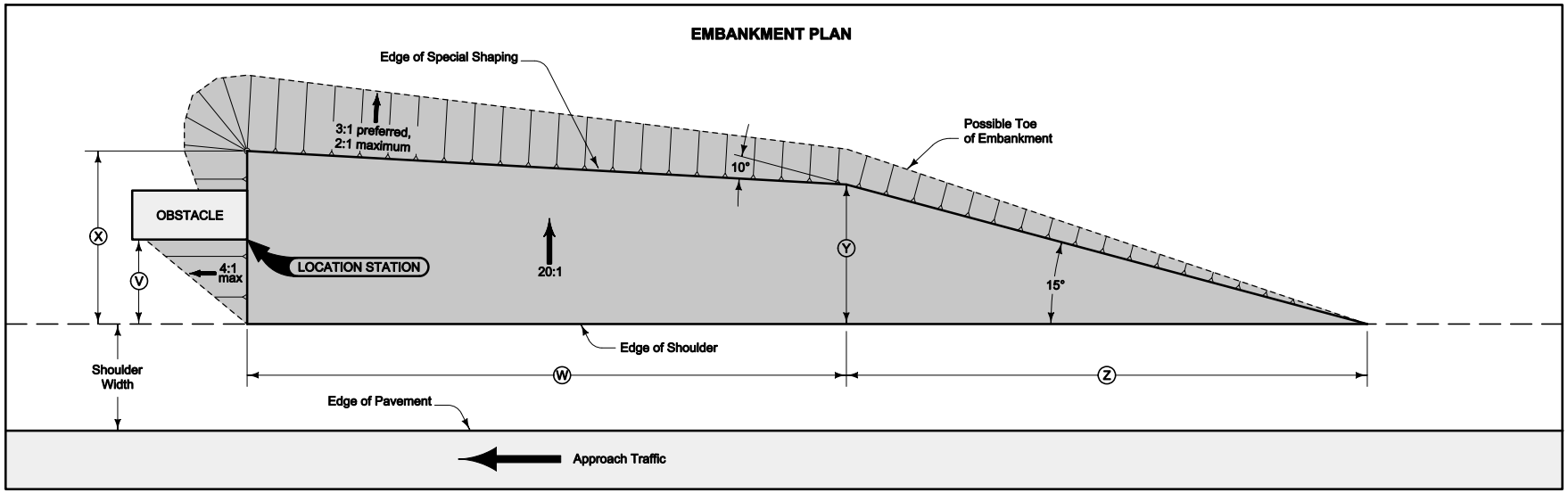
DESIGNER INFO

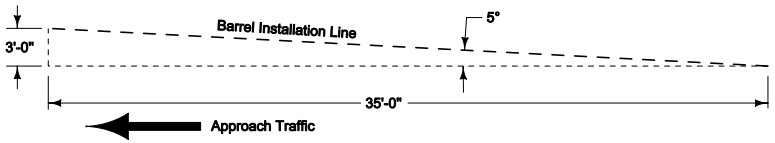
EMBANKMENT PLAN



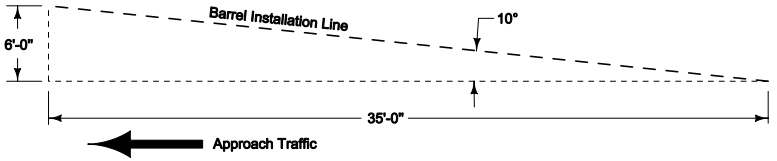
BARREL INSTALLATION LINE LAYOUT

Angle of Barrel Installation Line is measured from a line parallel to roadway centerline.

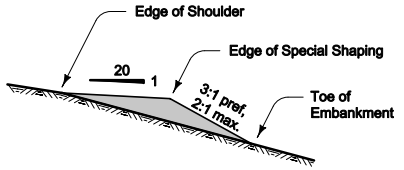
Where distance to obstacle is less than 15 feet from edge of traveled way: (1)



Where distance to obstacle is 15 feet or greater from edge of traveled way:



EMBANKMENT TYPICAL SECTION



(1) For obstacles located within the traveled way where space is limited, Barrel Installation Line may be parallel to roadway centerline. In this case, (Y) dimension equals (X) dimension.

