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DESCRIPTION TITLE SHEET LEGEND SITE PLAN

SHEET

PROFILE

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS** GEOTECHNICAL ENGINEERING UNIT

STRUCTURE SUBSURFACE INVESTIGATION

PROJ. REFERENCE NO. 41431.1.1 (U-5018) __ F.A. PROJ. <u>STP-0043 (8</u>) COUNTY PITT PROJECT DESCRIPTION GREENVILLE - NC 43 FROM US 264 TO NC 11 (MEMORIAL DRIVE) SITE DESCRIPTION __RETAINING WALL LEFT OF -L- STA. 63 + 00

RETAINING WALL INVENTORY

| STATE | STATE PI | NO. | SHEE | | |
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| N.C. | 41431 | 1.1.1 (U-5018) | 1 | 4 | |
| STATE PROJ. NO. | | F. A. PROJ. NO. | DESCRIPTION | | |
| 41431.1.1 | | STP-0043(8) | P.E. | | |
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CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURFOSE OF STUDY, PLANNING, AND DESIGN, AND NOT FOR CONSTRUCTION OR PAY PURFOSES. THE VARIOUS FELD BORNING LOSS, ROCK CORES, AND SOL TEST DATA AVAILABLE MAY THE TION, REVEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N. C. DEPARTMENT OF TRANSPORTATION. GOTECHNICAL ENGINEERING UNIT AT 1981 920-4088. RETHIRER THE SUBSURFACE PLANS AND REPORTS. NOR THE FIELD BORING LOGS. ROCK CORES, OR SOIL TEST DATA ARE PART OF THE CONTRACT.

CEMERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARIES ARE BASED ON A CECTECHNICAL INTERPRETATION OF ALL AVAILABLE SUBSUBFACE DATA AND MAY NOT NECESSARILY REFLECT THE ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS OR BETWEEN SAMPLED STRAYAL WITHIN THE BOREHOLE. THE LABORATORY SAMPLE DATA AND THE IN STU (IN-PLACE) TEST DATA CAN BE RELIED ON ONLY TO THE DEGREE OF RELABLITY INHERENT IN THE STANDARD TEST METHOD. THE OSSERVED WATER LEVELS OR SOIL MOISTURE CONDITIONS NIDICATED IN THE SUBSURFACE INVESTIGATIONS ARE AS RECORDED AT THE TIME OF THE INVESTIGATION. THESE WATER LEVELS OR SOIL MOISTURE CONDITIONS AND VARY CONSIDERABLY WITH THE ACCORDING TO CLIMATIC CONDITIONS INCLUDING TEMPERATURES, PRECIPITATION, AND WIND, AS WELL AS OTHER NON-CLIMATIC FACTORS.

THE BIDDER OR CONTRACTOR IS CAUTIONED THAT DETAILS SHOWN ON THE SUBSURFACE PLANS ARE PRELIMINARY ONLY AND IN MANY CASES THE FINAL DESIGN DETAILS ARE DIFFERENT, FOR BIDDING AND CONSTRUCTION PURPOSES, REFER TO THE CONSTRUCTION PLANS AND DOCUMENTS FOR FINAL DESIGN INFORMATION ON THIS PROJECT. THE DEPARTMENT DOES NOT WARRANT OR CULARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTICATION MADE, NOR THE INTERPRETATIONS MADE, OR OPINION OF THE DEPARTMENT AS TO THE TYPE OF MATERIALS AND CONDITIONS TO BE ENCOUNTERED. THE BIDDER OR CONTRACTOR IS CAUTIONED TO MAKE SUCH INDEPENDENT SUBSURFACE INVESTICATIONS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO CONDITIONS TO BE ENCOUNTERED ON THE PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM FOR ADDITIONAL COMPENSATION OR FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS.

| | PERSONNEL |
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| INVESTIGAT | ΓED | BY J.L. STONE |
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| CHECKED I | nv. | D.N. ARGENR |

