

CONTRACT DOCUMENTS

LANCASTER COUNTY

**Annual Supply
Traffic Control and Custom Signs
City of Lincoln - Bid No. 17-062**

**Contractor:
Vulcan Signs (Vulcan Inc.)
PO Box 1850
Foley, AL 36536-1850
Vendor Phone No. 251-943-1541**

**LANCASTER COUNTY
CONTRACT**

THIS CONTRACT, made and entered into by and between Vulcan Signs (Vulcan Inc.), PO Box 1850, Foley, AL 36536-1850 hereinafter called "Contractor", and the County of Lancaster, Nebraska, a political subdivision of the State of Nebraska, hereinafter called the "County".

WHEREAS, Neb. Rev. Stat. § 23-3109(1)(d)(iii) allows for waiver of bidding requirements when the price has been established by a cooperative purchasing agreement by which supplies and equipment are procured in accordance with a contract established by another governmental entity or group of governmental entities if the contract was established in accordance with the laws and regulations applicable to the establishing governmental entity or, if a group, the lead governmental entity; and

WHEREAS, the County through local inter-governmental cooperative purchasing have chosen to participate in the contract between the City of Lincoln and Vulcan Signs (Vulcan Inc.), for Traffic Control and Custom Signs, Bid No. 17-062, which was prepared in accordance with the City of Lincoln's usual and customary laws, procedures and policies, and has approved and adopted said documents connected with said, Work, to-wit:

for all materials and equipment necessary to supply and deliver Traffic Control and Custom Signs for Lancaster County Engineering, in compliance with the prices as established via the Contract between the City of Lincoln and Vulcan Signs (Vulcan Inc.), executed on March 20, 2017.

WHEREAS, the Contractor, in response to the County's request to participate in said contract, has submitted to the County, an offer approving County's participation under the same pricing structure, terms and conditions as the City of Lincoln and Vulcan Signs (Vulcan Inc.), with only those exceptions stated herein; and

WHEREAS, the City of Lincoln, in the manner usual and customary to their laws, policies and procedures has opened, read, examined, and canvassed the Proposals submitted in response to the proposal request, and as a result of such canvass has determined and declared the Contractor to be the lowest responsible bidder for the said Work for the sum or sums named in the City of Lincoln and Vulcan Signs (Vulcan Inc.) Contract, Bid No. 17-062, a copy thereof being attached to and made a part of this Contract; and

NOW, THEREFORE, in consideration of the sums to be paid to the Contractor and the mutual covenants herein contained, the Contractor and the County hereby agree as follows:

1. The Contractor agrees to (a) furnish all tools, equipment, supplies, superintendence, transportation, and other accessories, services, and facilities necessary to provide Traffic Control and Custom Signs for Lancaster County Engineering, as the County may determine.
2. Term of the Contract. The initial term of this contract will begin upon execution through March 20, 2019.
 - 2.1 Upon conclusion of the initial term, the contract has the option of two (2) additional one (1) year renewals, not to exceed the term of the City of Lincoln Contract.
 - 2.2 Any renewal of the contract will be under the same terms and conditions as the original agreement.
3. Pricing. Pricing for these services are pursuant to the Contract between the City of Lincoln and Vulcan Signs (Vulcan Inc.), Bid No. 17-062, a copy thereof being attached to and made a part of this Contract.

The County shall order on an as-needed basis for the duration of the contract. The total cost of products or services for the County shall not exceed \$45,000.00 during the contract term without approval by the Lancaster County Board of Commissioners.

- 3.1 Terms of payment shall be *net* thirty (30) days for all services meeting the County's Specifications and approval. Each location will have a separate account number and billing address. The

County may choose to pay the vendor using an Electronic Funds Transfer. If this option is used, any discounts available to the City of Lincoln shall be made available to the County.

4. Equal Employment Opportunity. In connection with the carrying out of this project, the Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, disability, age or marital status. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, ancestry, disability, age or marital status. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other compensation; and selection for training, including apprenticeship.
5. E-Verify. In accordance with Neb. Rev. Stat. 4-108 through 4-114, the contractor agrees to register with and use a federal immigration verification system, to determine the work eligibility status of new employees performing services within the state of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324 a, otherwise known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of a newly hired employee pursuant to the Immigration Reform and Control Act of 1986. The Contractor shall not discriminate against any employee or applicant for employment to be employed in the performance of this section pursuant to the requirements of state law and 8 U.S.C.A 1324b. The contractor shall require any subcontractor to comply with the provisions of this section.
6. Termination. This Contract may be terminated by the following:
 - 6.1 Termination for Convenience. Either party may terminate this Contract upon thirty (30) days written notice to the other party for any reason without penalty.
 - 6.2 Termination for Cause. The County may terminate the Contract for cause if the Contractor:
 - 6.2.1 Refuses or fails to supply the proper labor, materials and equipment necessary to provide Traffic Control and Custom Signs.
 - 6.2.2 Disregards Federal, State or local laws, ordinances, regulations, resolutions or orders.
 - 6.2.3 Otherwise commits a substantial breach or default of any provision of the Contract Document. In the event of a substantial breach or default the County will provide the Contractor written notice of said breach or default and allow the Contractor ten (10) days from the date of the written notice to cure such breach or default. If said breach or default is not cured within ten (10) days from the date of notice, then the contract shall terminate.
7. Independent Contractor. It is the express intent of the parties that this contract shall not create an employer-employee relationship. Employees of the Contractor shall not be deemed to be employees of the County and employees of the County shall not be deemed to be employees of the Contractor. The Contractor and the County shall be responsible to their respective employees for all salary and benefits. Neither the Contractor's employees nor the County's employees shall be entitled to any salary, wages, or benefits from the other party, including but not limited to overtime, vacation, retirement benefits, workers' compensation, sick leave or injury leave. Contractor shall also be responsible for maintaining workers' compensation insurance, unemployment insurance for its employees, and for payment of all federal, state, local and any other payroll taxes with respect to its employees' compensation.
8. The parties agree that the terms and conditions of this Contract shall prevail and govern in the case of any such inconsistent or additional terms in the Contract between the City of Lincoln and Vulcan Signs (Vulcan Inc.), Bid No. 17-062.

The Contract Documents comprise the Contract, and consist of the following:

1. Copy of City of Lincoln Contract, Bid No. 17-062

2. Tax forms

This Contract Agreement together with the other Contract Documents herein above mentioned, form this Contract, and are a part of the Contract as if hereto attached.

The Contractor and the County hereby agree that all the terms and conditions of this Contract shall be binding upon themselves, and their heirs, administrators, executors, legal and personal representatives, successors, and assigns.

IN WITNESS WHEREOF, the Contractor and the County do hereby execute this contract upon completion of signatures on:

Vendor Signature Page
Lancaster County Signature Page

Vendor Signature Page

CONTRACT
Annual Supply – Traffic Control and Custom Signs
City of Lincoln – Bid No. 17-062
Lancaster County
Vulcan Signs (Vulcan Inc.)

EXECUTION BY CONTRACTOR

IF A CORPORATION:

Attest:

Secretary Seal

Vulcan Inc., d/b/a Vulcan Signs
Name of Corporation

PO BOX 1850 Foley, AL 36536
Address:

By: 
Duty Authorized Official David B. Beviacqua

General Manager
Legal Title of Official

IF OTHER TYPE OF ORGANIZATION:

Name of Organization

Type of Organization

Address

By: _____
Member

By: _____
Member

IF AN INDIVIDUAL:

Name

Address

Signature

Lancaster County Signature Page

CONTRACT
Annual Supply – Traffic Control and Custom Signs
City of Lincoln – Bid No. 17-062
Lancaster County
Vulcan Signs (Vulcan Inc.)

EXECUTION BY LANCASTER COUNTY, NEBRASKA

Contract Approved as to Form:

The Board of County Commissioners of
Lancaster, Nebraska

Deputy Lancaster County Attorney

dated _____

**AMENDMENT TO CONTRACT
Annual Supply
Traffic Control and Custom Signs
Bid No. 17-062
City of Lincoln
Renewal
Vulcan Signs (Vulcan Inc.)**

This Amendment is hereby entered into by and between Vulcan Signs (Vulcan Inc.), PO Box 1850, Foley, AL 36536-1850 (hereinafter "Contractor") and City of Lincoln (hereinafter "City"), for the purpose of amending the Contract dated March 20, 2017, executed under City Executive Order No. 90499, for Annual Supply - Traffic Control and Custom Signs, Bid No. 17-062, which is made a part hereof by this reference.

WHEREAS, the original term of the Contract is March 20, 2017 through March 19, 2018, with the option to renew for three (3) additional one (1) year terms upon written mutual consent of both parties; and

WHEREAS, the parties hereby renew the Contract for an additional one (1) year term beginning March 20, 2018 through March 19, 2019; and

WHEREAS, the expenditures for the City of Lincoln Public Works and Utilities Department for the term of this renewal shall not exceed \$250,000.00 without approval by the City of Lincoln; and

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in the Contract, under City Executive Order No. 90499 and stated herein the parties agree as follows:

- 1) The parties hereby renew the Contract for an additional one (1) year term beginning March 20, 2018 through March 19, 2019.
- 2) The expenditures for the City of Lincoln Public Works and Utilities Department for the term of this renewal shall not exceed \$250,000.00 without approval by the City of Lincoln.
- 3) All other terms of the Contract, not in conflict with this Amendment, shall remain in full force and effect.

The Parties do hereby agree to all the terms and conditions of this Amendment. This Amendment shall be binding upon the parties, their heirs, administrators, executors, legal and personal representatives, successors, and assigns.

IN WITNESS WHEREOF, the Parties do hereby execute this Amendment upon completion of signatures on:

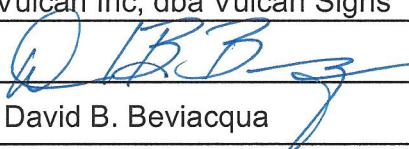
Vendor Signature Page
City Signature Page

Vendor Signature Page

AMENDMENT TO CONTRACT
Annual Supply
Traffic Control and Custom Signs
Bid No. 17-062
City of Lincoln
Renewal
Vulcan Signs (Vulcan Inc.)

Please sign, date and return within 5 days of receipt.

Mail to: City/County Purchasing
 Attn: Brianne Crooks
 440 So. 8th St., Ste. 200
 Lincoln, NE 68508
 Or email to: bcrooks@lincoln.ne.gov

Company Name:	Vulcan Inc, dba Vulcan Signs
By: (Please Sign)	
By: (Please Print)	David B. Beviacqua
Title:	General Manager
Company Address:	PO Box 1850 Foley, AL 36536
Company Phone & Fax:	800-633-6845 251-943-1544
E-Mail Address:	vulcan3@vulcaninc.com
Date:	1/30/2018
Contact Person for: "Orders or Service"	Customer Service Representative
Contact Phone Number:	800-633-6845

City of Lincoln Signature Page

AMENDMENT TO CONTRACT
Annual Supply
Traffic Control and Custom Signs
Bid No. 17-062
City of Lincoln
Renewal
Vulcan Signs (Vulcan Inc.)

EXECUTION BY THE CITY OF LINCOLN, NEBRASKA

ATTEST:

Teresa J. Medley

City Clerk



CITY OF LINCOLN, NEBRASKA

Chris Beutler

Chris Beutler, Mayor

Approved by Executive Order No. 091575

dated 2-26-18

Tracking No. 17030005

CONTRACT DOCUMENTS

**CITY OF LINCOLN
NEBRASKA**

**Annual Supply
Traffic Control and Custom Signs
Bid No. 17-062**

**Vulcan Signs (Vulcan Inc.)
PO Box 1850
Foley, AL 36536-1850
(251) 943-1541**

**CITY OF LINCOLN
CONTRACT TERMS**

THIS CONTRACT, made and entered into by and between **Vulcan Signs (Vulcan Inc.), PO Box 1850, Foley, AL 36536-1850**, hereinafter called "Contractor", and the City of Lincoln, Nebraska, a municipal corporation, hereinafter called "City".

WHEREAS, the City has caused to be prepared, in accordance with law, Specifications, Plans, and other Contract Documents for the Work herein described, and has approved and adopted said documents and has caused to be published an advertisement for and in connection with said Work, to-wit:

Traffic Control and Custom Signs, Bid No. 17-062

and,

WHEREAS, the Contractor, in response to such advertisement, has submitted to the City, in the manner and at the time specified, a sealed Proposal/Supplier Response in accordance with the terms of said advertisement; and,

WHEREAS, the City, in the manner prescribed by law has publicly opened, read aloud, examined, and canvassed the Proposals/Supplier Responses submitted in response to such advertisement, and as a result of such canvass has determined and declared the Contractor to be the lowest responsible bidder for the said Work for the sum or sums named in the Contractor's Proposal/Supplier Responses, a copy thereof being attached to and made a part of this Contract;

NOW, THEREFORE, in consideration of the sums to be paid to the Contractor and the mutual covenants herein contained, the Contractor and the City has agreed and hereby agree as follows:

1. The Contractor agrees to (a) furnish all tools, equipment, supplies, superintendence, transportation, and other accessories, services, and facilities; (b) furnish all materials, supplies, and equipment specified to be incorporated into and form a permanent part of the complete work; (c) provide and perform all necessary labor in a substantial and workmanlike manner and in accordance with the provisions of the Contract Documents; and (d) execute and complete all Work included in and covered by the City's award of this Contract to the Contractor, such award being based on the acceptance by the City of the Contractor's Proposal, or part thereof, as follows:

Agreement to full proposal

2. The City agrees to pay to the Contractor for the performance of the Work embraced in this Contract, the Contractor agrees to accept as full compensation therefore, the following sums and prices for all Work covered by and included in the Contract award and designated above, payment thereof to be made in the manner provided by the City:

The City will pay for products/service, according to the Line Item pricing as listed in Contractors Proposal/Supplier Response, a copy thereof being attached to and made a part of this Contract. The City shall order on an as needed basis for the duration of the contract. The cost of products or services for City departments shall not exceed \$250,000.00 during the contract term without approval.

3. Equal Employment Opportunity. In connection with the carrying out of this project, the contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, disability, age or marital status. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, ancestry, disability, age or marital status. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other compensation; and selection for training, including apprenticeship.
4. E-Verify. In accordance with Neb. Rev. Stat. 4-108 through 4-114, the contractor agrees to register with and use a federal immigration verification system, to determine the work eligibility status of new employees performing services within the state of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program of the

Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324 a, otherwise known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of a newly hired employee pursuant to the Immigration Reform and Control Act of 1986. The Contractor shall not discriminate against any employee or applicant for employment to be employed in the performance of this section pursuant to the requirements of state law and 8 U.S.C.A 1324b. The contractor shall require any subcontractor to comply with the provisions of this section.

5. Termination. This Contract may be terminated by the following:
 - 5.1) Termination for Convenience. Either party may terminate this Contract upon thirty (30) days written notice to the other party for any reason without penalty.
 - 5.2) Termination for Cause. The City may terminate the Contract for cause if the Contractor:
 - 5.2.1) Refuses or fails to supply the proper labor, materials and equipment necessary to provide services and/or commodities.
 - 5.2.2) Disregards Federal, State or local laws, ordinances, regulations, resolutions or orders.
 - 5.2.3) Otherwise commits a substantial breach or default of any provision of the Contract Document. In the event of a substantial breach or default the City will provide the Contractor written notice of said breach or default and allow the Contractor ten (10) days from the date of the written notice to cure such breach or default. If said breach or default is not cured within ten (10) days from the date of notice, then the contract shall terminate.
6. Independent Contractor. It is the express intent of the parties that this contract shall not create an employer-employee relationship. Employees of the Contractor shall not be deemed to be employees of the City and employees of the City shall not be deemed to be employees of the Contractor. The Contractor and the City shall be responsible to their respective employees for all salary and benefits. Neither the Contractor's employees nor the City's employees shall be entitled to any salary, wages, or benefits from the other party, including but not limited to overtime, vacation, retirement benefits, workers' compensation, sick leave or injury leave. Contractor shall also be responsible for maintaining workers' compensation insurance, unemployment insurance for its employees, and for payment of all federal, state, local and any other payroll taxes with respect to its employees' compensation.
7. Period of Performance. This Contract shall be effective upon execution by both parties. The term of the Contract shall be a one (1) year term with the option to renew for three (3) additional one (1) year terms.
8. The Contract Documents comprise the Contract, and consist of the following:
 1. Contract Terms
 2. Accepted Proposal/Supplier Response
 3. Specifications
 4. Instructions to Bidders
 5. Notice to Bidders
 6. Sales Tax Exemption Form 13
(Note: This form cannot be used for the WATER Division of the City of Lincoln. The WATER Division is taxable per Reg. 066.14A or applicable laws.)

The herein above mentioned Contract Documents form this Contract and are a part of the Contract as if hereto attached. Said documents which are not attached to this document may be viewed at: lincoln.ne.gov - Keyword: Bid - Awarded or Closed bids.

The Contractor and the City hereby agree that all the terms and conditions of this Contract shall be binding upon themselves, and their heirs, administrators, executors, legal and personal representatives, successors, and assigns.

