SECTION 02230 - SITE CLEARING

1. <u>RELATED DOCUMENTS</u>

- A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.
- B. FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (FDOT SPECS), SECTION 110, LATEST EDITION. WORK SHALL COMPLY WITH REQUIREMENTS OF FDOT SPECS AS MODIFIED HEREIN. REFERENCES TO MEASUREMENT AND PAYMENT DO NOT APPLY.

2. <u>SUMMARY</u>

- A. THIS SECTION INCLUDES. BUT IS NOT LIMITED TO. THE FOLLOWING:
 - 1 PROTECTION OF EXISTING TREES INDICATED TO REMAIN.
 - 2. REMOVAL OF TREES AND OTHER VEGETATION.
 - 3. TOPSOIL STRIPPING.
 - 4. CLEARING AND GRUBBING.
 - 5. REMOVING ABOVE-GRADE IMPROVEMENTS.
 - REMOVING BELOW-GRADE IMPROVEMENTS.
- B. EXTENT OF SITE CLEARING SHALL BE AS INDICATED ON DEMOLITION PLAN UNLESS OTHERWISE NOTED OR INSTRUCTED. REMOVE ALL ITEMS THAT INTERFERE WITH NEW CONSTRUCTION
- C. OBTAIN AND PAY FOR ALL PERMITS THAT MAY BE REQUIRED BY ANY AHJ.

3. PROJECT CONDITIONS

- A <u>TRAFFIC</u>: CONDUCT SITE-CLEARING OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PRIOR APPROVAL.
- B. <u>PROTECTION OF EXISTING IMPROVEMENTS</u>: PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED TO REMAIN IN PLACE.
 - 1. PROTECT IMPROVEMENTS ON ADJOINING PROPERTIES AND ON COUNTY PROPERTY.
 - 2. RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION.
- C. PROTECTION AND PRUNING OF EXISTING TREES AND VEGETATION: PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY GUARDS TO PROTECT TREES AND VEGETATION TO BE LEFT STANDING. SUBMIT PLANS DETAILING THE TEMPORARY GUARDS TO THE ENGINEER. FOR ANY TREE DESIGNATED TO BE SAVED PRIOR TO CONSTRUCTION THAT IS DAMAGED BEYOND SALVAGE BY THE CONTRACTOR'S FORCES, A SUM OF \$150.00 PER INCH DIAMETER WILL BE PAID BY THE CONTRACTOR TO THE OWNER.
 - 1. WATER TREES AND OTHER VEGETATION TO REMAIN WITHIN LIMITS OF CONTRACT WORK AS REQUIRED TO MAINTAIN THEIR HEALTH DURING COURSE OF CONSTRUCTION OPERATIONS.

- 2. PROVIDE PROTECTION FOR ROOTS OVER 1-1/2 INCH IN DIAMETER THAT ARE CUT DURING CONSTRUCTION OPERATIONS. COAT CUT FACES WITH AN EMULSIFIED ASPHALT OR OTHER ACCEPTABLE COATING FORMULATED TO USE ON DAMAGED PLANT TISSUES. TEMPORARILY COVER EXPOSED ROOTS WITH WET BURLAP TO PREVENT ROOTS FROM DRYING OUT; COVER WITH EARTH AS SOON AS POSSIBLE.
- 3. REPAIR OR REPLACE TREES AND VEGETATION INDICATED TO REMAIN THAT ARE DAMAGED BY CONSTRUCTION OPERATIONS IN A MANNER ACCEPTABLE TO ENGINEER. EMPLOY A LICENSED ARBORIST, AS NEEDED, TO REPAIR DAMAGED TREES AND SHRUBS.
- 4. REPLACE TREES THAT CANNOT BE REPAIRED AND RESTORED TO FULL-GROWTH STATUS, AS DETERMINED BY ARBORIST.
- 5. TRIM ALL LIMBS OF TREES TO REMAIN TO A POINT 10'-0" FROM ANY NEW STRUCTURE OR AS DIRECTED BY THE ARCHITECT IN THE FIELD. THE 10'-0" POINT SHALL BE MEASURED IN A VERTICAL PLANE. CONSULT WITH THE ARCHITECT PRIOR TO PERFORMING ANY TREE TRIMMING."

4. EXISTING UTILITIES AND OTHER SERVICES

- A. LOCATIONS AND ELEVATIONS OF UTILITIES SHOWN ON PLANS ARE TO BE CONSIDERED APPROXIMATE ONLY. THE CONTRACTOR SHALL EMPLOY THE USE OF GROUND PENETRATING RADAR (GPR) EQUIPMENT BY A QUALIFIED COMPANY AND PERSONNEL TO LOCATE, IDENTIFY AND PROTECT EXISTING UNDERGROUND UTILIZES IN THE AREA OF WORK. ANY UTILITIES SPOTTED SHALL BE DRAWN ON THE SITE PLAN PROVIDED BY THE ARCHITECT/ENGINEER AND SUBMITTED AS PART OF THE "AS-BUILT" DRAWINGS. COST OF GPR LOCATES SHALL BE INCLUDED IN THE CONTRACTORS BASE BID. NOTIFY UTILITY AND ARCHITECT/ENGINEER OF CONFLICTS BETWEEN EXISTING AND PROPOSED FACILITIES.
- B. COORDINATE RELOCATION OF EXISTING PUBLIC UTILITIES REQUIRED ON NEW CONSTRUCTION. UNLESS OTHERWISE NOTED RELOCATION COSTS SHALL BE AT EXPENSE OF UTILITY.

