



*Maryland State Highway
Administration*

OFFICE OF TRAFFIC & SAFETY

***QUALIFIED PRODUCTS
LIST (QPL)***

***(NOTE) - All questions concerning the scheduling of new traffic product demonstrations, scheduling of meetings and this approval list should be directed to David Anderson, Qualified Traffic Products Coordinator, OOTS - Capital Programs Division.**

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INTRODUCTION

The Qualified Products List (QPL) contains Maintenance of Traffic products that have been approved for use and are required by Maryland's State Highway Administration to meet standards, specifications, and policies when working on or along Maryland roadways. Many of the products within the QPL list have also passed NCHRP Report 350 crashworthy requirements. If a product has passed NCHRP Report 350 requirements, this does not necessarily mean that the product can be used on Maryland's roadways. If a contractor or other agency would like to use a particular product on Maryland's roadways, then he/she should contact the manufacturer/vendor and ask the manufacturer/vendor to submit product literature to the New Products Committee of the Office of Traffic & Safety for review and evaluation. Please send request for product approvals to the Office of Traffic and Safety, New Products Committee, 7491 Connelly Drive, Hanover, MD 21076-1702.

The QPL list has been prepared to facilitate the search of those products that are permitted on Maryland's roadways. Products that are being used on Maryland's roadways and are not included on this list are subject to removal at cost to the contractor or the agency responsible for the installation of the product on SHA's right-of-way. Also, please note that products may continue to be added if approved, or removed from this list if deemed to perform unsatisfactorily.

The qualified products or items are listed under titles and section numbers, which are similar to those found in the "Maryland Department of Transportation Standard Specifications for Construction and Materials" book. The QPL includes a reference number behind each manufacturer's name, which refers to the manufacturer's contact information in Appendix B.

These products shall also meet the Manual on Uniform Traffic Control Devices (MUTCD) requirements as well as comply with Maryland's standards and specifications, which may exceed the minimum MUTCD requirements.

Office of Traffic & Safety QPL

104.00 General Section

Special Provision - Barrier Delineator – Manufacturer’s Specification

Artuk, Inc. (A9)

FB 34 1 & 2 – Model No. FB 34
FT 1 & 2 (8”x12” size requirement)
FR 1 & 2

Astro Optics Corp (A3)

One Way Barrier JD-1
Two Way Barrier JD-2

Pexco, LLC (P5) (Formerly Filtrona Extrusion) – 104.00

PCBM 12 Y1 (barrier Mount)
PCBM 12 W1 (barrier Mount)
IBM 12 Y1 (I Beam Mount) I-Flex ...Note: using Reflexite AR 1000 Amber Sheeting
IBM 12 W1 (I Beam Mount)... Note: using Reflexite AR 1000 Amber Sheeting
PCBM-9, Y-1, Y-2, W-1
Butterfly Guardrail Reflectors - Model No. Butterfly GO W1 Y1
PCBM T-12

Duraflex Corporation (D2)

2020 Rail Rider

Stimsonite (S3)

Median and Barricade Marker - Model No. 965

JBC Safety Plastic, Inc (J1)

Big Dog PCBM FL: Org 1 8 x 12 Top Mount Reflector

Special Provision – Speed Display Signs – Manufacturer’s Specification

Information Display Company (I2)

Active Traffic Safety Display Sign - Model No. VSC-1520

RU2 Systems, Inc (R5)

Traffic Calming Speed Sign – Model No. RU2 FAST-250

Special Provision - Water Filled Barrier – Manufacturer’s Specification

Note: The Office of Traffic & Safety’s approval is necessary before using the water filled barrier on any SHA owned, operated or maintained roadway.

Energy Absorption Systems, Inc. (E3)

Triton Barrier
Triton End Terminal (for Triton Barrier Only-non re-directive terminal)

Armocast Products Company (A7)

Guardian 350 Highway Barrier - Model No. P6000142-350

Office of Traffic & Safety QPL

Off The Wall Products (O1)

MB350 Highway Barrier

Yodock Wall Co., Inc. (Y1)

Yodock Longitudinal Barrier-Model No. 2001 and Model No. 2001-M

Special Provision – Reinforced Steel Barrier – Manufacturer’s Specification

Barrier System, Inc (B3)

SafeGuard Link System – Model No. ARMORGUARD

Special Provision – Vulcan Steel Barrier – Manufacturer’s Specification

Energy Absorption Systems, Inc (E3)

Special Provision – Zoneguard – Manufacturer’s Specification

Hill & Smith, Inc (H3)

Special Provision - Longitudinal Separator- Manufacturer’s Specification

Qwick Kurb (Q1)

Model No. L60, L61, L62, L65, L84, L104, L125

Pexco, LLC (P5) (Formerly Filtrona Extrusion)

FG 300 Interstate Grade Curb System – Model No.FG 300 Curb System

Impact Recovery (I1)

IRS Tuff Curb

Shur-Tite Products (S10)

Shur-Curb – Model No.SFO200

Special Provision – ICONE – Manufacturer’s Specification

Icone Products, LLC (F4)

Model No. V026A (*Note – The Office of Traffic & Safety’s approval is needed before using this product on any SHA project.)

