

# Vulcan Barrier Gate

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- Product Overview
  - Available Configurations
  - Sliding and Pivoting Configurations
  - Installation Steps
  - Anchoring Proposal
- Previous Approval
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- Applications

# Vulcan Barrier Gate Description

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- Vulcan Barrier Gate uses standard Vulcan Steel Barrier sections along with a hinge and transition to provide users the ability to quickly and easily create access to a construction zone or through a median barrier.

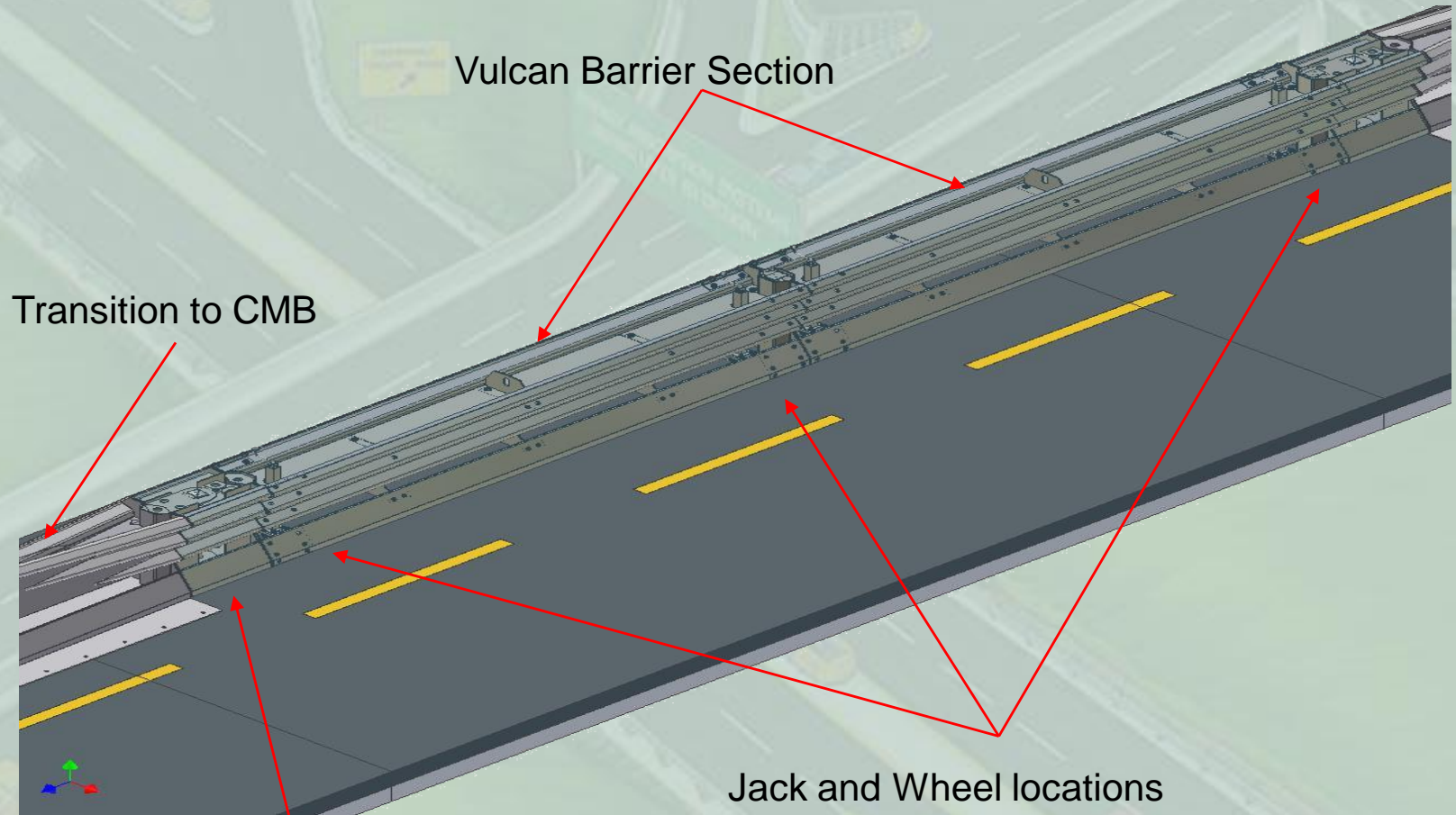
# Features

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- Light-weight, rugged steel construction
- Different methods of opening
  - Roll away
  - Pivot
- Can be used in medians and work zones
- Tested to NCHRP 350 TL-3 and EN1317 N2&H2
- Minimum length is 25ft (8m) with standard configurations at 50ft (16m), 70ft (70m) and 85ft (24) meters
- Self-contained jacks and wheels
- Fully modular construction for easy repair

