ASTM A 792, with an AZ50 coating. Materials are structural steel grade 50 except for 29 ga. thickness and 48 inch wide sheets, which are grade 37.

PVDF Finish Coating shall meet the following performance criteria:

| Property | Result-Aluminum | Result-Steel | Test Designation | |
|--|---|--|--|--|
| 60° Specular Gloss | 25-40 | 25-40 | ASTM D 523 | |
| Pencil Hardness | НВ-2Н | HB-2H | ASTM D 3363 NCCA 11-12 | |
| Flexibility: T-Bend Mandrel | 2-T (1) No cracking | 2-T (1) No cracking | ASTM D 4145, (NCCA 11-19) No cracking or tape removal of film ASTM D 522 180 bend around 1/8" mandrel | |
| Adhesion: Impact Reverse Impact | Acceptable (2) Acceptable (2) | Acceptable (2) Acceptable (2) | ASTM D 3359, (NCCA 11-5) ASTM D 2794, (NCCA 11-6) | |
| Abrasion: Falling Sand Transit | 50 liters minimum No disfigurement | 50 liters minimum No disfigurement | ASTM D 968 Method A | |
| Acid Pollutants | No effect No effect <5 u. color change HunterΔE units | No effect No effect <5 u. color change Hunter ΔE units | ASTM D 1308, Proc. 6.2 10% Muriatic acid, 15 min. ASTM D 1308, Proc. 6.2 20% sulfuric acid, 18 hrs. AAMA 2605, TEST # 7.7.3.3 70% nitric acid vapors, 30 min. | |
| Acid Rain Test | 10 cycles minimum No color change | 10 cycles minimum No color change | KESTERNICH Sulfur dioxide cyclic test | |
| Accelerated Tests | | | | |
| Weatherometer, 3000 hrs. exposure | Acceptable (3) | Acceptable (3) | ASTM D 822, G 155 Weatherometer | |
| Dew Cycle Weatherometer, 500 hrs. exposure | Acceptable (3) | Acceptable (3) | ASTM D 3361 | |
| Humidity, 100% relative humidity @ 95°F. | Passes 3000 hrs. (4) | Passes 1500 hrs. (4) | ASTM D 2247 | |
| Salt Spray, 5 % sat fog @ 95°F. | Passes 3000 hrs. (5) | Passes 1000 hrs. (5) | ASTM B 117 (NCCA 111-2) | |
| Cyclic Salt fog/UV Exposure Test | Passes 2016 hrs. (6) | Passes 2016 hrs. (6) | ASTM D 5894 | |

Notes:

- (1) Flexible to point of metal rupture without rupture of coating.
- (2) No loss of adhesion between coating and substrate to point of metal rupture with 1/16" cross-hatch scribe pattern through coating to bare metal.
- (3) No objectionable chalking, color change or blistering.
- (4) No No. 8 size blisters.

(5) Aluminum: none or few No. 8 size blisters, not more than $^{1}/_{16}$ " avg. creep or tape off scribe.

Metallic Coated Steel: none or few No. 8 size blisters, not more than $^{1}/_{8}"$ avg. creep or tape off scribe.

(6) No blistering and no rating less than 5 per ASTM D 714; no rusting per ASTM D 610; Rating of 6, less than 1.5 mm creepage from scribe per ASTM D 1654.

5. INSTALLATION

Installation shall be in accordance with standards established by the Architectural Sheet Metal Community. Installer to comply with all manufacturer's installation instructions as per project requirements. Care should be taken during handling and fabrication of materials to prevent bending, twisting, abrasion, scratching, denting, etc. All cutting tools should be kept sharp, properly dressed and aligned. If protective masking is utilized, it must be removed immediately after installation.

6. AVAILABILITY AND COST

Availability: Normal orders for in stock items and colors are ready for shipment within a 48 to 72 hour period. Custom fabricated items are shipped within 7 to 10 working days. Requests for custom colors need longer lead time. Products are sold through Dealer/Distributor outlets.

Materials: Shipped F.O.B. ATAS Plant.

Cost: For specific cost and availability contact ATAS.

7. WARRANTY

Products coated with a fluoropolymer, 70% PVDF finish carry a limited warranty against chalking and fading. The product is to be used as it is intended.

8. MAINTENANCE

ATAS coated materials are non-staining and require limited maintenance. Any surface residue is easily removed with conventional cleaning solvents or detergents. For painted products, minor scratches should be touched up with an air dry touch-up coating of the same color. Conventional caulking compounds and sealants compatible with the ATAS finish are acceptable for use in conjunction with the ATAS coated materials.

9. TECHNICAL SERVICES

Complete technical information and literature are available at www.atas.com. ATAS will assist with design ideas and shop drawings.

10. FILING SYSTEM

- · www.atas.com
- Additional product information is available from the manufacturer upon request.

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Allentown, PA | Mesa, AZ 800.468.1441 info@atas.com | www.atas.com





STOCK COLORS (70% PVDF Finish)

70% PVDF resin based coatings provide high-performance durability for exterior and interior applications. These coatings are designed to resist fading, chalking, and abrasion. Meets the requirement of AAMA 2605-13 and AAMA 620-02.





A leading manufacturer of sustainable building envelope technology, ATAS utilizes cool pigment paint on many color offerings. Our products reflect infrared radiation, which results in cooler surface temperatures, and maximum fade resistance.

Many of the ATAS products meet the qualifications for potential LEED credits, CRRC ratings and ENERGY STAR certification. See ATAS website for specific SRI values and certifications.

70% PVDF finish carries a limited warranty against fading and chalking. ATAS coated materials are non-staining and virtually maintenance free. Any surface residue is easily removed with conventional cleaning solutions or detergents.

For complete selection of additional color offerings, visit www.atas.com/COLORS

For current SRI values and agency listings, refer to our Color and Material Reference Guide: www.atas.com/SRI

GALVALUME® is an internationally recognized trademark of BIEC International Inc., and some of its licensed producers. Stainless steel products provided by ROOFINOX®. Colors are as close to the actual colors as modern printing allows. Metal color chips available on request (this is a requirement for all premium colors), and should be used for final color selection. If you have requirements or preference for colors or finishes other than shown, contact ATAS. Color availability varies by material. gauge and profile. ATAS reserves the right to modify, eliminate and/or change its products without prior notification. All colors are produced under stringent guidelines and tolerances that are identified within the coated metal industry. Batch to batch variations may occur within these established industry tolerances. Care should be exercised by customer when mixing lots. Contact ATAS for more information.

LAMINATES*

ATAS International, Inc. offers five laminate patterns: four wood grain and one stacked stone. Our laminates are UV stable for exterior wall applications.





Cherry (81) Oak (82)





Dark Teak (83)

Medium Teak (84)

Stacked Stone (85)

OXIDE SERIES*

Made to look like weathered steel with a rust-like appearance, you can combine the aesthetic appeal of aged metal with the advantages of brand new metal cladding with a 70% PVDF finish.



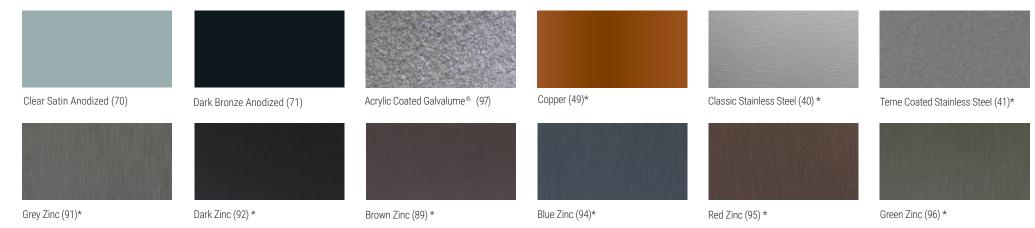


Copper Brown (42)

Tarnished Red (47)

NATURAL METALS

Due to their beauty, durability and time-proven performance, natural metals are a preferred material used in architecture. Natural metals will weather and patina naturally over time, adding character and aesthetic appeal to any building design. In addition to natural metals, ATAS offers Acrylic Coated Galvalume®, and anodized aluminum as standard available materials.



^{*} Special material. Pricing and availability dependent upon project specifics. Color chips available upon request.

OW1305 - AVATAR™



Project: VisaLighting.com/products/Avatar Type: Fill in shaded boxes using information listed below Order OW1305 **MVOLT** Code: MODEL VOLTAGE **B** FRAME A SOURCE ACCENT BAR AND END CAP OPTION(S) Finishes

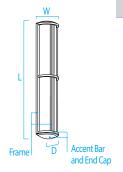


The options available in this series provide a variety of visual compositions; this rugged die-cast and extruded fixture stands up to the elements.

DIMENSIONS Depth is measured from wall to front of fixture D = Depth W = Width L = Length 36-1/8" (918 mm)

(102 mm)

(184 mm)



A SOURCE (Select one) and VOLTAGE

MVOLT fixture accepts 120 through 277 input voltage LED sources are 83CRI, within 3-step MacAdam and are dimmable 0-10V to 1%

| | LED Sources | ССТ | Delivered Lumens | Power (Watts) | Voltage | |
|---|-------------|-------|------------------|---------------|---------|--|
| • | L30K-L | 3000K | 1400 | | | |
| | L35K-L | 3500K | 1600 | 19 | | |
| • | L40K-L | 4000K | 1700 | | MVOLT | |
| • | L30K-H | 3000K | 2400 | | MVOLI | |
| | L35K-H | 3500K | 2400 | 29 | | |
| • | L40K-H | 4000K | 2500 | | | |

FINISHES (Select one B Frame Finish and one Accent Bar and End Cap Finish

Powder Coat Painted Finishes (Standard) for Frame or Accent Bar and End Cap

| AG7038 | Agate Grey | CVBL | Cove Blue | GW9002 | Grey White | PB1035 | Pearl Beige |
|--------|--------------|--------|-----------------|--------|------------|--------|---------------|
| BMAT | Bronze Matte | CW9001 | Cream | HTHR | Heather | RUST | Rust |
| BRNZ | Bronze | GLIM | Glimmer | JB9005 | Jet Black | SUNG | Sungold |
| BSIL | Blade Silver | GSIL | Graphite Silver | OBRZ | Old Bronze | TW9016 | Traffic White |

Metals (Premium) for Accent Bar and End Cap only

Brushed Stainless Steel



Polished Stainless Steel



OPTIONS (Multiple Selections Allowed)

▲ Option availability may be interdependent with Voltage, Source or Other Options

HM Horizontal mount (vertical is standard)

XPS Express 10 day shipping. Items marked with a bullet (•) are not available with XPS









See page 2 for color chart

XPS

ETL Listed

5 Year Warranty

D

7-1/4"

ECN 16-0317 Rev: 2019/12/12

OW1305 - AVATAR



Photometrics

Technical Information

- Modular design for replacement of LED source and integral driver
- Vertical mounting standard (horizontal mounting optional)
- Mounts to standard electrical junction box (by others) and wall with provided hardware
- Removable cam-action hinged frame for ease of maintenance
- Extruded aluminum backplate and center accent, die-cast end caps. Solid metal or die cast accent.
- Sealed and gasketed construction
- High impact white acrylic diffuser
 - F1 rated, UV stable
 - ◆ UL-94 HB Flame Class rated
- No VOC powder coat paint or stainless steel finish
- ETL listed for wet location mounting 4' above grade

Door Height = 7' Ceiling Height = 9' Silhouette Height = 6'

Specify color code when ordering. For accurate color matching, individual paint and finish samples are <u>available upon request</u>

For additional information see <u>VisaLighting.com/materials-finishes</u>

Painted Finishes (Standard)



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TU = AIRVENT

TU = BRITISH THERMAL UNIT

TUH = BTU PER HOUR

FM = CUBIC FEET PER MINUTE

D = CLEAN OUT

B = DRY BULB

EG = DEGREE

LVG = LEAVING

WATER TEMPERATURE

NMBH = THOUSAND BTUH

NTS = NOT TO SCALE

OA = OUTSIDE AIR

PH = PHASE (ELECTRICAL)

= DIAMETER

= DIAMETER

R = RETURN

RA = RETURN AIR

RG = RETURN GRILLE

= DOWN

= DISHWASHER

= DISHWASHER

= EACH

= ENTERING AIR TEMPERATURE

RA = RETURN AIR

RG = RETURN AIR

RG = RETURN AIR

RG = RETURN AIR REGISTER

RLA = RUNNING LOAD AMPS

RPM = REVOLUTIONS PER MINUTE

SA = SUPPLY AIR

ESP = EXTERNAL STATIC PRESSURE

EWT = ENTERING WATER TEMPERATURE

EXIST'G = EXISTING

F = FAHRENHEIT

FC = FLEXIBLE CONNECTOR

SD = SUPPLY AIR DIFFUSER

SEN = SENSIBLE

SP = STATIC PRESSURE

SR = SUPPLY REGISTER

TA = TRANSFER AIR

TA = TRANSFER AIR

PM = FEET PER MINUTE

PS = FEET PER SECOND

T = TRANSFER REGISTER

TSP = TOTAL STATIC PRESSURE

TYP = TYPICAL

FTR = FIN TUBE RADIATION VAV = VARIABLE AIR VOLUME TERMINAL UNIT
GA = GAGE VD = MANUAL VOLUME DAMPER
HP = HORSEPOWER W = WATT OR WIDE

HWR = HOT WATER RETURN

HWS = HOT WATER SUPPLY

HZ = FREQUENCY (CYCLES PER SECOND)

N = INCH

WB = WET BULB

WC = WATER COLUMN

WG = WATER GAUGE

KH = KITCHEN HOOD

LAT = LATENT OR LEAVING AIR TEMPERATURE

HVAC SPECIFICATIONS

<u>PART 1 — GENERAL</u>

1.01 <u>WORK INCLUDED</u>:

- A. THE WORK UNDER THIS SECTION SHALL INCLUDE THE FURNISHING OF ALL MATERIALS, LABOR, EQUIPMENT AND SUPPLIES AND THE PERFORMANCE OF ALL OPERATIONS TO PROVIDE COMPLETE WORKING SYSTEMS AS INDICATED ON THE CONTRACT DRAWINGS.
- B. FURNISH, SET UP AND MAINTAIN ALL DERRICKS, HOISTING MACHINERY, SCAFFOLDS, STAGING AND PLANKING AS REQUIRED
- 1.02 <u>CODES, ORDINANCES, AND PERMITS</u>: INSTALLATION OF SYSTEMS AND EQUIPMENT PROVIDED UNDER THIS SECTION SHALL BE DONE IN STRICT ACCORDANCE WITH CONNECTICUT DEPARTMENT OF PUBLIC SAFETY CODES, CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION, 2018 CONNECTICUT STATE BUILDING CODE AND TOWN REGULATIONS HAVING JURISDICTION.
- 1.04 RECORD DRAWINGS: FURNISH UPON COMPLETION OF ALL WORK, RECORD DRAWINGS OF THE WORK OF THIS SECTION.
- 1.05 <u>SHOP DRAWINGS</u>: PROVIDE SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL OF ALL EQUIPMENT, MATERIALS SPECIFIED AND AUTOMATIC TEMPERATURE CONTROLS.
- 1.06 <u>OPERATING AND MAINTENANCE INSTRUCTIONS</u>: FURNISH UPON COMPLETION OF ALL WORK, OPERATION AND MAINTENANCE DATA FOR ALL EQUIPMENT PROVIDED UNDER THIS SECTION.
- 1.07 <u>CUTTING AND PATCHING</u>: ALL CUTTING AND PATCHING NECESSARY FOR THE PROPER INSTALLATION OF WORK TO BE PERFORMED UNDER THIS SECTION AND SUBSECTIONS SHALL BE PERFORMED BY THE CONTRACTOR.
- 1.08 <u>SEISMIC RESTRAINT REQUIREMENTS</u>: ALL WORK INDICATED ON THESE DRAWINGS SHALL BE INSTALLED IN ACCORDANCE WITH REQUIREMENTS OF THE 2018 CONNECTICUT STATE BUILDING CODE, AND REFERENCED REQUIREMENTS OF IMC AND NFPA.