Special Provision – VLoc Sign Support System – Manufacturer’s Spec

Traffic & Parking Control Company (T7)

104.03 Temporary Raised Pavement Markers (See Office of Materials QPL)

Ray-O-Lite Company (R1)

Ray-O-Lite Marker Model AA (All Acrylic) 9700 Series

Ennis Paint (E5)

Model No.80F

Office of Traffic & Safety QPL

Pexco, LLC (P5) (Formerly Filtrona Extrusion)

Davidson Plastics Temporary Overlay Markers (TOMS)

Note: "TOMS" are a cost-effective alternative for a short duration and low AADT. (<3weeks durations) (<7,000 AADT)

Davidson RPM - Model No.35

104.04 Temporary Concrete Traffic Barrier

All manufacturers... F-Shape Barrier with Pin and Loop connection

Note: Any connection shown in the AASHTO Roadside Design Guide Manual is currently approved for use as a connection for the F-Shaped Barrier. Note: As of July 1, 2006 all permanent barrier shall be NCHRP Compliant F shaped barrier.

Rockingham Precast (R3)

T-Lok Barrier - Model No. MB7D, MB7E, MB7F, F-Shaped Barrier

Smith Midland Corporation (S8)

J-J Hook – Model No. F-Shaped Barrier MB7D-PC

Single Face F-Shape bolt down barrier - Model No. MB10A

Artuk, Inc (A9)

Delineator – Model No. FT 1 & 2

104.05 Traffic Barrier W Beam

End Treatments: Refer to 104.09 and 104.10

104.06 Tubular Markers

Astro Optics Corp (A3)

Astro Re-bouncer Flexible Post (RFP)

Bent Manufacturing Co. (B2)

Up-Rite Glue-Down Posts

Carsonite International (C1)

The Super Duck – Model No. SDR328

Pexco, LLC (P5) (Formerly Filtrona Extrusion)

Surface Mount Channelizer Post - Model No.FG 300 Delineator Post

Impact Recovery (I1)

2001-S

Tuff Post – TUFFDP/TUFFTP

Safe Hit (S1)

Channelizer – Model No.SH336 SMA (Tubular Type)

Guidepost (Channelizing device or edge delineator)

RubberTough 360 Delineator – Model No. RT360

Office of Traffic & Safety QPL

TraFFix Devices, Inc. (T2)

Flexible Tube Delineator

Three D Traffic Works (T5)

Boomerang Surface Mount Reboundable Delineator – Model No. TD 5200

J.O. Herbert, Inc. (Formerly Jilson) (J2)

Flexible Rebound Post – Model No. PC-1 Post

Shur-Tite Products (S10)

Shur-Flex Surface Mount Delineator – Model No. SF0040

Flexstake, Inc (F2)

Surface Mount Delineator – Model No. TM-750 Series

104.07 Arrow Panel

Solar Technology, Inc. (S4)

Silent Sentinel (Truck and Trailer Mounted)

Trafcon Industries, Inc. (T3)

Solar Arrow Board (Trailer mounted) – Model No. TC1-25S

Solar Arrow Board (Trailer mounted) – Model No. TC1-15S

Arrow Board (Vehicle Mount) – Model No. MB3

Arrow Board (Vehicle Mount) – Model No. MB4

Arrow Board (Vehicle Mount) – Model No. MB5

Allmand Bros., Inc. (A5)

Eclipse - Model No. 2220/SE ALT

Protection Services Inc. (P4)

Solar Assist Advance Warner - Model No. M90

Work Area Protection, Corp. (W2)

Arrowmaster M90EZ

Wanco, Inc (W3)

Solar Traffic Director – Model No. WTSP

Ver-mac, Inc (V1)

ST-4815

104.08 Temporary Traffic Signs

Note: For roll-up signs, Reflexite's Marathon and 3M diamond grade are the only one's permitted for use.

Alcan Composites USA, Inc (A12)

Dibond – 2mm

Office of Traffic & Safety QPL

Alutile (A10)

Aluminum Composite

Reflexite (R2)

Marathon Fluorescent Orange Roll-up sign material

3M (T1)

Fluorescent Orange Diamond Grade Roll-Up Sign Material RS 24

Alcoa Aluminum (A11)

Model # RB160PE

Bone Safety Signs (B4)

Bonelight 3mm (max sign size is up to 36"x36")

BoneLight 4mm (max sign size is up to 48"x48")

PACJ, LLC (Formerly Dymalon, Inc.) (D3)

Alucobest

Grimco (G2)

Max-Metal – 3mm

Max-Metal – 4mm

Korman Signs, Inc (K1)

Apolic Sign Substrate

Kommerling USA (K2)

Aluminum Clad Sheets – Model No. KomaAlu

Traffix Devices (T2)

Safe Sign - 350 Sign Blanks – 27000 Series - 10mm

Protection Services, Inc. (P4)

Sign substrate - Model No. RB160PE

Portable Sign Stands (*Note - Supplementary signs may be mounted on portable sign stands using additional brackets obtained from the sign stand manufacturer.)

The following sign stands are approved for use with roll-up material:

Bone Safety Signs (B4)

Model No. SZ 412 (same as old model CZ130)

Model No. SZ 412/S

Model No. SZ 412 2S

Office of Traffic & Safety QPL

Dicke Tool Company (D1)

Model No. DF3003W (same as old model DF3000RE)

Model No. DF3003S (same as old model DF3003)

Fold-n-Roll, Model No. DF-3003-S

Twin Flex, Model No. TF-12-C

Twin Flex, Model No. TF-12-W

Twin Flex, Model No. TF-18-RUB

Twin Flex, Model No. 60-RUB

Steel Twin Flex, Model No. 18-RUB

Eastern Metal/USA-Signs (E2)

Model No. C-102 (or C-132)

Model No. C-200

Model No. C-202

Model No. C-902

Model No. C-942

Model No. Interstate Stand X-500 (501 hardware)

Model No. Interstate Stand X-550 (551 hardware)

Model No. Interstate Stand X-600 (601 Hardware)

The following sign stands are approved for use with Alpolic, DiBond, or roll-up Material:

Model Interstate Stand X-552 (sign mounting height 15" above grade)

Model Interstate Stand X-602 (sign mounting height 5' above grade)

Note: Special clamps listed below may be used for guardrail and barrier in accordance with manufacturer's specifications when allowed by Engineer.