IN WITNESS WHEREOF, the Contractor and the City do hereby execute this contract upon completion of signatures on:

Vendor Signature Page
City of Lincoln Signature Page

Vendor Signature Page

**CONTRACT
Annual Supply
Traffic Control and Custom Signs
Bid No. 17-062
City of Lincoln
Vulcan Signs (Vulcan Inc.)**

EXECUTION BY CONTRACTOR

IF A CORPORATION:

Attest:

Secretary Seal

Vulcan Inc. dba Vulcan Signs
Name of Corporation

P.O. Box 1850 Foley, AL 36536
Address

By: 
Duly Authorized Official David B. Beviacqua

Sales Manager
Legal Title of Official

IF OTHER TYPE OF ORGANIZATION:

Name of Organization

Type of Organization

Address

By: _____
Member

By: _____
Member

IF AN INDIVIDUAL:

Name

Address

Signature

City of Lincoln Signature Page

**CONTRACT
Annual Supply
Traffic Control and Custom Signs
Bid No. 17-062
City of Lincoln
Vulcan Signs (Vulcan Inc.)**

EXECUTION BY THE CITY OF LINCOLN, NEBRASKA

ATTEST:

Teresa J. Meier

City Clerk



CITY OF LINCOLN, NEBRASKA

Chris Beutler

Chris Beutler, Mayor

Approved by Executive Order No. _____

-- 090499

dated 3-20-17

City of Lincoln/Lancaster County (Lincoln Purchasing) Supplier Response

Bid Information		Contact Information		Ship to Information
Bid Creator	Sharon Mulder Asst Purchasing Agent	Address	Purchasing 440 S. 8th St. Lincoln, NE 68508	Address
Email	smulder@lincoln.ne.gov	Contact	Sharon Mulder Asst Purchasing Agent	Contact
Phone	(402) 441-7428			
Fax	(402) 441-6513			
Bid Number	17-062	Department		Department
Title	Annual Supply - Traffic Control and Custom Signs	Building	Suite 200	Building
Bid Type	Bid	Floor/Room		Floor/Room
Issue Date	2/8/2017 12:00 PM (CT)	Telephone	(402) 441-7428	Telephone
Close Date	2/22/2017 12:00:00 PM (CT)	Fax	(402) 441-6513	Fax
		Email	smulder@lincoln.ne.gov	Email

Supplier Information

Company Vulcan Signs (Vulcan Inc.)
 Address PO Box 1850
 Foley, AL 36536-1850
 Contact J. Todd Koniar
 Department
 Building
 Floor/Room
 Telephone (251) 943-1541
 Fax (251) 943-7590
 Email vulcan1@vulcaninc.com
 Submitted 2/22/2017 09:36:38 AM (CT)
 Total \$20,513.04

By submitting your response, you certify that you are authorized to represent and bind your company.

Signature David B. Beviacqua

Email vulcan3@vulcaninc.com

Supplier Notes

Bid Notes

Bid Activities

Bid Messages

Bid Attributes

Please review the following and respond where necessary

#	Name	Note	Response
1	Instructions to Bidders	I acknowledge reading and understanding the Instructions to Bidders.	Yes
2	U.S. Citizenship Attestation	<p>Is your company legally considered an Individual or Sole Proprietor: YES or NO</p> <p>As a Vendor who is legally considered an Individual or a Sole Proprietor I hereby understand and agree to comply with the requirements of the United States Citizenship Attestation Form, available at: http://www.sos.ne.gov/business/notary/citizenforminfo.html</p> <p>All awarded Vendors who are legally considered an Individual or a Sole Proprietor must complete the form and submit it with contract documents at time of execution.</p> <p>If a Vendor indicates on such attestation form that he or she is a qualified alien, the Vendor agrees to provide the US Citizenship and Immigration Services documentation required to verify the Vendor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.</p> <p>Vendor further understands and agrees that lawful presence in the United States is required and the Vendor may be disqualified or the Contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. 4-108.</p>	No
3	Specifications	I acknowledge reading and understanding the specifications.	Yes
4	Sample Contract	I acknowledge reading and understanding the sample contract.	Yes
5	Purchase Order, Contract and Delivery Contact	<p>The City/County Purchasing Department issues Purchase Orders and Contracts via email to a designated contact person of the awarded Vendor. This designee will be the primary contact with the department through the delivery of the product/services.</p> <p>Please list the name, email address and phone number of the person who will be the contact person for the PO to be awarded.</p>	David B. Beviacqua/Sales Manager vulcan3@vulcaninc.com 800-633-6845
6	Delivery	State number of delivery days ARO. FOB to the City/County at the location specified with all transportation charges paid.	30-45 Days ARO FOB: Lincoln, Nebraska
7	Insurance Requirements and Endorsements	<p>Vendor agrees to the applicable terms listed in the Insurance Clause document including the submission of the Certificate of Accord and the following endorsements:</p> <ol style="list-style-type: none"> 1. Additional Insured - City of Lincoln. 2. Workers Compensation. <p>Insurance Certificate and required Endorsements are required at time of contract execution by the vendor.</p>	Yes
8	Bid Documents	I acknowledge and accept that it is my responsibility as a Bidder to promptly notify the Purchasing Department Staff prior to the close of the bid of any ambiguity, inconsistency or error which I may discover upon examination of the bid documents including, but not limited to the Specifications.	Yes

9	Quantities	I acknowledge that the quantities listed for each line item are an estimated yearly amount. The City does not guarantee any dollar amount or order quantities for the term of the contract.	Y
10	Contact	Name of person submitting this bid:	David B. Beviacqua/Sales Manager
11	Renewal is an Option	Contract Extension Renewal is an option.	Yes
12	Special Provision Term Contract Provisions	I acknowledge reading and understanding the Special Provision Term Contract Provisions.	Yes
13	Term Clause of Contract	I acknowledge that the term of the contract is for a one (1) year term with the option for three (3) additional one (1) year renewals from the date of the executed contract. (a) Are your bid prices firm for the first one (1) year contract period. YES or NO _____ (b) Are your bid prices subject to escalation/de-escalation YES or NO _____ (c) If (b), state period for which prices will remain firm: through _____	a) yes c) one year from award date
14	Bid Award	a) I acknowledge and understand that the City, County and/or Public Building Commission reserves the right to award bids item-by-item, with or without alternates/options, by groups, or "lump sum" such as shall best serve the requirements and interests of the City, County and/or Public Building Commission. Do you agree and understand? Yes/No _____ b) Is your pricing based on all-or-nothing basis, please indicate is so. Yes/No _____	Yes
15	Warranty	Per Specifications Section 4, attached to the Response Attachment Section of the E-bid is a copy of the manufactured warranty.	Yes
16	Tax Exempt Certification Forms	Materials being purchased in this bid are tax exempt and unit prices are reflected as such. A Purchasing Agent Appointment form and a Exempt Sales Certificate form shall be issued with contract documents. (Note: State Tax Law does not provide for sales tax exemption for proprietary functions for government, thereby excluding the purchases of pipes to be installed in water lines and purchase of water meters.)	Yes
17	Electronic Signature	Please check here for your electronic signature.	Yes

Line Items

#	Qty	UOM	Description	Response
1	1	Ea	Traffic Control and Custom Signs - Please enter a zero in line item amount as pricing will be entered on attached spreadsheet.	\$20,513.04
Item Notes: Fill out the itemized Excel spreadsheet attached below. Attach completed spreadsheet on the 'Response Attachments' of your response.				
Supplier Notes:				
			Response Total:	\$20,513.04

Line Items

#	QTY	UOM	Description						Response			
			Designation	Sign/Plaque	Size (Inch)					Sheeting	Plate	USD
					W	x	H	x	T			
STANDARD STREET NAME SIGNS: LINE ITEMS 1 - 16												
PUNCHED VERTICAL CL 3/8" DIA. 1" FROM TOP AND BOTTOM, HORIZONTAL CL 5/16" DIA. 1" FROM EACH END												
1	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	6	x	6	x	0.063	HIP	RSA	\$1.55
2	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	12	x	6	x	0.063	HIP	RSA	\$2.47
3	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	18	x	6	x	0.063	HIP	RSA	\$3.41
4	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	24	x	6	x	0.063	HIP	RSA	\$4.38
5	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	30	x	6	x	0.063	HIP	RSA	\$5.47
6	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	36	x	6	x	0.063	HIP	RSA	\$6.57
7	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	42	x	6	x	0.080	HIP	RSA	\$7.66
8	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	48	x	6	x	0.080	HIP	RSA	\$8.76
9	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	24	x	9	x	0.063	HIP	RSA	\$6.57
10	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	30	x	9	x	0.063	HIP	RSA	\$8.19
11	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	36	x	9	x	0.063	HIP	RSA	\$9.92
12	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	42	x	9	x	0.080	HIP	RSA	\$12.84
13	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	48	x	9	x	0.080	HIP	RSA	\$14.74
14	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	54	x	9	x	0.080	HIP	RSA	\$15.98
15	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	60	x	9	x	0.080	HIP	RSA	\$17.74
16	1	EA	D SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	66	x	9	x	0.080	HIP	RSA	\$19.52
17	STANDARD MUTCD SIGNS: LINE ITEMS 19 - 179											
18	ONE STANDARD MUTCD COLOR, WITH OR WITHOUT STANDARD HOLE PUNCH (SPECIFIED ON ORDER)											

19	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	6 x 12 x 0.063	HIP	RSA	\$2.47
20	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	9 x 12 x 0.063	HIP	RSA	\$3.41
21	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	12 x 12 x 0.063	HIP	RSA	\$4.45
22	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	18 x 12 x 0.063	HIP	RSA	\$6.57
23	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	24 x 12 x 0.080	HIP	RSA	\$9.81
24	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	30 x 12 x 0.080	HIP	RSA	\$11.85
25	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	36 x 12 x 0.080	HIP	RSA	\$14.22
26	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	42 x 12 x 0.080	HIP	RSA	\$16.59
27	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	48 x 12 x 0.080	HIP	RSA	\$18.96
28	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	54 x 12 x 0.080	HIP	RSA	\$21.33
29	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	60 x 12 x 0.080	HIP	RSA	\$23.70
30	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	66 x 12 x 0.080	HIP	RSA	\$26.07
31	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	72 x 12 x 0.080	HIP	RSA	\$28.44
32	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	78 x 12 x 0.080	HIP	RSA	\$30.81
33	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	84 x 12 x 0.080	HIP	RSA	\$33.18
34	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	90 x 12 x 0.080	HIP	RSA	\$35.55
35	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	96 x 12 x 0.080	HIP	RSA	\$37.92
36	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	102 x 12 x 0.080	HIP	RSA	\$40.29
37	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	108 x 12 x 0.080	HIP	RSA	\$42.66
38	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	114 x 12 x 0.080	HIP	RSA	\$45.03
39	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	120 x 12 x 0.080	HIP	RSA	\$47.40
40	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	30 x 18 x 0.100	DG3	RSA	\$25.61
41	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	36 x 18 x 0.100	DG3	RSA	\$30.73
42	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	42 x 18 x 0.125	DG3	RSA	\$39.38

43	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	48 x 18 x 0.125	DG3	RSA	\$45.00
44	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	54 x 18 x 0.125	DG3	RSA	\$50.63
45	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	60 x 18 x 0.125	DG3	RSA	\$56.25
46	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	66 x 18 x 0.125	DG3	RSA	\$61.88
47	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	72 x 18 x 0.125	DG3	RSA	\$67.50
48	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	78 x 18 x 0.125	DG3	RSA	\$73.13
49	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	84 x 18 x 0.125	DG3	RSA	\$78.75
50	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	90 x 18 x 0.125	DG3	RSA	\$84.38
51	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	96 x 18 x 0.125	DG3	RSA	\$90.00
52	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	102 x 18 x 0.125	DG3	RSA	\$95.63
53	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	108 x 18 x 0.125	DG3	RSA	\$101.25
54	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	114 x 18 x 0.125	DG3	RSA	\$106.88
55	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	120 x 18 x 0.125	DG3	RSA	\$112.50
56	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	126 x 18 x 0.125	DG3	RSA	\$118.13
57	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	132 x 18 x 0.125	DG3	RSA	\$123.75
58	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	138 x 18 x 0.125	DG3	RSA	\$129.38
59	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	144 x 18 x 0.125	DG3	RSA	\$135.00
60	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	30 x 20 x 0.100	DG3	RSA	\$28.46
61	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	36 x 20 x 0.100	DG3	RSA	\$34.15
62	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	42 x 20 x 0.125	DG3	RSA	\$43.75
63	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	48 x 20 x 0.125	DG3	RSA	\$50.00
64	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	54 x 20 x 0.125	DG3	RSA	\$56.25
65	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	60 x 20 x 0.125	DG3	RSA	\$62.50
66	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	66 x 20 x 0.125	DG3	RSA	\$68.75

67	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	72 x 20 x 0.125	DG3	RSA	\$75.00
68	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	78 x 20 x 0.125	DG3	RSA	\$81.25
69	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	84 x 20 x 0.125	DG3	RSA	\$87.50
70	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	90 x 20 x 0.125	DG3	RSA	\$93.75
71	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	96 x 20 x 0.125	DG3	RSA	\$99.98
72	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	102 x 20 x 0.125	DG3	RSA	\$106.25
73	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	108 x 20 x 0.125	DG3	RSA	\$112.50
74	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	114 x 20 x 0.125	DG3	RSA	\$118.75
75	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	120 x 20 x 0.125	DG3	RSA	\$125.00
76	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	126 x 20 x 0.125	DG3	RSA	\$131.25
77	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	132 x 20 x 0.125	DG3	RSA	\$137.50
78	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	138 x 20 x 0.125	DG3	RSA	\$143.75
79	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	144 x 20 x 0.125	DG3	RSA	\$150.00
80	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	30 x 24 x 0.080	HIP	RSA	\$23.70
81	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	36 x 24 x 0.080	HIP	RSA	\$28.44
82	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	42 x 24 x 0.125	HIP	RSA	\$42.00
83	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	48 x 24 x 0.125	HIP	RSA	\$48.00
84	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	54 x 24 x 0.125	HIP	RSA	\$54.00
85	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	60 x 24 x 0.125	HIP	RSA	\$60.00
86	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	66 x 24 x 0.125	HIP	RSA	\$66.00
87	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	72 x 24 x 0.125	HIP	RSA	\$72.00
88	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	78 x 24 x 0.125	HIP	RSA	\$78.00
89	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	84 x 24 x 0.125	HIP	RSA	\$84.00
90	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	90 x 24 x 0.125	HIP	RSA	\$90.00

91	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	96 x 24 x 0.125	HIP	RSA	\$96.00
92	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	102 x 24 x 0.125	HIP	RSA	\$102.00
93	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	108 x 24 x 0.125	HIP	RSA	\$108.00
94	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	114 x 24 x 0.125	HIP	RSA	\$114.00
95	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	120 x 24 x 0.125	HIP	RSA	\$120.00
96	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	126 x 24 x 0.125	HIP	RSA	\$126.00
97	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	132 x 24 x 0.125	HIP	RSA	\$132.00
98	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	138 x 24 x 0.125	HIP	RSA	\$138.00
99	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	144 x 24 x 0.125	HIP	RSA	\$144.00
100	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	30 x 30 x 0.100	HIP	RSA	\$33.13
101	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	36 x 30 x 0.100	HIP	RSA	\$39.75
102	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	42 x 30 x 0.125	HIP	RSA	\$52.50
103	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	48 x 30 x 0.125	HIP	RSA	\$60.00
104	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	54 x 30 x 0.125	HIP	RSA	\$67.50
105	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	60 x 30 x 0.125	HIP	RSA	\$75.00
106	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	66 x 30 x 0.125	HIP	RSA	\$82.50
107	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	72 x 30 x 0.125	HIP	RSA	\$90.00
108	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	78 x 30 x 0.125	HIP	RSA	\$97.50
109	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	84 x 30 x 0.125	HIP	RSA	\$105.00
110	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	90 x 30 x 0.125	HIP	RSA	\$112.50
111	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	96 x 30 x 0.125	HIP	RSA	\$120.00
112	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	102 x 30 x 0.125	HIP	RSA	\$127.50
113	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	108 x 30 x 0.125	HIP	RSA	\$135.00
114	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	114 x 30 x 0.125	HIP	RSA	\$142.50

115	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	120 x 30 x 0.125	HIP	RSA	\$150.00
116	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	126 x 30 x 0.125	HIP	RSA	\$157.50
117	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	132 x 30 x 0.125	HIP	RSA	\$165.00
118	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	138 x 30 x 0.125	HIP	RSA	\$172.50
119	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	144 x 30 x 0.125	HIP	RSA	\$180.00
120	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	30 x 36 x 0.080	HIP	RSA	\$35.55
121	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	36 x 36 x 0.100	HIP	RSA	\$42.66
122	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	42 x 36 x 0.080	HIP	RSA	\$49.77
123	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	48 x 36 x 0.800	HIP	RSA	\$56.88
124	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	54 x 36 x 0.080	HIP	RSA	\$63.99
125	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	60 x 36 x 0.125	HIP	RSA	\$90.00
126	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	66 x 36 x 0.125	HIP	RSA	\$99.00
127	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	72 x 36 x 0.125	HIP	RSA	\$108.00
128	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	78 x 36 x 0.125	HIP	RSA	\$117.00
129	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	84 x 36 x 0.125	HIP	RSA	\$126.00
130	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	90 x 36 x 0.125	HIP	RSA	\$135.00
131	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	96 x 36 x 0.125	HIP	RSA	\$144.00
132	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	102 x 36 x 0.125	HIP	RSA	\$153.00
133	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	108 x 36 x 0.125	HIP	RSA	\$162.00
134	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	114 x 36 x 0.125	HIP	RSA	\$171.00
135	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	120 x 36 x 0.125	HIP	RSA	\$180.00
136	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	126 x 36 x 0.125	HIP	RSA	\$189.00
137	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	132 x 36 x 0.125	HIP	RSA	\$198.00
138	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	138 x 36 x 0.125	HIP	RSA	\$207.00

