

GENERAL STRUCTURAL AND CONSTRUCTION NOTES

THESE NOTES SUPPLEMENT THE SPECIFICATIONS WHICH SHALL BE REFERRED TO FOR ADDITIONAL REQUIREMENTS.

A. CODES AND STANDARDS:

- 1. THE FOLLOWING CODES AND STANDARDS, INCLUDING ALL SPECIFICATIONS REFERENCED WITHIN, SHALL APPLY TO THE DESIGN, CONSTRUCTION, QUALITY CONTROL AND SAFETY OF ALL WORK PERFORMED ON THE PROJECT. USE THE LATEST EDITIONS UNLESS NOTED OTHERWISE.
a. INTERNATIONAL BUILDING CODE (IBC), 2012.
b. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE/SEI 7-10), AMERICAN SOCIETY OF CIVIL ENGINEERS.
c. BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE. ACI 318-08, AMERICAN CONCRETE INSTITUTE.
d. STEEL CONSTRUCTION MANUAL, FOURTEENTH ADDITION, 2011 AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).
e. STANDARD SPECIFICATIONS FOR OPEN WEB STEEL JOISTS, K-SERIES, STEEL JOIST INSTITUTE.
f. DESIGN MANUAL FOR FLOOR DECKS AND ROOF DECKS, STEEL DECK INSTITUTE.

B. DESIGN DATA:

1. GRAVITY - SUPERIMPOSED DEAD LOADS

- COMPOSITE ROOF DECK: 51 PSF
- BAR JOISTS: 2 PSF
- JOISTS GIRDERS: 2 PSF
- REINFORCED MASONRY: 54 PSF
- PRECAST CONCRETE FAÇADE: 50 PSF
- BRICK: 39 PSF
- REINFORCED CONCRETE: 150 PCF
- MISC. EQUIPMENT (PER CATALOGS)
- MISC. DUCTS, LIGHTS, ETC: 5PSF
- GLASS / WINDOWS: 8PSF
- CATWALKS: 10PSF

2. GRAVITY - SUPERIMPOSED LIVE LOADS

Table with 2 columns: AREA, PSF. Rows include MECHANICAL ROOMS (150), ROOF LIVE LOAD (20 MINIMUM), CATWALK LIVE LOAD (40).

3. LATERAL LOADS - WIND

- a. MAIN WIND - FORCE RESISTING SYSTEM:
(1) BASIC WIND SPEED: 120 MPH EXPOSURE: B
(2) IMPORTANCE FACTOR (I): 1.15

Table with 2 columns: HEIGHT (FT), EFFECTIVE PRESSURE (PSF). Rows show pressure values for heights 0-15, 20, 25, 30, 40 feet.

- b. COMPONENTS & CLADDING - DESIGNED IN ACCORDANCE WITH ASCE/SEI 7-10.

C. FOUNDATIONS / GEOTECHNICAL REPORT:

- 1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED BY GATOR ENGINEERING & AQUIFER RESTORATION, INC. (G.E.A.R.), DATED AUGUST 2012; ENTITLED "GEOTECHNICAL REPORT, MALCOM RANDALL VA MEDICAL CENTER BUILDING". SEE THAT REPORT FOR ADDITIONAL REQUIREMENTS.

2. FOUNDATIONS PLACED ON UNDISTURBED SOIL OR COMPACTED STRUCTURAL FILL AT ELEVATIONS INDICATED HAVE BEEN DESIGNED FOR AN ALLOWABLE NET BEARING PRESSURE OF 2000 PSF.

D. MATERIALS:

- 1. THE FOLLOWING ASTM STANDARDS AND DESIGN STRESSES SHALL BE USED FOR THE APPROPRIATE MATERIALS USED IN THE CONSTRUCTION OF THIS PROJECT.
2. CEMENT: ASTM C150; TYPE I OR II
ASTM C150; TYPE II FOR CONCRETE IN CONTACT WITH EARTH
3. AGGREGATES: ASTM C33 (NORMALWEIGHT)
4. CONCRETE: ALL CONCRETE SHALL BE AIR-ENTRAINED 5% +/- 1-2% BY VOLUME. AIR-ENTRAINING ADMIXTURE TO COMPLY WITH ASTM C260.