Guard Rail Clamp GRC-5-LS

Median Barrier Clamp (MBC) Base – Model No. MBC-12 and MBC-15

Korman Signs, Inc. (K1)

Model No. SS 548 (Approved for use with Alpolic, DiBond, or roll-up material)

Model No. SS 548 A

Model No. SS 548 UC

Model No. SS 548 UCA

Model No. SS 548 CA

Model No. SS 560 (Approved for use with Alpolic, DiBond, or roll-up material)

Model No. SS 560 A

Marketing Displays International MDI (M1)

Windmaster

Model No. 4815

Model No. 4818 (Approved for use with Alpolic, DiBond, or roll-up material)

Model No. 4850

Model No. 4860 (Approved for use with Alpolic, DiBond, or roll-up material)

Model No. 5018 (Approved for use with Alpolic, DiBond, or roll-up material)

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Steelmaster

Model No. 50SM
40CAMKD

Jackson Safety, Inc (formerly Services & Materials) (J3)

Model No. QFV-W (3007816)
Model No. QFV-60 (3006173)
Model No. QFV-48 (3008790)
Model No. QFVR (3015524)

Signs and Safety Equipment (S2)

UF-2000 Series

Ultimate Highway Products, Inc (U1)

Sign Support
Model No. UM20014
Model No. UM22512

TraFFix Devices, Inc. (T2)

Model No. 22000
Model No. 24018

*Please note that portable sign stands may have passed NCHRP350 crash tests with addition of certain breakaway features. Please make sure you order the sign stands with exactly the same features as tested. Also, these stands should be installed as tested.

104.09 Temporary Traffic Barrier End Treatments

(Double “w” beam traffic barrier or temporary concrete barrier and treatments)

Type E Traffic Barrier End Treatment

Barrier System, Inc (B3)

Crash Cushion System – Model No. TAU II Re-directive Non-Gating Crash Cushion –
(Permanent and temporary application)

Energy Absorption Systems, Inc. (E3)

QuadGuard CZ
QuadGuard (Temporary and permanent applications)
QUEST

Trinity Industries, Inc. (T6)

TRACC (Approved Alternate)
Model No. TRACC, ShorTRACC, WideTRACC, FasTRACC

SCI Industries (S7)

SMART CUSHION - Model No. SCI 100GM

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Type J Traffic Barrier End Treatment

Energy Absorption Systems, Inc. (E3)

REACT 350

QuadGuard LMC (Temporary and permanent applications)

QuadGuard Elite (Temporary and permanent applications)

SCI Industries (S7)

SMART CUSHION – Model No. SCI 100GM

Moveable Concrete Barrier End Treatments

Barrier System, Inc (B3)

Absorb 350 Crash Cushion (Approved Alternate to Crash Cushion Sand Filled Plastic Barrels - Temporary and permanent applications)

104.10 Temporary Crash Cushion Sand Filled Plastic Barrels

Plastic Safety Systems, Inc (P3)

CrashGard Sand Barrel System - Model No. CC-48, CC-I27, CCL36

TrafFix Devices Inc. (T2)

TrafFix Sand Barrel System

Energy Absorption Systems, Inc (E3)

Fitch Inertial Barrel System – Model No. 400lb, 700lb, 1400lb & 2100lb

Energite III System

104.11 Temporary Pavement Markings (see Materials QPL and Section 549)

Please refer to Maryland State Highway Administration’s Office of Materials Technology: For “List of Qualified Removable Preformed Pavement Marking Material for Maintenance of Traffic”, and “Approved Products for Waterborne Traffic Marking Material for 2000”.

3M (T1)

Stamark Removable Black Line Mask – Series 145

Advanced Traffic Markings (A2)

ATM 280 Hide-A-Line

ATM Removable Rumble-strip

Brite-Line Technologies (B1)

Deltaline BTR Blackout Tape

Swarco Industries (S5)

Director 2 Blackout Tape

Trelleborg Industries (T4)

Black Masking RB-140

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104.12 Drums

Eastern Molding International (E4)

High Tech Low Density Drum – Model No. LD-6DG

Plastic Safety System, Inc. (P3)

Lifeguard

Lifeguard II

TrafFix Devices, Inc. (T2)

TrafFix Channelizer Device – Model No. 18000

Work Area Protection, Corp. (W2)

B-400 Plastic Channelizer Drum – Model No. B-400

Lane Changer – Model No. B500 LC

Plasticade Products (P1)

Rhino Barrel

Econocade II Traffic Drum – Model No. 452-75LD

Econocade Drum – Model No. 453-LD

Jackson Safety, Inc (formerly Services & Materials) (J3)

Channelizer Drum – Model No.1500

Trail Boss Channelizer Drum – Model No. 1600

Bent Manufacturing Co. (B2)

Superdome

DRUM SHEETING

3M (T1)

Type VII – Diamond Grade Flexible Work zone Sheeting Series – Series 3910/14 Florescent Orange/White

104.13 Barricades

(Types I & II)

Jackson Safety, Inc (formerly Services & Materials) (J3)

Type I PRB-124 Plastic Barricade – Model No. 3007572

TrafFix Devices, Inc. (T2)

TrafFix Plastic Folding Barricades

Korman Signs, Inc. (K1)

