

Tower D
Project Narrative
City of Fitchburg, Dane County, Wisconsin

Project Background

The proposed project site will contain a new 600,000-gallon single pedestal elevated storage tank. The project also includes the necessary site, electrical, and supervisory control and data acquisition improvements.

Existing Conditions

The proposed elevated tank site will be located in the SW 1/4 and SE 1/4 of the SE 1/4 of Section 12 of Township 06N and Range 09E. The site is located in the northeast corner of the Lacy Road and US Highway 14 interchange. The sites topography has elevations ranging from 938 to 958 feet msl.

No wetlands or waterways are contained within the site boundaries. The lot is lightly wooded and covered with shrubs and tall grass. The lot is approximately 0.75 acres. The west and east property boundary is widest at the north and is approximately 190 feet long. The west and east property boundary to the south is approximately 120 feet long. The north and south property boundary is approximately 200 feet long. The lot is currently zoned as rural development.

Construction Schedule

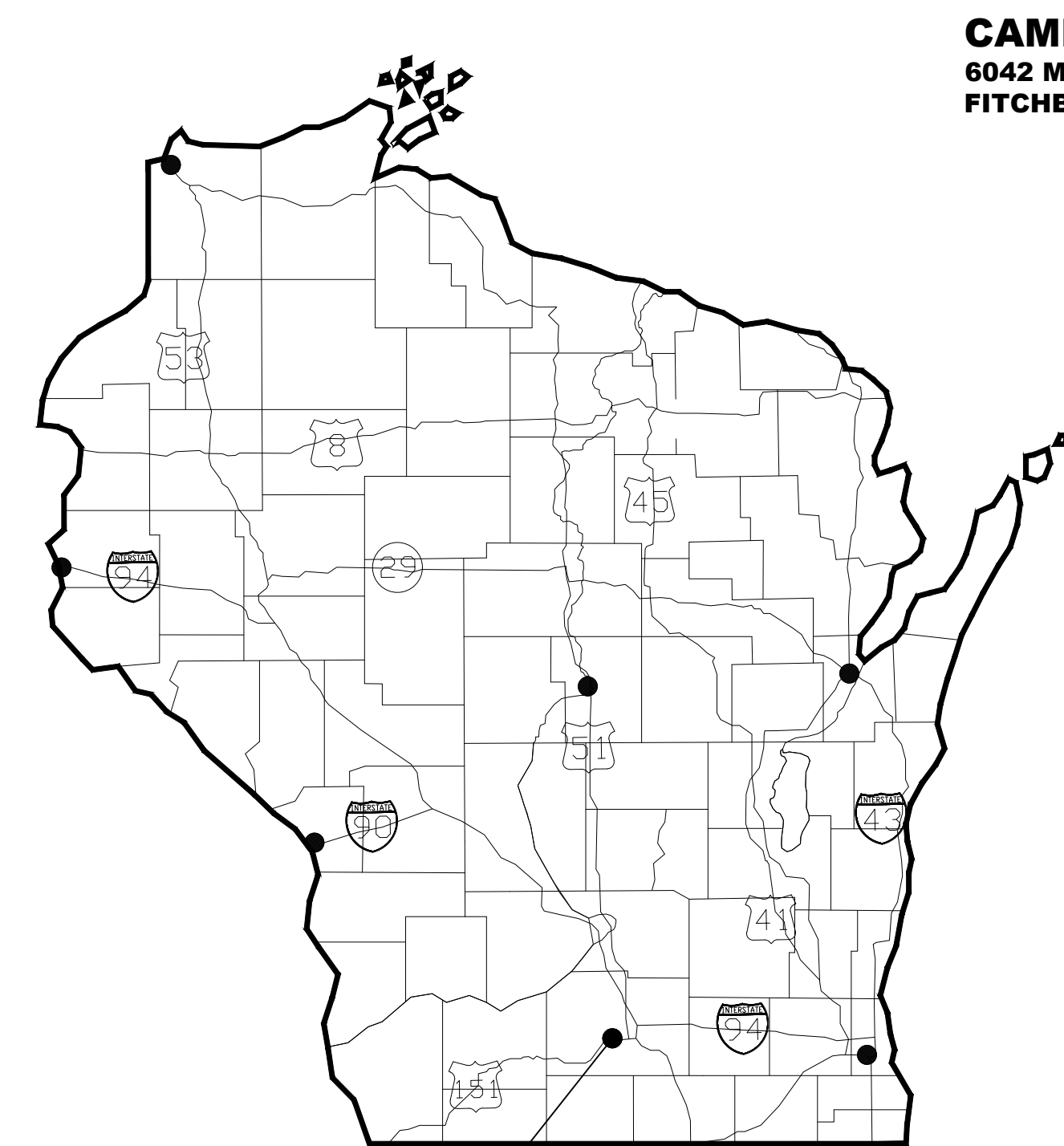
The sequence will be up to the contractor, but Strand Associates, anticipates the elevated tank contractor will begin with installing erosion control measures around the site in Spring 2025. Then, (in sequential order), the contractor will complete the site utilities, tank foundation and tank erection by Fall 2025. Tank painting, electrical, system start-up and final site grading will follow and be completed by spring 2026. Site restoration will follow substantial completion in spring 2026. The area surrounding the tank and driveway will be restored with turf grass while the rest of the disturbed site will be restored with a native prairie seed mixture.

FITCHBURG TOWER D

FOR THE

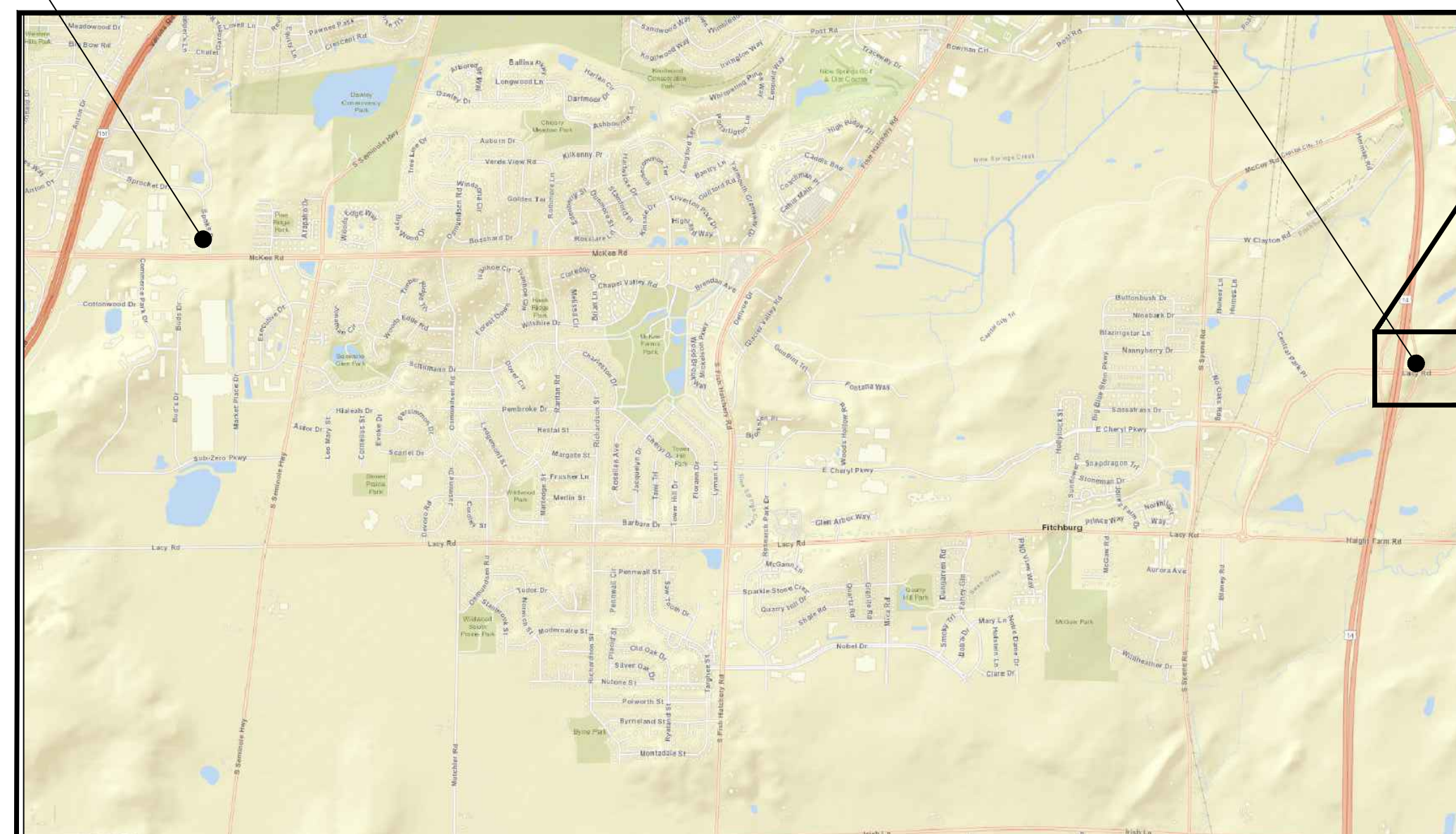
CITY OF FITCHBURG

DANE COUNTY, WISCONSIN

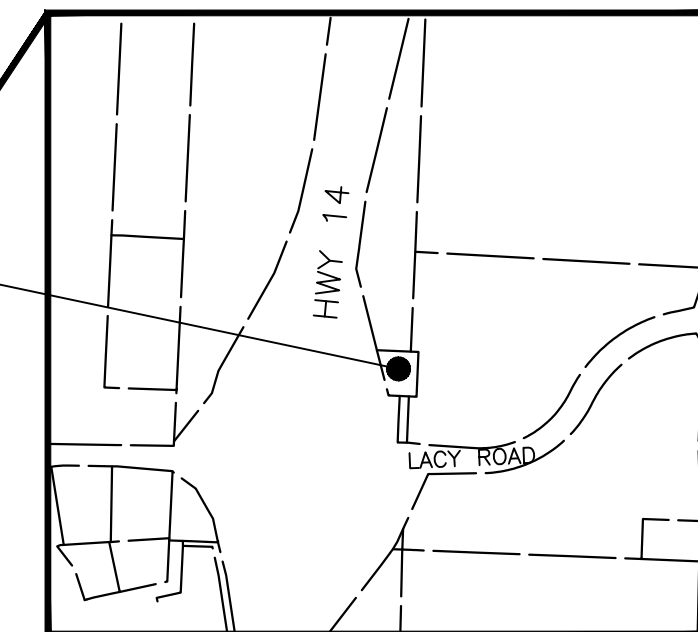


PROJECT LOCATION

CAMP BADGER RESERVOIR
6042 MCKEE ROAD
FITCHBURG, WISCONSIN

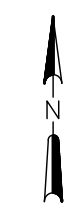


TOWER D
4974 LACY ROAD
FITCHBURG, WISCONSIN



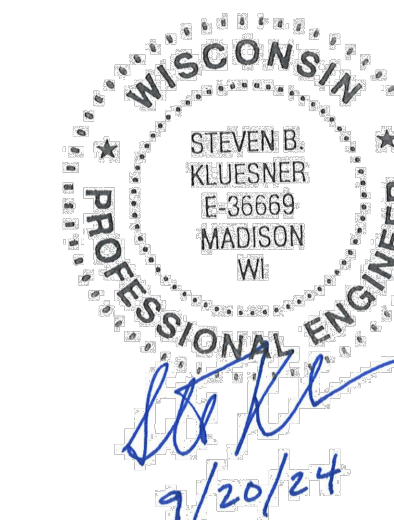
SHEET NO.	DRAWING NO.	TITLE
1	G0.1	TITLE SHEET, LOCATION MAP, AND LIST OF DRAWINGS
2	G0.2	STANDARD SYMBOLS - 1
3	G0.3	STANDARD SYMBOLS - 2
4	G0.4	ABBREVIATIONS
5	CE1.1	SITE PLAN - TOWER D
6	C1.2	SITE PLAN - CAMP BADGER RESERVOIR
7	ASME1.1	FLOOR PLANS
8	ASME3.1	SECTIONS
9	CASME5.1	DETAILS - 1
10	CASME5.2	DETAILS - 2
11	CASME5.3	DETAILS - 3
12	ASM6.1	PAINTING SCHEDULE
13	E6.1	ELECTRICAL SCHEDULES AND ONE-LINE DIAGRAM

PROJECT LOCATION MAP
NO SCALE



910 West Wingra Drive
Madison, WI 53715
608-251-4843
608-251-8655 fax
www.strand.com

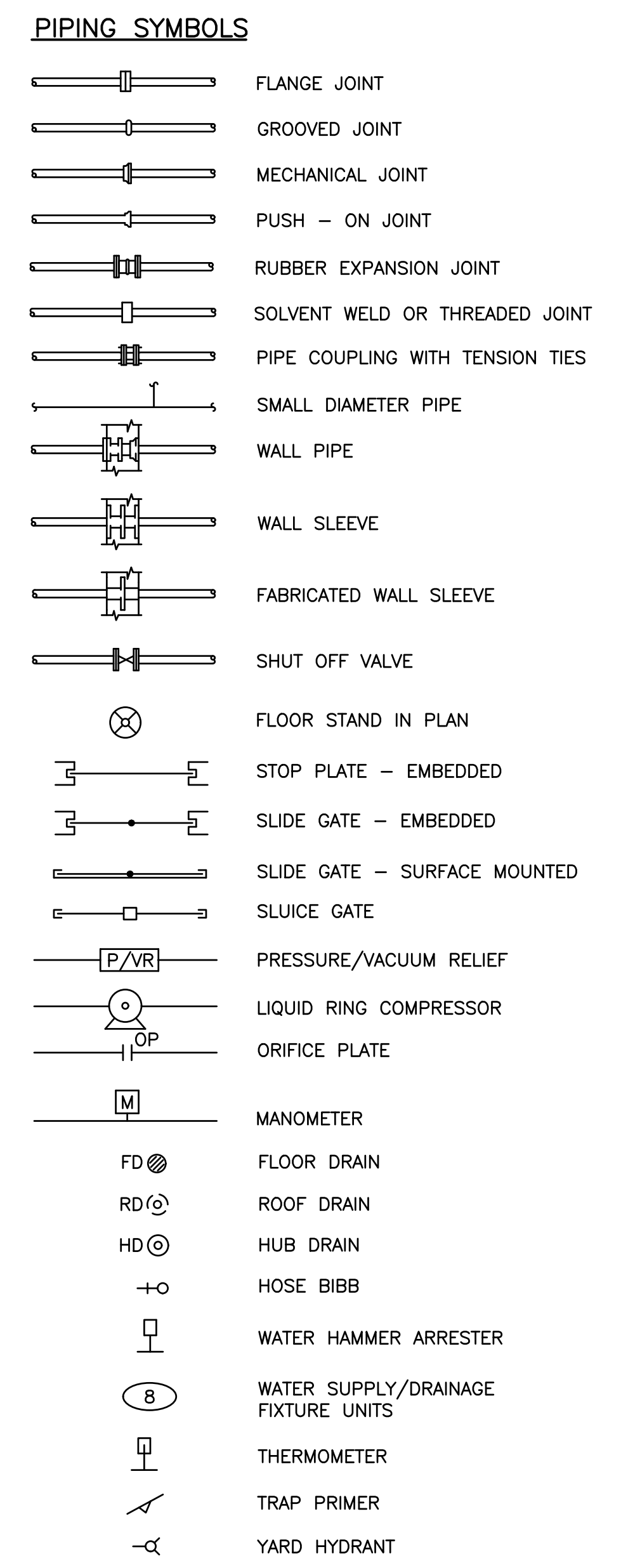
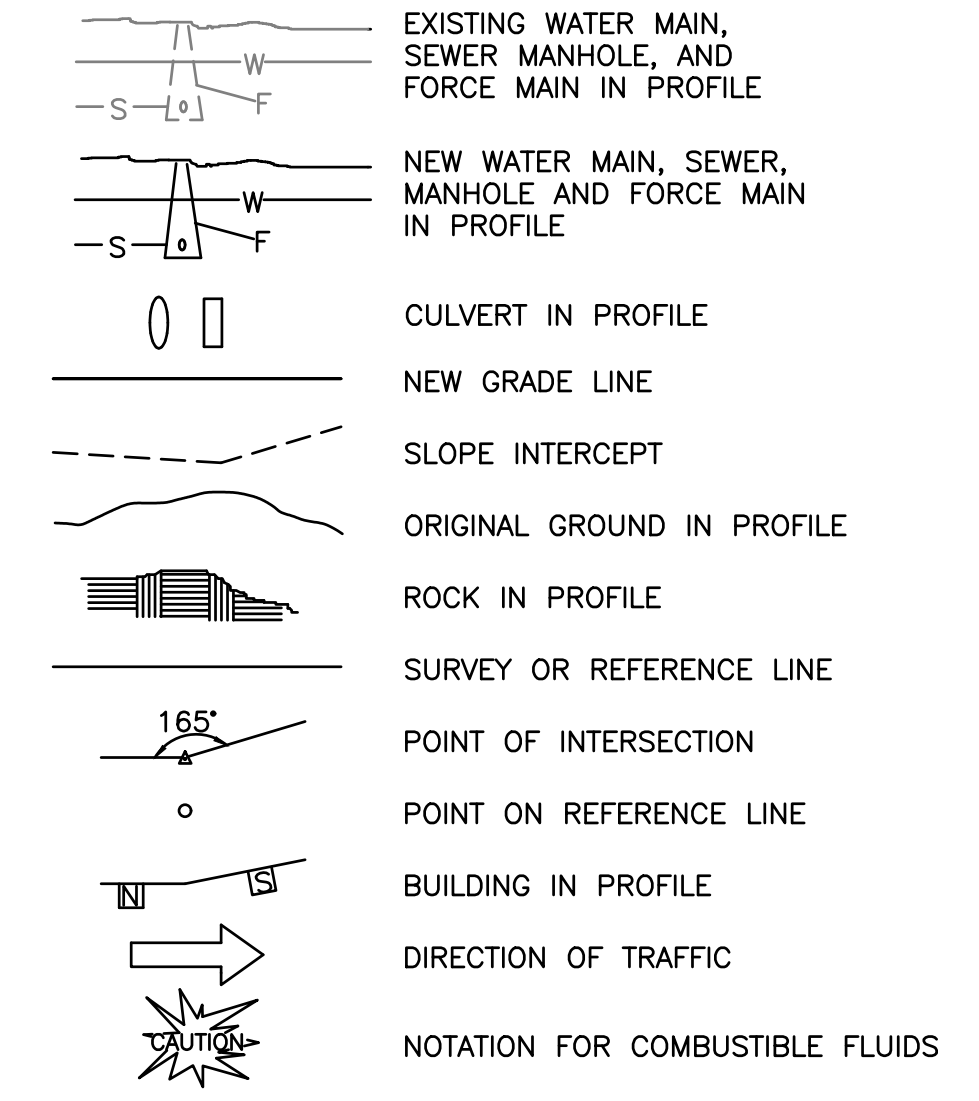
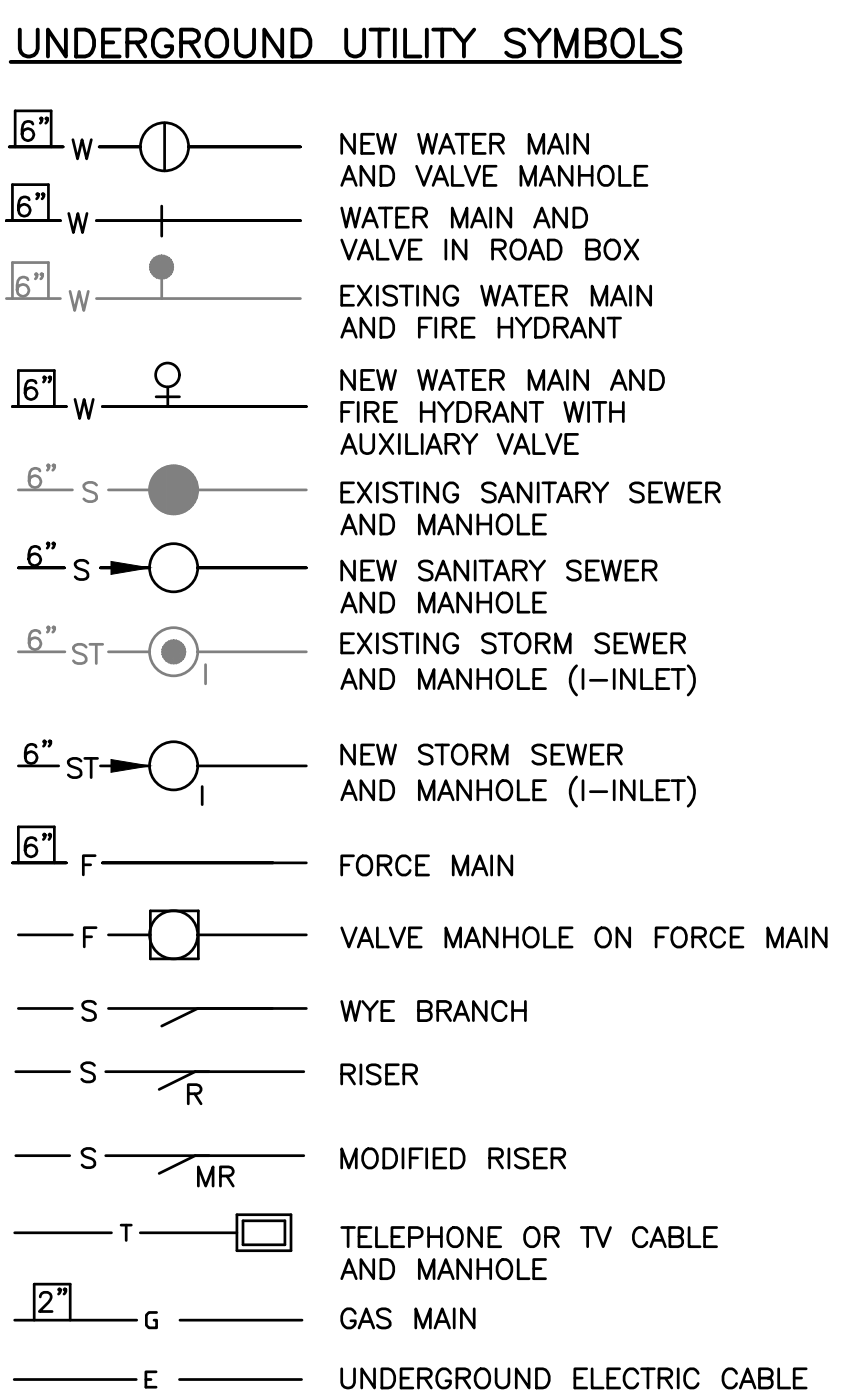
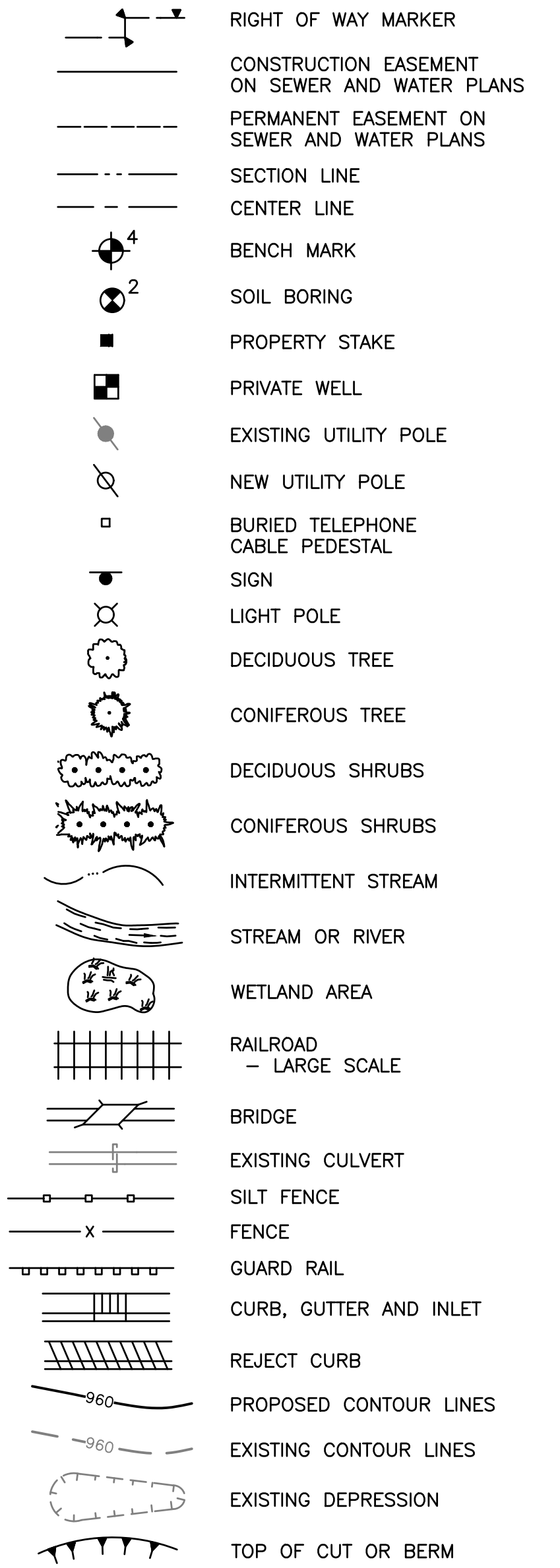
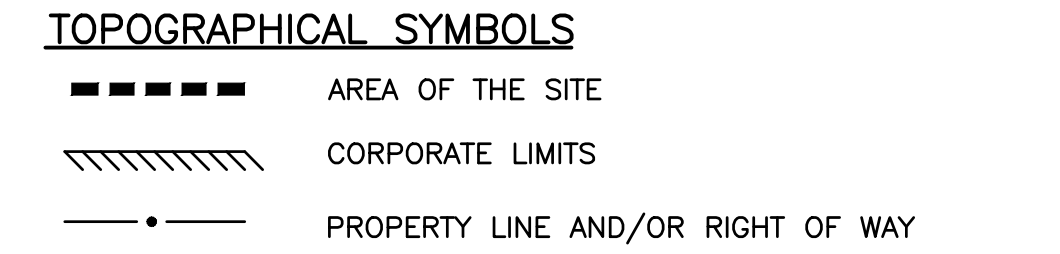
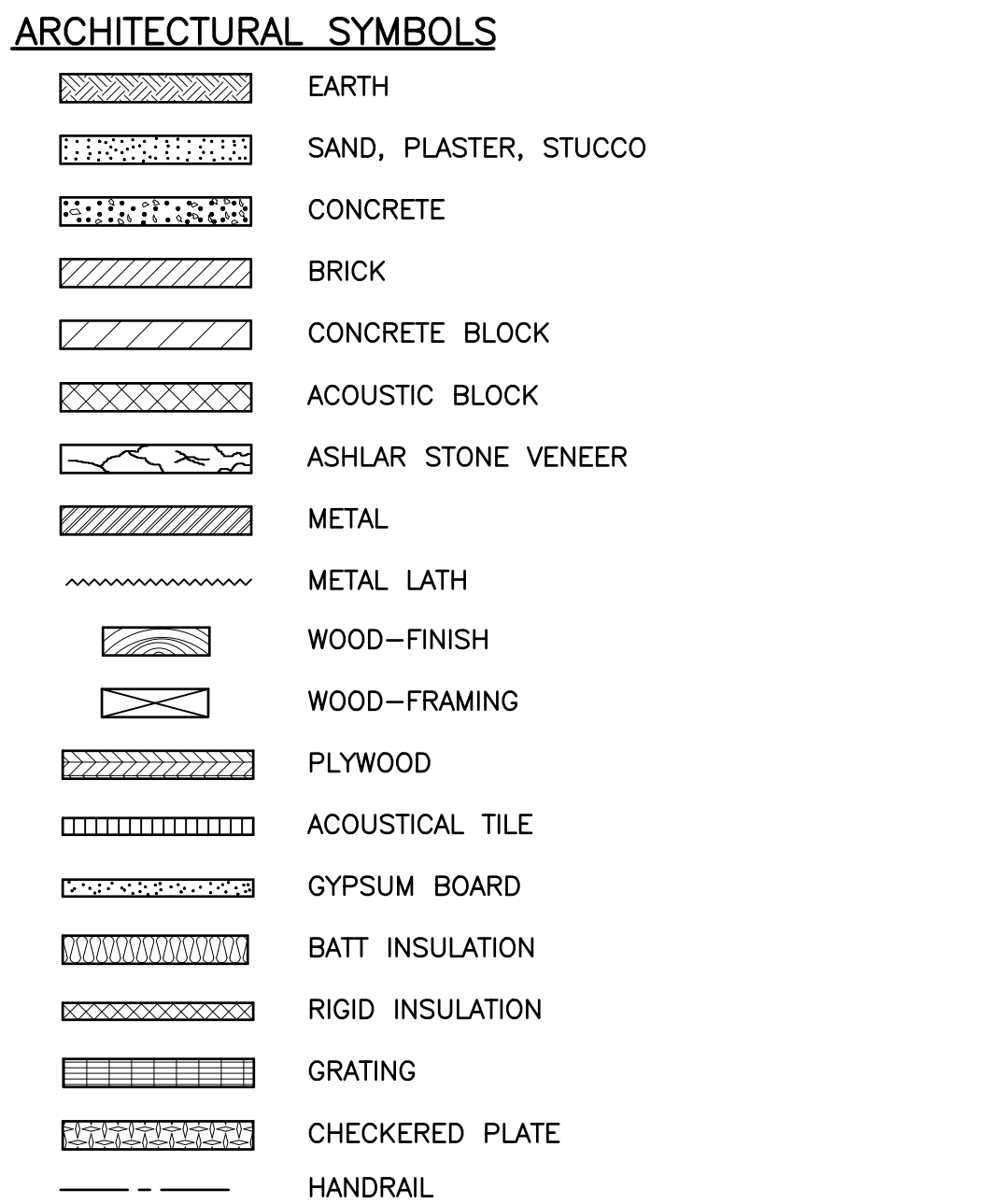
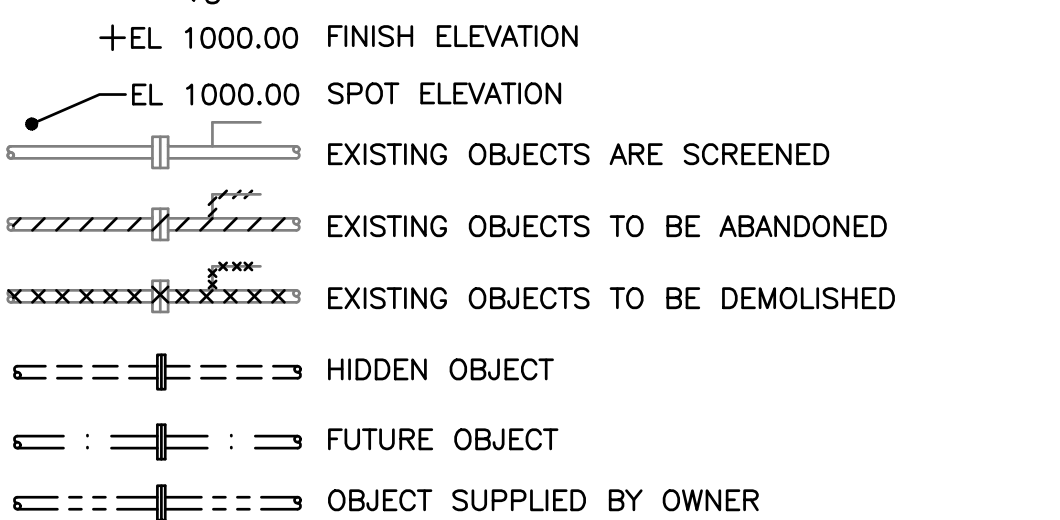
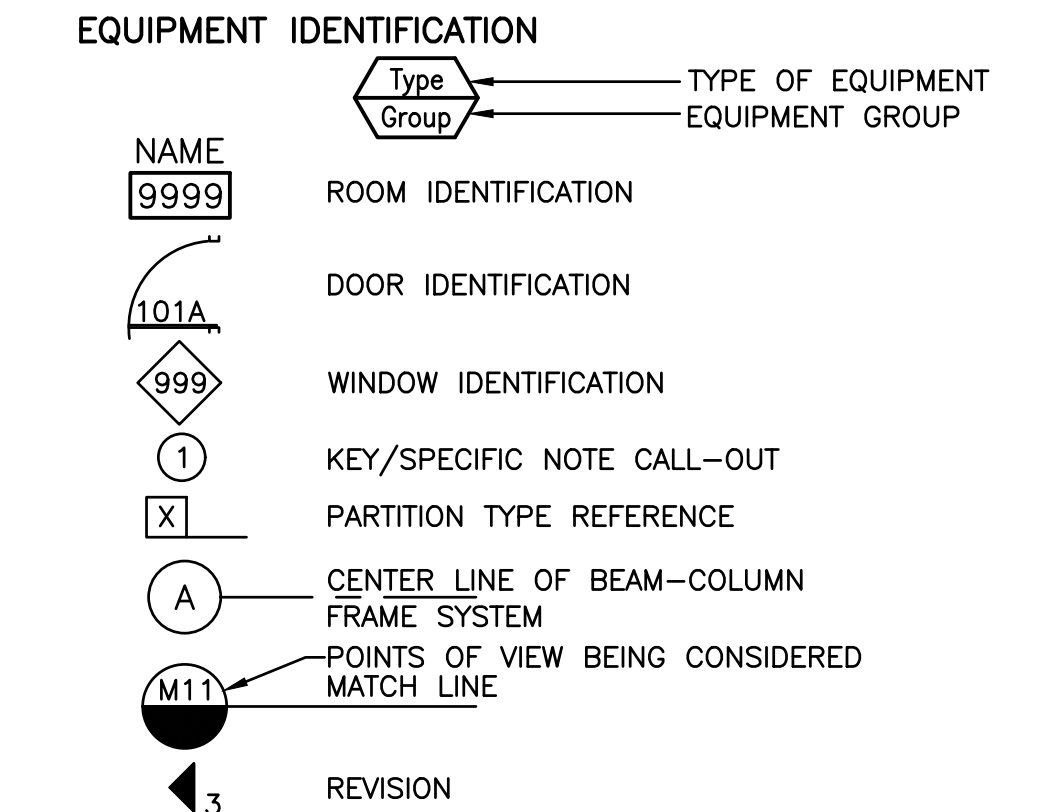
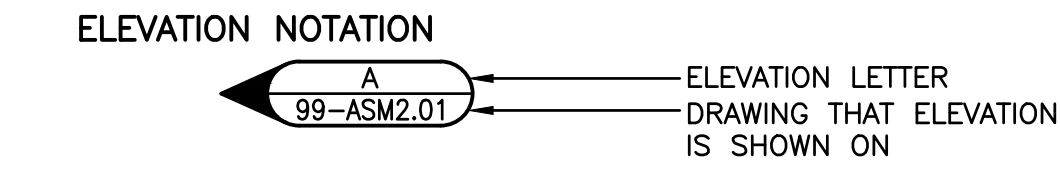
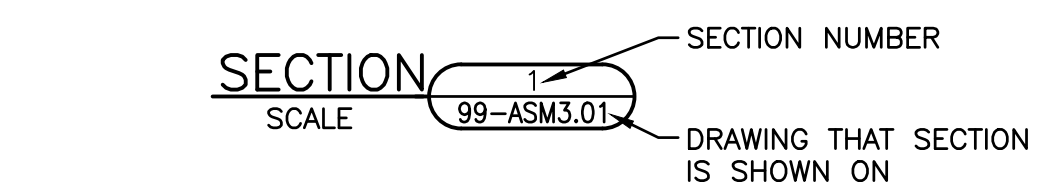
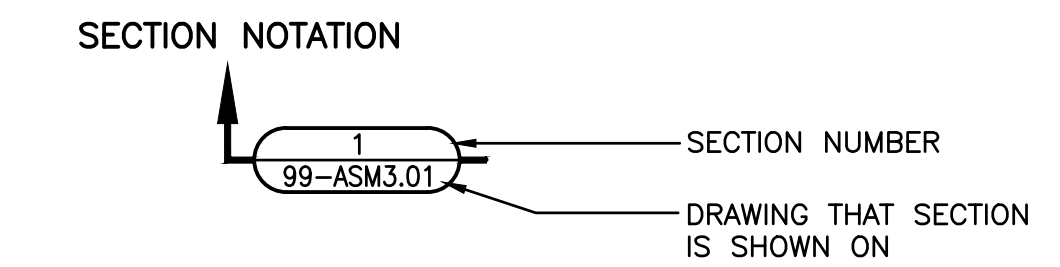
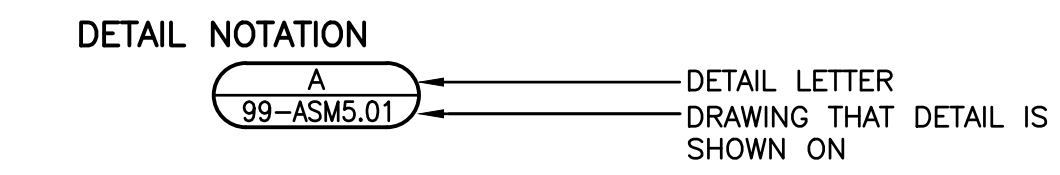
PROJECT NUMBER 602-574-4532



