



Texas Department of Transportation

DEWITT C. GREER STATE HIGHWAY BLDG. • 125 E. 11TH STREET • AUSTIN, TEXAS 78701-2483 • (512) 463-8585

March 12, 2003

Mr. Ernest Huckaby
Federal Highway Administration
Office of Transportation Operations
Room 3408
400 Seventh Street., S.W.
Washington, D.C. 20590

Dear Mr. Huckaby:

The Texas Department of Transportation would like to request permission from the Federal Highway Administration to experiment with a non-standard sign application as part of the evaluations for TxDOT/TTI research project 0-4413, Advanced Warning of Stopped Traffic.

Purpose:

A major safety concern in freeway operations is traffic flowing at normal speed encountering unexpected stopped traffic on the freeway main lanes. Traffic can be queued due to recurrent congestion during peak periods, construction or maintenance in work zones, crashes or other incidents. Drivers encountering queues are often faced with rapidly changing conditions in terms of queue length, sight distance to the end of queue, terrain, and available warning devices for traffic control. The most common type of multi-vehicle freeway crash is a rear-end collision, often due to stopped traffic on the freeway main lanes.

TxDOT has placed a high priority on informing drivers of roadway conditions in real-time, in terms of construction and maintenance signing for work zones and via Intelligent Transportation System strategies for incident conditions. However, techniques and strategies for providing drivers with real-time advanced warning for stopped freeway conditions are not widely practiced on a routine basis.

The focus of this research will be to identify current practices and develop innovative techniques to provide advance warning of stopped traffic on freeways, thereby increasing safety and mobility

Description of Traffic Control Device:

The non-standard sign and implementation arrangement for which we are requesting experimentation is a 48 X 48 inch yellow warning with a modified European queue symbol. A supplemental sign attached below to give more detail information concerning distance, etc. Please see the attachment for sign design and placement information.

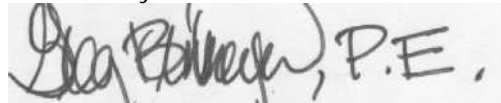
Field Evaluation:

It is requested that permission be granted to experiment with the non-standard sign at a maximum of five locations on TxDOT highways. The field evaluations will include the daytime and nighttime effect of this non-standard sign on driver speeds and deceleration characteristics

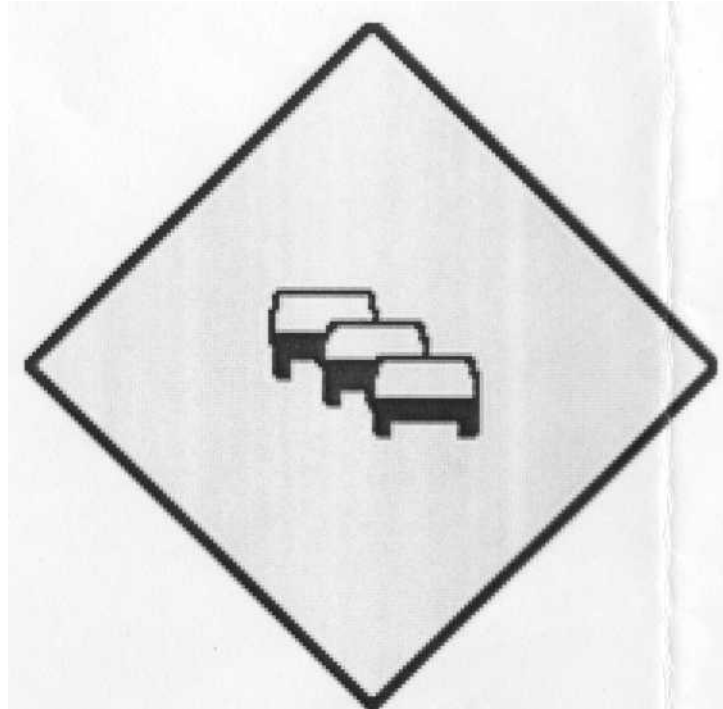
TxDOT and TTI staffs see no reason to believe that the R2-1 colored border extension will have adverse effects on traffic operations or safety while in place. However, the experiment will be terminated if it is determined that significant safety concerns are directly or indirectly attributable to the colored border used in this experiment.

Thank you for your consideration. If you have any questions or need additional information, please call me at (512) 416-3120.

