



Ridgemoor Boulevard Over Brooker Creek Bridge Replacement FPID 445437-1

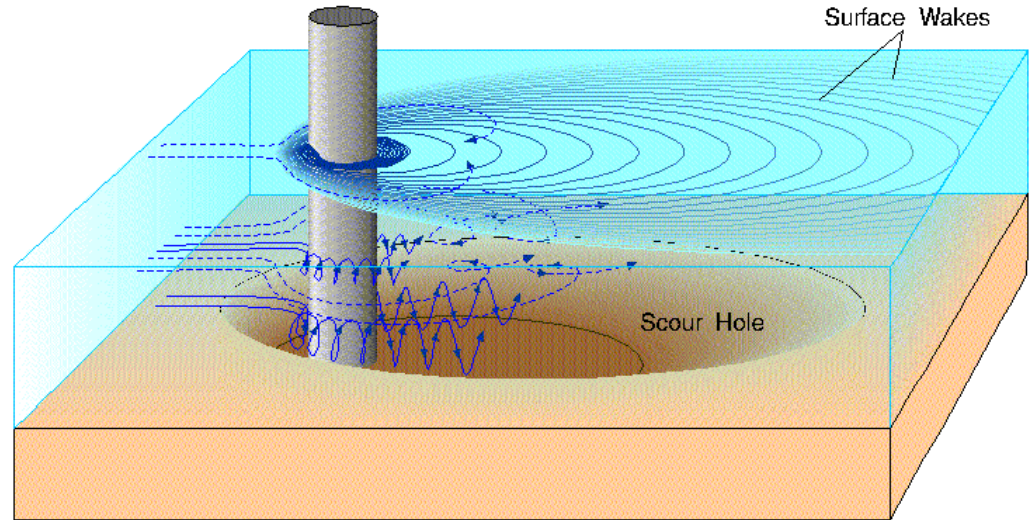
By FDOT, Presenter Nate Willbur, P.E.

Ridgemoor Blvd over Brooker Creek



History

- Built in 1985
- Constructed by Developer
- 1987 the U.S. Started reviewing and measuring Scour
 - New Criteria for Scour Established



Ridgemoor Blvd over Brooker Creek



History

- In 2013, FDOT determined this bridge was Scour Critical
- Yearly inspection and after severe storms
- Prepare a Contingency in case of Emergency Closure
- Determined it needed to be Replaced