139	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	144 x 36 x 0.125	HIP	RSA	\$216.00
140	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	30 x 42 x 0.100	HIP	RSA	\$46.38
141	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	36 x 42 x 0.100	HIP	RSA	\$55.65
142	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	42 x 42 x 0.125	HIP	RSA	\$73.50
143	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	48 x 42 x 0.125	HIP	RSA	\$84.00
144	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	54 x 42 x 0.125	HIP	RSA	\$94.50
145	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	60 x 42 x 0.125	HIP	RSA	\$105.00
146	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	66 x 42 x 0.125	HIP	RSA	\$115.50
147	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	72 x 42 x 0.125	HIP	RSA	\$126.00
148	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	78 x 42 x 0.125	HIP	RSA	\$136.50
149	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	84 x 42 x 0.125	HIP	RSA	\$147.00
150	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	90 x 42 x 0.125	HIP	RSA	\$157.60
151	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	96 x 42 x 0.125	HIP	RSA	\$168.00
152	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	102 x 42 x 0.125	HIP	RSA	\$178.50
153	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	108 x 42 x 0.125	HIP	RSA	\$189.00
154	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	114 x 42 x 0.125	HIP	RSA	\$199.50
155	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	120 x 42 x 0.125	HIP	RSA	\$210.00
156	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	126 x 42 x 0.125	HIP	RSA	\$220.50
157	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	132 x 42 x 0.125	HIP	RSA	\$231.00
158	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	138 x 42 x 0.125	HIP	RSA	\$241.50
159	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	144 x 42 x 0.125	HIP	RSA	\$252.00
160	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	30 x 48 x 0.100	HIP	RSA	\$53.00
161	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	36 x 48 x 0.100	HIP	RSA	\$63.60
162	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	42 x 48 x 0.125	HIP	RSA	\$84.00

163	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	48 x 48 x 0.125	HIP	RSA	\$96.00
164	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	54 x 48 x 0.125	HIP	RSA	\$108.00
165	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	60 x 48 x 0.125	HIP	RSA	\$120.00
166	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	66 x 48 x 0.125	HIP	RSA	\$132.00
167	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	72 x 48 x 0.125	HIP	RSA	\$144.00
168	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	78 x 48 x 0.125	HIP	RSA	\$156.00
169	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	84 x 48 x 0.125	HIP	RSA	\$168.00
170	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	90 x 48 x 0.125	HIP	RSA	\$180.00
171	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	96 x 48 x 0.125	HIP	RSA	\$192.00
172	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	102 x 48 x 0.125	HIP	RSA	\$204.00
173	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	108 x 48 x 0.125	HIP	RSA	\$216.00
174	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	114 x 48 x 0.125	HIP	RSA	\$228.00
175	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	120 x 48 x 0.125	HIP	RSA	\$240.00
176	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	126 x 48 x 0.125	HIP	RSA	\$252.00
177	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	132 x 48 x 0.125	HIP	RSA	\$264.00
178	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	138 x 48 x 0.125	HIP	RSA	\$276.00
179	1	EA	ANY SERIES	GUIDE SIGN, DESTINATION, STREET NAME, OTHER	144 x 48 x 0.125	HIP	RSA	\$288.00
180	STANDARD MUTCD REGULATORY UNLESS OTHERWISE NOTED (STANDARD COLORS ONLY) LINE ITEMS: 182-225							
181	*CITY OF LINCOLN LAYOUT SPECIFIED/SUPPLIED UPON QUOTE REQUEST/ORDER; **SPEED SPECIFIED ON ORDER (BY 5 MPH)							
182	250	EA	R1-1	STOP	30 x 30 x 0.080	HIP	RSA	\$21.29
183	250	EA	R1-1	STOP	36 x 36 x 0.080	HIP	RSA	\$30.85
184	100	EA	R1-2	YIELD	36 x 36 x 0.080	HIP	RSA	\$15.72
185	100	EA	R2-1**	SPEED LIMIT	24 x 30 x 0.080	HIP	RSA	\$16.75
186	100	EA	R2-1**	SPEED LIMIT	30 x 36 x 0.080	HIP	RSA	\$25.13

187	15	EA	R3-1,2,3,4,18,27	MOVEMENT PROHIBITION	24 x 24 x 0.080	HIP	RSA	\$13.40
188	15	EA	R3-1,2,3,4,18,27	MOVEMENT PROHIBITION	36 x 36 x 0.100	DG3	RSA	\$52.74
189	100	EA	R3-5,5A	MANDATORY LANE CONTROL	30 x 36 x 0.080	DG3	RSA	\$39.98
190	75	EA	R3-6	OPTIONAL MOVEMENT LANE CONTROL	30 x 36 x 0.080	DG3	RSA	\$39.98
191	30	EA	R3-7	RIGHT/LEFT LANE MUST TURN RIGHT/LEFT	30 x 30 x 0.080	HIP	RSA	\$20.94
192	30	EA	R3-7	RIGHT/LEFT LANE MUST TURN RIGHT/LEFT	36 x 36 x 0.100	HIP	RSA	\$34.65
193	20	EA	R3-8 SERIES*	LANE USAGE	30 x 30 x 0.080	HIP	RSA	\$20.94
194	5	EA	R3-8 SERIES*	LANE USAGE	36 x 30 x 0.080	HIP	RSA	\$25.13
195	5	EA	R3-8 SERIES*	LANE USAGE	42 x 30 x 0.080	HIP	RSA	\$29.31
196	5	EA	R3-8 SERIES*	LANE USAGE	48 x 30 x 0.080	HIP	RSA	\$33.50
197	5	EA	R3-8 SERIES*	LANE USAGE	54 x 30 x 0.080	HIP	RSA	\$37.69
198	100	EA	R4-7,7a,7b	KEEP RIGHT	18 x 24 x 0.080	HIP	RSA	\$10.05
199	150	EA	R4-7,7a,7b	KEEP RIGHT	24 x 30 x 0.080	HIP	RSA	\$16.75
200	25	EA	R5-1	DO NOT ENTER	30 x 30 x 0.080	HIP	RSA	\$20.94
201	25	EA	R5-1	DO NOT ENTER	36 x 36 x 0.100	HIP	RSA	\$34.65
202	10	EA	R5-3	NO MOTOR VEHICLES	24 x 24 x 0.063	HIP	RSA	\$12.00
203	10	EA	R5-6	NO BICYCLES	24 x 24 x 0.080	HIP	RSA	\$13.64
204	200	EA	R6-1	ONE WAY (LEFT/RIGHT)	36 x 12 x 0.080	HIP	RSA	\$10.05
205	100	EA	R6-2	ONE WAY(LEFT/RIGHT)	24 x 36 x 0.080	HIP	RSA	\$20.10
206	5	EA	R6-3,3A	DIVIDED HIGHWAY CROSSING	30 x 24 x 0.080	HIP	RSA	\$16.75
207	30	EA	R6-4	ROUNDABOUT DIR. 2 CHEVRON	30 x 24 x 0.080	HIP	RSA	\$16.75
208	30	EA	R6-4a	ROUNDABOUT DIR. 3 CHEVRON	48 x 24 x 0.080	HIP	RSA	\$26.80
209	30	EA	R6-4b	ROUNDABOUT DIR. 4 CHEVRON	60 x 24 x 0.080	HIP	RSA	\$33.50
210	30	EA	R6-5P	ROUNDABOUT CIRCULATION PLAQUE	30 x 30 x 0.080	HIP	RSA	\$20.94

211	200	EA	R7 SERIES*	PARKING RESTRICTION	12 x 18 x 0.063	HIP	RSA	\$4.88
212	25	EA	R7 SERIES*	PARKING RESTRICTION	12 x 24 x 0.063	HIP	RSA	\$6.50
213	25	EA	R7 SERIES*	PARKING RESTRICTION	12 x 30 x 0.063	HIP	RSA	\$8.13
214	25	EA	R7 SERIES*	PARKING RESTRICTION	12 x 36 x 0.063	HIP	RSA	\$10.05
215	250	EA	R7-1*	PARKING RESTRICTION	12 x 18 x 0.063	HIP	RSA	\$4.88
216	250	EA	R7-1R/L*	PARKING RESTRICTION	12 x 18 x 0.063	HIP	RSA	\$4.88
217	50	EA	R7-5*	PARKING RESTRICTION	12 x 18 x 0.063	HIP	RSA	\$4.88
218	50	EA	R7-8*	PARKING RESTRICTION	12 x 18 x 0.063	HIP	RSA	\$4.88
219	50	EA	R7-107	PARKING RESTRICTION	12 x 18 x 0.063	HIP	RSA	\$4.88
220	50	EA	R7-107R	PARKING RESTRICTION	12 x 18 x 0.063	HIP	RSA	\$4.88
221	50	EA	R7-107L	PARKING RESTRICTION	12 x 18 x 0.063	HIP	RSA	\$4.88
222	10	EA	R7-108*	PARKING RESTRICTION	12 x 18 x 0.063	HIP	RSA	\$4.88
223	20	EA	R9-3	NO PEDESTRIAN CROSSING	18 x 18 x 0.063	HIP	RSA	\$7.31
224	25	EA	R10-6	STOP HERE ON RED	24 x 36 x 0.080	HIP	RSA	\$20.10
225	50	EA	R10-11	NO TURN ON RED BALL	36 x 48 x 0.100	DG3	RSA	\$46.80
226	INTERSTATE, HIGHWAY AND ARROWS: LINE ITEMS 228 - 234							
227	*ALL STANDARD MUTCD COLORS, COLOR SPECIFIED/SUPPLIED UPON QUOTE REQUEST/ORDER, LINE ITEMS 230 - 234							
228	10	EA	M1-1	INTERSTATE ROUTE SIGN (1-2 DIGITS)	24 x 24 x 0.063	HIP	RSA	\$14.34
229	10	EA	M1-1	INTERSTATE ROUTE SIGN (3 DIGITS)	24 x 30 x 0.063	HIP	RSA	\$18.51
230	10	EA	M1-4	US ROUTE SIGN	24 x 24 x 0.063	HIP	RSA	\$11.76
231	5	EA	M2-1	JUNCTION	21 x 15 x 0.063	HIP	RSA	\$7.33
232	12	EA	M3-1,2,3,4	CARDINAL DIRECTION*	24 x 12 x 0.063	HIP	RSA	\$5.88
233	25	EA	M5-1,2	ADVANCE TURN ARROW*	21 x 15 x 0.063	HIP	RSA	\$7.33
234	25	EA	M6-1,2,2a,4,5,6,7	DIRECTIONAL ARROW*	21 x 15 x 0.063	HIP	RSA	\$7.33

235	SCHOOL SIGNS: LINE ITEMS 236 - 242						
236	100	EA	S1-1	SCHOOL ADVANCE (FYG)	36 x 36 x 0.100	DG3 RSA	\$53.26
237	5	EA	W16-5P	HORIZONTAL ARROW (FYG)	24 x 12 x 0.063	DG3 RSA	\$10.19
238	5	EA	W16-6P	ADVANCE LEFT/RIGHT ARROW (FYG)	24 x 12 x 0.063	DG3 RSA	\$10.19
239	50	EA	W16-7P	45 DOWN LEFT/RIGHT ARROW (FYG)	24 x 12 x 0.063	DG3 RSA	\$10.19
240	50	EA	W16-9P	AHEAD (FYG)	24 x 12 x 0.063	DG3 RSA	\$10.19
241	10	EA	S5-1	SCHOOL SPEED ADVISORY (FYG/W/B)	24 x 48 x 0.100	DG3 RSA	\$51.62
242	25	EA	S5-2,3	END SCHOOL ZONE/SPEED LIMIT	24 x 30 x 0.080	DG3 RSA	\$27.12
243	WARNING SIGNS- STANDARD HOLE PUNCHING FOR SPECIFIED SIGN: LINE ITEMS 244 - 293						
244	1	EA	ANY WARNING	MUTCD STANDARD YELLOW/BLACK	9 x 24 x 0.063	HIP RSA	\$5.14
245	1	EA	ANY WARNING	MUTCD STANDARD YELLOW/BLACK	12 x 24 x 0.063	HIP RSA	\$6.74
246	1	EA	ANY WARNING	MUTCD STANDARD YELLOW/BLACK	18 x 24 x 0.063	HIP RSA	\$8.82
247	1	EA	ANY WARNING	MUTCD STANDARD YELLOW/BLACK	24 x 24 x 0.063	HIP RSA	\$11.76
248	1	EA	ANY WARNING	MUTCD STANDARD YELLOW/BLACK	30 x 30 x 0.080	HIP RSA	\$20.94
249	1	EA	ANY WARNING	MUTCD STANDARD YELLOW/BLACK	36 x 36 x 0.100	HIP RSA	\$34.65
250	25	EA	OM1-3, OM4-3	TYPE 1 OBJECT MARKER - NO BUTTONS	18 x 18 x 0.063	HIP RSA	\$7.55
251	25	EA	OM2-2V,H	TYPE 2 OBJECT MARKER -NO BUTTONS	6 x 12 x 0.063	HIP RSA	\$2.23
252	100	EA	OM3-L, C, R	TYPE 3 OBJECT MARKER	12 x 36 x 0.080	HIP RSA	\$10.05
253	5	EA	W1-1,2,3,4,5	HORIZONTAL ALIGNMENT	30 x 30 x 0.080	HIP RSA	\$20.94
254	5	EA	W1-1,2,3,4,5	HORIZONTAL ALIGNMENT	36 x 36 x 0.100	HIP RSA	\$34.65
255	25	EA	W1-6	HORIZONTAL ARROW	48 x 24 x 0.100	HIP RSA	\$30.80
256	25	EA	W1-7	DOUBLE ENDED ARROW	48 x 24 x 0.100	HIP RSA	\$30.80
257	25	EA	W1-8	CHEVRON	18 x 24 x 0.063	HIP RSA	\$8.82
258	1	EA	W1-10	COMBINATION HORIZONTAL ALIGNMENT	36 x 36 x 0.100	HIP RSA	\$34.65

259	5	EA	W2-1,2,3,4,5,6,7,8	INTERSECTION WARNING	30 x 30 x 0.080	HIP	RSA	\$20.94
260	10	EA	W3-1,2,3	ADVANCED TRAFFIC CONTROL	30 x 30 x 0.080	HIP	RSA	\$20.94
261	20	EA	W3-4	BE PREPARED TO STOP	36 x 36 x 0.100	HIP	RSA	\$34.65
262	5	EA	W3-5	REDUCED SPEED LIMIT AHEAD	36 x 36 x 0.100	HIP	RSA	\$34.65
263	10	EA	W4-1	MERGE	36 x 36 x 0.100	HIP	RSA	\$34.65
264	4	EA	W4-3	ADDED LANE	36 x 36 x 0.100	HIP	RSA	\$34.65
265	1	EA	W4-4P	ONCOMING TRAFFIC DOES NOT STOP	24 x 12 x 0.063	HIP	RSA	\$5.88
266	1	EA	W6-3	TWO WAY TRAFFIC	36 x 36 x 0.100	HIP	RSA	\$34.65
267	10	EA	W8-1,2	BUMP OR DIP	30 x 30 x 0.080	HIP	RSA	\$20.94
268	10	EA	W8-1,2	BUMP OR DIP	36 x 36 x 0.100	HIP	RSA	\$34.65
269	10	EA	W8-13	BRIDGE ICES BEFORE ROAD	36 x 36 x 0.100	HIP	RSA	\$34.65
270	5	EA	W8-18	ROAD MAY FLOOD	36 x 36 x 0.100	HIP	RSA	\$34.65
271	5	EA	W9-1	LEFT/RIGHT LANE ENDS	36 x 36 x 0.100	HIP	RSA	\$34.65
272	10	EA	W9-2	LANE ENDS MERGE LEFT/RIGHT	36 x 36 x 0.100	HIP	RSA	\$34.65
273	25	EA	W10-1	GRADE CROSSING ADVANCE WARNING	36 x 36 x 0.100	HIP	RSA	\$34.65
274	5	EA	W10-2,3,4,11,12	GRADE CROSSING AND INTERSECTION ADVANCE	36 x 36 x 0.100	HIP	RSA	\$34.65
275	10	EA	W10-9P	NO TRAIN HORN	30 x 24 x 0.080	HIP	RSA	\$16.75
276	10	EA	W10-15P	ROUGH CROSSING	30 x 24 x 0.080	HIP	RSA	\$16.75
277	10	EA	W11-1	BICYCLE (FYG)	30 x 30 x 0.080	HIP	RSA	\$20.94
278	25	EA	W11-2	PEDESTRIAN (FYG)	30 x 30 x 0.080	HIP	RSA	\$20.94
279	25	EA	W11-2	PEDESTRIAN (FYG)	36 x 36 x 0.100	HIP	RSA	\$34.65
280	10	EA	W11-8	EMERGENCY VEHICLE (FIRETRUCK)	30 x 30 x 0.080	HIP	RSA	\$20.94
281	10	EA	W11-8	EMERGENCY VEHICLE (FIRETRUCK)	36 x 36 x 0.100	HIP	RSA	\$34.65
282	50	EA	W11-15	BICYCLE/PEDESTRIAN (FYG)	30 x 30 x 0.080	HIP	RSA	\$20.94

