

# Exhibit A

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# Robert Joyce

## Architecture & Landscape Design

September 19, 2016

Martha Diehl, Chair  
Monterey County Planning Commission  
168 West Alisal Street, 2nd Floor  
Salinas, CA 93901

Re: 3196 17 Mile Drive - Existing Cypress Tree Assessment / Proposed Plan

### PROJECT LOCATION AND BACKGROUND

3196 17 Mile Drive is located at the center of the Del Monte Grove coastline, just 4 lots above the Lone Cypress. The current 10,895 sf house and site were developed in the early 90's under an earlier version of LUP Policy 20. Several large Cypress are within 1' to 4' of house foundation. Many large Cypress trees are under significant hardscape coverage.

In 2013, the current owner purchased the property and, after reviewing reports on the house condition, decided to consider a plan to demolish the existing house and build a new house on the existing footprint. The owner asked us to prepare plans for a home of comparable size ( 10,195 sf ). The proposed house requires no tree removal, very minimal grading and removes over 2,700 sf of irrigated garden area and 1,500 sf of hardscape. The design proposes to reuse existing foundations for most of the new construction.

At the time of our first meeting, the owner pointed out that in the three years since he had bought the property, several of the larger Cypress trees close to the house and driveway had lost multiple large branches, which concerned him. As a part of the new house design he wanted us to review, and if possible improve, the conditions of these Cypress trees.

## POLICY 20 - REVIEW EXISTING AND PROPOSED DEVELOPMENT IMPACT ON CYPRESS TREES

As part of the design process, we reviewed policies of the Del Monte Forest Land Use Plan and the ESHA policies applicable to this area of the Del Monte Forest. We are designing to the limits set forth in the 2012 LUP Policy 20 and want to get feedback from the Planning Commission on the project configuration in general, and in particular, concerning 4 large Cypress trees close to the existing house. The LUP 2012 Policy 20 clearly states its purpose as follows: “all use and development in or adjacent to indigenous Monterey cypress habitat areas shall be compatible with the objective of protecting this environmentally sensitive coastal resource.” Three basic tenets are included regarding new development referred to as “improvements”:

- 1 First in general, that “all improvements shall be carefully sited and designed to avoid any potential damage or degradation of Monterey cypress habitat, including the microhabitat of individual cypress trees”....
- 2 .....”and must be located within existing hardscaped areas”.....
- 3 ....”and ( must be located within existing hardscaped areas and ) outside of the drip line of individual cypress trees.”

Given all three of the above design directives, we are seeking direction from the Planning Commission for our work at the 3196 site and how to respond to, or balance, staying within the existing hardscape footprint (directive #2), while at the same time staying outside of the existing Cypress dripline (directive #3 ). For example, our site assessment determined that over 65% of the existing hardscape footprint is under the dripline of 5 to 7 mature Cypress trees. In the specific case of 4 large Cypress trees analyzed by the project forester, the driplines are covered by between 45% to 75% built or paved surfaces. These same Cypress trees are located as near as 1 to 4 feet from the existing building mass (see pages A 2 – A 3.2) These specific trees are also visibly showing signs of stress with an atypical, large branch splintering and drop pattern from the Cypress’ upper story canopy (see page A1 for photos and forester’s report by Ralph Osterling, attached ).

The challenge is how best to respond to these 4 declining trees within the directions of Policy 20. One possibility is to carefully remove and relocate small areas of existing hardscape and reconfigure any new development in a way that clearly improves the quantity and quality of the both the dripline and the root zone for these key Cypress trees and others. This approach attempts to better respond to the Policy 20 objective of protecting this environmentally sensitive resource and attempts to strike a balance between the development challenges of all 3 tenets stated in the Policy 20: 1) not harm cypress, 2) locate within existing hardscape and 3) locate outside of dripline of existing Cypress trees ( with top priority given to item #3 Cypress dripline area ). The second possibility of siting the home anywhere within the existing hardscape footprint, including within dripline areas, while meeting code, would in the Forester's opinion, result in continued decline and long term loss of several large Cypress.



### 3196 DEVELOPMENT STRATEGY / CYPRESS TREE CASE STUDY

This process for our team working on 3196 required a careful case by case, Cypress by Cypress, review to direct the best development plan for the Cypress trees in question, while allowing for a house and drive of similar or smaller design to that which existed. We considered the merits of removing hardscape ( both building and drive ) from Cypress root zone areas when possible, and the impact of relocating small areas of this development to adjacent areas outside of the Cypress tree's drip line or root zone.

The current LUP Policy 20 refers to Cypress tree dripline as the limit of site development. For purposes of mapping our study ( see attached pages A 1 - A 4.2 ) consulting forester, Ralph Osterling, recommended a 1" trunk to 1.2' root zone diameter ratio. He suggested that this ratio generates a root zone area that routinely exceeds dripline area by 10 to 20%, and that for any site development analysis this would provide a more conservative limit of new construction.

In our proposed house development plan the total amount of hardscape is reduced by nearly 1,500sf. More importantly, only 29% of this proposed hardscape footprint is under the drip line of key Cypress trees as opposed to 65% of the existing hardscape footprint that is currently under the Cypress drip line. This is to say that the proposed plan removes and additional 3,000 sf of hardscape from areas that currently cover Cypress root zone. This was done through a design concept that breaks the existing house single building mass into a more village like composition with several garden courtyards, and replacing a very grand existing entry gate and drive with a simple 13' porous gravel drive. Hardscape treatments include paving using Flagstones on sand with planting between are used throughout to allow air and moisture penetration.

In the attached highlighted images ( pages A1 – A3.2 ) we have looked carefully at how to best improve the conditions of 4 large Cypress at the 3196 site. The design reduces the root zone coverage of a 60" Cypress from 45% to 1% and reduces the root zone coverage of a 26" Cypress from 75% to 16%. It is the firm belief of Ralph Osterling, consulting forester, that given this hardscape correction, these trees' roots and feeder areas will benefit from the improved moisture and gas exchange for a healthy functioning root system, and, in the next 5 to 10 years, reverse their decline and thrive over time. Mr. Osterling also noted that the proposed lower, more open, building mass will promote the positive effects of ocean breezes and moisture moving through the site to Cypress trees east of the residence.

The proposed development plan at 3196 was in large part shaped to respond to and preserve the 4 largest trees closest to the existing hardscape building site. The owner's position is that these trees are the most visible part of the experience of the property surrounding the house and their long-term wellbeing is of great concern. The owner would like to develop the site in a way that provides a house of similar size to what they purchased, but would like to do it in a way that breaks up the building mass, creates garden courtyards around key Cypress and enhances the life of these Cypress trees and the larger habitat. It is our hope that the proposed plan, with its consideration for the wellbeing of key large Cypress trees and other Cypress sensitive measures, demonstrates a serious attempt to reconcile the 3 tenets of the current Policy 20 on a challenging site, with many aggressively nonconforming existing conditions.

In conclusion, given current site conditions, we are asking for direction from the Planning Commission on whether we must look exclusively to the existing hardscaped areas for future development, which could result in the long-term loss of Cypress trees discussed above, or if we can also incorporate the dripline criteria for a design that is more responsive to Cypress trees in question. We believe we have developed a design that responds to general and specific tenets of Del Monte Forest LUP Policy 20. Given the particulars of this site, the analysis presented supports a design approach to avoid degradation of Monterey cypress habitat by reducing impervious surfaces / hardscaped areas within the Cypress tree drip line, one directive in Policy 20. It is our hope that in prioritizing the dripline requirements for the 4 large Cypress at 3196, we are better responding to LUP ESHA Key Policy - to maintain and enhance sensitive cypress habitat and individual Cypress trees.

We look forward to this opportunity to meet with the Planning Commission and conduct an initial screening of policy consistency concerning native cypress habitat.

