



CENTRALBIDDING
FROM CENTRAL AUCTION HOUSE

**5000119827 - TWO (2) YEAR CONTRACT FOR A SUPPLY OF
THERMOPLASTIC PAVEMENT MARKINGS FOR THE JEFFERSON
PARISH TRAFFIC ENGINEERING DIVISION**
Jefferson Parish Government

Project documents obtained from www.CentralBidding.com

14-Jun-2017 02:20:31 PM



Bid Number 50 - 00119827

**TWO (2) YEAR CONTRACT FOR A SUPPLY OF THERMOPLASTIC
PAVEMENT MARKINGS FOR THE JEFFERSON PARISH TRAFFIC
ENGINEERING DIVISION**

BID DUE: June 29, 2017, 2:00 PM

ATTENTION VENDORS!!!

**Please review all pages and respond accordingly, complying with all provisions
in the technical specifications and Jefferson Parish Instructions for Bidders and
General Terms and Conditions. All bids must be received in the Purchasing
Department by the bid due date and time.**

**Jefferson Parish Purchasing Department
200 Derbigny Street
General Government Building, Suite 4400
Gretna, LA 70053
Buyer Name: Melissa Ovalle
Buyer Email: movalle@jeffparish.net
Buyer Phone: (504) 364-2687**



JEFFERSON PARISH

Department of Purchasing

Michael S. Yenni
Parish President

Brenda C. Patel
Director

CHANGES TO JEFFERSON PARISH BIDDING PROCEDURES

The East bank Office of Purchasing is now open! We are located in the Joseph S. Yenni Building, 1221 Elmwood Park Blvd., Suite 404, Jefferson, LA 70123. Bidders may submit bid responses at this location, pending authorization in each bid package. **Bidders should carefully read and must respond accordingly per the requirements of the bid packages. NOTE: Bidders submitting bids on the day of bid opening, bidders must submit at the West Bank location only.**

Other Changes Continued:

- For all advertised sealed bids, written evidence of signature authority must be included with bid submission.
- Current W9 Forms and vendor applications may be submitted at any time; however, if your company is not registered and/or a current W-9 form is not on file, a current W-9 form must be supplied upon contract execution, should you be awarded a contract and/or issued a purchase order.
- Upon contract execution, successful bidder must produce final insurance certificates per standard Jefferson Parish insurance requirements. Proof of insurance is required for bidding purposes. Bidders must read the insurance requirements attachment included in each bid package for specific instructions.

Bidders should reference the “Additional Requirements” section of the bid instructions and/or the “Important Notice to Bidders” included in the bid package for specific requirements to respond accordingly.

For more information, please call Jefferson Parish Purchasing at 504-364-2678.

**JEFFERSON PARISH DEPARTMENT OF ENGINEERING
TRAFFIC ENGINEERING DIVISION
SPECIFICATION TE-STMAT-2017
SPECIFICATION FOR THERMOPLASTIC PAVEMENT MARKINGS
MATERIAL ONLY**

GENERAL NOTES: The following specifications describe are for a two-year contract to provide retroreflective pavement marking (MATERIAL ONLY). The material shall include but not be limited to: Raised Pavement Markers, Pavement Marking, and Preformed Letters, Legends, and Symbols. All material and legends shall conform to these specifications and to those listed in the Manual of Uniform Traffic Control Devices, 2009 Edition.

Upon request bidders must submit references prior to award. References shall include contact information for municipalities where material has been used successfully on roadways in similar environmental conditions.

HOT APPLIED THERMOPLASTIC PAVEMENT MARKING

DESCRIPTION: This specification describes a reflectorized thermoplastic pavement striping material that is applied using the propane torch method recommended by the manufacturer, to the road surface in a molten state by mechanical means. The material must be able to be applied without minimum requirements for ambient and road temperatures and without any preheating of the pavement to a specific temperature. Upon cooling to normal pavement temperatures the resulting traffic marking shall produce a stripe of specified thickness and width that is retroreflective in dry and wet conditions and capable of resisting deformation by traffic.

- a) The markings must be a resilient white or yellow thermoplastic product with uniformly distributed glass beads throughout the entire cross sectional area. The markings must be resistant to the detrimental effects of motor fuels, lubricants, hydraulic fluids etc. Lines, legends, and symbols are capable of being affixed to bituminous and/or Portland cement concrete pavements by the use of the normal heat of a propane torch. Other colors shall be available as required.
- b) The markings must be capable of conforming to pavement contours, breaks and faults through the action of traffic at normal pavement temperatures. The markings shall have resealing characteristics, such that it is capable of fusing with itself and previously applied thermoplastic when heated with the torch.
- c) The markings must be able to be applied in temperatures down to 32 degrees F. without any special storage, preheating, or treatment of the material before application.
- d) Sealer shall be required for all markings on portland cement concrete and other non-bituminous surfaces where the marking is at street level and would be subjected to vehicular traffic. The sealer shall be supplied in 5 gallon pails. Expiration date for the sealer shall be clearly stamped on the container label.

MATERIALS: The thermoplastic material shall be homogeneously composed of pigment, binder, and glass beads. **PREHEATED MATERIAL WILL NOT BE ACCEPTED.** All material shall conform to the Manual of Uniform Traffic Control Devices, 2009 Edition.

The material shall be comprised of maleic modified rosin ester resin and high boiling plasticizer resistant to degradation by motor fuels, lubricants, etc. in conjunction with aggregates, pigments, binders, and glass beads which have been factory produced as a finished product, and meets the requirements of the current edition of the Manual on Uniform Traffic Control Devices. The binder shall be a minimum of 50% maleic modified rosin ester.

The thermoplastic material shall conform to AASHTO designation M249-79 (86), with the exception of the relevant differences due to the material being supplied in a preformed state.

The thermoplastic material shall be free of skins, dirt and foreign debris.

The reflective media shall be made up by the internal and external application of glass beads and shall conform to the following requirements:

Glass Beads- The material must contain a minimum of thirty percent (30%) graded glass beads by weight and shall in the "received state" have surface beads firmly affixed. The beads shall be clear and transparent. Not more than twenty percent (20%) of the beads shall consist of irregular fused spheroids, or silica. The index of refraction shall not be less than 1.50.

The thermoplastic materials shall have the following characteristics:

- Shall not deteriorate upon contact with pavement materials, petroleum droppings from traffic and chemicals, such as sodium chloride or calcium chloride, used to prevent formation of ice on roadways or streets.
- Shall not scorch, discolor, or deteriorate if kept at the manufacturer's recommended application temperature, or deteriorate if kept at the manufacturers recommended application temperature, or at least 400° F (204.4° C) for 4 hours.
- Has a temperature versus viscosity characteristic that remains constant from batch to batch through 3-4 re-heat cycles.
- The thermoplastic material in the plastic state shall not exude fumes that are toxic, or cause injury to persons or property.

The Thermoplastic materials shall have the following composition:

- The pigment, beads and filler shall be uniformly dispersed in the resin. The thermoplastic shall be free of skins, dirt, and foreign objects and shall comply with requirements according to Table 3.

Table 3 - COMPOSITION

All Weather Thermoplastic		
Component	Weight Percent	
	White	Yellow
Binder	18% minimum	18% minimum
Type I Glass Spheres (AASHTO M247, Type I)	30% - 40%	30% - 40%
TiO2, Type II Rutile	10% minimum	As needed
Pigment Yellow 83	None	See Note 1
Calcium Carbonate and Inert Filler (200 mesh sieve)	42% Maximum	See Note 1

Note 1- The amount of yellow pigment, calcium carbonate and inert fillers shall be at the option of the manufacturer, providing all other requirements of this specification are met.

- The thermoplastic material shall be produced without the use of lead chromate or arsenic.
- The thermoplastic shall contain clear glass beads as described above.
- The thermoplastic shall be formulated and manufactured from first-grade materials and specifically compounded for traffic markings.
- The thermoplastic shall resist smearing or spreading under normal traffic conditions below 120° F (49° C).
- The finished line shall maintain its original dimensions and placement.
- The finished line shall be free from tack below 120° F (49° C) and is not slippery when wet.
- The thermoplastic line shall be homogenous with even distribution of pigments, and beads throughout the plastic matrix.
- The physical properties of the thermoplastic line shall be uniform throughout the plastic matrix.
- The thermoplastic line shall resist lifting from the pavement in freezing weather and possess cold ductility properties that permit reasonable movement resulting from thermal expansion and contraction with the road surface to minimize chipping or cracking.

The Thermoplastic materials shall have the following physical characteristics:

Storage Life – The thermoplastic material shall meet the requirements of this specification and melt uniformly with no evidence of skins or un-melted particles for a period of one year.

Yellowness Index – Test according to recommendations in ASTM D 4960 and make yellowness index measurements according to ASTM E 1349 using a 2 degree observer and D 65 illuminant. The yellowness index for the white thermoplastic shall not exceed 15.

Cracking Resistance at Low Temperature - After heating the thermoplastic for 240 +/-5 minutes at 425° +/-3° F (218° +/- 2° C) and then applying to concrete blocks, and cooling to 15° +/-3.6° F (-9.4° +/-2.0° C) the material shall show no cracks. Ref: (AASHTO T-250-04 section 12).

Impact Resistance - After heating the thermoplastic for 240 +/-5 minutes at 425° +/-3° F (218° +/- 2° C) and making test specimens and testing per ASTM 256, Method A (un-notched), the impact resistance shall be a minimum of 8.8 inch-lbs. (1.0 J) Ref: (AASHTO T-250-04 section 14).

Softening Point - After heating the thermoplastic for 240 +/-5 minutes at 425° +/-3° F (218° +/- 2° C) and testing in accordance with ASTM D 36 the materials shall have a softening point of 215° +/-15° F (102.5° +/-5° C).

Flowability - After heating the thermoplastic for 240 +/-5 minutes at 425° +/-3° F (218° +/- 2° C) and testing for flowability, the white thermoplastic shall have a maximum percent residue of 18 and the yellow thermoplastic shall have a maximum percent residue of 21. Ref: (AASHTO T-250-04 section 11).

Flowability with Extended Heating - After heating the thermoplastic for 8.0 +/- 0.5 hrs. at 425° +/-3° F (218° +/- 2° C), with stirring the last 6 hrs., and testing for flowability, the thermoplastic shall have a maximum percent residue of 28. Ref: (AASHTO T-250-04 section 17).

Flash Point – When tested in accordance with ASTM D 92 the thermoplastic will have a flash point not less than 475° F (248° C).

Indentation Resistance – Test according to ASTM D 2240 Shore Durometer, A2. Durometer and panel at 110° F (43.3° C) with a 4.4 lb load applied. Measurement is taken after 15 seconds. The thermoplastic should have a minimum value of 40 and a maximum value of 75. **Note:** Extra care should be taken to ensure the intermix is thoroughly mixed and uniform in the test samples. A non-uniform sample will result in erratic measurement values.

