Consulting Arborists

3109 Sacramento Street San Francisco, CA 94115

Member, American Society of Consulting Arborists Certified Arborists, Tree Risk Assessment Qualified

City of Pacifica
Department of Public Works
Attn: Gino Assereto
151 Milagra Dr.
Pacifica, CA 94044

RE: Cypress Trees on Minerva Ave.

Date: 4/26/23



Assignment

- Provide inspections and tree risk assessments for 16 mature Monterey cypress (Hesperocyparis macrocarpa) street trees located on Minerva Avenue.
- Conduct inspections using ground level analysis, city-provided aerial lift system and a drone.
- Provide an Arborist Report of findings and recommendations.

Background

Following several waves of storms that hit Pacifica this winter, city staff and residents were concerned about the condition of the Monterey cypress (*Hesperocyparis macrocarpa*) trees along Minerva Avenue.

Several of the trees partially failed or lost large branches in the course of the storms. While on site crews were cleaning up dead, broken, and hanging branches.

Observations

We inspected the trees on March 31 and April 4, 2023.

On March 31 we used a city provided lift to inspect defects in the tree aloft. The same day we captured imagery using a small drone to inspect areas inaccessible from the lift.

We returned on April 4 to complete the inspections and our risk assessments.

A separate ISA Basic Tree Risk Assessment Form was completed for each tree and is attached to this report.

All trees were found to be either High or Extreme Risk.



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Discussion

These trees are large and overmature specimens that have reached the end of their useful life, they have numerous defects and have been severely compromised by recent storms.

Some of the trees could likely be mitigated through pruning. The removal of the more severely compromised trees will be necessary, and consideration of any remaining trees newly exposed to new wind stresses will require additional pruning. These trees have grown as a grove and because of their close association, are not adapted to the new wind forces that will be present.

Conclusions & Recommendations

Based on the attached tree risk assessments, it is recommended that the trees be removed.

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Assumptions and Limiting Conditions

- Any legal description provided to the consultant is assumed to be correct. Title and ownership of all
 property considered are assumed to be good and marketable. No responsibility is assumed for
 matters legal in character. Any and all property is appraised or evaluated as though free and clear,
 under responsible ownership and competent management.
- 2. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes or other governmental regulations.
- Care has been taken to obtain all information from reliable sources. All data has been verified insofar
 as possible. The consultant can neither guarantee nor be responsible for the accuracy of information
 provided by others.
- 4. Various diagrams, sketches and photographs in this report are intended as visual aids and are not to scale, unless specifically stated as such on the drawing. These communication tools in no way substitute for nor should be construed as surveys, architectural or engineering drawings.
- 5. Loss or alteration of any part of this report invalidates the entire report.
- 6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior written or verbal consent of the consultant.
- 7. This report is confidential and to be distributed only to the individual or entity to whom it is addressed. Any or all of the contents of this report may be conveyed to another party only with the express prior written or verbal consent of the consultant. Such limitations apply to the original report, a copy, facsimile, scanned image or digital version thereof.
- 8. This report represents the opinion of the consultant. In no way is the consultant's fee contingent upon a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
- 9. The consultant shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule, an agreement or a contract.
- 10. Information contained in this report reflects observations made only to those items described and only reflects the condition of those items at the time of the site visit. Furthermore, the inspection is limited to visual examination of items and elements at the site, unless expressly stated otherwise. There is no expressed or implied warranty or guarantee that problems or deficiencies of the plants or property inspected may not arise in the future.

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Disclosure Statement

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. An arborist cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate the trees.

Tree risk assessment is not tree risk management. The arborist typically has the distinct and separate role of being the tree risk assessor. The tree risk manager is typically the property owner or the agent thereof. Tree risk management should consider tree risk management and may consider other factors related to property management decision making.

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Certification of Performance

I, Roy C. Leggitt, III, Certify:

- That we have inspected the trees and/or property evaluated in this report. We have stated findings
 accurately, insofar as the limitations of the Assignment and within the extent and context identified by
 this report;
- That we have no current or prospective interest in the vegetation or any real estate that is the subject of this report, and have no personal interest or bias with respect to the parties involved;
- That the analysis, opinions and conclusions stated herein are original and are based on current scientific procedures and facts and according to commonly accepted arboricultural practices;
- That no significant professional assistance was provided, except as indicated by the inclusion of another professional report within this report;
- That compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

I am a member in good standing of the American Society of Consulting Arborists and a member and Certified Arborist with the International Society of Arboriculture.

I have attained professional training in all areas of knowledge asserted through this report by completion of a Bachelor of Science degree in Plant Science, by routinely attending pertinent professional conferences and by reading current research from professional journals, books and other media.

I have rendered professional services in a full-time capacity in the field of horticulture and arboriculture for more than 34 years.

Signed:

Certified Arborist WE-0564A

Date:

4/26/2023

roy@treemanagementexperts.con

Cell (415) 606-3610

Consulting Arborists

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Certification of Performance

- I, Aaron Wang, Certify:
- That we have inspected the trees and/or property evaluated in this report. We have stated findings
 accurately, insofar as the limitations of the Assignment and within the extent and context identified by
 this report;
- That we have no current or prospective interest in the vegetation or any real estate that is the subject of this report, and have no personal interest or bias with respect to the parties involved;
- That the analysis, opinions and conclusions stated herein are original and are based on current scientific procedures and facts and according to commonly accepted arboricultural practices;
- That no significant professional assistance was provided, except as indicated by the inclusion of another professional report within this report;
- That compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

I am a member and Certified Arborist with the International Society of Arboriculture.

I have attained professional training in all areas of knowledge asserted through this report by completion of a Bachelor of Science degree in Forestry and Natural Resources, by routinely attending pertinent professional conferences and by reading current research from professional journals, books and other media.

I have rendered professional services in a full-time capacity in the field of horticulture and arboriculture for more than 10 years.

Signed:

Certified Arborist MW-5597A

Date: 4/26/2023

aaron@treemanagementexperts.com

Cell (847) 630-3599



Clie	nt City of Pacifica		Date <u>3/31/2023</u>	3		Tir	ne Davlight		
									1
Tre	dress/Tree location Minerva Avenue, Pacifica e species Monterey Cypress (Hesperocyparis macrocarpa)	_ dbh_ <u>59.0"</u>	Height <u>80ft</u>		Crov	vn spi	- read dia. <u>8(</u>	Oft	
	essor(s) Roy Leggitt, Aaron Wang								
	Ta	arget Assessment							
Target number	Target description		Target protection		Target within as 1 x Ht.		Occupancy rate 1-rare 2 - occasional 3 - frequent 4 - constant	Practical to move target?	Restriction practical?
1	Structures		none	X			4	No	No
2	Vehicles		none	X			4	No	No
3	Pedestrians		none	X			3	No	No
4									
		Site Factors							
Hist	ory of failures Tearouts, limb drop		Topography	, Flat ⊠	Slope	e 🗆	%	Aspect	
Soil	changes None ☐ Grade change ☒ Site clearing ☒ Changed so conditions Limited volume ☐ Saturated ☐ Shallow ☐ Compa vailing wind direction West Common weather Strong wind	cted Pavement	over roots 🛛70	% Des	cribe _				
		alth and Species	•	301180	,				
	or Low □ Normal ☑ High □ Foliage None (seasonal) Its/Biotic Cypress Canker, Brown Cubical Rot	□ None (dead) □ Normal <u>100</u>			ic	% Nec	rotic _	%
Spe	cies failure profile Branches 🖾 Trunk 🖾 Roots 🖾 Describe <u>b</u> i	rittle wood failures in	n overextended branc	hes, ur	orootin	g/stem	n failures in h	eavy st	torms
	·	Load Factors				_		-	
Wir	nd exposure Protected ☐ Partial ☒ Full ☐ Wind funneling ☐		Relativ	e crow	n size	Sma	II□ Mediu	m 🛛 La	arge □
Cro	wn density Sparse ☐ Normal ☒ Dense ☐ Interior branches	Few⊠ Normal□	Dense□ Vines/N	/listleto	oe/Mo	ss 🗆			
Rec	ent or expected change in load factors								
	Tree Defects and Condi	tions Affecting th	e Likelihood of Fail	ure					
	— Crov	vn and Branch	ies —						$\overline{}$
	Unbalanced crown 🖾 LCR 50 % Dead twigs/branches 🖾 5 % overall Max. dia. 2" Broken/Hangers Number 1 Max. dia. 6" Over-extended branches 🖾 Pruning history Crown cleaned 🖾 Thinned 🗆 Raised Reduced 🗀 Topped 🗆 Lion-tailed Flush cuts 🗆 Other	Previou Dead/f I □ Conks		rs/Galls,	/Burls [decay	_ Cav _ Sim □ Sap	Includ ity/Nest hole ilar branches	ed bark 50 % c present se/decay	circ. t 🛭
	Co. " U.T	ndition (s) of concer	n						
	Scaffold Tearout Part Size 18" Fall Distance 50ft Load on defect N/A Minor Moderate Signification Likelihood of failure Improbable Possible Probable Immine	ant 🖾 Load o	ze n defect N/A ☐ ood of failure Improba	ı	Minor		stance loderate □ Si robable □ Ir	ignifican	ıt 🗆 📗
	—Trunk —		— Roots	and	Root	Col	lar —		
	Dead/Missing bark ☒ Abnormal bark texture/col Codominant stems ☐ Included bark ☒ Crac Sapwood damage/decay ☒ Cankers/Galls/Burls ☐ Sap oo: Lightning damage ☐ Heartwood decay ☒ Conks/Mushroor Cavity/Nest hole _ 5 _ % circ. Depth _ 8" _ Poor tap Lean _ 8 _ ° Corrected? _ No Response growth _ Poor Condition (s) of concern None Part Size Fall Distance	cks ☒ Dead ze ☒ Ooze ms □ Cracks eer ☒ Root p Respo Condit		roots D	⊠ C	Distand	Conks/Musl Cavity □ te from trunl Soil we	% c k <u>12"</u> eakness	s 🗆
	Load on defect N/A ☒ Minor ☐ Moderate ☐ Significative likelihood of failure Improbable ☒ Possible ☐ Probable ☐ Immine	I	n defect N/A□ ood of failure Improba				loderate□ Si obable □ Ir	•	

	Risk Categorization Likelihood Failure Impact Failure & Impact (from Matrix																						
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(Target n or descrip	umber	Tre	e part		of co		Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely	Negligible	Minor	Significant	Severe	Risk rating (from Matrix 2
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Pedest				_			Х						Х		Х				_			Χ	Low
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Vehicles Roots Uprooting														Х		Х						Х	Modera
Pedestr			Х					Χ		Х							Χ	Low					
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of Failure	Very lo	w Lo			dium	High							\top	\top						\top			
Imminent	Unlike				kely	Very likely			-														
Probable	Unlike		<u></u>		hat likely	Likely																	
Possible	Unlike	ly Unli	kely	Unl	ikely	Somewhat lik	ely																
Improbable	Unlike	ly Unli	kely	Unl	ikely	Unlikely			-	-			+	_						_			
Matrix 2. Risk	rating n	natrix.							_														
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Failure & Im	pact	Negligible	Min	or S	Significant	Severe			-					\top									
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Likely		Low	Mode	_	High	High																	
Somewhat I		Low	Lov		Moderate	Moderate	9													N	orth		
Unlikely	/	Low	Lov	V	Low	Low																	
Notes, expla	nation	s, descripti	ons																				
•	<u>nt failure</u>	s, tree is fall	ing apart	extensiv	∕e decay o	on top of 2 lowe	er																1
scaffolds																							
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Overall tree		J				J																	



Client City of Pacifica	Date <u>3/31/2023</u>		Tir	ne Daylight		
Address/Tree location Minerva Avenue, Pacifica Tree species Monterey Cypress (Hesperocyparis macrocarpa) dbh 30.8"	Tree ı	no. <u>584</u>		_ Sheet1	of	1
Assessor(s) Roy Leggitt, Aaron Wang Tools used <u>d-tar</u>	e, aerial lift, drone, pro	bes	Tim	e frame <u>one</u>	year	
Target Assessment	:					
Target description	Target protection	Target within drip line and Target within	1xHt. oz Target within au 1.5 x Ht.	Occupancy rate 1-rare 2-occasional 3-frequent 4-constant	Practical to move target?	Restriction practical?
1 Structures	none	Х		4	No	No
2 Vehicles	none	Х		4	No	No
3 Pedestrians	none	Х		3	No	No
4						
Site Factors						
History of failures Tearouts, limb drop						
Site changes None \square Grade change \boxtimes Site clearing \boxtimes Changed soil hydrology \boxtimes Ro	ot cuts 🛛 Describe <u>P</u> a	aving and	construc	tion		
Soil conditions Limited volume \square Saturated \square Shallow \square Compacted \square Pavement	over roots 🛛 <u>60</u>	6 Describ	oe			
	☐ Heavy rain 🖾 Des	scribe <u>Hea</u>	vy season	al storms with	extreme	e winds
Tree Health and Species	Profile					
Vigor Low □ Normal ☑ High □ Foliage None (seasonal) □ None (dead		% Chlo	rotic	% Ned	crotic _	%
Pests/Biotic Cypress Canker, Brown Cubical Rot Abiotic	n overextended brancl	nes unroc	ntina/sten	n failures in h	neavy st	torms
Load Factors	TI OVOIOXIONADA BIANDI	100, uproc	ourig/otori	Tidilaroo iii i	louvy or	COLLING
Wind exposure Protected ☐ Partial ☒ Full ☐ Wind funneling ☐	Relativ	rrown s	ize Sma		m 🕅 Ta	arge [
Crown density Sparse□ Normal ☒ Dense□ Interior branches Few ☒ Normal ☒						
Recent or expected change in load factors			W1033 L			
Tree Defects and Conditions Affecting th						
						$\overline{}$
— Crown and Brancl Unbalanced crown ☑ LCR 15 % Cracks				l imbanin m		_ /
	ninant 🗆				led bark	
Proken/Hanger Number May dia	attachments 🛛					
Over-extended branches W	us branch failures 🏻					
Pruning history Dead/	Missing bark ☐ Cankers					
Crown cleaned ☑ Thinned ☐ Raised ☑ Conks Reduced ☐ Topped ☐ Lion-tailed ☐ Conks	_					
Flush cuts	nse growth <u>Good</u>					
Condition (s) of conce	rn					
Scaffold Tearout Part Size 6" Fall Distance 70ft Part S						_
Ture Size Ture Size Ture Size Ture Size	ize			stance		
,	n defect N/A□ ood of failure Improbal			1oderate□ S robable □ Ir	_	
	<u> </u>					$\overline{}$
—Trunk —	— Roots	and Ro	ot Col	lar —		
Dead/Missing bark ☐ Abnormal bark texture/color ☒ Collar	buried/Not visible 🛚	Depth	4"	_ Stem	girdling	g 🗆
Codominant stems ☐ Included bark ☐ Cracks ☐ Dead	□ Dec	ay 🗆		Conks/Mus	hrooms	i 🗆
Sapwood damage/decay ☑ Cankers/Galls/Burls □ Sap ooze □ Ooze				Cavity \square _	% c	irc.
Lightning damage ☐ Heartwood decay ☑ Conks/Mushrooms ☐ Cracks	Cut/Damaged of	roots 🛚	Distanc	ce from trun	k <u>12"</u>	
	olate lifting 🛛				akness	
Lean 8 ° Corrected? No Respo	nse growth <u>Poor</u>					
Response growth Poor Condition (s) of concern Mid-stem Failure Condition	tion(s) of concern <u>Up</u> i	ooting				
	ize30.8"		Fall Dist	ance	80ft	
Tan Distance — Tan Distance	120			uncc		. 124
Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant 🖾 Load o	n defect N/A □	Min	or 🛭 N	Inderate∏ S		t LXI