Sincerely,

Robert Joyce

## Exhibit B

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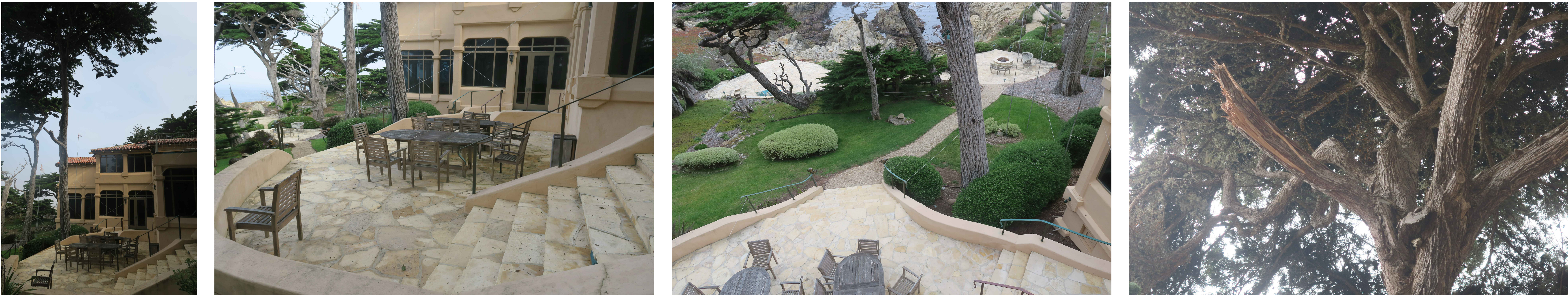
EVALUATION OF KEY CYPRESS TREE DETERIORATING CONDITIONS



60 " CYPRESS AT EXISTING DRIVEWAY ENTRANCE - EXISTING ROOT ZONE 45 % IMPERMEABLE



26 " CYPRESS AT EXISTING HOUSE ENTRY - EXISTING ROOT ZONE 76 % IMPERMEABLE



36 " & 44 " CYPRESS AT OCEANSIDE OF EXISTING HOUSE - EXISTING ROOT ZONES 52 % AND 36 % IMPERMEABLE

LIST OF DRAWINGS

A 1.0	COVER SHEET - CYPRESS TREES PHOTOS
A 2.0	EXISTING HOUSE PLAN - IMPERMEABLE SURFACES AND CYPRESS DRIP / ROOT ZONE FOR (4) CRITICAL CYPRESS TREES
A 2.1	PROPOSED HOUSE PLAN - IMPERMEABLE SURFACES AND CYPRESS DRIP / ROOT ZONE FOR (4) CRITICAL CYPRESS TREES
A 3.0	60" CYPRESS - ENTRY GATE TREE EXISTING AND PROPOSED COMPARISON
A 3.1	26" CYPRESS - HOUSE ENTRY TREE EXISTING AND PROPOSED COMPARISON
A 3.2	36" & 44" CYPRESS - OCEANSIDE TREE EXISTING AND PROPOSED COMPARISON
A 4.0	EXISTING HOUSE PLAN - IMPERMEABLE SURFACES AND CYPRESS DRIP / ROOT ZONE FOR ALL ADJACENT TREES
A 4.1	PROPOSED HOUSE PLAN - IMPERMEABLE SURFACES AND CYPRESS DRIP / ROOT ZONE FOR ALL ADJACENT TREES
A 4.2	EXISTING HOUSE COMPLETE SITE CYPRESS ROOT ZONE ANALYSIS - NOTES AREAS OUTSIDE OF ROOT ZONE
A 5.0	SITE SURVEY

DRAWING ISSUE	
NO.	DATE

DRAWING ISSUE	
NO.	DATE
1	9/14/16





EXISTING HOUSE, IMPERMEABLE AREAS AND CYPRESS DRIP / ROOT ZONE ANALYSIS - KEY CYPRESS

PRELIMINARY PLANNING SUBMISSION SET

ROBERT JOYCE ARCHITECTURE  
& LANDSCAPE DESIGN

DRAWING ISSUE

NO.	DATE
1	9/14/16

3196 SEVENTEEN MILE DRIVE  
PEBBLE BEACH, CA 93953

DRAWING ISSUE

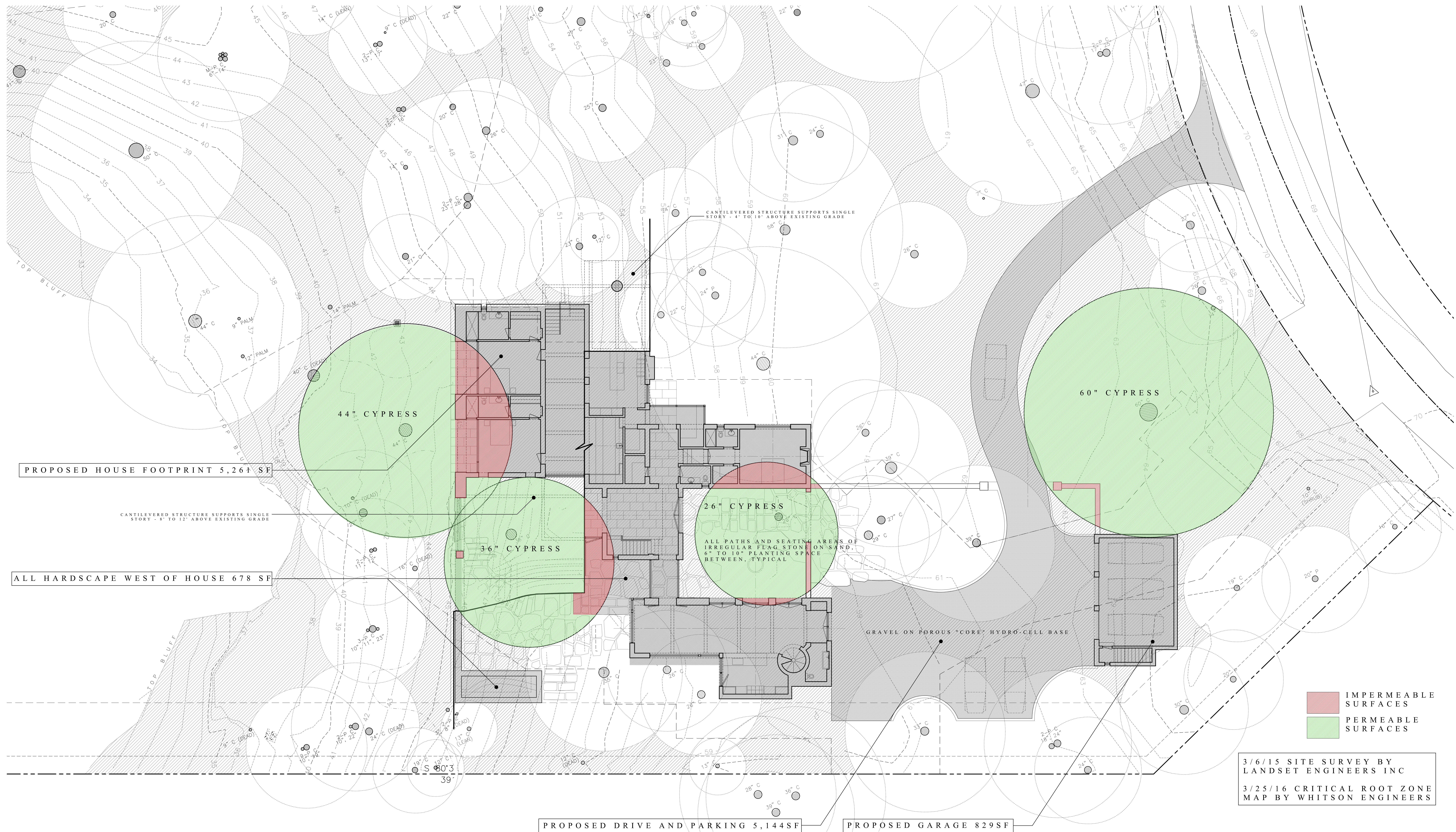
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1	9/14/16

