

## STANDARD DETAILS FOR SIGNING & STRIPING

SECTION 2900

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### Section 2900 Signing & Striping

### 2900.1.1 Function and Purpose of Signs

Signs provide regulations, warnings, and guidance information for road users. Additional guidance and requirements are located in the following subchapters of the *MUTCD* and this manual:

### 2900.1.2 Standardization of Application [2A.03]

Ensure that all signs are in place on new roadways, detours, and temporary routes before opening up to traffic.

In situations where you believe unique sign messages are required, you may request approval by Traffic Engineering to develop and use a special sign message, but any new sign must be of the same shape and color as standard signs of similar type.

### 2900.1.3 Excessive Use of Signs [2A.04]

Only use signs when warranted by facts and field studies since unnecessary signs create a safety problem by adding extra fixed objects and visual clutter. Therefore, avoid excessive use of signs.

Signs are generally not necessary to confirm rules of the road or general provisions regarding the operation of vehicles (e.g., SLOWER TRAFFIC KEEP RIGHT (R4-3), PASS ONLY ON THE LEFT, etc.). However, signs are essential where special regulations apply at specific places or specific times, or where unusual conditions are not self-evident. When signs are essential, take a conservative approach to the use of regulatory and warning signs since using too many of these signs will cause them to lose their usefulness.

The placement of a sign where it is not appropriate or justified is as objectionable as a substandard or obsolete sign. As soon as possible, remove or cover all signs that were required by uncommon circumstances or temporary restrictions when those conditions cease to exist, or the restrictions are withdrawn.

Never use roadway signs for advertising or for any purpose other than related to traffic control.

The application of all signs should comply with this manual and the following standards:

- MUTCD.
- · Standard Highway Signs (SHS) Book.

Engineering judgment and studies are critical to the accurate use of signs and other traffic control devices. Traffic engineering studies may indicate that signs are unwarranted at certain locations.

### 2900.1.4 Classification of Signs [2A.05]

As noted in Section 2A.05 of the MUTCD, there are only three classifications of signs:

A. Regulatory signs give notice of traffic laws or restrictions.

- B. Warning signs give notice of a situation that might not be readily apparent.
- C. Guide signs show route designations, destinations, directions, distances, services, points of interest and other geographical, recreational, or cultural information.

### 2900.1.5 Design of Signs [2A.06]

The primary purpose of the *MUTCD* is to improve safety and reduce driver frustration by promoting uniformity in the design and application of traffic control devices. FHWA is also working internationally to share and borrow ideas so that uniformity is much broader than just in the United States.

Uniform designs and applications of traffic signs help everyone, because as drivers we can see and understand the sign messages, and the systematic advance placement of warning signs provide sufficient notice for us to take appropriate actions.

To that end, the *MUTCD* establishes the basic framework for the design and application of signs, and the *Standard Highway Signs* (*SHS*) *Book* provides detailed drawings of the standard signs and alphabets.

Like all other cities and states, Albuquerque, has a need for unique signs in order to satisfy city ordinances and city initiatives, and the need to personalize some signs. Since these unique signs are not in the *Standard Highway Signs Book*, they are included in these COA Signing and Striping Standards.

The COA Signing and Striping Standards include Special signs approved for use in City of Albuquerque. Please refer to Section 2900-800 for details.

Some of the signs are ones included in the *Standard Highway Signs Book* and others are special City of Albuquerque signs. Those that are "City of Albuquerque sign designs" always have the "COA" identifier in the sign code. In addition to the sign code, the COA Signing and Striping Standards includes information such as sign width and height, size, route number for shields, numerals for speed signs, R or L for Right or Left, and suggested application on what type of roadway. The COA Signing and Striping Standards also provide sign face layout details for some of the signs not included in the *Standard Highway Signs Book*.

### Regulatory and Warning Signs

On rare occasions, you may need to design a unique regulatory or warning sign that is not in either the *Standard Highway Signs Book* or the COA Signing and Striping Standards, and then obtain the COA Traffic Engineer's approval prior to fabricating the sign. In these situations, consider the following:

- 1. Follow the basic principles established in the *MUTCD* relating to sign shape, color, legend, size, and application.
- 2. Ensure that word messages are clear so that everyone has the same understanding of the sign message. Avoid words and phrases included in **Exhibit 2900.1-A**.

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- 3. On regulatory and warning signs, words may be close to the borders; therefore, optically center the words within the sign space.
- 4. The use of Warning Signs shall be based on an engineering study or on engineering judgement. Use of warning signs should be kept to a minimum as the unnecessary use of warning signs tends to breed disrespect for all signs.

### Exhibit 2900.1-A Words Not Recommended for Use in Sign Legends

Do Not Use	Because
HAZARDOUS or DANGEROUS	You are attempting to eliminate these problem locations and there is no need to identify the site for potential lawsuits.
WARNING	The size, shape and color indicate a warning sign.
SLOW	This relative term means different speeds to different road users; what speed is slow? "SLOW TO XX MPH" is an acceptable legend.
NOTICE or CAUTION	These are unnecessary words – the sign provides the notice, with shape and color indicating caution.
TRAFFIC LAWS STRICTLY ENFORCED	It is assumed that the traffic laws will be enforced so the legend is unnecessary.
Terms, legends or destinations that may not be familiar to road users	These are unnecessary and may create confusion for road users [e.g., towns that are not on the New Mexico Transportation Map, and words like "Traffic Queue," etc.] *
Cute or trite symbols, phrases, or words	These may reduce road user's respect for the sign legend [e.g., "EVEN IF YOU ARE LATE, DON'T TAILGATE," "ANGER IS ONE LETTER AWAY FROM DANGER," "SPEED LIMIT 44," etc.] *

### <u>Guide Signs</u>

By their very nature and application, traffic engineers need to personalize guide signs for their specific location. Therefore, these signs typically need some final design details to determine the sign layout and dimensions. Traffic Engineering will need to approve prior to fabricating guide signs.

Designers may manually layout new signs using the spacing tables in the "standard alphabets" section in the *Standard Highway Signs Book* (or the tables for Clearview font using tables in FHWA's website <a href="http://mutcd.fhwa.dot.gov/pdfs/clearfont/CTSEng.pdf">http://mutcd.fhwa.dot.gov/pdfs/clearfont/CTSEng.pdf</a>.

Sometimes it is necessary to use substandard size signs due to limited roadway right-of way, to limit the sign width of overhead signs to the lane width, or to limit the height of a sign due to vertical clearances. In these situations, there is a natural tendency to crowd letters together; however, legibility is generally better with smaller letters and normal spacing between letters than it is with larger letters and cramped spacing.

When designing the signing plan for a roadway, it is very important that throughout the development process, all members of the design team frequently communicate with Traffic Engineering. This communication is necessary since some members may have detailed information or knowledge that could influence sign messages or sign placement.

### 2900,1,6 Retroreflection and Illumination [2A,08]

The *MUTCD* requires traffic signs to be either retroreflective or illuminated to show the same shape and color both day and night. Since it is more cost effective to make signs retroreflective than it is to illuminate them, the COA requires retroreflective sheeting material on all signs.

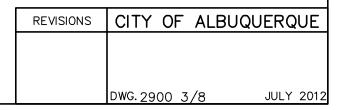
"Retroreflection" is the unique ability of a surface to reflect light back toward the light source, and "retroreflectivity" is the measurable property of a material to redirect light back to its source.

### Retroreflective Sheeting Materials

To make signs retroreflective, apply retroreflective sheeting, which contains either microscopic glass beads or cube corner reflectors, to the face of each sign.

Retroreflective materials are also more efficient when the light source is approximately perpendicular to the sign face; therefore, it is important to have signs oriented to face approaching traffic.

The City of Albuquerque requires the use of **Type XI** Retroreflective Material on all permanent signing.



### 2900.1.8 Sign Sheeting Requirements

Type XI retroreflective sheeting is the minimum type included in COA Standard Specification Section 400.

The use of the brighter materials for the legend, and Type III or IV material for the sign background, increases the retroreflectivity contrast between the white legend and the background material and improves nighttime legibility. Therefore, the white legend shall be a Type VII, VIII, IX or X material on:

- 1. All overhead guide signs.
- 2. All post-mounted guide signs (including guide signs with blue or brown backgrounds) on all freeways and expressways.

**Exhibit 2900.1-J** summarizes the recommended retroreflective sheeting materials for the various types of signs.

### Exhibit 2900.1-J Recommended Retroreflective Sheeting

NO.	SIGN TYPE	SIGN SHEETING	INK OR APPLIED
NO.	SIGN TYPE	MATERIAL	LEGEND
1	STOP, YIELD, DO NOT ENTER, WRONG WAY	White Type III or IV	Red reverse-screened
	signs		background
2	Other regulatory signs	White Type III or IV	Black ink (may also
			include red, green, or
			blue ink)
3	All pedestrian, school, and bicycle related	Flourescent yellow-	
	warning signs and plaques	green (YG), minimum	
		Type III or IV	Black ink or non-
4	Other warning signs and plaques	Flourescent yellow	reflective black copy
		(FY), minimum Type III	
		or IV	
5	Post-mounted guide signs on conventional		Prismatic white (W)
	roads*	Crear (a) Dive (DI) an	Type III or IV
6	Overhead guide signs on conventional roads	Green (g), Blue (BL) or	
		Brown (BR) Type	White (W) Type VII, VIII,
7	Guide signs along freeways and	III or IV	IX or X
	expressways (guide signs)		

Microprismatic materials, such as Types VII, VIII, IX, X, and XI material generally have small arrows to indicate what orientation of the material should be at the top of the sign. It is important to comply with this recommendation since failure to comply causes some panels to be more retroreflective than other panels. This is also a problem with legends when in an effort to reduce material usage, a sign shop rotates material in a die-cutting machine or uses nesting software on a computerized sign maker.

FHWA has a Retroreflective Sheeting Identification Guide that is visible at http://safety.fhwa.dot.gov/roadway\_dept/retro/sign/retrore\_sheet\_id.htm . The portion of FHWA's guide that covers rigid signs is included in **Exhibit 2900.1-K**.

### 2900.1.9 Sign Shapes and Colors [2A.10-11]

Sections 2A.10 and 2A.11 in the *MUTCD* identify nine sign shapes and ten sign colors. All signs used in New Mexico shall conform to these standards. The *MUTCD* also notes that the colors coral, purple and light blue are reserved for uses that will be determined in the future by FHWA.

The COA uses the following color combinations abbreviations for signs:

B/FO Black-on-Fluorescent Orange

B/FP Black-on-Fluorescent Pink

B/FY Black-on-Fluorescent Yellow

B/O Black-on-Orange

B/W Black-on-White

B/Y Black-on-Yellow

B/FYG Black-on-Fluorescent Yellow Green

G/W Green-on-White

R/W Red-on-White

W/B White-on-Black

W/BL White-on-Blue

W/BR White-on-Brown

W/G White-on-Green

W/R White-on-Red

The COA uses the designation "RB" for reflective background; however, keep in mind that all colors except black are required to be retroreflective.

All Warning signs used in Albuquerque City Limits shall have fluorescent yellow backgrounds with black legends and borders.

### 2900.1.10 Dimensions [2A.12]

The dimensions for signs given in the *MUTCD* are the standard sizes for application on public streets and highways. When listing sign dimensions, the width is the first dimension and the height is the second dimension for rectangular signs, and dimensions of diamond-shaped signs are along each edge, e.g., 30 by 30 inches. Always round the overall sign dimensions for width and height to the nearest 6-inch increment.

Speed greatly affects the legibility and comprehension of sign legend. Larger sign sizes are advantageous where increased legibility or emphasis is desirable. Generally, there is a need for larger-size signs on high-speed facilities such as freeways or expressways. The COA Signing and Striping Standards and the *MUTCD* provide some recommended sign sizes. **Exhibit 2900.1-L** provides additional guidance.

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### Exhibit 2900.1-K FHWA's Retroreflective Sheeting Guide

	Ret	roreflectiv	e Sheeting	Materials M	ade with Gl	ass Beads		
Example of Sheeting (Shown to scale)		4	\$T					
ASTM D4956-04	I	II.	II	III	:11	III	III	III
ASTM D4956-09	1	II	п	IΠ	т.	III	III	III
AASHTO M268-10	(1)	(1)	(1)	A	A	A	A	A
Marrufacturer	Several companies	Avery Dennison®	Nippon Carbide	3M *	ATSM, Inc.	Avery Dennison(s)	Nippon Carbide	Craca
Brand Name	Frigineer Grade	Super Engl Grace	Super Fogr Grace	High Intensity	High Intensity	High Intensity	High Intensity	High Intensit
Series	Several	T-2000	15000	2800 3800	ATSM HI	7-5500	MSDD	5800
KOTES:	(2)	(3) (4)	(4)	(3) (1)	(4)	(4)	- (4)	(4)

- ASTM 04955-04 is referenced in Table 2A-3 of the 2009 MUTCD.
- ASTM 24955-35 is the most current ASTM step sheeting specification (the 2009 version is designated by "-09").

  AASHTO M268-10 Types for this Guide are based only on retroreflective properties and not other unique AASHTO requirements such as color.

### 2011 Traffic Sign Retroreflective Nippon Carbide High Intensity Prismatic Diamon Grade<sup>-1</sup> LDP Reflective Sheeting MVP Prismatic Crystal Grade Intensity Prismatic Prismatic 3930 3970 NOTE: The watermarks have not as visible on actual sheeting materials. It helps to view the sheeting materials at different Avery Nippon Dennison® Carbide

TES:

- Material was either unavailable in 2005 (previous version of this Guide) or unassigned in the 2004 version of ASTM D4956.

- Sheeting material does not meet minimum AASHTO classification criteria.

- Section 2A.08 of the 2009 MUTCD (http://mutcd.fhwa.dot.gov) does not allow this sheeting type to be used for new

w or orange signs, or new legends on green signs.

These two materials (94000 and 92000) are visually Indistinguishable from one another.
Haberial has been discontinued prior to AASHTO M268-10.

— Material no longer sold in the United States as of the date of this publication.

### Exhibit 2900.1-L Minimum Sign Sizes for Road Type and Speed

•	· +	<i>3</i> 1			
	Two-Lane	Two-Lane			
	Conventional	Conventional			
Ciara Trans	Road ≤ 35 mph	Road ≥ 40 mph	F	F	
Sign Type	Multi-Lane	Multi-Lane	Expressway	Freeway	
	Conventional	Conventional			
	Road ≤ 30 mph	Road ≥ 35 mph			
STOP (R1-1)	30x30	36x36	48x48	48x48	
YIELD (R1-2)	36x36x36	48x48x48	48x48x48	60x60x60	
Speed Limit (R2-1)	24x30	24x30	36x48	48x60	
Turn Prohibition (R3-series)	24x24	30x30	36x36	48x48	
DO NOT PASS (R4-1)	24x30	24x30	36x48	48x60	
SLOWER TRAFFIC KEEP RIGHT (R4-3)	24x30	24x30	36x48	48x60	
Keep Right/Left (R4-7, R4-8)	24x30	24x30	36x48	48x60	
DO NOT ENTER (R5-1)	30x30	30x30	36x36	48x48	
WRONG WAY (R5-1a)	36x24	36x24	36x24	42x30	
ONE WAY (R6-1)	36x12	36x12	54x18	54x18	
ONE WAY (R6-2)	24x30	24x30	36x48	48x60	
No Parking (R7 & R8 series)	12x18	12x18	36x36	48x48	
NO TURN ON RED (R10-11, 11a)	24x30	24x30	36x48	-	
Weight Limit (R12-1, 2)	24x30	36x36	36x48	36x48	
Turn/Curve (W1-series, except 1a, 2a)	30x30	36x36	48x48	48x48	
Turn/Curve Combination (W1-1a, 2a)	36x36	48x24	48x48	48x48	
Large Arrows (W1-6, W1-7)	48x24	18x24	60x30	60x30	
Chevron (W1-8)	18x24	36x36	24x30	30x36	
Intersection (W2-series)	30x30	36x36	48x48	48x48	
Stop /Yield/Signal Ahead (W3-series)	36x36	36x36	48x48	48x48	
Merge/Change Lane (W4-series)	36x36	36x36	48x48	48x48	
Divided Highway/Ends (W6-1, 2)	36x36	36x36	48x48	48x48	
Hill (W7-1)	30x30	36x36	36x36	48x48	
Slippery When Wet (W8-5)	30x30	36x36	36x36	48x48	
LEFT/RIGHT LANE ENDS (W9-3L, R)	36x36	36x36	48x48	48x48	
Railroad Advance Warning (W10-1)	36	36	48	48	
Advisory Speed (W13-1)	18x18	24x24	30x30	30x30	
NO PASSING ZONE (W14-3)	36x48x48	36x48x48	-	-	
Route Marker, post mounted*	24x24, 30x24	24x24, 30x24	36x36, 45x36	48x48, 60x4	
Destination/Distnace - Legend size (D1, D2-seri	ies) 6	6	-	-	

For special circumstances such as limited right-of-way, or conditions such as parking facilities, parks, etc., the use of smaller than standard size signs may be justified. When sign sizes are changed, retain the standard shapes, colors and proportions insofar as practicable.

### 2900.1.11 Use of Symbol Messages [2A.13]

To assist motorists that have limited understanding of the English language, always use approved symbol-type signs in lieu of legend messages whenever possible.

### 2900 1 12 Sign Borders [2A 15]

Unless specifically stated otherwise, each sign shall have a border of the same color as the legend, at or just inside the panel edge. Except for the STOP sign, all borders should have round corners.

A dark border on a light background has a "margin" or setback distance from the edge, which reduces the possibility that ink will run over the edge of the blank if manufactured by a silk-screening process. The outside corner radius of a dark-colored margin is equal to the radius used on the sign blank, less the width of the margin.

Except for stop signs, all signs should have rounded corners.

Appendix Part 7 of the Standard Highway Signs Book identifies the standard sign blank radii, margins and borders for small sign blanks. These values are also included with sign layouts for regulatory and warning signs in the Standard Highway Signs Book.

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### 2900.1.12 Standardization of Location [2A.16]

The longitudinal locations of signs along the roadway depend on the type of sign, the nature of the message, and the desired motorist response. The longitudinal displacement between a sign and the corresponding roadway element varies from zero in the case of a speed limit sign (or most regulatory signs) that is physically placed at the point where the speed limit (or regulation) begins or ends, to 1 mile or more in the case of an advance guide sign. In most cases, you can shift signs longitudinally without compromising their intended purpose. Signs may also be shifted longitudinally to improve their visibility, to avoid blocking other signs, to advance safety (by placing sign supports behind an existing barrier), or to improve operations (by providing more distance between signs in a series).

The longitudinal spacing between signs in a series may vary but as a rule, the spacing should be as follows:

• On conventional roads — approximately 100 feet. (Districts are encouraged to use greater distances, such as 500 feet, on high-speed conventional roads, and it may be necessary to use reduced spacing in urban areas.)

Warning signs generally belong in advance of the condition to which they call attention, whereas regulatory signs belong at the location where a prohibition applies or begins, or at intervals were mandated. On the other hand, place guide signs at varying locations to inform drivers as to their route of travel, destinations, and points of interest. Do not stack signs.

While it is preferable to erect signs individually (except where one sign supplements another or where guide signs must be grouped), it is sometimes advantageous to group signs together to eliminate extra posts. This is particularly true in urban areas where the number of signs is greater than the space available. As a rule, maintain minimum 200- foot spacing between sign assemblies. Urban areas, in particular, may require a case-by-case review.

Since it is not always possible to install signs at their normal location, the COA has established the following standard priority order:

- 1. Regulatory Signs Stop, Yield, Turn Prohibitions, Lane Restrictions and Speed Limit, followed by Parking Restrictions and various other regulatory signs.
- 2. Warning Signs Curve, Cross Road, Stop Ahead, Yield Ahead, Signal Ahead, Merging Traffic, Road Narrows, Narrow Bridge, Ramp Narrows, Divided Highway, and various other warning signs.
- 3. Guide Signs Route Markers, Trailblazers, Destination, Advance Guide, and Exit Directional.
- 4. Emergency Service Signs Hospital, Police, and Telephone.

- 5. Motorist Service Signs Fuel, Food, Lodging, Camping, and Tourist Information.
- 6. Public Transportation Signs Park and Ride, Bus Stop, and Light Rail.
- 7. Traffic Generators Signs Airports, College or University, Military Bases, Convention Centers, Stadiums, State and National Parks, Museums, Municipal Golf Courses and Ski Areas.
- 8. General Information Signs County Line, Reservation Boundaries, City or Village, Reference Location (i.e., Mileposts).

Make signing location decisions on a case-by-case basis considering the signing needs for the entire route. If more than one sign normally belongs at the same location, relocate or eliminate the lower-priority sign. For example, if a curve warning sign and a distance sign would normally belong at the same location, the curve sign should have priority because of the need to place it at a standard distance from the curve. On the other hand, you either can move a distance sign ahead or beyond the curve sign, or even eliminate it if other similar signs are along the roadway.

Ensure that signs are located to be compatible with all other roadway signs in the area and other roadway features in the area. For example, do not place speed limit signs just before an intersection, a school zone, or a curve with a lower safe travel speed. On a given route, the signs should be consistent in size and messages.

### 2900.1.13 Make Upgrades When Replacing Signs

When developing a signing project on an existing roadway, it is very important not to just replace existing signs with the same types of signs and in the same locations. Instead, the designer should consider making changes to the signs to conform to the current *MUTCD* and COA Standards. It is also important to remove all non-essential signs at the same time.

### 2900.1.14 Sign Materials

The most widely used sign blank materials are aluminum, steel and plywood. However, aluminum is currently the only substrate approved for sign panels by COA. Aluminum is lightweight and does not rust, but it requires cross bracing or extrusions for the larger-size signs. Aluminum provides a long life span and can be straightened or refaced as needed.

The thickness of the aluminum sign panels shall be 0.125-inch, except use 0.080-inch aluminum if the width of the sign is 24 inches or less. All blanks shall be 6061-T6 aluminum alloy. With very few exceptions, signs need to be visible at night and the only approved method of making signs visible at night is the application of retroreflective sheeting material. Technically, some signs such as No Parking Signs with only daytime restrictions and signs for pedestrians (e.g., PUSH BUTTON FOR WALK SIGNAL, etc.) would not need retroreflective sheeting material, but retroreflective sheeting is more durable than nonretroreflective sheeting. Therefore, retroreflective sheeting is required for all traffic signs.

Specifications for sign materials are in Section 400 of the COA Standard Specifications for Public Works Construction.

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### 2900.1.15 Sign Installations - Up to 50 Square Feet

Generally, construct signs with areas up to 50 square feet with flat panel aluminum substrate and mount them on a single post, double post, or up to a maximum of three posts depending on sign area.

