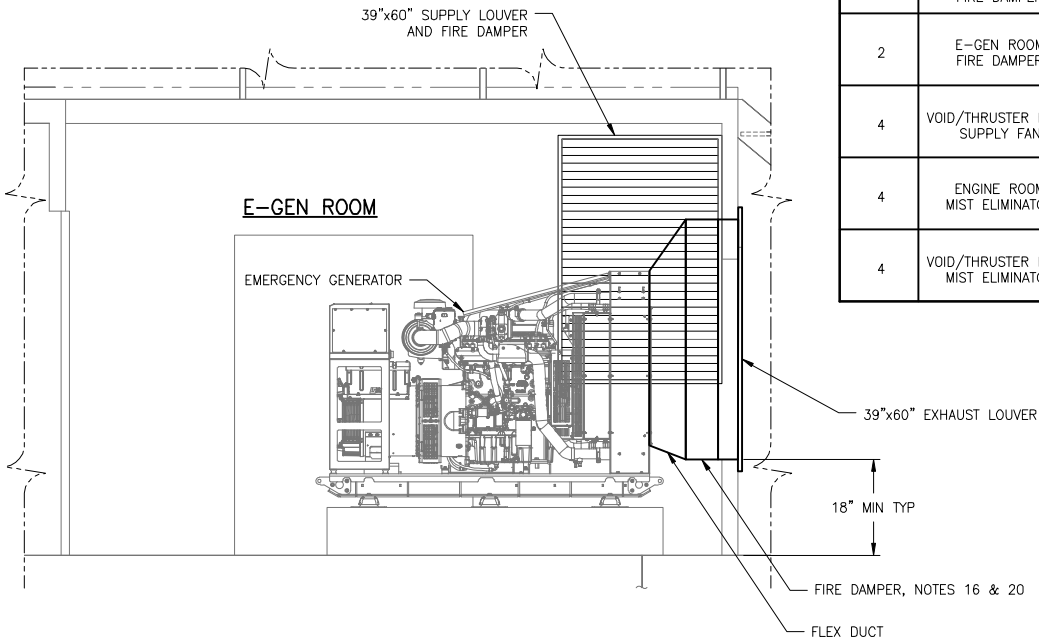


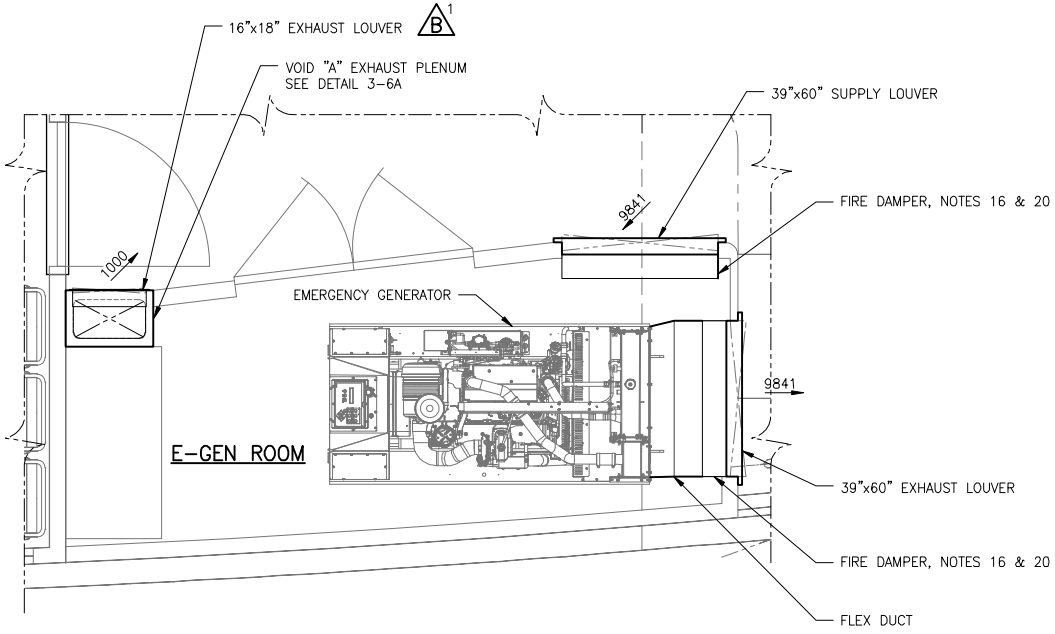
CONFIDENTIAL AND PROPRIETARY PROPERTY OF
EBDG - NC, PLLC
 MAY NOT BE USED FOR CONSTRUCTION OR PROVIDED TO
 ANY THIRD PARTIES WITHOUT PRIOR WRITTEN CONSENT.
 © 2017 ELLIOTT BAY DESIGN GROUP.

