

REFER TO CALTRANS 2018 STANDARD PLAN AND SPECIFICATION. UNLESS OTHERWISE NOTED.

GENERAL NOTES

1. THESE ELECTRICAL PLANS ARE DIAGRAMMATIC AND ARE CORRECT FOR GENERAL DESIGN ONLY. THE EXACT LOCATIONS OF EQUIPMENT & APPURTENANCES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

2. THE CONTRACTOR SHALL COORDINATE WITH PG&E VIA SFPUC FOR SERVICE CONNECTIONS; 14 WORKING DAYS ADVANCE NOTICE IS REQUIRED.

3. SERVICE CONNECTIONS SHALL BE MADE PER SPDPWSF #87,203. IF THE PLAN REQUIRES FUSING IN A PULL BOX FOR IC SERVICE, THIS IS THE POINT THE NEUTRAL IS BONDED TO GROUND. THE GROUND ROD IN THE PULL BOX SHALL BE CONNECTED TO THE GROUND ROD IN THE IC WITH #6 BSCW TO FORM A GROUNDING SYSTEM.

4. FOR SIGNAL SERVICE FROM PG&E THAT DOES NOT GO DIRECTLY TO INTERSECTION CONTROLLER, CONTRACTOR SHALL PROVIDE IN LINE FUSE AND FUSE HOLDER SIMILAR TO STREET LIGHTS APPLICATIONS. SEE SPDPWSF #87,203. F/I IN-LINE FUSE HOLDERS WITH 40A FUSE FOR IC SERVICE AND 40A FUSE FOR SL SERVICE. CONNECT BOTH SERVICES TO THE SAME PHASE. PROVIDE LABELING FOR "IC CONTROLLER" AND STREETLIGHT" SERVICE WITH LOCATION IDENTIFICATION.

5. PROVIDE 12" CONCRETE COLLAR ALL AROUND PULL BOX IN UNPAVED OR LAWN AREA PER SPDPWSF #87,201.

6. CONTRACTOR SHALL CONSTRUCT A CONCRETE PAD AROUND A POLE OR CONTROLLER CABINET FOUNDATION IN AN UNPAVED OR LAWN AREA. FINAL DIMENSIONS OF CONCRETE PAD SHALL BE DIRECTED BY RESIDENT ENGINEER, AS INCIDENTAL COST.

7. CONTRACTOR SHALL COORDINATE WITH RESIDENT ENGINEER TO REFERENCE EX SURVEY MONUMENTS BEFORE CONSTRUCTION: 10 WORKING DAYS ADVANCE NOTICE IS REQUIRED.

8. IN ACCORDANCE WITH SAN FRANCISCO ADMINISTRATIVE CODE SECTION 6.22(E), THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL PAY THEIR WORKERS THE GENERAL RATES OF PREVAILING WAGE BASED ON THE TYPE OF WORK PERFORMED. THE CONTRACTOR AND ITS SUBCONTRACTORS ARE ADVISED THAT THE CITY CONSIDERS THE PROPER CLASSIFICATION FOR EMPLOYEES WHO PERFORM ALL ELECTRICAL WORK ASSOCIATED WITH THE INSTALLATION OF UNDERGROUND FED TRAFFIC SIGNALS TO BE THAT OF ELECTRICIAN: INSIDE WIREMAN. THE CLASSIFICATION OF ELECTRICAL UTILITY LINEMAN IS NOT APPLICABLE FOR THIS TYPE OF WORK. THE SAN FRANCISCO BOARD OF SUPERVISORS ANNUALLY DETERMINES THE CLASSIFIED PREVAILING RATES OF WAGE. PRINTED VERSIONS ARE AVAILABLE FROM DEPUTY BUREAU CHIEF MAURICE WILLIAMS AT (415)554-8362. THE RATES ARE ALSO AVAILABLE ON-LINE AT <http://www.dir.ca.gov/DLRS/PWD>.

9. CONTRACTOR TO FIELD VERIFY AND MAINTAIN TRAFFIC SIGNAL, STREETLIGHT, AND INTERCONNECT WIRING WHICH WILL NOT BE MADE OBSOLETE AND WHICH WILL BE DISTURBED DUE TO CONSTRUCTION CHANGES REQUIRED BY THIS CONTRACT. THEY SHALL BE RESTORED TO OPERATING CONDITION, AS REQUIRED AND/OR AS DIRECTED. WHERE REQUIRED, SHOWN AND/OR DIRECTED, CONDUIT RUNS SHALL BE RELOCATED. IN SOME CASES, IT MAY BE NECESSARY TO EXTEND CONDUITS AND PULL IN NEW WIRING OR REPLACE OLD WIRING WITH NEW.

10. NO EXPOSED CONDUITS. U.O.N.

11. CONTRACTOR SHALL RESTORE SIDEWALK AND CROSSWALK TO MATCH EXISTING SIDEWALK AND CROSSWALK IN DESIGN, COLOR, AND MATERIAL. RESTORE WHOLE FLAGS OF EXISTING SIDEWALK THAT ARE AFFECTED BY THIS PROJECT.

