

Tanzania Bridge Guardrail Technical Document

一、 Design Concept:

The design concept is based on the customer's drawing requirements, combined with the guardrail specifications we have supplied to the local market in the past and combined with the European and American standards referred to in Tanzania.

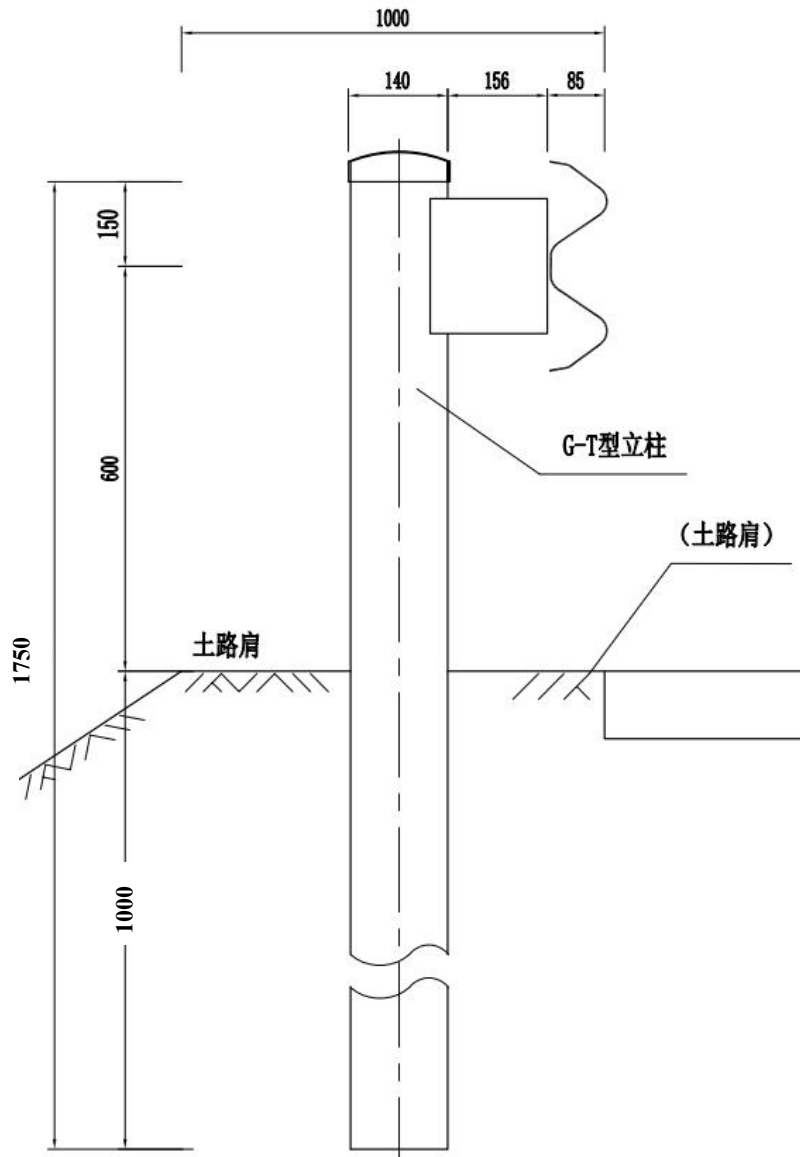
二、 Design based on foreign standards:

- 1、 Standard Specification for Corrugated Sheet Steel Beams for Highway Guardrail AASHTO M180-12
- 2、 Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products ASTM A123
- 3、 Hot-rolled products of structural steels - Part 2: Technical delivery conditions for non-alloyed structural steels EN 10025-2:2004