EXISTING HOUSE PLAN AND CYPRESS DRIP AND ROOT ZONE

SCALE 1/8"=1'-0"

A 2.0





PROPOSED HOUSE, IMPERMEABLE AREAS AND CYPRESS DRIP / ROOT ZONE ANALYSIS - KEY CYPRESS

PRELIMINARY PLANNING SUBMISSION SET

ROBERT JOYCE ARCHITECTURE  
& LANDSCAPE DESIGN

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NO.	DATE

3196 SEVENTEEN MILE DRIVE  
PEBBLE BEACH, CA 93953

DRAWING ISSUE	
NO.	DATE
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PROPOSED HOUSE FOOT PRINT PLAN  
SCALE 1/4"=1'-0"

A2.1

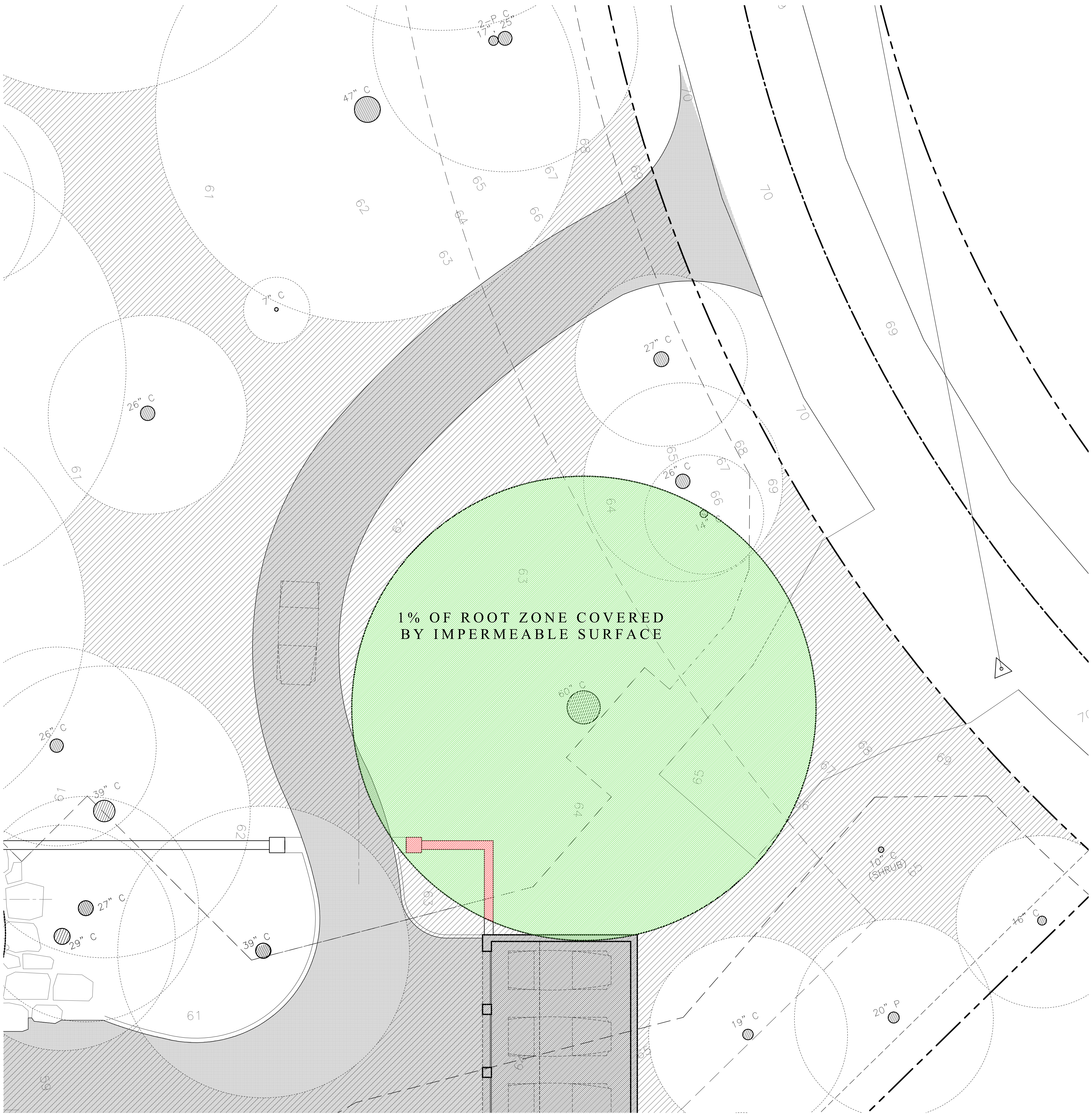


PROPOSED MODIFICATIONS TO DECREASE IMPERMEABLE AREA AT CYPRESS  
ROOT ZONE

- 1 - RELOCATE DRIVE ENTRY AT 17 MILE AND REMOVE ALL IMPERMEABLE PAVING AND WALLS - RESTORE ROOT ZONE
- 2 - LOCATE PROPOSED DRIVE IN AREA OUTSIDE OF CYPRESS ROOT ZONE / DRIP - OPEN ZONE
- 3 - REPLACE EXISTING ASPHALT DRIVE MATERIAL WITH GRAVEL ON POROUS "CORE" HYDRO-CELL BASE



60" CYPRESS AT EXISTING DRIVEWAY ENTRANCE



60" CYPRESS AT PROPOSED DRIVEWAY ENTRANCE

EXISTING AND PROPOSED HOUSE IMPERMEABLE SURFACE COMPARISON FOR 60" CYPRESS AT DRIVEWAY  
PRELIMINARY PLANNING SUBMISSION SET

