CALIFORNIA COASTAL COMMISSION
NORTH COAST DISTRICT OFFICE
1385 EIGHTH STREET, SUITE 130
ARCATA, CA 95521
VOICE (707) 826-8950
FAX (707) 826-8960

F8a

1-20-0360 (YATES)

December 11, 2020

EXHIBITS

Exhibit 1 – Regional Location
Exhibit 2 – Vicinity Map
Exhibit 3 – Flood Zone
Exhibit 4 – Site Plan
Exhibit 5 – Existing Floor Plan
Exhibit 6 – 90% Plans
Exhibit 7 – Soil Study (excerpts)

EXHIBIT NO. 1

CDP Application No.
1-20-0360 (Yates)
REGIONAL LOCATION

EXHIBIT NO. 2

CDP Application No.
1-20-0360 (Yates)
VICINITY MAP

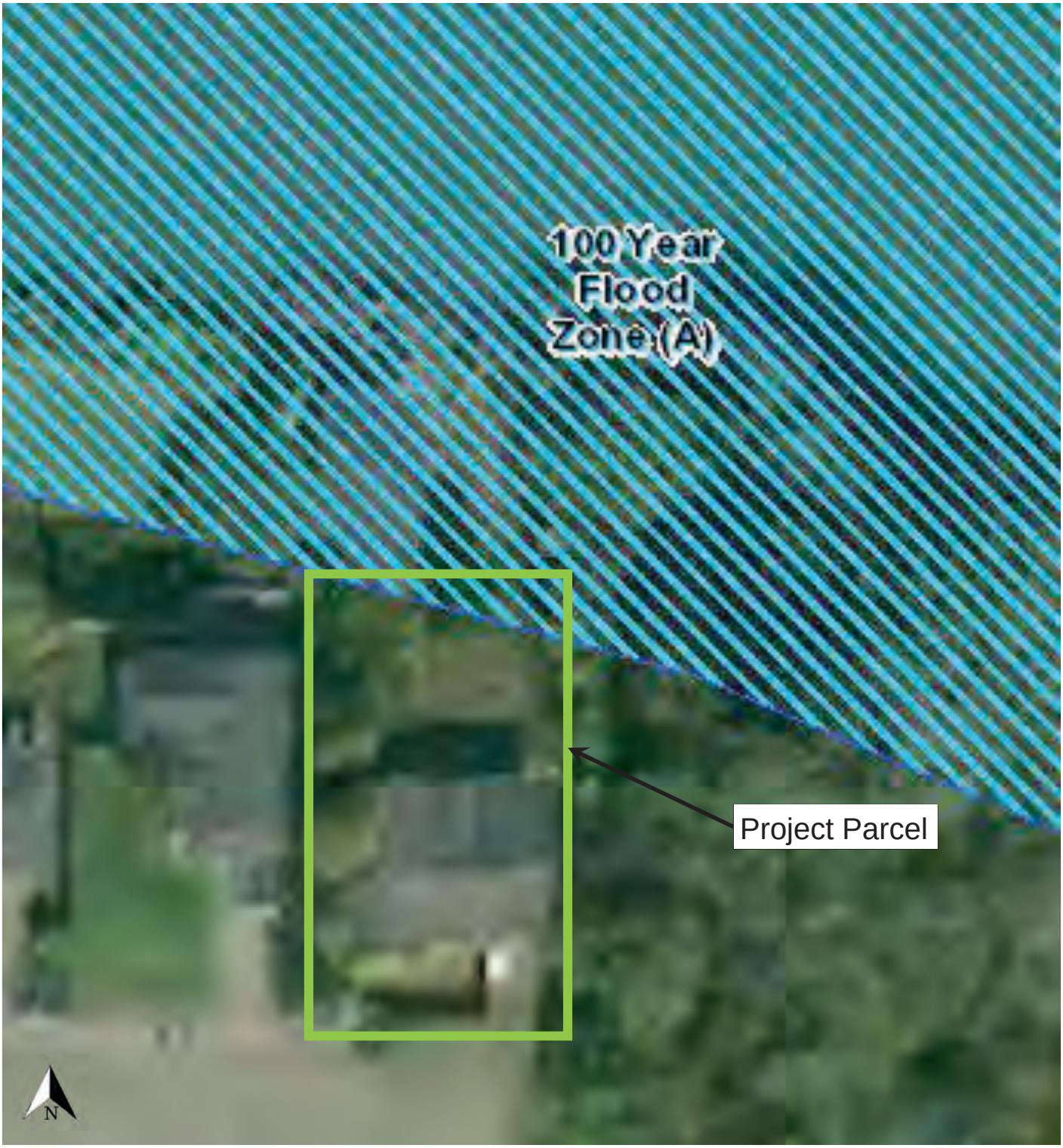
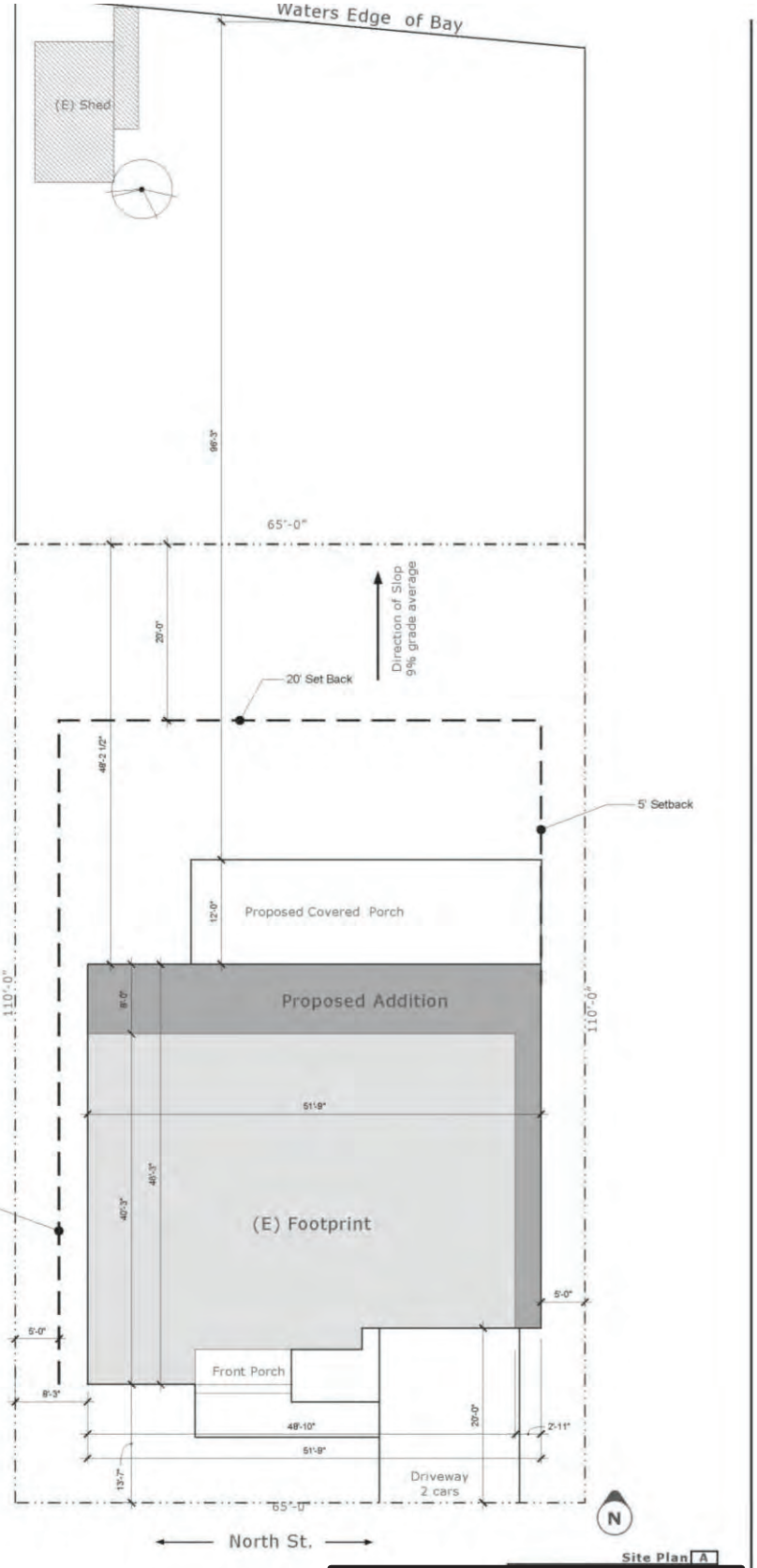


EXHIBIT NO. 3

CDP Application No.
1-20-0360 (Yates)
FLOOD ZONE

Vicinity Map A
scale: NA 03

Humboldt County GIS Map A
scale: NA 02



Site Plan A

Site Legend

Property line: ___ . ___

Setback Lines: _ _ _ _

Existing Tree

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EXHIBIT NO. 4

CDP Application No.
1-20-0360 (Yates)
SITE PLAN

Existing Plan
SCALE: 1/4"=1'-0"

EXHIBIT NO. 5

CDP Application No.
1-20-0360 (Yates)
EXISTING FLOOR PLAN

Legend
Existing

a
1.00

Sheet Description
Existing Plan

CLIENT:
Karvier Yates
2989 North St
Eureka, CA 95501

Design BY
Charlie Hatfield design
701 Duncanville Ct., Campbell, CA 95008
phone: 650-248-4744
email: charliehatfield@mac.com

