



# Borger Vessel Project



“BIG OPPORTUNITY – BIG CHALLENGES”

RICA 2026 – Tampa, FL.



HEAVY LIFT & TRANSPORT SOLUTIONS



A **KASGRO** Company



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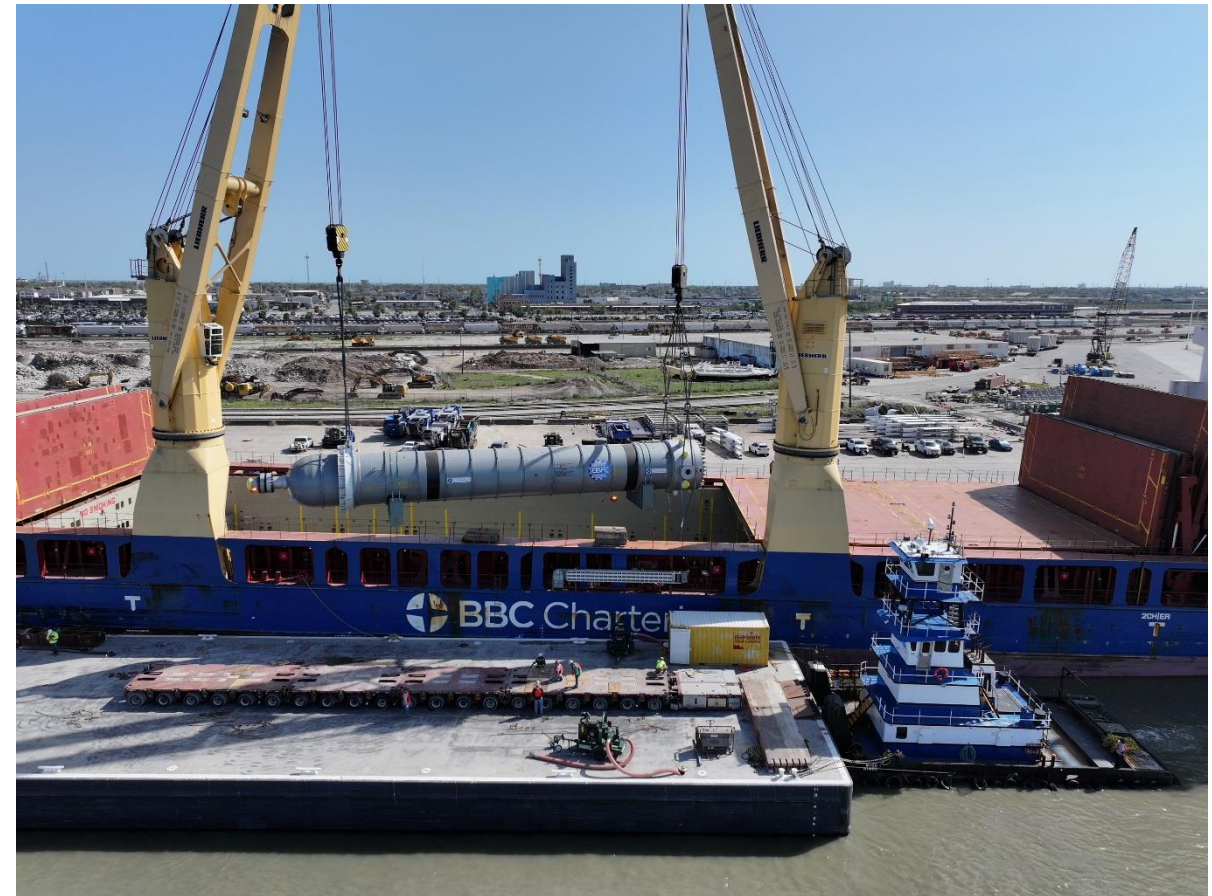
# Overview – Transport Scope Challenges

- Large vessel move from Texas gulf to panhandle (Borger)
  - Original third party had pursued a full OTR solution, which ran into multiple issues.
  - Tasked to provide additional OTR assessment of the 935,000 lb vessel.
  - Engagement was made later in project (post component design)
    - Limited ability on original saddle design and spacing
    - OTR plan was abandoned after rail was deemed best suited.
  - Port assessment (Houston, Victoria, Corpus Christi, and Galveston)
    - Port of Galveston was chosen
      - Best rail clearances given the envelope and weight requirements
- How can this be railed?



