



January 17, 2012

Ms. Meghan Tiernan
Recreation and Park Department
City of San Francisco
30 Van Ness Avenue, 5th Floor
San Francisco CA 94102

Subject: Trail improvements
Glen Canyon Park

Dear Ms. Tiernan:

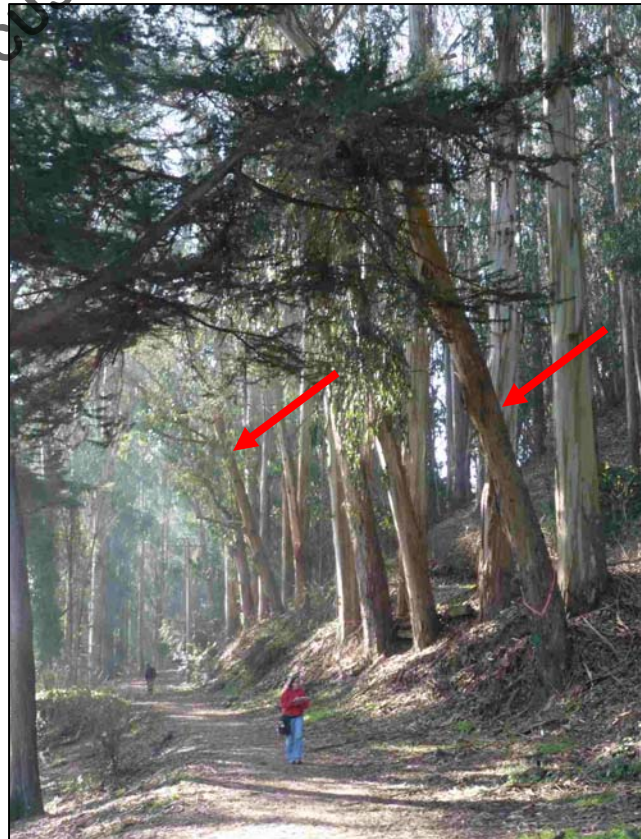
The Recreation and Park Department is planning to construct new trails as part of a series of improvements to Glen Canyon Park. The Department requested that HortScience assess the health, structural condition and risk associated with trees located along the proposed trails. I visited the site earlier this month. This letter summarizes my observations and recommendations.

I visually assessed the health and structural condition, from the ground, of trees within 50' of the trails. The focus of the assessment was trees that were dead, dying, in poor health or possessed significant defects in structure that required abatement. Information on such trees included species and trunk diameter. Tree location was recorded on a map. Trees were marked with pink plastic flagging tape and green paint.

Thirty-nine (39) trees were noted for removal:

- **18 blue gum** (*Eucalyptus globulus*). Trees were mature in development with trunk diameters between 12" and 56". Blue gums were found in the center and southern end of the park. Dead and dying trees were present were those with defects in structure such as lean and exposed roots (Photo 1).

Photo 1. Looking south near Recreation Center. Trees flagged for removal in this area had significant lean over the trail (red arrows).



- **15 arroyo willow** (*Salix lasiolepis*). Exclusively found along the existing and proposed trails, on the north side of the property. Trees were mature in development with trunk diameters ranging from 10" to 18". Mature willows develop extensive decay in the trunk and frequently fail at the base, creating a dense thicket of leaning and failed stems (Photo 2).



Photo 2. Willow thicket. Trees marked for removal had failed or were leaning (red arrows). Note pink flagging.

- **2 Monterey cypress** (*Cupressus macrocarpa*). Both trees dying with poor form and structure.
- **2 Fremont cottonwood** (*Populus fremontii*). Both trees dying.
- **1 white alder** (*Alnus rhombifolia*). Dead tree.
- **1 coast redwood** (*Sequoia sempervirens*). Dead tree.

Two trees were recommended for pruning (see ***Tree Removal Map***):

1. Blue gum #1. 89" diameter tree located at the junction of several trails, just north of the Recreation Center. Tree is in good condition but needs to be pruned.
2. Blue gum #627. Located north of tree #1, the crown is formed by three stems. One stem, 25" in diameter, leans severely to the east over another trail. The 25" stem should be removed.

Summary

Existing and proposed trail improvements at Glen Canyon Park will require some excavation and construction. Trees along the trail alignments were visually assessed for health and structure. Thirty-nine trees that were either dead, dying or possessing defects that required immediate abatement were identified by green paint and pink plastic flagging tape. Two trees were identified as needing to be pruned.

Thanks very much for the opportunity to provide this assessment. Please contact me with any questions. I look forward to hearing from you.