PART 2 - PRODUCTS

2.01 SHEET METAL WORK

- A. GALVANIZED SHEET METAL ALL SUPPLY, RETURN, OUTDOOR, AND EXHAUST (SA, RA, OA, EA)
 - 1. ALL DUCTS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA. ALL DUCTWORK SHALL BE GALVANIZED STEEL. SEAL ALL LOW PRESSURE DUCT JOINTS (CLASS B). EXCESS SEALANT MUST BE REMOVED IMMEDIATELY TO PROVIDE A NEAT APPEARANCE.
 - 2. ALL LOW PRESSURE DUCTS SHALL BE FABRICATED FOR 2 INCHES WATER GAUGE PRESSURE.
 - 3. PROVIDE 2" THICK ACOUSTIC LINING FOR ALL RETURN AIR DUCTWORK.

B. GREASE EXHAUST DUCT (KE)

- 1. INTERIOR DUCTWORK SHALL BE CONSTRUCTED OF MINIMUM 16 GAUGE BLACK STEEL OR 18 GAUGE STAINLESS STEEL. ALL EXTERNAL JOINTS AND SEAMS SHALL BE WELDED LIQUID—TIGHT. DUCT CONNECTION TO THE HOOD SHALL BE WELDED LIQUID—TIGHT.
- 2. PROVIDE HORIZONTAL CLEANOUTS IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS MINIMUM EVERY 12 FEET AND AT EACH CHANGE IN DIRECTION.
- 3. PROVIDE GREASE COLLECTOR AT BASE OF VERTICAL RISE TO ROOF EXHAUST FAN IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS.
- 4. DUCTWORK SHALL BE INSTALLED WITH A 1/4:12 (2%) SLOPE IF 75 FEET HORIZONTAL RUN OR LESS; 1:12 (8.3%) SLOPE IF OVER 75 FEET.

C. GREASE DUCT TEST

- 1. PRIOR TO THE USE OR CONCEALMENT OF ANY PORTION OF A GREASE DUCT SYSTEM, A LEAKAGE TEST SHALL BE PERFORMED. DUCTS SHALL BE CONSIDERED TO BE CONCEALED WHERE INSTALLED IN SHAFTS OR COVERED BY COATINGS OR WRAPS THAT PREVENT THE DUCTWORK FROM BEING VISUALLY INSPECTED ON ALL SIDES. THE PERMIT HOLDER SHALL BE RESPONSIBLE TO PROVIDE THE NECESSARY EQUIPMENT AND PERFORM THE GREASE DUCT LEAKAGE TEST. A LIGHT TEST SHALL BE PERFORMED TO DETERMINE THAT ALL WELDED AND BRAZED JOINTS ARE LIQUID TIGHT.
- 2. A LIGHT TEST SHALL BE PERFORMED BY PASSING A LAMP HAVING A POWER RATING OF NOT LESS THAN 100 WATTS THROUGH THE ENTIRE SECTION OF DUCTWORK TO BE TESTED. THE LAMP SHALL BE OPEN SO AS TO EMIT LIGHT EQUALLY IN ALL DIRECTIONS PERPENDICULAR TO THE DUCT WALLS. A TEST SHALL BE PERFORMED FOR THE ENTIRE DUCT SYSTEM, INCLUDING THE HOOD—TO—DUCT CONNECTION. THE DUCT WORK SHALL BE PERMITTED TO BE TESTED IN SECTIONS, PROVIDED THAT EVERY JOINT IS TESTED. FOR LISTED FACTORY—BUILT GREASE DUCTS, THIS TEST SHALL BE LIMITED TO DUCT JOINTS ASSEMBLED IN THE FIELD AND SHALL EXCLUDE FACTORY WELDS.

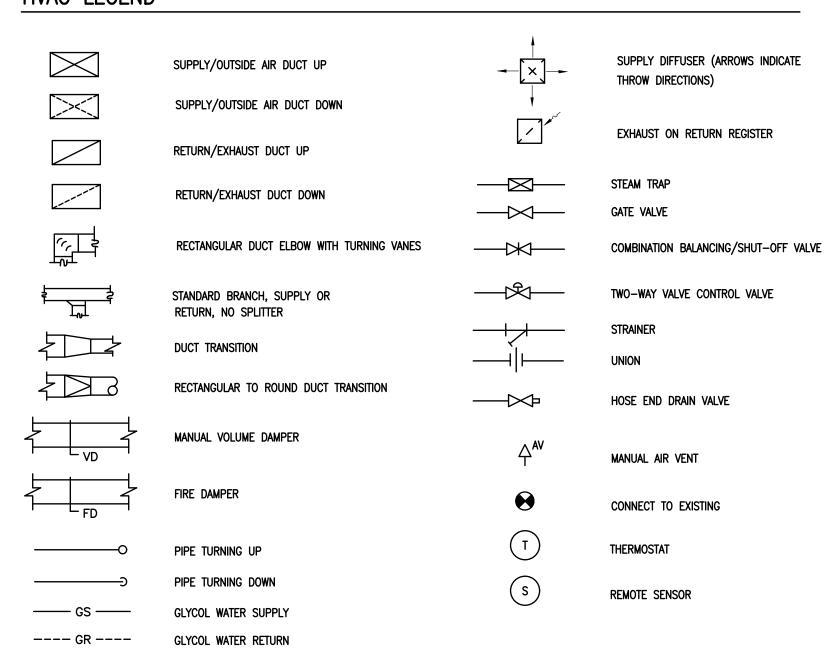
D. DISHWASHER EXHAUST DUCT (DE)

1. DUCTWORK SHALL BE CONSTRUCTED OF 18 GAUGE STAINLESS STEEL. ALL EXTERNAL JOINTS AND SEAMS SHALL BE WELDED LIQUID—TIGHT. DUCT CONNECTION TO THE HOOD SHALL BE WELDED LIQUID—TIGHT

2.02 <u>DUCTWORK ACCESSORIES</u>

- A. MANUAL VOLUME DAMPERS: MANUAL VOLUME DAMPERS SHALL BE PROVIDED WHERE SHOWN ON THE DRAWINGS AND AT EVERY BRANCH TAKE OFF FROM THE MAIN DUCT.
- B. FIRE DAMPERS: PROVIDE AND INSTALL FIRE DAMPERS AT ALL FIRE WALLS AND FLOORS, WHERE REQUIRED BY CODE AND AS INDICATED. FIRE DAMPER CONSTRUCTION AND INSTALLATION SHALL MEET THE REQUIREMENTS OF THE NFPA 90A, AND SHALL BE UL LABELED, TESTED AND INSPECTED IN ACCORDANCE WITH UL 555. AN ACCESS DOOR SHALL BE PROVIDED AT EACH DAMPER TO SERVICE AND INSPECT THE FUSIBLE LINK. PROVIDE FIRE DAMPERS IN EACH APARTMENT UNIT WHERE THE SUPPLY AIR DUCTWORK PENETRATES THE CEILING/FLOOR ASSEMBLY.
- C. FLEXIBLE DUCT SHALL NOT EXCEED 5 FEET IN TOTAL LENGTH AND SHALL HAVE A MINIMUM INSULATING VALUE OF R-5.

HVAC LEGEND



2.03 ACOUSTIC LINING

DIRECTION OF FLOW IN PIPE

CONCENTRIC REDUCER

- A. PROVIDE 2" THICK ACOUSTIC LINING ON ALL RETURN AIR DUCTWORK.
- B. PROVIDE 2" THICK ACOUSTIC LINING ON SUPPLY AIR DUCTWORK FOR 10' AFTER ROOFTOP UNITS.

2.04 AIR OUTLETS

PROVIDE ALL AIR OUTLETS AS SHOWN ON PLANS AND SPECIFIED UNDER THIS SECTION. COLORS SHALL BE SELECTED BY THE ARCHITECT.

- A. CEILING DIFFUSERS: SQUARE CONE DIFFUSER, FIXED AIR PATTERN (3 CONE)
 FURNISH AND INSTALL PRICE MODEL SCD STEEL CEILING DIFFUSERS OF SIZES AND MOUNTING TYPES DESIGNATED BY THE
 PLANS AND AIR DISTRIBUTION SCHEDULE. DIFFUSERS SHALL CONSIST OF A PRECISION FORMED BACK CONE OF ONE PIECE
 SEAMLESS CONSTRUCTION WHICH INCORPORATES A ROUND INLET COLLAR OF SUFFICIENT LENGTH FOR CONNECTING RIGID OR
 FLEXIBLE DUCT. THE DIFFUSER SHALL INTEGRATE WITH ALL DUCT SIZES SHOWN ON THE PLANS WITHOUT AFFECTING THE
 FACE SIZE AND APPEARANCE OF THE UNIT. AN INNER CONE ASSEMBLY SHALL CONSIST OF 3 CONES WHICH DROP BELOW
 THE CEILING PLANE TO ASSURE OPTIMAL VAV AIR DIFFUSION PERFORMANCE. THE INNER CONE ASSEMBLY SHALL BE
 COMPLETELY REMOVABLE FROM THE DIFFUSER FACE TO ALLOW FULL ACCESS TO ANY DAMPERS OR OTHER DUCTWORK
 COMPONENTS LOCATED NEAR THE DIFFUSER NECK. FINISH SHALL BE B12 WHITE POWDER COAT.
- B. CEILING DIFFUSERS (SD):

 FURNISH AND INSTALL PRICE MODEL SMD STEEL, AMD ALUMINUM DIRECTIONAL LOUVERED FACE DIFFUSERS OF THE SIZES AND MOUNTING TYPES SHOWN ON THE PLANS AND AIR DIS—TRIBUTION SCHEDULE. DIFFUSERS SHALL CONSIST OF AN OUTER FRAME ASSEMBLY, WHICH FACILITATES MOUNTING IN THE APPLICATION SHOWN. A COLLAR THAT ALLOWS CONNECTION TO THE SQUARE (OR RECTANGULAR) DUCT SIZE INDICATED SHALL BE AN INTEGRAL PART OF THE FRAME ASSEMBLY. AN INNER CORE ASSEMBLY CONSISTING OF FIXED LOUVERS CAPABLE OF PRODUCING THE AIR FLOW DISCHARGE PATTERN INDICATED ON THE PLANS SHALL BE FULLY REMOVABLE FROM THE INSTALLED DIFFUSER FRAME FOR ACCESS TO ANY DAMPERS OR OTHER DUCTWORK COMPONENTS LOCATED IN OR NEAR THE DIFFUSER NECK. THE INNER CORE ASSEMBLIES SHALL BE IDENTICALLY CON—STRUCTED SO THAT DIRECTIONAL CORE ASSEM—BLIES PROVIDING DIFFERENT AIR FLOW DISCHARGE PATTERNS MAY BE INTERCHANGED BETWEEN FRAMES, PROVIDED THE FRAME DUCT CON—NECTIONS ARE OF THE SAME SIZE. FINISH SHALL BE
- C. RETURN/EXHAUST REGISTERS (RR,ER):

 FURNISH AND INSTALL PRICE MODEL 530 STEEL RETURN GRILLES OF THE SIZES AND MOUNTING TYPES INDICATED ON THE PLANS. GRILLES SHALL BE 45 DEGREE DEFLECTION FIXED LOUVER TYPE WITH BLADES SPACED 3/4" ON CENTER. THE

BLADES SHALL RUN PARALLEL TO THE LONG DIMENSION OF THE GRILLE. THE GRILLE SHALL BE FINISHED IN B12 WHITE

B12 WHITE POWDER COAT. PAINT FINISH SHALL PASS 500 HOURS OF SALT SPRAY EXPOSURE WITH NO MEASURABLE CREEP

IN ACCORDANCE WITH ASTM D1654 AND 1000 HOURS WITH NO RUSTING OR BLISTERING AS PER ASTM D610 AND ASTM

2.05 <u>INSULATION</u>

- B. KITCHEN EXHAUST DUCTWORK
 1. GREASE DUCT SHALL BE INSULATED WITH INSULATION THAT PROVIDES ZERO CLEARANCE AND 2-HR FIRE RATING; TYPICAL OF FYRE WRAP MAX 2.0.
- C. SUPPLY, RETURN, EXHAUST, AND OUTDOOR AIR DUCTWORK AND DISHWASHER EXHAUST DUCTWORK

 1. INSULATE SUPPLY, RETURN, EXHAUST, OUTDOOR AIR DUCTWORK AND DISHWASHER EXHAUST DUCTWORK WITH 2" THICK FIBERGLASS DUCT WRAP WITH FOIL FACE. INSULATION VALUE SHALL BE A MINIMUM OF R-6.0.
- D. RETURN DUCTWORK

POWDER COAT.

- 1. PROVIDE 2" THICK ACOUSTIC LINING ON ALL RETURN AIR DUCTWORK.
- E. REFRIGERANT PIPE
- 1. INSULATE REFRIGERANT PIPE WITH 1" WALL THICKNESS ELASTOMERIC PIPE INSULATION.

2.06 EQUIPMENT

A. PROVIDE ALL EQUIPMENT WITH ACCESSORIES AS SCHEDULED.

2.07 AUTOMATIC TEMPERATURE CONTROL

- A. PROVIDE CONTROL COMPONENTS AND LOW VOLTAGE WIRING FOR EACH SYSTEM AS REQUIRED FOR THE SEQUENCE OF OPERATION INDICATED. PROVIDE ALL CONTROL COMPONENTS FOR NEW SEQUENCES OF CONTROL INCLUDING REQUIRED INTERCONNECTING WIRING AND APPURTENANCES TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.
- B. PROVIDE AND INSTALL A CENTRAL CONTROLLER EQUAL TO TRANE TRACER SC TO COMMUNICATE WITH ALL TEMPERATURE SENSORS AND UNITARY CONTROLLERS. THE CONTROLLER SHALL BE AN OPEN PROTOCOL WITH BACNET AND LONWORKS COMPATIBILITY
- C. THE CONTROL SYSTEM SHALL BE WEB-ENABLED AND HAVE THE ABILITY TO VIEW THE SPACE TEMPERATURES AS WELL AS PROGRAM EACH ZONE TEMPERATURE AND SCHEDULE SEPARATELY FROM ANY DEVICE WITH A WEB BROWSER.
- D. PROVIDE AND INSTALL A SPACE MOUNTED SENSOR FOR EACH ZONE AS INDICATED ON THE PLANS. THE SPACE SENSORS SHALL HAVE THE ABILITY TO BE HARD-WIRED OR WIRELESS.