Jammer Plastic 8”x24” Barricades – Model No.WBT2P

Steel 8”x24” Barricades – Model No. WBT2ST

Three D Traffic Works (T5)

Works Barricade – TD2100

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(Type III)

Pexco, LLC (P5) (Formerly Filtrona Extrusion)

T3B Plastic Barricades – Model No.T3B

TrafFix Devices, Inc. (T2)

TrafFix Breakaway Type III Barricade (plastic TrafFix rails, and utilizing Unistrus Telespar tubing)

Plasticade Products (P1)

All Plastic Type III Collapsible Barricade

Yodock Wall Co., Inc. (Y1)

Type III – Model No. 2001 and Model No. 2001 M

Korman Signs, Inc. (K1)

Bracket Assembly – Model No.WBT3BRH

Stub Weld – Model No.WBT3SW

Stub Weld – Model No.WBT3SWH

Plastic Safety Systems, Inc. (P3)

Anchor Barricade System – Model No. Telspar Type III (8' only)

Off the Wall Products (O1)

MB 42x45LCB – Model No. Multi Barrier 42x45LCB

Protection Services, Inc (P4)

Type III Barricade

Note: Only approved roll-up, composite aluminum and plastic sign materials shall be mounted on the Type III barricades.

104.14 Cones

Eastern Metal/USA-Sign (E2)

Traffic Cone - Model No. FLO CONE TC-28FC

Traffic Cone - Model No. FLO CONE TC-28FCH

Work Area Protection, Corp. (W2)

Traffic Cone - Model No. 28 PVCS

Traffic Cone - Model No. 28 PVCH

Traffic Cone - Model No. 28 PVCSR

Traffic Cone - Model No. 36 PVCS

Traffic Cone - Model No. 36 PVCSR

Jackson Safety, Inc (formerly Services & Materials) (J3)

DW Series Cone – Model No. 3004057 Cone TC-28DW (0100355)

W Series Cone – Model No. 3004158 Cone TC-28DW (2058087)

W Series Cone – Model No. 3004175 Cone TC-28DW (2058635)

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JBC Safety Plastics, Inc. (J1)

PVC Injection Molded Cone - Model No. RC 70030C (28" Cone)
PVC Injection Molded Cone - Model No. RC 70030R (28" Cone)
PVC Injection Molded Cone - Model No. RC 70045C (28" Cone)
PVC Injection Molded Cone - Model No. RC 90045C (36" Cone)
PVC Injection Molded Cone - Model No. RC 90050C (36" Cone)
Revolution Series Cone - Model No. RS70032C (28" Cone)
Revolution Series Cone - Model No. RS70032T (28" Cone)
Revolution Series Cone - Model No. RS70032CT3M64 (28" Cone)
Revolution Series Cone - Model No. RS70032C3M64 (28" Cone)
Revolution Series Cone – Model No. RS70045CT3M64 (28" Cone)
Revolution Series Cone – Model No. RS90045CT3M64 (36" Cone)

Tall Weighted - Cones

Three D Traffic Works (T5)

Ringtop Slim-Line Channelizer – TD7500

Plastic Safety Systems, Inc. (P3)

Navigator - Model No. N42

Protection Services, Inc (P4)

42" Channelizer Cone

104.15 Flagger

American Traffic Safety Services Association (A6)

Flagger Certification Course

MTS (M3)

Adjustable Flag post

Traffic & Parking Control Co, Inc. (T7)

Blinkerpaddle-STOP/SLOW – Model No.2180-00350

SAFECO Industries (S9)

Traff-Alert LED Flagger Paddle – Model No. TA18AX

104.17 Temporary Moveable Type Concrete Traffic Barrier

Barrier Systems, Inc (B3)

Quick Change Moveable Barrier

Note: The Office of Traffic & Safety approval is necessary before using the moveable barrier on any SHA project.

104.18 Traffic Manager

Maryland Highway Contractors Association (M2)

Temporary Traffic Control Traffic Manager's Training Course

Office of Traffic & Safety QPL

104.19 Portable Variable Message Signs

ADDCO Manufacturing Company (A4)

Model No. DH-1000-SLD

Model No. DH-1000-FM

Model No. DH-1000-ALSa

3M (T1)

Model No. 3M DMS 4

Precision Solar Controls, Inc. (P2)

Solar Message Center - Model No. SMC-1000 (amber display)

Winko-Matic Signal Company Multisonics Corp. (W1)

Model No. GEN 6, Nighthawk 345

Ver-Mac, Inc. (V1)

PCMS 1210 - Model No.1210 (testing interim approval)

PCMS-1500

Solar Technology, Inc. (S4)

Silent Messenger (size 126"x76") - Model No. MB-2248

Silent Messenger (size 126"x76") - Model No. MB-3048

Silent Messenger (size 126"x76") - Model No. MB-3748

Silent Messenger (size 126"x76") - Model No. MB-4048

Work Zone Trailer - Model No. IRT-112-1548

Wanco, Inc. (W3)

Model No. WTLMB

Model No. WTMMB

American Signal Company (A6)

Portable Changeable Message Sign - Model No. CMS-T331

NTCIP – Model No. CMS-T333

Daktronics (D4)

Model No. VP4000 (no longer available to purchase from manufacturer)

Display Solutions – Manufacturer no longer in business as of 2001.

Sunray Solar – Model No. 340

Protection Services, Inc (P4)

SMC 1000 RT – Model No. 1000 ST

National Signal, Inc (N1)

Message Board - Model No SR380

Message Board - Model No. SR390

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104.20 Temporary Orange Construction Fence

As approved by Engineer.