EQUIPMENT LIST						
QTY.	SERVICE	TYPE	SIZE	CAPACITY	DRIVE	REMARKS
2	ENGINE ROOM SUPPLY FAN	AXIAL FAN	Ø24"	6300 CFM @ 1.8 IN H2O	208V/3Ø/60Hz 5 HP TEAO MOTOR 1740 RPM	-
2	ENGINE ROOM SUPPLY FIRE DAMPER	A-60 ROUND	Ø24"	-	24 VDC ELECTRIC ACTUATOR	316SS CONSTRUCTION USCG APPROVED
1	ENGINE ROOM EXHAUST FIRE DAMPER	A-60 SQUARE	60"x78"	-	24 VDC ELECTRIC ACTUATOR	316SS CONSTRUCTION USCG APPROVED
2	E-GEN ROOM FIRE DAMPER	A-60 SQUARE	39"x50"	-	24 VDC ELECTRIC ACTUATOR	316SS CONSTRUCTION USCG APPROVED
4	VOID/THRUSTER ROOM SUPPLY FAN	AXIAL FAN	Ø12"	1000 CFM @ 1.3 IN H2O	120V/1Ø/60Hz 0.5 HP TEAO MOTOR 3450 RPM	-
4	ENGINE ROOM MIST ELIMINATOR	IMPINGEMENT TYPE	18"x25" OPEN AREA	6300 CFM	-	FACE DRAIN
4	VOID/THRUSTER ROOM MIST ELIMINATOR	IMPINGEMENT TYPE	12"x12" OPEN AREA	1000 CFM	-	FACE DRAIN

SYMBOLS LIST	
	BALL VALVE W/ SCREWED PLUG



ELEVATION 1-6B Δ^1
 E-GEN ROOM VENTILATION
 SCALE: 1/2"=1'-0"



PLAN 1-6A Δ^1
 E-GEN ROOM VENTILATION
 SCALE: 1/2"=1'-0"

- GENERAL NOTES CONT.**
- VENTILATION FANS SHALL BE MOUNTED USING NOISE/ISOLATION KITS.
 - TO THE EXTENT PRACTICABLE, FANS OF THE SAME SIZE SHALL BE INTERCHANGEABLE.
 - FANS SHALL BE LABELED WITH NAMEPLATES IDENTIFYING THE UNIT, LISTING THE SYSTEM SERVED BY THE FAN, THE FAN VOLUME IN CUBIC FEET PER MINUTE (CFM), STATIC PRESSURE RATING AT SPECIFIED VOLUME, MOTOR FULL LOAD AMPERAGE, FAN SPEED, AND MOTOR SPEED FOR BELT DRIVEN UNITS, AND MOTOR HORSEPOWER. AIRFLOW DIRECTION SHALL BE IDENTIFIED ON THE FAN EXTERIOR BODY.
 - FIRE DAMPERS SHALL BE PROVIDED WHERE REQUIRED BY REGULATION AND WHERE SHOWN IN THIS DIAGRAM.
 - FIRE DAMPERS SHALL BE ELECTRICALLY ACTUATED, POWER TO OPEN, SPRING CLOSED ON LOSS OF POWER. IN ADDITION, THEY SHALL HAVE ELECTRICAL THERMAL RELEASE, CLOSE AUTOMATICALLY AT A TEMPERATURE OF 162F, AND BE CAPABLE OF MANUAL OPERATION.
 - CLOSURE STATUS OF FIRE DAMPERS SHALL BE VISIBLE OUTSIDE THE DUCT. ACCESS COVERS SHALL BE INSTALLED TO ALLOW SERVICE OF DAMPERS AND ACTUATORS IF REQUIRED.
 - ENGINE ROOM VENTILATION FANS SHALL SHUT DOWN AND FIRE DAMPERS SHALL CLOSE AUTOMATICALLY UPON RELEASE OF THE FIRE SUPPRESSION SYSTEM. SEE REFERENCE 1.
 - DUCTS SHALL BE ROUTED AS HIGH IN THE OVERHEAD AS PRACTICABLE.
 - EMERGENCY GENERATOR FIRE DAMPERS SHALL BE CONFIGURED TO OPEN ON GENERATOR START AND CLOSE ON GENERATOR STOP.
 - SLIDING CLOSURE PLATES SHALL BE STORED IN STAINLESS STEEL BRACKETS ADJACENT TO WEATHER LOUVERS AND MIST ELIMINATORS. CLOSURE PLATES SHALL BE STOWED IN A SECURE MANNER WHICH ALSO ALLOWS FOR QUICK INSTALLATION.
 - DAMPERS USED AS WEATHER CLOSURES SHALL BE TESTED FOR WEATHER TIGHTNESS IN THE PRESENCE OF A USCG INSPECTOR.
 - ADJUST TERMINAL SIZES AND PROVIDE BALANCING DAMPERS AS REQUIRED TO BALANCE SYSTEM WITHIN 10% OF NOTED AIR FLOWS.

