## **AMBASSADORS THEATRE**

## Appendix C

Waterproofing and Structural Remedial Works to the following theatre ancillary spaces at Lower Ground and Sub-Stage Level: Existing Boiler Room, Prep Room and West Street Passage

MEP's Planning Statement





## **PLANNING STATEMENT**

PROJECT:	Ambassadors Theatre – Project Rocher Phase 2 Works			
TITLE:	Sub-Stage Level Boiler Room Strip-out and Reconstruction Works			
Author:	Nick Wells, C.Eng. F.I.Mech.E. – Power Plan Services Ltd			
Date:	21 <sup>st</sup> February 2023	Location:	Ambassadors Theatre	

## Note: LZC = Low and Zero Carbon

Ref:		Comments
ENV01	Environmental Impact	In order to meet the long term ATG Net Zero carbon strategy it is advantageous to replace gas fired based heating systems with LZC alternatives. The redevelopment works undertaken at the Ambassadors Theatre, West Street, London has involved the installation of heat pump based heating systems. The gas-fired boilers are now redundant and need to be removed. Like-for-like comparison between gas-fired boilers and heat pumps. 0.243kgCO <sub>2</sub> e/kWh (heat) – gas fired boiler 0.075kg.CO <sub>2</sub> e/kWh (heat) – heat pump heating The like-for-like reduction in CO <sub>2</sub> emissions will be approximately 70%.
ENV02	Environmental Impact	The new domestic hot water storage cylinder will have multiple circuit electric immersion heaters. This will provide demand based hot water on a rapid recovery basis, reducing the volume of stored water and associated losses. The new system will no longer need to run the gas-fired boilers inefficiently during the summer months when there is no heating requirement. Water storage volume reduced from 300litres to 210litres. 4-stage electric heating instead of single stage on/off. Standing losses per year reduced from 650kWh to 518kWh.
H&S01	Health & Safety Impact	The location of the gas-fired boilers is within a room at sub-stage level accessed via a vertical ladder under a hinged floor hatch. This is deemed as inadequate and unsafe. This is currently a restricted area and kept locked. It is proposed that an access staircase be installed from the stage to sub-stage level. This will require a mezzanine deck and handrail to provide safe access and egress.
H&S02	Health & Safety Impact	The domestic hot water heater will be repositioned at stage level and mounted on the new mezzanine decking. This will provide safe and easy access for operation and maintenance.



H&S03	Health & Safety Impact	The substage area will be cleared of all gas boilers, pumps, pipework and gas mains. By removing the gas mains from the sub- stage areas, we will eliminate the fire/explosion risk due to the gas supply to the site.

20033-PL01