104.23 Special Provision—Truck Mounted Attenuator

Energy Absorption Systems, Inc. (E3)

Safe Stop Truck Mounted Attenuator – Model No.180 & Model No. 90

ALPHA 100K Truck Mounted Attenuator - Model No.ALPHA 100K (modified) Contact Office of Traffic & Safety to purchase/use.

Trailer Truck Mounted Attenuator – Model No. Safe Stop-SST

Vorteq Trailer TMA – Model No. TL-3 TRAILER TMA

Barrier System, Inc. (B3)

Truck Mounted Attenuator – Model No. U-MAD 100K

U-MAD Trailer Mounted Attenuator – Model No. UTR100Y12

Gregory Industries, Inc. (G3)

Trailer Truck Mounted Attenuator – Model No. TTMA-100

Trinity Highway Products, LLC (T6)

Truck Mounted Attenuator – Model No. MPS 350 TMA

TraFFix Devices, Inc. (T2)

Scorpion Truck Mounted Attenuator – Model No.10000-TL3-12

TraFFix Scorpion TA – Model No. 10002-TL3-12TA

104.25 Radar Drone Warning System

Traffic Safety Technologies, LLC (T8)

Radar Drone – Model No. XT-1000 & Model No. XT1-1000

104.28 Speed Display Trailers

Note: The Office of Traffic and Safety's approval is necessary before using a speed display trailer on any SHA owned, operated or maintained roadway.

Solar Technology, Inc (S4)

Silent Advisor I – Model No.RST-1000

American Signal Company (A6)

Digitbrite Advantage Radar Speed Trailer – Model No.CMS-T131

RU2 Systems, Inc (R5)

Speed Display Trailer – Model No. RU2 FAST 850

Trailer Mounted Radar Speed Sign – Model No. RU2 850

104.29 Truck Mounted Variable Message Signs

Solar Technology, Inc. (S4)

Silent Messenger II – Model No. MBII

Office of Traffic & Safety QPL

Trafcon Industries, Inc. (T3)

MB-ADS – Model No. 3X2H

MB-ADS – Model No. 5X2V

MB-ADS – Model No. 4X3H

104.30 Portable Traffic Signals

Horizon Signal Technologies (H2)

Trailer Mounted Portable Traffic Signal System – Model No. SQ3TS

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List of Qualified Snow Plowable Raised Pavement Reflector Castings (Tentative Product Listing – See Materials QPL)

| <u>Casting Model I.D.</u> | <u>Manufacturer</u> | <u>Approval Date</u> |
|--|--|----------------------|
| STIMSONITE Model 96 STIMSONITE Model 101 LP STIMSONITE Model 101 LPS | Ennis Paint (1-800-331-8118) Reflective Products Division 1509 S. Kaufman Ennis, TX 75119 www.ennispaint.com | 10-18-06 |
| IRONSTAR 664 HOUSING | Hallen Products, Ltd (1-815-675-3100) 2500 Westward Drive, Unit #2 Spring Grove, Illinois 60081 Email: hallen@ais.net | 10-18-06 |

List of Qualified Pavement Marker Reflector Lenses (See Materials QPL)

| <u>Recessed Reflector Lenses</u> | <u>Manufacturer</u> | <u>Approval Date</u> |
|--|--|----------------------|
| STIMSONITE Model 948 | Ennis Paint | 10-18-06 |
| 3M Series 190 Marker | 3M Traffic Control Materials 3M Center, Building 225-5S-08 P.O. Box 33225 ST.Paul MN 55133-3325 1-800-553-1380 | 10-18-06 |
| <u>Snowplowable RPM Reflector Lenses</u> | <u>Manufacturer</u> | <u>Approval Date</u> |
| 3M Series 190 | 3M | 10-18-06 |
| Ennis Model 944 | | 10-18-06 |
| Ennis/STIMSONITE Model C40 (v) | Ennis Paint | |
| Ennis/STIMSONITE Model C40 (d) | | |
| Ennis Model 944 | | 02-01-07 |

*** Note – Lenses that are manufactured exclusively for recessed pavement markers are NOT permitted as substitutes for Snow plowable Raised Pavement Markers.**

*** Note - Lenses that are manufactured exclusively for Snow plowable Raised Pavement Markers are NOT permitted as substitutes for recessed marker reflector lenses.**

