(NOT ALL ITEMS MAY APPLY TO THIS PROJECT)

ABBREVIATIONS

A

A	AIR (COMPRESSED)
AAV	AIR ADMITTANCE VALVE
AC	AIR COMPRESSOR
AD	AIR DRYER
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASPE	AMERICAN SOCIETY OF PLUMBING ENGINEERS
ASSE	AMERICAN SOCIETY OF SANITARY ENGINEERING
AP	ACCESS PANEL
ARCH	ARCHITECT, ARCHITECTURAL
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AUX	AUXILIARY
AV	ACID VENT
AVTR	ACID VENT THROUGH ROOF
AW	ACID WASTE

B

B	BOILER
BF	BOTTLE FILLER
BFF	BELOW FINISH FLOOR
BFG	BELOW FINISHED GRADE
BFP	BACKFLOW PREVENTER
BFV	BUTTERFLY VALVE
BOF	BOTTOM OF FOOTING
BOP	BOTTOM OF PIPE
BOS	BOTTOM OF STRUCTURE
BRF	BELOW RAISED FLOOR
BT	BATH TUB
BTU	BRITISH THERMAL UNIT
BV	BALL VALVE
BWV	BACK WATER VALVE

C

C	CELSIUS
CB	CATCH BASIN
CD	CONDENSATE DRAIN LINE
CI	CAST IRON
CIRC	CIRCULATING
CISPI	CAST IRON SOIL PIPE INSTITUTE
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
CMU	CONCRETE MASONRY UNIT
CL	CENTERLINE
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE, CONCENTRIC
CONN	CONNECTION
CP	CIRCULATING PUMP, CHROME PLATE
CPVC	CHLORINATED POLYVINYL CHLORIDE
CW	COLD WATER
CWP	COLD WORKING PRESSURE

D

DBP	DOMESTIC BOOSTER PUMP
DC	DOWNSPOUT COVER
DCVA	DOUBLE CHECK VALVE ASSEMBLY
DDCVA	DOUBLE DETECTOR CHECK VALVE ASSEMBLY
DF	DRINKING FOUNTAIN
DFU	DRAINAGE FIXTURE UNIT
DI	DEIONIZED
DIA	DIAMETER
DIM	DIMENSION
DISC	DISCONNECT
DN	DOWN, DOWNSPOUT NOZZLE
DS	DOWNSPOUT
DW	DISHWASHER
DWG	DRAWING
DWV	DRAINAGE WASTE AND VENT

E

ECC	ECCENTRIC
EDF	ELECTRIC DRINKING FOUNTAIN
EEW	EMERGENCY EYEWASH
EL	ELEVATION
ES	EMERGENCY SHOWER
ESP	ELEVATOR SUMP PUMP
ET	EXPANSION TANK
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER

F

F	FARENHEIT, FIRE
FBO	FURNISHED BY OTHERS
FCO	FLOOR CLEAN OUT
FCV	FLOOR CONTROL VALVE
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FEC	FIRE EXSTINGUISHER CABINET
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FHR	FIRE HOSE RACK
FHV	FIRE HOSE VALVE
FIXT	FIXTURE
FOG	FATS, OILS, AND GREASE
FLR	FLOOR
FP	FIRE PUMP
FS	FLOW SWITCH, FIRE SPRINKLER FLOOR SINK
FT	FOOT, FEET
FW	FORCE WASTE, FILTER WATER

G

G	GAS
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GCO	GRADE CLEANOUT
GD	GARBAGE DISPOSAL
GI	GREASE INTERCEPTOR
GL	GLOBE VALVE
GPD	GALLONS PER DAY
GPF	GALLONS PER FLUSH
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GT	GREASE TRAP
GV	GATE VALVE, GREASE VENT
GW	GREASE WASTE
GWH	GAS WATER HEATER

H

HB	HOSE BIBB
HC	HANDICAPPED
HD	HEAD, HUB DRAIN
HKP	HOUSEKEEPING PAD
HP	HORSEPOWER
HR	HOSE REEL
HSC	HORIZONTAL SPLIT CASE
HT	HEIGHT
HTR	HEATER
HW	HOT WATER
HWR	HOT WATER RETURN
HZ	HERTZ

I

IAPMO	INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IN	INCH
INSUL	INSULATION
IPC	INTERNATIONAL PLUMBING CODE
IPS	IRON PIPE SIZE
IW	INDIRECT WASTE
IWH	INSTANTANEOUS WATER HEATER
IWR	INDIRECT WASTE RECEPTOR

J

JP	JOCKEY PUMP

K

KEC	KITCHEN EQUIPMENT CONTRACTOR
KVA	KILOVOLT- AMPS
KW	KILOWATT

L

L	LAVATORY, LENGTH
LAV	LAVATORY
LF	LINEAR FEET
LP	LOW PRESSURE
LPG	LIQUEFIED PETROLEUM GAS
LT	LINT, LINT TRAP
LVL	LEVEL

M

MAX	MAXIMUM
MBTUH	THOUSAND OF BTU'S PER HOUR
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MS	MOP SINK
MSB	MOP SERVICE BASIN
MTD	MOUNTED

N

N.C.	NORMALLY CLOSED
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
N.O.	NORMALLY OPEN
NPT	NATIONAL PIPE THREAD
NTS	NOT TO SCALE

O

OC	ON CENTER
OD	OUTSIDE DIAMETER, OVERFLOW DRAIN
OS&Y	OUTSIDE STEM AND YOKE
OZ	OUNCES

P

PD	PRESSURE DROP, PRESSURE DIFFERENTIAL
PDI	PLUMBING DRAINAGE INSTITUTE
PH	PHASE
PIV	POST INDICATOR VALVE
PLBG	PLUMBING
POU	POINT-OF-USE
PP	POLYPROPYLENE
PPM	PARTS PER MILLION
PRV	PRESSURE REDUCING VALVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PVC	POLYVINYL CHLORIDE
PVDF	POLYVINYLIDENE FLUORIDE

Q

QTY	QUANTITY

R

RCP	REFLECTED CEILING PLAN, REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
RE	REFERENCE REFER
RECIRC	RECIRCULATE
REFG	REFRIGERATOR
RH	ROOF HYDRANT
RM	ROOM
RO	REVERSE OSMOSIS
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE (BACKFLOW PREVENTER)
RTU	ROOFTOP UNIT
RV	RELIEF VALVE

S

SAN	SANITARY DRAINAGE
SCH	SCHEDULE
SD	STORM DRAIN
SDR	STANDARD DIMENSIONAL RATIO
SECT	SECTION
SF	SQUARE FEET
SH	SHOWER
SI	SOLIDS INTERCEPTOR
SIM	SIMILAR
SK	SINK
SOS	SAND OIL SEPARATOR
SOV	SHUT-OFF VALVE
SP	SUMP PUMP, STATIC PRESSURE
SPEC	SPECIFICATION
SPKR	SPRINKLER
SQ	SQUARE
SS	SERVICE SINK, SANITARY SEWER, STAINLESS STEEL
SSD	SUBSURFACE DRAIN
STD	STANDARD
STL	STEEL
STR	STRAINER
SV	SANITARY VENT
SW	SOFT WATER

T

TCO	TRAFFIC CLEANOUT
TD	TRENCH DRAIN
TDH	TOTAL DYNAMIC HEAD
TDL	TOTAL DEVELOPED LENGTH
TLT	TOILET
TMV	THERMOSTATIC MIXING VALVE
TOB	TOP OF BEAM
TOF	TOP OF FOOTER
TP	TRAP PRIMER
TPD	TRAP PRIMER DEVICE
TS	TAMPER SWITCH
TW	TEMPERED WATER
TYP	TYPICAL

U

U	URINAL
UF	UNDERFLOOR
UG	UNDERGROUND
UH	UNIT HEATER
UL	UL SOLUTIONS
UNO	UNLESS NOTED OTHERWISE
UPC	UNIFORM PLUMBING CODE

V

V	VOLT, VENT
VAC	VACUUM
VB	VALVE BOX, VACUUM BREAKER
VFD	VARIABLE FREQUENCY DRIVE
VP	VACUUM PUMP
VS	VENT STACK
VTR	VENT THRU ROOF