# Product Over-view Construction

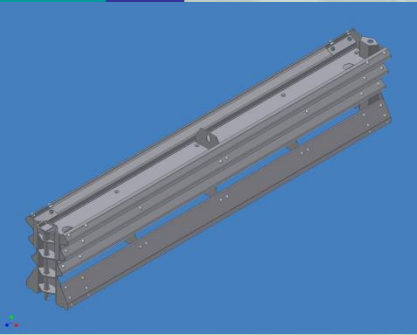
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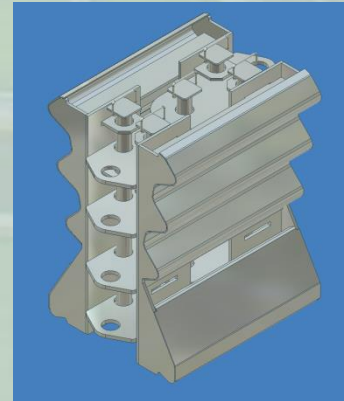
# Construction Detail

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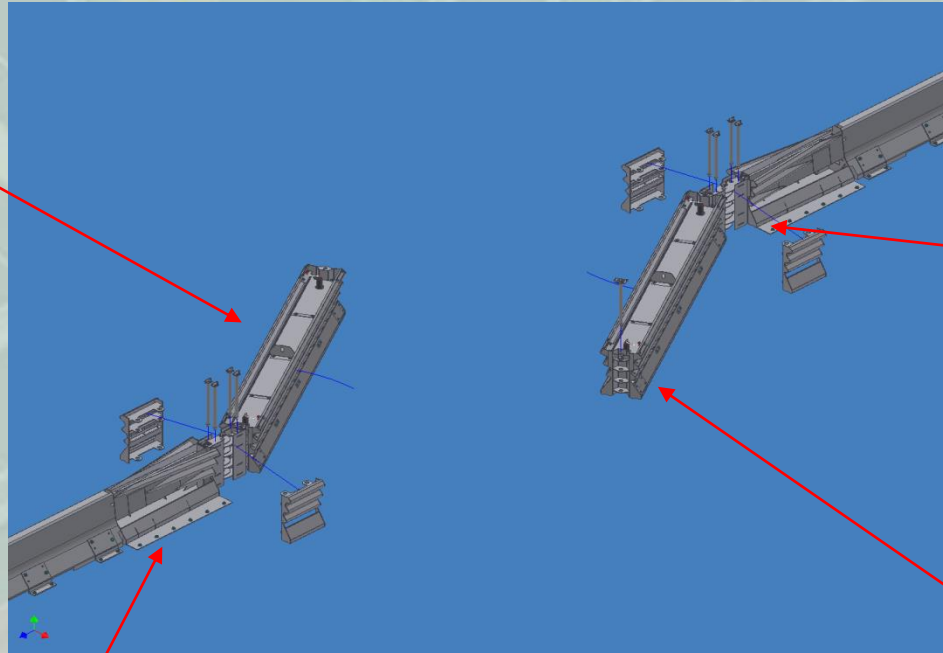
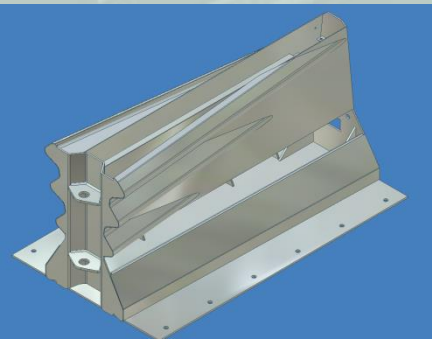
**Vulcan Barrier Section**