IMPERMEABLE SURFACES PERMEABLE SURFACES

ROBERT JOYCE ARCHITECTURE  
& LANDSCAPE DESIGN

DRAWING ISSUE

NO.	DATE
1	9/14/16

3196 SEVENTEEN MILE DRIVE  
PEBBLE BEACH, CA 93953

DRAWING ISSUE

NO.	DATE
1	9/14/16

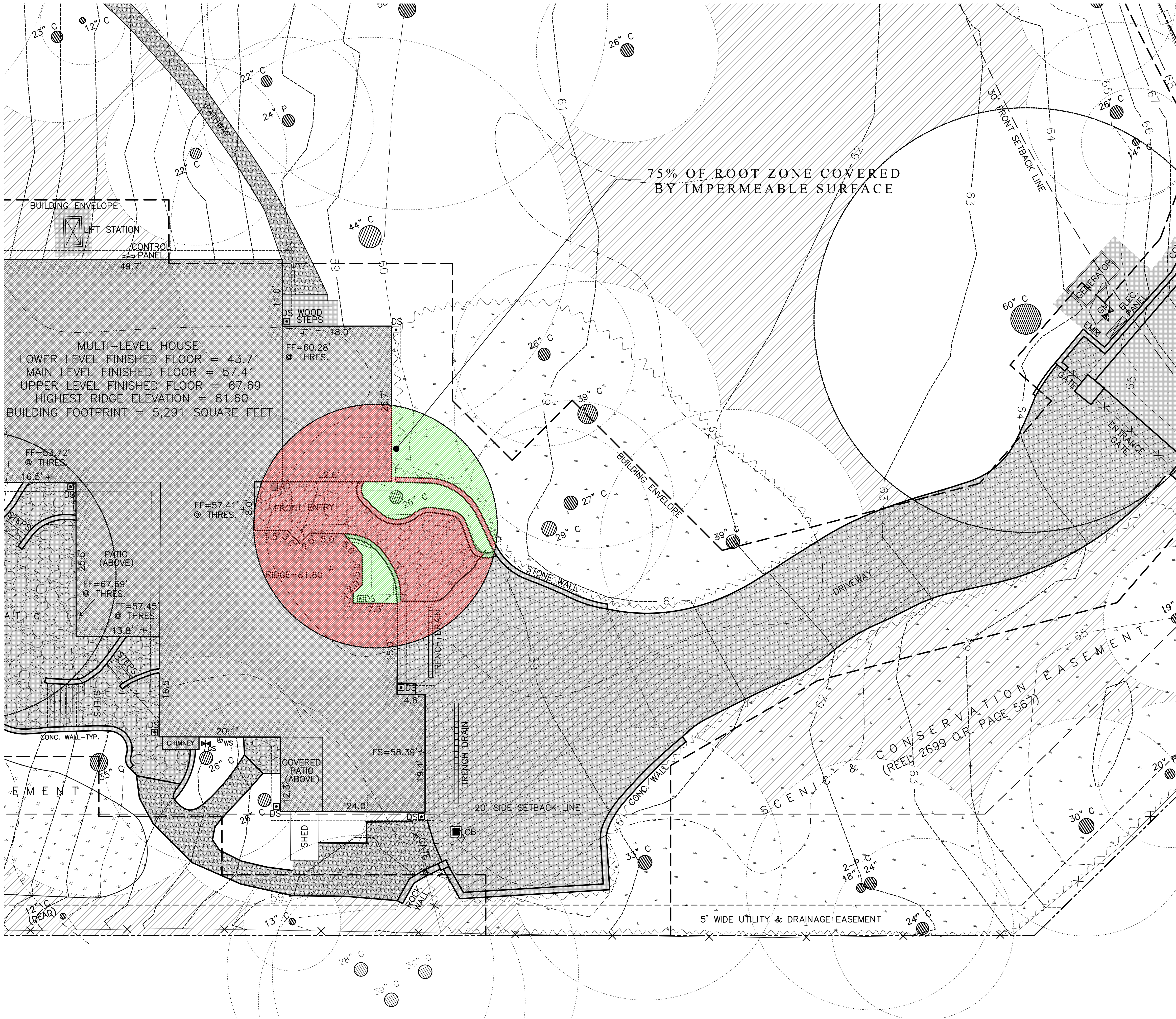
60" CYPRESS  
ENTRY GATE TREE ANALYSIS  
SCALE 1/8"=1'-0"

A 3.0

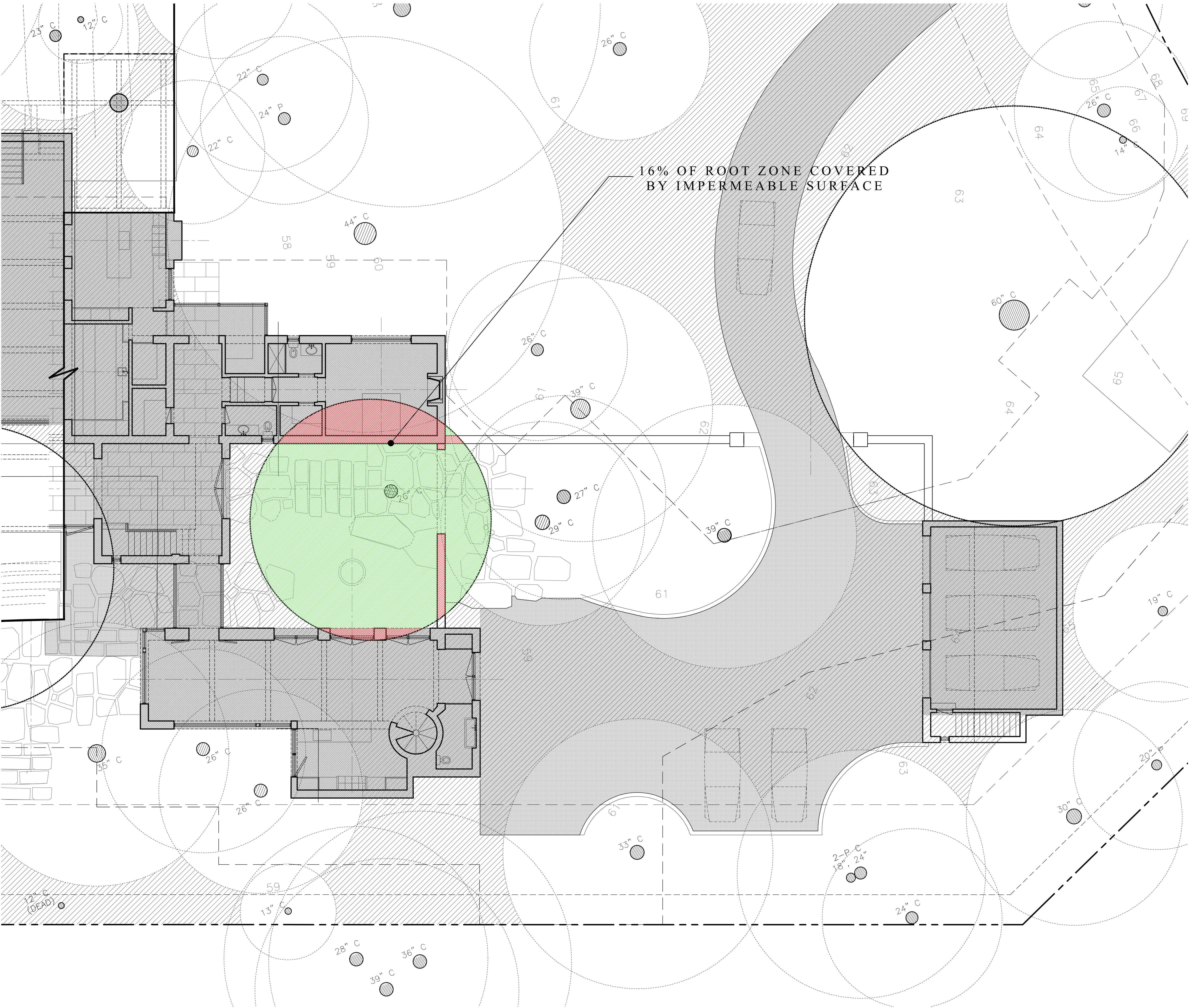


PROPOSED MODIFICATIONS TO DECREASE IMPERMEABLE AREA AT CYPRESS ROOT ZONE

- 1 - RELOCATE EXISTING HOUSE / GARAGE AREA AND ALL ON SLAB PAVING FROM CYPRESS ROOT ZONE
- 2 - CREATE LARGE GARDEN COURTYARD AROUND CYPRESS
- 3 - CREATE DETACHED GARAGE IN AREA OUTSIDE OF ALL CYPRESS ROOT ZONES
- 4 - REPLACE EXISTING ASPHALT DRIVE MATERIAL WITH GRAVEL ON POROUS "CORE" HYDRO-CELL BASE
- 5 - REPLACE ALL ON SLAB PAVING WITH STEPPING STONES ON SAND AND SOIL- PLANTING POCKETS



26" CYPRESS AT EXISTING HOUSE ENTRY - BUILDING MASS AND PAVING



26" CYPRESS AT PROPOSED HOUSE ENTRY - GARDEN COURTYARD

IMPERMEABLE SURFACES  
PERMEABLE SURFACES

EXISTING AND PROPOSED HOUSE IMPERMEABLE SURFACE COMPARISON FOR 26" CYPRESS AT HOUSE ENTRY  
PRELIMINARY PLANNING SUBMISSION SET