W

W	WATT, WASTE, WIDTH, WASHING MACHINE
W/	WITH
W/O	WITHOUT
WB	WALL BOX
WC	WATER CLOSET, WATER COLUMN
WCO	WALL CLEANOUT
WH	WALL HYDRANT
WHA	WATER HAMMER ARRESTOR
WM	WATER METER
WMB	WASHING MACHINE BOX
WOG	WATER OIL AND GAS
WP	WEATHERPROOF
WS	WATER SOFTENER, WASTE STACK
WSFU	WATER SUPPLY FIXTURE UNIT
WT	WATERTIGHT, WEIGHT

Y

YCO	YARD CLEANOUT
YH	YARD HYDRANT

Z

Z	ZONE
ZV	ZONE VALVE

SYMBOLS

PLUMBING SYSTEMS

- AV — ACID VENT
- AV(E) — EXISTING ACID VENT PIPING - AV(E)
- AW — ACID WASTE, BURIED
- AW(E) — EXISTING ACID WASTE PIPING, BURIED- AW(E)
- AW — ACID WASTE, NOT BURIED
- AW(E) — EXISTING ACID WASTE PIPING, NOT BURIED - AW(E)
- COLD WATER - CW
- CW(E) — EXISTING DOMESTIC COLD WATER - CW(E)
- A — COMPRESSED AIR
- D — DRAIN LINE
- F — FIRE STANDPIPE, FIRE LINE
- FW — FORCE WASTE
- GW — GREASE WASTE, BURIED
- GW — GREASE WASTE, NOT BURIED
- HOT WATER - HW
- HW(E) — EXISTING DOMESTIC HOT WATER - HW(E)
- HOT WATER RECIRCULATION
- HWR(E) — EXISTING DOMESTIC HOT WATER RETURN - HWR(E)
- LT — LINT WASTE
- LP — LIQUIFIED PETROLEUM GAS
- G (4oz) — NATURAL GAS (LOW PRESSURE)
- G (2 PSI) — NATURAL GAS (MEDIUM PRESSURE)
- G (5 PSI) — NATURAL GAS (HIGH PRESSURE)
- N — NITROGEN
- NP-CW — NON-POTABLE - COLD WATER
- OD — OVERFLOW DRAIN, NOT BURIED
- PIPE, TO BE DEMOLISHED
- SANITARY DRAIN, BURIED
- S(E) — EXISTING SANITARY DRAIN, BURIED - S(E)
- SANITARY DRAIN, NOT BURIED
- S(E) — EXISTING SANITARY DRAIN PIPING, NOT BURIED - S(E)
- SW — SOFT WATER
- SD — STORM DRAIN, BURIED
- SD — STORM DRAIN, NOT BURIED
- TW — TEMPERED WATER
- TP — TRAP PRIMER
- VENT
- (E) — EXISTING VENT
- FS — WET AUTOMATIC FIRE SPRINKLER

PIPING FITTINGS

- CAP ON END OF PIPE
- PIPE UP OR PIPE UP AND DOWN
- PIPE DOWN
- VALVE IN DROP
- VALVE IN RISE
- DIRECTION OF FLOW
- DIRECTION OF SLOPE DOWN
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER
- TEE UP
- TEE DOWN
- UNION
- FLANGE
- STRAINER WITH BLOWDOWN VALVE
- GATE VALVE
- GLOBE VALVE
- BALL VALVE
- BALANCING VALVE WITH DIFFERENTIAL PRESSURE TAPS
- OS&Y VALVE
- CHECK VALVE
- BUTTERFLY VALVE
- TWO-WAY MODULATING CONTROL VALVE
- THREE-WAY MODULATING CONTROL VALVE
- SOLENOID VALVE
- PRESSURE REDUCING VALVE
- GAS REGULATOR
- GAS VALVE
- SPRINKLER FLOOR CONTROL VALVE STATION
- MANUAL AIR VENT
- AUTOMATIC AIR VENT
- T&P RELIEF VALVE
- LINE CLEANOUT/ WALL CLEANOUT
- FLOOR CLEANOUT
- GRADE CLEANOUT
- PRESSURE GAUGE WITH GAUGE COCK
- THERMOMETER
- FLOW VENTURI
- VACUUM BREAKER
- VACUUM RELIEF VALVE
- BACKFLOW PREVENTER
- CIRCULATING PUMP
- WATER METER/SUB-METER

MISCELLANEOUS

- DRAIN(TYPE AND SIZE AS NOTED ON PLANS)
- ROOF DRAIN OR OVERFLOW DRAIN
- ROOF DRAIN OR OVERFLOW DRAIN(FROM ABOVE)
- HOSE BIBB
- WALL HYDRANT
- PLUMBING FIXTURE
- EXISTING PLUMBING FIXTURE
- POINT OF NEW CONNECTION TO EXISTING PIPING
- LIMIT OF DEMOLITION
- P.X.X — PLUMBING DRAWING NOTE REFERENCE
- 2 / P2.1 — DETAIL NUMBER OR PLAN; SHEET WHERE DETAIL OR PLAN IS SHOWN
- FS — FLOW SWITCH
- TS — TAMPER SWITCH
- ACCESS PANEL (AP)
- FIRE DEPARTMENT CONNECTION(WALL MOUNTED)
- FIRE DEPARTMENT CONNECTION(FREE STANDING)
- 2 / P7.1 — PLUMBING RISER DIAGRAM NUMBER; SHEET WHERE PLUMBING RISER DIAGRAM IS SHOWN

PLUMBING CODES

2021	UNIFORM PLUMBING CODE (COH AMENDMENTS)	UPC
2021	INTERNATIONAL FIRE CODE (COH AMENDMENTS)	IFC
2021	INTERNATIONAL ENERGY CONSERVATION CODE (COH AMENDMENTS)	IECC

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REVISION:

No.	DATE	DESCRIPTION
	10/13/25	IFB

SEAL:

STATE OF TEXAS — WILLIAM MEISTER — 101184 — LICENSED PROFESSIONAL ENGINEER — 10/13/25

NEW FIRE STATION #12 CY-FAIR
VOLUNTEER DEPARTMENT HARRIS
COUNTY EMERGENCY SERVICES NO. 9

TBPE Firm Registration No. 2234

DATE: 03/16/23

DRAWN BY: DBR

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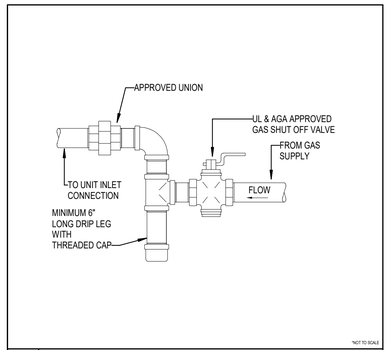
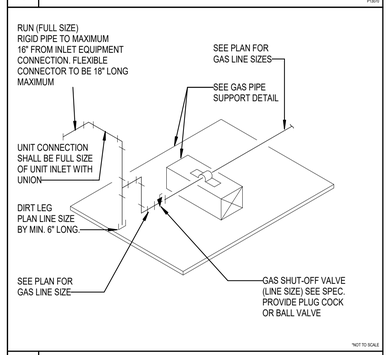
PROJECT NUMBER Project Number

SHEET TITLE: PLUMBING SYMBOL LEGEND

SHEET NUMBER: P0.01



1 GAS CONNECTION TO EQUIPMENT - FIRE DEPT.



2 GAS EQUIPMENT CONNECTION

SITE UTILITY NOTES

1. REFER TO CIVIL DRAWINGS FOR BUILDING FINISHED FLOOR ELEVATION(S).
2. ALL INVERT ELEVATIONS INDICATED ARE RELATIVE TO THE FINISHED FLOOR ELEVATION OF THE BUILDING SLAB AT THEIR RESPECTIVE LOCATIONS, UNLESS SPECIFICALLY NOTED OTHERWISE.
3. ROLL-DOWN AS NECESSARY AND PROVIDE PIPE, FITTINGS, AND ADAPTERS AS REQUIRED TO MAKE PROPER CONNECTIONS TO SITE UTILITY LINES.
4. PROVIDE SCHEDULE 40 SOLID WALL PVC SLEEVES FOR ALL INCOMING GAS SERVICE PIPING TO BE ROUTED BELOW CONCRETE, ASPHALT, OR PAVING. SLEEVES SHALL BE NO SMALLER THAN TWO TIMES THE DIAMETER OF THE GAS PIPING TO BE SERVED. PROVIDE 4'-0" X 4'-0" TEMPORARY LEAVE-OUTS IN THE PAVING AT ALL CHANGES IN DIRECTION ALONG THE ROUTE OF THE SLEEVING. ENSURE ALL SLEEVES ARE MAINTAINED FREE FROM DIRT AND DEBRIS, CAPPED AT BOTH ENDS, AND CLEARLY LABELED. FILL LEAVE-OUTS TO MATCH FINISHED CONDITIONS. THESE GENERAL GUIDELINES SHALL NOT SUPERCEDE THE LOCAL GAS PROVIDER'S REQUIREMENTS, WHICH SHALL GOVERN THE INSTALLATION OF ALL SLEEVING.
5. FIELD COORDINATE/CONFIRM THE ROUTING AND INSTALLATION OF GAS SERVICE PIPING WITH THE LOCAL UTILITY PROVIDER PRIOR TO ANY SITE PAVING WORK. MAKE ADJUSTMENTS AS REQUIRED.

