

Description

- ◆ Our team have long-term experience working at Devonport Naval Base and now have an ongoing agreement with Babcock Marine where we lead a team comprising project managers, architects and engineering consultancies.
- ◆ Under this call-off contract, SDS has delivered well-over fifty separate projects on a mix of schemes covering new and refurbished facilities, upgrading of essential services and nuclear related projects within the Submarine Refit Complex.



Benefits Delivered to Babcock Projects

- ◆ Fully coordinated detailed design of M&E in Revit MEP Building information Model (BIM) with clash detection to co-ordinate the services with the building and structure
- ◆ Production of detailed condition reports for life extension projects
- ◆ Stakeholder engagement and end user requirements fully considered and applied to design
- ◆ Our team includes experience in high voltage, climate based daylight modelling and steam systems

CFCS Life Extension

Description

- ◆ The Central Frequency Changing Station (CFCS) is Devonport Naval Base's 60Hz station providing a network throughout the site for shore power and testing facilities

Involvement

- ◆ We undertook the full detailed design for the refurbishment of the mechanical and electrical systems including the phased replacement of the buildings main LV Switchboard and Central Ventilation Plant
- ◆ A condition survey was carried out to identify the extent of building fabric works necessary for life extension
- ◆ Consulted with stakeholders on furniture arrangements, space configuration and consideration of builders-work necessary to accommodate the mechanical and electrical systems refurbishment. The mechanical and electrical designs were prepared following space planning activities



CFCS Load Test Kiosk

Description

- ◆ To revisit current concept proposals for the HV load test kiosk location and infrastructure. Preparation of concept design for four options, including the civils, builders-work, building surveying, acoustic and assessment of cost implications

SRC Steam

Description

- ◆ The design of replacement steam mains and associated plant with the Submarine Refit Complex (SRC) in Devonport Naval Base

Involvement

- ◆ Detailed design drawings produced in Revit MEP
- ◆ As part of our design we carried out detailed calculations using Dialux for lighting, Amtech for cable calculations and Cymap for the mechanical calculations. Once complete these were issued for review and approval
- ◆ Engagement in value engineering process, highlighting the risk and benefits of alternative design options

Emergency Power off System

Description

- ◆ Electrical installation including an EPO (Emergency Power Off) system to modify the electrical supplies and to isolate the supplies in accordance with Babcock's statement of requirements

Involvement

- ◆ The production of detailed schematics to be used for as installed drawings for data racks and systems
- ◆ Provision of full parts lists including full cable data sheets produced in Amtech Pro-design