				izati	ion																			
										Likel	ihod	d												
_									Failu	ure			Imp	act				& lm 1atrix		Coı	nseq	uen	ces	
Targe (Target n	umber		Tree	part			tion(s) ncern	l e			Ţ	Г				0,		TULLIA	ŕ	a)		<u> </u>		Risk
or descri _l	ption)					0.00		Improbable	Possible	Probable	Imminent	Very low		Medium		Unlikely	Somewhat	^	Very likely	Negligible	or	Significant	ire	rating
								F g	Poss	Prok	lm m	Very	Low	Med	High	Unli	Som	Likely	Very	Neg	Minor	Sign	Severe	(from Matrix 2)
Struct	ures	一						Т		Х					Χ			Χ					Χ	High
Vehic	cles		Bra	nch		Scat Tea				Х			İ		Χ			Χ					Χ	High
Pedest	rians					160	out			Х		Т		Χ			Χ						Χ	Moderat
Struct	ures	\neg			\top			т	X			Г			Χ		Χ							Moderat
Vehic	eles	\dashv	Tru	ınk		Mid-		H	X			Г			Χ		Χ							Moderat
Pedest						Fail	ure		Х					Χ		Χ	, ,						Х	Low
Structu		\dashv			\dashv			т		Х		г			Х			Х					Х	High
Vehicl		\dashv	Roo	nts		Uprod	otina	\vdash		X		H			Х			Х					Х	
Pedestr			1100	J10		op.o.	,g	\vdash		\ Х		H		V	۸		Х	^		Н				High Moderat
reuesii	iaiis	_				╀		^		H		Х			^						^	Moderat		
												H	H			Н				H				
Matrix I . Likel	lihood r	matr	ix.								_			+	_		_	_			+	_		
Likelihood				Likelih	ood	of Impact																		
of Failure	Very l	ow	Lov	N		Medium	High																	
Imminent	Unlike	_	Somewha			Likely	Very likely	,		-												\dashv		
Probable Possible	Unlike Unlike		Unlik Unlik		Son	Unlikely	Likely Somewhat lik	rolv.		-	-			+	+						+	\dashv		
Improbable	Unlike	_	Unlik			Unlikely	Unlikely	Rely		_														
Matrix 2. Risk				,		,	,																	
Likelihood	$\overline{}$			Cons	eaue	ences of Failur	<u> </u>																	
Failure & In		Ne	egligible			Significant				-				+								\dashv		
Very like	ly		Low	Mode		High	Extreme	9		_				+	_						+	_		
Likely			Low	Mode		High	High														NI.	orth		
Somewhat Unlikely			Low	Lov		Moderate Low	Moderat Low	:e													140	orun		
Officery	y [LOVV	LOV	•	LOW	1000																	
Notes, expla					na in	ndicates intern	al decay, low	I CR																
no taper	•						ai accay, low																	
																			\					
												J			\									
Mitigation of 1. Remove Tre	-		(hahnaı																D	ocid	ual	rick		None
2																			_					INOTIE
																			_					
	3																		_					
	verall tree risk rating Low □ Moderate □ High ☒ Ext																		_	-		-		
Overall resid		_	None ∑				l High □ E				Rec	Om	mer	ıder	line	pect	lion	inte	rva	I N/A	Δ			
																			va	· <u>· · •//</u>	•			
	☑ Final ☐ Preliminary Advanced assessment needed ☑ No ☐ Yes-Typerction limitations ☑ None ☐ Visibility ☐ Access ☐ Vines ☐ Root collar																							



CIIE	ent_City of Pacifica	Date 3/31/2023			Tir	ne Daylight		
Add	dress/Tree location Minerva Avenue, Pacifica	Tree	no. 58	5		Sheet 1	of	11
Tre	e species Monterey Cypress (Hesperocyparis macrocarpa) dbh 35.2"	Height <u>100ft</u>		Crov	vn spr	ead dia. <u>5(</u>	Oft	
Ass	sessor(s) <u>Roy Leggitt, Aaron Wang</u> Tools used <u>d-tap</u>	<u>e, aerial lift, drone, pro</u>	obes		_ Time	e frame <u>one</u>	year	
	Target Assessment							
Target number	Target description	Target protection		Target within ap		Occupancy rate 1-rare 2 - occasional 3 - frequent 4 - constant	Practical to move target?	Restriction practical?
1	Structures	none	Х			4	No	No
2	Vehicles	none	Х			4	No	No
3	Pedestrians	none	Х			3	No	No
4								
	Site Factors	•						
Hist	tory of failures Tearouts, limb drop	Topography	, Flat⊠	Slope	e 🗆	% .	Aspect	
Site	e changes None Grade change Site clearing Changed soil hydrology Roo							
	I conditions Limited volume ☐ Saturated ☐ Shallow ☐ Compacted ☐ Pavement							
	vailing wind direction West Common weather Strong winds I Ice Snow I							
	Tree Health and Species	Profile						
	or Low □ Normal ☒ High □ Foliage None (seasonal) □ None (dead		% C	hlorot	ic	% Nec	rotic _	%
Pes	ts/Biotic Cypress Canker, Brown Cubical Rot Abiotic Abiotic							
Spe	ecies failure profile Branches 🛛 Trunk 🖾 Roots 🖾 Describe brittle wood failures in	n overextended branc	hes, up	prooting	g/stem	i failures in h	eavy st	orms
	Load Factors							
	nd exposure Protected ☐ Partial ☒ Full ☐ Wind funneling ☐							
	wn density Sparse□ Normal 🖾 Dense□ Interior branches Few 🖾 Normal 🗆		1istleto	e/Mo	ss 🗆 .			
Rec	ent or expected change in load factors							
	Tree Defects and Conditions Affecting the	e Likelihood of Fail	ure					
	— Crown and Branch	ies —						
1	11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1							١ ١
1	Unbalanced crown $\ \square$ LCR $ \underline{ 15} \ \%$ Cracks	□				Lightning o	lamage	□ \
	Dead twigs/branches % overall Max. dia Codom	ninant 🛘				Includ	ed bark	X
	Dead twigs/branches					Includ	ed bark	X
	Dead twigs/branches ☐% overall Max. dia Codom Broken/Hangers Number Max. dia Weak a Over-extended branches ☒ Previou	ninant 🛘			_ Cavi	Includ ity/Nest hole	ed bark % c	IXI irc.
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1. Remove Tre	ee (reco	mm	ended)																_ R	esid	lual	risk		None
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	☑ Final ☐ Preliminary Advanced assessment needed ☑ No ☐ Yes-Type ection limitations ☑ None ☐ Visibility ☐ Access ☐ Vines ☐ Root collar be																							



Addition / Transition Minerya Avenue Pacifica	Date <u>3/31/2023</u>			Time Daylight		
Address/Tree location Minerva Avenue, Pacifica	Tree r	no. <u>586</u>		Sheet´	of	1
Address/Tree location Minerva Avenue, Pacifica Tree species Monterey Cypress (Hesperocyparis macrocarpa) dbh_34.0"						
Assessor(s) Roy Leggitt, Aaron Wang Tools used d-tape	e, aerial lift, drone, pro	bes	Ti	me frame <u>one</u>	year	
Target Assessment						
Target umper Target description	Target protection		Target within as 1x Ht.	Occupancy rate 1-rare 2-occasional 3-frequent 4-constant	Practical to move target?	Restriction practical?
1 Structures	none	X		4	No	No
2 Vehicles	none	X		4	No	No
3 Pedestrians	none	X		3	No	No
4						
Site Factors						
History of failures Tearouts, limb drop	Topography	Flat 🖾 🥄	Slope□	%	Aspect	
Site changes None ☐ Grade change ☒ Site clearing ☒ Changed soil hydrology ☒ Roc						
Soil conditions Limited volume \square Saturated \square Shallow \square Compacted \square Pavement of	over roots 🛛 <u>50</u> 9	% Descr	ribe			
Prevailing wind direction West Common weather Strong winds ☒ Ice ☐ Snow ☐	☐ Heavy rain 🖾 Des	scribe <u>H</u> e	eavy seas	onal storms with	extreme	e winds
Tree Health and Species I	Profile					
Vigor Low □ Normal ☒ High □ Foliage None (seasonal) □ None (dead) Pests/Biotic Cypress Canker, Brown Cubical Rot Abiotic Abiotic		% Ch	lorotic _	% Ned	crotic _	%
Species failure profile Branches 🖾 Trunk 🖾 Roots 🖾 Describe brittle wood failures in	overextended brancl	hes, upro	ooting/st	em failures in h	neavy st	orms
Load Factors						
Wind exposure Protected ☐ Partial ☒ Full ☐ Wind funneling ☐	Relative	e crown	n size Sn	nall□ Mediu	m 🛛 La	arge □
Crown density Sparse □ Normal ☒ Dense □ Interior branches Few ☒ Normal □						
Recent or expected change in load factors						
Tree Defects and Conditions Affecting the	e Likelihood of Failu	ıre				
— Crown and Branch						_
	es —					
Unbalanced crown ☑ LCR 30 % Cracks				Lightning (damage	
Dead twigs/branches ☐% overall Max. dia Codom	es — □ inant □				damage led bark	
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	Risk Categorization Likelihood Failure Impact Failure & Impact (from Matrix																								
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(Target n or descrip	umber		Tree	part			tion(s ncern	•	Improbable	Possible	Probable	Imminent	Very low	N	Medium	t;	Unlikely	Somewhat	Likely	Very likely	Negligible	Minor	Significant	Severe	Risk rating (from
		1							트	Po		프	Ne N	Low	Me	High	5	Sor	_	Vei	Ne	Ξ	Sig	-	Matrix 2)
Struct	ures	_				Scaf	ff ald				Х			Ш		Х			X					Х	High
Vehic	les		Bra	nch		Tear					Х					Х			Х					Х	High
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of Failure	Very lo	w	Lov		_	Medium		High			_														
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Probable	Unlike	ly	Unlik	ely	Som	newhat likely		Likely			_														
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Improbable	Unlike	<u> </u>	Unlik	cely		Unlikely		Unlikely			-				+	\dashv							\dashv		
Matrix 2. Risk	rating n	natri	x.						_		-	_			+	_							\dashv		
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Mitigation o	-	mme	ended)																	_ R	esid	ual	risk		None
2																				_ R	esid	ual	risk		
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Overall tree	risk rat	ing		Low	<i>,</i> \Box	Moderate □	l Hi	gh 🔯 Ex	trem	ne 🗆															
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Client City of Pacifica	Date <u>3/31/2023</u>		Tir	ne Daylight		
Address/Tree location Minerva Avenue, Pacifica	Tree n	o. <u>587</u>		Sheet 1	of	1
Tree species Monterey Cypress (Hesperocyparis macrocarpa) dbh_58.5"	Height <u>110ft</u>	Cr	own spi	read dia. <u>8(</u>	Oft	
Assessor(s) Roy Leggitt, Aaron Wang Tools used d-tape	e, aerial lift, drone, pro	bes	Time	e frame <u>one</u>	year	
Target Assessment						
Target description	Target protection	Target within drip line and Target within and the statement of the stateme		Occupancy rate 1-rare 2 - occasional 3 - frequent 4 - constant	Practical to move target?	Restriction practical?
1 Structures	none	Х		4	No	No
2 Vehicles	none	Х		4	No	No
3 Pedestrians	none	Х		3	No	No
4						
Site Factors		·				
History of failures Tearouts, limb drop Site changes None □ Grade change ☒ Site clearing ☒ Changed soil hydrology ☒ Roc Soil conditions Limited volume □ Saturated □ Shallow □ Compacted □ Pavement of Prevailing wind direction West Common weather Strong winds ☒ Ice □ Snow □ Tree Health and Species F Vigor Low □ Normal ☒ High □ Foliage None (seasonal) □ None (dead)	over roots 凶 <u>50</u> %]Heavy rain 凶 Des Profile	ving and Describ cribe Hea	constructe e vy season	al storms with	extreme	e winds
Pests/Biotic Cypress Canker, Brown Cubical Rot Abiotic Species failure profile Branches ☒ Trunk ☒ Roots ☒ Describe brittle wood failures in Load Factors Wind exposure Protected ☒ Partial ☒ Full ☒ Wind funneling ☒	overextended branch	es, uproo	ting/stem	n failures in h	n 🛛 La	torms arge □
Crown density Sparse ☐ Normal ☒ Dense ☐ Interior branches Few ☒ Normal ☐		istletoe/I	vioss ⊔			
Recent or expected change in load factors						
Tree Defects and Conditions Affecting the	e Likelihood of Failu	re				
Dead twigs/branches □% overall Max. dia Codom Broken/Hangers Number Max. dia Weak a Over-extended branches ☑ Pruning history Crown cleaned ☑ Thinned □ Raised ☑ Conks I Reduced □ Topped □ Lion-tailed □ Conks I	XIinant □ ttachments XI is branch failures XI /lissing bark □ Cankers	/Galls/Bur wood dec	Cav Sim Is	Includ ity/Nest hole_ ilar branches wood damag	ed bark % c present re/decay	irc.
Condition (s) of concern	n					
Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☒ Load or	ze	Mino	Fall Di or 🔲 N	stance loderate□ Si robable □ In	gnificant	t□
—Trunk —	— Roots a	and Ro	ot Col	lar —		$\overline{}$
Dead/Missing bark ☑ Abnormal bark texture/color ☑ Collar to Codominant stems ☑ Included bark ☑ Cracks ☑ Dead Sapwood damage/decay ☑ Cankers/Galls/Burls □ Sap ooze □ Cracks ☑ Caphtning damage □ Heartwood decay ☒ Conks/Mushrooms □ Cavity/Nest hole 50 % circ. Depth 24" Poor taper ☒ Root plus Response growth Poor Condition(s) of concern Codominant Stem Failure Collar to Collar	ouried/Not visible ⊠ ⊠ Deca □	Depth	4" Distance	_ Stem Conks/Mush Cavity □ te from trunk Soil we	% ci k24"_ eakness	irc.
	n defect N/A 🗆 nod of failure Improbab			loderate□ Si robable □ In	_	

		tior	1																					
									Likel	ihoc	d													
									Fai	lure			Imp	act				& Im		Cor	nseq	uen	ces	
Target n			Tree	part			tion(s) ncern	<u>e</u>	Τ	\top	Τ	┢	r.	Г		U		1atrix	ŕ			<u> </u>	\Box	Risk
or descri _l	otion)					01 00	ncem	obab	ble	٩	nent	<u>8</u>		돌		el<	wha		likel	gible	_	fican	é	rating
								Improbable	Possible	Prohable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely	Negligible	Minor	Significant	Severe	(from Matrix 2)
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Vehicl	es	_	Roo	ots		Upro	oting	L	X			L			Х		Х						Χ	Moderat
Pedestr	Pedestrians								X					Х		Х							Χ	Low
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Probable	Unlike		Unlik		Son	newhat likely	Likely																	
Possible	Unlike	ely	Unlik	ely		Unlikely	Somewhat	likely																
Improbable	Unlike	ely	Unlik	ely		Unlikely	Unlikel	У			+				+							+		
Matrix 2. Risk	rating r	matr	ix.								\perp													
Likelihood				Cons	eque	nces of Failur																		
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Very like	-		Low	Mode		High	Extrer				+				+							_		
Likely Somewhat			Low	Mode Lov		High Moderate	High Moder														No	orth		
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3.4.																			_					
Overall tree	·																		_					
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	rerall residual risk None 🖾 Low 🗆 Moderate 🗀 High 🗀 Ext															-			¥U	. 11//	•			
	a ☑ Final ☐ Preliminary Advanced assessment needed ☑No ☐Yes-Typ pection limitations ☑None ☐Visibility ☐Access ☐Vines ☐Root collar													J. IUC		•								