REVISION HISTORY					
REV	ZONE	DESCRIPTION	DWN	DATE	APVD
A	1-6A 1-6B	1. REVISED EGEN LOUVERS AND AIRFLOWS, WAS 39X50 AND 10,171	MEJ	8/2/17	MEJ
B	1-6B	1. UPDATED LOUVER DIMENSIONS	DKG	8/30/17	MEJ

- GENERAL NOTES**
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH 46 CFR SUBCHAPTER H REGULATIONS.
 - THIS DRAWING IS DIAGRAMMATIC ONLY AND DOES NOT REPRESENT A COMPLETE DETAILED DESIGN. THE CONTRACTOR SHALL DEVELOP A DETAILED DESIGN THAT PROVIDES A FULLY FUNCTIONAL ARRANGEMENT AND IS SUITABLE FOR INSTALLATION, TAKING INTO ACCOUNT ALL NECESSARY SYSTEM INTERFACES AND INTERFERENCES. DIMENSIONS SHALL BE VERIFIED FROM THE SHIP AND MANUFACTURERS' CERTIFIED DRAWINGS AS APPROPRIATE.
 - DUCT VELOCITIES SHALL GENERALLY BE LIMITED TO 3000 FPM.
 - ALL INSTALLED DUCTWORK SHALL BE AIRTIGHT. DUCTWORK SHALL BE MADE OF HOT-DIPPED GALVANIZED STEEL SHEET METAL, WITH THE MINIMUM THICKNESS AND REINFORCEMENT IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS AND APPLICABLE USCG REGULATIONS, WHICHEVER IS GREATER. BURNED OFF GALVANIZING SHALL BE REPLACED WITH A SPRAY-ON TYPE GALVANIZING COATING. DUCTS SHALL BE SUITABLY SUPPORTED AND STIFFENED ON THE OUTSIDE TO PREVENT PANTING. ALL FASTENING SHALL BE STAINLESS STEEL. SEE REFERENCE 1.
 - DUCTING SHALL BE RUN AS DIRECTLY AS POSSIBLE WITH A MINIMUM NUMBER OF BENDS AND FITTINGS.
 - TAKEDOWN JOINTS SHALL BE PROVIDED AT MAXIMUM 8 FT INTERVALS WHICH ALLOW DISASSEMBLY AND REMOVAL OF DUCTING WITHOUT REMOVAL OR MODIFICATION OF PERMANENT STRUCTURE.
 - DUCTS SHALL BE FITTED WITH REMOVABLE ACCESS PANELS FOR CLEANING OF INTERNAL DUCT SURFACES. SUCH PANELS SHALL BE PROVIDED AT INTERVALS OF NOT MORE THAN 30 FEET, AND IMMEDIATELY UPSTREAM OF SPLITTERS OR TURNING VANES.
 - DUCTING SHALL BE ADEQUATELY SUPPORTED BY HANGERS SPACED AT REGULAR INTERVALS AND RIGIDLY ATTACHED TO VESSEL STRUCTURE.
 - ELBOWS WITH A BEND RADIUS LESS THAN 1 TIMES THE DIAMETER SHALL HAVE SPLITTERS OR TURNING VANES.
 - WEATHER LOUVERS SHALL BE ALUMINUM WITH A STAINLESS STEEL BUG SCREEN. WEATHER LOUVERS SHALL BE REMOVABLE AND FASTENED TO SUPERSTRUCTURE WITH STAINLESS STEEL FASTENINGS.
 - DRAINS SHALL BE PROVIDED AT LOW POINTS OF ALL VENTILATION DUCTING TO ALLOW COMPLETE DRAINAGE OF ANY WATER TRAPPED IN THE DUCTING SYSTEM.

- REFERENCES**
- 16101-200-832-1 TECHNICAL SPECIFICATION
 - 16101-200-101-1 PROFILES AND DECK ARRANGEMENTS
 - 16101-200-150-1 SUPERSTRUCTURE MAIN DECK TO 01 DECK
 - 16101-200-201-1 MACHINERY ARRANGEMENT
 - 16101-200-150-3 MAIN DECK BULKHEADS
 - 16101-200-120-3 HULL TRANSVERSE BULKHEADS
 - 16101-200-259-1 EXHAUST ARRANGEMENT



