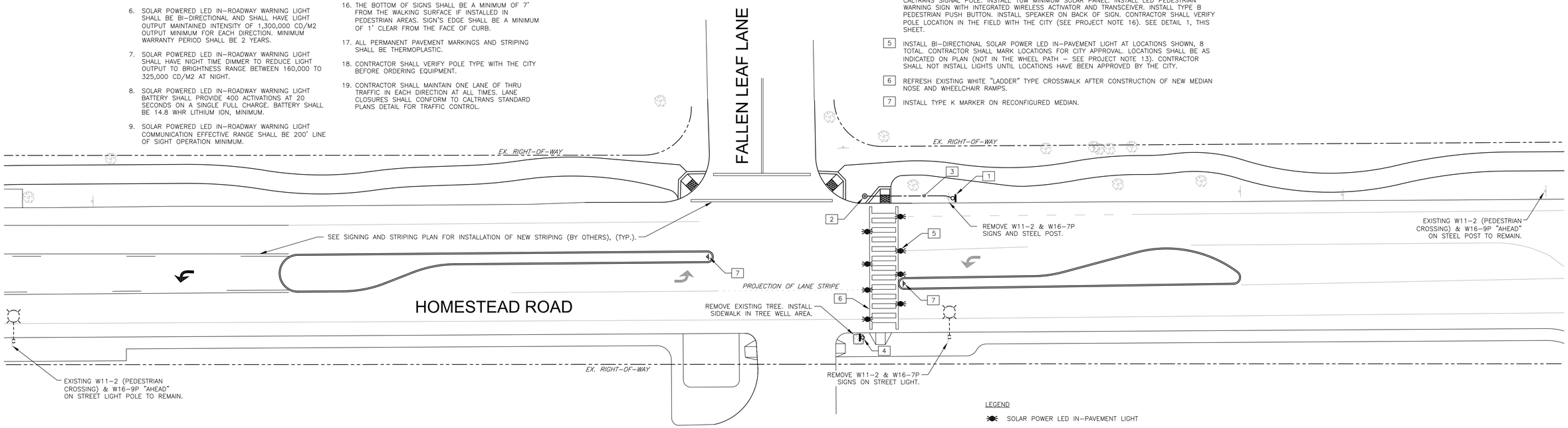
65% SUBMITTAL
AUGUST 2011
NOT FOR CONSTRUCTION