PART 3 - EXECUTION

3.01 <u>GENERAL</u>: INSTALL ALL ITEMS SPECIFIED UNDER PART 2 — PRODUCTS, ACCORDING TO THE APPLICABLE MANUFACTURER'S RECOMMENDATIONS AND SHOP DRAWINGS, THE DETAILS SHOWN ON THE DRAWINGS AND AS SPECIFIED UNDER THIS SECTION. PROVIDE ALL REQUIRED HANGERS AND SUPPORTS.

HVAC GENERAL NOTES

TO ELIMINATE CONFLICTS.

- 1. ALL PIPING AND DUCTWORK SHOWN IS DIAGRAMMATIC ONLY. DETERMINE THE EXACT LOCATION IN THE FIELD.
- 2. REFER TO ARCHITECTURAL DRAWINGS FOR NEW CONSTRUCTION DETAILS.
 - REVIEW ALL DRAWINGS BEFORE STARTING WORK TO BECOME FAMILIAR WITH
 THE DETAILS OF CONSTRUCTION, AND COORDINATE WITH OTHER TRADES
- 4. OBTAIN ALL REQUIRED PERMITS AND PAY ALL FEES RELATED TO SAME.
- PROVIDE ALL NECESSARY PIPING, EQUIPMENT AND SUPPORTS AS WELL AS ANY ADDITIONAL EQUIPMENT, ETC. NOT SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS BUT NECESSARY TO PROVIDE COMPLETE AND WORKABLE SYSTEMS.
- 6. PROVIDE ACCESS TO ALL EQUIPMENT REQUIRING PERIODIC SERVICE AND MAINTENANCE.
- 7. INSTALL ALL WORK IN ACCORDANCE WITH STATE AND LOCAL CODES.
- 8. DO NOT SCALE THESE DRAWINGS. TAKE ALL MEASUREMENTS IN THE FIELD
 IN COORDINATION WITH ALL EQUIPMENT AS APPROVED AND WITH ALL OTHER
 TRADES.
- 9. ALL DUCTWORK SHALL BE INSTALLED ON ACCORDANCE WITH THE LATEST EDITION OF SMACNA.
- 10. ALL ROTATING EQUIPMENT SHALL HAVE FLEXIBLE PIPE ON DUCT CONNECTIONS AND APPROVED VIBRATION ISOLATORS.
- PROVIDE AIRTIGHT ACCESS DOOR FOR INSPECTION OF FIRE DAMPERS, FILTERS, COILS.
- 12. CONTRACTOR SHALL VERIFY DUCT, PIPING AND EQUIPMENT LOCATIONS FOR INTERFERENCES BEFORE INSTALLATION.
- 13. COORDINATE AIR OUTLET AND EQUIPMENT LOCATIONS
 WITH ARCHITECTURAL REFLECTED CEILING PLAN.
- PROVIDE VERTICAL SUPPORTS FOR PIPING AT THE MAXIMUM INTERVALS INDICATED IN THE SPECIFICATIONS.

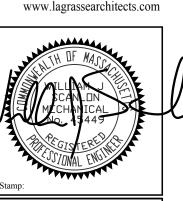
3.02 **EQUIPMENT**

- A. EQUIPMENT SHALL BE INSTALLED COMPLETE WITH ALL REQUIRED HANGERS AND SUPPORTS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- FURNISH AND INSTALL ALL STEEL STRUCTURAL SUPPORT MEMBERS FOR PROPER HANGING AND SUPPORT OF EQUIPMENT. PROVIDE VIBRATION ISOLATION ON ALL HANGERS.
- C. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT CONFORMANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- 3.03 <u>MISCELLANEOUS IRON AND STEEL</u>: PROVIDE STEEL SUPPORTS AND HANGERS REQUIRED TO SUPPORT EQUIPMENT, DUCTWORK, AND OTHER EQUIPMENT OR MATERIALS. SUBMIT DETAILS OF STEEL SUPPORTS AND METHOD OF FABRICATION FOR APPROVAL.
- 3.04 <u>BALANCING</u>: THE HVAC CONTRACTOR SHALL ENGAGE THE SERVICES OF AN INDEPENDENT FIRM TO PERFORM ADJUSTING AND BALANCING OF THE HVAC SYSTEMS (AIR). SYSTEMS SHALL BE ADJUSTED AND BALANCED SO THAT AIR QUANTITIES ARE AS INDICATED ON THE DRAWINGS AND SO THAT THE DISTRIBUTION FROM SUPPLY OUTLETS IS FREE FROM DRAFTS, AND UNIFORM OVER THE FACE OF EACH OUTLET. AFTER COMPLETION OF THE TESTING, BALANCING AND ADJUSTING OF THE AIR SYSTEMS, A BALANCING REPORT SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JD LaGrasse

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ORTSMOUTH, NI

HVAC LEGEND AND SPECIFICATIONS

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| <u> Lara</u> | <u> </u> | <u> FAIV</u> | INF ORMAIION | <i>JUU#4311U04</i> | |
| FAN | | | | | Ī |

| FAN UNIT ND. | TAG | FAN UNIT MODEL # | CFM | ESP. | RPM | H.P. | B.H.P. | ø | VOLT | FLA | DISCHARGE VELOCITY | WEIGHT (LBS.) | SONES |
|--------------------|-----|------------------|------|-------|------|-------|--------|---|------|------|-----------------------|------------------|-------|
| 1 | KEF | USBI24DD-RM | 5116 | 1.750 | 1089 | 5.000 | 3.0540 | 3 | 208 | 15.8 | 1695 FPM | 730 | 23 |
| 3 | DEF | DU30HFA | 600 | 0.350 | 1158 | 0.250 | 0.0810 | 1 | 115 | 3.8 | 297 FPM | 70 | 7.2 |

MUA FAN INFORMATION - Job#4311064

| FAN UNIT ND. | TAG | FAN UNIT MODEL # | BLOWER | HOUSING | MIN CFM | DESIGN CFM | ESP. | RPM | H.P. | B.H.P. | ø | VOLT | FLA | MCA | МПСР | WEIGHT (LBS.) | SONES |
|--------------------|------|------------------|------------|----------|------------|---------------|-------|------|-------|--------|---|------|-----|-------|------|------------------|-------|
| 2 | KMUA | A2-D.500-20D | 20MF-2-MDD | A2-D.500 | 2500 | 4120 | 0.500 | 1560 | 3.000 | 2.2110 | 3 | 208 | 9.5 | 11.9A | 20A | 816 | 15.5 |

GAS FIRED MAKE-UP AIR UNIT(S)

| CHO | <u>rindu</u> | MANE - | OF AIR | UNII(B) | | | |
|--------------------|--------------|---------------|----------------|------------|--------------------------------|----------|-------------------------|
| FAN UNIT ND. | TAG | INPUT BTUs | OUTPUT BTUs | TEMP. RISE | REQUIRED INPUT GAS PRESSURE | GAS TYPE | BURNER EFFICIENCY(%) |
| 2 | KMUA | 324047 | 298123 | 67 deg F | 7 in. w.c 14 in. w.c. | Natural | 92 |

FAN OPTIONS

| <u>F'AN</u> | <u>UP110</u> | <u>NS</u> |
|--------------------|--------------|--|
| FAN UNIT NO. | TAG | OPTION (Qty Descr.) |
| | | 1 - BI24 - Inlet Service Duct Connection. Used to connect to standard 24" Grease Duct or Field Welded Duct. Includes (2) 7" risers bolted to standard inlet riser. |
| ١. | NEE. | 1 - Utility Set Grease Cup |
| 1 | KEF | 1 - BI24 - 24" Discharge Extension. |
| | | 1 - BI - Discharge Orientation Vertical Upper Left - CW Inlet Side. |
| | | 1 - BI24 - Inlet Connection Standard 24" Flanged Grease Duct. |
| | | 1 - AC Interlock Relay - 24VAC Coil |
| | | 1 - Motorized Backdraft Damper for A2-D Housing |
| | | 1 - Low Fire Start |
| | | 1 - Inlet Pressure Gauge, 0-35' |
| | | 1 - Manifold Pressure Gauge, -5 to 15' wc |
| 2 | KMUA | 1 - Insulation Option for VBank filter section |
| | | 1 - DF 2 Indoor Hanging Option - Includes 2 HSA125 Hanging Spring Isolators per Uni-Strut |
| | | 1 - Single Electrical Cabinet LED Lights Used on Modular MUA Units |
| | | 1 - Separate 120V Wiring Package (Required and used only for DCV or Prewire with VFD) - Three Phase Only |
| 3 | DEF | 1 - I 15-BDD Damper |

FAN ACCESSORIES

| | 1 231 V | <u> AUUL</u> L | | <u> </u> | | | | |
|--|--------------------|----------------|---------------|-------------------|-----------------------|------|---------------------|---------------|
| | FAN UNIT NO. | TAG | | EXHAUST | | SUPF | PLY | |
| | | TAU | GREASE CUP | GRAVITY DAMPER | SIDE DISCHARGE | | MOTORIZED DAMPER | WALL MOUNT |
| | 1 | KEF | YES | | | | | |
| | 2 | KMUA | | | YES | | YES | |
| | 3 | DEF | | YES | | | | |

CURB ASSEMBLIES

| N□. | □N FAN | TAG | WEIGHT | ITEM | SIZE |
|-----|-----------|-----|---------|------|--|
| 1 | # 1 | KEF | 31 LBS | Rail | 4.000"W x 60.000"L x 10.000"H Comes as a set of 2. |
| 3 | # 3 | DEE | 20 I BC | Cuch | 19500%/ > 19500% > 22,000%H |

FAN SOUND DATA

| FAN UNIT | TAG | МПТПР | MOTOR RPM - | MOTOR RPM - | | SOUND DATA | | | OCTAVE BAND SOUND DATA | | | | | | | | | |
|-------------|------|---------|-------------|-------------|-----------------|---------------|------------------|-------|------------------------|--------|--------|-------|-------|-------|-------|--|--|--|
| ND. | IAG | MUIUK | | LWA | SONES @ 5 ft | DBA @ 5 ft | DISTANCE (ft) | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz | | | |
| 1 | KEF | Exhaust | 1089 | 85.4 | 23 | 73.9 | 5 | 87.5 | 89.3 | 88.9 | 82.8 | 76.7 | 75 | 69.6 | 61.9 | | | |
| 2 | KMUA | Supply | 1560 | 79 | 15.5 | 67.5 | 5 | 73.3 | 81 | 77.1 | 76.9 | 73.1 | 70.1 | 67.2 | 63.9 | | | |
| 3 | DEF | Exhaust | 1158 | 66.7 | 7.2 | 55.2 | 5 | 66.7 | 72 | 68.6 | 63 | 60.2 | 58.2 | 50.8 | 40.8 | | | |

NOTES:

1. ALL KITCHEN EQUIPMENT TO BE FURNISHED AND INSTALLED BY KITCHEN SUPPLIER.

2. PROVIDE ELECTRICAL DISCONNECTS FOR ALL KITCHEN EQUIPMENT.

| | | | | | FAN | SCHE | DULE | | | | |
|----------|----------------|---------------|---------------|--------------|---------------------|-------------|-------|-------|-----------|---------|---------|
| TAG No. | LOCATION(S) | MANUFACTURER | MODEL NO. | TYPE | | FAN DATA | 1 | E | LECTRICAL | DATA | REMARKS |
| 170 110. | SERVED | (AS STANDARD) | (AS STANDARD) | 1112 | CFM RPM ESP(IN) VOI | | VOLTS | PHASE | HP | NEMPINS | |
| SF-1 | OUTDOOR AIR | GREENHECK | SQ-140-VG | DIRECT DRIVE | 2590 | 1621 | 0.75 | 115 | 1 | 1 | [1] [2] |
| TEF-1 | TOILET EXHAUST | GREENHECK | SQ-95-VG | DIRECT DRIVE | 525 | 1610 | 0.5 | 115 | 1 | 1/6 | [1] [2] |

NOTES:
[1] PROVIDE MOUNTING EQUIPMENT, FILTER SELECTION, VIBRATION ISOLATION AND SPEED CONTROL DIAL.
[2] PROVIDE LOCAL DISCONNECT SWITCH.

| | REGISTER, GRILLE & DIFFUSER SCHEDULE | | | | | | | | | | |
|-----|--------------------------------------|-----------|--------------|---------------|----------|--------|------------------|-----------------------------|-----|---------------------------|---------------------|
| TAG | SERVICE | СҒМ | NECK SIZE | FRAME TYPE | MOUNTING | DAMPER | MATERIAL/FINISH | MANUFACTURER & MODEL NO. | NC | NECK VELOCITY (FPM) | REMARKS |
| SCD | SUPPLY | SEE PLANS | SEE PLANS | RECTANGLE | CEILING | NO | AS PER ARCHITECT | PRICE ASCD | <25 | 500 | [1] [2] [3] [4] [5] |
| SD | SUPPLY | SEE PLANS | SEE PLANS | RECTANGLE | CEILING | NO | AS PER ARCHITECT | PRICE AMD | <25 | 500 | [1] [2] [3] [4] [5] |
| RR | RETURN | SEE PLANS | SEE PLANS | RECTANGLE | CEILING | NO | AS PER ARCHITECT | PRICE 530 | <25 | 500 | [1] [2] [3] [4] [5] |
| ER | EXHAUST | SEE PLANS | SEE PLANS | RECTANGLE | CEILING | NO | AS PER ARCHITECT | PRICE 530 | <25 | 500 | [1] [2] [3] [4] [5] |

NOTES:
[1] COORDINATE MOUNTING REQUIREMENTS WITH ARCHITECTURAL CEILING PLANS.

2] COORDINATE FINISH & COLOR WITH ARCHITECT. PROVIDE FRAME SUITABLE FOR SURFACE MOUNTING.