Office of Traffic & Safety QPL

List of Qualified Temporary and Permanent Sign Sheeting Material

| <u>Product Name</u> | <u>Manufacturer</u> | <u>ASTM Type/ Model #</u> | <u>Color(s)</u> | <u>Spec Ref</u> | <u>Approval Date</u> |
|---|------------------------------|-------------------------------|----------------------|---------------------|----------------------|
| Diamond Grade (LDP) Sign Sheeting (5, 6) | 3M | Type VII Series 3900 | Flor.Orange White | 950.03 813.01 | 05-17-07 |
| Diamond Grade Cubed Sign Sheeting (1, 3, 4, 5) | 3M | DG Cubed Series 4000 | ALL | 950.03 813.01 | 05-17-07 |
| *Note – approved as alternative to ASTM Type IX | | | | | |
| Engineering Grade Sign Sheeting (2) | 3M | Type I Series 3200 | ALL | 950.03 813.01 | 05-17-07 |
| High Intensity Sign Sheeting (7) | 3M | Type III Series 3800 | ALL | 950.03 813.01 | 05-17-07 |
| Hi Prismatic Sign Sheeting (2, 3, 4) | 3M | Type IV Series 3930 | ALL | 950.03 813.01 | 05-17-07 |
| Diamond Grade (VIP) Sign Sheeting (1, 3, 4, 5) | 3M | Type IX Series 3990 | ALL | 950.03 813.01 | 05-17-07 |
| Engineering Grade Sign Sheeting (2) | Avery Dennison | Type I Series T1500 | ALL | 950.03 813.01 | 05-17-07 |
| Super Engineering Grade Sign Sheeting (2) | Avery Dennison | Type II Series T2500 | ALL | 950.03 813.01 | 05-17-07 |
| High Intensity Sign Sheeting (7) | Avery Dennison | Type III Series T6500 | ALL No brown | 950.03 813.01 | 05-17-07 |
| High Intensity Sign Sheeting (2, 3, 4) | Avery Dennison | Type IV Series T6500 | ALL | 950.03 813.01 | 05-17-07 |
| Reflective Sign Sheeting (2) | Nippon Carbide Industries | Type I 8100 Series | ALL | 950.03.02 813.01 | 6-17-08 |
| Reflective Sign Sheeting (7) | Nippon Carbide Industries | Type III N500 Series | ALL No brown | 950.03.02 813.01 | 6-17-08 |
| Reflective Sign Sheeting (3, 4) | Nippon Carbide Industries | Type VIII 92000 Series | ALL * see note | 950.03.02 813.01 | 6-17-08 |
| *NOTE – Florescent yellow and florescent yellow green are NOT included in approval. | | | | | |
| Construction Work Zone Sign Sheeting (5) | Avery Dennison | Type VIII Series T-7514 | Florescent Orange | 104.98 950.03 | 11-05-08 |
| Abrasion-resistant Retro-reflective Sign sheeting (6) | Reflexite | Type V AR1000 | ALL | 950.03 813.01 | 03-13-09 |

*** NOTE – When sheeting of different types are specified on the same sign (IE: Type IV on Type IX) the sheeting shall be from the same manufacturer.**

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Sign Sheeting Material Notes

Note 1 – Approved for use on SHA roadways for Guide, Exit Gore, Warning, School, “Red” Regulatory (Stop, Yield, Do Not Enter, and Wrong Way) signs as noted under Project Requirements on the general notes and proposals drawing (SN-1).

Note 2 – Approved for use on SHA roadways for all R7 and R8 series Parking related signs and their supplemental panels and No Trespassing signs as noted under Project Requirements on the general notes and proposals drawing (SN-1).

Note 3 – Approved for use on SHA roadways for all other Regulatory signs as noted under Project requirements on the general notes and proposals drawing (SN-1).

Note 4 – Approved for use on SHA roadways for all independent Route Marker and auxiliary panels as noted under Project requirements on the general notes and proposals drawing (SN-1).

Note 5 – Approved for use on construction work zone signs.

Note 6 – Reboundable material approved for use on channelizing devices.

Note 7 - Approved for use on NON State roadways only.

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Permanent Traffic Control Devices

MD 606.03

TYPE B Traffic Barrier End Treatment

Barrier Systems, Inc. (B3)

X-Tension Guardrail End Treatment (Flared)

Road Systems, Inc. (R6)

Flared Energy – Absorbing Terminal (FLEAT)

FLEAT – SP

Trinity Industries, Inc. (T6)

Slotted Rail Terminal (SRT-350)

MD 606.03

TYPE C Traffic Barrier End Treatment

Barrier Systems, Inc. (B3)

X-Tension Guardrail End Treatment (Tangent)

Road Systems, Inc. (R6)

Sequential Kinking Terminal (SKT-350)

SKT-SP

Trinity Industries, Inc. (T6)

ET Plus

MD 606.03

TYPE D Traffic Barrier End Treatment

Barrier Systems, Inc. (B3)

X-Tension Guardrail End Treatment (Median)

Energy Absorption Systems, Inc. (E3)

Brakemaster 350

Road Systems, Inc. (R6)

Flared Energy – Absorbing Terminal (FLAT-MT)

Trinity Industries, Inc. (T6)

Cash Cushion Attenuator (CAT)

MD 665.01

Grand Haven Plastics (G1)

Roadside Delineator - Model No. 11702-HG-W-S

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MD 665.01/MD 665.02 (Delineators)

Three D Traffic Works (T5)

TD5500

Model No. TD5500 Earthflex

MD 665.04 (Delineator w/beam)

Three D Traffic Works (T5)

TD9300 Roadguide Bridge and Barrier Marker - Model No. 9300

SPECIAL PROVISION 808.00 (Lighting Structures)

Angel Guard Products, Inc. (A1)

U-Cover Model No. 7125404001

MD 821(1).03-01, MD 821(1).03-02, MD 821(1).03-03, MD 821(1).03-07

Breakaway Support System

Secure Fabrication (S6)

Model No. SR-83

MD 810.03.08 and MD 950.14

Ideal Industries, Inc (I3)

Waterproof Breakaway Streetlight Connector and Splice Insulating Kits

SPECIAL PROVISION MD 800.00 and MD 950.03.01

Recycled Technology, Inc (R4)

Safe Lane Separator Curb

Pexco, LLC (P5) (Formerly Filtrona Extrusion)

I-Flex Guardrail Marker – Model No. I-Flex 12 w/AR Reflective Sheeting

Flint Trading, Inc (F1)

Decomark Material

Special Provision - Manufacturers Specification

Holophane Glass Works (H1)

Omni Glass Curb Marker – Model No. 300-GC

Signal Sense, Inc. (S11)

SSDC 2000A Traffic Uninterruptable Power System

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APPENDIX B

Company Listing, Addresses and Phone Numbers

- A1. Angel Guard Products, Inc
120 Goddard Memorial Drive
Worcester, PA 01603
1-508-791-1073**

