The Shade Tree Department LLC

July 15, 2015

Borough of Chatham
Att: Tony Torello, Deputy Director
Department of Public Works
54 Fairmount Avenue
Chatham, NJ 07928
Email: ETorello@chathamborough.org

RE: Evaluation of a 50.8" diameter
Scarlet Oak at Lower Lum Field

Dear Mr. Torello,

On Friday, July 10, 2015, at your request, I examined a 50.8" diameter Scarlet Oak tree on the lawn north of Borough Hall.

Assignment
The purpose of this inspection was to assess the potential viability and risk factor of the tree in consideration of recent tree failures in neighboring communities.

Observations and Discussion
The tree itself is less than 100' in height. Visually the tree is symmetrical in appearance with no visible defects other than the presence of normal deadwood. Leaf color and density appeared to be normal. Upon closer observation, at least one of the major scaffold branches contained a pocket cavity and carpenter ant activity was present. When the trunk was sounded with a rubber mallet it was apparent that there was a hidden trunk cavity on the west side of the tree. Fungal fruiting bodies were found in two locations near exposed surface roots.

On Monday July 13, 2015 I returned to the site with a cordless drill and a 1/8" 10" long drill bit for the purpose of assessing the extent of the trunk decay on the west side of the tree.
- The west sample penetrated 7" before hitting decay
- The southwest sample penetrated 4.75"
- The south sample also penetrated 4.75"
- The southeast sample penetrated 10" before hitting decay
- All other samples appeared to be solid to the full extent of the bit

From this it was determined that the internal cavity was approximately 24" in diameter which converts to be approximately 452 square inches. The total cross section area of the tree is 2042 square inches. This represents approximately 22% of the cross section area as being decayed.

Worksheets
Attached is a Tree Hazard Evaluation Form worksheet. It is a 12 point rating scale with 3 being the lowest risk and 12 being the highest risk. Under adverse conditions, all trees pose some level of risk for tree failure.

There are two conditions that must be met in order for a tree to be deemed hazardous.
- The first condition is that there must be a defect such as trunk decay, co-dominant stem, root pruning or severance, etc.
- The second condition is that there must be a target such as a building, pedestrian or vehicular traffic, parked vehicles, etc.

The hazard rating for this tree is a 7.
Photographs
The photographs show the shape of the tree, its distance from potential targets, a pocket cavity in a scaffold branch and the presence of a fungal fruiting body on an exposed root.

Conclusion
The tree is in fairly good condition for a tree of this age (approximately 175 years old). It exhibits good crotchng structure. The canopy is well distributed. It has very little residual storm damage.

Although the evidence of decay and carpenter ant activity is a concern, however, in my opinion, if these conditions are addressed and activity beneath the tree is restricted, the risk this tree poses can be maintained at an acceptable level for years to come.

Certification
I certify to the best of my knowledge and belief that the statements of fact contained in this report are true and correct, that opinions, evaluation and conclusions are limited only by the reported assumptions and limiting conditions, and that they are my personal, unbiased, professional analysis, opinions and conclusions. I have no personal or prospective interest in the subject of this report and I have no personal interest or bias with respect to the parties involved. My compensation is not contingent upon a predetermined direction or outcome which favors either party.

My analysis, opinions and conclusions were developed, and this report was prepared in conformity with “A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas” by Matheny and Clark published by the International Society of Arboriculture.

If you have any questions about this report, or if I can be of additional service, please do not hesitate to contact me.