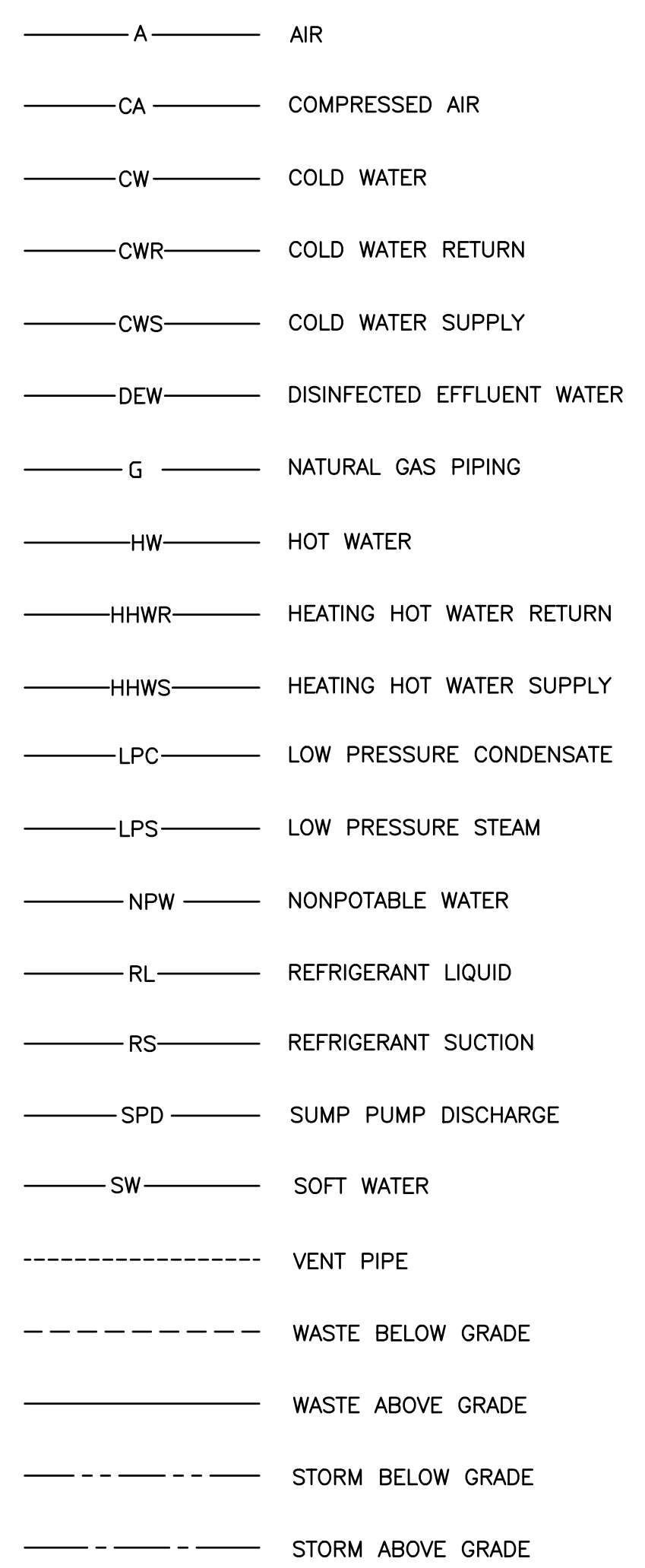
ISSUED FOR BID 10/02/24

SHEET
1
G0.1

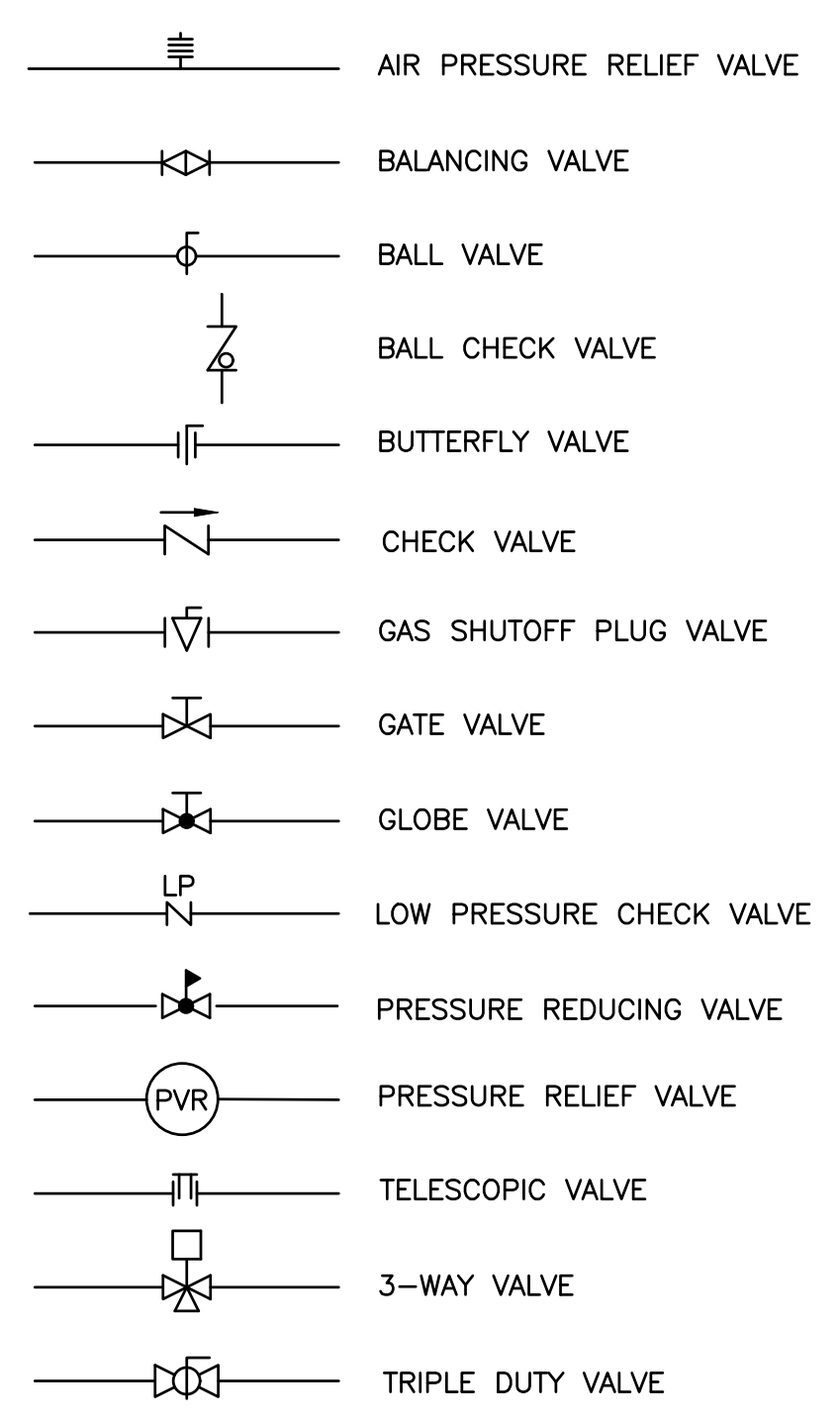
DRAFTING SYMBOLS



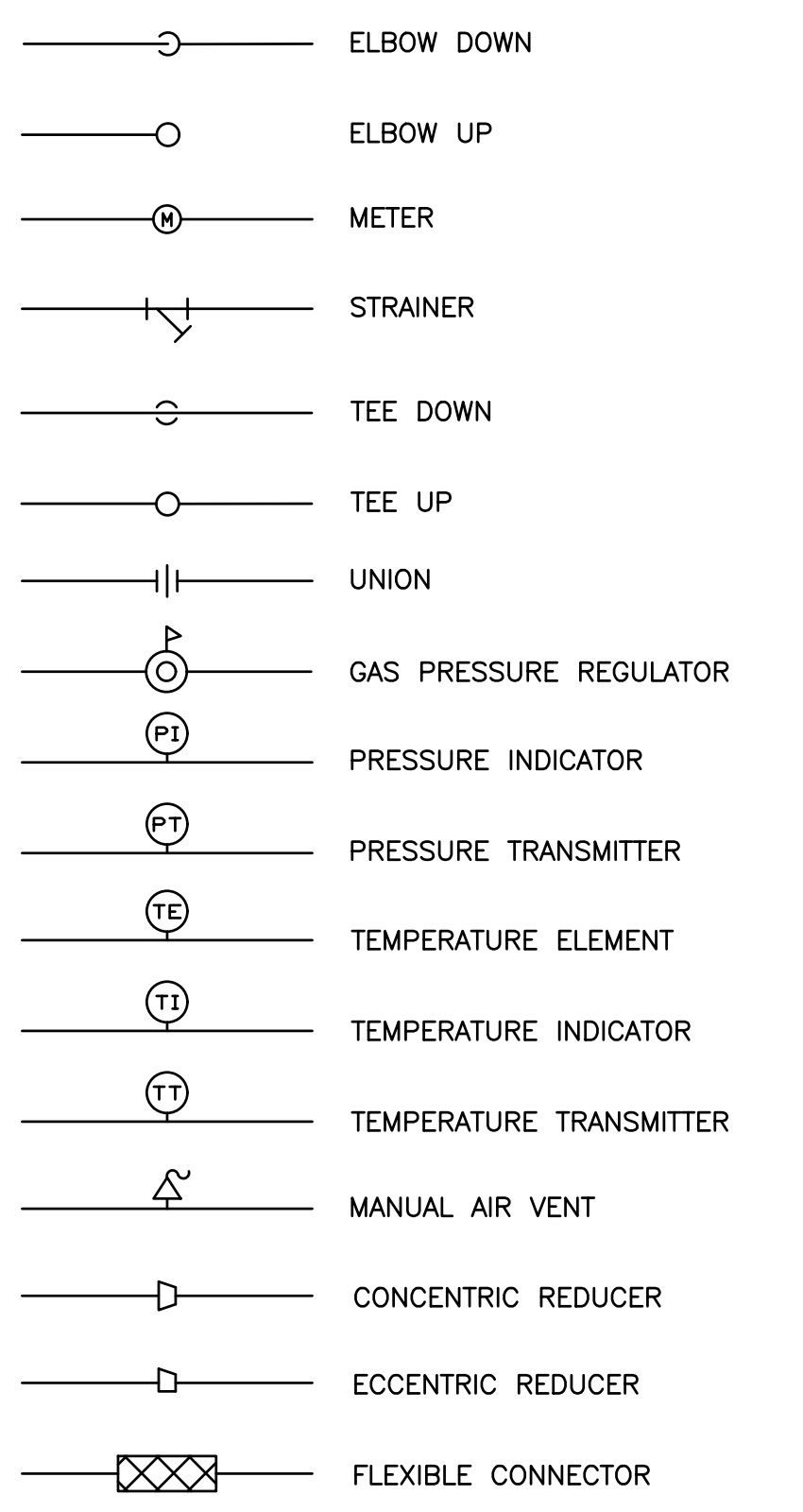
PIPING DESIGNATIONS



VALVE SYMBOLS



PIPING SYMBOLS



NO.	REVISIONS	ISSUED FOR	RD
1			

STANDARD SYMBOLS - 1

FITCHBURG TOWER D
CITY OF FITCHBURG
DANE COUNTY, WISCONSIN

JOB NO.
1275.060

PROJECT MGR.
STEVE KLUESNER

SHEET
2
G0.2

ELECTRICAL SYMBOLS

LIGHTING

FIXTURE SYMBOL (TYPICAL)
 A-INDICATES FIXTURE TYPE
 2-INDICATES CIRCUIT NUMBER
 b-INDICATES SWITCHING
 SOLID CIRCLE INDICATES ALWAYS ON

SURFACE OR PENDANT MOUNTED
 WALL MOUNTED
 1X4 SURFACE OR PENDANT MOUNTED LINEAR
 1X8 SURFACE OR PENDANT MOUNTED LINEAR
 WALL MOUNTED LINEAR
 1X4 RECESSED LINEAR
 2X2 RECESSED LINEAR
 2X4 RECESSED LINEAR
 RECESSED CAN
 EXIT, SURFACE, PENDANT OR RECESSED
 EXIT, WALL
 EMERGENCY LIGHTING

SWITCHES

SINGLE POLE
 #: (BLANK) = SINGLE POLE
 2 = TWO-WAY
 3 = THREE-WAY
 4 = FOUR-WAY
 K = KEYED
 D = DIMMER
 M = MANUAL MOTOR SWITCH (3 PHASE)
 P = SWITCH WITH PILOT LIGHT
 WP = WEATHERPROOF

LC LIGHTING CONTROL STATION
 PC PHOTOCELL

EQUIPMENT AND WIRING

DISCONNECT, F=FUSED, B=CIRCUIT BREAKER, BLANK=NON-FUSED
 CIRCUIT BREAKER COMBINATION STARTER
 JUNCTION BOX
 LINE VOLTAGE THERMOSTAT
 480V LOAD, REFER TO MCC/PANEL SCHEDULE FOR EQUIPMENT NUMBER
 SOLENOID VALVE

POWER AND ONE-LINE DIAGRAM SYMBOLS

CIRCUIT NUMBER (TYPICAL)
 OTHERWISE SHOWN PANEL DESIGNATION (TYP.)
 DUPLEX, 120 VOLT, 15" AFF
 WP INDICATES WEATHERPROOF
 DUPLX, 120 VOLT, 3'-6" AFF
 DOUBLE DUPLEX, 120 VOLT, 3'-6" AFF
 DOUBLE DUPLEX, 120 VOLT, 15" AFF
 SINGLE CONVENIENCE, 120 VOLT FOR ELECTRIC WATER COOLER
 EWC
 EXPLOSION-PROOF, 3'-6" AFF
 EXPLOSION-PROOF, 15" AFF
 FIXED EQUIPMENT CONNECTION
 POWER OUTLET, VOLTAGE & AMPERAGE AS INDICATED
 AUTOMATIC TRANSFER SWITCH
 CIRCUIT BREAKER
 PANELBOARD
 FUSE
 METER
 DRAW-OUT TYPE CIRCUIT BREAKER
 CURRENT TRANSFORMER, X:YA INDICATES RATIO
 X:YA
 PROTECTIVE RELAY
 *: SEE LEGEND
 TRANSFORMER
 DISCONNECT SWITCH
 CIRCUIT BREAKER INTERLOCK
 *: K = KIRK KEY
 E = ELECTRONIC

FIRE ALARM AND DETECTION SYMBOLS

FACP FIRE ALARM CONTROL PANEL
 FAAP FIRE ALARM ANNUNCIATOR PANEL
 FA# STROBE; WALL MOUNT
 STROBE CANDELA RATING 80" AFF
 FA#H HORN STROBE; WALL MOUNT
 STROBE CANDELA RATING 80" AFF
 FA#S SPEAKER STROBE; WALL MOUNT
 STROBE CANDELA RATING 80" AFF
 FA#H HORN; WALL MOUNT
 FA#S SPEAKER; WALL MOUNT
 FA#X STROBE; CEILING MOUNT
 STROBE CANDELA RATING
 FA#H HORN STROBE; CEILING MOUNT
 STROBE CANDELA RATING
 FA#S SPEAKER STROBE; CEILING MOUNT
 STROBE CANDELA RATING
 ARA AREA OF RESCUE ASSISTANCE
 EMS EMERGENCY TELEPHONE SYSTEM
 H HEAT DETECTOR; CEILING MOUNT
 Z SMOKE DETECTOR; CEILING MOUNT
 ZR ELEVATOR RECALL SMOKE DETECTOR
 NOX NITROUS OXIDE SENSOR
 CO CARBON MONOXIDE SENSOR
 SWITCH INDICATION
 DSD DUCT SMOKE DETECTOR
 DUCT SIZE
 RTS REMOTE TEST SWITCH
 SWITCH INDICATION
 FIRE ALARM PULL STATION
 SFS SPRINKLER FLOW SWITCH
 TM SPRINKLER VALVE TAMPER SWITCH
 BO FIRE ALARM BELL

TECHNOLOGY SYMBOLS

DATA JACK; * = # OF JACKS
 POTS ANALOG PHONE JACK; * = # OF JACKS
 POTS ANALOG PHONE AND DATA JACKS; * = # OF JACKS
 WALL MOUNT VOIP PHONE JACK ABOVE FURNITURE
 WALL MOUNT POTS ANALOG PHONE JACK ABOVE FURNITURE
 SCADA NETWORK JACK
 2-POST DATA RACK
 COAX CABLE JACK
 POWER POLE
 PA SYSTEM HORN; 10'-0" AFF
 PA SYSTEM SPEAKER
 CEILING MOUNT SPEAKER
 A=SPEAKER TYPE
 KEY PAD
 GBD GLASS BREAK DETECTOR
 MS MOTION SENSOR
 P PUSH BUTTON
 ES ELECTRIC STRIKE
 ML MAGNETIC LOCK
 I INTERCOM STATION
 OS OCCUPANCY SENSOR, CEILING, OR WALL
 SEE SPECIFICATION FOR SENSOR TYPE
 YE CARD READER
 RVC REMOTE VOLUME CONTROL
 FIX FIXED SECURITY CAMERA
 PTZ PAN, TILT, ZOOM SECURITY CAMERA
 PAN PANORAMIC SECURITY CAMERA
 ALARM HORN; WALL MOUNT
 WARNING LIGHT; WALL MOUNT
 OMNI-DIRECTIONAL ANTENNA
 DIRECTIONAL (YAGI) ANTENNA

SITE SYMBOLS

E UNDERGROUND ELECTRIC
 OH OVERHEAD ELECTRIC
 C CABLE TELEVISION SERVICE
 T TELEPHONE SERVICE
 FO FIBER OPTIC CABLE
 UTILITY POLE

MECHANICAL/HVAC SYMBOLS

DAMPER AND ACTUATOR SYMBOLS

M AUTOMATIC DAMPER
 BDD BACKDRAFT DAMPER
 MANUAL VOLUME DAMPER
 FD 1-1/2 HR. FIRE DAMPER
 M MOTOR (ELECTRIC)
 P PNEUMATIC
 S SOLENOID

EQUIPMENT SYMBOLS

ACU ACCUMULATOR
 AIR FLOW DIRECTION
 BASE MOUNTED PUMP
 BLOWER
 CEILING DIFFUSER WITH FLEXIBLE DUCT
 CENTRIFUGAL PUMP
 CONNECT TO EXISTING
 DT DRIP TRAP
 DUCT BOOST COIL
 EQUIPMENT TAG
 FA FLAME ARRESTER
 FC FLAME CELL
 FT FLAME TRAP ASSEMBLY
 G GRINDER
 INLINE PUMP
 POSITIVE DISPLACEMENT PUMP
 ROOF EXHAUST FAN
 UNIT HEATER
 VARIABLE AIR VOLUME (VAV) BOX WITH ELECTRIC REHEAT COIL
 VARIABLE AIR VOLUME (VAV) BOX WITH HEATING HOT WATER REHEAT COIL
 FLOATING MIXER
 SCREW CONVEYOR

DUCTWORK SYMBOLS

SUPPLY DUCT (UP OR SECTION)
 SUPPLY OR OUTSIDE AIR DUCT (DOWN/OR AWAY)
 EXHAUST DUCT (UP OR SECTION)
 EXHAUST OR RETURN DUCT (DOWN/OR AWAY)
 ROUND DUCTWORK UP
 ROUND DUCTWORK DOWN
 FLEXIBLE CANVAS CONNECTION
 TURNING VANES

FIELD MOUNTED HVAC CONTROLS

T THERMOSTAT
 H ROOM HUMIDISTAT
 P PRESSURE SENSOR
 S ROOM SENSOR
 S DUCT SMOKE DETECTOR
 S PRESSURE GAUGE

INSTRUMENTATION SYMBOLS

INTERNATIONAL SOCIETY OF AUTOMATION (ISA) DEFINITION TABLE

LETTER	FIRST LETTERS		SUCCEEDING LETTERS		
	PROCESS OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS (+)		ALARM		
B	BURNER, COMBUSTION		USER'S CHOICE (+)	USER'S CHOICE (+)	USER'S CHOICE (+)
C	USER'S CHOICE (+)		CONTROL		
D	USER'S CHOICE (+)	DIFFERENTIAL			DEVIATION
E	VOLTAGE		PRIMARY ELEMENT (SENSOR)		
F	FLOW, FLOW RATE	RATIO			
G	USER'S CHOICE (+)		GLASS, GAUGE	GATE	
H	HAND (MANUAL)				HIGH
I	CURRENT		INDICATE		
J	POWER	SCAN			
K	TIME, SCHEDULE	TIME RATE		CONTROL STATION	
L	LEVEL		LIGHT (PILOT)		LOW
M	USER'S CHOICE (+)	MOMENTARY			MIDDLE
N	USER'S CHOICE (+)		USER'S CHOICE (+)	USER'S CHOICE (+)	USER'S CHOICE (+)
O	USER'S CHOICE (+)		ORIFICE, RESTRICTION		OPEN
P	PRESSURE, VACUUM		POINT (TEST CONNECTION)		
Q	QUANTITY (+)	INTEGRATE	INTEGRATE		
R	RADIATION		RECORD		
S	SPEED, FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE (+)		MULTIFUNCTION (+)	MULTIFUNCTION (+)	MULTIFUNCTION (+)
V	VISCOSITY, VIBRATION			VALVE, DAMPER	
W	WEIGHT, FORCE		WELL, PROBE		
X	UNCLASSIFIED (+)	X-AXIS	UNCLASSIFIED (+)	UNCLASSIFIED (+)	UNCLASSIFIED (+)
Y	EVENT, STATE, PRESENCE (+)	Y-AXIS		RELAY, COMPUTE (+)	
Z	POSITION, DIMENSION	Z-AXIS		DRIVE, ACTUATOR OR UNCLASSIFIED FINAL CONTROL ELEMENT	

(+) WHEN USED, EXPLANATION IS SHOWN ADJACENT TO INSTRUMENT SYMBOL. SEE ABBREVIATIONS AND LETTER SYMBOLS.

DEVICE TAG NAMING & DESCRIPTORS

EQUIPMENT

TAG NAMING: W-XY-Z
 W = TYPE OF EQUIPMENT
 XY = LOOP/STRUCTURE NUMBER
 Z = UNIT NUMBER

CONTROL & INSTRUMENTATION

TAG NAMING: TRC-XY-Z
 T = FIRST LETTER FROM ISA DEFINITION TABLE
 RC = SUCCEEDING LETTERS FROM ISA DEFINITION TABLE
 XY = LOOP/STRUCTURE NUMBER
 Z = UNIT NUMBER

ADDITIONAL DESCRIPTORS:
 A = NUMBER OF UNITS DEPICTED (BLANK IF ONE)
 B = NUMBER OF SETS DEPICTED (BLANK IF ONE)
 D = SUPPLEMENTAL DESCRIPTION (REFER TO INSTRUMENT-SPECIFIC ELECTRICAL ABBREVIATIONS)

INSTRUMENTS

D GENERAL INSTRUMENT
 (SEE DEVICE TAG NAMING & DESCRIPTORS ABOVE AND ABBREVIATIONS SHEET)

DATE:	10/02/2024								
NO.	1								

STANDARD SYMBOLS - 2

FITCHBURG TOWER D
 CITY OF FITCHBURG
 DANE COUNTY, WISCONSIN

JOB NO.
 1275.060

PROJECT MGR.
 STEVE KLUESNER

STRAND ASSOCIATES

SHEET
 3
 G0.3

GENERAL EQUIPMENT ABBREVIATIONS

AC	AIR COMPRESSOR
ACU	ACCUMULATOR
ADT	AUTOMATIC DRIP TRAP
AFT	AUTOMATIC FILTER
AOV	AIR OPERATED VALVE
AM	ANOXIC MIXER
AST	AUTOMATIC STRAINER
BSLP	BLENDED SLUDGE PUMP
B	BLOWER
BC	BRIDGE CRANE
BFP	BELT FILTER PRESS
BFPFP	BFP FEED PUMP
BFV	BUTTERFLY VALVE
BLP	BIO SOLIDS LOADING PUMP
BLR	BOILER
BP	BOOSTER PUMP
BSLMP	BLENDED SLUDGE MIXING PUMP
BSLP	BLENDED SLUDGE PUMP
BSTM	BIO SOLIDS STORAGE MIXER
BTP	BIO SOLIDS TRANSFER PUMP
BWP	BACKWASH PUMP
CENT	CENTRIFUGE
CNTP	CENTRATE PUMP
CENTP	CENTRIFUGE FEED PUMP
CP	CHEMICAL PUMP
COMP	COMPRESSOR
CON	CONVEYOR
DBC	DEWATERED BIOSOLIDS CONVEYOR
DCP	DECANT PUMP
DEWP	DISINFECTED EFFLUENT PUMP
DP	DRAINAGE PUMP
DRLP	DIGESTER RECIRCULATION PUMP
DSLMP	DIGESTER MIXING PUMP
DSLTP	DIGESTED SLUDGE TRANSFER PUMP
DT	DRIP TRAP
DOW	DOWNWARD OPENING WEIR GATE
EFC	EXCESS FLOW CLARIFIER
EFP	EXCESS FLOW PUMP
EFSP	EXCESS FLOW SOLIDS PUMP
EP	EFFLUENT PUMP
FC	FINAL CLARIFIER
FCD	FINAL CLARIFIER DRIVE
FEP	FINAL EFFLUENT PUMP
FILT	FILTER
FM	FLOW METER
FO	FERMENTER OVERFLOW
FRS	FERMENTED SLUDGE
FT	FLAME TRAP
GBT	GRAVITY BELT THICKENER
GC	GRIT CLASSIFIER
GFM	GAS FLOW METER
GCS	GAS COMPRESSOR SKID
GP	GRIT PUMP
GRN	GRINDER
GT	GRIT TRAP
GUH	GAS UNIT HEATER
GW	GRIT WASHER
H	HOIST
HBT	HYDROPNEUMATIC BOOSTER TANK
HTX	HEAT EXCHANGER
IP	INFLUENT PUMP
MA	MOTORIZED ACTUATOR
MBV	MOTORIZED BALL VALVE
MFS	MECHANICAL FINE SCREEN
MIX	MIXER
MOV	MOTOR OPERATED VALVE
MP	MIXING PUMP
MPE	MISCELLANEOUS PROCESS EQUIPMENT
MST	MANUAL STRAINER
MT	MICROTURBINE
NRP	NITRATE RECYCLE PUMP
OCD	OVERHEAD COILING DOOR
OCE	ODOR CONTROL EQUIPMENT
ODE	OXIDATION DITCH EQUIPMENT
PC	PROGRESSING CAMTY PUMP
PCD	PRIMARY CLARIFIER DRIVE
PCFD	PRIMARY CLARIFIER FLOCCULATOR DRIVE
PF	POLYMER FEEDER
PFP	POLYMER FEED PUMP
PLWP	PLANT WATER PUMP
PRCP	PHOSPHORUS REMOVAL CHEMICAL PUMP
PRCT	PHOSPHORUS REMOVAL CHEMICAL TANK
PREP	PRIMARY EFFLUENT PUMP
PRFP	PROCESS RETURN FLOW PUMP
PRSP	PRIMARY SLUDGE PUMP
PTP	POLYMER TRANSFER PUMP
RAD	REFRIGERATED AIR DRYER
RASP	RETURN ACTIVATED SLUDGE PUMP
RDT	ROTARY DRUM THICKENER
RDTP	ROTARY DRUM THICKENER FEED PUMP
RM	RAPID MIXER
SA	SAMPLER
SBFP	SODIUM BISULFITE FEED PUMP
SBST	SODIUM BISULFITE STORAGE TANK

SCMP	SCUM PUMP
SCW	SCREENINGS WASHER
SEJ	SEWAGE EJECTOR
SG	SLIDE GATE
SHFP	SODIUM HYPOCHLORITE FEED PUMP
SHST	SODIUM HYPOCHLORITE STORAGE TANK
SLG	SLUICE GATE
SP	SUMP PUMP
SRT	SILOXANE REMOVAL TANK
SSC	SCREENINGS SCREW CONVEYOR
STCP	STRUVITE CHEMICAL PUMP
STG	STOP GATE
STR	STRAINER
SV	SOLENOID VALVE
SWP	SCREENINGS WASHER/PRESS
TV	TELESCOPING VALVE
TWASD	TWASD PUMP

FLUID ABBREVIATIONS

A	AIR
BOX	BIOXIDE
BSL	BLENDED SLUDGE
BWW	BACKWASH WATER
CA	COMPRESSED AIR
CNT	CENTRATE
CDG	COMPRESSED DIGESTER GAS
CLS	CHLORINE SOLUTION
CNT	CENTRATE
CW	COLD WATER
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
D	DRAIN
DEW	DISINFECTED EFFLUENT WATER
DG	DIGESTER GAS
DIV	DIVERSION
DRL	DIGESTER RECIRCULATION
DS	DIGESTER SUPERNATANT
DSL	DIGESTED SLUDGE
DSL MD	DIGESTER SLUDGE MIXER DISCHARGE
DSL MS	DIGESTER SLUDGE MIXER SUCTION
EF	EXCESS FLOW
FC	FERRIC CHLORIDE
EFS	EXCESS FLOW SOLIDS
FE	FINAL EFFLUENT
F	FORCE MAIN
G	NATURAL GAS
GR	GRIT
GTS	GRAVITY THICKENER SUPERNATANT
HHGR	HEATING HOT GLYCOL RETURN
HHGS	HEATING HOT GLYCOL SUPPLY
HOCL	HYPOCHLORITE
HW	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
ML	MIXED LIQUOR
MLW	MILL WASTE
MTW	METRO WASTE
NAOH	SODIUM HYDROXIDE
NPW	NONPOTABLE WATER
OF	OVERFLOW
OC	ODOR CONTROL
PD	PLANT DRAIN
PDP	PERFORATED DRAIN PIPE
PE	PLANT EFFLUENT
PEC	POLYELECTROLYTE CHEMICAL
PER	PLANT EFFLUENT REUSE
PI	PLANT INFLUENT
PRC	PHOSPHORUS REMOVAL CHEMICAL
PRE	PRIMARY EFFLUENT
PRF	PROCESS RETURN FLOW
PRI	PRIMARY INFLUENT
PRS	PRIMARY SLUDGE
PSS	PLANT SANITARY SEWER
PW	POTABLE WATER
PWR	PROCESS WATER RETURN
PWS	PROCESS WATER SUPPLY
RAS	RETURN ACTIVATED SLUDGE
RW	RAW WASTEWATER
SAM	SAMPLE
SAN	SANITARY SEWER
SB	SODIUM BISULFITE
SCM	SCUM
SCMD	SCUM DECANT
SE	SECONDARY EFFLUENT
SH	SODIUM HYPOCHLORITE
SL	SLUDGE
SPD	SUMP PUMP DISCHARGE
SSM	SECONDARY SCUM

PLUMBING ABBREVIATIONS

EW	APRON END WALL
IF	BLIND FLANGE
:A	COMPRESSED AIR
:B	CATCH BASIN
:D	CONDENSATE DRAIN
:I	CAST IRON
:O	CLEAN OUT
:OND	CONDENSATE
:PVC	CHLORINATED POLYVINYL CHLORIDE
:W	COLD WATER
:)	DRAIN
ICBP	DOUBLE CHECK BACKFLOW PREVENTER
ICW	DOMESTIC COLD WATER
ICW	DOMESTIC HOT WATER
IF	DRINKING FOUNTAIN
IFU	DRAINAGE FIXTURE UNIT
JI	DUCTILE IRON
EWS	EMERGENCY EYEWASH SHOWER
EW	EYEWASH
EWC	ELECTRIC WATER COOLER
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
HB	HOSE BIBB
HD	HUB DRAIN
HDPE	HIGH DENSITY POLYETHYLENE
HHGR	HEATING HOT GLYCOL RETURN
HHGS	HEATING HOT GLYCOL SUPPLY
HR	HOSE REEL
HWL	HIGH WATER LEVEL
HW	HOT WATER
HWR	HOT WATER RETURN
IE	INVERT ELEVATION
IWP	INDIRECT WASTE PIPE
L	LAVATORY
MB	MOP BASIN
MH	MANHOLE
MV	MUD VALVE
PHW	PROCESS HOT WATER
P	PUMP
PLW	PLANT WATER
POC	POINT OF CONNECTION
PRV	PRESSURE REDUCING VALVE
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
PVR	PRESSURE VACUUM RELIEF ASSEMBLY
QC	QUICK CONNECT
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
RL	REFRIGERANT LIQUID
RS	REFRIGERANT SUCTION
RZBP	REDUCED ZONE BACKFLOW PREVENTER
S	SINK
SD	SHOWER DRAIN
SEJ	SEWAGE EJECTOR
SHR	SHOWER
SP	SUMP PUMP
SS	STAINLESS STEEL
SV	SOLENOID VALVE
SVS	SERVICE SINK
T	TANK
TD	TRENCH DRAIN
U	URINAL
V	VENT
VB	VACUUM BREAKER
VCP	VITRIFIED CLAY PIPE
VTR	VENT THRU ROOF
WCO	WALL CLEANOUT

GENERAL/HVAC ABBREVIATIONS

ACH	AIR CHANGES PER HOUR
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
AP	ACCESS PANEL
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT PER HOUR
CFM	CUBIC FEET PER MINUTE
CLG	CEILING
COND	CONDENSATE
DAT	DISCHARGE AIR TEMPERATURE
DB	DRY BULB TEMPERATURE
DDC	DIRECT DIGITAL CONTROL
DG	DOOR GRILLE
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EL	ELEVATION
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
FC	FAIL CLOSED
FLA	FULL LOAD AMPS

FO	FAIL OPEN
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FT	FEET
GA	GAUGE
GPM	GALLONS PER MINUTE
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSANDS OF BTU PER HOUR
MC	MECHANICAL CONTRACTOR
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NPT	NATIONAL PIPE THREAD
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OC	ON CENTER
OV	OUTLET VELOCITY
PD	PRESSURE DROP
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
RA	RETURN AIR
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SP	STATIC PRESSURE

HVAC EQUIPMENT ABBREVIATIONS

ACCU	AIR COOLED CONDENSING UNIT
AFR	ARCHITECTURAL FINE TUBE RADIATION
AHU	AIR HANDLING UNIT
AS	AIR SEPARATOR
BLR	BOILER
BB	BASEBOARD
C	CONVECTOR
CD	CEILING DIFFUSER
CHILL	CHILLER
CT	COOLING TOWER
CUH	CABINET UNIT HEATER
CWP	CHILLED WATER PUMP
DC	DRY COOLER
DH	DEHUMIDIFIER
DL	DRUM LOUVER
EBB	ELECTRIC BASEBOARD
EDH	ELECTRIC DUCT HEATER
EF	EXHAUST FAN
EG	EXHAUST GRILLE
EJ	EXPANSION JOINT
EL	EXPANSION LOOP
ER	EXHAUST REGISTER
ERC	ELECTRIC REHEAT COIL
ERU	ENERGY RECOVERY UNIT
EUH	ELECTRIC UNIT HEATER
EW	ELECTRIC WALL HEATER
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FR	FINNED TUBE RADIATION
FUR	FURNACE
GDF	GAS DUCT FURNACE
GRV	GRAVITY ROOF VENTILATOR
GUH	GAS UNIT HEATER
HC	HEATING COIL
HP	HEAT PUMP
HRP	HEAT RECOVERY PUMP
HU	HUMIDIFIER
HUH	HOT WATER UNIT HEATER
HWP	HOT WATER PUMP
HTX	HEAT EXCHANGER
ICF	INDUSTRIAL CEILING FAN
IR	INFRARED HEATER
L	LOUVER
MAU	MAKE-UP AIR UNIT
P	PUMP
PWP	PROCESS WATER PUMP
RFP	RETURN FAN
RG	RETURN GRILLE
RR	REGISTER
RTU	ROOFTOP UNIT
SD	SUCTION DIFFUSER
SF	SUPPLY FAN
SG	SUPPLY GRILLE
SR	SUPPLY REGISTER
ST	STEAM TRAP
SUH	STEAM UNIT HEATER
TEMP	TEMPERATURE CONTROL PANEL
TG	TRANSFER GRILLE
UH	UNIT HEATER
UV	UNIT VENTILATOR
VAV	VARIABLE AIR VOLUME BOX
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
WSHP	WATER SOURCE HEAT PUMP
XT	EXPANSION TANK