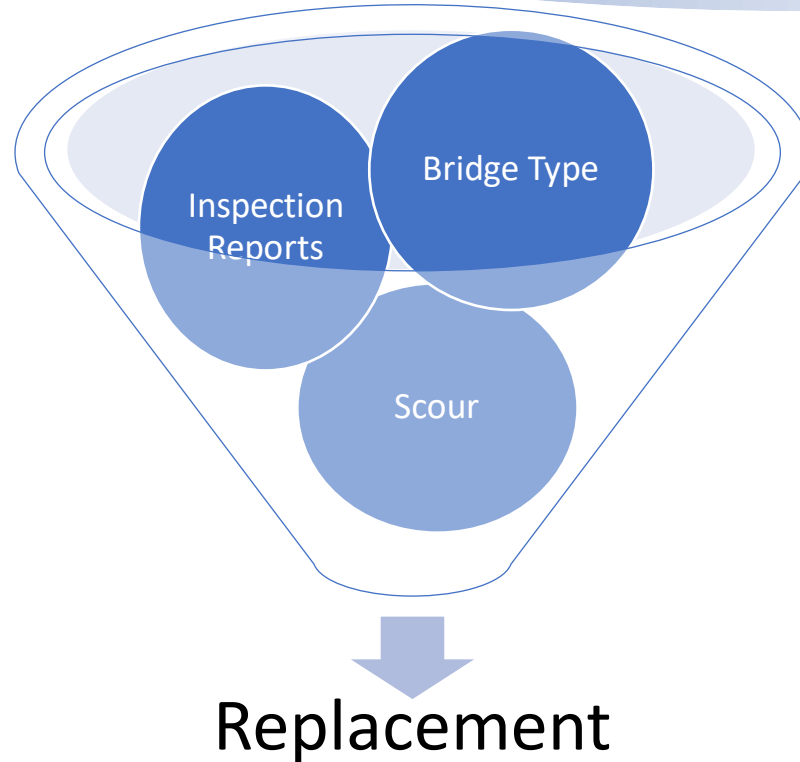


Ridgemoor Blvd over Brooker Creek



**Why Replace the Bridge and not Repair
it?**

Ridgemoor Blvd over Brooker Creek

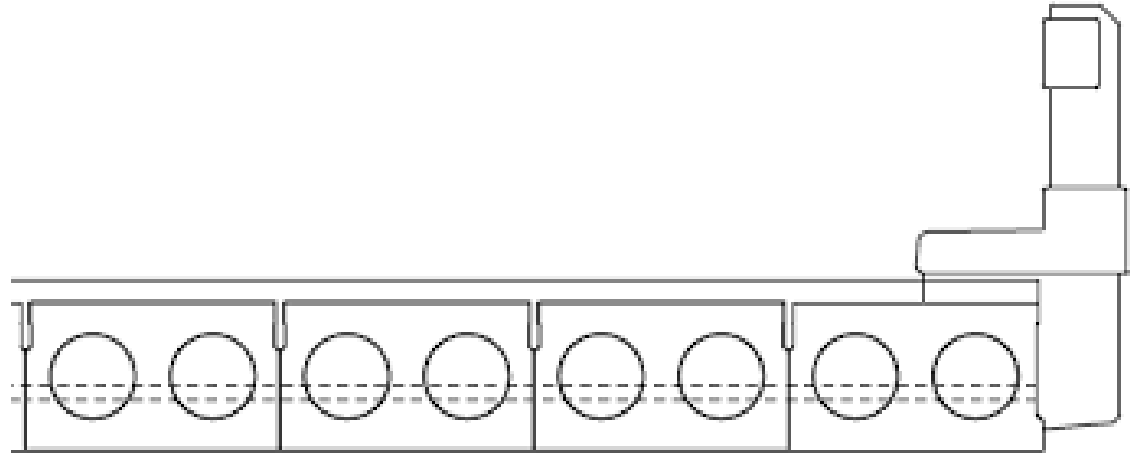


Ridgemoor Blvd over Brooker Creek



Existing Bridge Type

- Voided Slab Beam or Sonovoid Slab Beams Bridge
- Top Asphalt Surface



Ridgemoor Blvd over Brooker Creek



Inspection Reports

BRIDGE ID: 154153

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection CDOT Report
(INTERIM INSPECTION REPORT)

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Structure ID: 154153
DISTRICT: D7 - Tampa

Inspection

INSPECTION DATE: 7/23/2019 WDBU

BY: Klinger Campo & Associates

STRUCTURE NAME: RIDGEMOOR BLVD / BROOKER CREEK

OWNER: 2 County Hwy Agency

YEAR BUILT: 1985

MAINTAINED BY: 2 County Hwy Agency

SECTION NO.: 15 000 435

STRUCTURE TYPE: 5 Prestressed Concrete - 01 Slab

MP: 0.489

LOCATION: 0.5 MI E OF CR-611

ROUTE: 50000

SERV. TYPE ON: 5 Highway/underpass

FACILITY CARRIED: RIDGEMOOR BLVD

SERV. TYPE UNDER: 5 Waterway

FEATURE INTERSECTED: BROOKER CREEK

THIS BRIDGE CONTAINS FRACTURE CRITICAL COMPONENTS

THIS BRIDGE IS SCOPED CRITICAL

THIS REPORT IDENTIFIES DEFICIENCIES WHICH REQUIRE PROMPT CORRECTIVE ACTION

FUNCTIONALLY OBSOLETE

STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Interim

DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 7/23/2019 UNDERWATER: 6/5/2018

OVERALL NBI RATINGS:

DECK: 4 Poor

CHANNEL: 7 Minor Damage

SUPERSTRUCTURE: 4 Poor

CULVERT: N/A N/A

SUBSTRUCTURE: 7 Good

SURF RATING: 67.3

REPAIR RATING: Poor

HEALTH INDEX: 34.51

FIELD PERSONNEL TITLE / NUMBER:

Harrison, LaShawn - Bridge Inspector (CB180059) (lead)

McMinn, Bruce - Bridge Inspector (CB800405)

REVIEWING BRIDGE INSPECTION SUPERVISOR:

Rothman, David - Bridge Inspector (CB180059)

CONFIRMING REGISTERED PROFESSIONAL ENGINEER:

LoCicero, Thomas - PE #31136 Klinger Campo & Associates
CDOT Civil Pave Div
Certificate of Authorization #2317
Tampa FL 33611

Signature: _____

DATE: _____

The official record of this package has been electronically signed and sealed using a Digital Signature as required by 615.15-23.004 F.A.C. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

This report contains information relating to the physical structure of a structure and condition of the structure. This information is confidential and exempt from public inspection pursuant to sections 119.071(5)(a) and 119.071(5)(b), Florida Statutes. Only the cover page of this report may be inspected and copied.

