



Commonwealth Edison

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August 23, 1985

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Byron Station Unit 1
Environmental Effects of High
Energy Line Breaks
NRC Docket No. 50-454

Reference (a): August 2, 1985 letter from K. A.
Ainger to H. R. Denton

Dear Mr. Denton:

Reference (a) provided details of the design of the temperature monitoring system to detect and isolate high energy line breaks in the Steam Generator Blowdown (SD) and Auxiliary Steam (AS) systems. This is to inform you of minor field changes to the modifications described in reference (a) and to advise you of the status of the installation of these modifications for Byron Unit 1.

Equipment interference problems have prevented the installation of some of the temperature sensors in locations as originally described in reference (a). The revised locations of these sensors are shown on the attached figures. The relocation of these sensors does not reduce their effectiveness to promptly detect the adverse environmental conditions associated with high energy line breaks in the SD and AS systems.

The installation of these modifications is near completion. However, receipt of some of the temperature sensors was delayed beyond originally scheduled delivery dates from the vendor. This delay along with the time required to perform the functional testing of the equipment may extend completion of the modification beyond August 31, 1985. Every available hour is being worked to complete the modifications and manpower has been increased to help compensate for delays. We expect to have the modifications complete no later than September 30, 1985.

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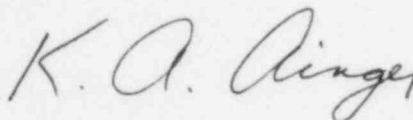
August 23, 1985

We will continue to keep personnel posted at designated locations in the Auxiliary Building so that line breaks can be promptly detected and terminated manually before environmental conditions exceed predicted values.

Please direct any questions regarding this matter to this office.

One signed original and fifteen copies of this letter and attachment are provided for NRC review.

Very truly yours,

A handwritten signature in cursive script, reading "K. A. Ainger".

K. A. Ainger
Nuclear Licensing Administrator

lm

Attachment

cc: Byron Resident Inspector

0546K

FIGURE 1C
STEAM GENERATOR BLOWDOWN SYSTEM HELB MONITORING
(UNIT 1)