ELECTRICAL ABBREVIATIONS

A	AMPERE
AF	AMPERE FRAME
AJD	ADJUSTABLE FREQUENCY DRIVE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWTCH
AV	AUDIO VISUAL
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
C	CONDUIT
CAT	CATALOG
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CL	CENTERLINE
CLG	CEILING
COL	COLUMN
CT	CURRENT TRANSFORMER
CTE	CONNECT TO EXISTING
CU	COPPER
CUH	CABINET UNIT HEATER
D	DEDICATED
DC	DIRECT CURRENT
DISC	DISCONNECT
DWG	DRAWING
E	EMERGENCY
EC	ELECTRICAL CONTRACTOR
EDH	ELECTRIC DUCT HEATER
EF	EXHAUST FAN
EHH	ELECTRICAL HANDHOLE
EMT	ELECTRICAL METALLIC TUBING
EOL	END OF LINE DEVICE
EWC	ELECTRIC WATER COOLER
EX	EXISTING
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FCU	FAN COIL UNIT
FLA	FULL LOAD AMPERES
FPCP	FIRE PUMP CONTROL PANEL
FR	FIRE RETARDANT
FT	FEET
FDA	FOOD AND DRUG ADMINISTRATION
FVNR	FULL VOLTAGE NON-REVERSING
FVR	FULL VOLTAGE REVERSING
G	GROUND
GC	GENERAL CONTRACTOR
GFI	GROUND FAULT INTERRUPTER
GFP	GROUND FAULT PROTECTION (EQUIPMENT)
GFCI	GROUND FAULT CKT INTERRUPTER
GRS	GALVANIZED RIGID STEEL
HACR	HEATING AND AIR CONDITIONING RATED
HP	HORSEPOWER
HV	HIGH VOLTAGE
HVAC	HEATING, VENTILATING, & AIR CONDITIONING
HZ	HERTZ
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
JB	JUNCTION BOX
KCMIL	ONE THOUSAND CIRCULAR MILS
KO	KNOCKOUT
KVA	KILOVOLT AMPERES
KVAR	KILOVOLT AMPERES REACTIVE
KW	KILOWATT
LP	LIGHTING PANEL
LTG	LIGHTING
LV	LOW VOLTAGE
MATV	MASTER ANTENNA TELEVISION
MC	METAL CLAD
MCC	MOTOR CONTROL CENTER
MCB	MAIN CIRCUIT BREAKER
MCCB	MOLDED CASE CIRCUIT BREAKER
MCM	THOUSAND CIRCULAR MILS
MCP	MOTOR CIRCUIT PROTECTOR
MDP	MAIN DISTRIBUTION PANELBOARD
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MO	MOTOR OPERATED
MTD	MOUNTED
MTG	MOUNTING
MTS	MANUAL TRANSFER SWTCH
MV	MEDIUM VOLTAGE
MW	MICROWAVE OR MEGAWATT
N	NEUTRAL
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NAC	NOTIFICATION APPLIANCE CIRCUIT PANEL
NEC	NATIONAL ELECTRIC CODE
NIC	NOT IN CONTRACT

NL	NIGHT LIGHT
NM	NONMETALLIC
NO	NORMALLY OPEN
NSF	NATIONAL SANITARY FOUNDATION
NTS	NOT TO SCALE
OCB	OIL CIRCUIT BREAKER
OL	OVERLOAD
OIP	OPERATOR INTERFACE PANEL
OT	OVERTEMP
PR	PAIR
P	POLE
PB	PULL BOX
PC	PULL CORD
PH	PH SENSOR
ø	PHASE
PNL	PANELBOARD
PP	POWER PANEL
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PTZ	PAN, TILT, ZOOM CAMERA
PVC	POLYVINYL CHLORIDE
PWR	POWER
RSC	RIGID GALVANIZED STEEL CONDUIT
RTS	REMOTE TEST SWITCH
RVNR	REDUCED VOLTAGE NON-REVERSING
RVSS	REDUCED VOLTAGE SOLID STATE
SC	SHORT CIRCUIT
SCADA	SUPERVISORY CONTROL AND DATA
SCC	SUPERVISORY CONTROL CENTER
SE	SERVICE ENTRANCE
SEC	SECONDARY
SH	SHIELDED
SPD	SURGE PROTECTION DEVICE
SS	STAINLESS STEEL
SSRV	SOLID STATE REDUCED VOLTAGE
STP	SHIELDED TWSTED PAIR
SV	SOLENOID VALVE
SW	SWTCH
SWBD	SWITCHBOARD
TEL	TELEPHONE
TS2W	TWO SPEED TWO WINDING
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTP	UNSHIELDED TWSTED PAIR
V	VOLTS
VFD	VARIABLE FREQUENCY DRIVE
W	WIRE OR WATT
WD	HIGH PRESSURE WASH DOWN
WL	WET LOCATION

INSTRUMENT-SPECIFIC ELECTRICAL ABBREVIATIONS

A	AIR FLOW
ALT	ALTERNATOR
BF	BUILDING FLOODING
C	CAPACITANCE
CA	CHLORINE ANALYZER
CH4	METHANE
CON	CONDUCTANCE
CS-1	CONSTANT (SINGLE) SPEED
CS-2	CONSTANT (TWO) SPEED
D	DENSITY
DISC	DISCONNECT SWITCH
DO	DISSOLVED OXYGEN
DOU	DOWN-OFF-UP SELECTOR SWITCH
DP	DIFFERENTIAL PRESSURE
ESPB	EMERGENCY STOP PUSHBUTTON
ESPC	EMERGENCY STOP PULLCORD
ETM	ELAPSED TIME METER
F	BALL FLOAT
FL	FLANGE-MOUNTED
FS	FAST-SLOW SELECTOR SWITCH
FOR	FORWARD-OFF-REVERSE SELECTOR SWITCH
GD	GAS DETECTION
H	HORN
H2S	HYDROGEN SULFIDE
HLOA	HIGH-LOW-OFF-AUTO SELECTOR SWITCH
HLOOR	HIGH-LOW-OFF-REVERSE SELECTOR SWITCH
HOA	HAND-OFF-AUTO SELECTOR SWITCH
L	LIMIT
LOR	LOCAL-OFF-REMOTE SELECTOR SWITCH
LOS	LOCKOUT STOP
M	MAGNETIC
MST	MOISTURE
MY	MOTOR PROTECTION RELAY
O/C	OVERCURRENT
O/L	OVERLOAD
O/T	OVERTEMPERATURE
OC	OPEN-CLOSE SELECTOR SWITCH
OCA	OPEN-CLOSE-AUTO SELECTOR SWITCH
OO	ON-OFF SELECTOR SWITCH
OP	OXYGEN PURITY
ORP	OXIDATION REDUCTION POTENTIAL
P	PADDLE
pH	pH
PO4	ORTHOPHOSPHATE
POT	POTENTIOMETER
PR	

KEY NOTES:

- ACCESS DRIVE FROM LACY ROAD IS WITHIN WDOT ROW. CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF THE OWNER OBTAINED WISCONSIN STATE TRUCK HIGHWAY CONNECTION PERMIT AND OTHER WDOT ROW PERMITS AS SPECIFIED IN DIVISION 01. REVIEW DIVISION 01 FOR SITE ACCESS AND SITE SECURITY RELATED TO THIS PERMIT.
- PROVIDE 3-FOOT WIDE CONCRETE SIDEWALK AROUND THE PERIMETER OF THE TANK. SIDEWALK SHALL BE SLOPED AWAY FROM THE TANK WITH THE TOP OF THE SIDEWALK 4 INCHES BELOW THE TANK FOOTING WALL. SEE DETAIL **D** CASME5.1
- REMOVE TREES AND VEGETATION AS NECESSARY TO COMPLETE WORK. CONTRACTOR SHALL PROVIDE NATIVE PRAIRIE/ NATIVE VEGETATION AS SPECIFIED ON ALL AREAS OF THE TOWER SITE FURTHER THAN 10 FEET FROM IMPERIOUS IMPROVEMENTS OR AS OTHERWISE SHOWN ON THE DRAWINGS. CONTRACTOR SHALL PROVIDE DRAWING SHOWING THE EXTENTS OF GRASS AREA VERSUS NATIVE VEGETATION PRIOR TO PERFORMING WORK.
- CONTRACTOR SHALL PROVIDE GRASS AREA AS SPECIFIED FOR ALL GREEN AREAS WITHIN 10 FEET OF IMPERIOUS IMPROVEMENTS ON THE TOWER SITE AND WITHIN ALL AREAS OF DISTURBED WDOT RIGHT OF WAY OR AS OTHERWISE SHOWN ON THE DRAWING. CONTRACTOR SHALL PROVIDE DRAWING SHOWING THE EXTENTS OF GRASS AREA VERSUS NATIVE VEGETATION PRIOR TO PERFORMING WORK.
- VERIFY UPSTREAM VALVES ARE CLOSED, AND REMOVE HYDRANT, AUXILIARY VALVE, VALVE BOX, REDUCER, AND HYDRANT LEAD. HYDRANT SHALL BE REUSED.
- VERIFY UPSTREAM VALVES ARE CLOSED AND CONNECT NEW 16" DUCTILE IRON WATER MAIN TO EXISTING. CONTRACTOR SHALL FIELD VERIFY EXISTING WATER MAIN SIZE AND LOCATION PRIOR TO INSTALLING NEW WATER MAIN.

KEY NOTES CONTINUED:

- RELOCATE FIRE HYDRANT WITH NEW 6" AUXILIARY GATE VALVE AND VALVE BOX.
- PROVIDE NEMA 4X, STAINLESS-STEEL BOX FOR STORING PORTABLE GENERATOR CABLE. PROVIDE SJOOW 12/3 CABLE IN 3/4" CONDUIT FROM BOX TO SCC-D. PROVIDE MINIMUM 10FT OF COILED CABLE WITH MALE PLUG IN BOX. CABLE SHALL BE HARDWIRED TO SCC-D.
- HEIGHT OF THE VALVE BOX SHALL BE ADJUSTED TO FINISHED DRIVEWAY ELEVATION.
- COORDINATE NEW UTILITY SERVICE WITH UTILITY COMPANY. REFER TO SPECIFICATION SECTION 26 21 00 FOR ADDITIONAL INFORMATION.
- CONTRACTOR SHALL PROVIDE WDOT GATE PIPE PER WDOT STANDARD DETAIL DRAWING 15B12. CONTRACTOR SHALL CONFIRM PIPE GATE REQUIREMENT WITH WDOT PRIOR TO CONSTRUCTION.
- SPOTLIGHT SHALL BE POWERED THROUGH EXTERIOR PHOTOCELL. COORDINATE FINAL LOCATION AND AIMING OF SPOTLIGHT WITH OWNER-SELECTED TANK LOGO LOCATIONS.
- PROVIDE CONCRETE PAD PER UTILITY COMPANY REQUIREMENTS.
- PROVIDE CONDUIT, SIZED PER UTILITY COMPANY RECOMMENDATION, FROM MAIN SERVICE BREAKER TO BELOW GRADE FOR INCOMING PRIMARY CABLING.

GENERAL NOTES:

- LOCATIONS AND ELEVATIONS OF EXISTING PIPING, ELECTRICAL SERVICE, AND OTHER SITE FEATURES ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY DEPTHS AND LOCATIONS OF EXISTING PIPING PRIOR TO INSTALLING NEW PIPING THAT CONNECTS TO EXISTING.
- THESE DRAWINGS DO NOT INDICATE ALL PIPE FITTINGS REQUIRED TO INSTALL YARD PIPING AS SHOWN. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND PROVIDING ALL REQUIRED FITTINGS.
- PROVIDE MINIMUM 6'-6" COVER OVER ALL NEW WATER MAIN.
- CONTRACTOR SHALL CONTACT APPROPRIATE AGENCIES FOR UTILITY LOCATIONS.
- RESTORE ALL DISTURBED AREAS AS SPECIFIED.
- PROVIDE CONCRETE WASHOUT STATION ACCORDING TO **G** CASME5.1
- CONTRACTOR SHALL RESTRAIN ALL UNDERGROUND WATER MAIN PIPE JOINTS AND FITTINGS AS SPECIFIED.
- UNLESS OTHERWISE NOTED OR SPECIFIED, ALL YARD PIPING SHALL BE DUCTILE IRON AND WRAPPED IN POLYETHYLENE. SEE SPECIFICATIONS.
- CONTRACTOR SHALL REPLACE PAVEMENT REMOVED OR DAMAGED DURING CONSTRUCTION. SAWCUT PAVEMENT AT JOINT. NOT ALL NEW PAVEMENT MAY BE SHOWN.

GENERAL NOTES CONTINUED:

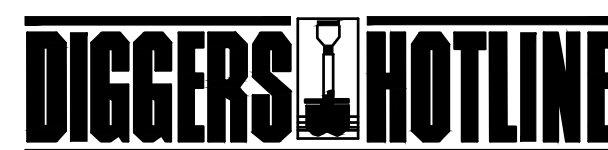
- TANK COORDINATES ARE FROM THE DANE COUNTY COORDINATE SYSTEM.
- CONTRACTOR SHALL SUBMIT AND COMPLY WITH PROVISIONS OF CITY OF FITCHBURG EROSION CONTROL INSPECTION FORM.
- PROJECT SITE MAY BE LOCATED WITHIN A PROTECTED SPECIES AREA. CONTRACTOR SHALL FOLLOW WDNR APPROVED MEASURES TO MINIMIZE IMPACT. CONTACT WDNR FOR INPUT PRIOR TO LAND DISTURBING ACTIVITIES. FOR TREE CLEARING, BEST MANAGEMENT PRACTICE MEASURES MUST INCLUDE ONE OF THE FOLLOWING:
 - AVOID OR MINIMIZE SOIL DISTURBANCE AND HEAVY EQUIPMENT OPERATIONS DURING OVERWINTERING (MID OCTOBER - MID MARCH).
 - AVOID OR MINIMIZE FOREST MANAGEMENT THAT MAY DESTROY SPRING BLOOMING FLOWERS DURING THEIR BLOOM PERIODS.
 - CONSIDER THINNING OR SINGLE TREE SELECTION AND DENSE INVASIVE SHRUB REMOVAL THAT MAY IMPROVE OVERWINTERING AND SPRING FORAGING HABITAT.
- SITE IMPERVIOUS SURFACE RATIO FOR CITY PROPERTY EQUALS 0.11.
- UNDERGROUND WATER SYSTEM MATERIALS, INSTALLATION, AND TESTING SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF FITCHBURG STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION.

EROSION CONTROL NOTES:

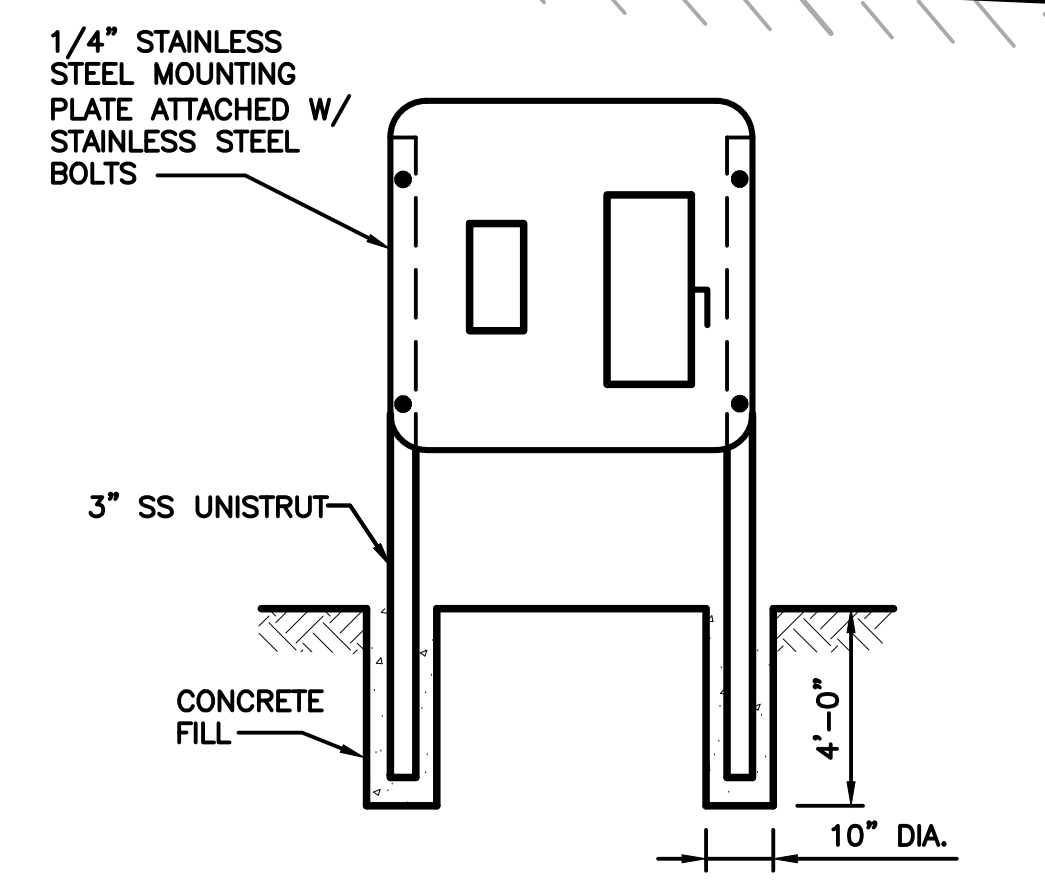
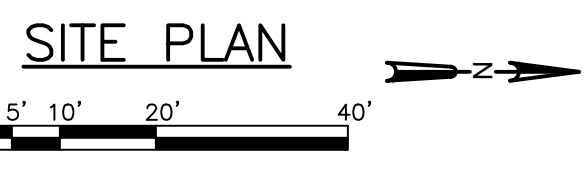
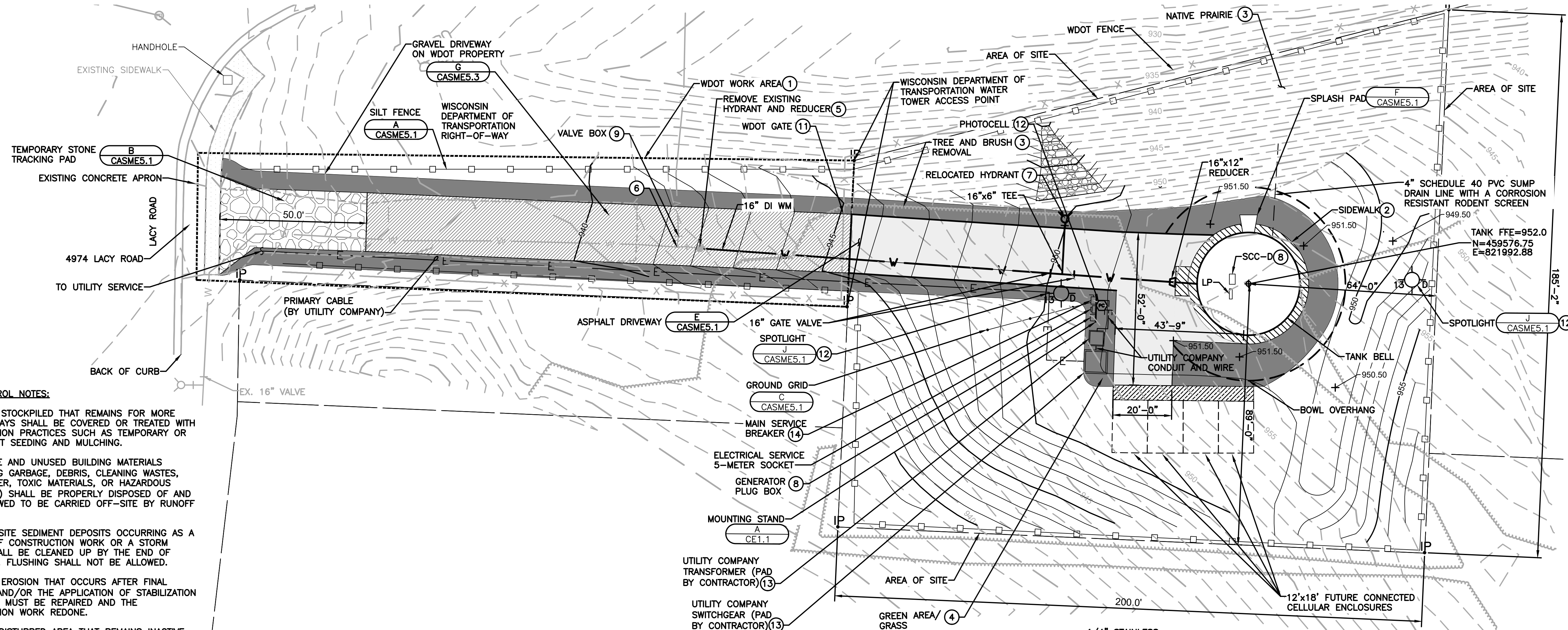
- ANY SOIL STOCKPILED THAT REMAINS FOR MORE THAN 7 DAYS SHALL BE COVERED OR TREATED WITH STABILIZATION PRACTICES SUCH AS TEMPORARY OR PERMANENT SEEDING AND MULCHING.
- ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED OF AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
- ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A STORM EVENT SHALL BE CLEANED UP BY THE END OF EACH DAY. FLUSHING SHALL NOT BE ALLOWED.
- ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR THE APPLICATION OF STABILIZATION MEASURES MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.
- FOR ANY DISTURBED AREA THAT REMAINS INACTIVE FOR GREATER THAN 7 WORKING DAYS, OR WHERE GRADING WORK EXTENDS BEYOND THE PERMANENT SEEDING DEADLINES, THE SITE MUST BE TREATED WITH TEMPORARY STABILIZATION MEASURES SUCH AS SOIL TREATMENT, TEMPORARY SEEDING AND/OR MULCHING.
- ALL TEMPORARY EROSION CONTROL PRACTICES SHALL BE MAINTAINED UNTIL THE SITE IS STABILIZED WITH 70% VEGETATION.
- WIND EROSION SHALL BE KEPT TO A MINIMUM DURING CONSTRUCTION. WATERING, MULCH OR A TRACKING AGENT MAY NEED TO BE UTILIZED TO PROTECT NEARBY RESIDENCES/WATER RESOURCES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL THE EROSION CONTROL MEASURES IN CONFORMANCE WITH THE WDNR, COUNTY AND CITY OF FITCHBURG REQUIREMENTS.

LEGEND:

- ASPHALT DRIVEWAY
- TEMPORARY TRACKING PAD
- GREENSPACE/GRASS
- EXISTING SIDEWALK
- NEW SIDEWALK
- GRAVEL DRIVEWAY
- FUTURE SIDEWALK
- RIPRAP



Toll Free (800) 242-8511
 Milwaukee Area (414) 259-1181
 Hearing Impaired TDD (800) 542-2289
 www.DiggersHotline.com



CONTROL STATION MOUNTING
 A CE1.1 NO SCALE

NO.	REVISIONS	DATE
1	ISSUED FOR BID	10/02/2024

SITE PLAN - TOWER D
 FITCHBURG TOWER D
 CITY OF FITCHBURG
 DANE COUNTY, WISCONSIN

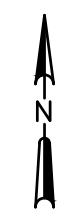
JOB NO.
 1275.060
PROJECT MGR.
 STEVE KLUESNER



SHEET
 5
 CE1.1

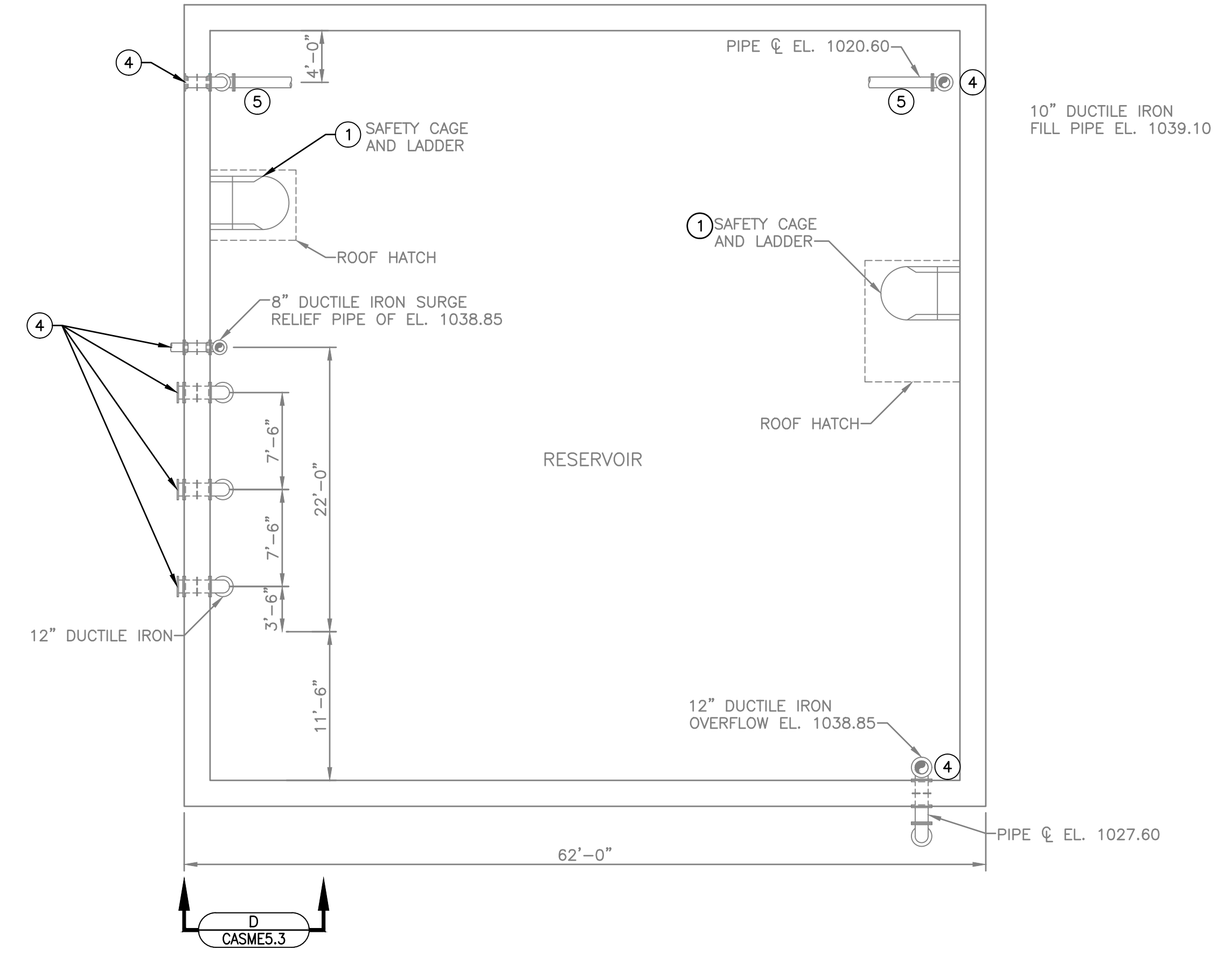


SITE PLAN
0 5' 10' 20' 40'



KEYNOTES:

- ① REMOVE CAGE AND REPLACE EXISTING ALUMINUM LADDER WITH NEW 316 STAINLESS STEEL INTERIOR LADDER SYSTEM WITH SAFETY CLIMB SYSTEMS. SEE B FOR DETAILS AND APPROXIMATE DIMENSIONS. CONTRACTOR SHALL FIELD CASME5.3 VERIFY DIMENSIONS PRIOR TO ORDERING MATERIAL AND STARTING WORK.
- ② REPLACE EXISTING CAULK (COLOR TO BE SELECTED BY OWNER) AND BACKER RODS WITH NEW CAULK AND BACHER RODS AT ALL CONTROL JOINTS. CAULK SHALL BE AS SPECIFIED PER DIVISION 07. SEE PRECAST WALL PANEL DETAIL IN RECORD DRAWINGS APPENDIX.
- ③ SITE ACCESS SHALL BE FROM SHARED DRIVEWAY. CONTRACTOR SHALL NOT BLOCK SHARED DRIVEWAY NOR SHALL CONTRACTOR PARK ON SHARED PARKING LOT TO SOUTH OF DRIVEWAY.
- ④ REPLACE ALL PIPE SUPPORTS FOR VERTICAL PIPE PER DETAIL D CASME5.3.
- ⑤ REPLACE ALL PIPE SUPPORTS FOR HORIZONTAL PIPE WITH STAINLESS STEEL SUPPORTS.



RESERVOIR
A C1.3
0 2' 4' 8' 16'

NO.	ISSUED FOR BID	REVISIONS	DATE
1			10/02/2024

SITE PLAN - CAMP BADGER RESERVOIR
FITCHBURG TOWER D
CITY OF FITCHBURG
DANE COUNTY, WISCONSIN

JOB NO.
1275.060
PROJECT MGR.
STEVE KLUESNER



SHEET
6
C1.2

KEY NOTES:

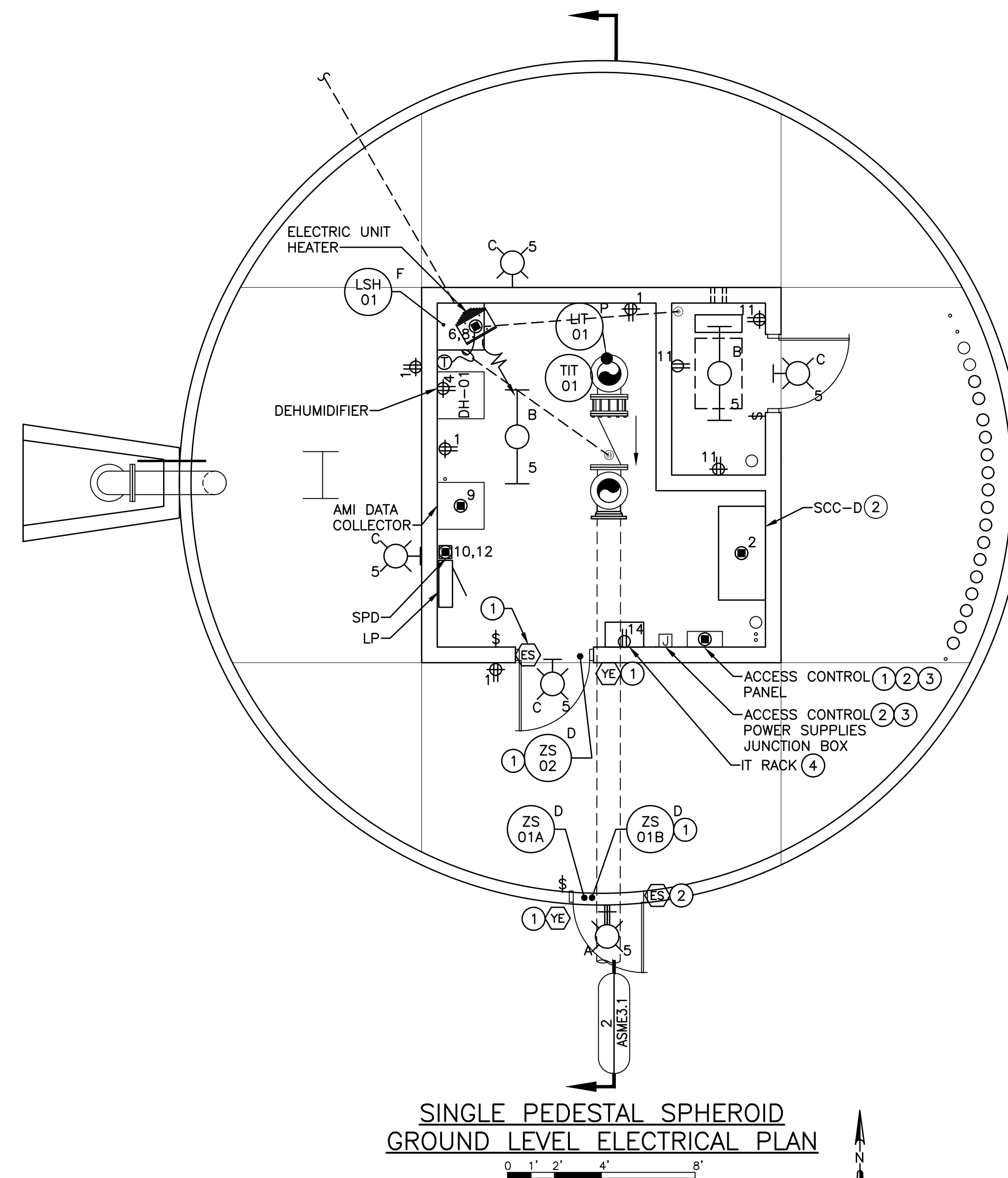
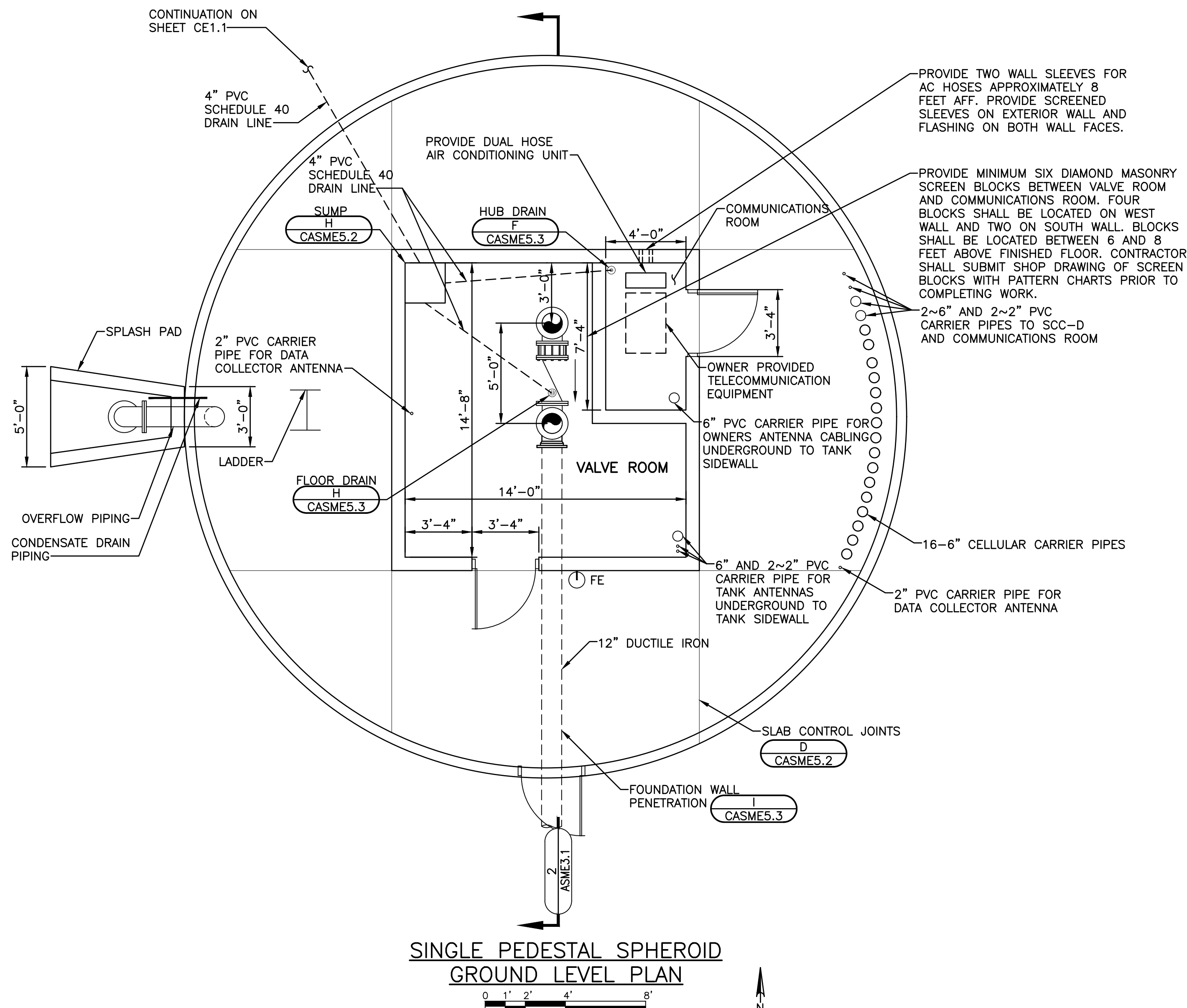
- ① CARD READER, DOOR SWITCH, AND ACCESS CONTROL PANEL INSTALLED AND WIRED BY DIVISION 28 IN DIVISION 26 PROVIDED CONDUIT. PROVIDE DEVICE BOXES AND 3/4" CONCEALED CONDUIT BETWEEN DEVICES AND ACCESS CONTROL PANEL AS NEEDED.
- ② PROVIDE JUNCTION BOX WITH TERMINAL BLOCKS FOR TERMINATION OF INCOMING WIRE. PROVIDE 4~#14 IN 3/4" CONDUIT FROM SCC-D TO ACCESS CONTROL POWER SUPPLIES JUNCTION BOX FOR 16.5VAC POWER FOR CONTROL POWER TO ACCESS CONTROL PANEL. PROVIDE 2~#14 IN 3/4" CONDUIT FROM SCC-D TO ACCESS CONTROL POWER SUPPLIES JUNCTION BOX FOR 24VDC POWER FOR ACCESS CONTROL PANEL FOR POWER TO THE ELECTRIC STRIKE.
- ③ PROVIDE PLYWOOD BACKBOARD, SIZED AS REQUIRED, PERMANENTLY ATTACHED TO THE WALL WITH FLUSH MOUNTING HARDWARE FOR ACCESS CONTROL EQUIPMENT. TREAT THE PLYWOOD WITH A NONCONDUCTIVE, FIRE-RESISTANT COATING. MOUNT THE BACKBOARD 24 INCHES ABOVE THE FINISHED FLOOR. COLOR TO MATCH WALL COLOR.
- ④ PROVIDE 6U RACK ENCLOSURE AS MANUFACTURED BY TRIPP LITE, MODEL SRW6U, OR EQUAL, FOR MOUNTING OF FITCHBURG IT DEPARTMENT FURNISHED MODEM AND FIREWALL. PROVIDE BACK-UPS CS 500, OR EQUAL, FOR BACKUP POWER FOR MODEM AND FIREWALL. INSTALL RECEPTACLE BEHIND BACK OPENING OF ENCLOSURE.

