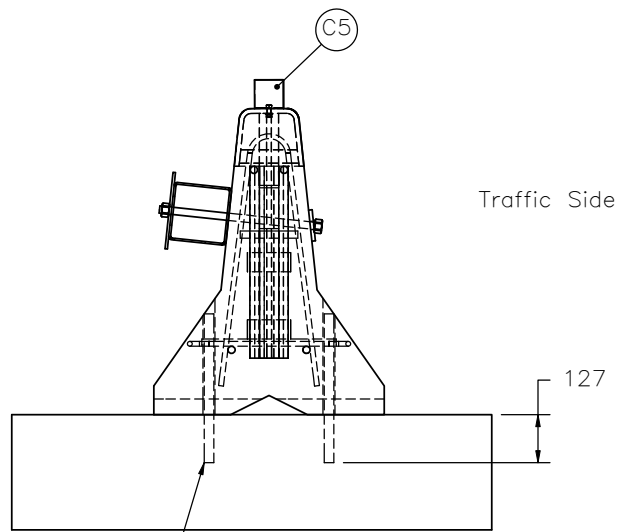


25.0°
 1300.5
 Impact with 2270 Vehicle

Top View



SECTION A-A
 SCALE 1 : 20

Sections 1 and 10 only anchored into concrete pad with 9 - A36 $\phi 25.4$ x 394mm long unthreaded steel rods set in $\phi 25.4$ x 127 mm deep drilled holes

Note: (1) Only sections 1 and 10 are anchored.
 (2) Anchor pins may also be driven 457mm into asphalt surface.



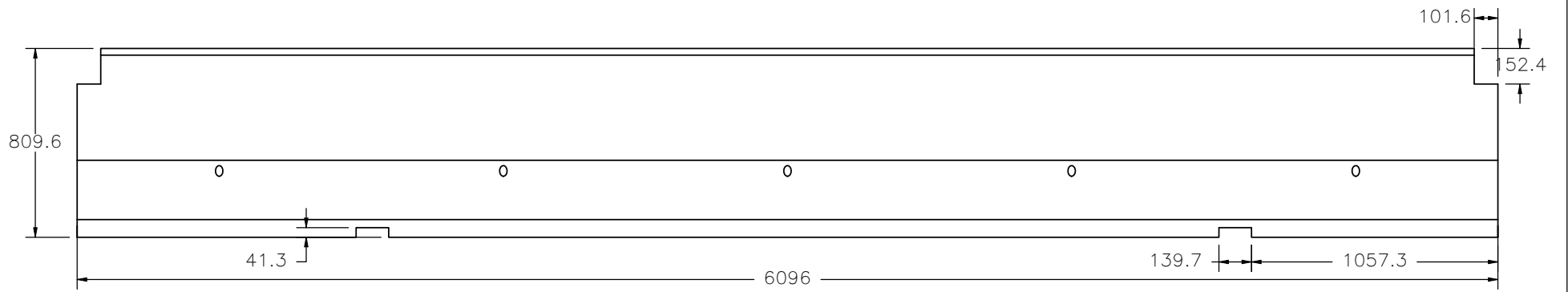
Midwest Roadside Safety Facility

Box Beam Stiffened, Temporary Concrete Barrier System Layout

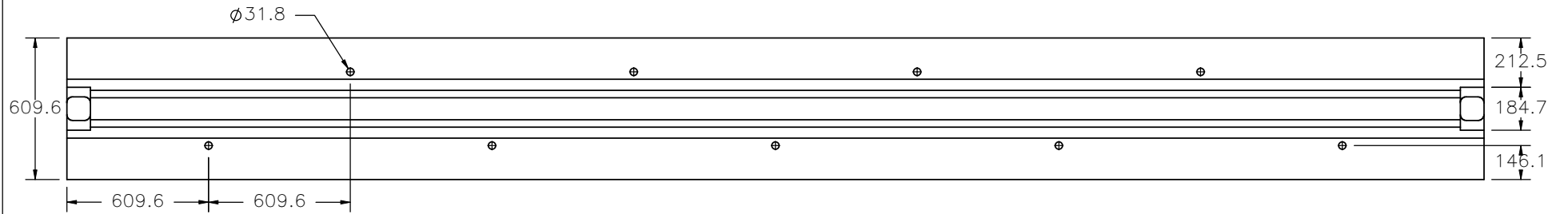
SHEET: 1 of 11
DATE: 2/27/2008
DRAWN BY: GRA
REV. BY: KAP/RKF

DWG. NAME:
NY-BB-TempBarrier_R9_metric

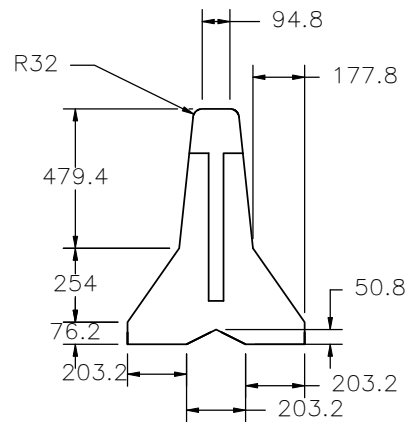
SCALE: None
UNITS: mm



Front View



Top View



Side View

Note: (1) Concrete has minimum 28-day compressive strength of 21.0 MPa.