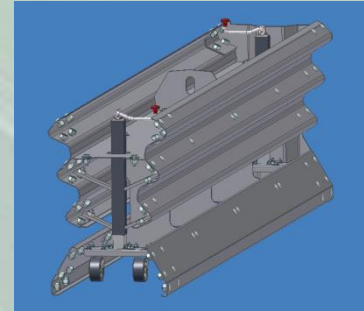
**Vulcan Gate Hinge**



**Vulcan CMB Transition**



**Jack and Wheels**



# Component Examples

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Gate Sections



Hinge



CMB Transition

# Configurations

Work Zone Access

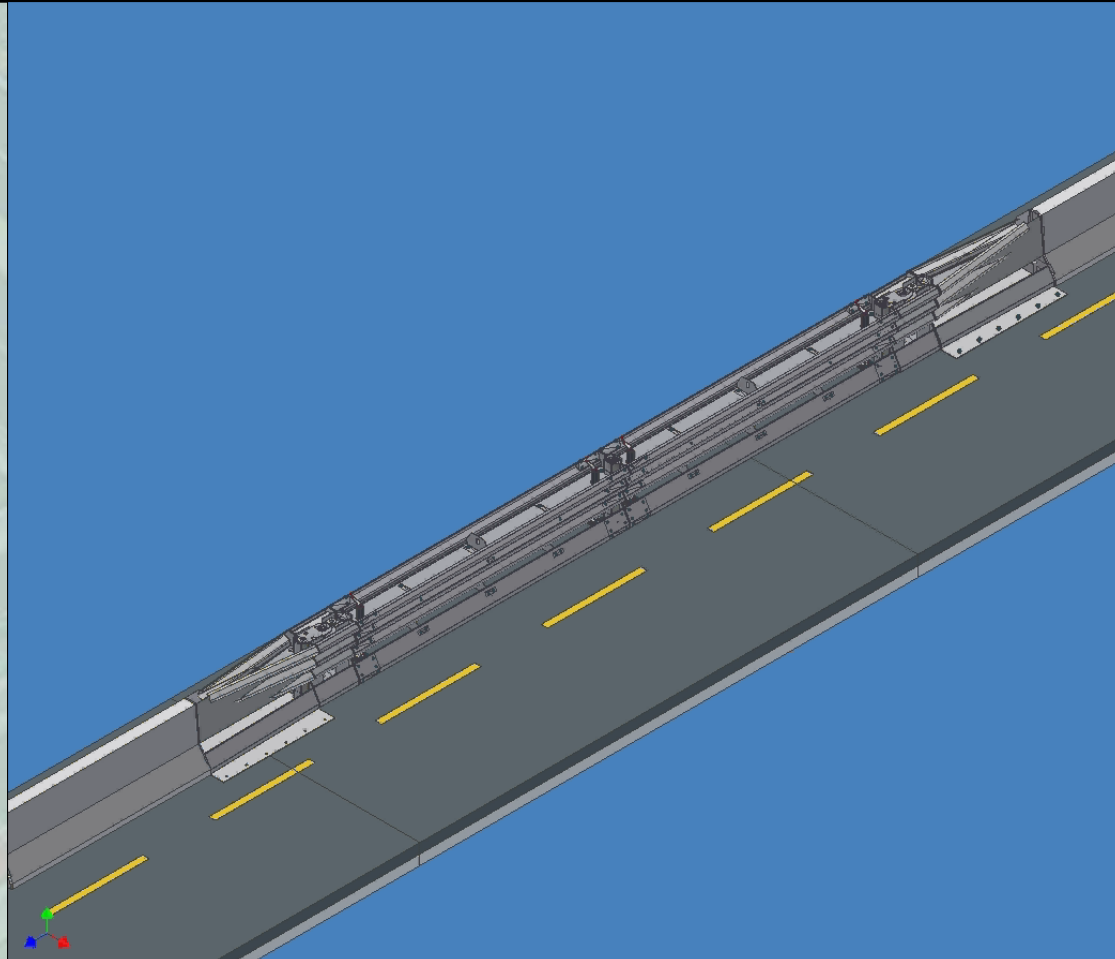
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Median Barrier  
Opening