ROBERT JOYCE ARCHITECTURE  
& LANDSCAPE DESIGN

DRAWING ISSUE	
NO.	DATE

3196 SEVENTEEN MILE DRIVE  
PEBBLE BEACH, CA 93953

DRAWING ISSUE	
NO.	DATE
1	9/14/16

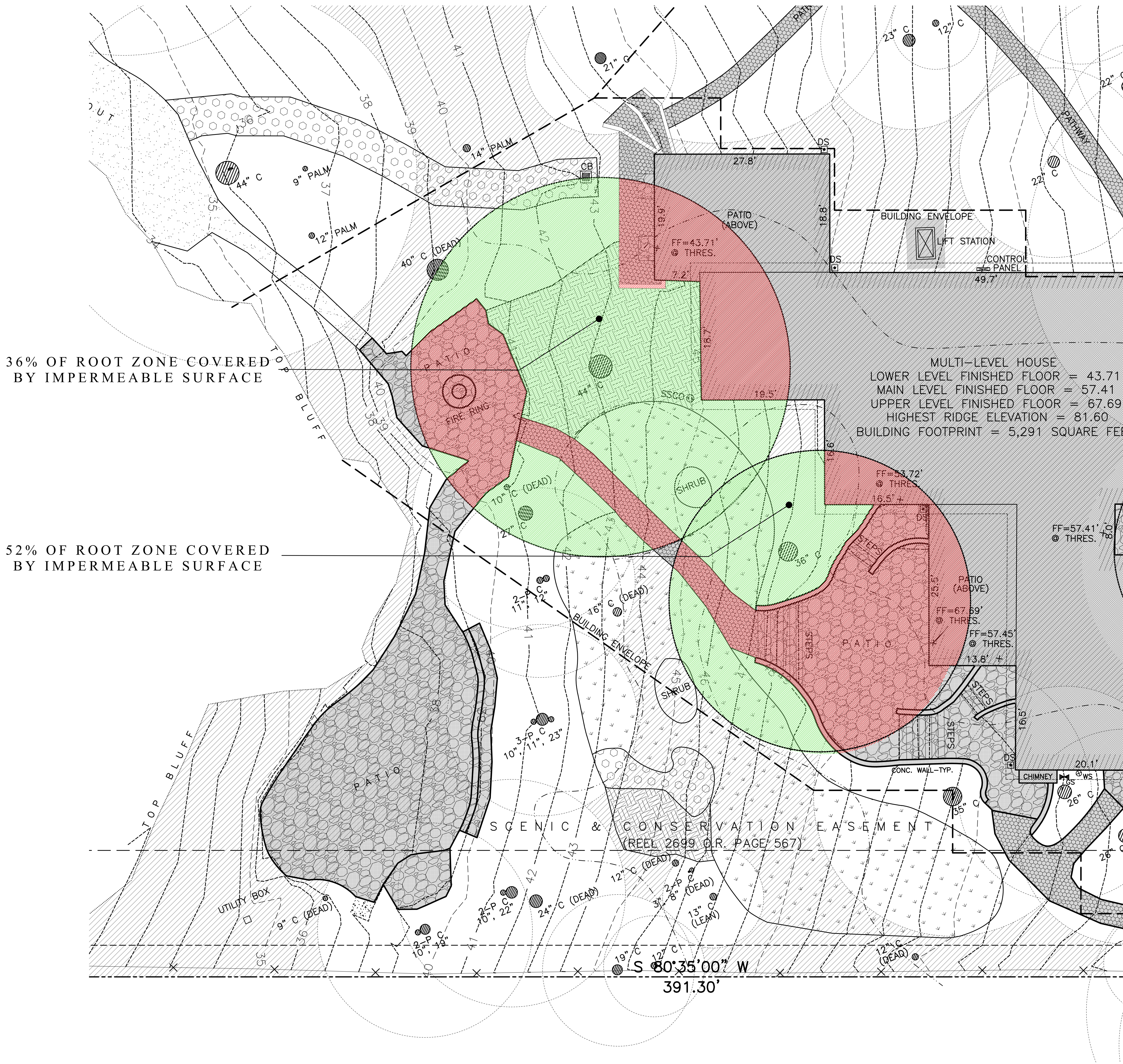
26" CYPRESS  
HOUSE ENTRY TREE ANALYSIS  
SCALE 1/8"=1'-0"

A3.1

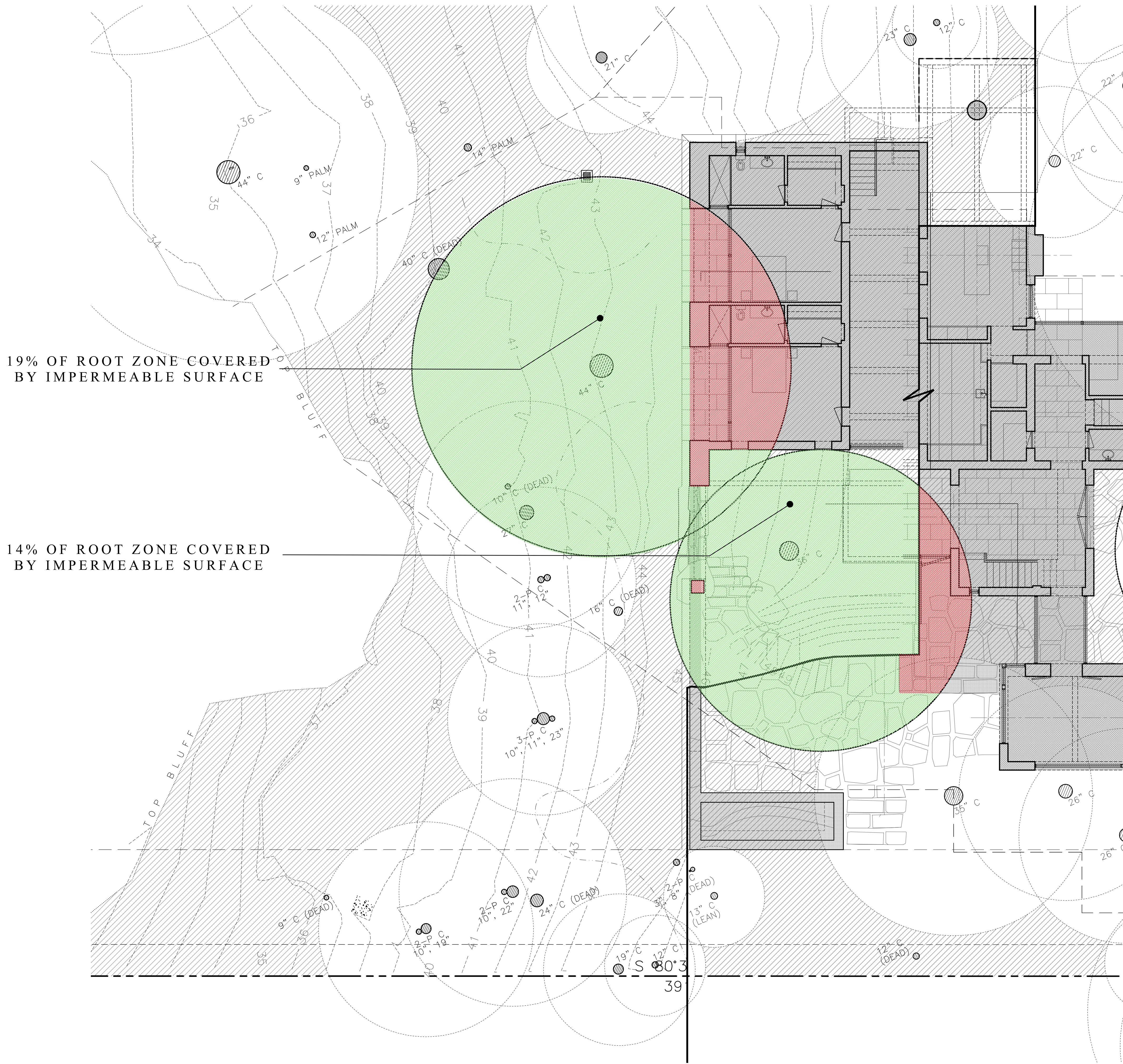


PROPOSED MODIFICATIONS TO DECREASE IMPERMEABLE AREA AT CYPRESS ROOT ZONE

- 1 - PULL BACK EXISTING BUILDING FOOTPRINT FROM CYPRESS ROOT ZONE AREA - RESTORE ROOT ZONE
- 2 - REMOVE 1,334 SF OF TERRACE ON SLAB, 110 LF OF WALL FROM CYPRESS ROOT ZONE AREA
- 3 - RELOCATE ALL EXTERIOR SITTING AREAS TO OUTSIDE OF CYPRESS ROOT ZONE
- 4 - REPLACE ALL SLAB TERRACE WITH STEPPING STONES ON SAND AND SOIL- PLANTING POCKETS
- 5 - RETURN 4,017 SF OF IRRIGATED GARDEN AND TERRACES TO SCENIC EASEMENT - RESTORE ROOT ZONE