Sincerely,



James R. Clark, Ph.D.
Vice President

Enc. ***Assessment Summary***
Tree Removal Map

DRAFT - FOR DISCUSSION PURPOSES ONLY

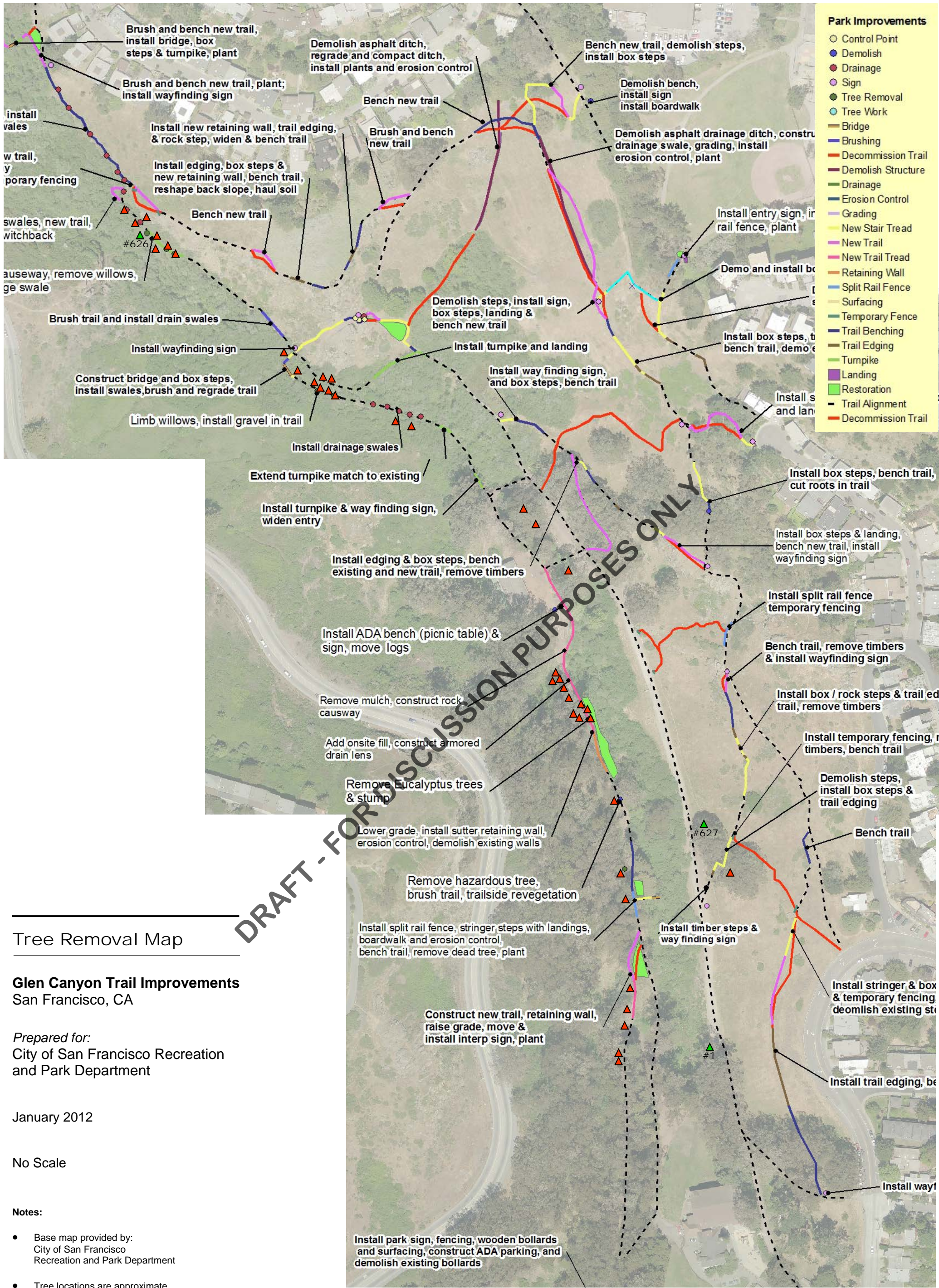
Table 1. Recommended tree work. Glen Canyon Park trail improvement project.
 January 2012

Tree Tag No.	Species	Trunk Diameter (in.)	Notes
Trees marked for removal			
	Blue gum	24	
	Blue gum	26	
	Blue gum	24	
	Blue gum	28	
	Blue gum	22	
	Blue gum	22	
	Monterey cypress	26,25	25" largely dead
	Monterey cypress	28	Snag
	Blue gum	56	Exposed roots
	Blue gum	24	Exposed roots
	Blue gum	20	Exposed roots
	Blue gum	18	
	Blue gum	54	All but dead
	Blue gum	12	
	Blue gum	44	
	Blue gum	16	
	Blue gum	25	
	Blue gum	34	
	White alder	16	Dead
	Coast redwood	36	Snag
	Blue gum	28	Decay; very thin
	Fremont cottonwood	15	
	Fremont cottonwood	12	
	Willow	12	
	Willow	12	
	Willow	12	
	Willow	18	
	Willow	16	
	Willow	14	
	Willow	15	
	Willow	13	
	Willow	14	
	Willow	12	Branch only
	Willow	12	
	Willow	18	Sprawling
	Willow	10	
	Willow	12	
	Willow	15	
	Blue gum	40	Leans over trail

Table 1, continued. Recommended tree work. Glen Canyon Park trail improvement project. January 2012

Tree Tag No.	Species	Trunk Diameter (in.)	Notes
<i>Trees recommended to be pruned</i>			
1	Blue gum	89	Prune to clean crown & reduce weight on long, horizontal branches.
627	Blue gum	29, 28, 25	Prune to clean crown on 29" & 28" stems; remove 25" stem.

DRAFT - FOR DISCUSSION PURPOSES ONLY



Tree Removal Map

**Glen Canyon Trail Improvements
San Francisco, CA**

Prepared for:
City of San Francisco Recreation
and Park Department

January 2012

No Scale

- Notes:**
- Base map provided by:
City of San Francisco
Recreation and Park Department
 - Tree locations are approximate.

KEY

- ▲ = Tree to be removed
(marked with green paint and pink flagging tape in the field)
- ▲ = Numbered tree to be pruned