

Chattel, Inc. | Historic Preservation Consultants

MEMORANDUM

DATE: September 27, 2019

TO: Roxanne Tanemori, AICP, Principal Planner
Planning and Community Development Department
City of Santa Monica

FROM: Robert Chattel, AIA, President
Olivia White, Associate II
Chattel, Inc.

RE: Miramar Santa Monica, 101 Wilshire Boulevard, Santa Monica, California
Conformance Report Update

This memorandum is an update to the Conformance Report for the Miramar Santa Monica, 101 Wilshire Boulevard (subject property) prepared by Chattel, Inc. (Chattel) dated April 10, 2018 (Conformance Report, Attachment A). The Conformance Report was based on design drawings for the redevelopment of the Miramar Santa Monica (proposed project) on a full-block parcel (Landmark Parcel) designed by Pelli Clark Pelli Architects (PCPA) and Gustafson Guthrie Nichol (GGN) dated February 15, 2018 (original submittal). This memorandum describes modifications to the proposed project included in the Miramar Concept Design Addendum Package designed by PCPA and GGN dated August 29, 2019 (revised package).

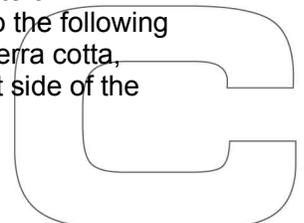
The revised package prepared for the proposed project is the result of ongoing collaboration between Chattel and PCPA, as well as feedback received from the City of Santa Monica (City), and the City's environmental review and historic preservation consultant, Environmental Sciences Associates (ESA), who is preparing the Environmental Impact Report (EIR) for the proposed project. The revised package for the proposed project is also based on feedback received from the Landmarks Commission and Architectural Review Board at courtesy presentations in 2019. The purpose of this memorandum is to describe design changes included in the revised package as well as to clarify certain design aspects included in the original submittal.

PROPOSED WORK

As described in the Conformance Report, the proposed project includes rehabilitation of the City-designated Landmark Palisades Building (Palisades Building), demolition of all non-contributing buildings, construction of two new buildings for hotel and residential use, and new landscaping.

Palisades Building Design Clarifications

In future stages of design development, more detailed drawings documenting treatment to the Palisades Building would be brought to the Landmarks Commission for a Certificate of Appropriateness. The Landmark Commission should review with close attention to the following items as part of the proposed rehabilitation scope of work; painting the brick and terra cotta, windows and doors, rooftop sign, and raising the grade at the open space on west side of the Palisades Building.



Rehabilitation of Palisades Building

The Conformance Report includes a period of significance of 1924-1958 for the Landmark Parcel and an identified period of significance for the Palisades Building of 1940-1958. During the period of significance, the Palisades Building had white painted brick exterior walls and unpainted architectural terra cotta, hung windows with divided light upper sashes, a sans serif open-face rooftop sign, and a Mission tile roof. The period of significance of the Palisades Building has guided proposed rehabilitation scope of work. The proposed rehabilitation scope of work includes painting the currently unpainted brick exterior, removing paint from the overpainted first floor terra cotta cladding, and repointing and repainting it, and constructing a new rooftop sign.

The project team engaged Rosa Lowinger Associates (RLA) to evaluate both the condition of the brick and terra cotta and the appropriateness of proposed treatments.

Painting brick exterior

From the 1924 date of construction until approximately 1940, the brick exterior of the Palisades Building was unpainted. A circa 1940 historic photograph shows the brick exterior painted a white or off-white color, which remained as the treatment until some point between 1974 and 1992 when the paint was removed from the brick by sandblasting and it was repointed with flush mortar.

The brick remains unpainted today. Previous repointing was done inconsistently, making the appearance of the mortar joints unsightly. The proposed project would involve painting the brick exterior in colors similar to those during the 1940-1958 period of significance.

RLA investigated the condition of the brick and provided treatment recommendations, the results of which are included in a brick testing and conservation consultation report dated July 10, 2019 (brick report, Attachment B). The goal of the investigation was to determine whether it would be safe to paint the brick in terms of material conservation, and whether, if painted, the paint could safely be removed in the future without causing further damage.

First, RLA tested the porosity and water absorption of the brick through RILEM testing in 10 locations. Results showed that brick was absorbing minimal amounts of water. Based on this testing, RLA determined that the brick could be painted safely, and that painting the brick could help protect it from additional weathering due to the salinity of the marine environment, and from sun and thermal effects. If the building is not painted, RLA recommends applying a clear protective coat to protect the brick from additional weathering and deterioration. Prior to painting the building, RLA has recommended the brick be cleaned, and a paint “stack” should be selected and subjected to removal tests prior to wholesale application.

Therefore, painting the building, as proposed in the original submittal and revised package is not only an appropriate restoration treatment because it returns the appearance of the building to its period of significance, it is also a treatment which will protect the bricks from the effects of weathering and prevent long term deterioration. Painting the building also improves the aesthetics of the building by disguising inconsistent mortar repairs and the rough texture of the sandblasted brick. Should the new paint be removed in the future, RLA has noted that there are several industry-tested removal methods and that the array of methods will only continue to grow and improve. It recommends not using a chemical method (which is currently restricted by law in California).

Removing paint and repointing terra cotta

The terra cotta decorative elements of the building were originally unpainted. Currently they exhibit various degrees of overpainting, with more paint layers at the ground floor than at upper floor window sills and cornices.

RLA investigated the condition of the terra cotta decorative elements and conducted paint stripping tests, the results of which are included in Report #2 Results of Paint Stripping Tests, dated July 28, 2019 (terra cotta report, Attachment C). The terra cotta decorative elements, which includes walls, sills, and other door and window enframements, have multiple layers of paint. The cornice exhibits more paint coatings that are generally more well adhered than the window sills and friezes. RLA tested five products in two locations at the first-floor frieze.

Each product was successful in removing extant coatings to varying levels of efficacy. RLA recommends the Savogran Strypeeze® Semi-Paste Strippper, a gel stripper removed with water. No adverse effects to the material were noted during testing, indicating that paint removal could be done to the terra cotta safely. Therefore, removal of paint from terra cotta can be achieved in a safe and effective manner with one of a few different paint stripping products.

Following paint removal, damaged terra cotta would be repointed. Repointing the terra cotta, where necessary, would follow National Park Service publication *Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings*. RLA has recommended two different Edison Coatings, Inc. products for patching any locations of material loss and for raking and repointing the joints.

Following any repairs and repointing, the terra cotta would be repainted a gray or contrasting color. As noted by RLA, the terra cotta exhibits varying degrees of material and glaze spalling, disaggregation, and biological growth, which it suggests has been caused in part by the current coating system. RLA advises against applying a new coating system to the terra cotta following repointing because a coating system could trap moisture and cause further deterioration, as evidenced today. However, it notes that there may be mineral-based paints which would offer the level of breathability and reversibility required for painting the terra cotta to be an appropriate treatment.

Paint removal of the terra cotta would allow for repointing to occur which is particularly important at the ground floor where terra cotta exhibits various degrees of cracking and earthquake damage. While repainting the terra cotta is the chosen treatment in the proposed project, the project team will continue to study whether this is the most appropriate treatment considering the recommendations made by RLA and may be more informed once the paint is removed from the terra cotta and the extent of the damage is known.

Windows & Doors

The proposed project includes retention of the fenestration pattern and existing windows and single-light glazing. However, during the period of significance, the building had hung windows with divided light upper sashes. The original submittal and revised drawings both include retention of the existing windows and single-light glazing. In future design development the project team will consider and evaluate replacing the windows.

In the proposed project, five ground floor windows on the south and west courtyard elevations facing the Palisades Garden would be altered to become doors to private guestroom terraces. Windows would be replaced with doors on all floors of the Palisades Building at the connection on the short south elevation with the hyphen to the Ocean Building and at the connection on the short west elevation with the hyphen to the California Building. On the north elevation, a double door exit would remain. On the east elevation, a service entrance would remain.

Roof and new rooftop sign

The building originally had a mission tile roof. Currently the building has a replacement standing seam metal roof. Proposed project does not include any change to the existing roof.

The proposed project would install a new rooftop sign, proposed for the Palisades Building at the location of a non-extant, historic roof sign as evidenced by historic photographs. While the new signage program for the Miramar Santa Monica has not been fully developed, the renderings in the original submittal and revised drawings provide estimations for how the new rooftop sign could appear.

The non-extant rooftop sign was constructed on a steel frame at the westward slope of the roof. As evidenced by historic photographs, the sign was constructed circa 1940 to read “HOTEL MIRAMAR” in sans-serif block typeface and was removed at some point between 1950 and 1969.

While the new rooftop sign would be a reconstruction, the typeface is proposed to take inspiration from the historic, non-extant main entry neon sign which had a script-style typeface (see Attachment C, Image 24), rather than reconstructing the sans-serif block typeface that existed on the historic rooftop sign. Since the project signage package is much further out in the design process, the design team will collaborate on the appropriate solution for the rooftop sign. In future design development the project team will consider designing a sign more compatible with the sign present during the 1940s, specifically being sans serif block letters on an open armature.

A new rooftop sign would further restore the building to its period of significance and increase the visibility of the City-designated building.

Raising the grade

As part of the proposed project, the grade would be raised at the Palisades Garden located between the Palisades Building and Ocean Building. Currently the grade is lower at the entrance to the Palisades Building, where steps provide access to the building. Consistent in the original submittal and revised package, the grade would be raised to improve accessibility to Palisades Building and across the site, creating a level transition between the California, Palisades, and Ocean Buildings and the Palisades and Miramar Gardens. Raising the grade also helps to reestablish the entry to the Palisades Building on the west elevation as the primary access point and further integrates the Palisades Building into the new Palisades Garden open space. This scope of work would reestablish the historic grade of the building and improves accessibility to the building and across the site.

Construction of new hotel and residential buildings

The proposed project would involve construction of two new buildings with mixed hotel and residential uses—the Ocean Building and the California Building—which would connect to the Palisades Building via recessed hyphens.

Ocean Building

The new Ocean Building is proposed to be roughly L-shape in plan, located on the southern two-thirds of the parcel around the City-designated Moreton Bay Fig Tree, with ten floors and accessible roofs above grade. The Ocean Building would physically connect to the short south elevation of the Palisades Building via a hyphen at the north elevation and would have a wide passageway at the first and second floors to accommodate a new porte-cochere entry from Second Street (Second). The lobby of the Ocean Building would connect both the Miramar Gardens and Palisades Gardens, with a two-story glass exterior and several doors that provide a view toward the Palisades Building.

In the revised package, two of the elevations of the Ocean Building have been modified, the east elevation on Second and the south elevation on Wilshire. The hyphen connecting with the short south elevation of the Palisades Building has also been modified.

South elevation

In the original submittal, the first-floor podium exterior wall was primarily solid. At the west portion of the elevation, there was a glass corner at the west end adjacent to a pathway leading to the

proposed Miramar Gardens. At the corner of Wilshire and Second, the corner retail space had four bays of curtain glass walls the full height of the first-floor podium.

In the revised package, the primarily solid massing of the first floor has been divided through the addition of one large window, and a curtain glass window condition at the corner retail space with pilasters between windows. Clerestory windows at the upper portion of first floor podium further distinguish the division of bays and break up the previous solid massing of the elevation. At the west corner, the first-floor walls are now curved glass and have been brought back, increasing visibility of the Miramar Gardens from Second and Wilshire. A 'Hotel Miramar' sign has been added in the center of the first floor on this elevation.

East elevation

In the original submittal the first-floor curtain glass wall from the south elevation continued for two bays and north of those two bays was a primarily solid wall until the opening of the porte-cochere. At the upper floors there were continuous balconies across the length of the elevation on all floors.

In the revised package, at the first floor the curtain glass wall that continued for two bays is divided by pilasters and continues for two additional bays to the north. Clerestory windows at the upper portion of the first-floor podium wrap the corner at Wilshire and Second. At the upper floors, the mass of the continuous balconies has been separated by removing the balconies for a portion in two sections along with a reduction to the interior building spaces along this elevation.

Hyphen

In the original submittal, the hyphen was wide, and upper floor walls of the Ocean Building met at an angle and disguised much of the short, south elevation of the Palisades Building.

In the revised package, the hyphen between the Ocean Building and Palisades Building has become narrower, and the upper floor walls have become curved and have been pulled back slightly, which improves visibility of the short south elevation of the Palisades Building.

California Building

The California Building is proposed to be rectangular in shape, similar in size to the Palisades Building and located on the western corner of the northern one-third of the parcel. A hyphen at the east elevation of the California Building would connect to the west elevation of the Palisades Building. Similar to the Ocean Building, the California Building would have a recess at the first floor, north elevation to accommodate a driveway that leads to new subterranean parking for employees.

In the revised package, all elevations of the California Building have been modified. In the original submittal the elevations had curved walls at the corner, mimicking the curves of the Ocean Building. In the revised package, the elevations meet at corners. In the original submittal, solid balconies spanned the length of the north, west, and south elevations. In the revised package, the balconies are divided. On the north and south elevations, the balconies span two bays and are divided by solid wall between each, creating a vertical emphasis and a relationship to both the vertical and horizontal architectural features and rhythm of the Palisades Building. At the sixth floor, the balcony is removed, and the seventh floor is set back. The removal of the sixth-floor balcony and set back of the seventh floor removes some of the massing at the upper floors. On the west elevation, the balconies have been divided in one place. On the east elevation the walls now step back to improve visibility of the short, west elevation of the Palisades Building.

The hyphen between the California Building and the Palisades Building has become narrower, exposing two windows of the short west elevation of the Palisades Building on either side of the hyphen, increasing visibility in these locations.

Conclusion

The revised package provides several design modifications that are the result of ongoing design collaboration which seek to address feedback received. Revised package includes further study of proposed treatments to the Palisades Building and refines several design features of both the Ocean and California Buildings which are all improvements to the proposed project. Specific areas have been identified for continued study and discussions for the Landmarks Commission to focus on in their Certificate of Appropriateness process for the proposed project.

Attachment A: Chattel Conformance Report

Attachment B: Brick Testing and Conservation Consultation Report

Attachment C: Report #2 Results of Paint Stripping Tests

ATTACHMENT A:
CHATEL CONFORMANCE REPORT

**MIRAMAR SANTA MONICA
CONFORMANCE REPORT UPDATE**

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Chattel, Inc. | Historic Preservation Consultants

MEMORANDUM

DATE: April 10, 2018

TO: Roxanne Tanemori, AICP, Principal Planner
Planning and Community Development Department
City of Santa Monica
1685 Main Street, Room 212
Santa Monica, CA 90401

FROM: Robert Chattel, AIA, President
Brian Matuk, Associate III
Chattel, Inc.

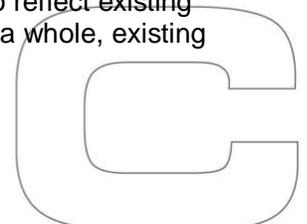
RE: Miramar Santa Monica, 101 Wilshire Boulevard, Santa Monica, California
Conformance with the *Secretary's Standards*

This conformance report evaluates proposed changes to the Miramar Hotel at 101 Wilshire Boulevard (subject property or Miramar) as presented in the Miramar Santa Monica concept design package by Pelli Clark Pelli Architects (PCPA) and Gustafson Guthrie Nichol (GGN) dated February 15, 2018 (Drawing Set). The Miramar is a designated Santa Monica Landmark Parcel (Landmark Parcel) consisting of the designated Santa Monica Landmark (Landmark) Moreton Bay Fig Tree (contributor), the Palisades Wing (Palisades Building; contributor), the Ocean Tower (non-contributor), Administration Building (non-contributor), six bungalows (non-contributors), and verdant and lush (lush) landscape (contributor). This memorandum provides background on the subject property, describes the proposed work, and evaluates the proposed project for conformance with the *Secretary of the Interior's Standards for Rehabilitation (Rehabilitation Standards)*.

The proposed project thoughtfully incorporates the historic features on the Landmark Parcel: the Landmark Moreton Bay Fig Tree, the Palisades Building, and the lush landscape character into the redevelopment of the Landmark Parcel. Out of a collaboration with Pelli Clarke Pelli Architects and Gustafson Guthrie Nichol, the key preservation elements have been integrated into the overall design process, and the project as a whole has been designed to be in conformance with the *Rehabilitation Standards*.

Background

The subject property is situated on a Landmark Parcel that is significant in the history of Santa Monica for its association with the founder of the City, for its role in beachfront tourism in the early to mid-19th century, and for significant Renaissance Revival architecture as represented by the Palisades Building. An Historic Resource Assessment (HRA) on the subject property was prepared by Chattel Architecture, Planning & Preservation, Inc. (now, Chattel, Inc.) and dated June 10, 2010 (2010 Chattel HRA; Attachment A). The 2010 Chattel HRA provides a relevant historic context, the history of the subject property, building and landscape descriptions that continue to reflect existing conditions at the subject property, and statements of significance for the parcel as a whole, existing buildings, and landscape.



The subject property occupies a full-block parcel, which, as further described below, was designated a local Landmark Parcel by the Santa Monica Landmarks Commission following public hearings in 2013, and has not once been subdivided. While no period of significance for the Landmark Parcel was identified in the nomination or Findings and Determinations of the designation by the Landmarks Commission, independent research by Chattel identified a period of significance of 1924 to 1958.¹ Additional information is provided in the 2010 Chattel HRA (Attachment A).

As described above, the period of significance for the Landmark Parcel is identified as 1924-1958, however, the proposed project seeks to, in many respects, restore the Palisades Building to the most important period of significance 1940-1958, as well as rehabilitate and improve the Landmark Parcel with new buildings and landscaping. This major, narrowed period of significance is the result of recent research conducted since the 2013 designation and represents the heyday of the Miramar Hotel. During these years, the Palisades Building had a main garden entry marked by columns and entablature that was highly visible, however, additional buildings and changes to hardscape and landscape have partially obscured view of this embellished entry. Additionally, the lush landscape from this period has gained significance and is a contributing feature to the Landmark Parcel.

The subject property has suffered a long history of incomplete conceptual planning and piecemeal additions and alterations. As the hotel component of the site approaches one hundred years of age, there is an opportunity to redevelop the parcel in an appropriate manner that respects the valued history of the site, with new and contemporary architecture and landscape that fits into the historic context and ensures the Miramar Santa Monica remains a landmark destination for years to come.

For the past two years, Chattel has been advising the project team on developing an appropriate scope of work that both honors the contributing features of the Landmark Parcel while striving to achieve project goals. The proposed project demonstrates this balance, as it is oriented toward Ocean Avenue, Palisades Park, and the Pacific Ocean beyond, with the designated Moreton Bay Fig Tree as the focal point of the redevelopment. While the subject property is currently concealed by perimeter walls, the proposed project intends to provide the public with the opportunity to enjoy the Landmark Parcel and all historic and contemporary features within it.

Rehabilitation Standards

The *Rehabilitation Standards* are not intended to be prescriptive, but instead provide general guidance. They are intended to be flexible and adaptable to specific project conditions to balance continuity and change while retaining historic building fabric to the maximum extent feasible. Their interpretation requires exercise of professional judgment, taking into account various opportunities and constraints of any given project based on use, materials retention and treatment, and compatibility of new construction. Not every standard necessarily applies to every aspect of a project, nor is it necessary to comply with every standard to achieve conformance.

The *Secretary of the Interior's Standards for the Treatment of Historic Properties* contain four treatments: preservation, rehabilitation, restoration, and reconstruction. The appropriate treatment for this project is rehabilitation, which utilizes the *Rehabilitation Standards*:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

¹ Ocean Tower was constructed in 1958, which signals the end of the period of significance. This date was identified because the construction of Ocean Tower and subsequent alterations to the landscaping resulted in dramatic changes to landscape character.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Proposed Work

The proposed project celebrates the Moreton Bay Fig Tree, embraces the rehabilitation and restoration of the Palisades Building, demolishes all non-contributing buildings including the Ocean Tower, the Administration Building, and the six bungalows, involves construction of two new buildings for hotel and residential operations, and revisits the landscaping, inspired by the history of the site to return the garden identity to the Miramar. The project architecture and landscape preserve and feature the Moreton Bay Fig Tree as the focal point of the proposed project and significantly enhance public access to the historic tree.

Rehabilitation of Palisades Building

The selected period of 1940-1958 provides the design team with the opportunity to reintroduce historic elements to the Palisades Building from a more defined span of time, with areas of restoration supported by historic photographs and other documentation from that period. The rehabilitation scope of work includes painting the brick exterior, removing paint from the overpainted first-floor terra cotta cladding, and constructing a new rooftop sign.

Painting brick exterior

From the 1924 date of construction until approximately 1940, the brick exterior of the Palisades Building was unpainted. A historic photograph from circa 1940 shows the brick exterior painted a white or off-white color, which remained as the exterior treatment until some point between 1974 and 1992 when the paint was removed from the exterior and was repointed with mortar flush with the brick.² Sandblasting was completed in 1982 and, although it is unclear if this work included the entire

² Original brick that has since been covered reveals that the mortar was likely tuck pointed, which would have likely been removed with the sandblasting in 1982.

building exterior, it is likely the paint was removed during this work. Sandblasting is not an appropriate treatment for the brick, and the project team now has the opportunity to determine the appropriate preservation treatment for the brick exterior. Conservator John Griswold Associates (JGA) was engaged to investigate the condition of the brick and provide recommendations, the results of which are in a conservator report dated February 20, 2015 (2015 JGA report; Attachment B).

The brick exterior of the Palisades Building remains unpainted today. The proposed project would involve painting the brick exterior in colors similar to those during the 1940-1958 selected period, as evidenced by historic photographs.

Removing paint and repointing terra cotta

In 2014, JGA was engaged to study the existing condition of the terra cotta decorative elements, including walls, sills, and other door and window enframements. The 2015 JGA report recommended that all paint coatings “be removed from all terra cotta surfaces,” additionally stating that the terra cotta is expected to be “largely in good condition, with some damages and previous repairs requiring expert repair or replacement with replica pieces if losses are extensive to particular units.” As JGA could only investigate a sample area of the terra cotta, a more extensive investigation is necessary to assess the condition of the terra cotta to determine if repair, in-kind replacement of damaged areas, or repainting is the appropriate treatment.

In accordance with this recommendation, the paint would be removed from the overpainted terra cotta utilizing the following treatment, as recommended by the conservator:

Paint removal may be accomplished with a combination of medium pressurized water blasting and poultice stripping. Dumond Peelaway 1 with the special Peelaway paper applied to the fresh paste is recommended, but field testing of large areas is recommended before full specifications can be developed.

Repointing the terra cotta, where necessary, would follow National Park Service publication *Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings*, as recommended in the 2015 JGA report.

New rooftop sign

The proposed project would involve installation of a new rooftop sign, proposed for the Palisades Building at the location of an non-extant, historic roof sign as evidenced by historic photographs compiled in a 2017 Chattel memorandum (2017 Chattel memo; Attachment C, Image 10). While the new signage program for the Miramar Hotel and Residences has not been fully developed, the renderings in the Drawing Set provide estimations for how the new rooftop sign could appear.

The non-extant rooftop sign was constructed on a steel frame at the westward slope of the roof of the Palisades Building, visible to passersby along Ocean Avenue and Palisades Park. As evidenced by historic photographs, the sign was constructed circa 1940 to read “HOTEL MIRAMAR” in sans-serif block typeface and was removed at some point between 1950 and 1969.

While the new rooftop sign would be a reconstruction, the typeface is proposed to take inspiration from the historic, non-extant main entry neon sign which had a script-style typeface (see Attachment C, Image 24), rather than reconstructing the sans-serif block typeface that existed on the historic rooftop sign. Since the project signage package is much further out in the design process, the design team will collaborate on the appropriate solution for the rooftop sign.

Protection of Landmark Moreton Bay Fig Tree

The designated Moreton Bay Fig Tree is the focal point of the proposed project and has literally shaped the new construction and landscape plan around it. The design of the new buildings both honors the tree, and proudly displays it to viewers along Ocean Avenue and Palisades Park. The proposed project lays out other substantial measures to ensure long-term protection of the tree, which are described in detail in the Brightview Tree Company reported dated February 26, 2018 (the 2018 Brightview Report) and summarized in other subsections of the project description below.

Demolition of non-contributing buildings

The proposed project would involve demolition of nine non-contributing buildings, including the Administration Building, the Ocean Tower, and the six bungalows.

Construction of new hotel and residential buildings

The proposed project would involve construction of two new buildings with mixed hotel and residential uses—the Ocean Building and the California Building—which would connect to the Palisades Building via recessed hyphens.

The Ocean Building is proposed to be roughly L-shape in plan, situated on the southern two-thirds of the parcel around the Moreton Bay Fig Tree, with ten stories and accessible roofs above grade. The Ocean Building would connect to the short south elevation of the Palisades Building via a hyphen at the north elevation and would have a wide passageway at the first and second levels to accommodate a new circular driveway accessible from Second Street. The lobby of the Ocean Building serves to connect both the Miramar Gardens and Palisades Gardens (described below), with a two-story glass exterior and several doors that provide a dramatic view toward the contributing Palisades Building.

The California Building is proposed to be a rectangular-shape building similar in size to the Palisades Building and located on the western corner of the northern one-third of the parcel. There would be a hyphen at the east elevation of the California Building which would connect to the short west elevation of the Palisades Building. Similar to the Ocean Building, the California Building would have a recess at the first level, north elevation to accommodate a driveway that leads to new subterranean parking for employees.

The exteriors of both the new Ocean Building and new California Building are proposed to be contemporary in design and materials, and would be defined by a series of sweeping, curved terraces that serve as balconies or shared outdoor decks. The two hyphens would serve as a continuation of the Palisades Building corridors connecting both new buildings. The hyphens are proposed to have glassy exterior materials, would be located along, and would be set back from the prevailing elevations of the Palisades Building, Ocean Building, and California Building. In particular the hyphen proposed for the short south elevation of the Palisades Building would replace the non-contributing elevator tower and would allow for more of the short south elevation of the Palisades Building exterior to be exposed.

Construction of new subterranean parking

The proposed project would involve construction of three levels of subterranean parking on site.³ This subterranean parking is organized around the root system of the Landmark Moreton Bay Fig Tree, with perimeter walls that would not encroach on the tree drip line.

New landscape

The proposed project includes a new landscape plan, which was developed to return the hotel

³ Some of the subterranean space is shared by rooms for back-of-house operations.

garden identity to the Landmark Parcel. Decades of piecemeal changes to the landscape have resulted in a loss of a defined landscape character despite reintroducing the significant lush planting. Changes that did not align with the historic character of the property include addition of the vehicular driveway and entrance gates at the southern end of the property at Wilshire Boulevard, perimeter wall along the western parcel boundary along Ocean Avenue and southern parcel boundary at Wilshire Boulevard, surface parking lot at the southern one-sixth of the parcel, redesign of the pool and pool area north of the Ocean Tower, as well as gradual changes in pedestrian circulation and other landscape features. The new landscape plan focuses on two new, distinct garden areas—the Miramar Gardens to the south and the Palisades Gardens to the north—both of which incorporate landscape terraces, as shown on drawing sheet 84.

Miramar Gardens

The shape of the new Miramar Gardens is proposed to be a partial ellipse which, when drawn in full, reaches across Ocean Avenue to Palisades Park to collect a Senator John Percival Jones monument. This ellipse concept was developed to link the two physical features that convey a significant association with Senator Jones: the Moreton Bay Fig Tree, which was planted by Jones' second wife Georgina Frances prior to 1900; and, a monument and bench dedicated to Senator Jones in Palisades Park, at the location where Jones frequently watched the sunset. The Moreton Bay Fig Tree is proposed to be the iconic focal point of the Miramar Gardens to both celebrate the tree and provide appropriate features that encourage public access and enjoyment.

The Moreton Bay Fig Tree is a designated Landmark and, as such, is proposed to be preserved through new landscaping and other work in the proposed project. To ensure the preservation of this tree, the arborist team at ValleyCrest Tree Company (predecessor to Brightview Tree Company) was engaged to develop a Tree Work Plan in 2007 to establish appropriate pruning and other routine maintenance. Brightview Tree Company then prepared the 2018 Brightview Report based on the proposed landscape plan.

The Miramar Gardens landscape plan also proposes an elliptical-shape pedestrian walkway from the Ocean Avenue sidewalk around the Moreton Bay Fig Tree, as well as a pedestrian deck and bench design for the area immediately surrounding the tree. The proposed work includes demolition of the existing driveway (constructed circa 1975) that encircles the tree, and construction of a new pedestrian deck that allows up-close public viewing, while being supported by micropiles to allow airspace flow, nutrients, and water to reach the tree roots. This strategy is coupled with the construction of a new ring-shape bench intended to keep the public off the buttressed tree roots and, according to the 2018 Brightview Report, to enhance the long-term health of the tree. The bench would also permit the public to sit under the tree, while discouraging physical interaction with the tree roots or trunk.

The foliage of the new Miramar Gardens would generally consist of a low-water plant palette, suitable for a southern California coastal climate zone, along with more lush foliage including Cardboard Palm (*Zamia floridana*) and Sword Fern (*Nephrolepis cordifolia*) (see drawing sheet 82). Various mature palm trees have been studied for salvage during construction of subterranean parking and are intended to be replanted on site to retain the lush character of the landscape. At the southern end of the ellipse, the new Miramar Gardens is proposed to incorporate extremely thin or shallow water features into the pedestrian walkway, referred to in the Drawing Set as “scrim”. These water features are one-quarter inch deep sheets of water that adults and children may walk through without concern.

Palisades Gardens

The Palisades Gardens would be bound by the proposed new California Building to the north, the Palisades Building to the north and east, and the new Ocean Building to the south. This concept was

developed to celebrate the Palisades Building and reintroduce a single garden identity to an area that has been disfigured by piecemeal changes over several decades. The Palisades Gardens would be constructed on structure.

The new Palisades Gardens identity is proposed to be distinct from the Miramar Gardens in design and symbolism. The landscape plan for these gardens intends to reintroduce the historic garden entry at the west elevation of the Palisades Building with a linear pedestrian walkway entry marked by columns and entablature. Additionally, this landscape plan would reverse the disrupted linear relationships resulting from construction and redesign of the pool area, additional buildings, and other alterations to the general spatial arrangement of this landscaped area. The Palisades Gardens design responds to the rhythm and hierarchy of the building façade and creates a central axis with the building's historic entry. Additionally, installation of a central fountain and other water features ensures a lush landscape feeling is retained. Similar to what is proposed for the Miramar Gardens, the new Palisades Gardens would consist of a low-water plant palette, along with ferns and palms, and the replanting of several mature palm trees after construction of the subterranean parking.

At various areas within the new Palisades Gardens, there would be terraces for visitors to enjoy the outdoor landscape and direct views of the contributing Palisades Building. Along the interior perimeters of the new California Building, Palisades Building, and new Ocean Building, private unit patios are proposed to extend from all three buildings and engage the Palisades Gardens. The elevation of the Palisades Gardens would be raised to more closely align with the first floor of the Palisades Building, improving accessibility at the historic entry.

Compatibility of Proposed Work

The subject property experienced several major alterations since it was first used as a residential estate. While many alterations to the subject property have become significant in their own right, several buildings and features were found to not be significant, or have lost integrity to the point of being unable to convey significance, as described in the 2010 Chattel HRA and established in a 2013 Statement of Official Action (STOA) by the Landmarks Commission for the designation of the Landmark Parcel (2013 STOA – Attachment B). Each item in the proposed scope of work is detailed below, along with a statement on how each item conforms to the *Rehabilitation Standards*.

Rehabilitation of Palisades Building

The rehabilitation of the Palisades Building conforms with the *Rehabilitation Standards*. The individual scope of work items are listed below, along with an evaluation of their conformance with the *Rehabilitation Standards*.

Painting brick exterior

Photographic evidence shows the Palisades Building with exposed, unpainted brick from the time of construction in 1924 until circa 1940 when it was painted a white or off-white. The Palisades Building remained painted until likely 1982, when the paint was removed from the brick exterior by sandblasting, as evidenced by photographs and building permit records. Repainting the brick exterior would return the Palisades Building to its appearance during the most important period of significance 1940-1958 and, therefore, would be in conformance with Standard 4.

The 2015 JGA report does not recommend repainting the brick, as “eventual future removal of the new paint would result in further damage to the historic fabric.” While this reasoning is sound, there is no intention to remove the paint from the exterior in the future, as any removal of exterior paint would be incompatible with the historic character of the property and not in conformance with Standards 2 and 5. Therefore, as paint removal—and not painting—has the potential to cause damage to historic fabric, the proposed scope of work for painting the brick exterior is in

conformance with the *Rehabilitation Standards*. Repainting would also reduce the visual impact of inappropriate sandblasting and repointing that had been carried out previously.

Removing paint and repointing terra cotta

The glazed terra cotta at the first-floor exterior was originally unpainted. While photographic evidence has been inconclusive on the date the material was overpainted, the terra cotta appears unpainted as late as 1959 (see Attachment C, Image 27). It is likely that the terra cotta was damaged in the 1994 Northridge Earthquake, prompting ownership to paint the material to conceal any damaged areas.

The existing paint is proposed to be removed from the terra cotta following recommendations provided in the 2015 JGA report, as mentioned above. This scope utilizes gentlest means possible so as not to cause damage to historic materials and, thus, is in conformance with Standard 7. As the terra cotta was originally unpainted and appears to have remained unpainted through the period of significance, removing the paint would be in conformance with Standards 2 and 5. Additional evaluation of the terra cotta after paint removal would determine if any further treatment, including repair, in-kind spot replacement, or repainting of the terra cotta, is necessary.

New rooftop sign

The new rooftop sign is proposed to be evocative of the rooftop sign that was historically on the Palisades Building and no longer extant, specifically in terms of location on west roof slope, general size and shape. The original rooftop sign had sans-serif block letters before its removal at some point between 1950-1969.

The typeface for the new rooftop sign is still to be determined but is currently proposed to be a script typeface inspired by the street level neon sign at the curved main entry to the subject property that was extant from circa 1946 to circa 1958 (Attachment C, Images 24 and 25).

As shown in the Drawing Set, the proposed new rooftop sign does not appear to fully conform with Standards 3 and 6. Reconstructing an historic feature that is no longer extant should be carried out to closely match the historic feature in size, shape, and design to avoid creating a false sense of history. In referencing the historic main entry neon sign, the new typeface could lead some to interpret the typeface (and, thus, the sign) as being historic. We recommend the applicant consider recreating the block typeface evidenced by historic photographs or selecting a typeface that takes inspiration from the curved main entry, but one which is undoubtedly contemporary. The signage and branding program for the proposed project overall is still in development and, therefore, the new typeface is subject to change until the program is finalized and the team can collaborate on the appropriate solution to be presented for subsequent review.

Demolition of non-contributing buildings

The nine buildings proposed for demolition are as follows: Administration Building, Ocean Tower, and the six bungalows. Based on the 2010 Chattel HRA and the 2013 Landmarks Commission STOA, these buildings do not appear to be significant under any Santa Monica Landmark Ordinance criteria and are non-contributing buildings to the Landmark Parcel. As the proposed demolition is of non-contributing buildings only, and does not adversely impact contributing improvements, this scope of work is in conformance with the *Rehabilitation Standards*.

Construction of new hotel and residential buildings

The proposed new Ocean Building and new California Building are designed with particular attention to the Moreton Bay Fig Tree and the Palisades Building, and appear to be in conformance with the *Rehabilitation Standards*.

Ocean Building

The new Ocean Building would be roughly L-shape in plan to celebrate, and ensure there would be an uninhibited view of, the Moreton Bay Fig Tree for passersby on Ocean Avenue and adds visibility to the tree from Second Street. Additionally, the Ocean Building would not encroach on the drip line of the Moreton Bay Fig Tree.

The Ocean Building is proposed to be connected to the south elevation of the Palisades Building by a simple, inset hyphen. The hyphen would connect to a secondary elevation of the Palisades Building and, due to its recess, would minimally impact historic fabric. Additionally, the contemporary design and materials differentiates the Ocean Building from the Palisades Building. While the Ocean Building does not reflect the massing, size, or scale of the Palisades Building, it would replace the existing Ocean Tower, which is of similar height. Therefore, there would be no significant change in building height at the subject property.

The Palisades Building was constructed in 1924 as a subordinate wing of a larger, unrealized, grand hotel design that included two additional wings totaling 800 rooms.⁴ This larger hotel design was never constructed. Once the Ocean Tower was constructed in 1959, the Palisades Building became—and remains—a subordinate building.

The new Ocean Building would not destroy historic fabric, would be connected to a secondary elevation of the Palisades Building via a hyphen, would not overwhelm the historic building in massing, size, scale, or design, and would preserve the historic character, form, significant materials, and features of the Palisades Building. Additionally, the Ocean Building would be shaped to appropriately accommodate and honor the Moreton Bay Fig Tree. In all, the design of the Ocean Building is in conformance with the *Rehabilitation Standards* as it relates to new construction adjacent to the historic building and tree.