Table with 4 columns: APPLICATION, FC @ 28 DAYS, WT (PCF), W/C (MAX). Rows include SLABS ON GRADE, REINFORCED SLABS, REINFORCED BEAMS, COLUMNS, WALLS, GRADE BEAMS, FOOTINGS.

5. REINFORCEMENT:

- a. DEFORMED REINFORCING BARS ASTM A615, GRADE 60
b. WELDED WIRE FABRIC (WWF) ASTM A185

6. STEEL:

- a. STRUCTURAL SHAPES & PLATES ASTM A992, GRADE 50
b. STRUCTURAL TUBING ASTM A500, Fy = 46 KSI
c. STRUCTURAL PIPE ASTM A53, GRADE B, Fy=36KSI - QR
ASTM A501, Fy=36KSI
d. HIGH STRENGTH BOLTS ASTM A325-N
e. ANCHOR BOLTS ASTM A307 & A325
f. WELDING ELECTRODES AWS A5.1 OR A5.5, E70XX
g. ADHESIVE ANCHORING SYSTEM ITW RAMSEY/REDHEAD EPCON SYSTEM, HILTI HVA SYSTEM OR APPROVED EQUAL
h. GALVANIZED METAL ROOF DECK ASTM A446

7. MASONRY:

- a. LOAD BEARING CONCRETE MASONRY UNITS HOLLOW - ASTM C90 TYPE I, GRADE N, MIN. COMPR. STRENGTH IN NET AREA = 2000 PSI
b. MORTAR ASTM C270 - TYPE M (MEDIUM GRADE)
c. GROUT ASTM C476 - MINIMUM COMPRESSIVE STRENGTH AT 7 DAYS = 2000 PSI
d. HORIZONTAL JOINT REINFORCING ASTM A82: 9 GAGE TRUSS - TYPE GALVANIZED
e. PRISM STRENGTH F'm = 1350 PSI PER ACI 530/ASCE 5 UNIT STRENGTH METHOD. INSPECTION REQUIRED

E. CONSTRUCTION

1. GENERAL:

- a. REPRODUCTION OF ANY PORTION OF THE STRUCTURAL CONTRACT DRAWINGS FOR RESUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED.
b. SHOP DRAWINGS SUBMITTED FOR STRUCTURAL REVIEW SHALL CONSIST OF TWO SETS OF PRINTS. ONLY ONE MARKED UP SET OF PRINTS WITH THE STRUCTURAL ENGINEER'S COMMENTS WILL BE RETURNED TO THE CONTRACTOR.
c. SUBMIT SHOP DRAWINGS AT LEAST 15 DAYS BEFORE DATE REVIEWED SUBMITTALS WILL BE NEEDED. SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S STAMP OF APPROVAL WHICH SHALL STATE CERTIFICATION THAT HE HAS VERIFIED ALL FIELD MEASUREMENTS, CONSTRUCTION CRITERIA, MATERIALS AND SIMILAR DATA AND HAS CHECKED EACH DRAWING FOR COMPLETENESS, COORDINATION AND COMPLIANCE WITH THE CONTRACT DOCUMENTS.

