

GENERAL TREE PROTECTION NOTES:

1. Protect and ensure the continued good health of existing trees identified on the plans or directed by the Engineer. Protective measures include providing, installing, maintaining and removing protective fences, bound wood planking, compost, berm pruning, boring, and watering.
2. Install tree protection before any heavy equipment arrives on the site and remains in place for the duration of the project.

PROTECTIVE FENCE

1. Critical Root Zone (CRZ) = 1 foot radius per 1 caliper inch of trunk diameter.
2. Place protective fence at the edge of the critical root zone of trees to be protected. Use 4-foot high orange plastic mesh or approved equivalent supported on steel T-posts. Use steel T-posts minimum of 6 feet long, spaced at intervals sufficient to keep fence pulled tight. Stretch smooth galvanized wire from post to post across the top of fence and draw tight. Attach plastic mesh to posts and top wire with aluminum tie wire or nylon ties.
3. No excavation, grading, filling, soil compaction, parking, or equipment storage is allowed within the fenced area.
4. When a construction zone overlaps the root zone due to lack of space, place fence within 2 feet of construction zone.
5. Install protective compost filter berm at base of protective fence as shown in detail and described in these notes under "Root Zone Protection". Compost filter berm functions as a protective filter from runoff associated with construction activities such as: concrete wash, erosion, fill, chemicals, cement and lime work and other activities.

VEGETATIVE WATERING FOR TREE PROTECTION

1. Water trees at a rate of 30 gallons per week for every week during construction activities. Watering is paid for separately under Item 168-6001 Vegetative Watering.

TRUNK PROTECTION

1. Where protective fence is located closer than 6 feet from a tree trunk from any direction, protect the tree trunk with bound wood planking. Wood planks may be construction grade lumber a minimum of 1 inch by 6 inch nominal. Band planks together with rope, band, or strap of sufficient gauge and quality to keep protective planking in place around tree trunk for the duration of the project. Install wood planks of sufficient length to protect the trunk to a height of 10 feet, or the height of the lowest major branching, whichever is less. Do not use nails, screws or other damaging attachment methods.

ROOT ZONE PROTECTION

1. Cover entire area of critical root zone with 4" depth of erosion control compost. Erosion control compost is paid for separately under Item 161-6009 Erosion Control Compost. See standard specification for compost requirements.
2. Install protective compost filter berm at base of protective fence along entire edge of critical root zone as shown on detail this sheet. Dimensions of compost filter berm are 1 foot tall, and 2 feet wide at base. Use erosion control compost for berm paid for under Item 161-6009 Erosion Control Compost. Maintain berm throughout project.
3. Vehicular traffic, stockpiling or storage of materials, parking of equipment and refueling equipment is prohibited in protected areas.