GENERAL WORK NOTES

1. ALL WORK, METHODS, AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH THE PREVAILING CODE AND INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
2. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS, ELEVATIONS, DIRECTION OF FLOW, PIPE SIZES & CAPACITIES, AND PIPE MATERIAL & CONDITION AT PROPOSED POINTS OF CONNECTION WITH EXISTING BUILDING PLUMBING LINES AND SITE CIVIL LINES PRIOR TO INSTALLATION OF ANY NEW WORK. MODIFY/REPLACE EXISTING PIPING IF AND AS REQUIRED TO ENSURE PROPER CONNECTIONS. ONLY CONNECT NEW LINES TO SUITABLE EXISTING LINES OF EQUAL OR GREATER SIZE.
3. COORDINATE ROUTING OF BURIED PIPING WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND UTILITIES, AND ALL OTHER SUB-SURFACE BUILDING ELEMENTS. MAKE ADJUSTMENTS AS REQUIRED AND ADVISE ARCHITECT/ENGINEER OF ANY GRADING CONFLICTS PRIOR TO COMMENCING INSTALLATION.
4. CONTRACTOR SHALL FIELD COORDINATE LOCATIONS AND ELEVATIONS OF ALL PLUMBING PIPING WITH OTHER TRADES PRIOR TO INSTALLATION. WHERE RELOCATIONS OF NEW WORK ARE REQUIRED TO CORRECT CONFLICTS WITH OTHER TRADES IT SHALL BE DONE AT NO ADDITIONAL COST TO OWNER.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD COORDINATING ALL PLUMBING PIPING SLEEVE LOCATIONS WITH ALL OTHER TRADES PRIOR TO INSTALLATION OF ANY PIPING OR SUPPORTS.
6. RENOVATIONS SITE INSPECTIONS: CONTRACTOR SHALL VISIT THE SITE OF WORK PRIOR TO SUBMITTING A BID AND THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AND EXACT NATURE OF WORK. SUBMISSION OF A BID ACKNOWLEDGES FULL RESPONSIBILITY FOR FURNISHING A COMPLETE AND FUNCTIONAL SYSTEM. NO CHANGES IN THE CONTRACT WILL BE MADE TO ACCOMMODATE OR ALLOW EXTRA FUNDS FOR ANY OMISSION WHICH RESULTS FROM FAILURE TO MAKE SUCH A THOROUGH EXAMINATION. NOTE THAT FOR GRAPHICAL CLARITY, ALL EXISTING PIPING TO REMAIN OR BE ABANDONED IN PLACE MAY NOT BE SHOWN ON THE FLOOR PLANS.

QTY.	GAS LOAD DEMAND (EXISTING)	CFH
1	APPLIANCES/EQUIPMENT @ 4OZ	875
1	EMERGENCY GENERATOR (EXST.)	1,728
	TOTAL - GAS LOAD (EXISTING)	2,603
	TOTAL DEVELOPED LENGTH 0'-0"	

QTY.	GAS LOAD DEMAND (NEW)	CFH
1	APPLIANCES/EQUIPMENT @ 4OZ	875
1	EMERGENCY GENERATOR @ 5 PSI (NEW)	2,188
	TOTAL - GAS LOAD (EXISTING)	3,063
	TOTAL DEVELOPED LENGTH 0'-0"	

GAS PRESSURE REGULATORS

MARK	INLET PRESSURE (PSI)	OUTLET PRESSURE (INC...	CFH	MANUFACTURER	MODEL NUMBER
GPR-1	5	11	3,063	MAXITROL	325 SERIES

NOTE:

1. COORDINATE FINAL REGULATOR SELECTIONS WITH FINAL EQUIPMENT BEING PROVIDED. MAKE ADJUSTMENTS AS REQUIRED.
2. ALL GAS PRESSURE REGULATORS SHALL MEET THE REQUIREMENTS OF ANSI Z21.80 (NFPA 54:5.8.2.).
3. REGULATORS LOCATED INDOORS SHAL NOT BE INSTALLED CONCEALED OR ABOVE A CEILING. ALL INDOOR REGULATORS MUST BE LOCATED BELOW FINISHED CEILINGS OR IN EXPOSED AREAS.
4. NATURAL GAS PIPING BELOW GRADE AND OUTSIDE THE BUILDING SHALL BE YELLOW POLYETHYLENE WITH SOCKET HEAT FUSION WELD FITTINGS.
5. REGULATORS LOCATED INDOORS SHAL NOT BE INSTALLED CONCEALED OR ABOVE A CEILING. ALL INDOOR REGULATORS MUST BE LOCATED BELOW FINISHED CEILINGS OR IN EXPOSED AREAS.
6. NATURAL GAS PIPING BELOW GRADE AND OUTSIDE THE BUILDING SHALL BE YELLOW POLYETHYLENE WITH SOCKET HEAT FUSION WELD FITTINGS.
7. NATURAL GAS PIPING ABOVE GRADE SHALL BE SEAMLESS SCHEDULE 40 BLACK STEEL.
8. PROVIDE REGULATOR VENT LINE FOR EACH REGULATOR INDEPENDENTLY AND ROUTE EACH LINE FULL SIZE TO THE OUTDOORS. (HIDE CELL IF SCHEDULING VENTLESS/VENT LIMITING PRESSURE REGULATORS)

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REVISION:

No.	DATE	DESCRIPTION
	10/13/25	IFB

SEAL:

STATE OF TEXAS
WILLIAM MEISTER
101184
LICENSED PROFESSIONAL ENGINEER
10/13/25

NEW FIRE STATION #12 CY-FAIR
VOLUNTEER DEPARTMENT HARRIS
COUNTY EMERGENCY SERVICES NO. 9

TBPE Firm Registration No. 2234

DATE: 07/31/24

DRAWN BY: Author

CHECKED BY: Checker

PROJECT NUMBER Project Number

SHEET TITLE: PLUMBING GENERAL NOTES

SHEET NUMBER: P0.11

ABBREVIATIONS

AC	ALTERNATING CURRENT
AF	AMPERE FUSE, AMPERE FRAME
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPT CAPACITY
AL	ALUMINUM
AM	AMMETER
AMP	AMPLIFIER
ANN	ANNUNCIATOR
ASC	AMPERES SHORT CIRCUIT
AT	AMPERE TRIP RATING
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
BKR	BREAKER
BLDG.	BUILDING
C	CONDUIT, CELSIUS
CKT	CIRCUIT
CLG.	CEILING
CONT.	CONTINUOUS,CONTINUATION
CONTR	CONTROLLER, CONTRACTOR
CT	CURRENT TRANSFORMER/COOLING TOWER
CU	COPPER
DAS	DISTRIBUTED ANTENNA SYSTEM
DC	DIRECT CURRENT
DISC	DISCONNECT
DP	DISTRIBUTION PANEL
DPDT	DOUBLE-POLE, DOUBLE-THROW
DPST	DOUBLE-POLE, SINGLE-THROW
DWG	DRAWING
ELEV.	ELEVATOR
EPO	EMERGENCY POWER OFF
ERRC	EMERGENCY RESPONDER RADIO COVERAGE SYSTEM
FA	FIRE ALARM
FF	FURNITURE FEED
FLA	FULL LOAD AMPS
FTL	FEED-THRU LUGS
GA	GAUGE
GEN	GENERATOR
GND	GROUND
GTD	GENERATOR TRANSFER DEVICE
IG	ISOLATED GROUND
LF	LINEAR FEET
LTG	LIGHTING
LV	LOW VOLTAGE
LVL	LEVEL
MAX.	MAXIMUM
MC	METAL CLAD CABLE
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MCCB	MOLDED CASE CIRCUIT BREAKER
MD	MOTORIZED DAMPER
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MIC	MICROPHONE
MIN.	MINIMUM
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVER-CURRENT PROTECTION
MSB	MAIN SWITCHBOARD
NSR	NEMA 3R
N4X	NEMA 4X
N.C.	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NF	NON-FUSED
NFS	NON-FUSED SWITCH
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
N.O.	NORMALLY OPEN
NO.	NUMBER
NTS	NOT TO SCALE
PH	PHASE
POS	POINT OF SALE
QTY	QUANTITY
RCP	REFLECTED CEILING PLAN
RCPT	RECEPTACLE
RE	REFERENCE, REFER
SF	SQUARE FOOT
SIM	SIMILAR
SKVA	STARTING KILOVOLT-AMPS
SPD	SURGE PROTECTION DEVICE
SPDT	SINGLE-POLE, DOUBLE-THROW
SPST	SINGLE-POLE, SINGLE-THROW
SPEC	SPECIFICATION
SQFT	SQUARE FOOT
ST	SHUNT TRIP
SWB	SWITCHBOARD
TL	TWIST-LOCK
TOC	TOP OF CURB
TOS	TOP OF STEEL
TR	TAMPER RESISTANT RECEPTACLE
TV	TELEVISION
TYP	TYPICAL
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SYSTEM
VFD	VARIABLE FREQUENCY DRIVE
WP	WEATHERPROOF
WT	WATERTIGHT, WEIGHT
W/SF	WATTS PER SQUARE FOOT
XFMR	TRANSFORMER

MANY ABBREVIATIONS NOT LISTED MAY BE FOUND IN THE NATIONAL ELECTRIC CODE, OR IN THE INTERNATIONAL AND UNIFORM CODES

PHASING

(E)	EXISTING (TO REMAIN)
(D)	SHALL BE DEMOLISHED
(N)	PROVIDE NEW
(R)	RELOCATED ELEMENT

ELECTRICAL SYMBOLS

MOTORS AND CONTROLS

- $M — MOTOR RATED SWITCH WITH THERMAL OVERLOADS
- (5) — SINGLE OR THREE PHASE MOTOR NUMBER INDICATES HORSE POWER
- ELECTRIC DUCT HEATER
- DISCONNECT (SAFETY) SWITCH "200/3/150" DENOTES AMPERES/POLE/FUSE, "NF" DENOTES NON-FUSED "NSR" DENOTES NEMA 3R
- B — ENCLOSED CIRCUIT BREAKER- "200/3/150" DENOTES AMPERES/POLE/TRIP.
- MOTOR STARTER FURNISHED BY DIVISION 23 AND INSTALLED BY DIVISION 26.
- COMBINATION DISCONNECT (SAFETY) SWITCH AND MOTOR STARTER. "30/3/15/#0" DENOTES AMPERES/POLES/FUSE/ STARTER SIZE, "NF" DENOTES NON-FUSED, FURNISHED BY DIVISION 23 AND INSTALLED BY DIVISION 26.
- VFD — VARIABLE FREQUENCY DRIVE PROVIDED BY DIVISION 23 AND INSTALLED BY DIVISION 26.
- EPO — EMERGENCY POWER OFF BUTTON.

RECEPTACLES AND OUTLETS

ALL RECEPTACLES SHALL BE MOUNTED 18" ABOVE FINISHED FLOOR TO CENTER OF DEVICE UNLESS NOTED OTHERWISE. REFER TO SPECIFICATIONS AND DRAWINGS FOR ADDITIONAL REQUIREMENTS.

ABBREVIATIONS APPLICABLE TO RECEPTACLES:
"GFCI" GROUND FAULT INTERRUPTER
"WP" WEATHERPROOF
"IG" ISOLATED GROUND
"TR" TAMPER RESISTANT
"USB" RECEPTACLE WITH USB CHARGING PORTS
"AC" ABOVE COUNTER MOUNTING
"UC" UNDER COUNTER MOUNTING
"H" HORIZONTALLY ORIENTED RECEPTACLE

- SIMPLEX WALL RECEPTACLE, NEMA 5-20R, 20A, 125V.
- DUPLEX WALL RECEPTACLE, NEMA 5-20R, 20A, 125V. SHADED INDICATES SPLIT-WIRED
- FOURPLEX (QUADRUPLEX) RECEPTACLE
- DUPLEX RECEPTACLE (PEDESTAL MOUNTED)
- CONTROLLED WALL RECEPTACLE. DUPLEX: SPLIT-WIRED QUAD: SEPARATELY WIRED UNDER A COMMON COVERPLATE.
- POWER DEVICE RED IN COLOR, ON EMERGENCY POWER CIRCUIT
- CEILING RECEPTACLE/QUAD, EMERGENCY POWER SYMBOL MAY APPLY
- SPECIAL RECEPTACLE, NEMA CONFIGURATION PER PLAN OR EQUIPMENT
- TV — TV ROUGH-IN: 3-GANG RECESSED TV BOX, CONTAINING 1 DUPLEX RECEPTACLE, 1 GANG FOR AV, 1 GANG FOR DATA
- FLOOR BOX OR POKE THRU. POKE-THRU'S WHERE IN SUSPENDED SLABS, RECESSED IN FOUNDATION WHERE SLAB ON GRADE
- FLUSH ELECTRICAL FLOOR OUTLET. REFER TO FLOOR BOX SCHEDULE, FIRE RATED POKE-THROUGH SCHEDULE AND KEYED NOTES.
- DC — DROP CORD WITH SIMPLEX RECEPTACLE UNLESS OTHERWISE NOTED
- CR — CORD REEL WITH DUPLEX RECEPTACLE UNLESS OTHERWISE NOTED
- J J / J J — JUNCTION BOX
  "MD" INDICATES POWER CONNECTION TO SERVE MOTOR DAMPER
  "HD" INDICATES POWER CONNECTION TO SERVE HAND DRYER
  "FV" INDICATES POWER CONNECTION TO SERVE FLUSH VALVES
- P — PULL BOX (OVER 4" SQUARE)
- BELL/BUZZER/CHIME
- PUSH BUTTON/DOOR BELL/START-STOP
- PP — POWER POLE
- POINT OF DIRECT CONNECTION TO EQUIPMENT
- C (2) — CLOCK RECEPTACLE SHALL BE MOUNTED 12" BELOW FINISHED CEILING. (2) DENOTES DOUBLE SIDED CLOCK.

LIGHTING

LETTER(S) DENOTE TYPE- SEE LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.

2' X 4' | 2' X 2' | 1' X 4' | 1' X 2' | 1' X 1'

- STRIP LIGHTING FIXTURES.
- ROUND DOWNLIGHT FIXTURE.
- SQUARE DOWNLIGHT FIXTURE.
- WALL MOUNTED LIGHTING FIXTURE.
- TRACK LIGHTING FIXTURE. MOUNTED AS SHOWN ON LIGHTING FIXTURE SCHEDULE.
- CEILING MOUNTED EXIT SIGN; ARROWS AS INDICATED. SHADED AREA DENOTES FACE.
- WALL MOUNTED EXIT SIGN; ARROWS AS INDICATED. SHADED AREA DENOTES FACE.
- EMERGENCY WALL MOUNTED LIGHTING FIXTURE. BATTERY OPERATED UNLESS NOTED OTHERWISE.
- SITE LIGHTING FIXTURE.

HATCHING PATTERNS BELOW SHALL APPLY TO ALL LIGHTING FIXTURE SYMBOLS.