Sincerely,

John D. Linson
John D. Linson
NJ Certified Tree Expert #198

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(973) 766-2143

CC: rjv23@optonline.net
Att: Tree Hazard Evaluation Worksheet Form and (3) Photographs
A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas

TREE HAZARD EVALUATION FORM

Site Address: South Laurel Field

Map Location: South Laurel Field

Owner: private

Date of last inspection: July 15, 2021

Date of inspection: July 15, 2021

TREES CHARACTERISTICS

Species: Swamp Chestnut Oak

Diameter: 30 - 40

Height: 72

Spreads:

Form: □ generally symmetrical □ minor asymmetry □ major asymmetry □ stump sprout □ stag-headed

Crown class: □ dominant □ co-dominant □ intermediate □ suppressed

Live crown ratio: □ 75% □ 50% - 74% □ 25% - 49% □ 0% - 24%

Age class: □ young □ semi-mature □ mature □ over mature/semimature

Pruning history: □ crown closed □ excessively thinned □ topped □ crown raised □ pollarded □ crown reduced □ flush cuts □ cabled/traced

Trees: □ multiple pruning events □ Approx. date: 

Special Value: □ specimen □ heritage trees □ wildlife □ unusual □ street tree □ lake □ railroad □ indigenous □ protected by law

TREE HEALTH

Foliage color: □ normal □ chlorotic □ necrotic □菲穆φερηθηγ? Y N □ Growth obstruction:

Foliage density: □ normal □ sparse

Leaf size: □ normal □ small

Annual stem growth: □ excellent □ average □ poor □ TWG Diameter? Y N

Wound wound exposure: □ excellent □ average □ poor □ none

Vigor class: □ excellent □ average □ fair □ poor

Major pests/diseases: □ competitive ants present

SITE CONDITIONS

Site Character: □ residence □ commercial □ industrial □ park □ open space □ natural □ woodland/forest

Landscape type: □ privacy □ raised bed □ container □ around cultivars □ shrub border □ wind break

Irrigation: □ none □ inadequate □ excessive □ leak wetted

Recent site disturbance: □ Yes □ Construction □ soil disturbance □ grade change □ line clearing □ site clearing

% % of site in forest:

% % of site in open:

% % of site in forest:

% % of site in open:

Soil problems: □ drainage □ shallow □ compacted □ draught □ salinization □ fescue □ soil volume □ disease □ history of tail

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# TREE DEFECTS

## ROOT DEFECTS:
- Suspected root rot (Y/N): N
- Mushroom/bank/bucket present (Y/N): N
- Exposed roots: □ severe □ moderate □ low □ unknown
- Root system: □ severe □ moderate □ low □ unknown
- Root area eviscerated: □ severe □ moderate □ low
- Roots wounded: □ Y □ R
- Decay in place of stem: □ N □ roots broken □ N
- Soil cracking: □ N
- Decay to place of stem: □ N □ roots broken □ N
- Soil cracking: □ N
- Crown filling factors: □ severe □ moderate □ low

## TRUNK DEFECTS:
- Peep taper
- Spike, sweep
- Conk, discoloration
- Multiple attachments
- Inclined bark
- Excessive end weight
- Checkered
- Hanger
- Splitting
- Wound/burn
- Decay
- Cavity
- Crotchforks/knot/knotted
- Bent/angled/low
- Leaking/flow
- Leaning/low
- Nipping/breaking butt
- Deadwood/failed
- Swollen/termedinal
- Sank/tilt/yell/bow
- Previous failure

## HAZARD RATING:
- Tree part most liable to fail: branches
- Failure potential: □ 1 - low □ 2 - medium □ 3 - high □ 4 - severe
- Size of part: □ 1 - ≤6” (15 cm) □ 2 - 6-12" (15-30 cm)
- □ 3 - 16-30" (40-70 cm) □ 4 - >30" (70 cm)
- Target rating: □ 1 - occasional use □ 2 - intermittent use
- □ 3 - frequent use □ 4 - consistent use

## HAZARD ABATEMENT:
- Prune: □ Remove defect - □ Reduce weight □ Crown clean □ Thin □ Subs closeup □ Dead □ Dead end □ Subs □ Subs
- Cable/braces:
- Remove tree: □ Y □ Replace: □ Y □ N □ Move target: □ Y □ N
- Other: □ exclusive □ footing
- Effect on adjacent lines: □ None □ Evaluate
- Notification: □ Owner □ Governor agency □ Date: 7/13/15

## COMMENTS:
- Decay does not appear to exceed 1/4 of the cross section crown.