

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

September 6, 1979

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

Dear Mr. Denton:

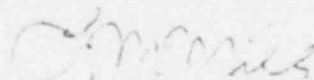
In the Matter of the Application of)	Docket Nos. STN 50-553
Tennessee Valley Authority)	STN 50-554

In an August 16, 1979, telephone conversation, Jerry Wills of my staff notified Bob Benedict of your staff that an additional fault had been discovered at our Phipps Bend Nuclear Plant in a soil pit area north-east of the intake pumping station. A conference call was subsequently made to the NRC geologist, Sandra Wastler, on August 16, 1979, to discuss the fault. The enclosure provides a detailed description of this feature.

We do not consider this minor fault to be capable within the meaning of Appendix A to 10 CFR Part 100.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager
Nuclear Regulation and Safety

Enclosure

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7909110 597
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ENCLOSURE

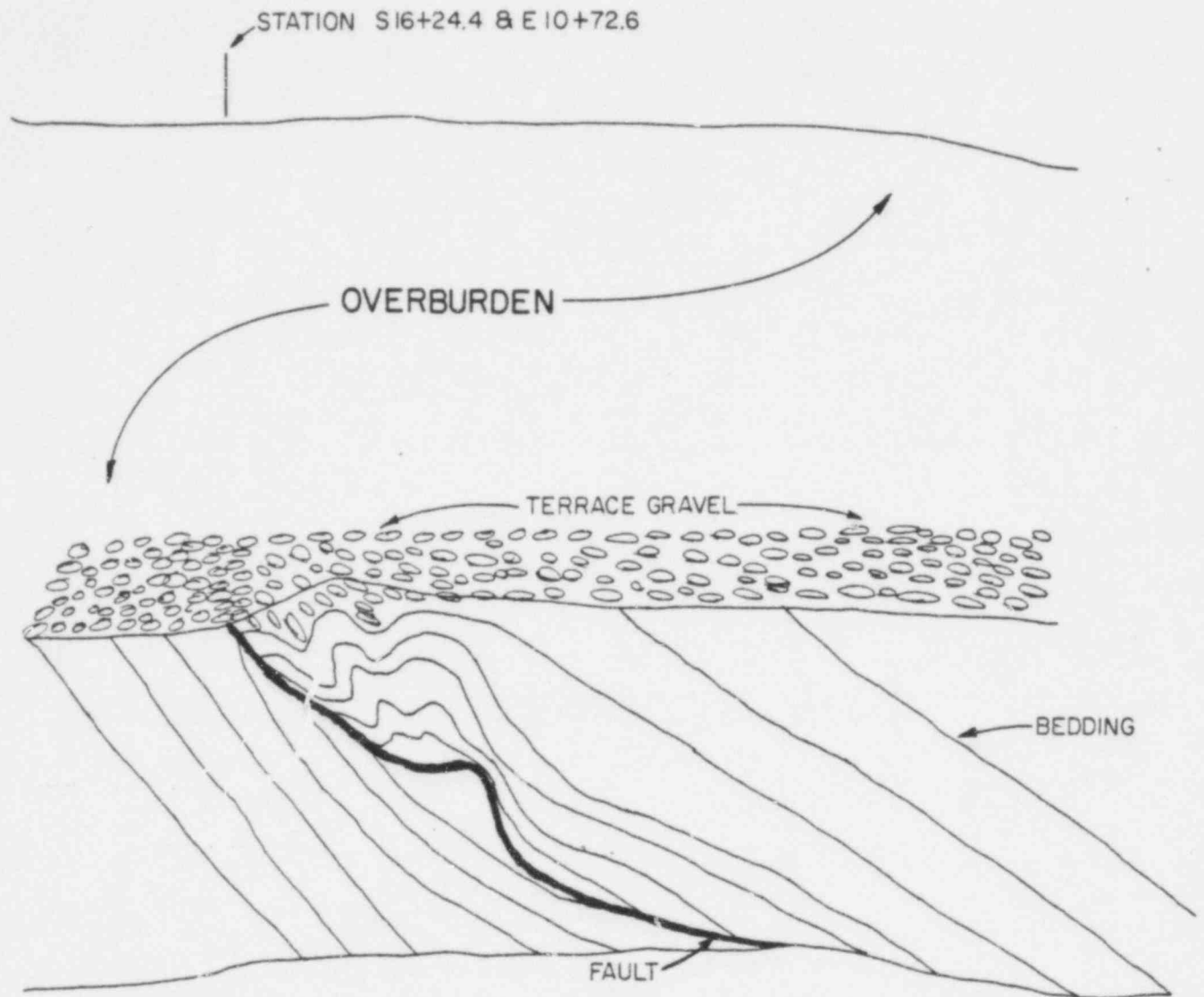
PHIPPS BEND NUCLEAR PLANT REVERSE FAULT IN SOIL PIT

A fault was uncovered in a soil pit excavated in an area northeast of the intake pumping station at approximate station S16+24.4 and E10+72.6. (See attached map for location.)