Midwest Roadside
Safety Facility

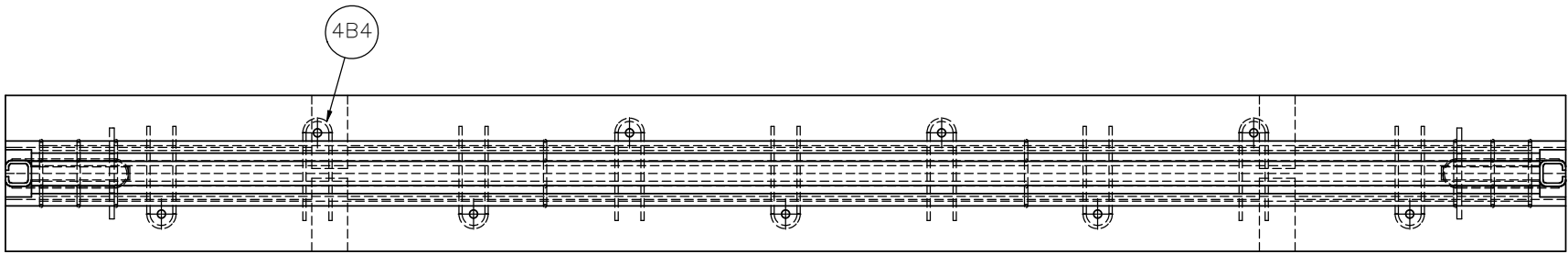
Box Beam Stiffened,
Temporary Concrete Barrier

Concrete Section
Part M1

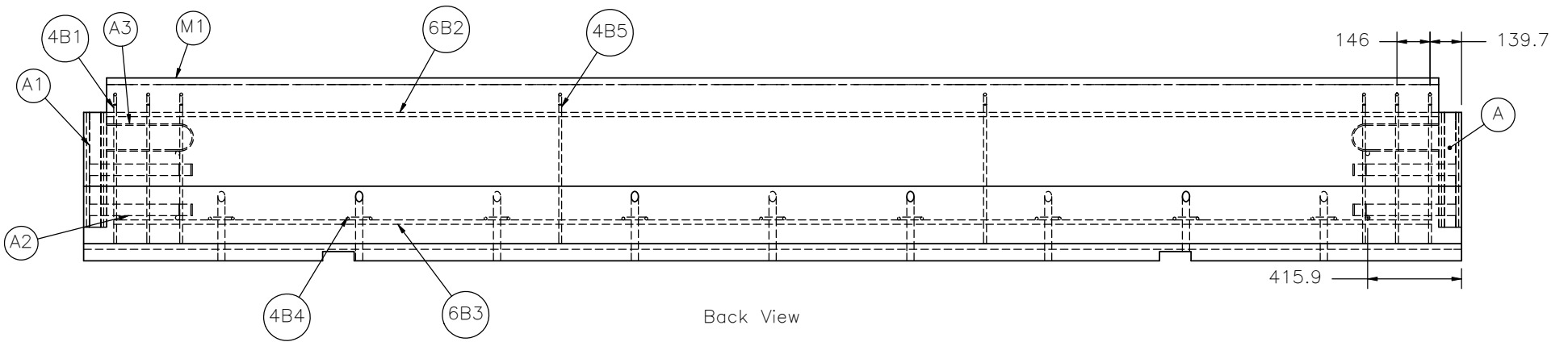
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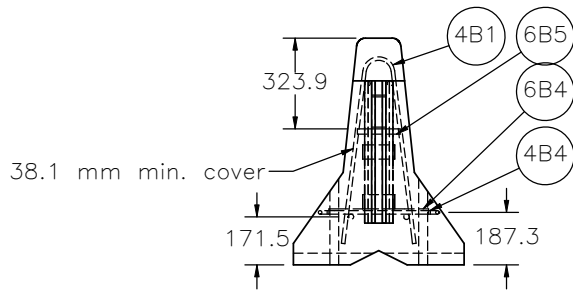
SHEET:
2 of 11
DATE:
2/27/2008
DRAWN BY:
GRA
REV. BY:
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Top View