# Overview – Port Offload Challenges

- Port construction created new challenges
  - Ground bearing pressure
  - Overall gross weight on dock
- Converter was moved from ship to barge
  - Directly loaded on SPMT for roll-off
- Secured use of BNSF “Beachside” facility
  - Adjacent to Port of Galveston
  - Ample laydown / loading space
- Local OTR via SPMT
  - Barge landing to BNSF facility
- Concurrently – working rail solution with SRT
  - Railcars
  - Clearances / Securement plan



# Overview – Rail Scope Challenge

- SRT was engaged by Deep South to define and design rail solution
  - Rail clearance consultation with BNSF which then turned into a proposal submission
  - Rail clearance drawings of preliminary bolster arrangement
    - Define the correct railcars to handle.
  - Securement plan for vessel on railcar
- During pre-clearance review, determined very specific criteria for the rail solution.
  - Railcar selection was going to be very narrow
    - Unique mix of two 12 axle railcars to balance the shorter bolster type load
  - Vessel weight reduction
    - To not overload bridge on route – vessel head had to be removed



# Clearance Planning – Profile Challenge

## Height

- 20'6" ATR (Tall than double stack)
  - Wire crossings
  - Overpasses

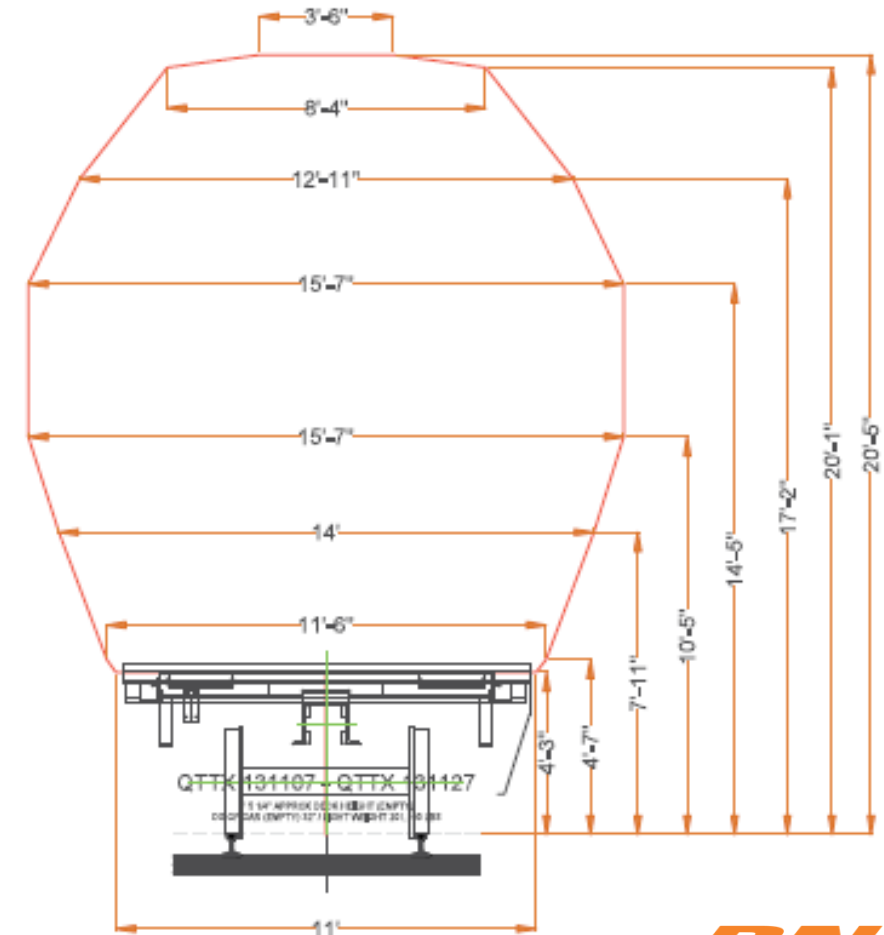
## Width

- 15'07" Wide
  - Meet / Pass (34)
  - No through truss bridges

## Weight

- 1,298,000 lbs. gross