Elliott Bay Design Group
 North Carolina, PLLC

CLIENT: NORTH CAROLINA D.O.T.
 RALEIGH, NORTH CAROLINA

PROJECT: NEW RIVER CLASS FERRY



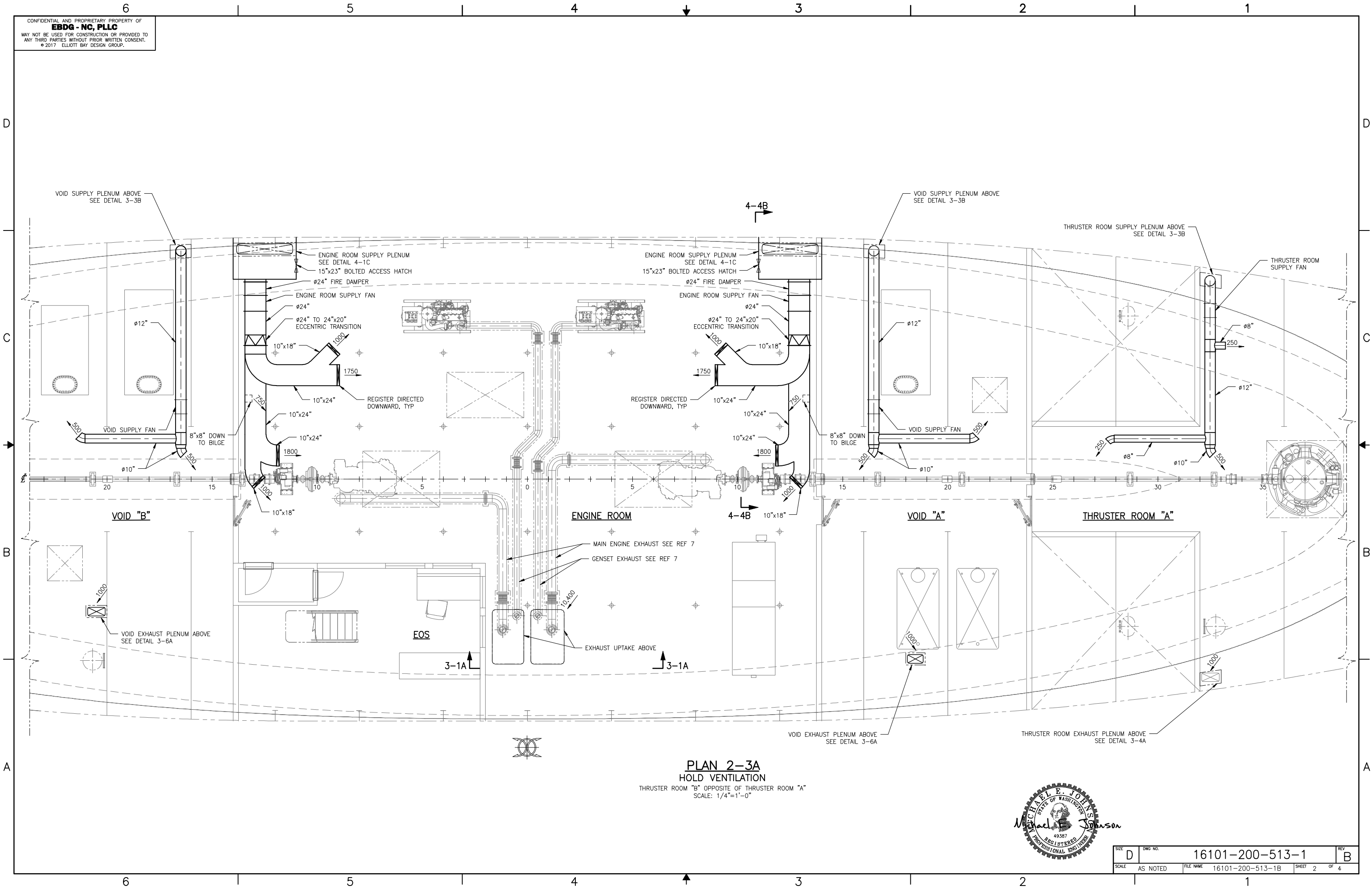
TITLE: MACHINERY VENTILATION ARRANGEMENT

SIZE: D DWG NO.: 16101-200-513-1 REV: B

SCALE: AS NOTED FILE NAME: 16101-200-513-1B SHEET 1 OF 4

DWN: JEH MOD: CKD NUB APVD: MEJ APVD DATE: 7/28/17

CONFIDENTIAL AND PROPRIETARY PROPERTY OF
EBDG - NC, PLLC
 MAY NOT BE USED FOR CONSTRUCTION OR PROVIDED TO
 ANY THIRD PARTIES WITHOUT PRIOR WRITTEN CONSENT.
 © 2017 ELLIOTT BAY DESIGN GROUP.