California Building

The new California Building would be rectangular in plan and similar in scale to the Palisades Building, located near the northwest corner of the parcel. The new California Building is proposed to be connected to the west elevation of the contributing Palisades Building by a simple, recessed hyphen. The hyphen would connect to a secondary elevation of the Palisades Building and, due to its recess, would minimally impact historic fabric. Additionally, the contemporary design and materials differentiates the California Building from the Palisades Building. The California Building is proposed to be similar in scale to the Palisades Building—so that its massing, size, or scale does not overwhelm the historic building.

The new California Building would not destroy historic fabric, would be connected to a secondary elevation of the Palisades Building via a hyphen, and would not overwhelm the Palisades Building in massing, size, scale, or design. Additionally, the design of the California Building would preserve the historic character, form, significant materials, and features of the Palisades Building. In all, the design of the California Building is in conformance with the *Rehabilitation Standards* as it relates to new construction adjacent to the historic building.

Construction of new subterranean parking

The design of the new subterranean parking takes steps to avoid contact with the Palisades Building and the root system or drip line of the Landmark Moreton Bay Fig Tree. The perimeter walls of the subterranean parking would not extend into the drip line of the tree and would only connect to the foundation of the Palisades Building in two locations at lower level 1, where the Palisades Building

⁴ “One of the Show Places in California is Santa Monica’s Miramar Hotel,” *Los Angeles Times*, 1 January 1924.

allows pedestrian entry to the subterranean parking. The subterranean parking would not destroy historic materials at the Palisades Building, would not encroach on the Moreton Bay Fig Tree drip line, and would not be visible above grade, thus, it is in conformance with the *Rehabilitation Standards*.

New landscape

The new landscape plan aims to celebrate and encourage public enjoyment of the Landmark Moreton Bay Fig Tree and would return the hotel garden identity to the Landmark Parcel, which had diminished as a result of several decades of changes to the landscape.

The landscape plan incorporates recommendations from the 2018 Brightview Report to ensure that the Moreton Bay Fig Tree is protected, enhances the health of the tree and implements design cues to allow visitors to view the Moreton Bay Fig Tree up-close while discouraging climbing on the buttressed root system. The new landscaping would remove existing paving around the tree and replace it with a raised deck supported by micropiles. This proposed new raised deck would protect the exposed roots and would not require additional soil or paving to raise the grade around the tree creating a significantly improved environment for the tree. Additionally, the exact placement of the micropiles would be determined by ground-penetrating radar to avoid damage to the subterranean root system. The raised deck is also designed to accommodate a bench around the perimeter of the tree to both encourage visitor access, yet subtly deter visitors from climbing on the tree roots. This scope of work ensures the protection of the tree and its root system, both exposed and subterranean, and does not introduce additional features or materials that might visually detract from the Landmark tree. All proposed changes related to the tree appear to be in conformance with Standards 1 and 2.

While the proposed new planting would generally consist of a low-water plant palette, along with some lush palms and ferns, various mature palm trees have been studied for salvage during construction of subterranean parking and are intended for replanting on site to retain the lush character of the landscape, in conformance with Standard 2.

As the new landscaping honors the Landmark Moreton Bay Fig Tree and the Palisades Building, and does not detract from the historic character nor damage historic materials of either feature or the subject property as a whole, the new landscape plan is in conformance with the *Rehabilitation Standards*.

Recommendations

The new rooftop sign at the Palisades Building, as proposed in the Drawing Set, does not yet appear to fully conform to Standards 3 and 6. Further study and information will be performed and gathered to make sure it is consistent with the *Rehabilitation Standards*, as the signage program for the entire project is still in development. Based on the new rooftop sign as proposed in the Drawing Set, we recommend further study of the new typeface as part of the overall project signage package to either be (i) more compatible with the original, or (ii) distinctly more contemporary.

Conclusion

The project team has been collaboratively working on a revised design for the Miramar Santa Monica for the last two years. This effort has been a great example of how a collaborative design process should work, where landscape design, architectural design, and preservation elements are integrated into the overall design process. The proposed project thoughtfully incorporates the historic features on the Landmark Parcel: the Landmark Moreton Bay Fig Tree, the Palisades Building, and lush landscape character into a redevelopment of the Landmark Parcel.

The proposed project has crafted a balanced approach that introduces contemporary features while celebrating the historic character of the subject property and its contributing features. The Palisades Building rehabilitation would return the brick exterior to a painted finish and would remove overpaint. Paint would be removed from the overpainted terra cotta and, upon additional investigation of its condition, further treatment would be identified and carried out, if necessary. No contributing buildings are proposed to be demolished, and demolition of the nine non-contributing buildings would not impact the historic character or significance of the Landmark Parcel. Additionally, the overall design of the new Ocean Building and new California Building is compatible and limits intervention with the Palisades Building. The signage program is still in development and would be subject to subsequent review. As a whole, the proposed project appears to be in conformance with the *Rehabilitation Standards*.

Attachments

Attachment A: 2010 Chattel HRA

Attachment B: 2015 JGA Report

Attachment C: 2017 Chattel Memo – Historic Photographs of Palisades Building

Attachment D: 2013 Landmarks STOA

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ATTACHMENT B:
BRICK TESTING AND CONSERVATION
CONSULTATION REPORT
ROSA LOWINGER ASSOCIATES

**MIRAMAR SANTA MONICA
CONFORMANCE REPORT UPDATE**

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**TESTING AND CONSERVATION CONSULTATION REPORT
MIRAMAR SANTA MONICA RENOVATION**

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Date of Testing and Investigation: June 17th, 2019

Date of Report: July 10th, 2019

RLA Conservation is pleased to submit the following report for testing and materials consultation to Chattel, Inc. Historic Preservation Consultants, for the Palisades Building of the Fairmont Miramar Hotel located at 101 Wilshire Blvd. Santa Monica, CA 90401.

Title:	Palisades Building
Date:	1924
Materials:	Brick, Terracotta
Style:	Renaissance Revival

DESCRIPTION:

The Palisades Building is a component of Santa Monica's historic Miramar Hotel. Originally constructed in the Renaissance Revival style in 1924, this historic brick and terracotta building is currently attached to a newer building that serves as the primary wing of the hotel via a stair and elevator tower. The ground floor of the Palisades Building is clad in a light pink terracotta that has been coated with a beige paint system of unknown composition. It is presumed to have several coats of paint on it. The upper stories are clad in exposed red brick pointed with grey mortar. Historic photographs indicate

that the brick was unpainted from 1924 to approximately 1940; then it was painted.

CONDITION:

Structurally, the Palisades building is purported to be in good condition. Despite multiple renovations to the property as a whole, the Palisades Building retains integrity in terms of form and function. The most apparent alteration is the exposure of the raw brick by sandblasting (1980s), the application of thick, unraked, pointing mortar between the bricks, and the coating of the terracotta.

BRICKS: The brickwork was likely exposed in the early 80s via sandblasting. This likely removed most, if not all, of the protective exterior skin formed on the bricks during the kiln firing process. The bricks currently appear visibly rough in texture. The pointing mortar varies in color and finish throughout. The predominant pointing is a grey Portland cement-based material that was likely added during the 1980s renovation. It was not raked back as it was in the original, and in places it looks unsightly, smeared over the edges of the joints. Overall the pointing mortar is in stable condition, but aesthetically it deviates greatly from the original appearance as seen in photographs.

TERRACOTTA: The condition of the terracotta is unknown, as it is coated with an unidentified paint system. There are locations of apparent terracotta deterioration where the masonry can be seen to be actively delaminating and breaking through the paint layer. The paint layer appears generally well adhered. Locations of paint layer deterioration are concentrated at undercut ornamental motifs surrounding doorways. The testing of the terracotta will be in a separate report.

GOAL OF TESTING: RLA was brought on board to work with Chattel, Inc. to determine certain conditions related to the building's brick and terracotta elements and how best to conserve and restore them during the renovation phases. Among the questions to consider are:

For Terracotta:

1. Study removing the paint and not having a painted finish.
2. What is the overall condition of the terracotta?
3. If the terracotta needs to be painted, what type of paint is recommended?

For Brick:

1. Is it safe to paint the brick to achieve a uniform appearance?
2. Should the joints be raked back?

This first phase report specifically addresses questions related to the brick.

The key question related to the brick is whether painting the brick would be an irreversible process. One of the key ways of determining reversibility is to look into the porosity of the brick. To determine that, RLA conducted RILEM tests in select areas throughout the building. RILEM is an acronym for *Reunion Internationale des Laboratoires d'Essais et de Recherches sur les Matériaux et des Constructions*

(International Union of Testing and Research Laboratories for Materials and Structures) France's version of the ASTM (American Society for Testing and Materials). RILEM tests measure the deterioration and porosity of masonry materials (brick, stone, and concrete), utilizing tubes that are affixed to a masonry surface and measure the absorption of water into a pore structure. In the case of the Palisades Building, the RILEM testing was used to provide a relative measure of how easily a liquid material, i.e. paint, would absorb into the pore structure of the brick. For more information on RILEM, please see the following:

<https://www.constructionspecifier.com/testing-the-test-water-absorption-with-rilem-tubes/>

<https://www.m-testco.com/files/pages/Rilem%20Test.pdf>

In addition to the RILEM Tests, RLA extracted specimens of terracotta and brick to perform additional testing in the studio.

TESTING PERFORMED:

1. Specimen Extraction
 - a. Terracotta specimens were extracted from locations of spalling on a 3rd floor sill accessed via fire escape.
 - b. A brick specimen was extracted from the buildings hyphen.
 - i. Extraction location was accessed via a hole cut in the drywall of the stairwell.
2. RILEM Tube testing on designated locations of the brickwork.
 - a. Two (2) tests were performed on each façade, excluding the façade acting as a hyphen to the elevator tower.
 - b. RILEM tests locations were accessed via fire escape and windows in designated rooms on the 2nd and 6th floors.

SPECIMEN EXTRACTION:

Terracotta specimens were extracted from an existing spall on the 3rd floor. The specimen will be used to produce restoration mortars for the restoration phase of the project.

A loose brick was extracted from the original buildings southeast facing wall. The specimen is coated in an insulating material. RLA is currently performing investigations to determine if the historic paint is still present on the brick beneath the insulation.

RILEM TESTING RESULTS:

Testing involved the application of a vertical RILEM tube to a brick surface. The purpose of RILEM testing is to assess the substrate’s rate of water absorption over a period of time. It should be noted that there is currently no ASTM standard for RILEM testing although it is widely accepted as a reliable testing method, as such the data from RLA’s testing should be interpreted within the context of the testing parameters and data set.

Testing locations were free of pointing mortar or any defect that may skew absorption results. The surface was dusted to remove loose debris before the RILEM tube base was adhered with Chavant™ Sulfur-Free Plasteline modeling clay. 5 mL of distilled water was added to the tube and monitored for 20 minutes as absorption of the water was recorded at multiple intervals.



Fig. 1: RILEM Tube Testing

TESTING LOCATION:	ABSORPTION AT 5 MINUTES (mL)	ABSORPTION AT 10 MINUTES (mL)	ABSORPTION AT 20 MINUTES (mL)
Northwest Façade 2 nd Floor	0.0	0.0	0.0
Northwest Façade 6 th Floor	0.0	0.0	0.4
Northeast Façade 2 nd Floor	0.0	0.0	0.0
Northeast Façade 6 th Floor	0.0	0.2	0.5
Southwest Façade 2 nd Floor	0.0	0.0	0.0
Southwest Façade 6 th Floor	0.0	0.5	0.7
Southeast Façade 2 nd Floor	0.0	0.0	0.0
Southeast Façade 6 th Floor	0.0	0.0	0.2
Fire escape Façade 2 nd Floor	0.0	0.0	0.0
Fire escape Façade 6 th Floor	0.0	0.3	0.4

The absorption rates identified in this report show minimal absorption of water. Based on these absorption rates at the test locations, it is reasonable to assume that there is minimal moisture flow

through the masonry assembly. The test locations at the upper levels exhibited higher rates of absorption that can likely be attributed to greater sun exposure.

During investigative probes into the interior of the walls at the test locations there was no visible moisture, associated staining or deterioration noted. This further supports the theory that moisture migration throughout the masonry assembly is minimal.

DISCUSSION:

The testing data and investigative probes demonstrate minimal liquid absorption into the brick at the lower levels, and only slightly higher porosity at upper levels of the brick masonry. This suggests to us that paint finish could be applied to the brick masonry in such a manner that poses minimal risk of irreversibility to the hydraulic performance of the historic masonry assembly. We understand the concerns about reversibility of the paint given the last aggressive campaign to remove such a coating. The following are additional key issues related to this discussion:

1. If done correctly, using appropriate barriers to increase reversibility, painting the brick could also help protect it from additional weathering due to exposure to salinity and thermal effects of high sun and heat.
2. Prior to painting the brick, the building should be cleaned thoroughly to remove dirt and salts. Though porosity was deemed to be very low, soluble salts accumulate on a regular basis, and a program for insuring that there are no salts trapped by paint will need to be implemented.
3. If a paint system is not applied, we recommend evaluating the use of a clear water repellent or consolidant at the upper levels of the building to prevent additional exposure to sun and salinity. A key consideration would be finding a proper vapor permeable barrier layer to apply to the bricks as a base coat.
4. If the building is painted, we recommend selecting a paint “stack” that is subjected to removal tests prior to wholesale application.
5. Removal methods continue to improve in the field of materials conservation and there are presently several safe mechanical and chemical methods for removing paint from masonry surfaces that do not involve aggressive methods such as sandblasting. Among these are combinations of dry ice blasting, IBIX® Systems, and Sponge Jet® systems. We cannot recommend one method over another without testing, but we have personally achieved excellent results at paint removal from delicate masonry finishes with a number of these methods. It stands to reason that these methods would only continue to improve over time, making removal (if desired) safely possible in 20 or 50 years. That said, California continues to restrict chemical methods, which means that certain methods may be prohibited. We recommend testing methods that are not chemical in nature.
6. If the brick is not painted, the unsightliness of the current pointing mortar will need to be addressed. In most cases such methods are likely to be invasive, time consuming, and costly.

CONCLUSIONS:

The aforementioned considerations allow us to conclude that painting the brick is a reasonable option. The “Cons” are self-evident: removal of the paint can pose reversibility problems and we strongly recommend testing this prior to wholesale application. The “Pros” have been outlined above. Our initial recommendation is to employ a vapor-permeable silicate masonry coating system to paint the brick. Such systems include:

- Restauro-Lasur Pigmented Mineral Stain, Keim, Inc.
- Everkote 300 Mineral Coating System, Edison Coatings, Inc.

Finally, if the brick is not going to be painted, we recommend evaluating the use of a clear coat to provide resistance to salinity and thermal effects that are subjecting the upper reaches to minor, though apparent, deterioration. As climate change impacts heat and salinity of coastal regions throughout the world, we can expect the effects of sun and salt to increase on a brick surface of this nature.

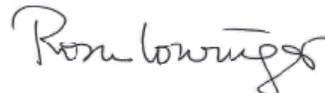
Thank you for the opportunity to participate in this important project. Please do not hesitate to contact us with any further questions.

Prepared by:



David Espinosa, Associate Conservator

Approved by:



Rosa Lowinger, Principal Conservator

ROSA LOWINGER

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PERSONAL INFORMATION

Born: 28 September 1956, Havana, Cuba
Citizenship: USA
Languages: English, Spanish, Italian, Hebrew, French

EDUCATION

- 1982** M.A. Institute of Fine Arts, New York University
Art History; Certificate, Art Conservation
- 1978** B.A. Brandeis University, Fine Arts, Summa Cum Laude

WORK EXPERIENCE

- 2008-** **Principal and Chief Conservator**, RLA Conservation of Art + Architecture, Inc., Miami, Los Angeles

Founder of a bicoastal conservation firm that provides planning and implementation services for restoration and preservation of buildings, monuments, archeological sites, public art, sculpture, and three-dimensional artworks. Specializing in tropical, marine, and desert clients, with special expertise in disaster planning and recovery. Serving as consultant conservators to several dozen municipal and statewide public art programs and historic preservation offices.

- 2011-2015** **Associate Editor**, *Change Over Time: An International Journal of Conservation and the Built Environment* University of Pennsylvania Press

Book Review Editor for international peer-reviewed journal on conservation of built heritage. Editor of Volume 5.1 on Vandalism.

- 1988-2008** **Founder and Principal Conservator**, Sculpture Conservation Studio, Los Angeles

Founder of L.A.'s oldest architectural conservation practice. Served as President and Chief Conservator from 1988-2000 then, Senior Conservator for postwar, modern and contemporary projects. Extensive architectural project list. Major projects include Simon Rodia Watts Towers (1925-58), WPA mural by artist Helen Lundeberg in Inglewood, CA (1940), Otto Piene's 1970 light sculptures in the Hawaii State Capitol (1969), Bullock's Wilshire (1929), the Robinson's May Building (1883), the Desmond Building (1917), Eastern Columbia Building (1930), Adamson House (1929), and post-earthquake survey of a dozen 18th century Missions along the California Coast.

- 1986-88** **Private Conservator: Charleston, South Carolina.** Specialty: Historic Southern

architecture, archeological sites, including wood frame houses.

- 1985-86** **Conservation Fellow: The Los Angeles County Museum of Art, Los Angeles, CA.**
Specialty: Modern and Contemporary Sculpture.
- 1982-85** **Private Conservator: Philadelphia, Pennsylvania.**
- 1983** **Consultant: Albright Institute of Archaeological Research, East Jerusalem.**
Archeological Sites and Ceramics.
- 1980-82** **Fellow: University Museum, University of Pennsylvania, Philadelphia, PA.**
Archeological Sites, Objects, and Ethnographic Artifacts.
- 1979-80** **Conservation Intern: Metropolitan Museum of Art, New York, New York.** American
Wing Conservation of works by John Lafarge, Augustus St. Gaudens, Tiffany, and Hiram
Powers.

ARCHEOLOGICAL FIELDWORK

- 2018** **St. George Village Botanical Garden, St. Croix, USVI:** Survey of 18th century sugar
plantation buildings and ruins.
- 2011-14** **San Ysidro Plantation, Trinidad, Cuba:** Consultant on stabilization of painted decorative
plaster finishes.
- 1985-88** **Archeological Project at the Spanish settlement at St. Catherine's Island, GA. American
Museum of Natural History:** Project conservator.
- 1979-84** **Expedition to the Coastal Plain of Israel (Tel Michal and Tel Gerisa): A joint project of
the University of Pennsylvania and Tel Aviv University.** Project Conservator for four
seasons.

AWARDS AND HONORS

- 2019** **Preservation Houston - Good Brick Award**
For relocation and restoration of the Extending Arms of Christ mosaic at the Houston
Methodist Hospital in the Texas Medical Center.
- 2014** **Getty Foundation- Keeping it Modern Initiative**
For development of conservation protocols for the Miami Marine Stadium.
- 2012** **American Institute for Conservation-Service Award**
For coordination of Cuba travel program.
- 2011** **Smithsonian Institution, Haiti Cultural Recovery Center- Achievement Award**
For Stabilization and Removal of Murals at Holy Trinity Cathedral, Port-Au-Prince.
- Association for Preservation Technology- Achievement Award for Service**
For Creation of Cuba Travel Program.
- 2009** **International Conservation Center in Rome (ICCROM)- Fellow**
- American Academy in Rome - Booth Family Rome Prize in Conservation '08-09**
Project: A Comprehensive History of Art Vandalism

- 2008** **Los Angeles Conservancy- Preservation Award**
For *History of Transportation* (1940), by H. Lundeberg, Inglewood, CA
- 2005** **Amistad Foundation, New York, NY- Cross-Cultural Understanding Award**
For *Tropicana Nights: The Life and Times of the Legendary Cuban Nightclub*.
- 2001** **Los Angeles Conservancy-Preservation Award**
For Conservation of "Vanishing Race," a 1930 cast-stone WPA sculpture.
- 2000** **Getty Preserve L.A. Award**
For Assessment of Damage to "History of Transportation" mural.
- 1998** **California Preservation Foundation**
For conservation of "Portal of the Folded Wings" 1926 cast stone and ceramic tile aviation monument in Burbank, CA restored after Northridge Earthquake.
- 1997** **Los Angeles Conservancy - Preservation Award:**
For conservation of "Portal of the Folded Wings," a 1926 cast stone and mosaic monument in Burbank. CA.

TEACHING EXPERIENCE

- 2014** **Architectural Metal Finishes**, Association for Preservation Technology Finishes Workshop, University of Denver, Denver, CO.
- 2013** **Architectural Metal Finishes**, Association for Preservation Technology Finishes Workshop, Taliesin, Spring Green, Wisconsin, June.
- Modern Architectural Metal Finishes**, Co-coordinator of pre-conference workshop for the Technical Committee for Modern Heritage, APT, New York, October.
- 2012** **Public Art: Legal Status, Maintenance, and Conservation**, Institut National du Patrimoine, Paris, France, March.
- 2011** **Conservation of Collections in Tropical Climates**, Museum Studies, (Debbye Kirschtel-Taylor Instructor), Florida International University, Miami, FL
- 2006** **Conservation of Wooden Ethnographic Painted Objects**, UCLA-Getty Conservation Institute Graduate Program in Conservation, Los Angeles, CA
- 2000** **Post Hurricane De-salination of earthen buildings with painted finishes**, Office of the Conservator, Trinidad, Cuba, July-August.
- 1995** **Conservation of Spanish Cannons and Military Fortifications**, Instituto Hondureño de Anthropologia USIS Technical Specialist Program, Omoa, Honduras, October.
- 1994** **Conservation of Cemetery Monuments and Statuary-Marble, Bronze and Granite**, Centro Nacional de Conservación, Restauración y Museología (CENCREM) Havana, Cuba, June.

TECHNICAL PRESENTATIONS AND PUBLICATIONS (since 2000)

- 2019** ***“Report on the State of Painted Outdoor Sculpture: Discussion on New Trends and Discoveries in the Field of Conservation”***, paper presented to the Florida Association of Public Art Professionals Meeting. Ft. Lauderdale, 10 May.
- “Collecting the Uncollectable: Conservation of 20th and 21st Century Works of Land Art,”*** symposium panelist at the Frick Art Museum, New York, 23 May.
- (with K. Ciociola), ***“Creating an Emergency Plan for Collections of Monumental Public Art,”*** Public Art Network, Americans for the Arts Annual Conference. Minneapolis, MN, 14 June.
- 2017** ***“Saving Public Art: Preparation and Recovery,”*** paper presented to the American Society of Appraisers Conference, Houston, October 8, 2017
- 2016** (with J.A. Fidler and K. Ciociola), ***“Don’t Destroy History! A Testing Program to Remove Layers of Graffiti at the Miami Marine Stadium,”*** paper presented to the Association for Preservation Technology Annual Conference, San Antonio, 1 November.
- 2015** (with J.A. Fidler, C.C. Ferraro, J.Hernandez, and M.M. Lynch), ***“Concrete Conclusions: Surface Treatment Trials for Conserving the Miami Marine Stadium,”*** paper presented to the American Institute for Conservation 43rd Annual Meeting, Miami, 15 May.
- (with C. Varvi), ***“One Piece at a Time – The repair of Felt-Based Sheet Flooring at Johnny Cash’s Boyhood Home in Dyess, Arkansas,”*** paper presented to the American Institute for Conservation 43rd Annual Meeting, Miami, FL, 16 May.
- “Layers of Understanding: Graffiti & the Miami Marine Stadium,”*** panelist at Miami Center for Architecture and Design, 11 May.
- (Editor), ***Change Over Time, Vandalism Issue.*** University of Pennsylvania, V. 5.1., Spring, 2015.
- “Vandalism Miami Style: Graffiti as a Tool in Preserving the Miami Marine Stadium,”*** *Change Over Time- Vandalism Issue*, V. 5.1., Spring, 2015, pp.
- (Editor, with K. Normandin), ***APT Bulletin: The Journal of the Association for Preservation Technology, Special Issue on Modern Metal Finishes***, V. 46, No. 1, 2015.
- 2014** ***“Savoir Faire: Bridging the Gap Between Tradition and Technology,”*** presented to the Metissage Workshop, Association for Preservation Technology Annual Conference, Quebec, Canada, 25 October.
- “Coral Rock: Preserving, Restoring, Maintaining Coral Gables Coral Rock Homes,”*** presented to the Historic Preservation Association of Coral Gables, 23 September.
- “Strategies for Pest Control in Museums,”*** presented to the Florida Association of Museums Conference, Jacksonville, 9 September.
- “Some Like it Hot- Miami Graffiti,”*** panelist at History Miami Museum, Miami, 19 April.
- “The Ultimate Modern Metal- Aluminum in Contemporary Art,”*** keynote address presented to

Aluminum 2014 Conference co-sponsored by FAIC, ICOM-CC Metals Group, National Air and Space Museum, and the Lunder Conservation Center, 8 April.

- 2013** ***“What Makes Original Architecture Original?”*** paper presented to the Florida Trust for Historic Preservation Meeting, St. Augustine, May.
- (with M.C. Schmitt), ***“Literature Review-Nostalgia,”*** in *Change Over Time- Nostalgia Issue*, J.D. Hunt (ed.), V. 2.2, Spring, 2013.
- “Vandalism and its Role in the Fabric of Cities,”*** paper presented to the Association for Preservation Technology Annual Conference, New York, 13 October.
- 2012** ***“An Ounce of Prevention: The Case For Pre-Fabrication Conservation Review of New Public Art Commissions,”*** paper presented to the Florida Association of Public Art Professionals Conference, Ft. Myers, FL, 4 May.
- “Cuban Modernism and its Preservation,”*** public lecture presented at the University of Arizona School of Architecture, Tucson, AZ, 18 April.
- 2011** (with V. Dominguez), ***“Conservation in the Time of Cholera: Stabilization and Removal of Murals at St. Trinité Cathedral in Port-Au-Prince Haiti,”*** paper presented to the Association for Preservation Technology Annual Conference, Victoria, B.C., 14 October.
- (with V. Dominguez), ***“The Stabilization and Removal of Three Wall Paintings at Holy Trinity Episcopal Cathedral,”*** in R. Kurin, (ed), *Saving Haiti’s Heritage: Cultural Recovery After the Earthquake*, Washington, D.C.: Smithsonian Press.
- “Literature Review-Repair and Reparations,”*** in *Change Over Time-Repair Issue*, F.G. Matero, (ed.), V. 1, No. 1, Fall.
- “Conserving Otto Piene’s Kinetic Light Sculptures in the Hawaii State Capitol,”*** *APT Bulletin: The Journal of the Association for Preservation Technology, Special Issue on Modern Heritage*, V. 42, No. 2/3, pp. 39-43.
- 2010** (Panelist), ***“Finishing Touches: Conserving Wall Paintings and Other Architectural Surfaces,”*** The Getty Conservation Institute, 15 April.
- 2009** ***“A Moveable Feast: The Conservation of Sun and Moon, Kinetic Light Sculptures in the Hawaii State Capitol,”*** paper presented to the Association for Preservation Technology Annual Conference, Los Angeles, 5 November.
- “Art + Vandalism = Art,”*** Acton Miscellany Lecture Series, Villa La Pietra, New York University, Florence, Italy, 8 February.
- (with A. Morse), ***“The Conservation of Helen Lundeberg’s “History of Transportation” Mural in Inglewood, CA,”*** International Institute for Conservation, Abstracts of the 22nd Biennial Congress, London, UK.
- 2006** Lowinger, R. ***“Views, Voices, and Visitors,”*** keynote address presented to the Hawaii Museums Conference, Maui, HI, 12 May.

Lowinger, R. **"Conservation of Public Sculpture in Tropical Climates,"** paper presented to the Hawaii Museums Conference, Maui, HI, 13 May.

- 2005 Lowinger, R., Morse, A. and Lucero, T. **"Mega Documentation Problems for a Monumental 240' WPA Project: Helen Lundeberg's 'History of Transportation' Petrachrome Mural,"** American Institute for Conservation of Historic and Artistic Works (AIC) -Abstracts of the 33rd Annual Meeting, Minneapolis, MN.

LITERARY (NON-ACADEMIC) PUBLICATIONS

- 2019 (with F. Luca) ***Promising Paradise: Cuban Allure, American Seduction, Florida International University Press: Miami, June.***
- 2018 **"Empress of the Waves,"** in (W. Guerra and L. Padura, Ed.) *Una Isla en Luz*, Trapublishing: Miami, pp. 15-17.
- 2016 (with Ofelia Fox), ***Tropicana Nights: The Life and Times of the Legendary Cuban Nightclub. (10th Anniversary Edition)***, In Situ Press: Los Angeles, CA.
- 2008 **"Havana: The All-Night City,"** *In Cuba: Art and History from 1868 to Today.* Montreal Museum of Fine Arts Press: Montreal, Canada.
- "Piedra Jaimanitas,"** in (Ruth Behar, Ed.) *Bridges Revisited*, University of Michigan Press, Ann Arbor, MI.
- 2007 **"The Object as Protagonist: An Interview with Los Carpinteros,"** in (G. Harper, ed.) *Conversations on Sculpture.* International Sculpture Center: Washington, DC.
- The Elements of Migration: Reflections on the work of KCHO,*** (artist catalogue), New York: Marlborough Gallery.
- 2005 ***Tropicana Nights: The Life and Times of the Legendary Cuban Nightclub.*** NY: Harcourt.
- 2004 **"Repairing Things,"** in (M.Finn, Ed.) *Cuba in Mind*, New York: Random House.
- 2002 **"The Encanto File,"** in (J. Miles, Ed.) *Rowing to America and Sixteen Other Short Plays*, New York: The Women's Project and Productions.
- 2000 **"Off the Bench,"** In (P. Stine, Ed.) *Sports in America*, Ann Arbor: Witness Press.

MAGAZINES, NEWSPAPERS, ONLINE

- 2017 **"In Defense of Decorative Finishes: Cuban Architectural Conservation in the 21st Century,"** in *Conservation Perspectives, the Getty Conservation Institute Newsletter*, Fall 2017.
- 2008-2011 Contributing blogger (as SanSuzie/ The Art Nurse) www.c-monster.net
- 2008 **"Rosa Lowinger on Cuba Before Castro"** Truthdig.com October, 2008
http://www.truthdig.com/arts_culture/page2/20081010_rosa_lowinger_on_cuba_before_castro/
- 2007 **"Tijuana Rising,"** *Tu Vida Magazine.* New York: Hearst Publications, March.

- 2006** "Cuba's Past, Future, as Seen in Buildings," *Philadelphia Inquirer*, Aug. 16, 2006.
- "In Biloxi, the Swetman House Rises out of the Rubble," *National Trust for Historic Preservation Online*, April. <http://www.nationaltrust.org/hurricane/swetman.html>
- 2001** "Francisco and I: An Interview with Fernando Rodriguez." *Sculpture Magazine*, Nov, 2001
- 2000** Cover Story, "Cuban Missives—KCHO Makes the Mainstream." *ArtNews*, June, 2000
 "Peace, Beauty, Butter, Oxtail: An Interview with Tony Labat." *Sculpture Magazine*, Sept., 2001, pp. xxx
- 1997** "Old Havana Reborn." *Preservation*, Sept, 1997

PROFESSIONAL AFFILIATIONS

- Association for Preservation Technology (Member since 2005), Technical Committee for Modern Heritage (2012)
- American Institute for Conservation (Member since 1983, Professional Associate-1988, Fellow-2012. Membership Committee (2014-17)
- International Institute for Conservation (Member since 1990)
- ICOM-CC (Member since 2017)
- ArtTable (Los Angeles Chapter, 2005) (Miami Chapter, 2009)

BOARD SERVICE

- Vincent Price Art Museum at East Los Angeles College (2009-2015)
- Florida Association of Museums (2011-)
- Florida Association of Public Art Professionals (2014-)
- Cuban Heritage Collection-University of Miami Libraries (2018-)

DAVID ESPINOSA

Professional Associate, AIC

PROFESSIONAL EXPERIENCE

Rosa Lowinger & Associates, Los Angeles, California

Associate Conservator, April 2018 - Present

- Responsible for project management of Los Angeles and national-based projects.
- Conducts condition assessments, develops treatment protocols, implementation of treatments, management of technicians and sub-contractors, and preparation of treatment reports.
- *Selected Projects:*
 - KING KAMEHAMEHA I, *KAPA'AU, HAWAII*, 2018: Re-painting of historic painted bronze sculpture.
 - FEDERAL COURTHOUSE, *LOS ANGELES, CALIFORNIA*, 2018: Glazed terra cotta patching and in-painting. Mitigation of mineral deposits on polished granite.
 - DINOSAUR TOPIARIES, *SANTA MONICA, CALIFORNIA*, 2018: Corrosion mitigation, patination, and application of protective wax coating on copper and bronze sheet elements of six (6) large-scale sculptures.
 - PETER SHELTON CANNONBOTTLES, *LOS ANGELES, CALIFORNIA*, 2018: Corrosion mitigation, re-patination, and protective wax coating on cast bronze sculptures.

Lorton Stone LLC, Springfield, Virginia

Project Manager & Conservator, February, 2017 – March 2018

- Conducted condition assessments, research, field investigation, testing, treatment design, and technical implementation. Wrote and edited various work plans and contract documents.
- Performed detailed photo-documentation and created treatment-tracking documents. Managed project details, including planning project priorities, ordering supplies, organizing and directing masons, site administration, equipment rental, scheduling and liaising with clients.
- *Selected Projects:*
 - United States Capitol Building, *Washington, DC*, 2017-2018
 - Russell Senate Office Building, *Washington, DC*, 2017-2018
 - Washington Monument, *Washington, DC*, 2018
 - Lockkeeper's House, Constitution Gardens, *Washington, DC*, 2017-2018

Conservation Solutions, Inc., Forestville, Maryland

Assistant Conservator, June 2014 – January 2017

- Conducted condition assessments, implemented treatments, managed technicians and sub-contractors, and prepared treatment reports.
- Maintained and operated Class IV Nd:YAG Laser system. Trained staff in application and operation of laser equipment.
- *Selected Projects:*
 - United States Capitol Building, *Washington, DC*, 2016-2017
 - Andrew W. Mellon Memorial Fountain, National Gallery of Art, *Washington, DC*, 2016
 - Cast Iron Rotunda Capitals, University of Virginia, *Charlottesville, Virginia*, 2016
 - Cast Zinc Civil War Soldier Statue, *Bethlehem, Pennsylvania*, 2016
 - The Aviator, University of Virginia, *Charlottesville, Virginia*, 2016
 - Henry Moore's *Reclining Figure*, Columbia University, *New York, New York*, 2016
 - Various memorials, Arlington Cemetery, *Arlington, Virginia*, 2015
 - Masonic Temple Bronze Night Doors, *Washington, DC*, 2015

University of Oregon Graduate Program, Eugene, Oregon

Selected Projects:

- **Eugene Masonic Cemetery, Eugene, Oregon, 2012**
 - Conservation maintenance and restoration of 35 grave markers and the Egyptian Revival Mausoleum.
- **Mill Street Neighborhood Architectural Survey, Eugene, Oregon, 2012**
 - Surveyed and documented historic residences of Eugene.
- **Frenchglen Sod House, Frenchglen, Oregon, August 2012**

- Foundation stabilization and window restoration.

EDUCATION

University of Oregon, Eugene, Oregon

Master of Science in Historic Preservation, GPA 4.0/4.0

Thesis: "Eugene Masonic Cemetery Restoration and Maintenance"

September 2012 - June 2014

University of Oregon, Eugene, Oregon

Bachelor of Arts, Art History GPA 3.85/4.0

September 2007 - June 2011

MEMBERSHIPS

- Professional Associate - American Institute for Conservation (AIC)
- Member - Association for Preservation Technology International (APTI)
- Member – Washington Conservation Guild

PRESENTATIONS AND SPEECHES

- "Artistry and Technology in the Conservation Treatment of the Andrew W. Mellon Memorial Fountain", Washington Conservation Guild, Washington, DC, January 2017.

