



Addendum to Environmental Impact Report

Addendum Date: 3.04.16

Project Title: Van Ness Avenue Bus Rapid Transit Project

EIS/EIR: Van Ness Avenue Bus Rapid Transit Project, EIR Certified September 10, 2013

Project Sponsor: San Francisco Municipal Transportation Agency, Peter Gabancho, (415) 701-4306

Lead Agency: San Francisco County Transportation Authority

Staff Contact: Michael Schwartz – (415) 522-4823

BACKGROUND

Van Ness Avenue Bus Rapid Transit (BRT) Project comprises a package of transit improvements along a two-mile corridor of Van Ness Avenue between Mission and Lombard Streets. Key features include: dedicated bus lanes, low-floor all-door boarding, consolidated transit stops, high quality stations, transit signal priority, elimination of most left turn opportunities for mixed traffic, and pedestrian safety enhancements. Replacement of the overhead contact system (OCS) support poles/streetlight network, as part of the project, would extend from Mission Street to North Point Street. The San Francisco County Transportation Authority (Transportation Authority) certified a final environmental impact report (EIR) for the Van Ness Avenue BRT on September 10, 2013 and approved a locally preferred alternative, hereafter referred to as the “BRT Project” or “Project.” The SFCTA issued a Notice of Determination the same day and the City and County of San Francisco issued an NOD on September 17, 2013. The Federal Transit Administration issued a Record of Decision (ROD) on December 20, 2013, thereby approving the Environmental Impact Statement (EIS) (the EIR and EIS were prepared in one joint document, hereinafter referred to as the “Final EIS/EIR”).

The purpose of the project is to:

- Significantly improve transit reliability, speed, connectivity, and comfort;
- Improve pedestrian comfort, amenities, and safety;
- Enhance the urban design and identity of Van Ness Avenue
- Create a more livable and attractive street for local residential, commercial, and other activities; and
- Accommodate safe multimodal circulation and access within the corridor.

Project Description: BRT is a new mode of transit in San Francisco and represents a package of features that together create rapid and reliable transit service for the benefit of passengers along a given corridor, and the transit system as a whole. The Van Ness Avenue BRT Project includes:

- Dedicated bus lanes separated from regular (mixed-flow) traffic to reduce delays and improve reliability.

- Level or near level boarding that minimizes the horizontal and vertical gap between the platform edge and vehicle door threshold to decrease passenger loading time, increase service reliability, and improve access for all users.
- Consolidated transit stops to reduce delays due to existing stop spacing that does not meet Muni standards (stop locations and details shown in Chapter 2, Table 2-3).
- High-quality stations, each with an elevated platform, canopy for weather protection, comfortable seating, vehicle arrival time information, landscaping, and other amenities. Platforms would be large enough to safely and comfortably accommodate waiting passengers, long enough to load two BRT vehicles, and designed to provide Americans with Disabilities Act (ADA) accessibility.
- Proof of Payment allowing passengers to swipe their fare cards either on the platform before the buses arrive or on-bus once boarded, allowing for all-door loading, and reducing passenger loading time.
- Traffic signal optimization using technology upgrades to allow real-time traffic management and optimal signal timing.
- Transit Signal Priority (TSP) to recognize bus locations and provide additional green light time for buses approaching intersections and reduce delay at red lights.
- Fewer left-turn pocket lanes for mixed-flow traffic by eliminating left turns at certain intersections to reduce conflicts with the BRT operation.
- Pedestrian safety enhancements, including enhanced median refuges, nose cones, and curb bulbs to reduce crossing distances at intersections and increase safety. Accessible pedestrian signals with crossing time countdowns would be installed at all signalized intersections in the project corridor.

Proposed Modification: Since certification of the Final EIS/EIR, staff has refined the design and location for traffic and overhead contacts system support poles/streetlights. The resulting modified Project indicates a conflict with four (4) additional trees along the sidewalk that will need to be removed and replaced*.