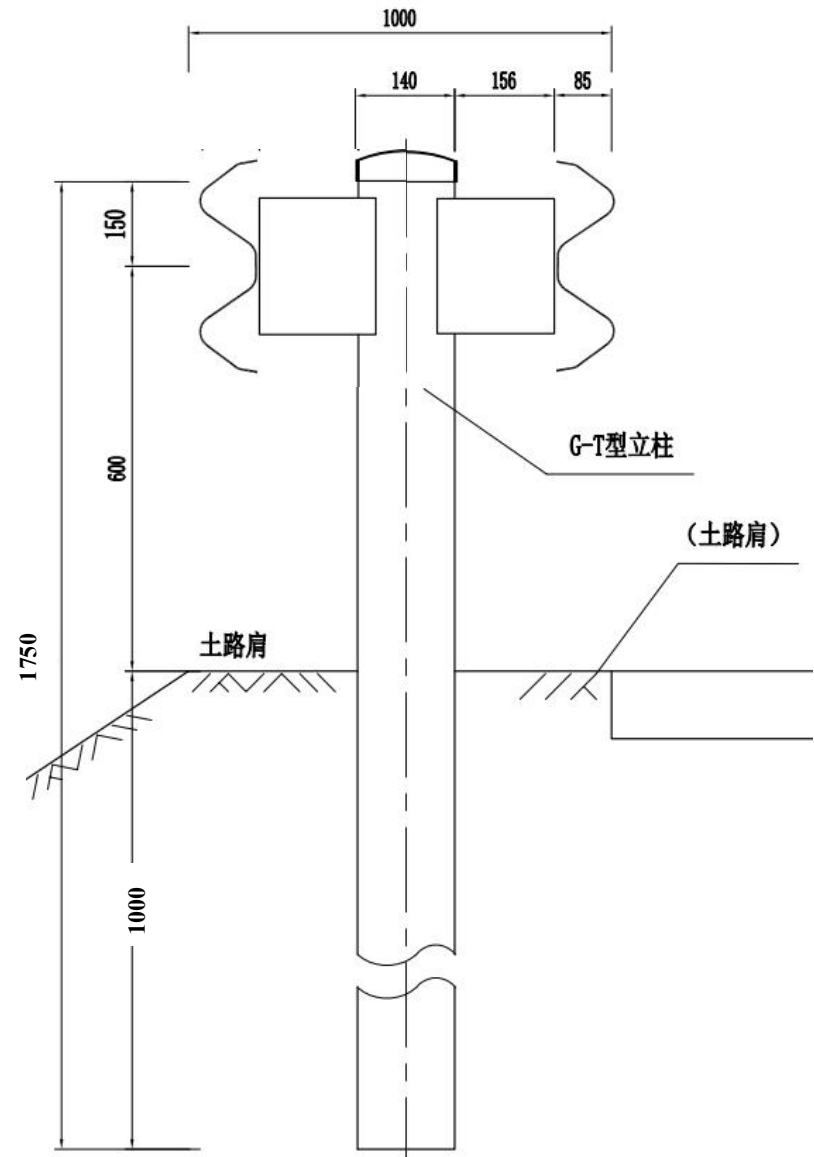
三、 Beam Guardrail Design Scheme:

No.	Name	Specification	Material	备注
1	W Beam Guardrail	4130*310*83*2.75	Q355B	
2	Round Post	φ 140*4.5*1750	Q235B	
3	Spacer	196*178*200*4.5	Q235B	
4	Bolt & Nuts	M16*160	Q235B	
5	Bolt & Nuts	M16*35	Q235B	
6	Washer	76*44*3.0	Q235B	
7	Post Cap	φ 140	Q235B	

See the attachment in the drawing.