PROFESSIONAL TRAINING

- OSHA 30-hour Construction Industry
- Certified Jahn Mortar Installer
- Class IV Nd:YAG Laser Training

TECHNICAL SKILLS

Adobe Photoshop, Microsoft Office, Spanish, Italian, German

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ATTACHMENT C:
REPORT #2 RESULTS OF PAINT STRIPPING TESTS
ROSA LOWINGER ASSOCIATES

**MIRAMAR SANTA MONICA
CONFORMANCE REPORT UPDATE**

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MIRAMAR SANTA MONICA RENOVATION – Report #2
RESULTS OF PAINT STRIPPING TESTS REVISION 1

Prepared for: Robert Jay Chattel, AIA, President
Chattel, Inc. | Historic Preservation Consultants
13417 Ventura Blvd
Sherman Oaks, CA 91423-3938
office: 818-788-7954 x3
mobile: 818-421-7167
robert@chattel.us

Conservators: David Espinosa, Associate Conservator
despinosa@rosalowing.com
Christina Varvi, Principal Conservator
cvarvi@rosalowing.com
Rosa Lowinger, Chief Conservator
rlowinger@rosalowing.com

Date of Testing and Investigation: July 21st, 2019

Date of Report: July 28th, 2019

RLA Conservation is pleased to submit the following report for paint stripping testing to Chattel, Inc. Historic Preservation Consultants, for the Palisades Building of the Fairmont Miramar Hotel located at 101 Wilshire Blvd. Santa Monica, CA 90401. This is the second report that addresses strategies for conservation and restoration of the Palisades Building.

Digital photographs were taken during testing. To access the Dropbox folder containing all photos please copy and paste the following link into your web browser:

<https://www.dropbox.com/sh/h9koohvlnsh9II/AACOboj0GE5ILqxyVWVNgIY9a?dl=0>

Title:	Palisades Building
Date:	1924
Materials:	Brick, Terracotta
Style:	Renaissance Revival

DESCRIPTION:

The terra cotta elements of the Palisades building exhibit multiple coats of paint in varying condition.

The decorative cornice components exhibit more recent paint coatings that are generally more well adhered than those coatings exhibited on the window sills and friezes. These coatings have not been analyzed by cross section; however, most are expected to be commercial paints in either oil or latex form that were applied to the surface over the years. In general, approximately 2-3 coats of paint were observed on the surface prior to testing. The observed coats of paint varied in color from off-white to grey. The terra cotta surface was observed as minimally porous, having a smooth texture and glaze. Weather conditions during testing were mild with no direct sunlight on the test area.

GOAL OF TESTING:

RLA applied multiple paint strippers to the terra cotta architrave located at the 2nd floor fire escape landing. Paint stripping tests are intended to inform future treatment protocols, which will include complete paint removal as a means of exposing original finishes. The goal of this testing was to find the most effective, safe, and efficient method for removing multiple layers of paint. The materials selected for testing below are all approved materials for use in the State of California.

MATERIALS TESTED:

1. Savogran Strypeeze® Semi-Paste Stripper
2. Jasco® Non-Methylene Chloride Formula Premium Paint & Epoxy Remover
3. Citristrip® Paint & Varnish Stripping Gel
4. Prosoco Enviro Klean® Safety Peel 1
5. Dumond™ Smart Strip Advanced Paint Stripper

TESTING METHODOLOGY:

1. All of the surfaces were treated in a similar manner. Sections measuring approximately 8" x 24" were selected at the cornice located at the 2nd floor fire escape landing. Each stripper was applied in once test location spanning smooth surfaces and dimensional decorative surfaces.
2. Each area was photographed before, during, and after testing.
3. Areas were brushed off to remove dust and particulate dirt.
4. Paint strippers were applied using a commercially available 2" chip brush and plastic spatulas to vertical and horizontal sections of the terra cotta cornice located at the 2nd floor fire escape landing.
 - a. Test areas extended from the drip edge to the top of the fascia board.
 - b. Application protocols were determined by individual product specifications.
 - i. Each stripper was applied in a single coat application and allowed to dwell for 15-20 minutes (depending on individual product specifications).
 - ii. Test areas were left uncovered and monitored over the duration of their dwell periods.
5. Paint strippers and targeted coatings were removed with plastic scrapers and nylon bristle brushes after completion of individual dwell cycles.
6. Target locations were cleared of residual stripper with cotton rags soaked in acetone.



Testing location 2 prior to stripper application



Testing location 1 prior to stripper application



Testing location 1 during application



Testing location 2 during application



Testing location 2 after removal



Testing location 1 after removal

PAINT STRIPPING TEST RESULTS:

Stripping tests were successful in removing extant coatings with varying levels of efficacy. The most effective stripping agent was Savogran Strypeeze® Semi-Paste Stripper. This material is a proprietary gel stripper that can be removed with water. One application was successful in removing all observed coatings (2-3) after a 15-minute dwell time and agitation with nylon-bristle detail brushes. The test area was successfully cleared with acetone, leaving no residual stripper in any material pores or texture. No damage or adverse effects to the terra cotta were noted during testing. Intact terra cotta surfaces exposed during testing were observed to be sound and retained the original glaze.

Jasco® Non-Methylene Chloride Formula Premium Paint & Epoxy Remover was successful in removing the majority of the observed coatings but failed to produce results as consistent as Savogran Strypeeze® Semi-Paste Stripper.

Citristrip® Paint & Varnish Stripping Gel was successful in removing all observed layers of paint but unsuccessful in producing consistent results within a 20-minute dwell period. Prosoco Enviro Klean® Safety Peel 1 and Dumond™ Smart Strip Advanced Paint Stripper were only successful in removing the most recent paint coating within a 20-minute dwell period.

RLA's testing suggests that Savogran Strypeeze® Semi-Paste Stripper would be the most efficient means of coating removal from terra cotta elements during future restoration operations.

TERRA COTTA RESTORATION:

After the successful removal of paint coatings from the terra cotta elements is complete restoration activities can begin.

RESTORATION ACTIVITIES INCLUDE:

- Restoration mortar patching
 - RLA recommends patching locations of material loss with Edison Coatings, Inc. Custom System 45 Latex Modified Restoration Mortar.
- Repointing
 - RLA recommends raking and repointing terra cotta joints with a custom mix of Edison Coatings, Inc. Spec Joint 46 Masonry Mortar.
- Crack Injection
 - RLA recommends applying Cathedral Stone Micro Crack Injection Grout (M30/M35/M40) to crack locations.

RECOMMENDATIONS FOR FUTURE TREATMENT OF THE TERRA COTTA:

The terra cotta exhibits material and glaze spalling, disaggregation, and biological growth. These are visible through the paint system, but once the paint was removed these conditions could be more appropriately assessed. It is our opinion that the terra cotta's deleterious conditions are associated with the current coating system. Of greatest concern is that the current coating system covers mortar joints which are intended to serve to draw moisture out and away from the terra cotta elements. As a direct result of the coating, moisture is inhibited from leaving the masonry system. The observed spalling and biological growth are exacerbated, if not directly produced by, moisture entrapment.

Based on paint stripping tests and assessment of the historic terra cotta it is RLA's opinion that the terra cotta would best function without an extraneous coating. We believe that recoating the terracotta is not a recommended approach to preservation. Instead, we recommend removing the paint, cleaning surfaces, making appropriate repairs to spalling, then repointing the joints and leaving these areas uncoated.

If it is desirable to paint the terracotta, we would recommend judicious testing to make sure only non-film forming agents are used. Though we stand behind the idea of not painting the terracotta, certain mineral-based paints might offer breathability, maintainability, and most importantly reversibility.

We understand that we have previously posed no objection to painting the brick. The reason why we do not recommend this for the terracotta is because we are not observing the same types of damage on the brick as on the terracotta. Moreover, the availability of aesthetically consistent replacement brick is much higher than that of the terra cotta. RLA recommends strict scrutiny of the proposed coating system for the terra cotta, but acknowledges that a lesser level of scrutiny is required for the brick's coating system.

Thank you for the opportunity to participate in this important project. Please do not hesitate to contact us with any further questions.



Prepared by:

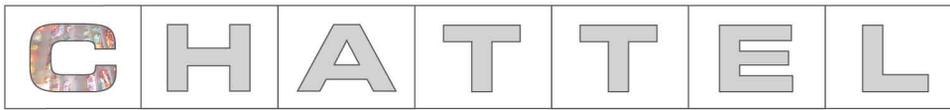
A handwritten signature in black ink, appearing to read 'David Espinosa', written over a horizontal line.

David Espinosa, Associate Conservator

Approved by:

A handwritten signature in black ink, appearing to read 'Rosa Lowinger', written over a horizontal line.

Rosa Lowinger, Principal Conservator



Chattel, Inc. | Historic Preservation Consultants

MEMORANDUM

DATE October 28, 2019
TO Roxanne Tanemori, AICP, Principal Planner
FROM Robert Chattel, AIA, President
RE Miramar Santa Monica, 101 Wilshire Boulevard, Santa Monica, California

This memorandum is prepared to serve as the Preservation Plan for the proposed redevelopment of the Miramar Santa Monica, 101 Wilshire Boulevard (subject property, proposed project).

This Preservation Plan is intended to be incorporated as a design feature in the project description of the Environmental Impact Report ("EIR") for the Miramar Hotel Redevelopment.

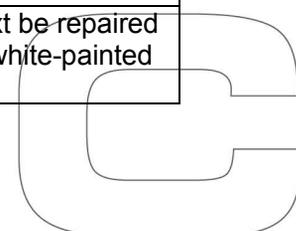
The Preservation Plan has two sections; the first section provides an overview of treatments to the Palisades Building and to the Moreton Bay Fig Tree and the second section describes protections to the City-designated Landmarks during construction and rehabilitation of these features.

Treatment of Palisades Building and Moreton Bay Fig Tree

Palisades Building

The table below lists and describes treatments to features of the Palisades Building and related new construction in the proposed project:

Table with 2 columns: Feature, Treatment. Rows include Brick and Terra cotta with their respective treatment descriptions.



13417 Ventura Boulevard, Sherman Oaks, CA 91423-3938 Phone 818-788-7954 Fax 818-788-9795 www.chattel.us

Windows & Doors	Existing aluminum windows would be retained. Center windows on short west and short south elevations would be altered to become doors to connect with hyphens. Five first floor windows at the south and west elevations facing the Palisades Garden would be altered to become doors. On the north elevation, a double door exit would be retained. On the east elevation, a service entrance would be retained.
Roof	Existing standing seam metal roof would be retained. A new west-facing rooftop sign would be added.
Grade	The grade would be raised at the Palisades Garden located between the Palisades Building, California Building and Ocean Building.
Hyphens	Two new hyphens would be constructed to connect the Palisades Building with the new buildings constructed as part of the project, one to connect the short west elevation of the Palisades Building to the new California Building and one to connect the short south elevation of the Palisades Building to the new Ocean Building.

Moreton Bay Fig Tree

The Moreton Bay Fig Tree would be preserved and integrated with new landscaping and other work of the proposed project, ensuring incorporation into the new Miramar Gardens as a primary feature of the project site. To ensure the preservation of this tree, the arborist team at ValleyCrest Tree Company (predecessor to Brightview Tree Company) was engaged to develop a Tree Work Plan in 2007 (2007 Tree Work Plan) to establish appropriate pruning and other routine maintenance. The 2007 Tree Work Plan was incorporated into the 2018 Brightview Report prepared by Brightview Tree Company (Attachment A) based on the proposed landscape plan and the Tree Protection Overlay (Attachment B). The table below lists and describes treatments to features of the Moreton Bay Fig Tree in the proposed project:

Feature	Treatment
Subsurface	Below grade, the existing basement wall to the east of the Moreton Bay Fig Tree would be retained. Two-foot shoring walls with internal bracing would be constructed (in lieu of inserting intrusive tiebacks) around the tree to avoid damage to the roots or undermining the soil.
At grade	At grade the existing driveway that encircles the tree would be removed. An elliptical-shaped walkway, pedestrian deck and bench would be constructed around the Tree. The pedestrian deck would be supported by micropiles which will allow beneficial airspace flow, nutrients, and water to reach the tree roots. The ring-shaped bench would protect the buttressed tree roots to ensure the long-term health of the tree.
Tree canopy	The tree canopy would be maintained through a pruning and routine maintenance plan as set forth in the 2018 Brightview Report.

Protections During Construction

Pre-Demolition

Once the existing buildings are permanently vacated in preparation for proceeding with the proposed project, the entire project site would be secured to protect against vandalism, including as to the Palisades Building and Moreton Bay Fig Tree, through installation of a maximum legal height plywood perimeter fence. Basement and first floor windows of the Palisades Building would be boarded up from the interior to prevent unauthorized entry.

Effective planning and protective measures to prevent and/or mitigate any damage to the Palisades Building and Moreton Bay Fig tree would be in place before excavation and construction starts. This would include documenting the existing condition of the Palisades Building and Moreton Bay Fig Tree, implementing

protective measures during construction, and monitoring the condition of both of these historic resources for the duration of the construction period.

Palisades Building

During construction, the rehabilitation of the Palisades Building consistent with the Certificate of Appropriateness (or equivalent approval) would be undertaken with the assistance of a qualified historic preservation architect meeting the *Secretary of the Interior's Standards and Guidelines for Historic Preservation, Professional Qualifications Standards*. The historic preservation architect would regularly review the ongoing rehabilitation to ensure that it continues to satisfy conditions of the associated Certificate of Appropriateness (or equivalent approval) issued by the City Landmarks Commission. The historic preservation architect would submit status reports to the City Landmarks Commission Planning Staff Liaison (Historic Preservation Officer) according to a schedule that they may agree upon prior to commencement of rehabilitation.

Pre-Excavation

Prior to any excavation or disturbance on the property, the existing conditions of the Palisades Building will be documented in as-built drawings that have been reviewed and approved by a historic preservation architect and registered structural engineer with a minimum of 5 years of experience in the rehabilitation and restoration of historic buildings. In addition, a historic preservation architect with a minimum of 5 years of experience in the rehabilitation and restoration of historic buildings would thoroughly document the existing conditions of the Palisades Building onsite through field photographs and written descriptions, including documenting the Palisades Building's character-defining features. Excavation and/or soil disturbance adjacent to the Palisades Building would not proceed until the adequacy of the required documentation has been reviewed and approved by the City's Historic Preservation Officer. The Historic Preservation Officer would review such documentation in consultation with other City staff as may be appropriate.

Prior to any excavation or disturbance on the project site, the historic preservation architect would establish and provide a construction employee training program that emphasizes protection of the Palisades Building for all construction workers involved in its protection or rehabilitation. This program would include information on recognizing historic fabric and materials, and directions on how to exercise care when working around and operating equipment near the Palisades Building, including storage of materials away from the historic resources. Training would also include information on effective means to reduce dust and vibrations from demolition and construction activities and monitoring and reporting any potential activities that could affect the Palisades Building. A provision for instituting this training program would be incorporated into the proposed project's construction contract.

Protective measures would be taken to anticipate and prevent increased dust, vibration, and fire risk to the historic resources. Sensitive features, if any as determined by the historic preservation architect, would be temporarily removed from the Palisades Building, and features that are not easily removed would be cushioned and buttressed by padded wood supports. The applicant would use "*Temporary Protection, Tech Note No. 3, Protecting a Historic Structure during Adjacent Construction*," published by the Technical Preservation Services, National Park Service, as its guide to consider, document, and implement such protective measures.

Protection and Monitoring During Construction

The historical preservation architect and structural engineer would monitor the Palisades Building during construction and report any material changes to pre-construction conditions. Monitoring reports would be submitted to the City's Historic Preservation Officer on a periodic basis. The City's Historic Preservation Officer would establish the frequency of monitoring and reporting. The structural engineer would consult with the historic preservation architect, especially if any problems with character-defining features of a historic resource are discovered.

If in the opinion of the structural engineer, in consultation with the historic preservation architect, substantial adverse impacts to the Palisades Building related to construction activities are encountered during construction, the applicant or applicant's designated representative responsible for construction activities would promptly inform City staff. In this event, the applicant and/or construction contractor would adhere to City staff's recommendations for corrective measures, including halting construction in situations where construction activities would imminently endanger the Palisades Building. The applicant and/or construction contractor would respond to any claims of damage by inspecting the affected property promptly. Any suspected damage to the Palisades Building would be compared to pre-construction conditions and a determination made as to whether the proposed project caused such damage. If the proposed project is demonstrated to have caused any damage, such damage would be repaired to pre-construction conditions by the applicant. Site visit reports and documents associated with claims processing would be provided to the City's Historic Preservation Officer.

Moreton Bay Fig Tree

During construction, the protection of the Moreton Bay Fig Tree consistent with the Certificate of Appropriateness (or equivalent approval) would be undertaken with the assistance of a qualified arborist. The arborist would regularly review the ongoing work to ensure that it continues to satisfy conditions of the associated Certificate of Appropriateness (or equivalent approval) issued by the City Landmarks Commission. The arborist would submit status reports to the City's Historic Preservation Officer according to a schedule that they may agree upon prior to commencement of rehabilitation.

Pre-Excavation

Prior to commencement of construction activities on the project site, training for employees working around the Moreton Bay Fig Tree will also be provided by a licensed arborist in accordance with Section 8: Protection, Preservation and Maintenance program of the 2018 Brightview Report. This training may either be provided separately or as part of the construction employee training program for the Palisades Building. The training program content will include: identifying the work limits around the Moreton Bay Fig Tree, identifying the required minimum protective systems required at the limits of, and within the drip line, identifying allowable work near the tree and within the drip line, and establishing the protocol for the scheduling and advance notification to the arborist prior to any work in or near the drip line.

Protection and Monitoring During Construction

The Moreton Bay Fig Tree will be protected throughout construction by implementation of the tree protection measures outlined in the 2018 Brightview Report (Attachment A) and the Tree Protection Overlay diagrams (Attachment B) including but not limited to:

1. No subterranean excavation/construction within the tree protection zone for the Moreton Bay Fig Tree. As documented in Section 8: Protection, Preservation and Maintenance program of the 2018 Brightview Report and the proposed project plans, the minimum distances between the subterranean levels and the dripline of the Moreton Bay Fig Tree are as follows:
 - a. 12'2" on the east side (to existing basement wall, which will be left in-place to minimize disruption to the Tree),
 - b. 24'3" on the north side,
 - c. 21'3" on the south side, and
 - d. No construction-related excavation on the west side of the Moreton Bay Fig Tree.
2. At all areas of temporary below-grade shoring around the Moreton Bay Fig Tree, internal braces will be used in lieu of tiebacks to avoid damage to the roots or undermining the soil.
3. Drill rigs used to install the below-grade shoring system will be held out of Moreton Bay Fig Tree Protection Zone (tree dripline), which as explained in the 2018 Brightview Report, will be surrounded by a six-foot tall temporary chain fence.

4. Throughout construction of the proposed project, the contractor will implement and monitor all construction protection and mitigation measures in accordance with Section 7 of Brightview Protection, Preservation and Maintenance program.
5. Throughout construction of the proposed project, access shall be provided to the Moreton Bay Fig Tree for ongoing care, maintenance and inspections of the tree in accordance with Section 8: Protection, Preservation and Maintenance program of the 2018 Brightview Report. As explained in the Brightview Protection, Preservation and Maintenance program, irrigation of the Moreton Bay Fig Tree during construction will be accomplished with a temporary drip irrigation system.
6. A licensed arborist shall monitor the Moreton Bay Fig Tree during the course of construction and shall be in regular communication with the general contractor to ensure that the Moreton Bay Fig Tree is not harmed and remains in good health throughout the construction of the proposed project. Inspections by the arborist will be followed by written recommendations where needed as to watering, supplemental mulching, supplemental pruning, and pest or disease control. All arborist's reports, before, during and after construction shall be available to the City's Urban Forester for review upon request.
7. In the event of any unintended damage to the Moreton Bay Fig Tree as a result of construction activity, the arborist shall provide a written report of recommendations to repair or stabilize the damaged part of the Moreton Bay Fig Tree to the City's Urban Forester for review and approval.

Attachment A: 2018 Brightview Report
Attachment B: Tree Protection Overlay diagrams

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ATTACHMENT A:
2018 BRIGHTVIEW REPORT

**MIRAMAR SANTA MONICA
CONFORMANCE REPORT UPDATE**

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MORETON BAY FIG TREE

(Ficus macrophylla)

PROTECTION, PRESERVATION

AND

MAINTENANCE PROGRAM

at

Santa Monica Miramar Hotel

Presented to:

Ocean Avenue LLC
Santa Monica, California



February 26, 2018 Tree Report

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Preface on Company Name Change

In 1949 ValleyCrest Companies opened its doors in the San Fernando Valley. What followed was a slow but steady rise to become one of the premier landscape services companies in the nation with offices primarily in the southwest and sunbelt states.

In 1939 Brickman Landscape opened its doors in Chicago and followed a similar path of slow and steady growth primarily in the Pacific Northwest, Midwest, Northeast, and Mid-Atlantic states.

In 2015 ValleyCrest Companies and The Brickman Group merged. In the process of merging the combined management teams opted to re-brand the resulting new entity with a new name, logo, and overall new look.

The merger created the BrightView Companies and its various service sector divisions:

- Valley Crest Tree Company became BrightView Tree Company
- ValleyCrest Landscape Development became BrightView Landscape Development
- ValleyCrest Landscape Maintenance became BrightView Landscape Services
- ValleyCrest Golf Maintenance became BrightView Golf Maintenance

In all respects the merger has served to enhance and expand the quality and consistency of the services that Ocean Avenue LLC and the Miramar Hotel have come to expect under the ValleyCrest name. BrightView remains committed to all of the proposed plans and programs described in this document as developed over the twelve years of monitoring and maintenance of the hotel's landmark Moreton Bay Fig.

For the balance of this document all prior references to Valley Crest Tree Company, ValleyCrest Landscape Development, or ValleyCrest Landscape Services have been replaced with the BrightView name style. Exceptions to this are any historical documents referenced in the appendix.

Section 1

PURPOSE OF THIS REPORT

Founded in 1949, as Valley Crest Nurseries, the re-branded BrightView Tree Company, based in Calabasas, California (BVTC), is part of the largest integrated landscape services company in the United States, offering design, installation, maintenance, and tree growing, tree preservation, and tree moving. Working closely with Ocean Avenue LLC (the "Owner"), the owner of the Miramar Hotel in Santa Monica, California (the "Hotel"), BrightView has nurtured and cared for the landmark Moreton Bay Fig Tree (*Ficus macrophylla*) (the "Heritage Tree") at the Hotel since 2006.

The Owner has proposed a comprehensive redevelopment of the Hotel which would feature the Heritage Tree as a key centerpiece. In that regard, BrightView has been asked to prepare a report which will:

- Analyze and Confirm the Tree's Existing Condition
- Assess the Potential Impacts on the Tree from the Proposed Construction
- Propose a Comprehensive Tree Protection Plan and Monitoring Program
- Provide Recommendations for Landscape Treatments Within the Canopy Zone
- Evaluate the Overall Feasibility of the Protection and Preservation Program

The Owner is clearly committed to the preservation of this outstanding landscape feature – and has invested substantial resources to return vigor and strength to the Heritage Tree and improve its longevity.

About BrightView Tree Company

BrightView Tree Company's Specimen Tree Division provides expert tree relocation, storage, and preservation services worldwide. For over 60 years, BVTC has been in the business of relocating, installing, supplying, and caring for an array of mature and one-of-a-kind trees that have been procured and preserved from their original setting.

BVTC's staff represents a cumulative wealth of 400 years of field experience and over 100 years of management experience in this highly specialized realm of horticultural services. As a result, the BVTC team is increasingly called on as the expert in tree relocation and tree preservation services. The firm's portfolio of work includes an extensive list of prominent projects in Mediterranean climate zones and the southwest, as well as around the world in places such as United Arab Emirates, where BVTC crews introduced the side-boxing method of tree relocation and preservation in support of a number of significant projects within the region.

BVTC's customers include a demanding and horticulturally astute clientele that routinely rely upon the firm's expertise. Among these customers are:

- The Los Angeles Arboretum
- Descanso Gardens
- The J. Paul Getty Trust
- The Huntington Library, Art Collections, and Botanic Gardens
- Walt Disney Imagineering
- Disneyland Anaheim
- Stanford University
- The Los Angeles Zoo
- The San Diego Zoo
- The Al Ain Wildlife Park and Resort
- Wynn Resorts

Highlights from the company's portfolio include the following:

- The successful relocation of 1,300 mature oaks as part of the Lake Sherwood Golf Course
- The successful relocation of a 100-year old Ficus using a twenty-six foot (26') tree box
- The successful relocation of a 150-year old Oak to preserve it from the path a new road
- The successful relocating a 150-year old Oak to make way for a tennis complex
- Boxing and preserving over 1,000 specimen Acacia and Mesquite trees under extreme desert conditions in the United Arab Emirates as part of the Al Ain Wildlife Park project
- The successful relocation of a 250-year old Oak to preserve it from the path of housing

The BVTC staff includes twelve (12) International Society of Arborists (ISA) Certified Arborists. The management team holds a broad set of degrees in the field of horticulture and plant science. The company and its leadership are active members of the prominent trade and industry associations including:

- International Society of Arboriculture (ISA)
- Western Chapter of the International Society of Arboriculture (WCISA)
- Street Tree Seminar (STS)
- Golf Course Superintendents Association of America (GCSAA)
- California Landscape Contractor's Association (CLCA)
- American Society of Landscape Architects (ASLA)
- California Association of Nurseries and Garden Centers (CANGC)
- The National Association of Landscape Professionals (NALP)

Please do not hesitate to contact our offices should you require additional information or further clarification of the matters discussed in this report.

Section 2

2007 TREE RESTORATION PROGRAM

Since acquiring the Hotel, the Owner has made a concerted effort to learn more about the Heritage Tree, and to solicit opinions from prominent Arborists concerning how the tree should be maintained going forward to ensure its health, vitality, and longevity.

Understanding that the Heritage Tree had significant historical as well as botanical value, Owner contacted BVTC to help develop a long-term management plan.

In March of 2007, BVTC arborist Dave Teuschler, an International Society of Arborists Certified Arborist, inspected the Heritage Tree to determine what steps needed to be taken to preserve, protect, and enhance the tree so that it could continue to thrive for many years to come. In addition, the inspection considered practical issues such as:

- **Public Safety:** Improving the tree to a condition that renders it safe for the many hotel visitors and hotel employees who pass beneath it on foot or in vehicles.
- **Property Damage:** Protecting the surrounding buildings and other landscape assets adjacent to or abutting the tree.

Pruning specifications and work conditions were developed in accordance with International Society of Arboriculture standards that are widely accepted and currently in use.

In this initial report, the following observations were made:

- The current health condition of the tree was found to be good as shown by previous year's growth, leaf size, lack of dead wood in the canopy and overall color and vigor.
- A great deal of over pruning of the tree had taken place in the past. It had been severely "lion-tail" pruned (intermediate side stems pruned off of branches leaving large clusters of foliage at the terminal ends).
- The lion-tailing had put all of the branch weight at the terminal ends of the branches, which resulted in a need to install support cables throughout the canopy as a means of preventing catastrophic limb failure which could severely affect the tree's health and could create a public safety issue.
- The tree is completely surrounded by driveway, building, and sidewalks and is accessible to the general public and vehicles suggesting compacted soils with reduced air and water infiltration into the root zone

- Many of the tree's branches were touching the sides of the existing buildings. This contact created abrasions and rub scars on the tree as well as posing a potential for damaging these structures.

Based upon the foregoing observations, the Owner requested that BrightView prepare a comprehensive restoration program inclusive of recommendations for the ongoing maintenance of the Heritage Tree. BrightView and the Owner made a point of engaging the public and seeking peer review from additional local arborists. A copy of Dave Teuschler's March 2011 report is included as Appendix 1.

Working with the City of Santa Monica

Following our initial inspection and in light of our observations, an on-site meeting was held on Friday, March 14th, 2008 with Mr. Walt Warriner, the former Community Forest & Public Landscape Superintendent for the City of Santa Monica, the Owner and the BVTC arborist team. The purpose of this site meeting was to develop a collaborative assessment of the best short and long-term management plans for preserving the Heritage Tree as a community landmark by enhancing its overall health and vigor.

It was generally observed by all that while the tree was in very good condition for a tree of its age, there was no documented work plan for the tree and little work had been performed in recent times to address some of the tree's basic arboricultural issues including the "lion-tailing". The group agreed upon the key elements of a superior arboricultural management plan. It was agreed that a written plan would be developed and submitted to the City for review, comments, and approval so that the much-needed maintenance work could be started. It was the Owner's critical objective to schedule the work for the optimal benefit of the tree and it was agreed that the work should begin as soon as possible.

2007 Tree Work Plan

The following detailed work plan ("2007 Tree Work Plan") was developed by BVTC and was consistent with the guidance in the City's Urban Forest Master Plan. It demonstrates the high level of expertise which was solicited, and the very specific actions proposed for the work plan. A pre-work meeting was held with all members of the team and the work was supervised at all times by a Certified Arborist.

Note that within the context of the 2007 Tree Work Plan, the use of the word 'shall' indicates a practice that was mandatory. The use of the word 'should' refers to a practice that was highly recommended.

Objectives

Reduce potential hazardous conditions in this *Ficus macrophylla* by initiating a long-term program of crown restoration through selective, incremental pruning to correct structural damage and imbalances resulting from improper or inadequate tree maintenance programs of prior years. The following activities were included in the program to meet this objective:

- Removing dead branches.
- Reducing the weight of branches or stems with included bark.
- Reducing the weight toward the ends of branches that have been lion-tailed during previous pruning.
- Crown thinning of the canopy.
- Removing over-structure branches.
- Removing crossing branches.
- Adjusting and or replacing cables within the canopy of the tree.
- Adjusting canopy lighting attachments.

General Procedures

The 2007 Tree Work Plan recommended the following general procedures:

- Live branches less than 1.5 inches in diameter should not be removed.
- Dead branches greater than 1.5 inches in diameter (measured at the base of the branch) shall be removed from the canopy of the tree.
- No live branches greater than 4 inches in diameter shall be removed from the tree without authorization.
- Remove no more than 20 percent of the live foliage from the tree unless indicated below.

Specific Procedures

The following specific procedures were included as part of the 2007 Tree Work Plan:

- Weight on main scaffold limbs with bark shall be reduced by approximately one-third by removing some secondary branches toward the ends of the limbs and/or by removing the end of the branch using a drop-crotch cut.
- If less than 20 percent of the foliage was removed on a mature tree following the procedures described above, then the canopy was to be thinned to allow more light to reach the ground under the tree and to reduce damage from wind storms. The foliage removed shall be taken primarily from the outer edge of the canopy, not from the interior. Interior branches shall be left on the tree. Water sprouts from the interior of the tree were not to be removed.

- Root zone should be protected during pruning operations.

Pruning Techniques

Pruning cuts shall be in accordance with ANSI A300 pruning standards.

Tools and Equipment Requirements

- Climbing spurs shall not be used when climbing the tree except if needed to expedite the rescue of another tree worker from within the canopy.
- Equipment and work practices that damage bark or cambium should be avoided.
- Rope injury from loading out heavy limbs should be avoided.

General

The tree work is to be supervised by an I.S.A. Certified Arborist. Certification is through the International Society of Arboriculture, Champaign, IL. A Certified Arborist shall be on site at all times during tree work activities.

Safety

All work shall be performed by workers trained in accordance with ANSI Z133.1 safety regulations as required by OSHA.

Public Outreach

Planning for the tree work anticipated that there would be concern from the local community once crews started removing branches from the Heritage Tree. In anticipation of this, the Owner initiated an outreach program to provide background and context to the proposed pruning and to solicit community input prior to commencing work. An informative newspaper article told the story of this historical tree and provided the community with insight into the need for a long-term tree management plan (a copy of this article is included in Appendix 2 to this report).



Section 3

ONGOING MAINTENANCE PROGRAM

Since BVTC's initial inspection and commencement of the restorative pruning program in 2007, the subject tree has been continuously maintained by trained maintenance gardeners from BrightView Landscape Maintenance and trained tree workers and BVTC Certified Arborists in accordance with the 2007 Tree Work Plan. The ongoing maintenance program has consisted of a broad range of routine and seasonal maintenance operations.

The original March 2007 Arborist's Report outlined the recommended actions to preserve, protect, and enhance the Heritage Tree. Those actions, as described in the prior section, involved pruning and other structural improvements that have been systematically implemented over a period of several years. The work done to date has resulted in the elimination of all of the health concerns outlined in the initial inspection while further improving the health and vigor of the tree. Ongoing work to that end has continued on an annual basis as needed and as directed by a Certified Arborist.

In addition to these actions, routine and seasonal management practices have been implemented for the ongoing care and protection of the tree. These include:

- Weekly management of irrigation
- Monthly observation and reporting of any structural issues to be addressed
- Minimization of under-story planting
- Hardscape placement to minimize impact to the root zone
- Inspection of the tree for any pest, disease, or nutritional needs and implementation of remediation practices as required
- Written reports prepared and submitted to Owner as needed

Section 4

EXISTING CONDITION OF THE TREE

As part of the ongoing management of the Heritage Tree, Ocean Avenue LLC, and BrightView Landscape Services (BVLC) have conducted periodic inspections of the tree to assess its health and structure. In addition to routine inspections by BVLC personnel, the team has engaged the services of an independent Arborist to provide an authoritative second opinion.

The most recent of these Arborist inspections was conducted on November 14, 2017. As with prior site inspections, this most recent review was performed by Mr. Kerry Norman of Arbor Essence. Mr. Norman is an independent ISA Certified Master Arborist (ISA No. WE-3643B). In addition, Mr. Norman is a Registered Consulting Arborist (No. 471) by the American Society of Consulting Arborists (ASCA).

The Arborist inspections are made in order to evaluate the tree's current health and vigor. The November 2017 report is included as Appendix 3. Mr. Norman's previous report was prepared on April 10, 2013, and is attached to this document as Appendix 4.

Both the November 2017 and April 2013 reports describe the tree as being in overall excellent condition:

- Color and vigor is optimal
- No structural issues require immediate attention
- Landscape management practices do not create negative conditions
- Hardscape is appropriately installed and maintained

Note that BrightView's Arborists visit the site each year in conjunction with annual / seasonal tree maintenance activities. The purpose of these visits is to oversee these maintenance activities and to observe the general health and physical condition of the tree. Inspections to date, including the most recent during tree maintenance activities in March of 2017, have observed tree color, structural condition, landscape management practices, and hardscape condition and maintenance practices that are consistent with those set forth above.

Section 5

OBSERVATIONS

BASED UPON 2018 REVISED BUILDING AND SITE PLANS

Following an international design competition involving many of the world's top architects, Ocean Avenue LLC engaged Pelli, Clarke Pelli Architects (PCPA) as the design architect for the Miramar Redevelopment. In order to ensure that the public realm was as special as the building itself, the award-winning firm of Gustafson Guthrie Nichol (GGN) was added to the team as Landscape Design Architect.

In response to a request from the Ocean Avenue LLC, BrightView has reviewed the revised 2018 hotel design and site plan from PCPA and GGN to assess its potential impact upon the Heritage Tree. The following are the results of that horticultural / arboricultural review process.

1. BrightView has reviewed the proposed new schematic design of the open space at the corner of Wilshire Boulevard and Ocean Avenue. It is clear that the design team thoroughly reviewed the original Tree Preservation and Protection Report (December 12, 2013) and carefully followed its recommendations with respect to the Heritage Tree. Indeed, the proposed new plan represents a significant improvement over the earlier HKS Hill Glazier (HKS) master plan from 2013 with respect to the health of the tree.
2. Below grade, the revised parking garage design in the 2018 design has increased the minimum distance between the underground parking garage and the drip line of the tree as follows:
 - From 4'-1" to 12'-2" on the east side
 - From 12'-8" to 24'-3" on the north side
 - From 17'-8" to 21'-3" on the south side
 - No excavation on the west side of the Heritage Tree.

Based on a review of the new GGN plan and given that basement structures on the east side of the tree already encroach on the drip line, the anticipated shoring and excavation will have no impact on the roots within the tree's drip line and minimal impact outside the drip line and results in a significantly better layout for the tree than the previous HKS concept from 2013.

3. GGN's current design eliminates the existing paved driveway. The driveway encircled the tree and greatly encroached into the tree's drip line and root zone. While the tree has adapted to this condition, the driveway nonetheless created an impervious surface that did not allow for proper irrigation within the root zone. In addition, the impervious surface prevented the exchange of the various atmospheric and root-produced gasses that support healthy plant development.

By eliminating the hard paved surface the underlying soil is opened up to improved root growth within the drip line area. The removal of the circular driveway pavement resulted in the creation of an open area below the tree. This open area has a wide range of possible programmable uses.

4. GGN's current landscape design provides for a raised deck platform with a continuous bench encircling the Heritage Tree. The deck is supported by micro-piles to protect the exposed roots without requiring additional soil or paving to raise the grade around the tree. This raised deck creates airspace below the deck that allows nutrients and water to reach the tree's roots. By elevating and leveling the walking surface around the tree, the deck greatly improves access to the tree while deterring visitors from climbing upon the buttress roots or compacting the soil within the critical root zone. This creative design solution significantly improves upon the recommendations in our December 12, 2013 report with respect to the treatment of the exposed roots and the area underneath the tree following removal of the existing paving. As a result, BrightView believes GGN's deck concept is superior to the design previously proposed by HKS in 2013.
5. Finally, the proposed pedestrian pathway around the Heritage Tree has been moved outside of the tree's drip line, which will also be an improvement for the long-term health of the tree.

