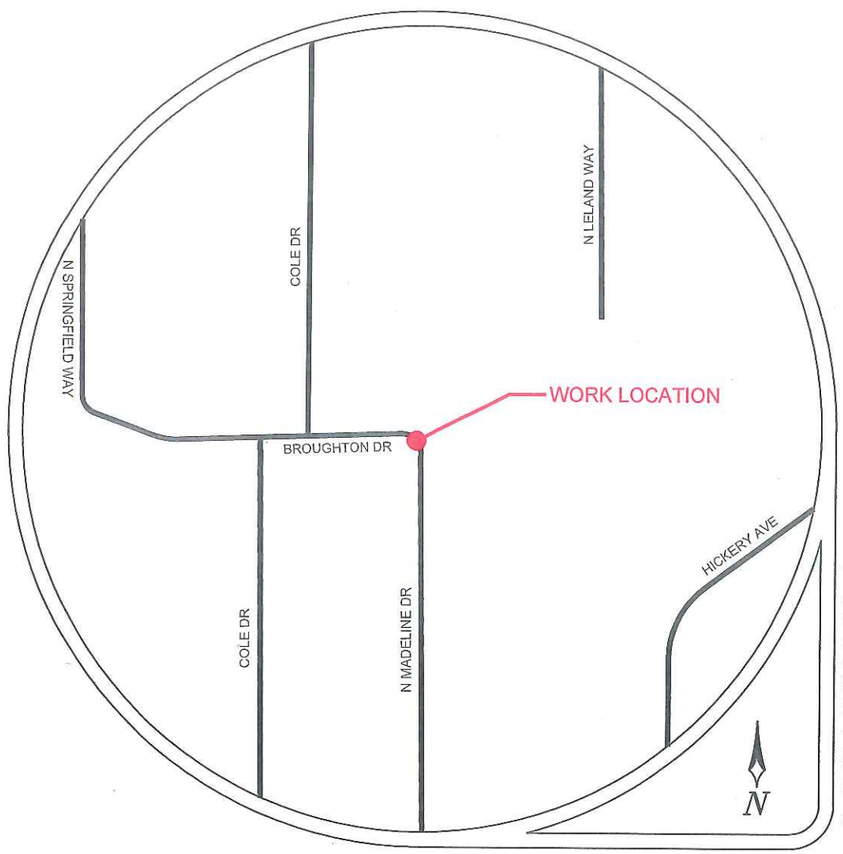
TRAFFIC CONTROL PLANS

BROUGHTON DR & N MADELINE DR

STOCKTON, CALIFORNIA

SAN JOAQUIN COUNTY



LOCATION MAP

PM31118309

CONTRACTOR

Pacific Gas and Electric Company

CONTACT GREG WASHINGTON

PHONE# (408) 316-1767

CONSULTANT

ALMENDARIZ CONSULTING INC

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1136 SUNCAST LN STE 9
EL DORADO HILLS, CA 95762
(888) 306-1211 OFFICE
(888) 768-7022 FAX
CA C31 LIC #979806