Client City of Pacifica	Date 3/31/2023	}	Tim	ne Daylight		
Address/Tree location Minerva Avenue, Pacifica Tree species Monterey Cypress (Hesperocyparis macrocarpa) dbh 55.0"	Tree	no. <u>588</u>		Sheet 1	of	1
Tree species Monterey Cypress (Hesperocyparis macrocarpa) dbh 55.0"	Height <u>80ft</u>	Cro	wn spre	ead dia. <u>6(</u>	Oft	
Assessor(s) Roy Leggitt, Aaron Wang Tools used d						
Target Assessm	ent					
Target description	Target protection	Target within drip line Target within 1x Ht.		Occupancy rate 1-rare 2 - occasional 3 - frequent 4 - constant	Practical to move target?	Restriction practical?
1 Structures	none	Х		4	No	No
2 Vehicles	none	X		4	No	No
3 Pedestrians	none	Х		3	No	No
4						
Site Factors	•					
History of failures Tearouts, limb drop	Topography	, Flat⊠ Slop	e□	% /	Aspect	
Site changes None ☐ Grade change ☒ Site clearing ☒ Changed soil hydrology ☒						
Soil conditions Limited volume ☐ Saturated ☐ Shallow ☐ Compacted ☐ Pavement						
Prevailing wind direction West Common weather Strong winds ☒ Ice ☐ Sno						
Tree Health and Spec	•					
Vigor Low □ Normal ☒ High □ Foliage None (seasonal) □ None (d		% Chloro	tic	% Nec	rotic	%
Pests/Biotic Cypress Canker, Brown Cubical Rot Abiotic						
Species failure profile Branches ☒ Trunk ☒ Roots ☒ Describe brittle wood failur	es in overextended branc	hes, uprootir	ng/stem	failures in h	eavy st	orms
Load Factors						
Wind exposure Protected ☐ Partial ☒ Full ☐ Wind funneling ☐	Relativ	e crown size	e Small	☐ Mediu	m 🛛 La	arge 🗆
Crown density Sparse ☐ Normal ☒ Dense ☐ Interior branches Few ☒ Norm	al□ Dense□ Vines/N	listletoe/Mo	oss 🗆 _			
Recent or expected change in load factors						
Tree Defects and Conditions Affecting		ure				
	the Likelihood of Fail	ure				
— Crown and Brai	the Likelihood of Fail			Lightning c	lamage.	
— Crown and Brai	the Likelihood of Fail nches — cks 囚					
Unbalanced crown ☑ LCR 30 % Cra Dead twigs/branches □ % overall Max. dia. Co Broken/Hangers Number 6 Max. dia. 6"	the Likelihood of Fail nches — cks 囚 dominant □			Includ	ed bark	X
Unbalanced crown ☑ LCR 30 % Dead twigs/branches □ % overall Max. dia. Co Broken/Hangers Number 6 Max. dia. 6" Over-extended branches ☑	the Likelihood of Fail nches — cks 囚		Cavit	Includ cy/Nest hole	ed bark % ci	irc.
Unbalanced crown 🖾 LCR 30 % Dead twigs/branches 🗆 % overall Max. dia Co Broken/Hangers Number 6 Max. dia. 6" Over-extended branches 🖾 Pruning history	the Likelihood of Fail nches — cks 囚 dominant □ ak attachments 囚		_ Cavit	Includ cy/Nest hole ar branches	ed bark % ci present	irc.
Unbalanced crown 🖾 LCR 30 % Dead twigs/branches 🗆 % overall Max. dia. Co Broken/Hangers Number 6 Max. dia. 6" Over-extended branches 🖾 Pruning history Crown cleaned 🖾 Thinned 🗆 Raised 🖾	the Likelihood of Fails ches — cks 🗓 dominant □ ak attachments 🗓 vious branch failures 🗓 ad/Missing bark □ Canker	s/Galls/Burls	_ Cavit _ Simil	Includ cy/Nest hole_ lar branches wood damag	ed bark % ci present ge/decay	irc.
Unbalanced crown 🖾 LCR 30 % Dead twigs/branches □ % overall Max. dia. Co Broken/Hangers Number 6 Max. dia. 6" Over-extended branches 🖾 Pruning history Crown cleaned 🖾 Thinned □ Raised 🖾 Reduced □ Topped □ Lion-tailed □ Co	the Likelihood of Fails ches — cks 🗓 dominant □ ak attachments 🗓 vious branch failures 🗓 ad/Missing bark □ Canker	s/Galls/Burls twood decay	Cavit Simil	IncludInclud	ed bark % ci present ge/decay	irc.
Unbalanced crown 🖾 LCR 30 % Dead twigs/branches □ % overall Max. dia. 6" Broken/Hangers Number 6 Max. dia. 6" Over-extended branches 🖾 Pruning history Crown cleaned 🖾 Thinned □ Raised 🖾 Co Reduced □ Topped □ Lion-tailed □ Co Flush cuts □ Other — Condition(s) of col	the Likelihood of Fails cks 🗓 dominant 🗆 ak attachments 🖾 vious branch failures 🖾 _ ad/Missing bark 🗆 Canker chks 🗀 Hear sponse growth Fair	s/Galls/Burls twood decay	Cavit Simil □ Sapv	Includ cy/Nest hole_ lar branches wood damag	ed bark % ci present ge/decay	irc.
Unbalanced crown 🖾 LCR 30 % Dead twigs/branches □ % overall Max. dia Co Broken/Hangers Number 6 Max. dia. 6" Over-extended branches 🖾 Pruning history Crown cleaned 🖾 Thinned □ Raised 🖾 Reduced □ Topped □ Lion-tailed □ Co Flush cuts □ Other Res Scaffold Tearout	the Likelihood of Fail ches — cks 🗓 dominant □ ak attachments 🗓 vious branch failures 🗓 ad/Missing bark □ Canker hks □ Hear sponse growth Fair	s/Galls/Burls twood decay	Cavit Simil □ Sapv	Includ cy/Nest hole_ lar branches wood damag	ed bark % ci present ge/decay	irc.
Unbalanced crown 🖾 LCR 30 % Dead twigs/branches	the Likelihood of Fail ches — cks 🗓 dominant □ cak attachments 🖾 vious branch failures 🖾 ad/Missing bark □ Canker ches □ Hear choose growth Fair checern ct Size	s/Galls/Burls twood decay	Cavit Simil Sapv	Includ cy/Nest hole ar branches wood damag tance	ed bark % ci present ge/decay	⊠ irc. ⊠
Unbalanced crown 🖾 LCR 30 % Cra Dead twigs/branches 🗆 % overall Max. dia Co Broken/Hangers Number 6 Max. dia. 6" Over-extended branches 🖾 Pruning history Crown cleaned 🖾 Thinned 🗆 Raised 🖾 Co Reduced 🗆 Topped 🗆 Lion-tailed 🗀 Co Flush cuts 🗆 Other Condition (s) of core Scaffold Tearout Part Size 8" Fall Distance 50ft Pa Load on defect N/A Minor Moderate Significant 🖾 Loa	the Likelihood of Fail ches — cks 🗓 dominant □ cak attachments 🖾 vious branch failures 🔯 ad/Missing bark □ Canker ches □ Hear choose growth Fair checrn ct Size don defect N/A □	s/Galls/Burls twood decay Minor	Cavit Simil Sapv	Includ cy/Nest hole_ ar branches wood damag tance oderate □ Si	ed bark % ci present ee/decay	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Unbalanced crown 🖾 LCR 30 % Cra Dead twigs/branches □ % overall Max. dia Co Broken/Hangers Number 6 Max. dia. 6" Over-extended branches ☑ Pruning history Crown cleaned ☑ Thinned □ Raised ☑ Co Reduced □ Topped □ Lion-tailed □ Co Flush cuts □ Other _ Condition (s) of cor Scaffold Tearout Part Size 8" Fall Distance 50ft Pa Load on defect N/A □ Minor □ Moderate □ Significant ☑ Load	the Likelihood of Fail ches — cks 🗓 dominant □ cak attachments 🖾 vious branch failures 🖾 ad/Missing bark □ Canker ches □ Hear choose growth Fair checern ct Size	s/Galls/Burls twood decay Minor	Cavit Simil Sapv	Includ cy/Nest hole_ ar branches wood damag tance oderate □ Si	ed bark % ci present ee/decay	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Unbalanced crown 🖾 LCR 30 % Cra Dead twigs/branches 🗆 % overall Max. dia Co Broken/Hangers Number 6 Max. dia. 6" Over-extended branches 🖾 Pruning history Crown cleaned 🖾 Thinned 🗆 Raised 🖾 Co Reduced 🗆 Topped 🗆 Lion-tailed 🗀 Co Flush cuts 🗆 Other Condition (s) of core Scaffold Tearout Part Size 8" Fall Distance 50ft Pa Load on defect N/A Minor Moderate Significant 🖾 Loa	the Likelihood of Fail ches — cks 🗓 dominant □ cak attachments 🖾 vious branch failures 🔯 ad/Missing bark □ Canker ches □ Hear choose growth Fair checrn ct Size don defect N/A □	s/Galls/Burls twood decay Minor ble Possibl	Cavit Simil Sapv	Includ cy/Nest hole ar branches wood damag tance derate Si bbable In	ed bark % ci present ee/decay	irc.
Unbalanced crown \(\) LCR \(\frac{30}{8} \) Overall Max. dia. \(\frac{6}{9} \) We Overall Max. dia. \(\frac{6}{9} \) We Over-extended branches \(\) Pruning history Crown cleaned \(\) Thinned \(\) Raised \(\) Reduced \(\) Topped \(\) Lion-tailed \(\) Co Flush cuts \(\) Other \(\) Condition (s) of c	the Likelihood of Fail ches — cks 🗓 dominant □ ak attachments 🔯 vious branch failures 🔯 ad/Missing bark □ Canker aks □ Hear sponse growth Fair acern t Size d on defect which are sponsed in the sponsed	s/Galls/Burls twood decay Minor ble□ Possibl and Roo	Cavit Simil Sapv	Includ cy/Nest hole_ lar branches wood damag tance oderate □ Si bbable □ In	ed bark % ci present ge/decay	irc.
Unbalanced crown \(\) LCR \(\frac{30}{9} \) Overall Max. dia. \(\frac{6}{9} \) We Over-extended branches \(\) Pruning history Crown cleaned \(\) Thinned \(\) Raised \(\) Reduced \(\) Ion-tailed \(\) Condition (s) of confliction of failure Improbable \(\) Pall Distance \(\) Significant \(\) Imminent \(\) Likelihood of failure Improbable \(\) Abnormal bark texture/color \(\) Coc	the Likelihood of Fail ches — cks 🗓 dominant □ cak attachments 🖾 vious branch failures 🖾 ad/Missing bark □ Canker ches □ Hear choose growth Fair checern ct Size don defect N/A □ celihood of failure Improba — Roots llar buried/Not visible 🖾	s/Galls/Burls twood decay Minor ble Possibl and Roo	Cavit Simil Sapv	Includ cy/Nest hole ar branches wood damag tance oderate Si bbable In Stem	ed bark % ci present ge/decay	irc.
Unbalanced crown ☑ LCR 30 % Dead twigs/branches □ % overall Max. dia. 6" We Preserve Max. dia. 6" Pruning history Crown cleaned ☑ Thinned □ Raised ☑ Co Reduced □ Topped □ Lion-tailed □ Co Flush cuts □ Other — Reserve Minor □ Moderate □ Significant ☑ Load on defect N/A □ Minor □ Moderate □ Significant ☑ Load on defect N/A □ Minor □ Moderate □ Significant ☑ Load Codominant stems ☑ Included bark ☑ Cracks ☑ Deed/Missing bark ☑ Abnormal bark texture/color ☑ Codominant stems ☑ Included bark ☑ Cracks ☑ Deed/Missing bark ☑ Cracks ☑ Deed/Missing bark ☑ Included bark ☑ Cracks ☑ Deed/Missing Defease Minor □ Moderate □ Codominant Stems ☑ Included bark ☑ Cracks ☑ Deed/Missing Defease Minor □ Codominant Stems ☑ Included bark ☑ Cracks ☑ Deed/Missing Defease Minor □ Codominant Stems ☑ Included bark ☑ Cracks ☑ Deed/Missing Defease Minor □ Codominant Stems ☑ Included bark ☑ Cracks ☑ Deed/Missing Defease Minor □ Codominant Stems ☑ Included bark ☑ Cracks ☑ Deed Minor □ Codominant Stems ☑ Included Defease Minor □ Codominant Stems ☑ Cracks ☑ Defease Minor □ Codominant Stems ☑ Codominant Stems ☑ Included Defease Minor □ Codominant Stems ☑	the Likelihood of Fail cks 🗓 dominant □ ak attachments 🔯 vious branch failures 🔯 ad/Missing bark □ Canker sponse growth Fair cern t Size d on defect hka □ Roots llar buried/Not visible 🔯 ad □ December	s/Galls/Burls twood decay Minor ble□ Possibl and Roo	Cavit Simil Sapv	Includ cy/Nest hole_ far branches wood damag tance oderate	ed bark % ci present ge/decay gignificant nminent girdling	irc.
Unbalanced crown \(\) LCR \(\frac{30}{8} \) Overall Max. dia. \(\frac{6}{9} \) We Overall Max. dia. \(\frac{6}{9} \) We Over-extended branches \(\frac{1}{2} \) Pruning history Crown cleaned \(\frac{1}{2} \) Thinned \(\frac{1}{2} \) Reduced \(\frac{1}{2} \) Topped \(\frac{1}{2} \) Lion-tailed \(\frac{1}{2} \) Condition (s) of column (s) of	the Likelihood of Fail ches — cks 🗓 dominant □ cak attachments 🖾 vious branch failures 🖾 ad/Missing bark □ Canker chks □ Hear sponse growth Fair cern ct Size d on defect N/A □ clihood of failure Improba — Roots clar buried/Not visible 🖾 ad □ Decemonser	s/Galls/Burls twood decay Minor ble Possibl and Roor Depth_ cay □	Cavit Simil Sapv Fall Dist Mce Pro t Colla	Include cy/Nest hole ar branches wood damag tance derate Si bbable In Stem Conks/Mush	ed bark % ci present ge/decay girdling hrooms 5 % ci	irc.
Unbalanced crown 🖾 LCR 30 % Overall Max. dia. Cobad twigs/branches 🗆 % overall Max. dia. 6" Web Over-extended branches 🖾 Pruning history Crown cleaned 🖾 Thinned 🗆 Raised 🖾 Cobad Reduced 🗀 Topped 🗀 Lion-tailed 🗀 Reservation (s) of color Flush cuts 🗆 Other Reservation Flush cuts 🗀 Fall Distance 50ft Part Size 8" Fall Distance 50ft Pathod on defect N/A Minor Moderate Significant 🖾 Location of failure Improbable Possible Probable 🖾 Imminent 🗆 Like Sapwood damage/decay 🖾 Cankers/Galls/Burls 🗀 Sap ooze 🗀 Cobad Cobad Reservation of the color of th	the Likelihood of Fail ches — cks 🗓 dominant □ clack attachments 🖾 vious branch failures 🖾 ad/Missing bark □ Canker ches □ Hear sponse growth Fair chern the Size do no defect N/A □ clihood of failure Improba — Roots clar buried/Not visible 🖾 ad □ Decented clar Cout/Damaged	s/Galls/Burls twood decay Minor ble Possibl and Roor Depth_ cay □	Cavit Simil Sapv Fall Dist Mce Pro t Colla	Include cy/Nest hole_ dar branches wood damag tance oderate	ed bark % ci present ge/decay gignificant nminent girdling hrooms 5 % ci k 6"	irc.
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	☑ Final ☐ Preliminary Advanced assessment needed ☑No ☐Yes-Typ																l								