Section 6

POTENTIAL CONSTRUCTION IMPACTS OF THE PROPOSED REDEVELOPMENT PROJECT

The 2018 concept for the redevelopment of the 4.5-acre property is designed around the Heritage Tree, which is intended to be the centerpiece of the new plan for the Miramar. The purpose of this section is to recommend a program that will minimize the impact of the proposed site construction activities upon the health and well-being of the Heritage Tree. This program will analyze potential impacts to the tree's environment as well as potential impacts to the tree's physical being itself.

Environmental Impacts

In considering the health and well-being of the Heritage Tree, we need to consider the physical space that supports and nurtures the tree. This area consists of the "Rhizosphere"; the upper layer of soil where the tree's roots take in moisture and nutrients, exchange various gasses through the pore spaces between soil particles and interact with symbiotic soil microorganisms. The Rhizosphere typically extends out to the "drip line" of the tree (the diameter of the furthest reach of the tree's foliage).

Environmental issues are less obvious to the untrained eyes. Identifying these potential impacts ahead of time and incorporating appropriate policies and procedures for mitigation are the proven and accepted best practice in tree preservation. The greatest potential environmental issues created by demolition and construction activities fall into the following categories:

- Soil compaction from excessive foot traffic or the use of equipment within the drip line
- Overly wet soil resulting from nuisance water from various construction activities
- Overly dry soil resulting from cessation of normal irrigation operations during construction
- Contamination of the soil with common construction materials impacting soil chemistry or the symbiotic soil microorganisms
- Dust landing on foliage impacting air exchange and photosynthesis
- Dust landing on foliage having potential adverse chemical reactions with the leaves
- Fumes from construction equipment having adverse chemical reactions with the leaves

All of the above items are addressed in the Tree Protection Plan outlined in Section 7 and are all manageable through (a) training, (b) procedural requirements, and (c) monitoring for compliance.

Physical Impacts

The risk of direct physical damage to the tree's roots, trunk, branches, and foliage is easily understood and managed by properly trained construction workers and is easily mitigated through physical barriers. The primary forms of physical damage from demolition and construction activities are chipping, gouges, cuts, and abrasions to surface roots, the trunk, lower branches, and perimeter branch tips located near areas of proposed multi-story construction. The necessary preventive training and protective barriers mitigate these risks and are outlined in the Tree Protection Plan as discussed in Section 7.

Tolerance of the Tree to Potential Root Reduction

Ficus trees are relatively robust and exhibit a high tolerance to root reduction. Root reductions outside of the "drip zone" are anticipated to have no impact to the health and vigor of the tree. The health of the tree is further enhanced if the root reduction is done incrementally where only select roots totaling no more than twenty-five percent (25%) of the known perimeter roots are pruned at any one time and a sufficient number of large structural roots are left to anchor the tree against wind loads. Further, root pruning, when required, is best if a period of sixty (60) to ninety (90) days is allowed to lapse between individual root pruning cycles.

Proper root pruning techniques include clean cuts with sharp instruments. Root pruning results in the development of new, smaller, and more fibrous roots at the point of pruning. These smaller "feeder" roots ultimately increase the trees ability to absorb water and nutrients and thereby improve its health.

Tolerance of the Tree to Potential Canopy Reduction

As with root pruning, Ficus species are tolerant of canopy reduction. Evidence of this is the improved general vigor achieved through the incremental restorative pruning and canopy reduction performed on the Heritage Tree since 2007.

Canopy reduction is a widely accepted means of reducing foliage, and therefore transpiration. Transpiration is the release of water vapor from the tree through the leaves as a function of the tree's normal respiration and as a means by which the tree cools its immediate environment during hot weather). Reducing transpiration through foliar pruning is a common practice used to off-set reductions in root mass that accompany the digging and transplanting of mature trees. Ficus are no exception to these biological processes.

As with all tree pruning, the selection of which branches or roots should be cut is best left to trained tree workers and Certified Arborists.

Section 7

PROPOSED TREE PROTECTION PLAN

The primary goal of the tree management program recommended by BVTC is to ensure the long-term health, enhancement, and preservation of this historic tree. Under the existing maintenance plan, the program to manage the canopy and increase the overall health, vigor, and structural needs of the tree have been described and implemented with great success. These recommendations were made with tree preservation in mind and in compliance with the City's Urban Forest Master Plan (Appendix J Tree Care Guidelines). Protection and preservation are very achievable goals for this tree.

Specific Pre-Construction Measures

Construction activities that are contemplated for the property have been evaluated for their potential impacts to the Heritage Tree. Much has been previously undertaken to bring the tree back up to its optimal condition. As a result, the tree is in excellent condition to experience construction activity with no negative impact to its health and longevity. In addition, the proposed redevelopment plan has been carefully redesigned to avoid any significant encroachment of the tree's drip line, whether above or below grade. Physical protective barriers around the tree and targeted construction strategies will provide for a sufficient level of tree protection as discussed in this section. Below are the key tree protection strategies that will be implemented protect and preserve this historic tree:

Preservation and Protection Measures During Construction

Evaluation of Impacts to the Root System

A walk through was performed on-site to make observations which suggest the following likely distribution of the expected reach and depth of the root system:

- The root zone of any tree will be influenced by its surrounding soil structure (relative compaction and pore space) and soil moisture content. The Miramar site exhibits typical urban conditions of compacted soil and a history of shallow surface watering.
- The subject tree has been growing at a site where the surface of the ground is covered by significant areas of paved hardscape, including the main hotel entrance drive.
- The existence of the surface paving has resulted in compacted soils with little opportunity for water infiltration, and less opportunity for the exchange of atmospheric gasses necessary for healthy root growth.
- Under these conditions, the root zone for the Ficus tree will tend to remain close to the surface as evidenced by the tree's root crown flare and buttress roots.

- The general consensus is that the roots of the subject tree will likely be found no deeper than four feet (4') near the tree's drip line and only slightly deeper as one approaches the trunk.
- The lateral expansion of the root zone has been constrained on the north and east sides by the footings and basement walls of the existing buildings.

Based on the above observations it is the opinion of the Project Arborists that the existing root system is likely to be most prevalent on the west and south sides of the tree where it is less constrained by hardscape or structures. In addition, it is only in these areas, which are furthest from the proposed construction activity where one will likely find any roots growing beyond the canopy drip line of the tree.

The City of Santa Monica's **Urban Forest Master Plan** (UFMP) suggests that a Tree Protection Zone (TPZ) be identified beyond the tree's drip line. As a precaution the UFMP recommends for broad canopied trees like the *Ficus macrophylla* that this zone cover an additional ten feet outward from the drip line of the tree.

Both the tree and the site have been reviewed by both BrightView's Certified Arborist and an independent Certified Arborist. It has been the shared judgment of both that, given consideration for the species of tree, the health of the tree, the existing hardscape driveway surrounding the tree, and the layout of the existing and proposed structures (where portions of the basements and structures already encroach into the drip line of the tree), that the existing tree drip line is a sufficient Tree Protection Zone. In our professional opinion, which is backed by six decades of field experience, carefully monitored work by trained personnel with proper precautions can be conducted up to the drip line of the tree with no negative impact to the tree.

The Arborist's opinion is supported by the recent tree preservation work in conjunction with the Palisades Garden Walk project near to the site. On that project, three large *Ficus macrophylla* were boxed and relocated. The tree drip lines were in the range of fifty feet (50') and the trees were boxed in twenty-foot (20') and twenty-two foot (22') boxes. The boxing operation was accompanied by an appropriate program of canopy reduction. The successful transplant of these trees speaks to the Moreton Bay Fig's high degree of tolerance to root reduction.

The construction activity most likely to affect the root system will arise after the demolition of the existing buildings as the contractor installs a shoring system to facilitate the construction of the basement areas of the proposed new hotel. This shoring will need to be eighteen inches (18") to twenty-four inches (24") nearer to the tree than the proposed structures below-grade walls. The proposed basement and parking garage in the current concept design plans provide a minimum clearance of 12'-2" to the tree's drip line on the eastern side of the tree and

at least 21'-3" to the tree's drip line on the other three sides. Based upon this layout, and the fact that the existing basement on the eastern side of the tree encroaches on the drip line in certain locations, there appears to be no impact to the tree's roots inside of the drip line and minimal impact outside the furthest edges of the drip line.

Based upon a conversation with Morley Builders, which has worked with Owner on the construction feasibility of the project, it is anticipated that once installed, the new below-grade structures will be reinforced with diagonal tie-back anchors. It is expected that these anchors will be directionally drilled starting at an elevation that is eight feet (8') below the surface grade and angled downward at approximately twenty-five (25) degrees below horizontal. As a result, it is most likely that the shoring tie-backs will miss all active areas of the root system.

Root Pruning Protocol

Ficus roots are highly tolerant of pruning activity as they are quick to regenerate additional roots when pruned. In fact, it is common for the roots left behind from tree removal to begin sprouting new growth. The following protocol should be followed with respect to any construction activity in the vicinity of the tree:

- At the beginning of construction, the footprint of all construction activity will be marked in the vicinity of the drip line.
- Excavation using hand tools, air spade, or water techniques shall be used to expose all roots abutting demolition or construction work at the drip line.
- All roots shall be gently exposed, and a photographic record made of the exposed roots.
- Based on the number and size of roots found in this area, BVTC shall recommend to Owner a plan that will provide an appropriate sequence of pruning.
- The exposed root zone will be kept hydrated during the examination with a temporary cover of peat moss. At the completion of the examination or pruning process, the roots will be backfilled with a loosely packed organic blend of peat moss and site soil that will favor root development.
- Root pruning, if required, will be limited to non-structural, peripheral roots. No roots greater than two inches (2") in diameter will be pruned or disturbed within the drip line of the tree.
- Root pruning, if required where roots abut construction, will be done incrementally over a period of time. No more than twenty-five percent (25%) of the roots abutting the drip line will be pruned in any sixty (60) day period.
- Where roots are identified to be pruned at a later date, the location of the roots to be pruned in the future shall be marked and recorded prior to backfill so that additional exploratory digging will not be required.

- It is highly likely that roots will have self-grafted into conjoined masses along the basement walls to the south east of the tree trunk. At the recommendation of the Project Arborist, such roots may be candidates for therapeutic pruning. The general recommendation is that these roots be pruned, regardless of size, to allow for the formation of new feeder roots that will take advantage of the expanded landscape areas that will result from the proposed revised hotel footprint. These areas will become available for unimpeded future root growth in the eastern half of the root zone.
- With the exception of the self-grafted / conjoined roots noted above, no roots larger than two inches (2") will be pruned unless no alternate is feasible. Further, no such roots will be cut without first consulting with the Project Arborist.

Overall, the impact to the root system from the construction of the Miramar will fall within the normal and acceptable range for Ficus trees and should have no material impact on its health and longevity. Additionally, the layout for the proposed replacement resort will reduce the amount of pavement within and beyond the drip line of the tree. This reduction in paved hardscape will have the beneficial result of relieving compaction and improving water infiltration and gas exchange within drip line of the tree.

Potential Site Work Impacts

Major underground utilities are not expected to impact the protection area of the tree. A review of the current civil engineering drawings did not reveal any underground utilities routed through the root zone. Any landscape utilities such as irrigation sprinklers, site lighting, or other similar items installed within the root zone of the tree shall be routed in the least invasive location and hand dug and backfilled as approved by the Project Arborist and the project's Landscape Architect.

Impacts from Construction Vibration

Trees typically respond to vibration by building what is referred to as "reaction wood" where the woody tissue of the tree builds additional girth. This is the concept behind the theory that young trees should not be staked or guyed so that their response to movement, such as wind, will encourage the development of a stronger trunk structure over time. This process is slow and typically occurs without our noticing. We see no negative impact and suggest that there will be no visible signs, symptoms, or physical manifestations resulting from construction-induced vibration over the course of the construction schedule

It is BVTC's opinion that, with the implementation of the Tree Protection Plan's strategies set forth in this section, there will be minimal impact to the Heritage Tree as a result of the proposed construction activity.

Potential Canopy Pruning Impacts to the Moreton Bay Fig

Ficus, as a tree species, is highly tolerant of pruning of both above and below ground woody elements such as branches and roots. Over the last six years, in order to achieve crown restoration for improved safety and structural appearance, the tree has undergone strategic crown pruning under the supervision of an ISA Certified Arborist. The results of this work have been very successful and are now part of the ongoing long-term management plan for the tree. New growth is apparent throughout the crown and the overall health, structure, and aesthetics of the tree have been improved dramatically.

The underground roots of the tree are expected to respond in a similar favorable manner with respect to any pruning as they will quickly begin to regenerate new roots in the impact zone when pruning cuts are made in accordance with the protocols outline above.

Tree Protection Measures

1. Prior to pavement demolition, the trunk of the tree should be equipped with “trunk armor” consisting of 2” x 4” wood planking set at 10” apart around the circumference of the tree. Planking is to be padded where it touches the bark of the tree and held in place with metal strapping. This armor may be removed after completion of demolition activities provided that the following steps are taken:
 - a. Upon the completion of pavement demolition, the entire soil surface area within the drip line is to be covered with a protective layer of four to six inches (4” – 6”) of bark mulch to reduce compaction and hold moisture.
 - b. A six foot (6’) tall temporary chain link fence is to be erected around the drip line to keep equipment and personnel out of the critical root zone. This fence shall include an access gate to allow for inspection within the drip line during construction. The fence shall feature posted signs indicating “Tree Protection Zone – Keep Out”
2. Existing vehicular and pedestrian hardscape covering a majority of the area within the drip line will be scored by saw-cutting to allow for a controlled breaking and removal operations. Where feasible, the breaking and removal of the perimeter hardscape will be by hand or will utilize low-ground pressure (LGP), tracked mini-excavators reaching inward from outside the drip line. Such equipment operations will only proceed if there is sufficient clearance beneath the branches to operate the excavator’s boom. Demolition and removal of hardscape beyond the reach of these pieces of equipment will be by hand with an air spade if necessary.
3. Should access be necessary within the drip line, the existing grade will be covered with double, overlapping sheets of one inch (1”) thick plywood or eight inches (8”) of wood mulch to distribute the weight of the equipment and minimize compaction and rutting. Plywood and / or mulch shall not be used as a bridging material for driving over exposed

tree roots. A Certified Arborist shall review and approve access and driving surfaces prior to use.

4. Extreme care, hand labor, or low ground pressure (LGP) equipment is to be used for the preparation of any sub-grade structures for the limited new pavement within the drip line.
5. Hand trenching or pot-hole excavation and directional boring equipment should be used in lieu of open-cut machine trenching for conduit, piping, or other underground wet or dry utilities within the drip line of the tree.
 - a. Where feasible, any piping or conduits are to go either over or under roots encountered while trenching within the drip line.
 - b. Where a drainage pipe flow gradient is to be maintained and piping cannot be shifted above or below to avoid roots, re-routing of the pipe shall be the first option considered. Where rerouting cannot be accomplished, root pruning may be considered after inspection and consultation by a Certified Arborist. All such pruning shall be performed by trained pruning personnel under the supervision of a Certified Arborist.
 - c. Note that the present plans do not foresee any significant drain lines or other utilities being routed through the drip line.
6. During demolition and construction activity, the following practices should be followed:
 - a. Dust control measures should be in place and there should be a periodic washing of accumulated dust from the foliage of the tree as needed.
 - b. Washing of the foliage, when needed, will be conducted during off-hours to not impact other construction operations, or encourage the adhesion of additional dust to wet leaves.
 - c. Items that could cause damage to the tree if they fall from areas above the tree crown will be secured.
 - d. Any damage to the tree that occurs as a result of construction activity will be reported to the Project Arborist who will then provide a written report of recommendations to repair or stabilize the damaged part of the tree and provide the report to the City's Community Forester.
 - e. Proper safety perimeters will be maintained around any welding operations where sparks may damage tree foliage.
 - f. Absolutely no discharge of paints, solvents, or other wash-out activities will be permitted on the site and especially not within the protected drip line of the tree.
 - g. No equipment, materials, supplies, fill soil, or aggregate materials shall be stockpiled in the drip line.

- 7. Irrigation of the tree during the construction operation will be accomplished with a temporary drip irrigation system. The timing of irrigation will be determined from readings taken from a soil moisture gauge supplemented by periodic visual inspections of soil collected with a soil probe.

Section 8

PROPOSED TREE PROTECTION TRAINING PROGRAM

Critical to the success of this tree protection and preservation program will be sensitizing all on-site personnel to the importance of the Moreton Bay Fig as a unique horticultural specimen, a beloved community landmark, and as an irreplaceable visual / environmental asset to the resort itself. While such sensitivity is ingrained in the Owner, the City, and the Landscape Professionals involved in the project, it may not be evident to the Civil Engineering or General Building Construction teams that will ultimately dominate the site.

Subscribing to the belief that education and communication are the keys to the project's success, BVTC has proposed a comprehensive Tree Protection **Training Program**. Participation in this Tree Protection Training Program will be mandatory for **ALL** personnel that will be working on site.

The Tree Protection Training Program consists of the following elements:

1. Prior to the commencement of construction activities on site, the Owner will conduct a series of training sessions focusing on the critical elements of the Tree Protection, Preservation, and Maintenance Program. Each training session will cover the same material but will be offered several times to keep class sizes manageable yet inclusive of all the key project trades as they are brought on to the construction team.
2. Classes will be conducted by the Owner's Project Arborists. The Community Forester will be advised in advance of course times and will be invited to review the curriculum and observe the inaugural class at his / her discretion.
3. Course content will cover all aspects of the following:
 - a. Identifying the work limits around the tree
 - b. Identifying the required minimum protective systems required at the limits of, and within the drip line.
 - c. Identifying allowable work near the tree and within the drip line.
 - d. Establishing the absolute authority of the Project Arborist to shut down any / all operations that may damage or defeat the protective systems or violate the allowable work in or near the drip line.
 - e. Establishing the protocol for the scheduling and advance notification to the Project Arborist prior to any work in or near the drip line.

- f. Establishing the “zero-tolerance” criticality of the Protection, Preservation, and Maintenance Program and the penalties for work in violation of the work limits or allowable work inside or near the drip line.
4. At the discretion of the Instructor Arborist, the course participants may be required to participate in a question-and-answer session to assess the retention of critical information by the class.
5. Upon satisfactory completion of the course, each participant will be entered into a log and will receive a decal to place on their hard hat. No personnel will be allowed into the work area of the project without the Tree Protection Training decal on their hard hat. Exceptions will be made for inspectors, vendor representatives, or other incidental personnel provided that they only enter the work area if they are accompanied by an approved escort who does have the necessary decal on his / her hard hat.
6. The courses will be video taped and course content made available for use as subsequent construction personnel are brought onto the project team during later stages of work.

Section 9

PROPOSED TREE MONITORING PROGRAM

Construction Monitoring Program

The Heritage Tree will require routine, periodic inspections during construction to monitor soil moisture level and to determine if construction work has resulted in detrimental stress to the tree. Inspections should be followed by written recommendations where needed as to watering, supplemental mulching, supplemental pruning, pest, or disease control.

Post-Construction Monitoring and Maintenance

After the completion of construction, the current program of landscape maintenance under the canopy of the tree and the strategies to continuously work to improve the overall health, structure, and longevity of the tree as described in the current maintenance plan should resume. An annual review by an ISA Certified Arborist of these practices should be done to update any additional practices that should be implemented.

All Arborist's reports, before, during, and after construction should be available to the City of Santa Monica for review upon request.

Section 10

POTENTIAL IMPACTS ON THE TREE FROM SHADOWS OF NEW BUILDINGS

The orientation of the new structures and their relationship to the Heritage Tree is favorable to sun exposure. A Shade and Shadow Study of the 2018 design, completed by Pelli Clarke Pelli Architects dated February 1, 2018 shows minimal amounts of tree canopy in shadow for periods of over three (3) hours as measured at the Spring, Summer, Fall and Winter Solstices. A copy of the Shade and Shadow Study is included as Appendix 5. The study illustrates that the balance of the tree will still receive a good amount of afternoon sun based on the footprint of the new building which is of a similar height of the existing Ocean Tower. The height and setbacks of the new buildings from the Ficus tree allows the tree to continue to have access to sunlight.

Additionally, it should be noted that leaves that function in full sun develop a different internal architecture than leaves in continual shade. As such, leaves that exhibiting “high-light” architecture, when placed into deep shade, will eventually fall from the tree, and be replaced by leaves that adjust to the new light levels by means of modified internal “low-light” architecture. Such low-light architecture leaves are typically larger in size to provide more exposed surface area, and thinner in cross-section to allow for greater light penetration into the leaf to reach the photosynthetic chloroplasts located therein.

Given that the construction of the building will occur over time and the change in light levels will be neither dramatic nor sudden, it is most likely that within any areas that may be in partial shade, the leaf drop will be minimal, piecemeal, and gradual with some small number of high-light leaves falling off and being incrementally replaced over an extended period of time. By the time the buildings are completed, and the shade and shadow patterns set, the tree should have made all necessary internal adaptation so as to show no visible sign of any negative impact.

Section 11

RECOMMENDATIONS FOR LANDSCAPE TREATMENTS WITHIN THE TREE CANOPY ZONE

During the last several years, important improvements have been made in the landscape beneath the tree to improve the relationship between the tree's requirements and the general landscape. Currently there is strategic, yet non-intrusive, landscaping in place under the canopy and among the open areas of the root zone of the tree.

Added Open Surface Area

A clear benefit of the proposed development plan as currently designed is the elimination of the existing impervious vehicular hardscape pavement at the *porte cochere and the new raised deck platform to enhance access to the tree and protect the exposed roots of the tree*. This pavement presently covers a significant percentage of the ground area within the tree's drip line. The removal of this pavement will accomplish several very significant horticultural improvements for the tree:

- Reduce compaction of the soil below the tree
- Provide an extensive area for irrigation water infiltration
- Provide for improved atmospheric gas exchange within the Rhizosphere

The above environmental improvements within the tree's root zone are more than sufficient to offset any negative impact from select perimeter root pruning that may be required to accommodate the new construction.

New Drainage, Irrigation, Lighting, and Planting Guidelines

New irrigation, landscape lighting, and planting in the area within the drip line shall follow the same guidelines as are currently in place along with the following:

- Drainage lines, if required, shall be designed to avoid roots to the maximum extent possible. Where installed, drain lines shall be placed in as shallow an excavation as possible. Further, all such excavation shall be by hand and / or air spade.
- If a drain pipe's flow line gradient intersects a root, every effort shall be made to route the pipe under the root if feasible. If it becomes necessary to prune the root, all pruning shall be made under the supervision and advisement of a Certified Arborist.
- Lighting, where required, shall be low-voltage with wiring routed in flexible plastic conduit, on grade, and in spaces between surface roots and hidden within the mulch layer.

- Irrigation mainlines, control valves, and quick-coupling valves shall be located outside of the tree's drip line. Lateral lines serving irrigation systems within the drip line shall be generally limited to drip irrigation installed as above grade tubing hidden within the mulch layer.
- Where irrigation piping may be required to be installed below grade, all trench excavation shall be by hand with piping run over or under roots as dictated by the individual situation. No root pruning is anticipated to facilitate irrigation installation.
- Planting shall be limited to strategic zones of select, non-invasive planting limited to interstitial spaces between major roots. Plants shall be selected to share a common watering requirement to the Ficus tree (hydro-zone compatibility) to allow for uniform irrigation application within the overall planter area.
- Unplanted areas shall make extensive use of organic surface mulch, decorative stone, or other protective treatments

Hardscape Guidelines

The 2018 conceptual design contemplates a pedestrian sidewalk around the Heritage Tree outside of the tree's drip line which is a significant improvement from the existing condition and an improvement from the previous 2013 HKS plan. These areas of pavement will still be constructed with a shallow structural cross-section so as to avoid or minimize any sub-grade preparation that might damage near-surface roots outside of the drip line of the tree.

Section 12

CONCLUSION

By all accounts, the preservation of the Heritage Tree is feasible for the following summarized reasons:

- The tree is in overall excellent health
- The tree is a relatively hardy species tolerant of minor impacts or encroachments
- Remedial and restorative pruning has effectively improved the tree's health and tolerance
- The proposed new 2018 schematic landscape design is a thoughtful approach to highlighting the natural beauty of the Heritage Tree for all to enjoy, while ensuring its long-term health and vitality.
- As described above, the anticipated shoring and excavation in the new 2018 design will have no impact on the roots within the tree's drip line and minimal impact outside the drip line.
- When construction of the elevated wood deck surrounding the tree begins, the placement of the micro-piles should be approved by the Project Arborist.
- The spacing of the structural wood support members for the elevated wood deck should be developed in consultation with the Project Arborist.
- The system for watering the tree root zone area below the wood deck should be developed in consultation with the Project Arborist.
- The proposed 2018 design removes existing pavement around the tree to improve the root zone environment
- The proposed 2018 design expands the available area for future root development
- The proposed 2018 design respects the drip line and avoids root damage
- Pavement areas are outside the drip line of the tree and will be minimally invasive, so as to avoid or minimize any sub-grade preparation that might damage near-surface roots.
- A full GPR map of the root zone has been generated to guide delicate perimeter work
- Perimeter work should be by hand or shall use minimally invasive equipment and techniques
- Monitoring and maintenance shall be conducted throughout the demolition and construction
- All personnel working on the tree should be trained horticulturalists or arborists
- Construction personnel working near the tree will receive instruction regarding tree protection protocols and drip zone limits and bounds.

- No roots larger than two inches (2") in diameter should be cut within the drip line of the tree (except as noted in Section 11).
- Outside the drip line of the tree, roots larger than 2" in diameter may be cut under the supervision of the Project Arborist.

The conclusion of the Arborists and horticulturalists involved in the development of the program that with the above measures, this tree will survive the construction process and will continue to thrive as the centerpiece of the proposed hotel and will ensure the health and longevity of the Heritage Tree for many years to come.

Section 13

SUPPLEMENTAL INFORMATION

REGARDING THE GROUND PENETRATING RADAR SURVEY

At BrightView's suggestion, Ocean Avenue LLC engaged **Arborist On-Site** to provide a tree **Root Radar Scanning Report**. A detailed scanning of critical areas of concern was conducted using Ground-Penetrating Radar (GPR). GPR is commonly used for this type of investigation and is acknowledged as the most reliable, non-invasive tool for assessing root depth and approximate sizes.

It should be noted that there are no practitioners of GPR in the Southern California area. It was necessary to retain **Arborist On-Site** of San Jose, California to perform this GPR survey. The additional information revealed about the status of the tree is of significant importance and serves as further evidence of Ocean Avenue LLC's on-going commitment to work with BrightView's tree protection team in developing the optimal plan to protect the Heritage Tree.

The Arborist On-Site report, (a copy of which is attached as Appendix 6 - **ISA Arborist's Report** [Ground-Penetrating Radar]) confirmed many of the assumptions that BrightView made in its December 12, 2013 analysis of the status of the Heritage Tree:

1. A majority of the tree's roots are located on the south side of the tree and have grown toward Wilshire Boulevard. This growth pattern takes advantage of the larger area of open space with greater access to soil moisture and air the absence of underground basements.
2. The majority of the tree's roots are located between a depth of 30-35" with little to no surface roots outside of the exposed roots within the tree's drip line. Root growth in this range is the result two forces:
 - a) The tree's natural geotropism (tendency for the roots to grown downward) where soil texture and compaction levels allow.
 - b) The limited ability for atmospheric gasses and water to penetrate lower strata of the site soils tends to preclude root growth at greater depths

Conclusions

The information revealed by the GPR Root Radar Scanning Report provides accurate data as to the depth and size of roots along critical drip line interfaces with the proposed construction. Access to this information in the simple graphic form provided in the report accomplishes the following:

1. The data demonstrates a reduced likelihood of clashes between construction and roots.
2. Where potential clashes are identified but unavoidable, the availability of the top view and profile view data reduces the need for detrimental “pot-holing” of to locate roots that may require selective pruning.
3. No roots larger than two inches (2”) in diameter should be cut within the drip line of the tree.
4. Outside the drip line of the tree, roots larger than 2” in diameter may be cut under the supervision of the Project Arborist.

Section 14 APPENDIX

The following documents are included as attachments to this Tree Report

1. Valley Crest Tree Care Services: *Ficus macrophyllum*
Moreton Bay Fig, Santa Monica Miramar Hotel & Bungalows March 2011
2. Time for a Trim, Santa Monica Daily Press, Article Date Unknown
3. Arbor Essence: Evaluation of Landmark Ficus November 16, 2017
4. Arbor Essence: Health Assessment of Moreton Bay Fig April 10, 2013
5. Shade and Shadow Study by Pelli Clarke Pelli Architects February 1, 2018
6. ISA Arborist’s Report (Ground-Penetrating Radar) October 9, 2014



ValleyCrest

Tree Care Services



Ficus Macrophyllum
Moreton Bay Fig
Santa Monica Miramar Hotel & Bungalows

March 2011

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 - 5. Results of Owner's Management Plan
- C. 2010 Phase 2 Maintenance and Pruning Program
- D. 2011 Phase 3 Maintenance and Pruning Program; Arborist's Update Report
- E. Long-Term Hotel Revitalization Plan
- F. About Valley Crest Tree Company

A. History and Background

In June 1976, the Landmarks Commission of the City of Santa Monica initiated proceedings for the designation of the Moreton Bay Fig tree (the "Ficus") at the Miramar Hotel (the "Hotel") as a landmark and in August of the same year approved the designation based on the following findings:

1. The Ficus is identified with an historical personage of local, state, and national history in that it was planted by members of Senator J.P. Jones' family.
2. It symbolizes elements of the cultural, social, economic, and political history of the city in that it is located on the former estate of Senator Jones, one of the founders of the City of Santa Monica.
3. It has aesthetic interest and value in that it is a fine botanical example of its species.

It is estimated that the Ficus was planted sometime around 1879, making it approximately 132 years old. The tree currently measures approximately 60 feet in height, 110 feet in spread, and has a diameter at breast height (DBH) of approximately 72 feet. Other examples of this species can be found in Los Angeles, San Diego, Santa Paula, and Santa Barbara where the tree is considered to be the largest known specimen in the continental United States.

The Ficus is named after Moreton Bay in southern Queensland, although it is found elsewhere. An evergreen tree that can reach heights of 200 feet, its trunk can be massive, with thick, prominent buttressing roots, and reach a diameter of 8 feet. The rough bark is grey-brown.

Since acquiring the Hotel, MSD Capital, L.P. (the "Owner") has made a concerted effort to learn more about the Ficus, and to solicit opinions from prominent arborists concerning how the tree should be maintained going forward.

Understanding that the Ficus had significant historical as well as botanical value, the Owners began to develop a long term management program for the tree and in the winter of 2006 contacted Valley Crest Tree Company, Calabasas, California to provide input into the planning process.

B. 2007 Arborist's Report and Work Plan

1. The Initial Report

In March of 2007, Valley Crest Tree Company arborist Dave Teuschler, an International Society of Arborists Certified Arborist, inspected the Ficus for the purpose of determining what steps need to be taken to preserve, protect, and enhance the tree so that it will continue to thrive for many years to come. In addition, the review considered public safety to make sure that the Ficus is in a condition that is safe for the many Hotel visitors who pass beneath it and protection of the property and buildings on this site. Pruning specifications and work conditions were then developed and assembled in accordance with International Society of Arboriculture standards that are widely accepted and currently in use.

In Mr. Teuschler's initial report, the following observation and recommendations were made:

Observations

- The Ficus has not undergone any significant maintenance in years. Nevertheless, the tree is in moderately good health, as shown by previous years' growth, leaf size, lack of dead wood in the canopy and overall color and vigor.
- A great deal of over pruning of this tree has taken place in the past. It has been lion tailed severely. This practice of removing all of the interior branches forces the tree to produce new foliage and the extreme branch ends.
- The result of lion tailing has put all of the branch weight out at the ends of the branches which required installation of support cables in the canopy in the past as a means of preventing catastrophic limb failure.
- This tree is completely surrounded by driveway, building, and sidewalks and is accessible to the general public and vehicles.
- Many of the tree branches touch the existing buildings and abrasions and rub scars exist which indicate these branches have been striking the building and pose a potential risk for property damage.

Recommendations

- End weight needs to be removed from this tree to make it safer for those who pass beneath it. You will see that large limbs have fallen in the past as shown by large open wounds which are in the process of compartmentalization. This is traditionally why tree branches are cabled. This tree currently has a system of cabling installed. Removing some end weight off of the end of the branches reduces that potential risk of another branch falling.

- All pruning should be done with the highest regard for the historical importance of this heritage tree and in compliance with ISA standards
- It is recommended that the pruning of this tree should be undertaken in several phases. In the first phase, all pruning will be limited to approximately one-half of the final crown reduction and will focus reducing end weight by approximately 30% as well as over structure branching.
- This pruning should take place in the warmer months of the year when the tree is actively growing. This would be considered April through October in Santa Monica.
- All pruning should be supervised by and ISA certified arborist and should be in accordance with all tree maintenance regulations set forth by the City of Santa Monica

2. Working with the City of Santa Monica

Following this initial inspection an on site meeting was held with Mr. Walt Warriner, Community Forest & Public Landscape Superintendent, City of Santa Monica, the Owners, and the arborist team from Valley Crest Tree Company. This was a walk through discussion regarding the short- and long-term management for the Ficus with the intent on developing a collaborative assessment of the best way forward for preserving this tree as a community landmark and enhancing its overall health and vigor in the year to come.

It was generally observed by all that while the tree was in very good condition for a tree of its age, there was no documented work plan for the tree and little work had been performed in recent times to address some basic arboricultural issues. Discussions amongst the group led to agreement of the elements of good arboricultural management effort. From that point, it was agreed that a written plan would be developed by the Owner and submitted to the City for review, comments, and approval so that much needed deferred maintenance could be started. As owners, it was important to time the work for the optimal benefit of the tree and it was agreed that the work should begin as soon as possible.

3. The Work Plan

The following detailed work plan was developed and approved by the City to be implemented in a series of phases over a period of years to ensure the long term health of the tree. It demonstrates the high level of expertise which was solicited and the very specific actions that were to take place during execution of the work plan. A pre-work meeting was held with all members of the team and the work was supervised at all times by a Certified Arborist. The purpose of this report is to describe the phased work and maintenance program as implemented for the tree since our initial review in 2007. This

program has improved the tree's previous moderately good health to its current excellent condition.

*Pruning Specifications for Ficus Macrophylla at the Miramar Hotel
in the City of Santa Monica*

by Dave Teuschler
I.S.A. Certified Arborist # WE – 4177A
Valley Crest Tree Company, Specimen Tree Division, Los Angeles, California

Background Information

- This is a heritage Ficus macrophylla. It was planted in 1879.
- This tree is the focal point of the Miramar Hotel in Santa Monica. The current vehicle entry and turn around encircles three fourths of the area beneath the canopy of the tree.
- Although the tree has been infrequently and improperly pruned in the past, its current health appears to be good.
- There are signs of prior limb failures within the canopy of this tree (figure 1).
- It appears that this tree has been overly thinned in the past. This thinning eliminated interior foliage and pushed all new growth towards the extreme ends of the branches. A practice that is called "lion tailing".

The word 'shall' indicates a practice that is mandatory. The word 'should' refers to a practice that is highly recommended.

Objectives

Reduce potential hazardous conditions in this Ficus macrophylla, begin correcting improper pruning that has taken place in the past and improve tree structure by:

- Removing dead branches.
- Reducing the weight of branches or stems with included bark.
- Reducing the weight toward the ends of branches that have been lion tailed during previous pruning (figure 2).
- Crown thinning of the canopy (figure 3).
- Removing over-structure branches (figures 4, 5).
- Removing crossing branches (figure 6).
- Adjusting and or replacing cables within the canopy of the tree (figure 7).
- Adjusting canopy lighting attachments (figure 8).

General Procedures

- Live branches less than 1.5 inches diameter should not be removed.

- Dead branches greater than 1.5 inches in diameter (measured at the base of the branch) shall be removed from the canopy of the tree.
- No live branches greater than 4 inches diameter shall be removed from the tree without authorization.
- Remove no more than 20 percent of live foliage from the tree unless indicated below.

Specific Procedures

1. Weight on main scaffold limbs with included bark shall be reduced by approximately one-third by removing some secondary branches toward the ends of the limbs and/or by removing the end of the branch using a drop-crotch cut.
2. If less than 20 percent of the foliage was removed on a mature tree following procedures 1 above, thin the canopy to allow more light to reach the ground under the tree and to reduce damage from wind storms. The foliage removed shall be taken primarily from the outer edge of the canopy, not from the interior (figure 9). Interior branches shall be left on the tree. Do not remove water sprouts from the interior of the tree.
3. Root zone shall be protected during pruning operations.