Signposts shall be approved breakaway posts, and shall consist of:

Square tubing (1.75-inch to 2.5-inch) inserted into a larger base post or attached to an approved slip base connection. (See NMDOT Standard Drawings 701-02 and 701-03.)

Sign areas exceeding 36 square feet for square tubing posts, require three posts with an approved multi-directional slip base for each post. The maximum area for a sign supported by square tubing posts is 50 square feet.

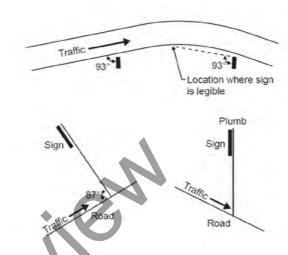
Backing zee bars or 1.5-inch perforated square tubing are required when the sign has an area of 10.5 square feet or more and is attached to more than one sign post.

### 2900.1.16 Orientation [2A.20]

In an effort to eliminate mirror reflection from the glossy face of traffic signs, position signs as follows and as indicated in **Exhibit 2900.1-N**:

- On tangent sections, position signs so that the vertical axis is plumb and the horizontal axis is at angle of 93 degrees with the edge of the roadway, i.e., angled 3 degrees away from traffic. (A 3-degree angle is approximately a 1:20 angle.)
- On horizontal curves, position the sign vertical and the horizontal axis at an angle of 93 degrees with a straight line between the sign and the location where the sign is first legible (based on 40 feet per 1 inch of letter height).
- Position overhead signs perpendicular to the roadway alignment at the location where
  the sign is first legible (based on 40 feet per 1 inch of letter height). On level roadways
  and those with an upgrade, angle the sign downward about 3 degrees more than the
  grade of the roadway. On downgrades, mount the sign vertical.

### **Exhibit 2900.1-N Recommended Sign Orientation**



### 2900.1.17 Posts and Mountings [2A.21]

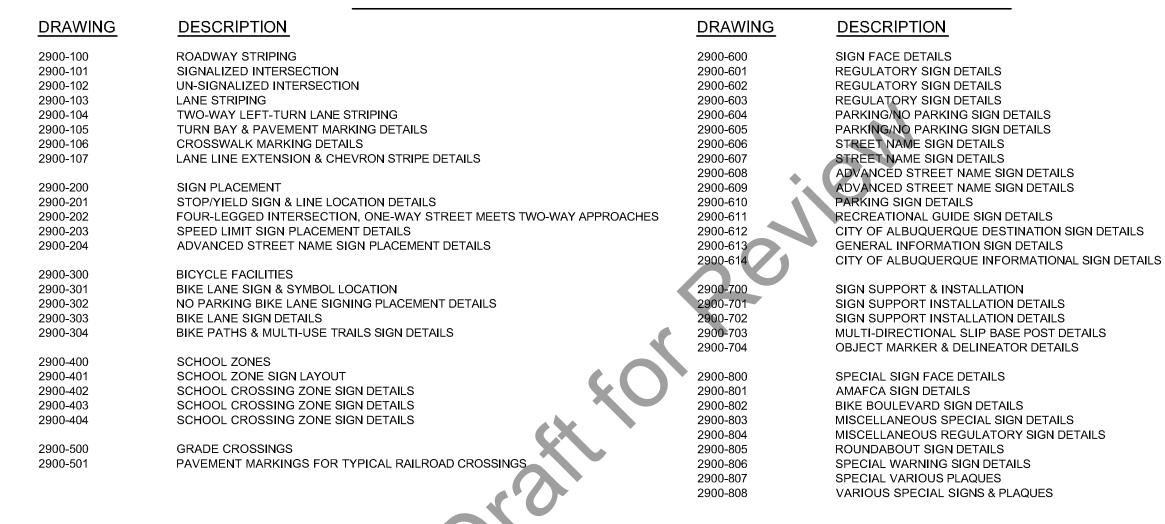
As noted in Section 2A.21 of the *MUTCD*, when engineering judgment indicates that there is a need to draw attention to a regulatory or warning sign, place a minimum 2-inch wide strip of retroreflective material for the full length of the support from the sign to within 2 feet above the edge of the roadway. The color should match the background color of the sign.

Retroreflective strips are preferred over using flags or flashing lights to call attention to the signs. They are especially effective at night, perhaps because they show the physical location of the sign instead of allowing the retroreflective sign to appear as if suspended in the air. To a lesser extent, they are also effective during the day.

Plastic retroreflective sleeves are commercially available from several sources, and sign crews can generally attach them to the post with selftapping screws. The sign crews can also achieve a similar effect by applying retroreflective sheeting directly to the front of the signpost.

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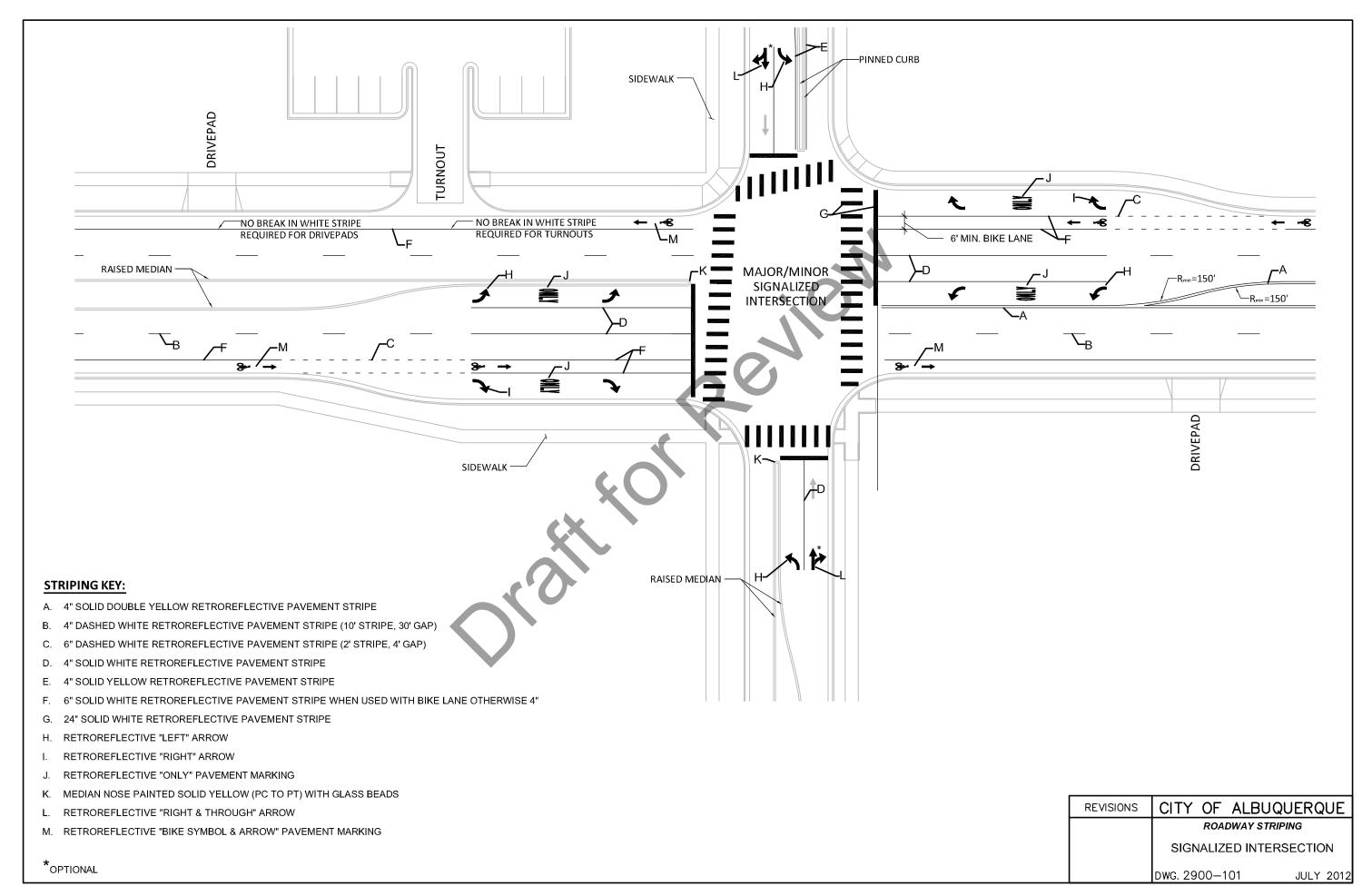


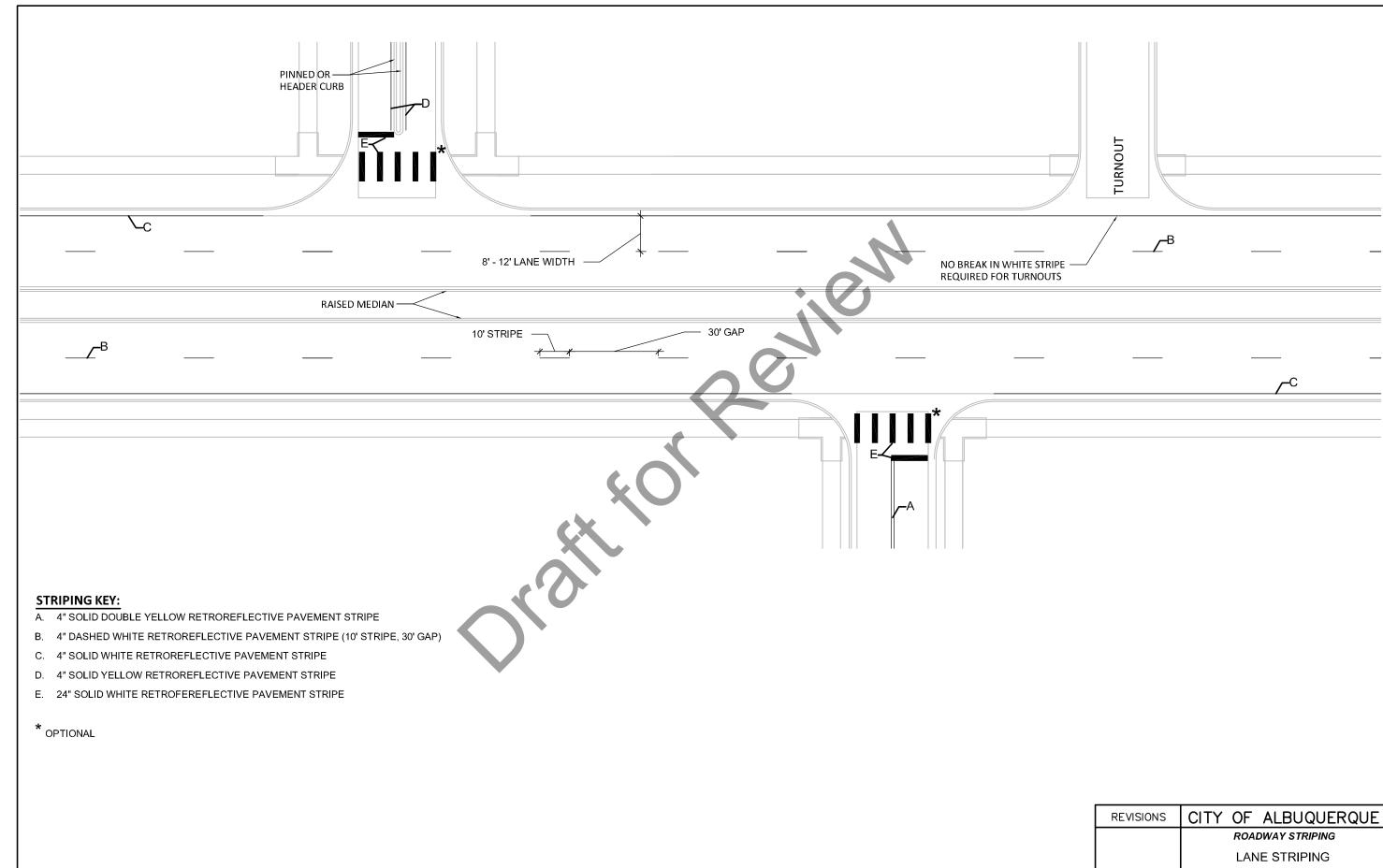
### ROADWAY STRIPING

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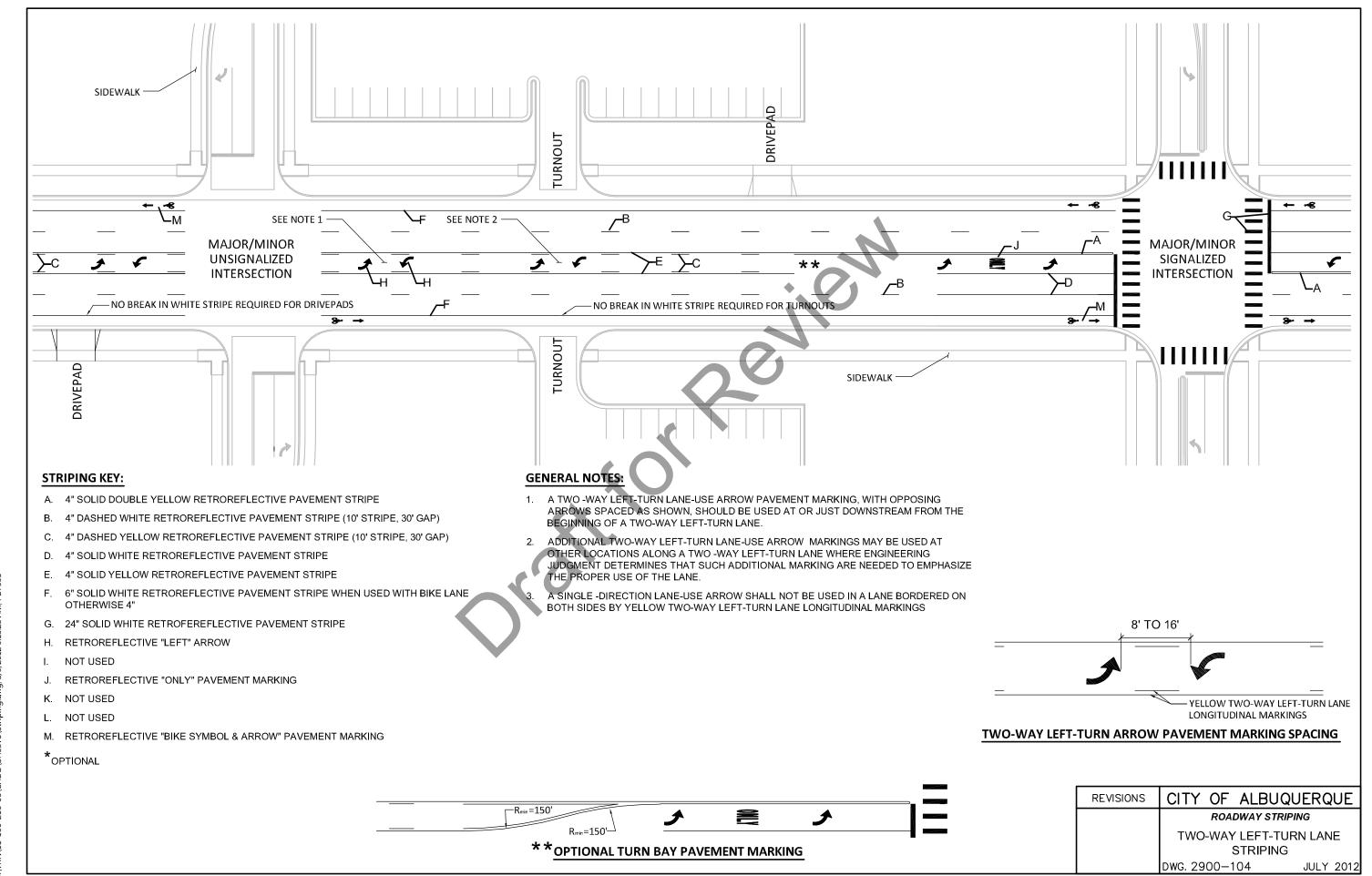
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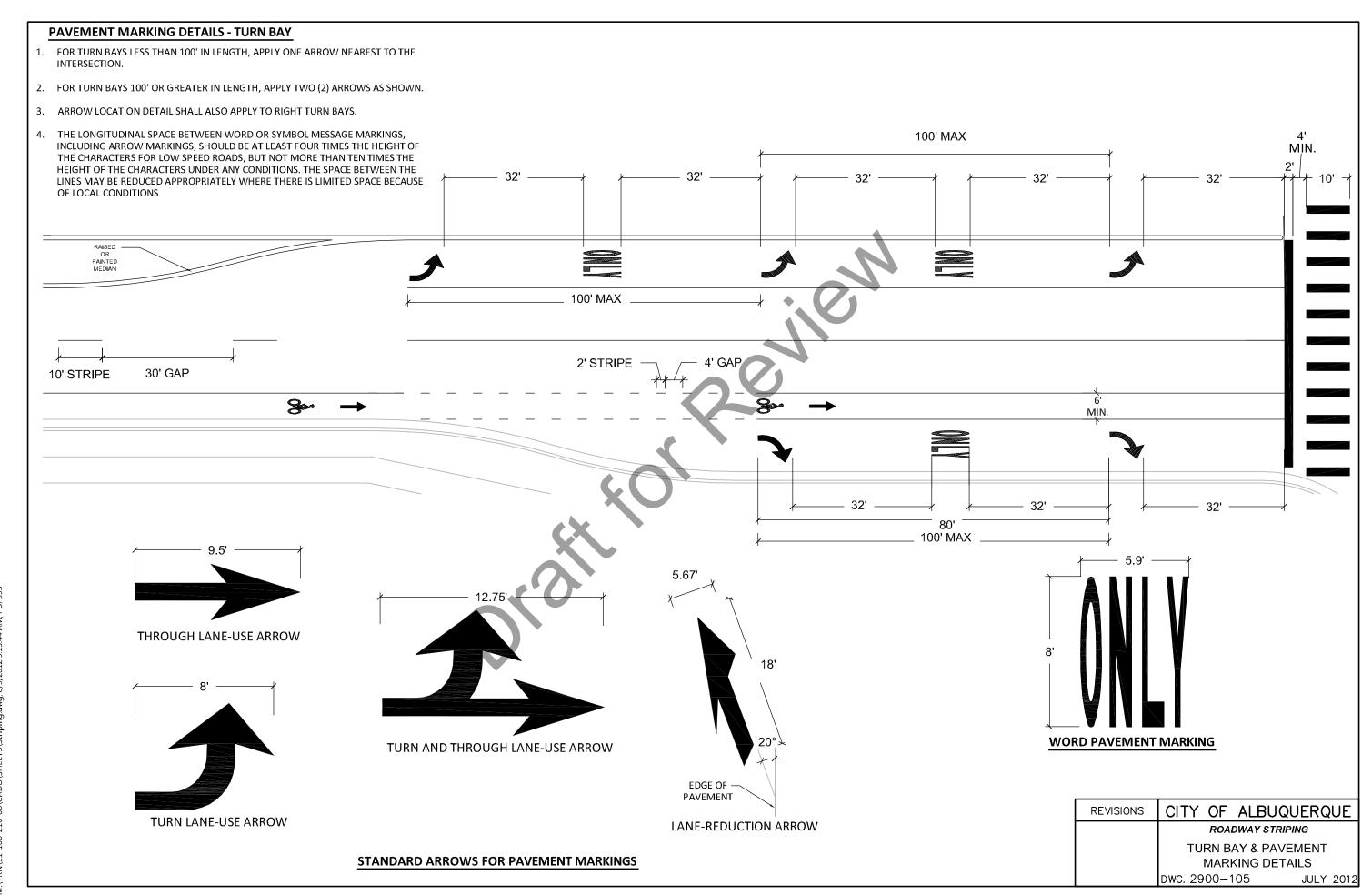






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- CONSISTING OF SOLID WHITE LONGITUDINAL LINES 10 FEET IN LENGTH AND 2 FEET
- 2. THE DESIGN OF THE LINES SHALL BE INSTALLED AT THE CENTER OF EACH DRIVING LANE, RIGHT TURN LANE, AND LEFT TURN LANE; CENTERED BETWEEN EACH LANE PARALLEL TO THE DIRECTION OF TRAVEL AS SHOWN.
- 3. CROSSWALK LINES SHOULD EXTEND ACROSS THE FULL WIDTH OF THE ROADWAY PAVEMENT OR TO THE EDGE OF THE INTERSECTING CROSSWALK TO DISCOURAGE DIAGONAL WALKING BETWEEN CROSSWALKS.
- 4. CROSSWALK MARKING SHOULD BE LOCATED SO THAT THE CURB RAMPS ARE WITHIN THE EXTENSION OF THE CROSSWALK MARKINGS.

NOTE: MID-BLOCK CROSSINGS SHALL NOT BE PERMITTED WITHIN ALBUQUERQUE CITY LIMITS, UNLESS APPROVED BY CITY OF ALBUQUERQUE TRAFFIC ENGINEERING.