GENERAL NOTES:

1. ALL CONDUIT ROUTED OUT OF THE VALVE ROOM SHALL BE UNDERGROUND.
2. FOR BRANCH CIRCUIT CONDUCTORS, ANTENNA CABLES AND SIGNAL CABLES IN CONDUITS ROUTED TO THE TOP OF TANK, PROVIDE NEMA 12 INTERIOR OR NEMA 4X EXTERIOR JUNCTION BOXES AT THE TOP OF TANK WITH CROUSE-HINDS CGB FITTINGS, OR EQUAL. PROVIDE CABLE STRAIN RELIEF FITTINGS TO SUPPORT CABLES. PROVIDE ADDITIONAL STRAIN-RELIEF JUNCTION BOXES AT TANK MANUFACTURER-PROVIDED CONDUIT SUPPORT FLANGES INSIDE ACCESS TUBE. STRAIN RELIEF JUNCTION BOXES SHALL BE INSTALLED WITH MAXIMUM VERTICAL SEPARATIONS IN ACCORDANCE WITH THE NEC OR A MAXIMUM OF 60- FEET, WHICHEVER DISTANCE IS SHORTER.
3. REFER TO SPECIFICATION SECTION 26 09 90 FOR WIRING ASSOCIATED WITH THE SCADA SYSTEM.
4. CONTRACTOR SHALL SUBMIT AN UNDERGROUND CONDUIT LAYOUT PLAN PRIOR TO POURING CONCRETE FLOOR. PROVIDE THE FOLLOWING UNDERGROUND CONDUITS FROM THE MASONRY ROOM TO THE INTERIOR TANK WALL:
 - a. 6~3/4" CONDUITS FOR THE DOOR SWITCHES, CARD READERS, EXTERIOR LIGHTS, TANK LIGHT SWITCH/INTERIOR LIGHTS, AND TWO CAPPED SPARES FOR FUTURE MOTION DETECTOR AND SECURITY CAMERA. THESE SHALL BE ROUTED NEAR THE TANK DOOR. (FROM VALVE ROOM).
 - b. 5~3/4" CONDUITS FOR OBSTRUCTION LIGHTING, RECEPTACLES AND CAPPED SPARES. THESE SHALL BE ROUTED WHERE TANK BELL LIGHTS WILL BE ACCESSIBLE FROM THE LADDER. (FROM VALVE ROOM).
 - c. 2~1" SPARE CONDUITS. (FROM THE VALVE ROOM).
 - d. CONDUITS NOTED TO BE PROVIDED FOR DEVICES NOT SPECIFIED TO BE INCLUDED IN THIS PROJECT SHALL BE PROVIDED FOR FUTURE USE.
 - e. UNDERGROUND CONDUIT LAYOUT DRAWINGS SHALL BE SUBMITTED WITH THE TANK CONDUIT SUPPORT LAYOUT DRAWINGS. CONTRACTOR SHALL LAYOUT CONDUIT ROUTING AND SUPPORTS SUCH THAT ACCESS TO OTHER TANK FEATURES IS MAINTAINED AND CONDUITS DO NOT CROSS BEHIND LADDERS.
 - f. PLUG ANY UNUSED CONDUIT 18" AFF.
5. PROVIDE THE FOLLOWING UNDERGROUND CONDUITS FROM THE MASONRY ROOM TO THE EXTERIOR OF THE TANK.
 - a. 3~2" CONDUITS FOR UTILITY POWER FROM METER, GROUND GRID AND SPARE. (FROM VALVE ROOM).
 - b. 2~2" CONDUITS FOR FIBER COMMUNICATION AND SPARE. (FROM COMMUNICATION ROOM).
 - c. 3/4" CONDUIT FROM GENERATOR CONNECTION IN GENERATOR PLUG BOX (FROM VALVE ROOM).
 - d. 3/4" CONDUIT FOR EXTERIOR TANK SPOTLIGHT AS SHOWN ON SHEET CE1.1 (FROM VALVE ROOM).
 - e. PLUG ANY UNUSED CONDUITS BELOW GRADE 5'-0" FROM TANK EXTERIOR WALL.
6. ALL EQUIPMENT SHALL BE WIRED BY AN ELECTRICIAN LICENSED IN WISCONSIN.

GENERAL NOTES (CONTINUED):

7. SEE SECTION 26 05 33 AND DRAWING CASME 3.1 FOR ADDITIONAL CONDUIT AND CONDUIT TAB REQUIREMENTS.
8. PROVIDE SIXTEEN 6" PVC CARRIER PIPES THROUGH FLOOR AND PLUG 18" ABOVE FLOOR INSIDE TANK PEDESTAL. ROUTE CARRIER PIPE UNDERGROUND THROUGH FOUNDATION WALL AND TERMINATE 8'-0" FROM TANK EXTERIOR WALL AND CAP BOTH ENDS. PROVIDE TRACER WIRE. ONLY LONG RADIUS ELBOWS SHALL BE USED. CARRIER PIPES PENETRATING FLOOR TO THE TOP OF THE CARRIER PIPE SHALL BE ONE PIECE WITHOUT FITTINGS. CARRIER PIPER SHALL HAVE 4'-0" OF COVER.
9. PROVIDE TWO 6" AND TWO 2" DIAMETER PVC CARRIER PIPES FROM COMMUNICATIONS ROOM AND VALVE ROOM TO TANK WALL. ROUTE UNDERGROUND ADJACENT TO CELLULAR PROVIDER 6" CARRIER PIPES AND STUB 18" AFF.
10. PROVIDE ONE 2" DIAMETER PVC CARRIER PIPE FROM VALE ROOM ADJACENT TO DATA COLLECTOR TO TANK WALL. ROUTE UNDERGROUND ADJACENT TO CELLULAR PROVIDER 6" CARRIER PIPES AND STUB 18" AFF.
11. SLOPE FLOOR WITHIN MASONRY ROOM TOWARDS SUMP.
12. STEEL OVERFLOW PIPE CONDENSATE DRAIN PIPE SHALL PENETRATE THE TANK SIDEWALL AND DISCHARGE 18" ABOVE SPLASH PAD. CONDENSATE DRAIN SHALL BE SCREENED BETWEEN FLANGES OR FITTINGS. OVERFLOW PIPE SHALL BE SCREENED AS DETAILED. PROVIDE WELDED FITTINGS ON TANK WALL FOR ALL PENETRATIONS.
13. DOORS AND DOOR HARDWARE PROVIDED AS SPECIFIED.
14. PROVIDE DEDICATED RECEPTACLE FOR DEHUMIDIFIER.
15. PROVIDE 2~3/4" THREADED COUPLINGS AND PLUGS THROUGH BASE CONE ABOVE DOOR ADJACENT TO LIGHT FIXTURE FOR FUTURE SECURITY CAMERA.
16. THE LIGHT SWITCH AT THE ENTRY DOOR SHALL TURN ON ALL LIGHTS WITHIN THE TANK PEDESTAL AND ACCESS TUBE. LIGHTS WITHIN THE VALVE ROOM SHALL BE CONTROLLED FROM THE SWITCH WITHIN THE VALVE ROOM.
17. CONTRACTOR SHALL PROVIDE VALVE/COMMUNICATION ROOM CONDUIT LAYOUT FOR REVIEW PRIOR TO INSTALLING MASONRY.
18. ALL CONDUIT SHALL BE CONCEALED WITHIN VALVE/COMMUNICATION BUILDING WALLS AND CEILINGS WITH THE FOLLOWING EXCEPTION. CONDUITS MAY BE EXPOSED DIRECTLY BELOW PANELS IN STRAIGHT ALIGNMENT FROM FLOOR TO PANEL, AND DIRECTLY ABOVE PANELS IN STRAIGHT ALIGNMENT FROM CEILING TO PANEL.



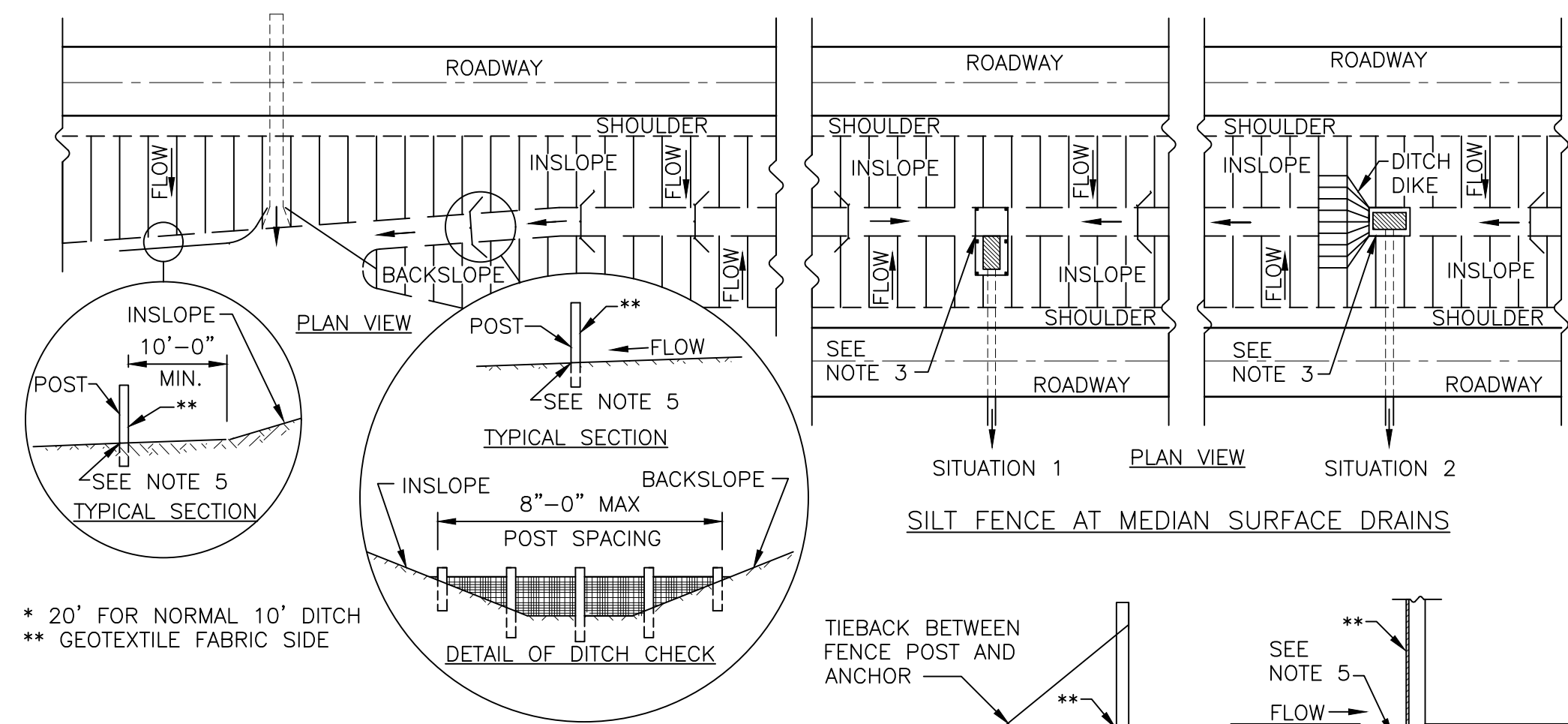
NO.	ISSUED FOR	REVISIONS	DATE
1			10/02/2024

FLOOR PLANS
FITCHBURG TOWER D
CITY OF FITCHBURG
DANE COUNTY, WISCONSIN

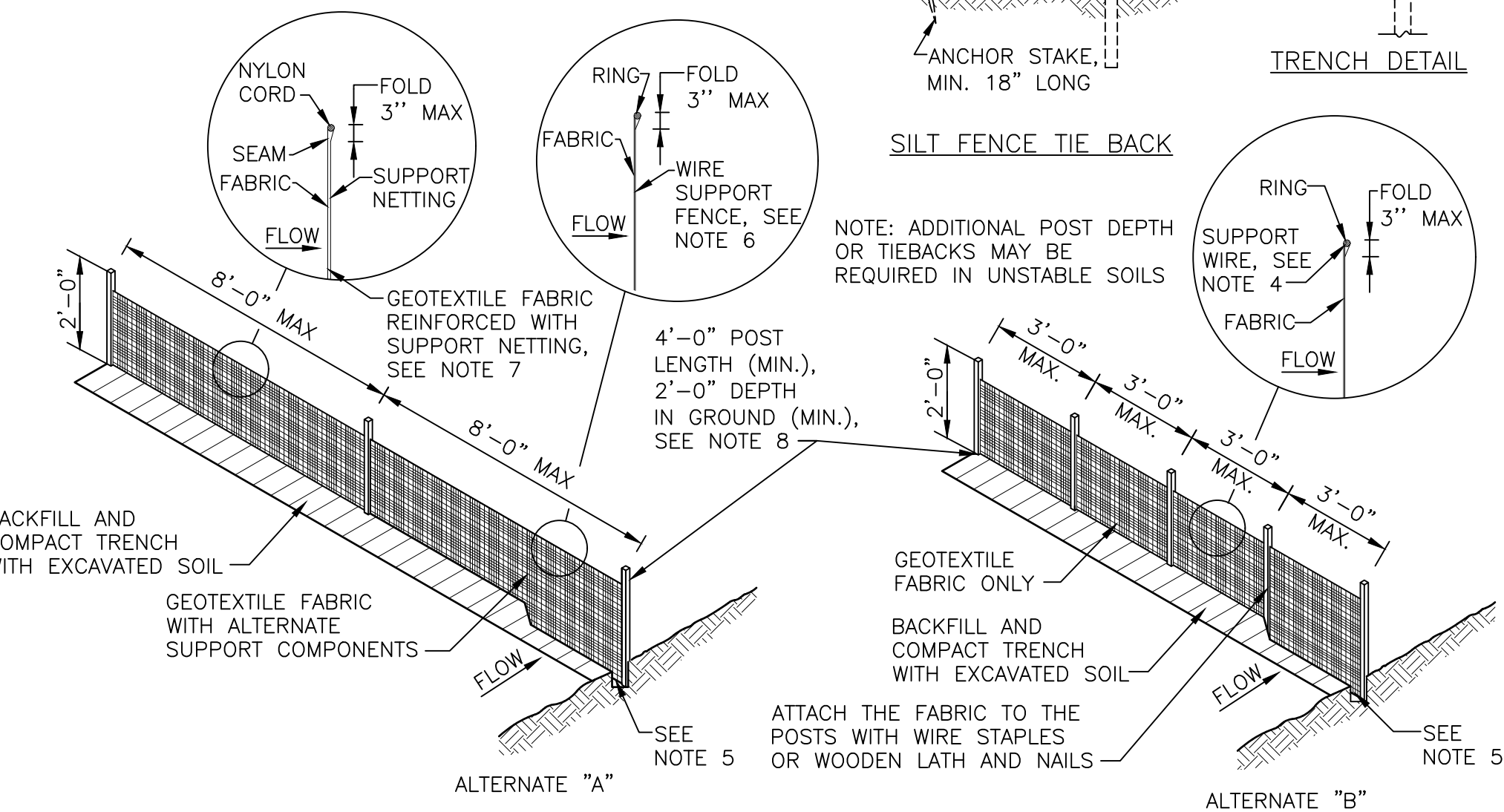
JOB NO.
1275.060
PROJECT MGR.
STEVE KLUESNER



SHEET
7
ASME1.1

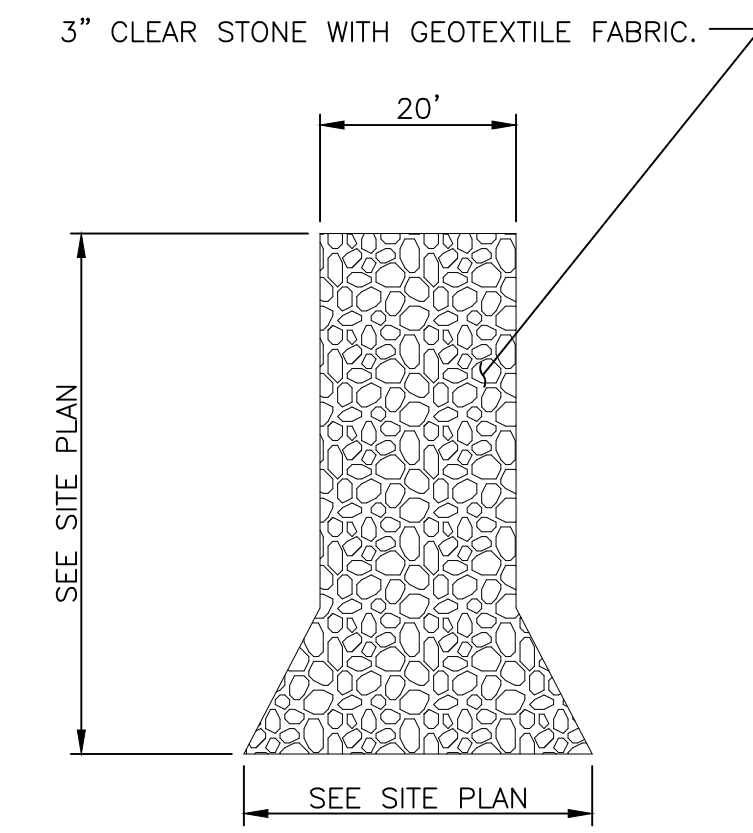


A SILT FENCE
CASME5.1 NO SCALE

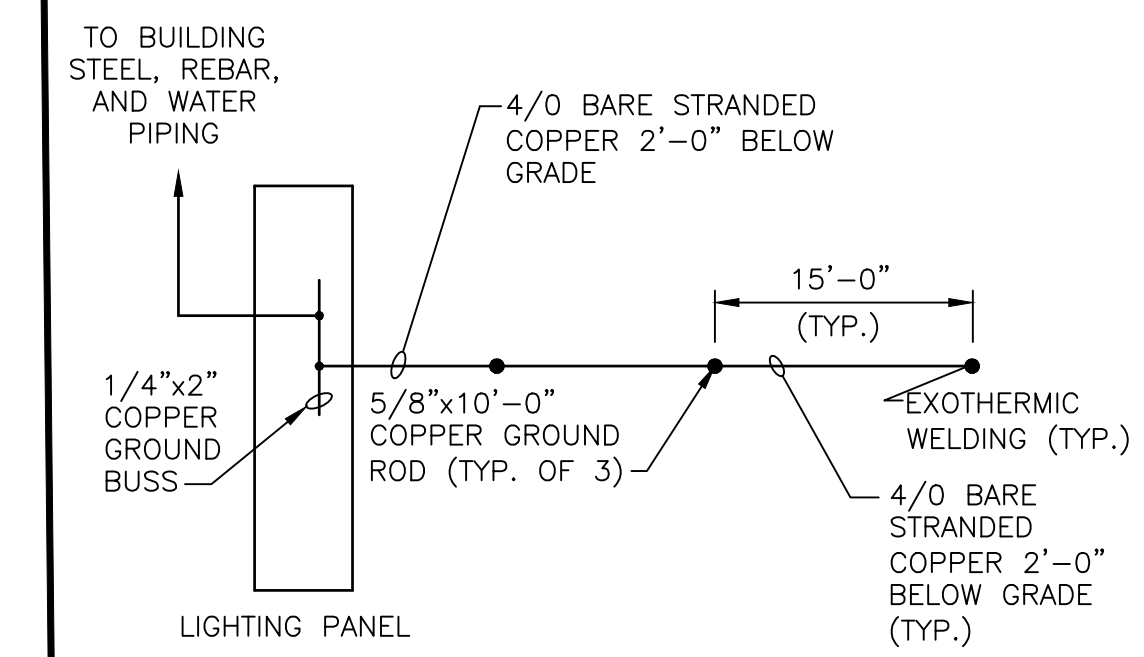


A SILT FENCE
CASME5.1 NO SCALE

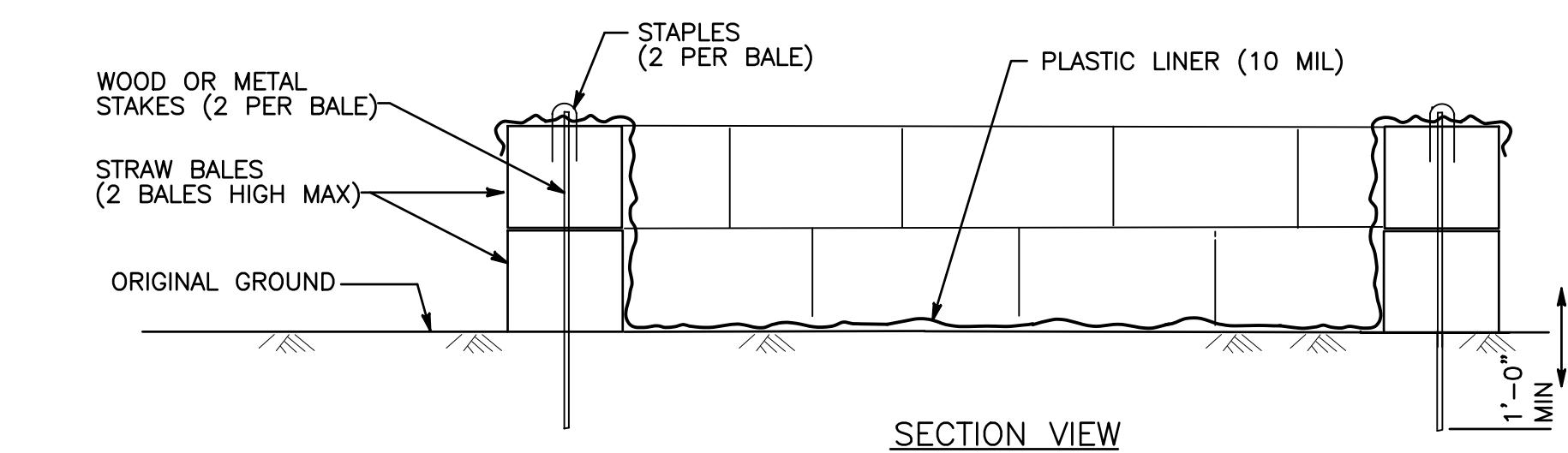
- NOTES:**
- DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.
 - WHEN POSSIBLE THE SILT FENCE SHALL BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE, WITH THE ENDS POINTING UPSLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.
 - CROSS BRACE WITH 2"x4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
 - MINIMUM 14 GAGE WIRE REQUIRED, FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" C-C.
 - EXCAVATE TRENCH A MINIMUM OF 4" WIDE AND 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC, FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
 - WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". SECURE TOP OF GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C TO C.
 - GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLYPROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF 1/4" OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.
 - STEEL POSTS SHALL BE STUDDED "TEE" OR "U" TYPE WITH A MINIMUM WEIGHT OF 1.2 LBS/LINEAR FOOT WITHOUT ANCHORS, OR ANCHORS SUFFICIENT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIAMETER, OR 2 1/2"x3 1/2", EXCEPT WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTING SHALL BE A MINIMUM SIZE OF 1 1/8"x1 1/8" OAK OR HICKORY.
 - ALTERNATES "A" AND "B" ARE EQUAL AND EITHER MAY BE USED.



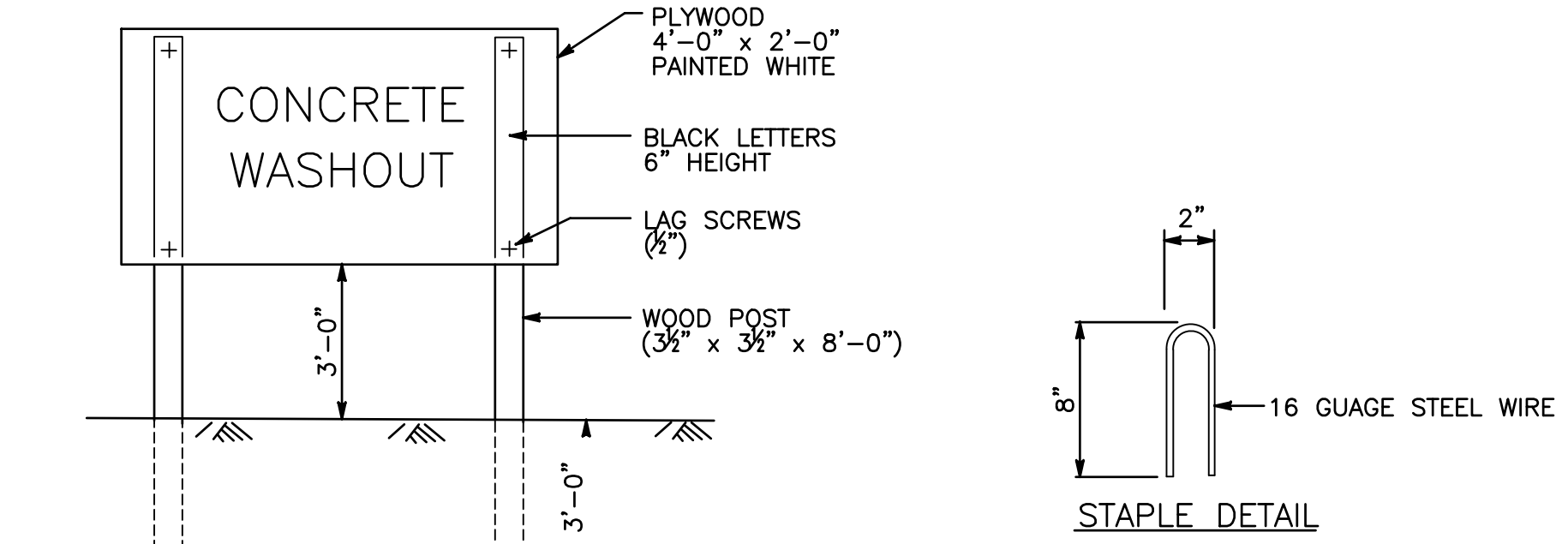
B STONE TRACKING PAD
CASME5.1 NO SCALE



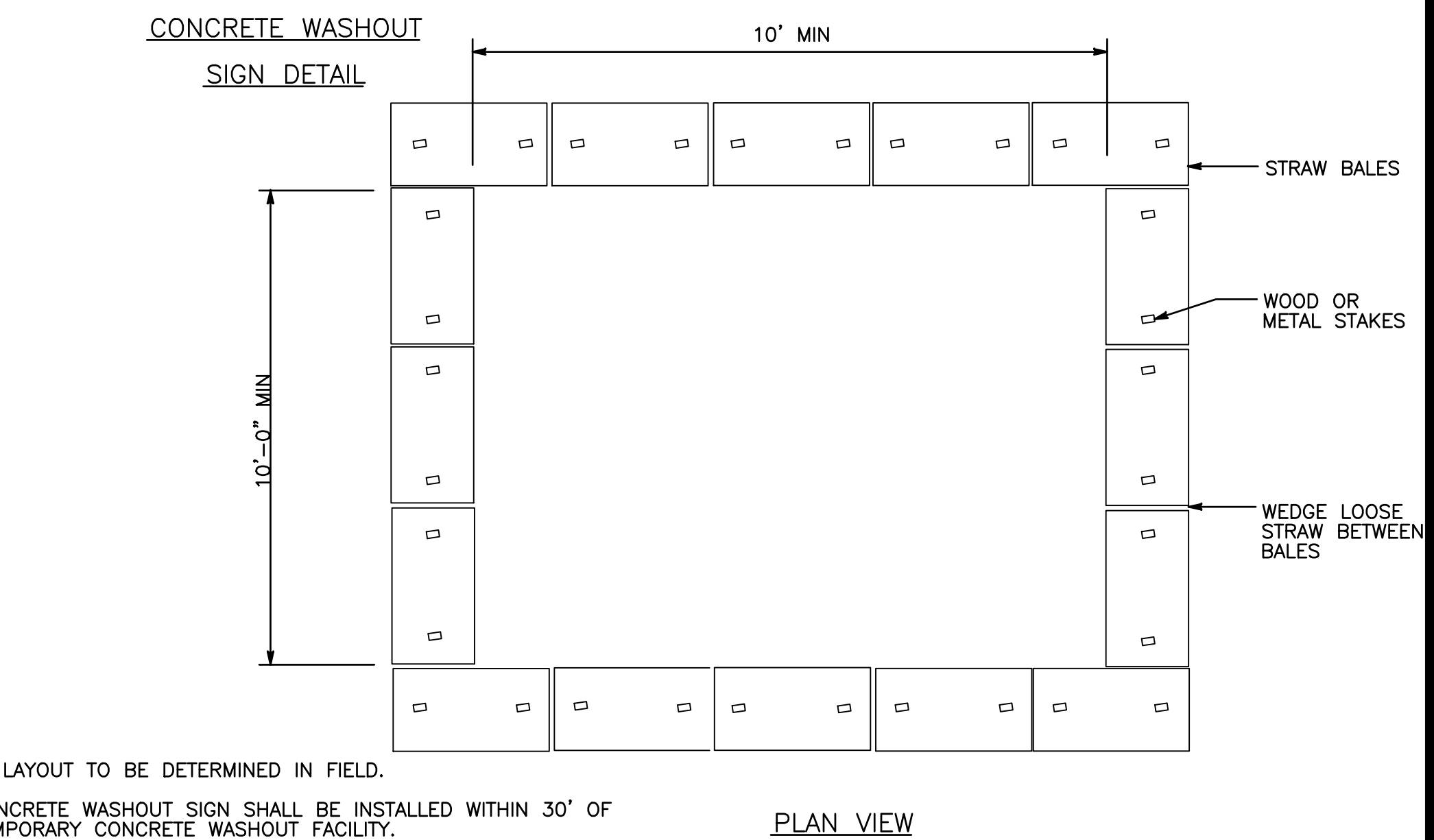
C GROUND GRID
CASME5.1 NO SCALE



SECTION VIEW



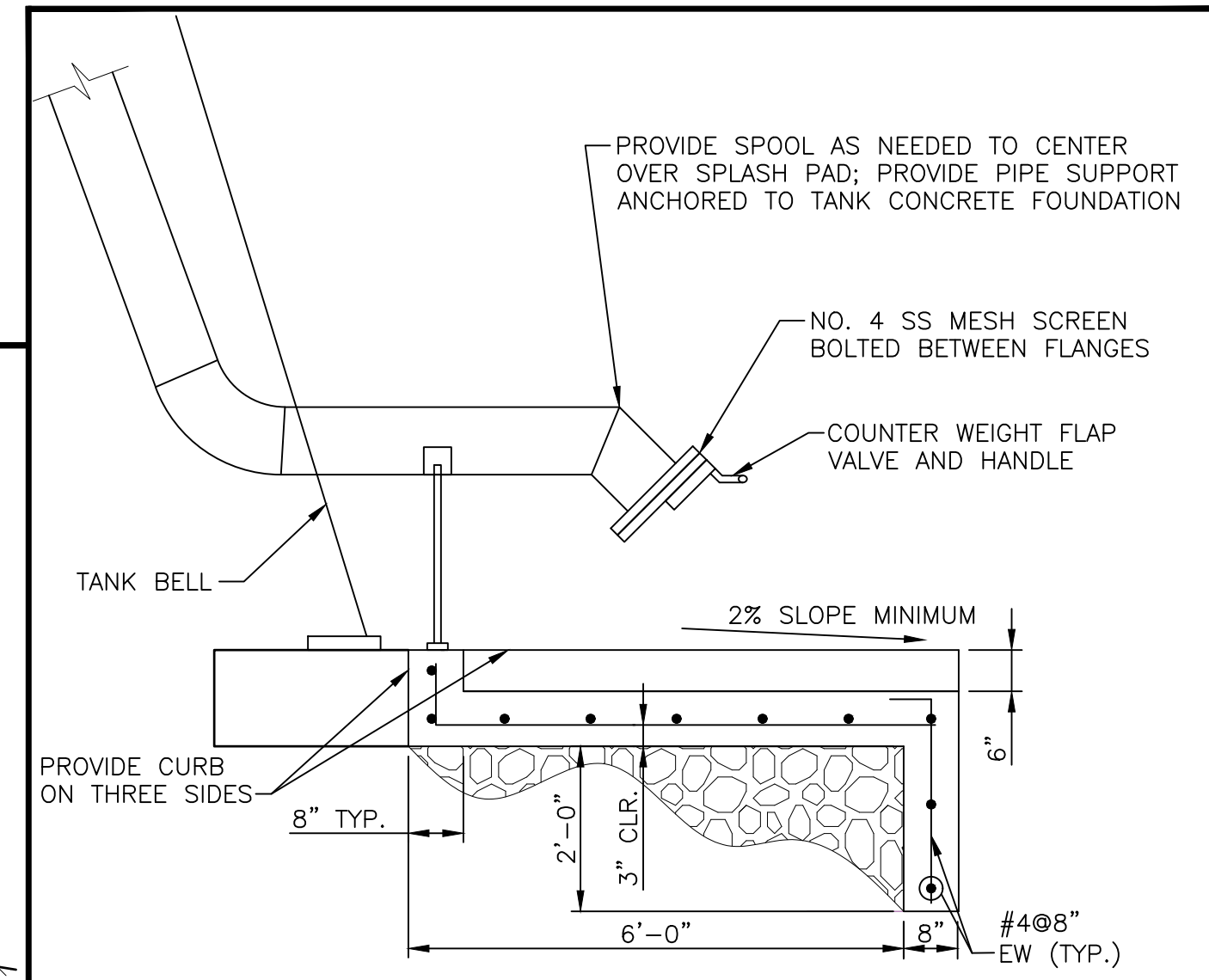
CONCRETE WASHOUT SIGN DETAIL



PLAN VIEW

G CONCRETE WASHOUT
CASME5.1 NO SCALE

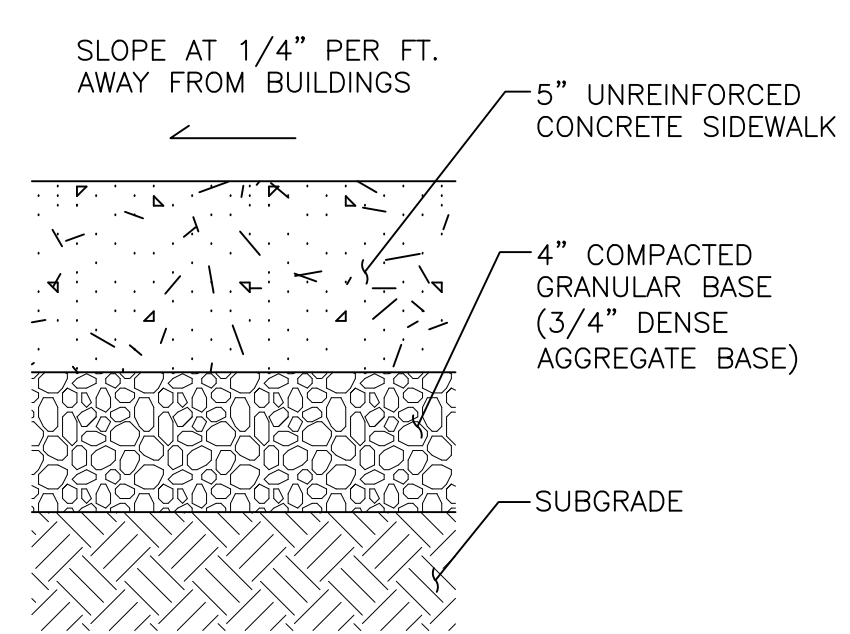
- NOTES:**
- ACTUAL LAYOUT TO BE DETERMINED IN FIELD.
 - THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
 - REMOVE WASHOUT AND SIGNAGE PRIOR TO GRADING AND RESTORATION.