36" & 44" CYPRESS AT OCEANSIDE OF EXISTING HOUSE - ADJACENT TO HOUSE AND LARGE PATIO AREA



36" & 44" CYPRESS AT OCEANSIDE OF PROPOSED HOUSE - GARDEN COURTYARD

IMPERMEABLE SURFACES PERMEABLE SURFACES

EXISTING AND PROPOSED HOUSE IMPERMEABLE SURFACE COMPARISON FOR 36"& 44" CYPRESS AT OCEANSIDE  
PRELIMINARY PLANNING SUBMISSION SET

ROBERT JOYCE ARCHITECTURE  
& LANDSCAPE DESIGN

DRAWING ISSUE

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3196 SEVENTEEN MILE DRIVE  
PEBBLE BEACH, CA 93953

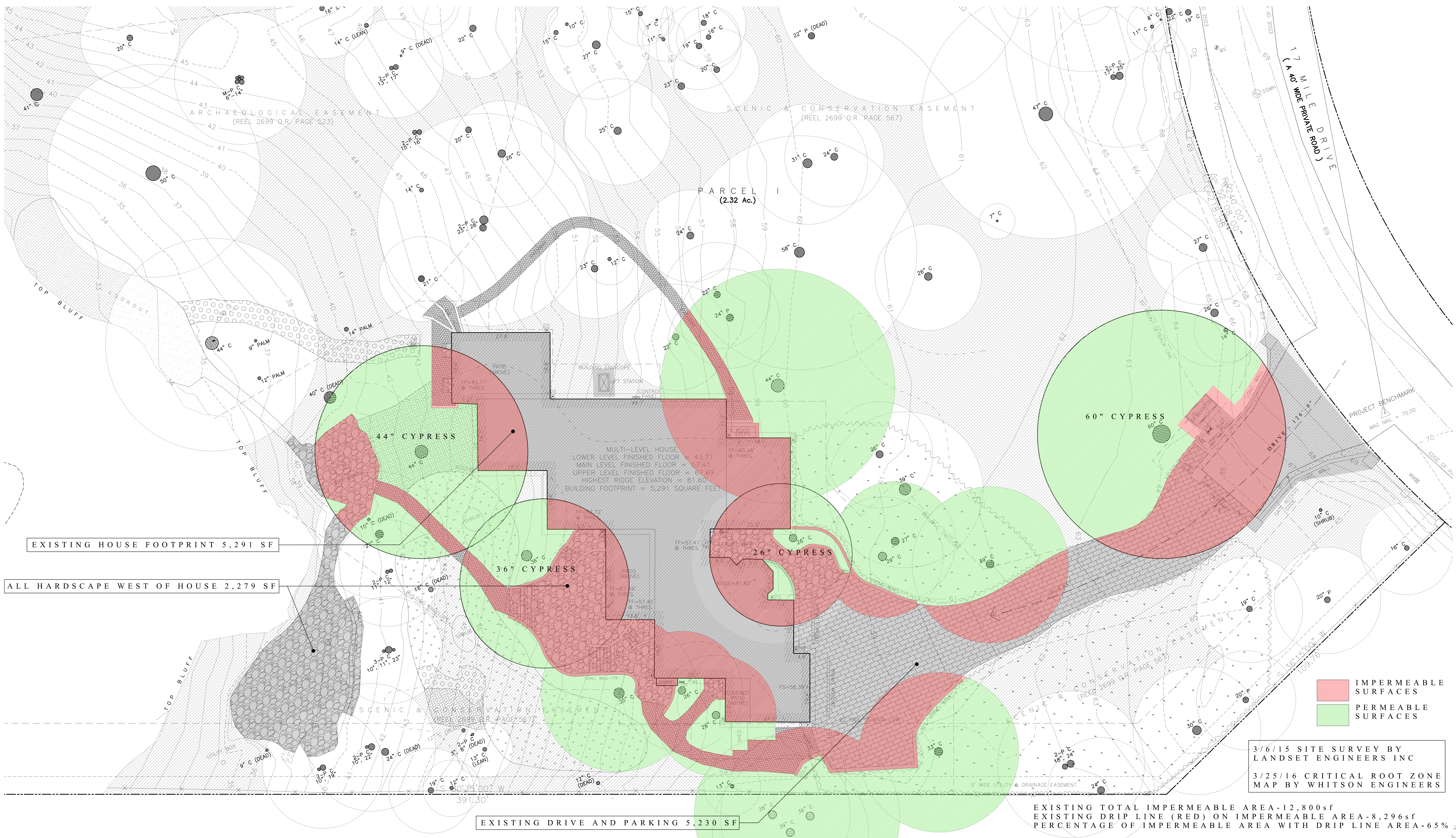
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36" & 44" CYPRESS  
OCEAN GARDEN TREE ANALYSIS  
SCALE 1/8"=1'-0"