REVISIONS	CITY OF	ALBUQUE	RQUE	
	ROADWAY STRIPING			
	CROSSWALK MARKING			
	DETAILS			
	DWG. 2900-1	06 J	ULY 20	

NOT ACCEPTABLE

CONTINENTAL/TRANSVERSE

CONTINENTAL

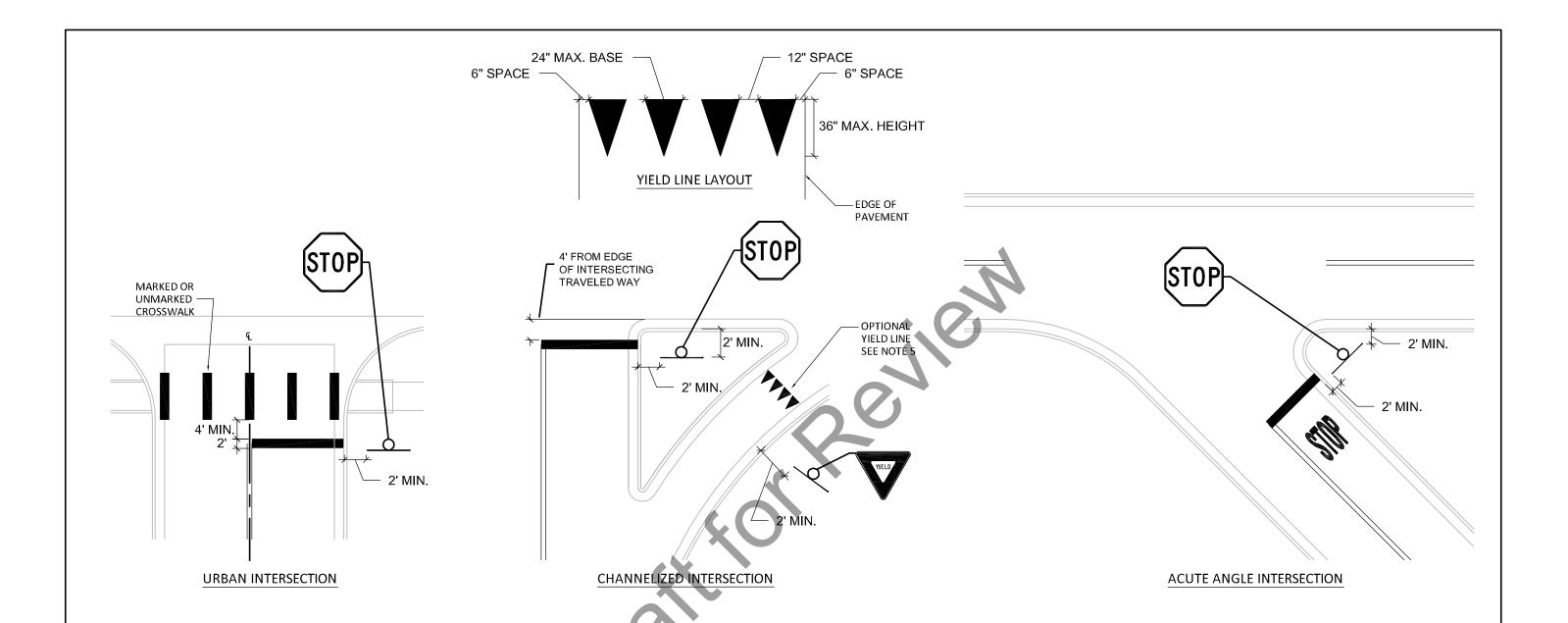
NOT ACCEPTABLE



### SIGN PLACEMENT

REVISIONS CITY OF ALBUQUERQUE

DWG. 2900-200 JULY 2012



### **STOP AND YIELD LINES NOTES:**

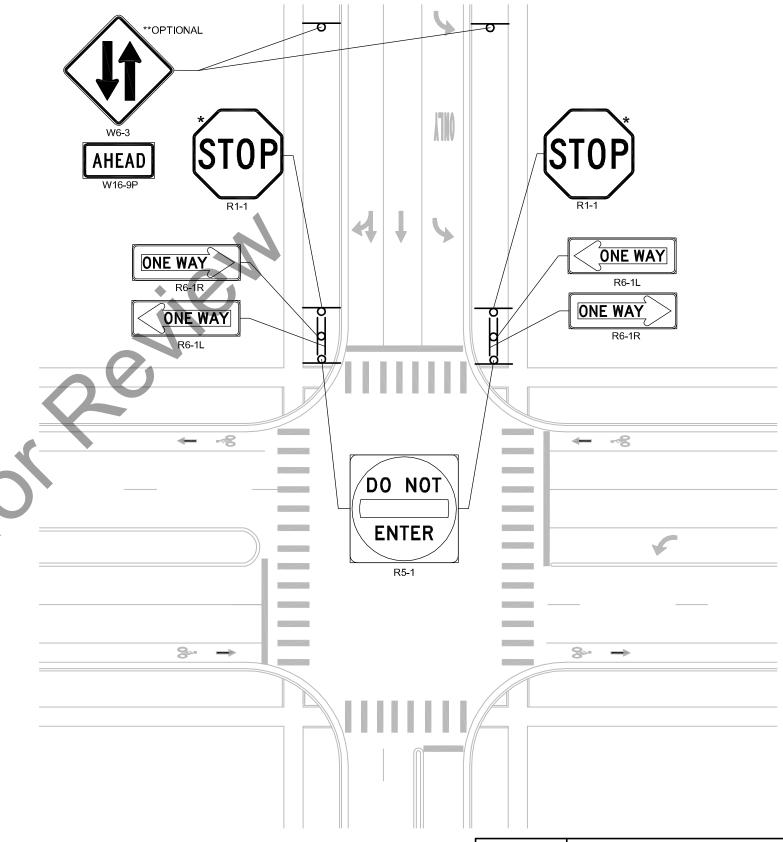
- 1. STOP LINES SHALL CONSIST OF SOLID WHITE LINES EXTENDING ACROSS APPROACH LANES TO INDICATE THE POINT AT WHICH THE STOP IS INTENDED OR REQUIRED TO BE MADE.
- 2. YIELD LINES SHALL CONSIST OF A ROW OF SOLID WHITE ISOSCELES TRIANGLES POINTING TOWARD APPROACHING VEHICLES EXTENDING ACROSS APPROACH LANES TO INDICATE THE POINT AT WHICH THE YIELD IS INTENDED OR REQUIRED TO BE MADE.
- 3. STOP LINES SHALL BE 24 INCHES WIDE.
- 4. THE INDIVIDUAL TRIANGLES COMPRISING THE YIELD LINE SHOULD HAVE A BASE OF 12 TO 24 INCHES WIDE AND A HEIGHT EQUAL TO 1.5 TIMES THE BASE. THE SPACE BETWEEN THE TRIANGLES SHOULD BE 3 TO 12 INCHES.
- 5. IF USED, STOP AND YIELD LINES SHOULD BE PLACED A MINIMUM OF 4 FEET IN ADVANCE OF THE NEAREST CROSSWALK LINE AT CONTROLLED INTERSECTIONS, EXCEPT FOR YIELD LINES AT ROUNDABOUTS AND AT MIDBLOCK CROSSWALKS. IN THE ABSENCE OF A MARKED CROSSWALK, THE STOP LINE OR YIELD LINE SHOULD BE PLACED AT THE DESIRED STOPPING OR YIELDING POINT, BUT SHOULD NOT BE PLACED MORE THAN 30 FT OR LESS THAN 4 FEET FROM THE NEAREST EDGE OF THE INTERSECTING TRAVELED WAY.
- STOP LINES AT MIDBLOCK SIGNALIZED LOCATIONS SHOULD BE PLACED AT LEAST 40 FEET IN ADVANCE OF THE NEAREST SIGNAL INDICATION.

### STOP SIGN/YIELD SIGN LOCATION NOTES:

- 1. MINIMUM STOP SIGN SIZE SHALL BE 30" X 30" FOR ALL SINGLE LANE ROADWAYS. 36" X 36" SHALL BE USED FOR ALL MULTI-LANE ROADWAYS.
- 2. THE STOP OR YIELD SIGN SHALL BE INSTALLED ON THE NEAR SIDE OF THE INTERSECTION ON THE RIGHT-HAND SIDE OF THE APPROACH TO WHICH IT APPLIES. WHEN THE STOP OR YIELD SIGN IS INSTALLED AT THIS REQUIRED LOCATION AND THE SIGN VISIBILITY IS RESTRICTED, A STOP AHEAD SIGN SHALL BE INSTALLED IN ADVANCE OF THE STOP SIGN OR YIELD AHEAD SIGN SHALL BE INSTALLED IN ADVANCE OF THE YIELD SIGN.
- 3. STOP OR YIELD SIGNS SHOULD NOT BE PLACED FARTHER THAN 50 FT FROM THE EDGE OF THE PAVEMENT OF THE INTERSECTED ROADWAY.
- 4. A SIGN THAT IS MOUNTED BACK-TO-BACK WITH A STOP OR YIELD SIGN SHOULD STAY WITHIN THE EDGES OF THE STOP OR YIELD SIGN.
- 5. STOP SIGNS AND YIELD SIGNS SHALL NOT BE MOUNTED ON THE SAME POST.

REVISIONS	CITY OF ALBU	QUERQUE	
	SIGN PLACEMENT		
	STOP/YIELD SIGN & LINE		
	LOCATION DETAILS		
	DWG. 2900-201	JULY 2012	

- 1. THE 'DO NOT ENTER' SIGN (R5-1) SHALL BE PLACED DIRECTLY IN VIEW OF A ROAD USER AT THE POINT WHERE A ROAD USER COULD WRONGLY ENTER THE ONE-WAY ROADWAY. THE SIGN SHOULD BE MOUNTED ON THE RIGHT HAND SIDE OF THE ROADWAY FACING TRAFFIC THAT MIGHT ENTER THE ROADWAY IN THE WRONG DIRECTION.
- IF THE 'DO NOT ENTER' SIGN WOULD BE VISIBLE TO TRAFFIC TO WHICH IT DOES NOT APPLY, THE SIGN SHOULD BE TURNED AWAY FROM, OR SHIELDED FROM, THE VIEW OF THAT TRAFFIC.
- 3. THE 'DO NOT ENTER' SIGN MAY BE INSTALLED WHERE IT IS NECESSARY TO EMPHASIZE THE ONE-WAY MOVEMENT.
- A SECOND 'DO NOT ENTER' SIGN ON THE LEFT-HAND SIDE OF THE ROADWAY MAY BE USED, PARTICULARLY WHERE TRAFFIC APPROACHES FROM AN INTERSECTING ROADWAY.
- 5. THE 'ONE WAY' SIGN (R6-1) SHALL BE USED TO INDICATE STREETS OR ROADWAYS UPON WHICH VEHICULAR TRAFFIC IS ALLOWED TO TRAVEL IN ONE DIRECTION ONLY.
- ★ 6. IF USED AT UN-SIGNALIGED INTERSECTIONS WITH ONE-WAY STREETS, 'ONE WAY' SIGNS SHALL BE PLACED ON THE NEAR RIGHT AND THE FAR LEFT CORNERS OF THE INTERSECTION FACING TRAFFIC ENTERING OR CROSSING THE ONE-WAY STREET.
- 7. IF USED AT SIGNALIZED INTERSECTIONS WITH ONE-WAY STREETS, 'ONE WAY' SIGNS SHALL BE PLACED NEAR THE APPROPRIATE SIGNAL FACES, ON THE POLES HOLDING THE TRAFFIC SIGNALS, ON THE MAST ARM HOLDING THE SIGNALS, OR AT THE LOCATIONS SPECIFIED FOR UN-SIGNALIZED INTERSECTIONS.



REVISIONS CITY OF ALBUQUERQUE

SIGN PLACEMENT

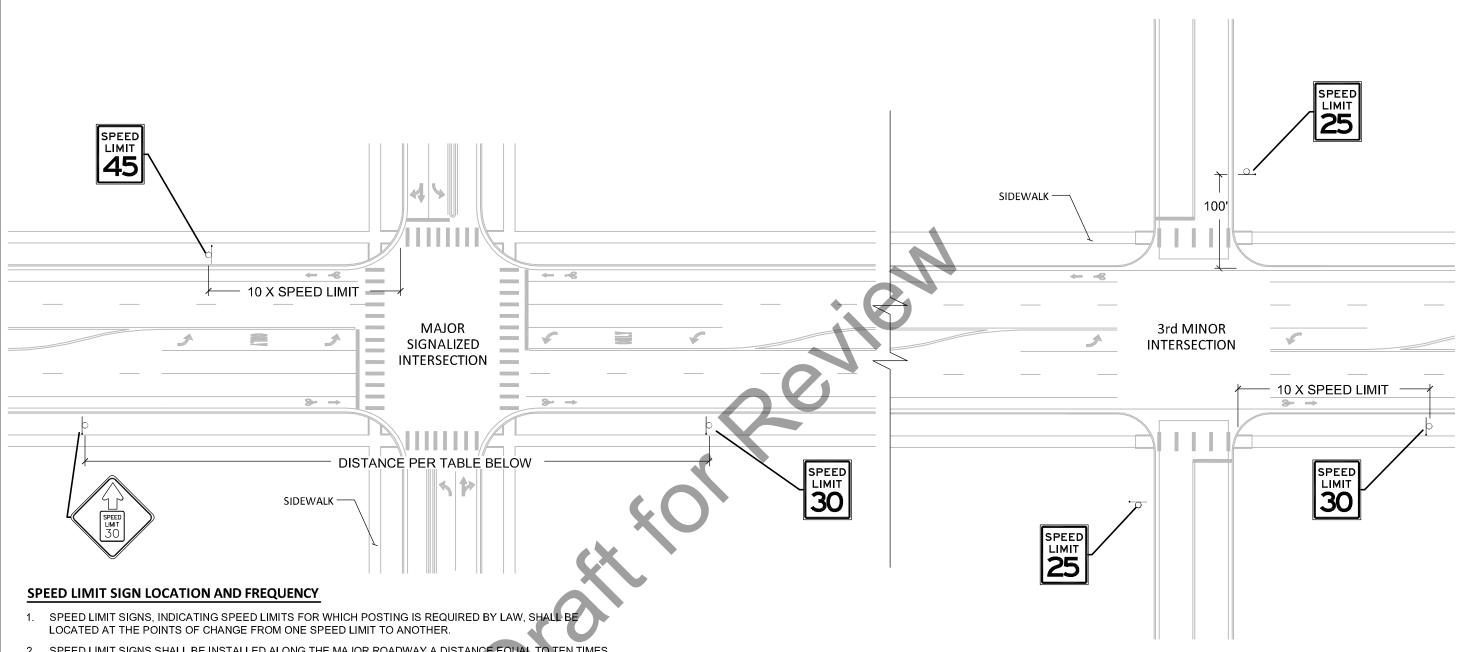
FOUR LEG INTERSECTION

ONE-WAY STREET MEETS

TWO-WAY APPROACHES

DWG. 2900—202

JULY 2012



- 2. SPEED LIMIT SIGNS SHALL BE INSTALLED ALONG THE MAJOR ROADWAY A DISTANCE EQUAL TO TEN TIMES THE POSTED SPEED LIMIT BEYOND MAJOR INTERSECTIONS AND AT LOCATIONS WHERE IT IS NECESSARY TO REMIND ROAD USERS OF THE SPEED LIMIT THAT IS APPLICABLE.
- 3. USING ENGINEERING JUDGMENT, SPEED LIMIT SIGNS SHALL BE INSTALLED AFTER EVERY THIRD MINOR INTERSECTION ALONG THE MAJOR ROADWAY BETWEEN MAJOR INTERSECTIONS.
- 4. SPEED LIMIT SIGNS SHALL BE INSTALLED ON THE MINOR ROADWAY 100 FT BEYOND THE INTERSECTING MAJOR ROADWAY. ENGINEERING JUDGEMENT SHALL BE USED FOR LOCATING SPEED LIMIT SIGNS ALONG MINOR ROADWAY BETWEEN MAJOR INTERSECTIONS.
- 5. SPEED LIMIT SIGNS INDICATING THE STATUTORY SPEED LIMITS SHALL BE INSTALLED, WHERE APPROPRIATE, AT JURISDICTIONAL BOUNDARIES IN URBAN AREAS.
- 6. A REDUCED SPEED LIMIT AHEAD SIGN (W3-5 OR W3-5a) SHOULD BE USED TO INFORM ROAD USERS OF A REDUCED SPEED ZONE WHERE THE SPEED LIMIT IS BEING REDUCED BY MORE THAN 10 MPH, OR WHERE ENGINEERING JUDGMENT INDICATES THE NEED FOR ADVANCE NOTICE TO COMPLY WITH THE POSTED SPEED LIMIT AHEAD.
- 7. DOUBLE INDICATE SPEED LIMIT SIGNS WHERE POSSIBLE.
- 8. INSTALL SPEED LIMIT SIGNS AS SHOWN IN THIS DETAIL AND AT MID POINT BETWEEN NEXT MAJOR SIGNALIZED INTERSECTION.

POSTED OR 85TH PERCENTILE SPEED	ADVANCED PLACEMENT
20 mph	225 ft
25 mph	325 ft
30 mph	460 ft
35 mph	565 ft
40 mph	670 ft
45 mph	775 ft
50 mph	885 ft

### **ADVANCED PLACEMENT OF REDUCED SPEED AHEAD SIGNS**

REVISIONS	CITY OF	ALBUQU	ERQ	UE
	SIGI	N PLACEMENT	•	
	SPE	ED LIMIT SIC	ŝΝ	
	PLACE	EMENT DET	AILS	
	DWG. 2900-2	.03	JULY	2012

- ADVANCE STREET NAME SIGNS (D3-2 SERIES) MAY BE INSTALLED IN ADVANCE OF SIGNALIZED OR UN-SIGNALIZED INTERSECTIONS TO PROVIDE ROAD USERS WITH ADVANCE INFORMATION TO IDENTIFY THE NAME(S) OF THE NEXT INTERSECTING STREET.
- 2. IN URBAN AREAS, ADVANCE STREET NAME SIGNS SHOULD BE USED IN ADVANCE OF ALL SIGNALIZED INTERSECTIONS ON MAJOR ARTERIAL STREETS, EXCEPT WHERE SIGNALIZED INTERSECTIONS ARE SO CLOSELY SPACED THAT ADVANCE PLACEMENT IS IMPRACTICAL.
- 3. ADVANCE STREET NAME SIGNS SHALL BE INSTALLED IN ADVANCE OF ALL INTERSECTIONS WITH A MEDIAN OF 6 FEET IN WIDTH OR MORE.
- 4. RECOMMENDED SPACING PRIOR TO SIGNALIZED OR UNSIGNALIZED INTERSECTION MAY BE 25 X SPEED LIMIT (FT).
- 5. DOUBLE INDICATE ADVANCED STREET NAME SIGNS WHERE POSSIBLE.

REVISIONS CITY OF ALBUQUERQUE

SIGN PLACEMENT

ADVANCED STREET NAME
SIGN PLACEMENT DETAILS
DWG. 2900–204

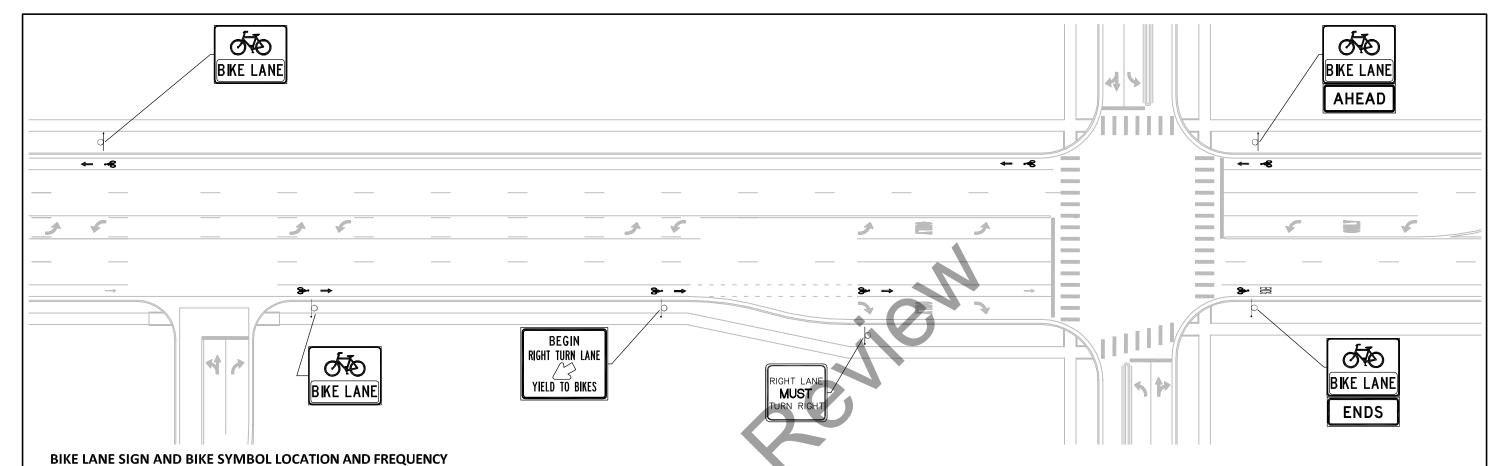
JULY 2012



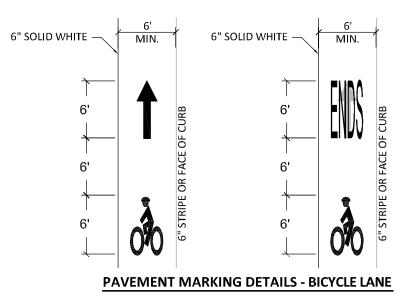
### BICYCLE FACILITIES

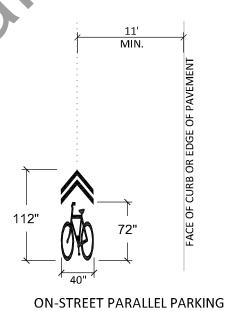
REVISIONS CITY OF ALBUQUERQUE

DWG. 2900-300 JULY 2012



- 1. BIKE LANE SIGNS SHALL BE USED ONLY IN CONJUNCTION WITH MARKED BICYCLE LANES.
- 2. WHEN USED, BIKE LANE SIGNS SHOULD BE USED AT THE BEGINNING OF THE BICYCLE LANE, AT THE TERMINATION OF THE BICYCLE LANE, AND AT PERIODIC INTERVALS ALONG THE BICYCLE LANE AS DETERMINED BY ENGINEERING JUDGEMENT.
- 3. WHERE BIKE LANE SIGNS ARE PLACED, THEY SHALL BE ACCOMPANIED BY "BIKE SYMBOL" PAVEMENT MARKINGS
- 4. "BIKE SYMBOL" PAVEMENT MARKINGS SHALL BE PLACED PRIOR TO RIGHT TURN BAY BREAK LINES, AT THE APPROACHES OF SIGNALIZED AND UNSIGNALIZED INTERSECTIONS, AND PLACED AFTER SIGNALIZED INTERSECTIONS.
- 5. ENGINEERING JUDGEMENT WILL BE USED WHEN PLACING "BIKE SYMBOL" PAVEMENT MARKINGS BEFORE/AFTER MINOR ROADWAY INTERSECTIONS AND ALONG CONTINUOUS STRETCHES OF ROADWAY.