4] PROVIDE SQUARE TO ROUND TRANSITIONS WHERE NEEDED. [5] PROVIDE 1" THICK FILTERS FOR EXHAUST REGISTERS.

| | | | HVAC F | POWER EQU | IPMENT SCHEDULI | E | | | |
|-----|------------------------|-------------------|------------------|---------------|-----------------------|--------------------------|-------|----------|-----|
| TAG | DESCRIPTION | LOCATION | MANUFACTURER (AS | MODEL No. | SERVING EQUIPMENT TAG | FIRE ALARM CONNECTION | ELECT | TRICAL D | ATA |
| | DESCRIPTION | STANDARD) (AS STA | | (AS STANDARD) | | CONNECTION | VOLTS | PHASE | HZ |
| DSD | DUCT SMOKE DETECTOR | REFER TO DWGS | - | - | MAU-1 | YES | 24 | _ | _ |

| ٨ID | DAI ANCE | CCHEDIII | _ |
|-----|----------|----------|---|
| AIR | BALANCE | 20HEDUL | |

| E.FCU-5 + 400 TOTAL +1100 TOTAL - 225 MAU-1 +2500 E.FCU-1 + 300 E.FCU-2 + 300 TOTAL -3216 | | DINING AIR BALANCE E.FCU-6 + 320 TOTAL + 320 | PDR AIR BALANCE E.FCU-7 + 370 TOTAL + 370 | BACK OF HOUSE AIR BALANCE TEF-1 - 525 E.FCU-8 + 300 TOTAL - 225 | E.FCU-2 + 300 | TOTAL AIR BALANCE LOUNGE/BAR +1100 DINING + 325 PDR + 370 BACK OF HOUSE - 225 KITCHEN -2616 TOTAL -1046 |
|---|--|--|---|---|---------------|---|
|---|--|--|---|---|---------------|---|

| | EXISTING FAN COIL UNIT SCHEDULE | | | | | | | | | | | | | | |
|---------|---------------------------------|---------------|-------------------|-----------------|-----------------|-------------|-----------------------|----------------|------|-------|----|-------------------|-------------|-------|---------------------|
| TAO No | MANUFACTURER | MODEL NO. | 7,05 | NOM. COOLING | COOLING HEATING | | 25.112.12 | | | | | | | | |
| TAG No. | (AS STANDARD) | (AS STANDARD) | TYPE | (MBH) | (MBH) | OA (CFM) | NOM. AIRFLOW (CFM) | ESP (IN WG) | VOLT | PHASE | HZ | RATED AMPS (A) | MOCP (A) | (LBS) | REMARKS |
| E.FCU-1 | LG | ARNU483BRA2 | HORIZONTAL DUCTED | 48.1 | 51.2 | 300 | 1600 | 0.8 | 208 | 1 | 60 | 1.62 | 15 | _ | [1] [2] [3] [4] [5] |
| E.FCU-2 | LG | ARNU483BRA2 | HORIZONTAL DUCTED | 48.1 | 51.2 | 300 | 1600 | 0.8 | 208 | 1 | 60 | 1.62 | 15 | _ | [1] [2] [3] [4] [5] |
| E.FCU-3 | LG | ARNU363BRA2 | HORIZONTAL DUCTED | 36.2 | 40.6 | 300 | 1200 | 0.8 | 208 | 1 | 60 | 1.12 | 15 | _ | [1] [2] [3] [4] [5] |
| E.FCU-4 | LG | ARNU483BRA2 | HORIZONTAL DUCTED | 48.1 | 51.2 | 400 | 1600 | 0.8 | 208 | 1 | 60 | 1.62 | 15 | _ | [1] [2] [3] [4] [5] |
| E.FCU-5 | LG | ARNU483BRA2 | HORIZONTAL DUCTED | 48.1 | 51.2 | 400 | 1600 | 0.8 | 208 | 1 | 60 | 1.62 | 15 | _ | [1] [2] [3] [4] [5] |
| E.FCU-6 | LG | ARNU483BRA2 | HORIZONTAL DUCTED | 48.1 | 51.2 | 320 | 1600 | 0.8 | 208 | 1 | 60 | 1.62 | 15 | _ | [1] [2] [3] [4] [5] |
| E.FCU-7 | LG | ARNU483BRA2 | HORIZONTAL DUCTED | 48.1 | 51.2 | 370 | 1600 | 0.8 | 208 | 1 | 60 | 1.62 | 15 | - | [1] [2] [3] [4] [5] |
| E.FCU-8 | LG | ARNU363BRA2 | HORIZONTAL DUCTED | 36.2 | 40.6 | 300 | 1200 | 0.8 | 208 | 1 | 60 | 1.12 | 15 | - | [1] [2] [3] [4] [5] |

NOTES:

[1] UNIT IS EXISTING TO REMAIN. COORDINATE WITH EC FOR SERVICE UTILITY CONNECTION REQUIREMENT.

[1] UNIT IS EXISTING TO REMAIN. COORDINATE WITH EC FOR SERVICE UTILITY CONNECTION REQUIREMENT. [3] UNIT VENTILATION AIR TO BE RE-BALANCED TO THE AIRFLOW LISTED ON THIS SCHEDULE.

[4] VERIFY EXACT UNIT LOCATION IN THE FIELD.
[5] PROVIDE LOCAL DISCONNECT SWITCH.

EXISTING AIR SOURCE HEAT PUMP SCHEDULE

| TAC No | MANUFACTURER | | MODEL NO. | | CAPACITY DATA | | ELECRICAL DATA | | | | WGT. | |
|--------|---------------|--------------|---------------|------------|---------------|---------------|----------------|-------|------------|-------------|---------------|-------------|
| TAG No | (AS STANDARD) | UNITS SERVED | (AS STANDARD) | TYPE | COOL (MBH) | HEAT (MBH) | VOLT | PHASE | MCA (A) | MOCP (A) | (LBS) REMARKS | |
| HP-1 | LG | E.FCU-1,2 | ARUN121BT3 | AIR COOLED | 120 | 135 | 208 | 3 | 44.1 | 60 | 800 | [1] [2] [3] |
| HP-2 | LG | E.FCU-3,4,5 | ARUN144BT3 | AIR COOLED | 144 | 162 | 208 | 3 | 49.9 | 70 | 800 | [1] [2] [3] |
| HP-3 | LG | E.FCU-6,7,8 | ARUN144BT3 | AIR COOLED | 17.6 | 21.6 | 208 | 3 | 49.9 | 70 | 800 | [1] [2] [3] |

NOTES:
[1] UNIT IS EXISTING TO REMAIN. COORDINATE WITH EC FOR SERVICE UTILITY CONNECTION REQUIREMENT.
[2] COORDINATE ALL SYSTEM ELECTRICAL REQUIREMENTS WITH EC PRIOR TO REALLOCATION IF REQUIRED.
[3] PROVIDE LOCAL DISCONNECT SWITCH.

| | | | | EXIS | TING | ELEC | TRIC | HEATER | SCHEDULE |
|---------|------------------------|---------------|----------|----------|-----------------|-------|------|------------|----------|
| TAG No. | MANUFACTURER MODEL No. | | ELECTRIC | CAPACITY | ELECTRICAL DATA | | | DIMENSIONS | REMARKS |
| IAG NO. | (AS STANDARD) | (AS STANDARD) | МВН | KW | VOLTS | PHASE | AMP | DIMENSIONS | REMARKS |
| E.EH-1 | QMARK | MUH03-81 | 10.2 | 3.0 | 208 | 1 | 14.5 | - | [1] [2] |

NOTES:
[1] UNIT IS EXISTING TO REMAIN, COORDINATE WITH EC FOR SERVICE UTILITY ELECTRICAL REQUIREMENT.
[2] PROVIDE INTEGRAL THERMOSTAT, MOUNTING EQUIPMENT.
[3] PROVIDE LOCAL DISCONNECT SWITCH.

| | PIP | E MATERIAL TABLE |
|---------------------------------|-----------------|------------------|
| SERVICE | LOCATION | PIPING |
| REFRIGERANT PIPING RLL & RLS | ABOVE GROUND | COPPER - ARC |
| CONDENSATE DRAIN PIPING CD | . DOTE ON ON IN | TYPE 'L' COPPER |

| | | PIPE INSULATION T | ABLE | | | |
|-----------------------|-----------------|--------------------|--------|------------|--------------------------------|--------------------|
| CEDVICE /LOCATION | | FITTING INSULATION | | | LL THICKNESS (INCH | ES) |
| SERVICE/LOCATION | INSULATION TYPE | TYPE | ø < 1" | ø < 1-1/2" | PE DIA. (INCHES) 1-1/2"< ø <4" | ø > 4 ¹ |
| REFRIGERANT PIPING | ELASTOMERIC | ELASTOMERIC | 1" | 1" | 1-1/2" | 1-1/2* |
| CONDENSATE PIPING | ELASTOMERIC | ELASTOMERIC | 3/4" | 3/4" | 3/4" | 3/4" |

| DUCT INSUL | ATION TABLE |
|---|---|
| SERVICE/LOCATION | INSULATION TYPE |
| SUPPLY, RETURN & OUTSIDE AIR DUCT INSULATION (WITHIN BUILDING ENVELOPE) | 2" FIBERGLASS DUXT WRAP WITH FSK FACING MIN. R-6 |
| EXHAUST DUCT INSULATION (BETWEEN DISCHARGE AND DAMPER) | NONE |
| KITCHEN EXHAUST DUCT INSULATION | FYRE WRAP -2HR RATED, ZERO CLEARANCE |

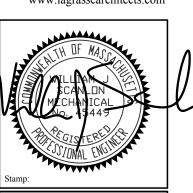
| | | | | ELECT | RIC V | WALL | HEAT | ER SCH | HEDULE |
|---------|------------------------------|--|-----------------------------|---------|-------|-----------|------|------------|---------|
| TAG No. | C No. MANUFACTURER MODEL No. | | MODEL No. ELECTRIC CAPACITY | | ELE | CTRICAL D | ATA | DIMENSIONS | DEMARKS |
| IAG NO. | (AS STANDARD) | (AS STANDARD) (AS STANDARD) MBH KW VOLTS PHASE AMP | DIMENSIONS | REMARKS | | | | | |
| EWH-1 | QMARK | AWH4408F | 6.8 | 2.0 | 208 | 1 | 9.6 | _ | [1] [2] |
| NATEO | • | | • | | | | | | |

NOTES:
[1] UNIT IS EXISTING TO REMAIN, COORDINATE WITH EC FOR SERVICE UTILITY ELECTRICAL REQUIREMENT.
[2] PROVIDE INTEGRAL THERMOSTAT, MOUNTING EQUIPMENT.

[3] PROVIDE LOCAL DISCONNECT SWITCH.

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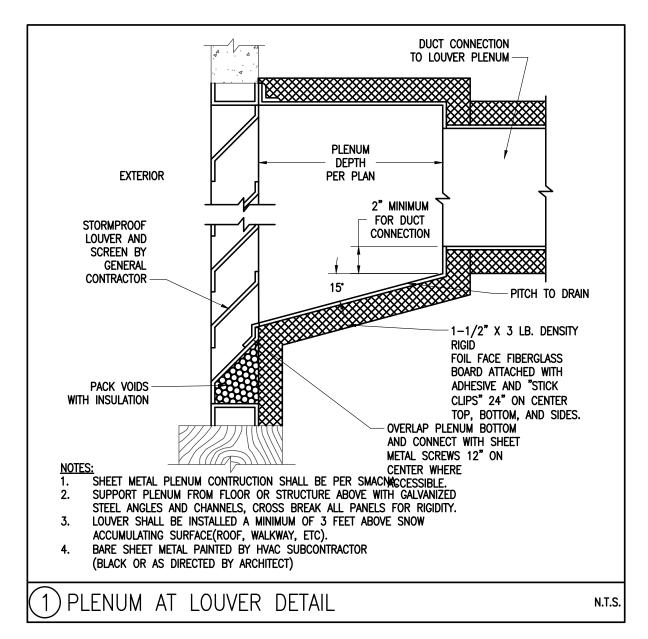
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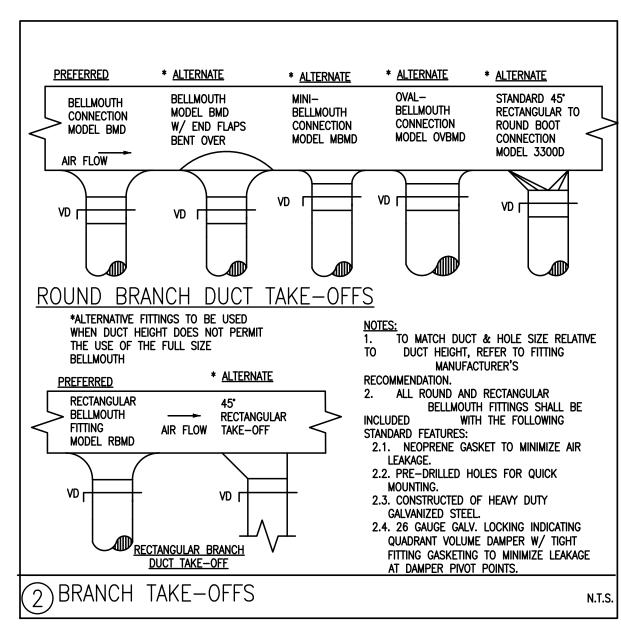