- A2. Advance Traffic Markings
P.O. Box H
Roanoke Rapids, NC 27870
1-252-536-2574**

- A3. Astro Optics Corp
1200 Abbott Drive
Elgin, IL 60123
1-847-488-9151 (1st)
1-888-312-8262 (2nd)**

- A4. Addco Manufacturing Company
1596 Linville Falls Highway
Linville, NC 28646
1-651-488-8600**

- A5. Allmand Bros., Inc.
1502 W. Fourth Avenue
Holdrege, NE 68949
1-308-995-4495**

- A6. American Signal Company
2755 Bankers Industrial Drive
Atlanta, GA 30360
1-770-448-6650**

- A7. Armorcast Products Co.
13230 Saticoy Street
North Hollywood, CA 91605
1-818-982-3600**

- A9. Artuk, Inc
3311 Enterprise Road
Fort Wayne, IN46808
1-414-475-5020**

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Company Listing, Addresses and Phone Numbers

- A10. Alutile**
615 Twin Ridge Lane
Richmond, VA
1-804-447-2618

- A11. Alcoa Aluminum**
1954 Halethorpe Farms Road
Baltimore, MD 21227
410-354-1113

- A12. Alcan Composites USA**
136 Fairview Road, Suite 300
Mooreville, NC 28117
1-800-626-3365

- B1. Brite-Line Technologies**
10660 E 51st Ave
Denver, CO 80239
1-303-375-1293

- B2. Bent Manufacturing Co.**
17311 Nichols Street
Huntington Beach, CA 92647-5721
1-888-842-0600

- B3. Barrier Systems, Inc**
180 River Road
Rio Vista, CA 94571
1-707-374-6800

- B4. Bone Safety Signs (Toya)**
1761 Mc Coba Drive, Suite A
Smyrna, GA 30080
1-800-873-2399

- C1. Carsonite International (Mr. McMaster)**
605 Bob Gifford Blvd.
Early Branch, SC 29916
1-800-648-7916
1-724-352-1555

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Company Listing, Addresses and Phone Numbers

- D1. Dicke Tool Company (Wayne)**
1201 Warren Avenue
Downers Grove, IL 60515
1-636-273-5566

- D2. Duraflex Corporation**
297 Margaret King Avenue
Ringwood, NJ 07456
1-973-962-7779

- D3. PACJ, LLC (Formerly Dymalon, Inc.)**
8207 Yarborough Road
Towson, MD 21204
410-825-0647

- D4. Daktronics**
201 Daktronics Drive
PO Box 5128
Brookings, SanDiego 57006-5128
1-605-696-3764

- E2. Eastern Metal/USA-Signs**
1430 Sullivan Street
Elmira, NY 14901
1-800-872-7446

- E3. Energy Absorption Systems, Inc.**
35 East Wacker Drive, Suite 1100
Chicago, IL 60601-2076
1-301-864-4150

- E4. Eastern Molding International**
PO Box Elizabeth Street
Batavia, NY 14020
1-585-344-0220
1-800-483-7875

- E5. Ennis Paint**
5910 N. Central Expressway
Suite 1050
Dallas, TX 75206
1-800-331-8118

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Company Listing, Addresses and Phone Numbers

E6. Exodyne Company
8433 N Black Canyon Hwy, Suite 200
Phoenix, AZ 85021
1-602-995-3700

F1. Flint Trading, Inc
PO Box 160
Thomasville, NC 27360
1-336-475-6600

F2. Flexstake, Inc
2150 Andrea Ln,
Fort Myers, FL 33912
239-481-3539

F3. Filtrona Extrusion
3110 70th Ave East Tacoma,
Washington 98424
1-253- 284-8000

G1. Grand Haven Plastics
1425 Aerial View Drive
Grand Haven, MI 48417
1-616-846-4950

G2. Grimco
1585 Fencorp
Fenton, Missouri 63026
1-800-542-9941

G3. Gregory Industries, Inc
4100 13th St. SW
Canton, OH 44710
1-330-477-4800

H1. Holophane Glass Works
144 Canterbury Street Worcester
Boston, MA 01603
1-508-753-6373

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Company Listing, Addresses and Phone Numbers

- H2. Horizon Signal Technologies**
216 Line Road
Malvern, PA 19355
610-226-7598

- H3. Hill & Smith, Inc.**
1000 Buckeye Park Road
Columbus, OH 43207

- I1. Impact Recovery Systems, Inc.**
PO Box 12637
San Antonio, TX 78212
1-210-736-4477

- I2. Information Display Company**
10950 SW 5th Street, Suite 330
Beaverton, OR 97005
1-800-421-8325

- I3. Ideal Industries, Inc**
Becker Place
Sycamore, IL 60178
1-800-435-0705

- I4. Icone Products, LLC**
P.O. Box 247
Cato, NY 13033
802-734-7711

- J1. JBC Safety Plastics, Inc.**
1616 Dielman Ave.
St. Louis, MO 63132
1-866-966-2663

- J2. J.O. Herbert Co., Inc.**
P.O. Box 5450
Midlothian, VA 23112
1-804-763-6480

- J3. Jackson Safety, Inc (formerly Services & Materials)**
1859 Bowles Avenue, Suite 200
Fenton, MO 63026
1-636-717-6600

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Company Listing, Addresses and Phone Numbers