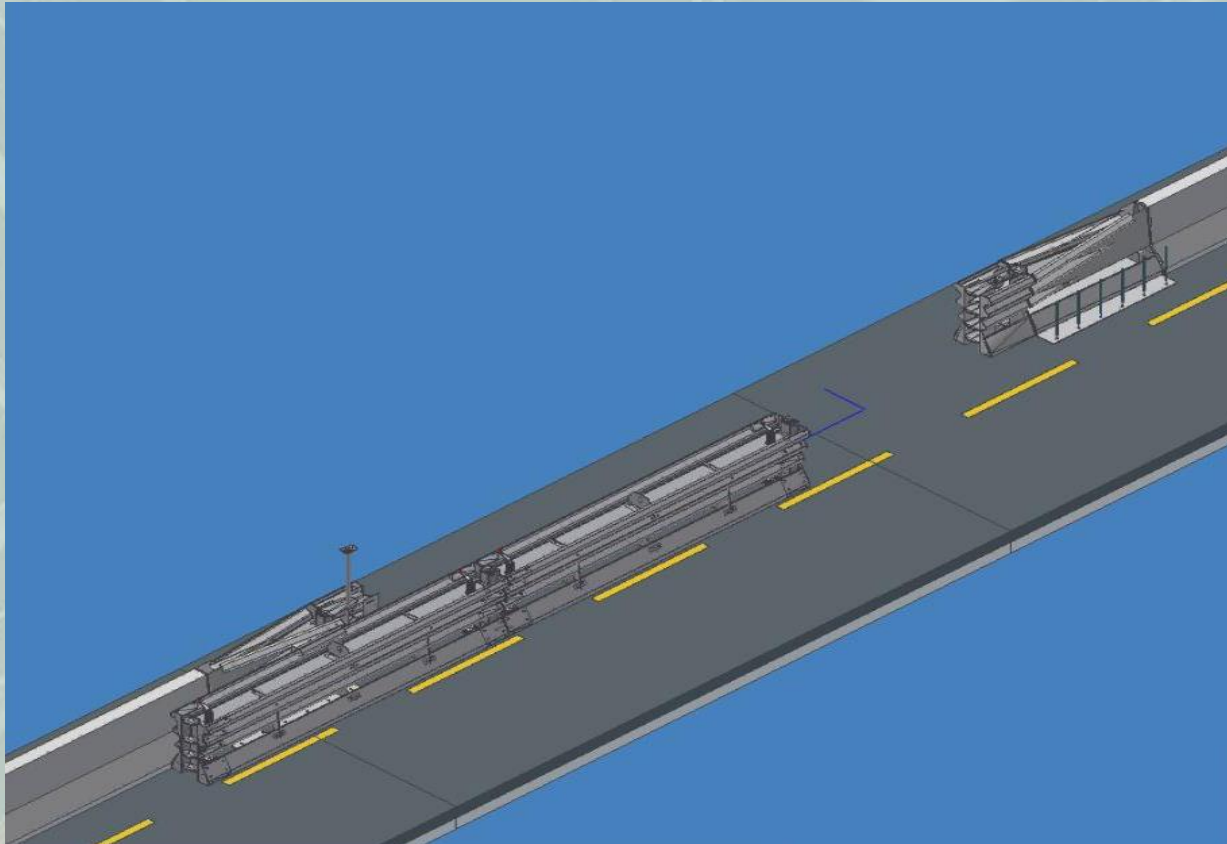


# Gate Operation - Sliding



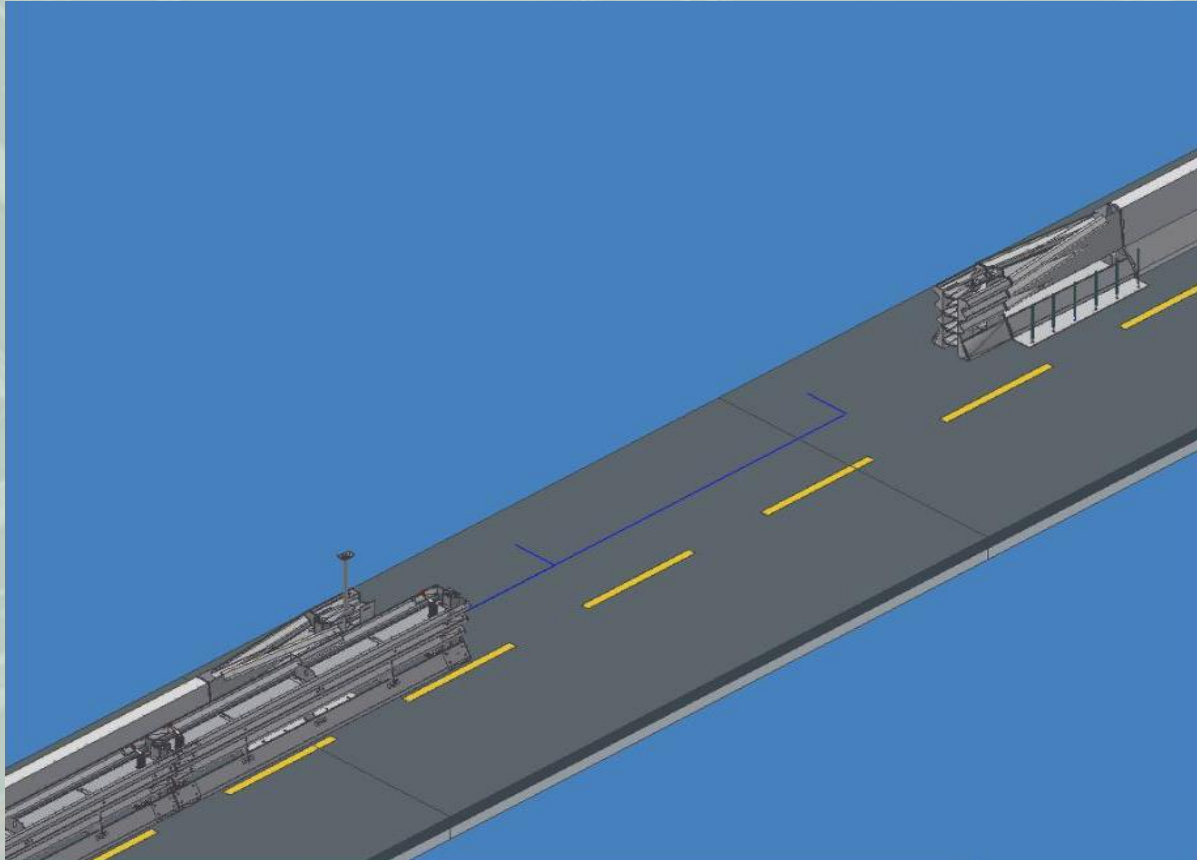