REVISIONS			
REV.	DESCRIPTION	REV DONE BY	DATE

PROJECT NO. 150231
DRAWN JEL
DESIGNED SM
CHECKED DC

DATE
MARCH 17, 2015

SHEET NO. 1 OF 3

GENERAL NOTES

1. NOTHING ALLOWED IN THE BUFFER AND TRANSITION AREAS AT ALL TIMES.
2. SIGNS ARE ONLY SHOWING TO THE PUBLIC WHEN IN USE.
3. SIGNS AND CHANNELIZING DEVICES MUST BE RETROREFLECTIVE OR ILLUMINATED DURING NIGHT OPERATIONS.
4. SIGN PANEL SIZES: 36"X36" MIN. ON ROADS <50mph, 48"x48" ON ROADS ≥ 50mph.
5. SIGNS ARE SPACED PER THE CA 2014 MUTCD.
6. CHANNELIZING DEVICES SPACING AND TAPER LENGTHS ARE BASED ON THEIR RESPECTIVE CHARTS. (SEE CHARTS THIS PAGE)
7. NOTIFY THE LOCAL LAW ENFORCEMENT, FIRE, AND AMBULANCE COMPANIES WITHIN 72 HOURS BEFORE CONSTRUCTION BEGINS.
8. CONTRACTOR TO MAKE SURE ALL TRAFFIC CONTROL EQUIPMENT MEETS ALL AGENCY REQUIREMENTS.
9. REMOVE ALL CONFLICTING MARKINGS FOR LONG TERM OPERATIONS (3 DAYS OR LONGER).
10. THE LOCATION OF THE SIGNS AS SHOWN ON THE ILLUSTRATIONS ARE GUIDELINES AND ACTUAL LOCATIONS WILL DEPEND UPON ALIGNMENT, GRADE, LOCATION OF STREET INTERSECTIONS AND 85% TILE/POSTED SPEED LIMITS/OR PRIMA FACIE.
11. WHILE CROSSING INTERSECTIONS DURING MOBILE WORK, WORK MUST FOLLOW THE FLOW OF TRAFFIC AND PROCEED ON A GREEN LIGHT.
12. FULL COMPLIANCE IS REQUIRED WITH THE COUNTY AGENCY.(AFFECTS NOTES #20 THRU 22, BELOW)
13. PEDESTRIAN ACCESS MUST BE MAINTAINED AS PER THE CA 2014 MUTCD STANDARDS AND ADA REQUIREMENTS.
14. C30 SIGNS ARE PERMITTED IN BUFFER AREAS.
15. SIGN SPACING IS PROVIDED IN THE CA 2014 MUTCD EDITION, PART 6. TRAFFIC SPEEDS ARE BASED UPON RADAR MEASUREMENTS OF MOTORISTS. THE MUTCD ALLOWS FOR A "RANGE" IN SIGN PLACEMENT AND WILL BE PROVIDED BY DOT. THE 85% TILE IS USED WHEN AVAILABLE TO PROVIDE A MORE ACCURATE REPRESENTATION OF MOTORISTS SPEEDS.
16. ANY WORK WITHIN 200 FT OF A SIGNALIZED INTERSECTION WILL REQUIRE CONTACT AND COORDINATION WITH COUNTY AGENCY PRIOR TO ANY WORK.
17. QUALITY STANDARD TO MEET REQUIREMENTS OF SECTION 1A-2 OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
18. ALL TRAFFIC CONTROL DEVICES INCLUDING: SIGNS, BARRICADES, VERTICAL PANELS, DRUMS, WARNING LIGHTS, ARROWBOARDS, CHANGEABLE MESSAGE SIGNS, CONES AND TUBULAR MARKERS THAT MEET THE REQUIREMENTS OF AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA). "CA 2014 MUTCD" SHALL BE USED ON THIS PROJECT/THIS WORK.