12. THE UTILITY INFORMATION IS FOR REFERENCE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATIONS OF THE UTILITIES. ALL DAMAGE TO EXISTING UTILITY LINES OR ADJACENT FACILITIES SHALL BE REPAIRED PROMPTLY AT THE CONTRACTOR'S EXPENSE.

13. CONTRACTOR TO PROVIDE TEMPORARY POLE BASE MOUNTED LIGHTING AND TRAFFIC SIGNAL FOR PEDESTRIAN AND VEHICULAR SAFETY IF THERE IS CONFLICT DUE TO UNFORESEEN UTILITIES WITHIN EXISTING AND/OR NEW LIGHTING IN THE LIMIT OF WORK AND OUTSIDE THE LIMIT OF WORK. TEMPORARY LIGHTING AND TRAFFIC SIGNAL SOURCE SHALL BE TAPPED FROM NEAREST EXISTING SOURCE. THIS WORK SHALL BE PART OF INCIDENTAL COST.

14. ANY GAP OPENING FOR WIRE ENTRIES OR EQUIPMENT MOUNTING SHALL BE COMPLETELY WATER AND AIR TIGHT SEALED WITH DUCT SEAL TO PREVENT FOREIGN OBJECTS FROM ENTERING.

GENERAL NOTES (CONT.)

15. FOR ALL TRAFFIC SIGNAL AND STREET LIGHT PULL BOXES THAT ARE ROTATED, RELOCATED, OR ADJUSTED, THE CONTRACTOR SHALL CONTACT SFMTA TRAFFIC SIGNAL SHOP AND SFPUC AT LEAST 3 DAYS PRIOR TO SETTING THE BOX AT THE NEW LOCATION AND/OR GRADE. THE WORK PERFORMED SHALL MEET THE FOLLOWING CONDITIONS:

a. THE ENDS OF ALL EXISTING CONDUITS SHALL BE WITHIN THE WALLS OF THE EXISTING PULL BOX AT ITS NEW LOCATION;

b. THE CONDUIT ENDS (I.E., BUSHINGS) SHALL BE A MINIMUM OF 5" FROM THE BOTTOM OF THE PULL BOX LID;

c. CONTRACTOR SHALL CONTACT THE SFMTA TRAFFIC SIGNAL SHOP AND SFPUC THROUGH THE ENGINEER AFTER THE WORK IS COMPLETED, FOR FINAL INSPECTION AND APPROVAL OF THE PULLBOX MODIFICATION(S).

d. ALL CONDUIT AND WIRING MODIFICATIONS SHALL BE PART OF INCIDENTAL COST.

16. WHERE EXISTING CONDUITS NEED TO BE EXTENDED TO THE PULL BOX, THE CONTRACTOR SHALL MODIFY THE EXISTING TRAFFIC SIGNAL WIRING AS FOLLOWS:

a. REMOVE EXISTING TRAFFIC SIGNAL WIRING, COMPLETE ALL NECESSARY PULL BOX AND CONDUIT MODIFICATIONS, PROVIDE NEW TRAFFIC SIGNAL WIRES TO REPLACE ALL THE EXISTING WIRING IMPACTED BY THIS MODIFICATION;

OR

b. WITH THE APPROVAL OF THE SFMTA TRAFFIC SIGNAL SHOP, THE CONTRACTOR SHALL PULL BACK EXISTING WIRES TO ADJACENT PULL BOX (TOWARD THE I/C), COMPLETE ALL NECESSARY PULL BOX AND CONDUIT MODIFICATIONS, RECONNECT, AND REUSE THE EXISTING TRAFFIC SIGNAL WIRES, IF FEASIBLE.

17. CURB RETURN AREA:

a. PRIOR TO CONSTRUCTION, CONTRACTOR AND RESIDENT ENGINEER SHALL PHOTOGRAPH THE CURB RETURN AREA, SIDEWALK, CURB RAMP, CONCRETE DETECTABLE SURFACE TILES, CURB AND GUTTER WITHIN THE PROJECT SCOPE.

b. CONTRACTOR TO SUBMIT PLANS FOR ALL SIDEWALK, CURB RAMP, CONCRETE DETECTABLE SURFACE TILES, CURB AND GUTTER THAT ARE TO BE REPLACED TO CITY REPRESENTATIVE FOR APPROVAL.

c. ANY DAMAGE TO CONCRETE DETECTABLE SURFACE TILES, CURB RAMPS, SIDEWALKS, AND/OR CURB AND GUTTER WHICH OCCURS DURING CONSTRUCTION SHALL BE REPLACED AT CONTRACTOR'S COST TO MATCH EXISTING CONCRETE DETECTABLE SURFACE TILES, CURB RAMPS, SIDEWALKS, CURB AND GUTTER IN DESIGN, COLOR AND MATERIAL TO EXISTING WHOLE PANELS, CONSTRUCTION JOINTS, SIDEWALK FLAGS AND/OR CURBS AND GUTTERS.

