

JACK MARKELL GOVERNOR

VIA WEBSITE POSTING

SHAILEN BHATT SECRETARY

(302) 760-2030 FAX (302) 739-2254

July 10, 2012

Contract No. DOT1220-REFLECTIVE\_SHT Supply of Reflective Sign Sheeting Statewide

Ladies and Gentlemen:

Enclosed is Addendum No. 1 for the referenced contract consisting of the following:

1. Two (2) pages, Special Provision, 749600 - Reflective Sheeting, Type 1, 24" x 50 Yds, pages 34 and 35, revised, to be substituted for the same page in the Proposal.

# **Questions and Answers:**

1. Line Nos. 0540 -0570 Decal Material: What is the current product on the Contract?

# The product on the current contract is 3M series680, review requirements of this contract for bidding purposes.

2. Line No. 0440 Vehicle Conspicuity Tape Specification: Applicable standard specification (NHTS FMVSS 108) has Observation Angles of 0.2 and 0.5, and Entrance Angles of -4, +30 and +45. Please eliminate +65 Entrance Angle (non-standard), so that bidders understand whether their products meet the specification or not. Is DE DOT sure that this specification is not a sole source specification? (We are currently reviewing the specification.)

## Addressed in Addendum No. 1. The +65 Entrance Angle was removed.

3. We have reviewed the specification for Vehicle Conspicuity Markings (9.0, Page 34). It is a sole source specification. We request DE DOT to revise the specification as listed below for competition.

Remarks - Reflective Limit Y (%) for White: 40 --> 15 NHTS FMVSS 108 (49 CFR 571.108) requires 15. Day time brightness (luminance) of Vehicle Conspicuity tape is practically insignificant. Vehicle Conspicuity tape is for night time visibility.

- Minimum Coefficient of Retroreflection

Addressed in Addendum No. 1. The minimum was lowered from 40 down to 15.

Please note the revisions listed above and submit your bid based upon this information.

Sincerely,

Stor J. Gonfried

Scott S. Gottfried Competitively Bid Contracts Coordinator :ssg Enclosures

# STATE OF DELAWARE Department of Transportation Contract Administration

The sheeting manufacturer shall, without additional cost to the Agency, provide the sign shops with competent technical service and product information, including service on screen printing problems with the inks furnished or recommended by the manufacturer for their sheeting. The manufacturer supplying the retroreflective sheeting shall provide technical assistance for their recommended sheeting application equipment. The manufacturer shall certify that trained personnel will be available on 72 hours notice to render such service to facilitate the manufacture of finished signs. "Service" is understood to mean the capability of calibration and troubleshooting, as well as the training and retraining of personnel as required. In addition, a manufacturer's representative shall be available on site within 24-hour notice to assess and advise on any manufacturing difficulty that arises.

### 9.0 Reflective Vehicle Conspicuity Markings:

Vehicle Conspicuity Markings shall be prismatic, wide angle, color retroreflective sheeting designed to enhance both day and night visibility and detection of vehicles. The highly reflective sheeting shall consist of prismatic lenses formed in a durable transparent resin backed with an aggressive pressure sensitive adhesive and protective liner. Retroreflectance of Markings shall conform to the following table:

	Minimum Coefficient of Retroreflection (Candelas per lux per meter squared) (0 and 90° Orientation)											
	Observation Angle (°)			) Entr	Entrance Angle (°)			White		Red		
	0.2				-4			600		120		
	0.2				+30			300		70		
	0.2				+45			90		20		
	0.2				+65			<del>20</del>		5		
	0.5				-4			250		50		
	0.5				+30			120		20		
	0.5				+45			45		10		
	<del>0.5</del>				<del>+65</del>		<del>10</del>		2			
	Color Specifications Limits* (Daytime)											
С	olor	1		2	2		3	4		Reflective Limit Y(%)		
		X	Y	X	Y	X	Y	X	Y	Min	Max.	
V	/hite	0.305	0.305	0.355	0.355	0.355	0.375	0.285	0.325	• 40		
v	me	0.303	0.303	0.555	0.555	0.555	0.375	0.265	0.525	15	-	
]	Red	0.690	0.310	0.595	0.315	0.569	0.341	0.655	0.345	3	15	

#### **10.0 Applicable Documents:**

The following documents, of the issues in effect on the date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

## STATE OF DELAWARE Department of Transportation Contract Administration

- 10.1 ASTM Standards
  - 10.1.1 B 209 Specification for Aluminum and Aluminum Alloy Sheet and Plate.
  - 10.1.2 D 523 Standard Method for Test for Specular Gloss.
  - 10.1.3 D 4956 Standard Specification for Retroreflective Sheeting for Traffic Control.
  - 10.1.4 E 284 Standard Definition of terms Relating to Appearance of Materials.
  - 10.1.5 E 308 Standard Method for computing the colors of objects by using the CIE system.
  - 10.1.6 E 810 Standard Test Method for Coefficient of Retroreflection of Retroflective Sheeting.
  - 10.1.7 E 1164 Standard Practice for obtaining spectrophotometric data for object color evaluation.
- 10.2 Other Standards
  - 10.2.1 AASHTO M 268 Standard Specification for Retroreflective Sheeting for Traffic Control
  - 10.2.2 FHWA FP-96 Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects
  - 10.2.3 National Product Evaluation Program (NTPEP) testing results.

<mark>7/2/12</mark>