PLAN

- NOTES:**
- EXTERIOR OVERFLOW PIPE AND OUTLET SHALL BE SURFACE PREPARED AND PAINTED PER DIVISION 09.
 - PIPE SUPPORT SHALL BE PROVIDED AS SPECIFIED IN DIVISION 40.

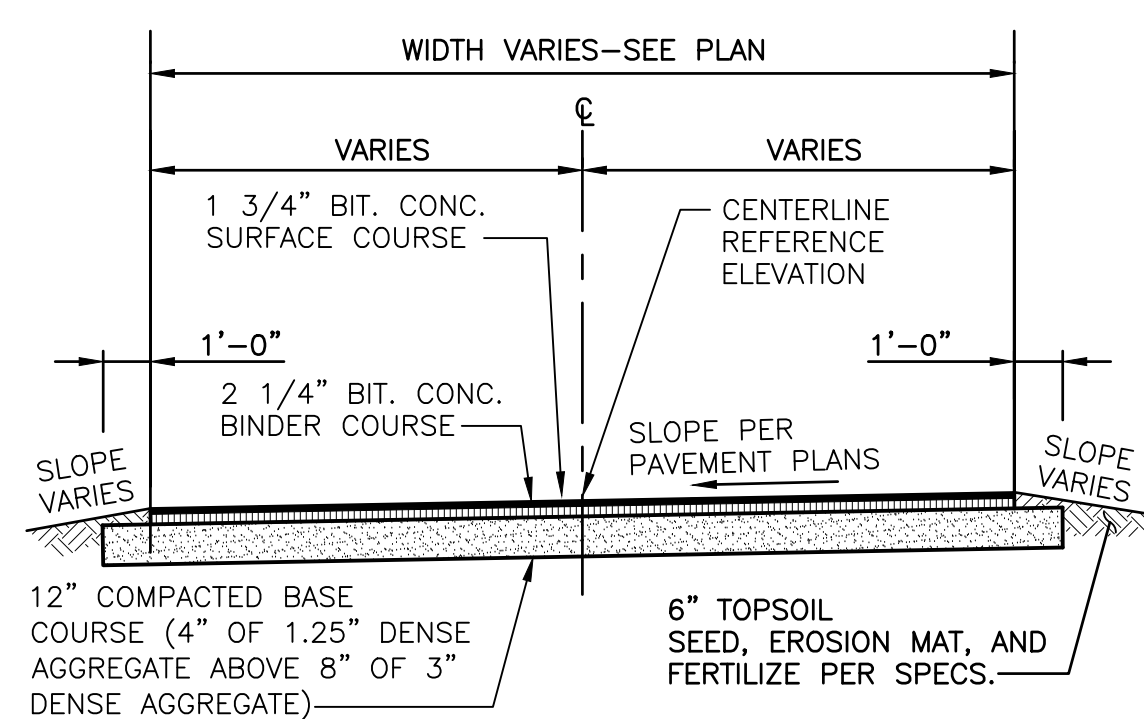
F OVERFLOW PIPE AND SPLASH PAD
CASME5.1 NO SCALE



NOTE:

PROVIDE CONTROL JOINTS 4 FT. ON CENTER PER

D CONCRETE SIDEWALK
CASME5.1 NO SCALE



E NEW PAVEMENT SECTION
CASME5.1 NO SCALE

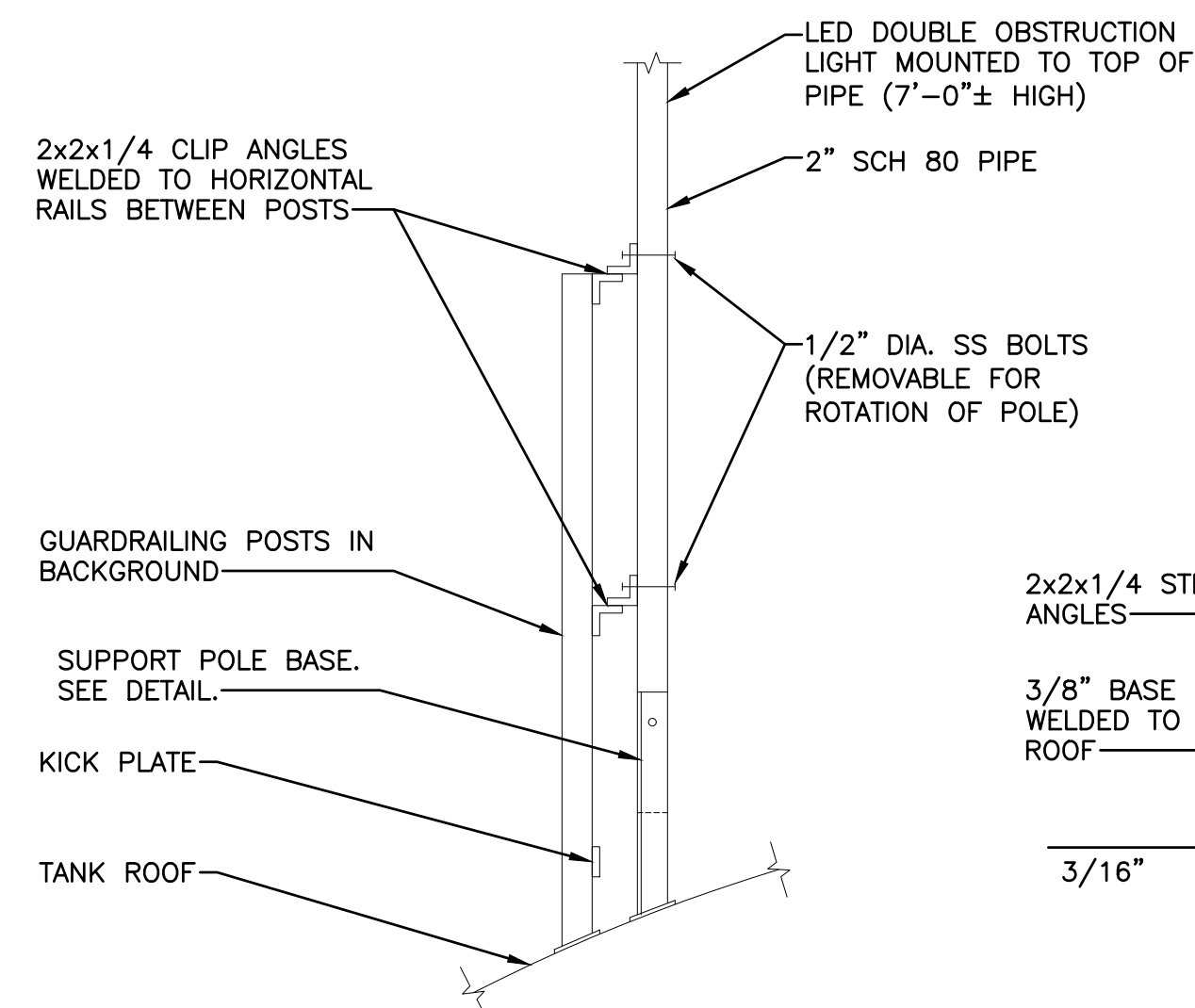
DATE:	10/02/2024
ISSUED FOR BID	
NO.	1
REVISIONS	

DETAILS - 1
FITCHBURG TOWER D
CITY OF FITCHBURG
DANE COUNTY, WISCONSIN

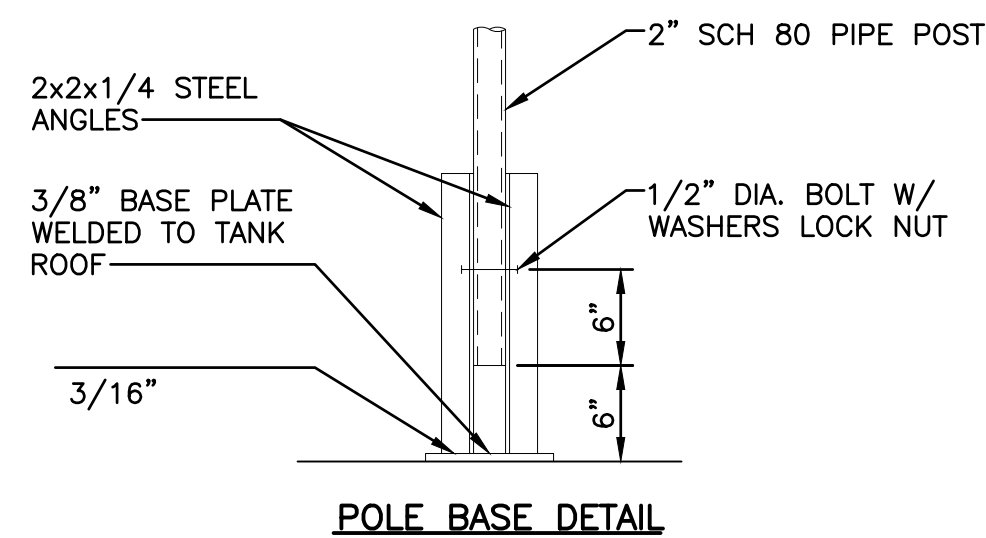
JOB NO.
1275.060
PROJECT MGR.
STEVE KLUESNER



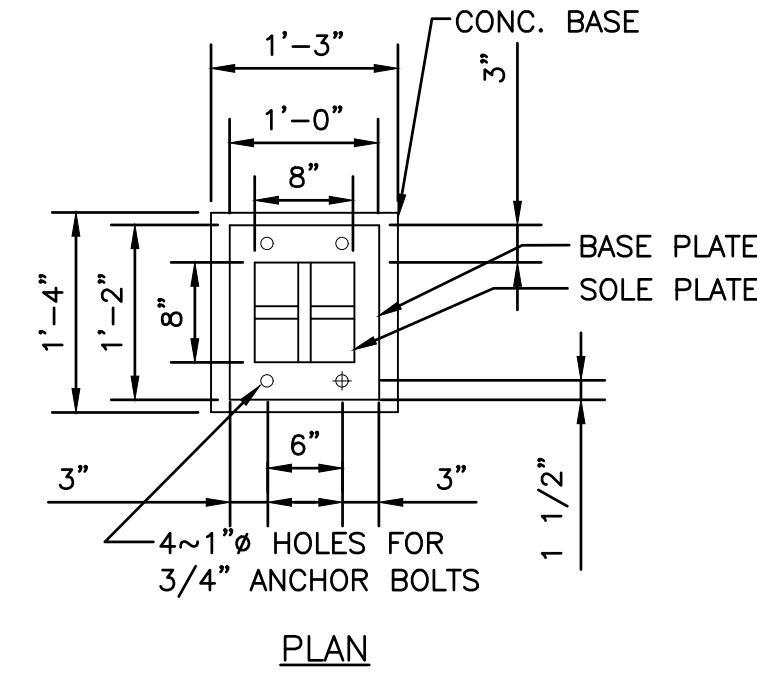
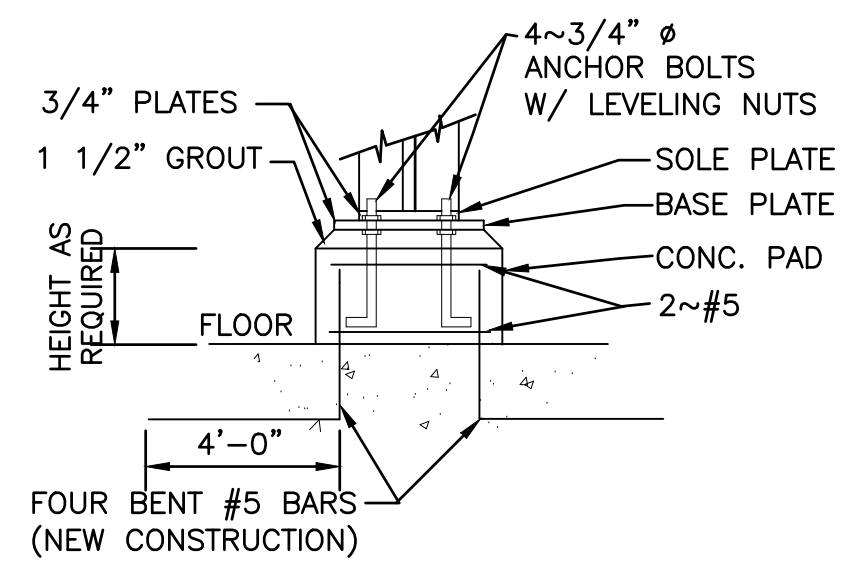
SHEET
9
CASME5.1



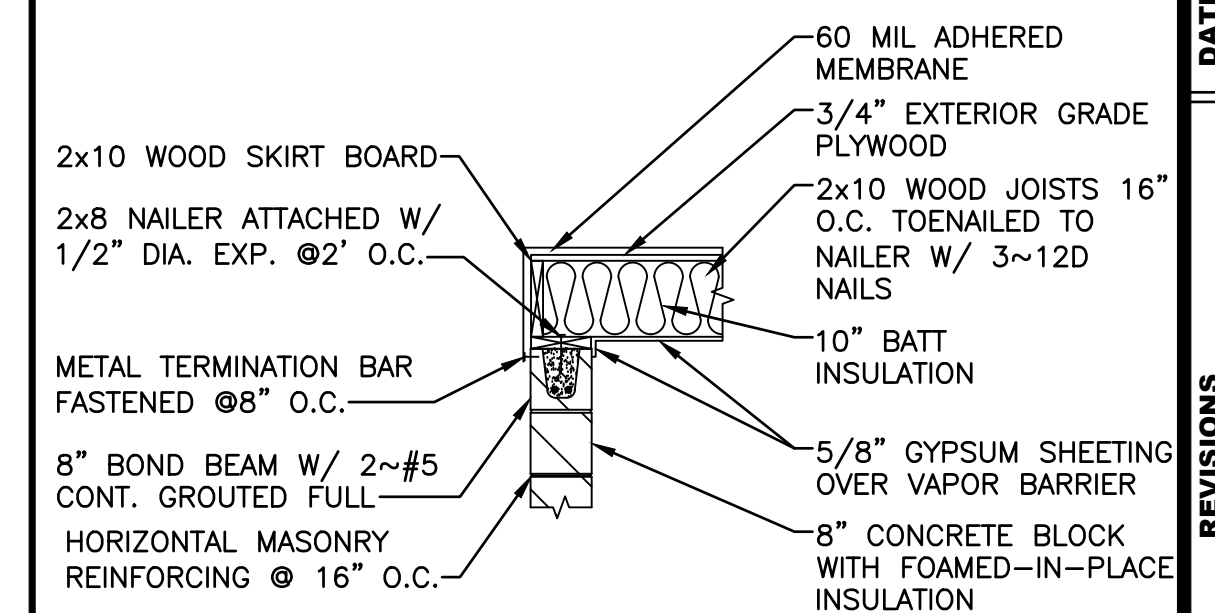
- GENERAL NOTES:**
1. ALL HARDWARE SHALL BE STAINLESS STEEL.
 2. ALL MATERIALS, EXCEPT HARDWARE AS NOTED, SHALL BE PAINTED STEEL.
 3. PROVIDE ADDITIONAL MOUNTING STRUCTURE FOR ANTENNA.



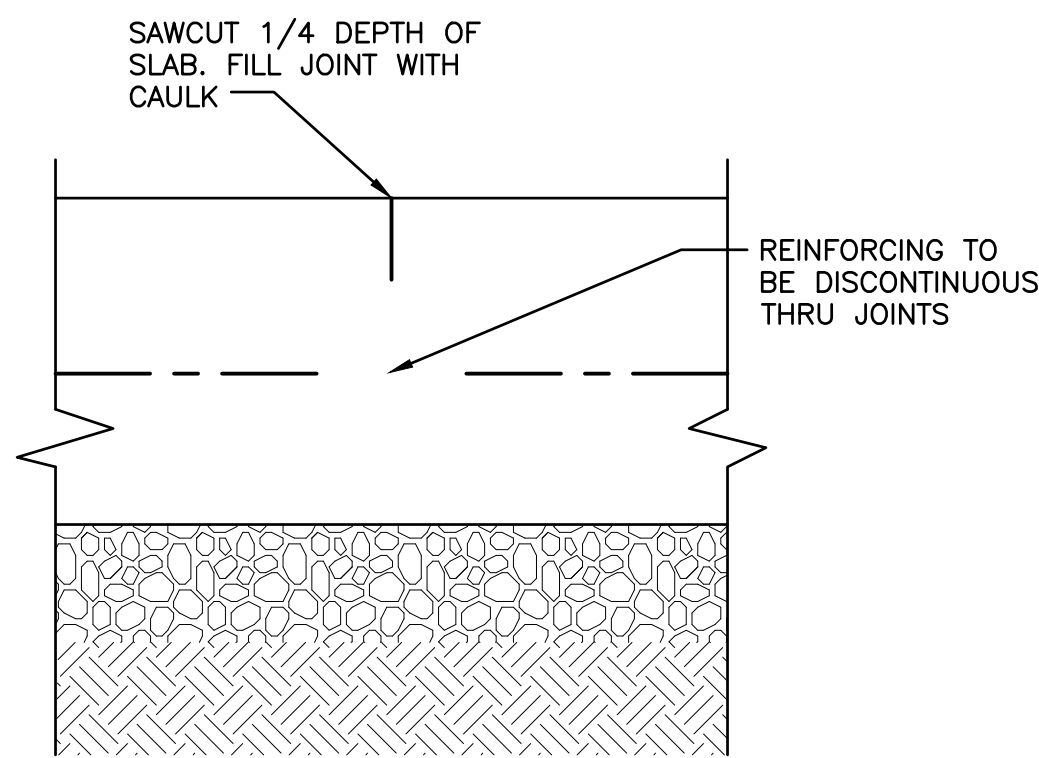
A GUARDRAIL MOUNTING DETAIL
CASME5.2 NO SCALE



B PIPE SUPPORT
CASME5.2 NO SCALE

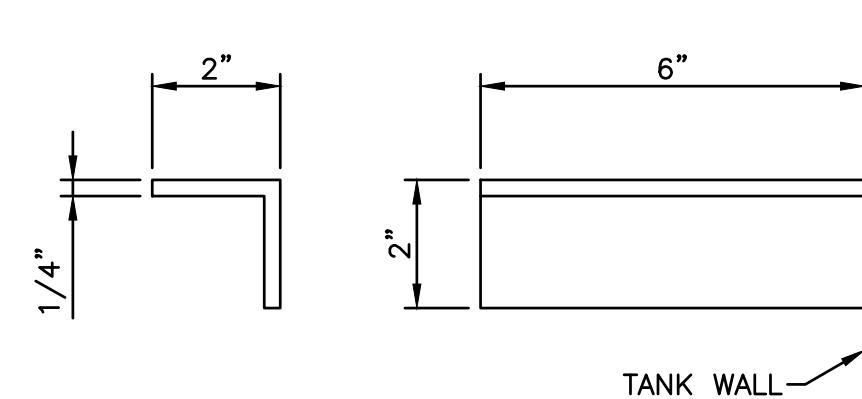


C ENCLOSURE EDGE DETAIL (TYP.)
CASME5.2 NO SCALE



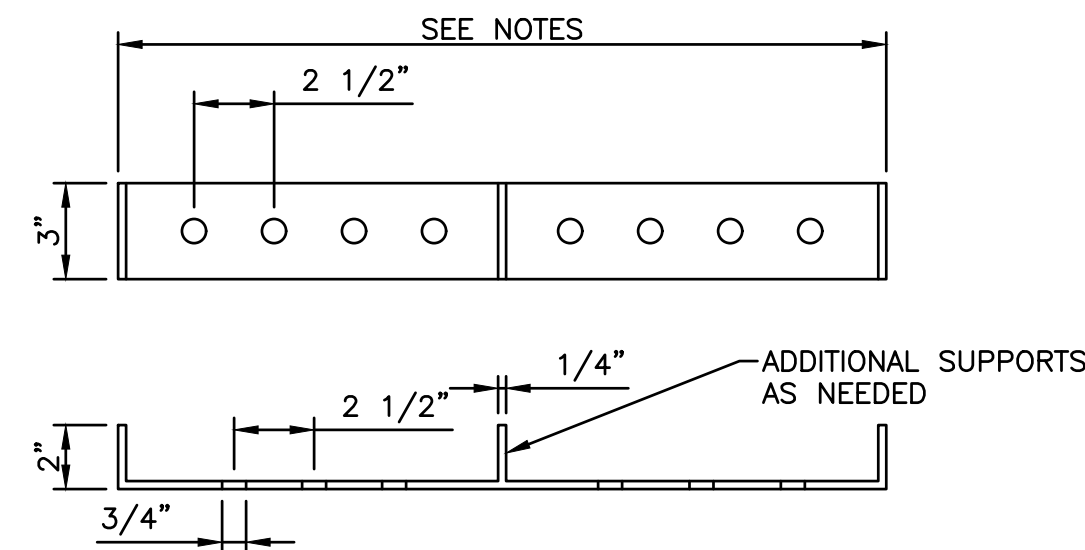
D TYPICAL SLAB SAWN JOINT
CASME5.2 NO SCALE

- NOTES:**
1. LOCATE SUPPORTS EVERY 8 FEET (VERTICALLY).
 2. SUPPORTS SHALL BE ADJACENT TO LADDER, AT LEAST 18 INCHES FROM LADDER CENTERLINE IN TANK STEM AND IN LINE WITH PLATFORM CUTOUTS.
 3. SUPPORTS SHALL BE BEHIND OVERFLOW PIPE IN ACCESS TUBE.
 4. PROVIDE WELDED SUPPORT LOCATION SHOP DRAWING.

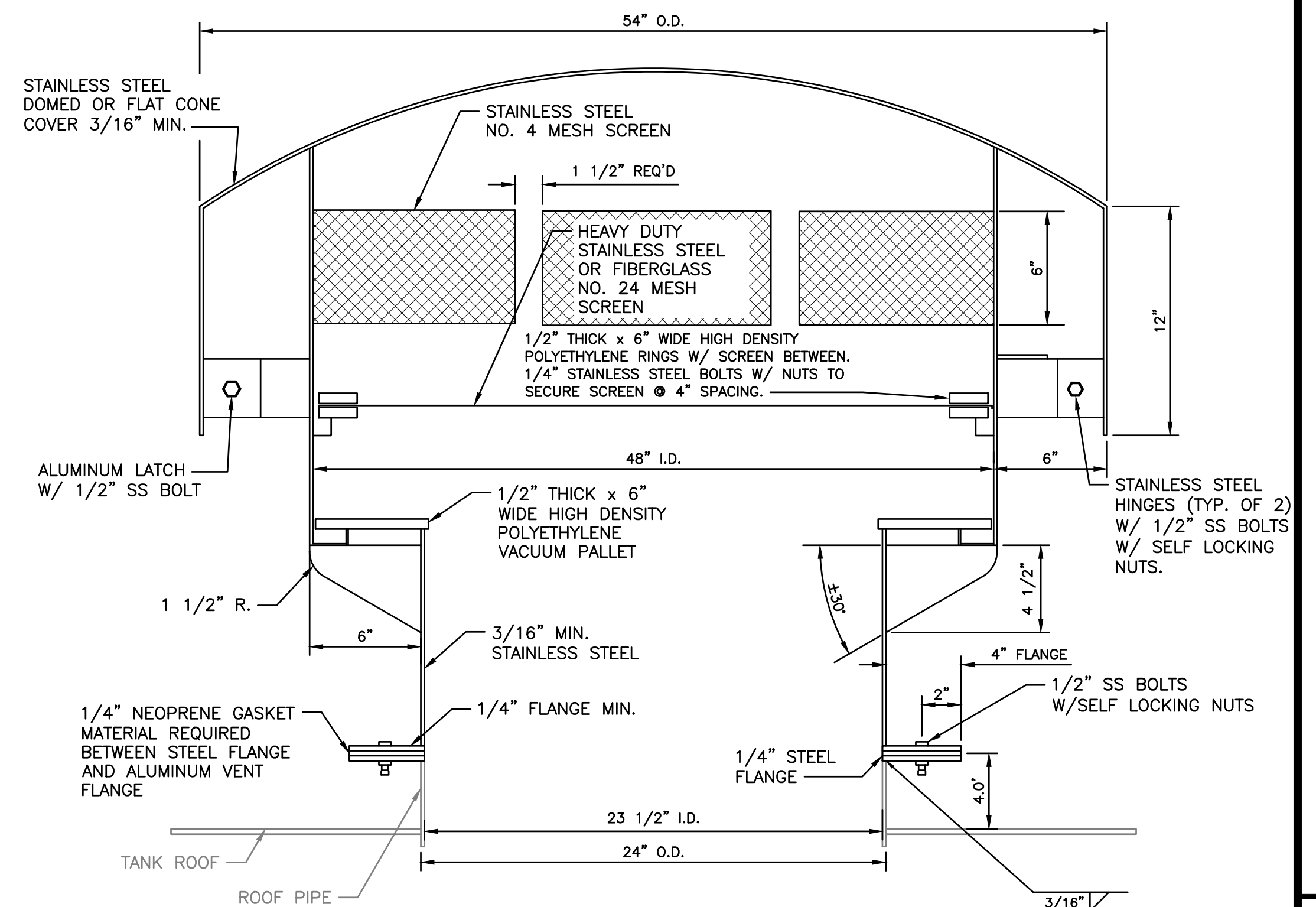


E CONDUIT SUPPORT TABS
CASME5.2 NO SCALE

- NOTES:**
1. LOCATE SUPPORTS EVERY 8 FEET (VERTICALLY).
 2. SUPPORTS SHALL BE ADJACENT TO LADDER, AT LEAST 18 INCHES FROM LADDER CENTERLINE IN TANK STEM. SUPPORTS SHALL BE 48" LONG. SUPPORTS SHALL BE IN LINE WITH PLATFORM CUTOUTS.
 3. FOUR GROUPS OF 18" LONG CELLULAR SUPPORTS SHALL BE PROVIDED IN THE ACCESS TUBE.
 4. PROVIDE WELDED SUPPORT LOCATION SHOP DRAWING.
 5. BEND BRACKET AROUND TANK PERIMETER TO MAINTAIN.

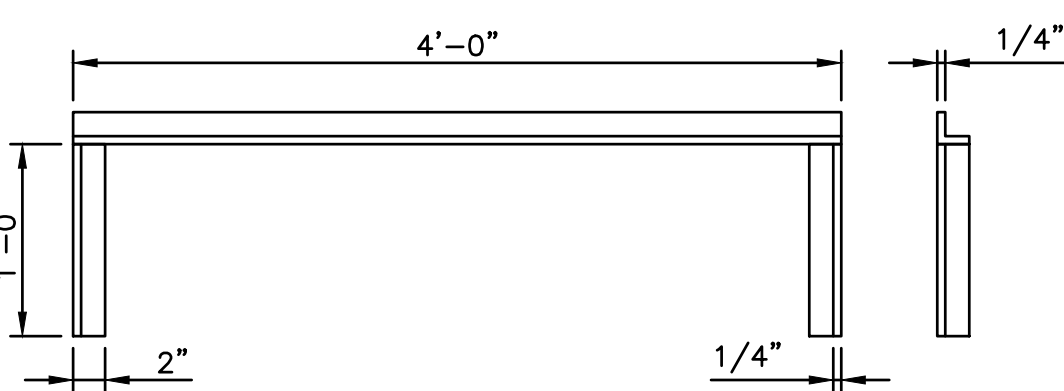


F CELLULAR SUPPORT BRACKETS
CASME5.2 NO SCALE

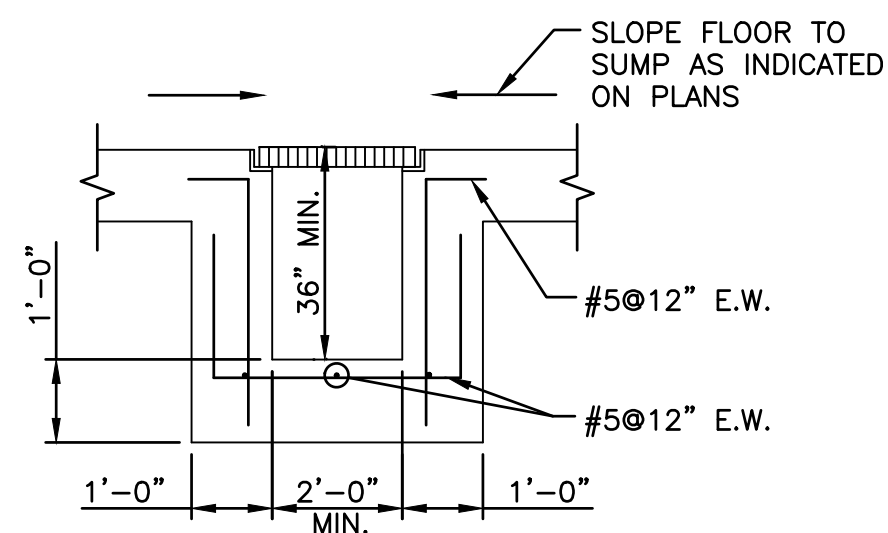
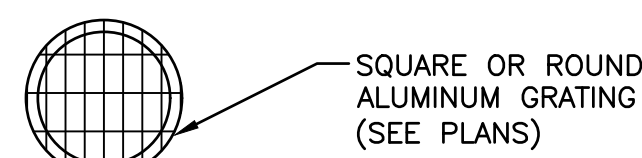


J FAIL SAFE VENT
CASME5.2 NO SCALE

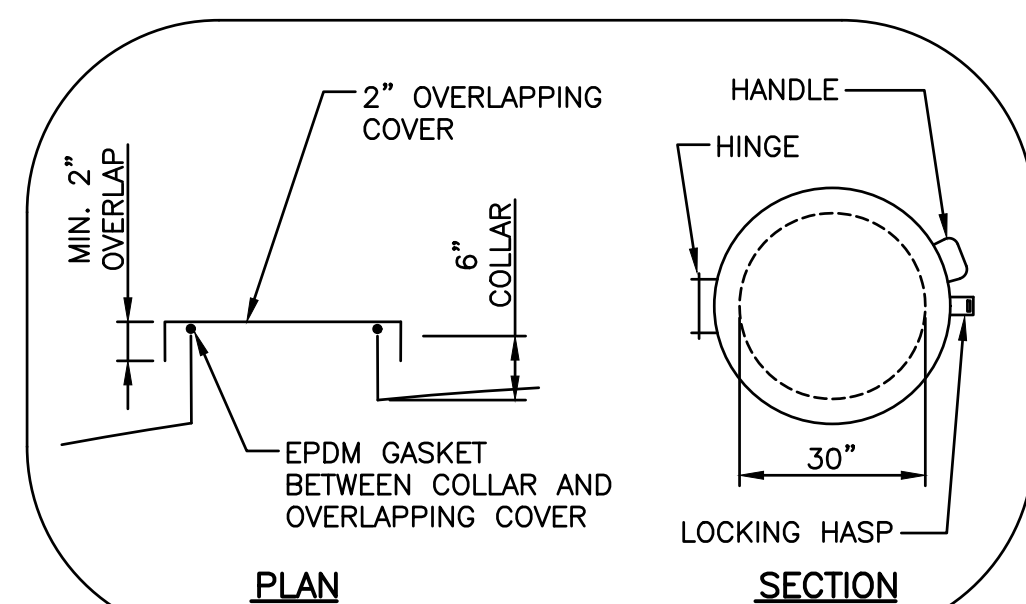
- NOTES:**
1. LOCATE SUPPORTS EVERY 3 FEET.
 2. ROOF SUPPORTS SHALL BE ON SAME SIDE OF TANK AS ROOF CONDUIT PENETRATIONS.
 3. PROVIDE WELDED SUPPORT LOCATION SHOP DRAWING.



