URBAN FOREST PRUNING MANAGEMENT

September 19, 2023

City Council

Why we prune trees

- To reduce the risk, improve or maintain health, develop desired structure and appearance, prevent interference with built environment and other ***specific objectives.***

Pruning Systems

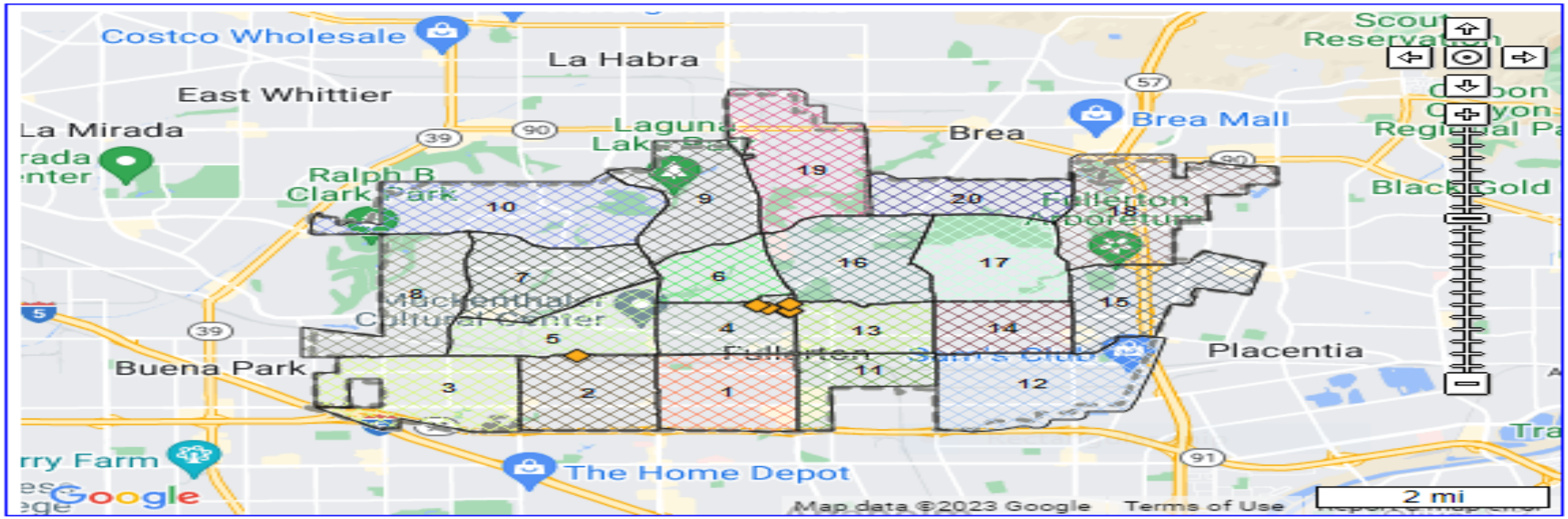
- Natural: informal style used to retain and promote the characteristic form of the species or cultivar in its current location, often with ***essential variations needed to avoid conflicts.***

Topiary

Natural

Natural Pruning Systems

- Grid Pruning (up to 25%)
- Large Scale Pruning (Risk Mitigation Pruning) (More than 25%)
- ***All Pruning systems performed in the city are within ISA Standards, ANSI A300 and Best Management Practices***



Grid Pruning

Objective: Remove diseased, decayed, dead and broken branches. Provide sidewalk and road clearance.