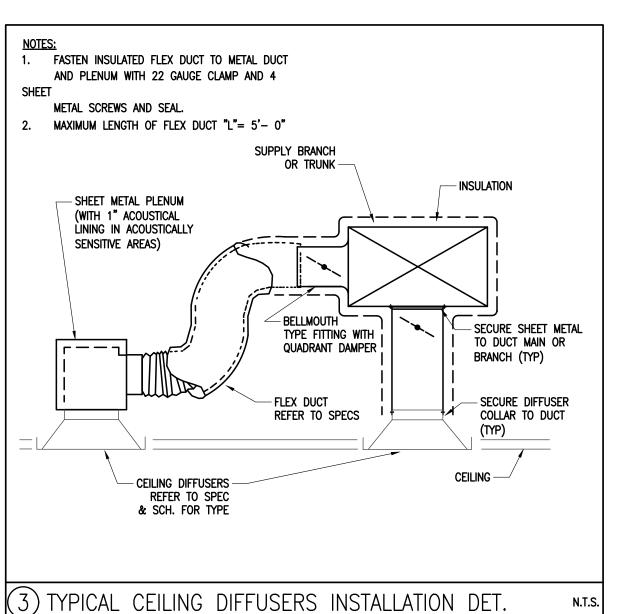
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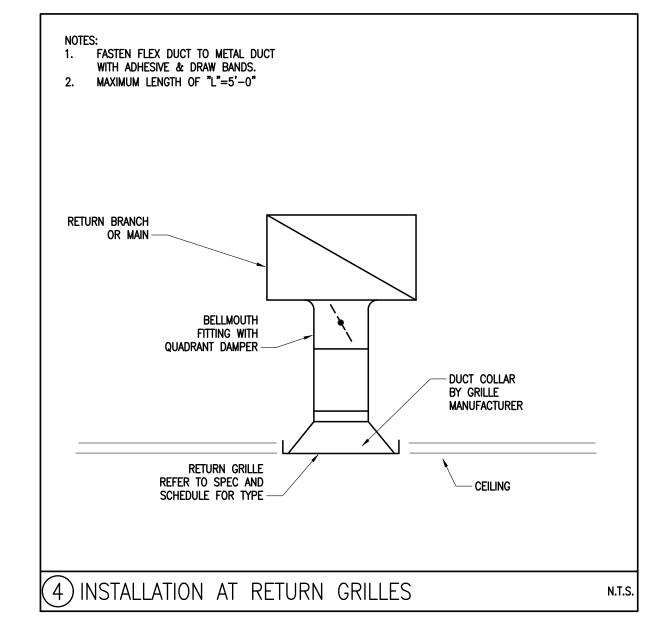
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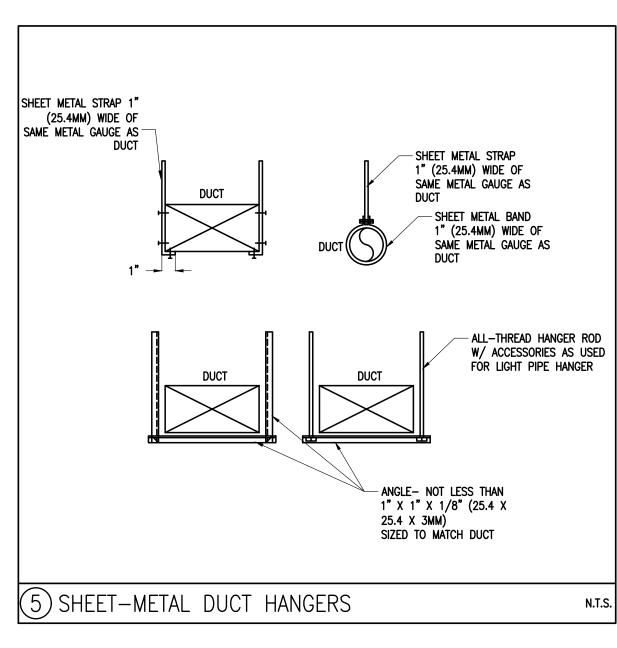
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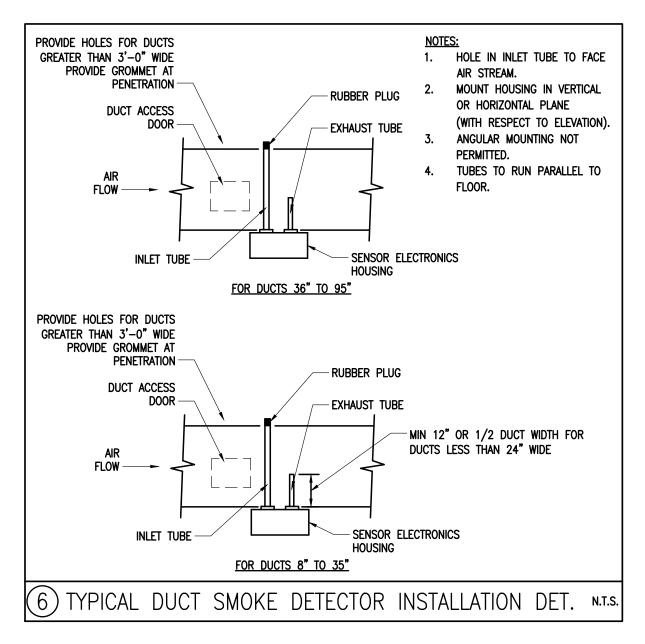


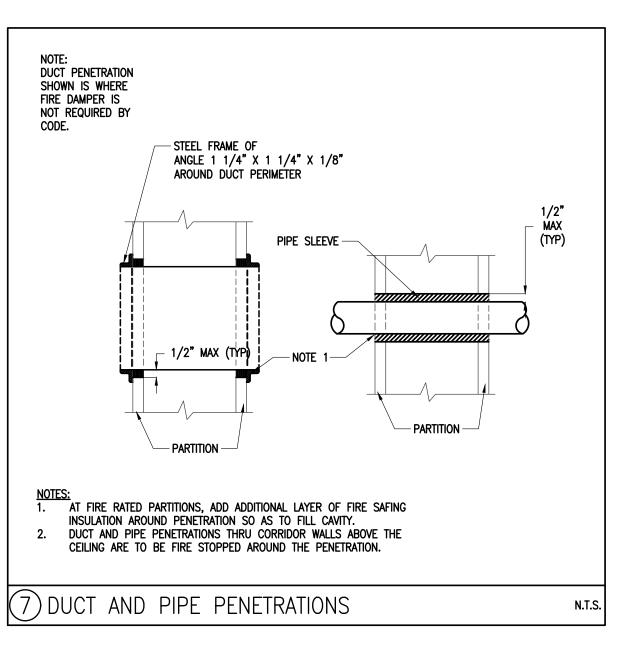


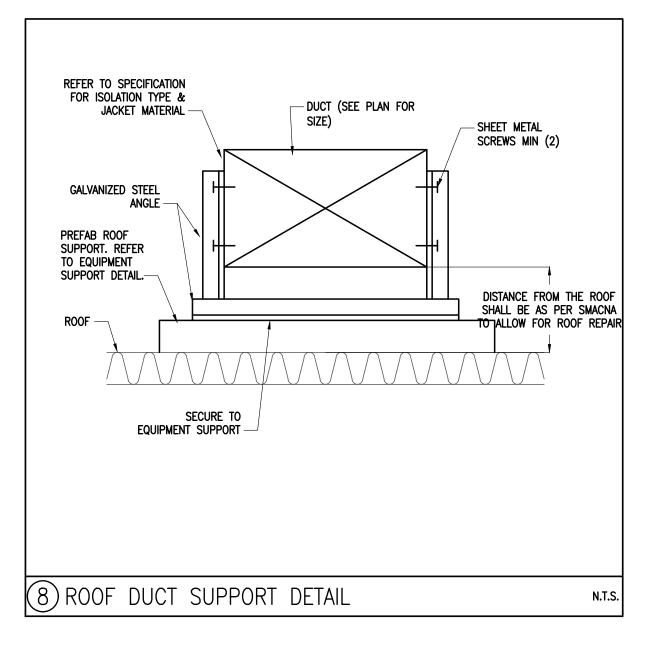


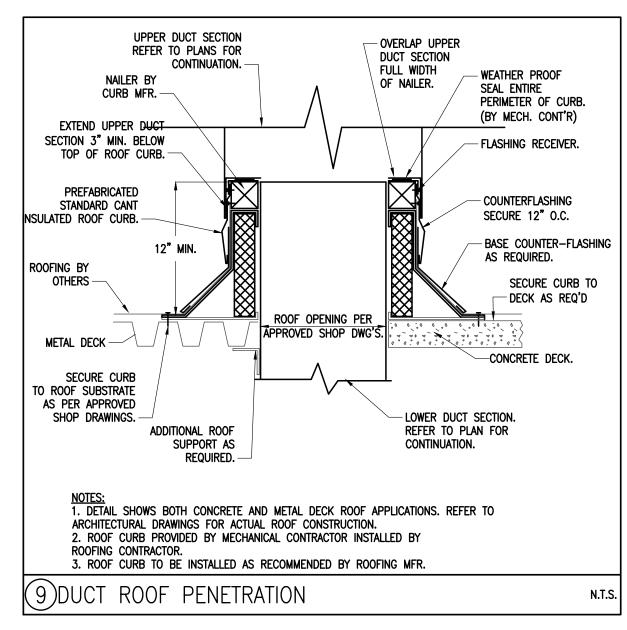


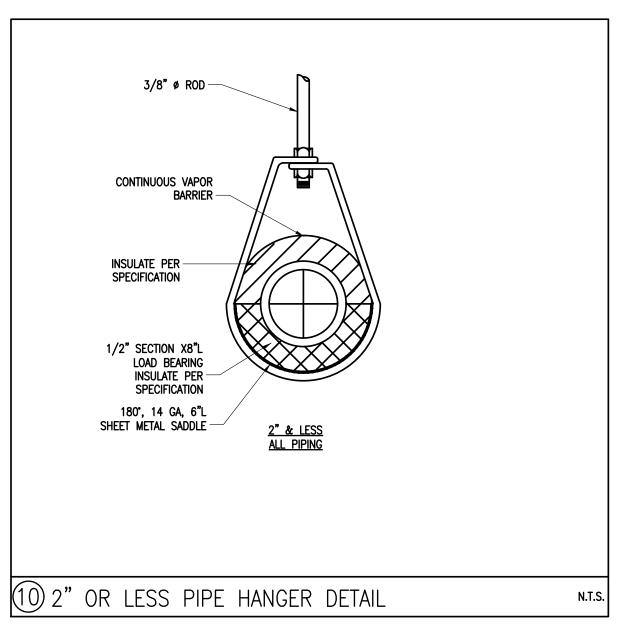


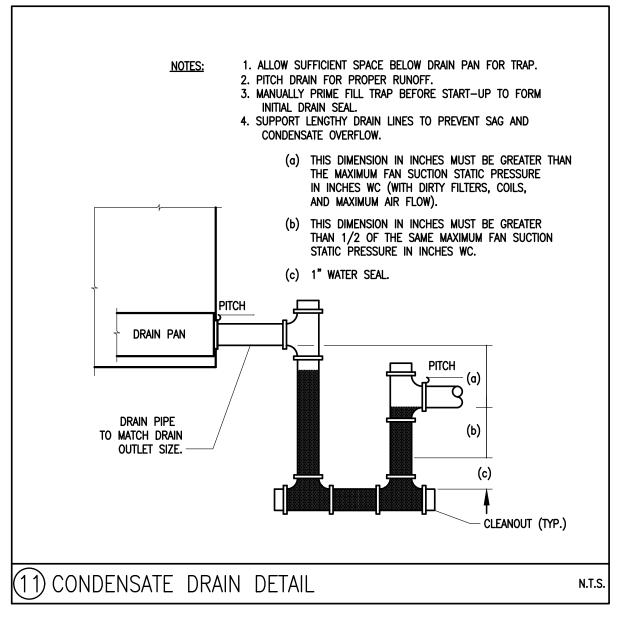


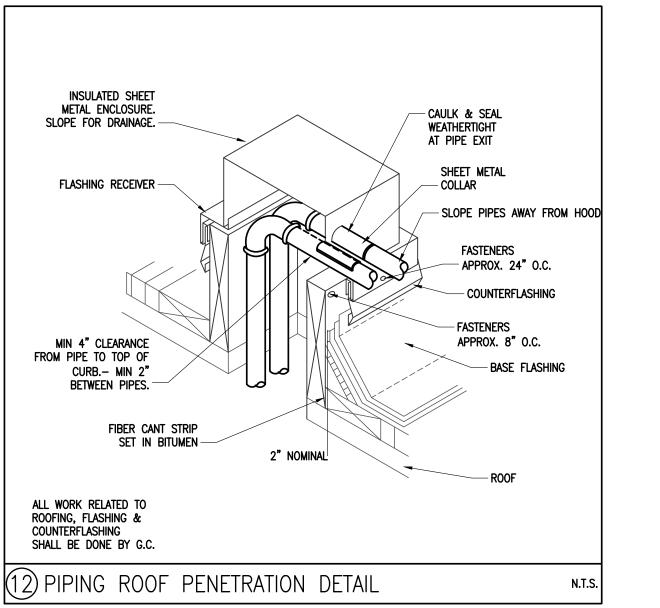






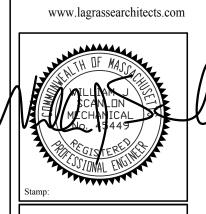


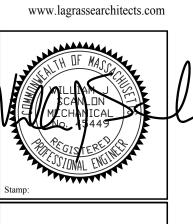






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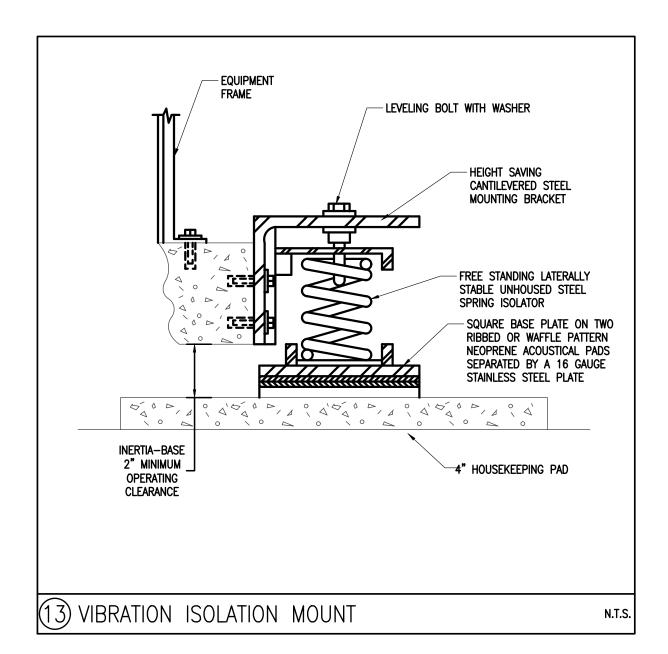
10 GRILL 'SMOUTH, $\overline{}$