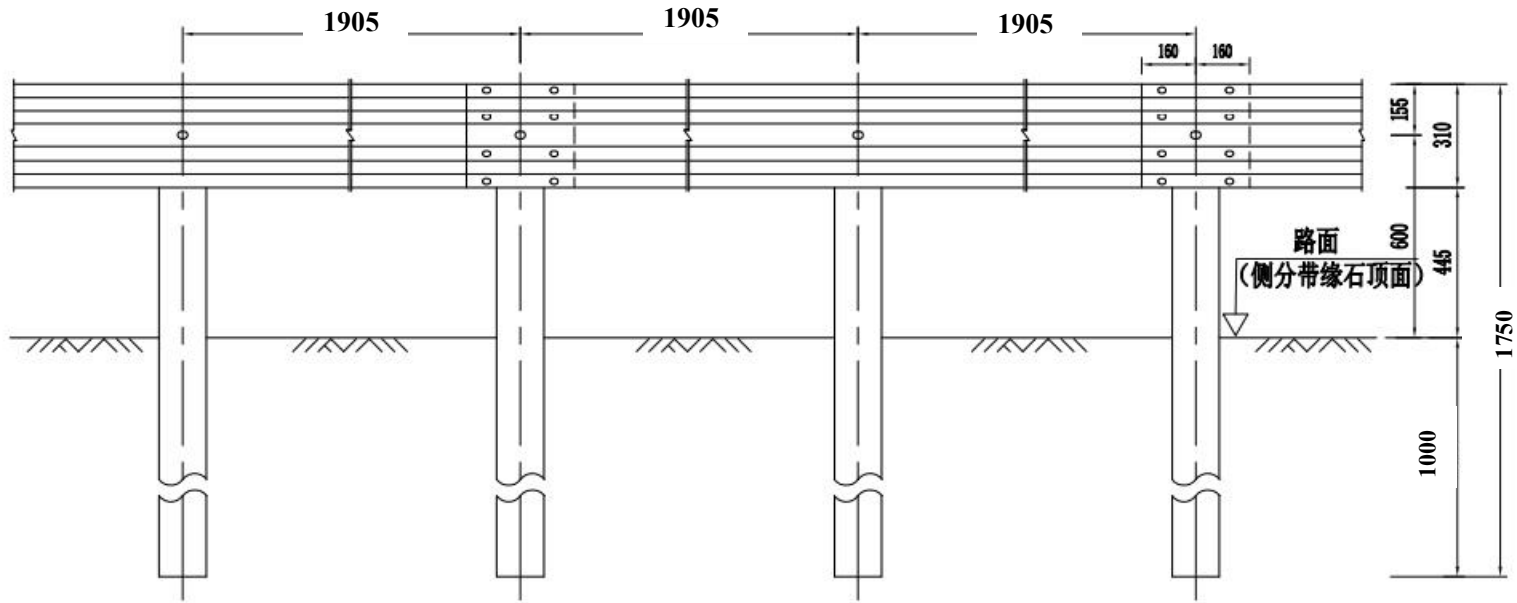
One Side Guardrail



Double Side Guardrail

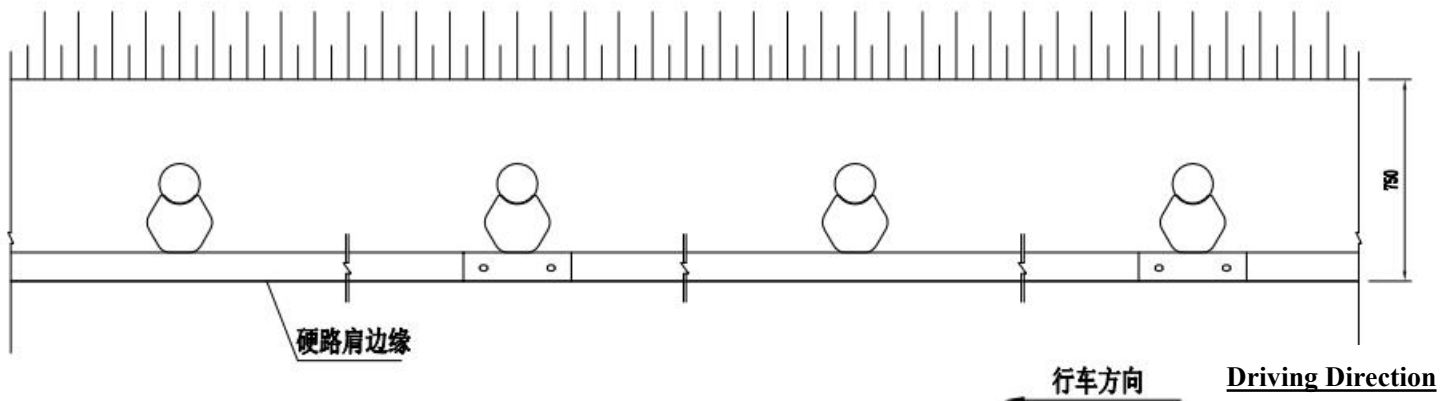
标准段立面图

Standard section elevation

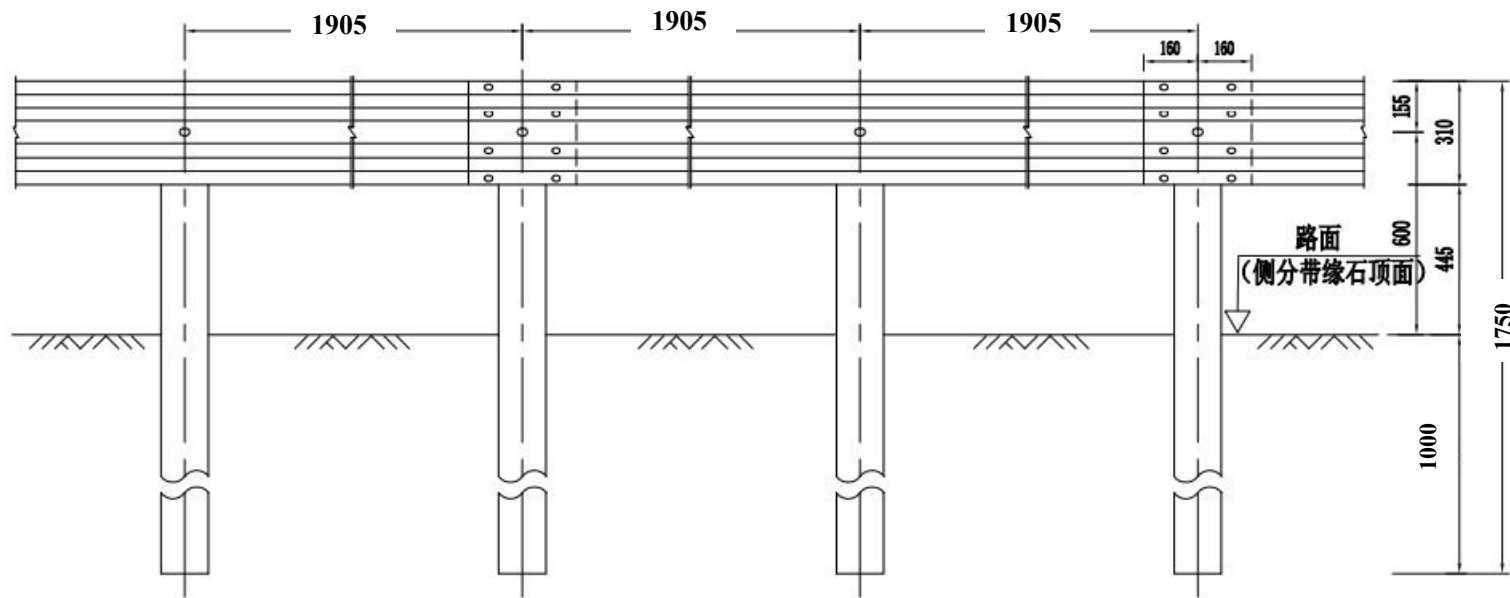


标准段平面图

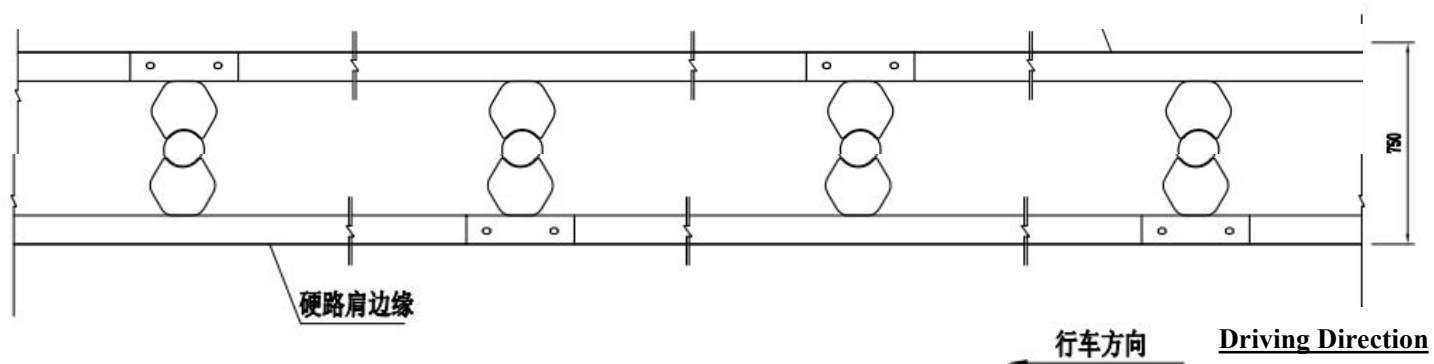
Standard segment plan