Pruning techniques

Pruning cuts shall be in accordance with ANSI A300 pruning standards. See attached documents.

Tools and equipment

- Climbing spurs shall not be used when climbing trees, except to climb a tree to be removed or to perform an aerial rescue of an injured worker.
- Equipment and work practices that damage bark or cambium should be avoided.
- Rope injury from loading out heavy limbs should be avoided.

General

Work will be supervised by an I.S.A. certified arborist. Certification is through the International Society of Arboriculture, Champaign, IL. A certified arborist shall be on site at all times during work activities.

Safety

All work shall be performed by workers trained in accordance with ANSI Z133.1 safety regulations as required by OSHA. See attached documents.

Exclusions

Only the *Ficus macrophylla* is to be pruned. All other trees at this location will require a separate pruning specification if they are to be pruned.

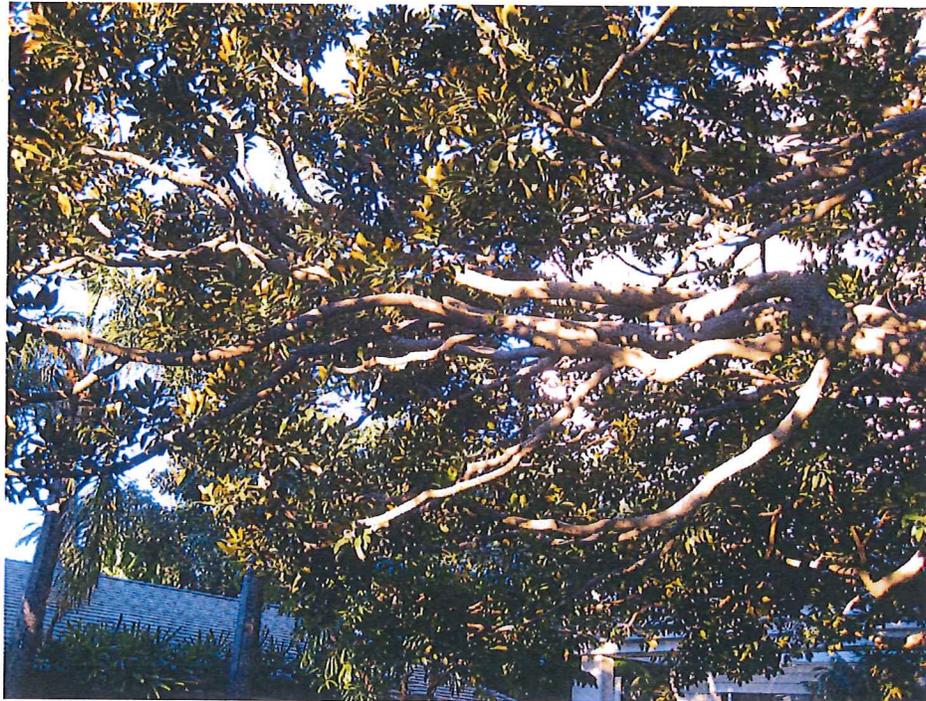
Additional Requirements

All debris and equipment shall be removed from the site by the end of each workday and public area shall be kept in a clean condition.

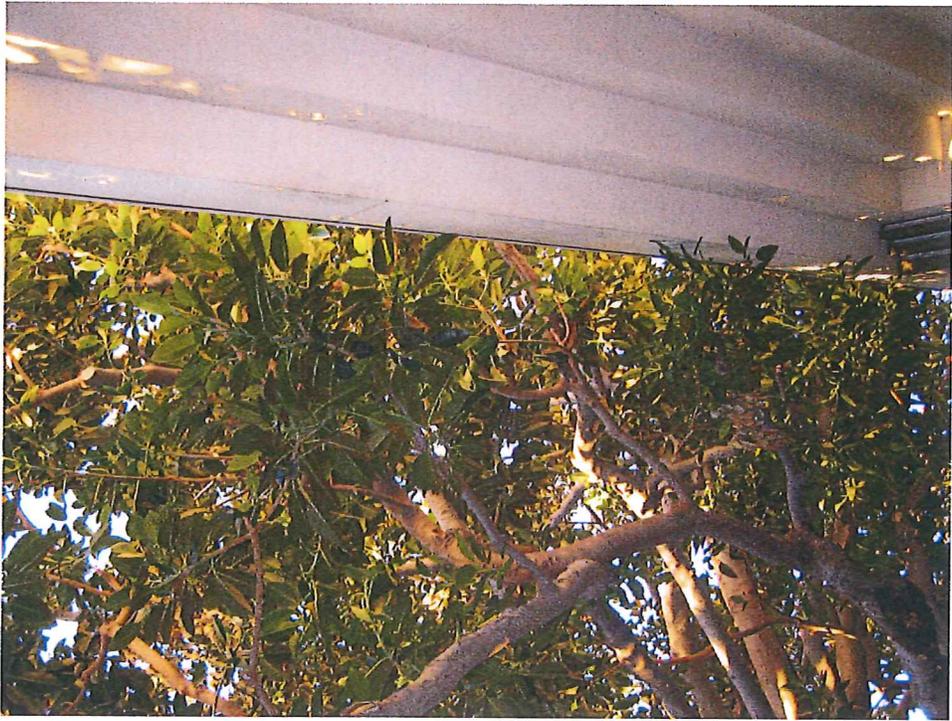
Examples of Work to be Performed



Canopy of tree impacting structure needs to be reduced



Extremely long branches carrying excessive weight are a hazard



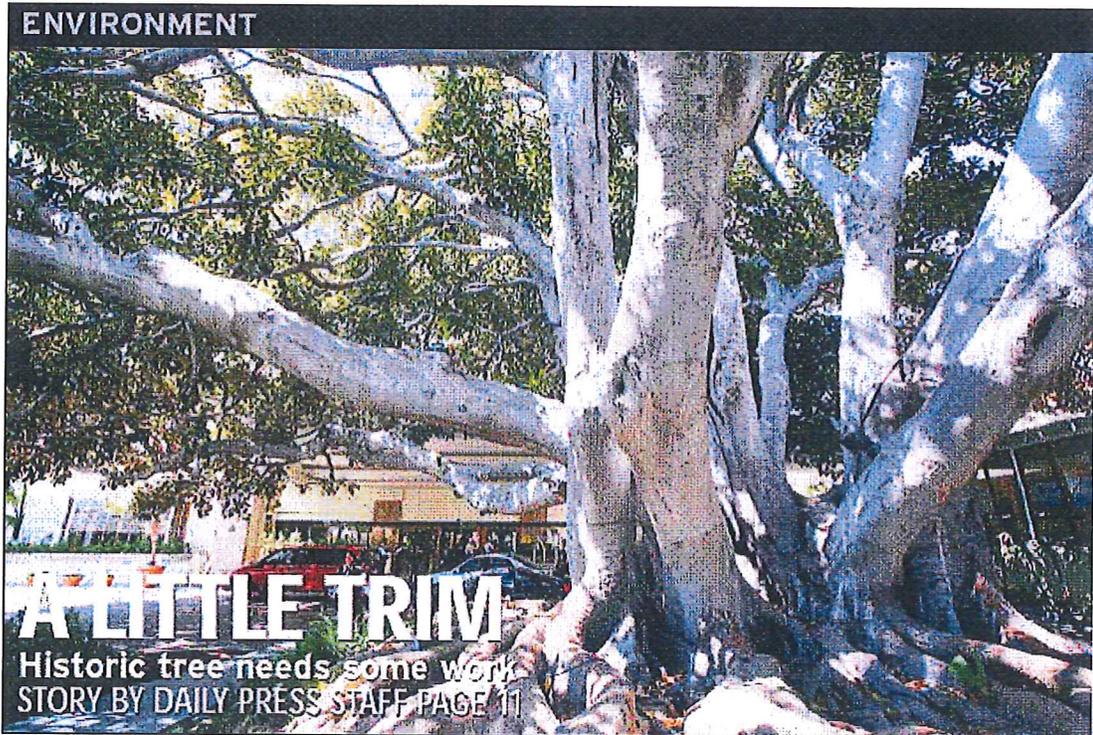
Branches growing inside of roofline need to be rebalanced



Selective pruning is needed to reduce the encroachment

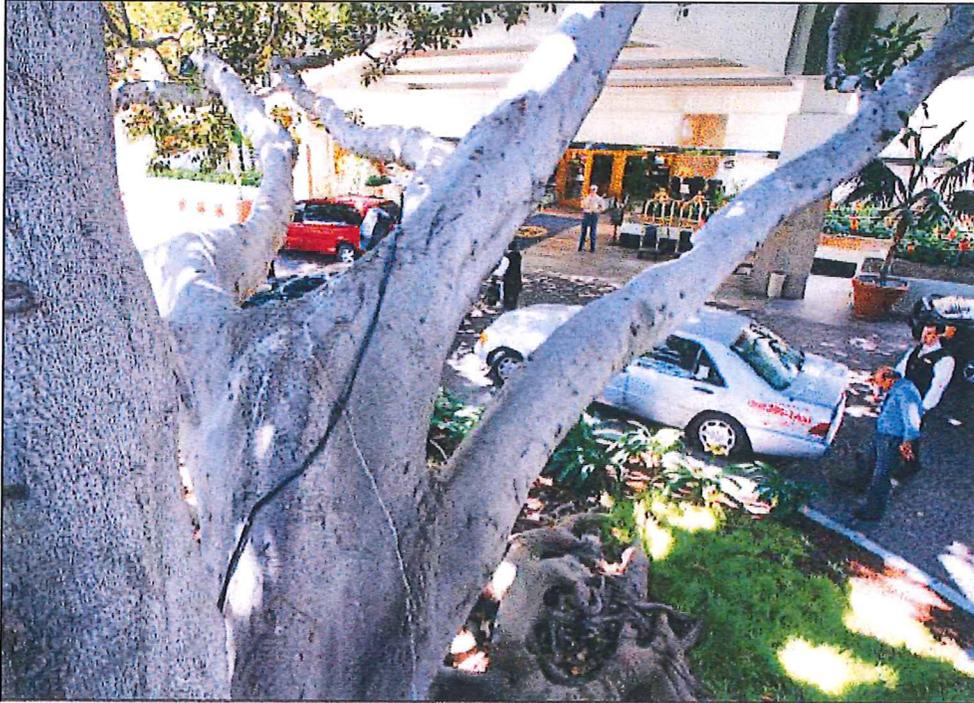
4. Community Outreach

As part of the planning for commencing much needed work on the Ficus, outreach to the community was initiated to provide background for the work and to solicit any input before commencing work. A newspaper article told the story of this historical tree and provided the community with insight into the need for a long-term plan for this botanical specimen.



LANDMARK NEEDS MAINTENANCE: With its branches stretching out over the Fairmont Miramar Hotel driveway, the landmarked Moretor Bay fig tree is the second largest found in California. Hotel management plans to do some much-needed pruning in May.

Brandon Wise brandonw@smdp.com



Brandon Wise brandonw@smdp.com

IMPORTANT PROJECT: Officials at the Fairmont Miramar Hotel are making plans to trim the historic Moreton Bay fig tree.

Time for a trim

Historic Moreton Bay fig tree to receive some maintenance

BY DAILY PRESS STAFF

DOWNTOWN Standing just inside the gates of The Fairmont Miramar Hotel, the impressive Moreton Bay fig tree has been welcoming guests and visitors from around the world for more than a century.

While it hasn't been that long since the historic landmark was last trimmed, the tree has seen better days and those at the hotel are planning to give it some tender loving care in the next few weeks to ensure it stays around for another 100 years.

"There are certain areas of the tree that are carrying an awful lot of weight and some of those branches are so heavy and fragile that it has become a safety issue," said Ellis O'Connor, general manager of the Fairmont.

"We just want to get the word out and let people know what we are planning to do because the tree is one of the focal points of Santa Monica," O'Connor added. "Everyone is proud of it and we want them to know we are doing this for the right reasons, for the best interest of the tree."

Ever since City Hall decided to remove dozens of ficus trees on Second and Fourth streets residents have been paying closer attention to Santa Monica's urban forest. A group of residents known as Santa Monica Treesavers formed to fight the removal of the ficus trees. The removal, which was part of a more than \$8 million streetscape improvement project, has been put on hold pending a court decision.

O'Connor said the Fairmont has been working with City Hall and professional arborists to come up with the best plan to preserve and strengthen the fig, which could include using cables to support some of the larger limbs. Fairmont is awaiting approval from the Landmarks Commission and hopes to start trimming May 1.

"We have done extensive reports about the effects of pos-

sible over trimming to see how much should be taken off of it," O'Connor said. "We have been in close communication with the city of Santa Monica and their tree department."

The company that will perform the work is ValleyCrest. The job should take anywhere from five to 10 days, O'Connor said.

The Fairmont's fig has a rich history. Dating back more than 100 years ago, an unknown sailor from Australia is believed to have carried the original sapling off his ship into a local Santa Monica watering hole. Unable to pay for his drinks, he gave the sapling to the bartender as payment. The bartender, having no use for the sapling, gave it to the wife of Nevada's Sen. John P. Jones, who founded Santa Monica in 1885 and who built the original Miramar as a family mansion in 1889. The Jones' gardener, a man by the name of W.H. Lee, planted it in the garden amongst some rare and exotic plants, some of which are still thriving today.

The Jones family sold their home shortly before the senator died in 1912 and it was converted into the Miramar Hotel in 1921. By this time, the original sapling had already grown to an impressive size and was widely recognized as the "Jones Family Tree." Although a modern building replaced the Jones' residence in 1938, the tree continued to serve as a focal point for outdoor meetings and local festivities, a tradition that is still followed today.

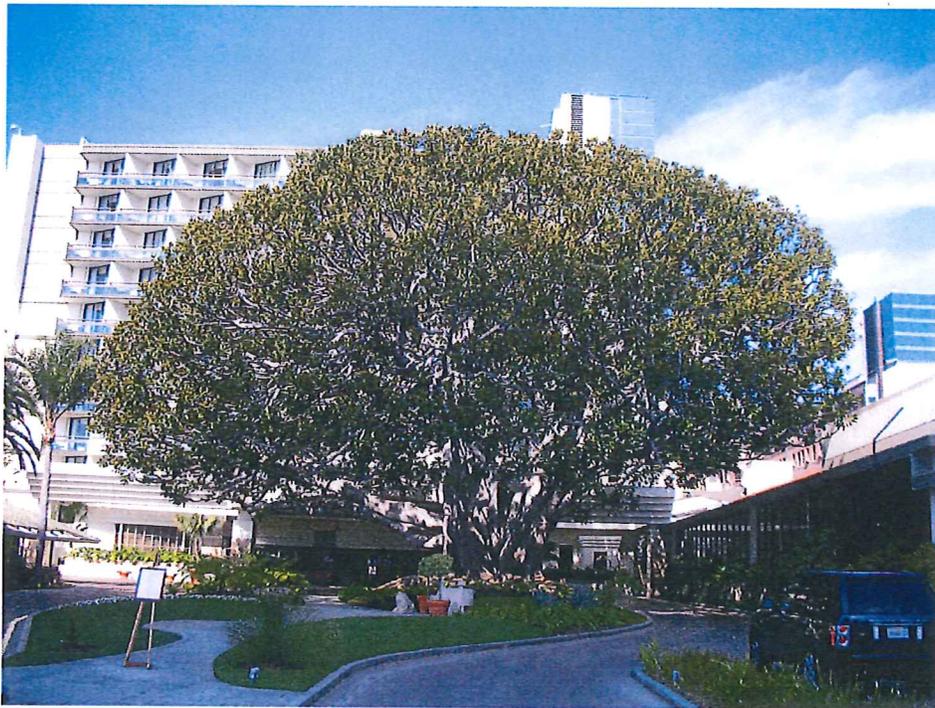
In 1969, the Santa Monica chapter of the Daughters of the American Revolution held a special ceremony commemorating the planting of the tree and issued a memorial plaque which is now affixed to the tree's base among the flowers near the sidewalk path. The Santa Monica Landmark's Commission during the United States bicentennial year in 1976 declared the tree an historic landmark.

news@smdp.com

5. Results of Owner's Management Plan



Before management was begun



Phase One Completed

C. 2010 Phase 2 Maintenance and Pruning Program

In March of 2010, ValleyCrest implemented Phase 2 of the maintenance and pruning program for the tree. These activities included the following:

- Crown reduction with an emphasis on an overall smaller canopy to reduce the risk of limb failures
- Crown thin per ANSI standards of 25% of the entire canopy
- Pruned the end weight of lateral branches throughout the canopy to reduce chances of limb failures
- Pruned back the lateral branches over structures for building clearance
- Inspected and made minor adjustments to the existing cabling system to ensure proper support for the lateral limbs

D. 2011 Phase 3 Maintenance and Pruning Program; Arborist's Update Report and

In February of 2011, ValleyCrest implemented Phase 3 of the maintenance and pruning program, which included the following work:

- Crown reduction of approximately 4' to 5'
- Crown thin per ANSI standards of 25% of the entire canopy
- Pruned the end weight of the lateral branches throughout the canopy to help reduce end weight to reduce the chances of limb failure
- Pruned back lateral branches over structure for building clearance
- Inspected and made minor adjustments to the existing cabling system supporting the larger lateral limbs for proper support

In accordance with the original 2007 work plan, the current overall health condition of the tree appears to be excellent. Overall, the tree is showing good uniformity, healthy growth and healthy leaf size, color and vigor. Shown below are several before and after pictures from the start of the maintenance project through the February 2011 Phase 3 pruning.

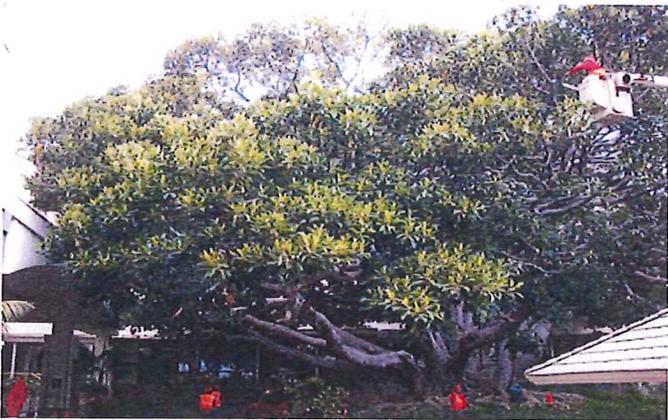
March 8, 2011



Before picture of first trimming over structure for building clearance. 2008



After picture of last trimming for building clearance completed Feb 22, 2011



Side view picture of before crown thinning of 25% . 2008



Side view picture of after crown thinning of 25% Completed Feb 22, 2011



Front view picture before Crown reduction. 2008



Front view picture after crown reduction. Completed Feb 22, 2011

There is, however, a section on the back side of the tree (see photos #1 and #2 below) that does *not* show the same positive appearance. In this area, there is visual evidence of stunted growth, dwarfed leaf size, thinning canopy, lack of color and vigor.

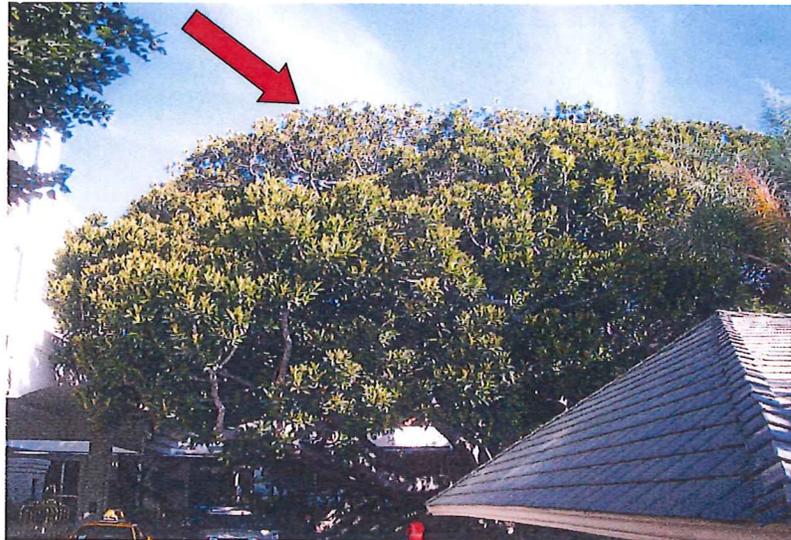


Photo #1



Photo 2

The area of decline is isolated to one main large “parent leader.” There are five points where cabling hardware has been installed for the purpose of support as shown in photo #3 and #4.

Cabling systems are installed in the tree limbs to increase the weight each limb can hold, thus a larger-sized canopy is created. With a larger canopy, the cables help to limit limb breakage and the potential threat to property or people below. However, when hardware is installed in a tree, a wound is created in the vascular system at the point of entry. A developmental process unique to trees is the ability of the tissue surrounding the cable at the point of entry to compartmentalize around the wound. When this reaction is triggered the tree forms boundaries around the wounded area.

The limb shown in photo #3 has too many wounds in a confined area, restricting the proper function/flow of the vascular system. The compartmentalized tissue creates an abnormal “maze” like effect to the vascular system thus reducing the flow of nutrients. Therefore, the nutrients are not readily able to reach the upper canopy resulting in a poor performing or struggling upper canopy.



Photo #3

Another likely contributing factor to the poor performance of the limb is the large wound shown in photo #4 along the trunk caused from a previous broken lateral limb.



Photo #4

The last item of concern is a crossing lateral branch indicated on Photo #5 that is rubbing and exerting pressure against the main struggling parent limb.



Photo #5

Recommendation

We are strategically allowing lateral limbs to grow and mask the stunted parent limb shown in photos #1 and #2. Ultimately, the lateral limbs will grow to help maintain the shape of the canopy. The stunted parent limb will not be removed because the existing cables, shown in photo #3 and 4 are supporting other structurally important limbs.

In conclusion, any added stress should be avoided to help prolong the life span of this majestic tree such as the following:

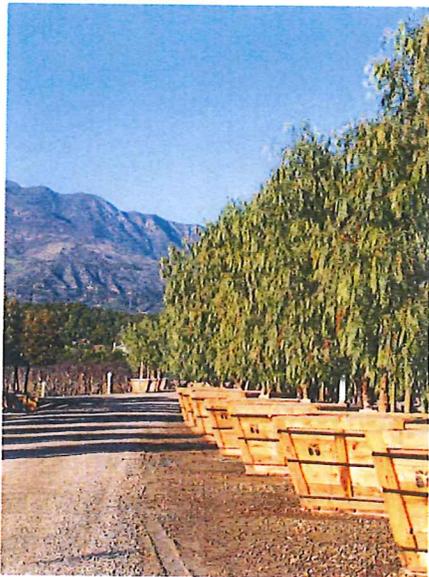
1. Avoid new plantings that will disturb the soil. This will prevent root hair loss which is essential for nutrient uptake.
2. Avoid installing lighting that will require additional holes to be drilled into the bark. Use the existing anchor points where possible.

E. Long-Term Hotel Revitalization Plan

We understand that the Owner is in the process of considering various long-term Hotel revitalization scenarios, and that preservation of the Ficus is central to each alternative. Valley Crest Tree Company will work with the Owner to develop a tree protection plan that ensures the long-term health and vitality of the Ficus, in accordance with applicable City of Santa Monica ordinances and good arboreal practice.

F. About Valley Crest Tree Company

As the largest producer of containerized specimen trees in the West, Valley Crest Tree Company offers an unparalleled variety of high quality trees to landscape contractors, architects and developers seeking to create mature and distinctive landscapes. With 800 acres of state-of-the-art growing grounds in northern and southern California, the Nursery Division's standing inventory of 15 gallon through 72 inch boxes includes a broad cross-section of shrubs and trees. The Specimen Division offers expert tree relocation, storage and preservation services worldwide and an array of mature and one of kind mature trees that have been procured and preserved from their original setting.





Appendix 2

Santa Monica Daily Press

Visit us online at smdp.comBrandon Wise brandonw@smdp.com**IMPORTANT PROJECT:** Officials at the Fairmont Miramar Hotel are making plans to trim the historic Moreton Bay fig tree.

Time for a trim

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[35]

November 16, 2017

Mr. Dustin Peterson
Fairmont Mira mar Hotel
Santa Monica, CA

Regarding: Evaluation of Landmark Ficus
Fairmont Mira Mar Hotel
Santa Monica, CA

Dear Mr. Peterson,

At your request I visited the referenced site November 14, 2017. I was asked to evaluate the current health condition of the Landmark Morton Bay Fig tree in front of the hotel.

My visual inspection was performed from ground level and did not involve any invasive or advanced diagnostics. The tree was visually examined to assess its current state of health and to identify any apparent pest or structural problems. The lower trunk area was sounded using a rubber mallet to check for any indication of internal cavities or decay, and the crown of the tree was inspected using binoculars.

The tree appears very healthy with good foliage color and strong seasonal shoot growth. No signs of stress or decline were observed in the tree. The south side of the crown is not quite as full as the north, but I simply attribute this to exposure.

Compared to photos of the tree taken in 2013, the tree generally appears to be healthier, foliage color has improved, and crown density has also increased.

There are several support cables installed in the tree, some of which are very slack. I also question the workmanship of the cable installation and suggest having the cables check by a reputable company, and adjusted or modified as needed.

It should be noted that the study of trees is not an exact science and arboriculture does not detect or predict with any certainty. The arborist therefore is not responsible for tree defects or soil conditions that cannot be identified by a prudent and reasonable inspection.

If you have any questions or require other services please contact me at the number listed below.

Respectfully,
Arbor Essence



Kerry Norman
ASCA, Registered Consulting Arborist #471
ISA Board-Certified Master Arborist #WE-3643B
ISA Tree Risk Assessor Qualification

Appendix 4

April 10, 2013

Mr. Robert Crudup
Valley Crest Tree Company
24151 Ventura Boulevard
Calabasas, California 91302

Regarding: Health Assessment of Morton Bay Fig
Miramar Hotel
101 Wilshire Blvd.
Santa Monica, CA

Dear Mr. Crudup,

At your request I visited the above referenced site April 9, 2013. The purpose of this visit was to inspect a landmark Morton Bay Fig (*Ficus macrophylla*), to evaluate its current condition.

My inspection of the tree was performed from ground level and did not include any extensive or invasive diagnostics. The tree was inspected to assess its overall health and structural condition, and to identify any signs or symptoms of insect pest or disease problems.

The subject tree is located growing in a large planter outside the main entry to the hotel. The tree is massive in size with several large stems and an immense canopy.

Overall the tree appears to be in healthy stable condition. The tree displays good foliage color, and healthy new shoot growth throughout its entire crown. The tree does not display any stress or decline symptoms. No significant insect pest or disease problems were observed in the tree, nor were any major structural defects identified.

In preparation for proposed construction and hotel renovations the tree has progressively been pruned for crown reduction over the past few years. This approach has enabled the crown to be significantly reduced without impacting tree health, vigor and structure.

Only a few minor structural defects were observed in the tree, which include two distinct wounds in the lower portion in two of the main stems. Currently it appears that decay is minimal and there is enough sound healthy wood to reasonably support the stems with little risk.

I did note the extraordinary number of cables installed in the crown of the tree. Some of the cables appears to be very old having been installed many years ago, and others look as though they were installed more recently. Many of the cables appear to be redundant and probably can be removed, while others were simply installed incorrectly and need to be replaced, modified or adjusted. It is recommended that cables in trees be inspected annually and adjusted as needed.

I also observed a large birds nest on the upper north side of the crown; we must be mindful to protect and nests when working in the tree.

It should be noted that the study of trees is not an exact science. The arborist therefore is not responsible for tree defects or soil conditions that cannot be identified by a prudent and reasonable inspection.

If you have any questions or require other services please contact me at the number listed below.

Respectfully,
Arbor Essence



Kerry Norman
ASCA, Registered Consulting Arborist #471
ISA Board-Certified Master Arborist #WE-3643B
PNW-ISA Certified Tree Risk Assessor, CTRA #1034

Appendix 5



SUMMER SOLSTICE (JUNE 21)



SPRING EQUINOX (MARCH 21)



WINTER SOLSTICE (DECEMBER 21)



FALL EQUINOX (SEPTEMBER 21)

MIRAMAR HOTEL & RESIDENCES REDEVELOPMENT FEBRUARY 01, 2018	APPLICANT OCEAN AVENUE, LLC 100 WILSHIRE BOULEVARD SANTA MONICA, CA 90401 310.458.3600	PROJECT ADDRESS 1133 OCEAN AVENUE SANTA MONICA, CA 310.899.4184	DEVELOPER THE ATHENS GROUP 101 WILSHIRE BOULEVARD SANTA MONICA, CA 310.899.4184	ARCHITECT PCPA 322 EIGHTH AVENUE NEW YORK, NY 10001 212.417.9496	LANDSCAPE ARCHITECT GGN 1922 1ST AVENUE SEATTLE, WA 98101 206.903.6802	DESIGN CONSULTANTS URBAN (L&L) ARBY/ENVIRONMENTAL/STYSSA HENNESSY GROUP CIVIL: FUSCOE ENGINEERING, CHATEL HISTORIC PRESERVATION, CHATEL LANDSCAPE ARCHITECTURE PARKING: WALKER CONSULTANTS	SHEET NAME SHADE AND SHADOW STUDY	SHEET NUMBER APP-01
	MIRAMAR HOTEL & RESIDENCES REDEVELOPMENT - SHADING STUDY							

Arborist OnSite®

Horticultural Consulting Inc.

130 San Ramon Drive San Jose, California 95111
Direct 408/ 226-3427 Fax 408/ 227-9901
Robert@arboristonsite.com

Appendix 6

ISA Certified Arborist Report

Submitted To:

Ocean Avenue, LLC
100 Wilshire Blvd., Suite 1700
Santa Monica CA 90401

Project Location:

The Fairmont Miramar Hotel
101 Wilshire Blvd.
Santa Monica, California 90401

Submitted By:

Robert Booty, Registered Member # 487
The American Society of Consulting Arborists
ISA Certified Arborist WC-4286
October 9, 2014

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Assignment

Ocean Avenue, LLC, the owner of the Fairmont Miramar Hotel in Santa Monica, California, is planning a comprehensive redevelopment of the site that will include an underground parking structure. Their heritage tree, a Moreton bay fig (*Ficus macrophylla*) (the “Heritage Tree”), is located in the center of the site and will remain a focal point of the redeveloped hotel.

Ocean Avenue LLC previously engaged Valley Crest Tree Company to provide a comprehensive tree protection, preservation and maintenance plan to protect the Heritage Tree. At Valley Crest’s suggestion, Ocean Avenue LLC requested my services to utilize ground penetrating radar to locate the tree roots within the proposed construction area and to provide specific information as to root location, density and depth in order to provide as much information as possible to ensure the on-going health and vitality of the Heritage Tree during and after construction.

Observations

I visited the site on September 7, 2014. The Heritage Tree is located in the center of a round-about driveway at the entrance to the hotel. Traffic circles around the tree on a stone mosaic drive way. The tree is surrounded on three sides by buildings. The Heritage Tree is about 80 feet tall and appears to be in excellent health. I am very impressed with the quality in which it is being pruned and cared for.

Discussion / Conclusions

I completed a total of seventeen individual line scans around the tree; all, with the exception of one were next to the buildings that are proposed to be removed as part of the redevelopment plan. Sixteen of the scans utilized the 400MHz antenna and only identified structural roots one inch in diameter or greater. I did one scan (#17) along the entrance to the hotel itself with the 900MHz antenna in order to identify the smaller absorbing roots (i.e., those that are a quarter inch in diameter or greater).

As you evaluate the larger structural roots found on pages 13-30 and begin actual construction, those smaller roots are present in the soil although they are not identified in these 16 scans. The shallowest roots are about two inches below the surface and the deepest roots are at a depth of forty inches, with the majority of the structural roots being consistently found at 30-35 inches in depth.

The site map on page 8 shows the actual scanning locations and the virtual trench plots shown on pages 13-30 are very helpful in understanding root density near the buildings that will be removed as part of the redevelopment plan.

Methodology

How does it work?

Ground-Penetrating Radar (GPR) is an established technique that has been used worldwide for over 65 years. Radar is an object-detection system that uses *electromagnetic waves* – specifically *radio waves* – to identify the range, altitude, direction, or speed of both moving and fixed objects. When an electromagnetic wave¹ emitted from a small surface transmit antenna / receiver encounters a boundary between objects with different electromagnetic properties, it will reflect, refract, and or diffract from the boundary in a predictable manner. Radar waves or signals are reflected especially well by materials of considerable *electrical conductivity*.

The radar signals that are reflected back towards the antenna are the desirable ones that create the image and make radar work. An air-filled tree trunk (*with a decayed hollow*) or a partially air-filled incipient (early stage) decay zone inside a cell wall within a tree are excellent reflectors for detection by GPR systems. Use of GPR instrumentation for internal tree trunk decay detection and below ground root locating is one of its latest uses in the field of tree risk assessment.

GPR uses today seem endless. When you look at the weather report, you are looking at a Doppler weather radar scan; it will tell you where the heaviest amounts of rain will fall in your area. It works like this, the radar signal, as it passes through the clouds is reflected back to a transmit receiver antenna that measures the density of the moisture in them and the speed they are traveling. You can then determine approximately when it will start raining and how much rain will fall in a given area. Radar is used in aviation, automobiles, law enforcement and locating objects below ground.

¹ Daniels, D.J. 1996, Surface-Penetrating Radar. The Institute of Electrical Engineers, ISBN 0-85296-0.

Root Mapping

An Introduction to Below-Ground Tree Root Mapping using Ground – Penetrating Radar (GPR)

Ground-Penetrating Radar used as a method of mapping tree roots has several of the following advantages over other methods of root locating,

- It is capable of scanning the root systems of multiple trees under field conditions in a short time.
- 1. It is completely non-invasive and does not disturb the soils or damage the trees being examined, and causes no harm to the environment.
- 2. Being non-invasive, it allows repeated measurements that will reveal long-term root system development.
- 3. It allows observation of root distribution beneath hard surfaces (concrete, asphalt, and bricks) roads and buildings.

Its accuracy is sufficient to locate structural roots with diameters from less than 1 cm (0.4 in.) to 3 cm (1.2 in.) or more. It can characterize roots at both the individual tree and stand levels, facilitating

There were two different radar antennas utilized for this project. The 900MHz antenna begins identifying roots that are a quarter inch in diameter and larger and has a depth penetration of thirty-nine inches. The 400MHz antenna identifies roots that are one inch in diameter and larger and will penetrate down through the soil to twelve feet. These two different antennas are specifically used to identify the smaller absorbing roots and then the deeper and larger structural roots of trees.

Analysis Results

Top Down View

There are two ways to view the data obtained from the use of Ground Penetrating Radar. Both are designed to provide better understanding of existing root depth, pattern, and density. The first method we utilized is the top down view; this is an aerial view looking down on the property. This is how the radar looks at the existing roots. As the antenna is moved along the ground every 2/10ths of an inch, a radar signal is released into the ground at a predetermined depth.

As this signal encounters a root, it is reflected off its top and back to a receiver inside the antenna. This returned signal is displayed as an x in the final report and indicates the presence of a root. The colored x indicates the depth of the root. The advantage of the top down view is that it displays all roots found at all depths on one map and this will allow you to see the density of the roots around a given tree.

Secondly, one can observe all roots within a given soil profile depth. On the following pages, you will notice three soil profiles depicted. When looking at the top down view of the scans, keep in mind that each x marks the presence of a root. These roots are connected to the tree from the root flare as they grow into the soil and then grow outward in all directions; roots that have no obstructions and can travel laterally twice the height of the tree. This is what gives the tree stability.