- d. THESE DRAWINGS REPRESENT THE COMPLETED PROJECT WHICH HAS BEEN DESIGNED FOR THE WEIGHTS OF THE MATERIALS INDICATED ON THE DRAWINGS AND FOR THE SUPERIMPOSED LOADS INDICATED IN THE DESIGN DATA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE PROPER DESIGN AND CONSTRUCTION OF FALSEWORK, FORMWORK, STAGINGS, BRACING, SHEETING AND SHORINGS, ETC.
e. EXISTING BUILDING INFORMATION SHOWN IS AS INDICATED ON EXISTING BUILDING DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL EXISTING BUILDING INFORMATION SHOWN (DIMENSIONS, ELEVATIONS, ETC.) AND NOTIFY THE RESIDENT ENGINEER OF ANY DISCREPANCIES. UNLESS INDICATED OTHERWISE, NEW SLABS ARE TO BE AT THE SAME ELEVATIONS AS ADJACENT EXISTING SLABS. FOUNDATION ELEVATIONS OR COLUMN LENGTHS SHALL BE ADJUSTED WITH THE APPROVAL OF THE RESIDENT ENGINEER TO ACHIEVE MATCHING SLAB ELEVATIONS.

- f. IMPLEMENTING JOB SITE SAFETY AND CONSTRUCTION PROCEDURES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
g. ALL COSTS OF INVESTIGATION AND/OR REDESIGN DUE TO CONTRACTOR MISLOCATION OF STRUCTURAL ELEMENTS OR OTHER LACK OF CONFORMANCE WITH THE PROJECT DOCUMENTS SHALL BE AT THE CONTRACTOR'S EXPENSE.
h. CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR SIZE AND LOCATION OF OPENING, LEVEL, CONCRETE HOUSEKEEPING PADS, CURBS, AND ELEVATIONS.

- i. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR DETAILED INFORMATION REGARDING FINISHES, FIREPROOFING, ETC.
j. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY AND DRYWALL NON-LOAD BEARING PARTITIONS. PROVIDE SUPPORT CONNECTIONS THAT ALLOW VERTICAL MOVEMENT AT THE HEADS OF ALL SUCH PARTITIONS. CONNECTIONS SHALL BE DESIGNED TO SUPPORT THE TOP OF THE WALLS EXTERNALLY FOR THE CODE-REQUIRED LATERAL LOADS. PROVIDE COMPRESSIBLE FIBERFAP AT TOP OF WALLS AS REQUIRED BY ARCHITECTURAL DRAWINGS.

- k. THE CONTRACTOR SHALL SUBMIT, FOR REVIEW, DRAWINGS AND CALCULATIONS FOR ALL OF THE FOLLOWING ASSEMBLIES. THE DESIGN OF THESE ASSEMBLIES IS THE RESPONSIBILITY OF THE CONTRACTOR'S ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION. ALL SUBMITTALS SHALL BEAR THIS ENGINEER'S SEAL & SIGNATURE. REVIEW SHALL BE FOR GENERAL CONFORMANCE WITH THE PROJECT PARAMETERS AS INDICATED ON THE DRAWINGS AND IN THE GENERAL NOTES.
(1) METAL STAIRS AND METAL RAILINGS: DESIGNS SHALL TAKE INTO ACCOUNT ALL VERTICAL AND LATERAL LOADS REQUIRED BY APPLICABLE BUILDING CODES. WHERE HEADERS OR OTHER TYPES OF STRUCTURAL MEMBERS HAVE BEEN DESIGNATED BY THE STRUCTURAL ENGINEER OF RECORD TO SUPPORT THE STAIRS, THE CONNECTIONS FROM THE STAIRS SHALL BE DESIGNED SO THAT NO ECCENTRIC OR TORSIONAL FORCES ARE INDUCED IN THESE STRUCTURAL MEMBERS. THE CONTRACTOR SHALL BE RESPONSIBLE

FOR FURNISHING AND INSTALLING EMBEDS AND HARDWARE AS REQUIRED BY THE STAIR DESIGN.

- 1. CONTRACTOR SHALL FURNISH DIMENSIONED SHOP DRAWINGS AT ALL LEVELS LOCATING FLOOR AND ROOF EDGES FOR REVIEW BY THE RESIDENT ENGINEER.
m. CONTRACTOR SHALL FURNISH DIMENSIONED COORDINATED SHOP DRAWINGS AT ALL LEVELS SHOWING THE LOCATIONS OF ALL SLEEVES AND OPENINGS REQUIRED BY ALL TRADES.