A3.2





EXISTING HOUSE, IMPERMEABLE AREAS AND CYPRESS DRIP / ROOT ZONE ANALYSIS - ALL ADJACENT TREES

PRELIMINARY PLANNING SUBMISSION SET

ROBERT JOYCE ARCHITECTURE  
& LANDSCAPE DESIGN

DRAWING ISSUE

NO.	DATE
1	9/14/16

3196 SEVENTEEN MILE DRIVE  
PEBBLE BEACH, CA 93953

DRAWING ISSUE

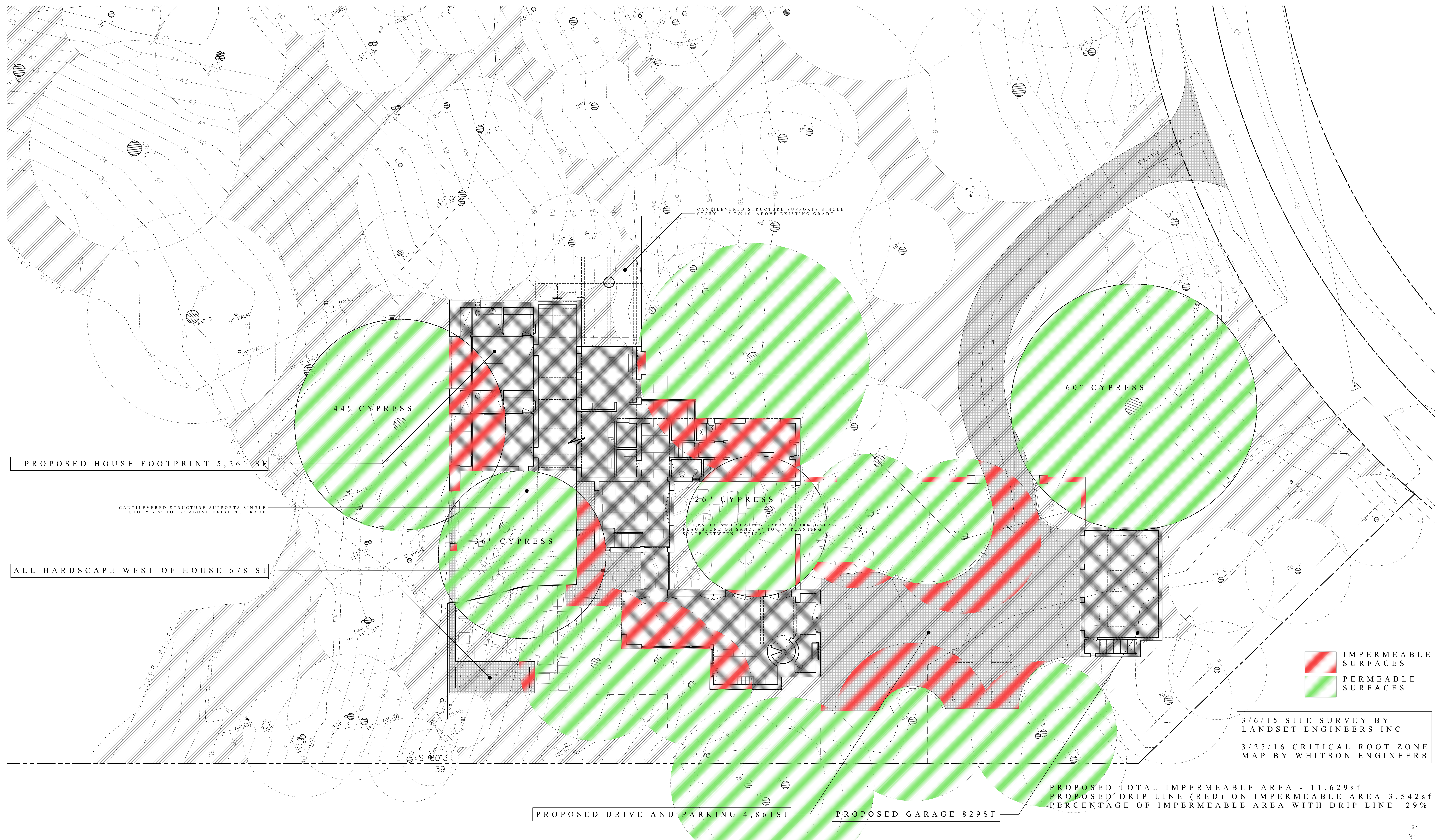
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EXISTING HOUSE PLAN AND CYPRESS DRIP AND ROOT ZONE

SCALE 1/8"=1'-0"

A4.0





# PROPOSED HOUSE, IMPERMEABLE AREAS AND CYPRESS DRIP / ROOT ZONE ANALYSIS - ALL ADJACENT TREES

PRELIMINARY PLANNING SUBMISSION SET

ROBERT JOYCE ARCHITECTURE  
& LANDSCAPE DESIGN

## DRAWING ISSUE

NO.	DATE
1	9/14/16

3196 SEVENTEEN MILE DRIVE  
PEBBLE BEACH, CA 93953

## DRAWING ISSUE

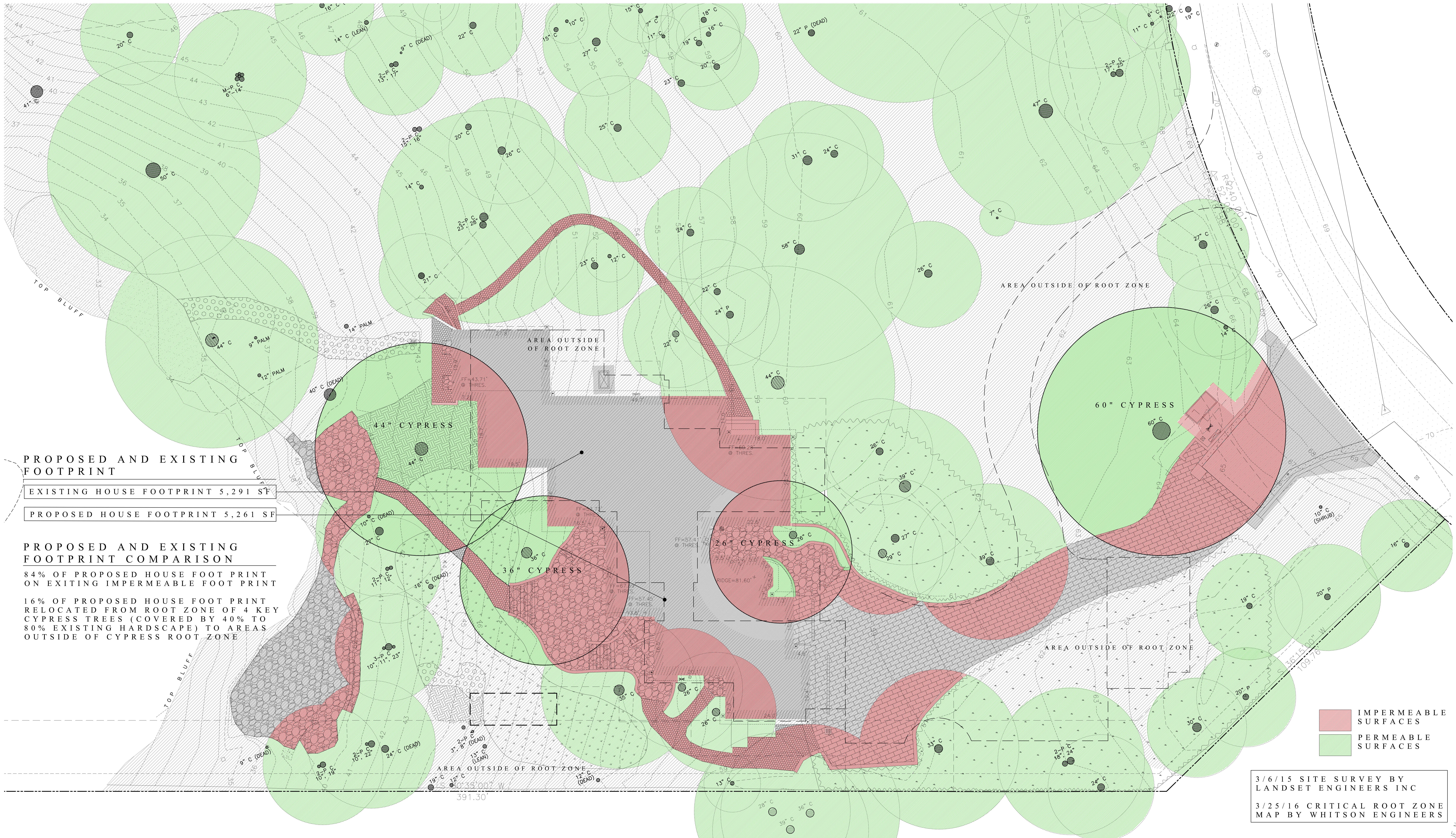
NO.	DATE
1	9/14/16

PROPOSED HOUSE FOOT PRINT PLAN

SCALE 1/4"=1'-0"

A4.1





PROPOSED AND EXISTING  
FOOTPRINT

EXISTING HOUSE FOOTPRINT 5,291 SF

PROPOSED HOUSE FOOTPRINT 5,261 SF

PROPOSED AND EXISTING  
FOOTPRINT COMPARISON

84% OF PROPOSED HOUSE FOOT PRINT  
ON EXITING IMPERMEABLE FOOT PRINT

16% OF PROPOSED HOUSE FOOT PRINT  
RELOCATED FROM ROOT ZONE OF 4 KEY  
CYPRESS TREES (COVERED BY 40% TO  
80% EXISTING HARDSCAPE) TO AREAS  
OUTSIDE OF CYPRESS ROOT ZONE