Back View



End View



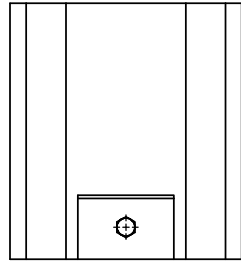
Midwest Roadside
Safety Facility

Box Beam Stiffened,
Temporary Concrete Barrier
Reinforcement Details

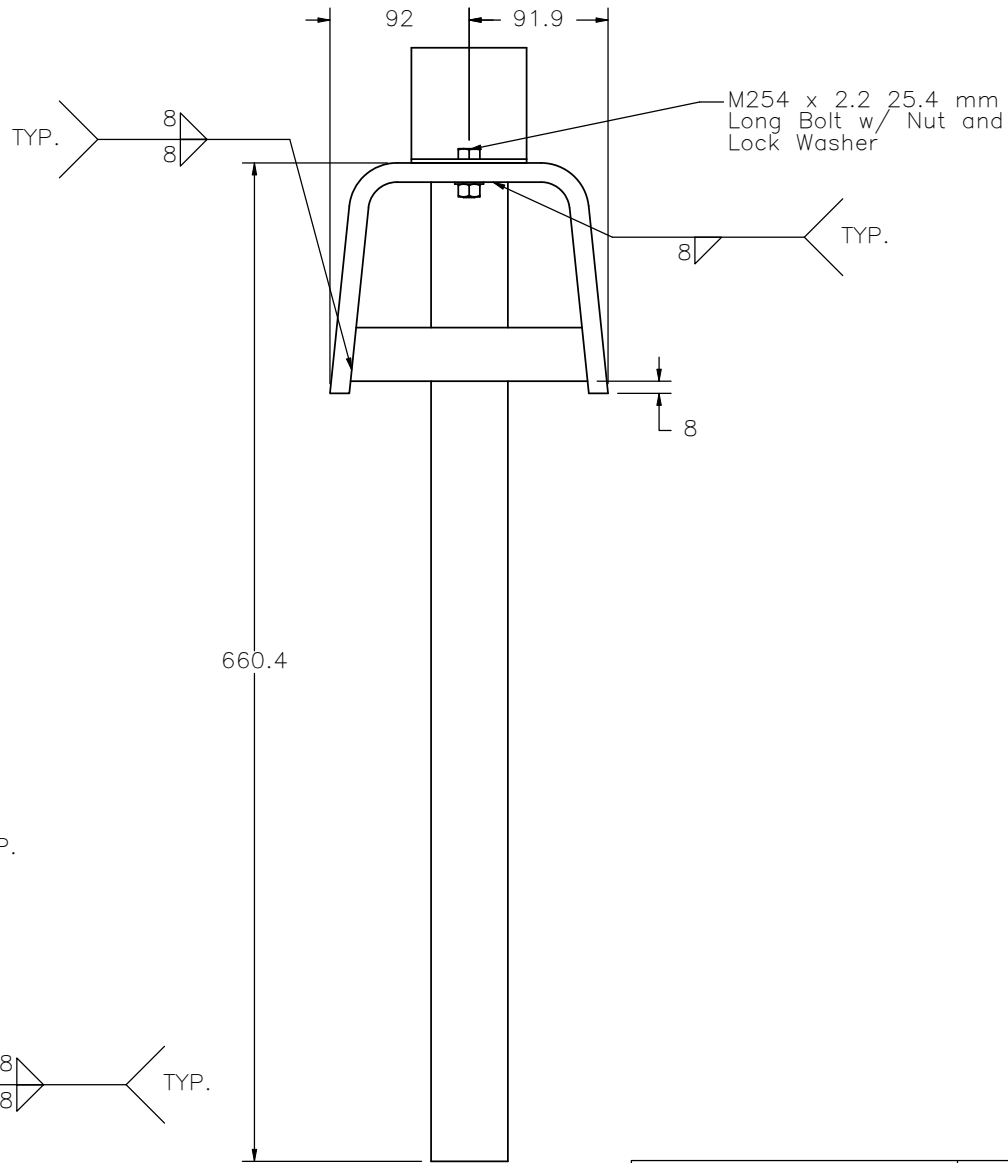
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NY-BB-TempBarrier_R9_metric

SCALE: None
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DATE:
2/27/2008
DRAWN BY:
GRA
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KAP/RKF