### NC 9.

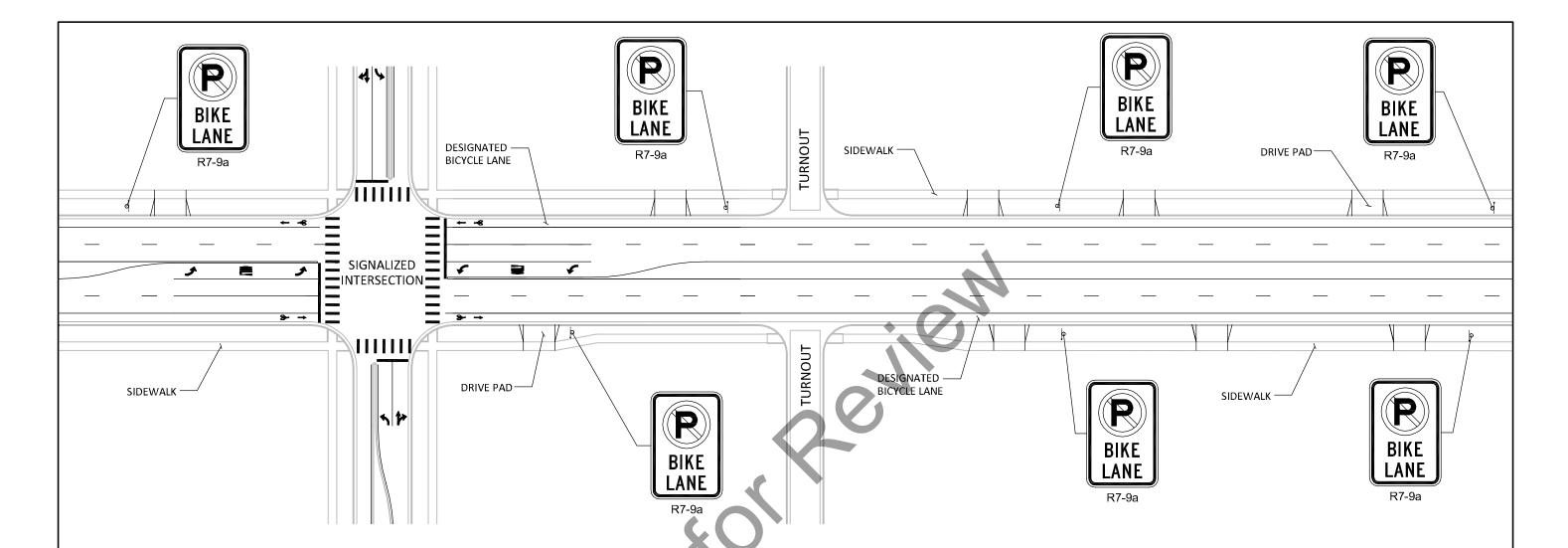
### PAVEMENT MARKING DETAILS - SHARED LANE "SHARROW"

- 1. SHARED LANE MARKINGS SHOULD NOT BE PLACED ON ROADWAYS THAT HAVE A SPEED LIMIT ABOVE 35 MPH.
- . SHARED LANE MARKINGS SHALL NOT BE USED ON SHOULDERS OR IN DESIGNATED BICYCLE LANES.
- 3. IF USED IN A SHARED LANE WITH ON-STREET PARALLEL PARKING, SHARED LANE MARKINGS SHOULD BE PLACED SO THAT THE CENTERS OF THE MARKINGS ARE AT LEAST 11' FROM THE FACE OF THE CURB, OR FROM THE EDGE OF THE PAVEMENT WHERE THERE'S NO CURB.
- IF USED ON A STREET WITHOUT ON-STREET PARKING THAT HAS AN OUTSIDE TRAVEL LANE THAT IS LESS THAN 14' WIDE, THE CENTERS OF THE SHARED LANE MARKINGS SHOULD BE AT LEAST 4' FROM THE FACE OF THE CURB, OR FROM THE EDGE OF THE PAVEMENT WHERE THERE IS NO CURB.
- . IF USED THE SHARED LANE MARKING SHOULD BE PLACED IMMEDIATELY AFTER AN INTERSECTION AND SPACED AT INTERVALS NOT GREATER THAN 250 FEET THEREAFTER.

REVISIONS	CITY OF ALBU	QUERQUE
	BICYCLE FAC	CILITIES
	BIKE LANE SIGN	& SYMBOL
	LOCATIO	N
	DWG. 2900-301	JULY 2012

ARROW AND BICYCLE SYMBOL DIMENSIONS SHALL MEET MUTCD REQUIREMENTS, AND SHALL REQUIRE APPROVAL BY THE PROJECT ENGINEER PRIOR TO INSTALLATION.

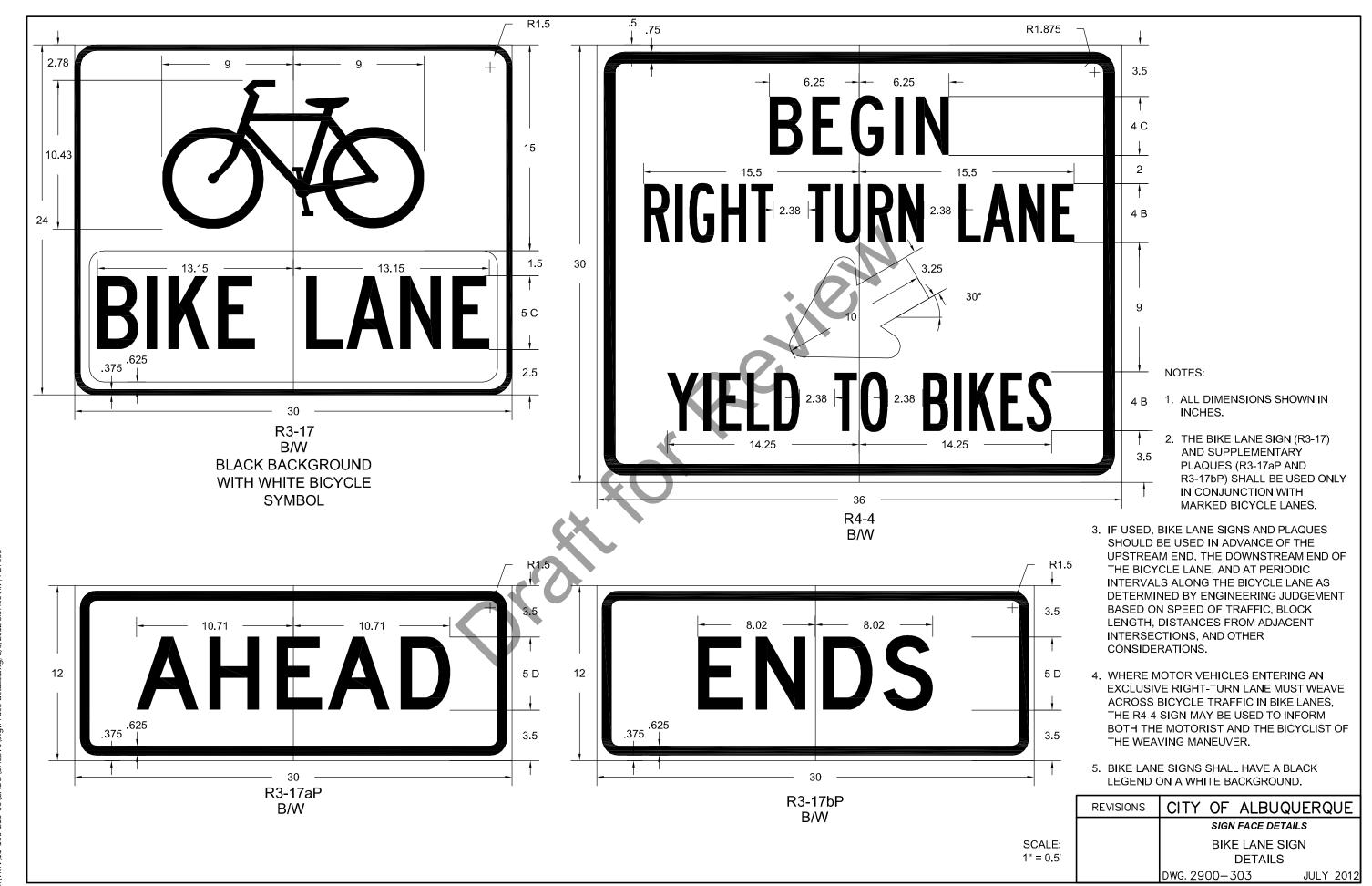
NO ON-STREET PARKING & TRAVEL LANE < 14'

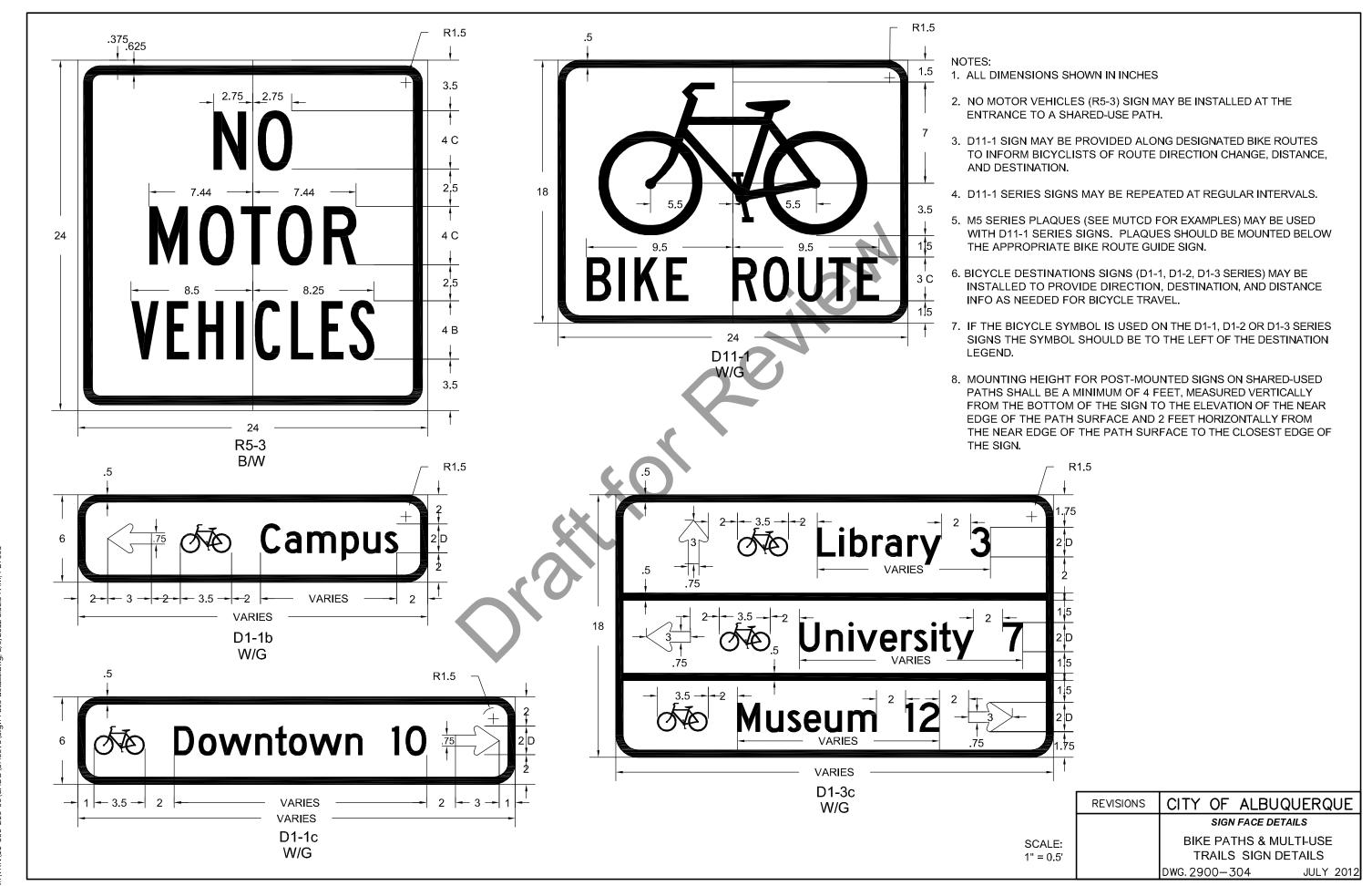


### **GENERAL NOTES**

- 1. IF INSTALLATION OF SIGNS IS NECESSARY TO RESTRICT PARKING, STANDING, OR STOPPING IN A BICYCLE LANE, APPROPRIATE SIGNS SUCH AS THE 'NO PARKING BIKE LANE' SIGNS SHALL BE INSTALLED. SEE ABOVE LAYOUT AS AN EXAMPLE.
- 2. WHEN PLACING PARKING, STOPPING, OR STANDING SIGNS, THOSE WITH ARROWS ARE USED TO INDICATE THE EXTENT OF THE RESTRICTED ZONE, SIGNS SHOULD BE SET AT AN ANGLE NOT LESS THAN 30 DEGREES OR MORE THAN 45 DEGREES WITH THE LINE OF TRAFFIC FLOW ORDER TO BE VISIBLE TO THE APPROACHING TRAFFIC.
- 3. SPACING OF SIGNS SHOULD BE BASED ON LEGIBILITY AND SIGN ORIENTATION.
- 4. IF THE ZONE IS LONG, SIGNS SHOULD BE USED AT INTERMEDIATE POINTS WITHIN THE ZONE.
- 5. IF THE SIGNS ARE MOUNTED AT AN ANGLE OF 90 DEGREES TO THE CURB LINE, SIGNS WITHOUT ANY ARROWS OR APPENDED PLAQUES SHOULD BE USED AT INTERMEDIATE POINTS WITHIN THE PARKING ZONE, FACING IN THE DIRECTION OF APPROACHING TRAFFIC.

REVISIONS	CITY	OF	ALBUQU	JERQ	UE
		BIC	YCLE FACILIT	TIES	
			KING BIKE		
	SIGNII	NG PL	ACEMENT	DETA	ILS
	DWG 29	00-3	302	JULY	2012



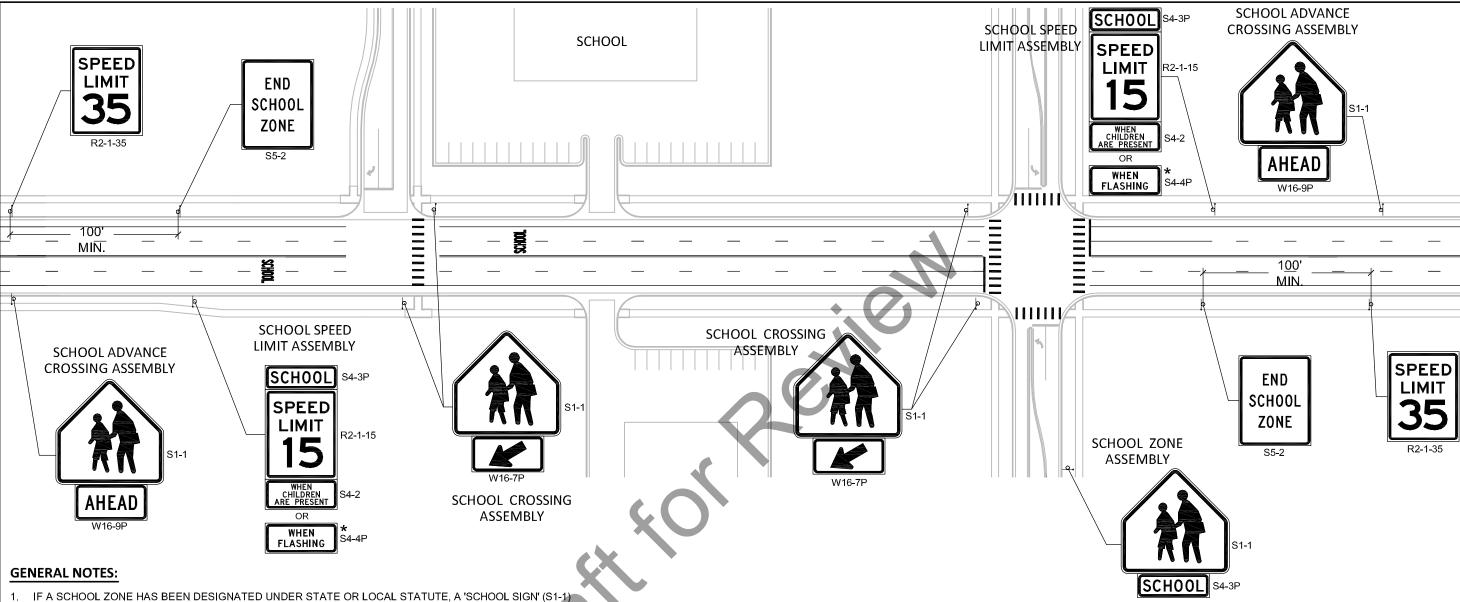




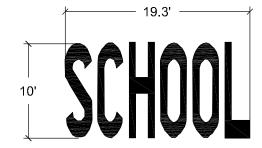
### SCHOOL ZONES

REVISIONS CITY OF ALBUQUERQUE

DWG. 2900-400 JULY 2012



- IF A SCHOOL ZONE HAS BEEN DESIGNATED UNDER STATE OR LOCAL STATUTE, A 'SCHOOL SIGN' (S1-1 SHALL BE INSTALLED TO IDENTIFY THE BEGINNING POINT(S) OF THE DESIGNATED SCHOOL ZONE.
- THE DOWNSTREAM END OF A DESIGNATED SCHOOL ZONE SHALL BE IDENTIFIED WITH AN 'END SCHOOL ZONE' (S5-2) SIGN. 'END SCHOOL ZONE' SIGNS SHALL NOT BE POSTED WITH SPEED LIMIT SIGNS OR OTHER PERMANENT SIGNING. DO NOT STACK SIGNS.
- 3. THE SCHOOL ADVANCE CROSSING ASSEMBLY SHALL CONSIST OF A S1-1 SIGN SUPPLEMENTED WITH A W16-9P OR W16-2P PLAQUE AND SHALL BE USED IN ADVANCE OF THE FIRST SCHOOL CROSSING ASSEMBLY THAT IS ENCOUNTERED IN EACH DIRECTION AS TRAFFIC APPROACHES A SCHOOL CROSSWALK.
- 4. THE SCHOOL CROSSING ASSEMBLY SHALL BE INSTALLED AT THE SCHOOL CROSSING OR AS CLOSE AS POSSIBLE AND SHALL CONSIST OF THE S1-1 SIGN AND W16-7P PLAQUE TO SHOW THE LOCATION OF THE CROSSING.
- 4.1. THE SCHOOL CROSSING ASSEMBLY SHALL NOT BE USED AT CROSSINGS OTHER THAN THOSE ADJACENT TO SCHOOLS AND THOSE ON ESTABLISHED SCHOOL PEDESTRIAN ROUTES.
- 4.2. THE SCHOOL CROSSING ASSEMBLY SHALL NOT BE INSTALLED ON APPROACHES CONTROLLED BY A STOP OR YIELD SIGN.
- 5. A SCHOOL SPEED LIMIT ASSEMBLY SHALL BE USED TO INDICATE THE SPEED LIMIT WHERE A REDUCED SCHOOL SPEED LIMIT ZONE HAS BEEN ESTABLISHED BASED UPON AN ENGINEERING STUDY OR BY STATUTE. THIS ASSEMBLY SHALL BE PLACED AT OR AS NEAR AS PRACTICAL TO THE POINT WHERE THE REDUCED SCHOOL SPEED LIMIT ZONE BEGINS.
- 5.1. IF A REDUCED SCHOOL SPEED LIMIT ZONE HAS BEEN ESTABLISHED, A S1-1 SIGN SHALL BE INSTALLED IN ADVANCE OF THE SCHOOL SPEED LIMIT ASSEMBLY.
- 5.2. IF THE SCHOOL SPEED LIMIT ASSEMBLY IS INSTALLED ON A FLASHING BEACON, THE S4-4P PLAQUE SHALL REPLACE THE S4-2 PLAQUE.



### **WORD PAVEMENT MARKING**

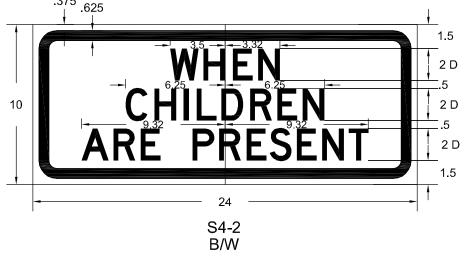
IF USED, THE SCHOOL WORD MARKING MAY EXTEND TO THE WIDTH OF TWO APPROACH LANES.

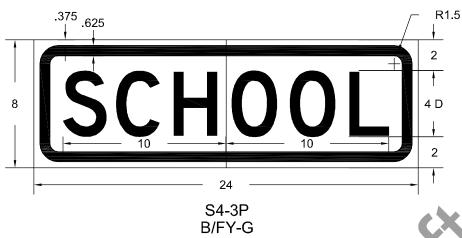
### **S1-1 SCHOOL SIGN NOTES:**

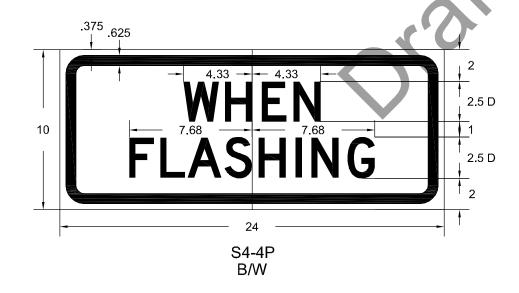
A 'SCHOOL SIGN' (S1-1) CAN BE USED IN MULTIPLE WAYS TO DESIGNATE A SCHOOL ZONE.

- CAN BE USED TO WARN ROAD USERS THAT THEY ARE APPROACHING A SCHOOL AREA, THAT MAY INCLUDE BUILDINGS, GROUNDS, CROSSINGS, OR SCHOOL RELATED ACTIVITY.
- 2. CAN BE USED TO IDENTIFY THE LOCATION OF THE BEGINNING OF A DESIGNATED SCHOOL ZONE.
- 3. IF COMBINED WITH AN 'AHEAD' (W16-9P) OR 'XX FEET' (W16-2P) PLAQUE, THE S1-1 SIGN CAN BE USED TO WARN ROAD USERS THAT THEY ARE APPROACHING A CROSSING WHERE SCHOOLCHILDREN CROSS THE ROADWAY.
- 4. IF COMBINED WITH A DIAGONAL DOWNWARD POINTING ARROW (W16-7P) PLAQUE, THE S1-1 SIGN CAN BE USED TO WARN APPROACHING ROAD USERS OF THE LOCATION OF A CROSSING WHERE SCHOOLCHILDREN CROSS THE ROADWAY.