- **Note:** During measurement of thermoplastic containing large glass beads the durometer probe may impact a large bead during the test resulting in a much higher than expected result. If the value is unreasonably high, it may be necessary to retest in another location on the sample.

Specific Gravity – Test according to ASTM D 153. The thermoplastic should have a minimum no less than 1.9 maximum of no more than 2.3.

Water Absorption - Test according to ASTM D 570. The thermoplastic sample should have a maximum of 0.5% water absorption.

Ultra Violet Light and Condensate Exposure – Make samples and test according to ASTM G 154. After 300 hrs. exposure the thermoplastic samples shall meet the requirements below.

Color – Make and test thermoplastic samples according to ASTM D 4960. Make color measurements according to ASTM D 6628-03 using a 2 degree observer and D 65 illuminant. The thermoplastic material, after heating for 240 +/-5 minutes at 425° +/- 3° F (218° +/- 2° C) and then cooled to 77° +/-3° F (25° +/- 2° C) shall meet the following criteria:

- **White Reflectance:** Daylight reflectance (*Cap Y*) measured at 45/0 degrees is 75% minimum.
- **White Color:** The color shall reasonably match Federal Test Standard number 595B, color 17886 and shall be within the following chromaticity limits "color box" defined by plotting the following four (x,y) pairs on a C.I.E. 1931 chromaticity diagram.
 - (x1,y1) = (0.355, 0.355)
 - (x2,y2) = (0.305, 0.305)
 - (x3,y3) = (0.285, 0.325)
 - (x4,y4) = (0.335, 0.375)
- **Yellow Reflectance:** Daylight reflectance (*Cap Y*) measured at 45/0 degrees is 45% minimum.
- **Yellow Color:** The color shall reasonably match Federal Test Standard number 595B, color 13538 and shall be within the following chromaticity limits "color box" defined by plotting the following four (x,y) pairs on a C.I.E. 1931 chromaticity diagram.
 - (x1,y1) = (0.560, 0.440)
 - (x2,y2) = (0.490, 0.510)
 - (x3,y3) = (0.420, 0.440)
 - (x4,y4) = (0.460, 0.400)

Retroreflectance – Typical initial retroreflectance are shown in the Table 4 below. Typical retroreflectivity averaged over many readings [mcd(ft-2)(fc-1)] metric equivalent [mcd(m-2)(lux-1)]

Table 4

Typical Initial Retroreflectivity*		
Average values over many applications		
(mcd (ft-2) (fc-1) ; {metric equivalent mcd (m-2) (lux-1)})		
	White	Yellow
Dry (ASTM E1710)	900	700
Wet recovery (ASTM E2177)	345	280
Wet Continuous (ASTM E2176)	125	90

*Note : Typical Retroreflectivity results represent average performance for smooth pavement surfaces. Results may vary due to differences in pavement type and surface roughness. Increased element drop rate may be necessary to compensate for increased surface area characteristics of rough pavement surfaces.

Some reasonable variance should be expected (for example, application on very rough road surfaces or differences in glass beads).

The initial retroreflectance of a single installation shall be the average value determined to the measurement and sampling procedures outlined in ASTM D 6359, using a 30-meter (98.4 feet) retroreflectometer. R_L shall be expressed in units of millicandelas per square foot per foot-candle [$mcd(ft^{-2})(fc^{-1})$] metric equivalent [$mcd(m^{-2})(lux^{-1})$].

Initial performance of pavement marking shall be measured no sooner than 4 - 7 days after application.

Wet retroreflectance values measured under a "condition of continuous wetting" (simulated rain) shall be in accordance with ASTM E2176, and to reduce variability between measurements, the test method shall be performed in a controlled laboratory environment while the marking is positioned with a 3 to 5 degree lateral slope. Measurements shall be reported as the average of the minimum of three locations. Samples of the completed finished product shall be applied to flat panels during application and brought back to the lab for testing.

On The Road Track-Free Time – When applied at a temperature range of 412.5° +/- 12.5° F (211° +/- 7° C) and a thickness of 60 mils to 185 mils (1.5mm-4.7mm) the material shall set to bear traffic in not more than 2 minutes when the air and road temperature is 50° +/- 3° F. (10° +/- 2° C) and not more than ten minutes when the air and road temperature is 90° +/- 3° F (32° +/- 2° C).

- **Track Free** - shall be considered as the condition where no visual deposition of the traffic marking to the pavement surface is observed when viewed from a distance of 50 feet, after a free-rolling traveling vehicle's tires have passed over the line.

Color After Application – The color of the applied white and yellow stripes and markings (with beads) shall conform to the daytime and nighttime color requirements in ASTM Designation: D 6628-03.

- **White Reflectance:** Daylight reflectance (*Cap Y*) measured at 45/0 degrees is 35% minimum.
- **White Color:** The color shall reasonably match Federal Test Standard number 595B, color 17886 and shall be within the following chromaticity limits "color box" defined by plotting the following four (x,y) pairs on a C.I.E. 1931 chromaticity diagram.
(x1,y1) = (0.355, 0.355)
(x2,y2) = (0.305, 0.305)
(x3,y3) = (0.285, 0.325)
(x4,y4) = (0.335, 0.375)
- **Yellow Reflectance:** Daylight reflectance (*Cap Y*) measured at 45/0 degrees is 25% minimum.

- **Yellow Color:** The color shall reasonably match Federal Test Standard number 595B, color 13538 and shall be within the following chromaticity limits “color box” defined by plotting the following four (x,y) pairs on a C.I.E. 1931 chromaticity diagram.
 - (x1,y1) = (0.560, 0.440)
 - (x2,y2) = (0.490, 0.510)
 - (x3,y3) = (0.420, 0.440)
 - (x4,y4) = (0.460, 0.400)

PACKAGING: The preformed thermoplastic markings shall be placed in protective plastic film with cardboard stiffeners where necessary to prevent damage in transit. Linear material must be cut to a maximum of 3' long pieces. Legends and symbols must also be supplied in flat pieces. The cartons in which packed shall be non-returnable and shall not exceed 40" in length and 25" in width, and be labeled for ease of identification. The weight of the individual carton must not exceed seventy (70) pounds. A protective film around the box must be applied in order to protect the material from rain or premature aging.

PAYMENT: Reflectorized thermoplastic pavement striping material will be paid for at the contract unit price, under:

(Prices are not to be included on this page. Prices must be provided on the Jefferson Parish Bid Form.)

<u>ITEM NO.</u>	<u>PAY ITEM</u>	<u>PAY UNIT</u>
0010	Left Arrow Pavement Marking	Package
0020	Straight Arrow Pavement Marking	Package
0030	Right Arrow Pavement Marking	Package
0040	Right/Straight Arrow Pavement Marking	Package
0050	Left/Straight Arrow Pavement Marking	Package
0060	“ONLY” Legend Pavement Marking	Package
0070	“R X R” Kit Pavement Marking	Package
0080	Eight Foot “SCHOOL” Legend Pavement Marking	Package
0090	Ten Foot “SCHOOL” Legend Pavement Marking	Package
0100	Handicap Kit, White on Blue	Package
0110	Bicycle Symbol	Package
0120	Shared Lane Symbol	Package
0130	Left Shared Bike Lane Symbol	Package
0140	Light Green Line	Package
0150	Four Inch Solid White Pavement Marking	Package
0160	Four Inch Solid Yellow Pavement Marking	Package
0170	Eight Inch Solid White Pavement Marking	Package
0180	Twelve Inch Solid White Pavement Marking	Package
0190	Twelve Inch Solid Yellow Pavement Marking	Package
0200	Twenty Four Inch Solid White Pavement Marking	Package

Pavement Marking Tape - Patterned Pavement Marking Tape for Intersections

Description: This specification describes Pavement Marking Tape Series 270 ES retroreflective patterned polymer pavement marking that can be used as an inlay marking on new asphalt or as an overlay marking on asphalt and concrete pavement surfaces in good condition. Series 270 ES tape shall offer “Extended Season” applications with pressure sensitive adhesive (PSA) package on the bottom surface. Series 270 ES shall not require surface preparation adhesive prior to application.

Materials:

Series A270 ES: Unlined. Used for long lines, edge lines, channelizing lines, gore markings, stop bars and crosswalks.

Series L270 ES: Lined. Used to cut symbols and legends.

Series SMS-L270 ES: Lined. Precut symbols and legends.

Properties:

A. Product Features:

- Durable, conformable to pavement and retroreflective
- Embedded net provides increased tear resistance
- Pressure sensitive adhesive (PSA) on bottom surface
- No surface preparation adhesive required when applied within standard tape application season
- Retroreflective layer of glass beads bonded in a highly durable polyurethane topcoat
- Manufactured without the use of heavy metals, lead chromate pigments or other similar, lead containing chemicals
- Nominal thickness of 0.065 in. (1.6 mm) at pattern heights
- White: 270 ES
- Yellow: 271 ES

B. Reflectance

Series 270 ES tape shall have the following initial minimum retroreflectance values when measured in accordance with ASTM-D4061 and ASTM 4505. The photometric quality to be measured is coefficient of retroreflected luminance (RL) and shall be expressed as:

English RL: millicandelas per square foot per footcandle [(mcd • ft-2) • fc-1] or equivalently as:

Metric RL: millicandelas per square meter per lux [(mcd • m-2) • lx-1]

	<u>White</u>	<u>Yellow</u>
Entrance Angle	88.76°	88.76°
Observation Angle	1.05°	1.05°
Retroreflected Luminance*	300	250

RL [(mcd • ft-2) • fc-1]

*The quantity of retroreflected luminance (RL) “relates to the way the effective retroreflective surface is focused on the retina of the human eye and to the visual effect thereby produced. It is recommended for describing the performance of highway signs and striping, or large vehicular markings which are commonly viewed as discernible surface areas.” Federal Test Method Standard 370, 3.1.2, Note 6, March 1, 1977.

C. Color

The preformed markings consist of white or yellow films with pigments selected and blended to conform to standard highway colors.

D. Skid Resistance

The patterned surface of the retroreflective pliant polymer shall provide an initial minimum skid resistance value of 45 BPN when tested according to ASTM E 303 except values will be taken in one direction and at 45° angle from that direction. These two values will then be averaged to find the skid resistance of the patterned surface.

E. Patchability

Heavy traffic may cause wear and damage. New materials shall be easily installed in these areas with minimal surface preparation by following the manufacturer’s recommendations.

PAYMENT: Reflectorized thermoplastic pavement striping material will be paid for at the contract unit price, under:

(Prices are not to be included on this page. Prices must be provided on the Jefferson Parish Bid Form.)