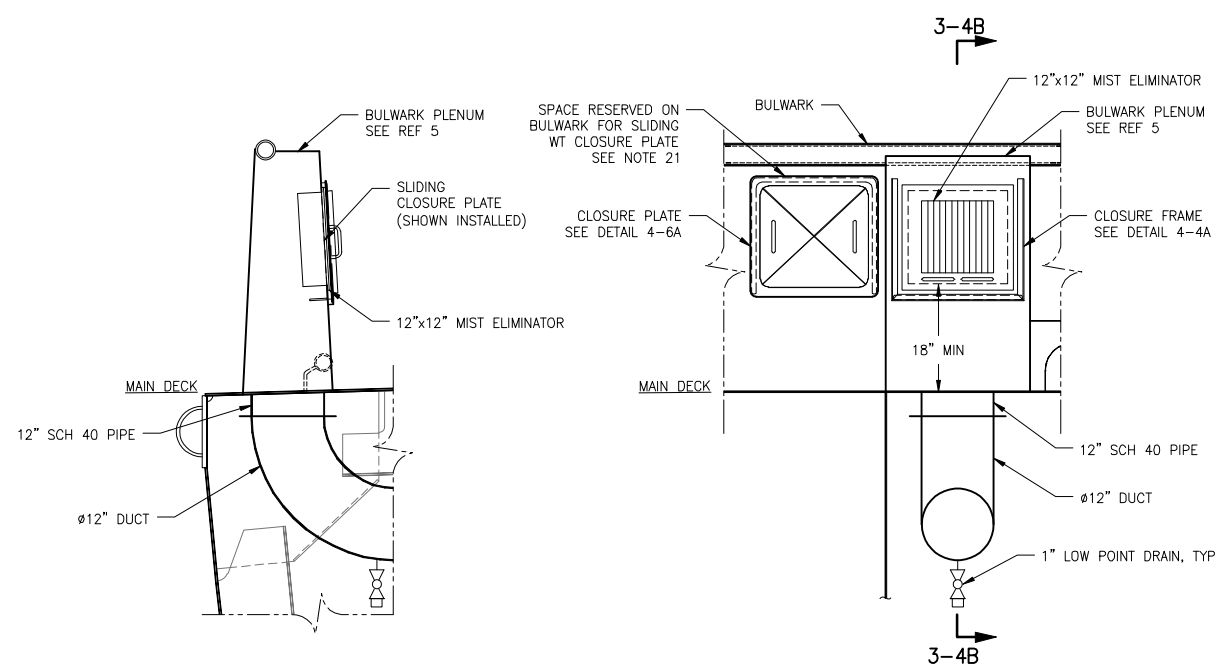


PLAN 2-3A
HOLD VENTILATION
 THRUSTER ROOM "B" OPPOSITE OF THRUSTER ROOM "A"
 SCALE: 1/4"=1'-0"



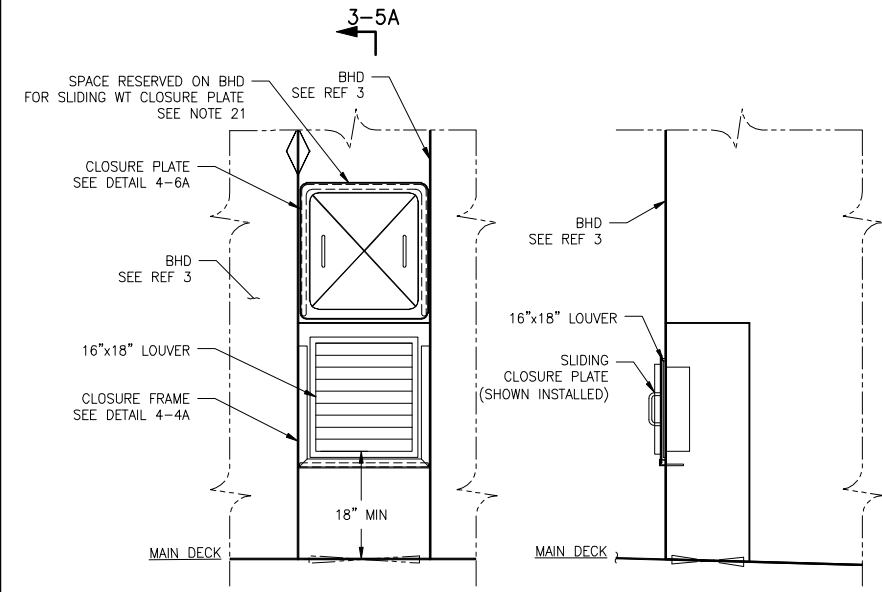
SIZE	D	DWG NO.	16101-200-513-1	REV	B
SCALE	AS NOTED	FILE NAME	16101-200-513-1B	SHEET	2 OF 4

8/31/2017 9:45:49 AM



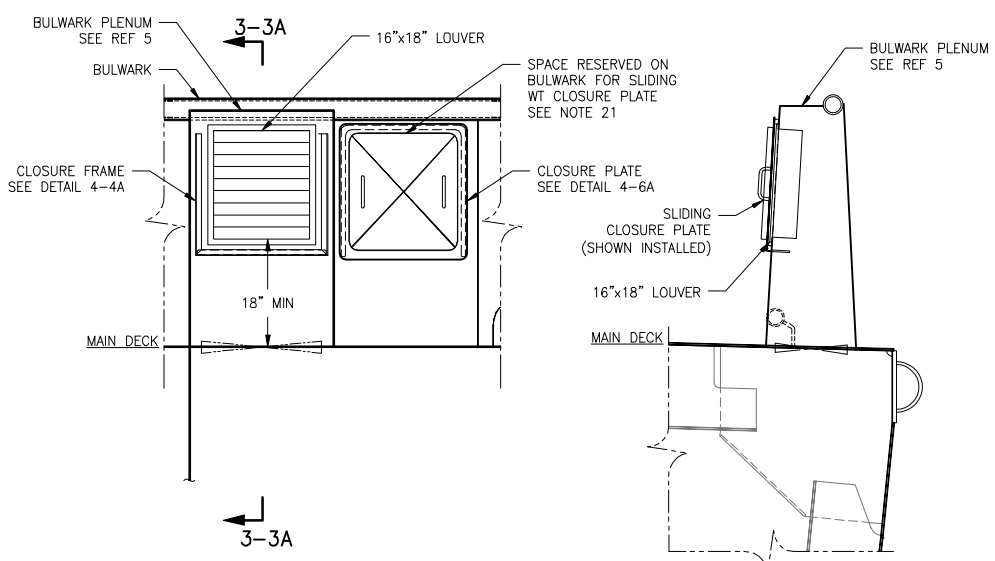
SECTION 3-4B
 VOID AND THRUSTER ROOM SUPPLY PLENUM
 SCALE: 3/4"=1'-0"

ELEVATION 3-3B
 VOID AND THRUSTER ROOM SUPPLY PLENUM
 SCALE: 3/4"=1'-0"