SUBMITTED BY _____ D.N. ARGENBRIGHT

APRIL 2008



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

| | SOIL AND ROO | CK LEGEND, TERM | S, SYMBOLS, A | AND ABBREVI | ATIONS | | |
|---|---|---|--|--|---|--|--|
| SOIL DESCRIPTION | GRADATION | | | | DESCRIPTION | TERMS AND DEFINITIONS | |
| SOIL IS CONSIDERED TO BE THE UNCONSOLIDATED, SEMI-CONSOLIDATED, OR WEATHERED EARTH MATERIALS THAT CAN BE PENETRATED WITH A CONTINUOUS FLIGHT POWER AUGER, AND YIELD LESS THAN 100 BLOWS PER FOOT ACCORDING TO STANDARD PENETRATION TEST (AASHTO T206, ASTM D-1586), SOIL CLASSIFICATION IS DESCRIPTIONS GENERALLY SHALL INCLUDE: CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH AS MINERALOGICAL COMPOSITION, ANGULARRITY, STRUCTURE, PLASTICITY, ETC. EXAMPLE: VER STREED AND AUGUST DAY, NOT WITH INTEREDED THE SMO LAVERSHOW PLASTE A-7-6 | WELL GRADED - INDICATES A GOOD REPRESENTATION OF PARTICLE SIZES FROM FINE TO CDARSE. LINEDRM - INDICATES THAT SOIL PARTICLES ARE ALL APPROXIMATELY THE SAME SIZE, (ALSO PODRLY GRADED) GAP-GRADED - INDICATES A MIXTURE OF UNIFORM PARTICLES OF TWO OR MORE SIZES. ANGULARITY OF GRAINS THE ANGULARITY OR ROUNDNESS OF SOIL GRAINS IS DESIGNATED BY THE TERMS; ANGULAR, SUBANGULAR, SUBROUNDED, OR ROUNDED. | | HARD ROCK IS NON-COASTAL PLAIN MATERIAL THAT IF TESTED, WOULD YIELD SPT REFUSAL, AN INFERRED ROCK LINE INDICATES THE LEVEL AT WHICH NON-COASTAL PLAIN MATERIAL WOULD YIELD SPT REFUSAL. SPT REFUSAL IS PENETRATION BY A SPLIT SPOON SAMPLER EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS. IN NON-COASTAL PLAIN MATERIAL, THE TRANSITION BETWEEN SOIL AND ROCK IS OFTEN REPRESENTED BY A ZONE OF WEATHERED ROCK. ROCK MATERIALS ARE TYPICALLY DIVIDED AS FOLLOWS: WEATHERED WEATHERED NON-COASTAL PLAIN MATERIAL THAT WOULD YIFLD SPT N VALUES > 100 | | Coastal Plain Material Would Yield Spt Refusal. SAMPLER BOULA TO OR LESS THAN 0.1 FOOT PER 60 BLOWS. ON BETWEEN SOIL AND ROCK IS OFTEN REPRESENTED BY A ZO. LOWS: LAIN MATERIAL THAT WOULD YIELD SPT N VALUES > 100 | ARENACEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OF THAT CONTAIN SAND. ARGILLACEOUS - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, AS SHALE, SLATE, ETC. | |
| SOIL LEGEND AND AASHTO CLASSIFICATION | MINERALOGICAL COMPOSITIO | ON | | 20.0.0 | IT IF TESTED. E GRAIN IGNEOUS AND METAMORPHIC ROCK THAT | ARTESIAN - GROUND WATER THAT IS UNDER SUFFICIENT PRESSURE TO RISE ABOVE THE LEVEL AT WHICH IT IS ENCOUNTERED, BUT WHICH DOES NOT NECESSARILY RISE TO OR ABOVE THE | |