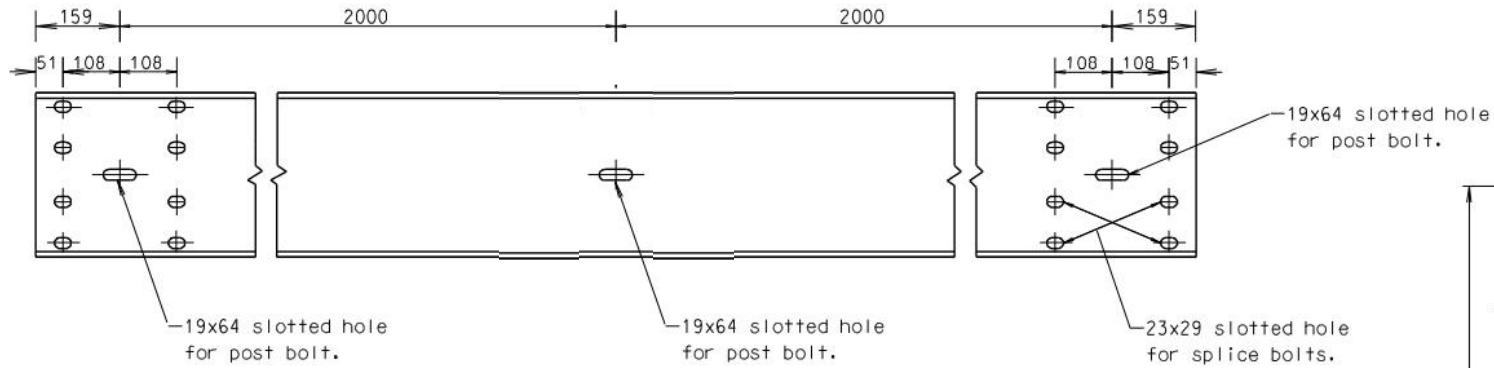


标准段立面图 Standard section elevation

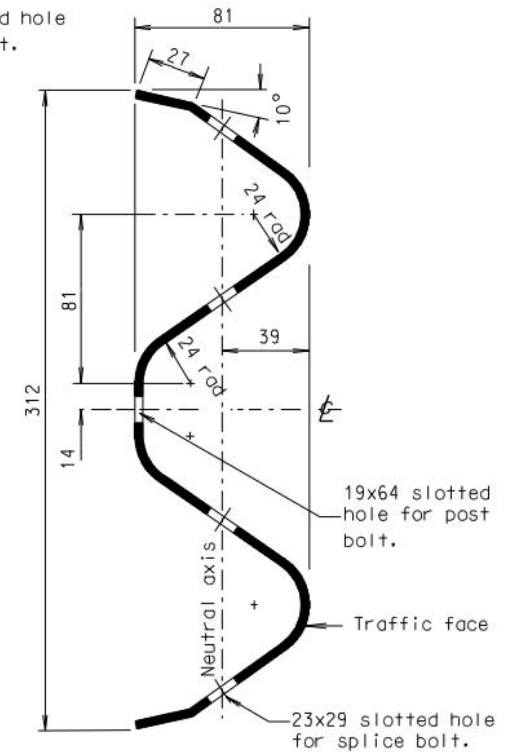


标准段平面图 Standard segment plan





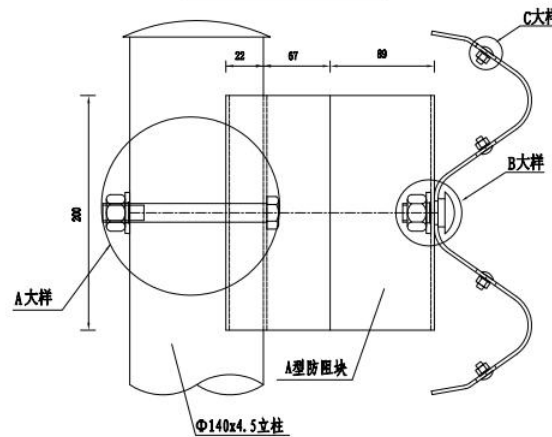
W BEAM NESTING RAIL
(B009)



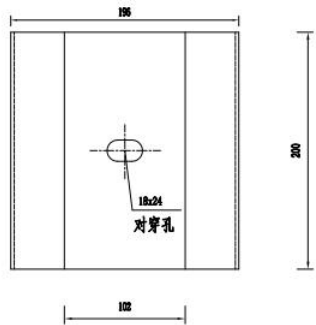
SECTION THROUGH RAIL AND STIFFENER