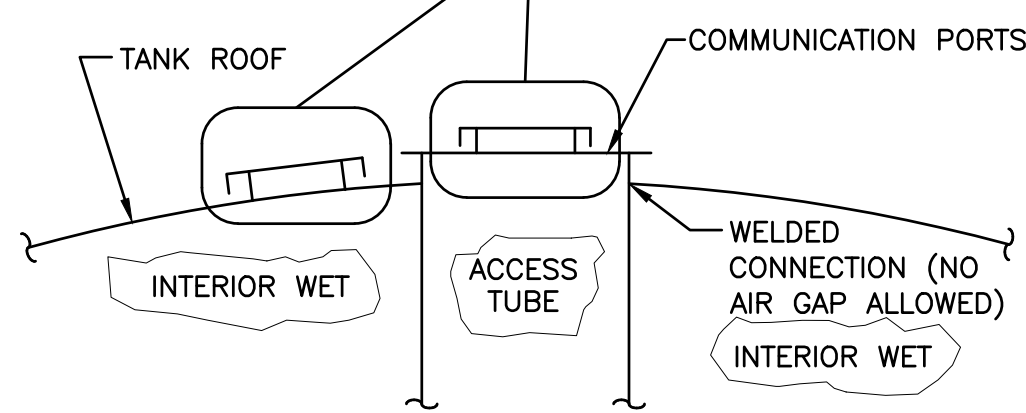
G ROOF SUPPORTS STANDS
CASME5.2 NO SCALE



H SUMP
CASME5.2 NO SCALE



K RAINPROOF TANK ROOF HATCHES
CASME5.2 NO SCALE



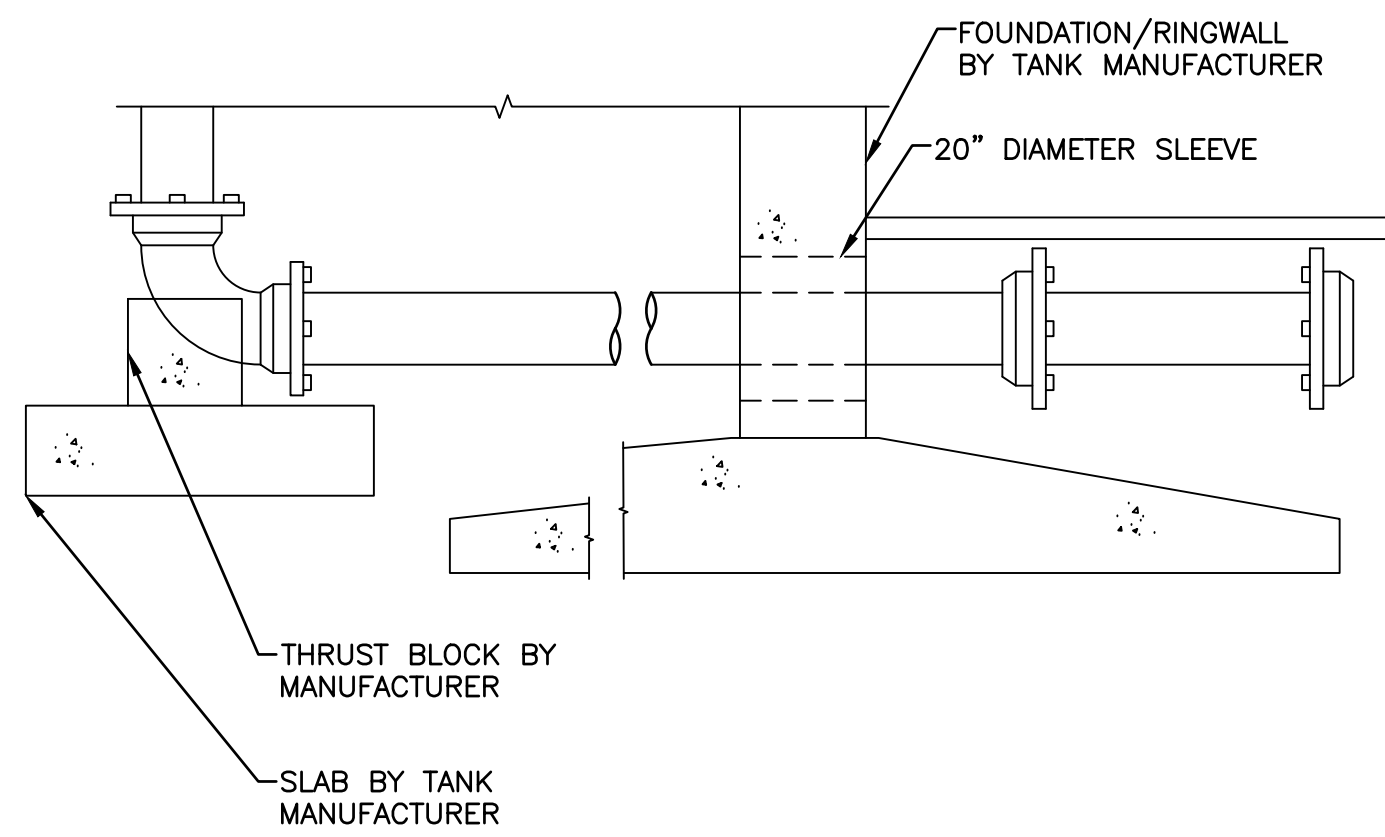
NO.	ISSUED FOR	REVISIONS	DATE
1			10/02/2024

DETAILS - 2
FITCHBURG TOWER D
CITY OF FITCHBURG
DANE COUNTY, WISCONSIN

JOB NO.
1275.060
PROJECT MGR.
STEVE KLUESNER

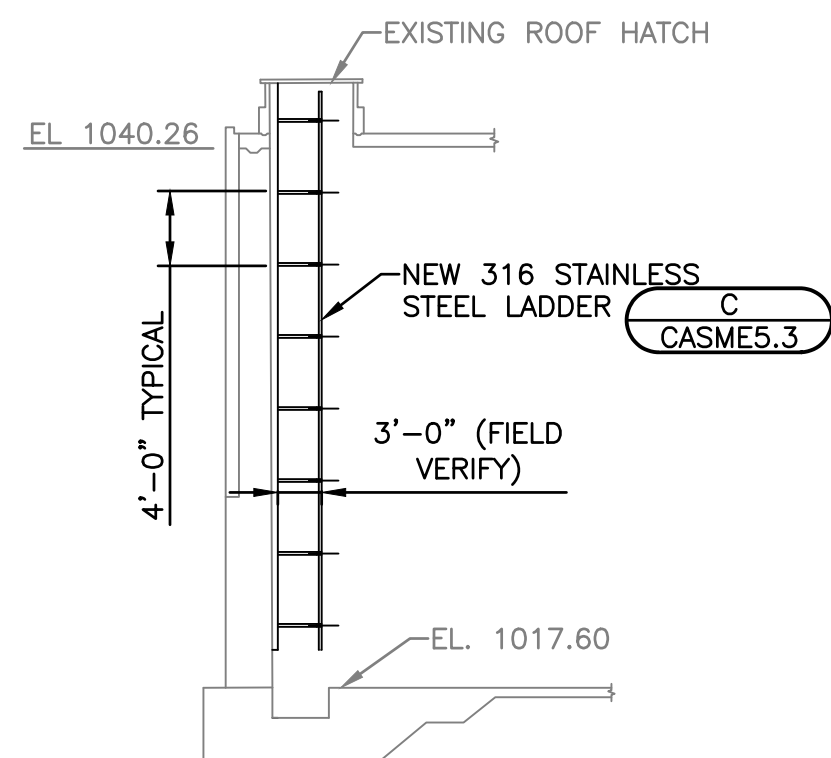


SHEET
10
CASME5.2

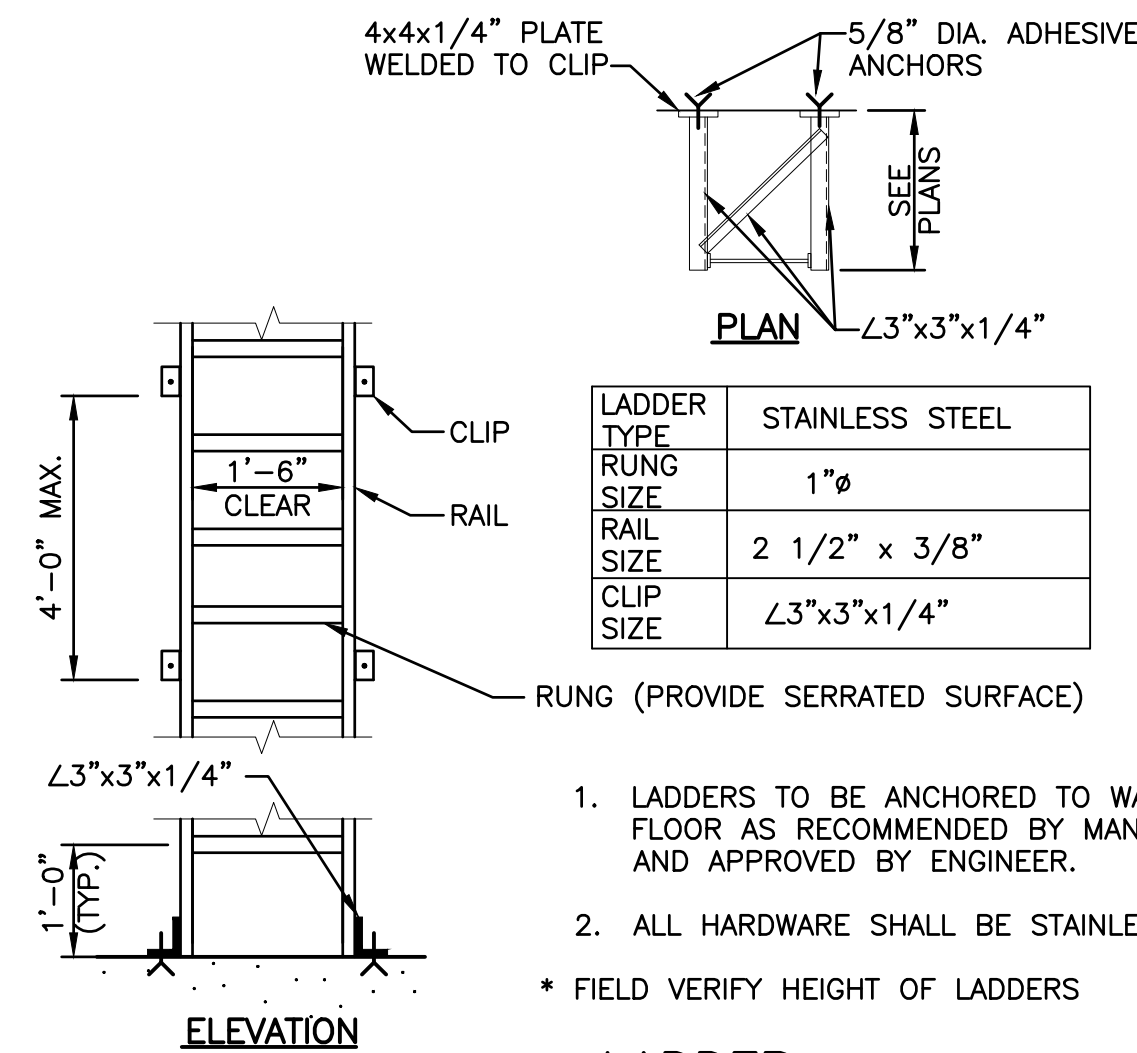


A FOUNDATION WALL PENETRATION
CASME5.3 NO SCALE

NOTES:
1. EXISTING INFORMATION SHOWN ON DRAWINGS IS BASED ON RECORD DRAWINGS OF THE STRUCTURES PROVIDED BY OWNER. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS PRIOR TO ORDERING MATERIAL AND STARTING WORK.

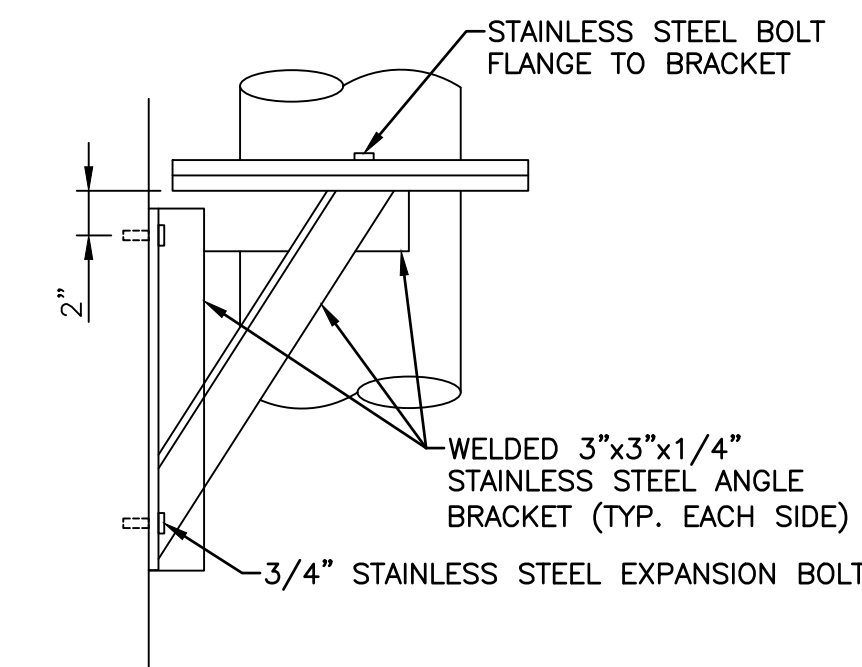


B SAFETY CAGE AND LADDER SECTION
CASME5.3 NO SCALE



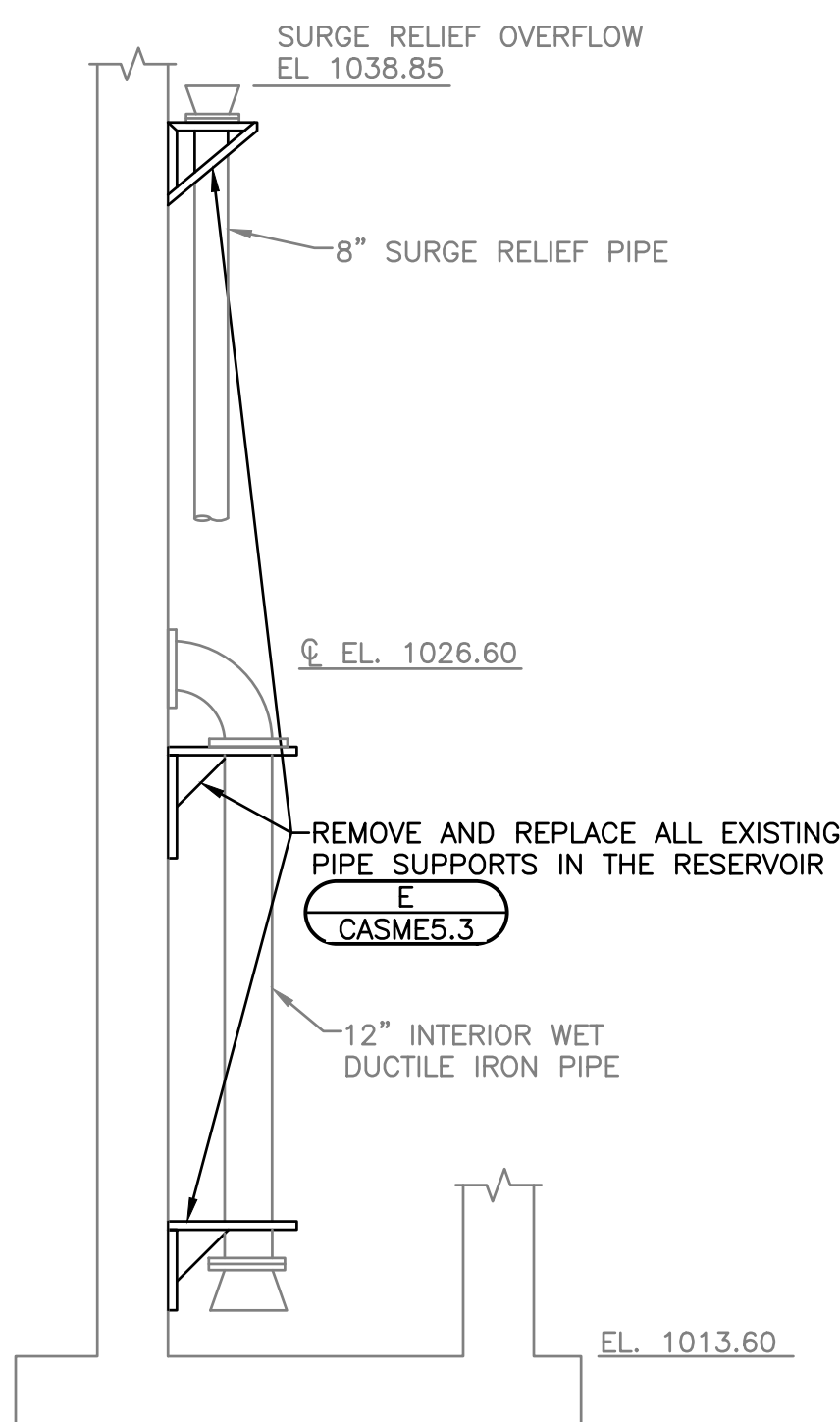
C LADDER
CASME5.3 NO SCALE

NOTES:
1. EXISTING INFORMATION SHOWN ON DRAWINGS IS BASED ON RECORD DRAWINGS OF THE STRUCTURES PROVIDED BY OWNER. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS PRIOR TO ORDERING MATERIAL AND STARTING WORK.
2. SEE RECORD DRAWING APPENDIX FOR LOCATION OF ALL PIPE SUPPORTS.

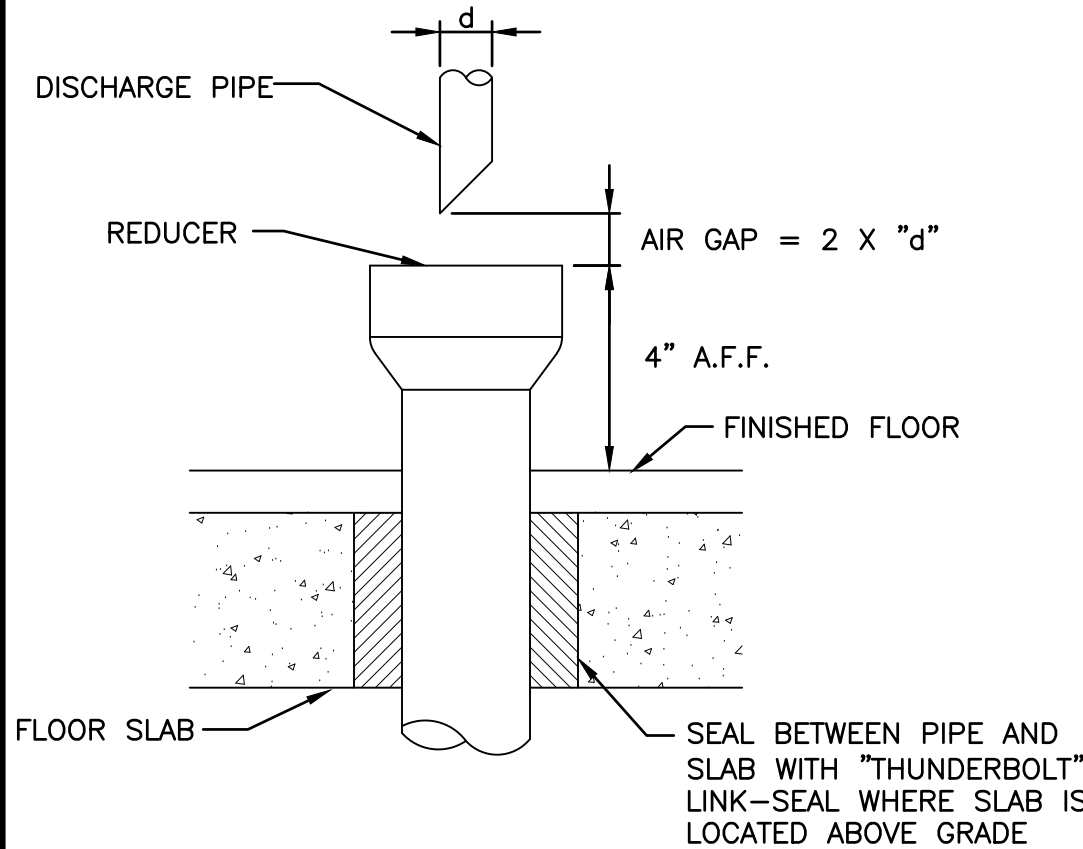


E WALL MOUNT PIPE SUPPORT
CASME5.3 NO SCALE

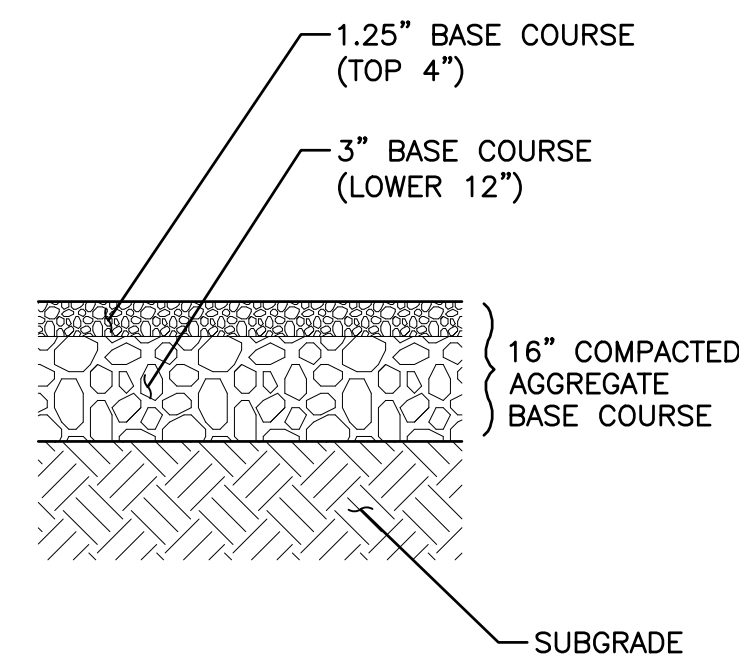
NOTES:
1. ALL INTERIOR WET DUCTILE IRON PIPE SHALL BE PAINTED AS SPECIFIED PER DIVISION 09. DUCTILE IRON PIPE AND PIPE FITTINGS SHALL BE SOLVENT-WIPED AND ABRASIVE-BLASTED IN ACCORDANCE WITH NATIONAL ASSOCIATION OF PIPE FABRICATORS NAPF 500-03 PRIOR TO PAINTING.
2. EXISTING INFORMATION SHOWN ON DRAWINGS IS BASED ON RECORD DRAWINGS OF THE STRUCTURES PROVIDED BY OWNER. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS PRIOR TO ORDERING MATERIAL AND STARTING WORK.



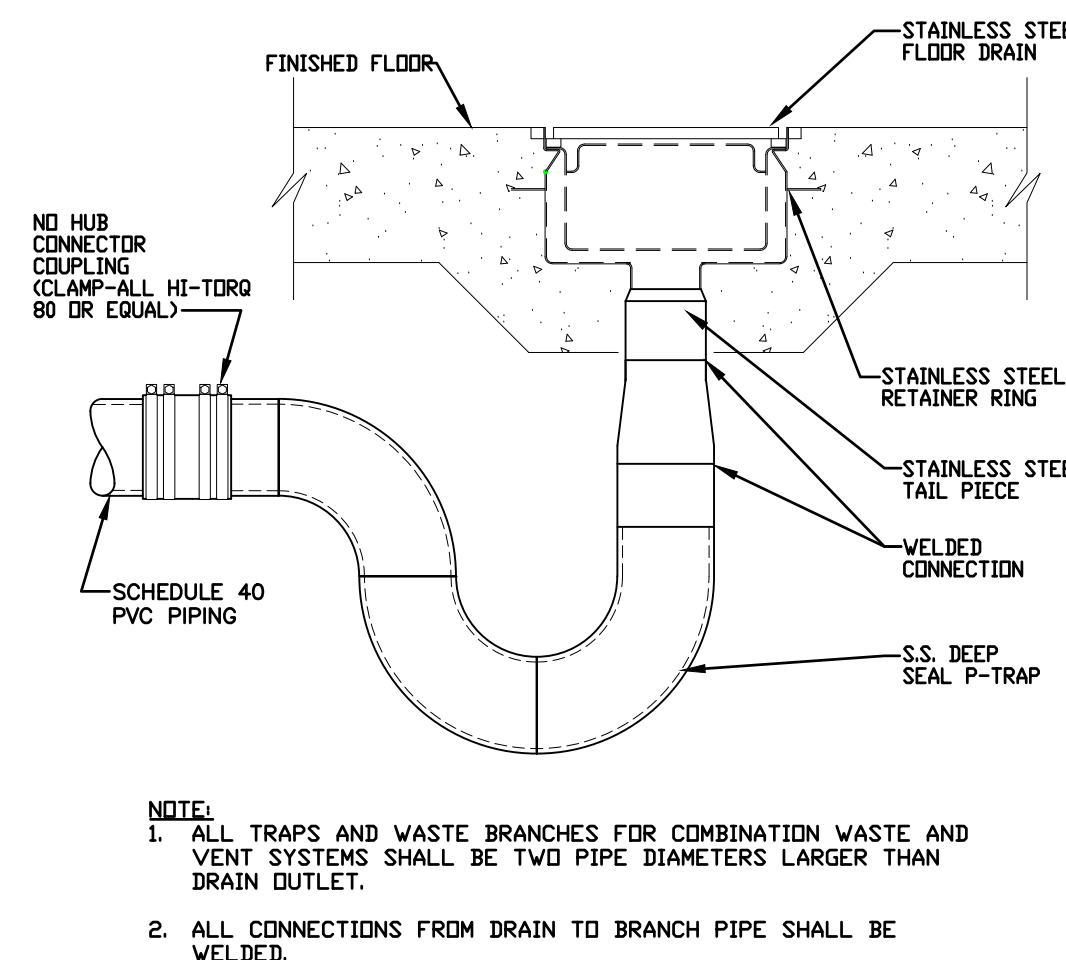
D INTERIOR WET PIPE
CASME5.3 NO SCALE



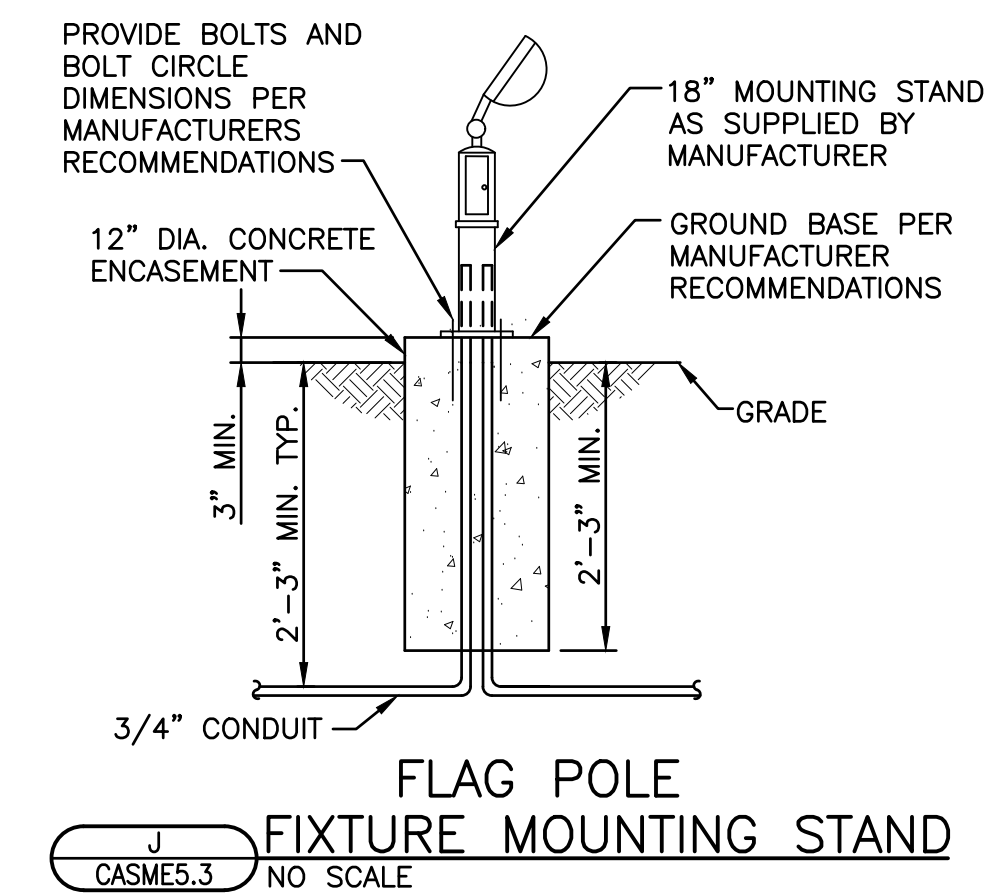
F HUB DRAIN
CASME5.3 NO SCALE



G NEW GRAVEL SURFACE
CASME5.3 NO SCALE



H FLOOR DRAIN
CASME5.3 NO SCALE



J FIXTURE MOUNTING STAND
CASME5.3 NO SCALE

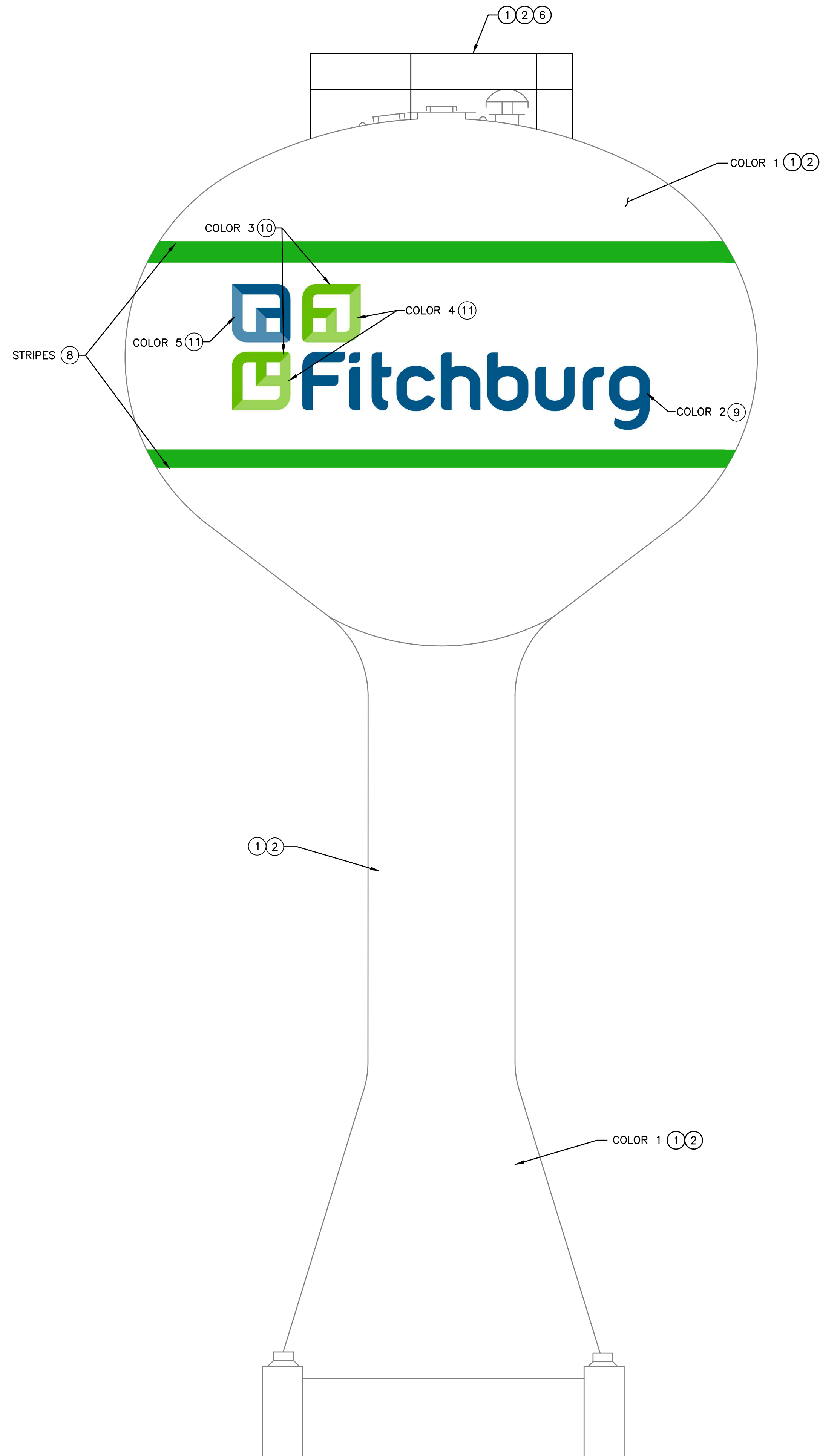
NO.	REVISIONS	DATE
1		10/02/2024

DETAILS - 3
FITCHBURG TOWER D
CITY OF FITCHBURG
DANE COUNTY, WISCONSIN

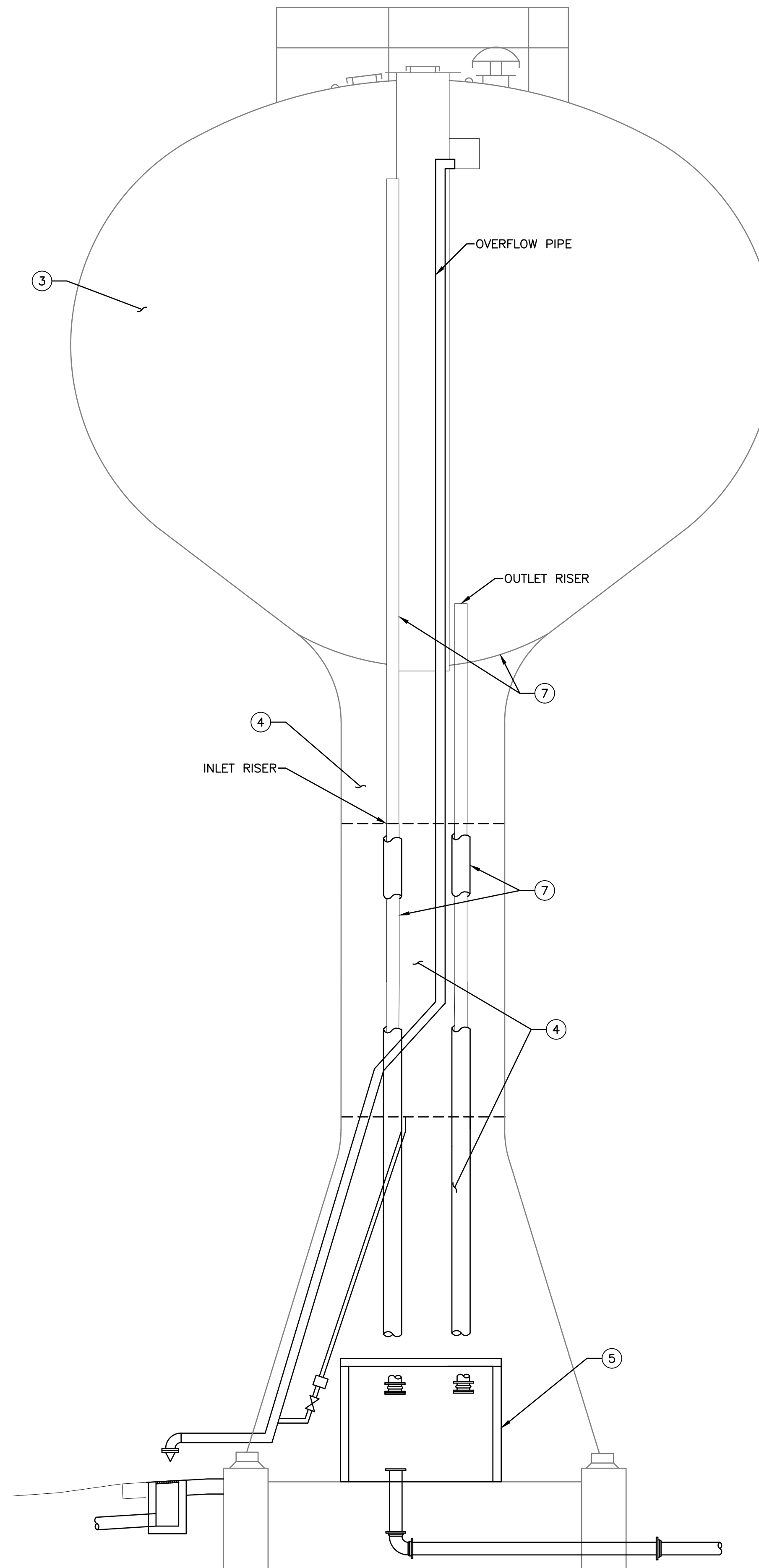
JOB NO.
1275.060
PROJECT MGR.
STEVE KLUESNER



SHEET
11
CASME5.3



EXTERIOR PAINTING SCHEME
NO SCALE



INTERIOR WET & DRY PAINTING SCHEME
NO SCALE

GENERAL NOTES:

1. EXACT TANK LOGO DIMENSIONS SHALL BE DETERMINED DURING LOGO LAYOUT SHOP DRAWINGS. APPROXIMATE DIMENSIONS ARE 63 FEET LONG BY 19 FEET TALL. TANK LOGO SHALL BE UP TO FOUR COLORS. LOGO SHALL BE PROVIDED ON TWO SIDES OF THE TANK BOWL AS LOCATED BY OWNER. TENTATIVE TANK LOCATIONS ARE DIRECTLY SOUTH AND AND THE NORTHWEST SIDE OF TANK. EXACT LOCATION WILL BE DETERMINED BY OWNER IN FIELD.
2. PROTECT ALL EQUIPMENT INSIDE MASONRY ROOM DURING SURFACE PREPARATION AND PAINTING OF DUCTILE IRON PIPING.
3. PROTECT ALL EQUIPMENT INSIDE MASONRY ROOM DURING SURFACE PREPARATION AND PAINTING OF DUCTILE IRON PIPING.

KEY NOTES:

1. COLOR 1 (TANK EXTERIOR) WILL BE WHITE. EXACT COLOR SELECTION WILL BE BY OWNER. PROVIDE COLOR SAMPLES FOR OWNER REVIEW.
2. EXTERIOR SURFACE PREPARATION AND PAINTING SHALL BE AS SPECIFIED.
3. INTERIOR WET SURFACE PREPARATION AND PAINTING SHALL BE AS SPECIFIED.
4. INTERIOR DRY SURFACE PREPARATION AND PAINTING SHALL BE AS SPECIFIED.
5. GYPSUM CEILING PAINTED WHITE AND MASONRY WALLS PAINTED WHITE INSIDE AND OUT. PAINT COLOR SHALL MATCH TANK.
6. GUARDRAIL AND ANTENNA SUPPORT STRUCTURES SHALL BE SURFACE PREPARED AND PAINTED TO MATCH EXTERIOR TANK PAINTING REQUIREMENTS.
7. INSULATING COATING SYSTEM SHALL BE AS SPECIFIED.
8. STRIPING WILL BE GREEN AND MATCH ONE OF THE LOGO COLORS. EXACT COLOR SELECTION WILL BE BY OWNER. PROVIDE COLOR SAMPLES FOR OWNER REVIEW. STRIPING SHALL COVER ENTIRE TANK CIRCUMFERENCE. STRIPING DIMENSIONS AND LOCATION SHALL BE DETERMINED DURING LOGO LAYOUT SHOP DRAWINGS.
9. COLOR 2 TEXT IS PANTONE 308C. CONTRACTOR SHALL MATCH COLOR AND PROVIDE COLOR SAMPLES FOR OWNER REVIEW.
10. COLOR 3 TEXT IS PANTONE 377C. CONTRACTOR SHALL MATCH COLOR AND PROVIDE COLOR SAMPLES FOR OWNER REVIEW.
11. CONTRACTOR SHALL COORDINATE COLOR 4 AND COLOR 5 SELECTION WITH OWNER DURING LOGO LAYOUT SHOP DRAWINGS.