Markers for Fairmont Hotel

Markers Scan #1

1. start

Markers Scan #2

1. start
2. Entering exposed root zone
3. passing center of tree
4. Exiting exposed root zone

Markers Scan #3

1. start
2. Entering exposed root zone
3. passing center of tree

Markers Scan #4

1. start
2. passing center of tree
3. Exiting exposed root zone

Markers Scan #5

1. start

Markers Scan #6

- 1.start
2. passing center of tree

Markers Scan #7

1. start

Markers Scan #8

1. start
2. passing center of tree

Markers Scan #9

1. start

Markers Scan #10

1. start
2. Entering exposed root zone
3. passing center of tree

Markers Scan #11

1. start
2. passing center of tree
3. Exiting exposed root

Markers Scan #12

1. start
2. Exiting exposed root zone

Markers Scan #13

1. start

Markers Scan #14

1. start

Markers Scan #15

1. start

Markers Scan #16

1. start

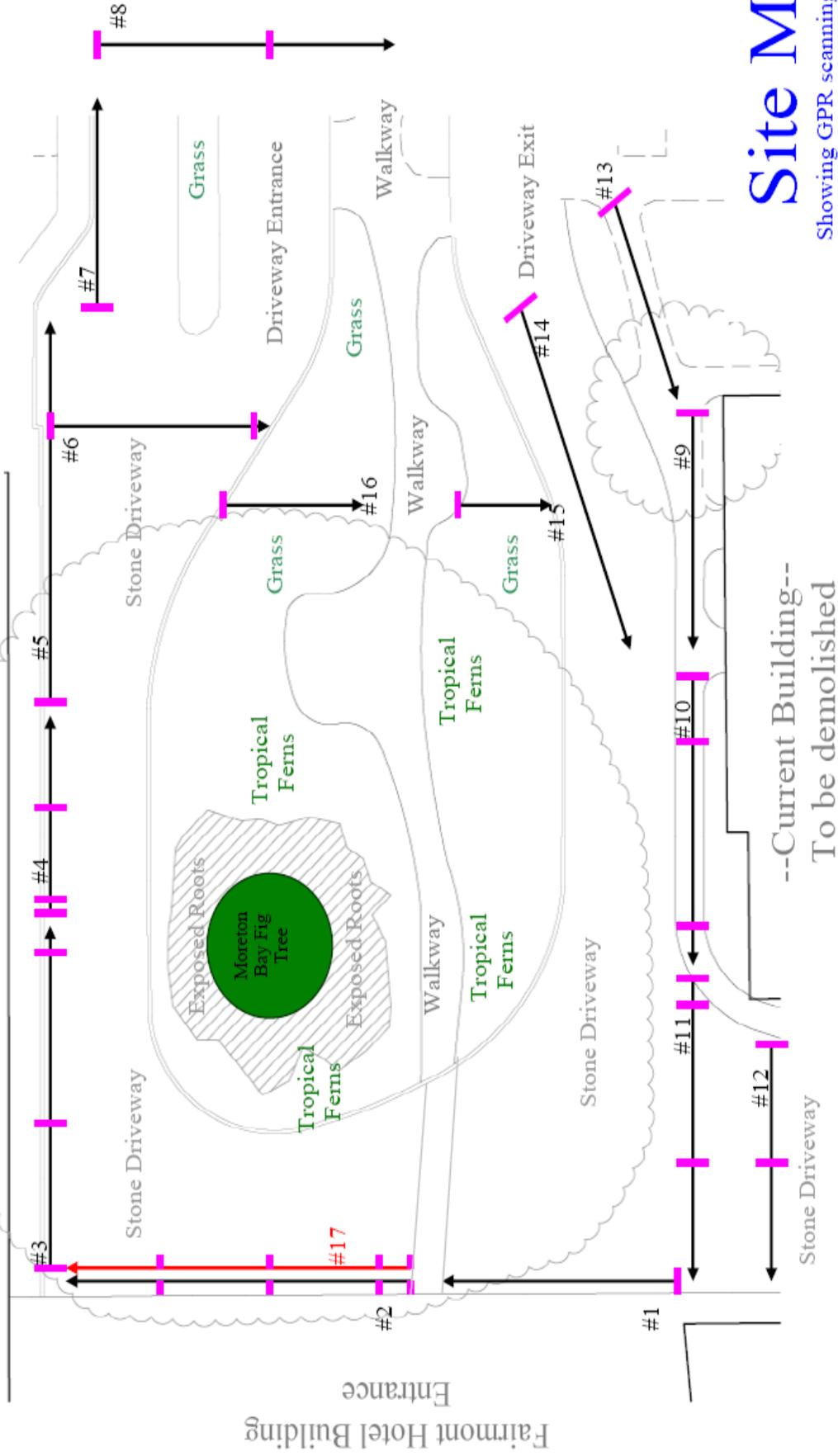
Markers Scan #17

1. start
2. Entering exposed root zone
3. passing center of tree
4. Exiting exposed root zone

Pink markers | are used during the scan to identify physical objects above ground during the root scan. These markers will help to compare above ground locations verses root density under the stone drive way.

--Current Building--
Proposed underground
Garage Site

400 Antenna
900 Antenna

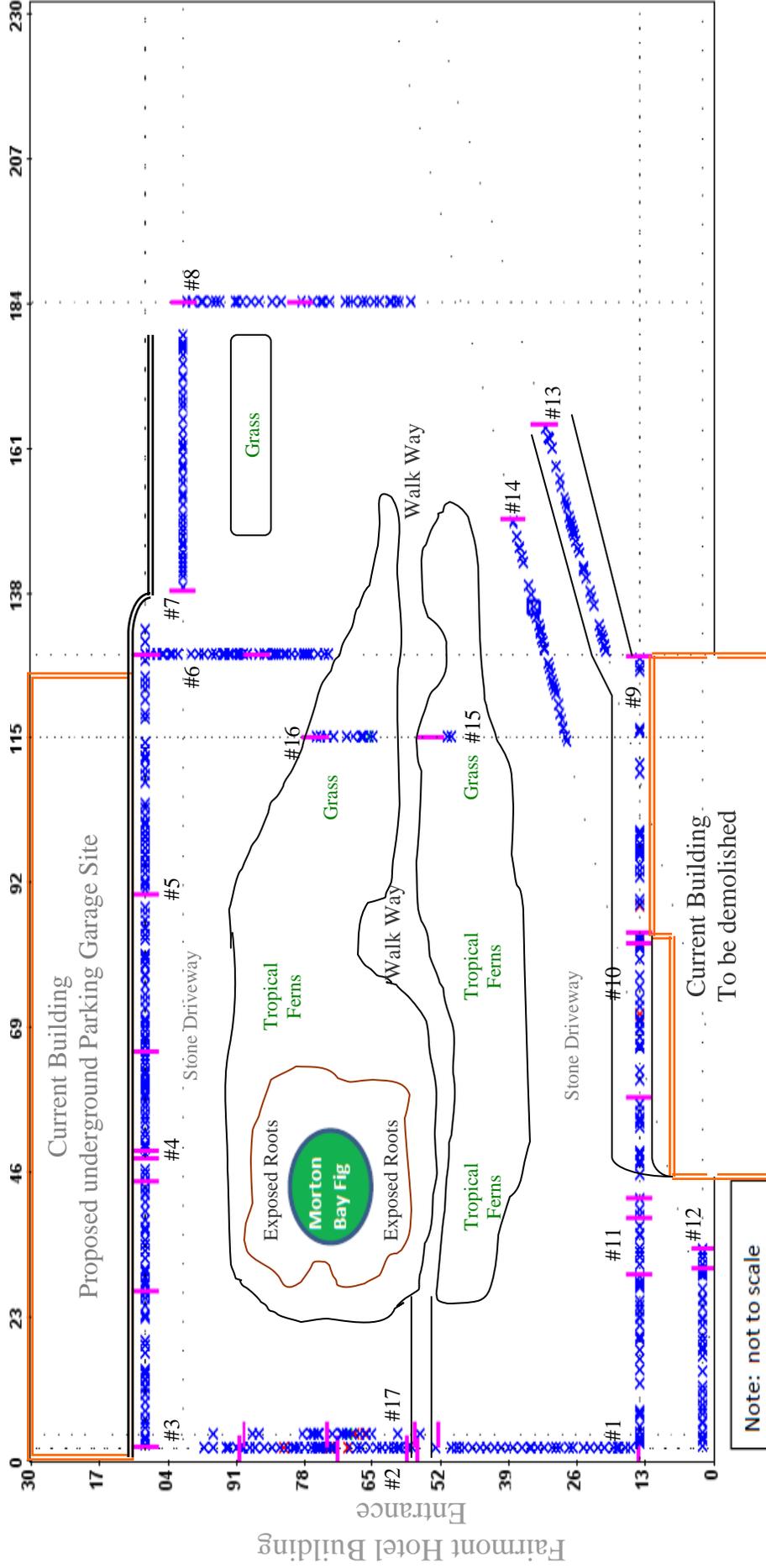


Site Map

Showing GPR scanning locations
And markers

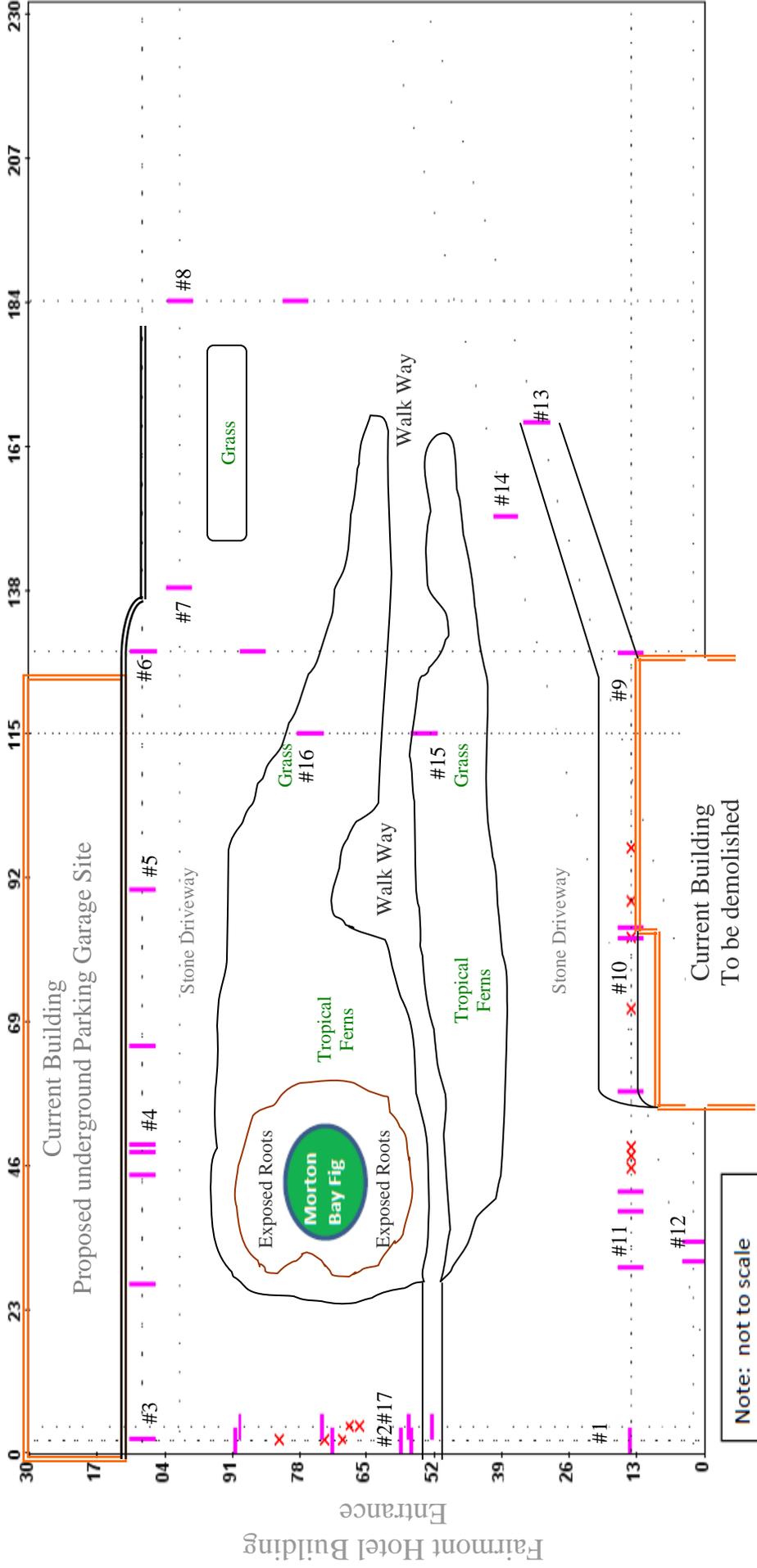
Top-Down View

All Roots Found Down to 55.5 inches in Depth



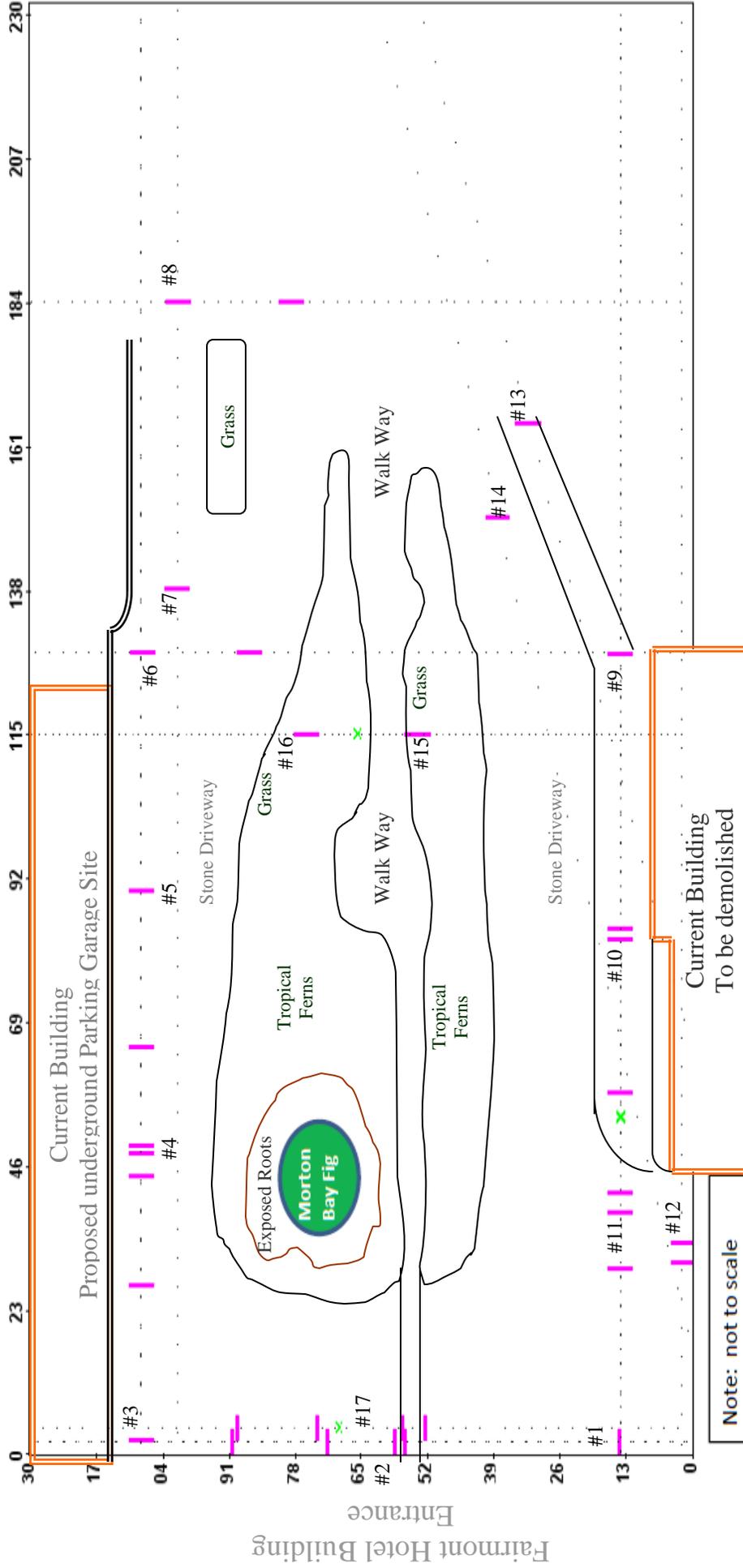
Top-Down View

All Roots Found from 0.0 to 8.0 inches in Depth



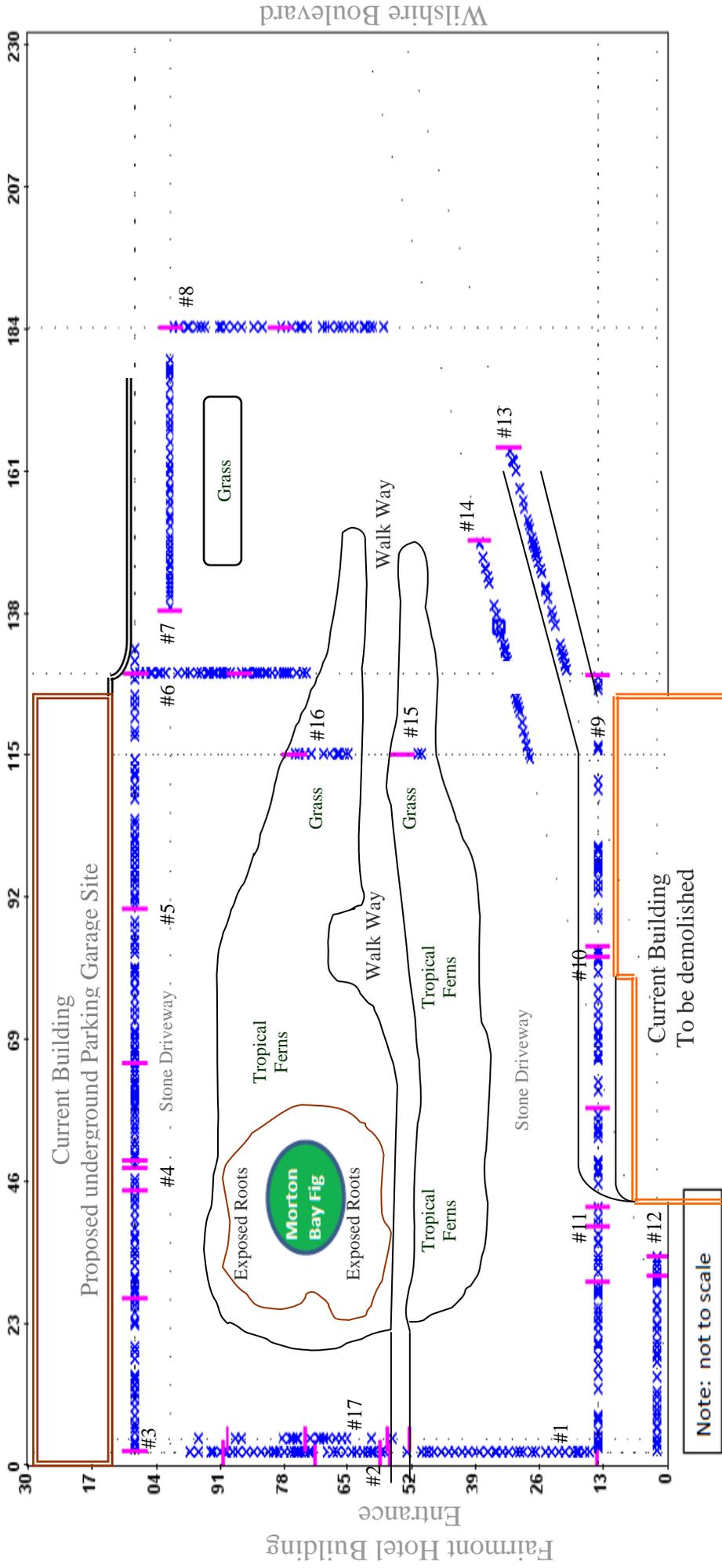
Top-Down View

All Roots Found from 8.0 – 16.0 inches in Depth



Top-Down View

All Roots Found from 16.0 – 55.5 inches in Depth



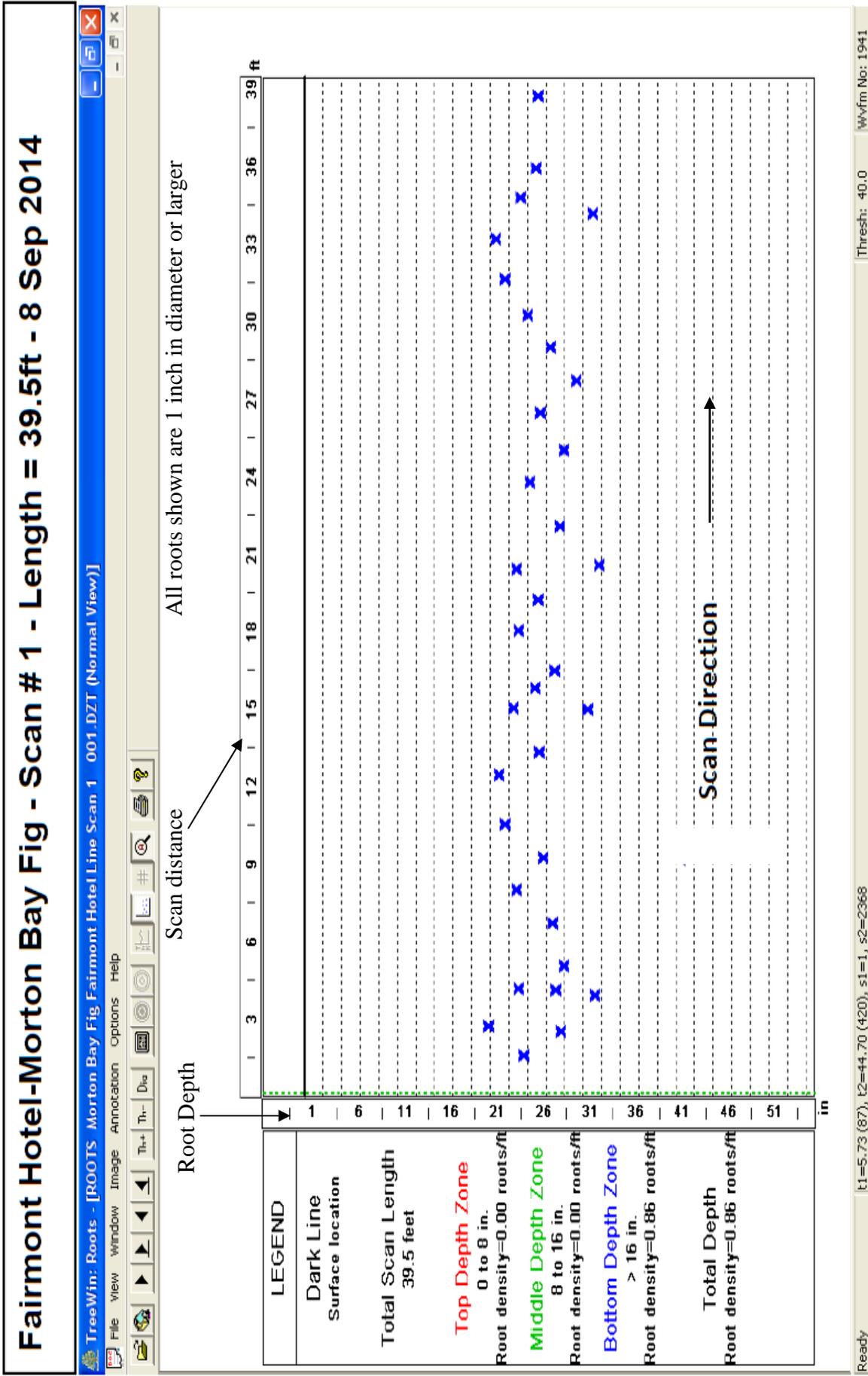
Analysis Results

Virtual Trench View

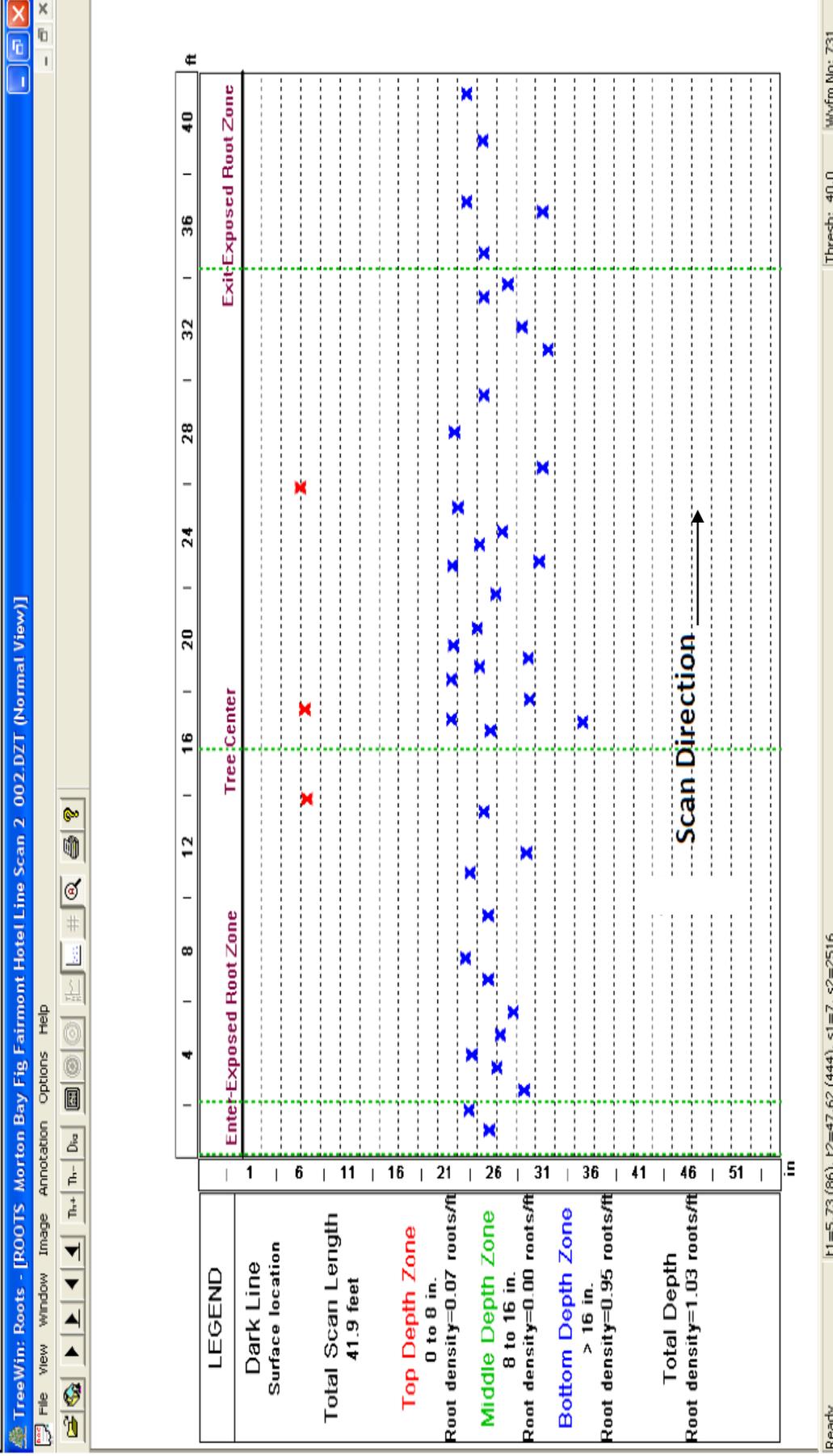
Another way of viewing the root data is as a virtual trench. The following panels represent each of the seventeen individual radar line scans from the site as if they were the walls of a trench. Think of this as if you were excavating a deep trench with a back-hoe. As you dig, tree roots will be encountered at various levels in the soil profile. After you have completed your trench, you then are able to walk down and stand in the bottom.

Looking up at the earthen wall, you are able to see the severed tree roots protruding from the soil at the various depths of your trench. As you look at the following 17 virtual trench scans, each x on the wall represents a severed root. Each colored x represents a different depth where the root is located.

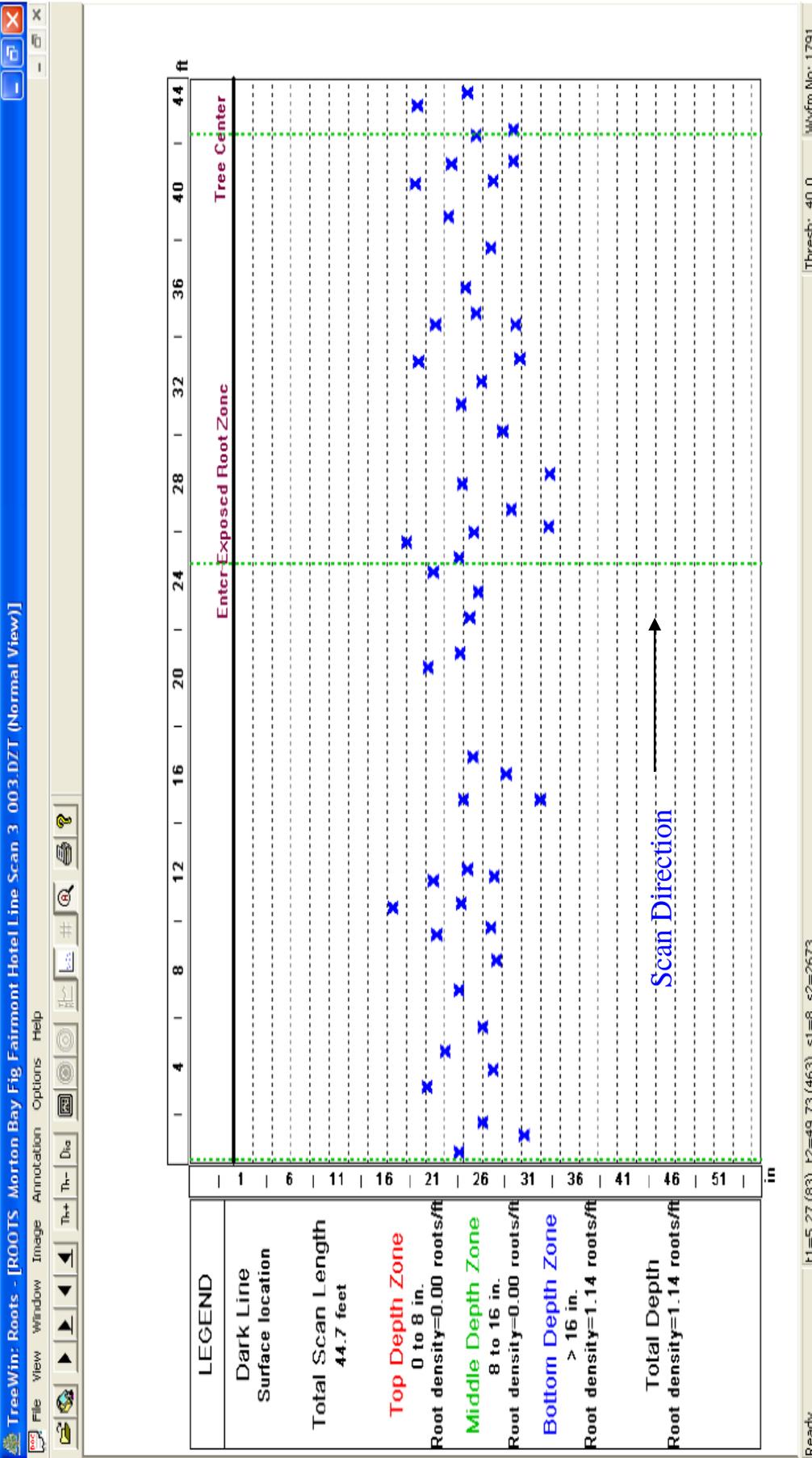
One advantage of the trench view over the top down view is that allows you to look at individual roots within their three represented depth zones to see the actual depth of each individual root.



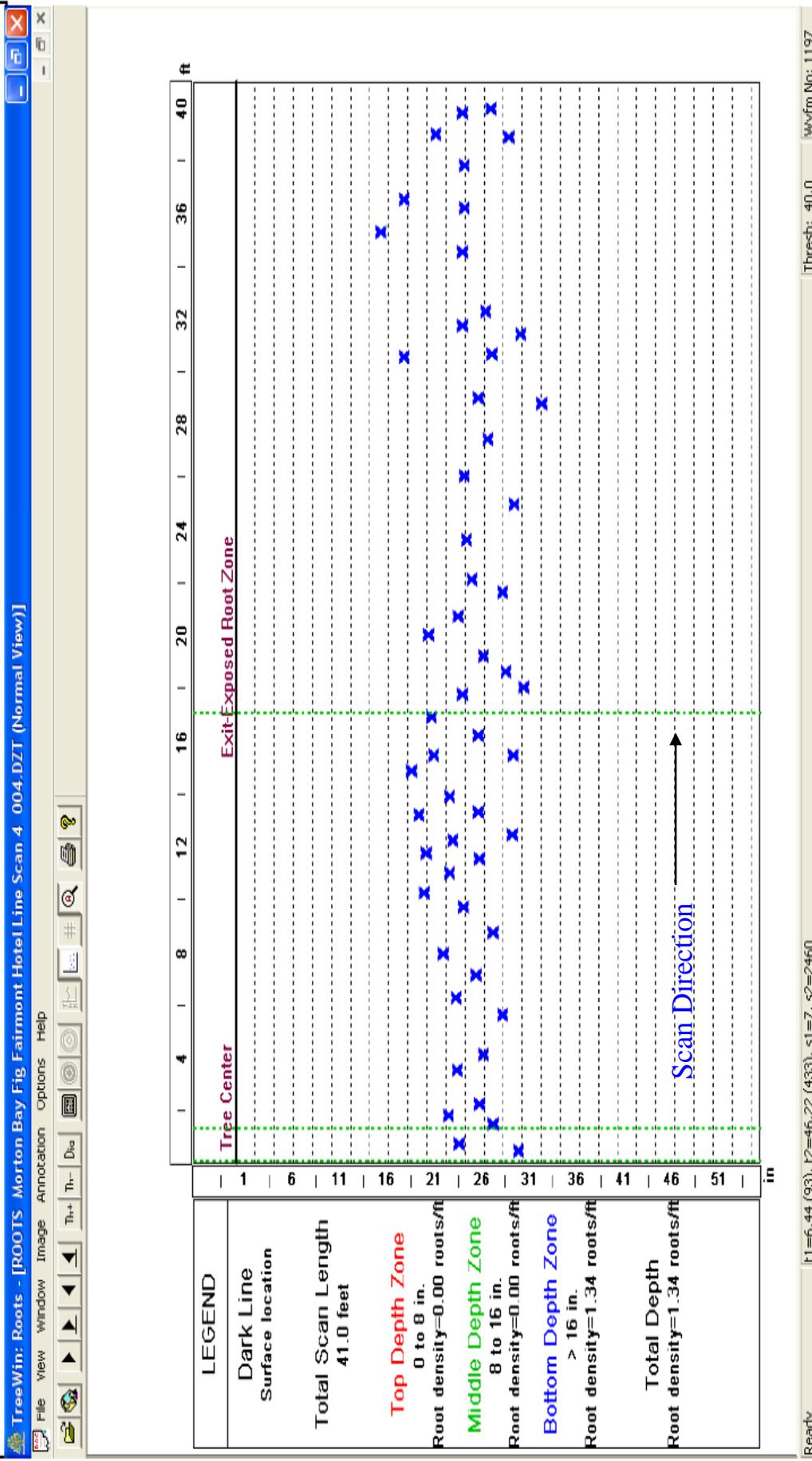
Fairmont Hotel-Morton Bay Fig - Scan # 2 - Length = 41.9ft - 8 Sep 2014