19. THE NCHRP REPORT 476 PROVIDES GUIDELINES FOR DESIGN AND OPERATION OF NIGHTTIME TRAFFIC CONTROL FOR HIGHWAY MAINTENANCE AND CONSTRUCTION. SEE TYPICAL APPLICATIONS NWTA-1 THROUGH NWTA-7. COMPLY WITH ANSI 107-2004 FOR APPAREL. HIGHWAY CONSTRUCTION WORK LIGHTING SHALL BE PER CONSTRUCTION SAFETY ORDER 1523 (CALIFORNIA CODE OF REGULATIONS TITLE 8, DIVISION1, CHAPTER 4, SUBCHAPTER 4, ARTICLE 3, SECTION 1523 - ILLUMINATIONS).
20. SIDEWALKS AT THE CONSTRUCTION LOCATION MAY BE CLOSED WITH ADEQUATE DETOURS. SIDEWALKS MAY ONLY BE CLOSED TO THROUGH TRAFFIC AND SHALL NOT PREVENT LOCAL PEDESTRIANS ACCESS. DETOURS SHALL NOT INCREASE THE PATH OF TRAVEL BY MORE THAN 500 FT. DETOUR ROUTES SHALL BE LIMITED TO EXISTING SIDEWALKS, PRIVATE PROPERTIES (SEE BELOW REQUIREMENTS) AND CROSSINGS AT ROADWAY INTERSECTIONS. TO THE MAXIMUM EXTENT FEASIBLE, THE ALTERNATE CIRCULATION PATH SHALL BE PROVIDED ON THE SAME SIDE OF THE STREET AS THE DISRUPTED ROUTE. WHERE IT IS FEASIBLE TO PROVIDE A SAME-SIDE ALTERNATE CIRCULATION PATH AND PEDESTRIANS WILL BE DETOURED, SECTION 6D.02 OF THE CA 2014 MUTCD SPECIFIES THAT THE ALTERNATE PATH PROVIDE A SIMILAR LEVEL OF ACCESSIBILITY TO THAT OF THE EXISTING DISRUPTED ROUTE . THIS MAY INCLUDE THE INCORPORATION OF ACCESSIBLE PEDESTRIAN SIGNALS (APS), CURB RAMPS, OR OTHER ACCESSIBILITY FEATURES.
21. PEDESTRIANS MAY BE DETOURED ONTO PRIVATE PROPERTY ONLY IF WRITTEN PERMISSION FROM THE PROPERTY OWNER IS OBTAINED ALONG WITH DOCUMENTATION INDICATING THAT THE COUNTY WOULD NOT BE LIABLE (HOLD HARMLESS) IN THE EVENT OF AN ACCIDENT.
22. DURING WORK HOURS, AT LEAST ONE WORKER SHALL BE ASSIGNED WITH THE RESPONSIBILITY TO ESCORT ELDERLY, DISABLED OR ANY OTHER PEDESTRIANS IN NEED OF ASSISTANCE THROUGH THE CONSTRUCTION SITE. A WORKER ASSIGNED WITH THIS RESPONSIBILITY MAY ALSO PARTICIPATE IN OTHER CONSTRUCTION ACTIVITIES; HOWEVER, THE ASSIGNED WORKER SHALL BE AWARE OF HIS OR HER RESPONSIBILITIES FOR PROVIDING THIS ASSISTANCE. MEASURES THAT SIMPLY CLOSE THE SIDEWALK, WITH THE EXCEPTION THAT PEDESTRIANS WILL CROSS SOMEWHERE ELSE DOES NOT ADEQUATELY SATISFY PEDESTRIAN ACCESS. PEDESTRIANS SHOULD NEVER BE DIRECTED/ EXPECTED TO CROSS A MULTI-LANE ROADWAY AT ANY LOCATION OTHER THAN AT A SIGNAL (OR ALL-WAY STOP). ACCOMMODATIONS SHOULD BE MADE ON THE SAME SIDE OF ROADWAY AS WORK.