<u>ITEM NO.</u>	<u>PAY ITEM</u>	<u>PAY UNIT</u>
0210	Four Inch White 270 ES	Package
0220	Eight Inch White 270 ES	Package
0230	Twelve Inch White 270 ES	Package
0240	Four Inch Yellow 271 ES	Package
0250	Twelve Inch Yellow 271 ES	Package
0260	Premark Sealer	Each

DURABLE, ABRASION-RESISTANT, RETROREFLECTIVE RAISED PAVEMENT MARKERS

DESCRIPTION: This specification describes durable, abrasion-resistant, retroreflective raised pavement markers designed for installation on asphalt and portland cement concrete road surfaces. The markers shall be designed to provide highly effective, long-life nighttime visibility.

MATERIALS: The marker shall be produced from an engineering polymer selected for superior impact resistance and weatherability. The color of the marker body shall be either neutral white or as specified. The marker shall incorporate an abrasion-resistant, retroreflective element designed to provide long-lasting nighttime visibility. These markers are intended for application directly onto asphalt or Portland concrete pavement surfaces and shall be compatible with commercially available bitumen or epoxy resin adhesives designed for use with raised pavement markers and as recommended by the marker manufacturer. All other adhesives must be tested by the user to determine suitability.

The markers shall be durable, impact and abrasion-resistant, retroreflective raised pavement markers designed for use with longitudinal and gore markings on new and existing roads in non-snow plow regions.

The marker shall be installed by use of a non-toxic, zero V.O.C., preformed thermoplastic adhesive Bundy pad designed to adhere raised pavement markers to the road surface when heated with a torch. (5" x 5", 125-mil thick squares)

The marker shall meet the following specified requirements:

The marker body shall be produced in neutral white or as specified. The color of the retroreflective element shall be white, yellow, red, green or blue as specified.

Dimensions: The typical dimensions of the marker shall be:

Height: 0.625 ± 0.050 in. (15.88 ± 1.27mm)

Width: 4.00 ± 0.50 in. (101.6 ± 12.7mm)

Length: 3.50 ± 0.50 in. (89.2 ± 12.7mm)

The white/red, and yellow/amber markers shall have initial minimum retroreflectance values specified as the product of the values in Table 1 when measured in accordance with ASTM E809. The photometric quantity to be measured is the coefficient of retroreflected luminous intensity (RI), expressed as millicandelas per lux (mcd/lx). One candela per lux equals 10.76 candelas per foot-candle.

Table 1: Minimum RI Values

Entrance angle β_2 ($\beta_1 = 0^\circ$)	0°		$\pm 20^\circ$	
Observation angle	$.2^\circ$		$.2^\circ$	
Color	Minimum R_1 (mcd/lx)	Minimum R_1 (cd/ftcd)	Minimum R_1 (mcd/lx)	Minimum R_1 (cd/ftcd)
White	279	3.00	112	1.20
Yellow/Amber	167	1.80	67	0.72
Red	70	0.75	28	0.30
Blue	26	0.28	10	0.11
Green	93	1.00	37	0.40

The markers shall have initial minimum retroreflectance values specified as the product of the values in **Table 2 and Table 3** when measured in accordance with ASTM E809. In **Table 2**, the angles referenced correspond to the entrance, rotation and observation geometry for a driver in a standard vehicle with pavement markers placed on a lane line to the left of the vehicle. The measured value at each simulated distance is the sum of the marker retroreflection from the incident illumination of the left and right headlights. Test set up and measurement geometry is illustrated in **Figure 1**.

Table 2: R_1 "Driver Geometry"

Simulated Distance		Headlight	Observation Angle (α) (degrees)	Rotation Angle (ϵ) (degrees)	Entrance Angle (β)		Minimum R_1 (mcd/lux) left + right	Typical R_1 (mcd/lux) left + right
Feet	Meters				β_1	β_2		
100	30	Left	0.95	19	-2.0	-1.6	40	80
		Right	2.91	-72	4.6	-2.9		
300	91	Left	0.35	24	-0.7	-0.5	350	500
		Right	0.90	-69	1.4	-1.0		
500	152	Left	0.22	24	-0.4	-0.3	600	1000
		Right	0.53	-68	0.8	-0.6		

Note: In laboratory testing Entrance Angles β_1 and β_2 are set to equal 0° and Left/Right Rotation Angles ϵ are set to 20° - 70° as an approximation with little loss of accuracy.

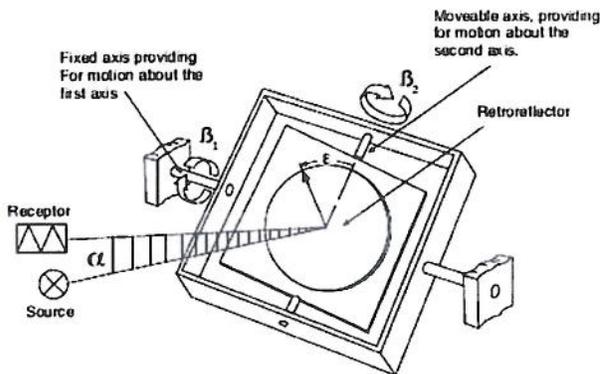


Figure 1: Driver Geometry (CIE Notation)

Table 3:
Color Multiplying Factors

Color	Multiplying Factor
White	1
Yellow/Amber	0.6
Red	0.25
Blue	0.1
Green	0.33

The retroreflected color of the markers shall lie within the respective retroreflected color gamut coordinates, plotted on the 1931 CIE Chromaticity (x,y) diagram, described in Table 4 and Figure 2 when tested in accordance with ASTM E811 using CIE Illuminant Source A and viewing conditions of 0.2° observation angle, 0° entrance angle. The source and receptor angular apertures are each 6 minutes of arc.

Table 4: Retroreflected Color Gamut Coordinates

Point Number	White		Yellow		Red		Blue		Green	
	x	y	x	y	x	y	x	y	x	y
1	0.310	0.348	0.545	0.424	0.650	0.330	0.039	0.320	0.009	0.733
2	0.453	0.440	0.599	0.439	0.668	0.330	0.160	0.320	0.288	0.520
3	0.500	0.440	0.609	0.390	0.734	0.265	0.160	0.240	0.209	0.395
4	0.500	0.380	0.597	0.390	0.721	0.259	0.183	0.218	0.012	0.494
5	0.440	0.380	-	-	-	-	0.088	0.142	-	-
6	0.310	0.283	-	-	-	-	-	-	-	-

If two points lie on the spectrum locus line, they must not be connected by a straight line but rather should, in this case, be joined by the boundary of the spectrum locus.

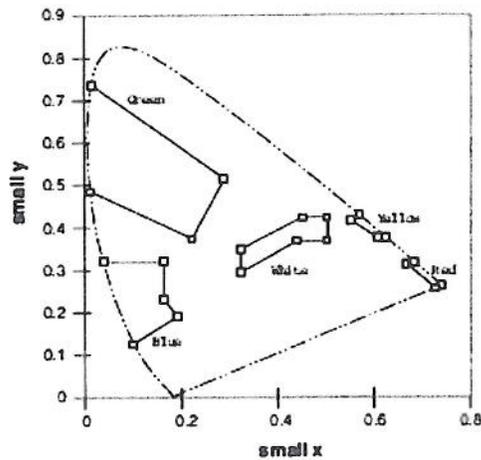


Figure 2: CIE 1931 Chromaticity Chart

The coefficient of retroreflected luminous intensity of the markers is measured after subjecting the entire lens surface to the test described in ASTM D 4280 section 9.5 using a sand drop apparatus. After the exposure described above, retroreflected values shall not be less than 0.5 times the values listed in Table #1.

The marker shall comply with the initial minimum brightness requirements as specified in Table 1 and the product of the values in Tables 2 and 3 after conditioning for 12 hours at $145^{\circ}\text{F} \pm 5^{\circ}\text{F}$ ($62.7^{\circ}\text{C} \pm 2.5^{\circ}\text{C}$).

The marker body shall display no cracking or breakage when tested according to ASTM D2444 Tup A, using a 1000 gm weight from a height of 1 meter. The marker shall be positioned in such a way that the Tup strikes the top of the marker. The marker lens shall display no cracking outside the impact area when tested according to ASTM D2444 Tup A, using a 1000 gm weight from a height of 1 meter. The marker shall be placed in a steel fixture designed to hold the marker lens horizontal and positioned such that the Tup strikes the center of the lens.

The markers shall be conditioned for 10 minutes at $145^{\circ}\text{F} \pm 5^{\circ}\text{F}$ ($62.7^{\circ}\text{C} \pm 2.5^{\circ}\text{C}$) and then immediately submerged in a water bath at $70^{\circ}\text{F} \pm 5^{\circ}\text{C}$ ($21^{\circ}\text{F} \pm 2.5^{\circ}\text{C}$) for 10 minutes. The markers should then be removed from the water bath, wiped dry with a soft cloth, visually inspected for penetration of water behind the lens, and measured for reflectivity in accordance with ASTM E809. The markers shall meet the initial minimum retroreflectance specified values in Table 1 and the product of the values in Tables 2 and 3.

The markers shall meet the performance requirements contained in the current ASTM D 4280 for Raised Retro-reflective Pavement Markers. This warranty excludes (without limitation) damage from improper installation, exposure to chemicals or mishandling. Should the marker fail to conform to this warranty, the manufacturer shall, at its expense for materials ONLY, furnish replacement markers for those non-conforming markers. Jefferson Parish Traffic Engineering Division will maintain and track all installation information.

PAYMENT: Raised pavement markers shall be paid for at the contract unit price. Payment will be made under:

(Prices are not to be included on this page. Prices must be provided on the Jefferson Parish Bid Form.)

<u>ITEM NO.</u>	<u>PAY ITEM</u>	<u>PAY UNIT</u>
0270	White / Red Raised Pavement Marker	Box
0280	Yellow Raised Pavement Marker	Box

HIGH IMPACT DELINEATOR POSTS

High Performance Surface Mount Post Assembly

DESCRIPTION: This specification describes a high performance surface mount delineator post assembly. The delineators shall be composed of a highly durable, urethane plastic and feature a 3" post diameter. The posts shall be able to withstand over 200 impacts at 60 mph, and shall be designed for areas with a high impact frequency. The posts shall remain extremely flexible, even at extreme temperatures and returns to an upright position after impact.

MATERIALS:

Heavy Duty Delineator Post

- Injection molded thermoplastic (100% polyurethane – no blends accepted)
- Diameter: 3" from all viewing angles
- Height: 36"
- Standard Colors: Yellow, White
- One piece design

Abrasive Resistant Reflective Sheeting

- Horizontal bands
(1, 2, or 3) 3" wide X 9 ¾" long horizontal bands per post assembly
- Vertical strips
(1 or 2) 3" X 12" vertical strips per post assembly
- Standard Colors: Silver or Amber

Surface Mount Base

- Injection molded high-impact polystyrene
- Base shall be one color throughout
- Color: Black
- Includes cold finished Aluminum retaining pin for locking post in base. (One required per post)
- Quick Change retaining pin
- Center screw mount base
- Base shall be installed by use of a non-toxic, zero V.O.C., preformed thermoplastic adhesive SuperBundy pad designed to adhere delineator posts to the road surface when heated with a propane torch. (8" x 8", 100-mil thick, TWO-piece system)

Performance

- Testing
Installed with the pin perpendicular to traffic, the dura-post assembly withstands in excess of 200 vehicle impacts at 60 mph.
- National Transportation Product Evaluation Program (NTPEP) Tested.