Sincerely,

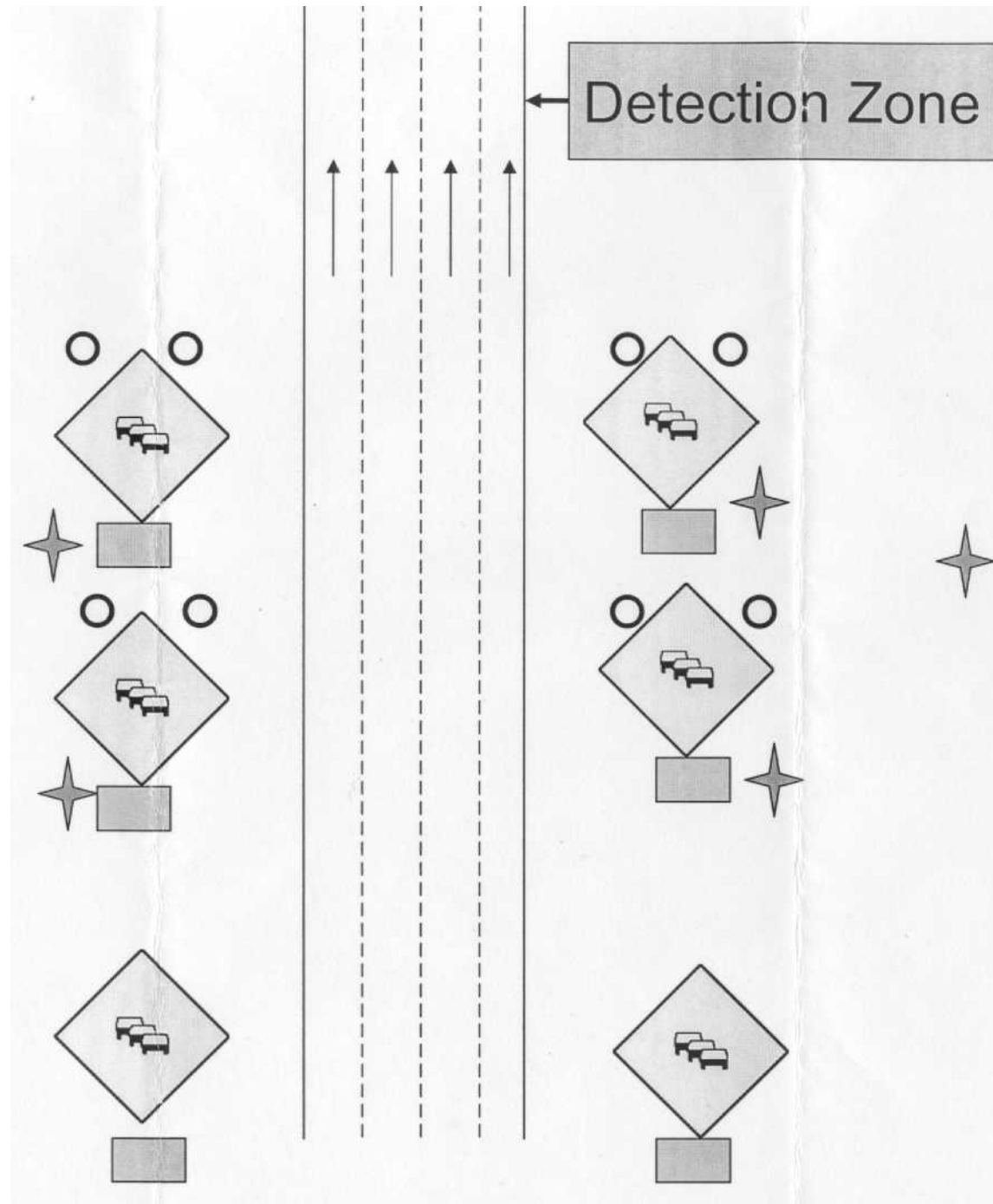
A handwritten signature in black ink, appearing to read "Greg Brinkmeyer, P.E.", is written over a light gray rectangular background.

