SAN FRANCISCO BAY EXPANSION - 58 SITES
44 SIMMS ST., SAN RAFAEL, CA 94901
EXIST. PG&E-OWNED WOOD JPA POLE
SF90XS2H0
SFB005m2
SF36XC052
LAT: 37.95789, LONG: -122.506809
CROWN CASTLE BILLING / SCU#: 479646

PROJECT DESCRIPTION

THIS PROJECT WILL CONSIST OF ADDING A NEW POLE-TOP CANISTER ANTENNA AND A SIDE-MOUNTED EQUIPMENT CHASSIS TO THE EXISTING POLE. THE EQUIPMENT CHASSIS WILL CONTAIN THE FOLLOWING:

- (1) NEW RADIO UNIT
- (1) FIBER ENCLOSURE BOX
- (1) ELECTRICAL LOAD CENTER / DISTRIBUTION PANEL
- (1) ELECTRICAL POWER METER

HANDICAP REQUIREMENTS:
- FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.
- HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED.

PLUMBING REQUIREMENTS:
- FACILITY HAS NO PLUMBING.

POWER COMPANY:
- PACIFIC GAS AND ELECTRIC (PG&E)
1. All work to be conducted in city right-of-way, unless approved by the City.
2. The City right-of-way shall be divided into strips and strips shall be numbered.
3. All existing landscaping shall be replaced to similar existing condition.
4. All disturbed landscaping shall be replaced to similar existing condition.
5. No materials or equipment shall be stored on private property.
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7. All work to be conducted in city right-of-way, U.N.O.
8. All work to be conducted in city right-of-way.
9. All work to be conducted in city right-of-way.

ALL DISTURBED LANDSCAPING SHALL BE REPLACED TO SIMILAR EXISTING CONDITION.

COMMENCING WORK.

RIGHT-OF-WAY USE PERMIT SHALL BE OBTAINED BY CONTRACTOR PRIOR TO COMMENCING WORK.

O.H.E.

PERPENDICULAR AND PARALLEL TO THE CENTERLINE CONTROLLING THAT CUTS USED FOR THE REMOVAL OF THESE ITEMS SHALL BE DEFORMED PAVEMENT, CURB AND GUTTER, SIDEWALK, ETC. ALL SAW THE CONTRACTORS OPERATIONS, THE REMOVAL AND REPLACEMENT OF EXISTING CRACKS WHERE THE CRACKS HAVE BEEN ENLARGED DUE TO THE PROJECT. THIS INCLUDES, BUT IS NOT LIMITED TO THE REMOVAL AND GUTTER OUTSIDE THE PAY LIMIT, DAMAGE DUE TO THEIR ACTIVITIES ON ALL WORK TO COMPLY WITH OSHA AND CITY GUIDELINES.

THE PROJECT AREA WILL BE RETURNED TO EXISTING CONDITION AT THE COMPLETION OF CONSTRUCTION AT EACH NODE LOCATION.

ANY SIDEWALK CLOSURE SHALL BE COORDINATED WITH THE CITY AND REQUIRED.

TEMPORARY LIGHTING WILL BE COORDINATED WITH CITY AND PROVIDED.

NO MATERIALS OR EQUIPMENT SHALL BE STORED ON PRIVATE PROPERTY.

THIS LOCATION)

BEFORE YOU DIG.
CALL TWO WORKING DAYS
IT IS FORBIDDEN WITHOUT THE WRITTEN
AND/OR THE INFORMATION CONTAINED IN
REPRODUCTION OR USE OF THIS DRAWING
OWNER AND ITS AFFILIATES.

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THE CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND REPLACE, AT THEIR COST, ANY AND ALL DAMAGED PAVEMENT, SIDEWALK, CURB AND GUTTER.

THE CITY, AT THE CONTRACTOR'S COST, ANY AND ALL DAMAGED PAVEMENT, SIDEWALK, CURB AND GUTTER.