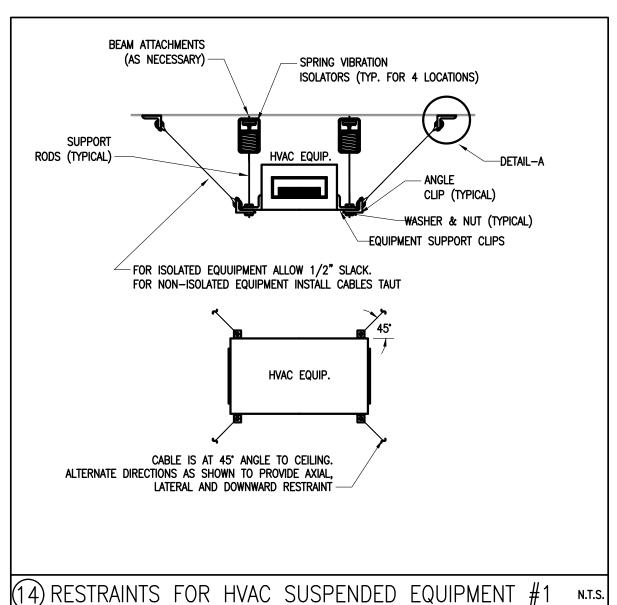
HVAC DETAIL

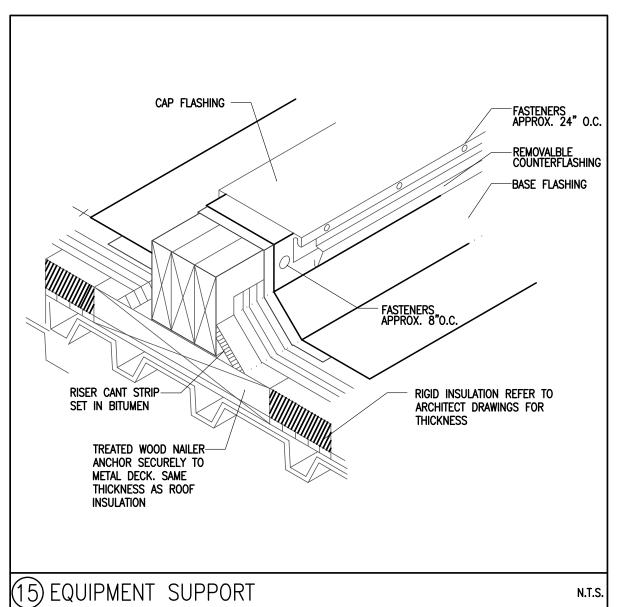
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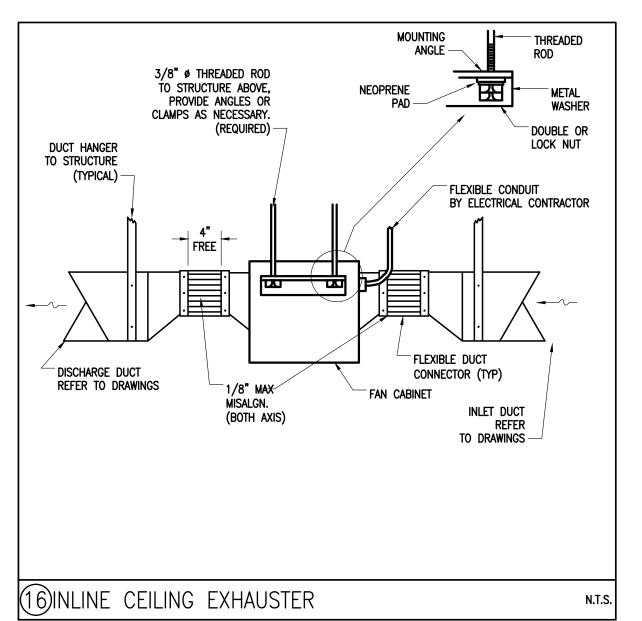
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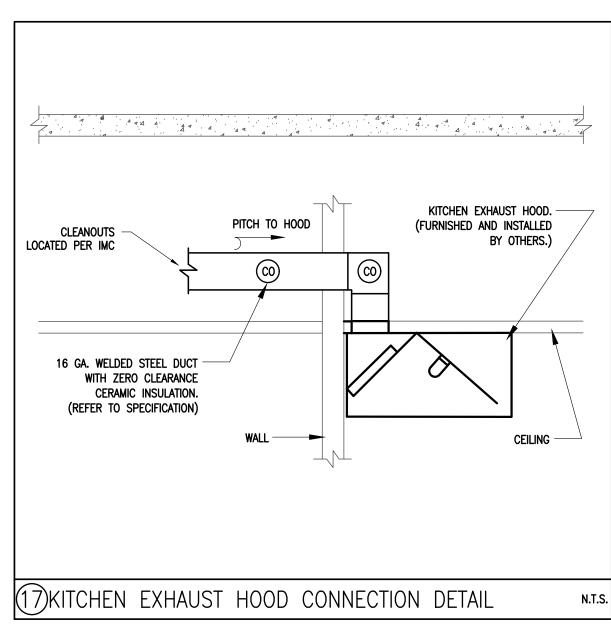
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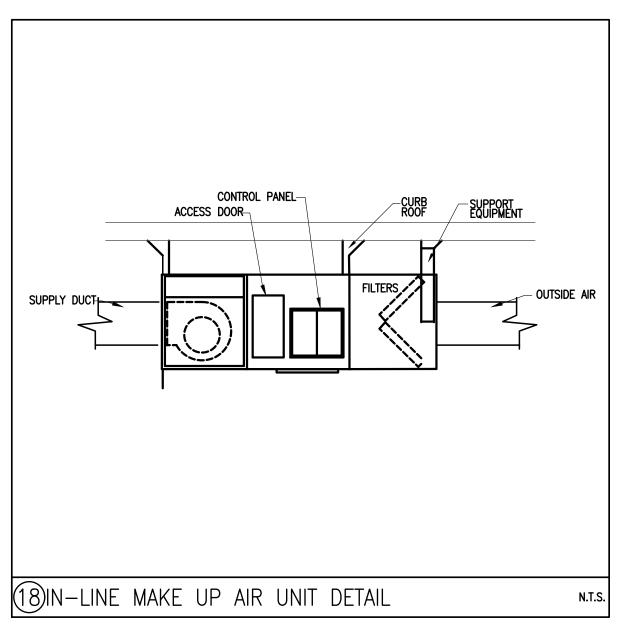


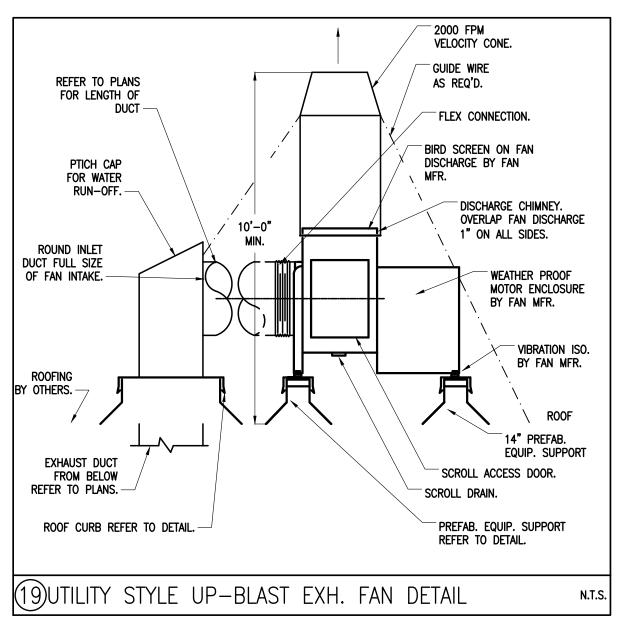


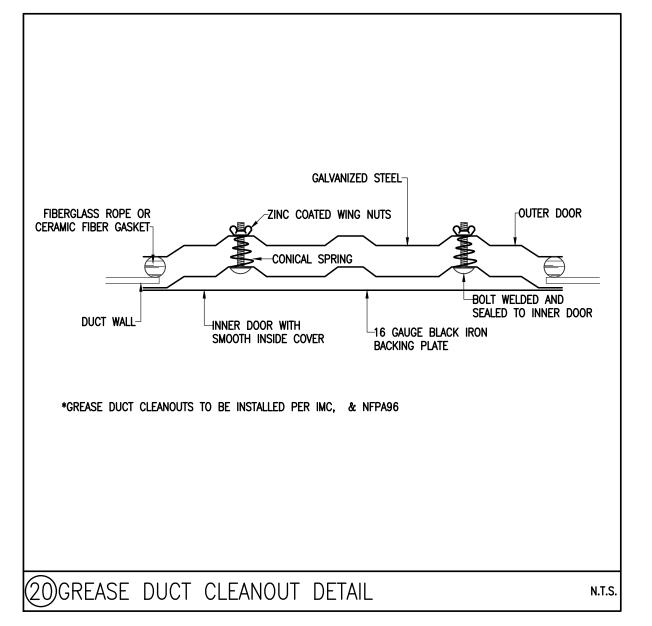


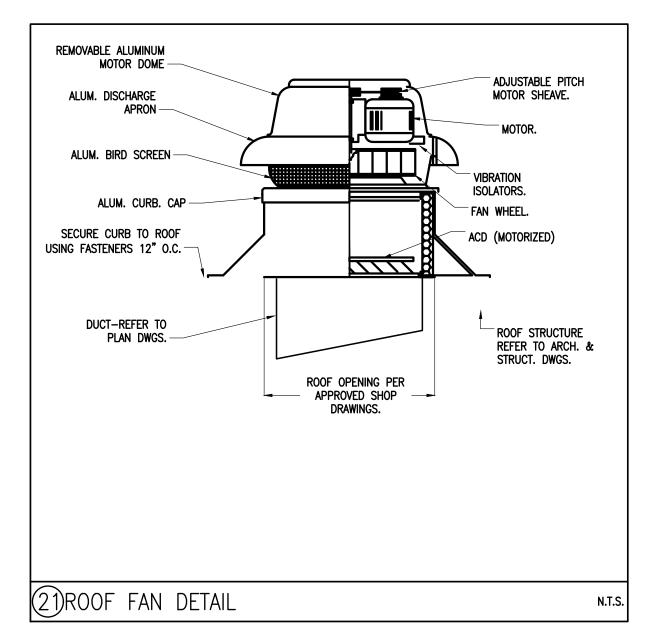


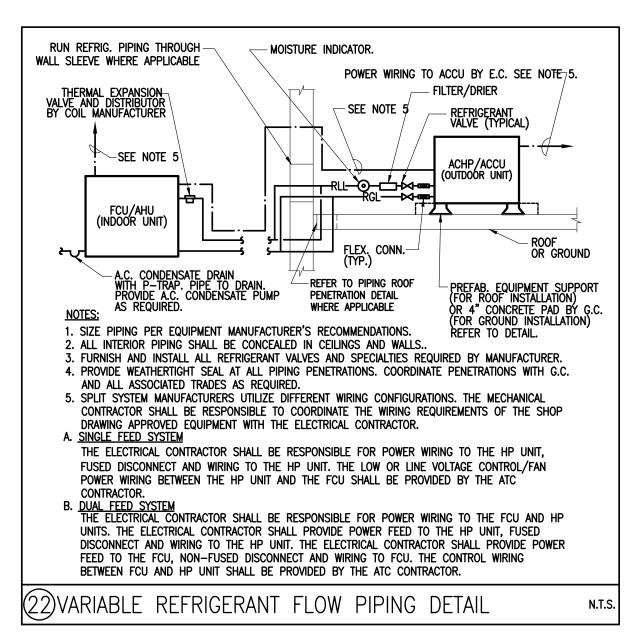














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HMAC*ELECTRICAL*PLUMBING*FIREP

PORTSMOUTH, N

HVAC DETAILS

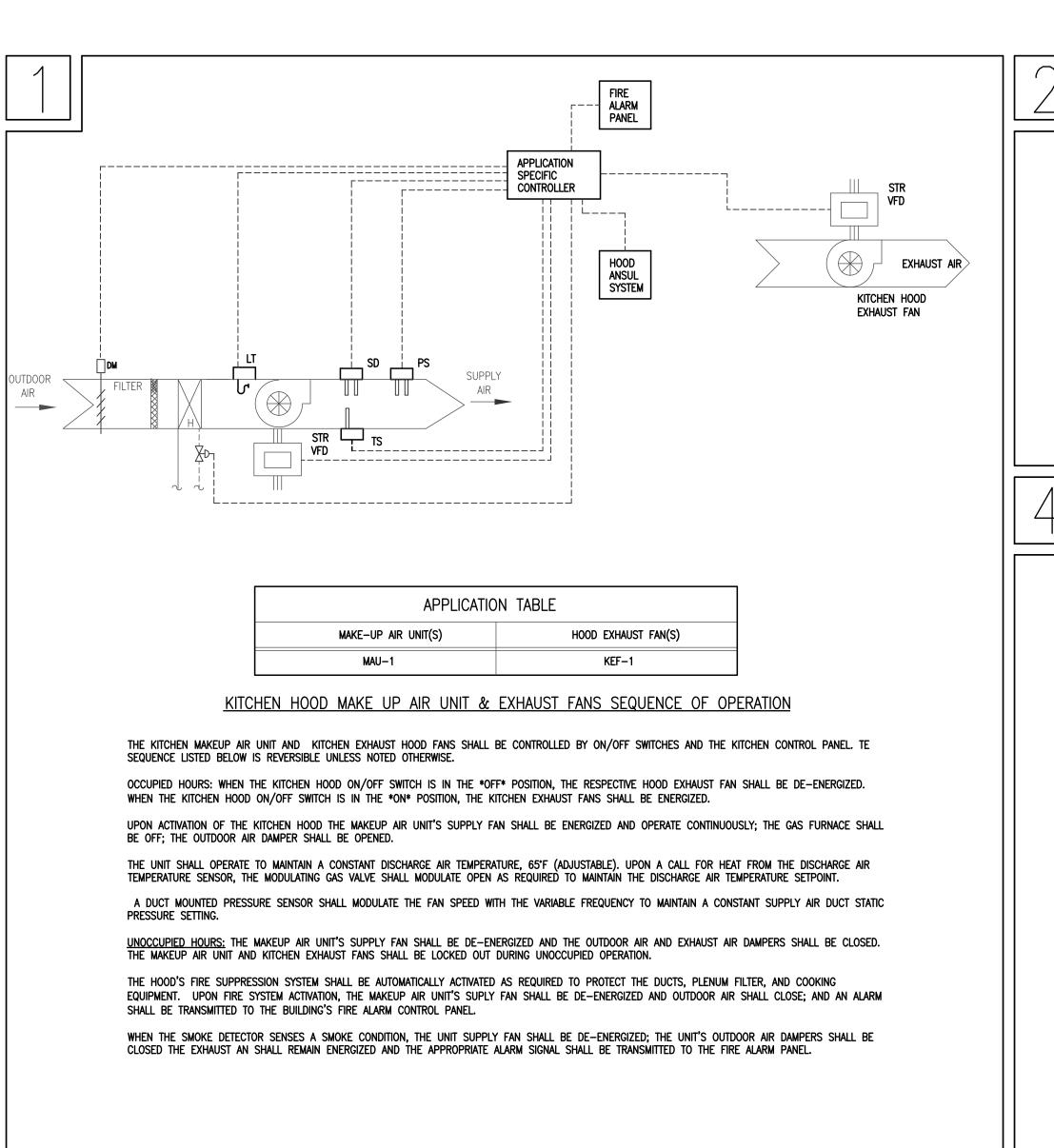
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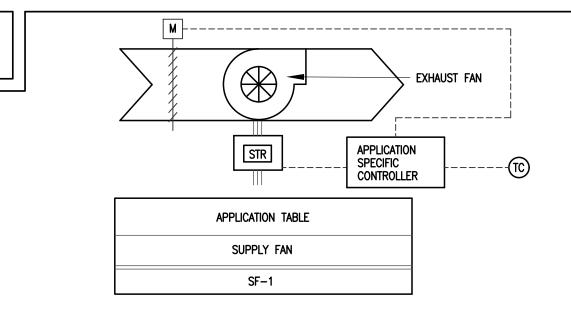
H004



CONTROLLER APPLICATION TABLE TOILET EXHAUST FAN

BATHROOM TOILET EXHAUST FAN SEQUENCE OF OPERATION THE BUILDING TOILET EXHAUST FAN SHALL BE CONTROLLED THROUGH AN APPLICATION SPECIFIC CONTROLLER. THE SEQUENCE LISTED BELOW SHALL BE REVERSIBLE UNLESS NOTED OTHERWISE.