PAYMENT: High Impact Delineator posts shall be paid for at the contract unit price. Payment will be made under:

(Prices are not to be included on this page. Prices must be provided on the Jefferson Parish Bid Form.)

<u>ITEM NO.</u>	<u>PAY ITEM</u>	<u>PAY UNIT</u>
0290	White Delineator Post	Each
0300	Yellow Delineator Post	Each
0310	Base with Lock Pin	Each
0320	Bundy	Pack
0330	Super Bundy	Pack

PROPANE FIELD TORCH KIT

DESCRIPTION: This specification describes an Extra-long, Propane fuel Field Torch Kit. The torch shall be propane gas fueled and used with a propane gas bottle to heat thermoplastic pavement markings when applying to asphalt or concrete roads, surfaces, etc. The torch shall be used to apply thermoplastic lines, letters, and thermoplastic legends on a variety of different surfaces to create a durable finish that can be walked on and driven over within minutes. The torch shall be easily operated by one person. The gas torch shall attach to a gas bottle (not provided) and work by manual application.

MATERIALS: The torch kit shall include the following:

- 24" Extra-Long brass torch handle with 70mm electronic nozzle
- 600,000 BTU
- 33' U/L listed regulator
- Swivel hose connector
- Safety stand
- Lightweight and balanced
- Brass constructed
- Interchangeable nozzles
- Electronic ignition

PAYMENT: The propane field torch kit shall be paid for at the contract unit price. Payment will be made under:

(Prices are not to be included on this page. Prices must be provided on the Jefferson Parish Bid Form.)

<u>ITEM NO.</u>	<u>PAY ITEM</u>	<u>PAY UNIT</u>
0340	Extra-long Propane Field Torch Kit	Each



JEFFERSON PARISH

Department of Purchasing

Michael S. Yenni
Parish President

Brenda C. Patel
Director

June 23, 2017

ADDENDUM # 1

Bid No.: 50-00119827

Bid Opening Date: June 29, 2017, 2:00 PM

For: Two (2) Year Contract for a Supply of Thermoplastic Pavement Markings for the Jefferson Parish Traffic Engineering Division

➤ CLARIFICATION OF SPECIFICATIONS FOR ITEMS 0210 - 0250

Change the series for items 0210 – 0250:

Items 0210 – 0250 should be NON-LINERED

ITEM #	CURRENT SERIES	CHANGE SERIES TO
0210	270ES	A270ES
0220	270ES	A270ES
0230	270ES	A270ES
0240	271ES	A271ES
0250	271ES	A271ES

Sincerely,

Melissa Ovalle

Melissa Ovalle, Buyer II
Jefferson Parish Purchasing Department

Bidders must acknowledge all addenda on the bid form. Bidder acknowledges receipt of this addendum on the bid form as indicated. Failure to do so will result in bid rejection.

This addendum is a part of the contract documents and modifies the original bidding documents and specifications. The contents of this addendum shall be included in the contract documents. Changes made by this addendum shall take precedence over the documents of earlier date.

General Government Bldg. – 200 Derbigny St – Suite 4400 - Gretna, LA 70053

Office 504.364.2678 – Fax 504.364.2693

Email: Purchasing@jeffparish.net Website: www.jeffparish.net

INVITATION TO BID
THIS IS NOT AN ORDER

DATE: 6/14/2017

Page: 1

BID NO.: 50-00119827

JEFFERSON PARISH

PURCHASING DEPARTMENT
P.O. BOX 9
GRETNA, LA. 70054-0009
504-364-2678

BUYER: MOVALLE@jeffparish.net

BIDS WILL BE RECEIVED IN THE WEST BANK PURCHASING DEPT, SUITE 4400, JEFFERSON PARISH GENERAL GOVERNMENT BUILDING, 200 DERBIGNY STREET, GRETNA, LA 70053 UNTIL 2:00 PM, 6/29/2017 AND PUBLICLY OPENED THEREAFTER.

For convenience, bidders may also submit bids in the East Bank Purchasing Department, Suite 404, Jefferson Parish Joseph S. Yenni Building, 1221 Elmwood Park Blvd., Jefferson LA 70123. However, if submitting bids on the day of bid opening, bidders must submit at the West Bank location only. All bids will be publicly opened at the West Bank location.

At no charge, bidders may also submit via Jefferson Parish's electronic procurement page by visiting www.jeffparishbids.net to register for this free site. Additional instructions are included in the text box highlighting electronic procurement.

LATE BIDS WILL NOT BE ACCEPTED

Unless submitting via online (see Page 3), each bid must be submitted in a sealed envelope bearing on the outside; the name of the Bidder, his address, and the name of the project for which the bid is submitted and the bid number.

NOTE: ONLY BIDS WRITTEN IN INK OR TYPEWRITTEN, AND PROPERLY SIGNED BY A MEMBER OF THE FIRM OR AUTHORIZED REPRESENTATIVE, WILL BE ACCEPTED. PENCIL AND/OR PHOTOSTATIC FIGURES OR SIGNATURES SHALL RESULT IN BID REJECTION.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

THE FOLLOWING INSTRUCTIONS APPLY TO ALL BIDS

All bids submitted are subject to these instructions and general conditions and any special conditions and specifications contained herein, all of which are made part of this bid proposal reference. By submitting a bid, vendor agrees to comply with all provisions of Louisiana Law as well be in compliance with the Jefferson Parish Code of Ordinances, Louisiana Code of Ethics, applicable Jefferson Parish ethical standards and Jefferson Parish Resolution No. 113646 and/or Resolution No. 113647.

All vendors submitting bids should register as a Jefferson Parish vendor if not already yet registered. Registration forms may be downloaded from <http://purchasing.jeffparish.net> and by clicking on Vendor Information. Current W-9 forms with respective Tax Identification numbers and vendor applications may be submitted at any time; however, if your company is not registered and/or a current W-9 form is not on file, vendor registration is mandatory. Further, a current W-9 form and respective Tax Identification number must be supplied upon contract execution, should you be awarded a contract and/or issued purchase order. Failure to do so may result in delay of payment.

All quotations shall be based on F.O.B. Agency warehouse or job site, anywhere within the Parish as designated by the Purchasing Department. This provision does not apply to public works projects

JEFFERSON PARISH requires all products to be new (current) and all work must be performed according to standard practices for the project. Unless otherwise specified, no aftermarket parts will be accepted. Unless otherwise specified, all workmanship and materials must have at least one (1) year guaranty, in writing, from the date of delivery and/or acceptance of the project. Any deviations or alterations from the specifications must be indicated and/or supporting documentation supplied with bid submission.

Bidders should submit all questions in writing and fax them to the Purchasing Department at (504) 364-2693 no later than FIVE (5) working days prior to bid opening. Bid numbers should be mentioned in all requests. Questions may also be emailed to the buyer for this bid at the email address listed above. If submitting online, vendors may send questions via the E-Procurement site no later than Five (5) working days prior to the bid opening.

If this bid requires a pre-bid conference (see Additional Requirements section), bidders are advised that such conference will be held to allow bidders the opportunity to identify any discrepancies in the bid specifications and seek further clarification regarding instructions. The Purchasing Department will issue a written response to bidders' questions in the form of an Addendum. Please note that all official communication will be expressed in the form of an addendum.

All formal Addenda require written acknowledgement on the bid form by the bidder. Failure to acknowledge an Addendum on the bid form shall cause the bid to be rejected. JEFFERSON PARISH reserves the right to award bid to next lowest responsive and responsible bidder in this event.

The purpose and intention of this invitation to bid is to afford all suppliers an equal opportunity to bid on all construction, maintenance, repair, operating supplies and/or equipment listed in this bid proposal. JEFFERSON PARISH WILL ACCEPT ONE BID ONLY FROM EACH VENDOR. Items bid must meet specifications.

Visit our website at [HTTP://PURCHASING.JEFFPARISH.NET](http://PURCHASING.JEFFPARISH.NET)

JEFFERSON PARISH will accept one price for each item unless otherwise indicated. Two or more prices for one item will result in bid rejection. Bidders are required to complete, sign and return the bid form and/or complete and return the associated line item pricing forms as indicated. Vendors must not alter the bid forms. Doing so will cause the bid to be rejected.

A corporate resolution or written evidence of the individual signing the bid having such authority must be submitted with the bid. Failure to comply will cause bid to be rejected. For corporate entities, such written evidence may be a printout of the Louisiana Secretary of State's website listing the signatory as an officer. Such printout shall be included with the bid submission. Bids submitted by Owners or Sole Proprietorships must include certification that he or she owns the entity for which the bid is signed. This documentation must be submitted with the bid. Failure to do so will result in bid rejection.

NOTE: A sample corporate resolution can be downloaded from our website <http://purchasing.jeffparish.net> or you may provide your own document. A sample certification of sole proprietorship can also be downloaded from our website <http://purchasing.jeffparish.net> or you may provide your own document.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

A. AWARD OF CONTRACT: JEFFERSON PARISH reserves the right to award contracts or place orders on a lump sum or individual item basis, or such combination, as shall in its judgment be in the best interest of JEFFERSON PARISH. Every contract or order shall be awarded to the LOWEST RESPONSIVE and RESPONSIBLE BIDDER, taking into consideration the CONFORMITY WITH THE SPECIFICATIONS and the DELIVERY AND/OR COMPLETION DATE. SPLIT AWARDS MADE TO SEVERAL VENDORS WILL ONLY BE GRANTED TO THOSE DEEMED RESPONSIVE AND RESPONSIBLE.

All bid prices shall remain valid for 45 days. Jefferson Parish and the lowest responsive and responsible bidder(s) by mutual written consent may mutually agree to extend the deadline for award by one (1) or more extensions of thirty (30) calendar days.

PROTESTS: Only those vendors that submitted a bid in response to this solicitation may submit a protest in writing to the Director of the Purchasing within 48 hours of bid opening. The Purchasing Director will review it in connection with the Parish Attorney's Office which will then respond in writing as soon as possible.

PREFERENCE: Unless federal funding is directly spent by Jefferson Parish for this purchase, preference is hereby given to materials, supplies, and provisions produced, manufactured or grown in Louisiana, quality being equal to articles offered by competitors outside the state. "LSA – R.S. 38:2251-2261"

B. USE OF BRAND NAMES AND STOCK NUMBERS: Where brand names and stock numbers are specified, it is for the purpose of establishing certain minimum standards of quality. Bids may be submitted for products of equal quality, provided brand names and stock numbers are specified. Complete product data may be required prior to award.