# Gate Operation - Sliding

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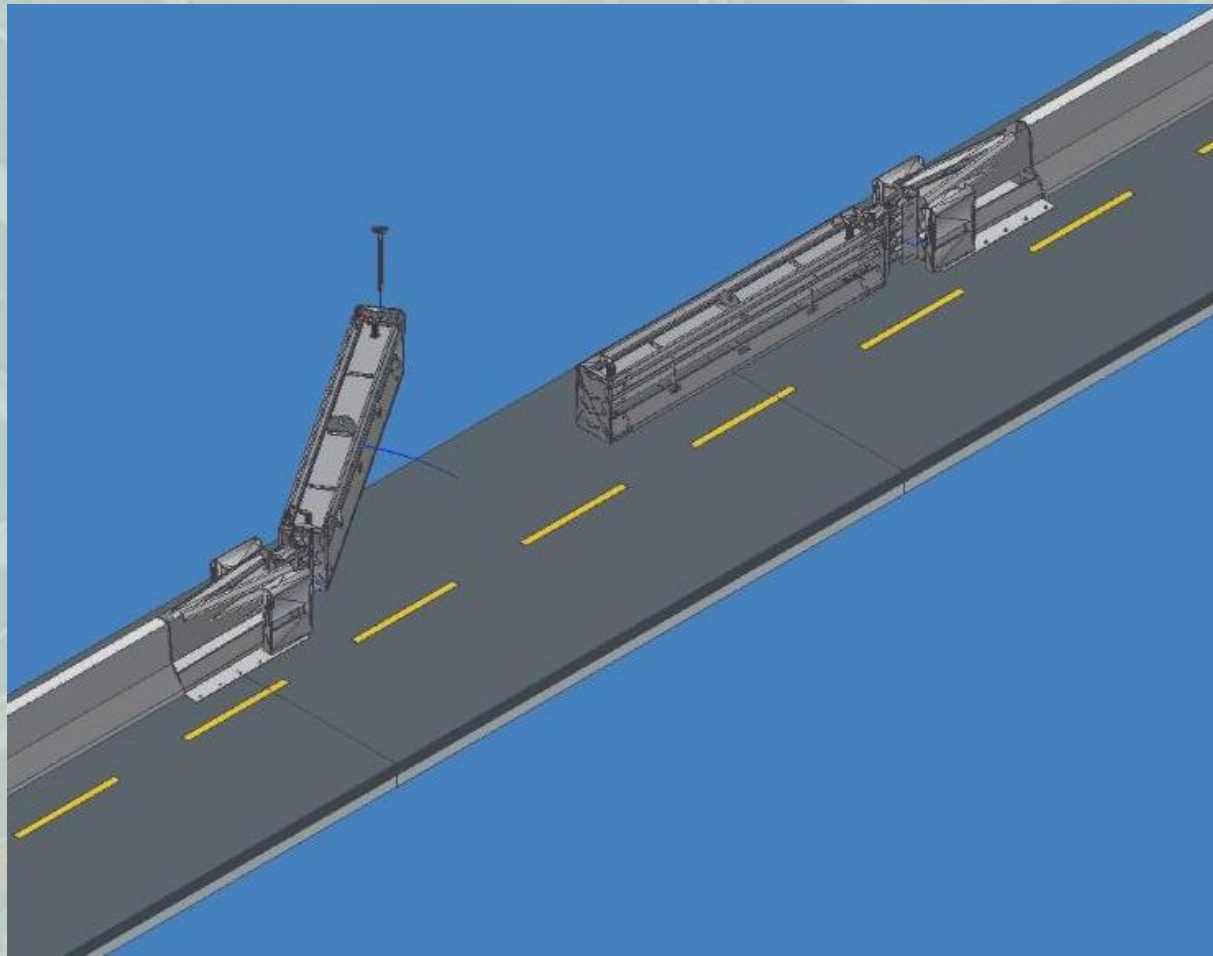
# Gate Operation - Sliding

