February 14, 2000

Mr. Neil Sellers
Tennessee Valley Authority
700 Hammond Plaza
Hopkinsville, Kentucky 42240

Re: Macon County Justice Center
Lafayette, Tennessee

This office performed a Thermal Conductivity test on one 200 feet deep, 6 inch diameter vertical bores, backfilled with drilled tailings, Feb. 10, 2000. The following data was derived from test data:

Thermal Conductivity	2.20 BTU/HR-F
Ground Temperature	57.4 F

We feel that based on our observation of the terrain, the above is representative of the area where Vertical Heat Exchanger bores will be located for this project.

Please let us know if any additional information is needed.

Sincerely,

TED WYNNE ENGINEERING CONTRACTORS, INC.

Ted Wynne, P.E.

jdh

Mid-South Geo & Water Resources, Inc.
P.O. Box 297 • Lebanon, TN 37088-0297
Phone: (615) 444-0423 • Fax: (615) 444-0427

WORK ORDER

01025

Date 1-26-00

Job MACON COUNTY JUSTICE CENTER SITE Phone

Address Hy 52 County

Requested On: By Neal Sellars TVA

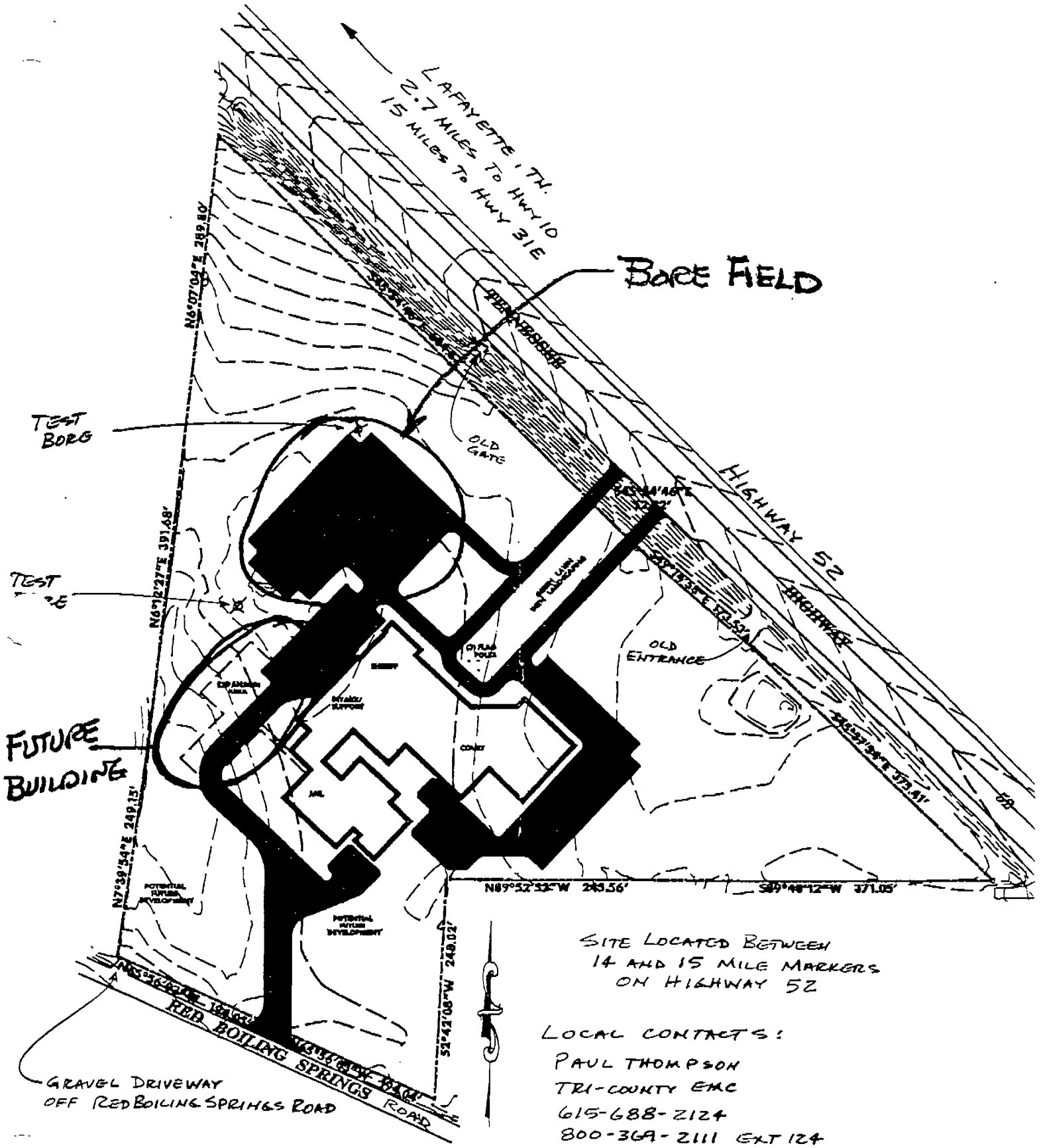
Start Drilling 1-25-00 Complete Drilling 1-28-00

Total Depth 200' Depth to Rock 25

Casing Set 30' Type & Size Bit Type/Size 6" HAMMER

Total Yield 20 GPM Water Zones 30-35 Quality Water NOT EST

DEPTH	FORMATION
0-25	Red Clay
25-30	Broken Rock
30-50	WATER 20 GPM
50-75	Lite Gray Lime
75-100	" "
100-125	" "
125-150	125-132 Green shale 132-152 Black shale
150-175	Dark Gray Lime
175-200	" " "
200	TD
	36.50137
	086.00253



SITE LOCATED BETWEEN
14 AND 15 MILE MARKERS
ON HIGHWAY 52

LOCAL CONTACTS:

PAUL THOMPSON
TRI-COUNTY EMC
615-688-2124
800-369-2111 EXT 124

NEAL SELLARS
TVA.
270-887-8467

~~12/15/99 10:15:00~~

FAX

Date: 2-2-00 Total pages: 2

To:
Name: JAMES HURT
Organization: TED WYHNE ENGR.
Location:
Phone: 615-331-7660 Fax: 615-333-0764

From:

Neal Sellars
Phone: ~~502~~-887-8467 FAX: ~~502~~ 270-887-8480
700 Hammond Plaza, Hopkinsville, KY 42240
e-mail: nsellars2@tva.gov

Message:

ATTACHED IS SITE PLAN FOR
MACON COUNTY JUSTICE CENTER
LOCATED 2 MILES EAST OF
LAFAYETTE TENN ON HIGHWAY 52
BETWEEN MILE MARKERS 14 & 15.

PLEASE ARRANGE TO PERFORM A
THERMAL CONDUCTIVITY TEST
ON ONE TEST BORE THAT HAS BEEN
DRILLED ON THIS SITE. A 200' × 3/4"
U-BEND WAS INSTALLED.
I WILL FAX DRILL LOGS WHEN I
RECEIVE THEM FROM MID SOUTH.
TWO TEST BORES WERE DUG BUT
PIPE WAS INSTALLED IN ONLY ONE.

PLEASE CALL WHEN YOU HAVE QUESTIONS.

THANKS
Neal Sellars