Client City of Pacifica	Date <u>3/31/2023</u>		Tir	ne Daylight		
Address/Tree location Minerva Avenue, Pacifica Tree species Monterey Cypress (Hesperocyparis macrocarpa) dbh 55.9"	Tree	no. 589		Sheet 1	of	1
Tree species Monterey Cypress (Hesperocyparis macrocarpa) dbh 55.9"	Height <u>80ft</u>	Cro	wn spr	ead dia. <u>6</u> (Oft	
Assessor(s) Roy Leggitt, Aaron Wang Tools used						
Target Assess	sment					
Target description	Target protection	Target within drip line Target within about 1		Occupancy rate 1-rare 2-occasional 3-frequent 4-constant	Practical to move target?	Restriction practical?
1 Structures	none	X		4	No	No
2 Vehicles	none	X		4	No	No
3 Pedestrians	none	Х		3	No	No
4						
Site Factor	rs					
History of failures Tearouts, limb drop	Topography	, Flat⊠ Slo	oe□	%	Aspect	
Site changes None ☐ Grade change ☒ Site clearing ☒ Changed soil hydrology						
Soil conditions Limited volume ☐ Saturated ☐ Shallow ☐ Compacted ☐ Pave						
Prevailing wind direction West Common weather Strong winds ☑ Ice ☐ S						
Tree Health and Spo	•					
Vigor Low □ Normal ☒ High □ Foliage None (seasonal) □ None		% Chlor	otic	% Nec	crotic	%
Pests/Biotic Cypress Canker, Brown Cubical Rot Abiot	tic					
Species failure profile Branches ☒ Trunk ☒ Roots ☒ Describe brittle wood fai	ilures in overextended branc	hes, uproot	ng/stem	<u>failures in h</u>	neavy st	orms
Load Factor	ors					
Wind exposure Protected ☐ Partial ☒ Full ☐ Wind funneling ☐	Relativ	e crown siz	e Sma	II□ Mediui	m 🛛 La	arge 🗆
Crown density Sparse ☐ Normal ☒ Dense ☐ Interior branches Few ☒ Normal ☐ Interior branches Few ☒ Dense ☐ Interior branches Few ☐ Interior br	rmal□ Dense□ Vines/N	listletoe/N	oss 🗆			
Recent or expected change in load factors						
necent of expected change in load factors						
Tree Defects and Conditions Affecti		ure				
Tree Defects and Conditions Affecti	ing the Likelihood of Fail	ure				
Tree Defects and Conditions Affects — Crown and Br	ing the Likelihood of Faileranches —			Lightning	lamage.	
Tree Defects and Conditions Affecti — Crown and Br Unbalanced crown ☑ LCR 25 % Dead twigs/branches □ % overall Max. dia	ing the Likelihood of Failuranches — Cracks 囚					
Tree Defects and Conditions Affecti — Crown and Br Unbalanced crown ☒ LCR 25 % Dead twigs/branches ☐ % overall Max. dia New / Lorgers Number May dia	ing the Likelihood of Failo ranches — Cracks 囚 Codominant □			Includ	led bark	X
Tree Defects and Conditions Affection — Crown and Br Unbalanced crown ☑ LCR 25 % Dead twigs/branches □ % overall Max. dia. Broken/Hangers Number Max. dia. Over-extended branches ☑	ing the Likelihood of Failuranches — Cracks 囚		Cavi	Includ ity/Nest hole	led bark % ci	irc.
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Tree Defects and Conditions Affecti — Crown and Br Unbalanced crown ☒ LCR 25 % Dead twigs/branches ☐ % overall Max. dia Broken/Hangers Number Max. dia Over-extended branches ☒ Pruning history Crown cleaned ☒ Thinned ☐ Raised ☒ Reduced ☐ Topped ☐ Lion-tailed ☐ Flush cuts ☐ Other — Condition (s) of or Scaffold Tearout Part Size 8" Fall Distance 60ft Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☒ Likelihood of failure Improbable ☐ Probable ☒ Imminent ☐ — Trunk — Dead/Missing bark ☒ Abnormal bark texture/color ☒ Codominant stems ☒ Included bark ☒ Cracks ☒ Sapwood damage/decay ☒ Cankers/Galls/Burls ☐ Sap ooze ☐ Lightning damage ☐ Heartwood decay ☒ Conks/Mushrooms ☐ Cavity/Nest hole 10 % circ. Depth 30" Poor taper ☒ Lean ° Corrected? Response growth Poor Condition (s) of concern Codominant Stem Failure	ranches — Cracks 🖾 Codominant □ Weak attachments 🖾 Previous branch failures 🖾 Dead/Missing bark 🖾 Canker Conks □ Hear Response growth Fair concern Part Size Load on defect N/A □ Likelihood of failure Improbal — Roots Collar buried/Not visible 🖾 Dead 🖾 Dec Ooze □ Cracks □ Cut/Damaged Root plate lifting □ Response growth Poor Condition (s) of concern Up	s/Galls/Burls twood deca Minor ble Possik and Roc Depth cay 🗓 roots 🗓	Fall Di: Mile Pr	Includity/Nest hole ilar branches wood damagestance stance sobable Ir Ir Ilar Stem Conks/Musl Cavity I se from trunk	led bark	
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Tree Defects and Conditions Affecti — Crown and Br Unbalanced crown ☑ LCR 25 % Dead twigs/branches □ % overall Max. dia. □ Broken/Hangers Number □ Max. dia. □ Over-extended branches ☑ Pruning history Crown cleaned ☑ Thinned □ Raised ☑ Reduced □ Topped □ Lion-tailed □ Flush cuts □ Other □ Condition (s) of ore of the condition of the condit	ranches — Cracks 🖾 Codominant □ Weak attachments 🖾 Previous branch failures 🖾 Dead/Missing bark 🖾 Canker Conks □ Hear Response growth Fair concern Part Size Load on defect N/A □ Likelihood of failure Improbal — Roots Collar buried/Not visible 🖾 Dead 🖾 Dec Ooze □ Cracks □ Cut/Damaged Root plate lifting □ Response growth Poor Condition (s) of concern Up	s/Galls/Burls twood deca Minor ble Possik and Roc Depth cay X roots X	Fall Distance	Includity/Nest hole ilar branches wood damagestancestan	led bark	

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Targe	et			Cond	ition(s)	L	Fail	ure			Imp	act				& lm ∕atrix			11304	jucii		
(Target n or descrip		Tree	part		ncern	bable	<u>e</u>	ple	ent	»(m		<u>~</u>	vhat		kely	ible		cant		Risk rating
						Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely	Negligible	Minor	Significant	Severe	(from Matrix 2)
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Vehic	les	Bra	nch		ffold rout			Х		Г			Х	Г		Х		Г			Х	High
Pedest	rians			166	iiout			Х				Χ			Х						Х	Moderat
Struct	ıres			Codo	minant			Х					Х			Х		Г			Х	High
Vehic	les	Tru	ınk	St	em			Х					Х			Х					Х	High
Pedest	rians			Fa	ilure			Х				Х			Х						Х	Moderat
Structu	ires						X						Х		Х						Х	Moderat
Vehicl	es	Roo	ots	Upro	oting		Х						Х		Х						Х	Moderat
Pedestr	ians						Х					Χ		Χ							Х	Low
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Matrix I . Likel	ihood m	atrix.							_						1							
Likelihood			Likeliho	ood of Impact																		
of Failure	Very lo	w Lov		Medium	High			-														
Imminent	Unlikel	` 		Likely	Very likel	У		-	+			+										
Probable	Unlikel			Somewhat likely	1 	l a la		-	_			+				_			+			
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Matrix 2. Risk		· ,			1																	
Likelihood	Ť		Conse	quences of Failu	re																	
Failure & Im	-	Negligible	Mino	or Significan	t Severe	•		-														
Very like	ly	Low	Moder	ate High	Extrem	e		-	+			+				+			+			
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Unlikely		Low	Low Low		Low	te				-			ı									
Notes evels																						
Notes, expl a vertical cavity				30" deep using til	e probe												/					\
										J							\					
Mitigation o	ptions																					
1. Remove Tre	-	mmended)															_ R	esid	lual	risk		None
2																	_ R	esid	lual	risk		
3.																	_ R	esid	lual	risk		
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		ing	Low	☐ Moderate ☐] High 🛛	Extren	ne 🗆	l														



Client City of Pacifica	Date <u>3/31/2023</u>		Tir	ne Daylight		
Address/Tree location Minerva Avenue, Pacifica Tree species Monterey Cypress (Hesperocyparis macrocarpa) dbh 49.6"	Tree r	no. <u>590</u>		_ Sheet1	of	1_
Assessor(s) Roy Leggitt, Aaron Wang Tools used d-tap	e, aerial lift, drone, pro	bes	Tim	e frame <u>one</u>	year	
Target Assessment						
Target description	Target protection	Target within drip line Target within as 1x Ht		Occupancy rate 1-rare 2 - occasional 3 - frequent 4 - constant	Practical to move target?	Restriction practical?
1 Structures	none	Х		4	No	No
2 Vehicles	none	Х		4	No	No
3 Pedestrians	none	Х		3	No	No
4						
Site Factors						
History of failures Tearouts, limb drop	Topography	Flat X Slop	e□	%	Aspect	
Site changes None ☐ Grade change ☒ Site clearing ☒ Changed soil hydrology ☒ Rod						
Soil conditions Limited volume ☐ Saturated ☐ Shallow ☐ Compacted ☐ Pavement						
Prevailing wind direction West Common weather Strong winds ☑ Ice ☐ Snow D	☐ Heavy rain 🖾 Des	scribe <u>Heavy</u>	season	al storms with	extreme	e winds
Tree Health and Species	Profile					
Vigor Low □ Normal □ High □ Foliage None (seasonal) □ None (dead Pests/Biotic Cypress Canker, Brown Cubical Rot Abiotic Abiotic		% Chloro	otic	% Nec	crotic _	%
Species failure profile Branches 🖾 Trunk 🖾 Roots 🖾 Describe brittle wood failures in	n overextended branch	nes, uprooti	na/sten	n failures in h	eavv st	torms
Load Factors						
Wind exposure Protected ☐ Partial ☒ Full ☐ Wind funneling ☐	Relative	crown siz	e Sma	II□ Mediui	m 🛛 La	arge □
Crown density Sparse □ Normal ☒ Dense □ Interior branches Few ☒ Normal □						
Recent or expected change in load factors						
Tree Defects and Conditions Affecting the	e Likelihood of Failu	ıre				
— Crown and Branch	es —					$\overline{}$
Unbalanced crown ☑ ICR 15 % Cracks	፟፟፟			Lightning o	damage	_ \
Dead twigs/branches D% overall Max. dia Codom	ninant 💢				ed bark	
Broken/Hangers Number Max. dia. Weak a	attachments 🛭				% ci	irc.
Over-extended branches 🖾 Previou	us branch failures 🛛 _		Sim	ilar branches	present	X
Pruning history Crown cleaned ☑ Thinned □ Raised ☑ Dead/N	Missing bark 🛛 Cankers	s/Galls/Burls	☐ Sap	wood damag	e/decay	/ X I
Reduced \square Topped \square Lion-tailed \square Conks						
Flush cuts Other Respon	ise growth <u>Fair</u>					
Scaffold Tearout Condition (s) of concer	n					
4.411	ze		Fall D:	stance		_
Tall Distance Tall of	n defect N/A □			loderate□ Si		
,	ood of failure Improbal				-	- 1
—Trunk —	— Roots	and Roo	t Col	 lar —		\prec
Y						_ /
	buried/Not visible -	_			girdling	
Codominant stems ☑ Included bark ☐ Cracks ☑ Dead		ау 🗆		Conks/Musl		
Sapwood damage/decay 🖾 Cankers/Galls/Burls 🗆 Sap ooze 🗆 Ooze				Cavity 🗆		
Lightning damage ☐ Heartwood decay ☒ Conks/Mushrooms ☐ Cracks Cavity/Nest hole % circ. Depth Poor taper ☒ Root n	, ,	oots 🛛	Distand	e from trunl		
15 Noot p	late lifting 🗆			Soil we		
Respoi	nse growth <u>Poor</u>					_
Condition (s) of concern Codominant Stem Failure Condit	ion(s) of concern <u>Upr</u>	ooting				_
	ize49.6"	F	all Dist	ance	100ft	
		-				
Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☒ Load on	n defect N/A □	Minor		loderate□ Si	ignificant	+ IXI

							Risk	Cate	egor	izati	ion														
														Likel	ihoc	od									
		ĺ								Failu	ure			Imp	act				& Im		Coı	nseq	luen	ces	
Target n			Tree	part			tion(s)		<u>e</u>				Н	Ė			0		1atrix	ŕ			l	\Box	5.1
or descri _l	otion)					OT CO	ncern		Improbable	e e	Probable	Imminent	»		돌		ĕ	Somewhat		Very likely	Negligible	L	Significant	e.	Risk rating
									mprc	Possible	rob	mmi	Very low	Low	Medium	High	Unlikely	ome	Likely	/ery	legli	Minor	ignif	Severe	(from Matrix 2)
Struct	ures	\dashv			+				F	_	X	_	ŕ	_	_	X	F	5	X	_	۲	_	5	X	High
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Pedest			ыа	TICH		Tea	rout		Н		X		Н		X			Х	^						
Structi		\dashv			+					V			H		^ 	X									Moderat Moderat
		\dashv	T .				minant		H	X	H		H			<u> </u>	\vdash	X			\vdash			-	
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Pedest		4			+	Гаі	luie			Х					Х		Х							Χ	Low
Structu	ıres	_										Х				Х				Х				Х	Extreme
Vehicl	es	_	Roo	ots		Upro	oting					Х				Х				Х				Χ	Extreme
Pedestr	ians											Х			Х				Х					Χ	High
		П											Г												
	d. Likelihood matrix.																					_			
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Likelihood					_	<u> </u>					-	+										+			
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Possible	Unlike	-	Unlik		00	Unlikely	Somewha		ely		-	+				\neg			\top			+	\neg		
Improbable	Unlike	ely	Unlik	ely		Unlikely	Unlike	ely			-	_													
Matrix 2. Risk	rating r	matr	ix.																						
Likelihood	l of			Cons	eque	nces of Failur	е																		
Failure & Im	pact	Ne	gligible	Min	or	Significant	Sev	ere			-														
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Client City of Pacifica	Date <u>3/31/2023</u>		Time_Daylight		
Address/Tree location Minerva Avenue, Pacifica Tree species Monterey Cypress (Hesperocyparis macrocarpa) dbh 100.9"					1_
Assessor(s) Roy Leggitt, Aaron Wang Tools used <u>d-tape</u>	e, aerial lift, drone, pro	bes	_ Time frame <u>one</u>	e year	
Target Assessment					
Target description	Target protection	Target within drip line Target within ab		Practical to move target?	Restriction practical?
1 Structures	none	Х	4	No	No
2 Vehicles	none	Х	4	No	No
3 Pedestrians	none	Х	3	No	No
4					
Site Factors					
History of failures Tearouts, limb drop					
Site changes None \square Grade change \boxtimes Site clearing \boxtimes Changed soil hydrology \boxtimes Roo	t cuts 🛛 Describe <u>Pa</u>	ving and co	nstruction		
Soil conditions Limited volume ☐ Saturated ☐ Shallow ☐ Compacted ☐ Pavement of		_			
Prevailing wind direction West Common weather Strong winds ☑ Ice ☐ Snow ☐		cribe <u>Heavy</u>	seasonal storms with	extreme	e winds
Tree Health and Species P					
Vigor Low □ Normal □ Foliage None (seasonal) □ None (dead) Pests / Biotic Cypress Canker, Brown Cubical Rot Abiotic Abiotic		6 Chlorot	tic% Ne	crotic	%
Species failure profile Branches 🏻 Trunk 🖾 Roots 🖾 Describe brittle wood failures in	overextended branch	es. uprootin	ng/stem failures in h	neavy st	orms
Load Factors					
Wind exposure Protected ☐ Partial ☒ Full ☐ Wind funneling ☐	Relative	crown size	small□ Mediu	m 🛛 La	arge □
Crown density Sparse ☐ Normal ☒ Dense ☐ Interior branches Few ☒ Normal ☐					
Recent or expected change in load factors					
Tree Defects and Conditions Affecting the	Likelihood of Failu	re			
— Crown and Branche	es —				$\overline{}$
Unbalanced crown 🖾 LCR 30 % Dead twigs/branches □ 5 % overall Max. dia. 2" Broken/Hangers Number Max. dia. 2" Over-extended branches 🖾 Pruning history Crown cleaned 🖾 Thinned □ Raised 🖾 Reduced □ Topped □ Lion-tailed □ Conks I	inant ttachments s branch failures fissing bark Cankers, Hearty	/Galls/Burls I	Include Cavity/Nest hole Similar branches	led bark % ci present ge/decay	irc.
——————————————————————————————————————	າ				
Part Size12" Fall Distance70ft Part Size Load on defect N/A □ Minor □ Moderate □ Significant ☒ Load on	eN/A 🗆	Minor	Fall Distance	ignificant	t 🗆 🏻
Likelihood of failure Improbable □ Probable □ Imminent □ Likeliho	od of failure Improbab	le 🗀 Possible	e □ Probable □ II	nminent	<u>"</u>
—Trunk —	— Roots a	and Root	t Collar —		
Codominant stems ☒ Included bark ☒ Cracks ☒ Dead ☐ Sapwood damage/decay ☒ Cankers/Galls/Burls ☐ Sap ooze ☐ Lightning damage ☐ Heartwood decay ☒ Conks/Mushrooms ☐ Cavity/Nest hole ☐ 10 % circ. Depth ☐ 12" Poor taper ☐ Lean _ 8 _ ° Corrected? No Response growth Poor Condition (s) of concern _ Codominant Stem Failure ☐ Cracks ☐ Response ☐ Condition ☐ Conditio		oots 🖾 🛚 [Conks/Mus Cavity □ _ Distance from trun Soil we	% ci k <u>0"</u> eakness	irc.
,	n defect N/A 🗆 nod of failure Improbab		☐ Moderate☐ S e☐ Probable ☐ II	•	

