

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED IN THE GRAND RIVER VALLEY, WITHIN THE LAKE PLANES PHYSIOGRAPHIC PROVINCE IN AN AREA WHERE RELATIVELY SHALLOW ALLUVIAL DEPOSITS OVERLIE SHALE BEDROCK OF THE DEVONIAN AGE.

EXPLORATION


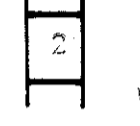
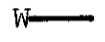
THE EXPLORATION CONSISTED OF DRIVE SAMPLE BORINGS MADE BY MEANS OF A MECHANICAL POWERED HOLLOW STEM AUGER MOUNTED ON A MOBIL PLATFORM PERFORMED BETWEEN AUGUST 2 AND 4, 1986.

INVESTIGATION FINDINGS AND OBSERVATIONS

THE TEST BORINGS DISCLOSED SHALE BEDROCK ENCOUNTER ELEVATION AT 575' ± AT THE DISTRESSED WEST ABUTMENT/EMBANKMENT SECTOR AND AT 597' ± AT THE TOP OF THE WEST RIVER BANK FLOOD PLANE SOUTH OF THE ROADWAY EMBANKMENT. OVERLYING THE SHALE BEDROCK AT THE WEST ABUTMENT, COARSE TO FINE NATURAL SAND OF MEDIUM DENSE RELATIVE DENSITY WERE EVIDENCED TO AN ELEVATION OF 593' ±. OVER THE FLOOD PLAIN, THE SHALE IS OVERLAID BY UNCONSOLIDATED SEDIMENTS OF SILT AND CLAY AND SILTY SAND SOILS.

BORING A-1 DRILLED AT THE WEST ABUTMENT APPARENTLY INTERCEPTED THE ABUTMENT FOOTING BETWEEN ELEVATIONS 593' AND 597' ±. ABOVE THE ABUTMENT FOOTING, PREDOMINANTLY GRANULAR SOILS WITH VARIABLE FRACTIONS OF FINES WERE ENCOUNTERED TO THE TOP OF ROADWAY ELEVATION.

LEGEND

-  AUGER BORING/DRIVE SAMPLE LOCATION-PLAN VIEW
-  HORIZONTAL BARS ON BORING LOGS INDICATE SAMPLE INTERVALS. FIGURES WITHIN SAMPLE INTERVALS INDICATE SAMPLING SEQUENCE.
- X/Y/Z FIGURES BESIDE THE BORING LOG IN PROFILE INDICATE THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST.
X = NUMBER OF BLOWS FOR FIRST 6 INCHES.
Y = NUMBER OF BLOWS FOR SECOND 6 INCHES.
Z = NUMBER OF BLOWS FOR THIRD 6 INCHES.
-  INDICATES FREE WATER ELEVATION
- TR TOP OF ROCK

GENERAL INFORMATION

DRIVE SAMPLE BORINGS ARE MADE BY MECHANICALLY-POWERED ROTARY TYPE DRILLING MACHINE EMPLOYING A 2" O.D., 1-3/8" I.D. SPLIT SPOON SAMPLING DEVICE, AT 2-1/2 OR 5-FOOT INTERVALS DRIVEN BY MEANS OF A 140-POUND DROP HAMMER WITH A FREE FALL OF 30 INCHES. THE NUMBER OF BLOWS REQUIRED TO DRIVE THE SAMPLING DEVICE 12 INCHES AFTER AN INITIAL 6" SEATING PENETRATION IS TERMED THE STANDARD PENETRATION TEST.

THE BORING LOG SHEETS DISPLAY GRAPHIC PLOTS OF THE INFORMATION OBTAINED, INCLUDING DEPTH AND ELEVATION OF THE SAMPLE, TYPE OF SAMPLE, BLOW COUNTS ON DRIVE SAMPLER IN 6" INCREMENTS, SAMPLE NUMBERS AND SAMPLE DESCRIPTIONS. THE SAMPLE MATERIALS OBTAINED WERE CLASSIFIED PER ASTM TEST PROCEDURE 2488 AND WERE IDENTIFIED WITH THE APPROPRIATE GROUP SYMBOLS OF THE UNIFIED AS WELL AS THE OHIO DEPARTMENT OF TRANSPORTATION CLASSIFICATION SYSTEM FOR SOILS.

NOTE: GEOTECHNICAL ENGINEERING REPORT FOR THIS PROJECT WAS PREPARED BY APPLIED CONSTRUCTION TECHNOLOGIES, INC. COPIES OF THIS INFORMATION MAY BE INSPECTED IN THE DISTRICT DEPUTY DIRECTOR'S OFFICE, THE BUREAU OF TESTS AT 1600 WEST BROAD STREET, THE PAVEMENT AND SOILS SECTION OF THE BUREAU OF LOCATION AND DESIGN OR IN THE BRIDGE BUREAU AT 25 SOUTH FRONT STREET.

THE GEOTECHNICAL ENGINEERING REPORT MAY CONTAIN SUBSURFACE INVESTIGATION RESULTS AND TEST DATA NOT SPECIFICALLY SHOWN ON THE STRUCTURE FOUNDATION INVESTIGATION SHEETS.

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