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EXISTING BUILDING

FACE OF RETENTION WALL

PROPERTY LINE

FIN. GRADE

0"

HGT. SECONDARY POWER

34' - 6"

T.O. POLE

42' - 10"

HGT. PRIMARY POWER

41' - 1"

HGT. PRIMARY POWER

39' - 4"

HGT. PRIMARY POWER

44' - 1"

ANTENNA RAD. CENTER

26' - 9"

HGT. TELCO DROP

22' - 6"

DISTANCE TO NEAREST BUILDING

17'-8" 4'-4" 2'-2" 6'-6"

RELEASE DATE

RECORD DRAWINGS ISSUE DATE:

PROJECT NAME

HUB AREA

IN HOUSE

DRAWN BY:

CHECKED BY:

PAGE

SHIFT JOB NUMBER

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PLOT SCALE:

1:1 @ 24"x36"; 1:2 @ 11"x17"

SHEET TITLE

SHEET NUMBER

REVISIONS

DATENO.

SUBMITTAL

COMMENT

Shift Companies, LLC

Shift Companies, LLC

3334 N. 20TH ST.

PHOENIX, ARIZONA 85016

ph: 480.264.0829

fax: 480.264.0163

CROWN CASTLE

695 RIVER OAKS PARKWAY

SAN JOSE, CA 95134

CROWN CASTLE

44 SIMMS ST., SAN RAFAEL, CA 94901

SAN FRANCISCO BAY

EXPANSION - 58 SITES

UTILITY POLE SITE SURVEY

SHIFT NUMBER

AERIAL VIEW

1" = 10'-0"

01 '2 ' 4 '

CONTEXTUAL ELEVATION OF EXISTING POLE WITH PROPOSED EQUIPMENT

3/8" = 1'-0"

01 '2 ' 4 ' 44 SIMMS ST., SAN RAFAEL, CA 94901
1. **GROUND ROOFTOP DETAIL**

   - All nuts on connector bolts must be tightened so that the lock washers are completely compressed.

   - Ground rod shall be 8' in depth minimum and copper clad.

   - Photos of the tests are required as well as test results in formal document format. Submit result of test to CC Construction Manager prior to final walkthrough. Submit all photos and test results to the CC Construction Manager.

   - **Note:** All fittings exposed to environment must be sealed with shrink wrap.

2. **#2 solid bare copper cable is highly susceptible to theft and may be a bit excessive to run to top of pole. #2 tin coated is recommended by Ops. As it’s cheaper and less likely to be stolen. Buss Bars may also be tin coated to make them less susceptible to theft.**

   - Nut on the bolt, turned to “three threads showing at maximum torque”.

   - **Note:** All connector lugs shall have two (2) compressions per lug.

   - **Note:** Exposed “shiners” conductors are prohibited if in excess of 1/16th of an inch.

   - **Note:** Bolt thru the lug hole facing outward.

   - **Note:** All connector lugs must be attached using 3/8" hardware x 2 per each lug and in the following manner:

   - **Note:** CADWELD GROUNDING WIRE TO ANTENNA GROUND BUS (

3. **PROVIDE (1) MAIN GROUND FROM THE ANTENNA MOUNTING BRACKET AT THE TOP OF THE POLE, TO THE MAIN GROUND BUS BAR (TMGB) (LOCATION DEFINED BELOW).**

4. **MAIN VERTICAL GROUND SHALL CONSIST OF**

   - Steel ground rod, type 5/8" x 8' coppper claded,

   - Ground rod test well with additional 14 ft. of bond wire to main ground bus bar. Grounding wire is to be filament wound and copper claded.

5. **GROUNDING SPECIFICATIONS**

   - Steel ground rod, type 5/8" x 8' coppper claded,

   - Ground rod test well with additional 14 ft. of bond wire to main ground bus bar. Grounding wire is to be filament wound and copper claded.

6. **GROUND ROOF DETAIL**

   - **Note:** All nuts on connector bolts must be tightened so that the lock washers are completely compressed.

   - Ground rod shall be 8' in depth minimum and copper clad.

   - Photos of the tests are required as well as test results in formal document format. Submit result of test to CC Construction Manager prior to final walkthrough. Submit all photos and test results to the CC Construction Manager.

   - **Note:** All fittings exposed to environment must be sealed with shrink wrap.