REVISIONS	CITY OF	ALBUQU	JERQ	UE
	sc	HOOL ZONES		
	SCHO	OL ZONE S	IGN	
		LAYOUT		
	DWG. 2900-4	101	JULY	2012





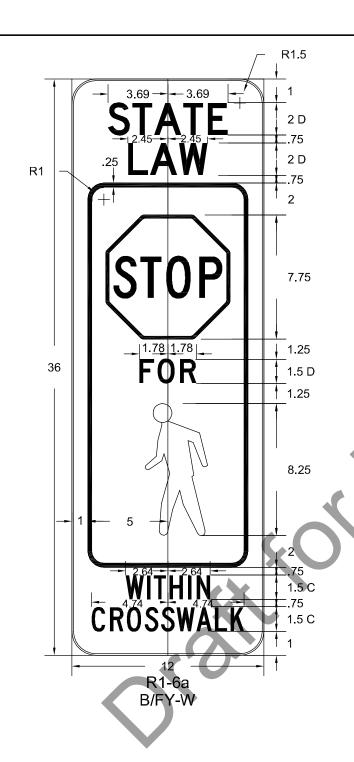


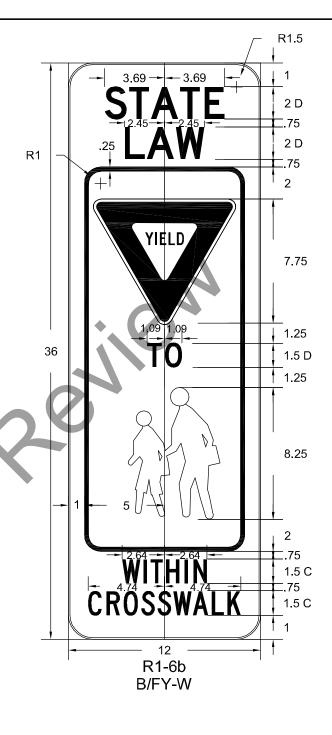
### NOTES:

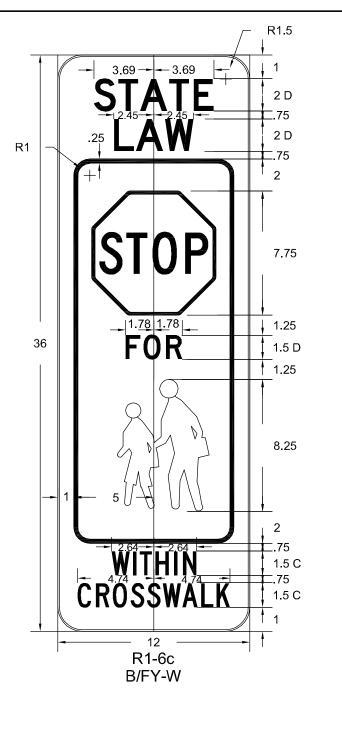
- 1. ALL DIMENSIONS SHOWN IN INCHES.
- ALL SCHOOL SIGNS ARE SIZED FOR A CONVENTIONAL ROADWAY. \$1-1 MAY BE 30X30 ONLY WHERE TRAFFIC VOLUMES ARE LOW AND SPEEDS ARE 30 MPH OR LOWER.
- 3. SCHOOL WARNING SIGNS AND ANY SUPPLEMENTAL PLAQUES USED WITH THESE SIGNS SHALL HAVE FLUORESCENT YELLOW-GREEN BACKGROUNDS WITH BLACK LEGENDS AND BORDERS, UNLESS OTHERWISE PROVIDED IN THE MUTCD FOR A SPECIFIC SIGN.
- 4. IF USED, THE SHOWN SCHOOL CROSSING ASSEMBLY SHALL BE INSTALLED AT THE SCHOOL CROSSING, OR AS CLOSE TO IT AS POSSIBLE AND SHALL CONSIST OF THE S1-1 SIGN SUPPLEMENTED WITH A DIAGONAL DOWNWARD POINTED ARROW (W16-7P) PLAQUE TO SHOW THE LOCATION OF THE CROSSING.
- 5. THE SCHOOL CROSSING ASSEMBLY SHALL NOT BE INSTALLED ON APPROACHES CONTROLLED BY A STOP OR YIELD SIGN.
- 6. PLEASE REFER TO THE MUTCD FOR FURTHER GUIDANCE ON SCHOOL ZONE SIGNING.

	REVISIONS	CITY OF ALBU	QUERQUE
		SIGN FACE DE	TAILS
		SCHOOL CROSSI	NG ZONE
\LE: 0.5'		SIGN DETA	ILS
0.5		DWG 2900-403	JULY 2012

SCALE: 1" = 0.5'







### NOTES:

R1.5

- 1. ALL DIMENSIONS SHOWN IN INCHES
- 2. THE USE OF THE "STATE LAW" LEGEND IS OPTIONAL ON R1-6 SERIES SIGNS.
- 3. THE USE OF THE SCHOOL PLAQUE (S4-3P) WITH A REDUCES SIZE OF 12 X 6 INCHES, PLACED ABOVE THE R1-6 SERIES IS OPTIONAL.
- 4. THE IN-STREET PEDESTRIAN CROSSING OR THE IN-STREET SCHOOLCHILDREN CROSSING (R1-6 SERIES) MAY BE USED AT UN-SIGNALIZED SCHOOL CROSSINGS.

	REVISIONS	CITY OF ALBUQUERQUE
		SIGN FACE DETAILS
		SCHOOL CROSSING ZONE
SCALE: 1" = 0.5'		SIGN DETAILS
1 - 0.5		DWG. 2900-404 JULY 2012

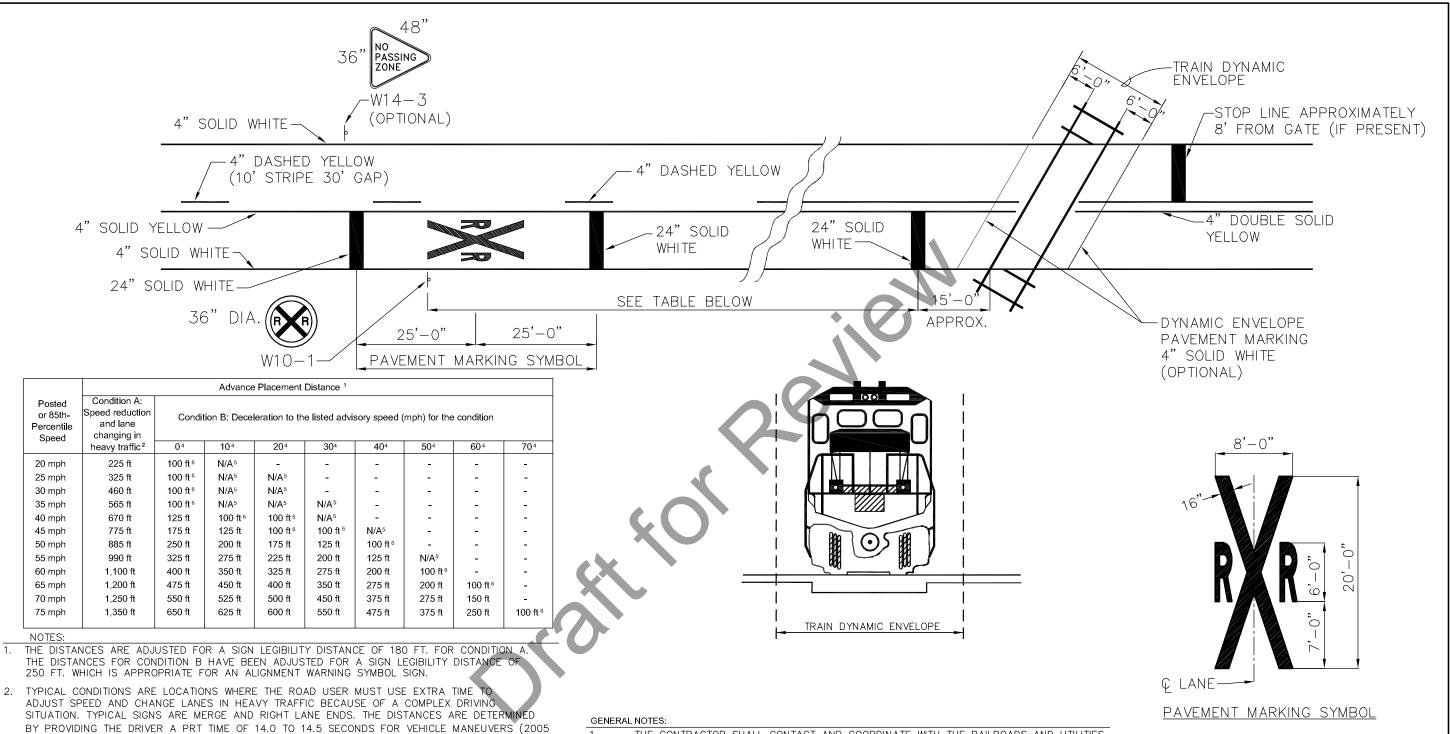


### GRADE CROSSINGS

REVISIONS CITY OF ALBUQUERQUE

DWG. 2900-500 JULY 2012





- . THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE RAILROADS AND UTILITIES SECTION MANAGER AT THE NEW MEXICO DEPARTMENT OF TRANSPORTATION. AND WITH THE RAILROAD OWNERS PRIOR TO ANY WORK DONE AT RAILROAD CROSSINGS.
- 2. A THREE-LANE ROADWAY SHOULD BE MARKED WITH A CENTERLINE FOR TWO-LANE APPROACH OPERATION ON THE APPROACH TO A CROSSING.
- 3. ON MULTI-LANE ROADS. THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES. AND INDIVIDUAL RXR SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.
- . THE 24" SOLID WHITE STOP LINE SHALL BE RETROREFLECTIVE THERMOPLASTIC.
- WHEN THE RAILROAD PAVEMENT MARKING SYMBOL, IS USED A PORTION OF THE SYMBOL SHOULD BE DIRECTLY OPPOSITE THE ADVANCED WARNING SIGN (W10-1). IF NEEDED, SUPPLEMENTAL PAVEMENT MARKING SYMBOLS MAY BE PLACED BETWEEN THE ADVANCED WARNING SIGN AND THE CROSSING, BUT SHOULD BE AT LEAST 50 FT. FROM THE STOP INF.

REVISIONS	CITY OF ALBUQ	UERQUE
	PAVEMENT MARKINGS FOI TYPICAL RAILROAD	
	CROSSING	3S
	DWG. 2900-501	JULY 2012

4. TYPICAL CONDITIONS ARE LOCATIONS WHERE THE ROAD USER MUST DECREASE SPEED TO MANUVER THROUGH THE WARNED CONDITION. TYPICAL SIGNS ARE TURN. CURVE. REVERSE TURN. OR REVERSE CURVE. THE DISTANCE IS DETERMINED BY PROVIDING A 2.5 SECOND PRT, A

VEHICLE DECELERATION RATE OF 10 FT/SECOND2 MINUS THE SIGN LEGIBILITY DISTANCE OF 250 FT.

AASHTO POLICY. EXHIBIT 3-3. DECISION SIGHT DISTANCE. AVOIDANCE MANEUVER E) MINUS THE

TYPICAL CONDITION IS THE WARNING OF A POTENTIAL STOP SITUATION. TYPICAL SIGNS ARE STOP

AHEAD. YIELD AHEAD. SIGNAL AHEAD. AND INTERSECTION WARNING SIGNS. THE DISTANCES ARE

TIME OF 2.5 SECONDS, A DECELERATION RATE OF 11.2 FT/SECOND2. MINUS THE SIGN LEGIBILITY

BASED ON THE 2005 AASHTO POLICY. STOPPING SIGHT DISTANCE. EXHIBIT 3-1. PROVIDING A PRT

LEGIBILITY DISTANCE OF 180 FT FOR THE APPROPRIATE SIGN.

DISTANCE OF 180 FT.

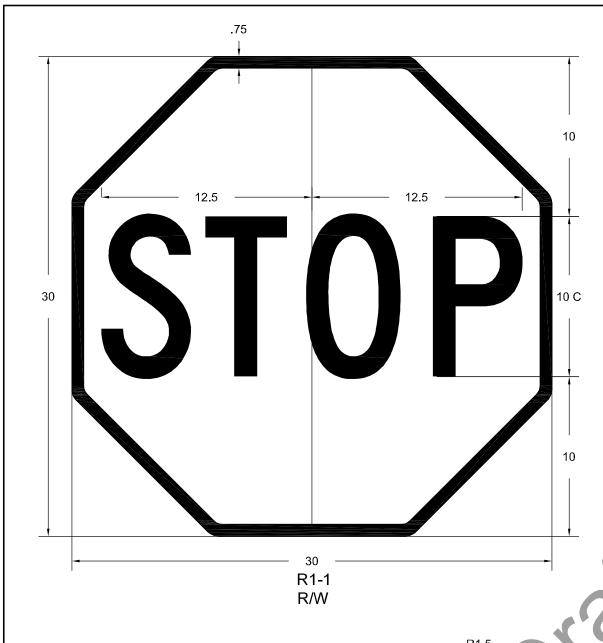
- 5. NO SUGGESTED DISTANCES ARE PROVIDED FOR THESE SPEEDS, AS THE PLACEMENT LOCATION IS DEPENDANT ON SIGHT CONDITIONS AND OTHER SIGNING TO PROVIDE AN ADEQUATE ADVANCE WARNING FOR THE DRIVER
- 6. THE MINIMUM ADVANCE PLACEMENT DISTANCE IS LISTED AS 100 FEET TO PROVIDE ADEQUATE SPACING.



## SIGN FACE DETAILS

REVISIONS CITY OF ALBUQUERQUE

DWG. 2900-600 JULY 2012



	Stop Sign Standards			
Street Typ	ре	Speed Limit	Letter Height	Sign Size
Single lar	ne	40 MPH or less	10 in.	30 in.
Multi-lar	ne 4	5 MPH or more	12 in.	36 in.

### NOTES:

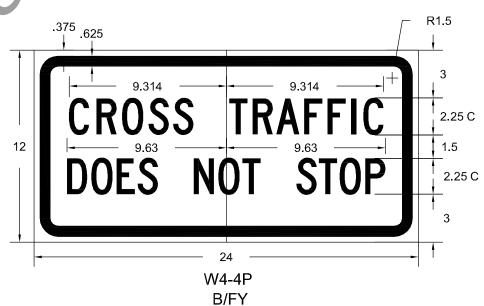
- 1. ALL DIMENSIONS SHOWN IN INCHES
- 2. 'STOP' SIGNS (R1-1) SHALL BE AN OCTAGON WITH A WHITE LEGEND AND BORDER ON A RED BACKGROUND.
- 3. WHEN IT IS DETERMINED THAT A FULL STOP IS REQUIRED ON AN APPROACH TO AN INTERSECTION, A 'STOP' SIGN (R1-1) SHALL BE USED.
- 4. SECONDARY LEGENDS SHALL NOT BE USED ON 'STOP' SIGN FACES.
- 5. AT INTERSECTIONS WHERE ALL APPROACHES ARE CONTROLLED BY 'STOP' SIGNS, AN 'ALL WAY' SUPPLEMENTAL PLAQUE (R1-3P) SHALL BE MOUNTED BELOW EACH 'STOP' SIGN. THE 'ALL WAY' PLAQUE SHALL HAVE A WHITE LEGEND AND BORDER ON A RED BACKGROUND.
- 6. THE 'ALL WAY' (R1-3P) PLAQUE SHALL ONLY BE USED IF ALL INTERSECTION APPROACHES ARE CONTROLLED BY 'STOP' SIGNS.
- 7. SUPPLEMENTAL PLAQUES WITH LEGENDS SUCH AS '2-WAY', '3-WAY', '4-WAY', OR OTHER NUMBERS OF WAYS SHALL NOT BE USED WITH 'STOP' SIGNS.
- 8. THE 'CROSS TRAFFIC DOES NOT STOP' (W4-4P) PLAQUE MAY BE USED IN COMBINATION WITH A STOP SIGN WHEN ENGINEERING JUDGEMENT INDICATES THAT CONDITIONS ARE PRESENT THAT ARE CAUSING OR COULD CAUSE DRIVERS TO MISINTERPRET THE INTERSECTION AS AN ALL-WAY STOP.

SCALE

1" = 0.5'

9. IF A R1-3P OR W4-4P PLAQUE IS USED, IT SHALL BE MOUNTED BELOW THE STOP SIGN.



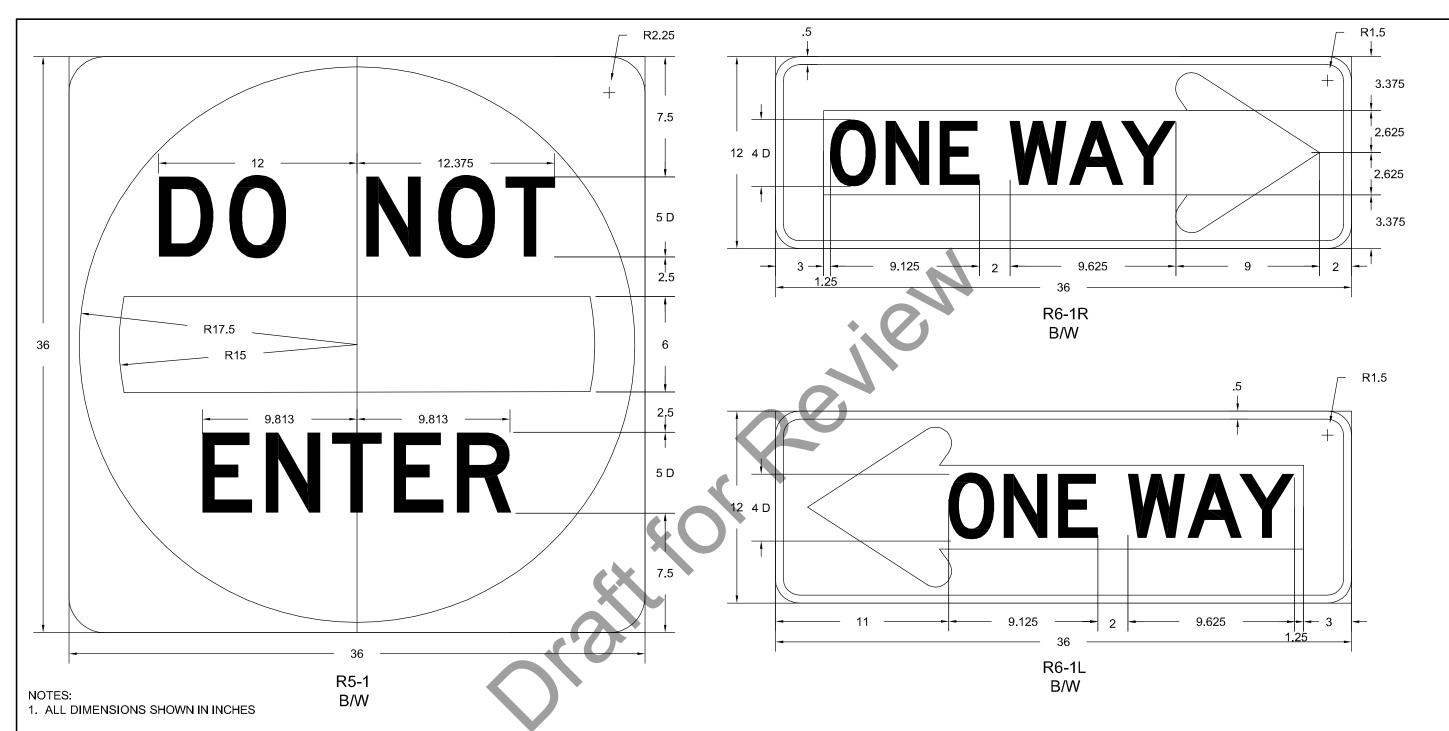


REVISIONS	CITY OF ALBUQUERQUE
	SIGN FACE DETAILS
	REGULATORY SIGN
	DETAILS
	DWG 2900_601 JULY 2012

6.25

R1.5

6.25



- 2. REGULATORY SIGNS SHALL HAVE WHITE BACKGROUNDS WITH BLACK LEGENDS AND BORDERS. THE 'DO NOT ENTER' SIGN SHALL HAVE A WHITE BACKGROUND AND WHITE LEGEND INSIDE A RED CIRCLE.
- 3. THE 'DO NOT ENTER' SIGN (R5-1) SHALL BE USED WHERE TRAFFIC IS PROHIBITED FROM ENTERING A RESTRICTED ROADWAY. IF USED, R5-1 SIGN SHALL BE PLACED DIRECTLY IN VIEW OF A ROAD USER AT THE POINT WHERE A ROAD USER COULD WRONGLY ENTER A DIVIDED HIGHWAY OR A ONE-WAY ROADWAY.
- 4. A SECOND 'DO NOT ENTER' SIGN MAY BE INSTALLED ON THE LEFT HAND SIDE OF THE ROADWAY, PARTICULARLY WHERE TRAFFIC APPROACHES FROM AN INTERSECTING ROADWAY.
- 5. THE 'ONE WAY' SIGN (R6-1) SHALL BE USED TO INDICATE STREETS OR ROADWAYS UPON WHICH VEHICULAR TRAFFIC IS ALLOWED TO TRAVEL IN ONE DIRECTION ONLY. 'ONE WAY' SIGNS SHALL BE PLACED PARALLEL TO THE ONE-WAY STREET.
- 6. IF THE R6-1 SIGN IS USED AT UN-SIGNALIZED INTERSECTIONS WITH ONE-WAY STREETS, THE 'ONE WAY' SIGN SHALL BE PLACES ON THE NEAR RIGHT AND THE FAR LEFT CORNERS OF THE INTERSECTION FACING TRAFFIC ENTERING OR CROSSING THE ONE-WAY STREET.
- 7. IF USED AT SIGNALIZED INTERSECTIONS WITH ONE-WAY STREETS, THE 'ONE WAY' SIGNS SHALL BE PLACED NEAR THE APPROPRIATE SIGNAL FACES, ON THE POLES HOLDING THE TRAFFIC SIGNALS, ON THE MAST ARM OR SPAN WIRE HOLDING THE SIGNALS, OR AT THE LOCATIONS SPECIFIED FOR UN-SIGNALIZED INTERSECTIONS.

SC	CALE:
1"	= 0.5'

REVISIONS	CITY OF ALBUC	UERQUE
	SIGN FACE DETA	AILS
	REGULATORY	SIGN
	DETAILS	
	DWG. 2900-603	JULY 2012



R1.5

1.875

3 C

.875

3 B

2 C =625 2 C

1.5

2.5

R1.5

1.875

.50

2 C

1.25

2.5

12

R7-6

R/W



### NOTES:

- 1. ALL DIMENSIONS SHOWN IN INCHES.
- 2. WHERE PARKING IS PROHIBITED AT ALL TIMES OR AT SPECIFIC TIMES THE R7 SERIES SHALL BE USED.
- 3. PARKING/NO PARKING SIGNS SHALL HAVE A RED LEGEND AND BORDER ON A WHITE BACKGROUND. WHERE ONLY LIMITED-TIME PARKING OR PARKING IN A PARTICULAR MANNER ARE PERMITTED, THE SIGNS SHALL HAVE A GREEN LEGEND AND BORDER ON A WHITE BACKGROUND.
- 4. PLEASE REFER TO THE MUTCD FOR FURTHER GUIDANCE ON PARKING AND NO PARKING SIGNS.

