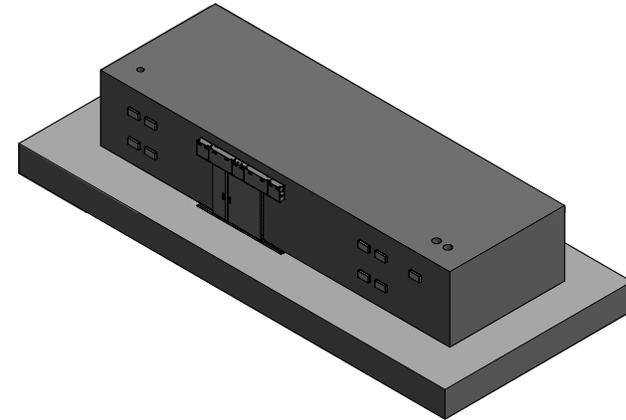
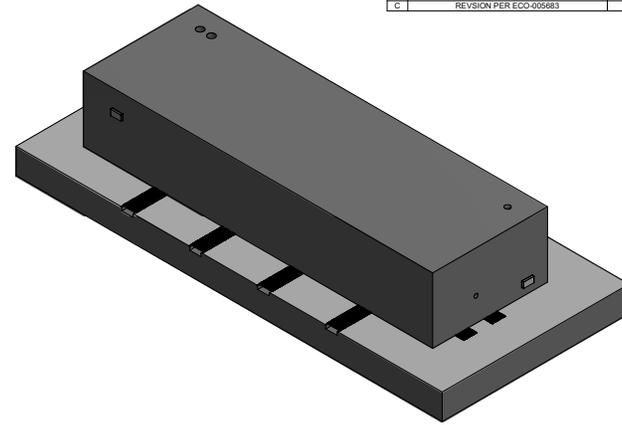
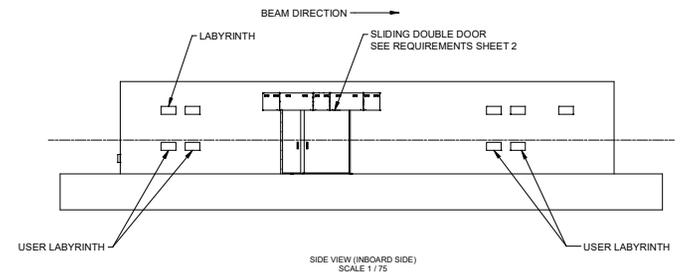
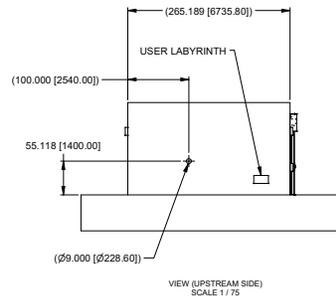
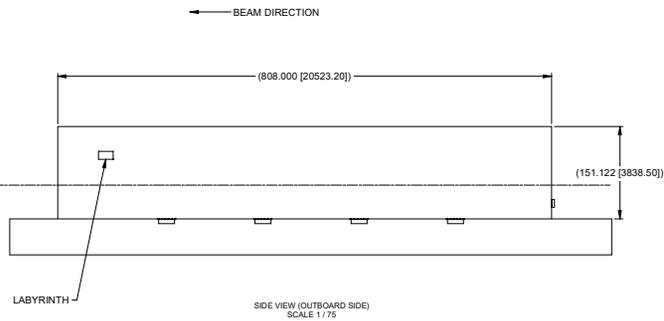
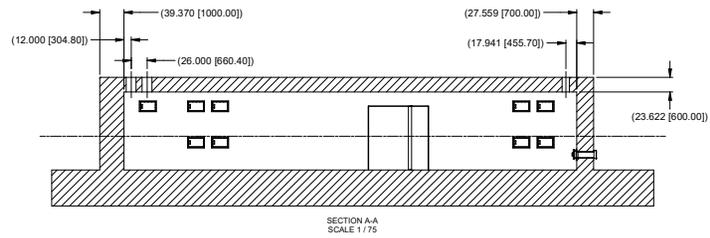
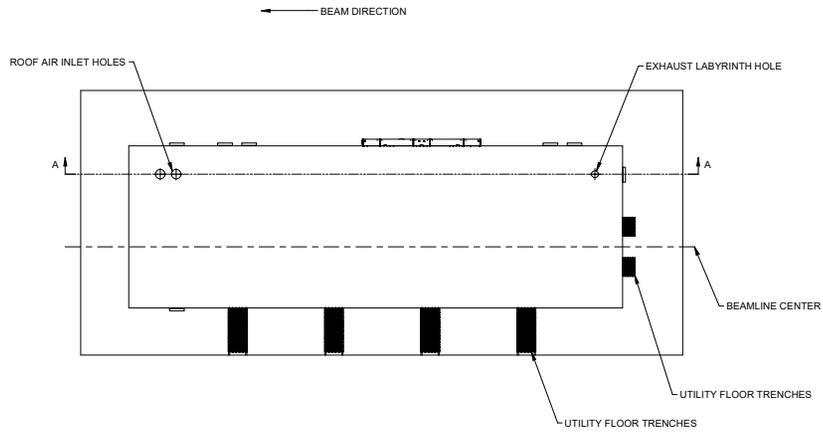


REVISION HISTORY					
REV	DESCRIPTION	DATE	DESIGNER	CHECKED BY	ENGINEER
A	RELEASE PER ECO-005541	7/2018	J.FABIJANIC	R.GAMBELLA	M.LUCAS
B	REVISION PER ECO-005544	10/2018	A.DESANTIS	R.GAMBELLA	M.LUCAS
C	REVISION PER ECO-005683	11/2018	J.FABIJANIC	R.GAMBELLA	M.LUCAS



1. DETAILS FOR THIS BEAMLINE ENCLOSURE ARE LOCATED IN THE DOCUMENT "TECHNICAL SPECIFICATIONS FOR THE NSLS-II High-energy Engineering X-ray (HEX) Beamline Shielding Enclosures Technical Specification", NSLSII-27ID-SPC-00.
2. ENCLOSURE 27-ID-F IS A CONCRETE STRUCTURE THAT IS PART OF THE HEX SATELLITE BUILDING CONSTRUCTION AND IS NOT PART OF THIS LEAD HUTCH PROCUREMENT PACKAGE. ONLY THE ASSOCIATED HARDWARE IS PART OF THIS PACKAGE. HARDWARE INSTALLATION IS REQUIRED. FOR INTERFACE DETAILS SEE THE FOLLOWING DOCUMENT: HDR ARCHITECTURE, INC., BROOKHAVEN NATIONAL LABORATORY, NATIONAL SYNCHROTRON LIGHT SOURCE II (NSLS-II), HIGH ENERGY ENGINEERING X-RAY BEAMLINE (HEX) BUILDING, DRAWING A-400, "INTERIOR ELEVATIONS"; DRAWING A-401, "EXP. HUTCH OPENING DETAILS".