2. INSPECTION AND TESTING:

- a. THE OWNER WILL ENGAGE A TESTING AGENCY TO PROVIDE SERVICES AS INDICATED BELOW AND SUBMIT REPORTS.
b. CAST-IN-PLACE CONCRETE

- (1) THE AGENCY SHALL INSPECT THE FORMWORK AND REINFORCING STEEL PLACEMENT FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS AND SHOP DRAWINGS. THE AGENCY SHALL MONITOR ALL STRUCTURAL CONCRETE PLACEMENT FOR CONFORMANCE WITH APPLICABLE ACI REQUIREMENTS.
(2) SAMPLE FRESH CONCRETE IN ACCORDANCE WITH ASTM C172. MOLD TEST CYLINDERS IN ACCORDANCE WITH ASTM C31.
(3) THE FOLLOWING NUMBER OF TEST CYLINDERS SHALL BE CAST FOR EACH DAY'S POUR OR EACH 50 CUBIC YARDS, WHICHEVER RESULTS IN MORE TEST CYLINDERS:

Table with 3 columns: FOR ELEVATED SLAB (TO INCLUDE BEAMS, JOISTS, GIRDERS); FOR FOOTINGS AND OTHER STRUCTURAL CONCRETE; FOR WALLS, COLUMNS. Rows show test cylinder counts and curing requirements (e.g., 2 @ 7 DAYS, LAB CURED).

- (4) THE AGENCY WILL MAKE ADDITIONAL TESTS OF IN-PLACE CONCRETE AT THE CONTRACTOR'S EXPENSE WHEN TEST RESULTS INDICATE SPECIFIED CONCRETE STRENGTHS HAVE NOT BEEN ATTAINED, AS DIRECTED BY THE RESIDENT ENGINEER.
c. MASONRY:

- (1) THE AGENCY SHALL MONITOR THE PROPORTIONING, MIXING AND CONSISTENCY OF MORTAR AND GROUT; THE PLACEMENT OF MORTAR, GROUT AND MASONRY UNITS; AND THE PLACEMENT OF REINFORCING STEEL FOR COMPLIANCE WITH CONTRACT DOCUMENTS.
(2) COMPRESSION TEST MASONRY PRISMS FOR EACH TYPE OF WALL CONSTRUCTION IN ACCORDANCE WITH ASTM E447, METHOD B.
(3) THE CONTRACTOR SHALL PREPARE ONE SET OF PRISMS FOR TESTING AT 7 DAYS AND ONE SET FOR TESTING AT 28 DAYS. TESTS ARE TO BE CONDUCTED BY THE AGENCY FOR EACH 3000 SQUARE FEET OF WALL INSTALLED, BUT NOT LESS THAN 2 TESTS.

d. STRUCTURAL STEEL:

- (1) VISUALLY INSPECT ALL FILLET WELDS, BOLTED CONNECTIONS AND SHEAR STUDS
(2) THE AGENCY SHALL MONITOR THE INSTALLATION OF BOLTS REQUIRING PRE-TENSIONING FOR CONFORMANCE WITH SPECIFIC PRE-CALIBRATED TIGHTENING PROCEDURES.
(3) 10% OF ALL FIELD FILLET WELDS IN PRIMARY CONNECTIONS AND MULTI-PASS WELDS SHALL BE TESTED BY THE MAGNETIC PARTICLE METHOD.
(4) TEST ANY WELD FOR WHICH VISUAL EXAMINATION INDICATES AN UNUSUAL CONDITION AND/OR POOR QUALITY.
(5) WELDING INSPECTION AND TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH THE AWS CODE.

