

# Management of Trees during Construction

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# Avoiding Tree Damage During Construction

- Trees add significant value to urban and suburban areas where construction is most prevalent
- Tree decline is frequently disconnected from construction due to the delayed effect of damage
- The collaboration of arborists and design build professionals can help prevent construction damage

# How Trees Are Damaged During Construction

- Damage to Trunk and Crown
- Root Loss - Digging and Trenching
  - Location of Roots – Upper Horizons, Dripline
  - Damage to Health and Structural Integrity
- Soil Management
  - Compaction – pore space
  - Fill dirt
- Exposure to Elements

# Planning

- Consult with a professional arborist early in the planning process
- Develop a tree management plan
  - Assess trees for condition, structural integrity
  - Determine trees to be preserved, removed
- Integrate preserved trees with other design elements
- Conduct pre-construction meeting with contractors, designers, and arborist

# Erecting Barriers/ Limiting Access

- Erect fencing and signage around trees to be preserved
  - generally 1 foot per inch of Diameter, although to the dripline or beyond if possible
- Prevent digging, trenching, storing of materials and equipment, etc. in Tree Protection Zones
- Limit access routes onto site and predetermine work zones for specific activities



# Specifications

- Ensure tree protections measures are written into construction specifications
- Include fines and penalties for non-compliance

# Maintaining Good Communications

- Develop good working relationships between arborists and construction team
- Ensure all subcontractors are aware of tree preservation
- Frequent site visitation and visibility of arborist to monitor
- Photographic documentation of each stage of construction is essential

# Final Stages - Post-Construction Tree Maintenance

- Prevent tree damage during site cleanup and installation of landscaping and irrigation
- Preserved trees may be stressed and more susceptible to insects and disease
- Monitor for decline and perform maintenance as needed



# References

Avoiding Tree Damage During Construction

(c) 1998, 2004 International Society of Arboriculture

ANSI A300 Part 5 Management of Trees and Shrubs During  
Site Planning, Site Development, and Construction

(c) 2005 Tree Care Industry Association

ISA Best Management Practices – Managing Trees During  
Construction

(c) 2008 International Society of Arboriculture

City of Richmond DPU/DPW Joint procedure

Tree Risk Assessment PNW-ISA

**RMA**

The letters 'RMA' are rendered in a large, bold, sans-serif font. The interior of each letter is filled with a photograph of a dense green forest. The 'R' shows a river or path winding through the trees. The 'M' and 'A' also show various views of the forest canopy. The letters are white with a slight drop shadow, making them stand out against the white background.

**TREES**