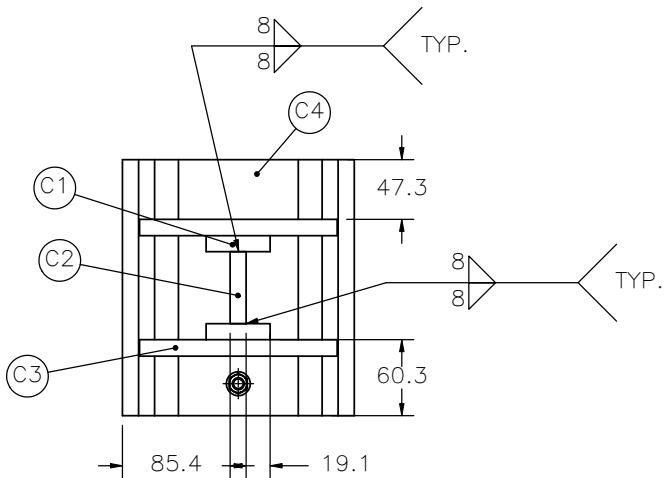


Top View

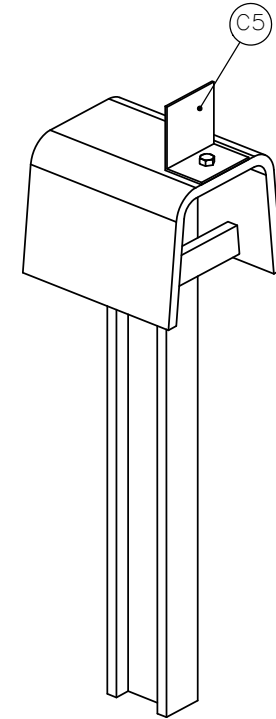


Front View

Part C
Concrete Key



Bottom View



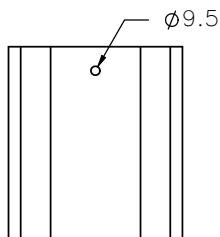
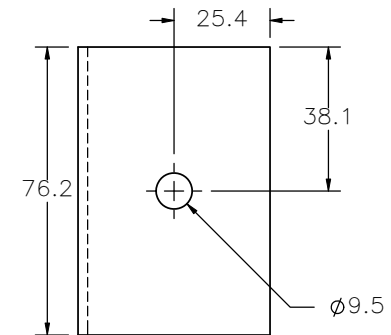
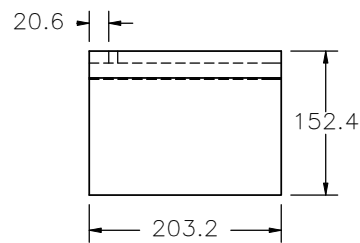
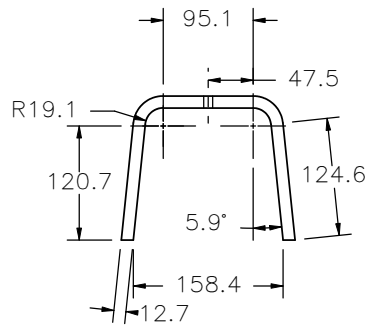
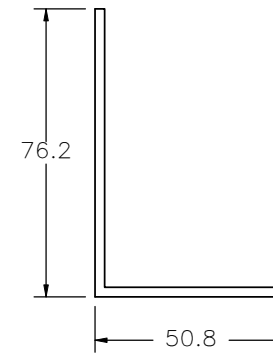
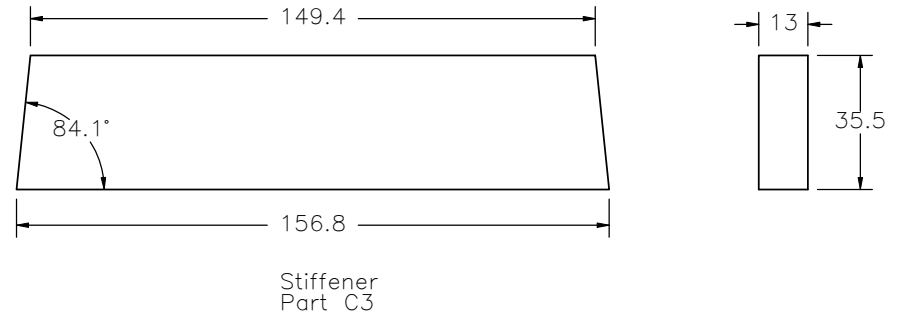
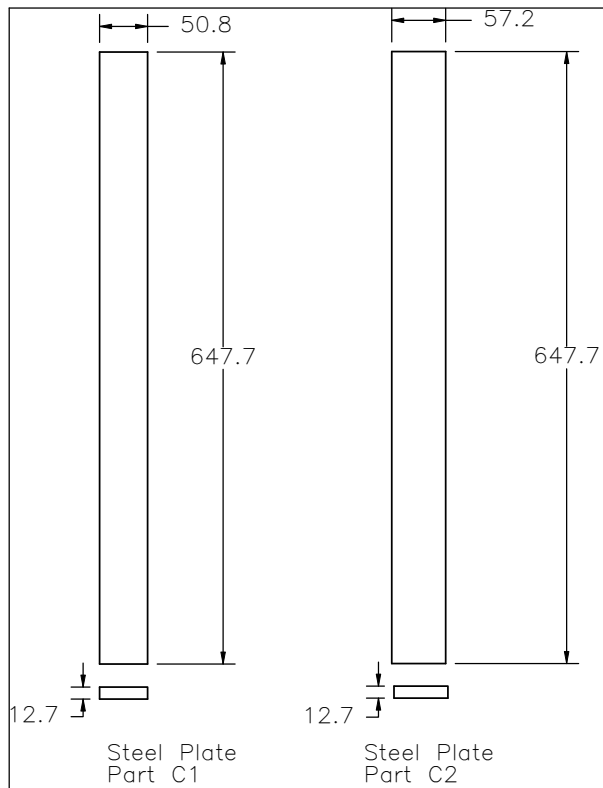
Midwest Roadside
Safety Facility

Box Beam Stiffened,
Temporary Concrete Barrier
Connection Key Assembly
Part C

DWG. NAME.
NY-BB-TempBarrier_R9_metric

SCALE: None
UNITS: mm

SHEET:
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Midwest Roadside Safety Facility

