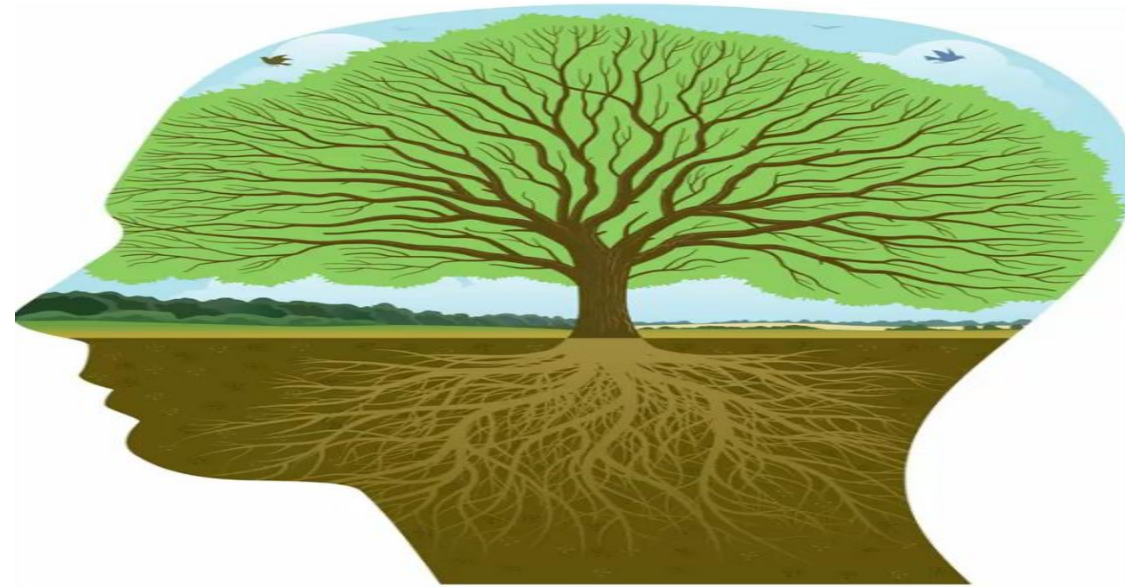


GRU Vegetation Management



Vegetation Management in an Urban Forest

Vegetation Management

- Safety – Trees and powerlines do not mix
 - Public safety
 - Employee safety
 - Electrical System Reliability



Contract Renewal Request

- GRU/Asplundh has a relationship spanning 20+ years.
- Asplundh was ~10% lower than closest competitor in 2016.
- Overhead costs of contract is fixed for life of contract including extensions.
- Asplundh employee pay is effected only by the City of Gainesville Living Wage Ordinance.
- Equipment costs are affected by quarterly fuel adjustments. In 2013 the average fuel costs were \$1.20/gal higher than current. This helps keep GRU costs lower.

Budget

- FY2011-2014 = \$1.7M
- FY2015-2016 = \$1.9M
 - This increase has paid for the decrease in outages related to vegetation by an average of 30% the last two years.
- FY2017 request at \$2.1M
 - Increased costs as more work has been put on O&M versus Capital, expected increases due to living wage, and continuation of targeting trouble areas to improve reliability.

Controlling Contract

- General Conditions 17.3 – GRU may terminate contract as a result of Contractor failure to meet GRU requirements pertaining to productivity, quality of work, etc.
- General Condition 18.2 – Contractor agrees to remedy promptly and without cost to GRU any defective materials or workmanship.
- Technical Specs 4.2 – Gives GRU right of review and approval for new hires, advancement, and modification of contract employees.
- Technical Specs 11 – Damage claims will be addressed within 24 hours and resolved within 5 working days.