						Risk Ca	ategoi	rizat	ion														
												Likel	ihoc	d									
Taus								Fail	ure			Imp	act				& lm ∕atrix		Cor	nseq	uen	ces	
Targe (Target n or descrij	umber	Tr	ee part			tion(s) ncern	Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely	Negligible	Minor	Significant	Severe	Risk rating (from Matrix 2
Struct	ures								X					Х			Х	П				Х	High
Vehic	les	\dashv $_{B}$	ranch		Sca ⁻ Tea			T	X					Х			Х	П	П			Χ	High
Pedest	rians				Tea	Tout			X				Х			Χ						Χ	Modera
Structi	ures						т	Т	X		Г			Х			Х		П			Χ	High
Vehic	les	┦ ,	runk			minant em	\vdash		X		Г			Х			Х	Н	Н			Χ	High
Pedest	rians					lure			X		Т		Х			Χ							Moderat
Structu				\top			+	Н		Х	г			Х				Х				Х	Extrem
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of Failure	Very lo	w L	ow		Medium	High																	
Imminent	Unlike		hat likely	+	Likely	Very like	у		-														
Probable Possible	Unlike Unlike		likely likely	+	Unlikely	Likely Somewhat I	ikoly		-	+			-	+			_			-	_		
Improbable	Unlike		likely		Unlikely	Unlikely																	
Matrix 2. Risk		- 1	- /		,	, ,																	
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Failure & Im		Negligible		-	Significan		e		-	+				+			+				\dashv		
Very like		Low	Mode		High	Extrem			-	_													
Likely		Low	Mode	rate	High	High																	
Somewhat I Unlikely		Low	Lo ¹		Moderate Low	Modera	ate													No	orth		
Notes, expla	nation	s, descript	ions			Low																	
Mitigation of 1. Remove Tre	ee (reco																	_	esid				None
2 3																		_					
4																							
Overall tree] High □			 า												-		
Overall resid		•				•				Rec	nn	mer	nder	line	pect	Hon	inte	arva ^l	N/ <i>I</i>	Δ			
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Data ⊠ Final Inspection lin		-											JIIUL	icie(



Client City of Pacifica	Date <u>3/31/2023</u>		Tin	ne Daylight								
	Tree no					1						
Tree species Monterey Cypress (Hesperocyparis macrocarpa) dbh 55.0"	Height <u>80ft</u>	Cro	wn spr	ead dia. <u>80</u>	Oft							
Assessor(s) Roy Leggitt, Aaron Wang Tools used <u>d-tape</u>	, aerial lift, drone, prob	es	_ Time	e frame <u>one</u>	year							
Target Assessment												
Target description	Target protection	Target within drip line Target within ab 1x Ht.		Occupancy rate 1-rare 2 - occasional 3 - frequent 4 - constant	Practical to move target?	Restriction practical?						
1 Structures	none	Х		4	No	No						
2 Vehicles	none	Х		4	No	No						
3 Pedestrians	none	Х		3	No	No						
4												
Site Factors												
History of failures Tearouts, limb drop Topography Flat Slope ☐												
Pests/Biotic Cypress Canker, Brown Cubical Rot												
· · ·		10										
		-										
Wind exposure Protected Partial												
Condition (s) of concern	1											
Scaffold Tearout Part Size18" Fall Distance60ft Part Size Load on defect N/A□ Minor □ Moderate□ Significant ☒ Load on	e	Minor	Fall Dis	stance oderate□ Si	gnificant	 t 🗆						
—Trunk —	— Roots a	nd Root	t Coll	lar —								
Dead/Missing bark ☒ Abnormal bark texture/color ☒ Codominant stems ☐ Included bark ☒ Cracks ☒ Dead ☒ Ooze ☐ Lightning damage ☐ Heartwood decay ☒ Conks/Mushrooms ☐ Cavity/Nest hole 25 % circ. Depth 12" Poor taper ☒ Response growth Poor Condition (s) of concern Codominant Stem Failure Part Size 24" Fall Distance 80ft Color ☒ Collar b Dead ☒ Ooze ☐ Cracks ☒ Ooze ☐ Cracks ☒ Conks/Mushrooms ☐ Cracks ☒ Root plate ☐ Response Book ☐ Condition ☐ Codominant Stem Failure ☐ Condition ☐ Condition ☐ Condition ☐ Part Size ☐ Part Size ☐ Part Size ☐ Collar b Dead ☒ Ooze ☐ Cracks ☒ Ooze ☐ Cracks ☒ Ooze ☐ Cracks ☒ Conks/Mushrooms ☐ Cracks ☒ Root plate ☐ Condition	uried/Not visible Deca Cut/Damaged roate lifting se growth Poor on (s) of concern Upro	Depth	4" Distance	_ Stem_ Conks/Mush Cavity e from trunk Soil we	% ci c 0" eakness	irc.						
Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☒ Load on Likelihood of failure Improbable ☐ Possible ☐ Probable ☒ Imminent ☐ Likelihood	defect N/A □ od of failure Improbable			oderate□ Si obable □ In	_							

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Target n	umber		Tree	part			tion(s) ncern	e e	Τ	1		Г				U		iuu ix	ŕ	0		<u> </u>		Risk
or descri	ption)					0.00		Improbable	Possible	Probable	Imminent	Very low		Medium		Unlikely	Somewhat	^	Very likely	Negligible	or	Significant	ire	rating
								ᆵ	Poss	Prok	lmm	Very	Low	Med	High	E	Som	Likely	Very	Neg	Minor	Sign	Severe	(from Matrix 2)
Struct	ures	T							Τ	X					Χ			Х					Χ	High
Vehic	cles	\neg	Bra	nch		Scat Tea			T	Х					Χ			Х					Χ	High
Pedest	rians					160	out			X		Т		Χ			Х						Χ	Moderat
Struct	ures	\neg			\top				Т	X		Г			Χ	г		Χ					Χ	High
Vehic	eles	\dashv	Tru	ınk		Codor	ninant em		十	X		Г			Χ			Х					Χ	High
Pedest						Fai				X		г		Χ			Х	,						Moderat
Structu		\dashv			\top				X			г			Х	Н	Х							Moderat
Vehic		\dashv	Roo	nte		Upro	ntina	\vdash	^ X	\vdash		⊢	Н		Х	H	X			Н		<u> </u>		Moderat
Pedestr			1100	J10		op.o.	,g		^ X			H		V	۸	Х	_			Н			X	
reuesii	lalis	_			+			-	 ^			H		Х		_							^	Low
		4			\vdash	╀	-		L				_				H							
						\vdash			L															
Matrix I . Like	lihood r	natr	ix.								_			_	_		1				_	_		
Likelihood	Likelihood matrix. Likelihood of Impact																							
of Failure	Very lo	ow	Lov		_	Medium	High																	
Imminent	Unlike	_	Somewha			Likely	Very like			-				+	+							\dashv		
Probable Possible	Unlike	_	Unlik Unlik		Son	newhat likely	Likely Somewhat			-	_			+								_		
Improbable	Unlike Unlike	_	Unlik			Unlikely Unlikely	Unlikel																	
Matrix 2. Risk		<u> </u>		,				,																
Likelihood	$\overline{}$			Cons	eane	nces of Failur	e																	
Failure & In		Ne	gligible			Significant		re		-	+			+								_		
Very like	ly		Low	Mode		High	Extrer				+			+	_		-				+	_		
Likely	-		Low	Mode		High	High														N.I.			
Somewhat Unlikely			Low	Lov		Moderate Low	Moder Low														IN	orth		
Officer	y [LOW	LOV	v	LOW	LOW	<i>'</i>																
Notes, expla Extensive cul					orth c	ida @ 15' 25'																		
large helical f							/																	
																			\					
												J			\				\					
Mitigation of 1. Remove Tr	-		ondod)																В	ام:م	امیر	مامات		None
																			_					None
2 3																			_					
Overall tree		_	None ∑				-				Pos		mai	doo	ممزا	nor	Ho-	in+-	. Pr. /-	ı NI/	٨			
																-	uon	шце	sı vd	I <u>N//</u>	٦			
Data Final						ssment need I∆ccess □Vii										l								



Client City of Pacifica	Date <u>3/31/2023</u>		Tin	ne Daylight		
Address/Tree location Minerva Avenue, Pacifica Tree species Monterey Cypress (Hesperocyparis macrocarpa) dbh_53.1"						1
Assessor(s) Roy Leggitt, Aaron Wang Tools used d-tape	e, aerial lift, drone, pro	bes	_ Time	e frame <u>one</u>	year	
Target Assessment						
Target umper Target description	Target protection	Target within drip line Target within 1x Ht.		Occupancy rate 1-rare 2 - occasional 3 - frequent 4 - constant	Practical to move target?	Restriction practical?
1 Structures	none	Х		4	No	No
2 Vehicles	none	Х		4	No	No
3 Pedestrians	none	Х		3	No	No
4						
Site Factors						
History of failures Tearouts, limb drop	Topography	Flat X Slop	e□	% .	Aspect	
Site changes None ☐ Grade change ☒ Site clearing ☒ Changed soil hydrology ☒ Roc						
Soil conditions Limited volume ☐ Saturated ☐ Shallow ☐ Compacted ☐ Pavement of	over roots 🛛 <u>30</u> %	Describe				
Prevailing wind direction West Common weather Strong winds \square Ice \square Snow D	☐ Heavy rain 🖾 Des	cribe <u>Heavy</u>	season	al storms with	extreme	e winds
Tree Health and Species F	Profile					
Vigor Low □ Normal □ High □ Foliage None (seasonal) □ None (dead) Pests/Biotic Cypress Canker, Brown Cubical Rot Abiotic Abiotic		6 Chloro	tic	% Nec	crotic _	%
Species failure profile Branches 🖾 Trunk 🖾 Roots 🖾 Describe brittle wood failures in	n overextended branch	es. uprootir	na/stem	failures in h	eavv st	torms
Load Factors		, -,	J 1-			
Wind exposure Protected ☐ Partial ☒ Full ☐ Wind funneling ☐	Relative	crown size	s Smal		m 🛛 La	arge □
Crown density Sparse ☐ Normal ☒ Dense ☐ Interior branches Few ☒ Normal ☐						
Recent or expected change in load factors						
Tree Defects and Conditions Affecting the	e Likelihood of Failu	re				
— Crown and Branch						
	□			Lightning c	lamage	п \
Dead twigs/branches ☐% overall Max. dia Codom	inant 🛘				ed bark	
Broken/Hangers Number Max. dia Weak a	ttachments 🛛				% c	irc.
Over-extended branches Previou	ıs branch failures 🛛					
Pruning history Crown cleaned ☑ Thinned □ Raised ☑ Dead/N	Aissing bark ☐ Cankers	/Galls/Burls	□ Sap	wood damag	e/decay	/□
Crown cleaned ☒ Thinned ☐ Raised ☒ Conks ☐ Co	□ Heart	wood decay	- □			
	se growth <u>Fair</u>					
Condition (s) of concern	n					
Scaffold Tearout Part Size 12" Fall Distance 50ft Part Size			E-II D:			
Turi dise	ze n defect N/A □			stance <u> </u>		
,	ood of failure Improbab				-	- 1
—Trunk —	— Roots a	and Roo	t Call			\prec
Y						~ /
	ouried/Not visible 🛛				girdling	
Codominant stems Included bark Cracks Dead		ay 🛛		Conks/Mush		
Sapwood damage/decay ☑ Cankers/Galls/Burls ☐ Sap ooze ☐ Ooze				Cavity 🗆		
Lightning damage ☐ Heartwood decay ☒ Conks/Mushrooms ☐ Cracks Cavity/Nest hole % circ. Depth Poor taper ☐ Root no		oots 🛛	Distanc	e from trunk		
	late lifting 🗆			Soil we		
Response growth Poor	nse growth <u>Poor</u>					
Condition (s) of concern Codominant Stem Failure Condition	ion(s) of concern <u>Upr</u>	ooting				
	ze53.1"	Fa	all Dista	ance	90ft	
	n defect N/A □			oderate□ Si	ignificant	† l X 1
	ood of failure Improbab				•	

