

## Bridge Management System BRIDGE Inventory Sheet

Structure No

N002\_17E\_B2171

Structure Name

Eagles Nek Bridge

### Location Details

N-Route No. : N002  
Section No. : 17E  
Route Description :  
Route km : 4.67  
N-Route Over/Under : Over  
Province : Eastern Cape  
Magisterial District :  
Other Authority : SANRAL  
Orientation : North/South

Primary Feature : Railway  
Feature Name : Eagles Nek Rail  
Feature Road No. :  
Feature Road km :  
Farm :  
Secondary Feature : N/A  
Secondary Feature Name :  
Other Bridge No. :  
Elevation (m) :  
Direction of River Flow : N/A

#### 1:50,000 TOPOGRAPHICAL MAP

Map Name :  
Map No. :  
Survey System :

#### GIS Coordinates

	Latitude (South)	Longitude (East)
Start :	32d 28m 28.90s	27d 59m 40.10s
End :	32d 28m 29.10s	27d 59m 40.20s

### Contract Details

Design Engineers :  
Contractors :  
Contract Price :  
Escalated Cost :  
Total Cost (Design & Construct) :

Contract Number :  
Year Built : 2000  
Completion Time : 0

### Structural Features

No. of Spans : 1  
Facility Carried : Road  
Structure Type : Simply supported  
Bridge Description : Road over Rail  
Deck Constr. Method : Cast insituon stationary falsework  
Parapet Handrails : Spoonet type solid balustrade (not NJ)  
No of arches : 0  
Springer Thickness (m) : 0  
Crown Thickness (m) : 0

No. of Abutments : 2  
Approach Slabs : Unknown  
Abutment Gallery : No  
fcu Slabs : MPa  
fcu Beams : MPa  
fcu Piers : MPa  
fcu Abutments : MPa  
fcu Arches : MPa

### Deck Cross Section

Position	Type	Material	Span Length	Deck Soffit Profile	Avg Deck Depth (m)	Min Deck Depth (m)	Max Deck Depth (m)
S1	Solid slab	Reinforced concrete	6.25	Straight	0.3750	0.75	0
S1	Inverted T- beam with infill	Precast Beam and Infill Slab	6.25	Straight	0.3750	0.75	0

### Bearings

Position	Type	Fixity
S1	Malthoid (slip membrane)	Friction
S1	Rubber pad	Shear stiffness of bearing pads

### Expansion Joints

Position	Type	Dir Movement	Photos
BA	Buried under surfacing	Longitudinal	

## Bridge Management System BRIDGE Inventory Sheet

**Structure No** N002\_17E\_B2171

**Structure Name** Eagles Nek Bridge

### Piers

Position	Type	Material	Foundation Type	Founding Material	Hmax	Dmax
----------	------	----------	-----------------	-------------------	------	------

### Abutments

Position	Type	Material	Foundation Type	Founding Material	Hmax	Dmax
BA	Solid wall	Reinforced Concrete	Spread footings	Unknown	5.10	

### Wing/Retaining Walls

Position	Type	Material	Foundation Type	Founding Material	Hmax	Dmax
BA	Cantilever	Reinforced Concrete	Spread footings	Hard rock	6.50	0.00

### Embankment Protection

Position	Type	Material	Thickness	Slope
BA	Grass or other vegetation	Grass	0.00	50

### Arches

No Arches	Span Length	Springer Thickness	Crown Thickness	FCU
0	0	0	0.00	

### Design Characteristics

Design Live Load : Unknown  
Design Codes : TMH7 (1988)  
Temp. Range From : 0C  
Temp. Range To : 0C  
Temp. Gradients :

Perc. Overloading :  
Wind Load : kN/m2  
Frequency : Hz

### Hydraulic Data

Peak Discharge : m3/sec  
Design Discharge : 0 m3/sec  
Design Flood Level : 0  
Soffit Level : 0 m ASL  
Clearance (Freeboard) : 0 m  
Peak Year :  
Return Period : 0 yrs  
Depth of Design Flow : m