283	50	EA	W11-15	BICYCLE/PEDESTRIAN (FYG)	36 x 36 x 0.100	HIP	RSA	\$34.65
284	10	EA	W12-1	DOUBLE ARROW	30 x 30 x 0.080	HIP	RSA	\$20.94
285	10	EA	W12-1	DOUBLE ARROW	36 x 36 x 0.100	HIP	RSA	\$34.65
286	5	EA	W12-2	LOW CLEARANCE W/ARROWS	36 x 36 x 0.100	HIP	RSA	\$34.65
287	20	EA	W13-1P	ADVISORY SPEED PLAQUE	18 x 18 x 0.063	HIP	RSA	\$7.55
288	15	EA	W14-1,2	DEAD END, NO OUTLET	30 x 30 x 0.080	HIP	RSA	\$20.94
289	15	EA	W14-1,2	DEAD END, NO OUTLET	36 x 36 x 0.100	HIP	RSA	\$34.65
290	10	EA	W14-1a,2a	DEAD END, NO OUTLET W/ARROW	38 x 8 x 0.080	HIP	RSA	\$7.51
291	2	EA	W16-1P	SHARE THE ROAD	18 x 24 x 0.080	HIP	RSA	\$10.05
292	10	EA	W16-13P	WHEN FLASHING	24 x 18 x 0.080	HIP	RSA	\$10.05
293	5	EA	W17-1	SPEED HUMP/BUMP	30 x 30 x 0.080	HIP	RSA	\$20.94
294	SIGNS OTHER THAN STANDARD MUTCD (CUSTOM)							
295	LINE ITEMS 297 - 320 ARE FOR COSTING/ORDERING OF (CUSTOM) FABRICATED SIGN ONLY							
296	ALUMINUM PLATE (FOR STANDARD PLATES NOT CUSTOM CUT)W/W/O STANDARD HOLE PUNCH SPECIFIED AT QUOTE OR ORDER							
297	1	SF	ALUMINUM FOR SIGN FABRICATION		12 x 12 x 0.063			\$1.53
298	1	SF	ALUMINUM FOR SIGN FABRICATION		12 x 12 x 0.080			\$1.94
299	1	SF	ALUMINUM FOR SIGN FABRICATION		12 x 12 x 0.100			\$2.43
300	1	SF	ALUMINUM FOR SIGN FABRICATION		12 x 12 x 0.125			\$3.03
301	SHEETING CHARGES (APPLIED TO PLATE)							
302	1	SF	ADVANCED ENGINEER GRADE PRISMATIC SERIES 7930		12 x 12			\$0.90
303	1	SF	HIGH INTENSITY PRISMATIC (HIP) SERIES 3930		12 x 12			\$1.45
304	1	SF	DIAMOND GRADE CUBED SERIES 4000		12 x 12			\$3.26
305	COLOR GRAHIC APPLIED TO SHEETED PLATE (FABRICATED)							
306	1	SF	ONE COLOR EC FILM		12 x 12			\$1.05

307	1	SF	TWO COLOR EC FILM	12 x 12	\$2.09
308	1	SF	THREE COLOR EC FILM	12 x 12	\$3.15
309	1	SF	FOUR COLOR EC FILM	12 x 12	\$4.20
310	1	SF	FIVE COLOR EC FILM	12 x 12	\$5.25
311	1	SF	ONE COLOR SCREEN PRINT	12 x 12	\$0.12
312	1	SF	TWO COLOR SCREEN PRINT	12 x 12	\$0.23
313	1	SF	THREE COLOR SCREEN PRINT	12 x 12	\$0.35
314	1	SF	FOUR COLOR SCREEN PRINT	12 x 12	\$0.46
315	1	SF	FIVE COLOR SCREEN PRINT	12 x 12	\$0.58
316	1	SF	ONE COLOR DIGITAL PRINT	12 x 12	\$0.55
317	1	SF	TWO COLOR DIGITALPRINT	12 x 12	\$0.55
318	1	SF	THREE COLOR DIGITAL PRINT	12 x 12	\$0.55
319	1	SF	FOUR COLOR DIGITAL PRINT	12 x 12	\$0.55
320	1	SF	FIVE COLOR DIGITAL PRINT	12 x 12	\$0.55
321	LINE ITEMS 322 - 330 ARE APPLICABLE TO ALL SIGNS				
322	1	SF	PLATE THICKNESS UPCHARGE FROM 0.063 TO .08	12 x 12	\$0.45
323	1	SF	PLATE THICKNESS UPCHARGE FROM 0.063 TO 0.1	12 x 12	\$0.90
324	1	SF	PLATE THICKNESS UPCHARGE FROM 0.063 TO 0.125	12 x 12	\$1.52
325	1	SF	PLATE THICKNESS UPCHARGE FROM 0.08 TO 0.1	12 x 12	\$0.48
326	1	SF	PLATE THICKNESS UPCHARGE FROM 0.08 TO 0.125	12 x 12	\$1.10
327	1	SF	PLATE THICKNESS UPCHARGE FROM 0.100 TO 0.125	12 x 12	\$0.62
328	1	SF	SHEETING UPGRADE CHARGE FROM HIP TO DG3	12 x 12	\$2.23
329	1	SF	SHEETING PRICE REDUCTION FROM DG3 TO HIP	12 x 12	\$1.50
330	1	SF	SHEETING PRICE REDUCTION FROM HIP TO EGP	12 x 12	\$0.40

331	1	EA	UPCHARGE FOR 'FOLDABLE' SIGN DIAMOND 36 x 36	\$18.75
332	MINIMUM ORDER IN USD TO AVOID ADDITIONAL SHIPPING COSTS LISTED IN LINE ITEMS: 333 -334			\$1,000.00
333	1	EA	LESS THAN MINIMUM ORDER FREIGHT CHARGE (UPS/FED EX GROUND)	\$65.00
334	1	EA	LESS THAN MINIMUM ORDER FREIGHT CHARGE (TRUCK)	\$100.00



High Intensity Prismatic Reflective Sheeting Series 3930

Product Bulletin 3930

January 2013

Replaces PB 3930 dated January 2012

Description

3M™ High Intensity Prismatic Reflective Sheeting Series 3930 is a non-metalized microprismatic lens reflective sheeting designed for production of reflective durable traffic control signs, work zone devices and delineators that are exposed vertically in service. Applied to properly prepared sign substrates, 3M high intensity prismatic sheeting provides long-term reflectivity and durability. Series 3930 sheeting is available in the following colors.

Color	Product Code
White	3930
Yellow	3931
Red	3932
Orange	3934
Blue	3935
Green	3937
Brown	3939
Color – TT Series	
White – thermal transfer (TT) printable	3930TT
Yellow – TT printable	3931TT

Table A Daytime color specification limits¹

Color	x		y		x		y		Daytime Luminance Limit	
	x	y	x	y	x	y	x	y	Min.	Max.
White	0.303	0.300	0.368	0.366	0.340	0.393	0.274	0.329	27	
Yellow	0.498	0.412	0.557	0.422	0.479	0.520	0.438	0.472	15	45
Red	0.648	0.351	0.735	0.265	0.629	0.281	0.565	0.346	2.5	15
Orange	0.558	0.352	0.636	0.364	0.570	0.429	0.506	0.404	10	30
Blue	0.140	0.035	0.244	0.210	0.190	0.255	0.065	0.216	1	10
Green	0.026	0.399	0.166	0.364	0.286	0.446	0.207	0.771	3	12
Brown	0.430	0.340	0.610	0.390	0.550	0.450	0.430	0.390	1	9

¹The four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Standard Colorimetric System.

Photometrics

Daytime Color (x,y,Y)

The chromaticity coordinates and total luminance factor of the retroreflective sheeting conform to Table A.

Color Test – Ordinary Colored Sheeting

Conformance to standard chromaticity (x, y) and luminance factor (Y %) requirements shall be determined by instrumental method in accordance with ASTM E 1164 on sheeting applied to smooth aluminum test panels cut from Alloy 6061-T6 or 5052-H38. The values shall be determined on a HunterLab ColorFlex 45/0 spectrophotometer. Computations shall be done for CIE Illuminant D65 and the 2° standard observer.²

²The instrumentally determined color values of retroreflective sheeting can vary significantly depending on the make and model of colorimetric spectrophotometer as well as the color and retroreflective optics of the sheeting (David M. Burns and Timothy J. Donahue, Measurement Issues in the Color Specification of Fluorescent Retroreflective Materials for High Visibility Traffic Signing and Personal Safety Applications, Proceedings of SPIE: Fourth Oxford Conference on Spectroscopy, 4826, pp. 39-49, 2003). For the purposes of this document, the HunterLab ColorFlex 45/0 spectrophotometer shall be the referee instrument.

Coefficients of Retroreflection (R_A)

The values in Table B are minimum coefficients of retroreflection expressed in candelas per lux per squaremeter (cd/lux/m²).

Test for Coefficients of Retroreflection

Conformance to coefficient of retroreflection requirements shall be determined by instrumental method in accordance with ASTM E-810 “Test Method for Coefficient of Retroreflection of Retroreflective Sheeting”, and per E-810 the values of 0° and 90° rotation are averaged to determine the R_A in Table B.

Table B

Minimum Coefficient of Retroreflection R_A for new fluorescent sheeting (cd/lux/m²)

-4° Entrance Angle ³	Observation Angle ⁴	
	0.2°	0.5°
White	560	200
Yellow	420	150
Red	84	30
Orange	210	75
Green	56	21
Blue	30	13
Brown	18	7.5
30° Entrance Angle ³		
White	280	100
Yellow	210	75
Red	42	15
Orange	105	37
Green	28	10
Blue	14	6
Brown	8.5	3.5

³Entrance Angle – The angle from the illumination axis to the retroreflector axis. The retroreflector axis is an axis perpendicular to the retroreflective surface.

⁴Observation Angle – The angle between the illumination axis and the observation axis.

Printed Colors and Overlay Films

For screenprinted or thermally transfer printed transparent color areas on white sheeting when processed according to 3M recommendations, the coefficients of retroreflection shall not be less than 70% of the value for the corresponding color in Table B. For white sheeting covered with 3M™ ElectroCut™ Film Series 1170 when processed according to 3M recommendations, the coefficients of retroreflection shall not be less than 100% of the value for the corresponding color in Table B. The color chromaticity and luminance shall conform to Table A on page 1.

Entrance Angularity Performance in Regard to Orientation

High intensity prismatic reflective sheeting is designed to be an effective wide angle reflective sheeting regardless of its orientation on the substrate or ultimate orientation of the sign after installation. Signs and applied copy (letters, arrows, borders and shields) can be fabricated and installed using the application orientation that most efficiently utilizes the reflective sheeting.

Note: For multi-panel signs it is recommended that all background panels be sheeted such that the sheeting direction is the same for all panels.

Fabrication Lines

The manufacture of prismatic sheeting results in lines being present in the product. In high intensity prismatic sheeting these lines are slightly thicker than the seal pattern legs. Fabrication lines are noticeable in shop light but are not observable on the road either in daylight or at night under typical use conditions (Figure 1).

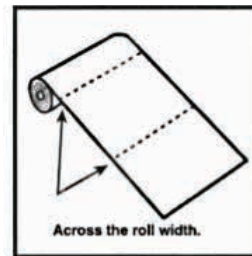


Figure 1 – Fabrication Lines

Adhesive

Series 3930 sheeting has a pressure-sensitive adhesive that is recommended for application at temperatures of 65°F (18°C) or higher.

Adhesive and Film Properties

Standard Test Panels

Unless otherwise specified herein, sheeting shall be applied to test panels and conditioned in accordance with ASTM D4956 and test methods and conditions shall conform to ASTM D4956.

Properties

The following properties shall conform to the requirements in ASTM D4956.

1. Adhesion
2. Outdoor weathering
 - retained coefficient of retroreflection
 - colorfastness

3. Shrinkage
4. Flexibility
5. Liner removal
6. Impact resistance
7. Night time color

In addition, Series 3930 sheeting will conform to the following properties.

1. Gloss

Test Method – Test in accordance with ASTM D523 using a 60° glossmeter.

Requirement – Rating not less than 50.

2. 2. Optical Stability

Test Method – Apply a 3 inch x 6 inch sample to a test panel. Measure R_A then place it in an oven at $71^\circ\text{C} \pm 3^\circ\text{C}$ ($160^\circ\text{F} \pm 5^\circ\text{F}$) for 24 hours followed by conditioning at standard conditions for 2 hours Remeasure R_A .

Requirement – The sheeting shall retain a minimum of 85% and a maximum of 115% of the original coefficient of retroreflection.

Sign Fabrication Methods

Application

Series 3930 sheeting incorporates a pressure sensitive adhesive and should be applied to the sign substrate at temperature of $65^\circ\text{F}/18^\circ\text{C}$ or higher by any of the following methods:

Mechanical squeeze roll applicator – refer to 3M Information Folder (IF) 1.4. Application to extrusions that are edge wrapped requires sufficient softening of the sheeting. This can be accomplished by directing additional heat to the “next to last” edge roller. This practice will increase productivity and minimize cracking.

Hand squeeze roll applicator – refer to 3M IF 1.6.

Application of Series 3930 sheeting for complete signs or backgrounds must be done with a roll laminator, either mechanical or hand driven.

Hand Application

Hand application is recommended for legend and copy only. Refer to 3M Information Folder 1.5 for more details.

Hand applications will show some visual irregularities, which are objectionable to aesthetically critical customers. These are more noticeable on darker colors. To obtain a close-up uniform appearance, a roll laminator must be used.

All direct applied copy and border **MUST** be cut at all metal joints and squeegeed at the joints.

Splices

Series 3930 sheeting must be butt spliced when more than one piece of sheeting is used on one piece of substrate. The sheeting pieces should not touch each other. This is to prevent buckling as the sheeting expands in extreme temperature and humidity exposure.

Double Faced Signs

The sheeting on the bottom side of a double faced sign can be damaged if rolled through a squeeze roll applicator with an unprotected steel bottom roller. The use of a semi-soft flat sheet between the steel roller and the applied sign face will provide protection from damage. A material such as a rubber mat, tag board or cardboard is recommended.

Substrates

For traffic sign use, substrates found to be most reliable and durable are properly prepared aluminum sheets and extrusions. **Users are urged to carefully evaluate all other substrates for adhesion and sign durability.** Other substrates that may be satisfactory for proper application of sheeting will have the following characteristics:

- Clean
- Smooth
- Flat
- Rigid
- Dimensionally stable
- Weather resistant
- Non-porous
- High surface energy (passes water break test)

Refer to Information Folder 1.7 for surface preparation recommendations. Substrates with low surface energy may require additional preparation such as flame treatment, mechanical abrasion or use of adhesion promoters prior to sheeting application. Guide sign extrusions may be edge wrapped. Flat panels or unwrapped extrusions are to be carefully trimmed so that sheeting from adjacent panels does not touch on assembled signs.

High intensity prismatic sheeting is designed primarily for applications to flat substrates. Any use that requires a radius of curvature of less than five inches should also be supported by rivets or bolts. Plastic substrates are not recommended where cold shock performance is required. **Sign failures caused by the substrate or improper surface preparation are not the responsibility of 3M.**

Imaging

High intensity prismatic sheeting may be processed into traffic signs by any of the imaging methods described below. 3M assumes no responsibility for failure of sign face legends or backgrounds that have been processed with non-3M process colors or matched component imaging materials other than those listed below.

Screen Processing

Series 3930 sheeting may be screen processed into traffic signs before or after mounting on a sign substrate, using 3M Process Colors Series 880I or Series 880N. Series 880I or 880N process colors can be screened at 60-100°F (16-38°C) at relative humidity of 20-50%. A PE 157 screen mesh with a fill pass is recommended. Refer to Information Folder 1.8 for details. No clear coating is required and is not recommended. Use of other process colors series is not recommended. **Care should be taken to avoid flexing high intensity prismatic sheeting before and especially after screening to eliminate the possibility of cracking from improper handling techniques.**

Thermal Transfer Printing

High intensity prismatic TT series sheeting may be imaged with 3M™ Thermal Transfer Ribbon Series TTR2300 in conjunction with the Matan SprinG3 or Matan Spot4 thermal transfer printers. For regulated traffic signs, Series TTR2300 Spot Traffic Colors are to be applied using these printers and must be covered with 3M™ ElectroCut™ Film 1170. Refer to Product Bulletin TTR2300 for more information.

3M™ ElectroCut™ Film

3M™ ElectroCut™ Film Series 1170 may be used to provide transparent colored background copy for traffic control signs on high intensity prismatic sheeting. Refer to Product Bulletin 1170 for fabrication procedures.

Applied Cut-Out Copy

High intensity prismatic cut letters may be applied to series 3930 sheeting background to create a sign legend. Such cut-out copy may be directly applied to the background sheeting, or may be applied in a demountable form. Direct applied copy must be cut at all panel seams and carefully trimmed back so that sheeting from adjacent panels does not touch on assembled signs. Refer to Information Folder 1.10 for more information.

Note: *It is recommended to fabricate all but the largest signs using 1170 electronic cuttable overlay film (ECOF) instead of direct applied copy.*

Additional Imaging Options for Work Zone Signs

Vinyl Graphic Films

Scotchcal™ Vinyl Series 3650, Series 7720 and Series 7725 may be used to provide copy for traffic control signs on high intensity prismatic sheeting (typically orange, white or yellow sheeting) for use in construction work zones. Refer to Scotchcal™ product literature for more information.

Latex Ink Jet Printing

Series 3930 sheeting to be used in work zone signs may be imaged with HP 789 series black latex ink in conjunction with the HP Designjet L25500 Printer, or with 792 series black latex ink in conjunction with the HP Designjet L26500 Printer. Refer to Information Folder 3.4 for more information.

Note: *With the exception of 3M branded products, 3M does not represent that any printer or printer accessory recommended in 3M literature will meet customer requirements, any federal, state or local regulations or any applicable safety standards. Such determination is the responsibility of the printer owner.*

Cutting

Series 3930 sheeting may be cut into letters and shapes of at least 3 inches in height and stroke widths of at least 1/2 inch. Smaller sizes are not recommended. Sealing cut edges of Series 3930 sheeting is not required.

Plotter Cutting

Programmable knife cut (electronic cutting)

1. Flat bed plotters can either die cut or kiss cut and offer the most consistent reliable performance.
2. Friction Fed plotter. Kiss cut only. Success has been achieved using plotters that have 600 grams of down force and a 60° cutting blade. Additional drive wheels may need to be added to improve tracking. An alternative procedure is to cut sheeting from the liner side. Blade force and knife depth must be set to score but not cut through the topfilm. Break apart individual copy or apply premask to retain spacing.