NO.	ISSUED FOR BID	REVISIONS	DATE:
1			10/02/2024

PAINTING SCHEDULE
FITCHBURG TOWER D
CITY OF FITCHBURG
DANE COUNTY, WISCONSIN

JOB NO.
1275.060

PROJECT MGR.
STEVE KLUESNER



SHEET
12
ASM6.1

KEY NOTES:

- ACCESS DRIVE FROM LACY ROAD IS WITHIN WDOT ROW. CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF THE OWNER OBTAINED WISCONSIN STATE TRUCK HIGHWAY CONNECTION PERMIT AND OTHER WDOT ROW PERMITS AS SPECIFIED IN DIVISION 01. REVIEW DIVISION 01 FOR SITE ACCESS AND SITE SECURITY RELATED TO THIS PERMIT.
- PROVIDE 3-FOOT WIDE CONCRETE SIDEWALK AROUND THE PERIMETER OF THE TANK. SIDEWALK SHALL BE SLOPED AWAY FROM THE TANK WITH THE TOP OF THE SIDEWALK 4 INCHES BELOW THE TANK FOOTING WALL. SEE DETAIL **D CASME5.1**
- REMOVE TREES AND VEGETATION AS NECESSARY TO COMPLETE WORK. CONTRACTOR SHALL PROVIDE NATIVE PRAIRIE/ NATIVE VEGETATION AS SPECIFIED ON ALL AREAS OF THE TOWER SITE FURTHER THAN 10 FEET FROM IMPERVIOUS IMPROVEMENTS OR AS OTHERWISE SHOWN ON THE DRAWINGS. CONTRACTOR SHALL PROVIDE DRAWING SHOWING THE EXTENTS OF GRASS AREA VERSUS NATIVE VEGETATION PRIOR TO PERFORMING WORK.
- CONTRACTOR SHALL PROVIDE GRASS AREA AS SPECIFIED FOR ALL GREEN AREAS WITHIN 10 FEET OF IMPERVIOUS IMPROVEMENTS ON THE TOWER SITE AND WITHIN ALL AREAS OF DISTURBED WDOT RIGHT OF WAY OR AS OTHERWISE SHOWN ON THE DRAWING. CONTRACTOR SHALL PROVIDE DRAWING SHOWING THE EXTENTS OF GRASS AREA VERSUS NATIVE VEGETATION PRIOR TO PERFORMING WORK.
- VERIFY UPSTREAM VALVES ARE CLOSED, AND REMOVE HYDRANT, AUXILIARY VALVE, VALVE BOX, REDUCER, AND HYDRANT LEAD. HYDRANT SHALL BE REUSED.
- VERIFY UPSTREAM VALVES ARE CLOSED AND CONNECT NEW 16" DUCTILE IRON WATER MAIN TO EXISTING. CONTRACTOR SHALL FIELD VERIFY EXISTING WATER MAIN SIZE AND LOCATION PRIOR TO INSTALLING NEW WATER MAIN.

KEY NOTES CONTINUED:

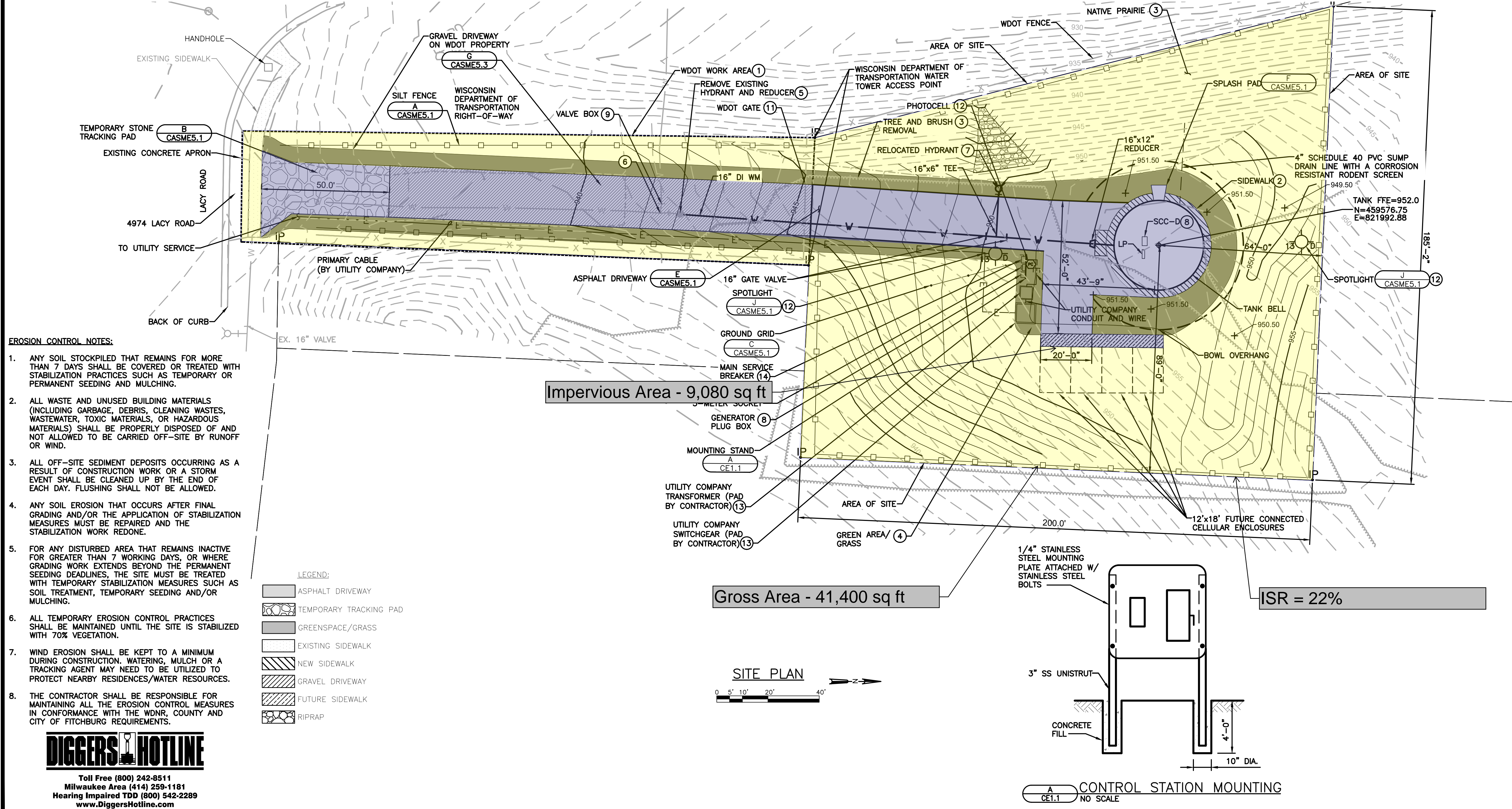
- RELOCATE FIRE HYDRANT WITH NEW 6" AUXILIARY GATE VALVE AND VALVE BOX.
- PROVIDE NEMA 4X, STAINLESS-STEEL BOX FOR STORING PORTABLE GENERATOR CABLE. PROVIDE SJOOW 12/3 CABLE IN 3/4" CONDUIT FROM BOX TO SCC-D. PROVIDE MINIMUM 10FT OF COILED CABLE WITH MALE PLUG IN BOX. CABLE SHALL BE HARDWIRED TO SCC-D.
- HEIGHT OF THE VALVE BOX SHALL BE ADJUSTED TO FINISHED DRIVEWAY ELEVATION.
- COORDINATE NEW UTILITY SERVICE WITH UTILITY COMPANY. REFER TO SPECIFICATION SECTION 26 21 00 FOR ADDITIONAL INFORMATION.
- CONTRACTOR SHALL PROVIDE WDOT GATE PIPE PER WDOT STANDARD DETAIL DRAWING 15B12. CONTRACTOR SHALL CONFIRM PIPE GATE REQUIREMENT WITH WDOT PRIOR TO CONSTRUCTION.
- SPOTLIGHT SHALL BE POWERED THROUGH EXTERIOR PHOTOCELL. COORDINATE FINAL LOCATION AND AIMING OF SPOTLIGHT WITH OWNER-SELECTED TANK LOGO LOCATIONS.
- PROVIDE CONCRETE PAD PER UTILITY COMPANY REQUIREMENTS.
- PROVIDE CONDUIT, SIZED PER UTILITY COMPANY RECOMMENDATION, FROM MAIN SERVICE BREAKER TO BELOW GRADE FOR INCOMING PRIMARY CABLING.

GENERAL NOTES:

- LOCATIONS AND ELEVATIONS OF EXISTING PIPING, ELECTRICAL SERVICE, AND OTHER SITE FEATURES ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY DEPTHS AND LOCATIONS OF EXISTING PIPING PRIOR TO INSTALLING NEW PIPING THAT CONNECTS TO EXISTING.
- THESE DRAWINGS DO NOT INDICATE ALL PIPE FITTINGS REQUIRED TO INSTALL YARD PIPING AS SHOWN. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND PROVIDING ALL REQUIRED FITTINGS.
- PROVIDE MINIMUM 6'-6" COVER OVER ALL NEW WATER MAIN.
- CONTRACTOR SHALL CONTACT APPROPRIATE AGENCIES FOR UTILITY LOCATIONS.
- RESTORE ALL DISTURBED AREAS AS SPECIFIED.
- PROVIDE CONCRETE WASHOUT STATION ACCORDING TO **G CASME5.1**
- CONTRACTOR SHALL RESTRAIN ALL UNDERGROUND WATER MAIN PIPE JOINTS AND FITTINGS AS SPECIFIED.
- UNLESS OTHERWISE NOTED OR SPECIFIED, ALL YARD PIPING SHALL BE DUCTILE IRON AND WRAPPED IN POLYETHYLENE. SEE SPECIFICATIONS.
- CONTRACTOR SHALL REPLACE PAVEMENT REMOVED OR DAMAGED DURING CONSTRUCTION. SAWCUT PAVEMENT AT JOINT. NOT ALL NEW PAVEMENT MAY BE SHOWN.

GENERAL NOTES CONTINUED:

- TANK COORDINATES ARE FROM THE DANE COUNTY COORDINATE SYSTEM.
- CONTRACTOR SHALL SUBMIT AND COMPLY WITH PROVISIONS OF CITY OF FITCHBURG EROSION CONTROL INSPECTION FORM.
- PROJECT SITE MAY BE LOCATED WITHIN A PROTECTED SPECIES AREA. CONTRACTOR SHALL FOLLOW WDNR APPROVED MEASURES TO MINIMIZE IMPACT. CONTACT WDNR FOR INPUT PRIOR TO LAND DISTURBING ACTIVITIES. FOR TREE CLEARING, BEST MANAGEMENT PRACTICE MEASURES MUST INCLUDE ONE OF THE FOLLOWING:
 - AVOID OR MINIMIZE SOIL DISTURBANCE AND HEAVY EQUIPMENT OPERATIONS DURING OVERWINTERING (MID OCTOBER - MID MARCH).
 - AVOID OR MINIMIZE FOREST MANAGEMENT THAT MAY DESTROY SPRING BLOOMING FLOWERS DURING THEIR BLOOM PERIODS.
 - CONSIDER THINNING OR SINGLE TREE SELECTION AND DENSE INVASIVE SHRUB REMOVAL THAT MAY IMPROVE OVERWINTERING AND SPRING FORAGING HABITAT.
- SITE IMPERVIOUS SURFACE RATIO FOR CITY PROPERTY EQUALS 0.11.
- UNDERGROUND WATER SYSTEM MATERIALS, INSTALLATION, AND TESTING SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF FITCHBURG STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION.

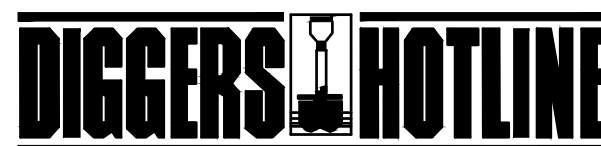


EROSION CONTROL NOTES:

- ANY SOIL STOCKPILED THAT REMAINS FOR MORE THAN 7 DAYS SHALL BE COVERED OR TREATED WITH STABILIZATION PRACTICES SUCH AS TEMPORARY OR PERMANENT SEEDING AND MULCHING.
- ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED OF AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
- ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A STORM EVENT SHALL BE CLEANED UP BY THE END OF EACH DAY. FLUSHING SHALL NOT BE ALLOWED.
- ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR THE APPLICATION OF STABILIZATION MEASURES MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.
- FOR ANY DISTURBED AREA THAT REMAINS INACTIVE FOR GREATER THAN 7 WORKING DAYS, OR WHERE GRADING WORK EXTENDS BEYOND THE PERMANENT SEEDING DEADLINES, THE SITE MUST BE TREATED WITH TEMPORARY STABILIZATION MEASURES SUCH AS SOIL TREATMENT, TEMPORARY SEEDING AND/OR MULCHING.
- ALL TEMPORARY EROSION CONTROL PRACTICES SHALL BE MAINTAINED UNTIL THE SITE IS STABILIZED WITH 70% VEGETATION.
- WIND EROSION SHALL BE KEPT TO A MINIMUM DURING CONSTRUCTION. WATERING, MULCH OR A TRACKING AGENT MAY NEED TO BE UTILIZED TO PROTECT NEARBY RESIDENCES/WATER RESOURCES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL THE EROSION CONTROL MEASURES IN CONFORMANCE WITH THE WDNR, COUNTY AND CITY OF FITCHBURG REQUIREMENTS.

LEGEND:

- ASPHALT DRIVEWAY
- TEMPORARY TRACKING PAD
- GREENSPACE/GRASS
- EXISTING SIDEWALK
- NEW SIDEWALK
- GRAVEL DRIVEWAY
- FUTURE SIDEWALK
- RIPRAP



Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

DATE:	10/02/2024
ISSUED FOR:	NO.
NO.	1

SITE PLAN - TOWER D
FITCHBURG TOWER D
CITY OF FITCHBURG
DANE COUNTY, WISCONSIN

JOB NO.
1275.060
PROJECT MGR.
STEVE KLUESNER



SHEET
5
CE1.1

Floodlights

Spotlight

Two locations to light up Fitchburg Logo on tank as shown on drawings.

The current specified light is 53 Watts and 3985.4 rated lumens.

The fixture gets a stencil cut so only area desired to be lit up is illuminated so light spill is minimal.

Product previously accepted by Deanna.



Description

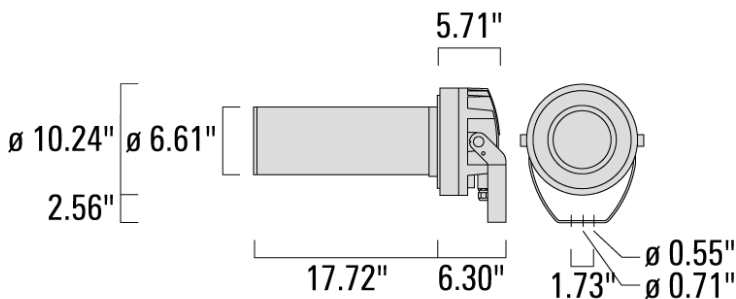
Profile Projector [FP] for framing applications, polygon shape.

Spherical/triple flat convex lens system. Aperture angle ranges from 14.6-20.2°.

IP66. Class I. IK07. Marine-grade, die-cast aluminum alloy. 5CE superior corrosion protection including PCS hardware. Silicone CCG® Controlled Compression Gasket. Safety glass lens. One cable gland, second gland for through wiring on request. PMMA LED lens array. Integral driver, thermally separated. Factory-installed LED circuit board. LED board can be removed for upgrading.

Specify product with 7 Digit product code - Finish Color. Accessories, such as mounting, optical, and electrical, must be specified separately.

Example: XXX-XXXX-9004 (Black)
+ XXX-XXXX (Accessory 1)



WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030





customersupport.usa@we-ef.com - <https://we-ef.com/us>

Subject to technical changes and errors. - Generated on 09/23/2024

Floodlights

Specifications

Material description

Body	Marine-grade, die-cast aluminium alloy
Lens	Safety glass lens
Colors	 RAL9004 Black  RAL9007 Grey Metallic  RAL9016 White  RAL8019 Dark Bronze
Gasket	Silicone CCG® Controlled Compression Gasket
Fasteners	PCS Polymer Coated Stainless Steel Hardware
Ingress protection	IP66
Impact resistance	IK07
Corrosion resistance	5CE superior corrosion protection system
Windage	1.073

Electrical description

Power supply	Integral [ECG] electronic driver 120V-277V. 0-10V dimmable, to be specified with order.
Driver / Ballast	Integral EC electronic converter with 0-10V dimming, thermally separated
Power factor	> 0.9
Surge protection	Integral 10kV Surge Protector

Additional information

Lifetime	Ta=25°/40° L70B50 > 50000h
Listings	ETL, UL-1598, CSA-C22.2#250.0. Suitable for Wet Locations.

WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

customersupport.usa@we-ef.com - <https://we-ef.com/us>

Subject to technical changes and errors. - Generated on 09/23/2024

FLC230 LED FRAMING PROJECTOR



Floodlights

Options

Light distribution



symmetric Framing-Projector [FP] - min aperture angle



symmetric Framing-Projector [FP] - max aperture angle

Color temperature

Nominal Watt



2200 K

0 W



2700 K



3000 K



4000 K

WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030
customersupport.usa@we-ef.com - <https://we-ef.com/us>



Subject to technical changes and errors. - Generated on 09/23/2024

FLC230 LED FRAMING PROJECTOR

we-ef

Floodlights

Configurations

Light distribution	Part ID	Light source	Rated lumens	Rated input power	CRI	Weight (lb)
symmetric Framing-Projector [FP] - max aperture angle 	139-2999_max	LED-FT-36W / 850 mA - 2200 K	2201.3	39 W	70	10.80
	139-3000_max	LED-FT-48W / 1100 mA - 2200 K	2810.5	53 W	70	10.80
	139-3001_max	LED-FT-36W / 850 mA - 2700 K	2580.2	39 W	80	10.80
	139-3002_max	LED-FT-48W / 1100 mA - 2700 K	3294.3	53 W	80	10.80
	139-3003_max	LED-FT-36W / 850 mA - 3000 K	2603.2	39 W	80	10.80
	139-3004_max	LED-FT-48W / 1100 mA - 3000 K	3325	53 W	80	10.80
	139-3005_max	LED-FT-36W / 850 mA - 4000 K	2790.1	39 W	80	10.80
	139-3005_min	LED-FT-36W / 850 mA - 4000 K	3120.7	39 W	80	10.80
	139-3006_max	LED-FT-48W / 1100 mA - 4000 K	3563.1	53 W	80	10.80
	symmetric Framing-Projector [FP] - min aperture angle 	139-2999_min	LED-FT-36W / 850 mA - 2200 K	2462.2	39 W	70
139-3000_min		LED-FT-48W / 1100 mA - 2200 K	3143.6	53 W	70	10.80
139-3001_min		LED-FT-36W / 850 mA - 2700 K	2886	39 W	80	10.80
139-3002_min		LED-FT-48W / 1100 mA - 2700 K	3684.7	53 W	80	10.80
139-3003_min		LED-FT-36W / 850 mA - 3000 K	2911.7	39 W	80	10.80
139-3004_min		LED-FT-48W / 1100 mA - 3000 K	3719.1	53 W	80	10.80
139-3006_min		LED-FT-48W / 1100 mA - 4000 K	3985.4	53 W	80	10.80

WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

customersupport.usa@we-ef.com - <https://we-ef.com/us>

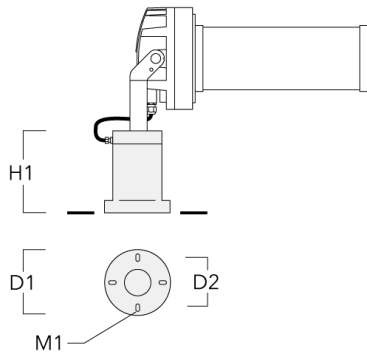
Subject to technical changes and errors. - Generated on 09/23/2024

Floodlights

Mounting Accessories

Short post EM

Description	Part ID	D1	D2	H1	M1	Weight (lb)
EM1-M16	270-9038	6.3	5.12	7.87"	0.35"	4.85 lbs



Floodlight mounting bracket TA

WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

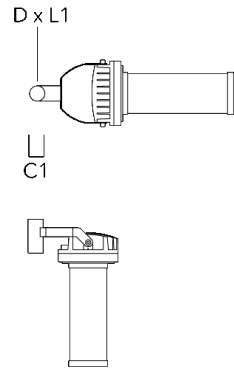
customersupport.usa@we-ef.com - <https://we-ef.com/us>

Subject to technical changes and errors. - Generated on 09/23/2024

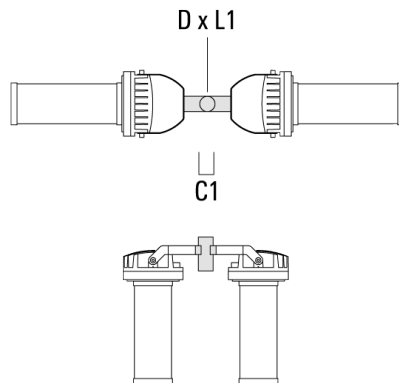
FLC230 LED FRAMING PROJECTOR

Floodlights

Description	Part ID	A	C1	D x L1	L	Weight (lb)	D x S
TA1 Mounting bracket, single (Ø 4.25 x 8)	147-0096		5.12	4.25 x 8	4.25	16.53	108 x 200



TA2 Mounting bracket, double (Ø 3 x 8)	147-0024		5.12	3 x 8	2.99	4.19	76 x 200
--	----------	--	------	-------	------	------	----------



WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

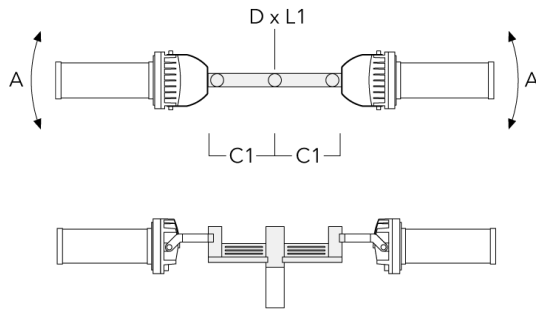
customersupport.usa@we-ef.com - <https://we-ef.com/us>

Subject to technical changes and errors. - Generated on 09/23/2024

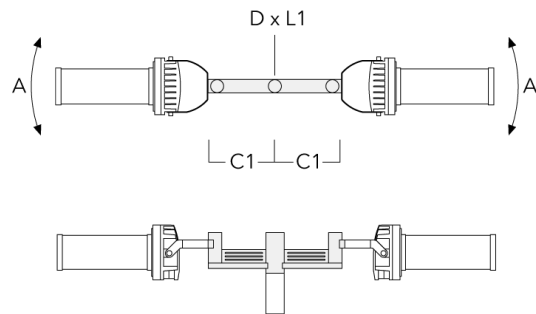
FLC230 LED FRAMING PROJECTOR

Floodlights

Description	Part ID	A	C1	D x L1	L	Weight (lb)	D x S
TA2-L Mounting bracket, double (Ø 4.25 x 8)	147-0148	±90°	16.54	4.25 x 8	4.25	44.53	108 x 200



TA2-L Mounting bracket, double (Ø 3 x 8)	147-0105	±90°	16.54	3 x 8	2.99	35.49	76 x 200
--	----------	------	-------	-------	------	-------	----------



WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

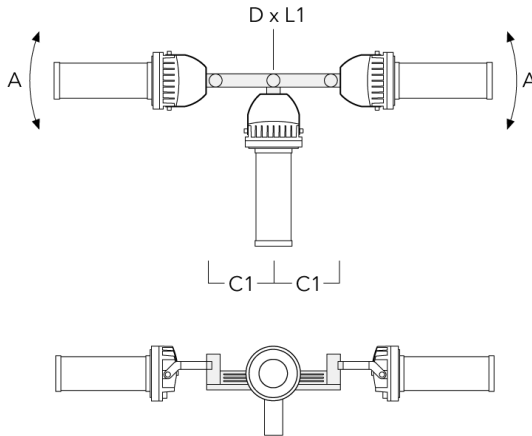
customersupport.usa@we-ef.com - <https://we-ef.com/us>

Subject to technical changes and errors. - Generated on 09/23/2024

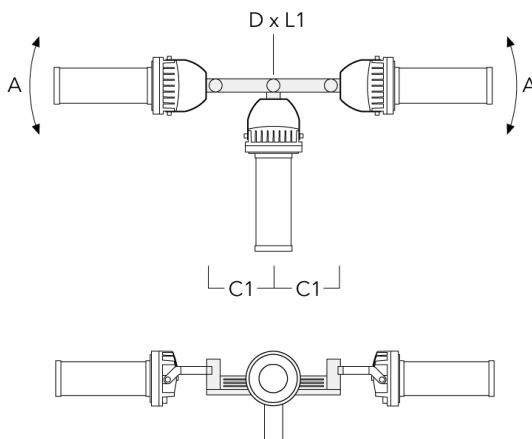
FLC230 LED FRAMING PROJECTOR

Floodlights

Description	Part ID	A	C1	D x L1	L	Weight (lb)	D x S
TA3 Mounting bracket, triple (Ø 3.50 x 8)	147-0025	±90°	25.59	3.50 x 8	3.5	39.46	89 x 200



TA3 Mounting bracket, triple (Ø 4.25 x 8)	147-0098	±90°	25.59"	4.25 x 8		53.35 lbs	108 x 200
---	----------	------	--------	----------	--	-----------	-----------



WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

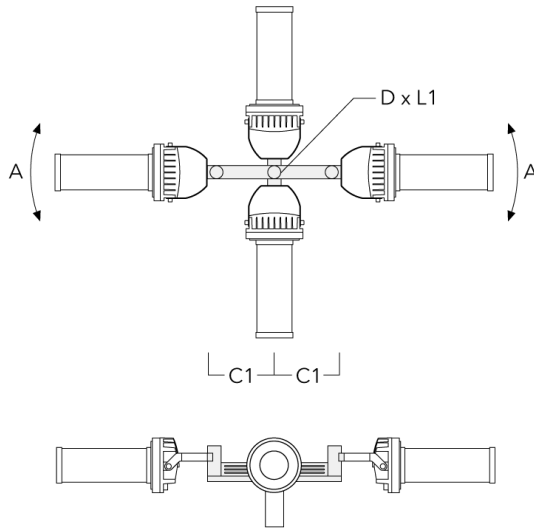
customersupport.usa@we-ef.com - <https://we-ef.com/us>

Subject to technical changes and errors. - Generated on 09/23/2024

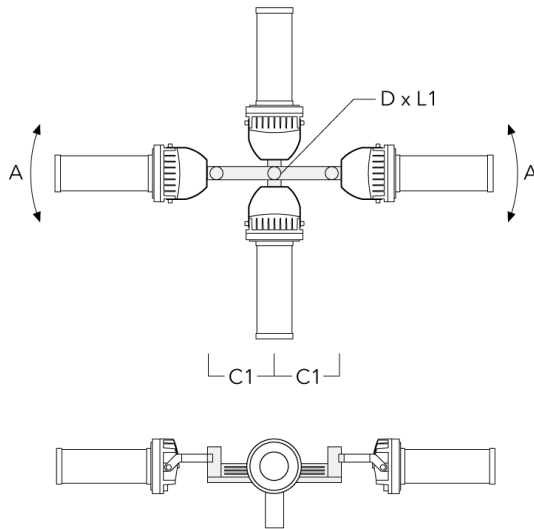
FLC230 LED FRAMING PROJECTOR

Floodlights

Description	Part ID	A	C1	D x L1	L	Weight (lb)	D x S
TA4 Mounting bracket, quad (Ø 3.50 x 8)	147-0099	±90°	25.59	3.50 x 8		45.86 lbs	89 x 200



TA4 Mounting bracket, quad (Ø 4.25 x 8)	147-0100	±90°	650	4.25 x 8		53.00	108 x 200
---	----------	------	-----	----------	--	-------	-----------



Pole clamp TS

WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

customersupport.usa@we-ef.com - <https://we-ef.com/us>

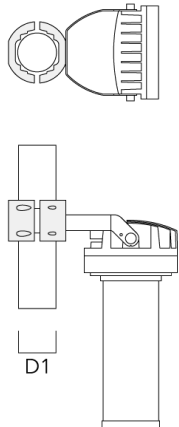
Subject to technical changes and errors. - Generated on 09/23/2024

FLC230 LED FRAMING PROJECTOR

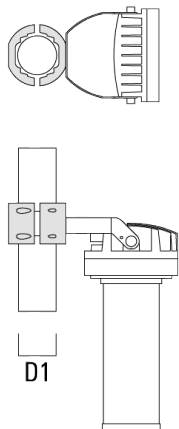
we-ef

Floodlights

Description	Part ID	D1	Weight (lb)	D
TS1-2/M12 Pole clamp, single (Ø 4.0"-4.5")	147-0526	4.0-4.50	3.53	102-114



TS1-2/M12 Pole clamp, single (Ø 4.5"-5.25")	147-0544	114-133	3.75	114-133
---	----------	---------	------	---------



WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

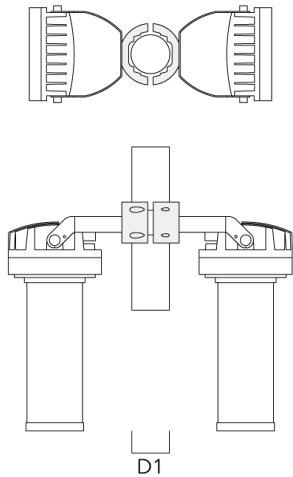
customersupport.usa@we-ef.com - <https://we-ef.com/us>

Subject to technical changes and errors. - Generated on 09/23/2024

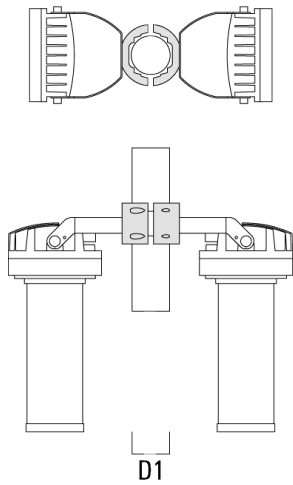
FLC230 LED FRAMING PROJECTOR

Floodlights

Description	Part ID	D1	Weight (lb)	D
TS2-2/M16 Pole clamp, double (Ø 4.0"-4.5")	147-0527	4.0-4.50	3.31	102-114



TS2-2/M12 Pole clamp, double (Ø 3"-3.5")	147-0545	3.0"-3.5"	3.09 lbs	76-89
--	----------	-----------	----------	-------



WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

customersupport.usa@we-ef.com - <https://we-ef.com/us>

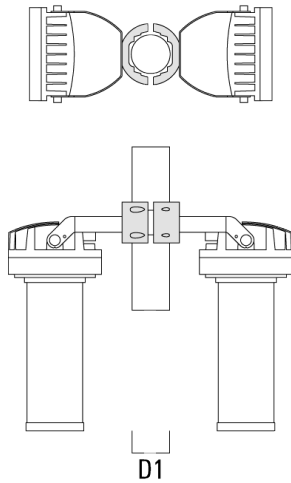
Subject to technical changes and errors. - Generated on 09/23/2024

FLC230 LED FRAMING PROJECTOR

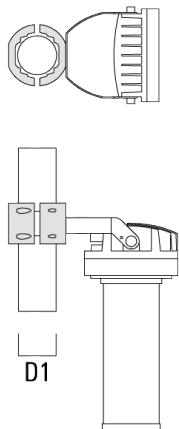
we-ef

Floodlights

Description	Part ID	D1	Weight (lb)	D
TS2-2/M16 Pole clamp, double (Ø 4.5"-5.25")	147-0546	4.50-5.25	3.53	114-133



TS1-2/M12 Pole clamp, single (Ø 3"-3.5")	147-0543	3.0-3.50	3.31	76-89
--	----------	----------	------	-------



Planted root

WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

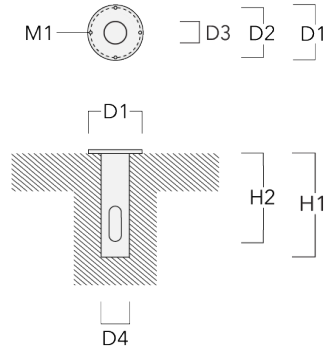
customersupport.usa@we-ef.com - <https://we-ef.com/us>

Subject to technical changes and errors. - Generated on 09/23/2024

FLC230 LED FRAMING PROJECTOR

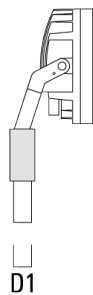
Floodlights

Description	Part ID	D1	D2	D3	D4	H1	H2	M1	Weight (lb)
Planted root ESV4	300-0461	5.71	5.12	2.36	3.50	15.75	13.78	.31	8.44



Pole top caps KF

Description	Part ID	D1	D × L1	Weight (lb)	D
KF16-60/M16 Spigot Cap (Ø 2.36")	310-9120	2.36	2.36 x 4	4.4 lbs	60 x 100



WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

customersupport.usa@we-ef.com - <https://we-ef.com/us>

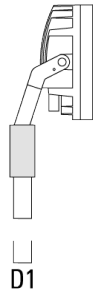
Subject to technical changes and errors. - Generated on 09/23/2024

FLC230 LED FRAMING PROJECTOR

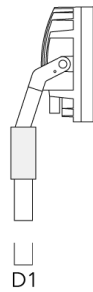
we-ef

Floodlights

Description	Part ID	D1	D × L1	Weight (lb)	D
KF16-76/M16 Spigot Cap (Ø 3.0")	310-9121	3	3 x 4	1.10 lbs	76 x 100



KF16-89/M16 Spigot Cap (Ø 3.5")	300-0734	3.50	3.5 x 3	1.10 lbs	89
---------------------------------	----------	------	---------	----------	----



WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

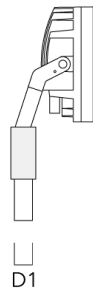
customersupport.usa@we-ef.com - <https://we-ef.com/us>

Subject to technical changes and errors. - Generated on 09/23/2024

FLC230 LED FRAMING PROJECTOR

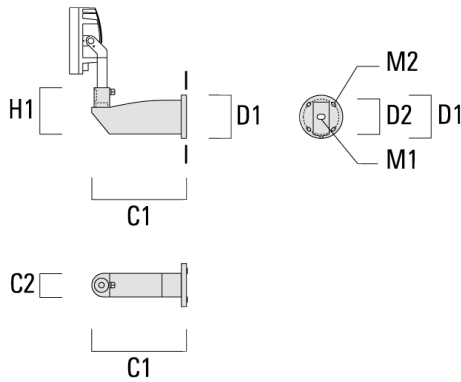
Floodlights

Description	Part ID	D1	D × L1	Weight (lb)	D
KF16-108/M16 Spigot Cap (Ø 4.25")	300-0735	4.25	4.25 x 3	4.4 lbs	108



Wall Mount Bracket WMB

Description	Part ID	C1	C2	D1	D2	H1	M1	M2	Weight (lb)
WMB200 Wall mount bracket	147-6015	20.28	4.72	9.25	7.88	11.34	1.05	0.47	20.0 lbs



Pole clamp PC

WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

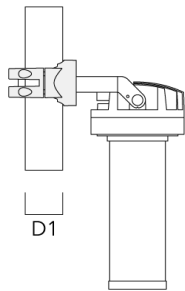
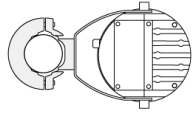
customersupport.usa@we-ef.com - <https://we-ef.com/us>

Subject to technical changes and errors. - Generated on 09/23/2024

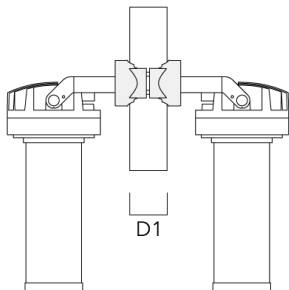
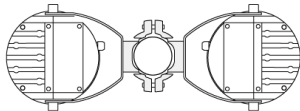
FLC230 LED FRAMING PROJECTOR

Floodlights

Description	Part ID	D1	Weight (lb)
PC1 76-89/60 Pole clamp, single (Ø 3"-3.5")	139-2702	3.0-3.50	2.20



PC2 76-89/60 Pole clamp, double (Ø 3"-3.5")	139-2703	3.0-3.50	2.20
---	----------	----------	------



WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

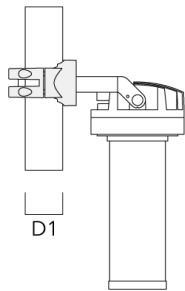
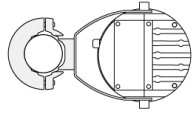
customersupport.usa@we-ef.com - <https://we-ef.com/us>

Subject to technical changes and errors. - Generated on 09/23/2024

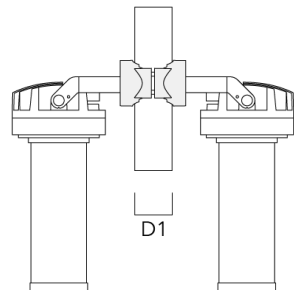
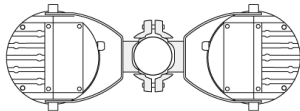
FLC230 LED FRAMING PROJECTOR

Floodlights

Description	Part ID	D1	Weight (lb)
PC1 82-109/60 Pole camp, single (Ø 3.25"-4.3")	139-2704	3.20-4.30	2.40



PC2 82-109/60 Pole clamp, double (Ø 3.25"-4.25")	139-2705	3.20-4.30	2.40
--	----------	-----------	------



WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

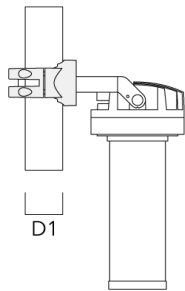
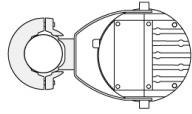
customersupport.usa@we-ef.com - <https://we-ef.com/us>

Subject to technical changes and errors. - Generated on 09/23/2024

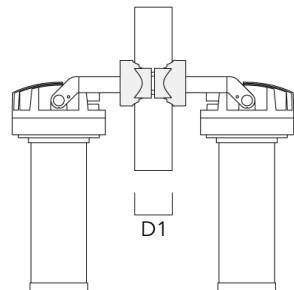
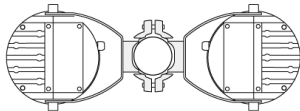
FLC230 LED FRAMING PROJECTOR

Floodlights

Description	Part ID	D1	Weight (lb)
PC1 102-114/60 Pole clamp, single (Ø 4"-4,5")	139-2706	4.0-4.50	2.65



PC2 102-114/60 Pole clamp, double (Ø 4"-4.5")	139-2707	4.0-4.50	2.65
--	----------	----------	------



WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

customersupport.usa@we-ef.com - <https://we-ef.com/us>

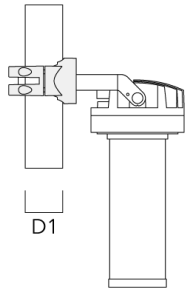
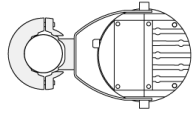
Subject to technical changes and errors. - Generated on 09/23/2024

FLC230 LED FRAMING PROJECTOR

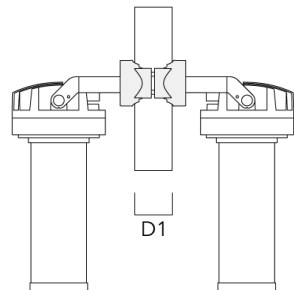
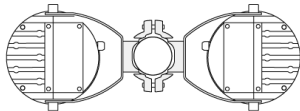
we-ef

Floodlights

Description	Part ID	D1	Weight (lb)
PC1 114-133/60 Pole clamp, single (Ø 4.5"-5.25")	139-2708	4.5-5.25	3.10



PC2 114-133/60 Pole clamp, double (Ø 4.5"-5.25")	139-2709	4.5-5.25	3.10
---	----------	----------	------



WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086 - Phone: +1 724 742 0030

customersupport.usa@we-ef.com - <https://we-ef.com/us>

Subject to technical changes and errors. - Generated on 09/23/2024

FLC230 LED FRAMING PROJECTOR

Floodlights

WE-EF LIGHTING USA, LLC

410-D Keystone Drive, 15086 Warrendale, PA 15086

Phone: +1 724 742 0030

customersupport.usa@we-ef.com

<https://we-ef.com/us>

Subject to technical changes and errors.