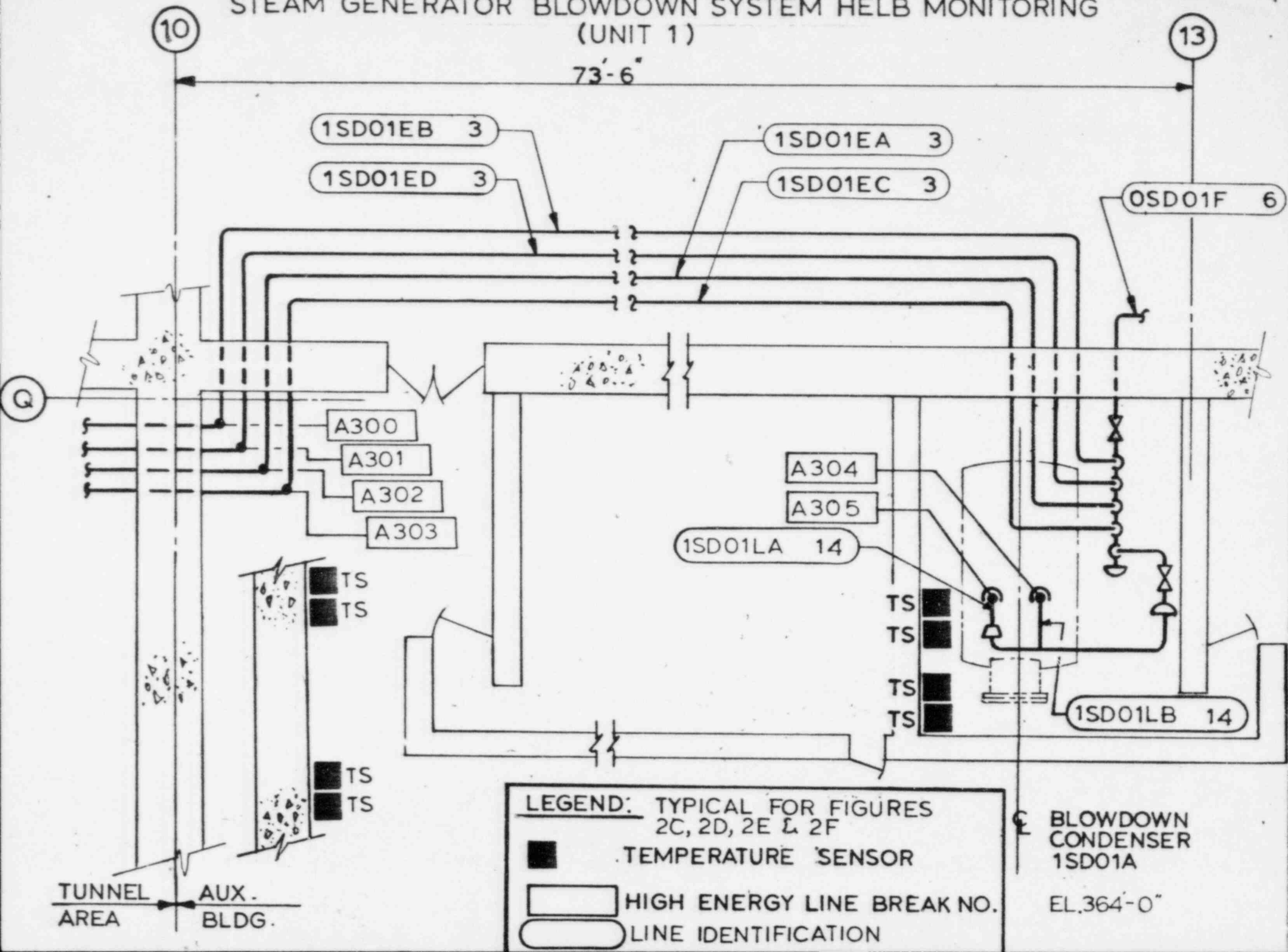


FIGURE 2C

AUX. STEAM SYSTEM HELB MONITORING (UNITS 1 & 2)