							Risk C	ategoi	rizat	ion														
													Likel	ihod	d									
_									Fail	ure			Imp	act			ure &			Cor	rseq	uen	ces	
Targe (Target n or descrip	umber	1	ree pai	rt			tion(s) ncern	Improbable	ple	able	Imminent	low		um			Somewhat		Very likely	Negligible	_	Significant	ē	Risk rating
								Impr	Possible	Probable	Immi	Very low	Low	Medium	High	Unlikely	Some	Likely	Very	Negli	Minor	Signi	Severe	(from Matrix 2
Structi	ures					0	·			Х					Χ			Х					Χ	High
Vehic	les		Branch	ı		Scat Tea		L		Х					Χ			Х					Χ	High
Pedest	rians				\perp					Х				Х			Х						Χ	Modera
Struct	ures					Codor	minant		L		Х				Χ				Х	Ц			Χ	Extrem
Vehic	les	_	Trunk			Ste	em	L	L	L	Х	L			Χ	L			Х	Ш			Χ	Extrem
Pedest	rians				\perp	Fai	lure		L		Х			Х				Х					Χ	High
Structu									X						Χ		Х		Ш	Ц			Х	Modera
Vehicl		_	Roots			Upro	oting	L	X	L					Χ	L	Х			Ш			Χ	Modera
Pedestr	Pedestrians X X X																		Х	Low				
		4						\perp	L										Ш	Ц		Ш		
		_						\perp	L															
Matrix I . Likel	ihood m	natrix.									+			+	_		_	+			+	-		
Likelihood		'	Lil	keliho	od o	f Impact	'																	
of Failure	Very lo		Low		N	Medium	High																	
Imminent Probable	Unlike Unlike		what li nlikely	- 	Some	Likely ewhat likely	Very like Likely	ly																
Possible	Unlike		nlikely			Unlikely	Somewhat I	ikely			+													
Improbable	Unlike	ly U	nlikely	,	ι	Unlikely	Unlikely	/			+			-	+			+			+	+		
Matrix 2. Risk	rating n	natrix.									_			_	_			_			_	_		
Likelihood					_	ces of Failur																		
Failure & Im	-					Significant																		
Very like Likely	iy	Low		Лоder Лoder		High High	Extren High																	
Somewhat I	ikely	Low		Low		Moderate															No	orth		
Unlikely	/	Low		Low	,	Low	Low																	
Notes, expla																								
crack betwee	n codon	ninant ster	ns, act	tive se	eparat	tion with 2" g	<u>lap</u>)
																			\					
												J			\				\					
Mitigation o	-		1																R	esid	ادیر	rick		None
2																			_					INOTIC
3																			_					
4																								
Overall tree				Low			l High □			1														
Overall resid		•		Low			l High □				Rec	om	men	nded	lins	pec	tion	inte	erval	N/A	<u>\</u>			
Data X Final	□ Prel	iminary	Advan	iced a			_									-								
Inspection lin		-																						



Client City of Pacifica	Date <u>3/31/2023</u>		Time	e Daylight		
	Tree n					
Tree species Monterey Cypress (Hesperocyparis macrocarpa) dbh 63.5"						
Assessor(s) Roy Leggitt, Aaron Wang Tools used <u>d-tape</u>	e, aerial lift, drone, prol	bes	_ Time f	frame <u>one</u>	year	
Target Assessment						
Target description	Target protection	Target within drip line Target within abs		Occupancy rate 1-rare ! - occasional 3 - frequent 4 - constant	Practical to move target?	Restriction practical?
1 Structures	none	Х		4	No	No
2 Vehicles	none	Х		4	No	No
3 Pedestrians	none	Х		3	No	No
4						
Site Factors						
	Topography				-	
Site changes None \square Grade change \boxtimes Site clearing \boxtimes Changed soil hydrology \boxtimes Root						
Soil conditions Limited volume ☐ Saturated ☐ Shallow ☐ Compacted ☐ Pavement o						
Prevailing wind direction West Common weather Strong winds ☑ Ice ☐ Snow ☐		cribe <u>Heavy</u>	seasonal	storms with	extreme	e winds
Tree Health and Species P		′ Chloro	<u></u>	0/ Noo		0/
Vigor Low □ Normal ☑ High □ Foliage None (seasonal) □ None (dead) Pests / Biotic Cypress Canker, Brown Cubical Rot Abiotic Abiotic	□ Normal 100 %	Cilloro	uc	_% Nec	rouc _	
Species failure profile Branches ☒ Trunk ☒ Roots ☒ Describe brittle wood failures in	overextended branch	es, uprootir	ng/stem f	ailures in h	eavy st	orms
Load Factors						
Wind exposure Protected ☐ Partial ☒ Full ☐ Wind funneling ☐						
Crown density Sparse ☐ Normal ☒ Dense ☐ Interior branches Few ☒ Normal ☐	Dense ☐ Vines/Mi	istletoe/Mo	oss 🗆 _			
Recent or expected change in load factors						
Tree Defects and Conditions Affecting the	Likelihood of Failu	re				
— Crown and Branche	es —					
Dead twigs/branches ☐% overall Max. dia Codomii Broken/Hangers Number Max. dia Weak at Over-extended branches ☑ Pruning history	nant 🗆 tachments 🕱 s branch failures 🛱		_ Cavity _ Simila	Include /Nest hole_ or branches	ed bark % c present	tirc.
Crown cleaned ☒ Thinned ☐ Raised ☒ Conks ☐ Conks ☐	lissing bark ⊠ Cankers, □ Heartv se growth <u>Fair</u>	wood decay				
Scaffold Tearout Condition (s) of concern						-
4011	e		Fall Dista	ance		_
Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☒ Load on	defect N/A ☐ od of failure Improbab			derate□ Si pable □ In	_	
—Trunk —	— Roots a	and Roo	t Colla	ır —		
Codominant stems ☑ Included bark ☑ Cracks ☑ Dead ☑ Sapwood damage/decay ☑ Cankers/Galls/Burls □ Sap ooze □ Lightning damage □ Heartwood decay ☑ Conks/Mushrooms □ Cavity/Nest hole 50 % circ. Depth 6" Poor taper ☑ Lean 10 Corrected? No Response growth Poor Condition (s) of concern Codominant Stem Failure	XI Deca	oots 🛛	Co Ca Distance	onks/Mush avity 🛛 <u>5</u> from trunk Soil we	6% ci c0" akness	irc.
Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☒ Load on Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☒ Likelihoo	defect N/A □ od of failure Improbab			derate□ Si _l pable □ In	_	

									on														
												Likel	ihoo	d									
								Failu	ıre			Imp	act			ure &			Cor	iseq	uen	ces	
Target (Target nui or descript	mber	Tree	part		Condi of co		Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely	Negligible	Minor	Significant	Severe	Risk rating (from Matrix 2
Structui	res								Х					Χ			Х	П				Χ	High
Vehicle	 es	- Bra	nch		Scaf				χ			П	П	Χ			Х	П			П	Χ	High
Pedestri	ans	1			Tear	out			Χ				Χ			Х						Χ	Modera
Structur	es								П	Χ				Χ	Г			Χ				Χ	Extreme
Vehicle	 es	- Tru	ınk		Codor Ste				Н	Х				Х	Н			Х				Χ	Extrem
Pedestria		-			Fail					Х			Χ	, ,			Χ	, A				Х	High
Structure				+			Н	Х	Н					Х	Н	Х		Н	Н			Х	Modera
Vehicle] Roo	nts		Uprod	ntina	Н	\ Х	Н		H	Н	Н		H	X		Н	Н		Н	Х	Modera
Pedestria		- 1	510		00.00	9		\ Х	Н				V	Х	Х	_						X	
reuesina	1115							^					Х		_							^	Low
		-					\vdash		Н			Н	Н		_			Н	\square		Н		
		-													H								
Matrix I . Likelih	nood man	trix.							_	+			+	_		_	_			+	_		+
Likelihood			Likelih	ood o	f Impact				_														
of Failure	Very low	Lov	v	N	/ledium	High																	
	Unlikely				Likely	Very likely			-	$^{+}$			\dagger							$^{+}$			
	Unlikely Unlikely	+			ewhat likely Jnlikely	Likely Somewhat lik	olv.		-	+			+	+						+	_		
	Unlikely				Jnlikely	Unlikely	ery																
Matrix 2. Risk r	,		- /		,	,																	
Likelihood			Conse	eauen	ices of Failur	P																	
Failure & Imp		Negligible		-	Significant		\dashv		-	+			+							+	+		
Very likely		Low	Mode		High	Extreme			-											_			
Likely		Low	Mode	rate	High	High																	
Somewhat lik Unlikely	kely	Low	Lov Lov		Moderate Low	Moderat	9													No	orth		
Notes, explar crack, decay o		description	ons				_																
Mitigation op 1. Remove Tree 2. 3.	otions e (recom	mended)																R R	esid	ual ual	risk risk		None
Overall tree r Overall residu Data Final Inspection lim	ual risk □ Prelim	None 🛭	anced a	□ assess	Moderate □		ctrem -Type	ie □ e/Re	asor	n <u>Al</u>	read	ly Co			-	tion	inte	erval	<u>N//</u>	Α			



Clie	ent City of Pacifica	Date 3/31/2023 Time Daylight										
Add	dress/Tree location Minerva Avenue, Pacifica	Tree	Sheet 1	Sheet 1 of 1								
Tre	e species Monterey Cypress (Hesperocyparis macrocarpa) dbh_35.0"	Height <u>90ft</u> Crown spread dia. <u>50ft</u>										
Ass	sessor(s) Roy Leggitt, Aaron Wang Tools used <u>d-ta</u>	oe, aerial lift, drone, pro	obes		Time	e frame <u>one</u>	year					
	Target Assessmen	t										
Target number	Target description	Target protection		Target within about 1 x Ht.	Target within ⁶ 1.5 x Ht.	Occupancy rate 1-rare 2-occasional 3-frequent 4-constant	Practical to move target?	Restriction practical?				
1		none	Х			4	No	No				
2	Vehicles	none	X			4	No	No				
3	Pedestrians	none	X			3	No	No				
4												
	Site Factors											
History of failures Tearouts, limb drop												
Site	e changes None 🗆 Grade change 🛛 Site clearing 🖾 Changed soil hydrology 🖾 Ro											
	l conditions Limited volume ☐ Saturated ☐ Shallow ☐ Compacted ☐ Pavement											
Pre	evailing wind direction West Common weather Strong winds 🛭 Ice 🗆 Snow	☐ Heavy rain 🖾 De	scribe <u>l</u>	Heavy s	eason	al storms with	extreme	e winds				
	Tree Health and Species	Profile										
	or Low ☑ Normal ☐ High ☐ Foliage None (seasonal) ☐ None (dea		% C	hloroti	ic	% Ned	crotic _	%				
Pes	sts/Biotic Cypress Canker, Brown Cubical Rot Abiotic ecies failure profile Branches X Trunk X Roots X Describe brittle wood failures	in overextended branc	has un	rooting	n/etom	failures in h	noavy et	forme				
Spe	Load Factors	in overextended brane	1103, up	nooung	<u> </u>	i idilaico iii i	icavy 3i	OIIIIO				
\\/ii	nd exposure Protected □ Partial ☒ Full □ Wind funneling □	Relativ	o crow	n siza	Sma	IID Madiu	m [∇] I:					
	own density Sparse□ Normal ☑ Dense□ Interior branches Few ☑ Normal □											
	cent or expected change in load factors		iistieto	e/ IVIO	зэ ⊔ .							
Nec												
	Tree Defects and Conditions Affecting the		ure					_				
	— Crown and Branc											
		acks 🗆 Lightning damage 🗖 adominant 🗖 Included bark 🕱										
	Droken/Hangers Number May die	attachments 🛛										
	Over-extended hranches IXI	ous branch failures 🛛						- 1				
	Pruning history Dead	Missing bark 🛭 Canker			-		•					
	Crown cleaned Kill Thinned Li Raised Kill	_										
	Reduced D Topped D Lion-tailed D	Dear										
	Condition (s) of conce	rn										
	Scaffold Tearout							_				
		ize				stance						
	,	on defect N/A 🗆 nood of failure Improba				loderate□ Si	0	- 1				
	—							$\overline{}$				
	—Trunk —	— Roots	and I	Root	Col	lar —)				
	Dead/Missing bark 🖾 Abnormal bark texture/color 🖾 Collar	buried/Not visible 🛚	De	pth	4"	_ Stem	girdling	;				
	Codominant stems ☐ Included bark ☒ Cracks ☒ Dead	□ Dec	cay 🗆			Conks/Musl	hrooms	. 🗆 📗				
	Sapwood damage/decay ☑ Cankers/Galls/Burls □ Sap ooze □ Ooze					Cavity 🗆	% c	irc.				
	Lightning damage ☐ Heartwood decay ☒ Conks/Mushrooms ☐ Crack	s □ Cut/Damaged	roots 🏻	I D	istanc	e from trunl	< <u>6"</u>					
		plate lifting 🗖				Soil we						
	Lean 8 ° Corrected? No	onse growth Poor						_				
	Response growth POOF	Condition (s) of concern Uprooting										
				F. I	LD:-/		90ft					
	Part Size14" Fall Distance90ft Part Size	Size35.0"				ance	90ft	_				

Risk Categorizat																									
														Likel	ihod	d									
										Failu	ıre			Imp	act				& Im		Coı	nseq	luen	ces	
Targe (Target n or descri _l	umber		Tree	part			tion(s) ncern		Improbable	Possible	Probable	Imminent	Very low	Low .	Medium	High	Unlikely	Somewhat	Tikely Cikely	Very likely	Negligible	Minor	Significant	Severe	Risk rating (from Matrix 2)
Struct	ures	\top			\top			┪			Х					Χ	П		Х					Χ	High
Vehic		1	Bra	nch		Scat Tea		ı			Х		Г			Х	Г		Х					Χ	High
Pedest	rians										Х				Х			Х						Χ	Moderat
Struct	ures					Codor	minant				Х					Χ			Χ					Χ	High
Vehic	les		Tru	ınk			illiani em				Х					Χ			Х					Χ	High
Pedest	rians					Fai	lure				Х				Χ			Х						Χ	Moderat
Structu	ıres									Х			Г			Χ	Г	Х						Χ	Moderat
Vehicl	es		Roo	ots		Upro	oting	ı		Х			Г			Х		Х						Χ	Moderat
Pedestr	ians							Χ			Г		Χ		Х							Χ	Low		
					十			╛					г		,,		г								
		┪						ı					Г				Н								
								ı									П								
								_		ļ	ļ			ļ								ļ	<u> </u>		
Matrix I . Likel	_		-																						
Likelihood of Failure			, , , , , , , , , , , , , , , , , , , 			od of Impact					-	+			+	+						+	\dashv		
Imminent	Very lo Unlike	_	Lov omewha			Medium Likely	High Very lik		_		_				_							_			
Probable	Unlike		Unlik		Son	Somewhat likely Likely																			
Possible	Unlike	ly	Unlikely			Unlikely	Somewhat	t likel	У																
Improbable	Unlike	ly	Unlik	ely		Unlikely	Unlike	ely			-				+							+			
Matrix 2. Risk	rating n	natrix	ζ.						_		-	_			+	_						+	_		
Likelihood	-					nces of Failur					_														
Failure & In	-		ligible	Min																					
Very like Likely	- +		ow ow	Mode		- 									+										
Somewhat			ow	Lov		Moderate			_													N	orth		
Unlikely	У	Lo	ow	Lov	V	Low	Lov	w																	
	Notes, explanations, descriptions no taper, no buttress or root flare																								
Mitigation of 1. Remove Tre												R	esid	lual	risk		None								
																				_					
2																				_					
4																									
Overall tree risk rating Low ☐ Moderate ☐ High ☐ Extr																									
Overall residual risk None ☑ Low ☐ Moderate ☐ High ☐ Extre												Rec	om	men	ideo	lins	pec	tion	inte	erva	I N/A	A			
	Data ☑ Final ☐ Preliminary Advanced assessment needed ☑No ☐Yes-Typ																-				. 1/1	-			
Inspection li																									