18. TRENCH DETAILS ARE TO FOLLOW CALTRANS STANDARD SPECIFICATIONS 2015. REFER TO CALTRANS REFERENCE DRAWINGS FOR "CASE 1: FOR TRAFFIC INDEX (TI) LESS THAN OR EQUAL TO 12" FOR TRENCH DETAILS.

19. R/C EXISTING FOUNDATION (UNLESS OTHERWISE NOTED):  
CONTRACTOR TO REMOVE UP TO 36" BELOW GRADE, INCLUDING ALL ASSOCIATED EMBEDDED CONDUITS, UNLESS IT IS MUNI POLE. REFER TO SPECIFICATION. IF IT IS POLE IN PLACE OF POLE, CONTRACTOR TO REMOVE POLE FOUNDATION TO ACCOMMODATE THE NEW POLE FOUNDATION AND FILL THE CAVITY WITH SLURRY AS REQUIRED.

20. IF TRAFFIC SIGNAL AND STREET LIGHT SHARE CONDUIT AND ARE POWERED FROM DIFFERENT SOURCES ADD LABELING FOR LOCATION OF POWER SOURCE FOR EACH SERVICE.

21. SPLICING OF TRAFFIC SIGNAL NEUTRAL AND STREET LIGHT CABLES IN PULL BOXES SHALL BE MADE USING SPLIT BOLT ONLY. SPLICE CONNECTORS SHALL BE OF THE APPROPRIATE SIZE.

22. IF TRAFFIC SIGNAL AND STREET LIGHT SHARE CONDUIT AND ARE POWERED FROM DIFFERENT SOURCES ADD LABELING FOR LOCATION OF POWER SOURCE FOR EACH SERVICE.

23. CONTRACTOR HAVE THE OPTION TO SHARE STREET LIGHT AND TRAFFIC SIGNAL CONDUITS IN THE SAME TRENCH.

24. R/C ALL TRAFFIC SIGNAL POLES. R/C STREETLIGHT POLES AND LUMINAIRES  
R/S LUMINAIRE ARMS.

GENERAL NOTES (CONT.)

25. CONTRACTOR TO PROVIDE FLEXIBLE ENGRAVING STOCK NAMEPLATE TAG WITH STAINLESS STEEL WIRE FOR TRAFFIC SIGNAL AND STREETLIGHT SERVICE LABELING, WHITE LETTER ON BLACK BACKGROUND.

26. CONDUITS FROM THE STREET TO SUB-SIDEWALK BASEMENTS AND CONDUITS INSIDE SUB-SIDEWALK BASEMENTS SHALL BE GRS.

27. PROVIDE 10A FUSE(S) IN WEATHERPROOF FUSE HOLDER FOR STREET LIGHT IN ADJACENT PULLBOX.

28. R/S TRAFFIC AND STREET SIGNS ON REMOVED POLES.

29. CITY FORCES TO PROVIDE TRAFFIC AND STREET SIGNS ON NEW POLES.

30. ALL TRENCHING IN ROADWAY SHALL BE WITHIN CALTRANS RIGHT OF WAY.

NO. DATE DESCRIPTION BY APP.

THIS DRAWING WAS LAST MODIFIED: 12/03/19 16:12, BY: dgargaritano

REFERENCE INFORMATION & FILE NO. OF SURVEYS

SEAL OF THE CITY AND COUNTY OF SAN FRANCISCO

BUREAU OF ENGINEERING

CITY & COUNTY OF SAN FRANCISCO

SAN FRANCISCO PUBLIC WORKS

30 VAN NESS AVENUE, 5TH FLOOR

SAN FRANCISCO, CA 94102 - 6028

Acting Section Mgr: PHILIP THWIN

Date: 12/11/19

DESIGNED: KS/DG 02/2018

Deputy Bureau Mgr: FERNANDO CISNEROS

Date: 12/16/19

DRAWN: KS/DG 02/2018

Acting Bureau Mgr: IQBAL DHAPA

Date: 12/16/19

CHECKED: MV/SL 02/2018

REGISTERED PROFESSIONAL ENGINEER

STEVEN T. LEE

NO. E15417

ELECTRICAL

STATE OF CALIFORNIA

SCALE: NONE

SHEET OF SHEETS 90 OF 356

19TH AVENUE (STATE ROUTE 1)  
COMBINED CITY PROJECT

ELECTRICAL LEGEND - GENERAL NOTES

CONTRACT NO. 1000005832

DRAWING NO. E-0.2

FILE NO. 111,387

REV. NO.

PLAN APPROVAL DATE

CONTRACT No. 04-0G3501

PROJECT ID 0400000325

DISTRICT 04

COUNTY SF

ROUTE 1

POST MILES TOTAL PROJECT R0.94/4.05

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Xrefs: V:\2652\19th Avenue\_Combined\_City\_Project\2\_Design\Working\Drawings\EE\Current\Xref\DE\_1\_TBD.dwg

Model Units: Undefined

Drawing Path: V:\2652\19th Avenue\_Combined\_City\_Project\2\_Design\Working\Drawings\EE\Current\Xref\DE\_1\_TBD.dwg

Plot Time: Wed, 04 Dec 2019 - 5:45pm