- Up to 25% of live crown
- Minimal stress
- Every 4 years
- ***All species except for Chinese Elm***
- ***In compliance with ISA, ANSI A300 and BMP***

Grid Pruning

Before

After

Grid Pruning

**WCA have Certified Tree Workers/Arborists performing trimming/removals at all times.*

Grid Pruning

Grid Pruning

Chinese Elm

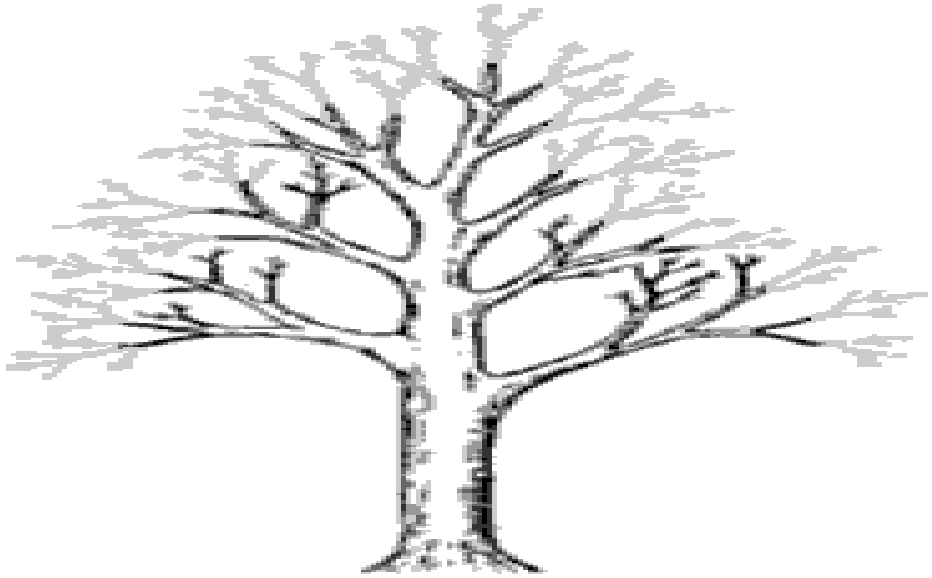
Species Profile:

- Branch strength: Medium Weak/Medium
- Prone to Sudden Limb Failure (Summer)
- Rapid crown regeneration
- ***Architecture: Twisted, irregular***
- ***Emergency Call Outs for FY 2016/2017: 169***

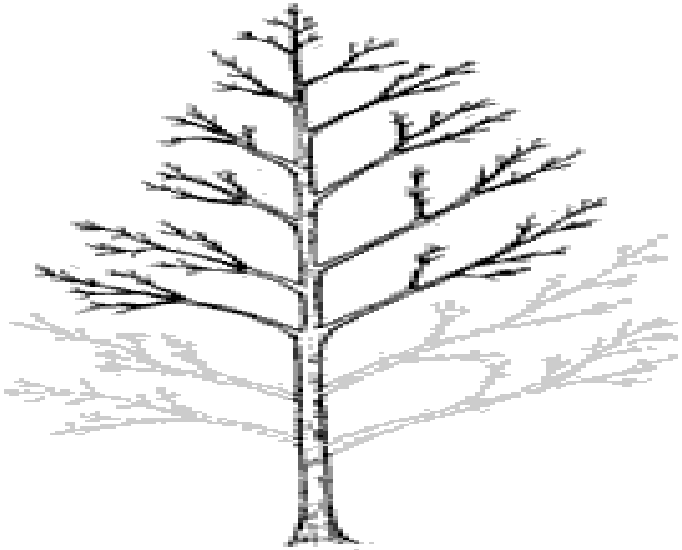
Risk Mitigation Pruning (Elm Trees)

Reduce the likelihood of whole tree and/or branch failure.

- Crown Reduction: removal of the larger of two or more branches, stems or codominant stems to a live lateral branch or stem, typically one-third the diameter of the stem being removed. Also, decreases wind load, leverage arm and total crown weight. (***In compliance with ISA, ANSI A300 and BMP***)



Crown Reduction



Crown Lifting

Risk Mitigation Pruning (Elm Trees)

BEFORE

CROWN REDUCTION

AFTER

Elm Architecture

Due to its unique architecture, regardless of the technique used, it is hard to preserve a defined shape, while effectively reducing crown for Risk Mitigation.