Client City of P	Pacifica			Date <u>3/31/20</u>												
Address/Tree	location Minerva Av	venue, Pacifica	l	Tre	e no59	596 Sheet 1 of 1 Crown spread dia. 20ft										
Tree species N	Nonterey Cypress (He	esperocyparis r	macrocarpa)	dbh <u>27.0"</u>	Height <u>100ft</u>		Crown spread dia. 20ft									
					-tape, aerial lift, drone,											
			Т	arget Assessm	ent											
Target number		Target descrip	tion	Target protection		Target within abs		Occupancy rate 1-rare 2-occasional 3-frequent 4-constant	Practical to move target?	Restriction practical?						
1 Structures					none	Х			4	No	No					
² Vehicles					none	Х			4	No	No					
3 Pedestrians	S				none	Х			3	No	No					
4																
				Site Factors	•											
History of failur	es Tearouts, limb dro	ор			Topograp	hy Flat i X	Slope	e 🗆	%	Aspect						
•					Root cuts 🛛 Describe											
					ent over roots 🛛 80											
			-		ow□ Heavy rain⊠ [_									
				ealth and Spec	•											
Vigor Low ☒	Normal □ High □] Foliage	None (seasonal)	□ None (d	ead) Normal 100	% (hlorot	ic	% Neo	crotic	%					
Pests/Biotic Cv	press Canker, Brown	n Cubical Rot		Abiotic	ne (dead)											
Species failure	profile Branches 🛭	Trunk 🛛 Roo	ts 🛛 Describe <u>b</u>	orittle wood failur	es in overextended bra	nches, u	orooting	g/stem	<u>n failures in h</u>	neavy st	orms					
				Load Factors	3											
					Relat											
Crown density	Sparse ☐ Normal D	又 Dense □	Interior branche	s Few 🛭 Norm	al □ Dense □ Vines ,	/Mistleto	oe/Mo	ss 🗆 🏻								
Recent or expec	cted change in load f	factors														
		Tree De	fects and Condi		g the Likelihood of Fa	ilure										
		Tree De			g the Likelihood of Fa	ilure										
Unbalanced	crown 🛭		— Crov	itions Affecting	g the Likelihood of Fanches —				Lightning (damage						
Unbalanced Dead twigs/b	crown ⊠ branches □	LCR <u>30</u> % % overall	— Crov	itions Affecting wn and Brai	g the Likelihood of Fa					damage led bark						
Broken/Hang	gers Number		— Crov	wn and Brai	g the Likelihood of Fa nches — acks 🗆				Includ	led bark	X					
Broken/Hang Over-extende	gers Number _ ed branches 🛚	LCR <u>30</u> % % overall	— Crov	wn and Brai	g the Likelihood of Fanches — ncks — dominant —			Cavi	Includ	led bark % c	irc.					
Over-extende Pruning histe Crown clean Reduced	gers Number_ ed branches 🖾 ory led 🖾 Thi	LCR <u>30</u> %% overall inned □ pped □	Max. dia Max. dia Raised Lion-tailed	wn and Brai	athe Likelihood of Fanches — acks □ dominant □ eak attachments ☒ evious branch failures ☒ ad/Missing bark □ Cank nks □ He	ers/Galls,	/Burls D	_ Cavi _ Sim _ Sap	Includ ity/Nest hole ilar branches wood damag	led bark % c present ge/decay	irc.					
Over-extende Pruning histe Crown clean	gers Number_ ed branches 🖾 ory led 🖾 Thi	LCR <u>30</u> %% overall	Max. dia Max. dia Raised Lion-tailed	wn and Brai	g the Likelihood of Fanches — acks dominant eak attachments evious branch failures ad/Missing bark cank checks He sponse growth Fair	ers/Galls,	/Burls D	Cavi	Includ ity/Nest hole ilar branches wood damag	led bark % c present ge/decay	irc.					
Over-extende Pruning histe Crown clean Reduced	gers Number_ ed branches 🖾 ory ed 🖾 Thi □ Top	LCR 30 %% overall inned pped ner	Max. dia Max. dia Raised Lion-tailed	wn and Brai	athe Likelihood of Fanches — acks □ dominant □ eak attachments ☒ evious branch failures ☒ ad/Missing bark □ Cank nks □ He	ers/Galls,	/Burls D	Cavi	Includ ity/Nest hole ilar branches wood damag	led bark % c present ge/decay	irc.					
Over-extende Pruning histe Crown clean Reduced	gers Number_ed branches 🖾 ory led 🖾 Thi Top Oth	LCR <u>30</u> %% overall inned □ pped □	Max. dia	wn and Brai	g the Likelihood of Fanches — acks dominant eak attachments evious branch failures ad/Missing bark cank checks He sponse growth Fair	 ers/Galls, artwood	/Burls [decay	_ Cavi _ Sim _ Sap	Includ ity/Nest hole ilar branches wood damag	led bark % c present ge/decay	⊠ irc. ⊠ / □ / □ / □ / □ / □ / □ / □ / □ / □ /					
Broken/Hang Over-extende Pruning hist Crown clean Reduced Flush cuts	gers Number_ed branches 🖾 ory ed 🖾 Thi Top Oth Scaffe	LCR 30 %% overall inned pped per old Tearout Fall Dista	Max. dia	wn and Brain Crain	g the Likelihood of Fanches — acks □ dominant □ eak attachments 図 evious branch failures 図 ad/Missing bark □ Canl nks □ He sponse growth Fair ncern —	ers/Galls, artwood	/Burls E decay	Cavi	Includ ity/Nest hole ilar branches wood damag	led bark % c present ge/decay	⊠ irc. ⊠					
Protein/Hang Over-extende Pruning histe Crown clean Reduced Flush cuts Part Size Load on defe	gers Number_ed branches 🖾 ory led 🖾 Thi Top Oth Scaffor	LCR 30 %% overall inned pped ner old Tearout Minor N	Max. dia Max. dia Raised Lion-tailed Co ance50ft Moderate□ Signific	wn and Brain Crain Company Com	g the Likelihood of Fanches — acks □ dominant □ eak attachments ☒ evious branch failures ☒ ad/Missing bark □ Cank nks □ He sponse growth Fair ncern	ers/Galls, artwood	/Burls E decay I Minor	Cavi	Includity/Nest hole ilar branches wood damag	led bark% c present ge/decay ignificant	irc.					
Protein/Hang Over-extende Pruning histe Crown clean Reduced Flush cuts Part Size Load on defe	gers Number_ed branches \(\begin{align*} \text{Number} & \text{Staffe} \\ \text{Scaffe} & \text{Scaffe} \\ \text{ect} & \text{N/A} \text{Improbable} \text{Improbable} \text{Improbable} \text{Improbable} \text{Improbable} \text{Improbable} \text{Improbable} \qquad \qq \qqq \qqq \qq \qq \qq \qq \qq \	LCR 30 %% overall inned pped ner old Tearout Fall Dista Minor Nossible Pi	Max. dia Max. dia Raised Lion-tailed Co ance50ft Moderate□ Signific	wn and Brain Crain Company Com	g the Likelihood of Fanches — acks □ dominant □ eak attachments ☒ evious branch failures ☒ ad/Missing bark □ Cank nks □ He sponse growth Fair ncern rt Size ad on defect N/A □ elihood of failure Impro	ers/Galls, artwood	/Burls E decay I Minor Possible	Cavi	Includity/Nest hole ilar branches wood damag	led bark% c present ge/decay ignificant	irc.					
Pruning history Crown clean Reduced Flush cuts Part Size Load on defe	gers Number_ed branches \(\text{\text{M}} \) ory led \(\text{\text{M}} \) Thi \text{\text{Torp}} \) Scaffe 6" ect \(\text{N/A} \text{\text{M}} \) f failure \(\text{Improbable} \text{\text{M}} \)	LCR 30 %% overall inned pped pold Tearout Fall Dista Minor Minor Possible Porunk —	Max. dia Max. dia Max. dia Raised Lion-tailed Co ance50ft Moderate□ Signific robable ☒ Immine	wn and Brain Crain	g the Likelihood of Fanches — acks □ dominant □ eak attachments 図 ad/Missing bark □ Canl nks □ He sponse growth Fair ad on defect N/A □ elihood of failure Impro	ers/Galls, artwood bable D	/Burls E decay I Minor Possible	Cavi Sim Sap Fall Di: M: Pr	Includity/Nest hole ilar branches wood damag	led bark% c present ge/decay ignificant mminent	irc. 🛛 📗 📗 🗎					
Pruning hister Crown clean Reduced Flush cuts Part Size Load on defe	gers Number_ed branches \(\tilde{\Sigma} \) ory led \(\tilde{\Sigma} \) Thi \tilde{\Sigma} Top Oth Scaffe 6" lect N/A \(\tilde{\Sigma} \) failure Improbable \(\tilde{\Sigma} \) — Tring bark \(\tilde{\Sigma} \)	LCR 30 %% overall inned pped per old Tearout Fall Dista Minor Possible Precedence Preceden	Max. dia Nax. dia Nax. dia Nax. dia Co Co Co Soft Noderate Signific robable Immineral bark texture/co	wn and Brain Cra Co Win Pra Co Re Indication (s) of co Eant Like Co Eant Like Co End	g the Likelihood of Fanches — acks ☐	ers/Galls, artwood bable cs and	/Burls E decay I Minor Possible	Cavi Sap Fall Di: Pr Col	Includity/Nest hole ilar branches wood damage stance stance Including st	led bark	irc. 🛛 📗 📗 📮					
Pruning histor Crown clean Reduced Flush cuts Part Size Load on defe Likelihood of Dead/Missir Codominant	gers Number_ed branches \(\text{\text{Scaffe}} \) ory led \(\text{\text{N}} \) Thi \text{Scaffe} \) ect \(\text{N/A} \) If failure \(\text{Improbable} \) — Tring bark \(\text{\text{M}} \) t stems \(\text{\text{S}} \)	LCR 30 %% overall inned □ oped □ ner old Tearout Fall Dista Minor □ M 1 Possible □ Pr runk — Abnorma Included bark	Max. dia	wn and Brain Crain Company Com	g the Likelihood of Fanches — acks — dominant — eak attachments evious branch failures ad/Missing bark — Cank nks — He sponse growth Fair ncern — rt Size — ad on defect N/A — elihood of failure Impro — Roof Illar buried/Not visible [ad — C	ers/Galls, artwood bable D	/Burls E decay I Minor Possible	Cavi Sim Sap Fall Di: M Pr Col	Includity/Nest hole ilar branches wood damage stance loderate Sobable Ir Stem Conks/Musi	led bark% compresent ge/decay ignificant mminent girdling hrooms	irc.					
Pruning history Crown clean Reduced Flush cuts Part Size Load on defe Likelihood of Dead/Missir Codominant Sapwood da	gers Number_ed branches 🖾 ory and 🖾 Thi Top Oth Scaffe 6" ect N/A failure Improbable — Trang bark 🖾 t stems amage/decay 🖾 Ca	LCR 30 %	Max. dia	wn and Brain Cra Co Win Pro Co Re ondition (s) of co Pa cant Lik Co Coks De Co	g the Likelihood of Fanches — acks □	ers/Galls, artwood bable cs and Decay Decay	/Burls E decay Minor Possible Root	Cavi Sim Sap Fall Dis Pr Coll	Includity/Nest hole ilar branches wood damage stance loderate Stobable Ir Stem Conks/Musi Cavity	led bark	irc.					
Pruning history Crown clean Reduced Flush cuts Part Size Load on defe Likelihood of Dead/Missir Codominant Sapwood da Lightning da	gers Number_ed branches \(\) ory led \(\) Thi \(\) Top \(\) Oth Scaffe 6" ect N/A \(\) failure Improbable \(\) mg bark \(\) t stems \(\) amage/decay \(\) Calanage \(\) Heartwo	LCR 30 %% overall inned	Max. dia	wn and Brain Cra Co Win Pro A Co Re Indication (s) of co East X Lo ent Like Like Locks X De cores X Co Cra	g the Likelihood of Fanches — acks ☐	ers/Galls, artwood bable cs and Decay Decay	/Burls E decay Minor Possible Root	Cavi Sim Sap Fall Dis Pr Coll	Includity/Nest hole ilar branches wood damage stance loderate Stobable Ir Stem Conks/Musicavity te from trunite its following to the context of t	led bark% co	irc.					
Pruning histor Crown clean Reduced Flush cuts Part Size Load on defe Likelihood of Dead/Missir Codominant Sapwood da Lightning da Cavity/Nest	gers Number_ed branches 🖾 ory and 🖾 Thi Top Oth Scaffe 6" ect N/A 🗆 failure Improbable 🗆 — Tr ang bark 🖾 t stems 🗆 amage/decay 🖾 Calamage 🗆 Heartwo hole 50 % circ.	LCR 30 %% overall inned □ oped □ ner old Tearout Fall Dista Minor □ M 1 Possible □ Pr runk — Abnorma Included bark ankers/Galls/Bu od decay 🔯 Depth 6'	Max. dia	wn and Brainer Company wn and Brainer Company Production (s) of company cant Liker Company cant Liker Company cant Com	g the Likelihood of Fanches — acks — dominant — eak attachments evious branch failures ad/Missing bark — Cank nks — He sponse growth Fair ncern — rt Size — ad on defect N/A — elihood of failure Impro — Root Illar buried/Not visible I acks — Cut/Damage ot plate lifting —	ers/Galls, artwood bable s and Deecay d roots d	/Burls E decay Minor Possible Root	Cavi Sim Sap Sap Pr Coll	Includity/Nest hole ilar branches wood damage stance loderate Stobable Ir Stem Conks/Musi Cavity te from trunk Soil we	led bark% co	irc.					
Pruning history Crown clean Reduced Flush cuts Part Size Load on defet Likelihood of Dead/Missir Codominant Sapwood da Lightning da Cavity/Nest Lean _8	gers Number_ed branches \(\) ory and \(\) Thi \(\) Top \(\) Oth Scaffe 6" ect N/A \(\) If failure Improbable \(\) and bark \(\) amage/decay \(\) Calamage \(\) amage \(\) Heartwo hole \(\) 60 % circ. " Corrected? \(\) No	LCR 30 %% overall inned □ oped □ her old Tearout Fall Dista Minor □ M 1 Possible □ Pr runk — Abnorma Included bark ankers/Galls/Bu od decay 🔯 Depth 6'	Max. dia Max. dia Max. dia Max. dia Raised Lion-tailed Co ance 50ft Moderate □ Signific robable ☒ Immine al bark texture/co ☒	wn and Brain Cra Co Win Pro A Co Re Indicate	g the Likelihood of Fanches — acks □	ers/Galls, artwood bable s and De lecay d roots d	/Burls E decay Minor Possible Root	Cavi Sap Sap Fall Di: Pr Col	Includity/Nest hole ilar branches wood damage stance stance sobable _ Ir Stem Conks/Musi Cavity se from trunks Soil we	led bark	irc.					
Pruning history Crown clean Reduced Flush cuts Part Size Load on defet Likelihood of Dead/Missir Codominant Sapwood da Lightning da Cavity/Nest Lean _8 Response gr	gers Number_ed branches \(\) ory and \(\) Thi \text N/A \(\) failure Improbable \(\) amage/decay \(\) Catanage \(\) manage/decay \(\) Catanage \(\) amage \(\) Heartwonhole \(\) amage \(\) Heartwonhole \(\) amage \(\) Corrected? \(\) rowth \(\) Poor	LCR 30 %% overall inned □ oped □ ner old Tearout Fall Dista Minor □ M 1 Possible □ Pr runk — Abnorma Included bark enkers/Galls/Bu od decay 🔯 Depth 6'	Max. dia	wn and Brain Cra Co Win Pro A Co Re Indicate	g the Likelihood of Fanches — acks — dominant — eak attachments evious branch failures ad/Missing bark — Cank nks — He sponse growth Fair ncern — rt Size — ad on defect N/A — elihood of failure Impro — Root Illar buried/Not visible I acks — Cut/Damage ot plate lifting —	ers/Galls, artwood bable s and De lecay d roots d	/Burls E decay Minor Possible Root	Cavi Sap Sap Fall Di: Pr Col	Includity/Nest hole ilar branches wood damage stance stance sobable _ Ir Stem Conks/Musi Cavity se from trunks Soil we	led bark	⊠ irc. ⊠ □ □ □ □ □ irc. □					
Pruning history Crown clean Reduced Flush cuts Part Size Load on defe Likelihood of Dead/Missir Codominant Sapwood da Lightning da Cavity/Nest Lean8 Response gr Condition (s	gers Number_ed branches \(\) ory and \(\) Thi \(\) Top \(\) Oth Scaffe 6" ect N/A \(\) If failure Improbable \(\) and bark \(\) at stems \(\) amage/decay \(\) Calamage \(\) amage \(\) Heartwolds hole \(\) 50 \(\) circ. Corrected? \(\) No	LCR 30 %% overall inned	Max. dia	wn and Brain Cra Co Win Pro Co Re Indication (s) of co Pa Condition (s) of co Pa Condition (s) of co Pa Condition (s) of co Re Condition	g the Likelihood of Fanches — acks □	ers/Galls, artwood bable s and De lecay d roots d	/Burls E decay Minor Possible Root	Cavi Sap Sap Fall Di: Pr Coll	Includity/Nest hole ilar branches wood damage stance loderate Stobable Ir Conks/Musicavity te from trunk	led bark	I					
Pruning history Crown clean Reduced Flush cuts Part Size Load on defe Likelihood of Dead/Missir Codominant Sapwood da Lightning da Cavity/Nest Lean8 Response gr Condition (s	gers Number_ed branches \(\) ory led \(\) Thi \(\) Top \(\) Oth Scaffe 6" ect N/A \(\) If failure Improbable \(\) amage/decay \(\) Calamage \(\) amage/decay \(\) Calamage \(\) hole \(\) 60 % circ. " Corrected? \(\) No rowth \(\) Poor) of concern	LCR 30 %	Max. dia	wn and Brain Cra Co Win Pro Co Re ondition (s) of co Pa cant X Lo ent Like Co Cks X De cor Re Co Re Re Co Re Co	g the Likelihood of Fanches — acks — dominant — eak attachments ad/Missing bark — Canlanks — He sponse growth Fair actern — Roof allar buried/Not visible ad — Canland	ers/Galls, artwood bable s and Deecay d roots Uprooting	/Burls E decay Minor Possible Root pth Fal	Cavi Sim Sap Sap Fall Di: Pr Coll	Includity/Nest hole ilar branches wood damage stance stance stance soderate Sobable Ir Stem Conks/Mus. Cavity se from trunk Soil we	led bark	I					