PROJECT NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST EDITION OF THE CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS AND SPECIFICATIONS AND CITY OF LOS ALTOS STANDARDS.
2. CONTRACTOR SHALL INSTALL A SOLAR POWERED LED IN–ROADWAY WARNING LIGHT SYSTEM AT THE CROSSWALK, INCLUDING ALL ACCESSORIES REQUIRED FOR A COMPLETE SYSTEM. THE LED IN–ROADWAY WARNING LIGHT SYSTEM SHALL BE MANUFACTURED BY SILICON CONSTELLATIONS, INC., OR APPROVED EQUAL. ALL EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
3. SOLAR POWERED LED IN–ROADWAY WARNING LIGHTS SHALL CONFORM TO CALIFORNIA MUTCD AND CALTRANS STANDARDS.
4. SIGNING AND STRIPING SHALL CONFORM TO THE APPLICABLE DETAILS OF THE LATEST EDITION OF THE CALTRANS STANDARD PLANS AND SPECIFICATIONS AND THE CALIFORNIA MUTCD.
5. EXISTING FACILITIES DISTURBED BY THE CONTRACTOR INCLUDING STRIPING, MARKINGS PAVEMENT MARKERS, LANDSCAPE, IRRIGATION, CURB SIDEWALK, ETC., SHALL BE REPLACED IN KIND, UNLESS OTHERWISE SHOWN ON THE PLAN.
6. SOLAR POWERED LED IN–ROADWAY WARNING LIGHT SHALL BE BI–DIRECTIONAL AND SHALL HAVE LIGHT OUTPUT MAINTAINED INTENSITY OF 1,300,000 CD/M2 OUTPUT MINIMUM FOR EACH DIRECTION. MINIMUM WARRANTY PERIOD SHALL BE 2 YEARS.
7. SOLAR POWERED LED IN–ROADWAY WARNING LIGHT SHALL HAVE NIGHT TIME DIMMER TO REDUCE LIGHT OUTPUT TO BRIGHTNESS RANGE BETWEEN 160,000 TO 325,000 CD/M2 AT NIGHT.
8. SOLAR POWERED LED IN–ROADWAY WARNING LIGHT BATTERY SHALL PROVIDE 400 ACTIVATIONS AT 20 SECONDS ON A SINGLE FULL CHARGE. BATTERY SHALL BE 14.8 WHR LITHIUM ION, MINIMUM.
9. SOLAR POWERED LED IN–ROADWAY WARNING LIGHT COMMUNICATION EFFECTIVE RANGE SHALL BE 200' LINE OF SIGHT OPERATION MINIMUM.
10. SOLAR POWERED LED IN–ROADWAY WARNING LIGHT OPERATING TEMPERATURE RANGE SHALL BE –10F TO +140F.
11. SOLAR POWERED LED IN–ROADWAY WARNING LIGHT HOUSING MATERIAL AND ANCHOR SHALL BE CAST IRON OR MACHINED AIRCRAFT GRADE CORROSION PROOF ALUMINUM. THE ELECTRONICS HOUSING SHALL BE VAPOR TIGHT CORROSION RESISTANT ALUMINUM CASING.
12. BATTERY FOR THE CONTROLLER SHALL BE 12 AHR LEAD ACID, MINIMUM.
13. CONTRACTOR SHALL INSTALL SOLAR POWERED LED IN–ROADWAY WARNING LIGHTS ON LANE LINES, PROJECTION OF LANE LINES, CENTERED IN LANES, OR 1' OFFSET FROM MEDIAN AS INDICATED ON THE PLAN. ALL IN–ROADWAY WARNING LIGHTS SHALL BE OFFSET 1' FROM EDGE OF CROSSWALK.
14. SOLAR POWERED LED IN–ROADWAY WARNING LIGHTS AND LED'S ON SIGN BORDER OF W11–2 SIGN SHALL BE WIRELESSLY INTERCONNECTED AND FLASH IN UNISON WHEN ACTIVATED BY PUSH BUTTON.
15. ALL STRIPING, SIGN POSITIONS, AND PAVEMENT MARKINGS SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
16. THE BOTTOM OF SIGNS SHALL BE A MINIMUM OF 7' FROM THE WALKING SURFACE IF INSTALLED IN PEDESTRIAN AREAS. SIGN'S EDGE SHALL BE A MINIMUM OF 1' CLEAR FROM THE FACE OF CURB.
17. ALL PERMANENT PAVEMENT MARKINGS AND STRIPING SHALL BE THERMOPLASTIC.
18. CONTRACTOR SHALL VERIFY POLE TYPE WITH THE CITY BEFORE ORDERING EQUIPMENT.
19. CONTRACTOR SHALL MAINTAIN ONE LANE OF THRU TRAFFIC IN EACH DIRECTION AT ALL TIMES. LANE CLOSURES SHALL CONFORM TO CALTRANS STANDARD PLANS DETAIL FOR TRAFFIC CONTROL.