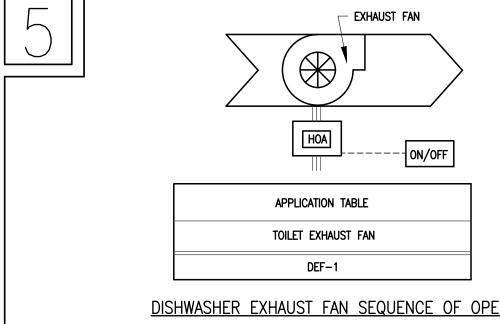
DURING OCCUPIED HOURS, THE EXHAUST FAN SHALL BE ENERGIZED AND RUN CONTINUOUSLY. DURING UNOCCUPIED HOURS, THE EXHAUST FAN SHALL BE DE-ENERGIZED.



OUTDOOR AIR SUPPLY FAN SEQUENCE OF OPERATION

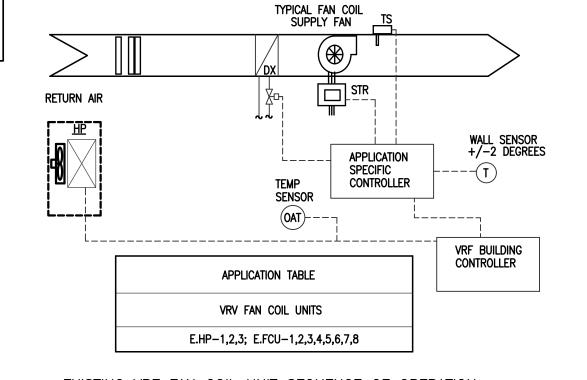
THE OUTDOOR AIR SUPPLY FAN SHALL BE CONTROLLED THROUGH A TIME CLOCK.

DURING OCCUPIED HOURS, THE MOTORIZED DAMPER SHALL OPEN, AND THE SUPPLY FAN SHALL BE ENERGIZED AND RUN CONTINUOUSLY. DURING UNOCCUPIED HOURS, THE SUPPLY FAN SHALL BE DE-ENERGIZED, AND THE MOTORIZED



DISHWASHER EXHAUST FAN SEQUENCE OF OPERATION

THE DISHWASHER EXHAUST FAN SHALL BE CONTROLLED BY THE DISHWASHER "ON/OFF" SWITCH. WHEN THE SWITCH IS IN THE "ON" POSITION, THE DISHWASHER EXHAUST FAN SHALL BE ENERGIZED. WHEN THE SWITCH IS IN THE "OFF" POSITION, THE DISHWASHER EXHAUST FAN SHALL BE DEENERGIZED.



EXISTING VRF FAN COIL UNIT SEQUENCE OF OPERATION

THE INDOOR UNITS UNITS SHALL BE OPERATED THROUGH SPACE THERMOSTAT AND MASTER SYSTEM CONTROLLER. THE SEQUENCE LISTED BELOW IS REVERSIBLE UNLESS NOTED

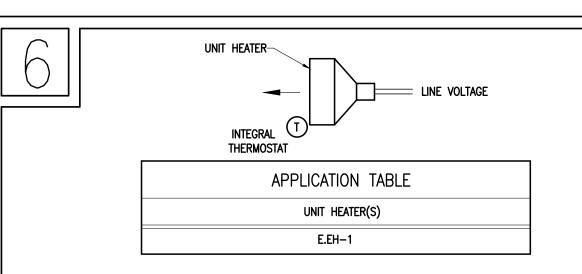
THE UNIT'S SUPPLY FAN SHALL BE ENERGIZED AND OPERATE CONTINUOUSLY AT LOW SPEED.

HEATING MODE:

UPON A CALL FOR HEATING FROM THE SPACE THERMOSTAT THE UNIT SHALL OPERATE MAINTAIN SPACE TEMPERATURE SET POINT 70F(ADJ.) UPON CONTINUED CALL FOR HEAT THE UNIT SUPPLY FAN SHALL INCREMENTALLY INCRÉASE SPEED TO THE HIGH SETTING TO MAINTAIN SPACE TEMPERATURE SET POINT.

COOLING MODE:

UPON A CALL FOR COOLING FROM THE SPACE THERMOSTAT THE UNIT SHALL OPERATE TO MAINTAIN SPACE TEMPERATURE SET POINT 75F(ADJ.) UPON CONTINUED CALL FOR COOLING THE UNIT SUPPLY FAN SHALL INCREMENTALLY INCREASE SPEED TO THE HIGH SETTING TO MAINTAIN SPACE TEMPERATURE SET POINT.

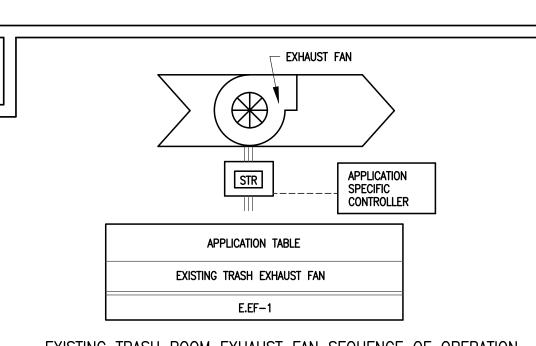


ELECTRIC WALL HEATER SEQUENCE OF OPERATION

ELECTRIC HEATERS SHALL BE CONTROLLED THROUGH INTEGRAL THERMOSTAT. THE SEQUENCE LISTED BELOW IS REVERSIBLE UNLESS NOTED OTHERWISE.

HEATING MODE:

UPON SENSING SPACE TEMPERATURE BELOW SET POINT OF 60°F THE UNIT FAN AND HEATING ELEMENT SHALL ENERGIZE AND OPERATE TO MAINTAIN SET POINT. UPON SATISFYING CALL FOR HEAT, HEATING ELEMENT SHALL DE-ENERGIZE AND AFTER SHORT DELAY FAN SHALL DE-ENERGIZE.



EXISTING TRASH ROOM EXHAUST FAN SEQUENCE OF OPERATION

THE BUILDING TOILET EXHAUST FAN SHALL BE CONTROLLED THROUGH AN APPLICATION SPECIFIC CONTROLLER. THE SEQUENCE LISTED BELOW SHALL BE REVERSIBLE UNLESS NOTED OTHERWISE.

DURING OCCUPIED HOURS, THE EXHAUST FAN SHALL BE ENERGIZED AND RUN CONTINUOUSLY. DURING UNOCCUPIED HOURS, THE EXHAUST FAN SHALL BE DE-ENERGIZED.

HVAC SEQUENCES OF OPERATION

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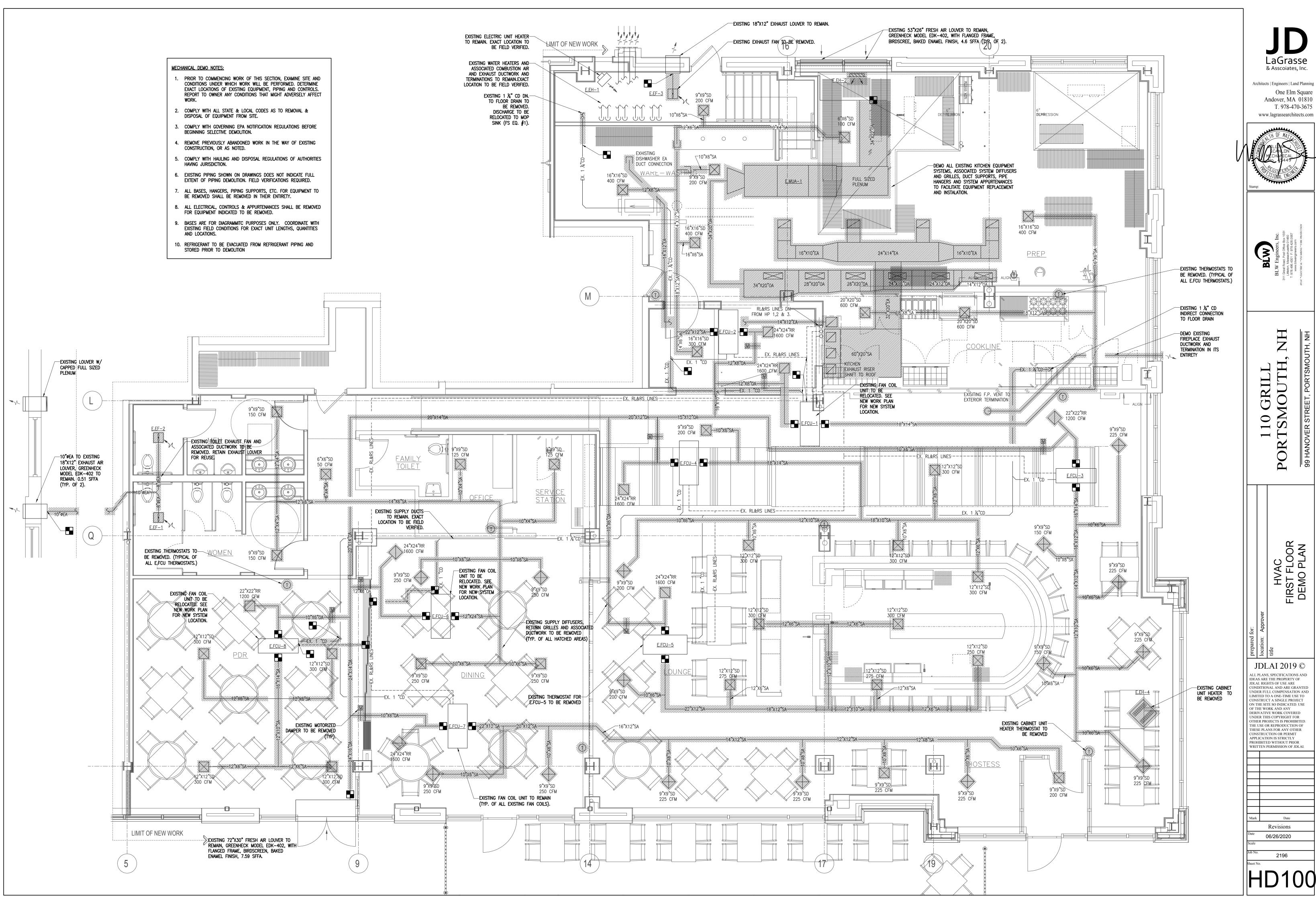
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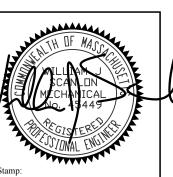
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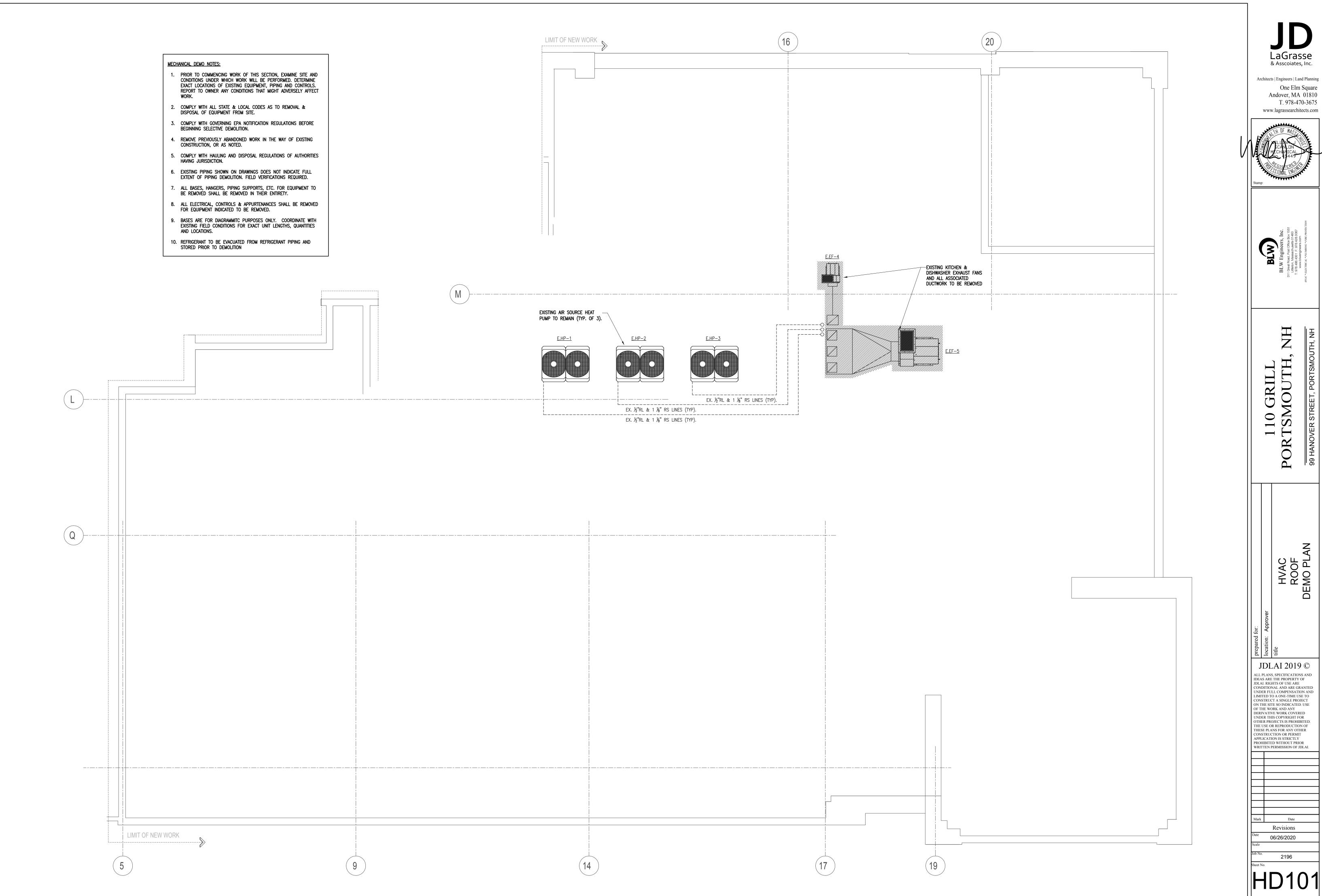
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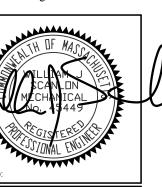