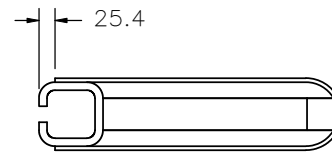
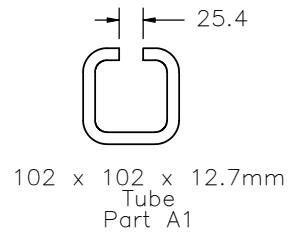
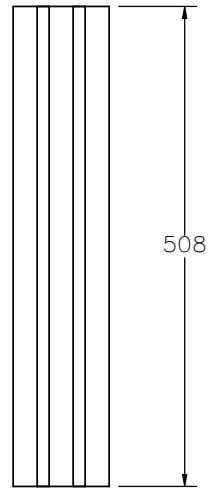
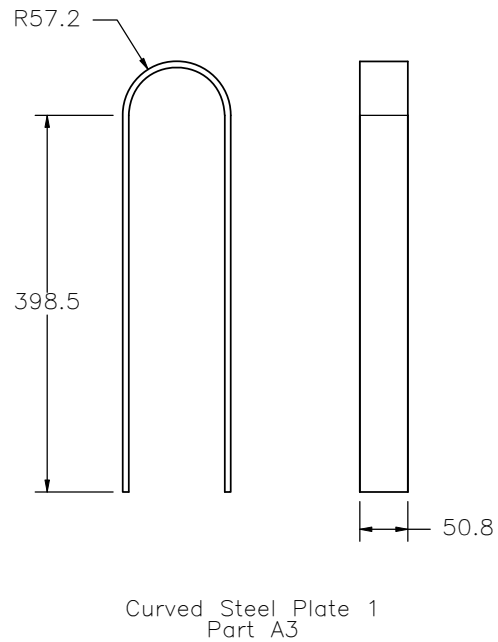
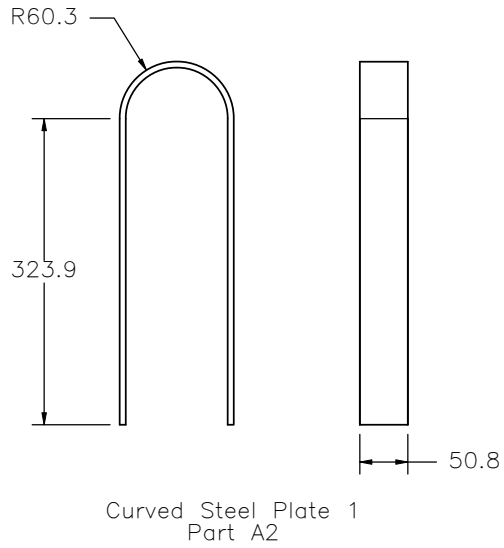
Box Beam Stiffened, Temporary Concrete Barrier

Connection Key Assembly Components

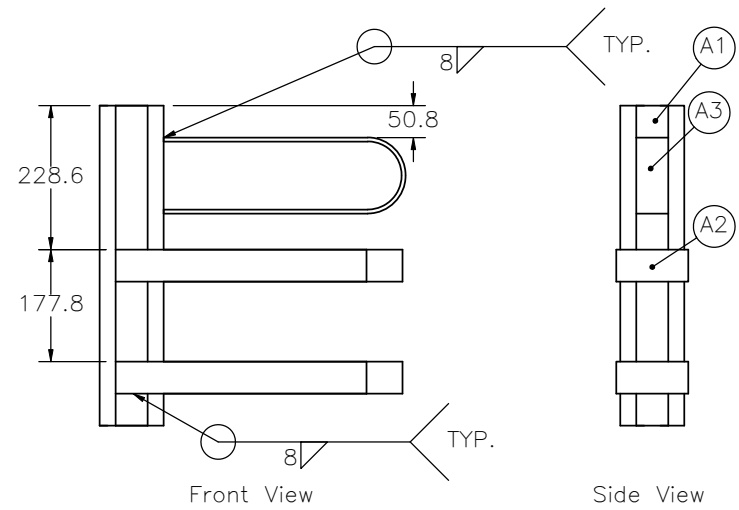
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NY-BB-TempBarrier_R9_metric

SCALE: None
UNITS: mm

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2/27/2008
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GRA
REV. BY:
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Top View