- NL — EMERGENCY LIGHT FIXTURE WITH BATTERY PACK. PROVIDE WITH UNSWITCHED HOT FOR LOSS OF VOLTAGE AND CHARGING (SAME CIRCUIT AS NORMAL POWER LIGHTING). FIXTURES SHALL BE WIRED IN A MANNER AS TO ALLOW SWITCHING OF FIXTURES WITHOUT DISCHARGING THE EMERGENCY BATTERY. BATTERY PACK IS TO ONLY OPERATE IN THE EVENT OF A POWER OUTAGE.
  "NL" NIGHT LIGHT ON UNSWITCHED 24HR OPERATION
- EM CIRCUIT — LIGHT FIXTURE ON LIFE SAFETY BRANCH CIRCUIT, GENERATOR TRANSFER DEVICES REQUIRED (UL1008 OR UL924) PROVIDE UNSWITCHED HOT, NEUTRAL AND GROUND FOR ALL LIFE SAFETY LIGHTING ORIGINATING FROM THE LIFE SAFETY CIRCUIT SHOWN.
- CRITICAL OPERATIONS LIGHTING ORIGINATING FROM THE CRITICAL CIRCUIT INDICATED, HATCHED AS INDICATED. HATCHING TYPICAL FOR ALL CRITICAL BRANCH LIGHT FIXTURES

RACEWAYS AND WIRING

- CAP AND STAKE
- CONDUIT CONCEALED IN WALL OR CEILING
- UNDERGROUND, UNDERSLAB, CONCEALED ROUTING
- OHE — OVERHEAD ELECTRIC PRIMARY UTILITY POWER LINE
- CONDUIT UP/DOWN
- HASH MARKS INDICATE NUMBER OF CONDUCTORS. LEFT TO RIGHT: PHASE/NEUTRAL/GROUND/ISOLATED GROUND. NO HASH MARKS INDICATES EMPTY CONDUIT, 1" MINIMUM, UNLESS NOTED OTHERWISE.
- 1LA-2,4,6 — HOMERUN TO PANEL WITH CIRCUIT NUMBER(S) AS INDICATED.
- (ON)1LA-6 — PARTIAL/SHARED CIRCUIT HOMERUN TO PANEL.
- TELECOMMUNICATIONS CABLE TRAY SHALL BE CONCEALED ABOVE ACCESSIBLE CEILING UNLESS OTHERWISE NOTED.

ELECTRICAL EQUIPMENT

- DISTRIBUTION PANEL
- MSB — SWITCHBOARD, MAIN DISTRIBUTION PANEL OR MOTOR CONTROL CENTER
- PANELBOARD (FLUSH/SURFACE MOUNT)
- FLOOR MOUNTED DRY-TYPE TRANSFORMER
- SUSPENDED OR WALL MOUNTED TRANSFORMER
- ATS — AUTOMATIC TRANSFER SWITCH
- FIRE RATED PLYWOOD TERMINAL BOARD, TYPE AS NOTED, 4' X 8' X 3/4" UNLESS NOTED OTHERWISE

COMMUNICATIONS

DEFAULT ELEVATION (UNLESS INDICATED OTHERWISE) TO CENTER OF ROUGH-IN: 18" ABOVE FINISHED FLOOR (AFF)

- DATA/COMM/AV ROUGH-IN. CONDUIT TO PLENUM AND BOX ONLY
- HS DS — SCHOOL INTERCOMMUNICATION SYSTEM HANDSET.

DEFAULT ELEVATION (UNLESS INDICATED OTHERWISE) TO CENTER OF ROUGH-IN: 42" AFF

- VC — VOLUME CONTROL - WALL MOUNTED
- CB — INTERCOM/PA SYSTEM CALL-IN OR CALL-BACK DEVICE

DEFAULT ELEVATION (UNLESS INDICATED OTHERWISE) TO CENTER OF ROUGH-IN: 120" AFF OR 12" BELOW CEILING, WHICHEVER IS LOWER

- S L — INTERCOM/PA SPEAKER "L" LOCAL SOUND REINFORCEMENT

CEILING MOUNTED DEVICES:

- S VC — INTERCOM/PA SPEAKER. "VC" INDICATES VOLUME CONTROL ON SPEAKER.

REFERENCE TECHNOLOGY/SECURITY SHEET FOR ADDITIONAL INFORMATION.

ONE-LINE DIAGRAM

- TRANSFORMER, TYPE AND RATINGS AS NOTED
- 800A/3P — SWITCH, RATING AS SHOWN
- 400A — FUSE, RATING AS SHOWN
- ST — SHUNT TRIP
- GF — GROUND FAULT PROTECTION
- AF — ARCH FAULT PROTECTION
- K — KIRK-KEY INTERLOCK
- M — DIGITAL METER OR SUB-METER INTEGRATED INTO EQUIPMENT
- 1200/5 — CURRENT TRANSFORMER, RATED AS SHOWN
- GROUND CONNECTION
- AUTOMATIC TRANSFER SWITCH
- BUS DUCT PLUG
- M — ELECTRICAL UTILITY REVENUE METER
- SPD — SURGE PROTECTION DEVICE
- GANN — GENERATOR ANNUNCIATOR PANEL
- CIRCUIT BREAKER
- DRAW-OUT CIRCUIT BREAKER
- NEW EQUIPMENT/WIRING
- DEMOLITION EQUIPMENT/WIRING
- EXISTING EQUIPMENT/WIRING
- UNDERGROUND WIRING

DAYLIGHT ZONES

DAYLIGHT ZONE/PRIMARY | SECONDARY DAYLIGHT ZONE

DAYLIGHT ZONES SHALL BE INCLUSIVE OF THE FIXTURES WITHIN THE SHADED REGION, AND SHALL BE DIMMED USING ON-BOARD OR EXTERNAL CONTROL IN ACCORDANCE WITH IECC 2021. IECC 2018 OR 2015 MAY BE REFERENCED ONLY WHERE ADOPTED BY LOCAL AHJ.

MISCELLANEOUS

- F — SHADED SYMBOLS INDICATE EXISTING DEVICES TO REMAIN, UNLESS OTHERWISE NOTED.
- INDICATES WALL-MOUNTED WHEN ATTACHED TO ANY SYMBOL
- (1) — DRAWING NOTE REFERENCE
- SOS — AREA OF RESCUE ASSISTANCE

FIRE ALARM

- W — WATER FLOW SWITCH
- SP — SUPERVISORY SWITCH
- S — SMOKE DETECTOR - MULTI CRITERIA DETECTOR
- S # — SMOKE DETECTOR - "SB" INDICATES IN INTEGRAL SOUNDER BASE "D" INDICATES DUCT TYPE "R" INDICATES 120 VOLT RESIDENTIAL TYPE
- H — HEAT DETECTOR
- S BT — BEAM DETECTOR TRANSMITTER, HIGH IN CEILING WALL DIRECT LINE OF SIGHT.
- S BR — BEAM DETECTOR RECEIVER, HIGH IN CEILING WALL DIRECT LINE OF SIGHT.
- S — FIRE ALARM SPEAKER STROBE / CEILING MOUNTED
- S — FIRE ALARM SPEAKER / CEILING MOUNT.
- DH — MAGNETIC DOOR HOLDER
- R — AUXILIARY CONTROL RELAY
- FH — FIRE FIGHTER HANDSET
- F — FIRE ALARM PULL STATION +42" AFF
- F — FIREMAN'S TELEPHONE JACK +42" AFF
- AUDIO VISUAL FIRE ALARM HORN STROBE +80" AFF- 15/75cd U.N.O.
- VISUAL FIRE ALARM (STROBE) CEILING MOUNT - 15/75cd U.N.O.
- AUDIO FIRE ALARM HORN +80" AFF
- FACP — FIRE ALARM CONTROL PANEL
- ANN — REMOTE FIRE ALARM ANNUNCIATOR PANEL
- RPS — REMOTE POWER SUPPLY FOR AUDIO/VISUAL FIRE ALARM DEVICES.
- FSD — FIRE SMOKE DAMPER
- REMOTE LED INDICATOR LIGHT

SECURITY

- PB — ADA AUTO DOOR OPEN BUTTON
- DR — DOOR RELEASE BUTTON
- CR — WALL MOUNTED CARD READER

REFERENCE TECHNOLOGY/SECURITY SHEET FOR ADDITIONAL INFORMATION.

