November 2, 2009

In Reply Refer To:
HSSD/WZ-285

Mr. John Reynolds
Chief Engineer
Work Zone Safety Products Inc.
7201 Haven Ave., Suite E-557
Rancho Cucamonga, CA 91701

Dear Mr. Reynolds:

In your letter of September 26, 2009, you requested the Federal Highway Administration (FHWA) acceptance of the Little Brother x-footprint temporary sign stand as a crashworthy traffic control device for use in work zones on the National Highway System (NHS). You requested acceptance of the temporary sign stand for use with roll-up, aluminum laminates (2 mm and 3 mm), and corrugated plastic (up to 16 mm) sign substrate materials. Your request for acceptance is based on the performance of the generic low mounted sign stands accepted in FHWA letter WZ-240 and a similar x-footprint sign stand in WZ-24. Accompanying your letter were the FHWA Office of Safety Design forms that included drawings and a detailed description of the Little Brother. Drawings of the Little Brother are enclosed for reference. You requested that we find the Little Brother acceptable for use as a Test Level 3 device 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 acknowledges FHWA’s acceptance of your request. The original completed forms have been modified by the addition of the FHWA acceptance letter number and the date of our review. The form will be posted on our Web site in the near future.

Sincerely yours,

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

Enclosures
## Contact Info

**Petitioner / Developer Name and Address:**

Work Zone Safety Products Inc.
7201 Haven Ave. Suite E #557
Rancho Cucamonga, Ca. 91701

I hereby certify that the devices covered by this Acceptance Letter meet(s) the crash worthiness test and evaluation requirements of the FHWA and NCHRP Report 350.

**Signature**

John Reynolds

**Telephone #**

(909) 266-1453

**Email Address**

john@workzonesafetyproducts.com

**Laboratory / Engineer Name and Address**

John Reynolds - Chief Engineer
7201 Haven Ave. Suite E #557
Rancho Cucamonga, CA. 91701

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.

I have evaluated the requested modifications to these devices previously found acceptable by the FHWA in Acceptance Letter WZ-624, and hereby certify that, in my opinion, the modifications do not adversely affect the crash performance of the devices. I also certify that these devices are accurately described on this form.

**Signature**

John Reynolds

**Telephone #**

(909) 587-8942

**Email Address**

john@workzonesafetyproducts.com

### Keywords:

- **Type of Device (See page 3):**
  - X-Footprint Sign Stand
  - Composition of Sign or Rail substrate (See Page 3)
  - Roll-up / Fabric (with fiberglass spreaders - aluminum or steel spreaders are not allowed)
  - Thickness of substrate (inches): 0.63

- **Height of sign from the ground (inches), if applicable: (See Page 3)**
  - Low: 12 to 18 inches above the pavement

- **Flags and or lights present during test? Indicate number of each:**
  - # of flags:  
  - # of lights:  
  - Weight of lights:  

## Device Name

**Little-Brother Sign Stand**

(May be attached on separate page(s))

The WZ Little-Brother sign stand is an X-footprint portable sign stand having a steel upright 1.20 inches square, out of which telescopes a 1 inch square up inner mast which can support a 48” x 48” roll-up sign at a height of (14”) above the pavement. The mast is supported on a dual spring base; with attached folding leg members measuring 42” each when extended. Roll-up Signs are held in place with a roll-up sign bracket. The steel legs and mast have a wall thickness of 0.120 inches.
<table>
<thead>
<tr>
<th>Attachment #1: Test data summary page(s)</th>
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<tbody>
<tr>
<td>Attach. #1a</td>
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<tr>
<td>Attach. #1b</td>
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<td>Attach. #1c</td>
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<td>Attach. #1d</td>
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| Attachment #1: Description and discussion of modification(s) to crash tested and or accepted device. |

<table>
<thead>
<tr>
<th>Date: 09/26/2009</th>
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<tr>
<td>Attachment #2: PDF drawing(s) of device(s)</td>
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<tr>
<td>Attach. #2a</td>
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<td>Attach. #2g</td>
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</table>
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.
Little Brother™
Model # 4200

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Work Zone Safety Products Inc.