Fairmont Hotel-Morton Bay Fig - Scan # 3 - Length = 44.7ft - 8 Sep 2014



Fairmont Hotel-Morton Bay Fig - Scan # 4 - Length = 41.0ft - 8 Sep 2014

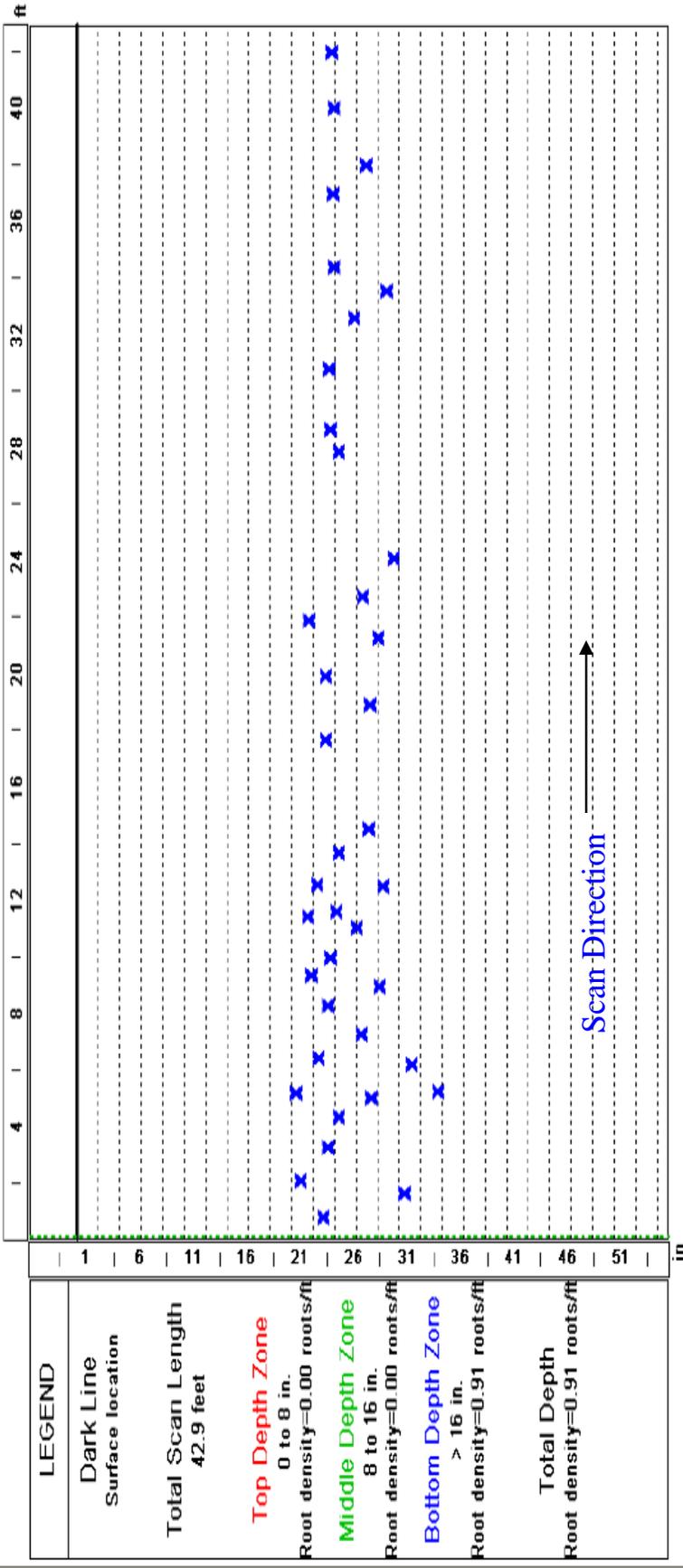


Fairmont Hotel-Morton Bay Fig - Scan # 5 - Length = 42.9ft - 8 Sep 2014

TreeWin: Roots - [ROOTS Morton Bay Fig Fairmont Hotel Line Scan 5 005.DZT (Normal View)]

File View Window Image Annotation Options Help

Th+ Th- Diew

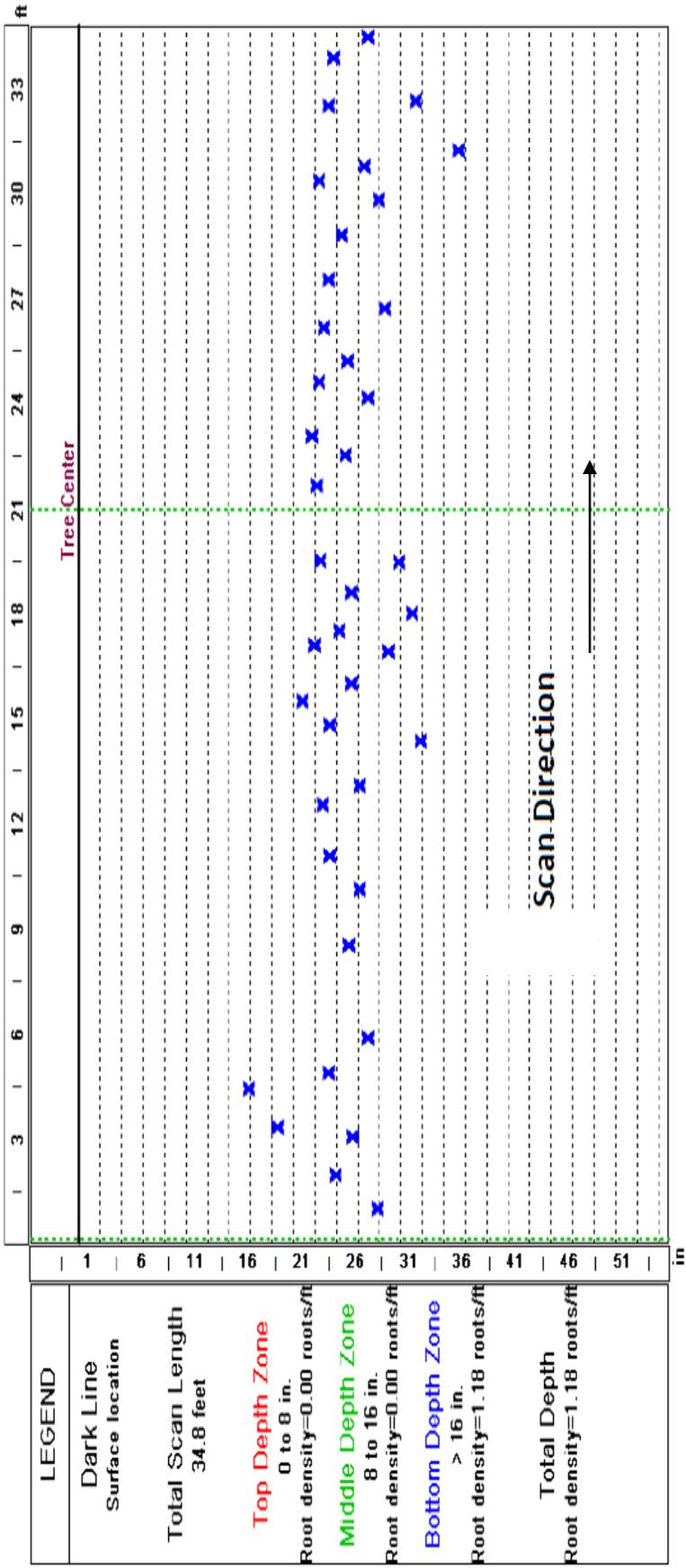


Ready t1=5.62 (85), t2=46.69 (436), s1=1, s2=2576

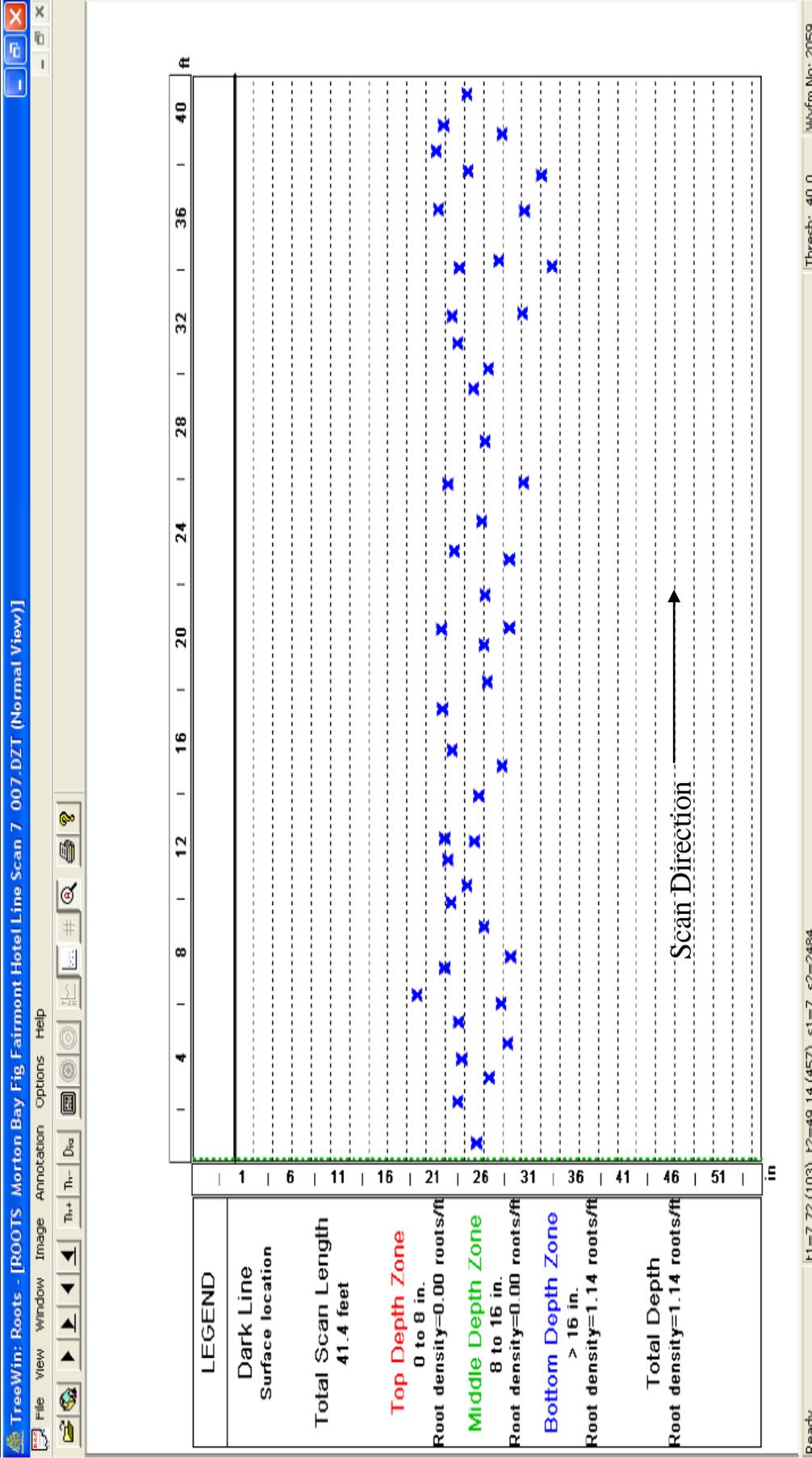
Thresh: 40.0 WwfM No: 1428

Fairmont Hotel-Morton Bay Fig - Scan # 6 - Length = 34.8ft - 8 Sep 2014

TreeWin: Roots - [ROOTS Morton Bay Fig Fairmont Hotel Line Scan 6 006.DZT (Normal View)]

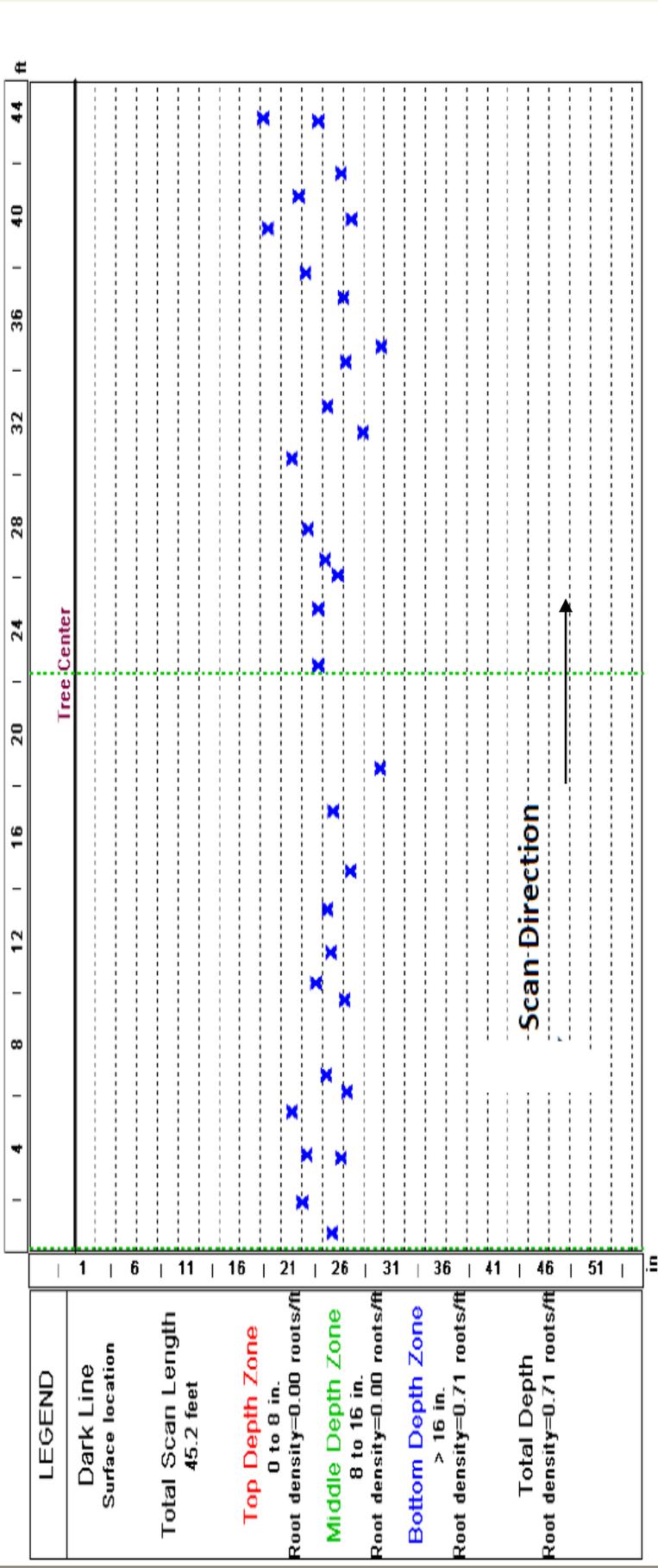


Fairmont Hotel-Morton Bay Fig - Scan # 7 - Length = 41.4ft - 8 Sep 2014



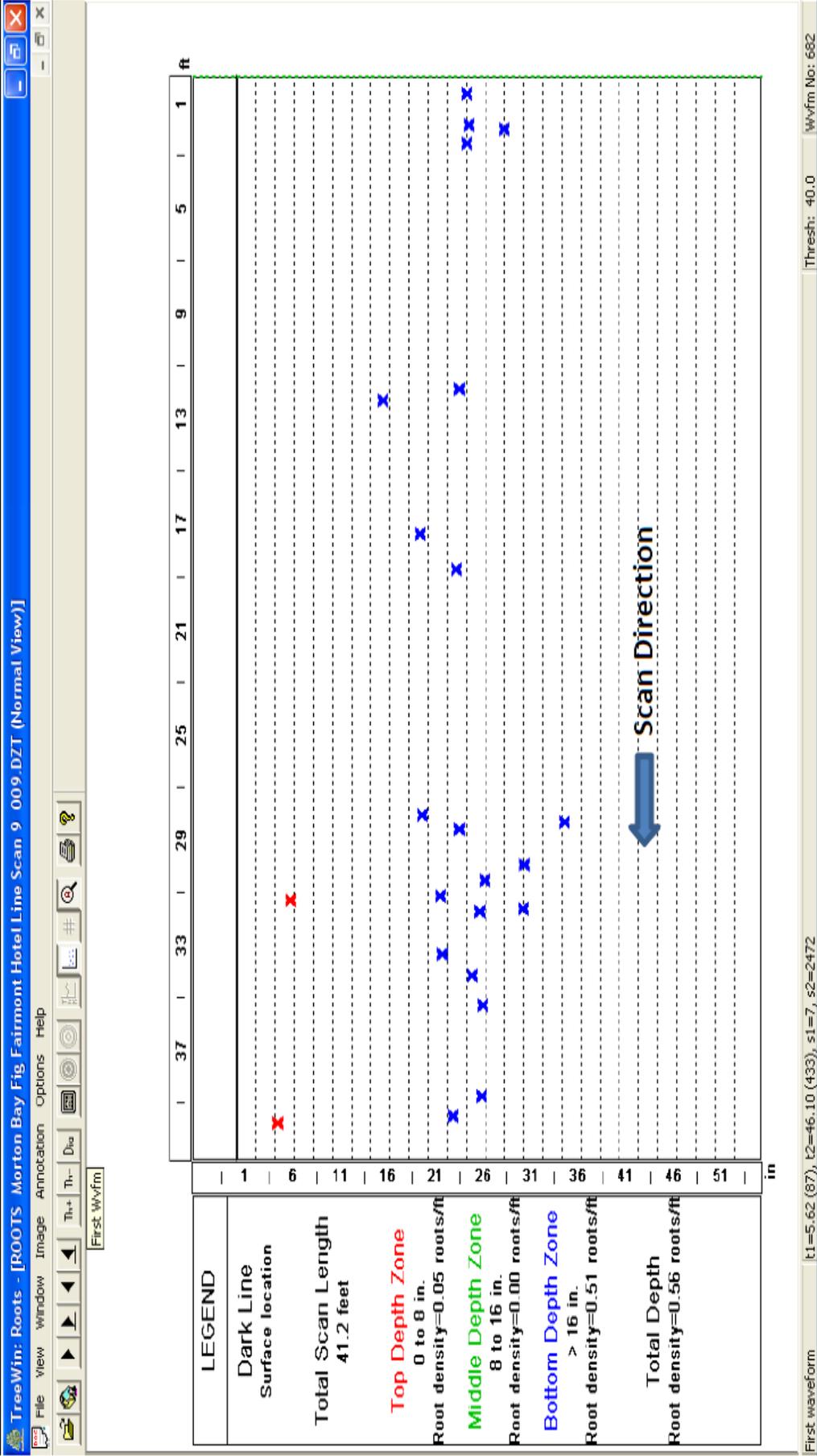
Fairmont Hotel-Morton Bay Fig - Scan # 8 - Length = 45.2ft - 8 Sep 2014

TreeWin: Roots - [ROOTS Morton Bay Fig Fairmont Hotel Line Scan 8 008.DZI (Normal View)]

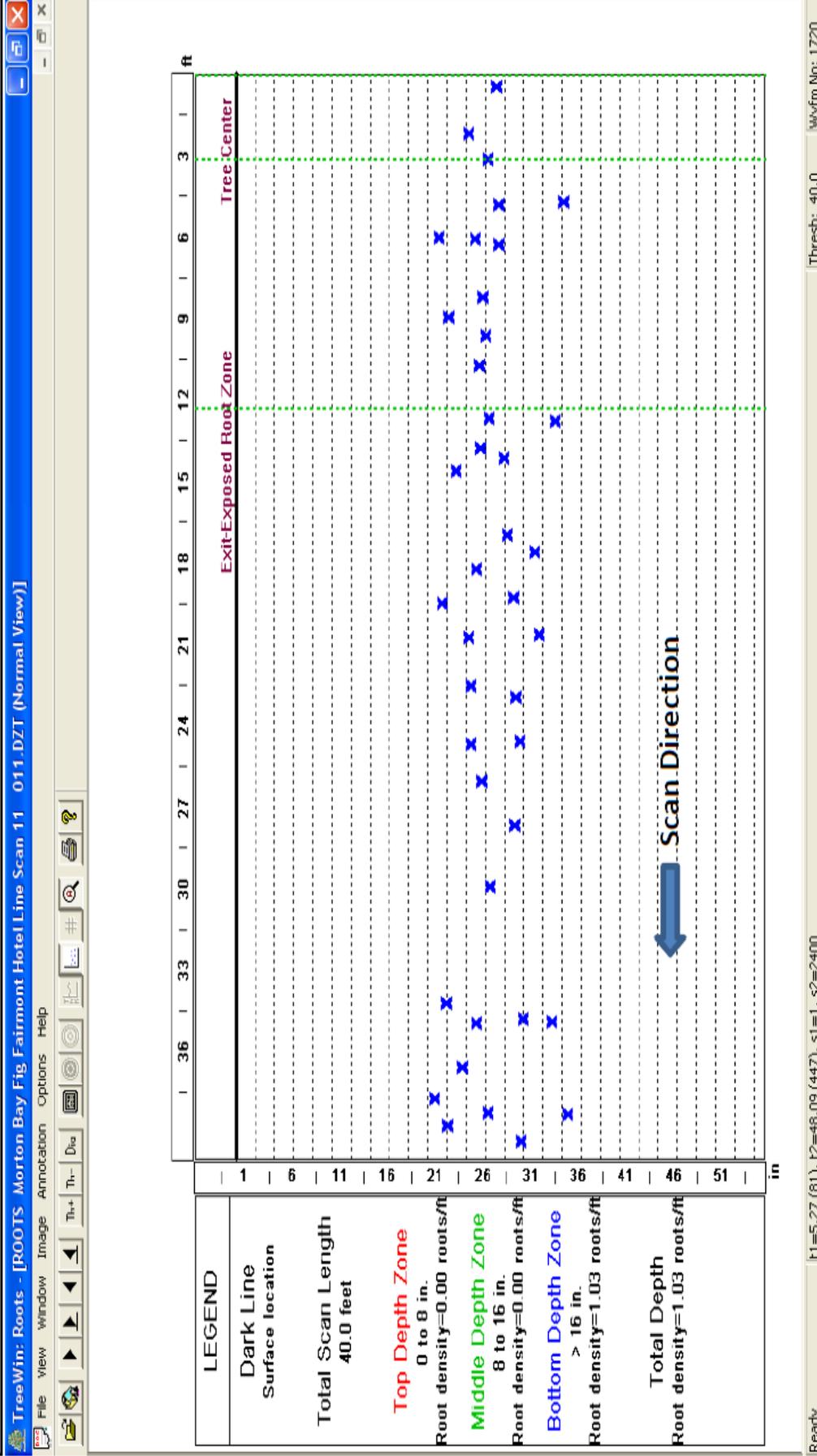


Ready | t1=6.08 (89), t2=48.56 (452), s1=11, s2=2712 | Thresh: 40.0 | Wvfm No: 915

Fairmont Hotel-Morton Bay Fig - Scan # 9 - Length = 41.2ft - 8 Sep 2014



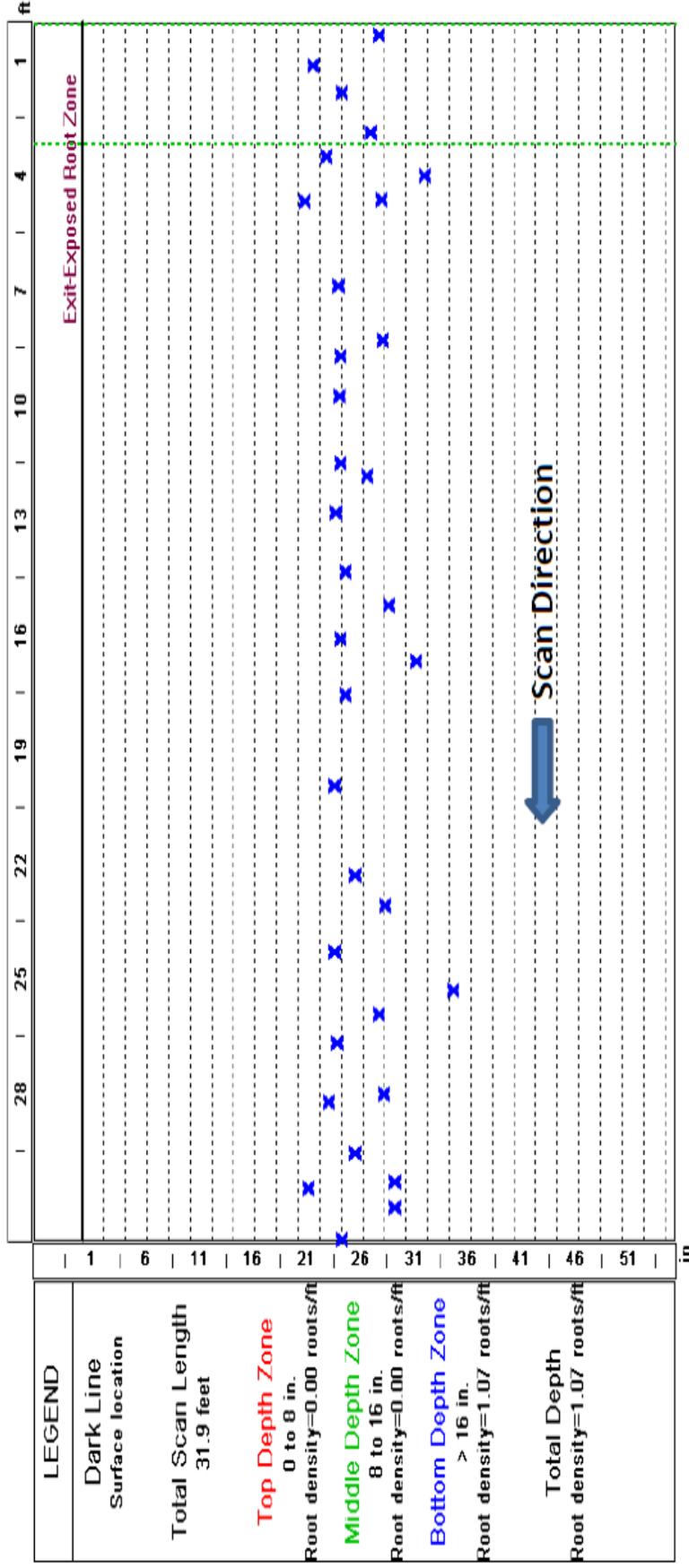
Fairmont Hotel-Morton Bay Fig - Scan # 11 - Length = 40.0ft - 8 Sep 2014



Fairmont Hotel-Morton Bay Fig - Scan # 12 - Length = 31.9ft - 8 Sep 2014

TreeWin: Roots - [ROOTS Morton Bay Fig Fairmont Hotel Line Scan 12 012.DZT (Normal View)]

File View Window Image Annotation Options Help



Ready | t1=4.91 (80), t2=48.44 (452), s1=1, s2=1912

Thresh: 40.0

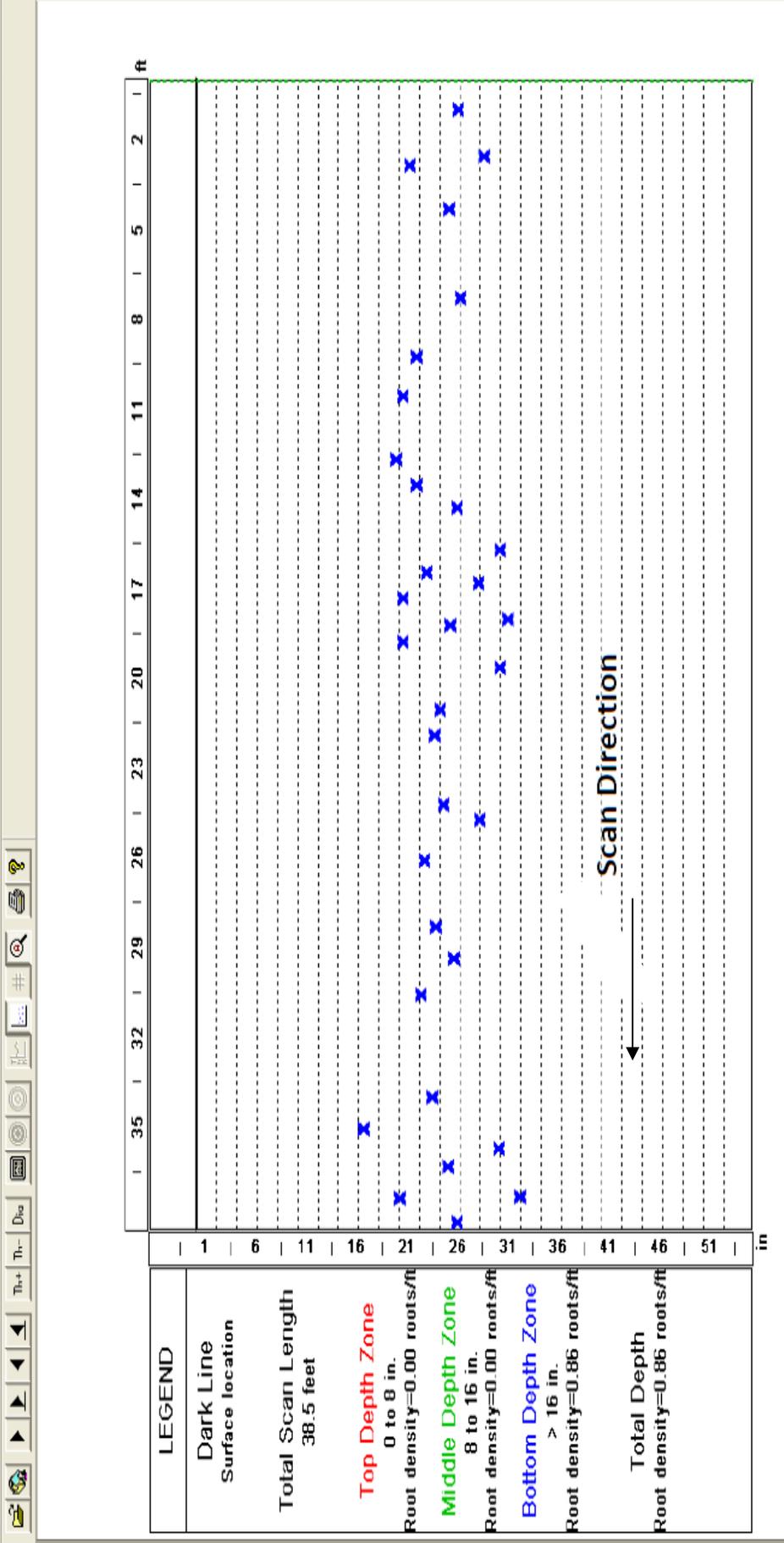
Wvfm No: 973

Fairmont Hotel-Morton Bay Fig - Scan # 13 - Length = 38.5ft - 8 Sep 2014

TreeWin: Roots - [ROOTS Morton Bay Fig Fairmont Hotel Line Scan 13 013-DZT (Normal View)]

File View Window Image Annotation Options Help

Th+ Th- Dca #

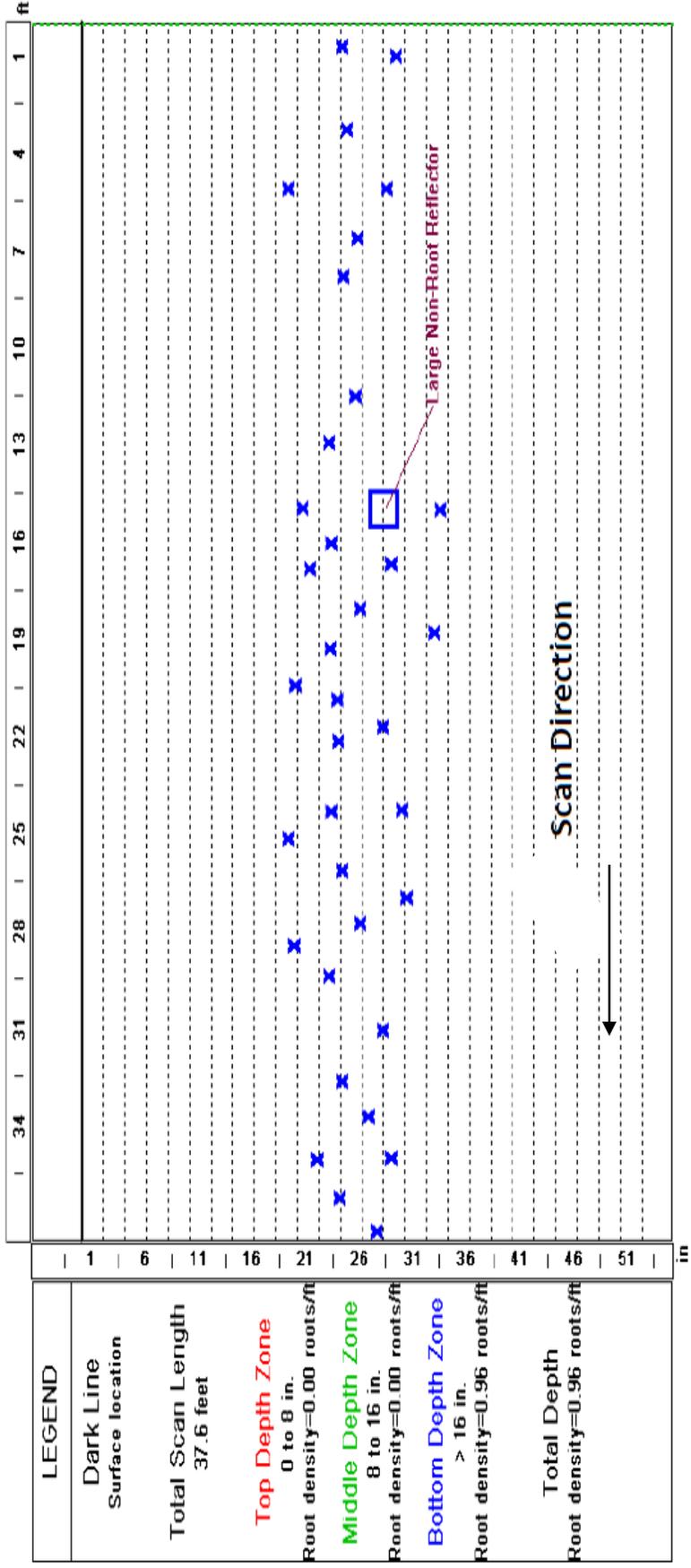


First waveform t1=7.25 (101), t2=47.74 (447), s1=1, s2=2308 Thresh: 40.0 Wvfm No: 1443

Fairmont Hotel-Morton Bay Fig - Scan # 14 - Length = 37.6ft - 8 Sep 2014

TreeWin: Roots - [ROOTS Morton Bay Fig Fairmont Hotel Line Scan 14 014.DZT (Normal View)]