PROJECT NO:
2015-

ISSUE - 6/22/20

CHd

02 a

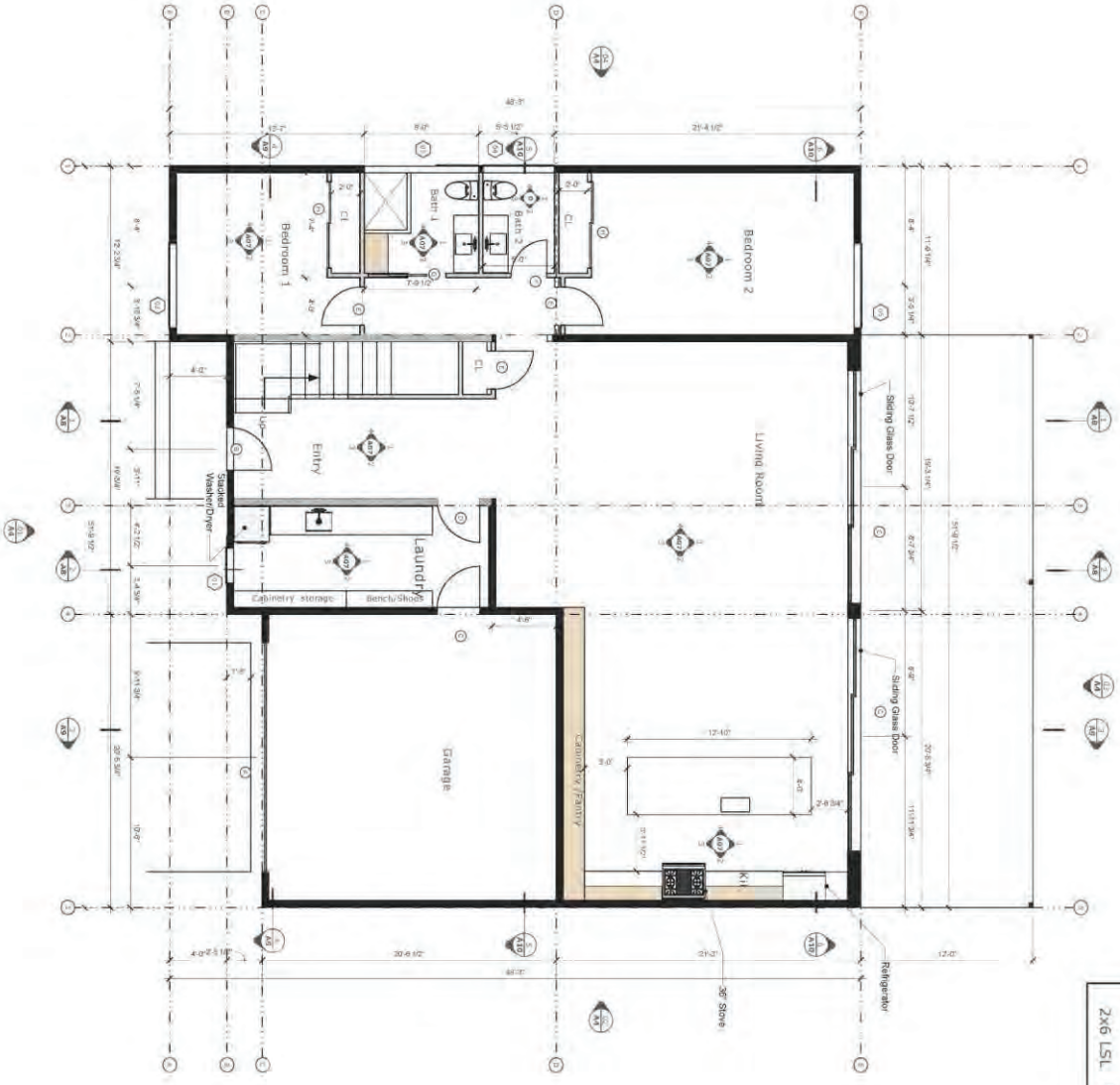
Sheet Description
Foundation Demo Plan

CLIENT
Karvier Yates
2989 North St
Eureka, CA 95501

Design BY
Charlie Hatf
791 Duncanville Ct., Campbe
phone: 650-248-4744
email: charliehatfield@mac.co

EXHIBIT NO. 6

CDP Application No.
1-20-0360 (Yates)
90% PLANS (page 1 of 6))