(Position of Slotted Holes shown)

Spacer & Post Connection Diagram

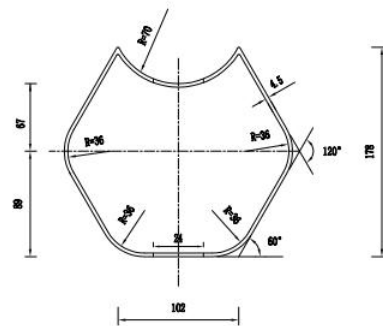
防阻块与立柱连接侧面 1:3.5



防阻块立面 : Spacer Elevation

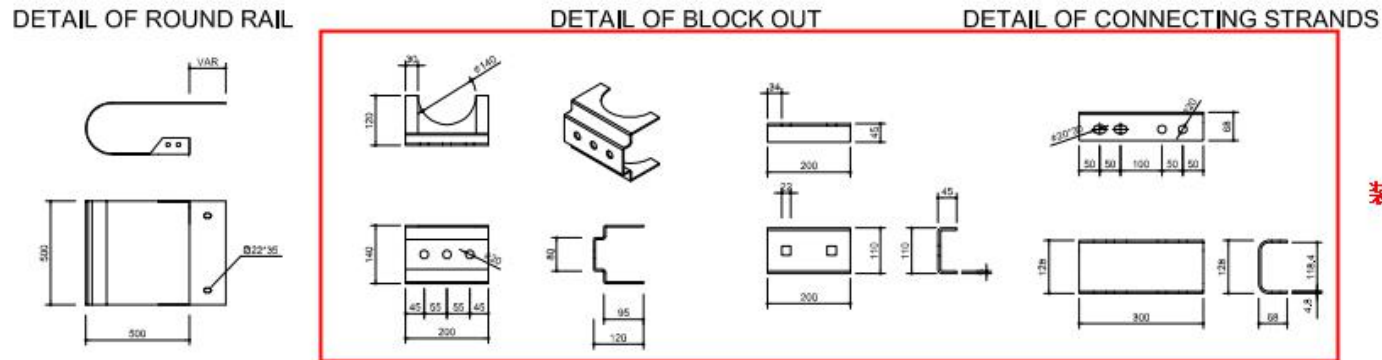
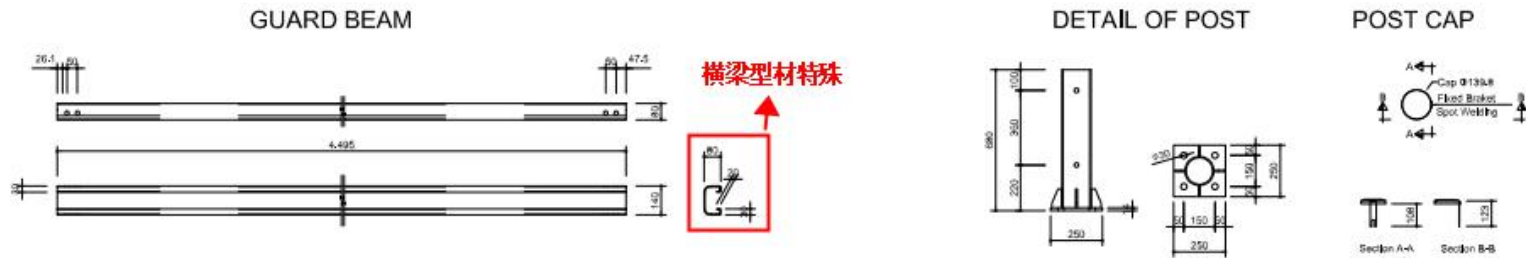
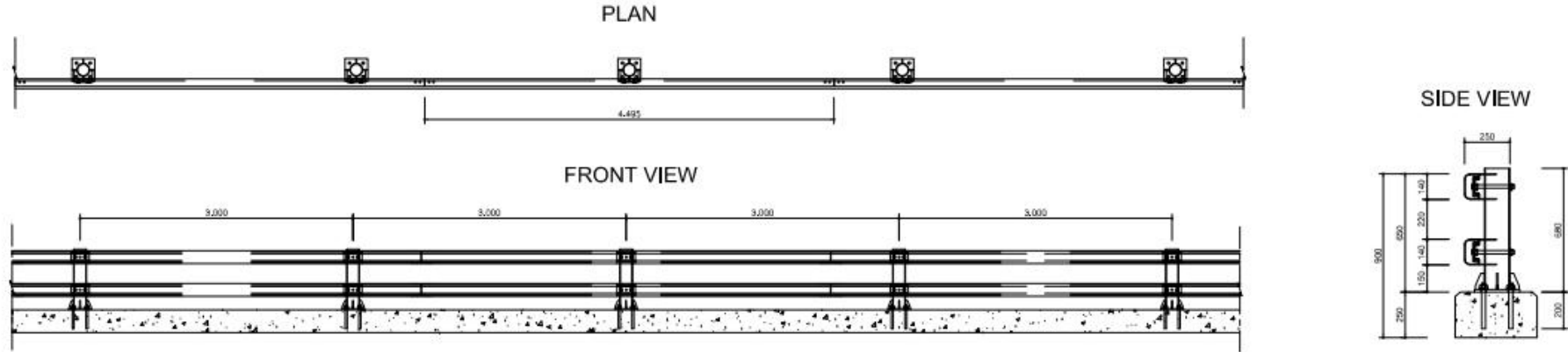