| GENERAL GRANULAR MATERIALS SILT-CLAY MATERIALS ORGANIC MATERIALS (≤ 35% PASSING *200) (> 35% PASSING *200) ORGANIC MATERIALS | MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE U WHENEVER THEY ARE CONSIDERED OF SIGNIFICANCE. | USED IN DESCRIPTIONS | CRYSTALLINE ROCK (CR) | WOULD YIELD S GNEISS, GABBRO | PT REFUSAL IF TESTED. ROCK TYPE INCLUDES GRANITE, | GROUND SURFACE. CALCAREOUS (CALC.) - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE. | |
| GROUP A-1 A-3 A-2 A-4 A-5 A-6 A-7 A-1, A-2 A-4, A-5 CLASS. A-1-a A-1-b A-2-4 A-2-5 A-2-6 A-2-7 A-2-7 A-7-6 A-3 A-6, A-7 | | LESS THAN 31 | ROCK (NCR) | SEDIMENTARY R | OCK THAT WOULD YEILD SPT REFUSAL IF TESTED. ROCK TYPE .ITE, SLATE, SANDSTONE, ETC. | COLLUVIUM - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM OF SLOPE. | |
| SYMBOL 000000000000000000000000000000000000 | HIGHLY COMPRESSIBLE LIQUID LIMIT | EQUAL TO 31-50 GREATER THAN 50 | COASTAL PLAIN SEDIMENTARY ROCK (CP) | COASTAL PLAIN SPT REFUSAL, F SHELL BEDS, ET | SEDIMENTS CEMENTED INTO ROCK, BUT MAY NOT YIELD OCK TYPE INCLUDES LIMESTONE, SANDSTONE, CEMENTED C. | CORE RECOVERY (REC.) - TOTAL LENGTH OF ALL MATERIAL RECOVERED IN THE CORE BARREL DIVIDED BY TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE. | |
| X PASSING 10 50 MX GRANULAR SILT- GRANULAR CLAY | PERCENTAGE OF MATERIAL ORGANIC MATERIAL GRANULAR SILT - CLAY ORGANIC MATERIAL | | | WE. | ATHERING | DIKE - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT ROCKS OR CUTS MASSIVE ROCK. | |
| # 40 38 MX 58 MX 51 MN PEAT SOILS SOILS | TRACE OF ORGANIC MATTER 2 - 3% 3 - 5% TRA | <u>OTHER MATERIAL</u> ACE 1 - 10% ITLE 10 - 20% | | ESH, CRYSTALS BRIGHT, FEW J IF CRYSTALLINE. | DINTS MAY SHOW SLIGHT STAINING ROCK RINGS UNDER | DIP - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL. | |
| LIDUID LIMIT PLASTIC INDEX 6 MX NP 16 MX 11 MN 46 MX 41 MN 46 MX 41 MN 46 MX 41 MN 50 ILS WITH LITTLE DR HIGHLY | MODERATELY ORGANIC 5 - 10% 12 - 20% SOM | | (V SLI.) CRYSTALS | ON A BROKEN SPECIMEN FA | (ED, SOME JOINTS MAY SHOW THIN CLAY COATINGS IF OPEN, CE SHINE BRIGHTLY. ROCK RINGS UNDER HAMMER BLOWS IF | DIP DIRECTION (DIP AZIMUTH) - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP MEASURED CLOCKWISE FROM NORTH. | |
| GROUP INDEX 0 0 0 4 MX 8 MX 12 MX 16 MX No MX MODERATE ORGANIC | GROUND WATER | | SLIGHT ROCK GEN | | NED AND DISCOLORATION EXTENOS INTO ROCK UP TO | FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE. | |
| USUAL TYPES STORE FRAGE. FINE SILTY OR CLAYEY SILTY CLAYEY DRGANIC GRAYEL, AND SAND SAND SAND SOILS SOILS MATTER MATERIALS SAND SAND SOILS SOILS | ▼ WATER LEVEL IN BORE HOLE IMMEDIATELY AFTER D ■ STATIC WATER LEVEL AFTER 24 HOURS | DRILLING | CRYSTALS | ARE DULL AND DISCOLORED | AY. IN GRANITOID ROCKS SOME OCCASIONAL FELDSPAR CRYSTALLINE ROCKS RING UNDER HAMMER BLOWS. | FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES. | |