Within the median, three (3) trees identified in the Final EIS/EIR for removal as part of the BRT Project have since been removed prior to the Project implementation, one near McAllister Street, one near Eddy Street due to health reasons, and another near Geary Street due to a conflict with the California Pacific Medical Center Pedestrian Tunnel Project. Finally, the Rosa Parks-dedicated tree at Jackson Street had been counted as a removal in the Final EIS/EIR since it was to be moved outside the corridor. Since that time, space along the corridor has been provided for this tree. In addition, the specie of median tree selected for the Project -- *Corymbia Citriodora* – created the opportunity to plant 115 additional replacement trees beyond those identified in the Final EIS/EIR for a total of 210 replacement trees (see Table 2).

Along the sidewalk, since the certification of the Final EIS/EIR, 20 trees have been removed due to either health reasons or construction projects unrelated to the Van Ness BRT Project and 32 new trees have been planted, including 16 as part of new planters along the block of City Hall.

San Francisco Public Works Proposed Tree Replacements, San Francisco Public Works (Public Works) has separately identified up to an additional 97 sidewalk trees that they propose for removal and replacement due to their poor health. Public Works would undertake these removals and replacements through implementation of a separate project called the Van Ness Avenue Streetscape Project. These trees would be replaced even without the Van Ness Avenue BRT Project and therefore have only been analyzed for potential cumulative impacts in this document. If the project is approved, Public Works proposes to

* For exact location of additional tree replacements, please see Attachment 1 of this addendum.

implement the removal and replacement of the trees in coordination with construction of the Van Ness Corridor Transit Improvements through the SFMTA construction contract.

As noted in Section 4.4.3 of the Final EIS/EIR, implementation of the BRT Project will result in net more trees on the median and sidewalks than currently exist after the removals and replacement of trees that are proposed. Since all of the additional trees proposed for removal will be replaced, this condition would still exist under the Project as proposed for modification as well as in the cumulative condition with implementation of Public Works' Van Ness Avenue Streetscape Project. Table 1 summarizes tree removals and new/replacement trees that were identified in the Final EIS/EIR and the anticipated tree removals and new/replacement trees as proposed by the Project modifications. Table 3 summarizes the anticipated tree removals and the new/replacement trees in the cumulative scenario, with the Project as modified and the Van Ness Avenue Streetscape Project.

Table 1: Summary of Trees Removals and New/Replacement Trees in Van Ness Avenue BRT Final EIS/EIR

	A	- B	+ C	A - B + C = D
	Existing Trees (2013)	Trees anticipated for removal in Van Ness Avenue BRT Final EIS/EIR	New/replacement trees in Van Ness Avenue BRT Final EIS/EIR	Total Trees: Van Ness Avenue BRT Final EIS/EIR
Sidewalk	314	-0	+48	362
Median	102	-90	+95	107
Total	416	-90	+143	469

Table 2: Summary of Trees Removals and New/Replacement Trees in Van Ness Avenue BRT Modified Project

	A	- B	+ C	A - B + C = D
	Existing Trees (2015)*	Trees anticipated for removal by Modified Project	New/Replacement trees in Modified Project	Total Trees: Modified Project
Sidewalk	326	-4	+91***	413
Median	99	-86**	+210	223
Total	425	-90	+301	636

*Since certification of the Final EIS/EIR, several trees have been removed for health reasons or by other projects unrelated to the Bus Rapid Transit Project. In addition, new trees have been planted in some locations.

**The Rosa Parks-dedicated tree at Jackson Street is not counted as a removed tree because it will be replanted along the corridor. It is also not counted as a new/replacement tree for the same reason.

***48 new sidewalk tree planting opportunities were identified in the Final EIS/EIR (see Table 1). In addition, 39 new sidewalk tree planting opportunities have been identified during final design, representing an increase of 87 sidewalk trees versus existing condition. The 4 trees anticipated for removal in the modified project will also be replaced, making a total of 91 new or replacement trees anticipated in the modified project.