SWITCHES AND LIGHTING CONTROL DEVICES

ALL SWITCH TYPES AND SENSORS TYPES FOUND ON 'LIGHTING CONTROL DEVICE SCHEDULE'. LOCATED ON ELECTRICAL SCHEDULE SHEETS

SWITCH ANNOTATION AS FOLLOWS:

X $a,b,c — TYPE, PER SCHEDULE; NO TYPE INDICATES SINGLE POLE TOGGLE SWITCH; SWITCH LEGS, PER PLAN, SHOWN HERE AS 3 (a,b,c)

OCCUPANCY SENSOR ANNOTATION, AS FOLLOWS:

OCx — OCCUPANCY / VACANCE SENSOR 'x' INDICATES TYPE, PER SCHEDULE; CEILING SENSOR; WITH BRACKET INDICATES WALL / CORNER MOUNT

LIGHT SENSOR ANNOTATION, AS FOLLOWS:

- PC — DIGITAL PHOTOCELL
- DS — DAYLIGHT HARVESTING SENSOR

RELAY PANELS, CONTACTORS, TIME SWITCHES:

XX — RELAYS/CONTACTORS/TIMERS/DEVICES WHERE 'XX' INDICATES:
"LC" LIGHTING CONTRACTOR
"LCP" LIGHTING CONTROL PANEL
"TS" TIME SWITCH
"TC" TIME CLOCK

DRAWING/DETAIL REFERENCE KEY

RE: 1 /E3-2 — REFER TO DRAWING/DETAIL NUMBER; SHEET NUMBER (1 / E3-2)

PANELBOARD NOMENCLATURE

5 DP C H A 1

- SUB PANEL
- AREA
- VOLTAGE H: 480Y/277V L: 208Y/120V
- BRANCH NONE: NORMAL E: LIFE SAFETY Q: EQUIPMENT C: CRITICAL R: LEGALLY REQUIRED X: OPTIONAL STAND-BY
- DISTRIBUTION PANEL (IF APPLICABLE)
- LEVEL

GENERAL NOTES:

A. NOT ALL SYMBOLS SHOWN ON THIS SYMBOL LIST ARE USED IN THE CONTRACT DOCUMENTS.

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REVISION:

No.	DATE	DESCRIPTION
	10/13/25	IFB

SEAL: STATE OF TEXAS — WILLIAM MEISTER — 101184 — LICENSED PROFESSIONAL ENGINEER — 10/13/25

NEW FIRE STATION #12 CY-FAIR
VOLUNTEER DEPARTMENT HARRIS
COUNTY EMERGENCY SERVICES NO. 9

TBPE Firm Registration No. 2234

DATE: 03/16/23

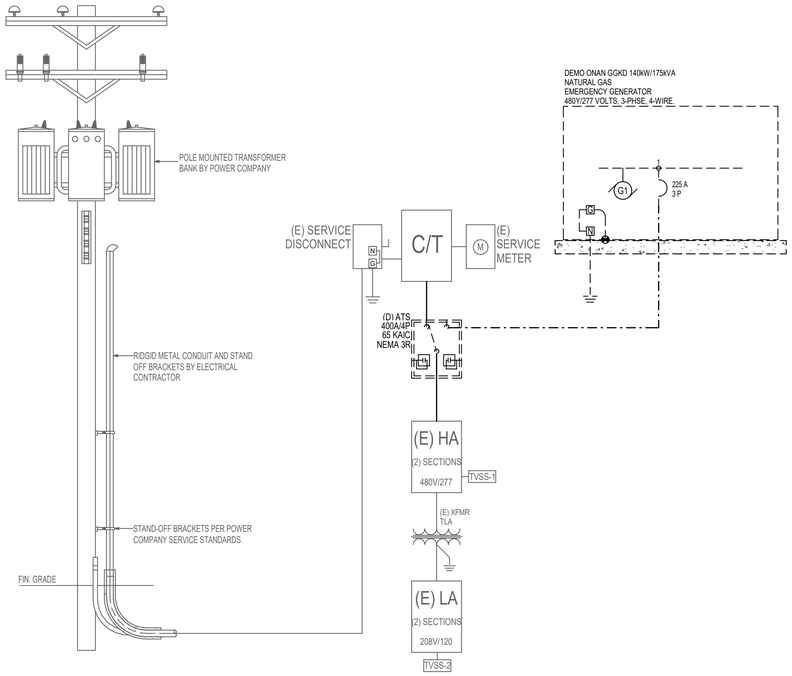
DRAWN BY: DBR

CHECKED BY: DBR

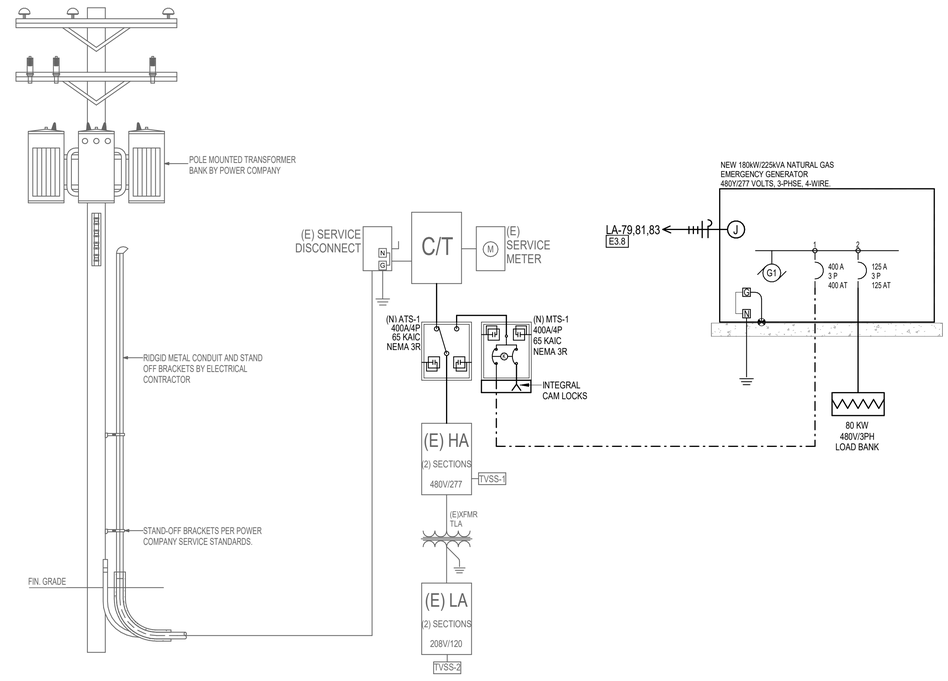
PROJECT NUMBER Project Number

SHEET TITLE: ELECTRICAL SYMBOL LEGEND

SHEET NUMBER: E0.01



1 DEMO ELECTRICAL ONE-LINE DIAGRAM
NOT TO SCALE

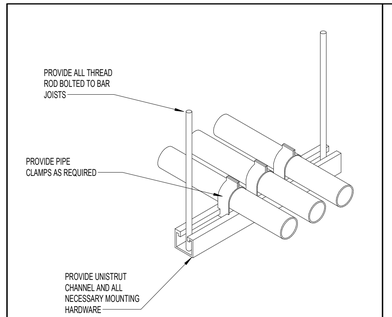


2 ELECTRICAL ONE-LINE DIAGRAM
NOT TO SCALE

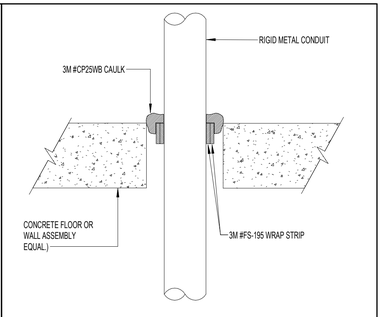
FEEDER SCHEDULE
COPPER ONLY

RATING	SETS	CONDUCTOR SIZE	CONDUIT
30A	1	4#10, 1#10 G.	3/4"
40A	1	4#8, 1#10 G.	1"
50A	1	4#8, 1#10 G.	1"
60A	1	4#6, 1#10 G.	1"
70A	1	4#4, 1#8 G.	1 1/4"
80A	1	4#4, 1#8 G.	1 1/4"
90A	1	4#3, 1#8 G.	1 1/4"
100A	1	4#3, 1#8 G.	1 1/4"
125A	1	4#1, 1#6 G.	1 1/2"
150A	1	4#1/0, 1#6 G.	1 1/2"
175A	1	4#2/0, 1#6 G.	2"
200A	1	4#3/0, 1#6 G.	2"
225A	1	4#4/0, 1#4 G.	2 1/2"
250A	1	4#250, 1#4 G.	2 1/2"
300A	1	4#350, 1#4 G.	3"
350A	1	4#500, 1#3 G.	3 1/2"
400A	1	4#600, 1#3 G.	4"
450A	2	4#4/0, 1#2 G.	2 1/2"
500A	2	4#250, 1#2G.	2 1/2"
600A	2	4#350, 1#1G.	3"
700A	2	4#500, 1#1/0G.	4"
800A	2	4#600, 1#1/0G.	4"
1000A	3	4#500, 1#2/0G.	4"
1200A	4	4#350, 1#3/0G.	3"
1600A	4	4#600, 1#4/0G.	4"
	5	4#500, 1#4/0G.	4"
2000A	5	4#600, 1#250 G.	4"
	6	4#500, 1#250 G.	4"
2500A	6	4#600, 1#350 G.	4"
	7	4#500, 1#350 G.	4"
3000A	8	4#500, 1#400 G.	4"
3500A	9	4#600, 1#500 G.	4"
	10	4#500, 1#500 G.	4"
4000A	10	4#600, 1#500 G.	4"
	11	4#500, 1#500 G.	4"
5000A	12	4#600, 1#750 G.	4"
	14	4#500, 1#750 G.	4"

