



FOUNDATION
SCALE: 1/8"=1'-0"

FOUNDATION NOTES:

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS & DEPRESSIONS PRIOR TO COMMENCING WORK.
2. TREAT SOIL BELOW SLAB FOR TERMITES.
3. ALL WATER (RAIN, RISING WATER, ECT.) SHALL BE DIRECTED AWAY FROM THE SLAB DURING PREPARATION, PLACING, AND CURING OF SAME. POSITIVE DRAINAGE MUST BE MAINTAINED AT ALL TIMES.
4. SITE PREPARATION SHALL INCLUDE CLEARING TO REMOVE ORGANIC BEARING MATERIALS AND ANY RUBBLE OR DEBRIS THAT MAY BE PRESENT WITHIN THE AREA OF PLANNED CONSTRUCTION. SOILS CONTAINING OBJECTIONABLE MATERIALS SHALL NOT BE USED FOR BACKFILL. AFTER THE MITIGATION OPERATIONS ARE PERFORMED (AS DESCRIBED BELOW), THE ENTIRE AREA TO BE FILLED AND/OR OCCUPIED BY PAVING OR FOUNDATIONS SHALL BE PROOF-ROLLED WITH A LOADED TANDEN-AXLE DUMP TRUCK OR SIMILAR PNEUMATIC-TIRED EQUIPMENT WITH A MINIMUM WEIGHT OF 15 TONS AND A MAXIMUM WEIGHT OF 25 TONS TO OBSERVE FOR THE PRESENCE OF WEAK, YIELDING, OR PUMPING FOUNDATION SOILS. IF RUTTING OR PUMPING IS ENCOUNTERED, THE AREAS SHALL BE FURTHER MITIGATED.
THE IN-PLACE SOILS MUST BE STABLE PRIOR TO THE PLACEMENT OF FILL MATERIALS OR STRUCTURES OVER THEM. AT THE TIME OF THIS INVESTIGATION, THE NEAR-SURFACE CLAYS (CH) WERE DESCRIBED AS FIRM TO VERY STIFF IN SOME AREAS AND SOFT IN OTHERS. IN ORDER TO PROVIDE MORE UNIFORM SUPPORT, THE ENTIRE SITE SHALL BE MODIFIED WITH HYDRATED LIME MIXED AT 4% BY WEIGHT TO A MINIMUM DEPTH OF 12 INCHES. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A STABILIZER CAPABLE OF MIXING TO THE FULL DEPTH OF 12 INCHES. THE PURPOSE OF THE LIME IS TO REMOVE EXCESS MOISTURE FROM THE SOIL AND TO REDUCE THE PLASTICITY INDEX (PI) OF THE MODERATELY PLASTIC AREAS. THE PROCEDURE SHALL FOLLOW THE GUIDELINES PRESENTED FOR TYPE C MIXING IN SECTION 304 OF THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, 2000 EDITION (RED BOOK).
AFTER COMPLETION OF THE LIME MODIFICATION, THE SUBGRADE AREA SHALL BE CEMENT MODIFIED USING TYPE 1 PORTLAND CEMENT MIXED AT 10% BY WEIGHT TO A MINIMUM DEPTH OF 9 INCHES. IF THE BUILDING IS TO BE SUPPORTED ON SHALLOW FOUNDATIONS, THEN THE BUILDING AREA SHALL BE INCLUDED WITHIN THE MITIGATION, CEMENT MODIFICATION PROCEDURES SHALL FOLLOW SECTION 301 OF THE RED BOOK. THE EXPOSED SUBGRADE SURFACE SHALL BE GRADED TO SHED WATER TOWARD THE LOWER PERIMETER AREAS. NO TRAFFIC SHALL BE ALLOWED ON THE PREPARED SUBGRADE FOR AT LEAST 72 HOURS AFTER FINAL COMPACTION AND GRADING.