03

Sheet Description
Proposed Floor Plan, Window & Door Schedule

CLIENT
Karvier Yates
2989 North St
Eureka, CA 95501

Design BY
Charlie Hatfield design
701 Duncanville Ct, Campbell, CA 95008
phone: 650-248-4744
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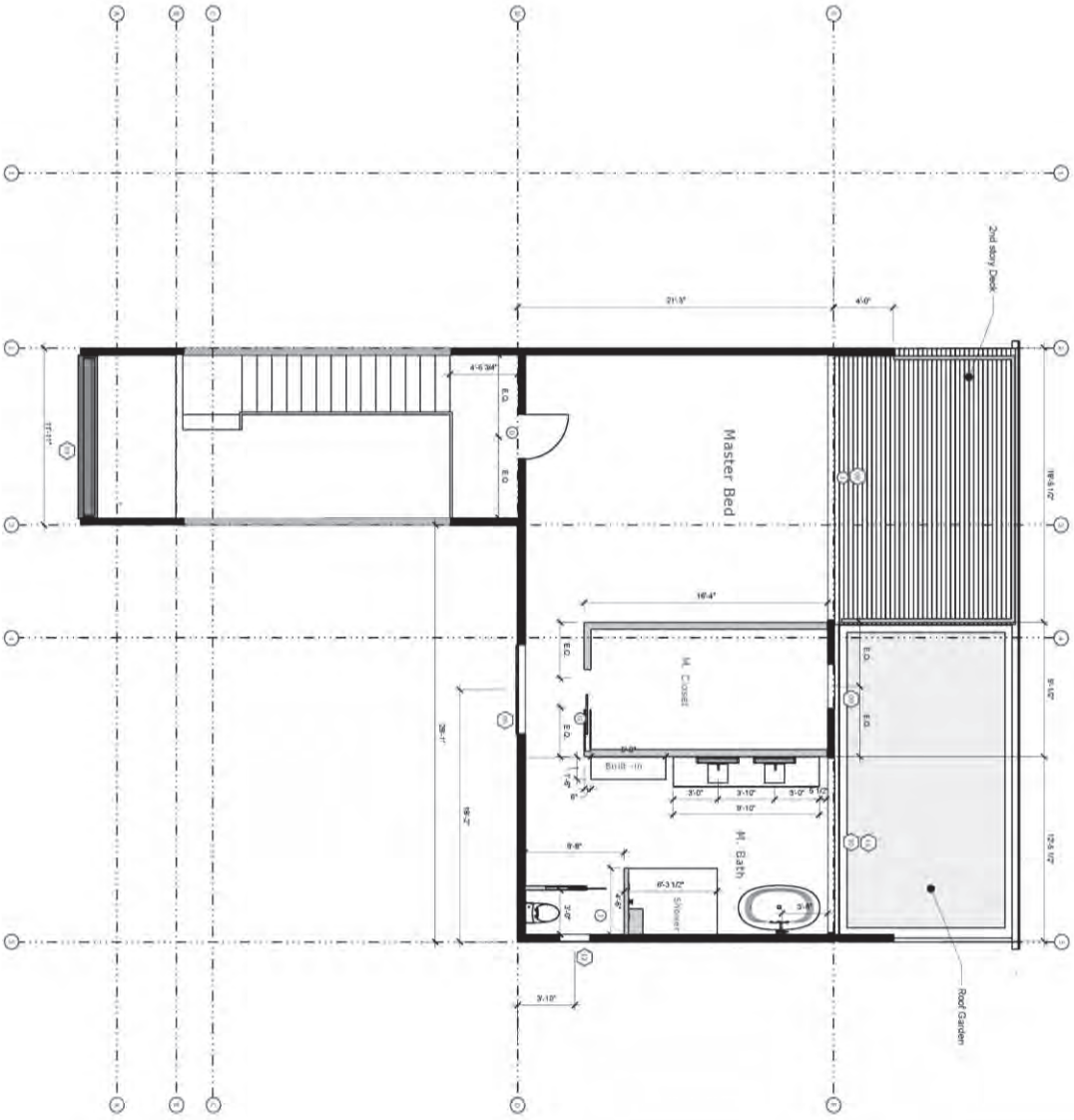
PROJECT NO: Z0151
ISSUE - 6/22/20

CHd

EXHIBIT NO. 6

CDP Application No.
1-20-0360 (Yates)
90% PLANS (page 2 of 6))



Second Floor Plan
scale: 1/4"=1'-0"

