Appendix K
Significant Tree Policy (EDSM I.1.1.21)
Significant Tree Report
Tree Protection Technical Specifications
Mechanical Root Pruning Technical Specifications
Tree Protection Detail LD-02
1. PURPOSE:
The purpose of this directive is to establish a general policy governing the treatment of significant trees by the Department within the highway right-of-way, zone of construction or operational influence.

2. DEFINITION:
For the purposes of this policy, a significant tree is a Live Oak, Red Oak, White Oak, Magnolia or Cypress that is considered aesthetically important, 18” or greater in diameter at breast height (4’-6” above the ground), and having a form that separates it from the surrounding vegetation or is considered historic. A historic tree is a tree that stands at a place where an event of historic significance occurred that had local, regional, or national importance. A tree may also be considered historic if it has taken on a legendary stature to the community; mentioned in literature or documents of historic value; considered unusual due to size, age or has landmark status. Significant trees must be in good health and not in a declining condition.

3. DESIGN CONSIDERATIONS:
The Landscape Architectural staff and District Roadside Development Coordinators shall be consulted during the scoping and/or environmental phase. The Landscape Architectural staff shall identify significant trees during the scoping and/or environmental phase. The Design Section shall indicate significant trees on the plans and implement a context sensitive design (i.e. preservation, specified limited impact, or special treatment) to accommodate these trees where practical.

4. CONSTRUCTION AND MAINTENANCE CONSIDERATIONS:
The Project Engineer or the Maintenance Engineer shall ensure that the contractor's or maintenance staff’s operations, respectively, are sensitive to the treatment indicated in the plans or the situation. Construction and maintenance considerations may include but are not limited to temporary fencing to protect trees from construction equipment, avoidance of root zones, care of overhanging branches, safety issues where the tree must be removed, installing guard rail etc. Significant tree issues arising on construction and/or maintenance projects shall be managed by the District Roadside Development Coordinators, who shall seek the guidance of the Landscape Architectural staff when questions arise.

5. CONSIDERATIONS FOR UTILITY COMPANIES:
Utility operators shall not prune trees identified as significant by the Department. Alternate construction methods such as changing the alignment will be required to avoid impacting the significant tree(s). Removal of significant trees may be necessary when electrical utility lines cannot be aligned to avoid removal. Consideration will be given to boring to place utilities under only significant Live Oaks or trees of historical significance where all other means of avoiding the trees have failed.

6. OTHER ISSUANCES AFFECTED:
This directive supersedes EDSM I.1.1.21 issued 05/31/2002.

8. EFFECTIVE DATE:
This policy becomes effective upon receipt.
**Significant Tree Report**

General notes concerning the treatment of significant trees (trees to remain): The Landscape Architectural staff and District Roadside Development Coordinators shall be consulted during the design phase. The Design Section shall indicate significant trees on the plans and implement a context sensitive design (i.e. preservation, specified limited impact, or special treatment) to accommodate these trees where practical. Any tree protection fencing is to be installed on LDOTD property only. Significant trees outside LDOTD ROW but with overhanging branches within LDOTD ROW lower than 16’ shall be trimmed according to the General Construction Requirements as described within section 201 Clearing and Grubbing. If there is not a pay item included for Clearing and Grubbing in the project, a NS-ENH item for tree trimming must be added. When cutting or trimming a large tree or a group of trees within the LDOTD ROW or not, the appropriate LDOTD personnel must inform the stakeholders and local government regarding those actions. Sufficient time must be given to those involved to respond or voice any concerns.
ITEM NS-ENH-20050, TREE PROTECTION: This item consists of supplying, installing, maintaining, and removal of tree protection fencing.

Materials: Materials for tree protection fencing shall conform to Section 1010 of the Standard Specifications.

Installation, Maintenance and Removal: Tree protection fencing shall be installed as per the details in the plans and at the locations shown in the plans or as directed by the engineer. The tree protection fencing shall be installed prior to the commencement of construction activities in accordance with the tree protection detail LD-02, or as far from the trunk of the tree as possible within the DOTD right-of-way as determined by the project engineer. The contractor shall be responsible for maintaining the fencing through the duration of the project. At the completion of construction activities, the tree protection fencing shall be removed and disposed of beyond the DOTD right of way.

Payment: Payment will be made for supplying, installing, maintenance and removal of the tree protection fencing at the contract unit price for each location.