C. CANCELLATION OF CONTRACT: JEFFERSON PARISH reserves the right to cancel all or any part if not shipped promptly. No charges will be allowed for parking or cartage unless specified in quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel any contract at anytime and for any reason by issuing a THIRTY (30) day written notice to the contractor.

For good cause and as consideration for executing a contract with Jefferson Parish, vendor conveys, sells, assigns and transfers to Jefferson Parish or its assigns all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of Louisiana, relating to the particular good or services purchased or acquired by Jefferson Parish.

D. PRICES: Jefferson Parish is exempt from paying sales tax under LSA-R.S. 47:301 (8)(c). All prices for purchases by Jefferson Parish of supplies and materials shall be quoted in the unit of measure specified and unless otherwise specified, shall be exclusive of state and Parish taxes. The price quoted for work shall be stated in figures. In the event there is a difference in unit prices and totals, the unit price shall prevail.

Quantities listed are for bidding purposes only. Actual requirements may be more or less than quantities listed.

Bidders are not to exclude from participation in, deny the benefits of, or subject to discrimination under any program or activity, any person in the United States on the grounds of race, color, national origin, or sex; nor discriminate on the basis of age under the Age Discrimination Act of 1975, or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, or on the basis of religion, except that any exemption from such prohibition against discrimination on the basis of religion as provided in the Civil Rights Act of 1964, or Title VI and VII of the Act of April 11, 1968, shall also apply. This assurance includes compliance with the administrative requirements of the Revenue Sharing final handicapped discrimination provisions contained in Section 51.55 (c), (d), (e), and (k)(5) of the Regulations. New construction or renovation projects must comply with Section 504 of the 1973 Rehabilitation Act, as amended, in accordance with the American National Standard Institute's specifications (ANSI A17.1-1961).

Jefferson Parish and its partners as the recipients of federal funds are fully committed to awarding a contract(s) to firm(s) that will provide high quality services and that are dedicated to diversity and to containing costs. Thus, Jefferson Parish strongly encourages the involvement of minority and/or woman-owned business enterprises (DBE's, including MBE's, WBE's and SBE's) to stimulate participation in procurement and assistance programs.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

Advertised bids will be tabulated and a copy of the tabulation will be forwarded to each responding bidder.

IN ACCORDANCE WITH STATE REGULATIONS JEFFERSON PARISH OFFERS ELECTRONIC PROCUREMENT TO ALL VENDORS

This electronic procurement system allows vendors the convenience of reviewing and submitting bids online. This is a secure site and authorized personnel have limited read access only. Bidders are encouraged to submit electronically using this free service; while the website accepts various file types, one single PDF file containing all appropriate and required bid documents is preferred. Bidders submitting uploaded images of bid responses are solely responsible for clarity. If uploaded images/documents are not legible, then bidder's submission will be rejected. Please note all requirements contained in this bid package for electronic bid submission.

Please visit our E-Procurement Page at www.jeffparishbids.net to register and view Jefferson Parish solicitations. For more information, please visit the Purchasing Department page at <http://purchasing.jeffparish.net>.

The general specifications for construction projects and the purchase of materials, services and/or supplies are those adopted by the JEFFERSON PARISH Council by Resolution No. 113646 or 113647 dated 12/09/09. The general conditions adopted by this resolution shall be considered as much a part of this document as if they were written wholly herein. A copy may be obtained from the Office of the Parish Clerk, Suite 6700, Jefferson Parish General Government Building, 200 Derbigny Street, Gretna, LA 70053. You may also obtain a copy by visiting the Purchasing Department webpage at <http://purchasing.jeffparish.net> and clicking on Online Forms.

ADDITIONAL REQUIREMENTS FOR THIS BID

PLEASE MATCH THE NUMBERS PRINTED IN THIS BOX WITH THE
CORRESPONDING INSTRUCTIONS BELOW.

10,12,13,15

1. All bidders must attend the MANDATORY pre-bid conference and will be required to sign in and out as evidence of attendance. In accordance with LSA R.S. 38:2212(l), all prospective bidders shall be present at the beginning of the MANDATORY pre-bid conference and shall remain in attendance for the duration of the conference. Any prospective bidder who fails to attend the conference or remain for the duration shall be prohibited from submitting a bid for the project.
2. Attendance to this pre-bid conference is optional. However, failure to attend the pre-bid conference shall not relieve the bidder of responsibility for information discussed at the conference. Furthermore, failure to attend the pre-bid conference and inspection does not relieve the successful bidder from the necessity of furnishing materials or performing any work that may be required to complete the work in accordance with the specification with no additional cost to the owner.
3. Contractor must hold current applicable JEFFERSON PARISH licenses with the Department of Inspection and Code Enforcement. Contractor shall obtain any and all permits required by the JEFFERSON PARISH Department of Inspection and Code Enforcement. The contractor shall be responsible for the payment of these permits. All permits must be obtained prior to the start of the project. Contractor must also hold any and all applicable Federal and State licenses. Contractor shall be responsible for the payment of these permits and shall obtain them prior to the start of the project.
4. A LA State Contractor's License will be required in accordance with LSA R.S. 37-2150 et. seq. and such license number will be shown on the outside of the bid envelope. Failure to comply will cause the bid to be rejected. Additionally if submitting the bid electronically, then the license number must be entered in the appropriate field in the Electronic Procurement system. Failure to comply will cause the bid to be rejected.
5. It is the bidder's responsibility to visit the job site and evaluate the job before submitting a bid.
6. Job site must be clean and free of all litter and debris daily and upon completion of the contract. Passageways must be kept clean and free of material, equipment, and debris at all times. Flammable material must be removed from the job site daily because storage will not be permitted on the premises. Precautions must be exercised at all times to safeguard the welfare of JEFFERSON PARISH and the general public.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

7. **PUBLIC WORKS BIDS:** All awards for public works in excess of \$5,000.00 will be reduced to a formal contract which shall be recorded at the contractor's expense with the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. A price list of recordation costs may be obtained from the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. All awards in excess of \$25,000.00 will require both a performance and a payment bond. Unless otherwise stated in the bid specifications, the performance bond requirements shall be 100% of the contract price. Unless otherwise state in the bid specifications, the payment bond requirements shall be 100% of the contract price. Both bonds shall be supplied at the signing of the contract.
8. **NON-PUBLIC WORKS BIDS:** A performance bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The performance bond shall be supplied at the signing of the contract.
9. **NON-PUBLIC WORKS BIDS:** A payment bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The payment bond shall be supplied at the signing of the contract.
10. Unless otherwise stated in the bid specifications, the successful bidder will be required to procure standard insurance policies evidencing Parish-mandated insurance requirements as indicated on the attached "insurance requirements" sheet. All bidders must comply with the instructions in this sheet. Failure to comply will cause bid to be rejected.
11. A bid bond will be required with bid submission in the amount of 5% of the total bid, unless otherwise stated in the bid specifications. Acceptable forms shall be limited to cashier's check, certified check, or surety bid bond. All sureties must be in original format (no copies) If submitting a bid online, vendors must submit an electronic bid bond through the respective online clearinghouse bond management system(s) as indicated in the electronic bid solicitation on Central Auction House. No scanned paper copies of any bid bond will be accepted as part of the electronic bid submission.
12. This is a requirements contract to be provided on an as needed basis. JEFFERSON PARISH makes no representations on warranties with regard to minimum guaranteed quantities unless otherwise stated in the bid specifications.
13. Freight charges should be included in total cost when quoting. If not quoted FOB DELIVERED, freight must be quoted as a separate item. Bid may be rejected if not quoted FOB DELIVERED or if freight charges are not indicated on bid form.
14. **PUBLIC WORKS' BIDS - Completed, Signed and Properly Notarized Affidavits Required;** This applies to all solicitations for construction, alteration or demolition of public buildings or projects, in conformity with the provisions contained in LSA-RS 38:2212.9, LSA-RS 38:2212.10, LSA-RS 38:2224, and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Conviction Affidavit, Non-Collusion Affidavit, Campaign Contribution Affidavit, Debt Disclosures Affidavit and E-Verify Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
15. **NON PUBLIC WORK BIDS - Completed, Signed and Properly Notarized Affidavits Required** in conformity with the provisions contained in LSA – RS 38:2224 and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Collusion Affidavit, Debt Disclosures Affidavit and Campaign Contribution Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled NON PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
16. The ensuing contract for this bid solicitation may be eligible for FEMA reimbursement and/or Federal funding/reimbursement. As such, the referenced appendix will be applicable accordingly and shall be considered a part of the bid documents. All applicable certifications must be duly completed, signed and submitted with bid submission. Failure to submit applicable certifications with bid submission will result in bid rejection.
17. For this project, the Contractor shall not pay any state or local sales or use taxes on materials and equipment which are affixed and made part of the immovable property of the project or which permanently incorporated in the project (hereinafter referred to as "applicable materials and equipment"). All purchases of applicable materials or equipment shall be made by the contractor on behalf of and as the agent of Jefferson Parish (Owner), a political subdivision of the State of Louisiana. No state and local sales and use taxes are owned on applicable materials and equipment under the provisions of Act 1029 of the 1991 Regular Session – Louisiana Revised Statute 47:301(8)(c). Owner will furnish contractor a certificate form which certifies that Owner is not required to pay such state or local sales and use taxes, and contractor shall furnish a copy of such certificate to all vendors or suppliers of the applicable materials and equipment

It shall be the duty of every parish officer, employee, department, agency, special district, board, and commission: and the duty of every contractor, subcontractor, and licensee of the parish, and the duty of every applicant for certification of eligibility for a parish contract or program, to cooperate with the Inspector General in any investigation, audit, inspection, performance review, or hearing pursuant to Jefferson Parish Code of Ordinances Section 2-155.10(19). By submitting a bid, vendor acknowledges this and will abide by all provisions of the referenced Jefferson Parish Code of Ordinances.

All Public Work Projects are required to use the Louisiana Uniform Public Work Bid Form

All prices must be held firm unless an escalation provision is requested in this bid. Jefferson Parish will allow one escalation during the term of the contract, which may not exceed the U.S. Bureau of Labor Statistics National Index for all Urban Consumers, unadjusted 12 month figure. The most recently published figure issued at the time an adjustment is requested will be used. A request must be made in writing by the vendor, and the escalation will only be applied to purchases made after the request is made.

Are you requesting an escalation provision?

YES _____ NO X _____

MAXIMUM ESCALATION PERCENTAGE REQUESTED 0 %

INITIAL BID PRICES WILL REMAIN FIRM THROUGH THE DATE OF end date of contract .