BORING, TRENCHING, GRADING, AND PRUNING

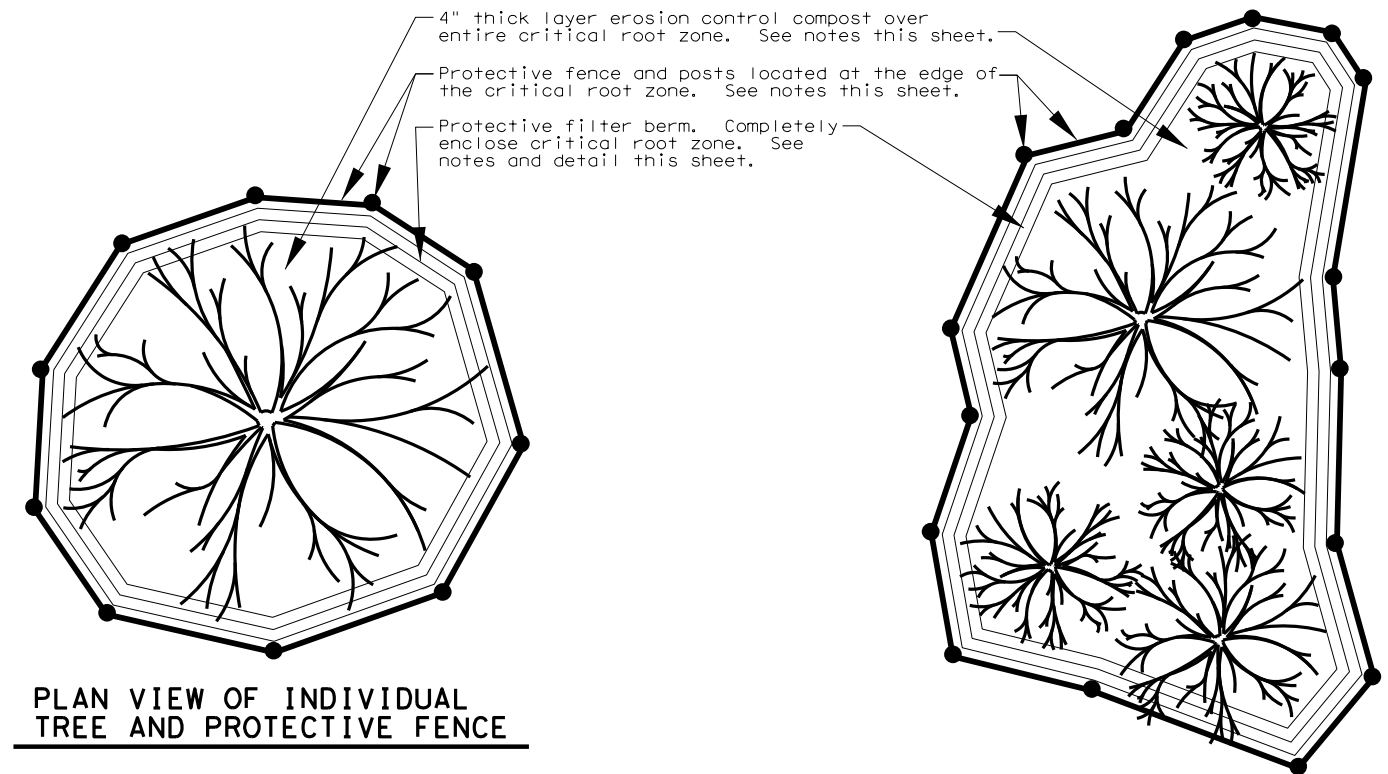
1. Where shown in plans, underground utilities crossing under protected areas will be bored beneath critical root zones. Avoid boring directly beneath root flare. Bore depth is 4 feet below existing grade.
2. No trenching, excavating, filling, or compaction is allowed within the critical root zone except as specifically identified in the plans and approved by the Engineer.
3. When existing grade must be cut within the critical root zone, contact the Engineer prior to beginning work. Before grading or excavation work, saw cut roots to the depth of the proposed disturbance along the edge of the proposed disturbance before excavation is begun.
4. Prune flush with soil any roots exposed by construction. Backfill root areas with good quality topsoil as soon as possible. If exposed root areas are not to be backfilled within two days, then cover with a minimum of six inches of erosion control compost. Erosion compost is paid for separately under Item 161-6009 Erosion Control Compost.
5. When grading within the critical root zone, use hand or small equipment and alter grade no more than two inches. No soil disturbance is allowed on the root flare under any circumstances.
6. Perform any pruning to provide clearance for structures, vehicular traffic, and construction equipment before construction damage might occur. Prune any limb damage within two hours of occurrence and according with ANSI A300-1995 standard.

MAINTENANCE OF TREE PROTECTION MATERIALS

1. Maintain all tree protection materials throughout entire length of project. Repair damaged or affected tree protection materials. Additional erosion control compost may be required during the project and will be paid for separately.