TABLES CHART - 2014 MUTCD

Posted Speed	Taper (L) Formula	Buffer Space	Minimum Taper Lengths 10' Offset L Merge	10' Offset 1/2 L Shift	10' Offset 1/3 L Shoulder	11' Offset L Merge	11' Offset 1/2 L Shift	11' Offset 1/3 L Shoulder	12' Offset L Merge	12' Offset 1/2 L Shift	12' Offset 1/3 L Shoulder	Maximum *Cone Spacing @ Taper	@ Tangent	@ Conflict	Sign Spacing
25	$L = \frac{WS^2}{60}$	155'	104'	52'	35'	115'	57'	38'	125'	63'	42'	25'	50'	12'	100' - 200'
30		200'	150'	75'	50'	165'	83'	55'	180'	90'	60'	30'	60'	15'	120' - 240'
35		250'	204'	102'	68'	225'	112'	75'	245'	123'	82'	35'	70'	17'	140' - 280'
40		305'	267'	133'	89'	293'	147'	98'	320'	160'	107'	40'	80'	20'	160' - 320'
45	L = WS	360'	450'	225'	150'	495'	248'	165'	540'	270'	180'	45'	90'	22'	360' - 540'
50		425'	500'	250'	167'	550'	275'	183'	600'	300'	200'	50'	100'	25'	400' - 600'
55		495'	550'	275'	183'	605'	303'	202'	660'	330'	220'	55'	110'	27'	440' - 660'
60		570'	600'	300'	200'	660'	330'	220'	720'	360'	240'	60'	120'	30'	480' - 720'
65		645'	650'	325'	217'	715'	358'	238'	780'	390'	260'	65'	130'	32'	520' - 780'
70		730'	700'	350'	233'	770'	385'	257'	840'	420'	280'	70'	140'	35'	560' - 840'

Both are based on.
1.) 85th % Tile or if not available, then use Posted Speed Limit (PSL)

L = Taper Length
S = Speed
W = Width (Offset from path of travel

*Cones shown on the templates are illustration purposes only. Exact number of cones required shall be based on cone spacing, taper lengths, actual field conditions, etc..

CA MUTCD 2014 TABLE 6C-1

MEANING OF LETTER CODES ON TYPICAL APPLICATION DIAGRAMS

ROAD TYPE	DISTANCE BETWEEN SIGNS A	B	C
URBAN (LOW SPEED) - 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
URBAN (LOW SPEED) - MORE THAN 25 MPH TO 40 MPH	250 FEET	250 FEET	250 FEET
URBAN (HIGH SPEED) - MORE THAN 40 MPH	350 FEET	350 FEET	350 FEET
RURAL	500 FEET	500 FEET	500 FEET
EXPRESSWAY / FREEWAY	1,000 FEET	1,500 FEET	2,640 FEET