For the purposes of comparison of bids when an escalation provision is requested, Jefferson Parish will apply the maximum escalation percentage quoted by the bidder to the period to which it is applied in the bid. The initial price and the escalation will be used to calculate the total bid price. It will be assumed, for comparison of prices only, that an equal amount of material or labor is purchased each month throughout the entire contract.

DELIVERY: FOB JEFFERSON PARISH

INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES est. 20-30 days ARO

LOUISIANA CONTRACTOR'S LICENSE NO.: (if applicable) N/A

THIS SECTION MUST BE COMPLETED BY BIDDER:

FIRM NAME: 3M Company

ADDRESS: 3M Center, Bldg 225-4N-14

CITY, STATE: St. Paul, MN ZIP: 55144-1000

TELEPHONE: (651) 736-4218 FAX: (888) 246-9793

EMAIL ADDRESS: tbidgroup@mmm.com

In the event that addenda are issued with this bid, bidders MUST acknowledge all addenda on the bid form. Bidder must acknowledge receipt of an addendum on the bid form as indicated. Failure to acknowledge any addendum on the bid form will result in bid rejection.

Acknowledge Receipt of Addenda: NUMBER: 1 (6/23/17)

NUMBER: _____

NUMBER: _____

NUMBER: _____

TOTAL PRICE OF ALL BID ITEMS: \$ 48,720.00

AUTHORIZED SIGNATURE: Denise McMahon

Denise McMahon

Printed Name

TITLE: Contract Administrator

SIGNING INDICATES YOU HAVE READ AND COMPLY WITH THE INSTRUCTIONS AND CONDITIONS.

NOTE: All bids should be returned with the BID NUMBER and BID OPENING DATE indicated on the outside of the envelope submitted to the Purchasing Department.

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00119827

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
1	30.00	PKG	TWO (2) YEAR CONTRACT FOR A SUPPLY OF THERMOPLASTIC PAVEMENT MARKINGS FOR THE JEFFERSON PARISH TRAFFIC ENGINEERING DIVISION 0010 - LEFT TURN ARROW EIGHT FEET STANDARD WHITE TWO PER PACK HOT TAPE PREMARK # 8330241L	No Bid	
2	10.00	PKG	0020 - STRAIGHT ARROW NINE FEET BY SIX INCHES STANDARD WHITE TWO PER PACK HOT TAPE PREMARK # 8330240	No Bid	
3	30.00	PKG	0030 - RIGHT TURN ARROW EIGHT FEET STANDARD WHITE TWO PER PACK HOT TAPE PREMARK # 8330241R	No Bid	
4	15.00	PKG	0040 - RIGHT/STRAIGHT ARROW TWELVE FEET BY NINE INCHES WHITE ONE PER PACK HOT TAPE PREMARK # 8330142R	No Bid	
5	15.00	PKG	0050 - LEFT/STRAIGHT ARROW TWELVE FEET BY NINE INCHES STANDARD WHITE ONE PER PACK HOT TAPE PREMARK # 8330142L	No Bid	
6	20.00	PKG	0060 - "ONLY" LEGEND EIGHT FEET WHITE ONE PER PACK HOT TAPE PREMARK # 8130102	No Bid	
7	20.00	PKG	0070 - "RXR" KIT SIX FEET BY SIXTEEN INCHES BY	No Bid	

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00119827

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
8	30.00	PKG	BY TWENTY FEET WHITE ONE PER PACK HOT TAPE PREMARK # 8130103A 0080 - "SCHOOL" LEGEND EIGHT FEET	No Bid	
9	15.00	PKG	WHITE ONE PER PACK HOT TAPE 0090 - "SCHOOL" LEGEND TEN FEET	No Bid	
10	10.00	PKG	WHITE ONE PER PACK HOT TAPE PREMARK # 8120100 0100 - HANDICAP KIT WHITE ON BLUE FORTY EIGHT INCHES BY FORTY EIGHT INCHES	No Bid	
11	20.00	PKG	TWO PER PACK 39 POUNDS PER PACK PREMARK HANDICAP MARKINGS WITH VIZIGRIP REMARKS NONE 0110 - BICYCLE SYMBOL PREMARK BIKE LANE MARKINGS WITH VIZIGRIP	No Bid	
12	20.00	PKG	SIX FEET BY THREE FEET FOUR INCHES ITEM NUMBER 89230576 HS FIVE PER PACK 35 POUNDS PER PACK FHWA STANDARD 0120 - SHARED LANE SYMBOL NINE FEET THREE INCHES BY	No Bid	
13	5.00	PKG	THREE FEET THREE INCHES ITEM NUMBER 892301464HS ONE PER PACK EIGHTEEN POUNDS PER PACK FHWA PROPOSED CALTRANS 0130 - LEFT SHARED BIKE LANE SYMBOL BOX PANEL LARGE-BIKE LANE GREEN VIZI GRIP BACKGROUND WHITE-VIZIGRIP SYMBOL MUTCD 2009 ITEM PM6902769LVG TWO PER PACK	No Bid	

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00119827

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
14	20.00	PKG	0140 - LIGHT GREEN LINE PM90LG Q15' VG24"	No Bid	
			PM SP SEALER REQUIRED/INCLUDED IN PRICE ITEM 89430566LGHS FIFTEEN FEET PER PACK	No Bid	
15	40.00	PKG	0150 - FOUR INCH SOLID WHITE FOUR INCHES BY THREE FEET	No Bid	
			SIXTY FEET PER PACK HOT TAPE PREMARK # 8432060	No Bid	
16	60.00	PKG	0160 - FOUR INCH SOLID YELLOW FOUR INCHES BY THREE FEET	No Bid	
			SIXTY FEET PER PACK HOT TAPE PREMARK # 8432060Y	No Bid	
17	70.00	PKG	0170 - EIGHT INCH SOLID WHITE EIGHT INCHES BY THREE FEET	No Bid	
			SIXTY FEET PER PACK HOT TAPE PREMARK # 8432062	No Bid	
18	95.00	PKG	0180 - TWELVE INCH SOLID WHITE TWELVE INCHES BY THREE FEET	No Bid	
			THIRTY FEET PER PACK HOT TAPE PREMARK # 8431064	No Bid	
19	60.00	PKG	0190 - TWELVE INCH SOLID YELLOW TWELVE INCHES BY THREE FEET	No Bid	
			THIRTY FEET PER PACK HOT TAPE PREMARK # 8431064Y	No Bid	
20	250.00	PKG	0200 - TWENTY FOUR INCH, SOLID WHITE LINES	No Bid	
			TWENTY FOUR INCHES BY THREE FEET FIFTEEN FEET PER PACK HOT TAPE PREMARK # 8430566	No Bid	
21	40.00	PKG	0210 - WHITE LINES 270 ES FOUR INCH WHITE		

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00119827

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
22	40.00	PKG	THIRTY YARDS PER PACK 3M A270 ES 0220 - WHITE LINES 270 ES EIGHT INCH WHITE 3M A270ES	\$121.80/roll	\$4,872.00
23	40.00	PKG	THIRTY YARDS PER PACK 0230 - WHITE LINES 270 ES TWELVE INCH WHITE 3M A270ES	\$243.60/roll	\$9,744.00
24	40.00	PKG	THIRTY YARDS PER PACK 0240 - YELLOW LINES 271 ES FOUR INCH YELLOW 3M A271ES	\$365.40/roll	\$14,616.00
25	40.00	PKG	THIRTY YARDS PER PACK 0250 - YELLOW LINES 271 ES TWELVE INCH YELLOW 3M A271ES	\$121.80/roll	\$4,872.00
26	20.00	EA	0260 - PREMARK SEALER FLINT ACCESSORIES FIVE GALLONS (EACH = 5 GALLON CONTAINERS) FIFTY POUNDS FOR CONCRETE APPLICATIONS	\$365.40/roll No bid	\$14,616.00
27	30.00	BX	0270 - WHITE/RED RAISED PAVEMENT MARKER ONE HUNDRED PER BOX	No bid	
28	30.00	BX	0280 - YELLOW RAISED PAVEMENT MARKER ONE HUNDRED PER BOX	No bid	
29	500.00	EA	0290 - WHITE DELINEATOR POST DURA-POST PREMARK # 730102	No bid	
30	500.00	EA	0300 - YELLOW DELINEATOR POST DURA-POST PREMARK # 730102Y	No bid	
31	300.00	EA	0310 - BASE WITH LOCK PIN EIGHT INCHES FOR USE WITH DELINEATORS	No bid	

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00119827

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
32	20.00	PK	PREMARK # 730160 0320 - BUNDY PLUS FIVE INCHES BY FIVE INCHES	No bid	
33	20.00	PK	BLACK RPM ADHESIVE ONE HUNDRED AND FORTY PER PACK (140/PK) PREMARK # 8430055BK	No bid	
34	8.00	EA	0330 - SUPER BUNDY PLUS PAD EIGHT INCHES BY EIGHT INCHES RPM ADHESIVE EIGHTY PER PACK PREMARK # 8434056	No bid	
			0340 - EXTRA LONG PROPANE FIELD TORCH KIT		

CORPORATE RESOLUTION

*** Please see 3M's Qualifications and Explanations page and the attached Power of Attorney document**

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF

INCORPORATED.

AT THE MEETING OF DIRECTORS OF _____
INCORPORATED, DULY NOTICED AND HELD ON _____,
A QUORUM BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED. IT
WAS:

RESOLVED THAT _____, BE AND IS HEREBY
APPOINTED, CONSTITUTED AND DESIGNATED AS AGENT AND ATTORNEY-IN-
FACT OF THE CORPORATION WITH FULL POWER AND AUTHORITY TO ACT ON
BEHALF OF THIS CORPORATION IN ALL NEGOTIATIONS, BIDDING, CONCERNS
AND TRANSACTIONS WITH THE PARISH OF JEFFERSON OR ANY OF ITS AGENCIES,
DEPARTMENTS, EMPLOYEES OR AGENTS, INCLUDING BUT NOT LIMITED TO, THE
EXECUTION OF ALL BIDS, PAPERS, DOCUMENTS, AFFIDAVITS, BONDS, SURETIES,
CONTRACTS AND ACTS AND TO RECEIVE ALL PURCHASE ORDERS AND NOTICES
ISSUED PURSUANT TO THE PROVISIONS OF ANY SUCH BID OR CONTRACT, THIS
CORPORATION HEREBY RATIFYING, APPROVING, CONFIRMING, AND ACCEPTING
EACH AND EVERY SUCH ACT PERFORMED BY SAID AGENT AND ATTORNEY-IN-
FACT.

I HEREBY CERTIFY THE FOREGOING TO BE
A TRUE AND CORRECT COPY OF AN
EXCERPT OF THE MINUTES OF THE ABOVE
DATED MEETING OF THE BOARD OF
DIRECTORS OF SAID CORPORATION, AND
THE SAME HAS NOT BEEN REVOKED OR
RESCINDED.