REPORT ID: INSP055 PRINTED: 08/29/2019

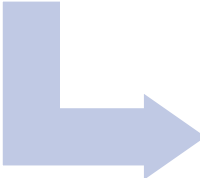
1993

- No Deficiencies



2018

- Structurally Deficient



Current

- Enhanced Inspection Schedule

Ridgemoor Blvd over Brooker Creek

Scour

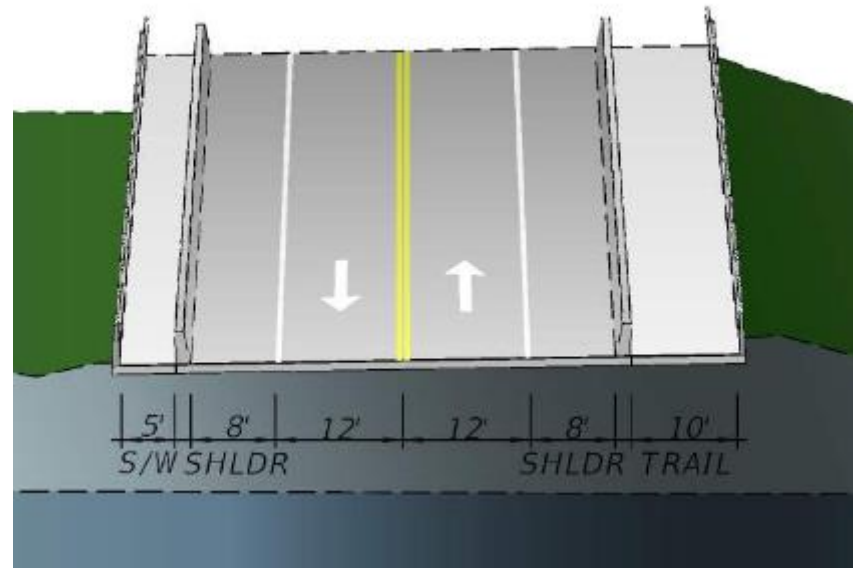
- This Bridge is Scour Critical
- Increased Risk of Scour



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New Bridge

- Replace within the same footprint.
- Adding a 10-foot Multi-Use Trail
- Different Bridge Type
 - Concrete Precast Prestressed Bridge



Ridgemoor Blvd over Brooker Creek



Construction

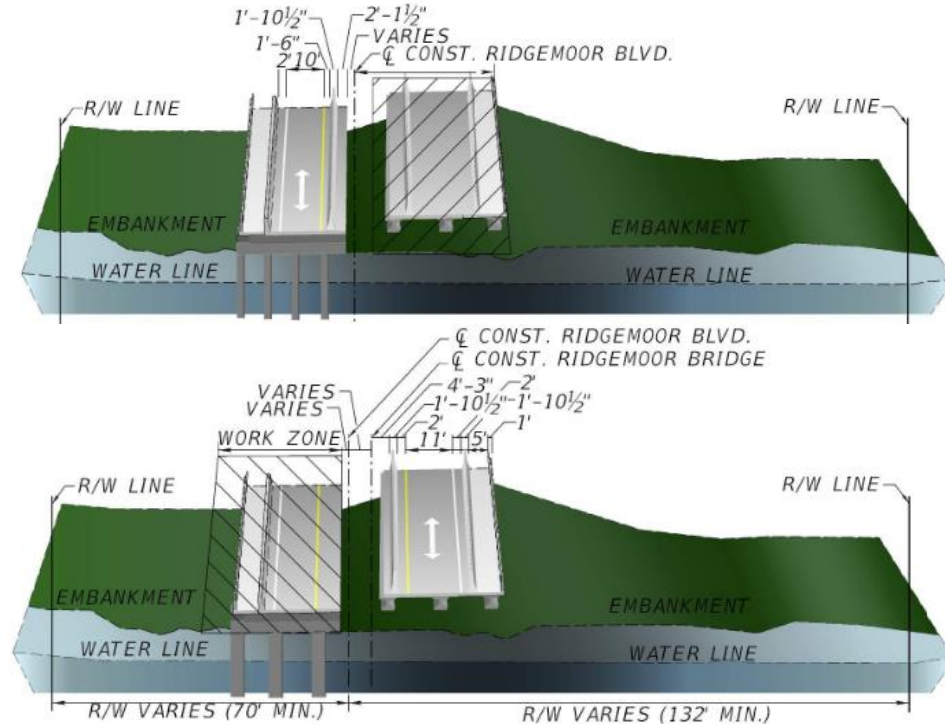
- Expected 1 ½ to 2 years of Construction
- The new bridge is being built in phases
- Use of Automated Flagger Expected



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Construction

- Reviewed a full shut-down and detour
 - Emergency response times were determined to be too long
- Half and Half Construction



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Project Costs

- Design, Construction, CEI
 - ~\$6.7 Million
- Funding
 - Federal Funds
 - \$3.7 Million
 - Local Funds
 - ~\$3.0 Million



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Benefits

- Smoother Riding Surface
- Added a 10' Multi-Use Trail
- Regular 24-month Inspection Cycle
- Meets all Current Criteria