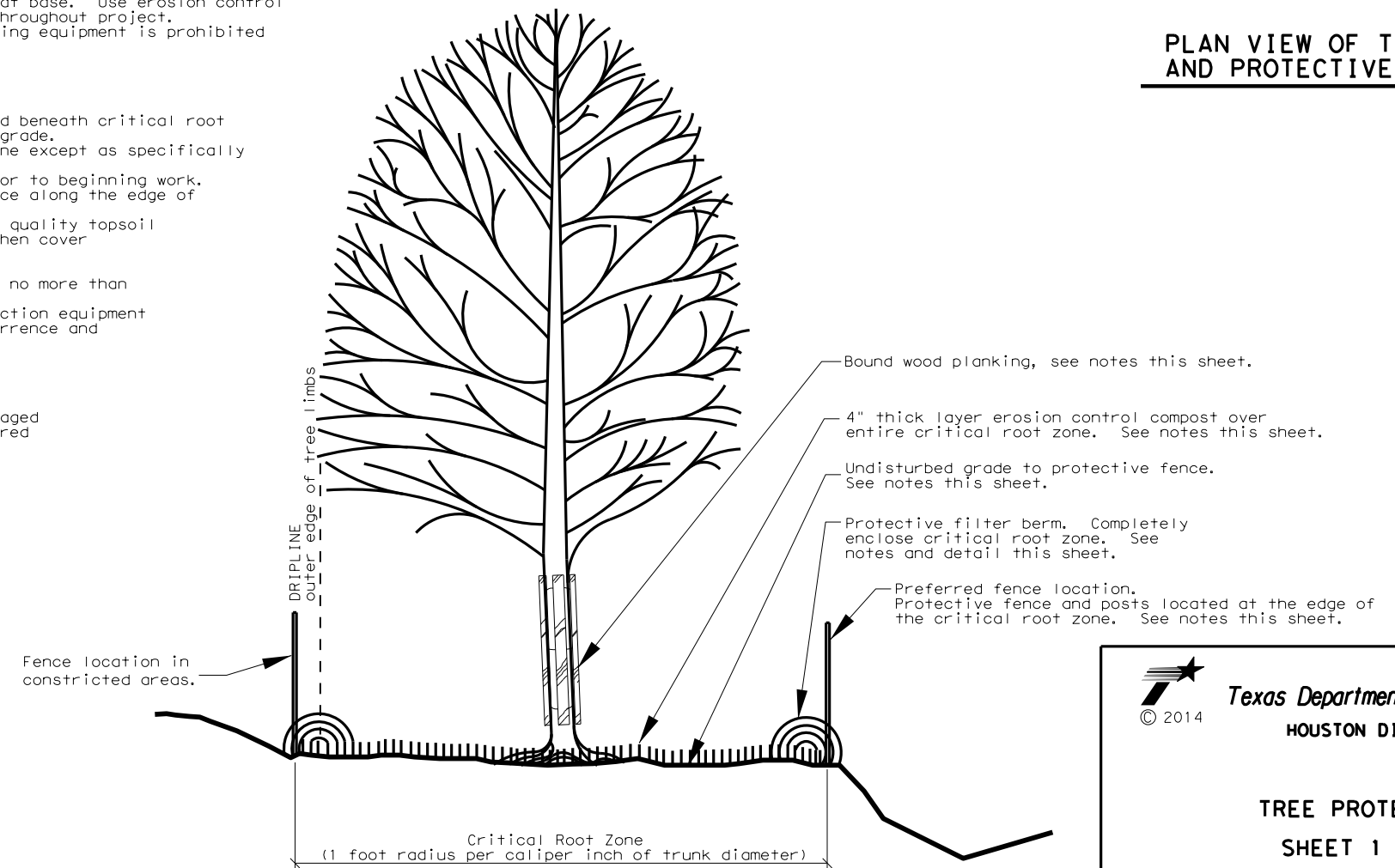
REMOVAL OF TREE PROTECTION MATERIALS

1. Remove and dispose of all protective fencing and trunk protection at end of project.



PLAN VIEW OF INDIVIDUAL TREE AND PROTECTIVE FENCE

PLAN VIEW OF TREE GROUP AND PROTECTIVE FENCE



TYPICAL TREE PROTECTION

REQUIRED ITEMS:

- Item 1004-6001 Tree Protection EA
- Item 1004-6002 Tree Protection AC
- Item 161-6009 Erosion Control Compost CY
- Item 168-6001 Vegetative Watering MG



Texas Department of Transportation
HOUSTON DISTRICT

TREE PROTECTION
SHEET 1 OF 1

Details not to scale

FILE:	FED 014	STATE	PROJECT NUMBER	SHEET
	6	TEXAS		
REVISED:	DIST	COUNTY	CONTROL	SECT
FEB 2015 FOR 2014 SPECS	12			JOB
				HIGHWAY