Greg Brinkmeyer, P.E.
Engineer of Policy and Standards
Traffic Operations Division-TE



WATCH FOR
CONGESTION
NEXT X MILE

NEXT X MILES is
text for the first set
of signs only



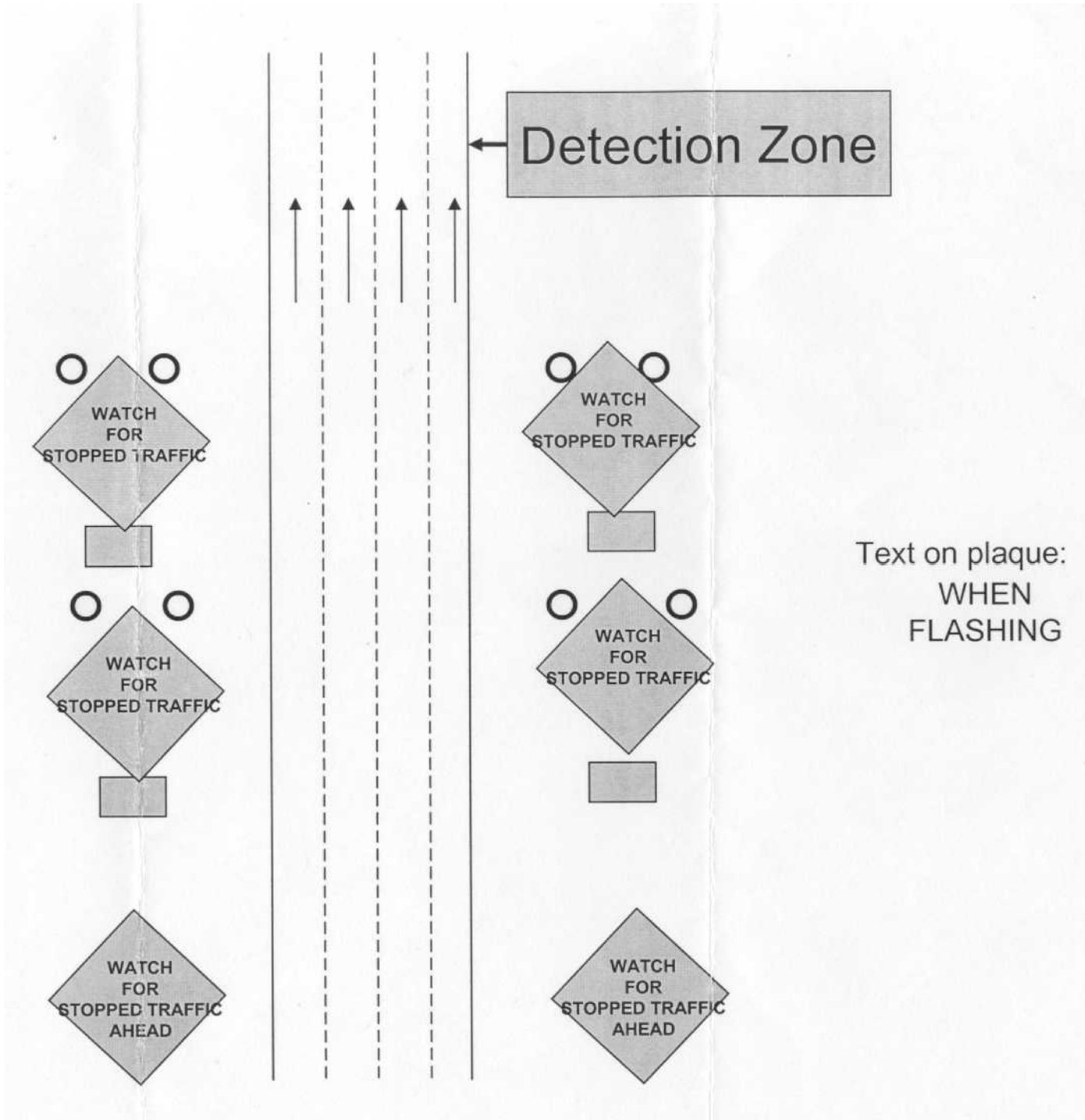
Text on plaque:
WHEN FLASHING

If no detection zone
 is used, and flashers
 are always on, then
 text on plaque may
 be:
**WATCH FOR
 STOPPED TRAFFIC**