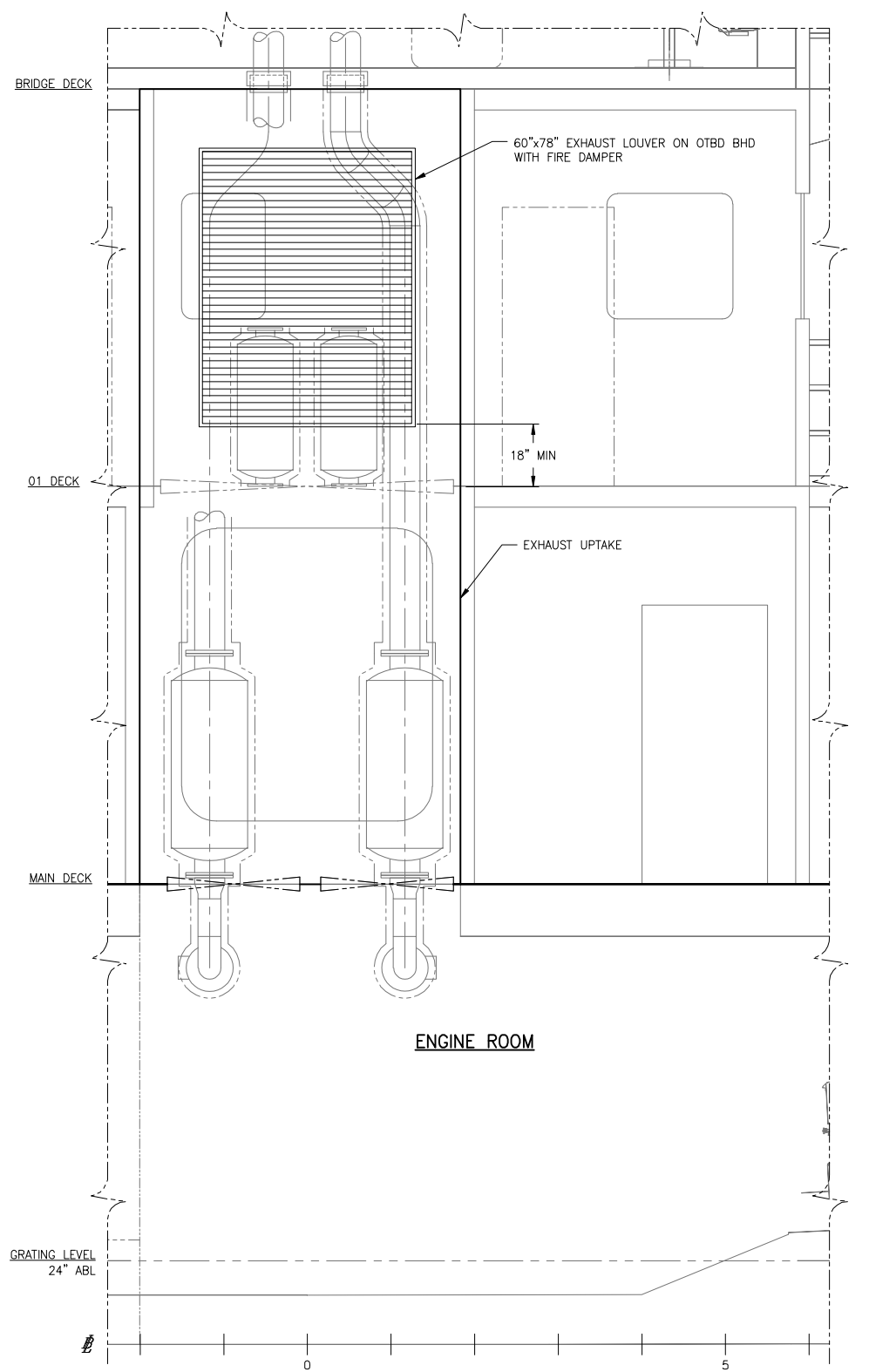
ELEVATION 3-6A
 VOID EXHAUST PLENUM
 "A" END SHOWN - "B" END SIM
 SCALE: 3/4"=1'-0"

SECTION 3-5A
 VOID EXHAUST PLENUM
 SCALE: 3/4"=1'-0"

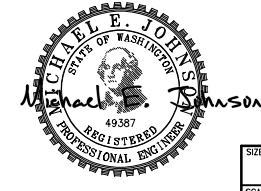


ELEVATION 3-4A
 THRUSTER ROOM EXHAUST PLENUM
 "A" END SHOWN - "B" END SIM
 SCALE: 3/4"=1'-0"

SECTION 3-3A
 THRUSTER ROOM EXHAUST PLENUM
 SCALE: 3/4"=1'-0"



ELEVATION 3-1A
 MACHINERY VENTILATION DUCTING
 LOOKING PORT
 SCALE: 1/2"=1'-0"