Possible Contract Items:
Embankment In Place
Temporary Crash Cushion

Possible Tabulation:
108-30

EMBANKMENT DIMENSIONS

For Obstacle Widths:	Sand Barrel Layouts Required	(W)	(X)	(Y) (must not be negative)	(Z)
3'-6" or less	1	24'-3"	(V)+5'-3"	(V)+3'-3"	0.268(V)+12'-0"
3'-7" - 10'-7"	2	25'-0"	(V)+12'-3"	(V)+10'-0"	0.268(V)+38'-0"
10'-8" - 17'-9"	3	25'-9"	(V)+19'-3"	(V)+17'-0"	0.268(V)+64'-0"
17'-10" - 32'-3"	4	26'-6"	(V)+26'-3"	(V)+24'-0"	0.268(V)+89'-0"

Iowa Department of Transportation

REVISION
New 04-20-10

STANDARD ROAD PLAN

BA-500

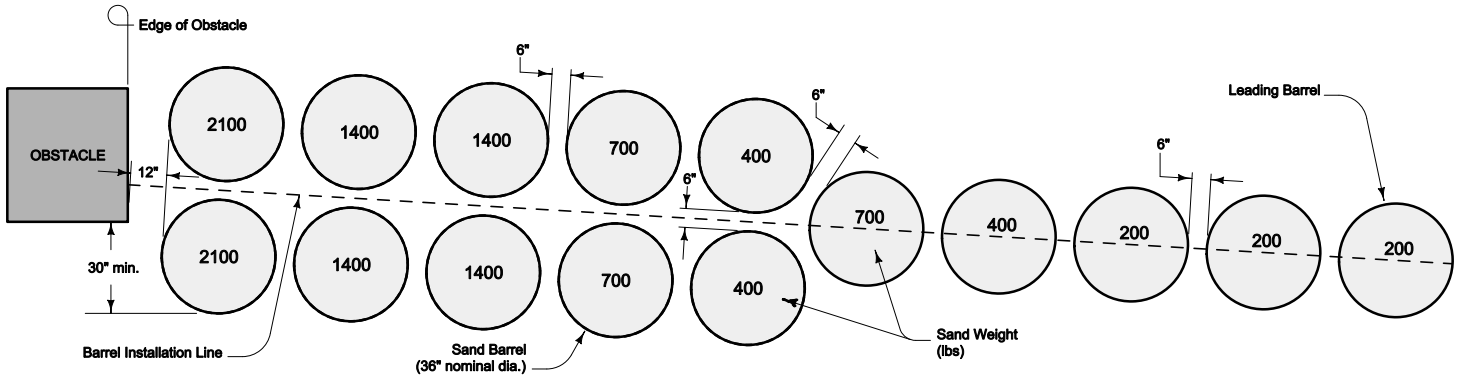
SHEET 1 of 2

REVISIONS: New. Replaces RE-85.

Deanna Maifield
APPROVED BY DESIGN METHODS ENGINEER

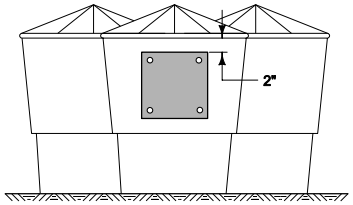
TEMPORARY CRASH CUSHIONS SAND BARREL

SAND BARREL LAYOUT

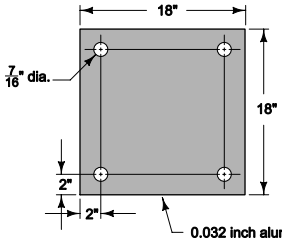


SAND BARREL DELINEATION

Mount marker plate on the leading barrel, centered on the barrel installation line.



MARKER PLATE

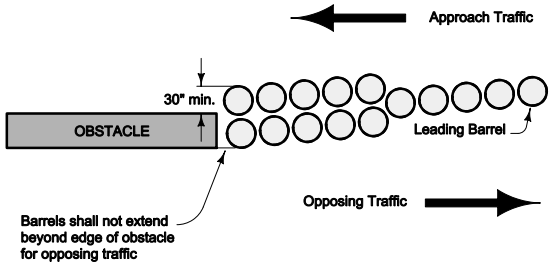


0.032 inch aluminum plate sheeted with yellow Type III or Type IV retroreflective sheeting

Mount plate using four 3/8" bolts, nuts, and washers meeting the requirements of Article 4186.09 for Type A signs.

Self-adhesive sheeting meeting the above requirements may be substituted for the marker plate.

PROTECTING OBSTACLES BETWEEN OPPOSING TRAFFIC

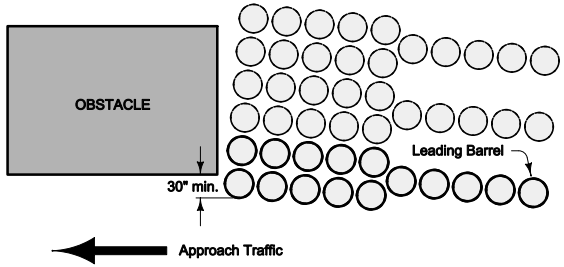


PROTECTING WIDE OBSTACLES

For wide obstacles, repeat sand barrel layout as needed

An installation consisting of multiple sand barrel layouts, similar to the one shown, will be measured as a single crash cushion.

All barrels separated by 6 inches.



Iowa Department of Transportation

REVISION	
New	04-20-10

STANDARD ROAD PLAN

BA-500

SHEET 2 of 2

REVISIONS: New. Replaces RE-85.

Deanna Maifield
APPROVED BY DESIGN METHODS ENGINEER

TEMPORARY CRASH CUSHIONS
SAND BARREL