  - Bridge span ratings
  - 114.48" CCG – 25 MPH

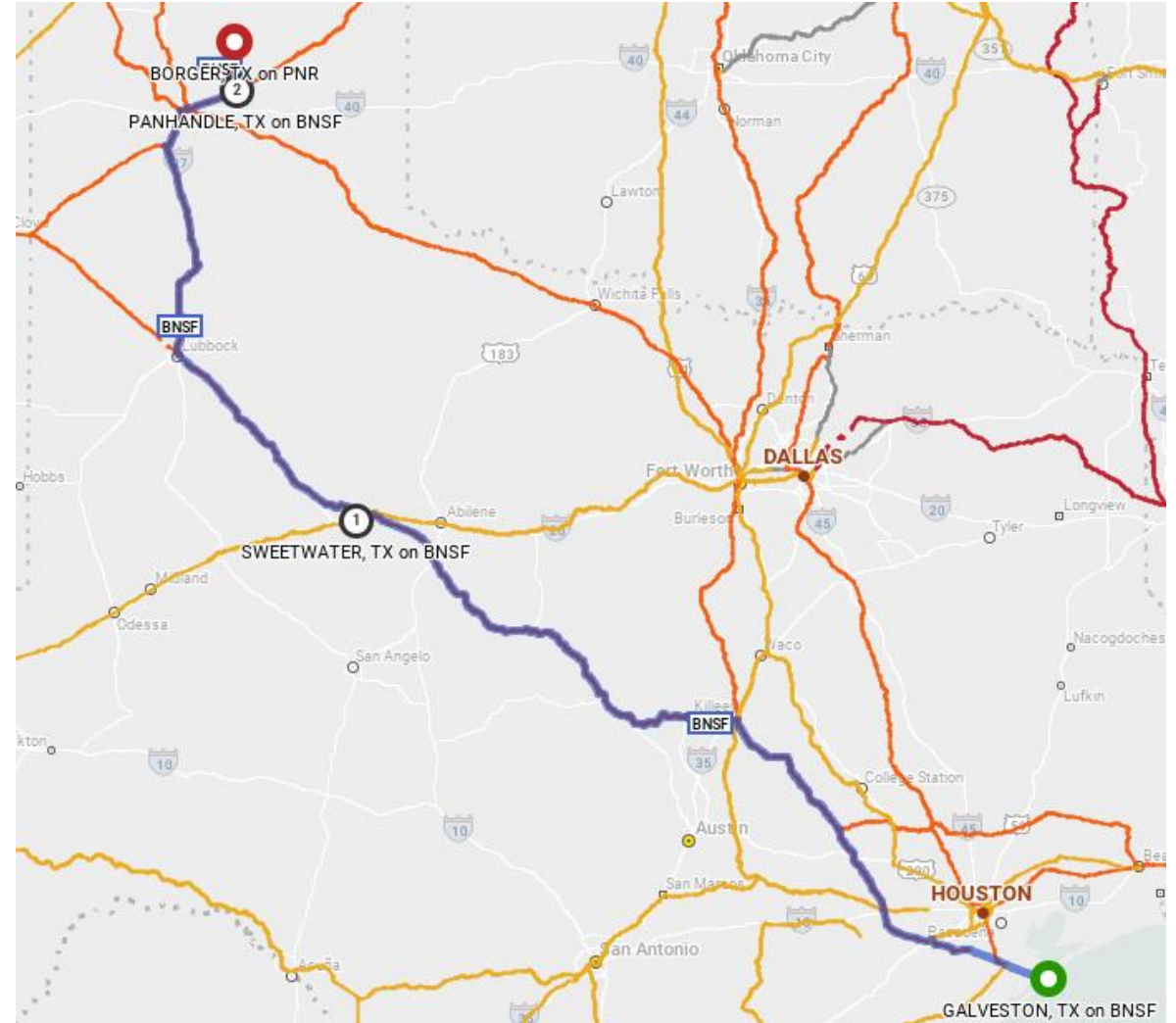
REQUESTED CLEARANCE ENVELOPE  
BOLSTERED QTTX 131127 RAILCAR





# Clearance Planning - Rail Route

- Mileage
  - BNSF Railway– 732
  - Panhandle Northern – 28
- Route
  - Galveston-Temple-Amarillo-Panhandle
  - Origin: Galveston, TX
    - BNSF “Beachside” Site
  - Destination: Borger, TX
    - Nutrien Borger Plant
- Rail Operations
  - 25mph with 10mph reduction on curves
  - 7 crew starts
  - 34 meet / pass locations
  - Special train (*All HIWI trains are “special”*)



# Load Out – Barge to Beachside

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## Preparation Work

- Prep work had to be done to railcars
  - Custom saddles fabricated
- 110,000 lb. vessel head was removed
  - Hauled on QTTX131250 series
- Replacement cover head
  - Made by Baton Rouge Yard
  - One of few facilities with capability
- 500 Ton Gantry used for rail loading



# Load Out – Railcar Challenge

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## Loadout @ Wind Yard

- Four week loading window

## QTTX131140 “The Unicorn”

- No gag slots (Uh Oh?!?!?)
- No alternate cars available

## Field Repair Mobilization

- BNSF Mechanical
- TTX Engineering / Shop
- Deep South Crew & Crane

## Heavy shop mod done in the field

- Completed over weekend



# Load Out – Railcar Challenge

- Shop level repair in field
- TTX Support / BNSF Car Dept.