F. FOUNDATIONS & STRUCTURAL EARTHWORK:

1. GENERAL:

- a. SEE THE SPECIFICATIONS AND GEOTECHNICAL REPORT REQUIREMENTS FOR EXCAVATION AND PREPARATION OF THE FOUNDATION AND SLAB-ON-GRADE SUBGRADE, INCLUDING COMPACTION PROCEDURES. REQUIREMENTS CONTAINED IN THE GEOTECHNICAL REPORT ARE PART OF THIS WORK.
b. CONTRACTOR SHALL VERIFY ALL EXISTING FIELD CONDITIONS THAT MAY AFFECT THE INSTALLATION OF THE FOUNDATION SYSTEM AS SHOWN PRIOR TO STARTING WORK.

- c. EXISTING UTILITIES KNOWN TO BE IN THE CONSTRUCTION AREA HAVE BEEN INDICATED. THE SIZE, LOCATION AND DEPTH OF THE UTILITIES ARE NOT KNOWN EXACTLY AND MAY VARY SIGNIFICANTLY FROM THAT INDICATED. OTHER UNKNOWN UTILITIES NOT INDICATED MAY ALSO BE PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES, WHETHER INDICATED OR NOT, WHICH MAY BE AFFECTED BY THE CONSTRUCTION PROCESS.
d. ALL FOUNDATIONS SHALL BE PLACED ON UNDISTURBED SOIL OR COMPACTED STRUCTURAL FILL BEARING ELEVATIONS ARE ESTIMATED FROM SOIL BORING DATA INDICATED IN THE GEOTECHNICAL REPORT. DETERMINE THE BEARING ELEVATIONS AND FIELD VERIFICATION OF ALLOWABLE BEARING PRESSURE SHALL BE MADE BY AN EXPERIENCED AND QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO PLACING FOUNDATIONS.

- e. CONCRETE FOR FOUNDATIONS SHALL BE PLACED ON THE SAME DAY SUBGRADE APPROVAL IS GIVEN BY THE GEOTECHNICAL ENGINEER.
UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE RESIDENT ENGINEER'S APPROVAL.

- f. THE SLOPE BETWEEN THE LOWER EDGES OF ADJACENT FOOTINGS SHALL NOT EXCEED 30 DEGREES WITH THE HORIZONTAL, UNLESS INDICATED OTHERWISE IN THE GEOTECHNICAL REPORT.
g. NEW FOOTING BEARING ELEVATIONS ARE TO MATCH ADJACENT EXISTING FOOTING BEARING ELEVATIONS WHERE APPLICABLE UNLESS INDICATED OTHERWISE ON PLANS.

- i. PROVIDE CONTINUOUS WATERSTOP AT ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS IN PIT WALLS.
j. ALL SHORING, SHEETING, AND DEWATERING SHALL BE THE TOTAL RESPONSIBILITY OF THE CONTRACTOR. SHEETING AND SHORING SHALL BE DESIGNED BY THE CONTRACTOR'S ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION. ALL SUBMITTALS SHALL BEAR HIS SEAL AND SIGNATURE.

- k. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT ALL EXISTING STRUCTURES, CURBS, STREETS, ETC FROM DAMAGE BY CONSTRUCTION EQUIPMENT. THE CONTRACTOR SHALL NOT DISPOSE OF ANY LIQUIDS, SLURRY, SPOILS OR CHEMICALS ON THE SITE EXCEPT AS DIRECTED BY THE RESIDENT ENGINEER AND APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL RESOURCES OR OTHER AGENCIES HAVING JURISDICTION.
l. THE BUILDING IS DETAILED WITH A SLAB-ON-GRADE GROUND FLOOR WHICH MAY REQUIRE VARIOUS AMOUNTS OF EXCAVATION TO REMOVE ORGANIC SOILS. EXCAVATED AREAS SHALL BE REPLACED AND COMPACTED WITH SUITABLE MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER.