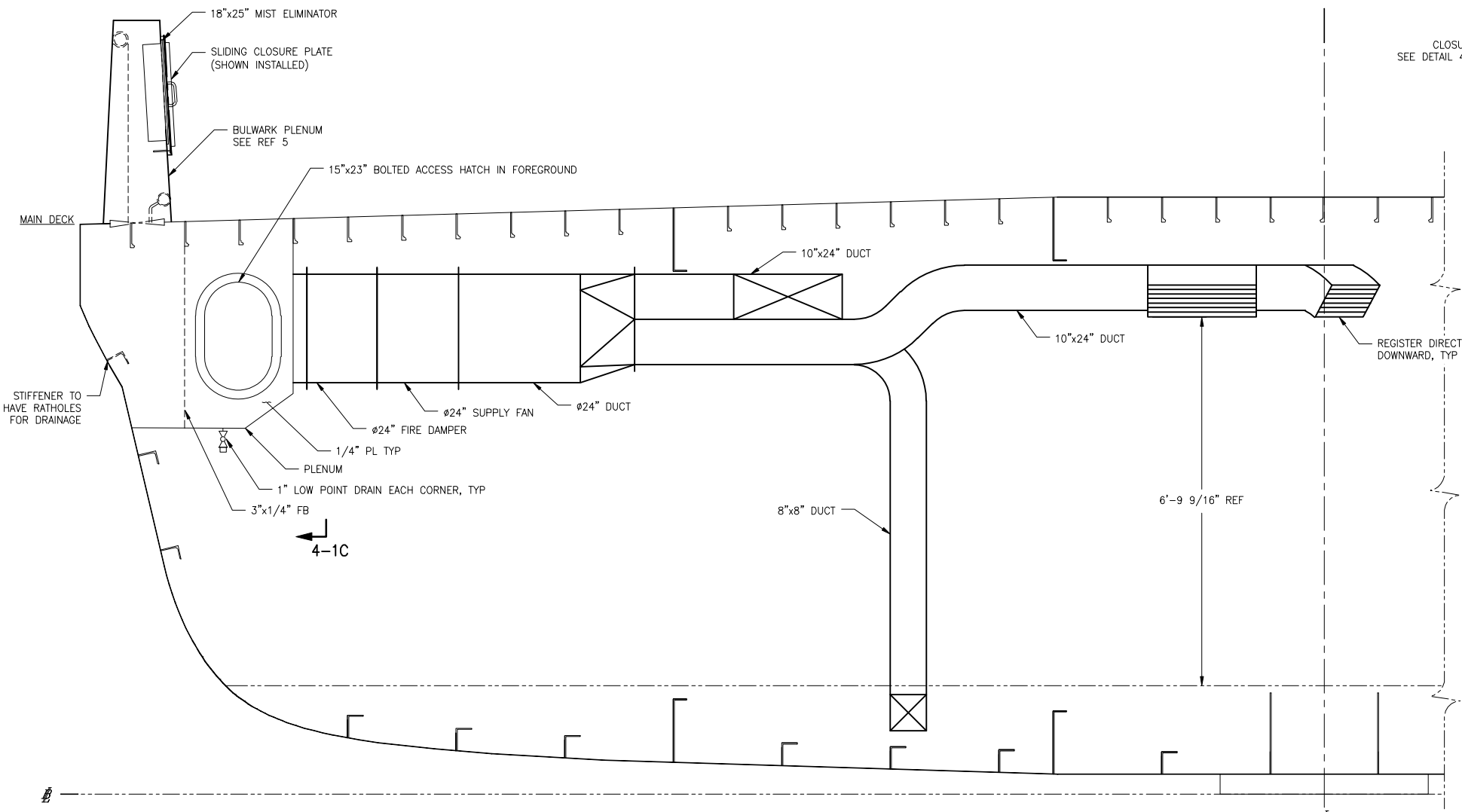


SIZE	D	DWG NO.	16101-200-513-1	REV	B
SCALE	AS NOTED	FILE NAME	16101-200-513-1B	SHEET	3 OF 4

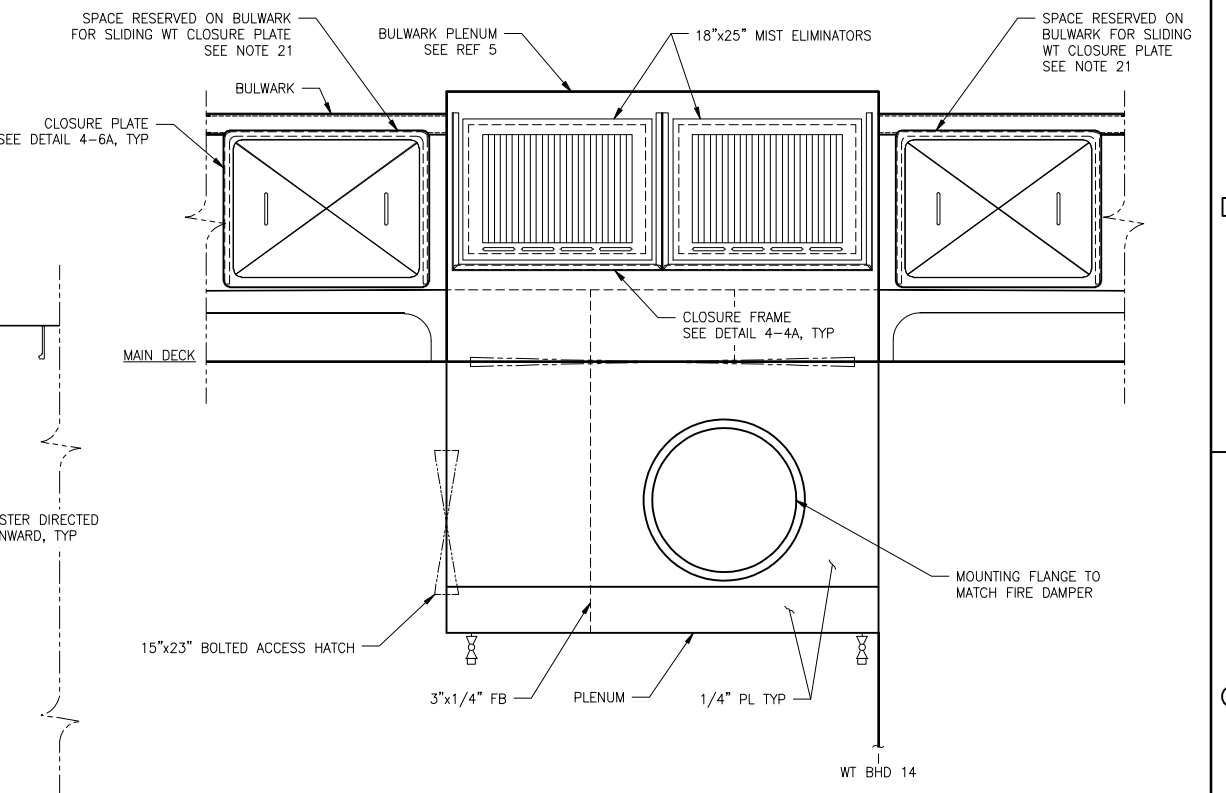
8/31/2017 9:45:52 AM

CONFIDENTIAL AND PROPRIETARY PROPERTY OF
EBDG - NC, PLLC
 MAY NOT BE USED FOR CONSTRUCTION OR PROVIDED TO
 ANY THIRD PARTIES WITHOUT PRIOR WRITTEN CONSENT.
 © 2017 ELLIOTT BAY DESIGN GROUP.

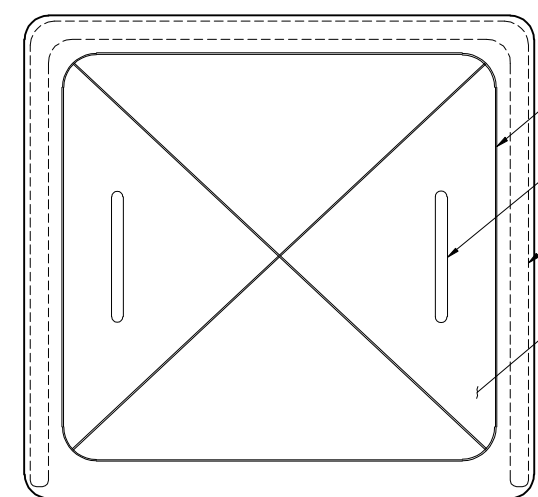
4-1C