04 a

Sheet Description
Proposed Second Plan,

CLIENT:
Karvier Yates
2989 North St.
Eureka, CA 95501

Design BY:
Charlie Hatfield design
701 Duncanville Ct., Campbell, CA 95008
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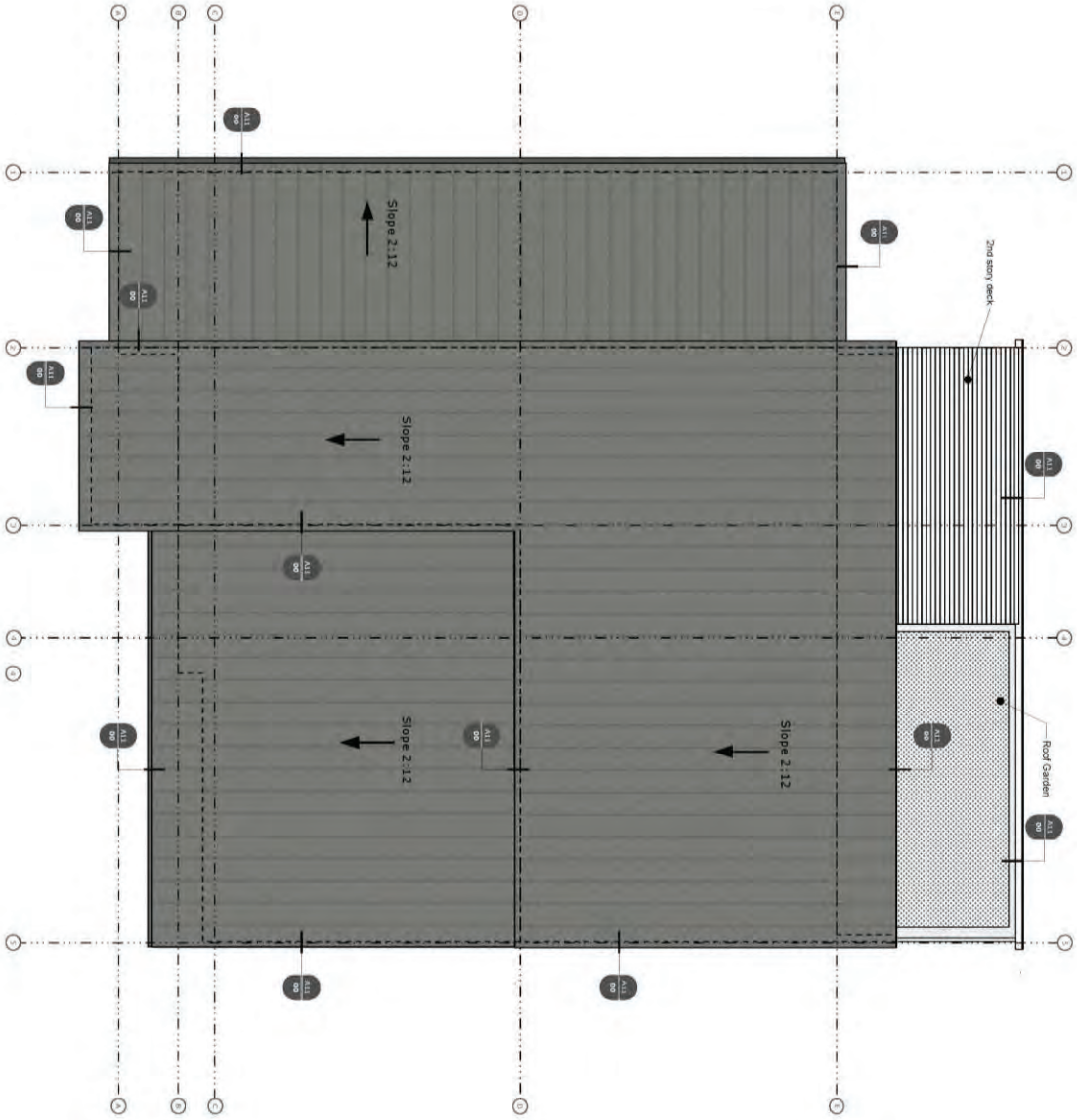
CHd
PROJECT NO.
2015.1
ISSUE - 6/22/20

EXHIBIT NO. 6

CDP Application No.
1-20-0360 (Yates)
90% PLANS (page 3 of 6)



Roof Plan A
scale: 1/4"=1'-0"