Table 3: Cumulative Scenario: Tree Removals and New/Replacement Trees for Modified Project in combination with Van Ness Avenue Streetscape Project

	A	- B	+ C	- D	+ E	= F
	Existing Trees (2015)	Modified Van Ness Avenue BRT Project: Removed Trees	Modified Van Ness Avenue BRT Project: New/Replacement Trees	Van Ness Avenue Streetscape Project (Public Works): Tree Removal	Van Ness Avenue Streetscape Project (Public Works): New/Replacement Trees	Total Trees after Modified Van Ness Avenue BRT Project and Van Ness Avenue Streetscape Project
Sidewalk	326	-4	+91	-97	+97	413
Median	99	-86	+210	-0	+0	223
Total	428	-90	+301	-97	+97	636

APPROVAL ACTIONS

The Project was approved by the SFCTA and SFMTA boards in September 2013 (see Background Section) through adoption of CEQA findings and approval Locally Preferred Alternative. The Project has since received other necessary approvals. The Project must obtain a tree removal permit, issued by

the Public Works Director, for the trees identified for removal in the median in the Final EIS/EIR as well as for each of the 4 additional sidewalk trees identified in this addendum.

ANALYSIS OF POTENTIAL ENVIRONMENTAL EFFECTS

CEQA Guidelines Section 15164 provides for the use of an addendum to document the basis of a lead agency's decision to not require a Subsequent or Supplemental EIR for a project that is already adequately covered in an existing certified EIR but where one of the conditions listed in CEQA Section 21166 (CEQA Guidelines Section 15162) arises, namely, project changes, new information or changed circumstances. The lead agency's decision to use an addendum must be supported by substantial evidence that the conditions that would trigger the preparation of a Subsequent EIR, as provided in CEQA Guidelines Section 15162, are not present.

This addendum provides analysis to understand whether the modified project would result in any new significant environmental impacts, substantial increases in the severity of previously identified effects, or necessitate implementation of additional or considerably different mitigation measures than those identified in the EIR. The addendum also provides analysis to determine any cumulative environmental impacts with implementation of Public Works' Van Ness Avenue Streetscape Project in conjunction with the BRT Project.

Aesthetics/Visual Resources: Section 4.4.3 of the Final EIS/EIR notes that changes to the existing landscaped median and tree canopy are one of the most noteworthy impacts of the Project on the visual setting. The landscaped medians and tree plantings along Van Ness Avenue contribute to the visual quality of the corridor, and they are one of the most important visual features in the corridor. All viewer groups, including sensitive viewer groups (i.e., residents, commuters, and tourists) would be sensitive to changes in the character and scenic quality of landscaping and trees in the corridor.

A number of comments regarding concern for tree loss were submitted by agencies and the public during circulation of the Draft EIS/EIR. For this reason, a more comprehensive Tree Removal Evaluation and Planting Opportunity Analysis was undertaken in fall 2012 to identify the maturity and health of trees in the corridor and thus better understand the impacts of tree removal and the opportunities for preserving trees and the parameters of new tree plantings (BMS Design Group, 2013). The Final EIS/EIR identified 90 median trees that would require removal and replacement with implementation of the project – 23 of which would be mature with a high health and condition score with another 44 of which would be young with a high health and condition score – but did not identify removal of any sidewalk trees.

The Final EIS/EIR concludes that the Project would alter the visual setting with the introduction of BRT features and the replacement OCS support pole/streetlight; however, these changes would not substantially change or impact the character of the Van Ness Avenue corridor because the proposed BRT features are consistent with the urban, contemporary visual setting of Van Ness Avenue, and the introduced features would not substantially degrade the surrounding visual environment for any viewer group. The removal of existing median would noticeably degrade the visual environment of the corridor. This would result in a notable, adverse change in the visual quality of the project corridor until new tree plantings mature. Impacts resulting from the removal of existing median landscape and trees would be reduced with incorporation of a median design plan described in mitigation measures M-AE-3 and M-AE-4 in Section 4.4.4. Increased sidewalk and median tree plantings over existing conditions would improve the visual setting, as plantings mature, resulting in longterm, beneficial effects.

