GUIDELINES FOR
CONSTRUCTION ZONES
Engineering Standards – Appendix G
February 2014

APPROVED BY:

[Signature]
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 an 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
(PAGES 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</th>
<th>SIGN SPACING (S)</th>
<th>BUFFER SPACE (B)</th>
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<tr>
<td></td>
<td>(Advance of Taper)</td>
<td>(Taper)*</td>
<td>(Tangent)</td>
<td>100’</td>
</tr>
<tr>
<td>25 MPH</td>
<td>125’</td>
<td>26’</td>
<td>53’</td>
<td>100’</td>
</tr>
<tr>
<td>30 MPH</td>
<td>190’</td>
<td>33’</td>
<td>66’</td>
<td>100’</td>
</tr>
<tr>
<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>
</tr>
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<td>45 MPH</td>
<td>525’</td>
<td>46’</td>
<td>92’</td>
<td>328’</td>
</tr>
<tr>
<td>50 MPH</td>
<td>600’</td>
<td>53’</td>
<td>105’</td>
<td>328’</td>
</tr>
<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.
FIGURE A
TWO-LANE WORK IN CENTER OF ROADWAY

END ROAD WORK
G20-2 (C14)

ROAD WORK AHEAD
W20-1 (C23)

Optional Flasher or Vehicle
Install temporary No Parking signs
(if required)
See Note 4

Dividing Line or Centerline

Indicate North with an "N"

S
Taper L
See Chart "A"

(see Chart "A"

Alternative Barricaded Work Zone

END ROAD WORK
G20-2 (C14)

S
Taper L
See Chart "A"

* SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.
FIGURE B
TWO-LANE
ONE WAY CLOSURE WITH FLAGGERS

Indicate North with an "N"

Optional Vehicle

Buffer B
See Chart "A"

Cone or Delineators, 23' max. spacing

30" x 30"
36" x 18"
36" x 36"

G20-2 (C14)
W3-4 (C36)
R1-1 (R1)

See Chart "A"
See Chart "A"

100' max.

* 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”

Cores or Delineators
23’ maximum spacing

Median or Dividing Line

One flashing arrow sign for each lane closed

See Note 5

See Chart “A”

200’ min.
Buffer Zone

150’ min.

Cones or Delineators
26’ maximum spacing

CONES OR DELINEATORS

1/2 L

30’ min.

VARIES

Median or Dividing Line

Median or Dividing Line

One flashing arrow sign

One flashing arrow sign

See Chart “A”

WORK AREA

Indicate North with an “N”

A

B

C

W20-1 (C23)
W20-5 (C23)
W9-3 ft. (C20 ft)
W9-3 ft. (C20 ft)
W20-1 (C23)

A

B

C

G20-2 (C14)
A

W9-3 ft. (C20 ft)
W20-1 (C23)

A

B

C

W9-3 ft. (C20 ft)
G20-2 (C14)
G20-1 (C23)

A

B

C

Overlay (as appropriate)

Overlay (as appropriate)

Overlay (as appropriate)

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

REVISIONS
BY
APP
DATE

New Figure
MH
JDW
11-04

Drafting edits
JDL
MH
4-13

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page 5
FIGURE E
MULTI-LANE
OUTSIDE LANE CLOSURE

Indicate North with an "N"

See Chart "A"

150' min. Buffer Zone

See Note 5

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

G20-2 (C14)

W20-5 (C30)

W9-3 rt (C20 rt)

W20-1 (C23)

ROAD WORK AHEAD

W9-3 rt (C20 rt)

W20-5 (C30)

LANE CLOSED

ROAD WORK AHEAD

INSTALLATION

WORK AREA

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

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<td>B 30&quot; x 30&quot;</td>
</tr>
<tr>
<td>C 36&quot; x 18&quot;</td>
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* SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.
FIGURE F
MULTI-LANE
LEFT 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"
- D: 24" x 24"
FIGURE G
MULTI-LANE
INSIDE LANE CLOSURE

Indicate North with an "N"

10' min.

See Chart "A"
Varies
Taper L
See Chart "A"

SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.
Indicate North with an "N"

* 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.
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
New Figure  MH    JDW    11-04
Drafting edits  JDL    MH    4-13

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FIGURE K
MULTI-LANE
CLOSING OF HALF ROAD

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

**TWO-LANE TWO WAY LEFT TURN LANE**

**ONE WAY CLOSURE**

* Indicate North with an "N"

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**SIGN PANEL SIZE (min.)**

- A 36" X 36"
- B 30" X 30"
- C 36" X 18"
- D 24" X 24"

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*SEE PAGE 1 THIS APPENDIX FOR LEGEND, NOTES AND SPACING REQUIREMENTS.*
FIGURE O
MULTI-LANE TWO WAY LEFT TURN LANE
CLOSING OF HALF ROAD

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

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<td>D  24&quot; X 24&quot;</td>
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* Indicate North with an "N"
NOTE: TEMPORARY PEDESTRIAN ACCESS PATHWAYS SHALL COMPLY WITH ADA AND SHALL INCLUDE RAMPS AND HANDRAILS AS PER THE CALIFORNIA UNIFORM BUILDING CODE REQUIREMENT.