SECRETARY-TREASURER

DATE

Non-Public Works Bid Affidavit Instructions

- **Affidavit is supplied as a courtesy to Affiants, but it is the responsibility of the affiant to insure the affidavit they submit to Jefferson Parish complies, in both form and content, with federal, state and parish laws.**
- **Affidavit must be signed by an authorized representative of the entity or the affidavit will not be accepted.**
- **Affidavit must be notarized or the affidavit will not be accepted.**
- **Notary must sign name, print name, and include bar/notary number, or the affidavit will not be accepted.**
- **Affiant MUST select either A or B when required or the affidavit will not be accepted.**
- **Affiants who select choice A must include an attachment or the affidavit will not be accepted.**
- **If both choice A and B are selected, the affidavit will not be accepted.**
- **Affidavit marked N/A will not be accepted.**
- **It is the responsibility of the Affiant to submit a new affidavit if any additional campaign contributions are made after the affidavit is executed but prior to the time the council acts on the matter.**

Instruction sheet may be omitted when submitting the affidavit

Non-Public Works Bid

AFFIDAVIT

STATE OF Minnesota

PARISH/COUNTY OF Ramsey

BEFORE ME, the undersigned authority, personally came and appeared: Denise McMahan, (Affiant) who after being by me duly sworn, deposed and said that he/she is the fully authorized Contract Administrator of 3M Company (Entity), the party who submitted a bid in response to Bid Number 50-00119827, to the Parish of Jefferson.

Affiant further said:

Campaign Contribution Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A _____ Attached hereto is a list of all campaign contributions, including the date and amount of each contribution, made to current or former elected officials of the Parish of Jefferson by Entity, Affiant, and/or officers, directors and owners, including employees, owning 25% or more of the Entity during the two-year period immediately preceding the date of this affidavit or the current term of the elected official, whichever is greater. Further, Entity, Affiant, and/or Entity Owners have not made any contributions to or in support of current or former members of the Jefferson Parish Council or the Jefferson Parish President through or in the name of another person or legal entity, either directly or indirectly.

Choice B X _____ there are **NO** campaign contributions made which would require disclosure under Choice A of this section.

Debt Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A _____ Attached hereto is a list of all debts owed by the affiant to any elected or appointed official of the Parish of Jefferson, and any and all debts owed by any elected or appointed official of the Parish to the Affiant.

Choice B X _____ There are **NO** debts which would require disclosure under Choice A of this section.

Affiant further said:

That Affiant has employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for Affiant; and

[The remainder of this page is intentionally left blank.]

That no part of the contract price received by Affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for Affiant.

Denise McMahon
Signature of Affiant

Denise McMahon
Printed Name of Affiant

SWORN AND SUBSCRIBED TO BEFORE ME
ON THE 26th DAY OF June, 2017.

Laura Ann Henderson
Notary Public



LAURA HENDERSON
Printed Name of Notary

Notary/Bar Roll Number

My commission expires January 31, 2021.

STANDARD INSURANCE REQUIREMENTS – PUBLICLY ADVERTISED BIDS

All required insurance under this bid shall conform to Jefferson Parish Resolution No. 113646 or No. 113647, as applicable. Contractors may not commence any work under any ensuing contract unless and until all required insurance and associated evidentiary requirements thereto have been met, along with any additional specifications contained in the advertised bid. Except as where otherwise precluded by law, the Parish Attorney or his designee, with the concurrence of the Director of Risk Management or his designee, may agree on a case-by-case basis, to deviate from Jefferson Parish's standard insurance requirements, as provided in this Section. Vendors requesting deviation therefrom shall submit such requests in writing, along with compelling substantiation, to the Purchasing Department prior to the bid's due date. Any changes to the insurance requirements will be reflected in the bid specifications and addenda. Prior to contract execution and at all times thereafter during the term of such contract, contractors must provide and continuously maintain all coverages as required by the foregoing Resolutions, and the contract documents. Failure to do so shall be grounds for suspension, discontinuation or termination of the contract.

For bidding purposes, bidders must submit with bid submission a current (valid) insurance certificate evidencing the required coverages. Failure to comply will cause bid to be rejected. The current insurance certificate will be used for proof of insurance at time of evaluation. Thereafter, and prior to contract execution, the low bidder will be required to provide final insurance certificates to the Parish which shall name the Jefferson Parish, its Districts Departments and Agencies under the direction of the Parish President and the Parish Council as additional insureds regarding negligence by the contractor for the Commercial General Liability, Workmen's Compensation Insurance and the Comprehensive Automobile Liability policies. Additionally, said certificates should reflect the name of the Parish Department receiving goods and services and reference the respective Jefferson Parish bid number.

JEFFERSON PARISH REQUIRED STANDARD INSURANCE **WORKER'S COMPENSATION INSURANCE**

As required by Louisiana State Statute, exception; Employer's Liability, Section B shall be \$1,000,000 per occurrence when Work is to be over water and involves maritime exposures to cover all employees not covered under the State Worker's Compensation Act, otherwise this limit shall be no less than \$500,000 per occurrence.

Note: If your company is not required by law to carry workmen's compensation insurance, i.e. not a Louisiana company, sole employee of the company, then bidders must request a workmen's compensation insurance declaration affidavit prior to the bid opening date. This insurance declaration affidavit must be fully completed, signed, properly notarized and submitted with the bid. A scanned copy may be submitted with the bid; however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

COMMERCIAL GENERAL LIABILITY

Shall provide limits not less than the following: \$1,000,000.00 Combined Single Limit per Occurrence for bodily injury and property damage.

 COMPREHENSIVE AUTOMOBILE LIABILITY

Bodily injury liability \$1,000,000.00 each person; \$1,000,000.00 each occurrence.
Property Damage Liability \$1,000,000.00 each occurrence.

Note: This category may be omitted if bidders do not/will not utilize company vehicles for the project or do not possess company vehicles. Bidder must request an automobile insurance declaration affidavit prior to the bid opening date. This insurance declaration affidavit must be fully completed, signed, properly notarized and submitted with the bid. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid; however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

DEDUCTIBLES

No insurance required shall include a deductible not greater than \$10,000.00. The cost of the deductible shall be borne by the contractor.

NOTE: If the vendor requires a change in deductibles, the request must be submitted in writing to the Purchasing Department prior to the due date of the bid. Such request shall be reviewed by the Parish Attorney's Office with the concurrence of the Director of Risk Management.

UMBRELLA LIABILITY COVERAGE

An umbrella policy or excess may be used to meet minimum requirements.

FOR CONSTRUCTION AND RENOVATION PROJECTS:

The following are required unless otherwise specified in the bid. Such insurance is due upon contract execution.

1) OWNER'S PROTECTIVE LIABILITY

To be for the same limits of liability for bodily injury and property damage liability established for commercial general liability.

2) BUILDER'S RISK INSURANCE

The contractor shall maintain Builder's Risk Insurance at his own expense to insure both the owner (Parish of Jefferson) and contractor as their interest may appear.



June 23, 2017

Jefferson Parish Purchasing Department
Jefferson Parish General Gov't Building, Ste. 4400
200 Derbigny St.
Gretna, LA 70053

Subject: Bid #50-00119827

Qualifications and Explanations

Invitation to Bid, Page 1, Instructions for Bidders:

3M will comply with all applicable Louisiana law, Jefferson Parish ordinances, ethics codes and resolutions.

Invitation to Bid, Page 2, paragraph 2:

3M Company is a global, publicly traded company with annual sales in 2016 of approximately \$30B and approximately 90,000 employees worldwide. Because of 3M's size, it is impossible for 3M's Board to issue a corporate resolution for the thousands of transactions 3M participates in. 3M authorizes certain individuals to sign bid submissions on behalf of 3M Company and documents this authority with a Power of Attorney. The Power of Attorney authorizing the signature of Denise McMahon is attached to 3M's bid submission, documenting her authority to sign bids and proposals on behalf of 3M Company. Please see the attached 3M Power of Attorney document.

Instructions to Bidders, Page 2, paragraph C:

3M will agree to assign all material causes of action it may acquire under US or Louisiana antitrust laws.

Insurance Requirements, Page 2 of 3, Deductibles:

As a large, publicly traded company, 3M maintains a comprehensive risk management program with a combination of self-insured retentions and insurance to manage 3M's liability risks. 3M's self-insured retentions are significantly above \$10k, but with a market cap in excess of \$127B, 3M has adequate financial resources to cover any losses that arise within 3M's self-insured retention.

Insurance Requirements, Page 2 of 3, Owner's Protective Liability:

The scope of this procurement is the provision of pavement marking materials. No services are required. Accordingly, as this is the sale of goods, 3M will not provide Owner's Protective Liability insurance nor Builder's risk insurance as these are unnecessary in the scope of this procurement.

3M Company Government Contracts Power of Attorney

By the authority granted the undersigned by the Deputy General Counsel and Secretary, the individuals listed below are appointed as 3M's or its designated subsidiaries', true and lawful attorneys-in-fact for it, and its name, for commercially available products and services and government unique products and services (except research and development services*) for which 3M or its designated subsidiaries will be a prime contractor or subcontractor to any federal, state or municipal governmental agency in the United States, or to a federal, state or municipal prime contractor or higher tier subcontractor in the United States, to perform acts specified on behalf of this Corporation.

- (a) To submit or execute proposals, bids, binding purchase orders, contracts and subcontracts, and documents related thereto, (including certifications, representations and warranties** with the exception of country of origin certifications), the following attorneys-in-fact are hereby appointed. Authority may not be sub-delegated.

<p><u>3M Purification Inc.</u> Towne, Richard</p> <p><u>3M Unitek Corporation</u> TBD</p> <p><u>Advanced Materials Division</u> Davis, Scott Giancola, John Hanson, Scott Ingstad, Cheryl Lockhart, Bruce Magrini, Dave Moeller, Kent Pearson, Claudia Race, Robert Utley, Elizabeth</p> <p><u>Aero Technologies LLC.</u> Canniff, Perry Hinko, David</p> <p><u>Automotive and Aerospace Solutions Division</u> Canniff, Perry</p> <p><u>Critical and Chronic Care Solutions Division</u> McDonald, Michael</p> <p><u>Display Materials & Systems Division</u> Summers, Micki</p>	<p><u>Electrical Markets Division</u> Irwin, Mike McGurran, Dan</p> <p><u>Electronics Materials Solutions Division</u> Anderson, Kevin Koch, Joseph</p> <p><u>Food Safety Department</u> Erdman, Michelle Wadie, John</p> <p><u>Government R&D Contacts Department*</u> Charles, Ruth Kays, Steven</p> <p><u>Health Information Systems Division</u> Black, Lisa Cline, Jan Garrison, Garri Graves, Terri Jennings, Gerald Kim, Myung Mason, Deborah Mathison, John McDonough, James Mitchell, Brian</p>	<p><u>Industrial Adhesives & Tapes Division</u> Canniff, Perry (Federal Supply Schedules only)</p> <p><u>Infection Prevention Division</u> Haataja, Brian (Service Support only) McDonald, Michael</p> <p><u>Oral Care Solutions Division</u> TBD</p> <p><u>Personal Safety Division</u> Canniff, Perry Wesemann, Melissa</p> <p><u>Stationery & Office Supplies Division</u> Rihm, Diana</p> <p><u>Traffic Safety & Security Division</u> Benz, John Flatley, Doreen Leibel, Matthew Morris, John McMahon, Denise Pointon, David Roese, Arnie Selby, Megan Shilling, Mitzi</p>
--	---	---

Authority for the above individuals applies to the specific Business Unit or staff function indicated, subject to the limitations imposed by their respective General Manager/Vice President or equivalent.