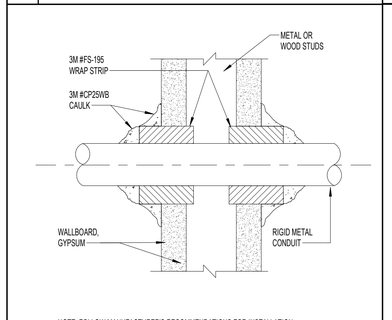
1. ELECTRICAL CONTRACTOR SHALL PROVIDE THE NUMBER OF LUGS AND PROPER LUG SIZES TO ACCEPT CONDUCTOR SIZES SHOWN.
2. GROUND NOT REQUIRED AT SERVICE LATERAL.



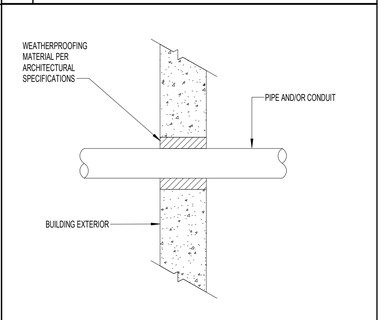
5 UNISTRUT CONDUIT E1003



8 2, 3 AND 4 HR. PENETRATIONS FOR CONCRETE E1001B



6 2 HR. GYPSUM WALLBOARD PIPE PENETRATION E1001



7 PIPE AND/OR CONDUIT PENETRATION E1001B

ELECTRICAL KEYED NOTES

E3.8 PANEL LA SHALL SERVE GENERATOR CONTROLLER, JACKET WARMER AND ANTI-CONDENSATE HEATER. CONTRACTOR SHALL CONFIRM EXISTING BREAKERS SERVE GENERATOR ACCESSORIES BEFORE CONNECTING NEW ACCESSORIES TO BREAKERS. PROVIDE NEW BREAKERS AS NEEDED.

Generator Load Analysis - FIRE STATION 12
480 / 277 , 3 -PHASE, 4 -WIRE

DESCRIPTION						NEC	KVA
LIGHTING:							
INTERIOR =	3.5	VA/S.F. X	8,903	S.F. X 125%			39.0
EXTERIOR =	3000	VA X	125%				3.8
POWER:							
RECEPTACLES =	1.0	VA/S.F. x	8,903	S.F.		220.44	8.9
MDF/IDF/MISC	3	VA/S.F. x	8903	S.F.			26.7
KITCHEN WALK-INS =	17339	VA X	65%			220.56	11.3
COOLING=	29998	VA					30.0
HEATING=	9000	VA	X	0			0.0
FANS=	8902	VA					8.9
25% LARGEST MOTOR =	7063	VA					7.1
WATER HEATER =	18000	VA					18.0
DRINKING FOUNTAIN =	3000	VA					3.0
CIRCULATION PUMP=	500	VA					0.5
						TOTAL KVA	157.0
						TOTAL KW	141.3
Sqaure footage:	8,903	S.F.				GEN SIZE (KW)	180.0
						RUNNING CAPACITY (KW)	144.0
MAX RUNNING CAPACITY IS 80% OF GENERATOR RATING PER MANUFACTURER						SPARE CAPACITY (KW)	2.7

GENERAL POWER DEMOLITION NOTES:

A. EXISTING CIRCUIT BREAKERS VACATED DUE TO REMODELING WORK SHALL REMAIN AS SPARE BREAKERS AND LEFT IN THE 'OFF' POSITION.

B. WHERE INDICATED OR REQUIRED BY OTHER TRADES, CONTRACTOR SHALL REMOVE ALL ELECTRICAL CONNECTIONS TO EXISTING PREWIRED FURNITURE. REMOVE CONDUIT AND WIRING BACK TO LAST ACTIVE JUNCTION. ALL DATA CABLING SHALL BE REMOVED.

C. CONTRACTOR SHALL REPORT ANY DAMAGED DEVICES THAT ARE SHOWN AS EXISTING TO REMAIN. ALL DEVICES FOUND TO BE DAMAGED AT THE TIME OF SUBSTANTIAL COMPLETION THAT NOT REPORTED PRIOR TO STARTING WORK SHALL BE REPLACED AT THE CONTRACTOR'S COST.

D. DEMOLISHED POKE-THRUS SHALL BE DISCONNECTED FROM EXISTING BRANCH CIRCUIT, DATA AND/OR AV CONDUCTORS. CAP WITH A UL LISTED FIRE RATED POKE-THRU COVER.

E. EXISTING RECEPTACLE OR MECHANICAL CIRCUITS MODIFIED IN FIELD SHALL NOT EXCEED 80% CAPACITY BASED ON AMP-RATING OF CIRCUIT.

GENERAL ELECTRICAL DEMOLITION NOTES:

A. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE VERIFIED THE EXISTING JOB SITE CONDITIONS DURING THE BIDDING PERIOD TO OBTAIN THE SCOPE OF ELECTRICAL WORK INVOLVED AS A RESULT OF THE ARCHITECTURAL MODIFICATIONS TO THE EXISTING CONDITIONS. THE SCOPE OF WORK SHALL INCLUDE MATERIALS AND OUTLETS, CONSISTING OF FIXTURES, DEVICES, EQUIPMENT OR APPARATUS, WHICH MUST BE REROUTED, RELOCATED OR REMOVED EITHER TEMPORARILY OR PERMANENTLY, OR WHICH MUST BE PROVIDED SO THAT THE REMODELING WORK MAY BE ACCOMPLISHED. NOT ALL EXISTING OUTLETS ARE NECESSARILY INDICATED ON THE DRAWINGS.

B. CONTRACTOR SHALL REVIEW DEMOLITION AND NEW WORK PLANS SIMULTANEOUSLY TO IDENTIFY SCOPE THAT IS TO BE MODIFIED FOR REUSE WITH NEW SCOPE.

C. CONTRACTOR SHALL VERIFY AND DOCUMENT EXISTING CONDITIONS OF ALL OUTLETS THAT ARE INDICATED OR REQUIRED TO BE REMOVED AND REINSTALLED TO FACILITATE THE WORK REQUIRED BY ALL TRADES. THE CONTRACTOR SHALL REPLACE NON-OPERABLE DEVICES AT NO ADDITIONAL COST TO THE OWNER. DOCUMENT OUTLETS IN NON-WORKING CONDITION PRIOR TO REMOVAL AND NOTIFY THE OWNER.

D. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL TO ALL REMOVED MATERIALS. CONTRACTOR SHALL COORDINATE WITH OWNER FOR LOCATION TO RETURN ANY AND ALL MATERIAL FOR OWNER STORAGE. FAILURE TO TURN OVER REMOVED MATERIAL TO OWNER MAY REQUIRE CONTRACTOR TO REPLACE EQUIPMENT REMOVED WITH NEW.

E. REMOVE ALL ELECTRICAL DEVICES WITHIN DEMOLISHED WALLS INCLUDING RECEPTACLES, DATA/TELEPHONE DROPS, P/A DEVICES, CONDUIT, AND WIRING. ALL EXISTING DEVICES MAY NOT BE DOCUMENTED ON PLANS. REFER TO ARCHITECTURAL DEMOLITION PLANS FOR DEMOLISHED WALLS. REMOVE CONDUIT AND WIRING BACK TO PANEL OR LAST ACTIVE JUNCTION BOX.

F. ALL ABANDONED CONDUIT AND BOXES FOUND IN CRAWLSPACES, CEILINGS SPACES, CHASES, OR UTILITY SPACES SHALL BE REMOVED. EXISTING UNDERGROUND CONDUIT MAY BE ABANDONED. CAP ABANDONED UNDERGROUND CONDUIT FLUSH WITH GRADE.