2. BACKFILL:

- a. ALL BACKFILL SHALL BE ACCOMPLISHED USING MATERIAL CONSISTING OF BANK RUN GRAVEL, CRUSHED STONE AND/OR MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER. WITH OPTIMUM MOISTURE CONTENT FOR COMPACTION AND SHALL BE FREE OF ANY DEBRIS.
b. NO BACKFILL MATERIAL SHALL BE PLACED AGAINST FOUNDATION WALLS UNTIL THE UPPER BRACING FLOORS ARE IN PLACE FOR AT LEAST 7 DAYS OR ADEQUATE BRACING IS INSTALLED.

- c. WHERE THE FINAL GRADE ELEVATIONS ARE APPROXIMATELY EQUAL ON BOTH SIDES OF A WALL, BACKFILL IN LIFTS TO MAINTAIN LEVEL ELEVATIONS WITHIN 12" ON BOTH SIDES AT ANY TIME.

3. STRUCTURAL FILL:

- a. REFER TO SPECIFICATIONS AND GEOTECHNICAL REPORT REQUIREMENTS FOR COMPACTED STRUCTURAL FILL. REQUIREMENTS CONTAINED IN THE GEOTECHNICAL REPORT ARE PART OF THIS WORK. IN CASE OF A DISCREPANCY BETWEEN THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND THE GEOTECHNICAL REPORT, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THE GEOTECHNICAL REPORT.

G. SPECIFIC FOUNDATION REQUIREMENTS OBTAINED IN GEOTECHNICAL REPORT:

- 1. THE FOUNDATIONS MAY BEAR IN EITHER THE COMPACTED STRUCTURAL FILL OR COMPACTED STRUCTURAL FILL. THE FOUNDATION SOILS, AFTER COMPACTION, SHALL EXHIBIT DENSITIES EQUIVALENT TO 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557), TO A DEPTH OF AT LEAST ONE FOOT BELOW THE FOUNDATION BEARING LEVELS.

- 2. PER THE GEOTECHNICAL REPORT, THE FOUNDATION SOILS ARE SUITABLE TO SUPPORT A WALL TO A DEPTH OF ABOUT 10 FEET. HOWEVER, THE SILTY SOILS ENCOUNTERED BEGINNING AT A DEPTH OF 4 TO 5 FEET BELOW EXISTING GRADE MAY BE DIFFICULT TO EXCAVATE AND COMPACT AT THE FOUNDATION BEARING ELEVATION. THEREFORE, ANY EXCAVATIONS EXCEEDING 4' IN DEPTH, THE SOILS BELOW SHALL BE FURTHER EXCAVATED TO A DEPTH OF 24" AND REPLACED W/ SUITABLE SAND BACKFILL.

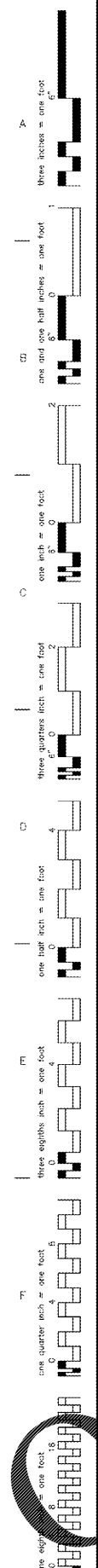
- 3. PRIOR TO CONSTRUCTION, THE LOCATION OF EXISTING UNDERGROUND UTILITY LINES WITHIN THE CONSTRUCTION AREA SHALL BE ESTABLISHED. PROVISIONS SHALL THEN BE MADE TO RELOCATE INTERFERING UTILITIES TO APPROPRIATE LOCATIONS.

- 4. THE "FOOTPRINT" OF THE PROPOSED BUILDING AREA, PLUS A MINIMUM ADDITIONAL MARGIN OF 5 FEET, AND OF THE HARDSCAPED AREAS (PARKING/DRIVEWAY) PLUS A MINIMUM ADDITIONAL MARGIN OF 3 FEET, SHALL BE STRIPPED OF ALL EXISTING PAVEMENT LAYERS (ASPHALT SURFACE AND LIMESTONE BASE) AS WELL AS SURFACE VEGETATION, STUMPS, DEBRIS, ORGANIC TOPSOIL, OR OTHER DELETERIOUS MATERIALS. DURING GRUBBING OPERATIONS, ROOTS WITH A DIAMETER GREATER THAN 0.5-INCH, STUMPS, OR SMALL ROOTS IN A CONCENTRATED STATE, SHALL BE GRUBBED AND COMPLETELY REMOVED.