5. MONUMENTS

- A. PROVIDE PROTECTION FOR ALL PUBLIC LAND CORNERS AND MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION.
- B. COORDINATE REFERENCE BY A FLORIDA REGISTERED LAND SURVEYOR OF CORNERS AND MONUMENTS IN CONFLICT WITH WORK AND IN DANGER OF BEING COVERED, DAMAGED OR DESTROYED.
- C. RESTORE DISTURBED CORNERS AND MONUMENTS TO THEIR ORIGINAL CONDITION UPON COMPLETION OF THE WORK.

6. SITE CLEARING

- A. <u>GENERAL</u>: REMOVE TREES, SHRUBS, GRASS, AND OTHER VEGETATION, IMPROVEMENTS, OR OBSTRUCTIONS, AS REQUIRED, TO PERMIT INSTALLATION OF NEW CONSTRUCTION. REMOVE SIMILAR ITEMS ELSEWHERE ON SITE OR PREMISES AS SPECIFICALLY INDICATED. REMOVAL INCLUDES DIGGING OUT AND OFF-SITE DISPOSAL OF STUMPS AND ROOTS.
 - 1. CAREFULLY AND CLEANLY CUT MINOR ROOTS AND BRANCHES OF TREES INDICATED TO REMAIN IN A CLEAN AND CAREFUL MANNER WHERE SUCH ROOTS AND BRANCHES OBSTRUCT INSTALLATION OF NEW CONSTRUCTION.

- B. <u>TOPSOIL</u>: TOPSOIL IS DEFINED AS SURFACE SOIL FOUND NORMALLY TO A DEPTH OF AT LEAST 4 INCHES. SATISFACTORY TOPSOIL IS REASONABLY FREE OF SUBSOIL, CLAY LUMPS, STONES, AND OTHER OBJECTS OVER 2 INCHES IN DIAMETER, AND WITHOUT WEEDS, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
 - 1. STRIP TOPSOIL TO WHATEVER DEPTHS ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER OBJECTIONABLE MATERIAL. REMOVE HEAVY GROWTHS OF GRASS FROM AREAS BEFORE STRIPPING.
 - a. WHERE EXISTING TREES ARE INDICATED TO REMAIN, LEAVE EXISTING TOPSOIL IN PLACE WITHIN DRIP LINES TO PREVENT DAMAGE TO ROOT SYSTEM.
 - 2. STOCKPILE TOPSOIL AND OTHER REUSABLE SOILS IN STORAGE PILES IN AREAS INDICATED OR DIRECTED. CONSTRUCT STORAGE PILES TO PROVIDE FREE DRAINAGE OF SURFACE WATER. COVER STORAGE PILES, IF REOUIRED, TO PREVENT WIND EROSION.
- C. <u>CLEARING AND GRUBBING</u>: CLEAR SITE OF TREES, SHRUBS, AND OTHER VEGETATION. EXCEPT FOR THOSE INDICATED TO BE LEFT STANDING.
 - 1. COMPLETELY REMOVE STUMPS, ROOTS, AND OTHER DEBRIS PROTRUDING THROUGH GROUND SURFACE.
 - 2. USE ONLY HAND METHODS FOR GRUBBING INSIDE DRIP LINE OF TREES INDICATED TO REMAIN.
 - 3. FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL, UNLESS FURTHER EXCAVATION OR EARTHWORK IS INDICATED.
 - a. PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING 6 INCHES LOOSE DEPTH, AND THOROUGHLY COMPACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.
- D. <u>REMOVAL OF IMPROVEMENTS</u>: REMOVE EXISTING ABOVE-GRADE AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION AND OTHER WORK AS INDICATED.
 - 1. THERE SHALL BE NO STOCKPILING OF CONSTRUCTION DEBRIS EXCEPT IN A LOCKED, FENCED STORAGE AREA APPROVED BY THE OWNER. DEBRIS IN STORAGE AREA MUST BE REMOVED ON A WEEKLY BASIS.
- 7. DISPOSAL OF WASTE MATERIALS
 - A. <u>BURNING</u>: BURNING IS NOT PERMITTED ON OWNER'S PROPERTY. REQUESTS TO BURN WILL BE CONSIDERED ON A CASE BY CASE BASIS. IF APPROVED, CONTRACTOR IS TO ACQUIRE PERMITS AND PROVIDE COPY TO THE ENGINEER.
 - B. <u>REMOVAL FROM OWNER'S PROPERTY</u>: REMOVE WASTE MATERIALS AND UNSUITABLE OR EXCESS TOPSOIL FROM OWNER'S PROPERTY, AND DISPOSE OF OFF SITE IN A LEGAL MANNER.

END OF SECTION