| GEN. RATING AS A EXCELLENT TO GOOD FAIR TO POOR POOR UNSUITABLE | ✓ PW PERCHED WATER, SATURATED ZONE, OR WATER BEARIN | ING STRATA | (MOD.) GRANITOID | D ROCKS, MOST FELDSPARS AF | DISCOLORATION AND WEATHERING EFFECTS. IN RE DULL AND DISCOLORED, SOME SHOW CLAY, ROCK HAS RE SHOWS SIGNIFICANT LOSS OF STRENGTH AS COMPARED | FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLODGED FROM PARENT MATERIAL. | |
| PI OF A-7-5 SUBGROUP IS ≤ LL - 30 ; PI OF A-7-6 SUBGROUP IS > LL - 30 | SPRING OR SEEP | | WITH FRES | SH ROCK. | O OR STAINED. IN GRANITOID ROCKS, ALL FELDSPARS DULL | FLOOD PLAIN (FP) - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY THE STREAM. | |
| CONSISTENCY OR DENSENESS RANGE OF STANDARD RANGE OF UNCONFINED | MISCELLANEOUS SYMBOLS | | SEVERE AND DISCO | OLORED AND A MAJORITY SHO | DO NOT STRINGED. IN GRANICIOUS NOCES, ALL FELDSFARS DULL WE KAOLINIZATION. ROCK SHOWS SEVERE LOSS OF STRENGTH DGIST'S PICK. ROCK GIVES 'CLUNK' SOUND WHEN STRUCK. | FORMATION (FM.) - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN THE FIELD. | |
| PRIMARY SOIL TYPE COMPACTNESS OR CONSISTENCY PENETRATION RESISTENCE (COMPRESSIVE STRENGTH (N-VALUE) (TONS/F12) | ROADWAY EMBANKMENT (RE) WITH SOIL DESCRIPTION P SPT CPT OFT DIT TEST BORIN VST PHT | NG SAMPLE DESIGNATIONS | IF TESTEL | D. WOULD YIELD SPT REFUSAL | • | JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED. | |
| GENERALLY VERY LODSE 44 | SOIL SYMBOL AUGER BORING | S - BULK SAMPLE SS - SPLIT SPOON | (SEV.) IN STREN | | D OR STAINED, ROCK FABRIC CLEAR AND EVIDENT BUT REDUCE ANITOID ROCKS ALL FELDSPARS ARE KAOLINIZED TO SOME ROCK USUALLY REMAIN | D LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT. | |
| MATERIAL (NON-COHESIVE) MEDIUM DENSE 10 TO 30 N/A N/A N/A N/A N/A N/A N/A N/ | ARTIFICIAL FILL (AF) OTHER THAN ROADWAY EMBANKMENT INFERRED SOIL BOUNDARY MW | SAMPLE ST - 9HELBY TUBE SAMPLE | VERY SEVERE ALL ROCK (V SEV.) THE MASS | ED. YIELDS SPT N VALUES > 1 C EXCEPT QUARTZ DISCOLORE S IS EFFECTIVELY REDUCED | | LENS - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS. MOTILED (MOT) - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS, MOTTLING IN SOILS USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE. PERCHED WATER - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN | |
| GENERALLY SUFT 2 TO 4 6.25 TO 6.50 SILT-CLAY MEDIUM STIFF 4 TO 8 6.5 TO 1.0 | "" MONITORING WEL THE INFERRED ROCK LINE A PIEZOMETER | RS - RUCK SAMPLE | VESTIGES | OF THE ORIGINAL ROCK FAB | RIC REMAIN. IF TESTED, YIELDS SPT N VALUES < 100 BPF NOT DISCERNIBLE, OR DISCERNIBLE ONLY IN SMALL AND | INTERVENING IMPERVIOUS STRATUM. RESIDUAL (RES.) SOIL - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK. | |