Concrete Connector
Part A



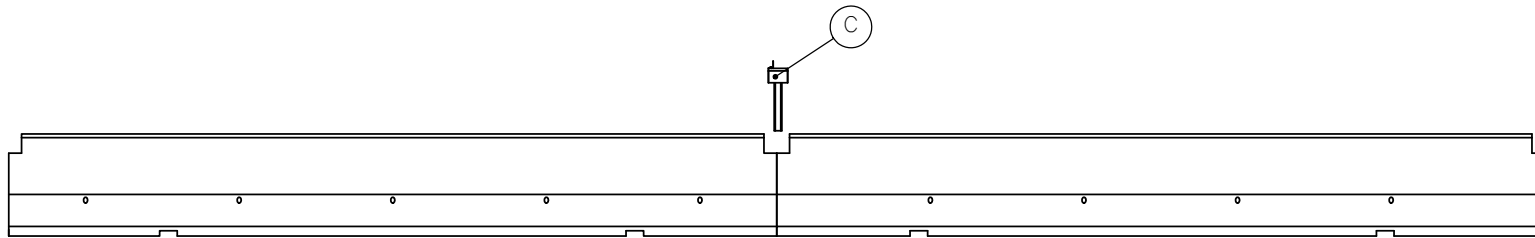
Midwest Roadside
Safety Facility

Box Beam Stiffened,
Temporary Concrete Barrier
Connector Key
Part A

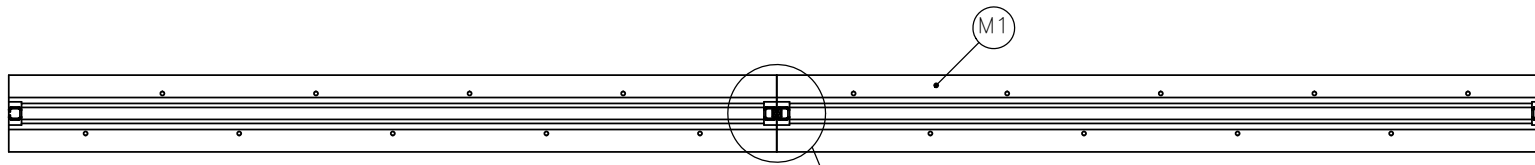
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NY-BB-TempBarrier_R9_metric

SCALE: None
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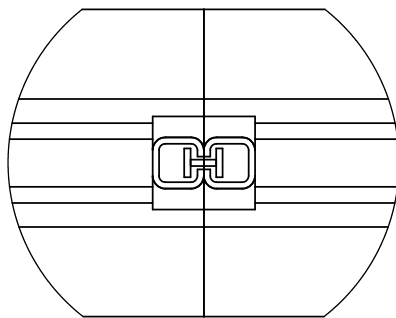
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GRA
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Front View



Top View



DETAIL B
SCALE 1 : 15



Midwest Roadside
Safety Facility

Box Beam Stiffened,
Temporary Concrete Barrier
Connection Key

SHEET:
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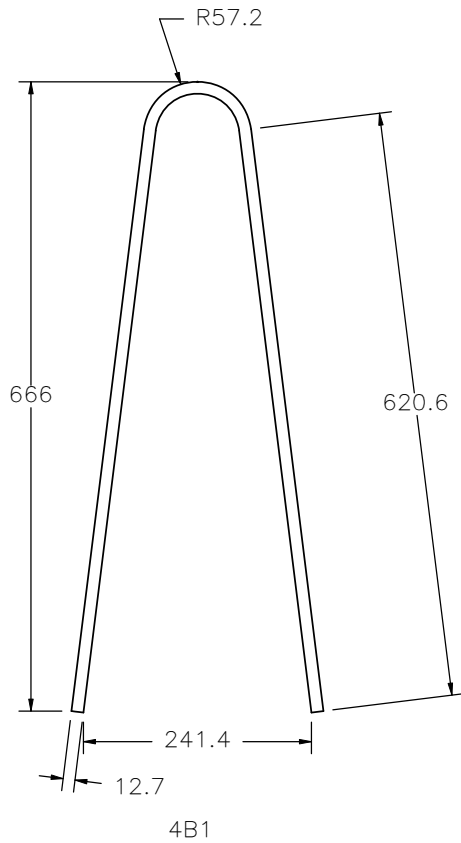
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2/27/2008

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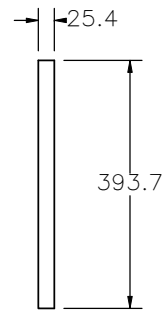
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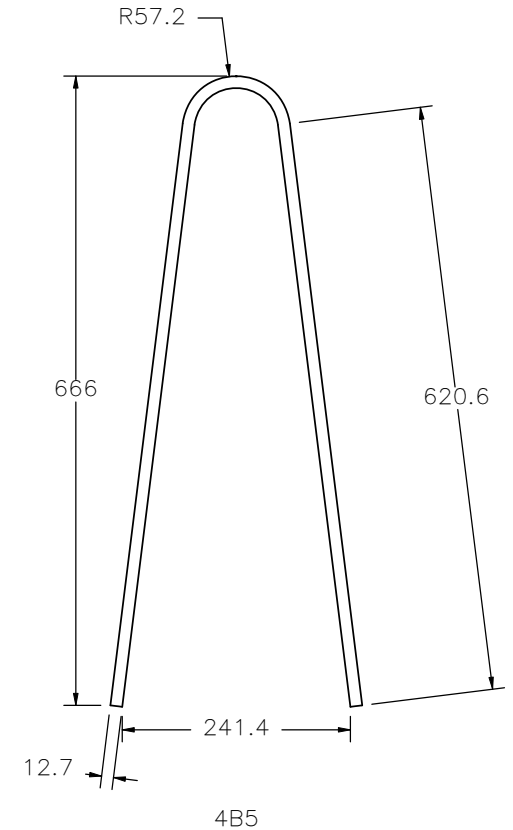
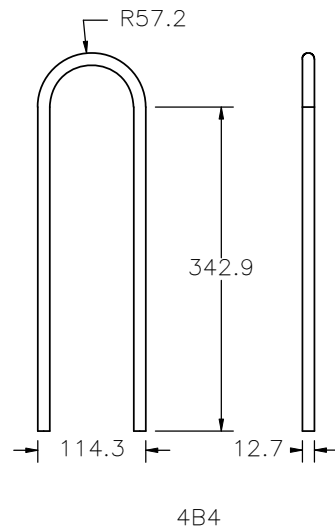
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NY-BB-TempBarrier					
Item No.	Bend Dia.	Qty.	Length	Material Spec	Bar Size
Smooth Anchor Rod	-	18	394mm	A36M	25.4mm
4B1	89mm	60	1407mm	A615 Gr. 60	12.7mm
4B4	89mm	90	868mm	A615 Gr. 60	12.7mm
4B5	89mm	20	1407mm	A615 Gr. 60	12.7mm
6B2	-	20	5893mm	A615 Gr. 60	19mm
6B3	-	20	5830mm	A615 Gr. 60	19mm
6B4	-	20	356mm	A615 Gr. 60	19mm
6B5	-	20	152mm	A615 Gr. 60	19mm