SCALE:
1" = 0.5'

REVISIONS

CITY OF ALBUQUERQUE

SIGN FACE DETAILS

PARKING/NO PARKING
SIGN DETAILS

DWG. 2900-604

JULY 2012

R/W

R/W

- 2. WHERE PARKING IS PROHIBITED AT ALL TIMES OR AT SPECIFIC TIMES THE R7 SERIES SHALL BE USED.
- 3. PARKING/NO PARKING SIGNS SHALL HAVE A RED LEGEND AND BORDER ON A WHITE BACKGROUND, WHERE ONLY LIMITED-TIME PARKING OR PARKING IN A PARTICULAR MANNER ARE PERMITTED, THE SIGNS SHALL HAVE A GREEN LEGEND AND BORDER ON A WHITE BACKGROUND.

R1.5

4 D

3.5

SCALE

1" = 0.5'

- 4. R8-4 SIGNS SHALL HAVE A BLACK LEGEND AND BORDER ON A
- 5. R8-3 SIGNS SHALL HAVE A BLACK LEGEND AND BORDER AND A RED CIRCLE AND SLASH ON A WHITE BACKGROUND.
- 6. PLEASE REFER TO THE MUTCD FOR FURTHER GUIDANCE ON PARKING AND NO PARKING SIGNS.

REVISIONS	CITY OF	ALBUQU	IERQ	UE
	SIGN	FACE DETAIL	.s	
	PARKING/NO PARKING			
	SIG	ON DETAILS		
	DWG. 2900-6	305	JULY	2012



# OVERHEAD MASTARM SIGN AT MAJOR ARTERIAL INTERSECTIONS

NOTE: USE FOR ILLUMINATED STREET NAME SIGNS



MAJOR ARTERIAL ROADWAY SIGN



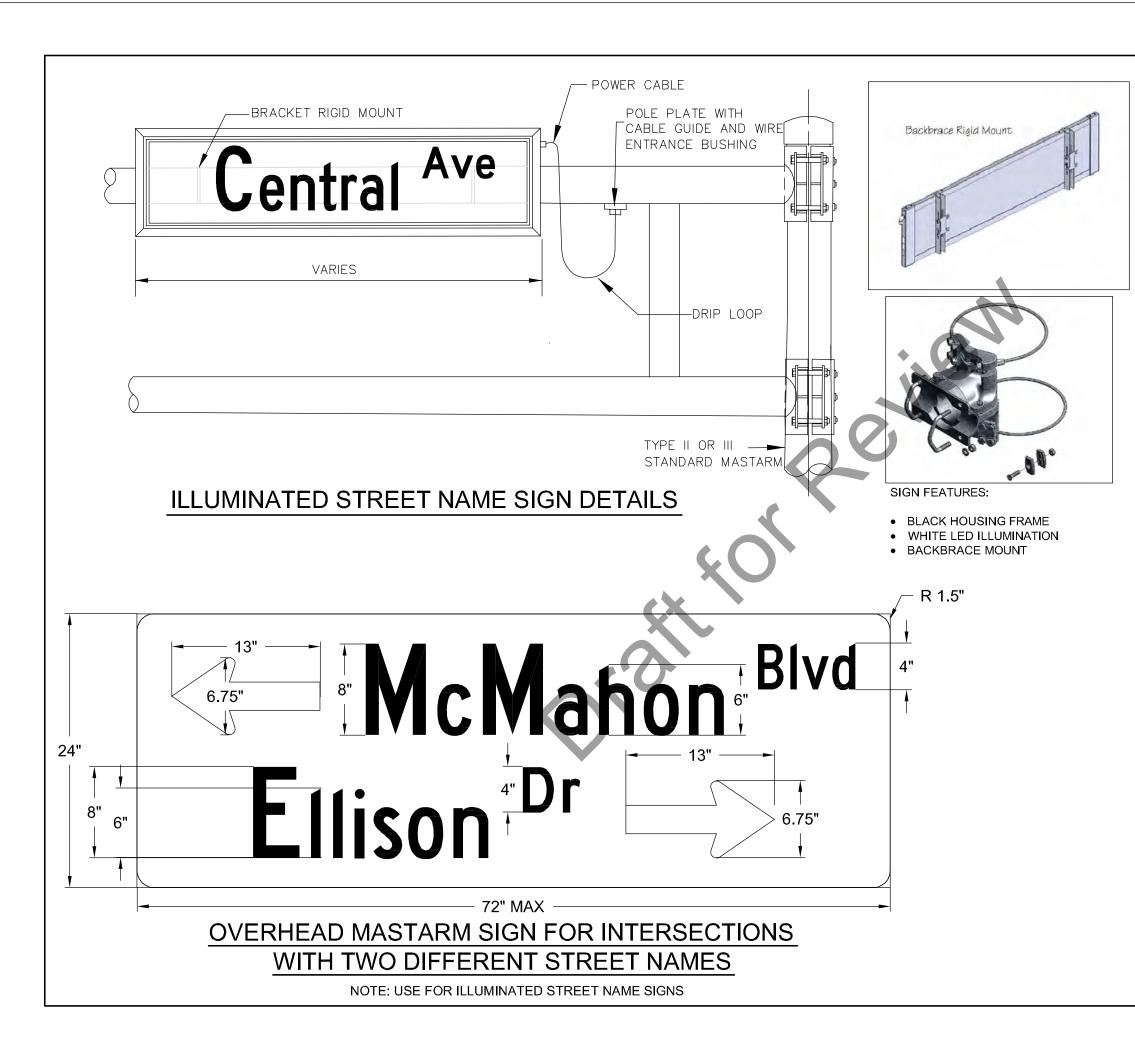
**NON-ARTERIAL ROADWAY SIGN** 

Street Name Standards					
			Letter	Height	
Mounting Type	Street Type	Speed Limit	Upper Case	Lower Case	Plate Size
Overhead	All types	All speeds	12 in.	9 in.	18 in.
Post-mounted	Multi-lane	More than 40 MPH	8 in.	6 in.	12 in.
Post-mounted	Multi-lane	40 MPH or less	6 in.	4.5 in.	10 in.
Post-mounted _	2-lane	All speeds	6 in.*	4.5 in.*	11 in.

## GENERAL NOTES

- 1. THE LETTERING FOR NAMES OF STREETS AND HIGHWAYS ON STREET NAME SIGNS SHALL BE COMPOSED OF A COMBINATION OF LOWER-CASE LETTERS WITH INITIAL UPPER-CASE LETTERS.
- 2. A MINIMUM OF 6" LETTER HEIGHT FOR LETTERING ON POST MOUNTED STREET NAME SIGNS SHALL BE USED.
- 3. A MINIMUM OF 8" LETTER HEIGHT FOR LETTERING ON POST MOUNTED STREET NAME SIGNS ON MULTI-LANE STREETS WITH SPEED LIMITS GREATER THAN 40 MPH SHALL BE USED.
- A MINIMUM OF 12" LETTER HEIGHT FOR LETTERING ON OVERHEAD STREET NAME SIGNS SHALL BE USED.
- 5. STREET NAME SIGNS (D3-1 SERIES) SHALL BE RETROREFLECTIVE (TYPE XI) OR ILLUMINATED TO SHOW THE SAME SHAPE AND SIMILAR COLOR BOTH DAY AND NIGHT. THE COLOR OF THE LEGEND AND BORDER SHALL BE WHITE REGARDLESS OF BACKGROUND COLOR OF THE SIGN.
- 6. AN ALTERNATIVE BACKGROUND COLOR OTHER THAN THE NORMAL GUIDE SIGN COLOR OF GREEN MAY BE USED FOR STREET NAME SIGNS WHERE THE AGENCY DETERMINES THIS IS NECESSARY. THE ONLY ACCEPTABLE BACKGROUND COLORS SHALL BE BLUE, BROWN, OR WHITE. IF A WHITE BACKGROUND IS USED. THE LEGEND AND BORDER SHALL BE BLACK.
- 7. SIGNS TO BE SIZED IN 6" INCREMENTS FOR WIDTH.
- 8. SHIFT LETTERING UPWARD AS NEEDED WHEN LETTERS WITH A TAIL ARE USED AS SHOWN WITH WYOMING BLVD.
- 9. PUNCTUATION MARKS SUCH AS PERIODS, COMMAS, ETC. SHALL NOT BE USED.
- 10. ALL STREET NAME SIGNS SHALL USE "HWY C" FONT, SIGNS WITH 3-LETTERS OR LESS AND ALL #'S USE "HWY D" FONT. ANY SIGN GREATER THAN 8-FEET IN WIDTH SHALL USE "HWY B" FONT.

REVISIONS	CITY OF ALBUC	QUERQUE	
	SIGN FACE DET	AILS	
	STREET NAME SIGN		
	DETAILS		
	DWG. 2900-606	JULY 2012	

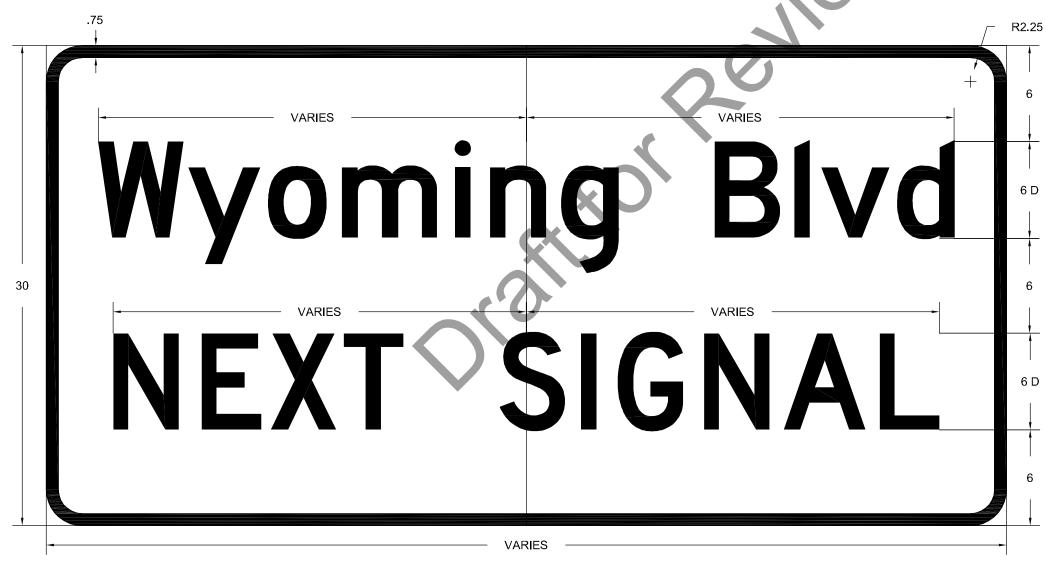


#### **GENERAL NOTES:**

- 1. THE LETTERING FOR NAMES OF STREETS AND HIGHWAYS ON STREET NAME SIGNS SHALL BE COMPOSED OF A COMBINATION OF LOWER-CASE LETTERS WITH INITIAL UPPER-CASE LETTERS.
- A MINIMUM OF 6" LETTER HEIGHT FOR LETTERING ON POST MOUNTED STREET NAME SIGNS SHALL BE USED.
- 3. A MINIMUM OF 8" LETTER HEIGHT FOR LETTERING ON POST MOUNTED STREET NAME SIGNS ON MULTI-LANE STREETS WITH SPEED LIMITS GREATER THAN 40 MPH SHALL BE USED. 8" LETTER HEIGHT SHALL ALSO BE USED FOR STREET NAME SIGNS WITH MORE THAN ONE STREET NAME LISTED (SHOWN BELOW).
- 4. A MINIMUM OF 12" LETTER HEIGHT FOR LETTERING ON OVERHEAD STREET NAME SIGNS SHALL BE USED.
- 5. STREET NAME SIGNS (D3-1 SERIES) SHALL BE RETROREFLECTIVE (TYPE XI) OR ILLUMINATED TO SHOW THE SAME SHAPE AND SIMILAR COLOR BOTH DAY AND NIGHT. THE COLOR OF THE LEGEND AND BORDER SHALL BE WHITE REGARDLESS OF BACKGROUND COLOR OF THE SIGN.
- 6. AN ALTERNATIVE BACKGROUND COLOR OTHER THAN THE NORMAL GUIDE SIGN COLOR OF GREEN MAY BE USED FOR STREET NAME SIGNS WHERE THE AGENCY DETERMINES THIS IS NECESSARY. THE ONLY ACCEPTABLE BACKGROUND COLORS SHALL BE BLUE, BROWN, OR WHITE. IF A WHITE BACKGROUND IS USED, THE LEGEND AND BORDER SHALL BE BLACK.
- 7. SIGNS TO BE SIZED IN 6" INCREMENTS FOR WIDTH.
- 8. SHIFT LETTERING UPWARD AS NEEDED WHEN LETTERS WITH A TAIL ARE USED, FOR EXAMPLE, WYOMING BLVD, MONTGOMERY BLVD, OR IRVING BLVD.
- PUNCTUATION MARKS SUCH AS PERIODS, COMMAS, ETC. SHALL NOT BE USED.
- 10. ALL STREET NAME SIGNS SHALL USE "HWY C" FONT, SIGNS WITH 3-LETTERS OR LESS AND ALL #'S USE "HWY D" FONT. ANY SIGN GREATER THAN 8-FEET IN WIDTH SHALL USE "HWY B" FONT.
- 11. SEE STREET NAME STANDARDS TABLE ON PREVIOUS PAGE FOR MUTCD STANDARD LETTER HEIGHTS AND PLATE SIZES.

REVISIONS	CITY OF ALBU	QUERQUE	
	SIGN FACE DE	TAILS	
	STREET NAME SIGN		
	DETAILS		
	DWG. 2900-607	JULY 2012	

- 1. ALL DIMENSIONS SHOWN IN INCHES
- 2. ADVANCE STREET NAME SIGNS (D3-2 SERIES) MAY BE INSTALLED IN ADVANCE OF SIGNALIZED OR UN-SIGNALIZED INTERSECTIONS TO PROVIDE ROAD USERS WITH ADVANCE INFORMATION TO IDENTIFY THE NAME(S) OF THE NEXT INTERSECTING STREET.
- 3. IN URBAN AREAS, ADVANCE STREET NAME SIGNS SHOULD BE USED IN ADVANCE OF ALL SIGNALIZED INTERSECTIONS ON MAJOR ARTERIAL STREETS, EXCEPT WHERE SIGNALIZED INTERSECTIONS ARE SO CLOSELY SPACED THAT ADVANCE PLACEMENT IS IMPRACTICAL.
- 4. ADVANCE STREET NAME SIGNS SHALL BE INSTALLED IN ADVANCE OF ALL INTERSECTIONS WITH A MEDIAN OF 6 FEET IN WIDTH OR MORE.
- 5. RECOMMENDED SPACING PRIOR TO SIGNALIZED OR UNSIGNALIZED INTERSECTION MAY BE 25 X SPEED LIMIT (FT).



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REVISIONS CITY OF ALBUQUERQUE

SIGN FACE DETAILS

ADVANCED STREET

NAME SIGN DETAILS

DWG. 2900-608

JULY 2012

D3-2 W/G

INFORMATION TO IDENTIFY THE NAME(S) OF THE NEXT INTERSECTING STREET.

3. IN URBAN AREAS, ADVANCE STREET NAME SIGNS SHOULD BE USED IN ADVANCE OF ALL SIGNALIZED INTERSECTIONS ON MAJOR ARTERIAL STREETS, EXCEPT WHERE SIGNALIZED INTERSECTIONS ARE SO CLOSELY SPACED THAT ADVANCE PLACEMENT IS IMPRACTICAL.

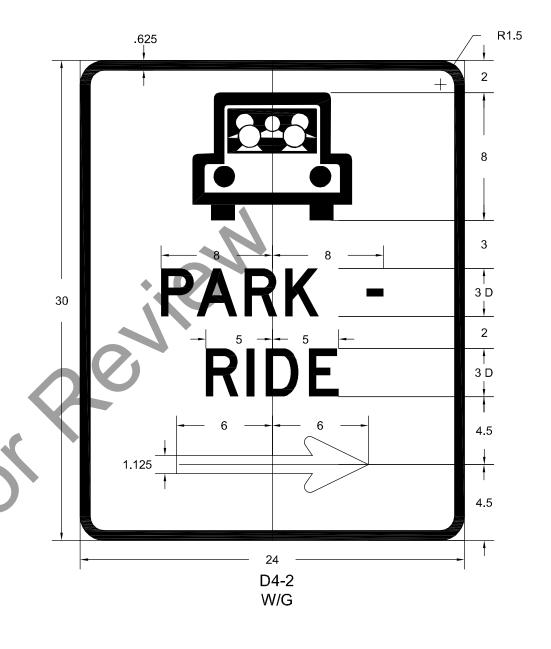
4. ADVANCE STREET NAME SIGNS SHALL BE INSTALLED IN ADVANCE OF ALL INTERSECTIONS WITH A MEDIAN OF 6 FEET IN WIDTH OR MORE.

5. 5. RECOMMENDED SPACING PRIOR TO SIGNALIZED OR UNSIGNALIZED INTERSECTION MAY BE 25 X SPEED LIMIT (FT).

REVISIONS	CITY OF	ALBUQUEF	RQUE
	SIGN	FACE DETAILS	
	ADVA	NCED STREET	
	NAME	SIGN DETAILS	6
	DWG 2900-6	IUI. POS	Y 2012

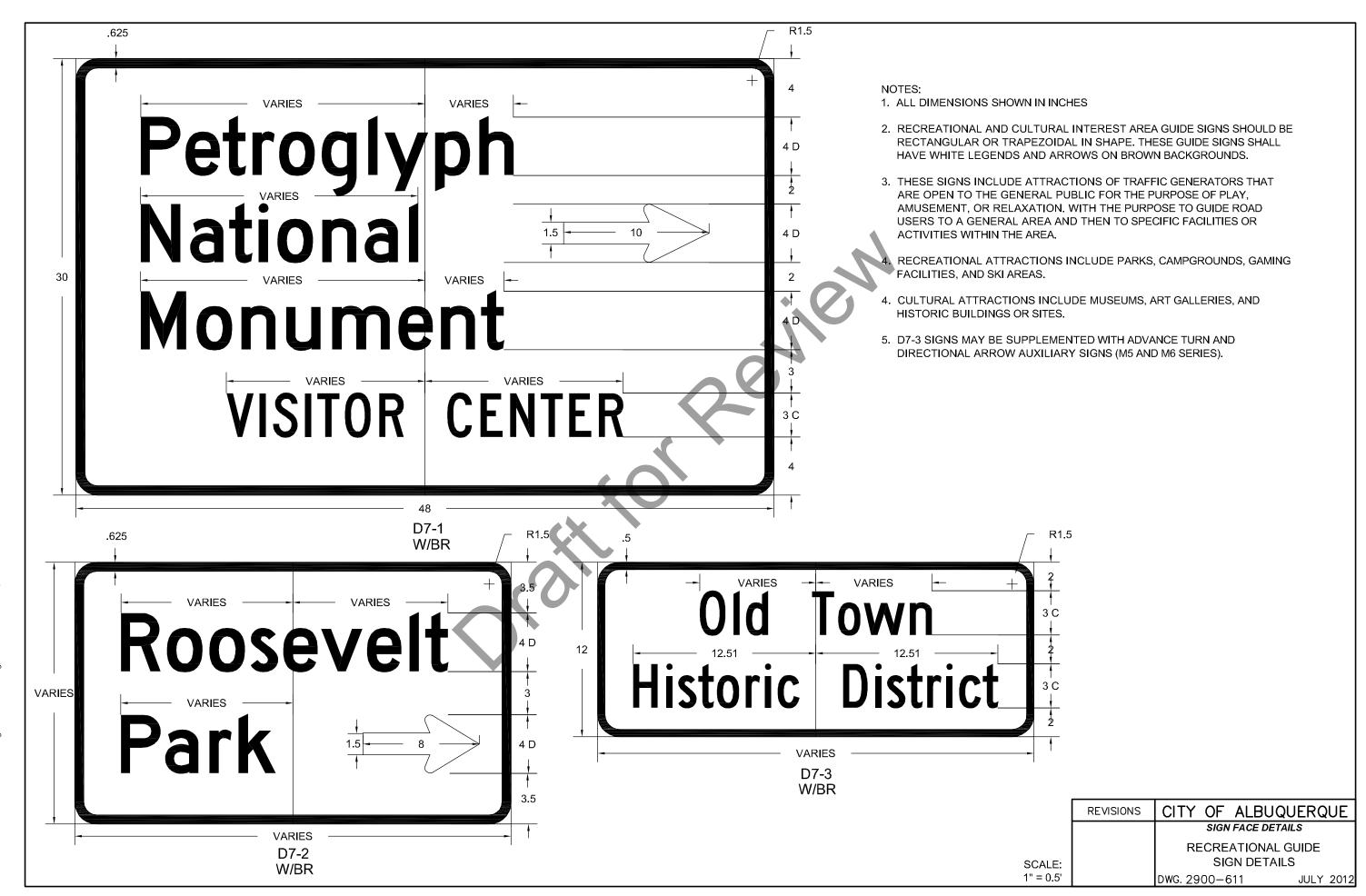
SCALE: 1" = 0.5'





- 1. ALL DIMENSIONS SHOWN IN INCHES
- 2. THE PARKING AREA GUIDE SIGN (D4-1) MAY BE USED TO SHOW DIRECTION TO A NEARBY PUBLIC PARKING AREA OR FACILITY.
- 3. D4-1 GUIDE SIGNS SHALL BE HORIZONTAL RECTANGLE WITH A STANDARD SIZE OF 30 X 24 INCHES OR 18 X 15 INCHES FOR MINOR, LOW-SPEED STREETS. THE LEGEND AND BORDER SHALL BE GREEN ON A WHITE BACKGROUND.
- 4. THE PARK RIDE SIGN (D4-2) MAY BE USED TO DIRECT ROAD USERS TO PARK RIDE FACILITIES. THIS SIGN MAY CONTAIN THE LOCAL TRANSIT PICTOGRAPH OR SYMBOL ON THE SIGN, IN NO CASE CAN THIS SYMBOL EXCEED 18 INCHES VERTICALLY.
- 5. THE D4-2 SIGN SHALL HAVE A WHITE LEGEND AND BORDER ON A RECTANGULAR GREEN BACKGROUND.

	REVISIONS	CITY OF	ALBUQU	JERQ	UE
SCALE:		SIGN	FACE DETAI	LS	
1" = 0.5'		PARKIN	G SIGN DE	TAILS	
		DWG. 2900-6	310	JULY	2012





- 1. ALL DIMENSIONS SHOWN IN INCHES
- 2. CITY OF ALBUQUERQUE DESTINATION SIGNS SHALL HAVE A WHITE LEGEND AND BORDER ON A GREEN BACKGROUND. THE RAIL RUNNER SYMBOL (AS SHOWN) SHALL HAVE A YELLOW BACKGROUND WITH A RED ROAD RUNNER.
- 3. SIZES OF THESE SIGNS MAY VARY DEPENDING ON ARROW ORIENTATION AND DESTINATION MESSAGE.