File View Window Image Annotation Options Help

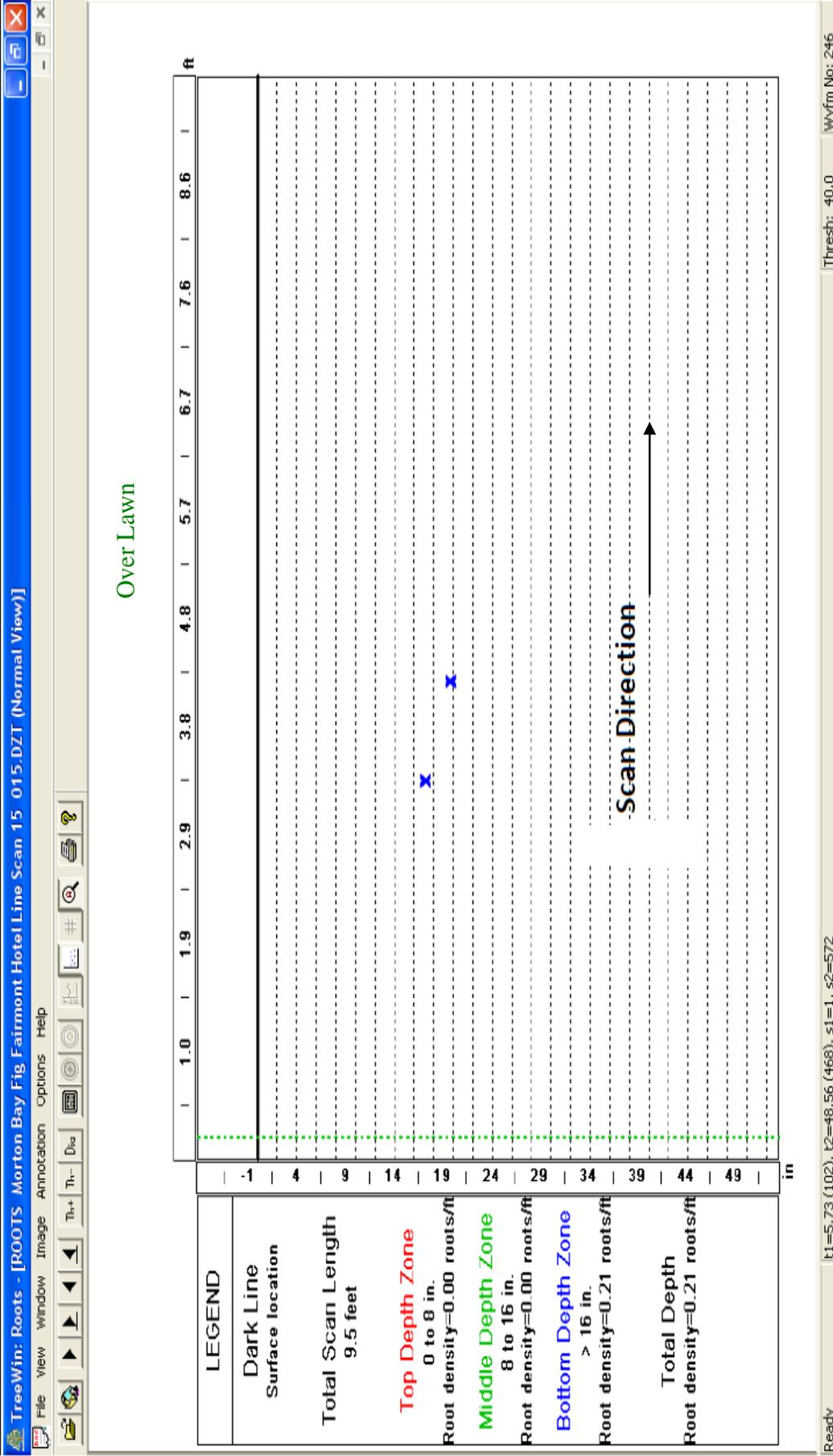


Ready | t1=9.95 (124), t2=44.11 (416), s1=1, s2=2256

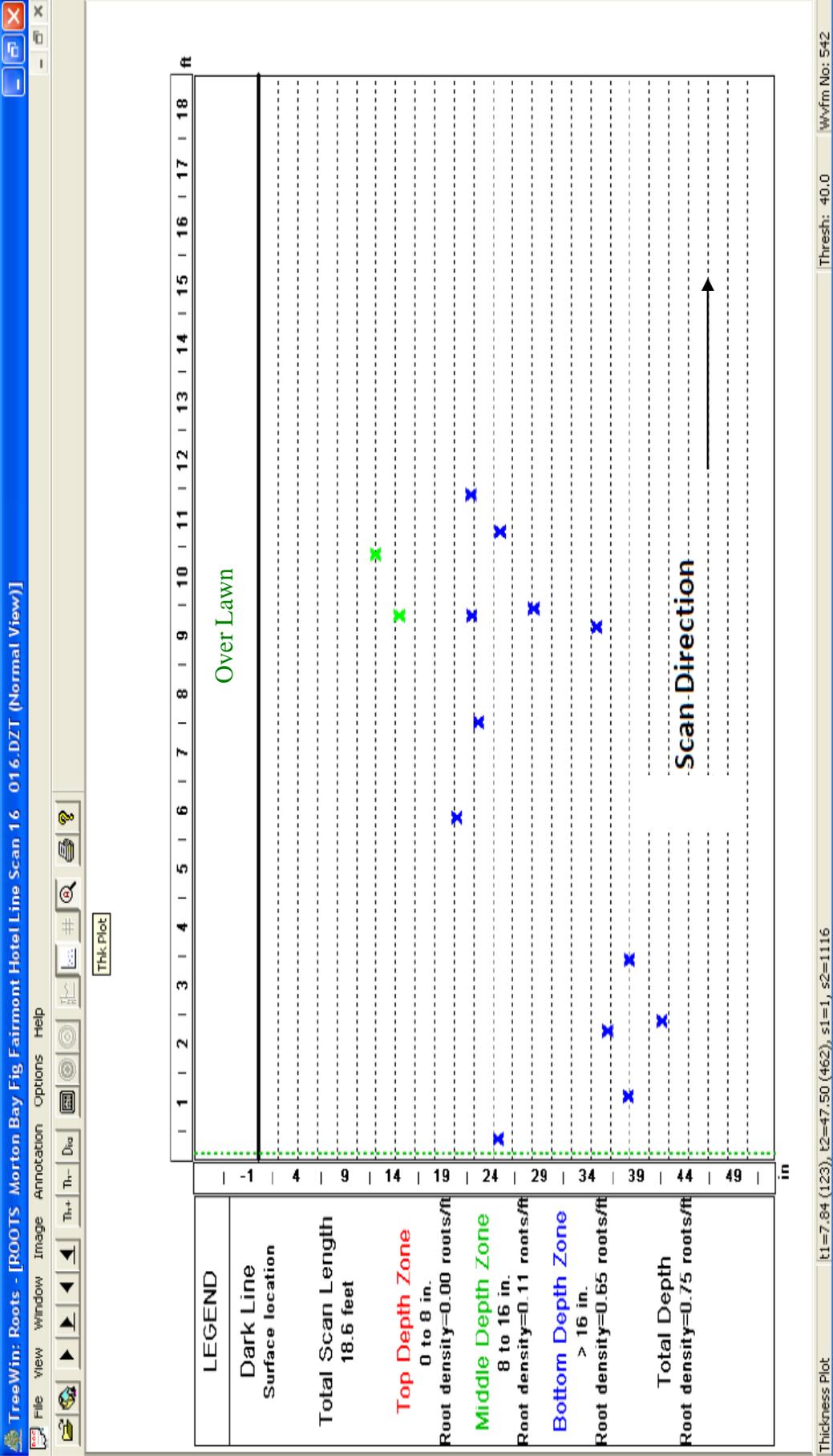
Thresh: 40.0

Wvfm No: 1617

Fairmont Hotel-Morton Bay Fig - Scan # 15 - Length = 9.5ft - 8 Sep 2014



Fairmont Hotel-Morton Bay Fig - Scan # 16 - Length = 18.6ft - 8 Sep 2014



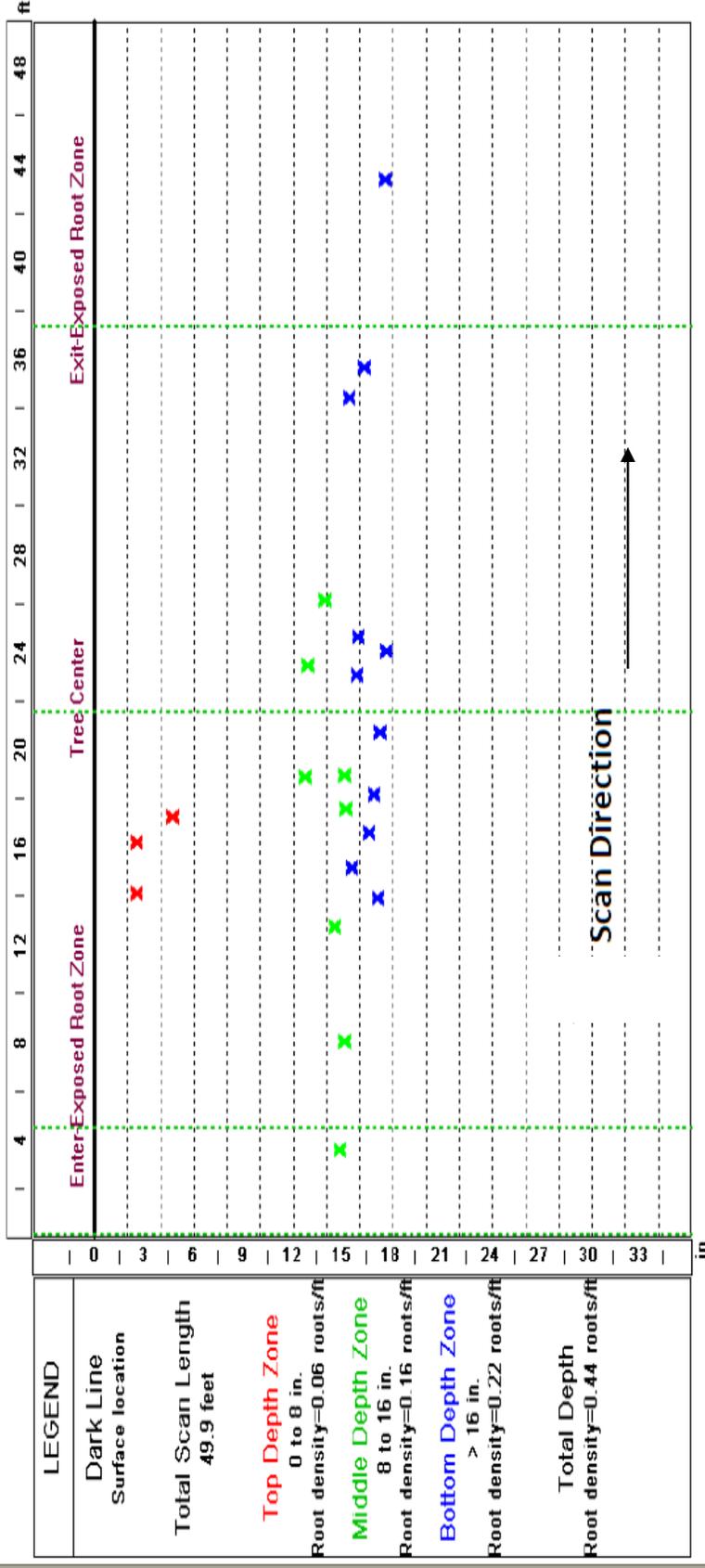
Fairmont Hotel-Morton Bay Fig - Scan # 17 - Length = 49.9ft - 8 Sep 2014

TreeWin: Roots - [ROOTS Morton Bay Fig Fairmont Hotel Line Scan 17 017.DZT (Normal View)]

File View Window Image Annotation Options Help

Th+ Th- Dia # ?

All roots shown are 1/4 inch or larger



October 9, 2014

Fairmont Miramar Hotel - Moreton Bay Fig Root Mapping

Santa Monica, California

Appendix A



Appendix B



TreeRadar / Arborist OnSite Disclaimer

1. Use at Customer's Risk. TreeRadar and Arborist OnSite endeavors to use equipment that generates useful information and, when provided, to prepare reports that will reflect its best judgment in light of the facts as it knows them, provided that you comply with all of your obligations to TreeRadar, but TreeRadar or Arborist OnSite does not guarantee the outcome of its efforts or the structural integrity of any tree. Any report prepared by TreeRadar or Arborist OnSite is used strictly at your sole risk. TreeRadar is not a certified arborist facility and its personnel are not certified arborists, and you are solely responsible for engaging the services of a certified arborist in interpreting any report or other information provided by TreeRadar.

2. Disclaimer of Warranties. You expressly understand and agree that:

(a) YOUR USE OF TREERADAR OR ARBORIST ONSITE'S SERVICES ARE AT YOUR RISK. SUCH SERVICES ARE PROVIDED ON AN "AS IS" AND "AS AVAILABLE" BASIS. TREERADAR AND ARBORIST ONSITE EXPRESSLY DISCLAIMS ALL WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. TREERADAR AND ARBORIST ONSITE MAKES NO WARRANTY THAT THE EQUIPMENT WILL BE ERROR-FREE OR THE RESULTS OBTAINED FROM THE USE OF THE EQUIPMENT WILL BE RELIABLE.

(b) TREERADAR OR ARBORIST ONSITE SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, INCLUDING BUT NOT LIMITED TO DAMAGES FOR GOODWILL, INJURY TO BODY OR PROPERTY, DEATH OR OTHER LOSSES (EVEN IF TREERADAR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES) RESULTING FROM USE OF OR RELIANCE UPON TREERADAR'S SERVICES.

Limitation of Damages. Notwithstanding the above, TreeRadar and Arborist OnSite total liability for any damages shall be limited to the total fees paid by you to Arborist OnSite for services over the preceding six (6) months. This is a comprehensive limitation of liability that applies to all damages of any kind, including (without limitation) compensatory, direct, indirect or consequential damages, loss of data, income or profit, loss of or damage to property and claims of third parties.

Exclusions and Limitations. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF CERTAIN WARRANTIES OR THE LIMITATION OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. ACCORDINGLY, SOME OF THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

Dispute Resolution. These terms shall be governed by and construed in accordance with the laws of the State of California, excluding its choice of law provisions. You agree that any dispute between you and TreeRadar or Arborist OnSite hereunder (other than as to payment of amounts owed) shall be submitted for binding arbitration before the American Arbitration Association conducted in accordance with its commercial dispute resolution rules in the State of California., with the arbitrator's decision to be enforceable in any court of competent jurisdiction. Each party shall bear its own legal and other fees and expenses.

Assumptions and Limiting Conditions

1. Any legal description provided to the appraiser or consultant is assumed to be correct. No responsibility is assumed for matters legal in character nor is any opinion rendered as to the quality of any title.
2. The appraiser or consultant can neither guarantee nor be responsible for accuracy of information provided by others, information not provided or disclosed.
3. The appraiser or consultant shall not be required to give testimony or to attend court by reason of this appraisal or consultation/reports unless subsequent written arrangements are made, including payment of an additional fee for services.
4. Loss or removal of any part of this report invalidates the entire appraisal or report/evaluation.
5. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the persons(s) to whom it is addressed without written consent of this appraiser or consultant.
6. This report and the values expressed herein represent the opinion of the appraiser or consultant, and the appraiser's or consultants fee is in no way contingent upon the reporting of a specified value nor upon any finding to be reported.
7. Sketches, diagrams, graphs, photos, ect., in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering reports or surveys.
8. This report has been made in conformity with acceptable appraisal/evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.
9. No tree described in this report was climbed, unless otherwise stated. Arborist OnSite® cannot assume responsibility for any defects which could only have been discovered by climbing. A full root collar or root crown inspection, consisting of excavating the soil around the tree to uncover hidden defects or disease involving the root collar and major buttress roots, was not performed, unless otherwise stated. Arborist OnSite® cannot accept responsibility for any root defects which could only have been discovered by such an inspection.

Consulting Arborist 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 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 medicine, cannot be guaranteed. 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 all trees.

Certification of Performance

I, Robert Booty, certify:

- That I have personally inspected the tree(s) and/or the property referred to in this report, and have stated my findings accurately. The extent of the evaluation and or appraisal is stated in the attached report and the terms and conditions;
- That I have no current interest in the vegetation or the property that is the subject of this report, and I have no personal interest or bias with respect to the parties involved;
- That the analysis, opinions and conclusions stated herein are my own, and are based on current scientific procedures and facts;
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party, nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events;
- That my analysis, opinions, and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices;
- That no one provided significant professional assistance to the consultant, except as indicated within the report.

I further certify that I am a Registered Member of the American Society of Consulting Arborists, and I am an International Society of Arboriculture Certified Arborist. I have been involved in the practice of arboriculture and the care and study of trees for over 45 years.

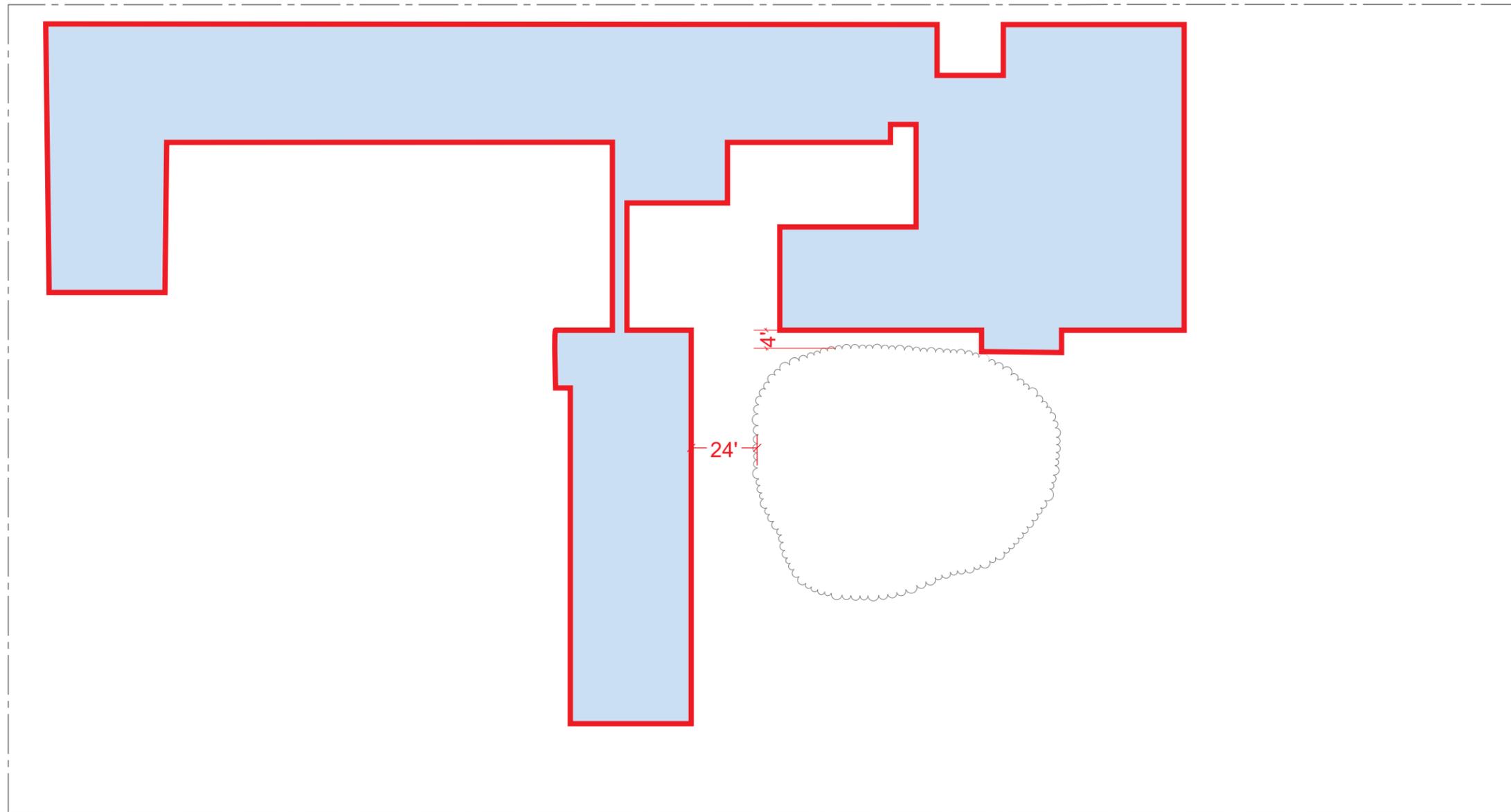
Signed: _____

Date: October 18, 2014

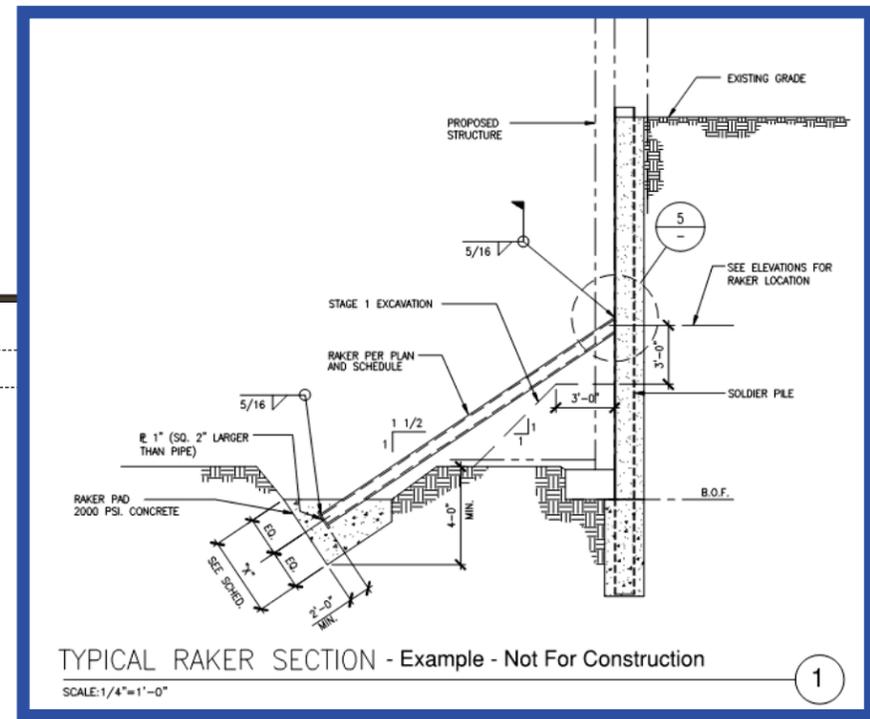
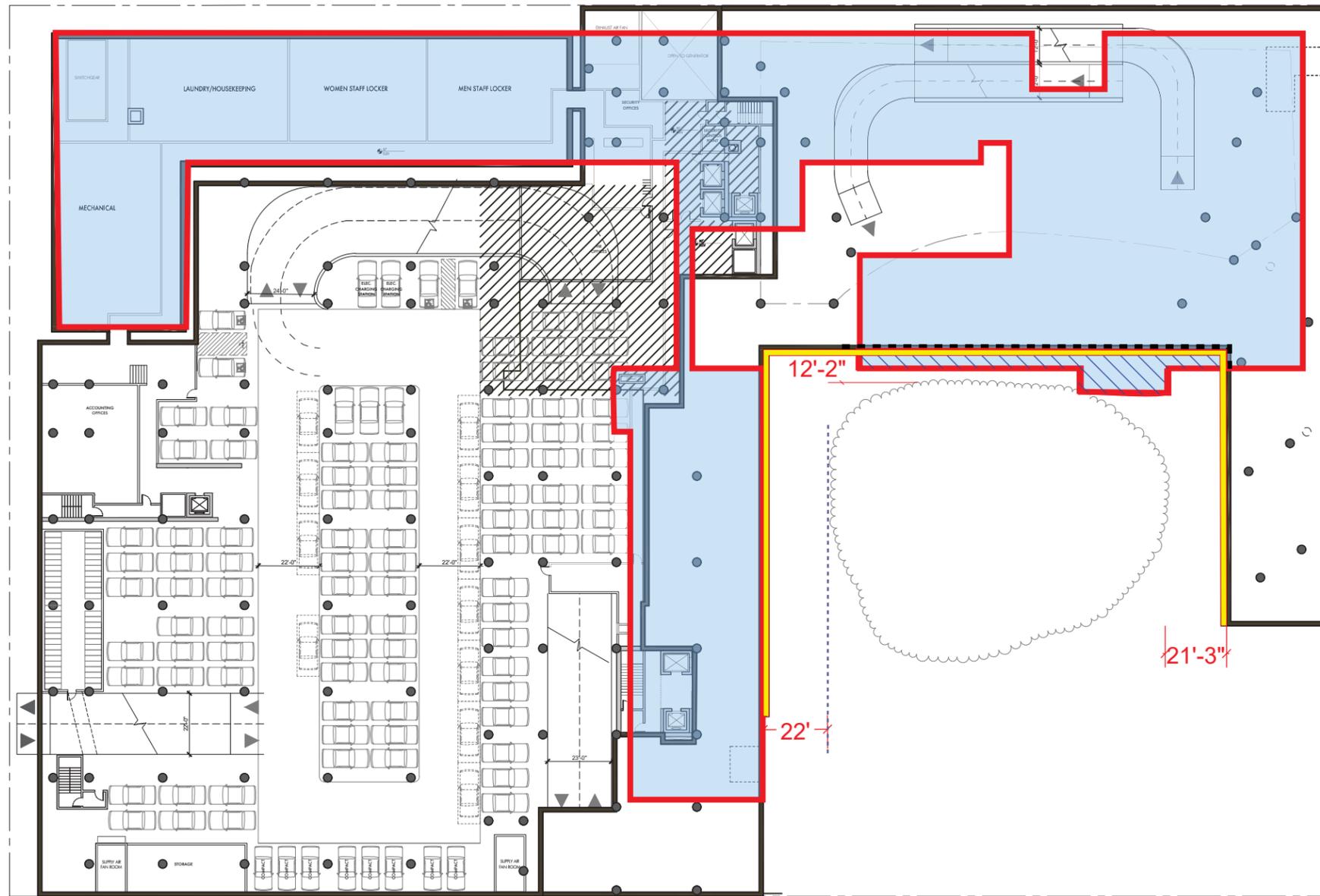
ATTACHMENT B:
TREE PROTECTION OVERLAY DIAGRAMS

**MIRAMAR SANTA MONICA
CONFORMANCE REPORT UPDATE**

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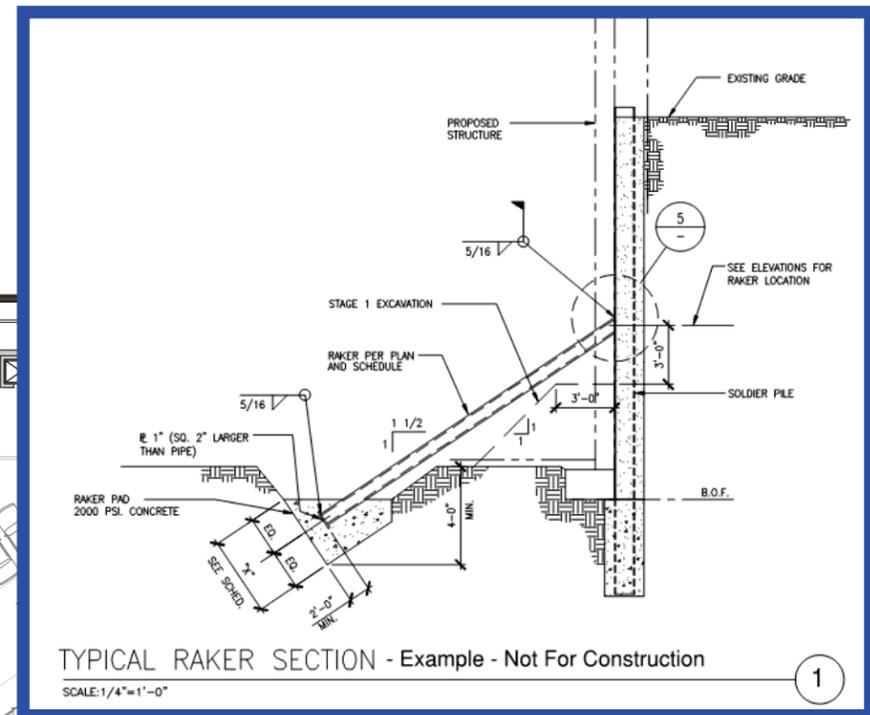
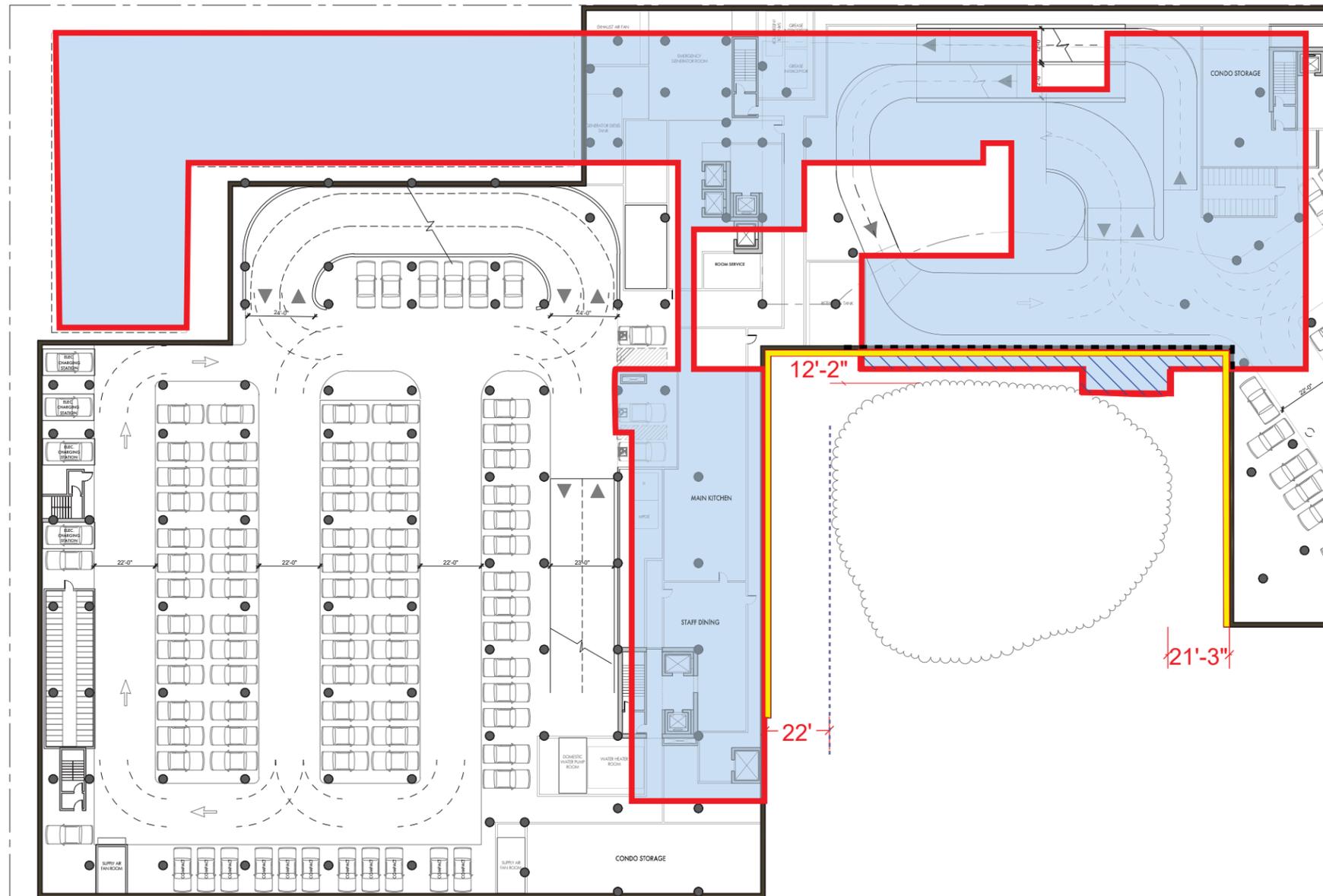
EXISTING BUILDING



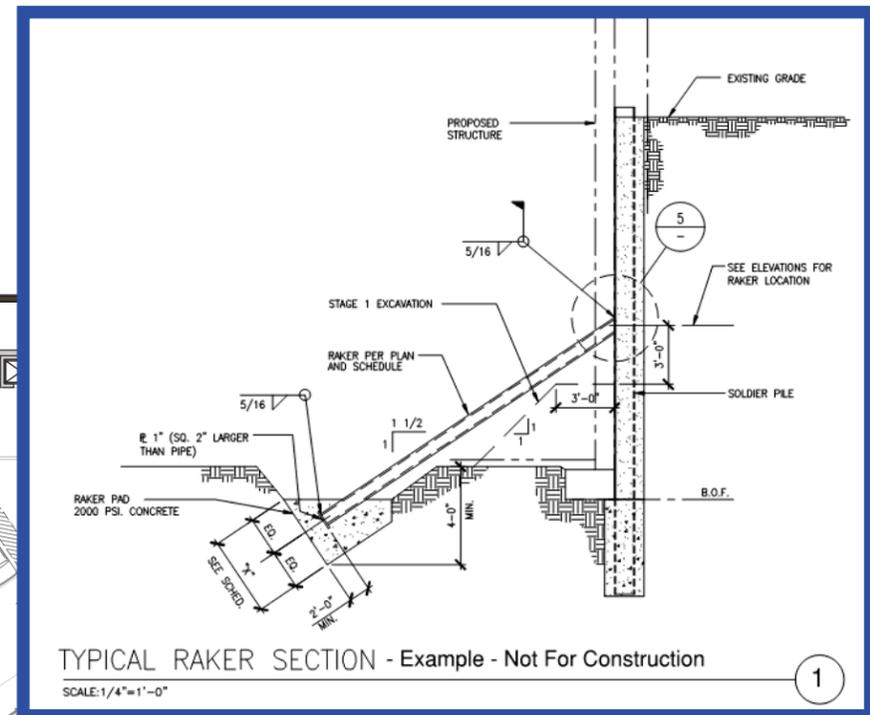
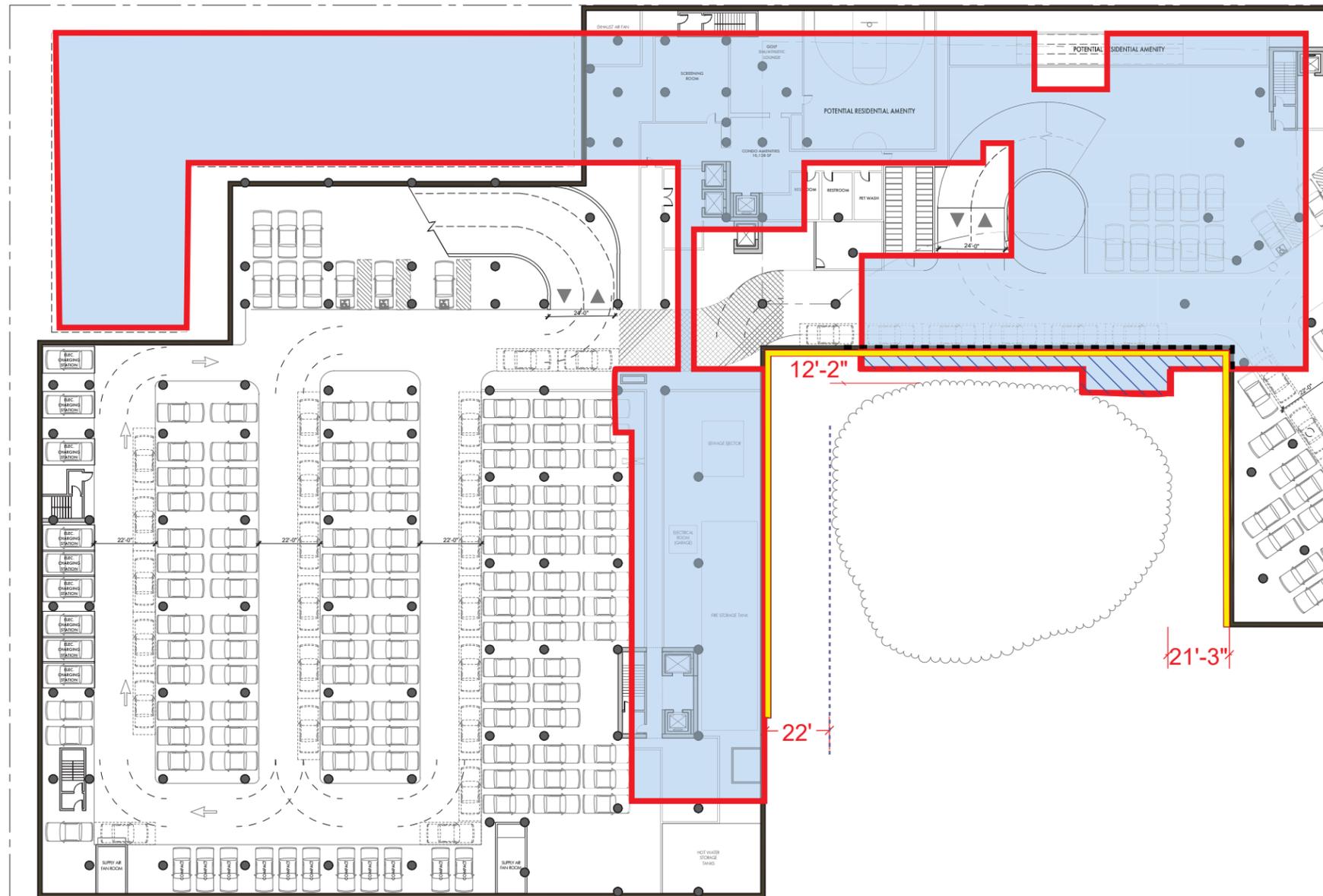
- Morley Builders Construction Notes:**
1. At all areas of temporary below grade shoring adjacent to the Fig tree, internal braces will be used (per detail 1) in lieu of tie-backs under the tree to avoid damage to the roots or undermining the soil.
 2. Due to the close proximity of the fig tree, the existing below grade wall to the East of fig tree will be left in place to minimize disruption to the tree.
 3. Drill rigs used to install below grade shoring system will be held out of tree protection zone.
 4. Throughout construction of the project, Morley will implement and monitor all construction protection and mitigation measures in accordance with section 7 of Brightview Protection, Preservation and Maintenance program dated 2.26.18.
 5. Throughout construction of the project, access shall be provided to the tree for ongoing maintenance and inspections of the tree in accordance with Brightview Protection, Preservation and Maintenance program dated 2.26.18.
 6. Throughout construction of the project, Morley will implement tree protection training program to all employees working around the tree in accordance with section 8 of Brightview Protection, Preservation and Maintenance program dated 2.26.18.

-  EXISTING BUILDING
-  PORTION OF EXISTING BUILDING TO REMAIN TO AVOID DISTURBANCE TO THE ROOTZONE
-  2' SHORING WALLS* WITH INTERNAL BRACING IN LIEU OF TIE BACKS PER DETAIL 1

*DISTANCE IS DECREASED TO DRIP LINE ON FOLLOWING WALLS FOR SHORING:
 NORTH: 22'-0" TO 20'-0"
 EAST: 12'-2" TO 10'-2"
 SOUTH: 21'-3" TO 19'-3"



- Morley Builders Construction Notes:**
1. At all areas of temporary below grade shoring adjacent to the Fig tree, internal braces will be used (per detail 1) in lieu of tie-backs under the tree to avoid damage to the roots or undermining the soil.
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- EXISTING BUILDING
- PORTION OF EXISTING BUILDING TO REMAIN TO AVOID DISTURBANCE TO THE ROOTZONE
- 2' SHORING WALLS* WITH INTERNAL BRACING IN LIEU OF TIE BACKS PER DETAIL 1

*DISTANCE IS DECREASED TO DRIP LINE ON FOLLOWING WALLS FOR SHORING:
 NORTH: 22'-0" TO 20'-0"
 EAST: 12'-2" TO 10'-2"
 SOUTH: 21'-3" TO 19'-3"