| MATERIAL STIFF 8 TO 15 1 TO 2 (COHESIVE) VERY STIFF 15 TO 30 2 TO 4 | ALLUVIAL SOIL BOUNDARY INSTALLATION SLOPE INDICATO | RT - RECOMPACTED TRIAXIAL SAMPLE OR | | D CONCENTRATIONS. QUARTZ | MAY BE PRESENT AS DIKES OR STRINGERS. SAPROLITE IS | ROCK QUALITY DESIGNATION (ROD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF CORE RUN AND | |
| TEXTURE OR GRAIN SIZE | DIP & DIP DIRECTION OF INSTALLATION ROCK STRUCTURES | CBR - CALIFORNIA BEARING RATIO SAMPLE | | ROCK | HARDNESS | EXPRESSED AS A PERCENTAGE. | |
| U.S. STD. SIEVE SIZE 4 10 40 60 200 270 OPENING (MM) 4.76 2.00 0.42 0.25 0.075 0.053 | SOUNDING ROD SOUNDING ROD REF SPT N-VALUE REF SPT REFUSAL | | | BE SCRATCHED BY KNIFE OR HARD BLOWS OF THE GEOLG | SHARP PICK. BREAKING OF HAND SPECIMENS REQUIRES GIST'S PICK. | SAPPOLITE (SAP.) - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT ROCK. SILL - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND | |
| POUL DED CORDIE CRAVEL COARSE FINE CLIT CLAY | ABBREVIATIONS AR - AUGER REFUSAL HI HIGHLY | w - MOISTURE CONTENT | | SCRATCHED BY KNIFE OR PIC ACH HAND SPECIMEN. | K ONLY WITH DIFFICULTY. HARD HAMMER BLOWS REQUIRED | THE ATTIVELY THIN COMPARED WITH ITS LATERAL EXTENT, THAT HAS BEEN EMPLACED PARALLEL TO THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS. | |
| (BLDA) (COB.) (COB.) (GR.) (CSE. SD.) (F SD.) (SL.) (CL.) GRAIN MM 305 75 2.0 0.25 0.05 0.005 | BT - BORING TERMINATED MED MEDIUM CL CLAY MICA MICACEOUS | V - VERY VST - VANE SHEAR TEST | HARD EXCAVAT | | CK. GOUGES OR GROOVES TO 0.25 INCHES DEEP CAN BE BLOGIST'S PICK. HAND SPECIMENS CAN BE DETACHED | SLICKENSIDE - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE. | |
| SIZE IN. 12 3 SOIL MOISTURE - CORRELATION OF TERMS | CPT - COME PENETRATION TEST MOD MODERATELY | WEA WEATHERED | MEDIUM CAN BE HARD CAN BE | GROOVED OR GOUGED 0.05 IN | ICHES DEEP BY FIRM PRESSURE OF KNIFE OR PICK POINT. TO PEICES 1 INCH MAXIMUM SIZE BY HARD BLOWS OF THE | STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT) - NUMBER OF BLOWS (N OR BPF) OF A 140 LB, HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER, SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 81 FOOT PER 60 BLOWS. | |
| SOIL MOISTURE SCALE FIELD MOISTURE GUIDE FOR FIELD MOISTURE DESCRIPTION GUIDE FOR FIELD MOISTURE DESCRIPTION | • - VOID RATIO SAP SAPROLITIC F - FINE SD SAND, SANDY | | FROM CH | HIPS TO SEVERAL INCHES IN | BY KNIFE OR PICK. CAN BE EXCAVATED IN FRAGMENTS SIZE BY MODERATE BLOWS OF A PICK POINT. SMALL, THIN | STRATA CORE RECOVERY (SREC.) - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE. | |