05 a

Sheet Description
Roof Plan

CLIENT:
Karvier Yates
2989 North St.
Eureka, CA 95501

Design BY
Charlie Hatfield design
701 Duncanville Ct., Campbell, CA 95008
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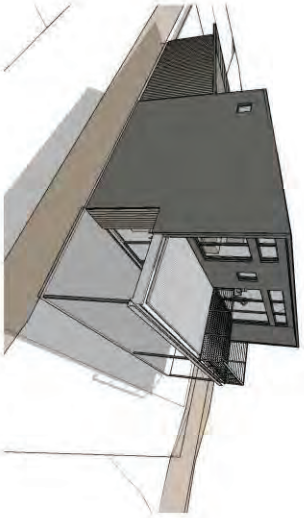
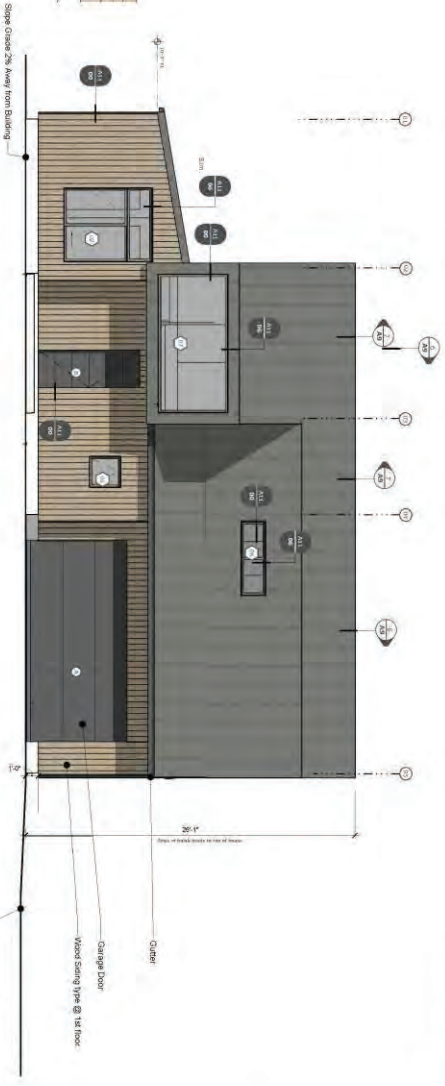
PROJECT NO.
2015.1
ISSUE - 6/22/20

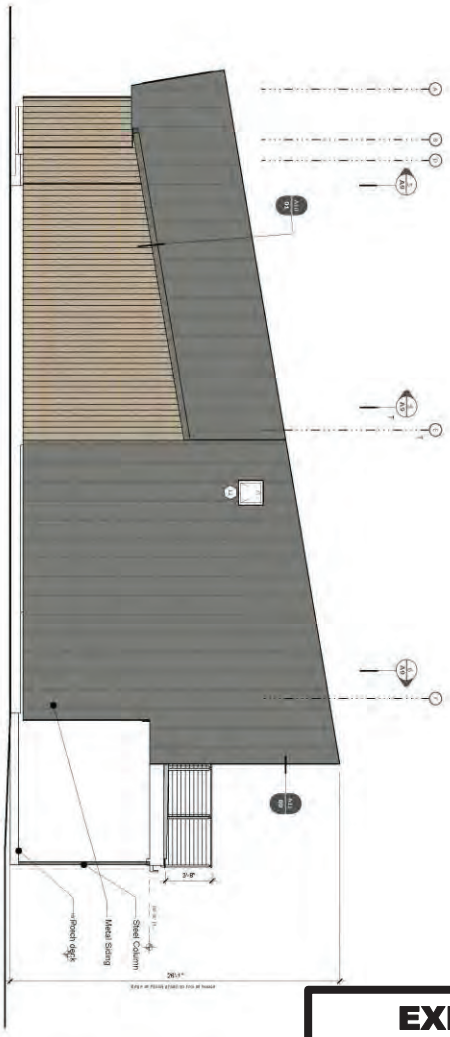
CHd

EXHIBIT NO. 6

CDP Application No.
1-20-0360 (Yates)
90% PLANS (page 4 of 6))



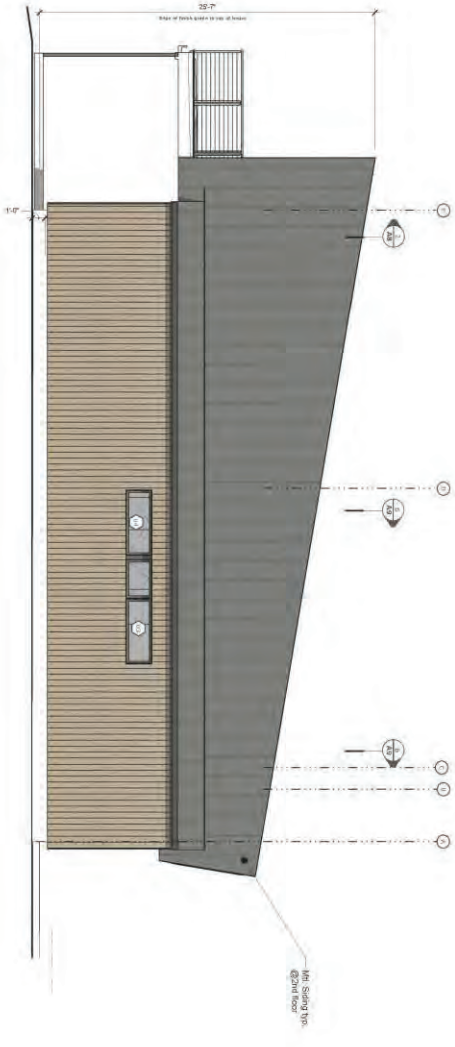




90	Sheet Description: **Elevations**	CLIENT **Karvier Yates** 2989 North St. Eureka, CA 95501	Design BY **Charlie Hatfie** 701 Duncanville Ct., Campbell, CA phone: 650-248-2744 email: charliehatfield@mac.com

