December 23, 2009

In Reply Refer To:
HSSD WZ-22/
WZ-106/WZ-106A/
WZ-107/WZ-127/
WZ-127#1

Mr. Leo Yodock
President
The Yodock Wall Company
P.O. Box 354
Bloomsburg, PA 17815

Dear Mr. Yodock:

In your letter of August 4, you requested the Federal Highway Administration (FHWA) acceptance of your modified longitudinal channelizing device, the 2001M or Metropolitan, for use as a crashworthy traffic control device in work zones on the National Highway System (NHS). The modified 2001M is now made of blow molded high-density polyethylene.

The modified 2001M or Metropolitan is intended for use as detailed in previous FHWA acceptance letters and considered equivalent to the original 2001M device.

The original 2001M device was performance tested and FHWA acceptance letters WZ 22, 106, 106A, 107, and 127 have since been issued.

Accompanying your letter was the FHWA Office of Safety Design forms, a drawing of the modified 2001M and a copy of a test report that documented static testing conducted on your modified device to verify connection strength between units linked together and to compare the results to the previously accepted 2001M device. The results of testing indicated that the connection strength did not exceed that of the original 2001M.

You have requested that we find this device acceptable as meeting Test Level 3 criteria for use on the NHS under the provisions of the National Cooperative Highway Research Program Report 350 "Recommended Procedures for the Safety Performance Evaluation of Highway Features”.

This letter is to acknowledge the FHWA’s acceptance of the modified device and your request.
Longitudinal channelizers should not be described as "barriers" because they do not meet crashworthiness requirements for redirection. The FHWA recommendations for labeling each unit or module to indicate limitations of use are enclosed. The original completed forms have been modified by the addition of the FHWA acceptance letter number and the date of our review. The forms will be posted on our Web site in the near future.

Sincerely yours,

[Signature]

David A. Nicol, P.E.
Director, Office of Safety Design
Office of Safety

Enclosures
<table>
<thead>
<tr>
<th>Page 1</th>
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| **FEDERAL HIGHWAY ADMINISTRATION**
**OFFICE OF SAFETY DESIGN**
**Category 2 Work Zone Device Acceptance Letter**

<table>
<thead>
<tr>
<th>Contact Info</th>
<th>Petitioner / Developer Name and Address:</th>
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</table>
| **The Yodock Wall Company, Inc.**
Attn: Leo J. Yodock, III
900 Patterson Dr.
Bloomington, IL 17815 |

<table>
<thead>
<tr>
<th>Signature</th>
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<tbody>
<tr>
<td>I hereby certify that the device(s) covered by this Acceptance Letter meet(s) the crash -worthiness test and evaluation requirements of the FHWA and NCHRP Report 350.</td>
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<tbody>
<tr>
<td>570-288-2856</td>
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<tr>
<th>Email Address</th>
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<tbody>
<tr>
<td><a href="mailto:yodock@yodock.com">yodock@yodock.com</a></td>
</tr>
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<tr>
<th>Laborator / Engineer Name and Address</th>
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</table>
| **Texas Transportation Institute**
3133 TAMU
College Station, TX 77843: Dean Alberon |

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<tr>
<th>Signature</th>
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<tbody>
<tr>
<td>I hereby certify that the testing that supports this Acceptance Letter was conducted in accordance with NCHRP Report 350 guidelines, that the device(s) tested is/are accurately described on this form, and that the test results indicate that the device meets all applicable NCHRP Report 350 evaluation criteria.</td>
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<tbody>
<tr>
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<tbody>
<tr>
<td><a href="mailto:d_alberon@tamu.edu">d_alberon@tamu.edu</a></td>
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<thead>
<tr>
<th>Keywords:</th>
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</table>
| **Type of Device** (See page 3)
**Longitudinal Channelizing Barriers, Type III, Barriers**
**Composition of Sign or Rail substrate (See Page 3)**
**Rail: Plastic, Sign: Metal, Wood, Plastic**
**Thickness of substrate (inches):**
**Height of sign from the ground (inches), if applicable: (See Page 3)**
**Flags and or lights present during test? Indicate number of each:**
# of flags: # of lights: Weight of lights: ea. |

<table>
<thead>
<tr>
<th>Device Name</th>
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<tbody>
<tr>
<td><strong>Detailed Desc. Of Device, Materials, sizes, Fasteners, Substrates Foundation, Aux. Features Ballast, etc.</strong></td>
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<td>WZ-12741</td>
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</table>

**Device Name**

- **Device Name**
- **Material:**
- **Size:**
- **Type:**
- **Foundation:**
- **Aux. Features:**
- **Ballast:**

**Keywords:**

- **Type of Device:** (See page 3)
- **Longitudinal Channelizing Barriers, Type III, Barriers**
- **Composition of Sign or Rail substrate:** (See Page 3)
- **Rail: Plastic, Sign: Metal, Wood, Plastic**
- **Thickness of substrate (inches):**
- **Height of sign from the ground (inches), if applicable:** (See Page 3)
- **Flags and or lights present during test? Indicate number of each:**
  - # of flags:
  - # of lights:
  - Weight of lights: ea.