防阻块平面 Spacer Plane



四、Crash Guardrail Design Scheme:

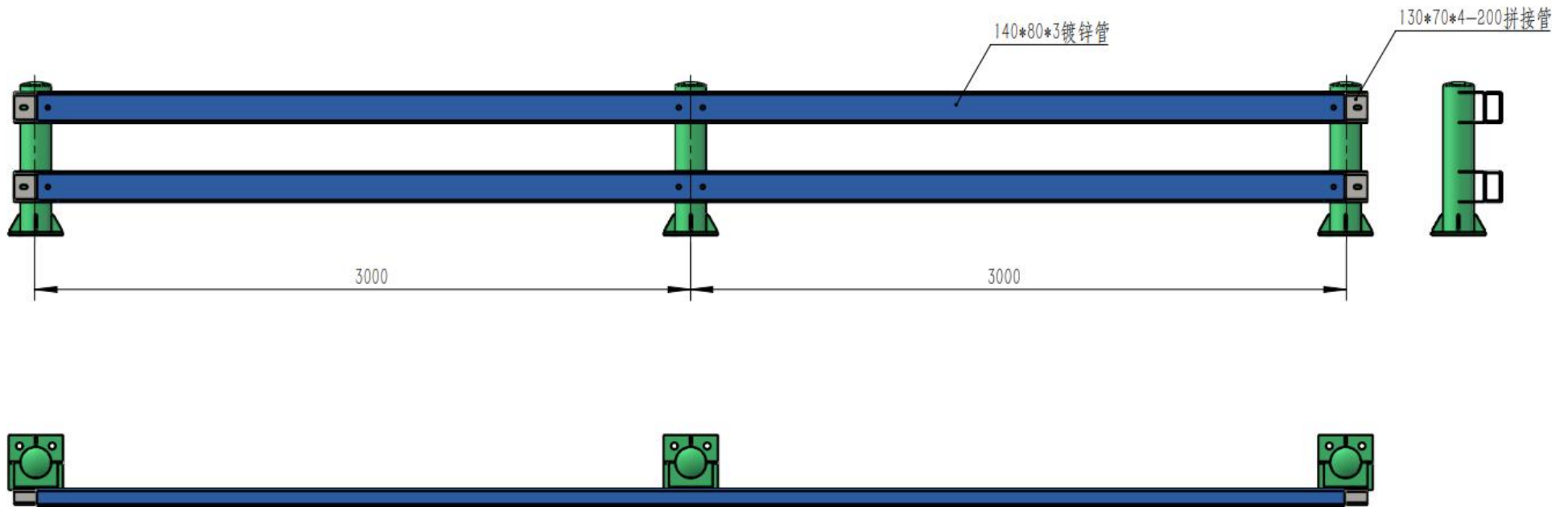
Original Technical Solution:

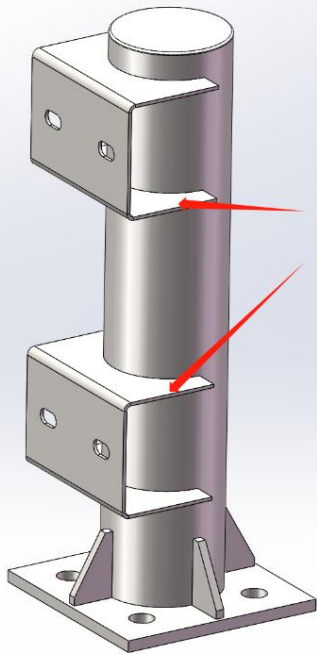
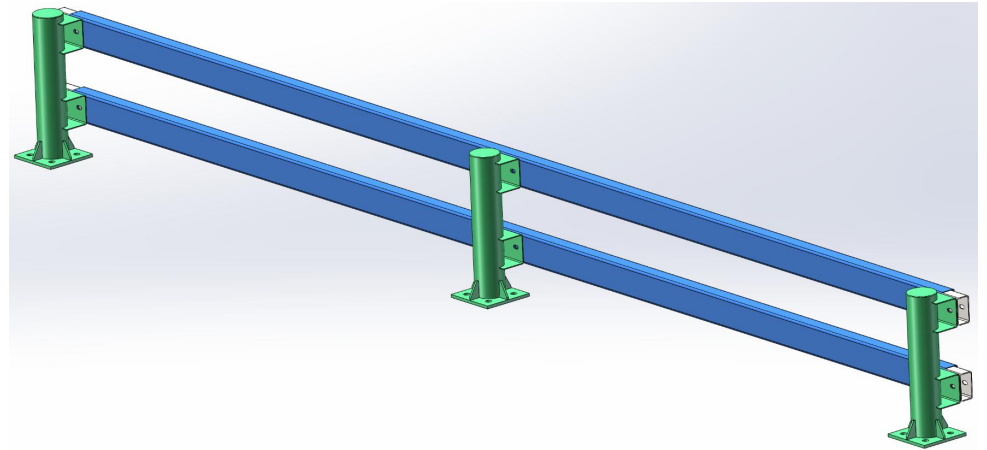
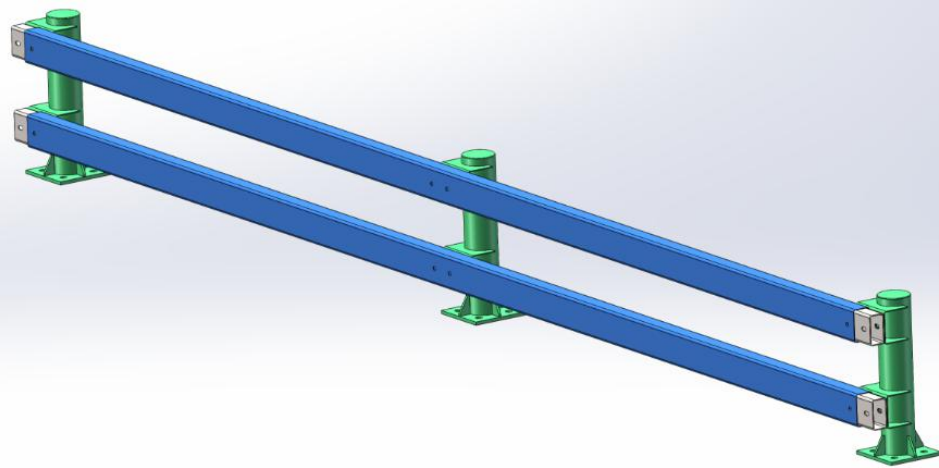


装配连接方式复杂且防撞能力差

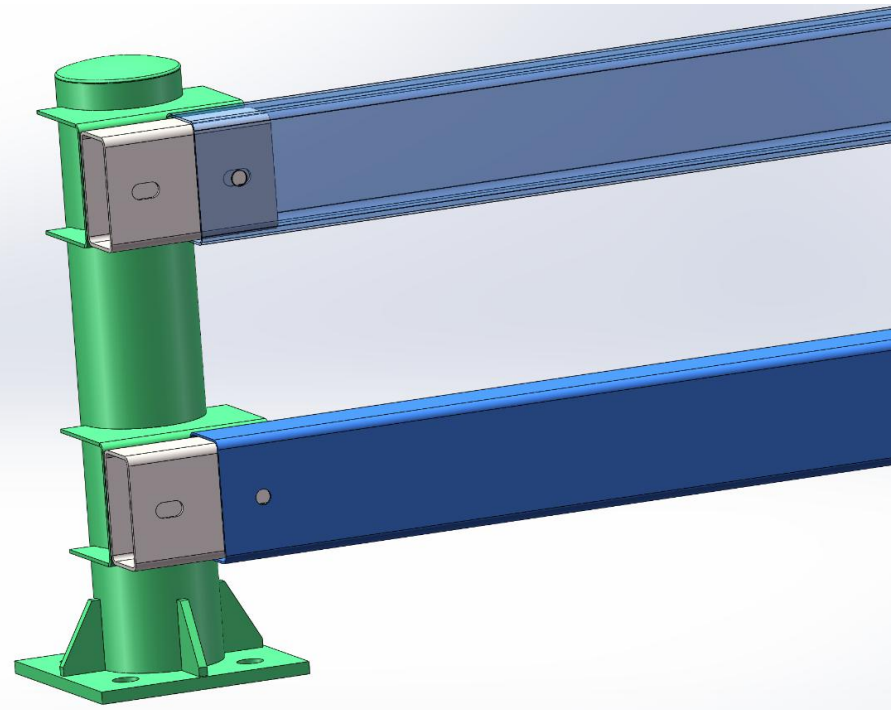
Optimized Technical Solution:

- 1、 The overall design appearance has not changed, round post with two beams.
- 2、 The beam is adjusted from 140*80 C-type beam to 140*80 square tubular beam with stronger mechanical properties.
- 3、 The assembly method is more firm, and the connection between the beams is fastened to the post through the 130*70 connector.
- 4、 The installation is simple, the construction is convenient, and the anti-collision ability is stronger.