Authority for the below individuals applies to any Business Unit or staff function.

<p><u>Global Channel Services</u> Hilfer, Derrick Mathers, Stephanie</p> <p><u>Office of General Counsel</u> Kuyath, Richard</p>	<p><u>Government Markets</u> Augustine, Rick Kiloran, Sarah Lundeen, Cheryl Patrick, Laurie Thill, Tony</p>	<p><u>Government Contract Compliance</u> Bordas, Rich Carr, Terrance Horwitz, Charles Paraschou, Maria Robinette, Thomas</p>
---	---	--

(b) To make Country of Origin Certification, the following attorney(s)-in-fact are hereby appointed:

<p><u>Trade Compliance Department</u></p>				
Goebel, Kathleen	Kirr, Ashley	LaMere, Pierre	Lukrafka Varassin, Magda	Mulinix, Jonathan

For all appointments, authority ceases or may be subsequently modified upon the individual's change in business unit, staff group or responsibilities, or when employment is terminated. Authority may be withdrawn or modified at any time.

This Power of Attorney revokes all prior Powers of Attorney with respect to the same matters and shall remain in effect until terminated by the undersigned or any other person authorized to grant powers of attorney on behalf of 3M. The undersigned has this Power of Attorney on this 13th day of June, 2017.

By 

Charles Horwitz
 Director, Government Contract Compliance
 3M Company

*Authority is delegated by 3M's Senior Vice President, Research and Development, and Chief Technology Officer, to the Vice President, Research and Development, for their respective 3M Business Groups, and to certain specified employees in GR&DC, to execute proposals, contracts, subcontracts (including certifications, representations and warranties to comply with certain laws and regulations) for government R&D services. Authority to sign country of origin certifications for government R&D services is delegated to the Trade Compliance Department as specified below.

**** Product or performance warranties are to be reviewed and accepted by any 3M individual granted authority or responsibility to do so by the applicable business unit or staff group.**



Stamark™ Pavement Marking Tape

Series 270 ES

Product Bulletin 270 ES

May 2011

Description

3M™ Stamark™ Pavement Marking Tape Series 270 ES is a retroreflective patterned polymer pavement marking that can be used as an inlay marking on new asphalt or as an overlay marking on asphalt and concrete pavement surfaces in good condition.

Series 270 ES tape offers “Extended Season” applications due to an improved pressure sensitive adhesive (PSA) package on the bottom surface.

Series 270 ES does not require 3M™ Stamark™ Surface Preparation Adhesive P-50 or 3M™ Stamark™ Low VOC Surface Preparation Adhesive SPA60 prior to application, if applied during the application season as outlined in the 3M Climate Guide for 3M™ Stamark™ Pavement Marking Tapes.

Series A270 ES: Unlined. Used for long lines, edge lines, channelizing lines, gore markings, stop bars and crosswalks.

Series L270 ES: Lined. Used to cut symbols and legends.

Series SMS-L270 ES: Lined. Precut symbols and legends.

Properties

A. Product Features

- Durable, conformable to pavement and retroreflective
- Embedded net provides increased tear resistance
- Pressure sensitive adhesive (PSA) on bottom surface
- No surface preparation adhesive required when applied within standard tape application season as by the 3M Climate Guide
- Can be applied early and late season, down to 40°F (4°C) with use of 3M™ Stamark™ Surface Preparation Adhesive P-50 or 3M™ Stamark™ Low VOC Surface Preparation Adhesive SPA60
- Retroreflective layer of glass beads bonded in a highly durable polyurethane topcoat

- Manufactured without the use of heavy metals, lead chromate pigments or other similar, lead containing chemicals
- Nominal thickness of 0.065 in. (1.6 mm) at pattern heights
- White: 270 ES
- Yellow: 271 ES

B. Reflectance

Series 270 ES tape has the following initial minimum retroreflectance values when measured in accordance with ASTM-D4061 and ASTM 4505. The photometric quality to be measured is coefficient of retroreflected luminance (R_L) and shall be expressed as:

English R_L : millicandelas per square foot per footcandle [(mcd • ft²) • fc⁻¹] or equivalently as:

Metric R_L : millicandelas per square meter per lux [(mcd • m²) • lx⁻¹]

	White	Yellow
Entrance Angle	88.76°	88.76°
Observation Angle	1.05°	1.05°
Retroreflected Luminance*	300	250

R_L [(mcd • ft²) • fc⁻¹]

*The quantity of retroreflected luminance (R_L) “relates to the way the effective retroreflective surface is focused on the retina of the human eye and to the visual effect thereby produced. It is recommended for describing the performance of highway signs and striping, or large vehicular markings which are commonly viewed as discernible surface areas.” Federal Test Method Standard 370, 3.1.2, Note 6, March 1, 1977.

C. Color

The preformed markings consist of white or yellow films with pigments selected and blended to conform to standard highway colors.

D. Skid Resistance

The patterned surface of the retroreflective pliant polymer shall provide an initial minimum skid resistance value of 45 BPN when tested according to ASTM E 303 except values will be taken in one direction and at 45° angle from that direction. These two values will then be averaged to find the skid resistance of the patterned surface.

E. Application

All applications should be installed using the instructions in the appropriate section of 3M Information Folder 270 ES. Surface preparation adhesive is not needed when applying the tape during the application season outlined in the 3M Climate Guide for 3M™ Stamark™ Pavement Marking Tapes. The tape can be applied down to 40°F (4°C) ambient temperature outside the dates outlined in the Climate Guide for Stamark pavement marking tapes with the use of 3M™ Stamark™ Surface Preparation Adhesive P-50 or 3M™ Stamark™ Low VOC Surface Preparation Adhesive SPA60. For long line applications, the P-50 or SPA60 surface preparation adhesive should be applied with a 3M™ Adhesive Spray Applicator PS-14. For transverse markings, the surface preparation adhesive should be applied using a solvent resistant 3/8 inch nap paint roller.

Road lanes are typically exposed to different levels of traffic shear exposure. Road lanes that are exposed to a high frequency of high shear turning, especially by trucks and other large vehicles, require use of SPA60 or P50 for application of Stamark pavement marking tapes. The following table summarized the product and surface preparation adhesive application recommendations by shear condition:

Contact 3M Technical Service at 1800-553-1380 for questions.

Shear Level	Product and Adhesive Recommendation
Very High Shear	Stamark Tape Use SPA60
High Shear	Stamark Tape "A" and "L" Series Use SPA60
Pounds per 100 sq ft	Stamark Tape "A" and "L" Series Use P50 or SPA60
Low Shear	Stamark Tape "A" and "L" Series

Within the Climate Guide Recommendations

F. Patchability

Heavy traffic and snow plowing may cause wear and damage. New materials can be installed in these areas with minimal surface preparation by following

the manufacturer's recommendations. Remove the damaged material and replace the damaged area by following the instructions in "Overlay Applications" of 3M Information Folder 270 ES.

General Performance Considerations

Stamark pavement marking tapes are highly effective traffic control devices when properly applied according to 3M recommendations provided in product bulletins and information folders.

The durability of Series 270 ES tape will depend on traffic conditions, snow removal practices, application techniques used, and pavement and atmospheric conditions at the time of application. Damage will be caused by heavy trucks, excessive encroachment (crossover) on high ADT roadways, narrow lane width, unpaved shoulders, snow removal and ice control techniques. It is recommended that the customer thoroughly evaluate Stamark tapes under the conditions in the specified location before making large-scale applications. While experience has shown that, properly applied, these materials are highly effective traffic control devices, 3M makes no generalized performance claims.

Storage

Store in a cool, dry area indoors. Use within one year of receipt.

Health and Safety Information

Read all health hazard, precautionary and first-aid statements found in the Material Safety Data Sheet (MSDS) and/or product label of chemicals prior to handling or use. Also refer to the MSDS for information about the volatile organic compound (VOC) content of chemical products. Consult local regulations and authorities for possible restrictions on product VOC content and/or VOC emissions. Electronically, visit us at www.3M.com/us and select MSDS search.

Literature Reference

For additional information on Stamark tapes, application instructions or application equipment, refer to the following publications:

- IF 270 ES Application Guidelines for 3M™ Stamark™ Tape Series 270 ES
- IF 5.2 Information Folder for 3M Highway Tape Applicator - HTA
- IF 5.7 Pavement Surface Preparation and Application Procedures for Stamark Pavement Marking Tapes
- IF 5.8 Application of 3M Stamark Precut Symbols and Legends
- IF 5.17 Instructions for using 3M Stamark Surface Preparation Adhesive P-50 for 3M Stamark Pavement Tapes
- IF 5.21 Instructions for using 3M Stamark Low VOC Surface Preparation Adhesive SPA60 for 3M Stamark Pavement Marking Tapes

FOR INFORMATION OR ASSISTANCE CALL:

1-800-553-1380

IN CANADA CALL:

1-800-265-1840

Internet:

www.3M.com/tss

3M assumes no responsibility for any injury, loss or damage arising out of the use of a product that is not of our manufacture. Where reference is made in literature to a commercially available product, made by another manufacturer, it shall be the user's responsibility to ascertain the precautionary measures for its use outlined by the manufacturer.

Important Notice

All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and the following is made in lieu of all warranties, or conditions express or implied. Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct, special or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for his/her intended use, and user assumes all risk and liability whatsoever in connection therewith. Statements or recommendations not contained herein shall have no force or effect unless in an agreement signed by officers of seller and manufacturer.

3M and Stamark are trademarks of 3M. Used under license in Canada.



Traffic Safety Systems Division
3M Center, Building 0235-03-A-09
St. Paul, MN 55144-1000
1-800-553-1380
www.3M.com/tss

3M Canada Company
P.O. Box 5757
London, Ontario N6A 4T1
1-800-3MHELPS

3M México, S.A. de C.V.
Av. Santa Fe No. 55
Col. Santa Fe, Del. Alvaro Obregón
México, D.F. 01210

Please recycle.
© 3M 2011. All rights reserved.
Bolger 11050135
Electronic Only