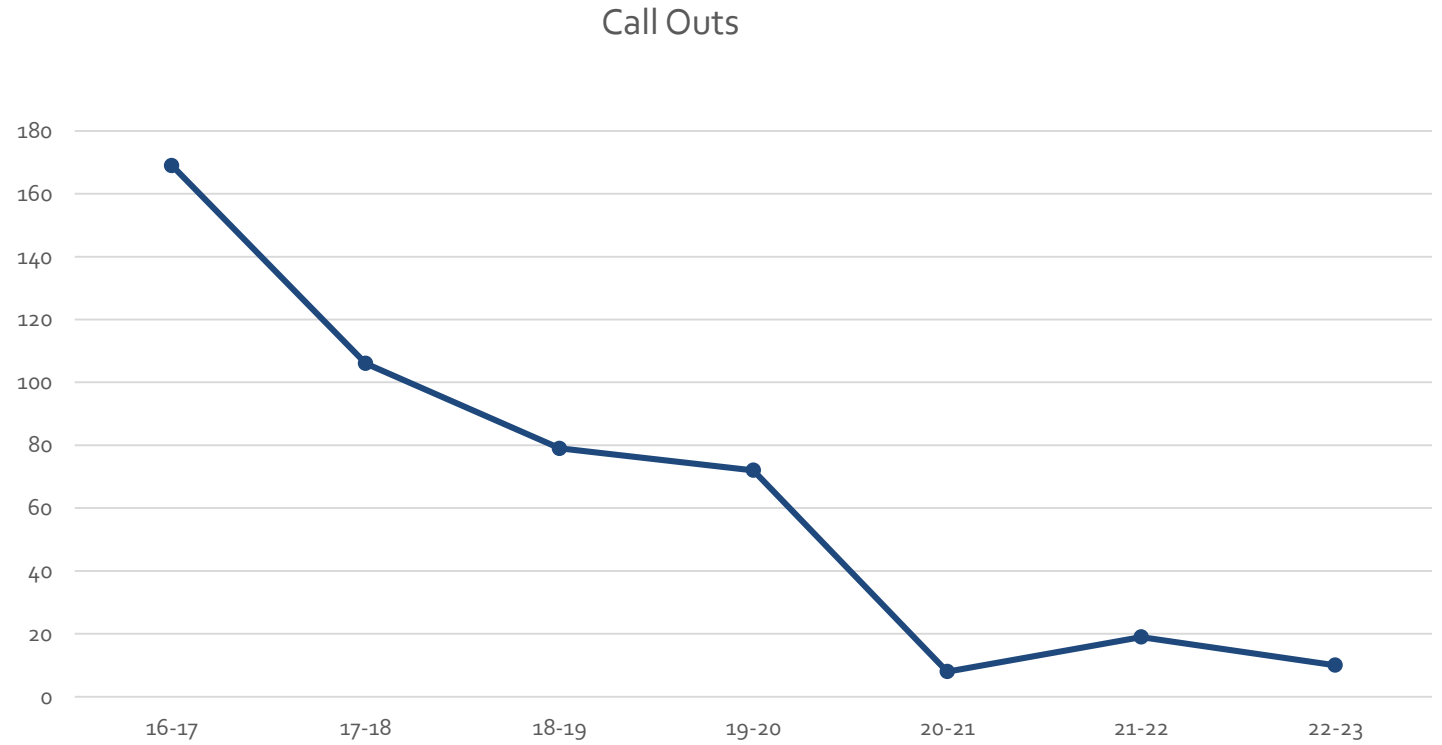
Elm Architecture

Elm Architecture

Benefits

The overall amount of call outs, due to sudden limb drop in the City of Fullerton, has been ***reduced around 95%*** through the years since implemented.

Year	Elm Emergency call outs
16-17	169
17-18	106
18-19	79
19-20	72
20-21	8
21-22	19
22-23	10



Conclusion

Risk Mitigation Pruning (Crown Reduction) to mitigate the risk of whole tree, stem and branch failure has been proven to effectively reduce the likelihood of failure, and given the rapid ability that this particular species has to regenerate its own crown, is the best way to preserve optimal tree cover, while reducing failures, emergencies and damage to structures.