(May be attached on separate page(s)
See specification sheets.)
### Mandatory Attachments

**Attachment # 1:** Test data summary page(s)

- Attach. #1a: Test # 1
- Attach. #1b: Test # 2
- Attach. #1c: Test # 3
- Attach. #1d: Test # 4

### Alternative

**Attachment # 1:** Description and discussion of modification(s) to crash tested and/or accepted device.

### Date:

**Attachment # 2:** PDF drawing(s) of device(s)

- Attach. #2a: Drawing Title:
- Attach. #2b: Drawing Title:
- Attach. #2c: Drawing Title:
- Attach. #2d: Drawing Title:
- Attach. #2e: Drawing Title:
- Attach. #2f: Drawing Title:
- Attach. #2g: Drawing Title:
Please select from the following Keywords for “Type of Device”:

Longitudinal Channelizing Barricade
Curb (Curb channelizer system with or without road tubes or other channelizers)
Drum
H-Footprint Sign Stand
X-Footprint Sign Stand
Trailer Mounted Signs (Does not include arrow boards or variable message signs or other Category 4 trailer mounted devices.)
Automated Flagger Device (not trailer mounted)
Tripod Sign Stand
Type I Barricade
Type II Barricade
Type III Barricade
Vertical Panel
Intrusion Detector
Ballast (Action relates to ballast on one or more devices)
Channelizer (Individual units unlike cones, road tubes, or drums)

Please select from the following Keywords for “Sign Substrate”:

Roll-up / Fabric (with fiberglass spreaders – aluminum or steel spreaders are not allowed.)
Plywood
Aluminum – Solid
Aluminum – Laminate
Corrugated Plastic
Extruded Plastic
Waffleboard Plastic
Wood / Lumber

Please select from the following Keywords for “Height of Sign”:

The distance to the lowest point on the sign is:

Low 12 to 18 inches above the pavement
Mid-A 20 to 24 inches above the pavement
Mid-B 25 to 36 inches above the pavement
Mid-C 37 to 59 inches above the pavement
Tall 60 to 71 inches above the pavement
Oversized 72 inches and taller
Please note the following standard provisions that apply to FHWA letters of acceptance:

- Our acceptance is limited to the crashworthiness characteristics of the devices and does not cover their structural features, or conformity with the Manual on Uniform Traffic Control Devices.
- Any changes that may adversely influence the crashworthiness of the device will require a new acceptance letter.
- Should the FHWA discover that the qualification testing was flawed, that in-service performance reveals unacceptable safety problems, or that the device being marketed is significantly different from the version that was crash tested, it reserves the right to modify or revoke its acceptance.
- You will be expected to supply potential users with sufficient information on design and installation requirements to ensure proper performance.
- You will be expected to certify to potential users that the hardware furnished has essentially the same chemistry, mechanical properties, and geometry as that submitted for acceptance, and that they will meet the crashworthiness requirements of FHWA and NCHRP Report 350.
- To prevent misunderstanding by others, this letter of acceptance shall not be reproduced except in full. This letter, and the test documentation upon which this letter is based, is public information. All such letters and documentation may be reviewed at our office upon request.
- If the subject of this letter is a patented device it is considered "proprietary." The use of proprietary work zone traffic control devices in Federal-aid projects is generally of a temporary nature. They are selected by the contractor for use as needed and removed upon completion of the project. Under such conditions they can be presumed to meet requirement "a" given below for the use of proprietary products on Federal-aid projects. On the other hand, if proprietary devices are specified by a highway agency for use on Federal-aid projects they: (a) must be supplied through competitive bidding with equally suitable unpatented items; (b) the highway agency must certify that they are essential for synchronization with existing highway facilities or that no equally suitable alternative exists or; (c) they must be used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes. Our regulations concerning proprietary products are contained in Title 23, Code of Federal Regulations, Section 635.411, a copy of which is enclosed.
- This Acceptance Letter shall not be construed as authorization or consent by the Federal Highway Administration to use, manufacture, or sell any patented device for which the applicant is not the patent holder. The Acceptance Letter is limited to the crashworthiness characteristics of the candidate device, and the FHWA is neither prepared nor required to become involved in issues concerning patent law. Patent issues, if any, are to be resolved by the applicant.
1) The Yodock Metropolitan Barricade is a recyclable, portable energy disbursement cell used to assist in the prevention of vehicle penetration of a work zone or gore area, as well as providing clear delineation for traffic channelization and pedestrian safety. When installed as a longitudinal channelizer, the units can be interlocked end-to-end, at bottom, with female-to-male adaptations, and at top, with locking coupling device and bollard. Warning flags, steady-burning lights, or flashing lights can be securely mounted to each unit. When used as a barrier wall, the system must be accessorized with the Yodock 350 Barrier Wall Kit.

2) The Metropolitan is made using blow molding to ensure watertightness and integrity. The unit is manufactured with internally molded baffles in order to retain water or other liquid. The drain plug and underside grooves allow for flow of surface drainage. The unit is filled by a unique process that helps in the prevention of separation of the individual portable energy disbursement cell units during impact. The unit has ports designed to allow for ground mounting and forklift holes for ease of mobility when filled.

3) The materials used are a recyclable polyethylene, blow molded to a nominal thickness of 1/16" (2 mm).

4) The standard colors of the cells are opaque white and orange. Other colors may be introduced as required by project specifications.

5) The nominal empty weight of each unit is 80 lbs (36 kg), and up to approximately 900 lbs (408 kg) when water-filled.

6) Light box recesses accommodate a standard barricade light & bolt.

7) Fill hole & drain hole cap use a standard 2" (50mm) bung wrench.
When pinned together, this product is classified as a longitudinal channelizing device (LCD), NOT a positive barrier. Like plastic traffic cones, this device is intended to serve as a visual channelizing device to direct vehicles or pedestrians. This device is NOT designed to keep vehicles from penetrating through. DO NOT use longitudinal channelizing devices in applications where people or fixed objects are intended to be protected from vehicle impacts.

Example of a possible Plastic Water-Filled Longitudinal Channelizing Device (LCD) Decal

Task Force 13 – Work Zone Hardware Committee
May 21, 2007