UNION COLLEGE 100 UNIVERSITY AVENUE SCHENECTADY, NY 12302-3501 TEL: 518/387-2000 FAX: 518/387-2005 WWW.UTSUNIA.EDU		BROOKHAVEN NATIONAL LABORATORY ATOMIUM BUILDING UPTON, NEW YORK 11973 TEL: 516/335-2000 FAX: 516/335-2005 WWW.BNL.GOV		NSLS-II NATIONAL SYNCHROTRON LIGHT SOURCE II PHOTON DIVISION HEX BEAMLINE, HUTCH HUTCH 27-ID-F PROCUREMENT ASSY PD-HEX-HU-1600 C	
PROJECT: PD-HEX-HU-1600 DRAWING: PD-HEX-HU-1600 TITLE: HUTCH 27-ID-F PROCUREMENT ASSY DATE: 7/2018 DESIGNED BY: J.FABIJANIC CHECKED BY: R.GAMBELLA ENGINEER: M.LUCAS	PROJECT: PD-HEX-HU-1600 DRAWING: PD-HEX-HU-1600 TITLE: HUTCH 27-ID-F PROCUREMENT ASSY DATE: 7/2018 DESIGNED BY: J.FABIJANIC CHECKED BY: R.GAMBELLA ENGINEER: M.LUCAS	PROJECT: PD-HEX-HU-1600 DRAWING: PD-HEX-HU-1600 TITLE: HUTCH 27-ID-F PROCUREMENT ASSY DATE: 7/2018 DESIGNED BY: J.FABIJANIC CHECKED BY: R.GAMBELLA ENGINEER: M.LUCAS	PROJECT: PD-HEX-HU-1600 DRAWING: PD-HEX-HU-1600 TITLE: HUTCH 27-ID-F PROCUREMENT ASSY DATE: 7/2018 DESIGNED BY: J.FABIJANIC CHECKED BY: R.GAMBELLA ENGINEER: M.LUCAS	PROJECT: PD-HEX-HU-1600 DRAWING: PD-HEX-HU-1600 TITLE: HUTCH 27-ID-F PROCUREMENT ASSY DATE: 7/2018 DESIGNED BY: J.FABIJANIC CHECKED BY: R.GAMBELLA ENGINEER: M.LUCAS	PROJECT: PD-HEX-HU-1600 DRAWING: PD-HEX-HU-1600 TITLE: HUTCH 27-ID-F PROCUREMENT ASSY DATE: 7/2018 DESIGNED BY: J.FABIJANIC CHECKED BY: R.GAMBELLA ENGINEER: M.LUCAS

PARAMETER	VARIABLE	VALUE/DESCRIPTION
Enclosure type		SCW70 at 271D Experimental Hutch F
Enclosure description		HEX White Beam Experimental End Station Enclosure
Shielding material		Concrete with lead additions
Dimensions (m) (Reference)	Height	3.2 m (inside) 3.8 m (outside)
	Width	5.3 m (inside) 6.7 m (outside)
	Length	18.8 m (inside) 20.5 m (outside)
Shielding	△ Door & Labyrinth	See below
	Guillotine	Not required
	Beam stop	1300 mm (H) X 1300 mm (W) X 50 mm (THK) Lead (Pb)
	Beam pipe penetration door	(alignment window): Not required
Entry 1	Position	Inboard side of beam direction
	△ Size (m)	US Door: 2.5 H x 0.76 (W), DS Door 2.5 (H) x 1.6 (W) (minimum clear opening) 20 mm (THK) Lead (Pb)
	Type	Sliding double
	Actuated/Manual Opening	Upstream panel actuated – downstream panel manual
	Floor groove/Threshold	Yes, floor groove
	PPS Interfaces	Mounting plates for magnetic lock and dual position switches
	Switch position for actuated door	Upstream side of the door below the wall labyrinth
	Window	Not required
Strip Curtain (internal)	Not required	
Hoist		Not required
Labyrinths		Positioned as on drawing, sealed with anti-tamper screws except where locks/interlocks specified.
	Roof labyrinth, compact	(on roof): Not required
	LN2 roof labyrinth	(on roof): Not required
	△ Inboard & Upstream wall Labyrinth, single sided	Qty 10 (Qty 5 lower labyrinths only to require interlock switches) 20 mm (THK) Lead (Pb)
	△ Outboard wall Labyrinth, single sided	Qty 1 25 mm (THK) Lead (Pb)
	Air inlet/outlet labyrinth	(on roof): Qty 2
	Roof exhaust labyrinth	(on roof): Qty 1
Roof fan with labyrinth	(on roof): Not required	
Lighting		LED (Not part of hutches contract)
Bridges		Not required
Other		Attachment points for adjacent enclosures: Not required