| - SATURATED - USUALLY LIQUID; VERY WET, USUALLY FROM BELOW THE GROUND WATER TABLE PLASTIC SEMISON ID, DECOMPOSE DRYING TO | FOSS FOSSILIFEROUS SL SILT, SILTY FRACE FRACTURED, FRACTURES SLI SLIGHTLY FRAGS FRAGMENTS TCR - TRICONE REFUSAL | | VERY CAN BE | IN THICKNESS CAN BE BROK | PRESSURE. EXCAVATED READILY WITH POINT OF PICK, PIECES 1 INCH (EN BY FINGER PRESSURE, CAN BE SCRATCHED READILY BY | STRATA ROCK QUALITY DESIGNATION (SROD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE. | |
| RANGE - WET - (W) ATTAIN OPTIMUM MOISTURE | EQUIPMENT USED ON SUBJECT P | PROJECT | | RE SPACING | BEDDING | IOPSOIL (TS.) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER. | |
| PLL TENSITE CIPIT | DRILL UNITS: ADVANCING TOOLS: | HAMMER TYPE: | TERM VERY WIDE | SPACING MORE THAN 10 FEET | TERM THICKNESS VERY THICKLY BEDDED > 4 FEET | BENCH MARK: BM#6 -BL- STA.65+86 46'LT | |
| OM OPTIMUM MOISTURE - MOIST - (M) SOLID; AT DR NEAR OPTIMUM MOISTURE SL SHRINKAGE LIMIT | MOBILE B CLAY BITS | X AUTOMATIC MANUAL | WIDE MODERATELY CLOSE | 3 TO 10 FEET | THICKLY BEDDED 1.5 - 4 FEET THINLY BEDDED 0.16 - 1.5 FEET | ELEVATION: 56.65 FT. | |
| REQUIRES ADDITIONAL WATER TO - DRY - (D) ATTAIN OPTIMUM MOISTURE | 6° CONTINUOUS FLIGHT AUGER BK-51 X 8° HOLLDW AUGERS | CORE SIZE: | CLOSE VERY CLOSE | 0.16 TD 1 FEET LESS THAN 0.16 FEET | VERY THINLY BEDDED 0.03 - 0.16 FEET THICKLY LAMINATED 0.008 - 0.03 FEET THINLY LAMINATED < 0.008 FEET | NOTES: UNDIV. C.P. = UNDIVIDED COASTAL PLAIN | |
| PLASTICITY | X CME-45B HARD FACED FINGER BITS | | | *************************************** | URATION | 7 | |
| PLASTICITY INDEX (PI) DRY STRENGTH NONPLASTIC 9-5 VERY LOW | TUNGCARBIDE INSERTS | | | | JING OF THE MATERIAL BY CEMENTING, HEAT, PRESSURE, ETC. | | |
| NONTLASTICT | CASING W/ ADVANCER | HAND TOOLS: | FRIABLE | | BLOW BY HAMMER DISINTEGRATES SAMPLE. | | |
| HIGH PLASTICITY 26 OR MORE HIGH | PORTABLE HOIST TRICONE STEEL TEETH | POST HOLE DIGGER HAND AUGER | MODERATELY | | CAN BE SEPARATED FROM SAMPLE WITH STEEL PROBE; EASILY WHEN HIT WITH HAMMER. | | |
| COLOR | TINGCARB. | SOUNDING ROD | INDURATED | | ARE DIFFICULT TO SEPARATE WITH STEEL PROBE; LT TO BREAK WITH HAMMER. | | |
| DESCRIPTIONS MAY INCLUDE COLOR OR COLOR COMBINATIONS (TAN, RED, YELLOW-BROWN, BLUE-GRAY). MODIFIERS SUCH AS LIGHT, DARK, STREAKED, ETC. ARE USED TO DESCRIBE APPEARANCE. | | VANE SHEAR TEST | EXTREMELY IN | NDURATED SHARP | HAMMER BLOWS REQUIRED TO BREAK SAMPLE; BREAKS ACROSS GRAINS. | | |

PROJECT REFERENCE NO.

U-5018

SHEET NO.

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