G. OWNER SHALL RESERVE THE RIGHT TO CLAIM ALL EQUIPMENT AND CABLING REMOVED DURING DEMOLITION.

H. RE-ESTABLISH SERVICE TO ALL OUTLETS THAT MAY BE INTERRUPTED DUE TO REMODELING WORK.

I. PROVIDE ALL APPURTENANCES REQUIRED TO REROUTE, RELOCATE, REMOVE OR REINSTALL ALL ITEMS REQUIRED BY SCOPE OF REMODEL.

J. ALL ABANDONED MATERIAL SHALL BE REMOVED FROM JOBSITE PRIOR TO PROJECT COMPLETION.

K. IDENTIFICATION AND LABELING SHALL BE PROVIDED IN ACCORDANCE WITH SPECIFICATIONS.

L. CIRCUIT NUMBERS ARE FOR PLAN REFERENCE ONLY. CONTRACTOR SHALL RELABEL ALL CIRCUIT DIRECTORIES WITH LOAD NAMES FOR ALL EXISTING AND NEW PANELS THAT WERE MODIFIED WITHIN THIS PROJECT.

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REVISION:

No.	DATE	DESCRIPTION
	10/13/25	IFB

SEAL:
STATE OF TEXAS
WILLIAM MEISTER
101184
LICENSED PROFESSIONAL ENGINEER
10/13/25

NEW FIRE STATION #12 CY-FAIR VOLUNTEER DEPARTMENT HARRIS COUNTY EMERGENCY SERVICES NO. 9

TBPE Firm Registration No. 2234

DATE: 08/01/22

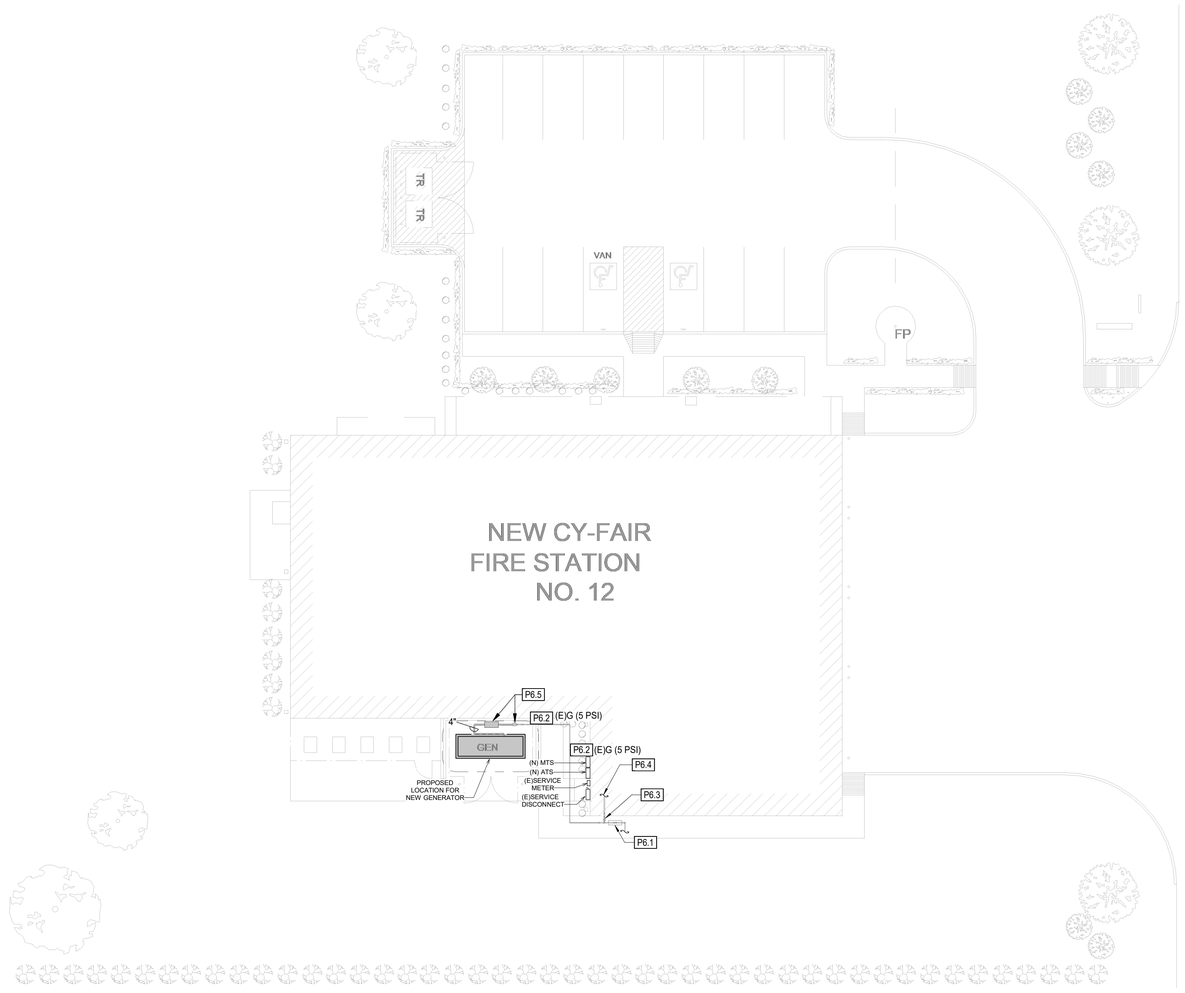
DRAWN BY: DBR

CHECKED BY: DBR

PROJECT NUMBER Project Number

SHEET TITLE: ELECTRICAL ONE-LINE DIAGRAM

SHEET NUMBER: E4.01



1 PLUMBING SITE PLAN

1/16" = 1'-0"

PLUMBING KEYED NOTES

P6.1 APPROXIMATE LOCATION OF EXISTING GAS METER: 2,603 CFH AT 5 PSI, SHUT-OFF VALVE AND PRESSURE REGULATOR ASSEMBLY. INCREASE IN GAS LOAD OF 460 CFH FOR A NEW TOTAL GAS LOAD OF 3,063 (REFER TO BUILDING GAS LOAD DEMAND TABLE ON SHEET P0.11). LOCAL GAS UTILITY COMPANY HAS BEEN CONTACTED TO DETERMINE IF EXISTING GAS METER REQUIRES REPLACING.

P6.2 EXISTING GAS PIPING TO GENERATOR ROUTED UNDERGROUND FROM GAS METER AND UP THROUGH SLEEVE AT GENERATOR PAD. CONTRACTOR SHALL VERIFY, IN THE FIELD, EXACT LOCATION OF EXISTING GAS PIPING TO GENERATOR.

P6.3 EXISTING GAS PRESSURE REGULATOR SET FROM 5 PSI TO 4 OZ TO REMAIN AND BE REUSED.

P6.4 EXISTING GAS 875 CFH AT 4 OZ TO EXISTING MECHANICAL EQUIPMENT AND APPLIANCES.

P6.5 EXISTING GAS PRESSURE REGULATOR AND BUFFER TANK TO BE REMOVED AND REPLACED WITH NEW GAS PRESSURE REGULATOR (5 PSI IN, 11" W.C. OUT) AND BUFFER TANK OF EQUAL SIZE (APPROXIMATELY . PROVIDE NEW PIPING FROM GAS PRESSURE REGULATOR OUTLET TO NEW GENERATOR, SIZE AS NOTED ON PLANS. CONTRACTOR SHALL VERIFY MANUFACTURER'S RECOMMENDED PRESSURE(S) PRIOR TO ORDER GAS PRESSURE REGULATOR.

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Firm Registration No. 2234
DBR Project # 250285.000

EK	ZA	EC	GH	-

DBR
SERVICE | QUALITY | INTEGRITY | SUSTAINABILITY

REVISION:

No.	DATE	DESCRIPTION
	10/13/25	IFB

SEAL:

STATE OF TEXAS
WILLIAM MEISTER
101184
LICENSED PROFESSIONAL ENGINEER
10/13/25

NEW FIRE STATION #12 CY-FAIR
VOLUNTEER DEPARTMENT HARRIS
COUNTY EMERGENCY SERVICES NO. 9

TBPE Firm Registration No. 2234

DATE: 05/07/18

DRAWN BY: DBR

CHECKED BY: DBR

PROJECT NUMBER Project Number

SHEET TITLE: ELECTRICAL AND PLUMBING SITE PLAN

SHEET NUMBER: EP.021