	REVISIONS	CITY OF	ALBUQU	ERQ	UE
		SIGN	FACE DETAIL	.s	
		CITY OF	<b>ALBUQUEF</b>	RQUE	
:		DESTINAT	ION SIGN D	ETAIL	.S
5'		DWG 2900-6	12	JULY	2012

- 1. ALL DIMENSIONS SHOWN IN INCHES
- GENERAL INFORMATION SIGNS (I SERIES) ARE SIGNS OF INTEREST TO THE TRAVELER. THEY INCLUDE ITEMS OF GEOGRAPHICAL FEATURES, SUCH AS RIVERS OR SUMMITS, AND OTHER JURISDICTIONAL BOUNDARIES, SAFETY OR TRANSPORTATION RELATED MESSAGES.
- 3. GENERAL INFORMATION SIGNS SHALL HAVE WHITE LEGENDS AND BORDERS ON GREEN RECTANGULAR-SHAPED BACKGROUNDS.

REVISIONS CITY OF ALBUQUERQUE

SIGN FACE DETAILS

GENERAL INFORMATION
SIGN DETAILS

DWG. 2900-613

JULY 2012

INFORMATIONAL SIGN DETAILS

JULY 2012

DWG. 2900-614

SCALE: 1" = 0.5'

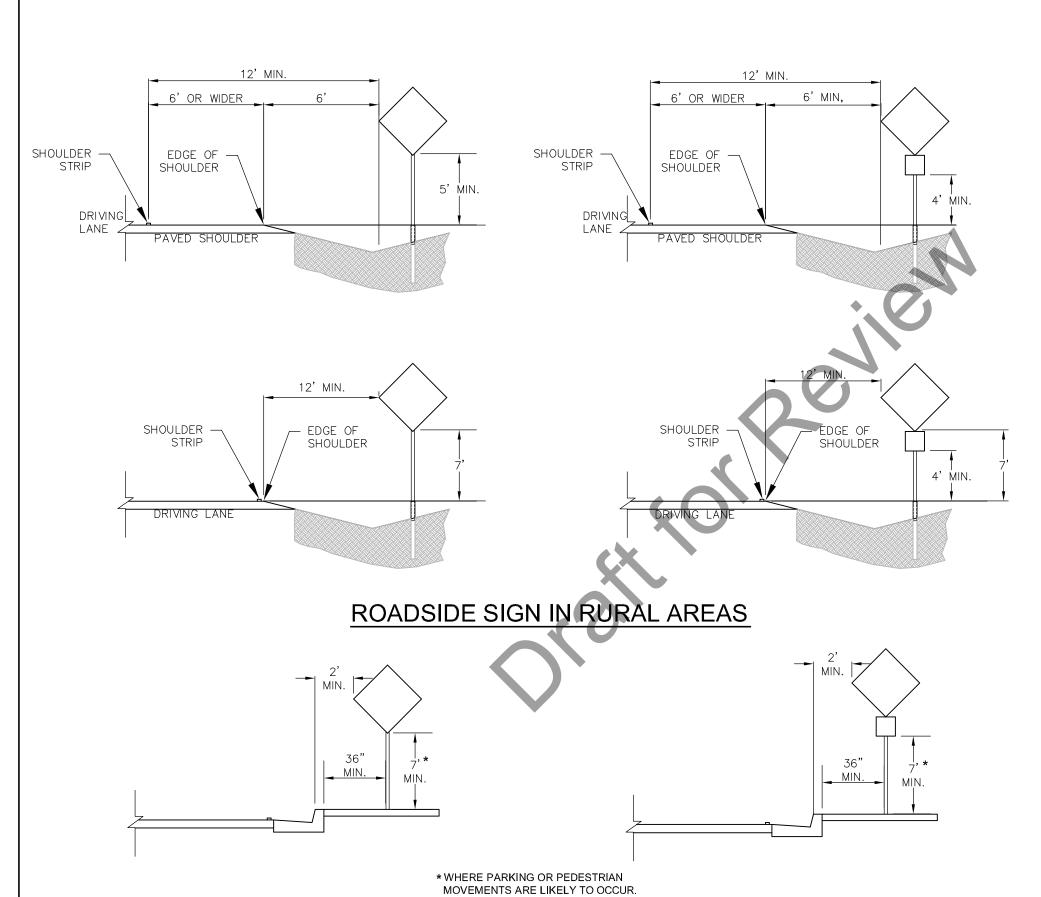


# SIGN SUPPORT & INSTALLATION

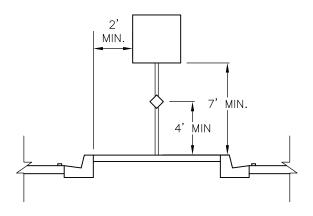
REVISIONS CITY OF ALBUQUERQUE

DWG. 2900-700 JULY 2012

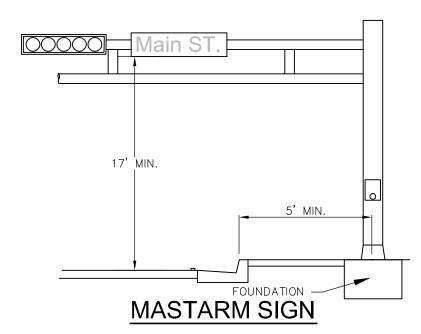




ROADSIDE SIGN IN URBAN AREAS



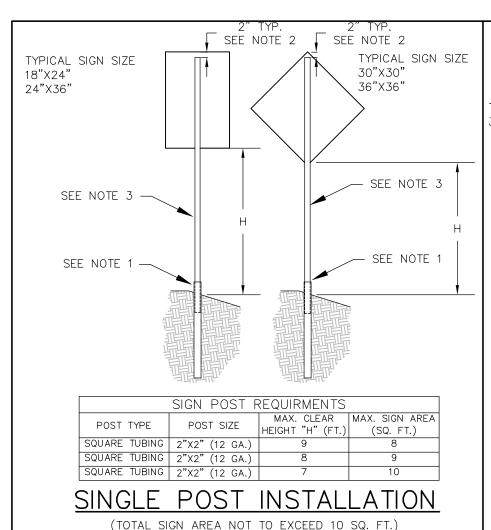
# SIGN ON MEDIAN NOSE

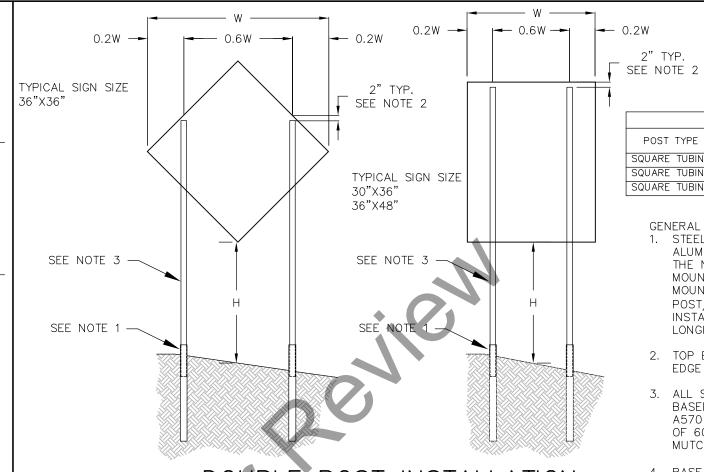


# GENERAL NOTES:

- 1. HORIZONTAL CLEARANCES APPLY TO INSTALLATIONS LEFT AND RIGHT SIDE OF ROADWAY.
- SUPPLEMENTAL SIGNS SHALL NOT BE ATTACHED DIRECTLY TO PRIMARY PANEL INSTALLATIONS.
- 3. SPACING BETWEEN SUPPLEMENTAL PANELS AND PRIMARY PANELS SHALL NOT EXCEED 6".
- 4. SIGN PANELS PLACED PARALLEL TO TRAFFIC SHALL BE MOUNTED ON A MULTI-DIRECTIONAL BREAKAWAY SYSTEM. SEE MULTI-DIRECTIONAL SLIP BASE POST DETAIL.

	REVISIONS	CITY OF ALBUC	QUERQUE
SCALE:		SIGN SUPPO INSTALLATION [	J
1" = 5'		DWG. 2900-701	JULY 2012





\*NOTE

2" TYP.

ALL CITY OF ALBUQUERQUE SIGN POSTS SHALL BE 2"X2" SQUARE TUBING. WHILE REPLACING SIGN POSTS, U-CHANNEL POSTS SHALL BE REPLACED WITH SQUARE TUBING. U-CHANNEL POSTS SHALL ONLY BE USED FOR OBJECT MARKERS AND DELINEATORS.

SIGN POST REQUIRMENTS				
POST TYPE	POST SIZE	MAX. CLEAR HEIGHT "H" (FT.)	MAX. SIGN AREA (SQ. FT.)	
SQUARE TUBING	2"X2" (12 GA.)	11	13	
SQUARE TUBING	2"X2" (12 GA.)	9	15	
SQUARE TUBING	2"X2" (12 GA.)	8	16	

### GENERAL NOTES:

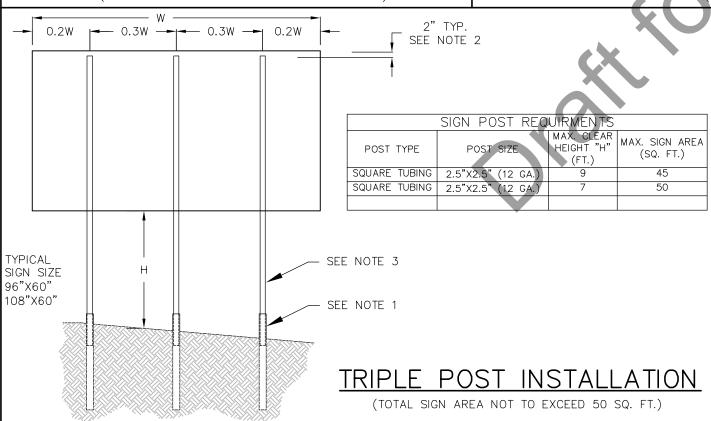
- 1. STEEL POSTS, BASE POSTS, AND SLIP BASES FOR ALUMINUM PANEL SIGNS SHALL BE SELECTED FROM THE NMDOTS APPROVED PRODUCT LIST. ALL SIGNS MOUNTED WITHIN THE CLEAR ZONE SHALL BE MOUNTED ON A NCHRP REPORT 350 APPROVED SIGN POST/BASE POST BREAKAWAY SYSTEM UNLESS INSTÁLLATION IS LOCATED BEHIND A NON-GATING LONGITUDINAL BARRIER.
- 2. TOP EDGE OF POSTS SHALL NOT EXTEND PAST TOP EDGE OF SIGN.
- 3. ALL SQUARE TUBING SIGN POST REQUIREMENTS ARE BASED ON A 10 OR 12 GAUGE THICKNESS. ASTM A570 GRADE 50 STEEL. A MINIMUM YIELD STRENGTH OF 60,000 PSI AND 70 MPH WIND LOAD. SEE THE MUTCD FOR FURTHER GUIDANCE.
- 4. BASE POST SHALL NOT EXTEND MORE THAN 4" ABOVE GROUND LEVEL AND SHALL BE OF THE SAME WEIGHT/GAUGE AND TYPE AS THE SIGN POST.

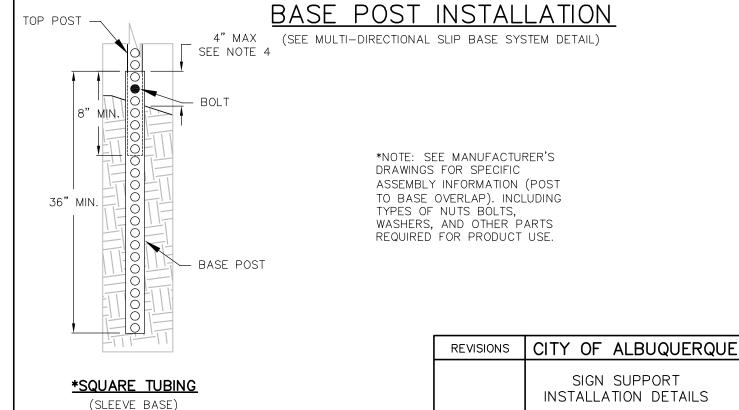
DWG. 2900-702

JULY 2012

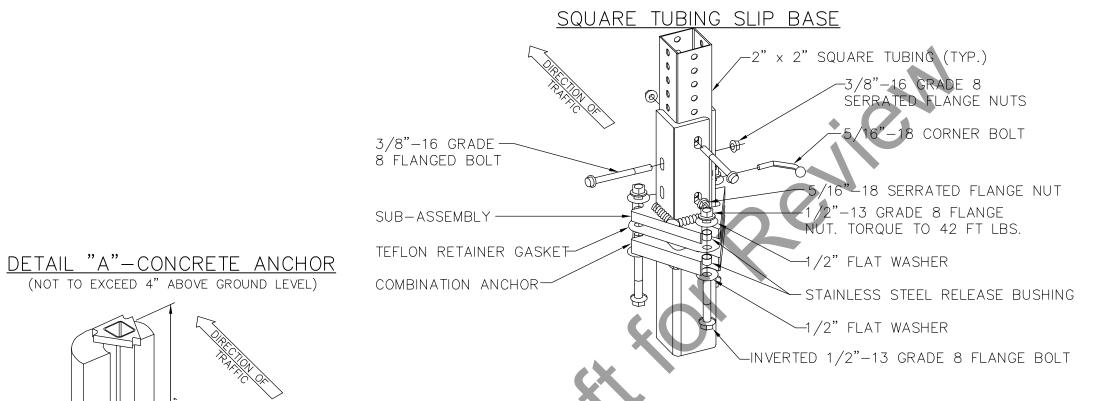
# DOUBLE POST INSTALLATION

TOTAL SIGN AREA NOT TO EXCEED 16 SQ. FT.)

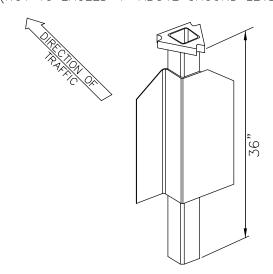




# MULTI-DIRECTIONAL SLIP BASE DETAILS



DETAIL "B"-SOIL ANCHOR (NOT TO EXCEED 4" ABOVE GROUND LEVEL)

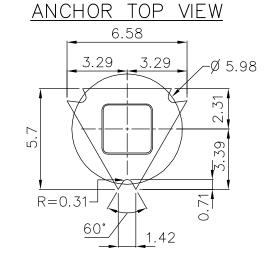


NOTES:

(NOT TO EXCEED 4" ABOVE GROUND LEVEL)

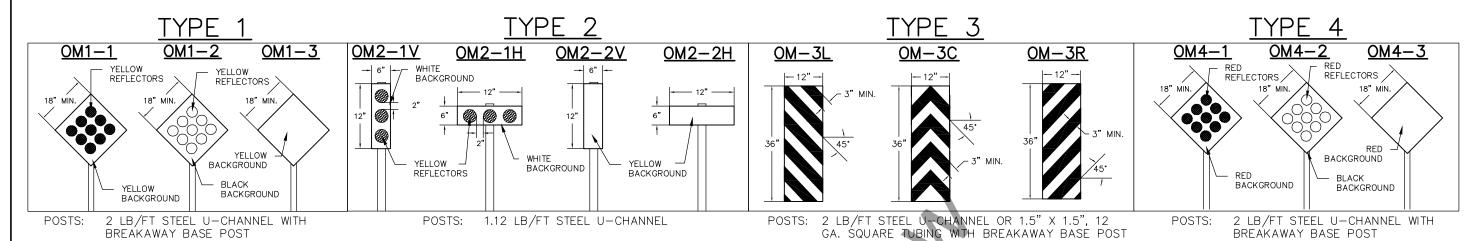
1. CONCRETE SHOULD BE A MINIMUM OF 12" DIA. AND 30" DEEP.

2. CLASS "A" CONCRETE SHALL BE USED. THE COST SHALL BE INCIDENTIAL TO THE PRICE OF STEEL POSTS & BASE POSTS FOR ALUMINUM PANEL SIGNS.

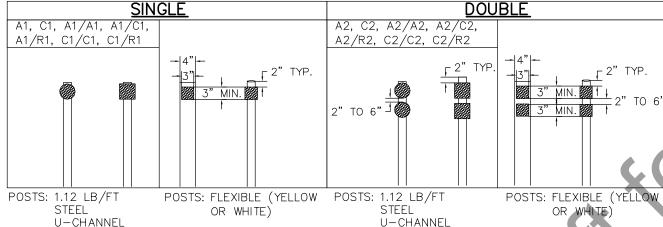


CITY OF ALBUQUERQUE REVISIONS MULTI-DIRECTIONAL SLIP **BASE POST DETAILS** DWG. 2900-703 JULY 2012

# **OBJECT MARKERS**



# **DELINEATORS**



# REFLECTOR UNIT TYPES

Let	A1	SINGLE YELLOW REFLECTOR
SIDE	A2	DOUBLE YELLOW REFLECTOR
() <u>\</u>	А3	TRIPLE YELLOW REFLECTOR
NGLE SI MOUNT		(TYPE 2 OBJECT MARKER)
SINGLE	C1	SINGLE WHITE REFLECTOR
$\overline{\circ}$	C2	DOUBLE WHITE REFLECTOR
	A1/A1	1 EACH
Z	A1/C1	1 EACH
9 8	A1/R1*	1 EACH
ΣÃ	C1/C1	1 EACH
H C	C1/R1*	1 EACH
SIDE MOUNT TO BACK)	A2/A2	2 EACH
DOUBLE (BACK	A2/C2	2 EACH
BL ĕĕ	A2/R2*	2 EACH
3 ==	C2/C2	2 EACH
	C2/R2*	2 EACH
	A3/A3	3 EACH
		(TYPE 2 OBJECT MARKER)

\* BIDIRECTIONAL MOUNTING BRACKET REQUIRED TO ORIENT RED REFLECTOR

NOTE: SEE SIGN SUPPORT INSTALLATION DETAIL FOR U-CHANNEL POST DETAIL

# **DELINEATOR GENERAL NOTES:**

- DELINEATORS ARE BENEFICIAL AT LOCATIONS WHERE THE ALIGNMENT MIGHT BE CONFUSING OR UNEXPECTED, SUCH AS AT LANE—REDUCTION TRANSITIONS AND CURVES. DELINEATORS ARE GUIDANCE AT NIGHT AND DURING ADVERSE WEATHER.
- 2. DELINEATORS SHALL CONSIST OF RETROREFLECTIVE DEVICES THAT ARE CAPABLE OF CLEARLY RETROREFLECTING LIGHT UNDER NORMAL ATMOSPHERIC CONDITIONS FROM A DISTANCE OF 1,000 FEET.
- THE COLOR OF DELINEATORS SHALL COMPLY WITH THE COLOR OF EDGE LINES.
- DELINEATORS ON THE LEFT-HAND SIDE OF A TWO WAY ROADWAY SHALL BE WHITE.
- ALL DELINEATORS SHALL BE PLACED 2 TO 8 FEET OUTSIDE OF ROADWAY EDGE OR FACE OF CURB. FOR DELINEATOR SPACING ALONG HORIZONTAL CURVES PLEASE REFER TO THE MUTCD, TABLE 3F-1.
- 6. RED DELINEATORS MAY BE USED ON THE REVERSE SIDE OF ANY DELINEATOR WHERE IT WOULD BE VIEWED BY A ROAD USER TRAVELING IN THE WRONG DIRECTION.

ALUMINIZED

SHEET ALLOY (0.08" THICK 6061-T6 OR

R5052-A38)

INTENSITY

\*TYPE III RETROREFLECTIVE

SHEETING OR GREATER

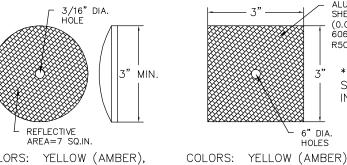
#### OBJECT MARKER GENERAL NOTES:

- 1. TYPE 3 OBJECT MARKERS SHALL HAVE SLOPING STRIPES POINT TOWARD THE SIDE OF THE OBSTRUCTION ON WHICH TRAFFIC IS TO PASS.
- 2. OBSTRUCTIONS 8' OR LESS FROM THE SHOULDER/CURB, THE MINIMUM MOUNTING HEIGHT, FROM BOTTOM OF MARKER TO THE ELEVATION OF THE NEAR EDGE OF TRAVELED WAY, SHOULD BE 4'. VERTICAL MOUNTING HEIGHT MAY VARY ACCORDING TO NEED.
- 3. OBSTRUCTIONS WITHIN THE ROADWAY SHALL BE MARKED WITH A TYPE 1 OR TYPE 3 MARKER (i.e. MEDIAN CURB).
- 4. OBSTRUCTIONS ADJACENT TO THE ROADWAY SHALL BE MARKED WITH A TYPE 2 OR TYPE 3 MARKER. IF USED, THE EDGE OF THE MARKER THAT IS CLOSEST TO THE ROAD USER SHALL BE INSTALLED IN LINE WITH THE CLOSEST EDGE OF THE OBSTRUCTION.
- 5. TYPE 4 OBJECT MARKERS SHALL BE USED TO MARK THE END OF A ROADWAY.

# NOTES:

- 1. ALL HARDWARE SHALL MEET FHWA CRASHWORTHINESS REQUIREMENTS AS PER NCHRP GUIDELINES AND SHALL BE ON THE NMDOTS APPROVED PRODUCT LIST.
- 2. SEE NMDOTS APPROVED PRODUCTS LIST FOR APPROVED U-CHANNEL & SQUARE TUBING, FLEXIBLE & TUBULAR TRAFFIC MARKER REFLECTOR MANUFACTURERS.
- 3. DELINEATOR POST & REFLECTOR UNIT COLOR SHALL CONFORM TO THE COLOR OF EDGE LINES.
- 4. BREAKAWAY BASE POST SYSTEMS FOR TYPE 1, TYPE 3, & TYPE 4 OBJECT MARKERS ARE REQUIRED. SEE NMDOTS APPROVED PRODUCT LIST FOR APPROVED SYSTEMS & MANUFACTURERS RECOMMENDATIONS.
- 5. FOR SQUARE TUBING WITH BREAKAWAY BASE POSTS SEE STANDARDS ON MULTI-DIRECTIONSL SLIP BASE DETAILS.