Other Cutting Methods

Series 3930 sheeting may be hand cut or die cut one sheet at a time, and band sawed or guillotined in stacks. Cutting equipment such as guillotines and metal shears, which have pressure plates on the sheeting when cutting, may damage the optics. Padding the pressure plate and easing it down onto the sheets being cut will significantly reduce damage. Maximum stack height for cutting Series 3930 sheeting is 1 ½ inch or 50 sheets. Details on cutting can be found in Information Folder 1.10.

Storage and Packaging

Series 3930 sheeting should be stored in a cool, dry area, preferably at 65-75°F (18-24°C) and 30-50% relative humidity and should be applied within one year of purchase. Rolls should be stored horizontally in the shipping carton. Partially used rolls should be returned to the shipping carton or suspended horizontally from a rod or pipe through the core. Unprocessed sheets should be stored flat. Finished signs and applied blanks should be stored on edge.

Screen processed signs must be protected with SCW 568 slipsheet paper. Place the glossy side of the slipsheet against the sign face and pad the face with closed cell packaging foam. Double faced signs must have the glossy side of the slipsheet against each face of the sign.

Unmounted screened faces must be stored flat and interleaved with SCW 568 slipsheet, glossy side against the sign face.

Avoid banding, crating, or stacking signs. Package for shipment in accordance with commercially accepted standards to prevent movement and chafing. Store sign packages indoors on edges.

Panels or finished signs must remain dry during shipment and storage. If packaged signs become wet, unpack immediately and allow signs to dry. Refer to Information Folder 1.11 for instructions on packing for storage and shipment.

Installation

Nylon washers are required when twist style fasteners are used to mount the sign.

Cleaning

Signs that require cleaning should be flushed with water, then washed with a detergent solution and soft bristle brush or sponge. Avoid pressure that may damage the sign face. Flush with water following washing. Do not use solvents to clean signs. Refer to 3M Information Folder 1.10.

Health and Safety Information

Read all health hazard, precautionary and first aid statements found in the Material Safety Data Sheet and/ or product label of any materials prior to handling or use.

General Performance Considerations

The durability of high intensity prismatic Series 3930 sheeting and finished signs using 3M Matched Component materials will depend upon substrate selection and preparation, compliance with recommended application procedures, geographic area, exposure conditions, and maintenance. Maximum durability of Series 3930 sheeting can be expected in applications subject to vertical exposure on stationary objects when processed and applied to properly prepared aluminum according to 3M recommendations provided in Information Folder 1.7. The user must determine the suitability of any nonmetallic sign backing for its intended use. **Sign failures caused by the substrate or improper surface preparation are not the responsibility of 3M.** Applications to unprimed, excessively rough or non-weather resistant surfaces or exposure to severe or unusual conditions can shorten the performance of such applications. Signs in mountainous areas that are covered by snow for prolonged periods may also have reduced durability. 3M process colors and ElectroCut™ Film, when used according to 3M recommendations, are generally expected to provide performance comparable to colored reflective sheeting. Custom colors, certain lighter colors, heavily toned colors or blends containing yellow or gold may have reduced durability. Atmospheric conditions in certain geographic areas may result in reduced durability.

Periodic sign inspection and regular sign replacement are strongly recommended in order for sign owners to establish their own effective service life expectation, beyond the warranty period.

3M has tested HP Designjet Printers and black latex inks: L25500 printer/series 789 black ink, and L26500 printer/series 792 black ink; and when applied within parameters defined in IF 3.4 the resulting sign performance is considered to be commensurate with typically expected sign life. However, this imaging system is not covered as part of the 3M Matched Component system noted in the General Warranty Terms.

3M Basic Product Warranty and Limited Remedy

3M™ High Intensity Prismatic Reflective Sheeting Series 3930 (“Product”) is warranted to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in this Product Bulletin. If Series 3930 Sheeting is proven not to have met the Basic Warranty on its shipment date, then a buyer’s exclusive remedy, and 3M’s sole obligation, at 3M’s option, will be refund or replacement of the sheeting.

General Warranty Terms:

1. 3M makes the Additional Warranty (as defined below) as to any traffic control and guidance sign in the United States and Canada (“Sign”) made with 3M™ High Intensity Prismatic Reflective Sheeting Series 3930 (“Product”) and the Matched Component materials listed in Table E. Any Additional Warranty is contingent on all components involved in that Additional Warranty being stored, applied, installed, and used only as 3M recommends in its Product Bulletins and Other Product Information.
2. The Basic Warranty and any applicable Additional Warranty are collectively referred to as the “3M Warranty.” EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, THE 3M WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, RIGHTS OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND THOSE ARISING FROM A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. A BUYER IS RESPONSIBLE FOR DETERMINING IF A PRODUCT IS SUITABLE FOR ITS PARTICULAR PURPOSE AND APPLICATION METHODS.
3. A Sign’s failure to meet the 3M Warranty must be solely the result of the Product or the matched component materials’ design or manufacturing defects. 3M has no obligation under the 3M Warranty if a sign failure is caused by: improper fabrication, handling, maintenance or installation; non-vertical applications where the Sign face is more than +/- 10% from vertical; use of any material or product not made by 3M or not included in Table E; use of application equipment not recommended by 3M; failure of sign substrate; loss of adhesion due to incompatible or improperly prepared substrate; exposure to chemicals, abrasion and other mechanical damage; snow burial or any other sign burial; collisions, vandalism or malicious mischief.

4. 3M reserves the right to determine the method of replacement, and any replacement Product will have the remainder of the original Product’s unexpired 3M Warranty. Claims made under this warranty will be honored only if
 - The Sign was dated upon completion of fabrication (“Fabrication Date”) using a permanent method (sticker, permanent marker or crayon, metal stamp, etc.)
 - 3M is notified of a 3M Warranty claim during any applicable Warranty Period and the owner or fabricator provides the information reasonably required by 3M to verify if a 3M Warranty is applicable.

Additional Warranty and Limited Remedy

1. The Additional Warranty for a Sign made with the Product is that the Sign will: (a) remain effective for its intended use when viewed from **a moving vehicle under normal day and night driving conditions by a driver with normal vision**, and (b) after cleaning, will meet the **minimum values for coefficient of retroreflection stated in Table C** for Table C’s applicable Warranty Period measured from the Sign’s Fabrication Date.

Table C

Minimum Percent Retained of Table B

Initial R_A for applicable Warranty Period for white, yellow, red, green, blue and brown

Warranty Period	Minimum Percentage R_A Retained
1-7 Years	80%
8-10 Years	70%

2. If any Sign made with the Product is proven not to have met the Additional Warranty, then a buyer’s **exclusive remedy**, and 3M’s sole obligation, at 3M’s option:
 - a. if this occurs within seven years after the Fabrication Date, then 3M will, at its expense, restore the Sign’s surface to its **original effectiveness**; or
 - b. if this occurs during the remainder of the Additional Warranty Period, then 3M will furnish only the necessary 3M sheeting Product and matched component materials quantity to restore the Sign’s surface to its original effectiveness.

Additional Warranty & Limited Remedy for 3934 Orange Product

- The Additional Warranty for a Sign made with 3934 orange sheeting (Orange Product) is that the Sign will: (a) **remain effective for its intended use when viewed from a moving vehicle under normal day and night driving conditions by a driver with normal vision;** (b) after cleaning, will retain the coefficient of retroreflection stated in Table D for three years measured from Fabrication Date; and (c) after cleaning, the Product will **maintain daytime luminance equal to or greater than the minimums specified in Table A.**

Table D

Minimum Coefficient of Retroreflection for 3934 Orange sheeting Product (cd/lux/m²) (0.2° observation and -4° entrance)

Warranty Period	Minimum R _A
Orange	80

If any Sign made with the Product is proven not to have met the Additional Warranty, then a buyer's **exclusive remedy**, and 3M's sole obligation, at 3M's option, is that 3M will provide pro-rated replacement of the 3M materials.

Table E

Matched Component Materials.

Matched Components	
Process Colors	Series 880I
Process Colors	Series 880N
Thermal Transfer Ribbons – Spot Traffic Colors only*	Series TTR2300
ElectroCut™ Film	Series 1170
Premium Protective Overlay Film	Series 1160
Slipsheet	SCW 568
Prespacing Tape	SCPS-2
Premasking Tape	SCPM-3
Transfer Tape	TPM-5

*must be covered with 3M™ ElectroCut™ Film 1170

Refer to 3M Information Folders and Product Bulletins for detailed information about recommended application procedures and equipment.

Other Product Information

Always confirm that you have the most current version of the applicable Product Bulletin, Information Folder or Other Product Information.

IF 1.4	Instructions for Interstate Squeeze Roll Applicator
IF 1.5	Hand Application Instructions
IF 1.6	Hand Squeeze Roll Applicator
IF 1.7	Sign Base Surface Preparation
IF 1.8	Process Color Application Instructions
IF 1.10	Cutting, Premasking, and Prespacing
IF 1.11	Sign Maintenance Management
PB 880I	Process Color 880I
PB 880N	Process Color 880N
PB 1170	ElectroCut™ Film
PB TTR2300	Thermal Transfer Ribbons Series TTR2300
PB 1160	Protective Overlay Film 1160 Ink Jet Imaging with HP Designjet L25500
IF 3.4	Printer and HP 789 Series latex Inks

Limitation of Liability

3M WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO A BUYER FOR DIRECT (other than the applicable Limited Remedy stated above), SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, LOSS OF PROFITS) IN ANY WAY RELATED TO A PRODUCT OR THIS PRODUCT BULLETIN, REGARDLESS OF THE LEGAL OR EQUITABLE THEORY ON WHICH SUCH DAMAGES ARE SOUGHT.

ASTM Test Methods are available from ASTM International, West Conshohoken, PA.

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.

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Diamond Grade™

DG³ Reflective Sheeting Series 4000

Product Bulletin 4000

January 2012

Description

3M™ Diamond Grade™ DG³ Reflective Sheeting Series 4000 is a super-high efficiency, full cube retroreflective sheeting designed for the production of traffic control signs and delineators that are exposed vertically in service. DG³ sheeting is designed to have the highest retroreflective characteristics at medium and short road distances as determined by the R_A values at 0.5° and 1.0° observation angles in Table B. Performance at these observation angles represents the most common nighttime viewing geometries encountered by the driving public. During the daytime, Diamond Grade DG³ fluorescent reflective sheeting provides higher visibility than ordinary (non-fluorescent) colored sheetings.

Applied to properly prepared sign substrates Diamond Grade DG³ reflective sheeting provides long-term retroreflectivity and durability. Series 4000 sheeting is available in the following colors.

Color	Product Code
White	4090
Yellow	4091
Red	4092
Blue	4095
Green	4097
Brown	4099
Fluorescent Yellow - FY	4081
Fluorescent Yellow Green- FYG	4083
Fluorescent Orange - FO	4084

Color Product Code

White - thermal transfer printable	4090TT
Yellow - thermal transfer printable	4091TT
Fluorescent Yellow - TT printable	4081TT
Fluorescent Yellow - Green - TT printable	4083TT

Photometrics

Daytime Color (x, y, Y)

The chromaticity coordinates and total luminance factor of the retroreflective sheeting conform to Table A.

Color Test – Fluorescent Sheetings

Conformance to standard chromaticity (x, y) and luminance factor (Y %) requirements shall be determined by instrumental method in accordance with ASTM E 991 on sheeting applied to smooth aluminum test panels cut from Alloy 6061-T6 or 5052-H38. The values shall be determined on a HunterLab ColorFlex 45/0 spectrophotometer. Computations shall be done for CIE Illuminant D65 and the 2° standard observer.²

Color Test – Ordinary Colored Sheeting

Conformance to standard chromaticity (x, y) and luminance factor (Y %) requirements shall be determined by instrumental method in accordance with ASTM E 1164 on sheeting applied to smooth aluminum test panels cut from Alloy 6061-T6 or 5052-H38. The values shall be determined on a HunterLab ColorFlex 45/0 spectrophotometer. Computations shall be done for CIE Illuminant D65 and the 2° standard observer.²

Table A - Daytime Color Specification Limits¹

Color	x		y		x		y		Daytime Luminance Limit (Y%)	
	x	y	x	y	x	y	x	y	Min.	Max.
White	0.303	0.300	0.368	0.366	0.340	0.393	0.274	0.329	27	
Yellow	0.498	0.412	0.557	0.442	0.479	0.520	0.438	0.472	15	45
Red	0.648	0.351	0.735	0.265	0.629	0.281	0.565	0.346	2.5	15
Blue	0.140	0.035	0.244	0.210	0.190	0.255	0.065	0.216	1	10
Green	0.026	0.399	0.166	0.364	0.286	0.446	0.207	0.771	3	12
Brown	0.430	0.340	0.610	0.390	0.550	0.450	0.430	0.390	1	9
FY	0.479	0.520	0.446	0.483	0.512	0.421	0.557	0.442	40	
FYG	0.387	0.610	0.369	0.546	0.428	0.496	0.460	0.540	60	
FO	0.583	0.416	0.535	0.400	0.595	0.351	0.645	0.355	20	

¹The four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Colorimetric System.

²The instrumentally determined color values of retroreflective sheeting can vary significantly depending on the make and model of colorimetric spectrophotometer as well as the color and retroreflective optics of the sheeting (David M. Burns and Timothy J. Donahue, Measurement Issues in the Color Specification of Fluorescent Retroreflective Materials for High Visibility Traffic Signing and Personal Safety Applications, Proceedings of SPIE: Fourth Oxford Conference on Spectroscopy, 4826, pp. 39-49, 2003). For the purposes of this document, the HunterLab ColorFlex 45/0 spectrophotometer shall be the referee instrument.

Coefficients of Retroreflection (R_A)

The values in Table B are minimum coefficients of retroreflection expressed in candelas per lux per square meter (cd/lux/m²).

Test for Coefficients of Retroreflection

Conformance to coefficient of retroreflection requirements shall be determined by instrumental method in accordance with ASTM E-810 “Test Method for Coefficient of Retroreflection of Retroreflective Sheeting”, and per E-810 the values of 0° and 90° rotation are averaged to determine the R_A in Table B.

Table B - Minimum Coefficient of Retroreflection R_A for new sheeting (cd/lux/m²)

	-4° Entrance Angle ³		
	Observation Angle ⁴		
	0.2°	0.5°	1.0°
White	580	420	120
Yellow	435	315	90
Red	87	63	18
Green	58	42	12
Blue	26	19	5
Brown	17	13	4
Fluorescent Yellow	350	250	72
Fluorescent Yellow Green	460	340	96
Fluorescent Orange	175	125	36

	30° Entrance Angle ³		
	Observation Angle ⁴		
	0.2°	0.5°	1.0°
White	220	150	45
Yellow	165	110	34
Red	33	23	7
Green	22	15	5
Blue	10	7	2
Brown	7	5	1
Fluorescent Yellow	130	90	27
Fluorescent Yellow Green	180	120	36
Fluorescent Orange	66	45	14

³ Entrance Angle – The angle from the illumination axis to the retroreflector axis. The retroreflector axis is an axis perpendicular to the retroreflective surface.

⁴ Observation Angle – The angle between the illumination axis and the observation axis.

Printed Colors and Overlay Films

For screenprinted or thermally transfer printed transparent color areas on white sheeting when processed according to 3M recommendations, the coefficients of retroreflection shall not be less than 70% of the value for the corresponding color in Table B. For white sheeting covered with 3M™ ElectroCut™ Film Series 1170 when processed according to 3M recommendations, the coefficients of retroreflection shall not be less than 100% of the value for the corresponding color in Table B. The color chromaticity and luminance shall conform to Table A on page 1.

Entrance Angularity Performance in Regard to Orientation

Diamond Grade DG³ Reflective Sheeting is designed to be an effective wide angle reflective sheeting regardless of its orientation on the substrate or ultimate orientation of the sign after installation. However, because the efficiency of light return from cube corner reflectors is not equal at all application orientations, especially with increasing entrance angles, it is possible to get the widest entrance angle light return when the sheeting is oriented in a particular manner. When high entrance angle (>50°) performance is required for given signs (e.g. Keep Right Symbols), it can be obtained easily by specifying the application orientation of the completed signs. In these situations the completed sign should have the sheeting positioned at the 0° orientation (downweb direction perpendicular to the road).

When the “primary groove line” (or, flat side of the diamond shape) is vertical in the completed sign, sheeting is said to be at a 0° orientation. When the “primary groove line” (or, flat side of the diamond shape) is horizontal in the completed sign, the sheeting is said to be at a 90° orientation. (Figure 1)

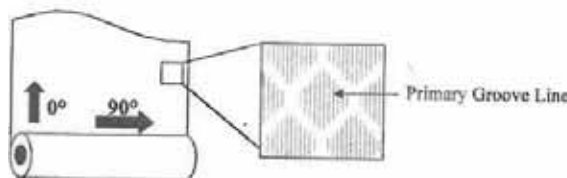


Figure 1

Unless the sign location and/or position calls for extra-wide entrance angularity performance, signs and applied copy (letters, arrows, borders and shields) can be fabricated and installed using the application orientation that most efficiently utilizes the reflective sheeting.

Note: For multi-panel signs it is recommended that all background panels be sheeted such that the sheeting direction is the same for all panels.

Fabrication Lines

The manufacture of prismatic sheeting results in lines being present in the product. In Diamond Grade DG³ sheeting these lines are slightly thicker than the seal pattern legs. Fabrication lines are noticeable in shop light but are not observable on the road either in daylight or at night under typical use conditions (Figure 2).