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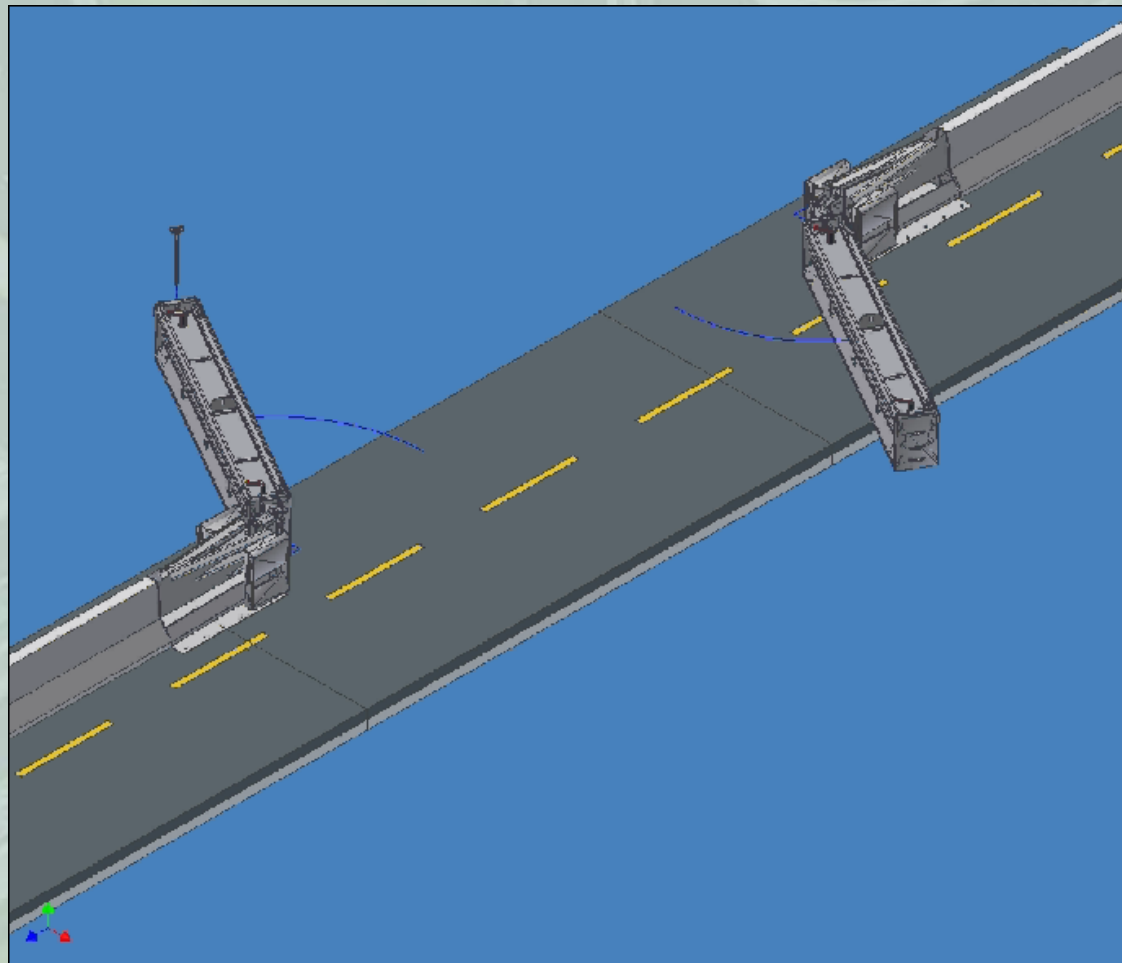
# Gate Operation - Pivoting

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# Gate Operation - Pivoting

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# Gate Operation - Pivoting

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# Installation Steps

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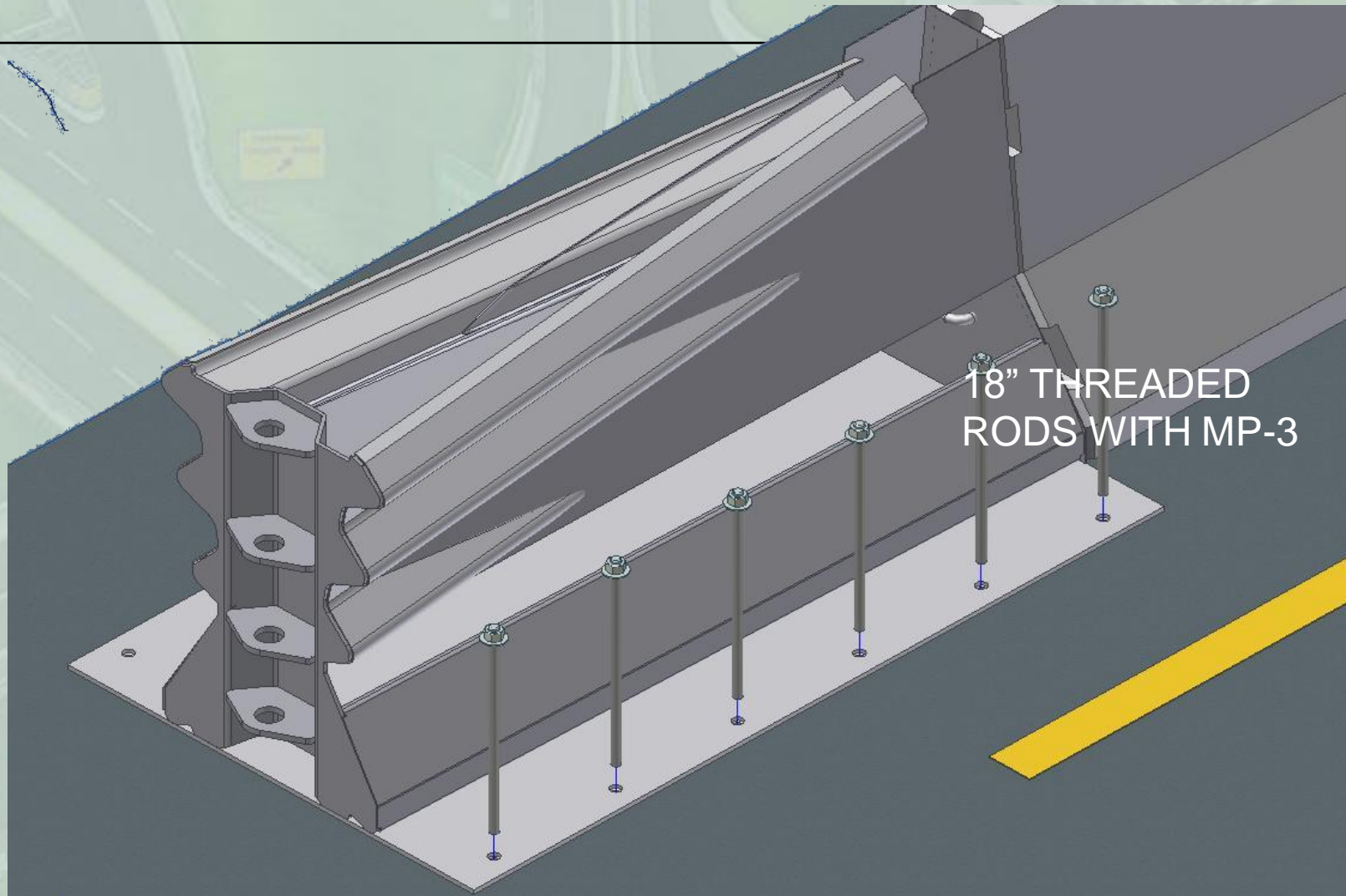
- Create Opening
- Anchor Transitions
- Install Hinges
- Install Vulcan Sections