- 5. BASED ON THE RESULTS OF THIS GEOTECHNICAL EXPLORATION, IT SHOULD BE ANTICIPATED THAT 13 TO 14 INCHES OF PAVEMENT MATERIAL AND 6 INCHES OF TOPSOIL OR SOILS CONTAINING SIGNIFICANT AMOUNTS OF ORGANIC MATERIALS MAY BE ENCOUNTERED ACROSS THE SITE. THE ACTUAL DEPTHS OF UNSUITABLE SOILS AND MATERIALS SHOULD BE DETERMINED BY A DESIGNATED REPRESENTATIVE USING VISUAL OBSERVATIONS AND JUDGMENT DURING EARTHWORK OPERATIONS. ANY TOPSOILS REMOVED FROM THE BUILDING AND PARKING/DRIVE AREAS CAN BE STOCKPILED AND USED SUBSEQUENTLY IN AREAS TO BE GRASSED.

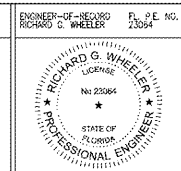
- 6. AFTER COMPLETING THE CLEARING AND STRIPPING OPERATIONS, THE EXPOSED SURFACE AREA SHALL BE COMPACTED WITH A VIBRATORY DRUM ROLLER HAVING A MINIMUM STATIC, AT-DRUM WEIGHT, ON THE ORDER OF 10 TONS. TYPICALLY, THE MATERIAL SHOULD EXHIBIT MOISTURE CONTENTS WITHIN +/- 2 PERCENT OF THE MODIFIED PROCTOR OPTIMUM MOISTURE CONTENT (ASTM D 1557) DURING THE COMPACTION OPERATIONS. COMPACTION SHALL CONTINUE UNTIL DENSITIES OF AT LEAST 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) HAVE BEEN ACHIEVED WITHIN THE UPPER 2 FEET OF THE COMPACTED NATURAL SOILS AT THE SITE.

- 7. SHOULD THE BEARING LEVEL SOILS EXPERIENCE PUMPING AND SOIL STRENGTH LOSS DURING THE COMPACTION OPERATIONS, COMPACTION WORK SHALL BE IMMEDIATELY TERMINATED, THE DISTURBED SOILS SHALL BE REMOVED AND BACKFILLED WITH DRY STRUCTURAL FILL SOILS, WHICH ARE THEN COMPACTED, OR THE EXCESS MOISTURE CONTENT WITHIN THE DISTURBED SOILS SHALL BE ALLOWED TO DISSIPATE BEFORE RECOMPACTION.



Order Plans

Table with 2 columns: CONSULTANTS, Date. Includes a signature line for the consultant.



ARCHITECT/ENGINEERS: AKEA INC. 3803 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 553-4437 COA: FL #26693 AKEA Project No. 083-14

Table with 2 columns: Drawing Title, Approved: Project Director. Drawing Title: GENERAL STRUCTURAL, CONSTRUCTION, AND GEOTECHNICAL NOTES.

Table with 2 columns: Project Title, Location. Project Title: REPLACE BOILERS - FCA D, ENERGY AT THE MALCOM RANDALL VAMC. Location: GAINESVILLE, FLORIDA.

Table with 2 columns: Project Number, Building Number, Drawing Number. Project Number: 573-14-600. Building Number: S001. Drawing Number: 17 OF 127.

Office of Construction and Facilities Management Department of Veterans Affairs

FINAL DESIGN APPROVED FOR CONSTRUCTION