# Load Out @ Beachside



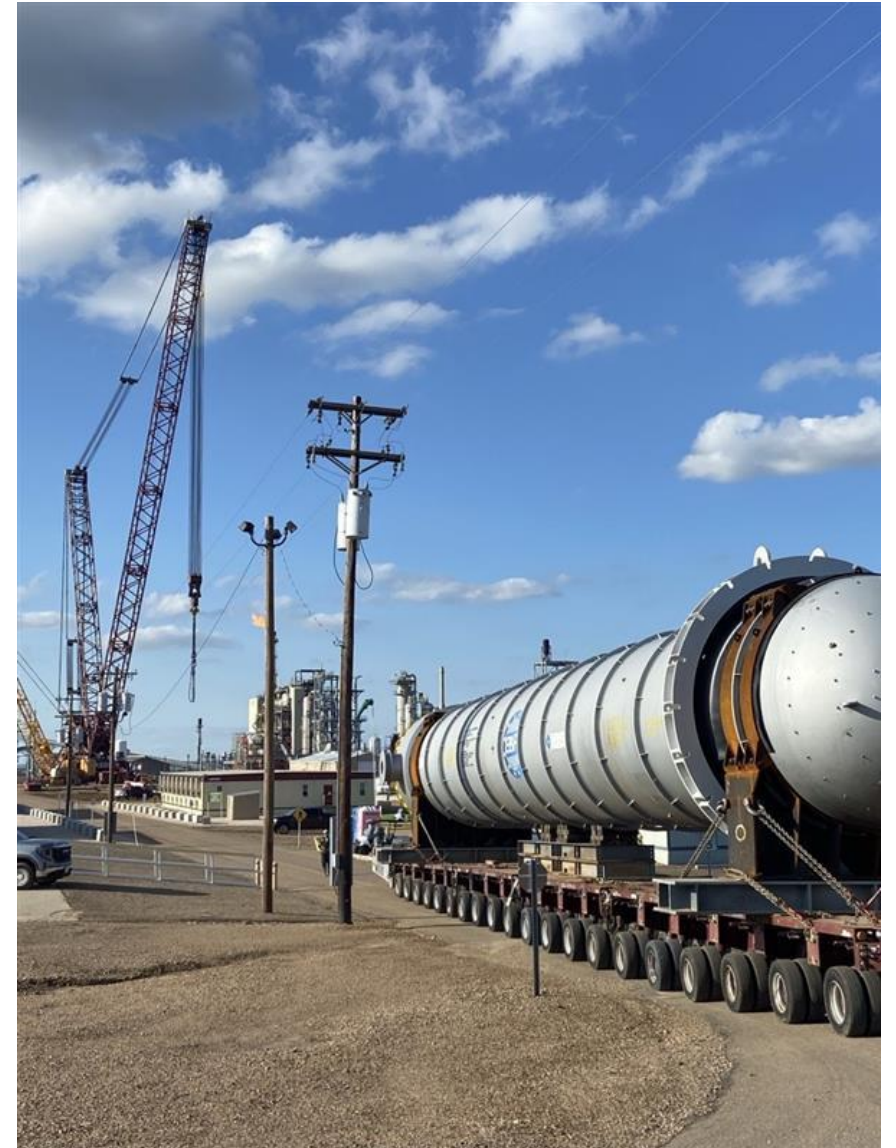
# Ready to Roll – Wade Beard vs Converter

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# Delivery @ Borger

- Railcars were interchanged to Panhandle Northern @ Panhandle, TX.
- Spotted to siding @ Panhandle, TX.
- Unloaded from railcar to SPMT via Gantry
- Deep South offloaded and transported OTR 22 miles from siding to Nutrien Plant.
- Hoisted into final pad location using 3000 ton crane – 36000 Versacrane.



# Final Lift



# Lessons Learned

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- Project Planning / Design Timeline
- Facility Changes (Port infrastructure)
- Railcar Pre-Inspection
- Bolster plate compatibility / functionality
- Securement Plan
- Railcar Backup Plan
- Field Mechanical Repair



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# Thank you