Generated on 09/23/2024

THE EDGE® Series

LED Security Wall Pack Luminaire

EXTERIOR LIGHT

Rev. Date: V9 06/25/2024

Product Description

THE EDGE® wall mount luminaire has a slim, low profile design. The luminaire end caps are made from rugged die cast aluminum with integral, weathertight LED driver compartments and high performance aluminum heat sinks specifically designed for LED applications. Housing is rugged aluminum. Includes a lightweight mounting box for installation over standard and mud ring single gang J-Boxes. Secures to wall with four 3/16" (5mm) screws (by others). Conduit entry from top, bottom, sides and rear. Allows mounting for uplight or downlight. Designed and approved for easy through-wiring. Includes leaf/debris guard.

Applications: General area and security lighting

Performance Summary

Patented NanoOptic® Product Technology

Assembled in the USA by Cree Lighting from US and imported parts

Initial Delivered Lumens: Up to 16,074 lumens

Input Power: 19 - 134 Watts

CRI: Minimum 70 CRI (4000K & 5700K); 80 CRI (3000K); 90 CRI (5000K)

CCT: Turtle Friendly Amber, 3000K (+/- 300K), 4000K (+/- 300K), 5000K (+/- 500K), 5700K (+/- 500K) standard

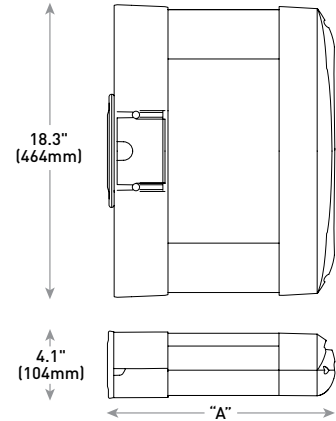
Limited Warranty*: 10 years for luminaire/10 years for Colorfast DeltaGuard® finish/5 years for PML sensors/1 year for accessories

* See <https://www.creelighting.com/resources/warranties/> for warranty terms

Accessories

Field-Installed		
Bird Spikes XA-BRDSPK	Beauty Plate WM-PLT12** - 12" (305mm) Square WM-PLT14** - 14" (356mm) Square - Covers holes left by incumbent wall packs	Hand-Held Remote XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required

** Must specify color



LED Count (x10)	Dim. "A"	Weight
02	9.9" (251mm)	20 lbs. (9.1kg)
04	11.9" (303mm)	22 lbs. (10.0kg)
06	13.9" (353mm)	25 lbs. (11.3kg)
08	15.9" (404mm)	27 lbs. (12.2kg)
10	17.9" (455mm)	31 lbs. (14.1kg)
12	19.9" (505mm)	32 lbs. (14.5kg)

Ordering Information

Example: SEC-EDG-2M-WM-06-E-UL-SV-700

SEC-EDG		WM		E				
Family	Optic	Mounting	LED Count (x10)	Series	Voltage	Finish	Drive Current	Options
SEC-EDG	2M Type II Medium 2MB Type II Medium w/BLS 2S Type II Short 2SB Type II Short w/BLS 3M Type III Medium 3MB Type III Medium w/BLS 4M Type IV Medium 4MB Type IV Medium w/BLS	WM Wall Mount	02 04 06 08 10 12	E	UL Universal 120-277V UH Universal 347-480V 34 347V	BK Black BZ Bronze SV Silver WH White	350 350mA 525 525mA 700 700mA -Available with 20-80 LEDs -Available with 20-60 LEDs	DIM 0-10V Dimming - Control by others - Refer to Dimming spec sheet for details - Can't exceed specified drive current - Not available with PML option F Fuse - Compatible only with 120V, 277V or 347V (phase to neutral) - Consult factory if fusing is required for 208V, 240V or 480V (phase to phase) - Refer to PML spec sheet for availability with PML options - When code dictates fusing, use time delay fuse P Button Photocell - Must specify UL or 34 voltage PML Programmable Multi-Level - Refer to PML spec sheet for details - Intended for downlight applications with 0° tilt 30K 3000K Color Temperature - Minimum 80 CRI - Color temperature per luminaire 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire 50K 5000K Color Temperature - Minimum 90 CRI - Color temperature per luminaire TRL Amber Turtle Friendly LEDs - Available only with 350mA - 600nm dominant wavelength - Additional shielding (by others) may be required for Florida Fish and Wildlife Conservation Commission compliance



CREE LIGHTING®

Website: creelighting.com

US: (800) 236-6800 Canada: (800) 473-1234

Product Specifications

CONSTRUCTION & MATERIALS

- Slim, low profile design
- Luminaire sides are rugged die cast aluminum with integral, weathertight LED driver compartment and high performance aluminum heat sinks specifically designed for LED applications
- Housing is rugged aluminum
- Furnished with low copper, light weight mounting box designed for installation over standard and mud ring single gang J-Boxes
- Luminaire can also be direct mounted to a wall and surface wired
- Secures to wall with four 3/16" (5mm) screws (by others)
- Conduit entry from top, bottom, sides, and rear
- Allows mounting for uplight or downlight
- Designed and approved for easy through-wiring
- Includes leaf/debris guard
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultradurable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver and white are available
- **Weight:** See Dimensions and Weight Chart on page 1

ELECTRICAL SYSTEM

- **Input Voltage:** 120–277V or 347–480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral weathertight J-Box with leads (wire nuts) for easy power hook up
- Integral 10kV/5kA surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- **Maximum 10V Source Current:** 20 LED (350mA): 10mA; 20LED (525 & 700 mA) and 40-120 LED: 0.15mA

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Enclosure rated IP66 per IEC 60529 when ordered without P or PML options
- ANSI C136.2 10kV/5kA surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- DLC qualified with select SKUs. Refer to <https://qpl.designlights.org/solid-state-lighting> for most current information
- RoHS compliant. Consult factory for additional details
- Assembled in the USA by Cree Lighting from US and imported parts
- Some configurations meet requirements of BAA and/or BABA. Consult factory when needed for a project: www.creelighting.com/BAA-BABA
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

Electrical Data*								
LED Count (x10)	CCT	System Watts 120-480V	Total Current (A)					
			120V	208V	240V	277V	347V	480V
350mA								
02	30K/40K/50K/57K	25	0.21	0.13	0.11	0.10	0.08	0.07
	TRL	19	0.16	0.09	0.08	0.07	0.05	0.04
04	30K/40K/50K/57K	46	0.36	0.23	0.21	0.20	0.15	0.12
	TRL	35	0.29	0.17	0.15	0.13	0.10	0.07
06	30K/40K/50K/57K	66	0.52	0.31	0.28	0.26	0.20	0.15
	TRL	50	0.41	0.24	0.21	0.18	0.14	0.10
08	30K/40K/50K/57K	90	0.75	0.44	0.38	0.34	0.26	0.20
	TRL	68	0.57	0.33	0.28	0.25	0.20	0.14
10	30K/40K/50K/57K	110	0.92	0.53	0.47	0.41	0.32	0.24
	TRL	83	0.69	0.40	0.35	0.30	0.24	0.17
12	30K/40K/50K/57K	130	1.10	0.63	0.55	0.48	0.38	0.28
	TRL	99	0.82	0.48	0.41	0.36	0.28	0.21
525mA								
02	30K/40K/50K/57K	37	0.30	0.19	0.17	0.16	0.12	0.10
04	30K/40K/50K/57K	70	0.58	0.34	0.31	0.28	0.21	0.16
06	30K/40K/50K/57K	101	0.84	0.49	0.43	0.38	0.30	0.22
08	30K/40K/50K/57K	133	1.13	0.66	0.58	0.51	0.39	0.28
700mA								
02	30K/40K/50K/57K	50	0.41	0.25	0.22	0.20	0.15	0.12
04	30K/40K/50K/57K	93	0.78	0.46	0.40	0.36	0.27	0.20
06	30K/40K/50K/57K	134	1.14	0.65	0.57	0.50	0.39	0.29

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/- 10%

THE EDGE® Series Ambient Adjusted Lumen Maintenance ¹						
Ambient	CCT	Initial LMF	25K hr Reported ² LMF	50K hr Reported ² LMF	75K hr Reported ² / Estimated ³ LMF	100K hr Estimated ³ LMF
5°C (41°F)	30K/40K/50K/57K	1.04	1.03	1.03	1.03 ²	1.03
	TRL	1.06	1.06	1.06	1.06 ³	1.06
10°C (50°F)	30K/40K/50K/57K	1.03	1.02	1.02	1.02 ²	1.02
	TRL	1.04	1.04	1.04	1.04 ³	1.04
15°C (59°F)	30K/40K/50K/57K	1.02	1.01	1.01	1.01 ²	1.01
	TRL	1.03	1.03	1.03	1.03 ³	1.03
20°C (68°F)	30K/40K/50K/57K	1.01	0.99	0.99	0.99 ²	0.99
	TRL	1.01	1.01	1.01	1.01 ³	1.01
25°C (77°F)	30K/40K/50K/57K	1.00	0.98	0.98	0.98 ²	0.98
	TRL	1.00	1.00	1.00	1.00 ³	1.00

¹ Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime ambient conditions.

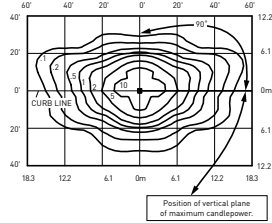
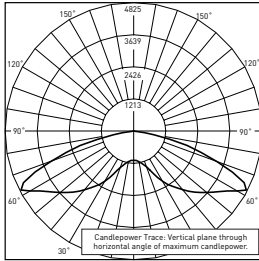
² In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.

³ Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/wall-mount/the-edge-series-5/>

2M



RESTL Test Report #: PL10270-004B
 ARE-EDG-2M-**-06-E-UL-525-40K
 Initial Delivered Lumens: 10,053

SEC-EDG-2M-**-06-E-UL-700-40K
 Mounting Height: 10' [3.0m] A.F.G.
 Initial Delivered Lumens: 12,425
 Initial FC at grade

Type II Medium Distribution										
LED Count (x10)	3000K		4000K		5000K		5700K		TRL	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
350mA										
02	2,072	B1 U0 G1	2,501	B1 U0 G1	1,902	B1 U0 G1	2,551	B1 U0 G1	816	B0 U0 G0
04	4,143	B2 U0 G1	5,003	B2 U0 G2	3,803	B1 U0 G1	5,102	B2 U0 G2	1,633	B1 U0 G1
06	6,144	B2 U0 G2	7,418	B2 U0 G2	5,640	B2 U0 G2	7,565	B2 U0 G2	2,421	B1 U0 G1
08	8,192	B2 U0 G2	9,891	B3 U0 G3	7,519	B2 U0 G2	10,087	B3 U0 G3	3,228	B1 U0 G1
10	10,215	B3 U0 G3	12,334	B3 U0 G3	9,377	B3 U0 G3	12,578	B3 U0 G3	4,025	B2 U0 G1
12	12,258	B3 U0 G3	14,801	B3 U0 G3	11,252	B3 U0 G3	15,094	B3 U0 G3	4,830	B2 U0 G2
525mA										
02	2,943	B1 U0 G1	3,550	B1 U0 G1	2,702	B1 U0 G1	3,624	B1 U0 G1		N/A
04	5,886	B2 U0 G2	7,099	B2 U0 G2	5,403	B2 U0 G2	7,248	B2 U0 G2		N/A
06	8,729	B3 U0 G3	10,527	B3 U0 G3	8,012	B2 U0 G2	10,748	B3 U0 G3		N/A
08	11,638	B3 U0 G3	14,037	B3 U0 G3	10,683	B3 U0 G3	14,331	B3 U0 G3		N/A
700mA										
02	3,472	B1 U0 G1	4,189	B2 U0 G1	3,187	B1 U0 G1	4,275	B2 U0 G2		N/A
04	6,943	B2 U0 G2	8,379	B2 U0 G2	6,373	B2 U0 G2	8,549	B3 U0 G3		N/A
06	10,296	B3 U0 G3	12,425	B3 U0 G3	9,451	B3 U0 G3	12,678	B3 U0 G3		N/A

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

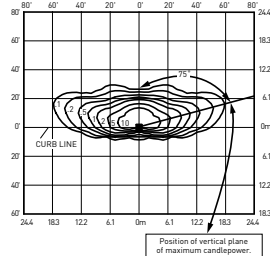
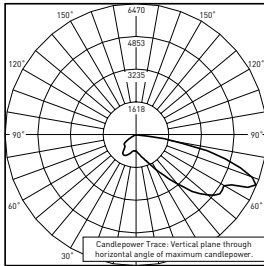
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

THE EDGE® LED Security Wall Pack Luminaire

Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/wall-mount/the-edge-series-5/>

2MB



RESTL Test Report #: PL10023-003B
 ARE-EDG-2MB-**-06-E-UL-525-40K
 Initial Delivered Lumens: 7,784

SEC-EDG-2MB-**-06-E-UL-700-40K
 Mounting Height: 10' (3.0m) A.F.G.
 Initial Delivered Lumens: 9,359
 Initial FC at grade

Type II Medium Distribution w/BLS										
LED Count (x10)	3000K		4000K		5000K		5700K		TRL	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
350mA										
02	1,560	B0 U0 G1	1,884	B0 U0 G1	1,432	B0 U0 G1	1,921	B0 U0 G1	615	B0 U0 G0
04	3,121	B0 U0 G1	3,768	B1 U0 G1	2,865	B0 U0 G1	3,843	B1 U0 G1	1,230	B0 U0 G1
06	4,628	B1 U0 G1	5,588	B1 U0 G1	4,248	B1 U0 G1	5,698	B1 U0 G1	1,824	B0 U0 G1
08	6,170	B1 U0 G1	7,450	B1 U0 G2	5,664	B1 U0 G1	7,598	B1 U0 G2	2,431	B0 U0 G1
10	7,695	B1 U0 G2	9,291	B1 U0 G2	7,063	B1 U0 G2	9,475	B1 U0 G2	3,032	B0 U0 G1
12	9,233	B1 U0 G2	11,149	B1 U0 G2	8,476	B1 U0 G2	11,370	B1 U0 G2	3,638	B1 U0 G1
525mA										
02	2,217	B0 U0 G1	2,674	B0 U0 G1	2,035	B0 U0 G1	2,730	B0 U0 G1	N/A	
04	4,434	B1 U0 G1	5,348	B1 U0 G1	4,070	B1 U0 G1	5,460	B1 U0 G1	N/A	
06	6,575	B1 U0 G2	7,930	B1 U0 G2	6,035	B1 U0 G1	8,096	B1 U0 G2	N/A	
08	8,766	B1 U0 G2	10,573	B1 U0 G2	8,047	B1 U0 G2	10,794	B1 U0 G2	N/A	
700mA										
02	2,615	B0 U0 G1	3,156	B0 U0 G1	2,400	B0 U0 G1	3,220	B0 U0 G1	N/A	
04	5,230	B1 U0 G1	6,311	B1 U0 G2	4,801	B1 U0 G1	6,440	B1 U0 G2	N/A	
06	7,755	B1 U0 G2	9,359	B1 U0 G2	7,119	B1 U0 G2	9,549	B1 U0 G2	N/A	

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

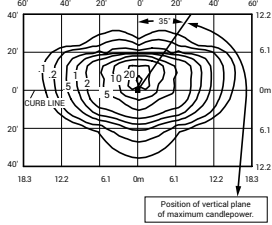
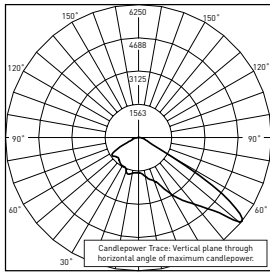
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

THE EDGE® LED Security Wall Pack Luminaire

Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/wall-mount/the-edge-series-5/>

25



RESTL Test Report #: PL12399-003A
 ARE-EDG-2S-**-06-E-UL-525-40K
 Initial Delivered Lumens: 10,843

SEC-EDG-2S-**-06-E-UL-700-40K
 Mounting Height: 10' (3.0m) A.F.G.
 Initial Delivered Lumens: 13,232
 Initial FC at grade

Type II Short Distribution										
LED Count (x10)	3000K		4000K		5000K		5700K		TRL	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
350mA										
02	2,206	B1 U0 G1	2,664	B1 U0 G1	2,025	B1 U0 G1	2,716	B1 U0 G1	869	B0 U0 G0
04	4,412	B1 U0 G1	5,327	B2 U0 G2	4,050	B1 U0 G1	5,433	B2 U0 G2	1,739	B1 U0 G1
06	6,543	B2 U0 G2	7,900	B2 U0 G2	6,006	B2 U0 G2	8,056	B2 U0 G2	2,578	B1 U0 G1
08	8,724	B2 U0 G2	10,533	B3 U0 G3	8,008	B2 U0 G2	10,742	B3 U0 G3	3,437	B1 U0 G1
10	10,879	B3 U0 G3	13,135	B3 U0 G3	9,986	B3 U0 G3	13,395	B3 U0 G3	4,286	B1 U0 G1
12	13,054	B3 U0 G3	15,762	B3 U0 G3	11,983	B3 U0 G3	16,074	B3 U0 G3	5,144	B2 U0 G2
525mA										
02	3,134	B1 U0 G1	3,780	B1 U0 G1	2,877	B1 U0 G1	3,859	B1 U0 G1		N/A
04	6,269	B2 U0 G2	7,560	B2 U0 G2	5,754	B2 U0 G2	7,719	B2 U0 G2		N/A
06	9,295	B3 U0 G3	11,211	B3 U0 G3	8,532	B2 U0 G2	11,446	B3 U0 G3		N/A
08	12,394	B3 U0 G3	14,948	B3 U0 G3	11,377	B3 U0 G3	15,261	B3 U0 G3		N/A
700mA										
02	3,697	B1 U0 G1	4,461	B1 U0 G1	3,393	B1 U0 G1	4,552	B2 U0 G2		N/A
04	7,394	B2 U0 G2	8,923	B2 U0 G2	6,787	B2 U0 G2	9,104	B3 U0 G3		N/A
06	10,964	B3 U0 G3	13,232	B3 U0 G3	10,064	B3 U0 G3	13,501	B3 U0 G3		N/A

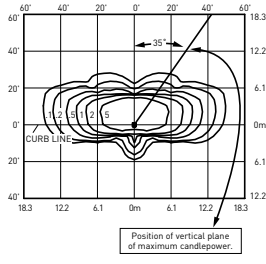
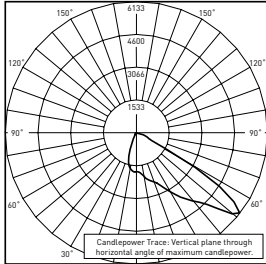
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
 ** For more information on the IES BUG [Backlight-Uplight-Glare] Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

THE EDGE® LED Security Wall Pack Luminaire

Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/wall-mount/the-edge-series-5/>

2SB



RESTL Test Report #: 12399-005A
 ARE-EDG-2SB-**-06-E-UL-525-40K
 Initial Delivered Lumens: 8,073

SEC-EDG-2SB-**-06-E-UL-700-40K
 Mounting Height: 10' (3.0m) A.F.G.
 Initial Delivered Lumens: 10,166
 Initial FC at grade

Type II Short Distribution w/BLS										
LED Count (x10)	3000K		4000K		5000K		5700K		TRL	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
350mA										
02	1,695	B0 U0 G0	2,046	B0 U0 G1	1,556	B0 U0 G0	2,087	B1 U0 G1	668	B0 U0 G0
04	3,390	B1 U0 G1	4,093	B1 U0 G1	3,112	B1 U0 G1	4,174	B1 U0 G1	1,336	B0 U0 G0
06	5,027	B1 U0 G1	6,069	B1 U0 G1	4,614	B1 U0 G1	6,190	B1 U0 G1	1,981	B0 U0 G1
08	6,702	B1 U0 G1	8,093	B1 U0 G1	6,152	B1 U0 G1	8,253	B1 U0 G1	2,641	B1 U0 G1
10	8,358	B1 U0 G1	10,091	B2 U0 G2	7,672	B1 U0 G1	10,291	B2 U0 G2	3,293	B1 U0 G1
12	10,029	B2 U0 G2	12,110	B2 U0 G2	9,206	B1 U0 G2	12,350	B2 U0 G2	3,952	B1 U0 G1
525mA										
02	2,408	B1 U0 G1	2,904	B1 U0 G1	2,210	B1 U0 G1	2,965	B1 U0 G1		N/A
04	4,816	B1 U0 G1	5,809	B1 U0 G1	4,421	B1 U0 G1	5,930	B1 U0 G1		N/A
06	7,142	B1 U0 G1	8,613	B1 U0 G1	6,555	B1 U0 G1	8,794	B1 U0 G1		N/A
08	9,522	B2 U0 G2	11,484	B2 U0 G2	8,740	B1 U0 G1	11,725	B2 U0 G2		N/A
700mA										
02	2,840	B1 U0 G1	3,428	B1 U0 G1	2,607	B1 U0 G1	3,497	B1 U0 G1		N/A
04	5,681	B1 U0 G1	6,855	B1 U0 G1	5,214	B1 U0 G1	6,995	B1 U0 G1		N/A
06	8,424	B1 U0 G1	10,166	B2 U0 G2	7,732	B1 U0 G1	10,373	B2 U0 G2		N/A

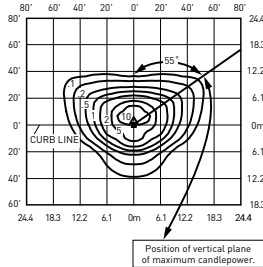
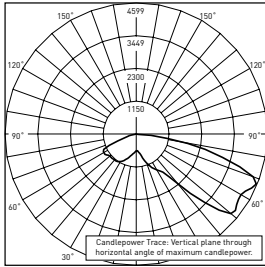
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

THE EDGE® LED Security Wall Pack Luminaire

Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/wall-mount/the-edge-series-5/>

3M



RESTL Test Report #: PL09405-001A
ARE-EDG-3M--06-E-UL-525-40K**
Initial Delivered Lumens: 9,460

SEC-EDG-3M--06-E-UL-700-40K**
Mounting Height: 10' (3.0m) A.F.G.
Initial Delivered Lumens: 11,779
 Initial FC at grade

Type III Medium Distribution										
LED Count (x10)	3000K		4000K		5000K		5700K		TRL	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
350mA										
02	1,964	B1 U0 G1	2,371	B1 U0 G1	1,803	B1 U0 G1	2,418	B1 U0 G1	774	B0 U0 G1
04	3,928	B1 U0 G1	4,743	B1 U0 G1	3,606	B1 U0 G1	4,837	B1 U0 G1	1,548	B1 U0 G1
06	5,825	B2 U0 G2	7,033	B2 U0 G2	5,347	B2 U0 G2	7,172	B2 U0 G2	2,295	B1 U0 G1
08	7,766	B2 U0 G2	9,377	B2 U0 G2	7,129	B2 U0 G2	9,563	B2 U0 G2	3,060	B1 U0 G1
10	9,685	B2 U0 G2	11,693	B3 U0 G3	8,890	B2 U0 G2	11,925	B3 U0 G3	3,816	B1 U0 G1
12	11,621	B3 U0 G3	14,032	B3 U0 G3	10,667	B3 U0 G3	14,310	B3 U0 G3	4,579	B1 U0 G1
525mA										
02	2,790	B1 U0 G1	3,365	B1 U0 G1	2,561	B1 U0 G1	3,436	B1 U0 G1		N/A
04	5,581	B2 U0 G2	6,731	B2 U0 G2	5,122	B2 U0 G2	6,872	B2 U0 G2		N/A
06	8,275	B2 U0 G2	9,981	B3 U0 G3	7,596	B2 U0 G2	10,190	B3 U0 G3		N/A
08	11,034	B3 U0 G3	13,307	B3 U0 G3	10,128	B3 U0 G3	13,586	B3 U0 G3		N/A
700mA										
02	3,291	B1 U0 G1	3,972	B1 U0 G1	3,021	B1 U0 G1	4,053	B1 U0 G1		N/A
04	6,582	B2 U0 G2	7,944	B2 U0 G2	6,042	B2 U0 G2	8,105	B2 U0 G2		N/A
06	9,761	B2 U0 G2	11,779	B3 U0 G3	8,960	B2 U0 G2	12,019	B3 U0 G3		N/A

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

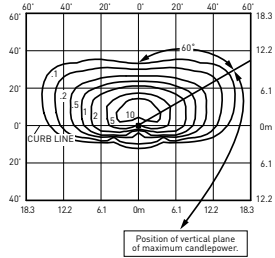
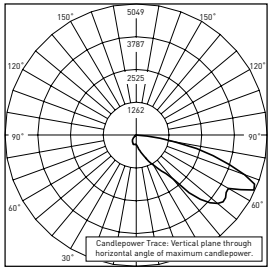
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

THE EDGE® LED Security Wall Pack Luminaire

Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/wall-mount/the-edge-series-5/>

3MB



RESTL Test Report #: PL10023-001B
 ARE-EDG-3MB-**-06-E-UL-525-40K
 Initial Delivered Lumens: 7,602

SEC-EDG-3MB-**-06-E-UL-700-40K
 Mounting Height: 10' (3.0m) A.F.G.
 Initial Delivered Lumens: 8,714
 Initial FC at grade

Type III Medium Distribution w/BLS										
LED Count (x10)	3000K		4000K		5000K		5700K		TRL	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
350mA										
02	1,453	B0 U0 G1	1,754	B0 U0 G1	1,334	B0 U0 G1	1,789	B0 U0 G1	572	B0 U0 G0
04	2,906	B0 U0 G1	3,508	B1 U0 G1	2,667	B0 U0 G1	3,578	B1 U0 G1	1,145	B0 U0 G1
06	4,309	B1 U0 G1	5,202	B1 U0 G1	3,955	B1 U0 G1	5,305	B1 U0 G1	1,698	B0 U0 G1
08	5,745	B1 U0 G2	6,936	B1 U0 G2	5,273	B1 U0 G1	7,074	B1 U0 G2	2,264	B0 U0 G1
10	7,164	B1 U0 G2	8,650	B1 U0 G2	6,576	B1 U0 G2	8,821	B1 U0 G2	2,823	B0 U0 G1
12	8,597	B1 U0 G2	10,380	B1 U0 G2	7,891	B1 U0 G2	10,585	B1 U0 G2	3,387	B1 U0 G1
525mA										
02	2,064	B0 U0 G1	2,489	B0 U0 G1	1,895	B0 U0 G1	2,542	B0 U0 G1	N/A	
04	4,128	B1 U0 G1	4,979	B1 U0 G1	3,789	B1 U0 G1	5,083	B1 U0 G1	N/A	
06	6,121	B1 U0 G2	7,383	B1 U0 G2	5,619	B1 U0 G2	7,538	B1 U0 G2	N/A	
08	8,162	B1 U0 G2	9,844	B1 U0 G2	7,492	B1 U0 G2	10,050	B1 U0 G2	N/A	
700mA										
02	2,435	B0 U0 G1	2,938	B1 U0 G1	2,235	B0 U0 G1	2,998	B1 U0 G1	N/A	
04	4,869	B1 U0 G1	5,876	B1 U0 G2	4,469	B1 U0 G1	5,996	B1 U0 G2	N/A	
06	7,220	B1 U0 G2	8,714	B1 U0 G2	6,628	B1 U0 G2	8,891	B1 U0 G2	N/A	

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

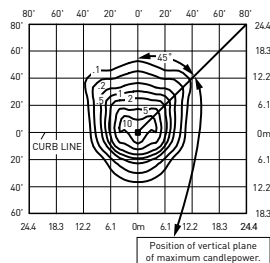
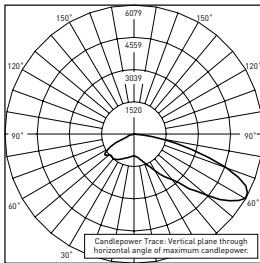
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

THE EDGE® LED Security Wall Pack Luminaire

Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/wall-mount/the-edge-series-5/>

4M



RESTL Test Report #: PL10270-001B
 ARE-EDG-4M**-06-E-UL-525-40K
 Initial Delivered Lumens: 10,483

SEC-EDG-4M**-06-E-UL-700-40K
 Mounting Height: 10' (3.0m) A.F.G.
 Initial Delivered Lumens: 12,425
 Initial FC at grade

Type IV Medium Distribution										
LED Count (x10)	3000K		4000K		5000K		5700K		TRL	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
350mA										
02	2,072	B1 U0 G1	2,501	B1 U0 G1	1,902	B1 U0 G1	2,551	B1 U0 G1	816	B0 U0 G1
04	4,143	B1 U0 G1	5,003	B2 U0 G1	3,803	B1 U0 G1	5,102	B2 U0 G1	1,633	B1 U0 G1
06	6,144	B2 U0 G1	7,418	B2 U0 G2	5,640	B2 U0 G1	7,565	B2 U0 G2	2,421	B1 U0 G1
08	8,192	B2 U0 G2	9,891	B2 U0 G2	7,519	B2 U0 G2	10,087	B2 U0 G2	3,228	B1 U0 G1
10	10,215	B2 U0 G2	12,334	B3 U0 G2	9,377	B2 U0 G2	12,578	B3 U0 G2	4,025	B1 U0 G1
12	12,258	B2 U0 G2	14,801	B3 U0 G3	11,252	B2 U0 G2	15,094	B3 U0 G3	4,830	B1 U0 G1
525mA										
02	2,943	B1 U0 G1	3,550	B1 U0 G1	2,702	B1 U0 G1	3,624	B1 U0 G1	N/A	
04	5,886	B2 U0 G1	7,099	B2 U0 G2	5,403	B2 U0 G1	7,248	B2 U0 G2	N/A	
06	8,729	B2 U0 G2	10,527	B2 U0 G2	8,012	B2 U0 G2	10,748	B2 U0 G2	N/A	
08	11,638	B2 U0 G2	14,037	B3 U0 G2	10,683	B2 U0 G2	14,331	B3 U0 G2	N/A	
700mA										
02	3,472	B1 U0 G1	4,189	B1 U0 G1	3,187	B1 U0 G1	4,275	B1 U0 G1	N/A	
04	6,943	B2 U0 G1	8,379	B2 U0 G2	6,373	B2 U0 G1	8,549	B2 U0 G2	N/A	
06	10,296	B2 U0 G2	12,425	B3 U0 G2	9,451	B2 U0 G2	12,678	B3 U0 G2	N/A	

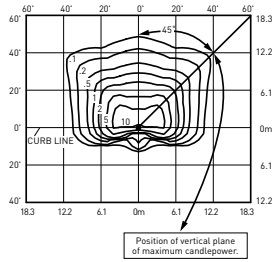
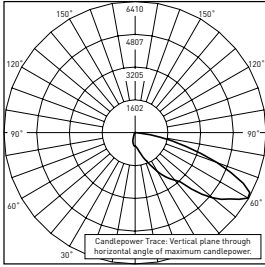
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

THE EDGE® LED Security Wall Pack Luminaire

Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/wall-mount/the-edge-series-5/>

4MB



RESTL Test Report #: PL10023-002B
 ARE-EDG-4MB-**-06-E-UL-525-40K
 Initial Delivered Lumens: 7,985

SEC-EDG-4MB-**-06-E-UL-700-40K
 Mounting Height: 10' (3.0m) A.F.G.
 Initial Delivered Lumens: 9,359
 Initial FC at grade

Type IV Medium Distribution w/BLS										
LED Count (x10)	3000K		4000K		5000K		5700K		TRL	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
350mA										
02	1,560	B0 U0 G1	1,884	B0 U0 G1	1,432	B0 U0 G1	1,921	B0 U0 G1	615	B0 U0 G0
04	3,121	B1 U0 G1	3,768	B1 U0 G1	2,865	B0 U0 G1	3,843	B1 U0 G1	1,230	B0 U0 G1
06	4,628	B1 U0 G1	5,588	B1 U0 G1	4,248	B1 U0 G1	5,698	B1 U0 G2	1,824	B0 U0 G1
08	6,170	B1 U0 G2	7,450	B1 U0 G2	5,664	B1 U0 G2	7,598	B1 U0 G2	2,431	B0 U0 G1
10	7,695	B1 U0 G2	9,291	B1 U0 G2	7,063	B1 U0 G2	9,475	B1 U0 G2	3,032	B1 U0 G1
12	9,233	B1 U0 G2	11,149	B1 U0 G2	8,476	B1 U0 G2	11,370	B1 U0 G2	3,638	B1 U0 G1
525mA										
02	2,217	B1 U0 G1	2,674	B1 U0 G1	2,035	B1 U0 G1	2,730	B1 U0 G1	N/A	
04	4,434	B1 U0 G1	5,348	B1 U0 G1	4,070	B1 U0 G1	5,460	B1 U0 G1	N/A	
06	6,575	B1 U0 G2	7,930	B1 U0 G2	6,035	B1 U0 G2	8,096	B1 U0 G2	N/A	
08	8,766	B1 U0 G2	10,573	B1 U0 G2	8,047	B1 U0 G2	10,794	B1 U0 G2	N/A	
700mA										
02	2,615	B1 U0 G1	3,156	B1 U0 G1	2,400	B1 U0 G1	3,220	B1 U0 G1	N/A	
04	5,230	B1 U0 G1	6,311	B1 U0 G2	4,801	B1 U0 G1	6,440	B1 U0 G2	N/A	
06	7,755	B1 U0 G2	9,359	B1 U0 G2	7,119	B1 U0 G2	9,549	B1 U0 G2	N/A	

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>.

Replacement Kits

Mounting Box
 XA-SECMTBOXKIT

Light Bars & Driver Replacement Kits
 - To ensure compatibility, please consult factory.



Conditional Use - Owner or Authorized Agent Acknowledgement

** It is highly recommended that an applicant hold at least one neighborhood meeting prior to submitting a CUP application to identify any concerns or issues of surrounding residents.

PLEASE NOTE - Applicants shall be responsible for legal or outside consultant costs incurred by the City. Submissions shall be made at least four (4) weeks prior to desired plan commission meeting.

By signing below, I certify that the information included with this Conditional Use application is true and correct, to the best of my knowledge. Any agent signing below verifies that he/she has the consent of the owner to file the application.

Jayson James
Owner's or Authorized Agent's Signature

02/14/2025
Date (DD/MM/YYYY)