This is a reverse fault, defined by a tight fracture, which strikes N.50°E. and dips 55°SE. (See attached photographs and sketch.) On the north side of the fault, bedding strikes N.50°E. and dips 62°SE.; on the south side, adjacent to the fault, bedding is contorted, but farther to the south it strikes N.45°E. and dips 45°SE.

Above the fault, at the contact between top of rock and Quaternary terrace deposits, the gravel layer shows no offsets or disturbances. No evidence has been found which would indicate that this fault did not occur in the early tectonic development of the Paleozoic (250 ⁺ million years before present) folding and faulting in this area. The fault site, having been stable for 250 million years, is not considered to be capable of producing ground offsets or generating earthquakes. Therefore, we do not classify it as a capable fault, within the meaning of Appendix A to 10 CFR Part 100.

SOIL PIT EAST WALL

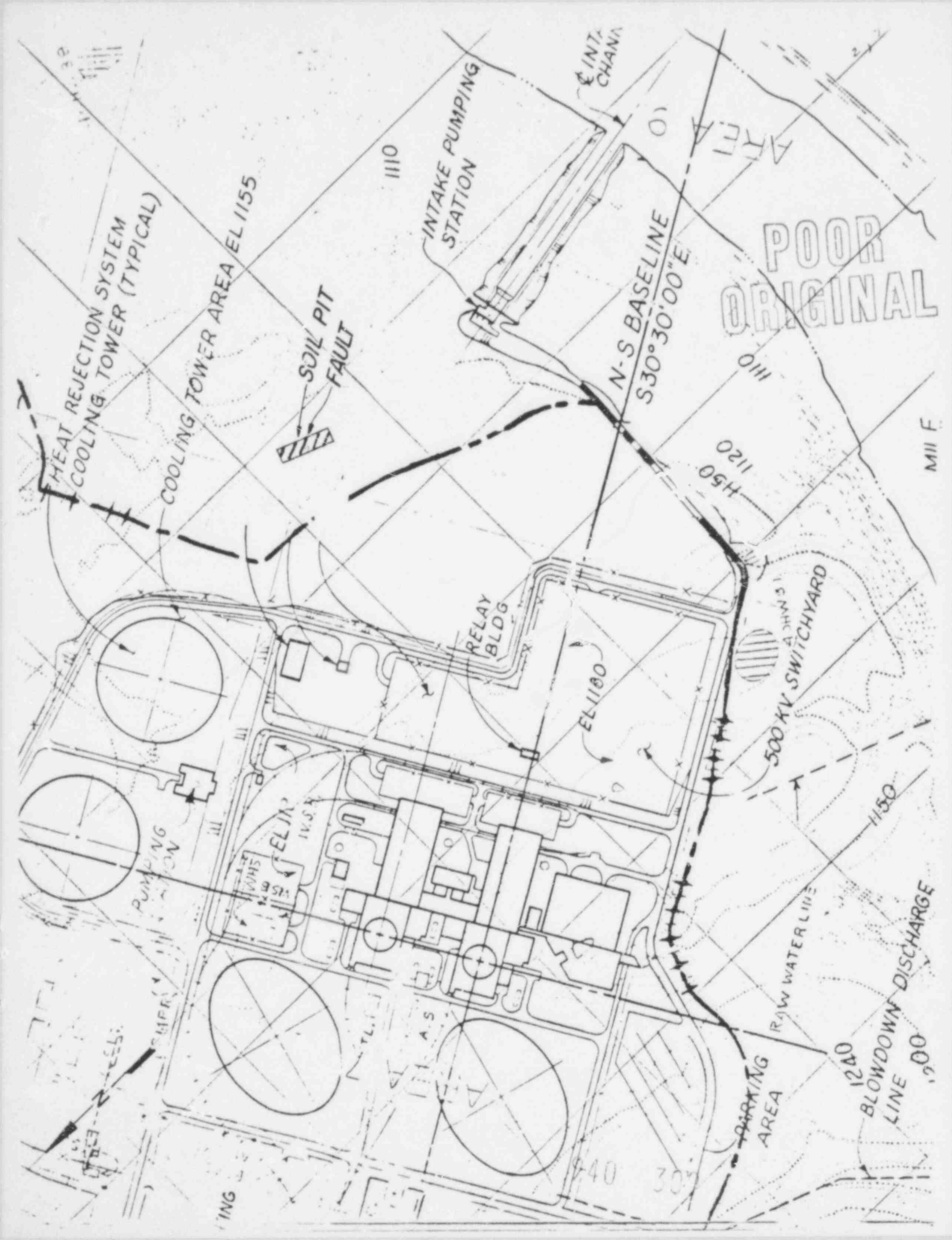


POOR
ORIGINAL

SCALE:

$\frac{3}{8}" = 1'$

940 308



VERY POOR
ORIGINAL



EAST WALL OF SOIL PIT - DASHED LINE INDICATES REVERSE FAULT