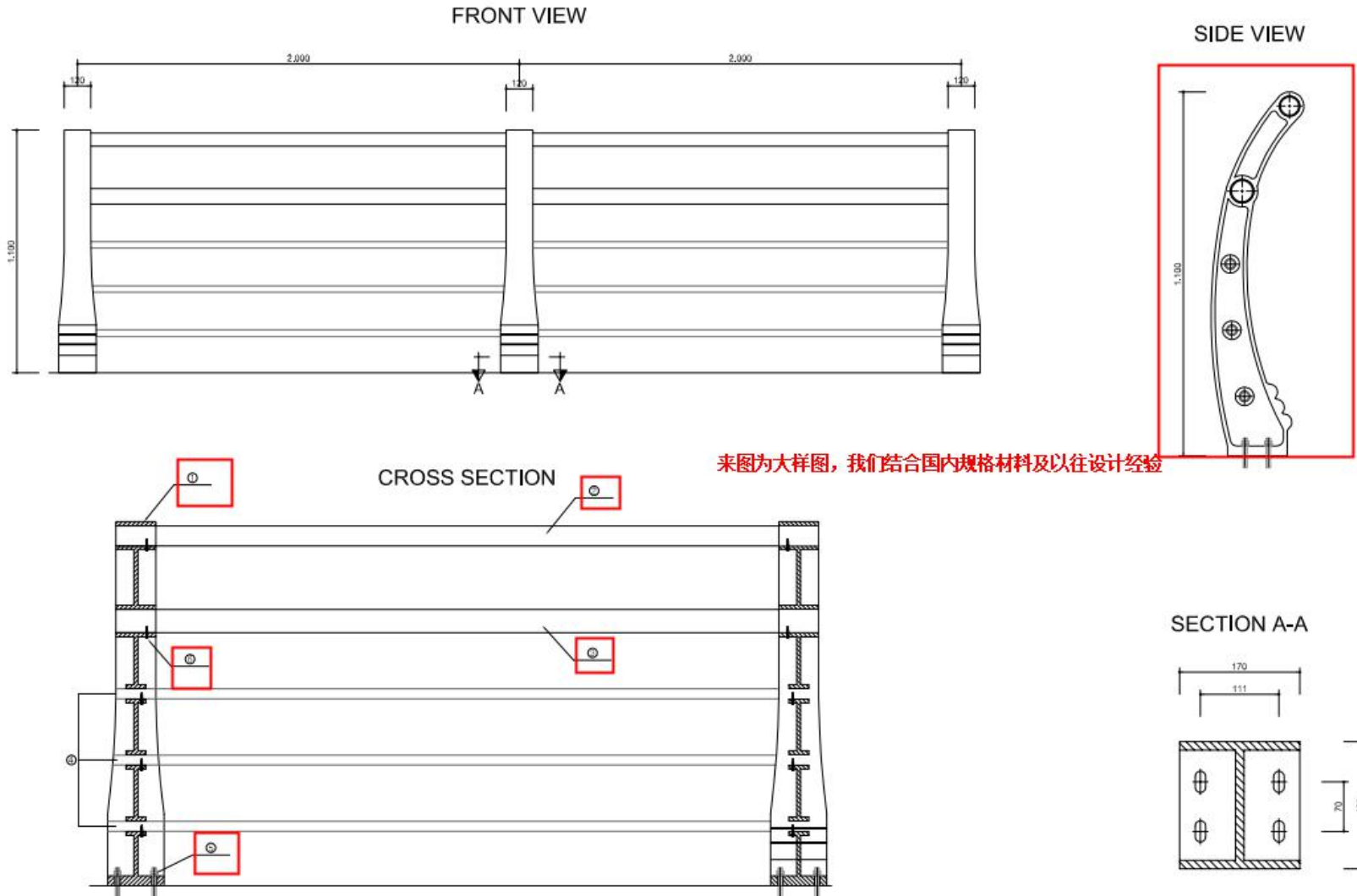


连接件改为直接与立柱焊接



五、Sidewalk Fence Design Scheme:

Original Technical Solution:



Optimized Technical Solution:

- 1、 The overall design appearance has not changed, and the size specifications of each accessory in the drawing have been optimized in detail;
- 2、 The upper beam is 60*3.0mm, the middle beam is 76*3.0mm, and the lower beam is 42*3.0mm
- 3、 12mm, The middle support thickness of the post is 10.0mm, the support thickness of both sides is 8.0mm, and the flange thickness is 12mm