IMPERMEABLE  
SURFACES

PERMEABLE  
SURFACES

3/6/15 SITE SURVEY BY  
LANDSET ENGINEERS INC

3/25/16 CRITICAL ROOT ZONE  
MAP BY WHITSON ENGINEERS

EXISTING HOUSE, COMPLETE SITE CYPRESS ROOT ZONE ANALYSIS - NOTE AREAS OUTSIDE OF ROOT ZONE

PRELIMINARY PLANNING SUBMISSION SET

ROBERT JOYCE ARCHITECTURE  
& LANDSCAPE DESIGN

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3196 SEVENTEEN MILE DRIVE  
PEBBLE BEACH, CA 93953

DRAWING ISSUE	
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EXISTING HOUSE, COMPLETE SITE CYPRESS ROOT ZONE  
ANALYSIS - AREA OUTSIDE OF ROOT ZONE

SCALE 1/8"=1'-0"

A4.2





EXISTING HOUSE SITE SURVEY WITH ALL IMPERMEABLE SURFACES AND IRRIGATED GARDENS  
PRELIMINARY PLANNING SUBMISSION SET

ROBERT JOYCE ARCHITECTURE  
& LANDSCAPE DESIGN

DRAWING ISSUE

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1	9/14/16

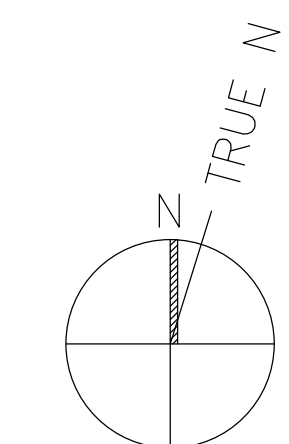
3196 SEVENTEEN MILE DRIVE  
PEBBLE BEACH, CA 93953

DRAWING ISSUE

NO.	DATE
1	9/14/16

SITE SURVEY

SCALE 3/32"=1'-0"



A5.0



# Exhibit C

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# Ralph Osterling Consultants, Inc.

1650 Borel Place, Suite 204  
San Mateo, CA 94402-3508



August 30, 2016

## **EVALUATION OF 4 KEY MONTEREY CYPRESS** 3196 SEVENTEEN MILE DRIVE, PEBBLE BEACH, CA.

### **PRIMARY CONCERNS**

#### 1. DECLINE AND BRANCH DROP

This report is in response to the decline and large branch drop shown on 4 large (60", 26", 36", 44") Monterey Cypress at 3196 17 Mile Drive. In observing these trees, one immediately notices the raw, splintered areas where large, upper story branches have snapped and fallen off. In several cases there are several branches that have dropped within the year. Maintenance pruning notes many more upper story branches were cleaned up and removed over the past 5 years. Please refer to cover page A 0.0 for photos of cypress conditions and branch splintering.

#### 2. EXISTING ROOT ZONE IMPERMEABLE CONDITIONS

The root zone area of these cypress, as mapped by Whitson Engineers is shown in the accompanying drawings (pages A 2 – A 3.2). The drawings which are highlighted to show areas of impermeable surfaces (shown in red) note that in all 4 cypress the existing root zone is significantly covered by building footprint, asphalt drive and terraces on concrete. Percentages of existing impermeable coverage at root zones of the 4 cypress ranges from 45% to 76%. All trees are within 4' of a site or building wall, and in one case the trunk is only 14" from the building footprint.

### 3. BASIC CYPRESS ROOT DEMANDS / NEEDS, FMP 8/3/92

As stated in the Forest Management Plan (prepared by Hugh E. Smith dated 8-3-92 (FMP) for Monterey County specifies many observations and conditions for the care of trees in the Monterey and Pebble Beach area), on page 0233452 regarding care and enhancement of cypress – *“the cypresses root systems do not extend deeper than 30” below the surface of the ground”*....hence uncovered and open rooting areas are critical for the moisture and gas exchange for a healthy functioning root system. In addition, *“the roots usually extend radially to the drip line or 15 times the diameter of the trunk. The outward 2/3 of the root zone is where roots are finely divided into feeders which absorb the minerals and water”*.... Therefore, the ability of the cypress to thrive over time is highly dependent on the quality of the root zone area.

### 4. CONCLUSIONS REGARDING ROOT COVERAGE AND TREE DECLINE

The decline due to reduced root zone of a large cypress often takes years to outwardly manifest (the current house, site walls, drive and terraces were built in 1991). Once decline is observed, large limb drop will occur, resulting in the ultimate failure of the cypress in 15 to 25 years. As the available moisture and nutrients are reduced over time the heartwood of the upper canopy branches becomes increasingly dehydrated and brittle weakening the branch until it can no longer support its own weight. The weakened branch splits, and gives way, leaving behind the splintered end of the branch at the cypress trunk (note this splintered condition in cypress photos on page A 0.0). It is significant to note that reviewing all other large cypress on the site, this splintering

and loss of large branches is not evident, but rather typical to the cypress habit, the lower branches of the trees die but remain on the trunk indefinitely.

#### **5. PROPOSED MITIGATION FOR 4 KEY CYPRESS**

Given the significance of these 4 large cypress to the cypress habitat, the County, and the owner, we have carefully review the options to remove impermeable material from the root zone wherever possible. In the attached highlighted drawings based on existing conditions survey and root zone maps, Mr. Robert Joyce, Architect and Landscape Architect, has prepared a detailed plan for the trees and development at this site. The plans (A 2 - A 3.2) demonstrate the extent of the existing impervious root zone issue and propose very clear ways to remove this impervious material to greatly improve the quality of the rooting areas within the development. In the case of these 4 cypress that are in decline, the impermeable coverage within root zone is reduced by between 50% to 100%. See detailed mitigation measures described below. Please note - all impermeable surfaces are shown in red and permeable surfaces are shown in green. Below is a summary of these proposed changes by tree, all of which are very positive. Each tree is is identified by the trunk diameter as shown on the plans.

#### **60" CYPRESS**

- Current hardscape in the rooting zone is 45%; following the proposed project hardscape is at zero; an excellent improvement
- Details are shown on Sheet A 3.0

### **26" CYPRESS**

- Current hardscape is 75%; following the proposed project, hardscape will be reduced to 16%; an excellent improvement
- Details are shown on Sheet A 3.1

### **36" and 42" CYPRESS**

- 36" tree the hardscape is reduced from 52% to proposed project is 14% - excellent improvement
- 44" tree hardscape is reduced from 36% to 19% with the project – significant improvement

## **6. PROPOSED MITIGATION AND ENHANCEMENT MEASURES**

Removal of any hardscape and especially on a large scale basis such as proposed in the plan is critical to the survival and recovery of the failing trees. In particular, the 60" cypress will, no doubt, reverse the failing mode it currently is in and begin to recover with the 100% removal of the impervious asphalt as will the other cypress.

The enhancement process begins with the careful removal of the hardscape.

Coordination of the site improvements and removal of the hardscape is critical to avoid any damage to uncovered roots. Often, rooting is immediately below the impervious surface where water vapor may condense on the underside and be available for root uptake; this is witnessed when roots grow under the surface and create lumps or failure in the impervious surface.

The hardscape should be removed carefully followed by an inspection by a Forester to determine rooting depth, density and conditions. Based on the inspection, careful scarification, nutrient addition and heavy mulch with chipped native wood materials (cypress trimmings preferred) are recommended. In addition, temporary irrigation should be applied on a regular schedule to restore the moisture levels in the soils, which in turn, will stimulate growth and rehydrate the trees. Maintaining the mulch cover with repeated applications may be required in the future.

## **7. ANTICIPATED RESULTS**

The 4 large cypress are in decline due to existing conditions. With the removal of the hardscape, and the mitigation and enhancement measures listed above, it is my professional opinion that the trees will revert from the current declining condition to recovery and healthy growth. Without these positive measures, it is my professional opinion that the cypress will die or become very hazardous in 15 to 25 years.

Respectfully,



Ralph Osterling, President, ACF, CLFA  
Registered Professional Forester #38  
State of California



RSO:js

Attachment

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