Scour Protection : N/A  
Risk of Scour : N/A  
Design Scour Depth : m  
Ht Above/Below Soffit : m  
Catchment Area : km2  
Angle Between :  
Max Scour Depth : m

### Drainage

Support Drainage : Weepholes  
Superstructure Drainage : Small diameter pipes (<150mm) on deck  
Seepage Drains : Geofabric

### Dimensions, Geometry and Road Clearances

Overall Length : 12.3 m  
Overall Width : 14.8 m  
Kerb Width : 13.6 m  
Carriageway : Single  
Direction Traffic : N  
Min Road Width : 13.6 m  
Approach Width : 13.6 m

Vertical Alignment :  
Horizontal Alignment :  
Camber/Crossfall :  
Angle of Skew : 30 degrees  
Ht of highest Pier/Abutment : 5.1 m  
Opening Area : m2

Minimum Horizontal Clearances

## Bridge Management System BRIDGE Inventory Sheet

**Structure No**

N002\_17E\_B2171

**Structure Name**

Eagles Nek Bridge

ID	Date Recorded	Clearance (m)	Description
----	---------------	---------------	-------------

Minimum Vertical Clearances			
ID	Date Recorded	Clearance (m)	Description
4	2006/01/25	4.7	S1
4	2016/08/11	4.42	From Railway Line to Deck
4	2011/10/28	4.5	Single Carriage Way

### Services

Type	Description	Location	Authority
------	-------------	----------	-----------

### Road Type, Traffic Volumes and Surfacing

	<b>Road Over</b>	<b>Road</b>
<b>Class of Road :</b>	2- Major route(Freeways and Highways)	Not applicable
<b>No. of Carriageways :</b>	1	
<b>Names of Carriageways :</b>	N 2 Sect 17E	
<b>No./Dimensions of Lanes (m) :</b>	3x3.7	
<b>No./Dimensions of Shoulders (m) :</b>	2x1.6	
<b>No./Dimensions of Sidewalks (m) :</b>		
<b>Average Daily Traffic :</b>		
<b>Year ADT Recorded :</b>		
<b>Truck Factor (%) :</b>		
<b>Detour Length (km) :</b>		
<b>Minimum Class of Detour :</b>	2- Major route(Freeways and Highways)	Not applicable
<b>Surface Slab :</b>	Asphalt	
<b>Surface Approach :</b>	Asphalt	

### Archive Details

<b>Project No. :</b>	<input type="text"/>	<b>Correspondence File :</b>	<input type="text"/>	<b>Strip Map :</b>	<input type="text"/>
----------------------	----------------------	------------------------------	----------------------	--------------------	----------------------

Drawing No.	Title	Location	Type
-------------	-------	----------	------

Microfilm No.	Title	Location
---------------	-------	----------

### Maintenance Agreements and Responsibilities

<b>Responsibilities :</b>	
<b>Agreement No. :</b>	
<b>Share of Costs :</b>	
<b>Agreement Location :</b>	

### Maintenance History

Details	Design Engineer	Contractor	Completion Date	Cost
---------	-----------------	------------	-----------------	------

### Widening, Strengthening, Retrofitting

Details	Design Engineer	Contractor	Completion Date	Cost
Widening with beams	-	Unknown	2011/10/28	0

### Additional Remarks

<b>Remarks :</b>	<input type="text"/>
------------------	----------------------

## Bridge Management System BRIDGE Inventory Sheet

**Structure No**

N002\_17E\_B2171

**Structure Name**

Eagles Nek Bridge

### Factors Influencing Field Inspection

**Access Factors :**

**Piers :** Easy access - binoculars adequate

**Bearings :** Easy access/6 m ladder required

**Box Girder :** No Box

**Effective Bridge Area :** 182

m2

**Availability of Drawings :** No drawings

**Deck Soffit :** Easy Access or binoculars

**Abutment Gallery :** No galleries

**Traffic Volume :** Medium

**General Info :**