# Create Opening

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# Anchor Transitions



18" THREADED  
RODS WITH MP-3



# Install Hinges

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# Install Vulcan Sections

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# Previous Approval

Department of Municipal Affairs  
AbuDhabi City Municipality  
Internal Roads and Infrastructure Directorate



مارة الشؤون البلدية  
بمدينة أبوظبي  
إدارة الطرق الداخلية والبنية التحتية

## طلب اعتماد مواد متنية Material Approval Request

Submission No: **MS- 695 Rev.3** Discipline: **Civil**  
Project: **Contract (1) Al Salam Street Tunnel** رقم العقد (1) نفق شارع السلام  
Contractor: **Samsung - Salf Bin Darwish JV** سامسونج - إنكلاف سيف بن درويش  
Consultant: **Parsons International Limited** بارسونز انترناشيونال ليميتد

المرجع بالمواصفات Spec. Ref	رقم مخططات العك Drawing No.	المرجع بجدول الكميات BoQ Ref.	Material Description (incl. make, model etc)
PS/1.12	SSBD-CON- BAR-SP-001A & SSBD-CON- BAR-SP-003A	1.48	<b>Portable Steel Barrier Gate (Vulcan Gate System)</b> <b>Model: VG 3000</b> Light-weight, rugged steel construction, Roll away/Pivot opening, Minimum length: 8m with standard configuration at 16, 22 & 24m, NCHRP 350 TL-3 and EN1317 N2&H2 tested Make: USA

<b>Intended Usage:</b>	Portable steel barrier gates at emergency median cross-over and in detour areas	
<b>Manufacturer / Source:</b>	M/s Energy Absorption Inc., USA	جهة المصنعة:
<b>Supplier &amp; Installer</b>	M/s Elite Road Supplies Company-ECO-WLL, Abu Dhabi, UAE	جهة المورد:

**Submitted Attachments Checklist:** رافقت المطلوب تقديمها مع الطلب:

- 1 - Material Source Declaration Form (MSDF)
- 2 - Copies of Relevant Parts of Specs, BoQ & Drawings
- 3 - Specification Comparison Table
- 4 - Manufacturer's Technical Data / Original Catalogues
- 5 - Recent Test Reports / Certificates