- K1. Korman Signs, Inc.**
3029 Lincoln Avenue
Richmond, VA 23228-4295
1-804-262-6050
- K2. Kommerling USA**
3402 Stanwood Blvd
Huntsville, AL 35811
1-800-330-2239
- M1. Marketing Displays International (MDI)**
38271 W. Twelve Mile Road
Farmington Hills, Michigan 48331-3041
1-248-553-1900
- M2. Maryland Highway Contractors Association**
2408 Peppermill Drive, Suite F
Glen Burnie, MD 21061
410-760-9505
- M3. MTS Safety Products**
PO Box 38847
Golden, MS 38847
1-800-647-8168
- N1. National Signal, Inc.**
2440 Artesia Ave
Fullerton, California 92833
1-714-441-7707
- O1. Off the Wall Products**
180 South 300 West, Ste. 326
Salt Lake City, UT 84101
1-801-363-7740
- P1. Plasticade Products – Jess Bacon (703-932-2992) or jcbacon2@verizon.net**
7700 N. Austin Avenue
Skokie, IL 60077
1-800-772-0355

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Company Listing, Addresses and Phone Numbers

- P2. Precision Solar Controls, Inc.**
2915 National Court
Garland, TX 75041
1-972-278-0553
- P3. Plastic Safety Systems, Inc.**
PO Box 20140
Cleveland, OH 44120
1-724-352-1555
- P4. Protection Services, Inc.**
635 Lucknow Road
Harrisburg, PA 17110
1-717-236-9307
- P5. Pexco, LLC**
3110 70th Ave East
Tacoma, WA 98424
877-335-4638
- Q1. Qwick Kurb**
1916 US 41 South
Ruskin, Florida 33570
1-813-645-5072
- R1. Ray-O-Lite Company---Division of Pac-Tec, Inc.**
1870 James Parkway
Heath, Ohio 43056
1-800-848-7025
- R2. Reflexite North America**
315 South St.
New Britain, CT 06051
1-860-223-9297
- R3. Rockingham Precast**
Highway 42 South
Harrison, VA 22801
1-540-433-8282
- R4. Recycled Technologies, Inc**
19475 SW Teton Avenue
Tualatin, Oregon 97062
1-503-691-5845

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Company Listing, Addresses and Phone Numbers

- R5. RU2 Systems Inc**
4840 East Jasmine Street, Suite 102
Mesa, AZ 85205
480-982-2107

- R6. Road Systems, ,Inc.**
3616 Old Howard County Airport
Big Spring, TX 79720
1-432-263-2435

- S1. Safe Hit**
35 East Wacker Drive, Suite 1100
Chicago, IL 60601
1-800-537-8958

- S2. Signs and Safety Equipment, Inc**
95 Hibbard Rd.
Big Flats, NY 14814
1-607-562-8463

- S3. Stimsonite - (Avery Dennison Corp.)**
6565 West Howard Street
Niles, IL 60714
1-847-647-4814

- S4. Solar Technology, Inc.**
7620 Cetronia Road
Allentown, PA 18106
1-610-391-8600

- S5. Swarco Industries**
PO Box 89
Columbia, Tennessee 38402-5900
1-615-388-5900

- S6. Secure Febrication**
6467 Milford Harrington Hwy
Harrington, DE 19952
1-302-566-0746

- S7. SCI Industries**
1433 Adelia Avenue
El Monte, CA 91733-3002
1-626-443-9441

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Company Listing, Addresses and Phone Numbers

- S8. Smith Midland Corporation
5119 Catlett Road/P.O. Box 300
Midland, VA 22728
1-540-439-3266**

- S9. Safeco Industries, Inc
P.O. Box 11127
Chandler, AZ 85248
1-480-290-5220**

- S10. Shur-Tite Products
P.O.Box 2283
Round Rock, TX 78680**

- S11. Signal Sense, Inc.
P.O. Box 760
878 Sussex Blvd., Bldg. #2
Broomall, PA 19008
1-866-586-8877**

- T1. 3M Company---3M Center, Building 225-5S-08 (Jason)
PO Box 33225
St. Paul, MN 55133-3225
1-800-553-1380**

- T2. Traffix Devices, Inc.
220 Calle Pinteroesco
San Clemente, CA 92672
1-949-361-5663**

- T3. Trafcon Industries, Inc.
81 Texaco Rd.
Mechanicsburg, PA 17050
1-717-691-8007**

- T4. Trelleborg Industries
22 Chandler Road
Edison, New Jersey 08820
1-732-494-0723**

- T5. Three D Traffic Works
430 N.Varney Street
Burbank, CA 91502
877-843-9757**

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Company Listing, Addresses and Phone Numbers

- T6. Trinity Industries, Inc**
2525 Stemmons Freeway
Dallas, TX 75207
1-800-321-2755
- T7. Traffic & Parking Control Co, Inc.**
800 Wall Street
Elm Grove, WI 53122
1-262-814-7337
- T8. Traffic Safety Technologies**
P.O. Box 151115
Ely, Nevada 89315
1-702-456-9664
- U1. Ultimate Highway Products, Inc**
10680 Fern Avenue
Stanton, CA 90680
1-800-730-4939
- V1. Ver-Mac, Inc.**
2120 Lavoisier
Ste-Foy, Quebec G1N 4B1 Canada
1-888-488-7446
- W1. Winko-Matic Signal Company Multisonics Corp.**
6301 Best Friend Road
Norcross, GA 30071
1-404-662-5400
- W2. Work Area Protection, Corp.**
PO Box 4087
St. Charles, IL 60174
1-630-377-9100
- W3. Wanco, Inc (Dan)**
5870 Tennyson Street
Arvada, Colorado 80003
1-908-400-5078
- Y1. Yodock Wall Co., Inc.**
623 N.E. 5th Terrace
Ft. Lauderdale, FL 33304
1-888-496-3625