The Final EIS/EIR further concludes that the Project would improve the feel of the Van Ness Avenue corridor with regard to the pedestrian environment by improving sidewalk lighting, installing curb bulbs, and generally widening the median to reduce crossing distances at intersections. The transit and

streetscape improvements associated with the Project would support recommendations in the Van Ness Corridor Initial Land Use and Urban Design Needs Assessment to make Van Ness Avenue an attractive space for pedestrian use and would support City policies to promote Van Ness Avenue as a prominent boulevard.

Section 4.4.4 of the Final EIS/EIR provides mitigation measures to reduce the impacts on the visual setting, including M-AE-3

² and M-AE-4³ which directly address trees and landscaping. The Project has complied with these mitigations to date in the following ways:

- Final designs include a landscape design plan with tree type and planting scheme. The Project is proposing one specie for new median trees and two species for new sidewalk trees. The choice of new sidewalk tree species will be consistent with nearby existing trees.
- The landscape design plan was created by San Francisco Public Works staff and has been reviewed by San Francisco Arts Commission; Public Works will review the modified project's street tree removal. The landscape design is undergoing review by the Historic Preservation Commission to receive its certificate of appropriateness for features in the Civic Center Historic District
- New/replacement trees were designed to provide a unified district, as evidenced by the single specie selection for the median and a specie selection for sidewalks that matches nearby existing trees. New/replacement trees were designed to be planted around existing trees in order to preserve as many existing trees as possible.

Of the 4 sidewalk trees removed, one (1) is mature and is in good condition. The other three (3) trees are young, two (2) of which are in good condition and one (2) is in poor condition and is leaning significantly.⁴ The modified project does not cause any new significant impacts to aesthetic/visual resources nor does it identify any new mitigation measures beyond what is described in the Final EIS/EIR. A relatively small number of additional trees will be removed and they will be replaced by a substantially greater number of trees than identified in the Final EIS/EIR.

Biological Environment: The Final EIS/EIR concludes that since the Project area has no special-status biological resources or protected habitats that could be impacted by the Project, no native plant assemblage or biotic community would be disturbed during operation of the Project. Nonetheless, median and sidewalk vegetation along Van Ness Avenue provides habitat for nesting birds, which are protected by the Migratory Bird Treaty Act (MBTA). Operation and construction of the Project would

² M-AE-3: "To the extent that the project alters sidewalk and median landscaping, design and implement a project landscape design plan, including tree type and planting scheme for median BRT stations and sidewalk plantings that replaces removed landscaping and reestablishes high-quality landscaped medians and a tree-lined corridor. To the extent feasible, use single species street trees and overall design that provides a sense of identity and cohesiveness for the corridor. Place new trees close to corners, if feasible, for visibility. The project landscape design plan will require review and approval by the San Francisco Arts Commission, as well as review and approval by the SFDPW as part of their permitting of work in the street ROW, which ensures consistency with the San Francisco Better Streets Plan. The median landscape design plan within the Civic Center Historic District will be reviewed by the San Francisco HPC and the City Hall Preservation Advisory Commission. A Certificate of Appropriateness must be obtained from the HPC for the landscape plans within the Civic Center Historic District.

³ M-AE-4: "Design and install landscaped medians so that median design promotes a unified, visual concept for the Van Ness Avenue corridor consistent with policies in the Van Ness Area Plan, Civic Center Area Plan, and San Francisco Better Streets Plan. This design goal for a unified, visual concept will be balanced with the goal of preserving existing trees; thus, new tree plantings would be in-filled around preserved trees.