**Contractor's Signature, Stamp and Submission Date:** وقع وختم المقاول والتوقيع للتقديم المطلوب

**Consultant's Remarks and Recommendations:** لاحظت وتوصيات الاستشاري:

**Consultant's Signature, Stamp and Date:** وقع وختم الاستشاري والتاريخ:

**Materials Approval Committee Decision:** **Conditional Approval** اراء موافقة لجنة المواد-

- A confirmation letter from manufacturer to be provided that the proposed gate shall be in operable condition even after being hit by an errant vehicle with the conditions as mentioned above.
- Copy of BS EN 1317 N2 & H2 tests to be provided.
- The Contractor shall be responsible for furnishing, Assembling, Placing, Installation, Repairing, Replacing damaged elements of Portable Steel Barrier Gates with genuine parts from original manufacturer, Maintaining, Dismantling, Removing, Relocating, Reinstalling, etc. of all delivered Portable Barrier Gates. All required labour, materials, tools, equipment, apparatuses, etc. shall also be provided by the Contractor.
- On delivery the Consultant shall check and confirm that:
  - (1) ALL COMPONENTS and DESIGN of the delivered Barrier Gate comply with required Project Specifications and approved shop drawings.
  - (2) The delivered materials are the same as approved (Model VG 3000) and from approved source & origin.
  - (3) All the required attachments, accessories, spares, consumables, fasteners, hardware, options, anchors, bolts, bushes, seals, manuals, drawings, etc. are included.
  - (4) All Technical and Safety certifications are complete.
- Installation to be done by properly qualified technicians duly approved by supplier/manufacturer and the entire job to be completed strictly in accordance with Manufacturer's recommendations, Municipality requirements and Final Approved shop drawings.
- The supplier / manufacturer shall provide adequate training for Assembling, Installation, operation and Dismantling of the proposed Barrier Gate to minimum FIVE personnel nominated by ADN at no extra cost.
- Routine QA/QC procedures to be carried on under Consultant's supervision.

**Signature of Committee Members & Date** as proposed by Supplier (التوقيع والتاريخ) أعضاء اللجنة

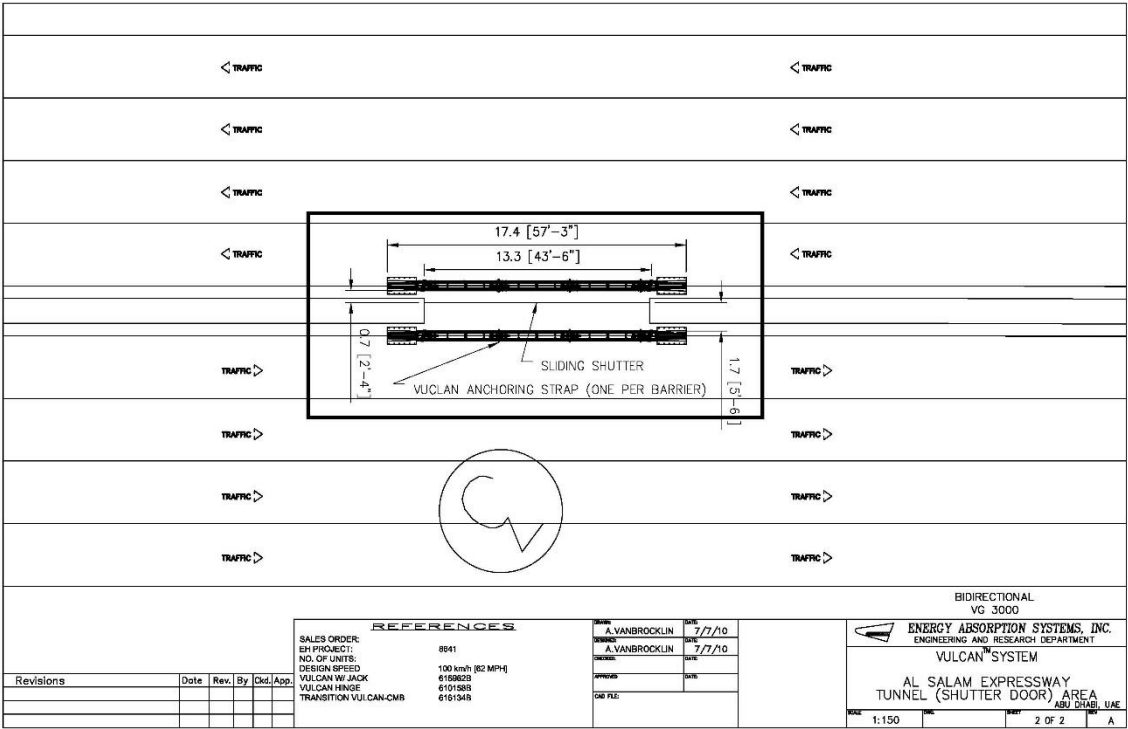


# DWGs & Installation Photos

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# DWGs & Installation Photos



# DWGs & Installation Photos

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# Installed Vulcan Photos

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# Installed Vulcan Photos



# Installed Vulcan Photos



# Installed Vulcan Photos

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# Installed Vulcan Photos



# Applications

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- Highway and road construction zones
- Bridge deck construction zones
- Construction zone entrance/exit gates
- Small mobile work zone situations
- Median barrier gates for emergency cross-over or evacuation/contra-flow situations

# Crash Tests

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# Summary

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- Vulcan Barrier Gate is an effective, crashworthy, manually operated steel barrier gate offering easy access and positive protection
- NCHRP TL-3 and EN1317 tested
- Available in 3 standard and also custom lengths from 25ft (8m) on up.
- Applicable in work zone and permanent median configurations
- Easy to use and maintain