GRU's Philosophy & Outage History

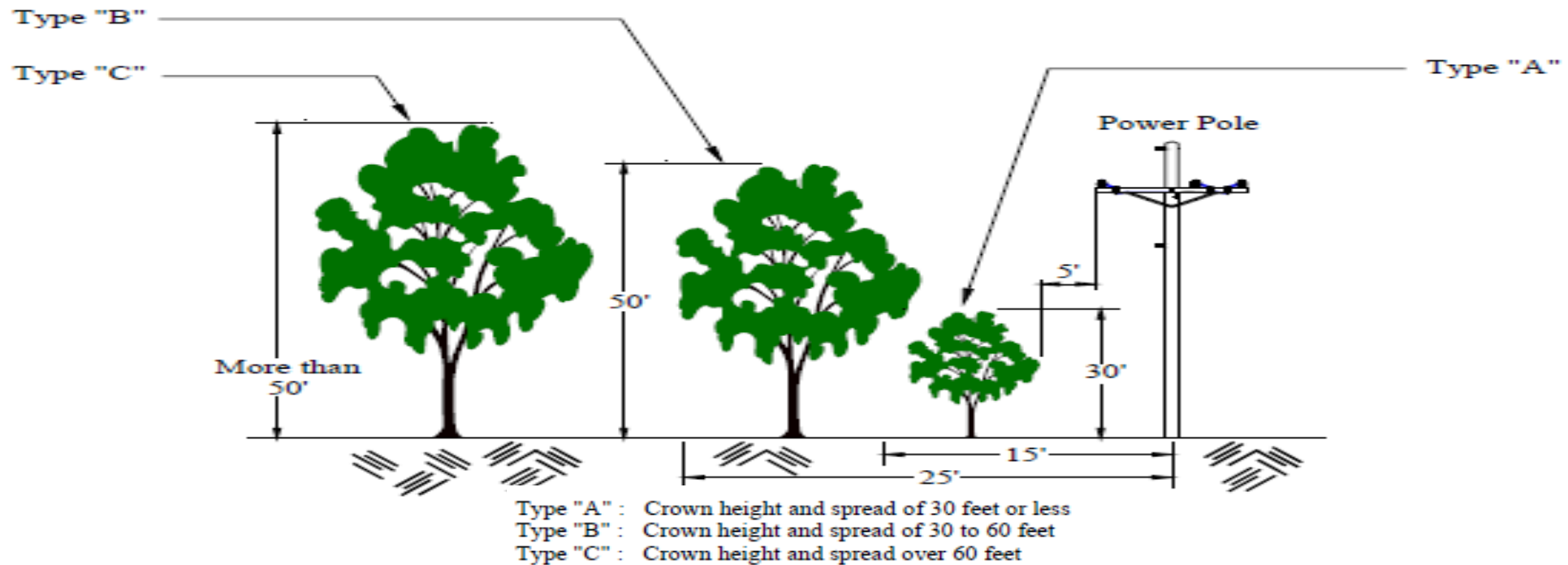
- GRU's philosophy is to trim what needs to be trimmed to maintain clearance for 3 years while also using proper techniques and methods to protect the health and aesthetics of the tree being trimmed.
- The number of outages began climbing in April 2013 and peaked in November 2014.
- Program put in place to target problem areas. (Focused Improvement)
- Currently our outages are lower than any period since January 2011.

Vegetation Clearances

TYPICAL OVERHEAD UTILITY CLEARANCE DETAIL

NOTE:

- 1) To allow room for construction and maintenance the customer shall grant GRU Energy Delivery Division a utility easement for the purpose of rendering safe and reliable service. Please do not place trees, shrubs or other obstructions in this area.



Excerpt from Energy Delivery Service Guide available online at GRU.com

Controlling Contract Employees

- Whatever type of complaint, GRU or contracted employees, are required to treat our customers with the utmost respect and courtesy at all times. Anything less **will** result in disciplinary actions.
- Technical Spec 12 – Inspection and Performance
 - Allows for any and all work to be inspected for workmanship and productivity.
 - Problems that are found will be addressed with the contractors General Foreman.
 - If problem persists or becomes recurring it will taken to the next higher level and all improvement plans will be documented.
 - If problem persists GRU Vegetation and Purchasing personnel may consider other options such as, withholding payment and/or termination of the contract.

Improvements

- Increase GRU personnel to provide guidance and oversight to contractors.
- Improve customer education. GRU Website & Bill stuffers
- Evaluate our vegetation management programs and carry on with the **Continuous Improvement Philosophy**.

Questions?