GUIDELINES FOR CONSTRUCTION ZONES

Engineering Standards – Appendix G
February 2014

APPROVED BY:

Timothy Scott Bochum

Approved on: February 18, 2014

ADOPTED BY THE CITY COUNCIL OF SAN LUIS OBISPO
BY RESOLUTION NO. 10495 (2014 SERIES)
FEBRUARY 18, 2014

PUBLIC WORKS DEPARTMENT
TRAFFIC ENGINEERING DIVISION
919 Palm Street
San Luis Obispo, CA 93401
(805) 781-7200
GENERAL NOTES:
A. These distances are guidelines only. Actual distances will be determined on an individual basis by the City. Before any work may be started in the street area:
   1. A traffic control plan shall be submitted to, and then approved by the City Engineer.
   2. Signs and delineation shall be in place, inspected and approved by a Public Works Inspector.
B. During construction:
   1. A copy of the approved traffic control plan shall be kept on the job site at all times.
   2. All workers in the street area shall wear ANSI Class III safety apparel.
   3. Flaggers shall be used as required.
   4. All traffic control and devices shall comply with the Caltrans Traffic Manual / MUTCD.

FIGURE NOTES:
1. All signs and traffic control devices shall conform to the MUTCD and CALTRANS Standards.
2. All cones shall be 18" or higher. Cones used for night work shall be 28" or higher and reflectorized by a 6" band located 3" to 4" from the top of the cone and an additional 4" band located 2" below the 6" band.
3. Speeds on advisory plate to be determined by the City Engineer.
4. Temporary parking sign(s) must be placed a minimum of 30 hours in advance of work when parking removal is required to maintain a 10’ minimum travel lane. Contact City of San Luis Obispo Police Department at 781-7312 for verification.
5. Use flashing arrow sign on roadways with three lanes or more in speed zones of 35 MPH or greater, or when required in approved Traffic Control Plan. Use high level warning device in speed zones of less than 35 MPH. A single flashing arrow sign (for each direction of travel) may be used in place of flashing beacons.
6. Flashing arrow sign (FAS) shall be Type I per Sec. 12-3.03 of the current Caltrans Standard Specifications. Operate FAS in Sequential arrow mode.
7. A G20-2 (C14)”END ROAD WORK” sign, as appropriate, shall be placed at the end of the work zone.
8. All warning signs for night lane closure shall be illuminated or reflectorized. All advance warning signs shall be supplemented with flashing beacons during night lane closures.
9. Provide access for all driveways.
10. Where signalized intersections are affected, provide notice to City Traffic Signal Maintenance Technician.
11. When construction signage is placed in a open bike lane, a 4’ minimum lane for bicycle usage shall be maintained. If 4’ minimum is unobtainable, signage shall be pole mounted.

FIGURE LEGEND
(TABLE 2-17)
- Traffic Cone or Delineator
- Sign (shown facing left)
- Flashing Arrow Sign
- High Level Warning Device (Flag Tree)
- Portable Flashing Beacon (Night Work)
- Direction of Travel (Not a Pavement Marking)
- Manhole
- Maintenance Vehicle w/ Flashing Lights
- Flagger
- Type II Barricade
- Type III Barricade
- Longitudinal Channelizing Device

CHART A (All Figures)
MINIMUM DELINEATOR AND SIGN PLACEMENT

<table>
<thead>
<tr>
<th>TRAFFIC SPEED</th>
<th>TAPER LENGTH (L)</th>
<th>DELINEATOR SPACING (Taper)</th>
<th>SIGN SPACING (S) (Advance of Taper)</th>
<th>BUFFER SPACE (B)</th>
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<tr>
<td>25 MPH</td>
<td>125'</td>
<td>26'</td>
<td>53'</td>
<td>100'</td>
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<td>30 MPH</td>
<td>190'</td>
<td>33'</td>
<td>66'</td>
<td>100'</td>
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<td>35 MPH</td>
<td>276'</td>
<td>39'</td>
<td>79'</td>
<td>100'</td>
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<td>40 MPH</td>
<td>328'</td>
<td>43'</td>
<td>85'</td>
<td>100'</td>
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<td>45 MPH</td>
<td>525'</td>
<td>46'</td>
<td>92'</td>
<td>328'</td>
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<td>50 MPH</td>
<td>600'</td>
<td>53'</td>
<td>105'</td>
<td>328'</td>
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<tr>
<td>55 MPH</td>
<td>663'</td>
<td>59'</td>
<td>118'</td>
<td>328'</td>
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*12’ STANDARD LANE WIDTH FOR CALCULATION PURPOSES. WIDER LANES REQUIRE ADDITIONAL LENGTH

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REVISIONS
BY APP DATE
Figure Notes and Legend; Drafting JDL MH 4-13
Added Note 13 MH BL 11-09
FIGURE A
TWO-LANE WORK IN CENTER OF ROADWAY

Indicate North with an "N"

Optional Flasher or Vehicle

Install temporary No Parking signs
(if required)
See Note 4

Dividing Line or Centerline

ROAD WORK AHEAD

A W20-1 (C23)

END ROAD WORK

B G20-2 (C14)

NOTE:
Indicate North with an "N"

Optional Flasher or Vehicle

Install temporary No Parking signs
(if required)
See Note 4

Dividing Line or Centerline

ROAD WORK AHEAD

A W20-1 (C23)

END ROAD WORK

B G20-2 (C14)

SIGN PANEL SIZE (min.)