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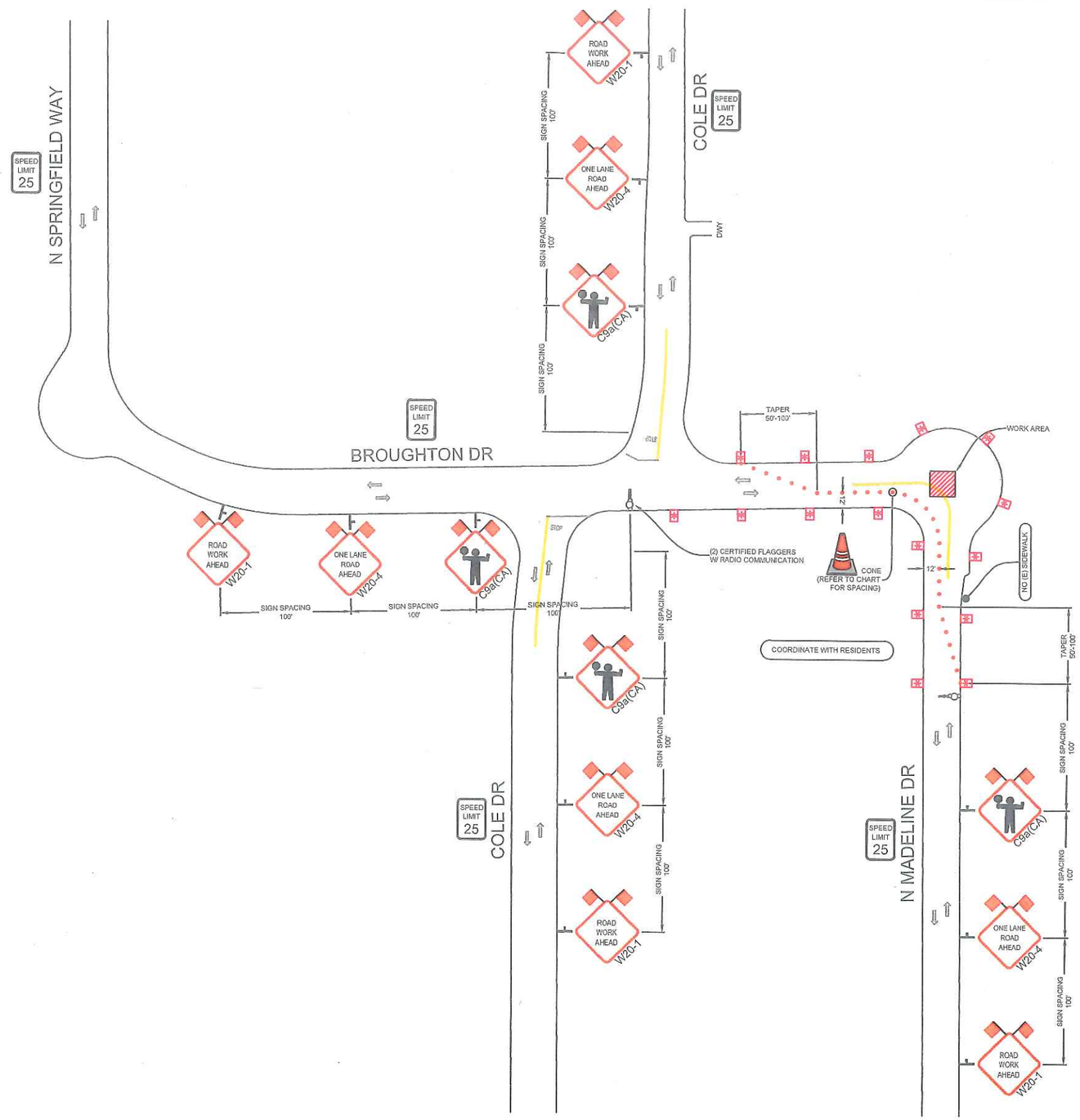
SYMBOL LEGEND

- CONSTRUCTION SIGN
- FLAGGER
- 28" CONE
- TYPE I BARRICADE
- TYPE III BARRICADE
- NO PARKING SIGN ON TYPE I BARRICADE
- FLASHING ARROW BOARD (FAS)

NOTES

- CONTRACTOR SHALL MAINTAIN/PROVIDE ACCESS TO ALL DRIVEWAYS AFFECTED BY THE WORK AREA.
- CONTRACTOR SHALL ASSIGN A WORKER TO ASSIST PEDESTRIANS AROUND WORK AREA.
- CONTRACTOR SHALL MAINTAIN A MINIMUM 4' PATH OF TRAVEL FOR PEDESTRIANS.
- MAXIMUM CHANNELIZING DEVICE SPACING FOR ALL SPEEDS ON ONE-LANE/TWO-WAY TAPERS IS 20'.
- W20-1 (ROAD WORK AHEAD) SIGNS SHALL BE PLACED ON ALL SIDE STREETS BETWEEN THE WORK AREA AND THE FIRST SIGN ENCOUNTERED BY TRAFFIC ON THE HWY.



CONST. HOURS: 7:00AM-4:30PM MON-FRI

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ROADS < 50 MPH: MINIMUM 36" SIGN PANELS (48" SIGNS MAY BE USED)

ROADS ≥ 50 MPH: MINIMUM 48" SIGN PANELS

ALMENDARIZ CONSULTING ACKNOWLEDGES NO RESPONSIBILITY IN THE CASE OF ANY ACCIDENT, INJURY, OR DEATH OCCURRING DURING THE USE OF THESE PLANS. PLANS ARE NOT TO BE DUPLICATED FOR USE BY ANY PERSONS NOT INCLUDED IN THIS CONTRACT WITHOUT THE CONSENT OF ACI OR OWNER.

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