Smooth Anchor Rod



Note: (1) Quantities in Bill of Bars represent a system with 10 barriers.



Midwest Roadside
Safety Facility

Box Beam Stiffened,
Temporary Concrete Barrier
Bill of Bars

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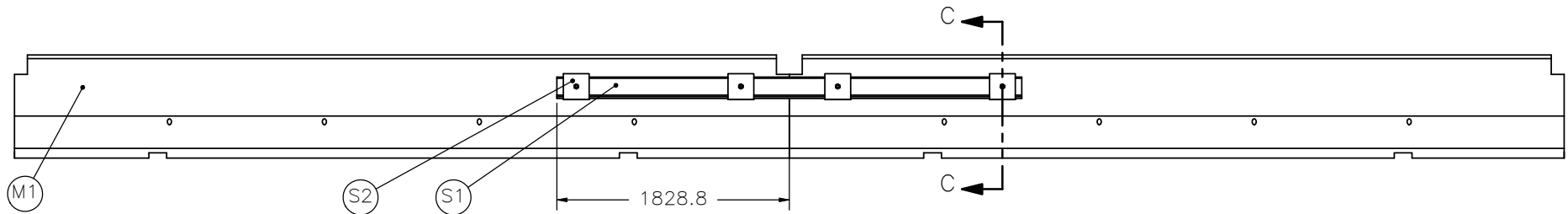
DATE:
2/27/2008

DRAWN BY:
GRA

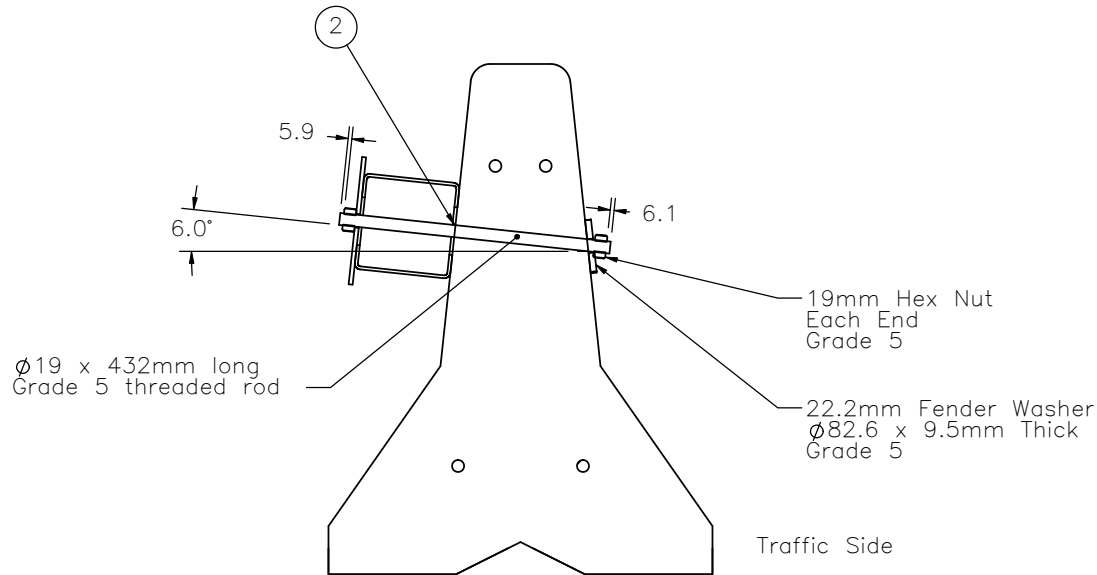
DWG. NAME:
NY-BB-TempBarrier_R9_metric

SCALE: None
UNITS: mm

REV. BY:
KAP/RKF



Back View



Traffic Side

SECTION C-C
SCALE 1 : 12

- Notes: (1) ASTM A193 Grade B7 is acceptable as a substitute for Grade 5 threaded rod.
 (2) Shim box beam as needed with 22.2mm i.d.-82.6mm o.d. x 9.5mm thick Grade 5 washer.