A 36" x 36"  
B 36" x 18"  
C 24" x 18"

* SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.

* 10' min.

See Chart "A"

See Note 4

G20-2 (C14)

W20-1 (C23)

R4-7 (R7)

Alternative Barricaded Work Zone

Taper L

S

Taper L

S

G20-2 (C14)

W20-1 (C23)
FIGURE B
TWO-LANE
ONE WAY CLOSURE WITH FLAGGERS

Indicate North with an "N"

Optional Vehicle

Dividing Line or Centerline

Buffer B

Cone or Delineators, 23' max. spacing

See Chart "A"

WORK AREA

WORK AREA

SIGN PANEL SIZE (min.)

A  36" X 36"
B  30" X 30"
C  36" X 18"

* SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.
FIGURE C
MULTI-LANE
OUTSIDE LANE CLOSURE BEYOND INTERSECTION

* SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.
FIGURE D
MULTI-LANE ONE WAY
MULTI-LANE CLOSURE
(LEFT AND RIGHT SIDE CLOSURE TO BE SIMILAR)

Indicate North with an "N".

Overlay (as appropriate)
ROAD WORK AHEAD
W20-1 (C23)

Overlay (as appropriate)
ROAD WORK AHEAD
W9-3 rt (C20 rt)

Cone or Delinators
23' maximum spacing
One flashing arrow sign
for each lane closed

Cone or Delinators
26' maximum spacing
Median or Dividing Line

Variates
Median or Dividing Line

See Chart "A"

150' min. Buffer Zone

200' min.

Taper L

S

See Chart "A"

S

Taper L

1/2 L

SIGN PANEL SIZE (min.)
- A 36" x 36"
- B 30" x 30"
- C 36" x 18"

* SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.
FIGURE E
MULTI-LANE OUTSIDE LANE CLOSURE

Indicate North with an "N"

See Chart "A"

150' min. Buffer Zone

WORK AREA

Install temporary No Parking Signs (if required) See Note 4

See Note 5

- ROAD WORK AHEAD
  W20-1 (C23)

- NIGHT LANE CLOSED AHEAD
  W9-3 rt (C20 rt)

- LANE CLOSED
  W20-5 (C30)

END ROAD WORK
  G20-2 (C14)

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<th>SIGN PANEL SIZE (min.)</th>
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<tbody>
<tr>
<td>A 36&quot; x 36&quot;</td>
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<tr>
<td>B 30&quot; x 30&quot;</td>
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<td>C 36&quot; x 18&quot;</td>
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* SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.
LEFT LANE CLOSURE BEYOND INTERSECTION

Indicate North with an "N"

MULTI-LANE LEFT LANE CLOSURE BEYOND INTERSECTION

For Raised Median

For Striped Median

* SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.

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page 7
FIGURE G
MULTI-LANE
INSIDE LANE CLOSURE

Indicate North with an "N"

* See page 1 this Appendix for legend, notes and spacing requirements.
Indicate North with an "N".

**Figure H**

**Multi-Lane Work Within Shoulder**

- **W20-1** (C23)
- **G20-2** (C14)

*See page 1 this Appendix for legend, notes and spacing requirements.*
FIGURE I
MULTI-LANE
INSIDE LANE CLOSURE BEYOND INTERSECTION

* SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.

SIGN PANEL SIZE (min.)

A 36" x 36"
B 30" x 30"
C 36" x 18"
FIGURE J
MULTI-LANE
INSIDE LANE CLOSURE AT INTERSECTION

* SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.

SIGN PANEL SIZE (min.)

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*REVISIONS*  |  *BY*  |  *APP*  |  *DATE*  
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FIGURE K
MULTI-LANE CLOSING OF HALF ROAD

* SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.
FIGURE L
MULTI-LANE
WORK WITHIN INTERSECTION

* SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.

Indicate North with an "N"

SIGN PANEL SIZE (min.)

A  36" x 36"
B  30" x 30"
C  36" x 18"
D  24" x 24"

NOTE: See Chart "A"
FIGURE M
BICYCLE LANE CLOSURE

Indicate North with an "N"

SIGN PANEL SIZE (min.)

A  36" x 36"
B  30" x 30"
C  36" x 18"
D  18" x 24"

* SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.
FIGURE N
TWO-LANE TWO WAY LEFT TURN LANE
ONE WAY CLOSURE

* See Page 1 This Appendix for Legend, Notes and Spacing Requirements.
NOTE: TEMPORARY PEDESTRIAN ACCESS PATHWAYS SHALL COMPLY WITH ADA AND SHALL INCLUDE RAMPS AND HANDRAILS AS PER THE CALIFORNIA UNIFORM BUILDING CODE REQUIREMENT.

California MUTCD