EXHIBIT NO. 6

CDP Application No.
1-20-0360 (Yates)
90% PLANS (page 5 of 6)



07

a

Sheet Description
Elevations

CLIENT:
Karvier Yates
2989 North St.
Eureka, CA 95501

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701 Duncanville Ct., Campbell,
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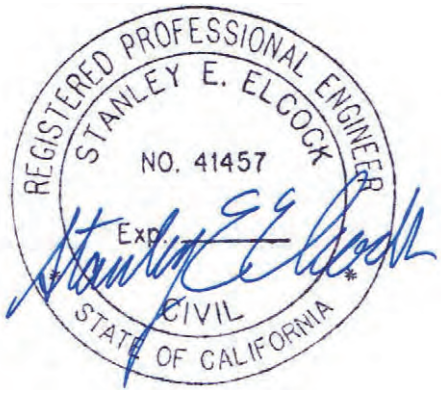
EXHIBIT NO. 6

CDP Application No.
1-20-0360 (Yates)
90% PLANS (page 6 of 6))

SOIL STUDY

FOR YATES RESIDENCE
2989 North St.
APN 014-203-006
IN MYRTLETOWNE

PREPARED FOR:
Karvier Yates



PREPARED BY:

S.E.E. ENGINEERING

August 6, 2020

EXHIBIT NO. 7

CDP Application No.
1-20-0360 (Yates)
SOIL STUDY (page 1 of 6)

SOIL STUDY

FOR YATES RESIDENCE
2989 North St.
APN 014-203-006
IN MYRTLETOWNE

A soils investigation was conducted on August 4, 2020 on the site of a proposed residence. The site is located at 2989 North Street in Eureka, California.

The purpose of the study was to determine the types and extent of the materials to be encountered during construction with recommendations for their utilization and site development criteria for the proposed project, including incorporating the existing foundation into the new residence.

FIELD INVESTIGATION

S. E. E. Engineering field investigations were limited to reconnaissance of the project site and drilling and sampling. Two exploratory borings were advanced to a maximum depth of 7'-0" inches below ground surface in Boring No.1 and Boring No.2. Ground water was encountered at 79" in Boring No.1 and no ground water was encountered in Boring No.2. A total of 6 moisture samples were taken with the results as follows:

Bore No.1 = 17.5% at 12 inch depth
Bore No.1 = 8.0% at 42 inch depth
Bore No.1 = 29.6% at 84 inch depth
Bore No.2 = 10.6% at 27 inch depth
Bore No.2 = 17.3% at 60 inch depth
Bore No.2 = 24.0% at 84 inch depth

Samples were obtained and logged in accordance with the Unified Soil Classification system and were rated SW, SM, and OH at the bottom of Boring No.2.. The borings were advanced using a hand auger to a depth of 7 feet below ground surface.

SITE CONDITIONS AND MATERIAL PRESENT

The site is located at the north end of North Street in Eureka. The area has a current residence and associated grading. Specific descriptions of the soils encountered are presented in the attached boring logs.

Most of the material was moist to wet and firm in nature. The material graded from 0 to 54" of light brown to medium brown silty sand, 54" to 84" medium brown sand, at 84" bluish gray silty clay in the bottom of Boring No.2. Free water was encountered at 79" in Boring No.1. There was some mottling in Boring No.1.

The tests taken with the Pocket Penetrometer revealed a compressive strength of 4 tons/sq. ft. at about 15" below grade in Boring No.2.

The site is approximately 1.5 kilometers South of a trace of the Freshwater fault and is approximately 2 to 3 kilometers North of the Little Salmon Fault which is actually South and East of the site. The Freshwater Fault is a type A fault and the Little Salmon is considered a type B, based on the 2019 CBC Seismic Design category is "E": Site Classification of "D" with site coefficients Fa and Fv equal to 1.0 and 1.5 respectively. We estimate a soil profile type Sd for the site. The calculated seismic response coefficient is -0.25.

The site is mapped in a "Co" area by the Humboldt County General Plan Geologic map (Humboldt County 1989). This is a generalized map and it indicates the site is in a relatively stable area with respect to land sliding, that it is composed of Pleistocene Non-Marine Formation.