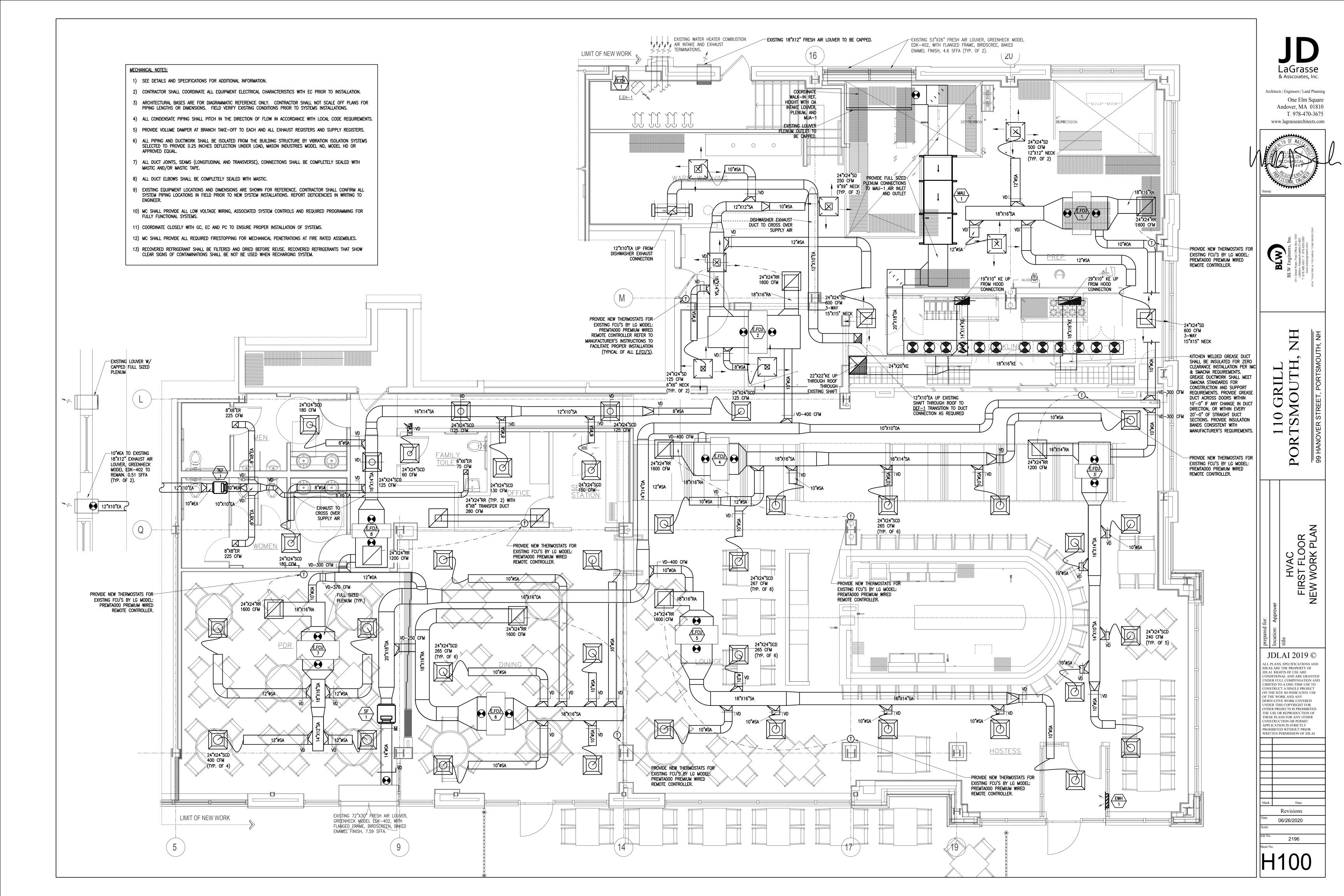


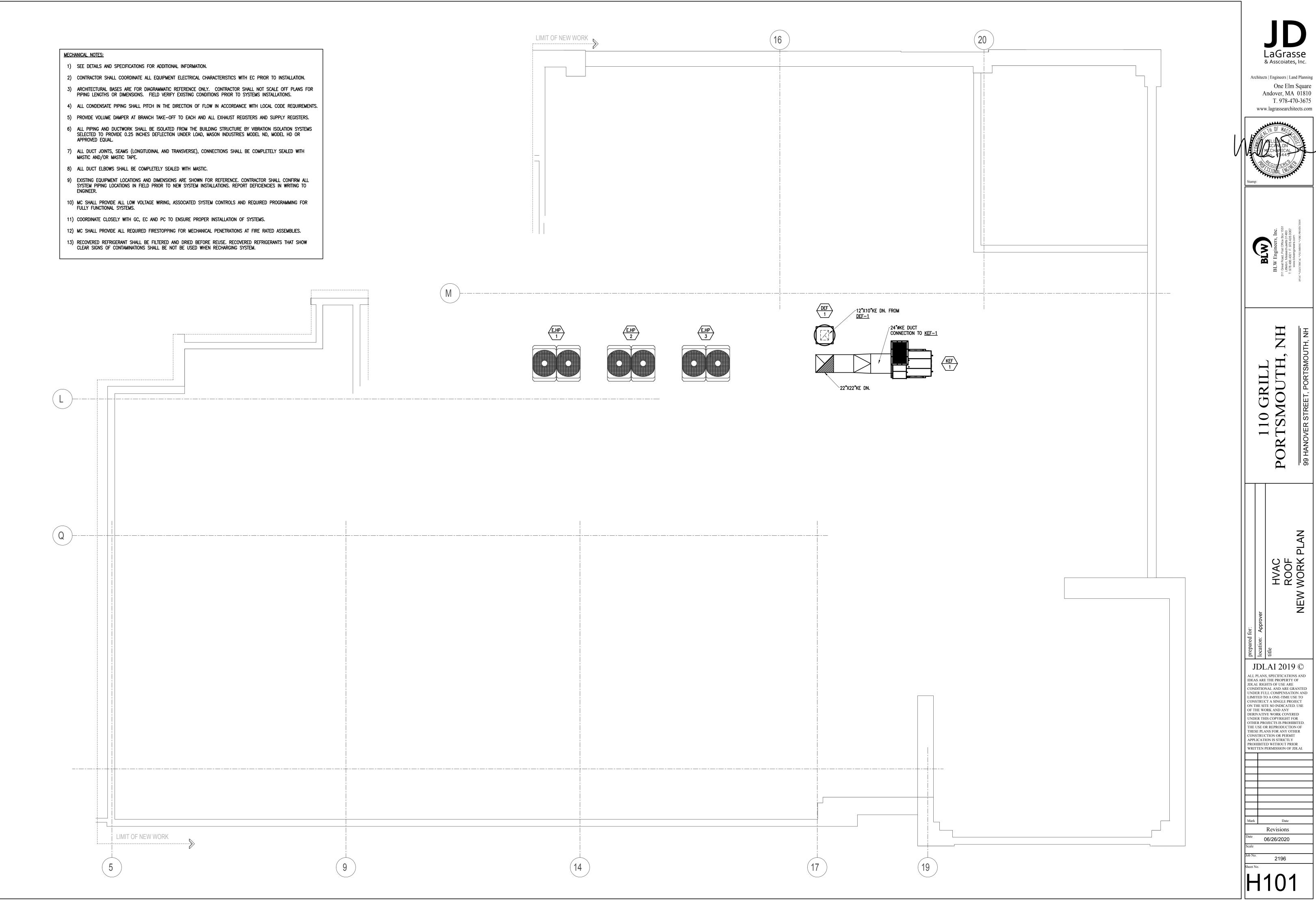


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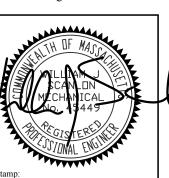
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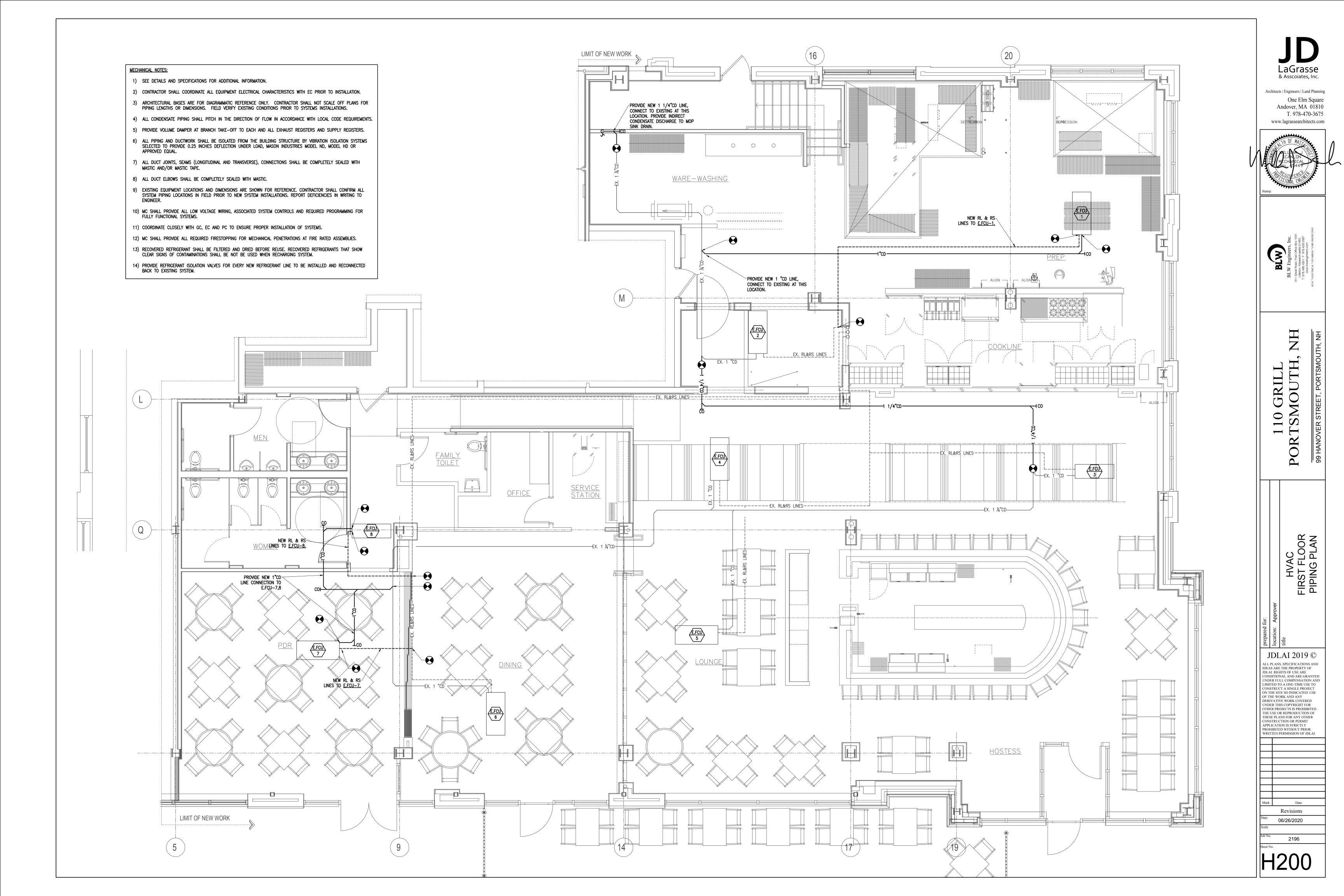


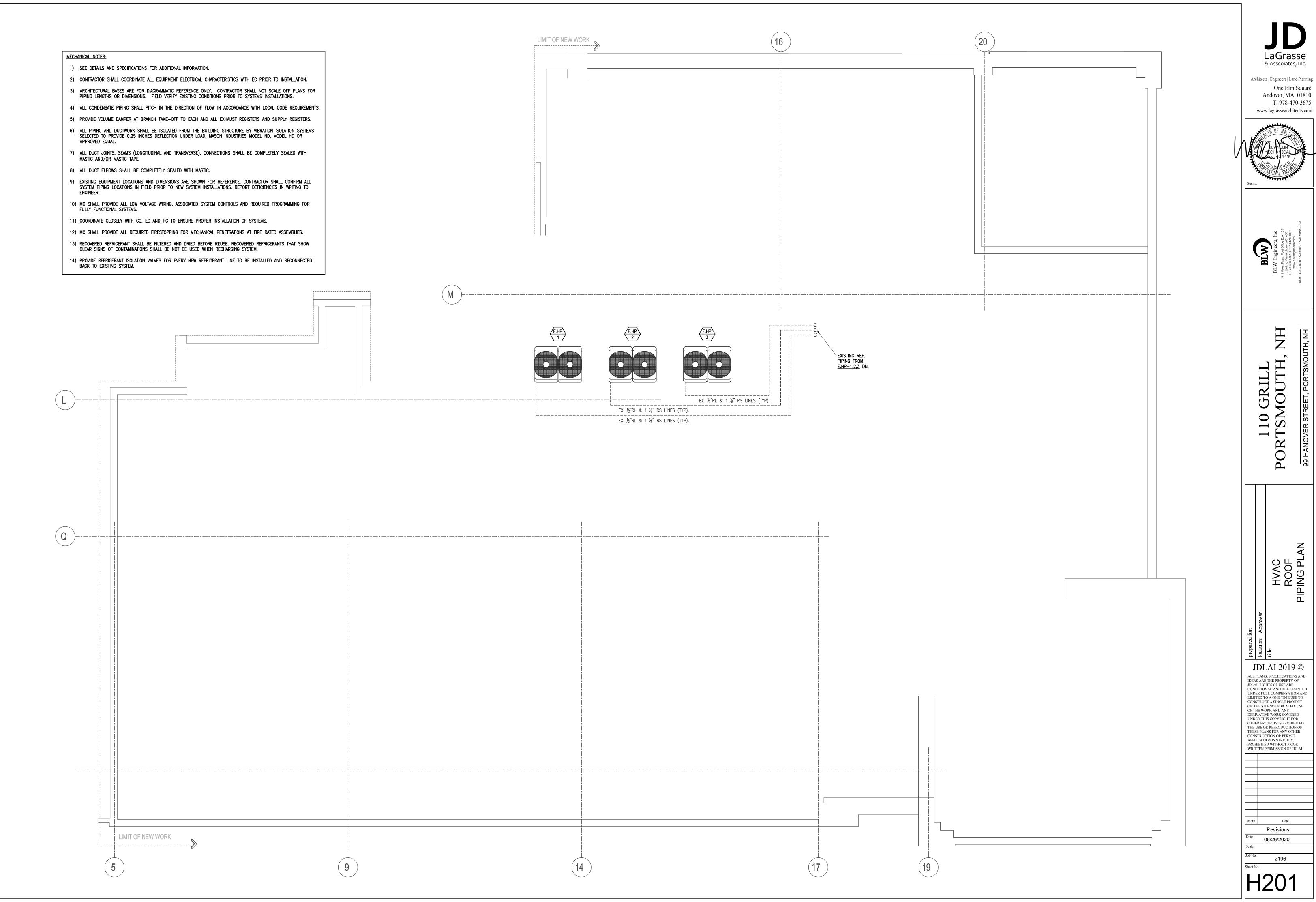


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