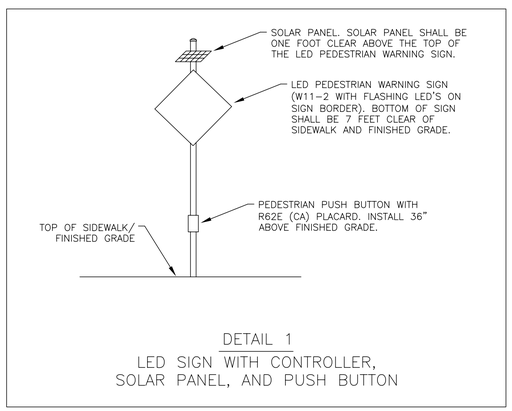
CONSTRUCTION NOTES

1. INSTALL TYPE 1–B CALTRANS SIGNAL POLE (12'). INSTALL 20W MINIMUM SOLAR PANEL. INSTALL LED PEDESTRIAN WARNING SIGN WITH INTEGRATED WIRELESS ACTIVATOR AND TRANSCEIVER. INSTALL SPEAKER ON BACK OF SIGN. CONTRACTOR SHALL VERIFY POLE LOCATION IN THE FIELD WITH THE CITY (SEE PROJECT NOTE 16). SEE DETAIL 1 THIS SHEET. OMIT PEDESTRIAN PUSH BUTTON. SPEAKER VOLUME SHALL BE ADJUSTED TO BE AUDIBLE BY A PEDESTRIAN NEAR THE PEDESTRIAN PUSH BUTTON.
2. INSTALL TYPE B PEDESTRIAN PUSH BUTTON (PPB) WITH R62E (CA) PLACARD AND PPB POST.
3. INSTALL 1" CONDUIT WITH 2 #18 CONDUCTORS FOR PPB WIRING TO ACTIVATOR.
4. INSTALL 12–FOOT LONG 2.875 INCH DIAMETER GALVANIZED STEEL POST OR TYPE 1–B CALTRANS SIGNAL POLE. INSTALL 10W MINIMUM SOLAR PANEL. INSTALL LED PEDESTRIAN WARNING SIGN WITH INTEGRATED WIRELESS ACTIVATOR AND TRANSCEIVER. INSTALL TYPE B PEDESTRIAN PUSH BUTTON. INSTALL SPEAKER ON BACK OF SIGN. CONTRACTOR SHALL VERIFY POLE LOCATION IN THE FIELD WITH THE CITY (SEE PROJECT NOTE 16). SEE DETAIL 1, THIS SHEET.
5. INSTALL BI–DIRECTIONAL SOLAR POWER LED IN–PAVEMENT LIGHT AT LOCATIONS SHOWN, 8 TOTAL. CONTRACTOR SHALL MARK LOCATIONS FOR CITY APPROVAL. LOCATIONS SHALL BE AS INDICATED ON PLAN (NOT IN THE WHEEL PATH – SEE PROJECT NOTE 13). CONTRACTOR SHALL NOT INSTALL LIGHTS UNTIL LOCATIONS HAVE BEEN APPROVED BY THE CITY.
6. REFRESH EXISTING WHITE "LADDER" TYPE CROSSWALK AFTER CONSTRUCTION OF NEW MEDIAN NOSE AND WHEELCHAIR RAMPS.
7. INSTALL TYPE K MARKER ON RECONFIGURED MEDIAN.



LEGEND

- SOLAR POWER LED IN–PAVEMENT LIGHT
- SOLAR POWER LED PEDESTRIAN WARNING SIGN, PUSH BUTTON, CONTROLLER, BATTERY
- TYPE K MARKER
- EXISTING SIGN
- EXISTING TREE
- EXISTING STREET LIGHT



DETAIL 1
LED SIGN WITH CONTROLLER, SOLAR PANEL, AND PUSH BUTTON

GRAPHIC SCALE
20 0 10 20 40 80
1 INCH = 20 FEET

CA: 1–800–227–2600
CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
CA: 1–800–227–2600
CALL TWO WORKING DAYS BEFORE YOU DIG

∘ THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

E-3

DRAWN	DESIGNED	SCALE
Ralph Garcia	Ralph Garcia	1" = 20'
CHECKED	DATE	
Jeff Elia	8/15/11	
APPROVED		
		CONTRACT NO.
ENGINEER	DATE	

PREPARED BY:
Hexagon Transportation Consultants, Inc.
111 West St. John Street, Suite 850
San Jose, California 95113
Ph: (408) 971-6100 Fx: (408) 971-6102

REVISIONS

NO.	DATE	BY	DESCRIPTION	APPR.	DATE

CITY OF LOS ALTOS

HOMESTEAD ROAD
IN-ROADWAY WARNING LIGHTS
HOMESTEAD RD. AT FALLEN LEAF LN.

PREPARED FOR: CITY OF LOS ALTOS

DRAWING NO. 17

SHT 17 OF 24