⁴ All 97 of the trees designated for replacement by Public Works through the Van Ness Avenue Streetscape Improvement Project are considered to be in poor condition.

not increase disturbance to migratory birds and active bird nests during the nesting season.

The impact from the removal of existing trees and shrubs would be alleviated with the Project through replacement planting. Increased sidewalk and median tree plantings over existing conditions would result in long-term, beneficial effects to biological resources, with improvements growing over time as plantings mature. Although tree removal impacts of the Project do not result in significant biological impacts, incorporation of a median design plan described in mitigation measures M-AE-3 and M-AE-4, in addition to measures IM-BI-1⁵ and IM-BI-2⁶, M-BI-C1⁷, and M-BI-C2⁸ would reduce impacts from tree removal. As noted in the Aesthetics/Visual Resources section above, the Project has been compliant with M-AE-3, M-AE-4, and IM-BI-1 to date. The Project has complied with the remaining measures in the following ways:

- The City arborist conducted a preconstruction survey, identifying a final potential list of trees for removal (see further discussion of cumulative impacts on the following page). The Project has been following the established San Francisco Public Works process for tree removal and creation of tree protection plans.
- Construction contract will include requirement for preconstruction surveys of nests

Based on the above findings, the additional 4 sidewalk trees in the modified project would not result in a new or increased environmental impact or identification of any new mitigation measures.

Cumulative Scenario: In compliance with mitigation measure #9 (IM-BI-C1) and Improvement Measure #4 (IM-BI-2), the BRT Project authorized a tree survey during final design, led by the City Arborist. The survey indicated that up to 97 additional trees besides those planned for removal by the BRT Project were

⁵ IM-BI-1: In compliance with local tree protection policies, mature trees shall be preserved and incorporated into the project landscape plan as feasible. Planting of replacement trees and landscaping will be incorporated into the landscape plan as feasible (also refer to M-AE-3).

⁶ IM-BI-2: Have a certified arborist complete a preconstruction tree survey to identify protected trees that could be impacted by the proposed project, and to determine the need for tree removal permits and tree protection plans under San Francisco Public Works Code requirements.

⁷ M-BI-C1: Best management practices identified in tree protection plans and tree removal permits resulting from the preconstruction tree survey will be implemented to preserve the health of trees during project construction.

⁸ M-BI-C2: Disturbance of protected bird nests during the breeding season will be avoided. Tree and shrub removal will be scheduled during the nonbreeding season (i.e., September 1 through January 31), as feasible. If tree and shrub removal are required to occur during the breeding season (i.e., February 1 through August 31), then the following measures will be implemented to avoid potential adverse effects to nesting birds:

- A qualified wildlife biologist will conduct preconstruction surveys of all potential nesting habitat within 500 feet of construction activities where access is available. Exclusionary structures (e.g., netting or plastic sheeting) may be used to discourage the construction of nests by birds within the project construction zone. A preconstruction survey of all accessible nesting habitat within 500 feet of construction activities is required to occur no more than 2 weeks prior to construction.
- If preconstruction surveys conducted no more than 2 weeks prior to construction identify that protected nests are inactive or potential habitat is unoccupied during the construction period, then no further mitigation is required. Trees and shrubs within the construction footprint that have been determined to be unoccupied by protected birds or that are located outside the no-disturbance buffer for active nests may be removed.
- If active protected nests are found during preconstruction surveys, then the project proponent will create a no-disturbance buffer (acceptable in size to CDFW) around active protected bird and/or raptor nests during the breeding season, or until it is determined that all young have fledged. Typical buffers include 500 feet for raptors and 50 feet for passerine nesting birds. The size of these buffer zones and types of construction activities restricted in these areas may be further modified during consultation with CDFW, and it will be based on existing noise and human disturbance levels at the project site. Nests initiated during construction are presumed to be unaffected, and no buffer will be necessary; however the “take” (e.g., mortality, severe disturbance to) of any individual protected birds will be prohibited. Monitoring of active nests when construction activities encroach upon established buffers may be required by CDFW.

in poor condition and San Francisco Public Works is recommending their removal as part of a separate project called the Van Ness Avenue Streetscape Project. If approved, this proposed action, in combination with the BRT Project, would result in removal and replacement of 101 additional sidewalk trees that were not previously identified in the Final EIS/EIR. However, these effects would not result in a new significant cumulative impact because Public Works proposes to replace all trees removed, the replacement trees would be of a type determined suitable for the corridor by Public Works, and the corridor as a whole would have more trees than in the existing condition when accounting for the additional 87 new sidewalk trees proposed as part of the BRT Project.