5. EXCAVATIONS - FOUNDATION EXCAVATIONS PLACED INTO THE UPPER 4 FEET IN THE FIRM TO VERY STIFF CLAYS (CH) SHALL BE CAPABLE OF STANDING ON NEAR VERTICAL SLOPES FOR SHORT-TERM CONDITIONS. THE SOFT AND VERY SOFT CLAYS (CH) MAY REQUIRE SLOPING OR BENCHING TO MAINTAIN STABILITY. GROUNDWATER SEEPAGE SHOULD BE MINOR. THE DEPTH TO GROUNDWATER SHALL BE EVALUATED BEFORE FOUNDATION EXCAVATIONS ARE PLACED. ALL EXCAVATIONS SHALL BE MADE AND KEPT IN COMPLIANCE WITH THE U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS (29 CFR PART 1926). THESE REGULATIONS REQUIRE THAT EXCAVATIONS GREATER THAN FIVE FEET IN DEPTH BE SLOPED, BENCHED, SHEETED, OR BRACED TO PROTECT EMPLOYEES WORKING IN OR NEAR THE EXCAVATION AGAINST THE RISK OF COLLAPSE.
6. FILL MATERIALS - FILL USED TO BRING THE SITE TO GRADE SHALL BE EITHER A LOW PLASTICITY CLAY (CL) OR A CLAYEY SAND (SC). THE SANDY MATERIALS ARE EASIER TO WORK DURING WET WEATHER, BUT THE LEAN CLAY IS LESS SUSCEPTIBLE TO EROSION, PROVIDES A BETTER LONG-TERM BARRIER TO SURFACE WATER PENETRATION AND IS GENERALLY MORE STABLE. ADDITIONALLY, THE LEAN CLAY MATERIALS WOULD PROVIDE MORE UNIFORM SUPPORT SYSTEM FOR SLABS ON GRADE. IMPORTED SOILS TO BE USED AS FILL SHALL BE FREE OF ROOTS, CONSTRUCTION DEBRIS, ORGANIC MATTER OR ANY OTHER TYPE DELETERIOUS MATTER. THE CLAYEY SOILS SHALL HAVE A LIQUID LIMIT OF LESS THAN 45 AND A PLASTICITY INDEX OF BETWEEN 8 AND 25.
7. FILL PLACEMENT/COMPACTION - THE FILL SHALL BE PLACED IN LOOSE LIFTS GRADED TO PROVIDE A UNIFORM THICKNESS NOT EXCEEDING NINE INCHES. THE SURFACE OF EACH PRECEDING, COMPACTED LIFT SHALL BE LIGHTLY SCARIFIED TO ENSURE ADEQUATE BONDING BETWEEN LIFTS. THE MOISTURE CONTENT DURING COMPACTION SHALL BE MAINTAINED WITHIN FIVE PERCENT OF ITS OPTIMUM AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D 699). THE MINIMUM COMPACTION REQUIREMENTS ARE A FUNCTION OF THE FUTURE USE OF THE AREA. THESE REQUIREMENTS ARE AS FOLLOWS: STRUCTURAL FILL (BENEATH FOOTINGS, BUILDING PADS, FLOOR SLABS, OR PARKING/DRIVEWAY AREAS) AT LEAST 95 PERCENT OF ITS MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D 699), AND GRADING FILL (OUTSIDE OF THE AREAS LISTED ABOVE) AT LEAST 90 PERCENT OF ITS MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D 699).
8. WHERE ADDITIONAL REINFORCEMENT WITH REBAR IS USED IN FOOTINGS, IT SHALL CONFORM TO ASTM A615. WOVEN WIRE FABRICS SHALL CONFORM TO ASTM A185. WWF AND BARS SHALL BE SECURELY SUPPORTED TO PREVENT BOTH VERTICAL AND HORIZONTAL MOVEMENT DURING PLACING OF CONCRETE.
9. CONCRETE DESIGN IS BASED UPON A CONCRETE MIX HAVING A MINIMUM OF 5.0 SACKS OF CEMENT PER CUBIC YARD AND A MAXIMUM OF 30 GALLONS OF WATER PER CUBIC YARD. SUCH A MIX SHOULD GIVE A MINIMUM COMPRESSION STRENGTH OF 3,000 P.S.I. AT 28 DAYS. CONCRETE DESIGN MIX SHALL BE IN ACCORDANCE WITH THE A.C.I. BUILDING CODE REQUIREMENTS (A.C.I. 318-77).

FOUNDATION PLAN
HIGHLAND INDUSTRIAL PARK
LOTS 8 & 9, SEC 24,68,&69
PLAQUEMINES PARISH LA

INSUL-TECH

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SCALE: AS NOTED
FILE:
JOB NO.: 1726
DATE: 11-15-07
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