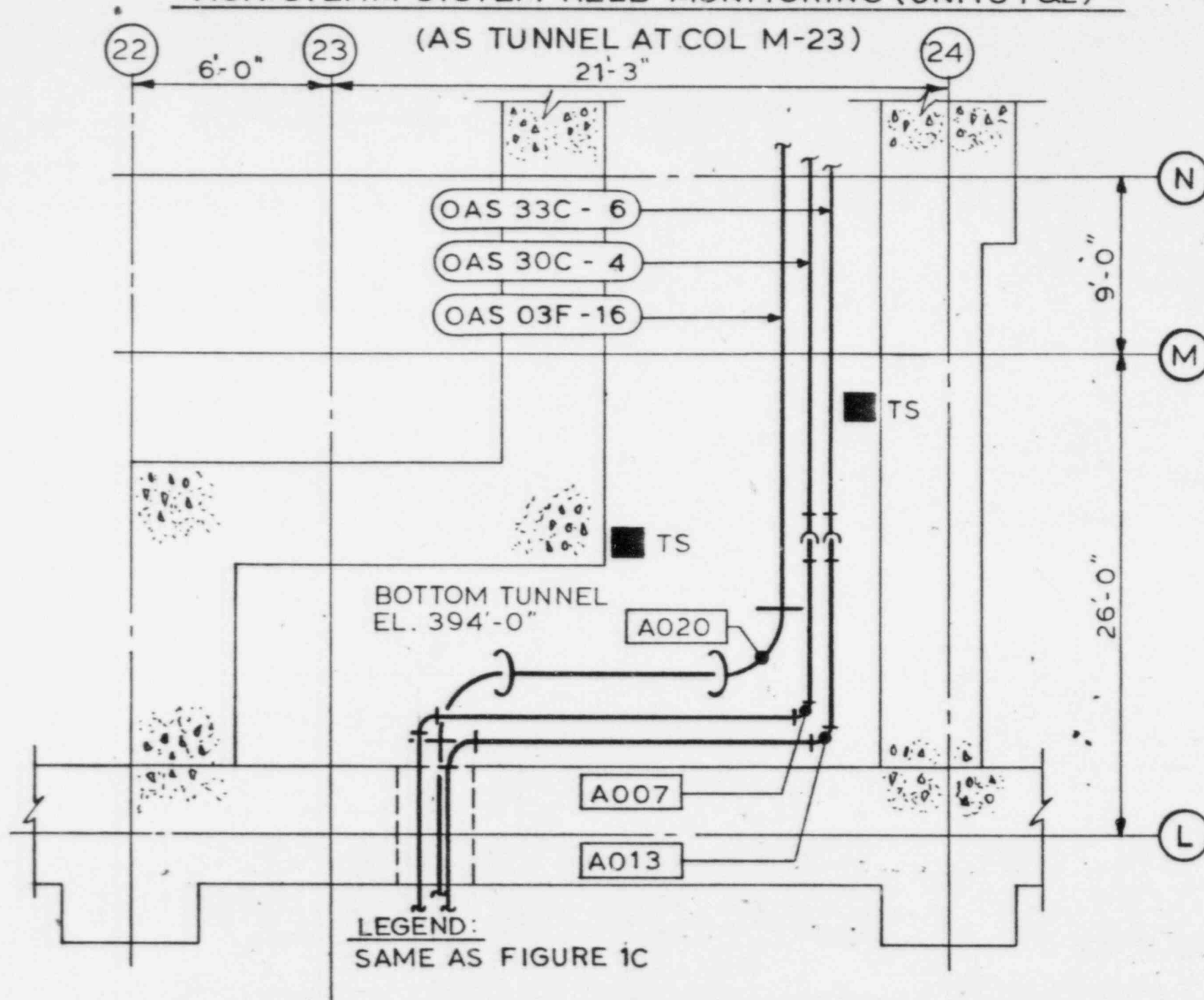


FIGURE 2D
 AUXILIARY STEAM SYSTEM HELB MONITORING (UNITS 1&2)
 (RECYCLE WASTE EVAPORATOR ROOMS)