Payment will be made under:
ITEM NS-ENH-20050, Tree Protection, per each.

ITEM NS-EHN-xxxxx, MECHANICAL ROOT PRUNING:

Description: This item consists of trimming the roots of trees that are to be saved in areas where excavation takes place for such purposes as grade changes, utilities installation or foundation work.

Construction Requirements: All work shall be performed or supervised by an ISA Certified Arborist with a minimum of 5 years experience in arboriculture to clean, cut and trim roots. Using a mechanical trenching device, the Arborist will first excavate a trench, then follow up by hand-pruning any exposed roots greater than 1” in diameter in order to make clean cuts allowing for the callusing of necessary wounds and healthy re-growth of lost root systems. The trench is then backfilled using the excavated material and compacted.

Root pruning closer than three trunk diameters from the tree base is not recommended due to increased injury/infection at pruning site and to increased danger of treefall from impaired anchorage. Consult the Project Engineer for location and length of trench. Bidders must submit documentation proving that the tree trimmer/tree climber has a minimum of three (3) years full-time experience in tree removal and pruning operations, along public roads, and near energized wires. The Department reserves the right to request a new crew to be assigned to perform the work if needed. All work shall be performed in compliance with current A.N.S.I. Z-133 and International Society of Arboriculture (ISA) standards which are incorporated herein by reference. In addition, the Arborist(s) shall maintain an arborist license and insurances in the State of Louisiana during the course of the project in accordance with standards set forth by the Horticulture Commission of Louisiana which are incorporated herein by reference. The Department reserves the right to require additional insurances Arborist Services shall also include, but is not limited to; Supervision, Consultation and Recommendations to the Project Engineer, for arboricultural work associated with maintaining the health of the surrounding trees during the course of the project, at no direct pay.

Payment: Payment will be made for trenching, hand pruning, and backfilling at the contract unit price for each location.

Payment will be made under:
Item ITEM NS-EHN-xxxxx, Mechanical Root Pruning, per each.
CUTTING GRADE AROUND EXISTING TREE

CONCRETE SIDEWALK
GEOTEXTILE FABRIC
NO. 57 CRUSHED LIMESTONE WITH NO FINES
BACKFILL SOIL
EXISTING GRADE

CONSTRUCTION / BARRIER FENCING TO BE MIN. 4'
HT. AND ANCHORED WITH 'F' OR 'T' STYLE STEEL
FENCE POSTS. THE BARRIERS SHALL BE PLACED
TO ENCOMPASS THE CRITICAL PROTECTION ZONE
(CPZ) OF THE TREE. ALL LABOR, MATERIALS, AND
ACCIDENTAL SHAL BE INCLUDED IN THE COST
OF CLEARING AND GRUBBING, SECTION 2011

SIDEWALK WITHIN CRITICAL PROTECTION ZONE

TREE ROOTS ABOVE AND BELOW GRADE

ENLARGED AREA

CONSTRUCTION FENCING FOR TREE PROTECTION

A - DIAMETER IN INCHES 4'-6" ABOVE GRADE OF
PROTECTED TREE
B - CRITICAL PROTECTION ZONE (CPZ)
THAT AREA SURROUNDING A TREE WITHIN
A CIRCLE INScribed BY A RADIUS OF ONE FOOT
FOR EACH INCH OF THE TREE'S DIAMETER
MEASURED AT 4'-6" ABOVE GRADE
C - MIN. 75% OF B AREA

NOTE:
GREAT CARE MUST BE TAKEN NOT TO
COMPACT, CUT, OR FILL THE EARTH
WITHIN THE CROWN AREA OF EXISTING
TREES. MOST TREE ROOTS ARE LOCATED
IN THE TOP 6 TO 18 INCHES OF THE SOIL
AND OFTEN SPREAD FARTHER THAN THE
DRIP LINE OF THE TREE. COMPACTING
THE EARTH UNDER A TREE CAN LEAD TO REDUCE THE MOVEMENT OF WATER AND
AIR THROUGH THE SOIL. TO AVOID
COMPACTING THE EARTH, DO NOT OPERATE
EQUIPMENT OR STORE MATERIALS WITHIN
THE DIAMETER OF THE TREE CROWN (DRIPLINE).

TREE PROTECTION DETAILS FOR
CONSTRUCTION AROUND EXISTING TREES