



Iowa Department of Transportation

DEVELOPMENTAL SPECIFICATIONS

FOR NIGHT WORK LIGHTING

Effective Date
January 18, 2006

THE STANDARD SPECIFICATIONS, SERIES 2001, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE DEVELOPMENTAL SPECIFICATIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

010075.01 DESCRIPTION

This work consists of furnishing, installing, operating, maintaining, moving, and removing night time lighting to illuminate construction work areas for night work when construction activities (vehicles, equipment, or workers) are within 15 feet (4.6 m) of an open lane of traffic. Night work is defined as work performed between 30 minutes before sunset and 30 minutes after sunrise.

010075.02 LIGHTING PLAN

The Contractor shall submit a lighting plan to the Engineer for review no later than the Preconstruction Conference. The lighting plan shall show the areas to be illuminated, type and layout of the lighting systems, and calculations of the averaged maintained lighting intensity.

Night work lighting shall be provided in areas where construction equipment or workers are active, and shall extend a minimum of 50 feet (15.2 m) ahead and behind such equipment or workers. The lighting shall provide a minimum intensity of 5 foot candles (54 lux) over the entire work area described above. The light sources shall be positioned to not interfere with or impede traffic in any direction and not cause glare for motorists or spillover onto adjacent properties.

Illumination may be accomplished by using a combination of portable floodlights, equipment lights, roadway lights (temporary or existing), or other lighting methods that will provide the required minimum lighting intensity.

The Engineer may require modifications to the lighting setup in order to fit field conditions.

01075.03 LIGHT METER

The Contractor shall furnish to the Engineer one light meter capable of measuring light intensity in foot candles (lux). Instructions for operating the light meter shall be provided to the Engineer. The light meter will remain the property of the Contractor upon completion of night work.

01075.04 TRAFFIC CONTROL

All vehicles hauling material to or from the work area shall display an 18 inch by 48 inch (450 mm by 1200 mm) sign with the legend "DO NOT FOLLOW - INTO WORK AREA" as shown in the appendix of this Developmental Specification. The sign shall be orange with black lettering using Type VII (Iowa) sheeting. The sign shall be kept clean in order to maintain its visibility.

All Contractor's vehicles and equipment (except for hand operated equipment) operating within 15 feet (4.6 m) of an open lane of traffic and all vehicles and equipment entering or exiting the work area shall display amber high intensity rotating, flashing, or oscillating lights.

All traffic control devices shall be placed and removed when possible, during daytime hours, unless otherwise specified in the contract documents.

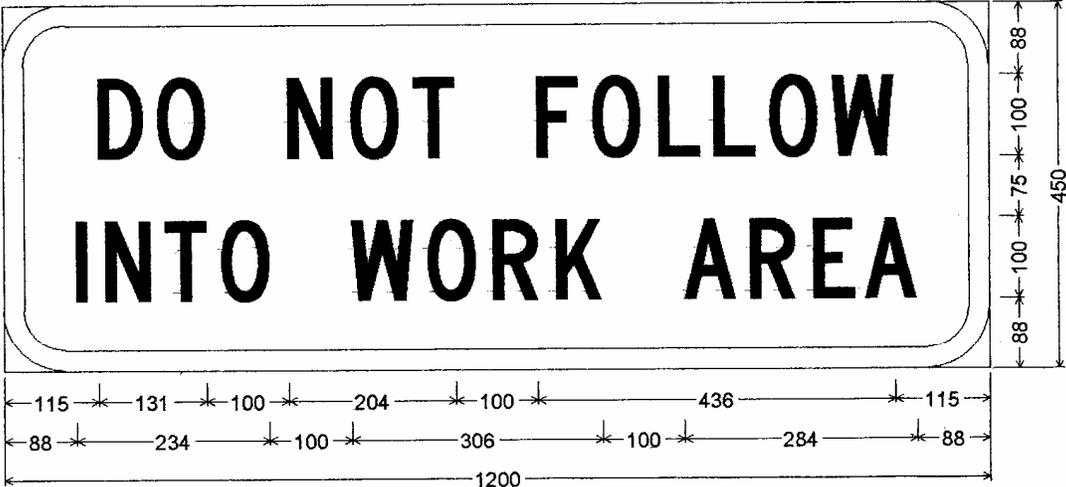
The Contractor shall continually review all traffic control devices, including monitoring of lights, to ensure proper installation and working order.