The project site is mapped outside a potential tsunami inundation zone by Special Publication 115 (CDMG 1995), in which is based on a Tsunami Inundation Model Study of Eureka and Crescent City, California by Bernard, Mader, Curtis and Satake, 1994. According to locally authored tsunami safety map; it is also outside a potential tsunami inundation area (Patton and Dengler 2004).

GEOLOGY

The sediment in the area is mainly recent Alluvium deposits of Humboldt Bay to Quaternary Non-Marine terrace deposits of the Rohnerville formation. The sediments encountered are Pleistocene to recent (less than 11,000 years).

As stated earlier, the project is located between the Freshwater Fault and the Little Salmon Fault. These are all thrust faults and are considered active. Thrust faults are low angle faults (30 degrees to 40 degrees) that build up considerable horizontal stress before they fail and can generate a large event.

A fault zone is a zone of related faults that commonly are braided and sub-parallel, but may be braiding and divergent. A fault zone has significant width ranging from a few feet to several miles.

An active fault is defined by the Mining and Geology Board as one which has "Bad Surface Displacement within Holocene time (about the last 11,000 years before present)

The project area is subject to strong seismic motion as is a good part of Humboldt County, but the incidence of damage could be rare. Due to the sites location, it would be considered in a relatively stable area with respect to land slidings. Liquefaction could be a problem in the event of a relatively rare, major earthquake. For example, we are not aware of liquefaction or no seismic settlement occurring in the area as a result of the 1992 Petrolia earthquake, which had a maximum movement magnitude of approximately 7.

Due to its elevation and location the site is to be considered a low tsunami risk.

TSUNAMI RISK

Tsunami Risk may be indicated in the two publications cited under ”Site Conditions” above. The December 26, 2004 tsunami in Sumatra resulted in west coast shoreline tsunami heights in Sumatra (approximately opposite the epicenter) on the order of 20 to 35 meters (66 to 115 feet), per the U. S. Geological Survey(USGS)webpagehttp://walrus.wr.usgs.gov/tsunami/sumatra05/ as of January 18, 2006. The causative subduction zone geology in Sumatra is generally analogues to that existing at Humboldt County’s off shore Cascadia subduction zone, which may indicate higher wave height potential than considered in previous publications. However, close to the elevation of the project site the event of a tsunami would be minimal to a slight possibility. Using the most current Tsunami Hazard Maps published by the Redwood Coast Tsunami Watch Group, the proposed site is in a low hazard zone and risk is considered speculative in a rare, extreme causative event.

LIQUEFACTION, CO-SEISMIC SETTLEMENT, LATERAL SPREADING

Relatively strong, prolonged earthquakes are the common source of dynamic loading causing liquefaction. During shaking, the soil structure tends to collapse, while pore ground water pressure build up in the soil until sheer strength is lost, and soil/ground water mixture temporarily act as liquid slurry until excess pore pressure dissipates.

Co-seismic settlement of moderately consolidate, sandy relatively cohesion loose soils can occur above or below ground water, and is characterized by soil densification resulting from dynamic loading of relatively loose or moderately consolidate granular soil, resulting in settlement of the ground surface.

Lateral spreading is considered a low risk at the subject site. For this report, risk of potentially liquefiable soils subject to co-seismic compaction is a decided possibility.

GENERAL SEISMIC DESIGN

The minimum standard for construction of the structu
accordance with the latest edition of the CBC for the most seis
areas.

EXHIBIT 7
CDP Application No.
1-20-0360 (Yates)
SOIL STUDY (page 5 of 6)

CONCLUSIONS AND RECOMMENDATIONS

Based upon the results of the study it is our opinion that the residence remodel can be constructed as proposed. The potential for compressible soil is limited; liquefaction is possible and tsunami risk is minimal. No high plasticity soils strata were encountered or are generally anticipated under the geologic formation comprising the site and risk of adverse consequences to the structure from expansive soil is considered low.

It is recommended that the bottom of new footings be between 6" to 12" below the existing grade for a design bearing pressure of 2000 PSF.

Surface drainage should be directed away from the foundation using ditches and sloping the grade and piping gutter drains away from the structure.

There is no conflict with any Alquist-Priolo study zones.

LIMITATIONS OF REPORT

The analysis, conclusions, and recommendations contained in this report are based on the site conditions at the time of the investigation. We have assumed that the information obtained from our subsurface investigation is representative of the subsurface conditions throughout both sites.

If there is a substantial change in the scope of the proposed work or if during construction the subsurface conditions differ significantly, then SEE ENGINEERING should be contacted to re-evaluate the applicability of our conclusions and recommendations.

The conclusions and recommendations contained in this report are professional opinions based on current standards of professional practice. The recommendations are based on the assumption that design improvements will conform to their intent. Assumptions about other site characterist