In addition, two trees in the median on Mission Street at the South Van Ness Avenue intersection would be removed as part of the Transit Effectiveness Project/Muni Forward proposed improvements. If approved under a different action, those improvements and associated removal of two trees may be coordinated with the implementation of the Van Ness Avenue Bus Rapid Transit Project.

Other Environmental Topics: The Final EIS/EIR analyzed the potential for significant impacts in the areas listed below. Under all of these topics, the analysis concluded that there was a less than significant impact or mitigation measures were identified to reduce such impacts to less than significant levels. Since the potential effects of the refinements to the design and construction would result mainly in a change to the number of trees identified for replacement, the modified project would not result in additional impacts beyond those identified in the Final EIS/EIR in those areas.

- Air Quality
- Greenhouse Gas Emissions
- Cultural Resources
- Geology/Soils/Seismicity/Topography
- Hazardous Waste
- Water Quality and Hydrology
- Land Use
- Noise and Vibration
- Population and Housing/Growth
- Public Services
- Transportation and Circulation
- Utilities and Service Systems

Conclusion: Based on the foregoing, it is concluded that the analyses conducted and the conclusions reached in the Van Ness Avenue Bus Rapid Transit Project Final EIS/EIR, certified on September 10, 2013, remain valid. The modified project would not cause new significant impacts not identified in the Van Ness Avenue Bus Rapid Transit Final EIS/EIR, nor would the modified project, in combination with the proposed removal and replacement of 97 additional trees through Public Works' Van Ness Avenue Streetscape Project, result in new significant cumulative impacts, and thus no new mitigation measures would be necessary to reduce significant impacts.

Other than as described in this addendum, no substantial Project changes have occurred and the proposed modifications described in the addendum will not cause any new significant impacts not identified in the Final EIS/EIR or an increase in the severity of previously identified significant effects. Further, no substantial changes have occurred with respect to circumstances surrounding the Project that will cause significant environmental impacts or a substantial increase in the severity of previously identified significant effects. Finally, no new information has become available that shows that (1) the Project will cause significant environmental impacts not discussed in the previous Final EIS/EIR, (2) significant effects will be substantially more severe, or (3) new or different feasible mitigation measures

or alternatives from those adopted will substantially reduce one or more significant effects of the project. Therefore, no supplemental environmental review is required beyond this addendum.

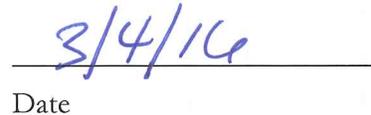
Notification: This addendum shall be made available on the Transportation Authority website through substantial completion of project construction. The SFMTA shall send an email to the Project list notifying interested parties of the addendum.

DETERMINATION

I do hereby certify that the above determination has been made pursuant to State and Local requirements.