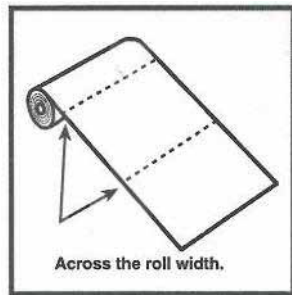


Figure 2 - Fabrication Lines

Adhesive

Diamond Grade DG³ sheeting has a pressure-sensitive adhesive that is recommended for application at temperatures of 65°F (18°C) or higher.

Adhesive and Film Properties

Standard Test Panels

Unless otherwise specified herein, sheeting shall be applied to test panels and conditioned in accordance with ASTM D4956 and test methods and conditions shall conform to ASTM D4956.

Properties

The following properties shall conform to the requirements in ASTM D4956.

1. Adhesion
2. Outdoor weathering
 - retained coefficient of retroreflection
 - colorfastness
3. Shrinkage
4. Flexibility
5. Liner removal
6. Impact resistance
7. Night time color

In addition, DG³ sheeting will conform to the following properties.

1. Gloss

Test Method – Test in accordance with ASTM D523 using a 60° glossmeter.

Requirement – Rating not less than 50.

2. Optical Stability

Test Method – Apply a 3-inch x 6-inch sample to a test panel. Measure R_A then place it in an oven at 71° C ± 3° C (160°F ± 5°F) for 24 hours followed by conditioning at standard conditions for two hours.

Remeasure R_A .

Requirement – The sheeting shall retain a minimum of 85% and a maximum of 115% of the original coefficient of retroreflection.

Sign Fabrication Methods

Application

Diamond Grade DG³ sheeting incorporates a pressure sensitive adhesive and should be applied to the sign substrate at temperature of 65°F/18°C or higher by any of the following methods:

Mechanical squeeze roll applicator – refer to 3M Information Folder (IF) 1.4. Application to extrusions that are edge wrapped requires sufficient softening of the sheeting. This can be accomplished by directing additional heat to the “next to last” edge roller. This practice will increase productivity and minimize cracking.

Hand squeeze roll applicator – refer to 3M IF 1.6.

Application of Diamond Grade DG³ sheeting for complete signs or backgrounds must be done with a roll laminator, either mechanical or hand driven.

Hand Application

Hand application is recommended for legend and copy only. Refer to 3M Information Folder 1.5 for more details.

Hand applications will show some visual irregularities, which are objectionable to aesthetically critical customers. These are more noticeable on darker colors. To obtain a close-up uniform appearance, a roll laminator must be used.

All direct applied copy and border MUST be cut at all metal joints and squeegeed at the joints.

Splices

Series 4000 sheeting must be butt spliced when more than one piece of sheeting is used on one piece of substrate. The sheeting pieces should not touch each other. This is to prevent buckling as the sheeting expands in extreme temperature and humidity exposure.

Double Faced Signs

The sheeting on the bottom side of a double faced sign can be damaged if rolled through a squeeze roll applicator with an unprotected steel bottom roller. The use of a semi-soft flat sheet between the steel roller and the applied sign face will provide protection from damage. A material such as a rubber mat, tag board or cardboard is recommended.

Substrates

For traffic sign use, substrates found to be most reliable and durable are properly prepared aluminum sheets and extrusions. **Users are urged to carefully evaluate all other substrates for adhesion and sign durability.** Other substrates that may be satisfactory for proper application of sheeting will have the following characteristics:

- Clean
- Smooth
- Flat
- Rigid
- Dimensionally stable
- Weather resistant
- Non-porous
- High surface energy (passes water break test)

Refer to Information Folder 1.7 for surface preparation recommendations. Substrates with low surface energy may require additional preparation such as flame treatment, mechanical abrasion or use of adhesion promoters prior to sheeting application. Guide sign extrusions may be edge wrapped. Flat panels or unwrapped extrusions are to be carefully trimmed so that sheeting from adjacent panels does not touch on assembled signs.

Diamond Grade DG³ sheeting is designed primarily for applications to flat substrates. Any use that requires a radius of curvature of less than five inches should also be supported by rivets or bolts. Plastic substrates are not recommended where cold shock performance is required. **Sign failures caused by the substrate or improper surface preparation are not the responsibility of 3M.**

Imaging

Diamond Grade DG³ sheeting may be processed into traffic signs by any of the imaging methods described below. 3M assumes no responsibility for failure of sign face legends or backgrounds that have been processed with non-3M process colors or matched component imaging materials other than those listed below.

Screen Processing

Diamond Grade DG³ sheeting may be screen processed into traffic signs before or after mounting on a sign substrate, using 3M Process Colors Series 880I or Series 880N. Series 880I or 880N process colors can be screened at 60-100°F (16-38°C) at relative humidity of 20-50%. A PE 157 screen mesh with a fill pass is recommended. Refer to Information Folder 1.8 for details. No clear coating is required or recommended. Use of other process colors series is not recommended.

Care should be taken to avoid flexing DG³ sheeting before and especially after screening to eliminate the possibility of cracking from improper handling techniques.

Thermal Transfer Printing

Diamond Grade DG³ TT sheeting may be imaged with 3M™ Thermal Transfer Ribbon Series TTR2300 in conjunction with the Matan SprinG3 or Matan Spot4 thermal transfer printers. For regulated traffic signs, Series TTR2300 Spot Traffic Colors are to be applied using these printers and must be covered with 3M™ ElectroCut™ Film 1170. Refer to Product Bulletin TTR2300 for more information.

3M™ ElectroCut™ Film

3M™ ElectroCut™ Film Series 1170 may be used to provide transparent colored background copy for traffic control signs on Diamond Grade DG³ sheeting. Refer to Product Bulletin 1170 for fabrication procedures.

Applied Cut-Out Copy

Diamond Grade DG³ cut letters may be applied to a DG³ sheeting background to create a sign legend. Such cut-out copy may be directly applied to the background sheeting, or may be applied in a demountable form. Direct applied copy must be cut at all panel seams and carefully trimmed back so that sheeting from adjacent panels does not touch on assembled signs. Refer to Information Folder 1.10 for more information.

Note: It is recommended to fabricate all but the largest signs using 1170 electronic cuttable overlay film instead of direct applied copy.

Cutting

Diamond Grade DG³ sheeting may be cut into letters and shapes of at least three inches in height and stroke widths of at least one half inch. Smaller sizes are not recommended. Sealing cut edges of DG³ sheeting is not required.

Plotter Cutting

Programmable knife cut (electronic cutting)

1. Flat bed plotters can either die cut or kiss cut and offer the most consistent and reliable performance.
2. Friction Fed plotter. Kiss cut only. Success has been achieved using plotters that have 600 grams of down force and a 60° cutting blade. Additional drive wheels may need to be added to improve tracking. An alternative procedure is to cut sheeting from the liner side. Blade force and knife depth must be set to score but not cut through the topfilm. Break apart individual copy or apply premask to retain spacing.

Other Cutting Methods

Diamond Grade DG³ sheeting may be hand cut or die cut one sheet at a time, and band sawed or guillotined in stacks. Cutting equipment such as guillotines and metal shears, which have pressure plates on the sheeting when cutting, may damage the optics. Padding the pressure plate and easing it down onto the sheets being cut will significantly reduce damage. Maximum stack height for cutting Series 4000 sheeting is 1½ inch or 50 sheets. Details on cutting can be found in Information Folder 1.10.

Storage and Packaging

3M Diamond Grade DG³ Sheeting should be stored in a cool, dry area, preferably at 65-75°F (18-24°C) and 30-50% relative humidity and should be applied within one year of purchase. Rolls should be stored horizontally in the shipping carton. Partially used rolls should be returned to the shipping carton or suspended horizontally from a rod or pipe through the core. Unprocessed sheets should be stored flat. Finished signs and applied blanks should be stored on edge.

Screen processed signs must be protected with SCW 568 slipsheet paper. Place the glossy side of the slipsheet against the sign face and pad the face with closed cell packaging foam. Double faced signs must have the glossy side of the slipsheet against each face of the sign.

Unmounted screened faces must be stored flat and interleaved with SCW 568 slipsheet, glossy side against the sign face.

Avoid banding, crating, or stacking signs. Package for shipment in accordance with commercially accepted standards to prevent movement and chafing. Store sign packages indoors on edges.

Panels or finished signs must remain dry during shipment and storage. If packaged signs become wet, unpack immediately and allow signs to dry. Refer to Information Folder 1.11 for instructions on packing for storage and shipment.

Installation

Nylon washers are required when twist style fasteners are used to mount the sign.

Cleaning

Signs that require cleaning should be flushed with water, then washed with a detergent solution and soft bristle brush or sponge. Avoid pressure that may damage the sign face. Flush with water following washing. Do not use solvents to clean signs. Refer to 3M Information Folder 1.10.

Health and Safety Information

Read all health hazard, precautionary and first aid statements found in the Material Safety Data Sheet and/or product label of any materials prior to handling or use.

General Performance Considerations

The durability of Diamond Grade DG³ sheeting and finished signs using 3M Matched Component materials will depend upon substrate selection and preparation, compliance with recommended application procedures, geographic area, exposure conditions, and maintenance. Maximum durability of Diamond Grade DG³ sheeting can be expected in applications subject to vertical exposure on stationary objects when processed and applied to properly prepared aluminum according to 3M recommendations provided in Information Folder 1.7. The user must determine the suitability of any nonmetallic sign backing for its intended use. **Sign failures caused by the substrate or improper surface preparation are not the responsibility of 3M.** Applications to unprimed, excessively rough or non-weather resistant surfaces or exposure to severe or unusual conditions can shorten the performance of such applications. Signs in mountainous areas that are covered by snow for prolonged periods may also have reduced durability. 3M process colors and ElectroCut™ Film, when used according to 3M recommendations, are generally expected to provide performance comparable to colored reflective sheeting. Custom colors, certain lighter colors, heavily toned colors or blends containing yellow or gold may have reduced durability. Atmospheric conditions in certain geographic areas may result in reduced durability.

Periodic sign inspection and regular sign replacement are strongly recommended in order for sign owners to establish their own effective service life expectation, beyond the warranty period.

3M Basic Product Warranty and Limited Remedy

3M™ Diamond Grade™ DG³ Reflective Sheeting Series 4000 (“Product”) is warranted to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in this Product Bulletin. If DG³ Sheeting is proven not to have met the Basic Warranty on its shipment date, then a buyer’s exclusive remedy, and 3M’s sole obligation, at 3M’s option, will be refund or replacement of the sheeting.

General Warranty Terms:

1. 3M makes the Additional Warranty (as defined below) as to any traffic control and guidance sign in the United States and Canada (“Sign”) made with 3M™ Diamond Grade™ DG³ Reflective Sheeting Series 4000 (“Product”) and the Matched Component materials listed in Table E. Any Additional Warranty is contingent on all components involved in that Additional Warranty being stored, applied, installed, and used only as 3M recommends in its Product Bulletins and Other Product Information.

2. The Basic Warranty and any applicable Additional Warranty are collectively referred to as the “3M Warranty.” EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, THE 3M WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, RIGHTS OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND THOSE ARISING FROM A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. A BUYER IS RESPONSIBLE FOR DETERMINING IF A PRODUCT IS SUITABLE FOR ITS PARTICULAR PURPOSE AND APPLICATION METHODS.

3. A Sign’s failure to meet the 3M Warranty must be solely the result of the Product or the matched component materials’ design or manufacturing defects. 3M has no obligation under the 3M Warranty if a sign failure is caused by:

improper fabrication, handling, maintenance or installation; non-vertical applications where the Sign face is more than +/- 10% from vertical; use of any material or product not made by 3M or not included in Table E; use of application equipment not recommended by 3M; failure of sign substrate; loss of adhesion due to incompatible or improperly prepared substrate; exposure to chemicals, abrasion and other mechanical damage; snow burial or any other sign burial; collisions, vandalism or malicious mischief.

4. 3M reserves the right to determine the method of replacement, and any replacement Product will have the remainder of the original Product’s unexpired 3M Warranty. Claims made under this warranty will be honored only if

–The Sign was dated upon completion of fabrication (“Fabrication Date”) using a permanent method (sticker, permanent marker or crayon, metal stamp, etc.)

–3M is notified of a 3M Warranty claim during any applicable Warranty Period and the owner or fabricator provides the information reasonably required by 3M to verify if a 3M Warranty is applicable.

Additional Warranty & Limited Remedy for Ordinary colored Product

1. The Additional Warranty for a Sign made with ordinary colored Product is that the Sign will: (a) **remain effective for its intended use when viewed from a moving vehicle under normal day and night driving conditions by a driver with normal vision**, and (b) after cleaning, will meet the **minimum values for coefficient of retroreflection stated in Table C** for Table C’s applicable Warranty Period measured from the Sign’s Fabrication Date.

Table C – Minimum Percent Retained of Table B Initial R_A for applicable Warranty Period for Ordinary Colors (white, yellow, red, green, blue and brown)

Warranty Period	Minimum Percentage R _A Retained
1-7 Years	80%
8-12 Years	70%

2. If any Sign made with Ordinary Product is proven not to have met the Additional Warranty, then a buyer’s **exclusive remedy**, and 3M’s sole obligation, at 3M’s option:

(a) if this occurs within seven years after the Fabrication Date, then 3M will, at its expense, restore the Sign’s surface to its **original effectiveness**; or

(b) if this occurs during the remainder of the Additional Warranty Period, then 3M will furnish only the necessary 3M sheeting Product and matched component materials quantity to restore the Sign’s surface to its original effectiveness.

Additional Warranty & Limited Remedy for Fluorescent Product

1. The Additional Warranty for a Sign made with Fluorescent Product is that the Sign will: (a) **remain effective for its intended use when viewed from a moving vehicle under normal day and night driving conditions by a driver with normal vision**; (b) after cleaning, will **retain 70% of the minimum values for coefficient of retroreflection stated in Table B** for the applicable Warranty Period stated in Table D, measured from Fabrication Date; and (c) after cleaning, the fluorescent Product will **maintain daytime luminance equal to or greater than the minimums specified in Table A**.

Table D – Warranty Period for Fluorescent Colors.

Color	Warranty Period
Fluorescent Yellow	10/7 Years ⁵
Fluorescent Yellow Green	10/7 Years ⁵
Fluorescent Orange	3 Years

⁵ Due to climatic conditions, Signs in Alabama, Arizona, Florida, Georgia, Hawaii, Louisiana, Mississippi, New Mexico, South Carolina and Texas have the 7-year Additional Warranty Period.

2. If a Sign made with Fluorescent Product is proven not to have met the Additional Warranty, then a buyer’s exclusive remedy, and 3M’s sole obligation, at 3M’s option:

(a) for those Fluorescent Products with a 10-year Additional Warranty Period, 3M will, at its expense: (a) restore the Sign’s surface to its **original effectiveness** if this occurs within seven years after the Fabrication Date; or (b) furnish only the necessary 3M Fluorescent Product and matched component materials quantity to restore the Sign’s surface to its original effectiveness if this occurs during the remainder of the Warranty Period.

(b) for those Fluorescent Products with a 7-year Additional Warranty Period, 3M will, at its expense: (a) restore the Sign’s surface to its **original effectiveness** if this occurs within five years after the Fabrication Date; or (b) furnish only the necessary 3M Fluorescent Product and matched component materials quantity to restore the Sign’s surface to its original effectiveness if this occurs during the remainder of the Warranty Period.

(c) for those Fluorescent Products with a 3-year Additional Warranty Period, 3M will furnish only the necessary Fluorescent Product and matched component materials quantity to restore the Sign’s surface to its original effectiveness.

Table E. Matched Component Materials.

Matched Components	
Process Colors	Series 880I
Process Colors	Series 880N
Thermal Transfer Ribbons – Spot Traffic Colors only*	Series TTR2300
ElectroCut™ Film	Series 1170
Premium Protective Overlay Film	Series 1160
Slipsheet	SCW 568
Prespacing Tape	SCPS-2
Premasking Tape	SCPM-3
Transfer Tape	TPM-5

* Must be covered with 3M™ ElectroCut™ Film 1170

Refer to 3M Information Folders and Product Bulletins for detailed information about recommended application procedures and equipment.

Other Product Information

Always confirm that you have the most current version of the applicable Product Bulletin, Information Folder or Other Product Information.

- IF 1.4 Instructions for Interstate Squeeze Roll Applicator
- IF 1.5 Hand Application Instructions
- IF 1.6 Hand Squeeze Roll Applicator
- IF 1.7 Sign Base Surface Preparation
- IF 1.8 Process Color Application Instructions
- IF 1.10 Cutting, Premasking, and Prespacing
- IF 1.11 Sign Maintenance Management
- PB 880I Process Color 880I
- PB 880N Process Color 880N
- PB 1170 ElectroCut™ Film
- PB TTR2300 Thermal Transfer Ribbons Series TTR2300
- PB 1160 Protective Overlay Film 1160

Limitation of Liability

3M WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO A BUYER FOR DIRECT (other than the applicable Limited Remedy stated above), SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, LOSS OF PROFITS) IN ANY WAY RELATED TO A PRODUCT OR THIS PRODUCT BULLETIN, REGARDLESS OF THE LEGAL OR EQUITABLE THEORY ON WHICH SUCH DAMAGES ARE SOUGHT.

ASTM Test Methods are available from ASTM International, West Conshohoken, PA.

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.