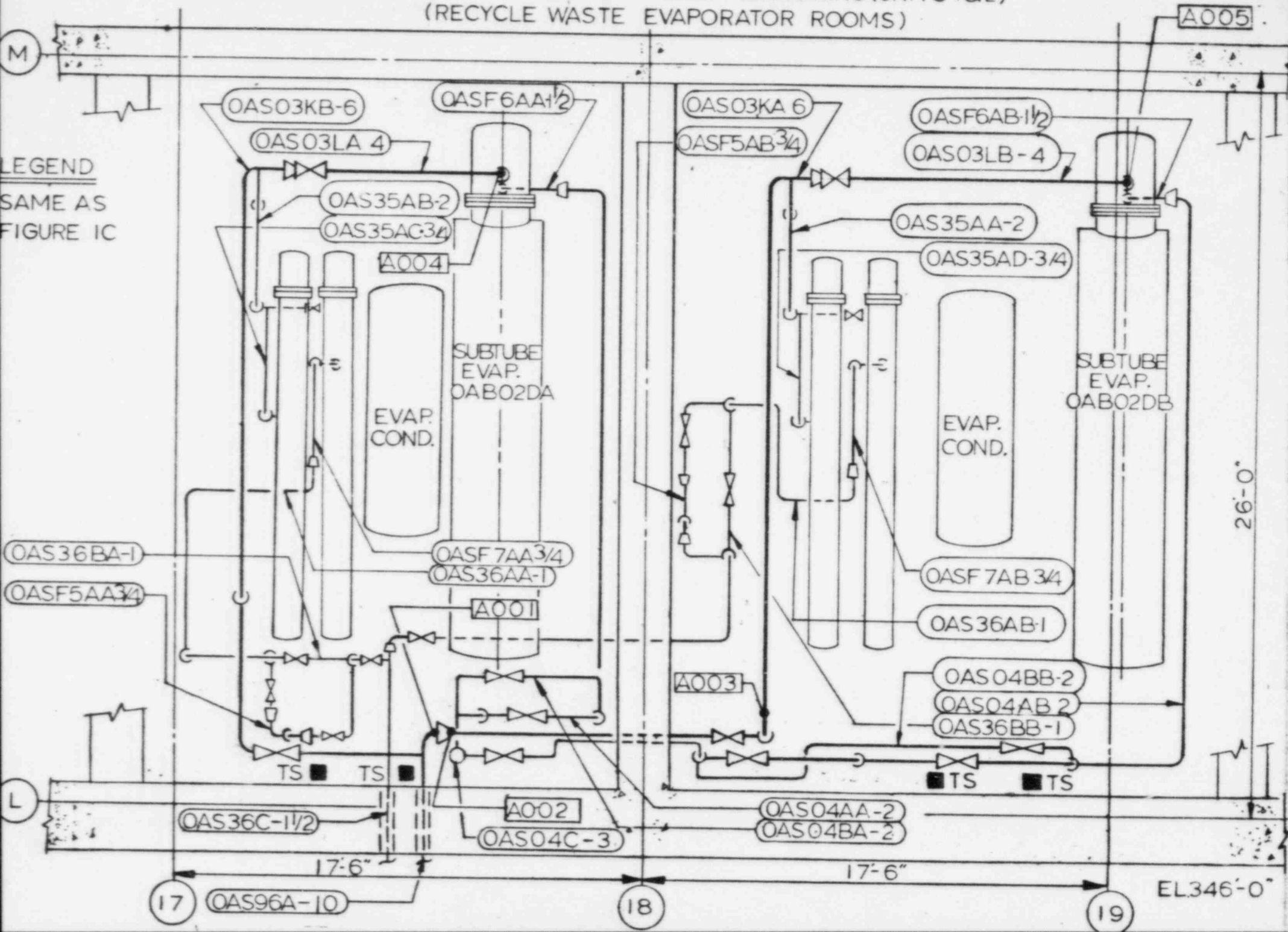
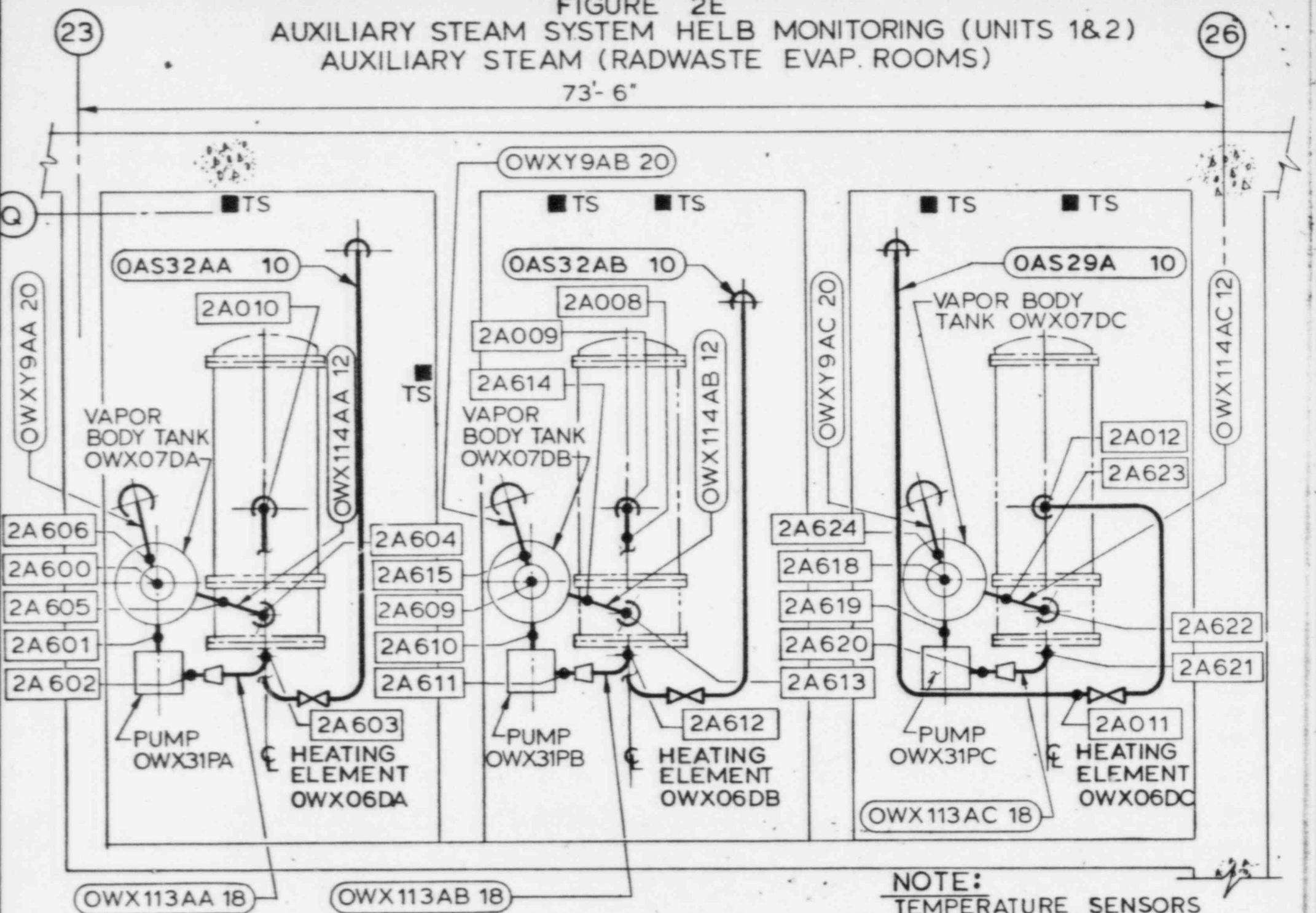


FIGURE 2E

AUXILIARY STEAM SYSTEM HELB MONITORING (UNITS 1&2)

AUXILIARY STEAM (RADWASTE EVAP. ROOMS)

73'-6"

**LEGEND:**

SAME AS FIG. 1C

EL 414'-0"

NOTE:

TEMPERATURE SENSORS
PROTECTING THESE AREAS
ALSO PROTECT AREAS SHOWN
ON FIG. 2F (401'-0")