01075.05 METHOD OF MEASUREMENT AND BASIS OF PAYMENT.

All costs associated with furnishing, installing, operating, maintaining, moving, and removing night work lighting and other traffic control requirements required by this Developmental Specification, shall be considered incidental to the lump sum bid price for Traffic Control.

APPENDIX

METRIC

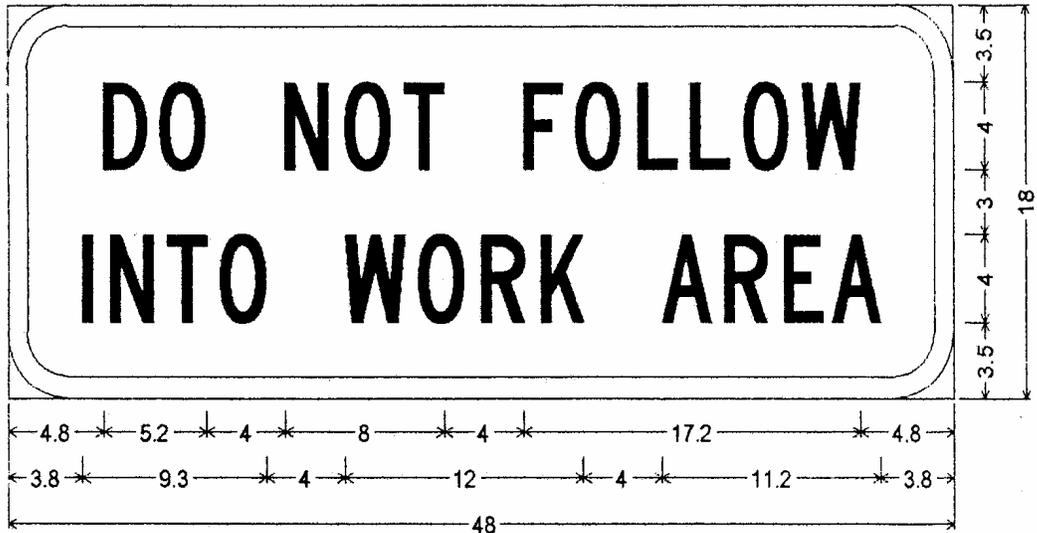


75mm Radius, 25mm Border, Black on Orange;
 "DO NOT FOLLOW" C; "INTO WORK AREA" C;

Table of widths and spaces.

115	D	56	16	O	58	101	N	56	21	O	58	18	T	51	100	F	51	16	O	58	22	51	18	L	51	16	O	58	18	W	76	115				
88	I	14	22	N	56	16	T	51	17	O	58	101	W	76	17	O	58	22	R	56	21	K	56	99	A	64	17	R	56	21	E	51	11	A	64	88

ENGLISH



3.0" Radius, 1.0" Border, Black on Orange;
 "DO NOT FOLLOW" C; "INTO WORK AREA" C;

Table of widths and spaces.

4.8	D	2.2	0.7	O	2.3	4.0	N	2.2	0.8	O	2.3	0.7	T	2.0	4.0	F	2.0	0.7	O	2.3	0.8	2.0	0.7	L	2.0	0.7	O	2.3	0.7	W	3.0	4.8				
3.8	I	0.6	0.8	N	2.2	0.6	T	2.0	0.7	O	2.3	4.0	W	3.0	0.7	O	2.3	0.9	R	2.2	0.8	2.2	4.0	2.2	A	2.5	0.6	R	2.2	0.9	E	2.0	0.4	A	2.5	3.8