Tilly Chang
Executive Director



Date

Attachments (3)

1. Sidewalk Tree Assessment Summary
2. Tree Removal Hearing Notice
3. San Francisco Public Works Tree Removal Criteria for Ficus Trees

cc: E. Reiskin, P. Gabancho -- SFMTA
M. Nuru, C. Short, C. Buck, M. Ketterer – SF Public Works
E. Warren, R. Kapla – City Attorney's Office
EC, RAM, MS – Chron, File: Van Ness BRT

ATTACHMENT 1

Van Ness BRT Modified Project Sidewalk Tree Assessment Summary

Address	Street	Site	Tree #	Species	Notes
200	Van Ness	East Sidewalk	1	Platanus acerifolia	Condition; Due to Pole Conflict
799	Van Ness	West Sidewalk	1	Platanus acerifolia	Due to Pole Conflict
2363	Van Ness	West Sidewalk	1	Lophostemon confertus	Due to Pole Conflict
2559	Van Ness	West Sidewalk	1	Platanus acerifolia	Due to Pole Conflict



Edwin M. Lee, Mayor
Mohammed Nuru, Director

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DPW Order No: 183850

TREE REMOVAL HEARING NOTICE

The Director of Public Works will hold a public hearing on Monday, August 24, 2015 commencing at 5:30 p.m. in Room 416 of City Hall, located at 1 Dr. Carlton B. Goodlett Place, San Francisco, to consider the following:

Removal of eighty-eight (88) trees maintained by Public Works within the Van Ness Ave. medians with replacement of two hundred ten (210) trees in the medians on Van Ness Ave. between Lombard and Market St. The removal of trees in the medians is a part of the approved Van Ness Corridor Transit Improvement Project.

Removal of one hundred six (106) street trees with replacement of one hundred ninety-one (191) street trees along Van Ness Ave. from Market to Lombard St., as part of the Van Ness Ave. Streetscape Project.

Interested parties are encouraged to attend. Persons unable to attend the public hearing may submit written comments regarding the subject matter to the Bureau of Urban Forestry, 1680 Mission Street, 1st floor, San Francisco, CA 94103. These comments will be brought to the attention of the hearing officer and made a part of the official public record.

The Van Ness Corridor Transit Improvement Project includes: Construction of a Bus Rapid Transit (BRT) system including dedicated, center-running transit lane, boarding islands, curb bulbs, median refuges; Overhead Contact System (OCS) replacement; traffic signal system replacement and upgrade; sewer replacement; water and Auxiliary Water Supply System replacement; streetlight pole replacement; and, street repaving. The construction of the project necessitates the removal of these median trees due to project conditions that will make the preservation of most existing median trees impossible.

The Van Ness Streetscape Improvement Project will be installed at the close of the project and will include the planting of 85 trees in new locations and removal and replacement of 106 trees that are currently in poor condition or will not tolerate the amount of root disturbance that will occur during construction activities. The proposed removals may be phased to reduce the impact to the local community.

Median tree removal	88	Median tree planting	210
Sidewalk tree removal	106	Sidewalk tree planting	191
Total removals	194	Replacement trees	401

For Van Ness Transit Corridor Improvement Project information, please visit sfmta.com/vannessbrt. For questions or comments about the Van Ness Transit Corridor Improvement Project, or to be added to the project mailing list, please email vannessbrt@sfmta.com or call 415-749-2446.

Further information about the Van Ness Streetscape Improvement Project may be obtained prior to the hearing by phoning (415) 554-6700.

City and County of San Francisco

San Francisco Department of Public Works



Edwin M. Lee, Mayor
Mohammed Nuru, Director

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DPW Order No: 183151

Tree removal criteria for ficus trees (*Ficus microcarpa* 'Nitida').

Article 16 of the Public Works Code governs trees and landscaping in the public right of way. The residents of San Francisco value street trees, and have mandated their protection. Article 16 of the Public Works Code, adopted as the Urban Forestry Ordinance of 1995, was created to:

(a) Realize the optimum public benefits of trees on the City's streets and public places, including favorable modification of microclimates, abatement of air and noise pollution, reduction of soil erosion and runoff, enhancement of the visual environment, and promotion of community pride;

(g) Recognize that trees are an essential part of the City's aesthetic environment and that the removal of important trees should be addressed through appropriate public participation and dialogue, including the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.).

(h) Recognize that green spaces are vital to San Francisco's quality of life, as they provide a range of environmental benefits and bring beauty to our residential neighborhoods and commercial districts.

