

**ABBREVIATIONS**

AAV	AUTOMATIC AIR VENT
ACI	AMERICAN CONCRETE INSTITUTE
AFFF	AQUEOUS FILM FORMING FOAM
AFHE	AUTOMATED FUEL HANDLING EQUIPMENT
API	AMERICAN PETROLEUM INSTITUTE
ATG	AUTOMATIC TANK GAUGE
AWG	AMERICAN WIRE GAUGE
BBL	BARREL
BE	BOTH ENDS
BS	BASKET STRAINER
BS&W	BOTTOM SEDIMENT AND WATER
CB	CATCH BASIN
CL	CLASS
CLR	CLEARANCE
CFR	CODE OF FEDERAL REGULATIONS
COE	CORPS OF ENGINEERS
CONC	CONCRETE
CONT	CONTINUOUS
CP	CATHODIC PROTECTION
CS	CARBON STEEL
CU	COPPER
CV	CHECK VALVE
EFSSO	EMERGENCY FUEL SHUT-OFF
DBB	DOUBLE BLOCK AND BLEED PLUG VALVE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DIV	DIVISION
ECC	ECCENTRIC
EPDS	EMERGENCY POWER DOWN SYSTEM
ETC	ET CETERA
FCC	FEDERAL COMMUNICATIONS COMMISSION
FB	FLAT BAR
FML	FLEXIBLE MEMBRANE LINER
FOB	FLAT ON BOTTOM
FRP	FIBERGLASS REINFORCED PIPE
F/S	FILTER/SEPARATOR
FS	FLOW SWITCH
FSC	FUEL SAMPLE CONNECTOR
FSCV	FILTER SEPARATOR CONTROL VALVE
FT	FOOT OR FEET
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GND	GROUND
GPM	GALLONS PER MINUTE
HDPE	HIGH DENSITY POLYETHYLENE
HHLA	HIGH-HIGH LEVEL ALARM
HHLS	HIGH-HIGH LEVEL SWITCH
HLA	HIGH LEVEL ALARM
HLS	HIGH LEVEL SWITCH
HLV	HIGH LIQUID LEVEL SHUT-OFF VALVE
HMWPE	HIGH MOLECULAR WEIGHT POLYETHYLENE
HPV	HIGH-POINT VENT
HS	HAND SWITCH
HSS	HOLLOW STRUCTURAL SECTION
IBC	INTERNATIONAL BUILDING CODE
ID	INNER DIAMETER
K BBL	THOUSAND BARREL
LB	ELBOW
LLA	LOW LEVEL ALARM
LLLA	LOW-LOW LEVEL ALARM
LLLS	LOW-LOW LEVEL SWITCH
LLS	LOW LEVEL SWITCH
LPD	LOW-POINT DRAIN
MAX	MAXIMUM
MAV	MANUAL AIR VENT
MIN	MINIMUM
MOV	MOTOR OPERATED VALVE
NFPA	NATIONAL FIRE PROTECTION AGENCY
NPT	NATIONAL PIPE THREAD
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PDI	PRESSURE DIFFERENTIAL INDICATOR
PI	PRESSURE INDICATOR
PIV	POST INDICATOR VALVE
PLC	PROGRAMMABLE LOGIC CONTROLLER
PSI	POUNDS PER SQUARE INCH
PST	PRODUCT SAVER TANK
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
REQ'D	REQUIRED
SCH	SCHEDULE
SRV	SAFETY RELIEF VALVE
SS	STAINLESS STEEL
STD WT	STANDARD WEIGHT
SV	SOLENOID VALVE
THRD	THREAD

**ABBREVIATIONS**

THWN	THERMOPLASTIC HIGH WATER-RESISTANT NYLON-COATED
TRV	THERMAL RELIEF VALVE
TYP	TYPICAL
UFC	UNIFIED FACILITIES CRITERIA
UFGS	UNIFIED FACILITIES GUIDE SPECIFICATIONS
UON	UNLESS OTHERWISE NOTED
WNF	WELD NECK FLANGE
XXS	DOUBLE EXTRA STRONG
CL	CENTERLINE
PL	PLATE
AT	AT
WWF	WELDED WIRE FABRIC
W/	WITH

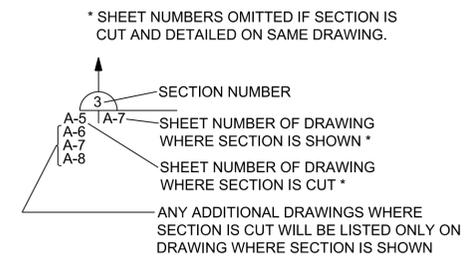
**LEGEND**

	BALL VALVE
	CHECK VALVE
	CONTROL VALVE (IF PROVIDED, ARROW INDICATES INTEGRAL BYPASS RELIEF AND DIRECTION)
	DOUBLE BLOCK & BLEED VALVE (DBB) (IF PROVIDED, ARROW INDICATES INTEGRAL BYPASS RELIEF AND DIRECTION)
	BALL JOINT
	CAM TYPE CONNECTION WITH DUST PLUG/CAP
	MOTORIZED VALVE
	SLIP ON FLANGE (SO)
	WELD NECK FLANGE (WNF)
	WELD NECK FLANGE WITH BLIND FLANGE
	REDUCER
	UNION
	PIPE CAP
	PUMP
	PIPE SECTION
	RELIEF VALVE
	JUNCTION BOX
	LEVEL SWITCH
	LEVEL INDICATOR
	VALVE LIMIT SWITCH
	NEW CATHODIC CABLE OR CONDUIT
	ELEVATION
	CONCRETE
	SAND
	GASKET OR NON-SHRINK GROUT
	EXISTING GRADE OR COMPACTED EARTH
	WIRE MESH
	STEEL PLATE

**STANDARD NORTH ARROWS**



**SECTION IDENTIFICATION**



**ELEVATION IDENTIFICATION**



APPROVED	DATE
FOR COMMANDER NAVFAC	DESCRIPTION
ACTIVITY	DATE
SATISFACTORY TO	DATE
DES MSO	DRW MHK
CHK WVB	DATE
SUBMITTED BY:	DATE
DATE: APRIL 2015	



APPROVED
FOR COMMANDER NAVFAC
ACTIVITY
SATISFACTORY TO
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DATE: APRIL 2015

NAVAL FACILITIES ENGINEERING COMMAND - ATLANTIC  
DOD STANDARD DESIGN AW78-24-27  
**FUEL TANKS WITH FIXED ROOFS ABOVEGROUND VERTICAL STEEL**  
LEGEND & ABBREVIATIONS

SCALE: AS NOTED
PROJECT NO.: XXXXX
CONSTR. CONTR. NO. XXXXX
NAVFAC DRAWING NO. XXXXX
SHEET 2 OF 57
<b>G.02</b>