REVISIONS	CITY OF ALBU	QUERQUE	
	OBJECT MARKER AND DELINEATOR DETAILS		
	DWG.2900-704 JULY 2012		



COLORS: YELLOW (AMBER), WHITE (CRYSTAL),

PRISMATIC REFLECTOR

PANEL REFLECTOR

└ 6" DIA.

WHITE (CRYSTAL)



# SPECIAL SIGN FACE DETAILS

I:\TRN\11-100-216-00\CADD\SHEETS\Cover Sheets.dwg, 8/9/2012 8:32:27 AM

REVISIONS	CITY	OF	ALBUQUERQUE
	DWG. 29	3-00	300 JULY 201:

- 1. ALL DIMENSIONS SHOWN IN INCHES.
- 2. ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY (AMAFCA) SIGNING SHALL HAVE A BROWN BACKGROUND WITH A WHITE LEGEND AND BORDER.
- 3. ARROYO AND CHANNEL NAMES WILL VARY, THEREFORE SIGN WIDTHS WILL VARY.

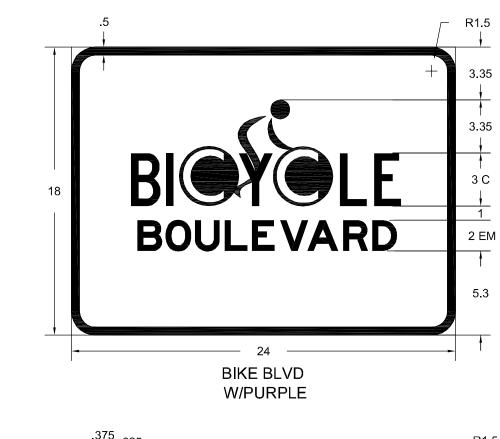
REVISIONS CITY OF ALBUQUERQUE

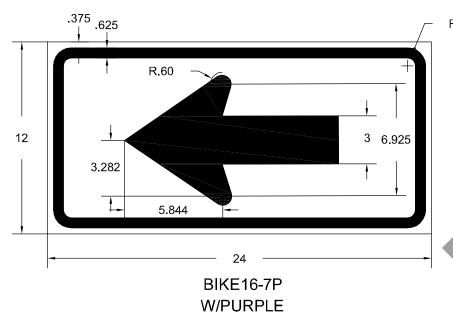
SIGN FACE DETAILS

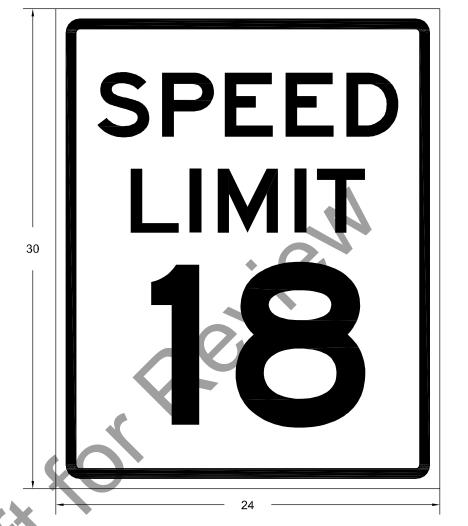
AMAFCA SIGN
DETAILS

DWG. 2900-801

DULY 2012







- 1. ALL DIMENSIONS SHOWN IN INCHES.
- 2. BICYCLE BOULEVARD SIGNS, DIRECTIONAL ARROWS, AND SUPPLEMENTAL PLAQUES SHALL HAVE A PURPLE BACKGROUND WITH A WHITE LEGEND AND BORDER.
- 3. EXAMPLES OF BIKE BOULEVARD SIGNS CORRESPONDING AND SUPPLEMENTAL PLAQUES ARE SHOWN.
- 4. THE SUPPLEMENTAL PLAQUE READING 'BICYCLE BOULEVARD' SHALL BE USED IN CONJUNCTION WITH POSTED SPEED LIMIT SIGNS ALONG THE BIKE BOULEVARD CORRIDOR.



W/PURPLE

REVISIONS CITY OF ALBUQUERQUE

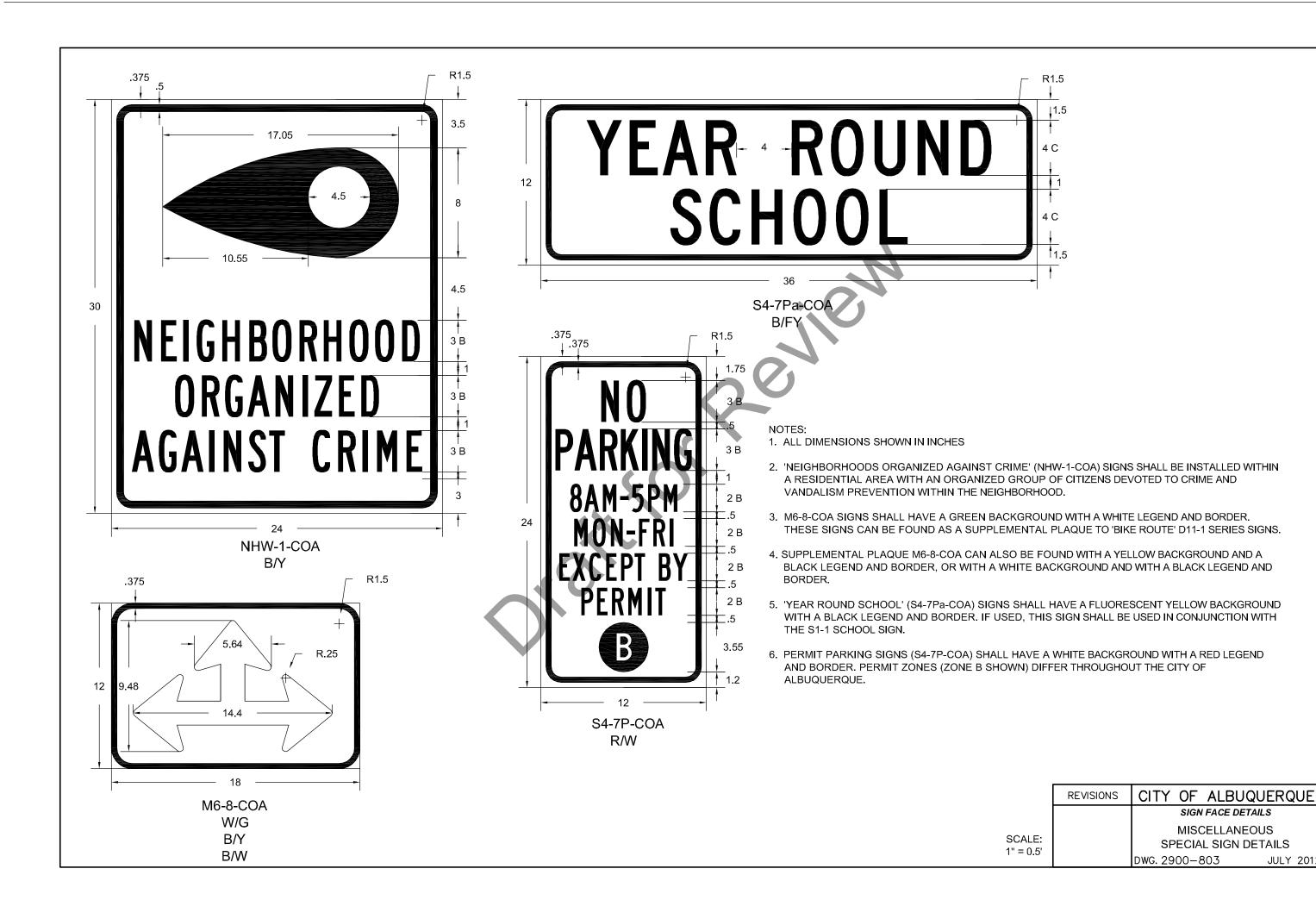
SIGN FACE DETAILS

BIKE BOULEVARD SIGN

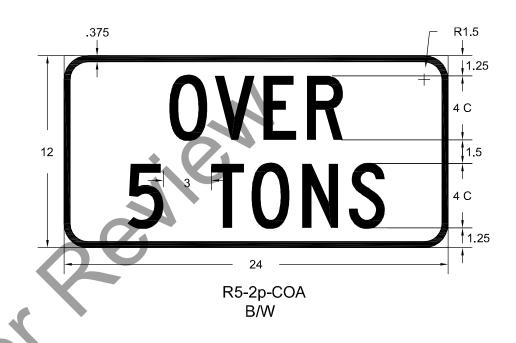
SCALE: 1" = 0.5'

DETAILS

DWG. 2900-802 JULY 2012



JULY 2012



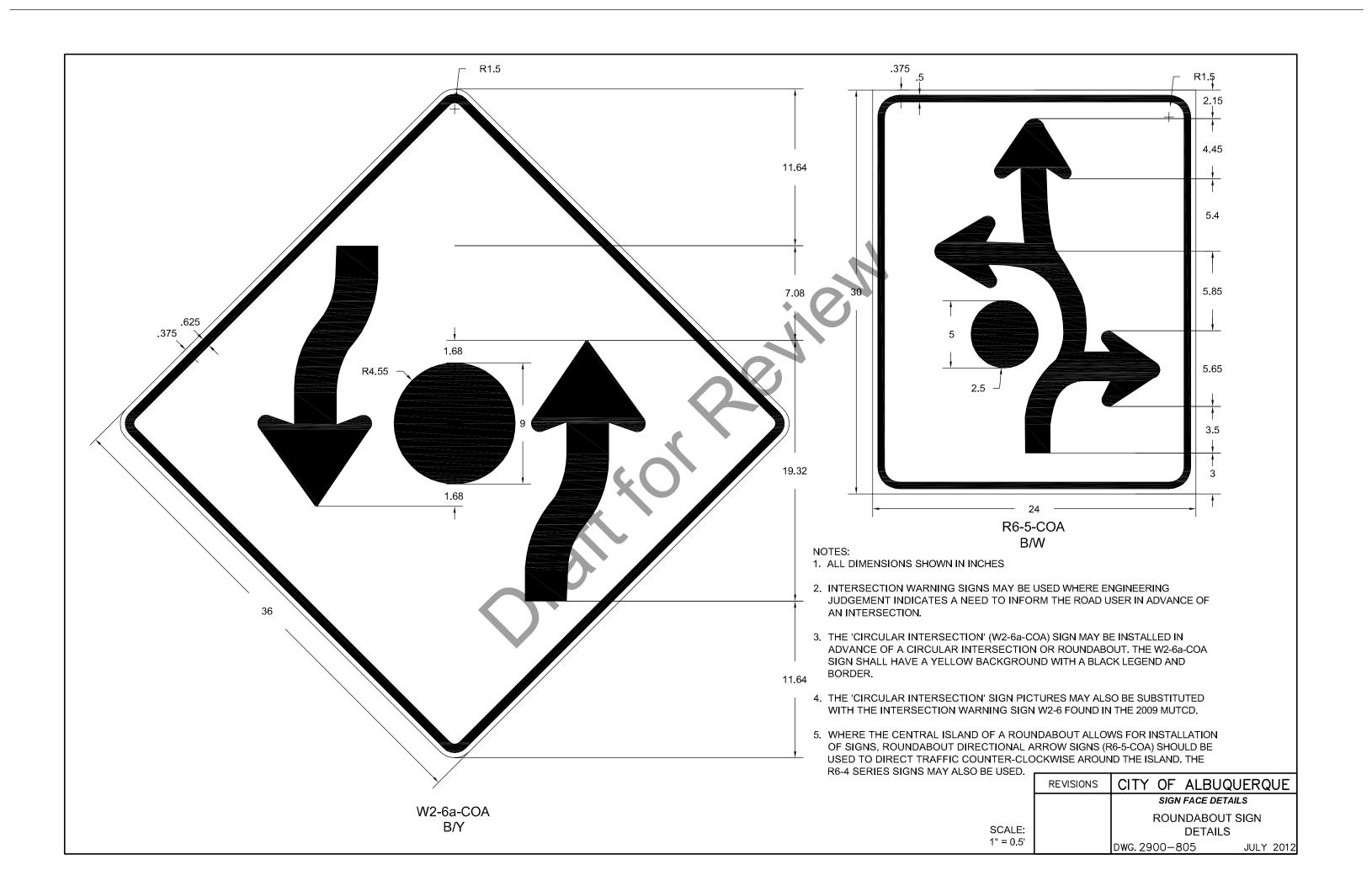
- 1. ALL DIMENSIONS SHOWN IN INCHES
- 2. MANDATORY LANE CONTROL SIGNS SHALL HAVE A WHITE BACKGROUND WITH A BLACK LEGEND AND BORDER (R3 SERIES).
- 3. THE 'EXCEPT BUSES' (R3-5hP-COA) SUPPLEMENTAL PLAQUE SHALL BE USED IN CONJUNCTION WITH THE 'RIGHT TURN LANE MUST TURN RIGHT' (R3-7R) SIGN WHERE BUSES ARE ALLOWED TO USE THE TURN LANE AS A THROUGH LANE.
- 4. THE 'OVER 5 TONS' (R5-2p-COA) SUPPLEMENTAL PLAQUE MAY BE USED IN CONJUNCTION WITH THE 'NO TRUCKS' (R5-2) REGULATORY SIGN.

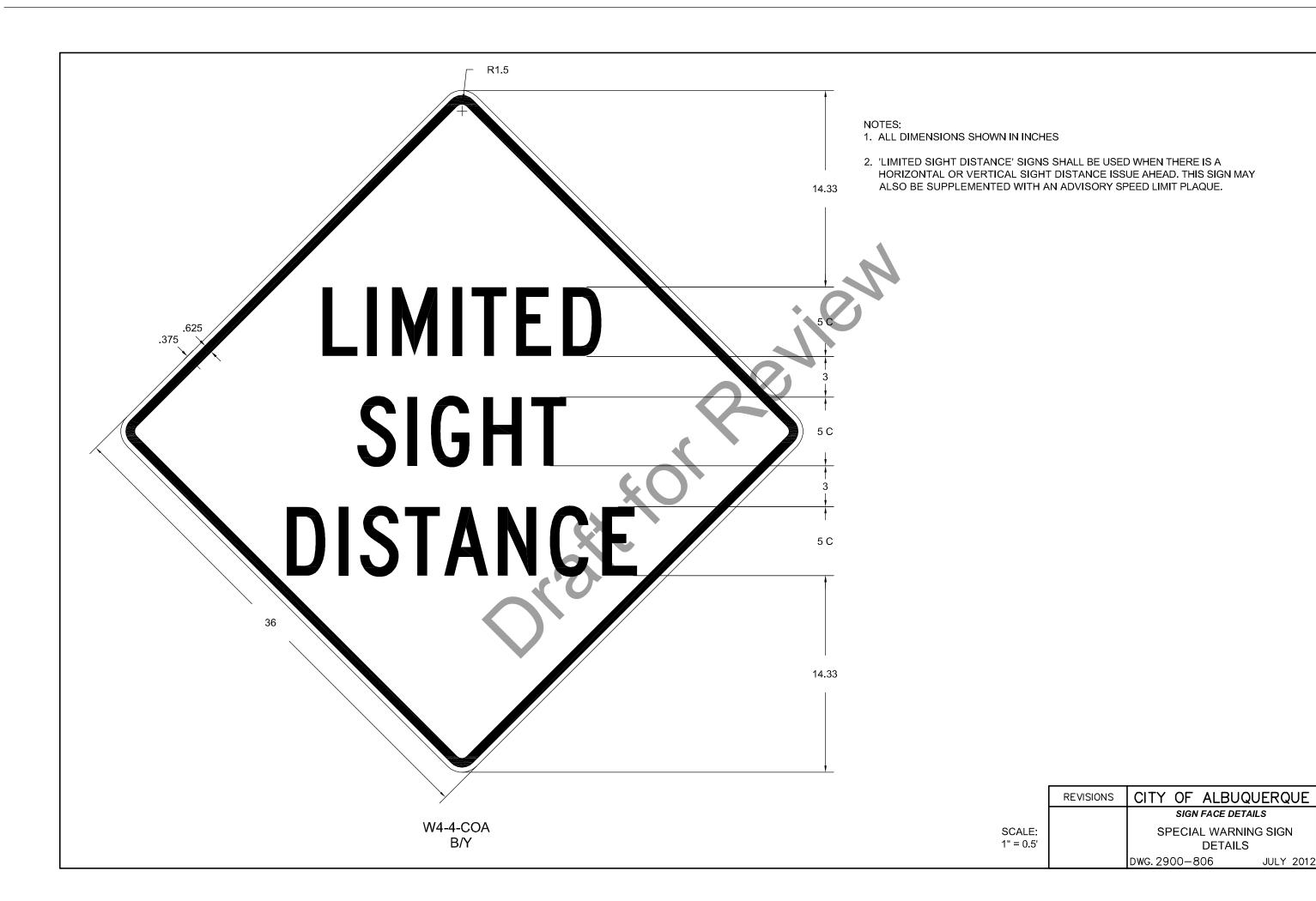
REVISIONS CITY OF ALBUQUERQUE

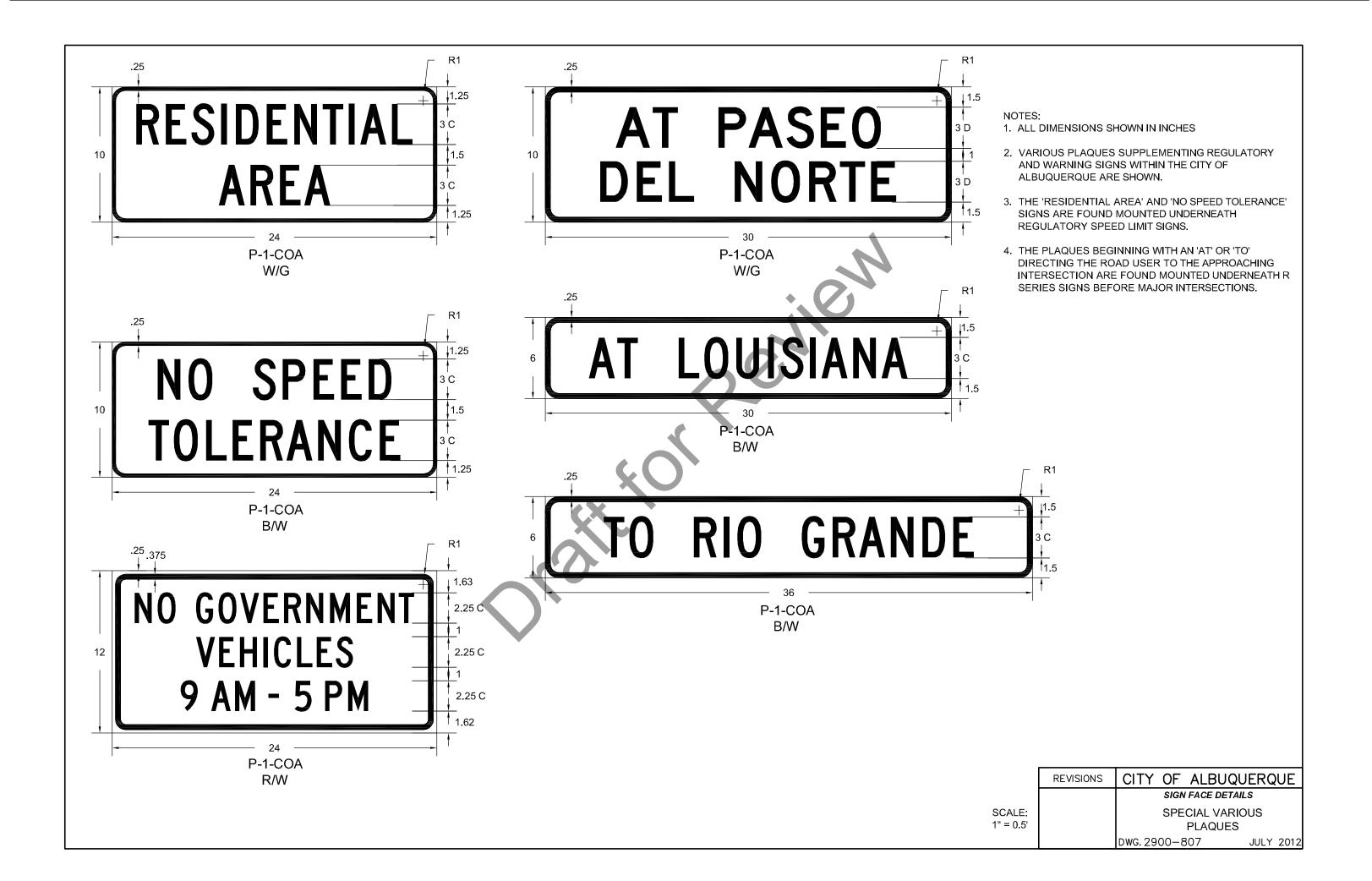
SIGN FACE DETAILS

MISC. REGULATORY SIGN
DETAILS

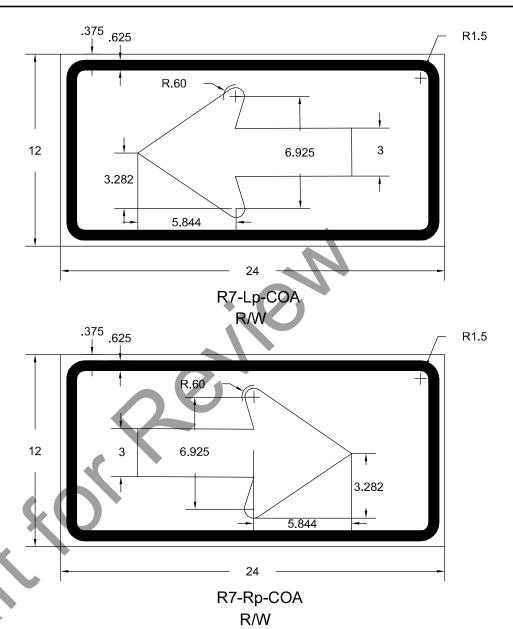
DWG. 2900-804 JULY 2012











- 1. ALL DIMENSIONS SHOWN IN INCHES
- 2. R3-7Ra-COA SHALL BE USED TO NOTIFY THE ROAD USER OF AN UPCOMING FRONTAGE ROAD.
- 3. R7-Lp-COA & R7-rP-COA ARE SUPPLEMENTAL PLAQUES THAT SHELL BE USED UN CONJUNCTION WITH NO PARKING SIGNS.

	REVISIONS	CITY OF ALBUQUERQUE	
		SIGN FACE DETAILS	
≣:		VARIOUS SPECIAL	
5'		SIGNS & PLAQUES	

SCALE: 1" = 0.5

JULY 2012 DWG. 2900-808