7. **#2 solid bare copper cable is highly susceptible to theft and may be a bit excessive to run to top of pole. #2 tin coated is recommended by Ops. As it’s cheaper and less likely to be stolen. Buss Bars may also be tin coated to make them less susceptible to theft.**

8. **Bolt thru the lug hole facing outward.**

9. **All connector lugs must be attached using 3/8" hardware x 2 per each lug and in the following manner:**

10. **CADWELD GROUNDING WIRE TO ANTENNA GROUND BUS (LOCATION DEFINED BELOW).**

11. **Provide (1) main ground from the antenna mounting bracket at the top of the pole, to the main ground bus bar (TMGB) (location defined below).**

12. **Main vertical ground shall consist of**

   - Steel ground rod, type 5/8" x 8' copper clad,

   - Ground rod test well with additional 14 ft. of bond wire to main ground bus bar. Grounding wire is to be filament wound and copper clad.

13. **GROUND ROD DETAIL**

14. **All nuts on connector bolts must be tightened so that the lock washers are completely compressed.**

15. **Ground rod shall be 8' in depth minimum and copper clad.**

16. **Photos of the tests are required as well as test results in formal document format. Submit result of test to CC Construction Manager prior to final walkthrough. Submit all photos and test results to the CC Construction Manager.**

17. **All fittings exposed to environment must be sealed with shrink wrap.**

18. **#2 solid bare copper cable is highly susceptible to theft and may be a bit excessive to run to top of pole. #2 tin coated is recommended by Ops. As it’s cheaper and less likely to be stolen. Buss Bars may also be tin coated to make them less susceptible to theft.**

19. **Bolt thru the lug hole facing outward.**

20. **All connector lugs must be attached using 3/8" hardware x 2 per each lug and in the following manner:**

21. **CADWELD GROUNDING WIRE TO ANTENNA GROUND BUS (LOCATION DEFINED BELOW).**

22. **Provide (1) main ground from the antenna mounting bracket at the top of the pole, to the main ground bus bar (TMGB) (location defined below).**

23. **Main vertical ground shall consist of**

   - Steel ground rod, type 5/8" x 8' copper clad,

   - Ground rod test well with additional 14 ft. of bond wire to main ground bus bar. Grounding wire is to be filament wound and copper clad.

24. **GROUND ROD DETAIL**

25. **All nuts on connector bolts must be tightened so that the lock washers are completely compressed.**

26. **Ground rod shall be 8' in depth minimum and copper clad.**

27. **Photos of the tests are required as well as test results in formal document format. Submit result of test to CC Construction Manager prior to final walkthrough. Submit all photos and test results to the CC Construction Manager.**

28. **All fittings exposed to environment must be sealed with shrink wrap.**

29. **#2 solid bare copper cable is highly susceptible to theft and may be a bit excessive to run to top of pole. #2 tin coated is recommended by Ops. As it’s cheaper and less likely to be stolen. Buss Bars may also be tin coated to make them less susceptible to theft.**

30. **Bolt thru the lug hole facing outward.**

31. **All connector lugs must be attached using 3/8" hardware x 2 per each lug and in the following manner:**

32. **CADWELD GROUNDING WIRE TO ANTENNA GROUND BUS (LOCATION DEFINED BELOW).**

33. **Provide (1) main ground from the antenna mounting bracket at the top of the pole, to the main ground bus bar (TMGB) (location defined below).**

34. **Main vertical ground shall consist of**

   - Steel ground rod, type 5/8" x 8' copper clad,

   - Ground rod test well with additional 14 ft. of bond wire to main ground bus bar. Grounding wire is to be filament wound and copper clad.
Instructions for De-Energizing the Site:
1. Call Crown Castle Network operations center 1888-632-0931
2. Identify RF DISCONNECT BOX
3. Open RF DISCONNECT BOX
4. Open cover for RF Disconnect Breaker
5. Turn RF Disconnect Breaker to the off position to de-energize node
6. To confirm that the site has been de-energized, PG&E crew/technician can remove the single screw on the bottom right cover of the RF Disconnect Breaker and remove the cover to expose the source and load terminals on the switch and then check for no potential between the load terminal and ground to verify that no RF signal can be generated.
7. Notify Crown Castle Network operations center that work is complete