**WATCH
FOR
STOPPED TRAFFIC
AHEAD**

“AHEAD” is
text for the first set
of signs only

**WHEN
FLASHING**



Detection Zone

WATCH FOR STOPPED TRAFFIC

WATCH FOR STOPPED TRAFFIC

WATCH FOR STOPPED TRAFFIC

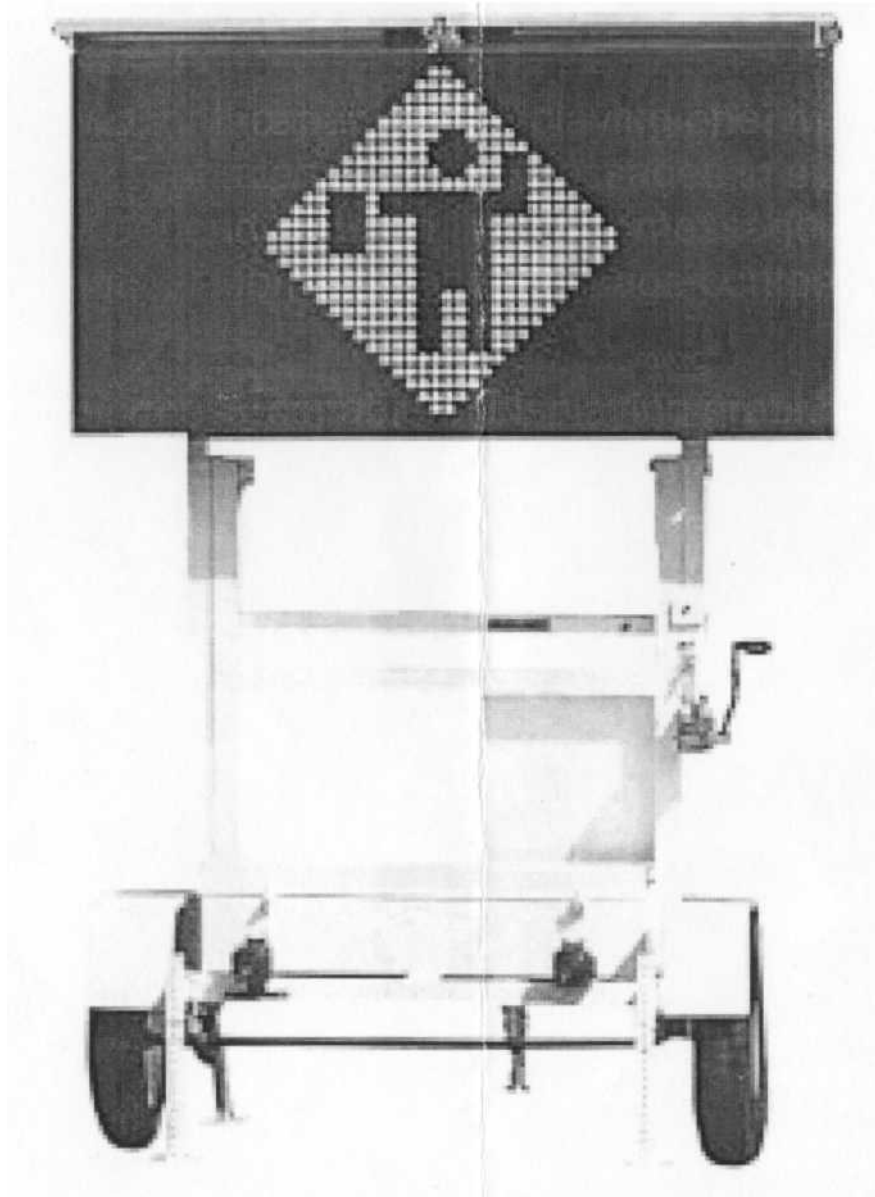
WATCH FOR STOPPED TRAFFIC

WATCH FOR STOPPED TRAFFIC AHEAD

WATCH FOR STOPPED TRAFFIC AHEAD

Text on plaque:
WHEN FLASHING

GENERAL PURPOSE TRAILER MOUNTED CHANGEABLE MESSAGE SIGN with alphanumeric and graphic display capability



Capable of displaying one, two, or three line alphanumeric messages in six font sizes- number of lines per message dependent upon font size and message content

-capable of displaying graphic messages consisting of any of twenty seven MUTCD Part VI construction zone signs

brightness, or intensity, of the LED display may be controlled manually, or alternatively may be regulated automatically

-optional radar