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Traffic Safety and Security Division

3M™ Advanced Engineer Grade Prismatic Sheeting

Series 7930 with Pressure Sensitive Adhesive

Product Bulletin 7930 – US
February 2016

Description

3M™ Advanced Engineer Grade Prismatic Sheeting Series 7930 meets the ASTM D4956 Type I standard, and is a non-metalized microprismatic reflective sheeting designed for production of retroreflective commercial signs, non-critical traffic control signs that are exposed vertically in service, as well as pressure sensitive stickers. Micro seal technology gives Series 7930 a more uniform visual appearance compared to its conventional prismatic counterparts and a whiter base color compared to beaded sheeting. Series 7930 can be readily identified by the integral product number watermark. When applied to properly prepared sign substrates, Series 7930 sheeting provides long-term reflectivity and durability.

Table 1. Series 7930 sheeting is available in the following colors.

Color	Product Code
White	7930
Yellow	7931
Red	7932
Orange	7934
Blue	7935
Green	7937
Brown	7939

Sign Fabrication Methods

Application

Series 7930 sheeting incorporates a pressure sensitive adhesive and should be applied to the sign substrate at room temperature 65°F (18°C) or higher by any of the methods below. If the sheeting temperature is less than 65°F (18°C), allow it to remain at 65°F – 75°F (18°C – 24°C) for at least 24 hours before application. Mechanical squeeze roll applicator – Reference Information Folder 1.4.

Hand squeeze roll applicator — Reference Information Folder 1.6.

Hand application is recommended for copy only. See Information Folder 1.5. Hand applications may result in visual irregularities that may be aesthetically objectionable to some customers. Such irregularities are more noticeable on darker colors. To obtain a close-up uniform appearance, a roll laminator must be used.

All direct applied copy and border **MUST** be cut at all panel seams and squeegeed at the joint. Squeegee used on Series 7930 must be covered with a low-friction sleeve. Change sleeve often.

Splices

Series 7930 sheeting must be butt spliced when more than one piece of sheeting is used on one piece of substrate. The sheeting pieces should not touch each other at the splice in order to prevent buckling as the sheeting may expand with extreme temperature/humidity exposure.

Double Faced Signs

The sheeting on the bottom side of a double faced sign can be damaged if rolled through a squeeze roll applicator with an unprotected steel bottom roller. The use of a semi-soft flat sheet between the steel roller and the applied sign face will provide protection from damage. A material such as a rubber mat, tag board or cardboard is recommended.

Substrates

For traffic sign use, substrates found to be most reliable and durable are properly prepared aluminum sheets and extruded aluminum street name blades. It is up to the individual customer to determine if a substrate is appropriate for its specific purpose. Users are urged to carefully evaluate all other substrates for adhesion and sign durability. Other substrates that may be satisfactory for proper application of sheeting will have the following characteristics:

- Clean
- Smooth
- Flat
- Rigid
- Dimensionally stable
- Weather resistant
- Non-porous
- High surface energy (passes water break test)

Refer to Information Folder 1.7 for surface preparation recommendations. Substrates with low surface energy may require additional preparation such as flame treatment, mechanical abrasion or use of adhesion promoters prior to sheeting application.

Series 7930 is designed primarily for applications to flat substrates but also may be suitable for simple curves, such as a pipe. Any use that requires a radius of curvature of less than five inches should also be supported by rivets or bolts. Plastic substrates are not recommended where cold shock performance is required. Sign failures caused by the substrate or improper surface preparation are not the responsibility of 3M. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application.

Imaging

For imaged areas on white sheeting when processed according to 3M recommendations, the coefficients of retroreflection should not be less than 70% of the value for the corresponding color in Table 2. The color chromaticity and luminance shall conform to Table 3.

Screen Processing

Series 7930 may be screen processed into traffic signs before or after mounting on a sign substrate, using 3M™ Process Colors Series 880N or Series 880I. Series 880N and Series 880I process colors can be screened at 60–100°F (16–38°C) at relative humidity of 20–50%. A PE 157 screen mesh with a fill pass is recommended. Refer to Information Folder 1.8 for details. Clear coating is not required or recommended. Use of other process colors series is not recommended. Care should be taken to avoid flexing Series 7930 sheeting faces after screening to minimize the possibility of cracking from improper handling techniques.

Digital Printing

Series 7930 is compatible with the 3M 8800 series UV inkjet inks printed by Durst Rho 161TS & Rho 162TS printers. Series 7930 is also compatible with the 3M 8900 series UV inkjet inks printed by an EFI H1625-RS printer. Conformance to ASTM D4956 requirements for Type I sheeting has been established when 3M printing requirements are followed. A 3M clear overlamine film must be used to finish the sign face. Regional requirements might vary. Please contact your 3M Technical Service for further information on compatible overlay films. Series 7930 is compatible with select latex and solvent ink jet inks and printers. Please contact 3M Technical Service for more information on compatible systems and inks. Series 7930 is not recommended for thermal transfer printing.

Cutting and Matching

Series 7930 may be cut into letters and shapes for direct applied copy. Sealing cut edges of Series 7930 sheeting is not required.

Plotter Cutting

Users are encouraged to evaluate cutting procedures for their own equipment and shop conditions, using typical beaded Engineer Grade settings. A slight increase in down force and knife depth may be needed.

Premasking/Prespacing

1. Premasked Markings: Use Application Tape SCPM-3.
2. Prespaced Markings: Use Prespacing Tape SCPS-2 or Application Tape SCPM-3.

Other Cutting Methods

Series 7930 may be hand cut or die cut one sheet at a time, and band sawed or guillotined in stacks. Cutting equipment such as guillotines and metal shears, which have pressure plates on the sheeting when cutting, may damage the sheeting. Padding the pressure plate and easing it down onto the sheets being cut will minimize the chance of damage. Maximum stack height for cutting Series 7930 sheeting is 50 sheets. Details on cutting can be found in Information Folder 1.10.

Background Matching

To optimize uniform appearance across all viewing conditions, background sheeting should be oriented in the same direction on the sign.

Fabrication Lines

The manufacture of prismatic sheeting results in lines being present in the product. Series 7930 fabrication lines may be noticeable very near to the sign, but do not affect the functional performance of the sign. See Figure 1 for an illustration of the fabrication lines.

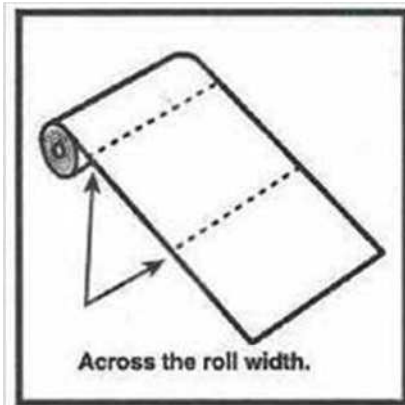


Figure 1 - Fabrication Lines

Cleaning

Signs that require cleaning should be flushed with water, then washed with a detergent solution and soft bristle brush or sponge. Avoid pressure that may damage the sign face. Flush with water following washing. Do not use solvents to clean signs. See 3M Information Folder 1.10.

Storage and Packaging

Series 7930 should be stored in a cool, dry area, preferably at 65–75°F (18–24°C) and 30–50% relative humidity and should be applied within one year of purchase. Rolls should be stored horizontally in the shipping carton. Partially used rolls should be returned to the shipping carton or suspended horizontally from a rod or pipe through the core. Unprocessed sheets should be stored flat.

Finished signs and applied blanks should be stored on edge. Processed sign faces must be protected with SCW 568 slipsheet paper. Place the glossy side of the slipsheet against the sign face. Double faced signs must have the glossy side of the slipsheet against each face of the sign.

Unmounted sign faces must be stored flat and interleaved with SCW 568 slipsheet, glossy side against the sign face.

Avoid banding, crating, or stacking signs. Package for shipment in accordance with commercially accepted standards to prevent movement and chafing. Store sign packages indoors on edges.

Panels or finished signs must remain dry during shipment and storage. If packaged signs become wet, unpack immediately and allow signs to dry. Refer to Information Folder 1.11 for instructions on packing for storage and shipment.

Installation

Nylon washers are required when twist style fasteners are used to mount the sign.

Health and Safety Information

Read all health hazard, precautionary and first aid statements found in the Safety Data Sheets, Article Information Sheets, and/or product label of chemicals prior to handling or use. To obtain SDS sheets for 3M products, go to 3M.com/SDS, or by mail, or in case of an emergency, call 1-800-364-3577.

General Performance Considerations

Minimum coefficient of retroreflection, chromaticity limits, and daytime luminance factor (Y%) for Series 7930 are given in Table 2 and Table 3, respectively.

Durability Considerations

When 3M's system of matched component materials (Table 4) are used, depending upon the substrate selection and preparation, compliance with recommended application procedures, geographic area, exposure conditions, and maintenance, Series 7930 can be expected to provide satisfactory performance for up to seven years.

Applications other than vertical exposure on stationary objects may reduce durability. Periodic sign inspection and regular sign replacement are strongly recommended.

Exposure Considerations

Exposure to severe or unusual conditions can shorten the performance of such applications. Signs in mountainous areas that are covered by snow for prolonged periods may also have reduced durability. Atmospheric conditions in certain geographic areas may result in reduced durability.

Custom Process Colors Considerations

Custom colors may have reduced durability.

Coefficient of Retroreflection and Chromaticity

Minimum coefficient of retroreflection, chromaticity limits, and daytime luminance factor (Y%) for Series 7930 are given in Table 2 and Table 3, respectively.

Table 2. Minimum Coefficient of Retroreflection

Candelas/Foot Candle/Square Foot Candelas/Lux/Square Meter

Obs. Angle ¹	Ent Angle ²	White	Yellow	Red	Orange	Green	Blue	Brown
0.2	-4	70	50	14.0	25	9.0	4.0	1.0
0.2	+30	30	22	6.0	7.0	3.5	1.7	0.3
0.5	-4	30	25	7.5	13	4.5	2.0	0.3
0.5	+30	15	13	3.0	4.0	2.2	0.8	0.2

Reflectivity conforms to ASTM D4956-13.

¹ Observation Angle – The angle between the illumination axis and the observation axis.

² Entrance Angle – The angle from the illumination axis to the retroreflector axis. The retroreflector axis is an axis perpendicular to the retroreflective surface.

Table 3. CIE Chromaticity Coordinate Limits

Color									Reflectance Limit (Y) Color	
	x	y	x	y	x	y	x	y	Min	Max
White	.303	.300	.368	.366	.340	.393	.274	.329	27.0	
Yellow	.498	.412	.557	.442	.479	.520	.438	.472	15.0	45.0
Red	.648	.351	.735	.265	.629	.281	.565	.346	2.5	15.0
Orange	.558	.352	.636	.364	.570	.429	.506	.404	10.0	30.0
Blue	.140	.035	.244	.210	.190	.255	.065	.216	1.0	10.0
Green	.026	.399	.166	.364	.286	.446	.207	.771	3.0	12.0
Brown	.430	.340	.610	.390	.550	.450	.430	.390	1.0	9.0

Table 4. System of Matched Component Materials

Matched Components	
Process Color	Series 880N or Series 880I
UV Inkjet Inks	8800UV, 8900UV
Slipsheet	SCW 568
Prespacing Tape	SCPS-2
Premasking Tape	SCPM-3
Transfer Tape	TPM-5

Additional General Performance Considerations for Orange

Advanced Engineer Grade Prismatic Sheeting Orange 7934 can be expected to provide satisfactory performance for up to three years when processed with 3M's system of matched components listed in Table 4, depending upon climatic conditions of the installation. The user must determine the suitability of any sign substrate for its intended use. Applications to unprimed, excessively rough or non-weather-resistant surfaces, or exposure to severe or unusual conditions can shorten the durability of such applications.

3M Basic Product Warranty

3M™ Advanced Engineer Grade Prismatic Sheeting Series 7930 ("Product") is warranted ("Basic Warranty") to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in this product bulletin. If the Product is proven not to have met the Basic Warranty on its shipment date, then a buyer's exclusive remedy, and 3M's sole obligation, at 3M's option, will be refund or replacement of the Product.

Limitation of Liability and Remedies

3M WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO A BUYER FOR DIRECT (other than the applicable Limited Remedy stated above), SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, LOSS OF PROFITS) IN ANY WAY RELATED TO A PRODUCT OR THIS PRODUCT BULLETIN, REGARDLESS OF THE LEGAL OR EQUITABLE THEORY ON WHICH SUCH DAMAGES ARE SOUGHT.

Literature Reference

Product Bulletin 880I	3M™ Process Color Series 880I
Product Bulletin 880N	3M™ Process Color Series 880N
Information Folder 1.4	Instructions for Squeeze Roll Applicator
Information Folder 1.5	Hand Application Instructions
Information Folder 1.6	Instructions for Hand Squeeze Roll Applicator
Information Folder 1.7	Sign Base Surface Preparation
Information Folder 1.8	Process Color Instructions
Information Folder 1.10	Cutting, Matching, Premasking, and Prespacing Instructions
Information Folder 1.11	Sign Maintenance Management

For Information or Assistance

Call: 1-800-553-1380

In Canada Call:

1-800-265-1840

Internet:

www.3M.com/roadwaysafety

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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.



Traffic Safety and Security Division

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SPECIFICATIONS FOR ANNUAL PURCHASE OF TRAFFIC CONTROL AND CUSTOM SIGNS

1. SUPPLEMENTAL INSTRUCTIONS

- 1.1 These specifications describe the minimum requirements for Traffic Control and Custom Signs furnished to the City of Lincoln for Traffic Safety and Guidance.
- 1.2 Bidder shall submit bid documents and supporting material via e-bid.
- 1.3 All inquiries regarding these specifications shall be directed via email or faxed written request to Sharon Mulder, Asst. Purchasing Agent (smulder@lincoln.ne.gov) or fax (402) 441-6513.
 - 1.3.1 These inquiries and/or responses shall be distributed to prospective bidders electronically as an addendum.
 - 1.3.2 The Purchasing Office shall only reply to written inquiries received within five (5) calendar days of bid opening.
 - 1.3.3 No direct contact is allowed between Vendor and other City staff throughout the bid process.
 - 1.3.3.1 Failure to comply with this directive may result in Vendor bid being rejected.
- 1.4 Awarded Vendor will become an Approved Vendor for the City of Lincoln, allowing the City of Lincoln to purchase items from the Vendor's Catalog.
- 1.5 Vendors submitting bids may reference a previous bid line item for items they consider redundant.

2. GENERAL REQUIREMENTS

- 2.1 All signs shall conform to the latest version of the Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD), and the State of Nebraska Supplement to the MUTCD including any updates and revisions.
- 2.2 Manufacturer's identification of company and year of production shall be shown in margin (sign edge, not border) of sign face on all signs and sign faces.
- 2.3 Completed or fabricated signs will consist of aluminum plate with sheeting and sign face applied.
- 2.4 Any line items that have a "City layout" in the description will be sent via email to the Vendor for use from the City of Lincoln.
- 2.5 The completed signs shall be inspected for defects upon receipt by the City of Lincoln Traffic Engineering staff.
 - 2.5.1 Vendor shall be responsible for correcting defects related to manufacturing and delivery to the satisfaction of the City of Lincoln Staff.
 - 2.5.2 Notification of any issues will be made within two business days of delivery to the Vendor via electronic means.
- 2.6 All layouts shall be approved by City of Lincoln Traffic Engineering staff prior to fabrication.
 - 2.6.1 Failure to do this will result in the Vendor being fully responsible for costs to correct signs.
- 2.7 Any and all line item may be purchased as a sign face, less the cost of the unneeded materials.
- 2.8 Line items have been provided, however, the City of Lincoln and the awarded vendor understand that not all FHWA MUTCD signs have been listed.
 - 2.8.1 As need arises pricing for unlisted signs will be provided by Vendor using its nearest reasonably comparable sign counter-part listed in available

line items or using Line items 306 through 329 in order to build the sign required.

2.8.2 Final price will be approved by City of Lincoln Traffic Engineering staff.

3. MATERIAL

- 3.1 Accepted Sheeting shall be High Intensity Prismatic Series 3930(HIP), Diamond Grade Cubed Series 4000(DG3), or Advanced Engineer Grade Prismatic Series 7930(EGP); all from the 3M Company.
 - 3.1.1 All signs shall be from these materials unless otherwise specified at time of order.
- 3.2 The Fluorescent Yellow Green (FYG) materials shall be made of 3M Diamond Grade Series 4000
- 3.3 Silk screen and Digital ink shall be the type recommended by the sheeting manufacturer.
- 3.4 All completed signs shall use aluminum that is new, die cut (or equal), free of burrs and sharp edges, meeting A.S.T.M. Specification B209, Alloy 5052-H38 of the gauge specified on the order of the completed signs.
- 3.5 All aluminum will be treated to prevent corrosion.
- 3.6 All completed signs and sign faces shall be packed with sufficient quantity of cut slip sheeting to protect each face from sticking together or any other damage in shipping as recommended by the sheeting manufacturer, 3M.

4. WARRANTY

- 4.1 Sign vendor will follow all recommended practices in order to maintain in effect all manufacturer warranties as they apply.
- 4.2 Vendor shall be responsible for all costs associated with correcting defects in materials and workmanship.
- 4.3 One (1) copy of the warranty shall be furnished with the bid.

5. ACCEPTANCE OF MATERIAL

- 5.1 Orders will be made on standard purchase orders issued by the Purchasing Agent, or via Email and/or verbally by the Traffic Engineering Division, referencing this contract and items.
 - 4.1.1 All orders will be assigned an order number.
- 5.2 All correspondence, including acknowledgement of receipt of orders, packing lists and invoices, shall carry the order number assigned by the City of Lincoln.
- 5.3 Vendor shall group materials on invoices as they are grouped on the City of Lincoln's order.
- 5.4 If asked, the Vendor shall furnish to the City of Lincoln affidavits from each manufacturer stating that the materials supplied fully conform to these specifications.

