

1 Make the following section a part of the Standard Specifications:

2
3 **"SECTION 695 – MOVEABLE STEEL BARRIER**

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5 **695.01 Description.** This work shall consist of furnishing, hauling,
6 installing, maintaining, relocating, and subsequently removing moveable steel
7 barriers in accordance with the requirements of the contract.

8 **695.02 Materials.** Materials shall meet the requirements specified in the
9 following subsections of Division 700 - Materials.

10
11 Structural Steel 713.01

12
13 Standard Fasteners 718.01

14
15 Reflector Marker 750.07

16
17 Preformed Pavement Marking Tape 755.04

18
19 **695.03 Construction Requirements.**

20
21 **(A) Fabrication.** Moveable steel barriers shall be Vulcan Barrier™ as
22 manufactured by Energy Absorption Systems, Inc. or approved equal.

23 **(B) Barrier Design.** The moveable steel barrier system shall meet
24 NCHRP-350 Test Level 3 requirements as a longitudinal redirecting
25 barrier. The barrier system shall be designed for quick deployment and
26 reconfiguration.

27 The nominal length of each individual barrier shall be approximately
28 4 meters. The barrier system shall be designed to deflect a minimum of
29 six degrees from one barrier to the next adjacent barrier. Each barrier unit
30 shall be equipped with retractable wheeled jacks designed to be deployed
31 using a hand crank.

32 **(C) Accessories.** Furnish and install one RM-2 reflector marker
33 mounted on top of the moveable barrier, a longitudinal 4-inch permanent
34 preformed pavement marking tape on the sloped side of the barrier facing
35 traffic (Tape, Type I, color to match appropriate roadway pavement stripe),
36 and a steady burn amber lamp on each barrier unit.

37 **(D) Installation.** Assemble and install the moveable steel barrier
38 system in accordance with the manufacturer's recommendation. Erect all
39 units as shown on the plans or as specified by the Engineer. Set the units
40 in a vertical position, closely following the roadway grade.

41 Minimum deployment lengths (e.g., anchored and unanchored
42 installations) of the moveable steel barrier system shall be in accordance
43 with manufacturer's recommendations.

44 Contractor shall not leave barrier ends exposed to traffic and shall
45 provide an end treatment which complies with NCHRP-350 Test Level 3
46 criteria.

47 Relocate any units not in use as order by the Engineer to a location
48 specified by the Engineer.

49 Contractor shall be responsible for maintaining moveable steel
50 barrier installation and shall promptly replace any damaged barrier unit as
51 directed by the Engineer at no additional cost to the State.

52 Contractor shall be responsible for the safe keeping of moveable
53 steel barrier units until they are removed from the project.

54 **695.04 Measurement.** The Engineer will measure Contractor-furnished
55 moveable steel barrier per each.

56
57 **695.05 Payment.** The Engineer will pay for the accepted Contractor-
58 furnished moveable steel barriers at the contract unit price per each, as shown in
59 the proposal schedule. The price includes full compensation for work prescribed
60 in this section and the contract documents.

61 The Engineer will pay for the following pay item when included in the
62 proposal schedule:

63	Pay Item	Pay Unit
64	Positive Protection Barrier _____	Each"

65

66 **END OF SECTION 695**