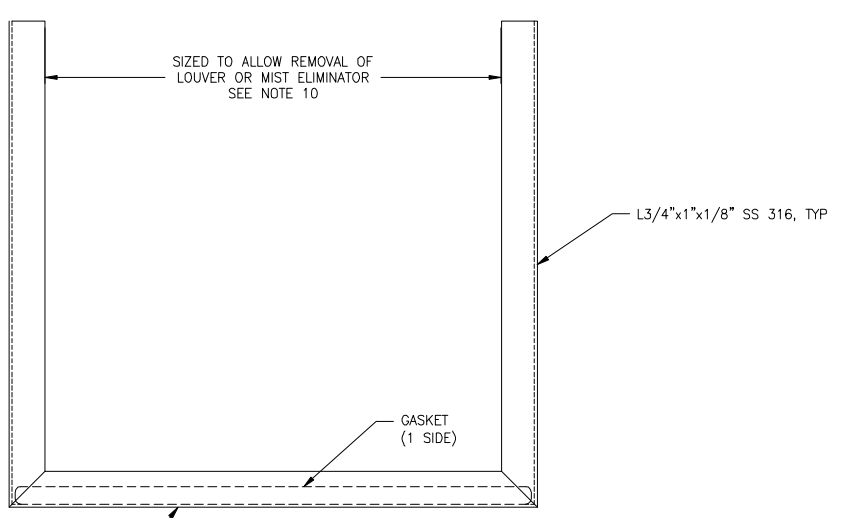
SECTION 4-4B
ENGINE ROOM SUPPLY
 LOOKING FWD TO FR 14
 SCALE: 3/4"=1'-0"



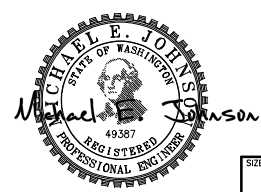
ELEVATION 4-1C
ENGINE ROOM SUPPLY PLENUM
 "A" END SHOWN, "B" END OPPOSITE
 SCALE: 3/4"=1'-0"



DETAIL 4-6A
TYPICAL SLIDING CLOSURE PLATE
 3"=1'-0"



DETAIL 4-4A
TYPICAL SLIDING CLOSURE FRAME
 3"=1'-0"



SIZE	D	DWG NO.	16101-200-513-1	REV	B
SCALE	AS NOTED	FILE NAME	16101-200-513-1B	SHEET	4 OF 4

8/31/2017 9:45:56 AM