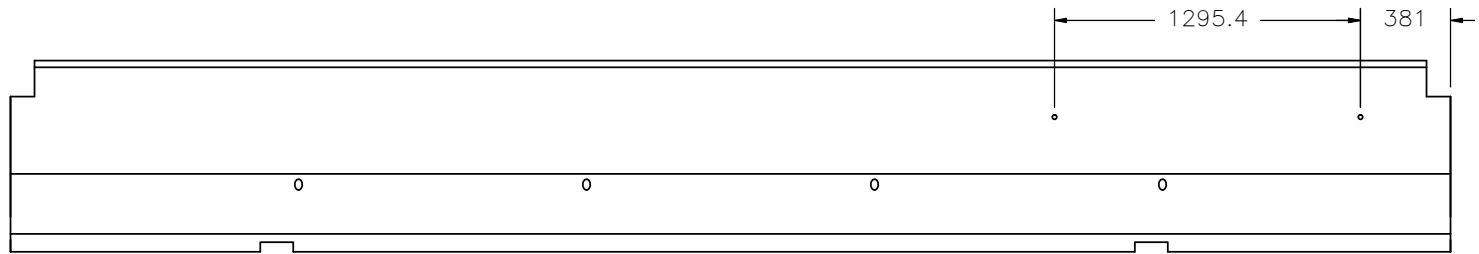
Midwest Roadside
Safety Facility

Box Beam Stiffened,
Temporary Concrete Barrier
Stiffener

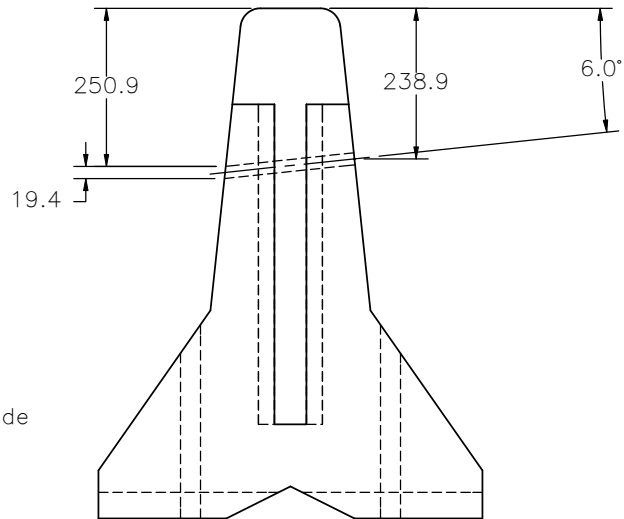
DWG. NAME:
NY-BB-TempBarrier_R9_metric

SCALE: None
UNITS: mm

SHEET:
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Back View



Traffic Side



Midwest Roadside
Safety Facility

Box Beam Stiffened,
Temporary Concrete Barrier
Stiffener Drilling

SHEET:
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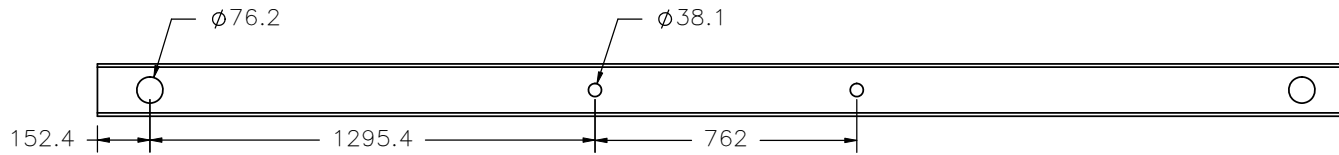
DATE:
2/27/2008

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GRA

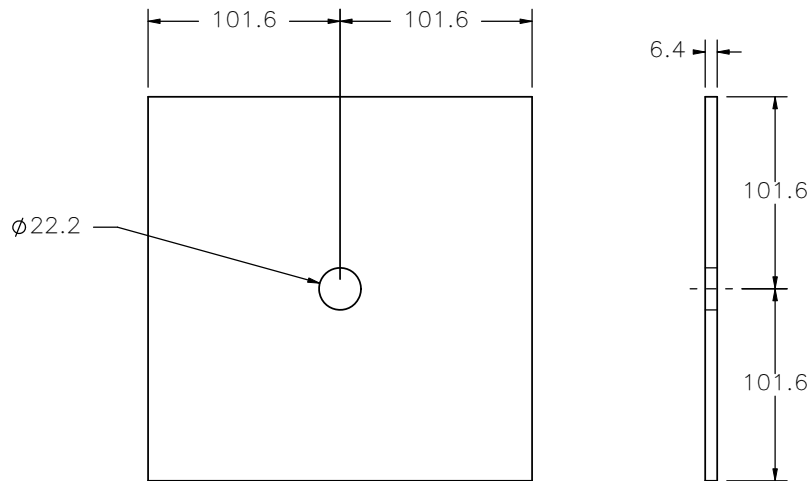
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NY-BB-TempBarrier_R9_metric

SCALE: None
UNITS: mm


REV. BY:
KAP/RKF



152 x 152 x 4.76mm Box Beam
 ASTM A500 Grade C
 Part S1



203mm Square Plate
 A36
 Part S2

	Box Beam Stiffened, Temporary Concrete Barrier		SHEET: 11 of 11
	Stiffener Components		DATE: 2/27/2008
Midwest Roadside Safety Facility	DWG. NAME: NY-BB-TempBarrier_R9_metric	SCALE: None UNITS: mm	DRAWN BY: GRA
			REV. BY: KAP/RKF