However, it also was designed to:

(d) Reduce the public hazard, nuisance, and expense occasioned by improper tree selection, planting, and maintenance.

The tree structure of many of these ficus trees includes large, competing trunks with acute angles of attachment. Due to recent large limb and tree failures of ficus trees, causing property damage, injury and concerns for public safety, the Director of Public Works has established new guidelines for the staff evaluation and determination of whether to approve removal of this particular species of tree on a case-by-case basis.

There is no one-size fits all approach and each tree must be evaluated by a qualified arborist. Ficus trees that are candidates for removal may only exhibit one of the defects described below, or, multiple defects may be present.



Staff will consider the following criteria to be considered when evaluating the structural health of ficus trees:

- **Competing/codominant stems, with acute angles of attachment, with or without included bark**

Large trees, with multiple competing trunks/stems, with acute angles of attachment (where pruning off the limb to mitigate the attachment would remove 30 percent or more of the tree canopy) with or without included bark.

- **Failure history**

Previous limb failures at point of codominance, or multiple previous limb failures within the canopy.

- **Live crown ratio**

The ratio of the size of a tree's live crown to its total height. Fifty percent live crown ratio is ideal but rarely attained in urban environments. Live-crown ratios of less than 30 percent shall be considered problematic.

- **Canopy vigor**

If the canopy of the tree shows decline and reduced vigor in 25% or more of the canopy.

- **Large limbs damaged by vehicles**

If there are large limb(s) that have repeatedly been hit by vehicles (where pruning off the limb to mitigate the damage would remove 30 percent or more of canopy).

- **Root pruning history**

If the tree has been root pruned more than two times

- **Canopy balance**

If the tree has been pruned for building clearance to the extent that it is seriously imbalanced, and balancing necessitates the removal of more than 25 percent of remaining canopy.

- **Large stature**

If the tree is taller than 50 feet, even if other criteria are not met, the approval may be granted based on size.

- **Utility conflicts**

If the tree has canopy or main trunk in conflict with existing utility infrastructure, such as high-voltage power lines, Muni overhead lines, or street lights.

Notwithstanding the above:

- 1) If the department determines that any of the criteria listed above can be mitigated through pruning or some other intervention, the department may not approve removal.
- 2) If the tree does not meet the above criteria but the director determines that other factors validate removal, the department may still grant removal.
- 3) All tree removals must still go through the process outlined in Article 16. Due to concerns regarding public safety, ficus trees meeting one or more of the criteria outlined



above may be determined to be imminent hazards, and therefore a reduced public notification, as outlined in the code, can be used.

- 4) The department recognizes the potential impact to the total street tree canopy cover due to the loss of such large stature trees. Therefore, if the ficus tree is removed, Public Works will require the replacement of the tree, as outlined in the Urban Forestry Ordinance and in some cases will require large stature (at maturity) replacement species, unless site constraints would preclude this.



Appendix 1

Below are excerpts from the book *Arboriculture* (3rd Edition, 1999), a text that is considered the primary authority in the arboricultural industry. Regarding codominant stems, with or without included bark, it states:

- Codominant trunks with included bark do not form connective tissues between stems and are prone to failure. (pg. 491, *Arboriculture*, 3rd Edition, 1999).
- The relative size and arrangement of the scaffold branches is important to structural stability. Two or more leaders (stems) about the same size or branches near the same size as the trunk are more likely to fail than if one leader or the branches were only half the size (75 percent of the diameter) of the main trunk. (pg. 491).
- A trunk is not able to grow around a branch when both are near the same size (pg. 491).
- Several relatively large branches arising near the same level on the trunk are even more vulnerable to failure (pg. 491).
- Also, the weight and leverage of such limbs are great in relation to the strength of their attachments. As trees age, their branches usually continue to spread, further increasing the stress on their attachments (pg. 491).
- Most of these structural hazards can be prevented by proper training of the trees while they are young. (pg 493).

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