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									Likelihood Failure & Impact															
_									Fail	ure			Imp	act				& lm ∕atrix		Coı	nseq	uen	ces	
Target n	umber		Tree	part			tion(s) ncern	e e				П				U		iuu ix	ŕ	0		<u> </u>		Risk
or descri _l	ption)					0.00		Improbable	Possible	Probable	Imminent	Very low		Medium		kely	Somewhat	^	Very likely	Negligible		ifican	ire	rating
								ᆵ	Poss	Prok	lmm	Very	Low	Med	High	Unlikely	Som	Likely	Very	Neg	Ξ	Sign	Seve	(from Matrix 2)
Struct	ures									Х					Χ			Х					Χ	High
Vehic	eles		Bra	nch		Scat Tea				Х					Χ			Х					Χ	High
Pedest	rians					rearout				Х				Χ			Х						Χ	Moderat
Struct	ures	\neg			\top				Т	Х		П			Χ	г		Χ					Χ	High
Vehic	les	一	Tru	ınk		Codor	ninant em	\vdash	\vdash	Х			П		Χ	Н		Χ			X High		High	
Pedest						Fai				Х				Χ			Х	,						Moderat
Structu		\dashv			\top				X						Х	Н	Х							Moderat
Vehicles			Roo	nts		Upro	otina	\vdash	X			Н	Н		Х	H	X					<u> </u>		
Pedestrians			1100	J10		op.o.	,g		^ X			H		V	۸	Х	_			Н				
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Matrix I . Likel	Matrix 1. Likelihood matrix.														_		1				_	_		
Likelihood		-		Likelih	ood (of Impact																		
of Failure	Very lo	ow	Lov		_	Medium	High																	
Imminent	Unlike	_	Somewha			Likely Very likely				-	+			+	+						+	\dashv		
Probable Possible	Unlike Unlike		Unlik Unlik		Son	omewhat likely Likely Unlikely Somewhat lik				_				+							+	_		
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Matrix 2. Risk		<u> </u>																						
Likelihood	Ť			Cons	eane	nces of Failur	е																	
Failure & Im		Ne	egligible			Significant Seve		e		-				+							+	_		
Very like	ly		Low	Mode		High	Extren			-	_			+	_		-				+	_		
Likely			Low	Mode		 															N.I			
Somewhat Unlikely			Low	Lov		Moderate Low	Modera														IN	orth		
Officer	у [LOW	LOV	v	LOW	LOW																	
Notes, expla					no t	aner no root	flaro																	
Codominants	oterns ar	ioit v	vitii baik ii	ICIUSIOII	, πο τ	<u>aper, 110 1001</u>	iiai C																	
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												\mathcal{I}			\									
Mitigation o												В	ام:م	امدا	مامات		None							
1. Remove Tree (recommended)																			_					None
2																			_					
3. 4.																								
Overall tree risk rating Low □ Moderate □ High □ Extreme ☒ Overall residual risk None ☒ Low □ Moderate □ High □ Extreme ☒											Dos		mo:-	doo	ممزا	nor	Ho-	in+-	. Pr. /-	ı NI/	٨			
Overall residual risk None ☑ Low ☐ Moderate ☐ High ☐ Extreme ☐ Recommendate ☑ Final ☐ Preliminary Advanced assessment needed ☑No ☐Yes-Type/Reason Alread															-	uon	шце	sı vd	1 <u>1\//</u>					
Inspection li																l								



Clie	nt City of Pacifica	Date 3/31/2023			 Tir	me Davlight		
Add		Date <u>0/0 1/2020</u> Tree I						1
	e species Monterey Cypress (Hesperocyparis macrocarpa) dbh_37.0"							
	essor(s) Roy Leggitt, Aaron Wang Tools used d-ta							
	Target Assessme	nt						
<u>_</u>		T		rget zo				
Target number	Target description	Target protection	Target within drip line	Target within 1 x Ht.	Target within 1.5 x Ht.	Occupancy rate 1-rare 2 - occasional 3 - frequent 4 - constant	Practical to move target?	Restriction practical?
	Structures	none	4	No	No			
2	Vehicles	none	Х			4	No	No
3	Pedestrians	none	Х			3	No	No
4								
	Site Factors							
Hist	ory of failures Tearouts, limb drop	Topography	Flat 🛚	Slope	e 🗆	% .	Aspect	
Site	changes None ☐ Grade change ☒ Site clearing ☒ Changed soil hydrology ☒ R	oot cuts 🛛 Describe <u>P</u>	aving a	and co	nstruc	tion		
	conditions Limited volume ☐ Saturated ☐ Shallow ☐ Compacted ☐ Pavemer							
Prev	vailing wind direction West Common weather Strong winds ☑ Ice ☐ Snow	v□ Heavy rain 🖾 Des	scribe	Heavy	seasor	al storms with	extreme	e winds
	Tree Health and Specie							
	or Low ☑ Normal ☐ High ☐ Foliage None (seasonal) ☐ None (dea			hlorot	ic	% Nec	rotic _	%
Pest	rs/Biotic Cypress Canker, Brown Cubical Rot Abiotic Abiotic	. i.e	 		/	. faila in la		
Spe	cies failure profile Branches 🛛 Trunk 🖾 Roots 🖾 Describe brittle wood failures	in overextended branci	nes, ur	<u>orootin</u>	g/sten	<u>1 tallures in r</u>	ieavy st	<u>.orms</u>
\A/:	Load Factors	D-I-45.			C		1771	
	d exposure Protected ☐ Partial ☒ Full ☐ Wind funneling ☐							
	wn density Sparse□ Normal ☑ Dense□ Interior branches Few ☑ Normal	⊔ Dense⊔ Vines/iv	iistieto	oe/ivio	oss ப			
Rece	ent or expected change in load factors							
	Tree Defects and Conditions Affecting to		ıre					
	— Crown and Brand							
	Dead twigs/branches □ % overall Max. dia Code Broken/Hangers Number Max. dia Wea Over-extended branches ☒ Prev Pruning history Deac Crown cleaned ☒ Thinned □ Raised ☒ Reduced □ Topped □ Lion-tailed □	•	s/Galls,	/Burls [decay	_ Cav _ Sim _ Sar	Includ ity/Nest hole ilar branches	ed bark % c present e/decay	irc. X
	Condition(s) of cond	ern						_
	Scaffold Tearout Part Size 6" Fall Distance 40ft Part	Size				stance		-
	Load on defect N/A Minor Moderate Significant Load	on defect N/A hood of failure Improbal	1	Minor		1oderate□ Si	gnifican	- 1
	— Trunk —	— Roots	and	Root	Col	lar —		
	Response growth POOr	ay □ roots ∑	ζ Ι [Distand	_ Stem Conks/Musl Cavity □ ce from trunl Soil we	% c <0" eakness	irc.	
		Size41.4"		Fa	ll Dist	ance	110ft	_
1		on defect N/A □ hood of failure Improbal				loderate□ Si robable □ Ir	_	

Risk Categorizat													-												
										Likelihood															
					İ				Fai	lure			Imp	act				& Im		Coı	nseq	uen	ces		
Target n			Tree	part			tion(s)	<u>e</u>	Т	Т	Т		T .			0		1atrix	ŕ			L		Dist.	
or descri _l	otion)					OT CO	ncern	Improbable	٩	Probable	Imminent	<u>8</u>		띮		e <u>~</u>	Somewhat		Very likely	Negligible	_ ا	Significant	e,	Risk rating	
								E N	Possible	Prob	m im	Very low	Low	Medium	High	Unlikely	Some	Likely	/ery	Vegli	Minor	Signif	Severe	(from Matrix 2)	
Struct	ures	+			+			╁	╁	- -	╀	ŕ	 -	_	X	F	0,	 X		Ë	_	",	X	High	
Vehic		\dashv	Dro	noh		Scat		\vdash	╁	X	\vdash	┢	\vdash		Х	Н		Х					Х	High	
Pedest			Bra	HCH		Tearout .				^ X				X			Х	^						_	
					+					+					X		^	V						Moderat	
Structi		4	_				minant	\vdash	╀	X	╀		_		<u> </u>	H		X					X	High	
Vehic			Tru	ınk			em 	\perp	\perp	X					Х			Х					Х	High	
Pedest	rians				\perp	Fai 	iure	_	╀	X	\perp			Х			Х						Х	Modera	
Structu	ıres								X						Х		Х						Х	Modera	
Vehicl	es		Roo	ots		Upro	oting		X						Х		Χ						Χ	Modera	
Pedestr	ians				İ				X					Х		Х							Х	Low	
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Matrix I . Likel			+			+	+		-	+			+			+-+									
Likelihood				Likelih	ood o	d of Impact					_										_				
of Failure	Very lo	\rightarrow	Lov			Medium	High																		
Imminent	Unlike	- +	Somewha		Com	Likely Very likely Somewhat likely Likely																			
Probable Possible	Unlike Unlike		Unlik Unlik		_	Unlikely	Somewhat	likely			+				+			_			+				
Improbable	Unlike	_	Unlikely			Unlikely	Unlikel																		
Matrix 2. Risk	rating r	natr	ix.				0																		
Likelihood	l of			Cons	eque	nces of Failur	e																		
Failure & Im		Ne	legligible Minor			•					+				\dashv			+			+				
Very like	ly		Low	Mode	rate	High	Extrer	ne			+				_						+				
Likely			Low	Mode	rate	te High High															N 1	ı.l.			
Somewhat	-		Low	Lov		Moderate															IN	orth			
Unlikely	у [Low	Lov	v	Low	Low																		
Notes, expla	anation	s, d	escriptio	ns																					
															- (
Mitigation o	-																								
1. Remove Tre	ee (reco	mme	ended)																_					None	
2																			_						
3	3																								
4											_ R	esid	lual	risk											
Overall tree risk rating Low □ Moderate □ High □ Extreme 🖾																									
Overall residual risk None ☑ Low ☐ Moderate ☐ High ☐ Extreme ☐ Recommended inspection int													inte	erva	<u>N//</u>	Α									
Data X Final	☐ Prel	limir	nary Adv	anced a	asses	ssment need	ed ⊠ No □Y	es-Typ	e/F	Reaso	on <u>A</u>	Iread	dy Co	ondu	ıcted	<u> </u>									
Inspection li	mitatio	ns D	I None □]Visibilit	ty 🗆	Access Vii	nes 🗆 Root	collar	buri	ed [Descr	ibe													



ISA Basic Tree Risk Assessment Form

CITC	ent_City of Pacifica	Date 3/31/2023		Tir	Time Daylight										
Add	dress/Tree location Minerva Avenue, Pacifica	Tree	no. 59	8	Sheet 1 of 1										
Tre	e species Monterey Cypress (Hesperocyparis macrocarpa) dbh_41.4"	Height <u>110ft</u>		Crow	own spread dia. 40ft										
Ass	sessor(s) <u>Roy Leggitt, Aaron Wang</u> Tools used <u>d-tap</u>	ape, aerial lift, drone, probes Time frame one yea													
	Target Assessment														
Target number	Target description	Target protection		Target within about 1 x Ht.		Occupancy rate 1-rare 2-occasional 3-frequent 4-constant	Practical to move target?	Restriction practical?							
1	Structures	none	Х			4	No	No							
2	Vehicles	none	Х			4	No	No							
3	Pedestrians	none	Х			3	No	No							
4															
	Site Factors														
Hist	History of failures Tearouts, limb drop Topography Flat⊠ Slope□% Aspect														
Site	e changes None□ Grade change☒ Site clearing☒ Changed soil hydrology☒ Roc														
	I conditions Limited volume ☐ Saturated ☐ Shallow ☐ Compacted ☐ Pavement														
	vailing wind direction West Common weather Strong winds \ Ice□ Snow [_											
	Tree Health and Species														
Vig	or Low ☑ Normal ☐ High ☐ Foliage None (seasonal) ☐ None (dead) □ Normal <u>80</u>	% C	hlorot	ic	% Nec	rotic 2	20%							
Pes	ts/Biotic Cypress Canker, Brown Cubical Rot Abiotic Abiotic														
Spe	ecies failure profile Branches 🛛 Trunk 🖾 Roots 🖾 Describe brittle wood failures in	n overextended branc	hes, up	prooting	g/stem	<u>failures in h</u>	eavy st	orms							
	Load Factors														
	nd exposure Protected ☐ Partial ☒ Full ☐ Wind funneling ☐														
Cro	wn density Sparse□ Normal 🖾 Dense□ Interior branches Few 🖾 Normal 🗆	l Dense □ Vines/N	1istleto	e/Mo	ss 🗆										
Rec	ent or expected change in load factors														
	Tree Defects and Conditions Affecting the	e Likelihood of Fail	ure												
— Crown and Branches —															
1		cks 🗆 Lightning damage 🗆													
1	Unbalanced crown ☑ LCR 60 % Cracks	□				Lightning o	lamage	□)							
	Dead twigs/branches	□ iinant □					lamage ed bark								
	Dead twigs/branches					Includ	ed bark	⋈							
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Tava					Condition(s) of concern			Failure				Imp	act		Failure & Impact				Consequence						
Targe (Target n or descrij		Tree	part					Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely	Negligible	Minor	Significant	Severe	Risk rating (from Matrix 2		
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Vehic	les		Brar	nch		Scaffold Tearout				Х					Χ			Х					Χ	High	
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