6. DELIVERY

- 6.1 Unit bid prices shall include all delivery costs, including shipper's charges and unloading time, at the following delivery location:

City of Lincoln Public Works and Utilities
Traffic Engineering
Attn: Michael Lamml
901 W. Bond Street, Garage Door Y
Lincoln, NE 68521

Phone: 402-441-5511

- 6.2 Deliveries shall be made between the hours of 8 am and 4 pm on normal City of Lincoln working days.
 - 6.2.1 Vendor shall provide the delivery company/driver with the above contact information.
 - 6.2.2 Vendor shall instruct the delivery company to make phone contact one (1) business day in advance of planned delivery date.
- 6.3 The City of Lincoln staff will be unloading using the traffic engineering's forklift to unload the shipment from the truck.

7. TERMS OF AGREEMENT

- 7.1 Term of agreement shall be for one (1) year with the option to renew for three (3) additional one (1) year terms upon execution of the signed contract.
 - 7.1.1 The renewals are upon mutual consent of both parties.

INSTRUCTIONS TO BIDDERS

CITY OF LINCOLN, NEBRASKA

E-Bid

1. **BIDDING PROCEDURE**

- 1.1 Sealed bid, formal and informal, subject to Instructions and General Conditions and any special conditions set forth herein, will be received in the office of the Purchasing Division, 440 So. 8th St., Lincoln, NE 68508, until the bid closing date and time indicated for furnishing the City of Lincoln, hereinafter referred to as "City", the materials, supplies, equipment or services shown in the electronic bid request.
- 1.2 Bidders shall use the electronic bid system for submitting bids and must complete all required fields.
- 1.3 Identify the item you will furnish by brand or manufacturer's name and catalog numbers. Also furnish specifications and descriptive literature if not bidding the specific manufacturer or model as listed in the specifications.
- 1.4 Any person submitting a bid for a firm, corporation, or other organization must show evidence of his authority so as to bind such firm, corporation, or organization.
- 1.5 Bids received after the time and date established for receiving bids will be rejected.
- 1.6 The Bidders and public are invited, but not required, to attend the opening of bids. At the opening, prices will be displayed electronically and/or read aloud to the public. The pricing is also available for immediate viewing on-line. No decisions related to an award of a contract or purchase order will be made at the opening.
- 1.7 If bidding on a construction contract, the City's most current Standard Specifications for Municipal Construction shall apply.
 - 1.7.1 Bidders may obtain this document from the City's Design Engineering Division of the Public Works & Utilities Department for a small fee.
 - 1.7.2 Said document can be reviewed at Design Engineering or at the office of the Purchasing Division.
 - 1.7.3 Said document is available on the web site.
<http://www.lincoln.ne.gov/city/pworks/engine/dconst/standard/stndspec/index.htm>

2. **BID SECURITY**

- 2.1 Bid security, as a guarantee of good faith, in the form of a certified check, cashier's check, or bid bond, may be required to be submitted with this bidding document, as indicated on the bid.
 - 2.1.1 Bid security, if required, shall be in the amount specified on the bid. The bid security must be scanned and attached to the "Response Attachments" section of your response or it can be faxed to the Purchasing Division at 402-441-6513. The original bid security should then be sent or delivered to the office of the Purchasing Division, 440 S. 8th St., Ste. 200, Lincoln, NE 68508 within three (3) days of bid closing.
 - 2.1.2 If bid security is not received in the office of the Purchasing Division as stated above, the vendor may be determined to be non-responsive.
- 2.2 If alternates are submitted, only one bid security will be required, provided the bid security is based on the amount of the highest gross bid.
- 2.3 Such bid security will be returned to the unsuccessful Bidders when the award of bid is made.
- 2.4 Bid security will be returned to the successful Bidder(s) as follows:
 - 2.4.1 For single order bids with specified quantities: upon the delivery of all equipment or merchandise, and upon final acceptance by the City.
 - 2.4.2 For all other contracts: upon approval by the City of the executed contract and bonds.
- 2.5 City shall have the right to retain the bid security of Bidders to whom an award is being considered until either:
 - 2.5.1 A contract has been executed and bonds have been furnished.
 - 2.5.2 The specified time has elapsed so that the bids may be withdrawn.
 - 2.5.3 All bids have been rejected.
- 2.6 Bid security will be forfeited to the City as full liquidated damages, but not as a penalty, for any of the following reasons, as pertains to this bidding document:
 - 2.6.1 If the Bidder fails or refuses to enter into a contract on forms provided by the City, and/or if the Bidder fails to provide sufficient bonds or insurance within the time period as established in this bidding document.

3. **BIDDER'S REPRESENTATION**

- 3.1 Each Bidder by electronic signature and submitting a bid, represents that the Bidder has read and understands the bidding documents, and the bid has been made in accordance therewith.
- 3.2 Each Bidder for services further represents that the Bidder has examined and is familiar with the local conditions under which the work is to be done and has correlated the observations with the requirements of the bidding documents.

4. CLARIFICATION OF BIDDING DOCUMENTS

- 4.1 Bidders shall promptly notify the Purchasing Agent of any ambiguity, inconsistency or error which they may discover upon examination of the bidding documents.
- 4.2 Bidders desiring clarification or interpretation of the bidding documents for formal bids shall make a written request which must reach the Purchasing Agent at least five (5) calendar days prior to the date and time for receipt of formal bids.
- 4.3 Changes made to the bidding documents will be issued electronically via addendum. All vendors registered for that bid prior to bid issuance will be notified of the addendum. Bidders registering after the bid is issued will receive the bid with the addendum included.
- 4.4 Oral interpretations or changes to the bidding documents made in any manner other than written form will not be binding on the City; and Bidders shall not rely upon such interpretations or changes.

5. ADDENDA

- 5.1 Addenda are instruments issued by the City prior to the date for receipt of bids which modify or interpret the bidding document by addition, deletion, clarification or correction.
- 5.2 Addenda notification will be made available to all registered vendors immediately via e-mail for inspection on-line.
- 5.3 No addendums will be issued later than forty-eight (48) hours prior to the date and time for receipt of bids, except an addendum withdrawing the invitation to bid, or an addendum which includes postponement of the bid.

6. INDEPENDENT PRICE DETERMINATION

- 6.1 By signing and submitting this bid, the Bidder certifies that the prices in this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor; unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the Bidder prior to bid opening directly or indirectly to any other Bidder or to any competitor; no attempt has been made, or will be made, by the Bidder to induce any person or firm to submit, or not to submit, a bid for the purpose of restricting competition.

7. ANTI-LOBBYING PROVISION

- 7.1 During the period between the bid advertisement date and the contract award, Bidders, including their agents and representatives, shall not lobby or promote their bid with the Mayor, any member of the City Council, or City staff except in the course of City sponsored inquiries, briefings, interviews, or presentations, unless requested by the City.

8. BRAND NAMES

- 8.1 Wherever in the specifications or bid that brand names, manufacturer, trade name, or catalog numbers are specified, it is for the purpose of establishing a grade or quality of material only; and the term "or equal" is deemed to follow.
- 8.2 It is the Bidder's responsibility to identify any alternate items offered in the bid, and prove to the satisfaction of the City that said item is equal to, or better than, the product specified.
- 8.3 Bids for alternate items shall be stated in the appropriate space on the e-bid form, or if the proposal form does not contain blanks for alternates, Bidder MUST attach to its bid document on Company letterhead a statement identifying the manufacturer and brand name of each proposed alternate, plus a complete description of the alternate items including illustrations, performance test data and any other information necessary for an evaluation.
- 8.4 The Bidder must indicate any variances by item number from the bidding document no matter how slight.
- 8.5 If variations are not stated in the bid, it will be assumed that the item being bid fully complies with the City's bidding documents.

9. DEMONSTRATIONS/SAMPLES

- 9.1 Bidders shall demonstrate the exact item(s) proposed within seven (7) calendar days from receipt of such request from the City.
- 9.2 Such demonstration can be at the City delivery location or a surrounding community.
- 9.3 If items are small and malleable, the Bidder is proposing an alternate product, the Bidder shall supply a sample of the exact item. Samples will be returned at Bidder's expense after receipt by the City of acceptable goods. The Bidder must indicate how samples are to be returned.

10. DELIVERY (Non-Construction)

- 10.1 Each Bidder shall state on the bid the date upon which it can make delivery of all equipment or merchandise.
- 10.2 The City reserves the right to cancel orders, or any part thereof, without obligation, if delivery is not made within the time(s) specified on the bid.
- 10.3 All bids shall be based upon **inside** delivery of the equipment/ merchandise F.O.B. to the City at the location specified by the City, with all transportation charges paid.
- 10.4 At the time of delivery, a designated City of Lincoln employee will sign the invoice/packing slip. The signature will only indicate that the order has been received and the items actually delivered agree with the delivery invoice. This signature does not indicate all items met specifications, were received in good condition and/or that there is not possible hidden damage or shortages.

11. WARRANTIES AND GUARANTEES

- 11.1 Copies of the following documents shall accompany the bid proposal for all items being bid, if requested:
 - 11.1.1 Manufacturer's warranties and/or guarantees.
 - 11.1.2 Bidder's maintenance policies and associated costs.
- 11.2 Unless stated otherwise in the specifications, as a minimum requirement of the City, the Bidder will guarantee in writing that any defective components discovered within a one (1) year period after the date of acceptance shall be replaced at no expense to the City. Replacement parts of defective components shall be shipped at no cost to the City. Shipping costs for defective parts required to be returned to the Bidder shall be paid by the Bidder.

12. ACCEPTANCE OF MATERIAL

- 12.1 All components used in the manufacture or construction of materials, supplies and equipment, and all finished materials, shall be new, the latest make/model, of the best quality, and the highest grade workmanship.
- 12.2 Material delivered under this proposal shall remain the property of the Bidder until:
 - 12.2.1 A physical inspection and actual usage of the material is made and found to be acceptable to the City; and
 - 12.2.2 Material is determined to be in full compliance with the bidding documents and accepted bid.
- 12.3 In the event the delivered material is found to be defective or does not conform to the bidding documents and accepted bid, the City reserves the right to cancel the order upon written notice to the Bidder and return materials to the Bidder at Bidder's expense.
- 12.4 Awarded Bidder shall be required to furnish title to the material, free and clear of all liens and encumbrances, issued in the name of the City of Lincoln, Nebraska, as required by the bidding documents or purchase orders.
- 12.5 Awarded Bidder's advertising decals, stickers or other signs shall not be affixed to equipment. Vehicle mud flaps shall be installed blank side out with no advertisements. Manufacturer's standard production forgings, stampings, nameplates and logos are acceptable.

13. BID EVALUATION AND AWARD

- 13.1 The electronic signature shall be considered an offer on the part of the Bidder. Such offer shall be deemed accepted upon issuance by the City of purchase orders, contract award notifications, or other contract documents appropriate to the work.
- 13.2 No bid shall be modified or withdrawn for a period of ninety (90) calendar days after the time and date established for receiving bids, and each Bidder so agrees in submitting the bid.
- 13.3 In case of a discrepancy between the unit prices and their extensions, the unit prices shall govern.
- 13.4 The bid will be awarded to the lowest responsible, responsive Bidder whose bid will be most advantageous to the City, and as the City deems will best serve the requirements and interests of the City.
- 13.5 The City reserves the right to accept or reject any or all bids; to request rebids; to award bids item-by-item, with or without alternates, by groups, or "lump sum"; to waive minor irregularities in bids; such as shall best serve the requirements and interests of the City.
- 13.6 In order to determine if the Bidder has the experience, qualifications, resources and necessary attributes to provide the quality workmanship, materials and management required by the plans and specifications, the Bidder may be required to complete and submit additional information as deemed necessary by the City. Failure to provide the information requested to make this determination may be grounds for a declaration of non-responsive with respect to the Bidder.
- 13.7 The City reserves the right to reject irregular bids that contain unauthorized additions, conditions, alternate bids, or irregularities that make the bid incomplete, indefinite or ambiguous.
- 13.8 Any governmental agency may piggyback on any contract entered into from this bid.

14. INDEMNIFICATION

- 14.1 The Bidder shall indemnify and hold harmless the City of Lincoln, Nebraska from and against all losses, claims, damages, and expenses, including, attorney's fees arising out of or resulting from the performance of the contract that results in bodily injury, sickness, disease, death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom and is caused in whole or in part by the Bidder, any subcontractor, any directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. This section will not require the Bidder to indemnify or hold harmless the City of Lincoln for any losses, claims damages, and expenses arising out of or resulting from the sole negligence of the City of Lincoln, Nebraska.
- 14.2 In any and all claims against the City or any of its members, officers or employees by an employee of the Bidder, any subcontractor, anyone directly or indirectly employed by any of them or by anyone for whose acts made by any of them may be liable, the indemnification obligation under paragraph 14.1 shall not be limited in any way by any limitation of the amount or type of damages, compensation or benefits payable by or for the Bidder or any subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

15. TERMS OF PAYMENT

15.1 Unless stated otherwise, the City will begin processing payment within thirty (30) calendar days after all labor has been performed and all equipment or other materials have been delivered, and all such labor and equipment and other materials have met all contract specifications.

16. LAWS

- 16.1 The laws of the State of Nebraska shall govern the rights, obligations, and remedies of the parties under this bid and any contract reached as a result of this process.
- 16.2 Bidder agrees to abide by all applicable local, state and federal laws and regulations, including those concerning the handling and disclosure of private and confidential information from individuals and corporations as to inventions, copyrights, patents and patent rights.
- 16.3 If there are any conflicts or inconsistencies between the Bidder's documents and the City's, the City's documents shall control.

17. EQUIPMENT TAX ASSESSMENT

17.1 Any bid for public improvement shall comply with Nebraska Revised Statute Sections 77-1323 and 77-1324. In that regard, every person, partnership, limited liability company, association or corporation furnishing labor or material in the repair, alteration, improvement, erection, or construction of any public improvement shall sign a certified statement which will accompany the contract. The certified statement shall state that all equipment to be used on the project, except that acquired since the assessment date, has been assessed for taxation for the current year, giving the county where assessed.

18. AFFIRMATIVE ACTION

18.1 The City of Lincoln provides equal opportunity for all Bidders and encourages minority businesses, women's businesses and locally owned business enterprises to participate in our bidding process.

19. LIVING WAGE

- 19.1 The Bidder shall be responsible for determining whether it is subject to the Living Wage ordinance in the event it is awarded the contract.
- 19.2 If the contract is subject to the City Living Wage pursuant to Section 2.81 of the Lincoln Municipal Code, the Bidder agrees to pay all employees employed in the performance of this contract, a base wage of not less than the City Living Wage. This wage is subject to change every July.

20. INSURANCE

20.1 All Bidders shall take special notice of the insurance provisions required for City contracts (*see Insurance Requirements for All City Contracts*).

21. EXECUTION OF AGREEMENT

21.1 Depending on the type of service or commodity provided, one of the following methods will be employed. The method applicable to this contract will be checked below:

- a. **PURCHASE ORDER**, unless otherwise noted.
 - 1. This contract shall consist of a City of Lincoln Purchase Order.
 - 2. A copy of the Bidder's bid response (or referenced bid number) attached and that the same, in all particulars, becomes the contract between the parties hereto: that both parties thereby accept and agree to the terms and conditions of said bid documents.
- b. **CONTRACT**, unless otherwise noted.
 - 1. City will furnish copies of a Contract to the successful Bidder who shall prepare attachments as required. Insurance as evidenced by a Certificate of Insurance (as required), surety bonds properly executed (as required), and Contract signed and dated.
 - 2. The prepared documents shall be returned to the Purchasing Office within 10 days (unless otherwise noted).
 - 3. The City will sign and date the Contract and prepare an Executive Order or Directorial Order for signature.
 - 4. Upon approval and signature, the City will return one copy to the successful Bidder.

22. TAXES AND TAX EXEMPTION CERTIFICATE

- 22.1 The City is generally exempt from any taxes imposed by the state or federal government. A Tax Exemption Certificate will be provided as applicable.
- 22.2 The Water Division of the City of Lincoln is taxable per Reg. 066.14A and no exemption certificate will be issued.

23. CITY AUDIT ADVISORY BOARD

23.1 All parties of any City agreement shall be subject to audit pursuant to Chapter 4.66 of the Lincoln Municipal Code and shall make Available to a contract auditor, as defined therein, copies of all financial and performance related records and materials germane to the contract/order, as allowed by law.

24. E-VERIFY

24.1 In accordance with Neb. Rev. Stat. 4-108 through 4-114, the winning bidder agrees to register with and use a federal immigration verification system, to determine the work eligibility status of new employees performing services within the state of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324 a, otherwise known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of a newly hired employee pursuant to the Immigration Reform and Control Act of 1986. The winning bidder shall not discriminate against any employee or applicant for employment to be employed in the performance of this section pursuant to the requirements of state law and 8 U.S.C.A 1324b. The winning bidder shall require any subcontractor to comply with the provisions of this section. For information on the E-Verify Program, go to www.uscis.gov/everify.

**Advertise 1 time
Wednesday, February 8, 2017**

**City of Lincoln/Lancaster County
Purchasing Division
NOTICE TO BIDDERS**

Sealed bids will be received by the Purchasing Agent of the City of Lincoln/Lancaster County, Nebraska BY ELECTRONIC BID PROCESS until: **12:00 pm, Wednesday, February 22, 2017** for providing the following:

**Annual Supply - Traffic Control and Custom Signs
Bid No. 17-062**

Bidders must be registered on the City/County's E-Bid site in order to respond to the above Bid. To register go to: lincoln.ne.gov (type: e-bid - in search box, then click "Supplier Registration").

[Questions concerning this bid process may be directed to City/County Purchasing at \(402\) 441-8103 or \[purchasing@lincoln.ne.gov\]\(mailto:purchasing@lincoln.ne.gov\)](#)