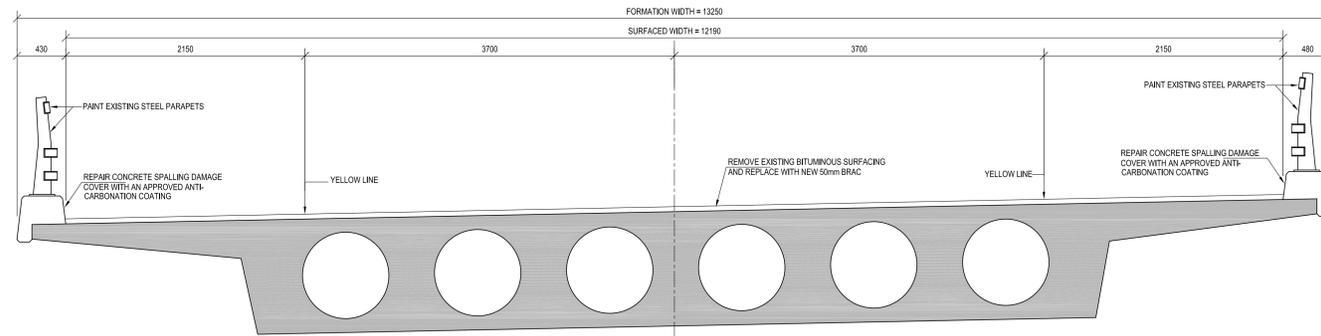
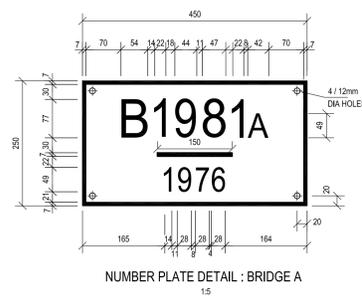


ELEVATION
1:100

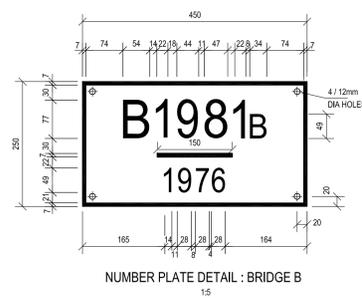


TYPICAL DECK SECTION
1:25

- REPAIR AND PREVENTATIVE MAINTENANCE**
- REPAIR CONCRETE SPALLING DAMAGE ON THE FOLLOWING STRUCTURAL MEMBERS:
 - PARAPET ENDBLOCKS
 - KERBS
 - COVER THE FOLLOWING MEMBERS WITH AN APPROVED ANTI-CARBONATION COATING
 - PARAPET ENDBLOCKS
 - KERBS
 - INSTALL NEW KERBS AT THE ENDBLOCKS TO ACCOMMODATE NEW EXPANSION JOINT TERMINATIONS
 - REMOVE EXISTING DECK BITUMINOUS SURFACING AND TOP OF CONCRETE NOSINGS BY MILLING.
 - OVERLAY THE DECK WITH A NEW 50mm BRAC SURFACING LAYER.
 - INSTALL NEW ASPHALTIC PLUG TYPE JOINTS, INCLUDING JOINT TERMINATIONS AND COVER PLATES.
 - SEAL KERB EXPANSION JOINTS WITH AN APPROVED SILICONE SEALANT.
 - PAINT THE EXISTING STEEL PARAPETS, AS FOLLOWS:
 - SURFACE PREPARATION - ABRASIVE BLAST CLEANING
 - PRIMER - INORGANIC ZINC WITH A 75 MICRON DRY FILM THICKNESS.
 - 2ND COAT - TWO COMPONENT CROSS-LINKED EPOXY WITH A 75 MICRON DRY FILM THICKNESS.
 - FINAL COAT - ALIPHATIC ACRYLIC POLYURETHANE WITH A 40 MICRON DRY FILM THICKNESS.
 - ATTACH GUARDRAILS TO ENDBLOCKS WITH M16 CONCRETE ANCHORS.
 - INSTALL NEW BRIDGE NUMBER PLATES
 - INSTALL TWO NEW HAZARD WARNING PLATES

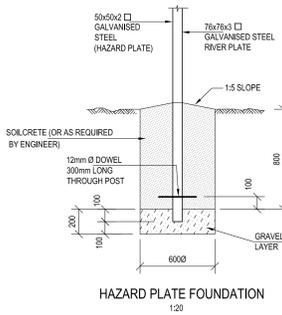


NUMBER PLATE DETAIL : BRIDGE A
1:5

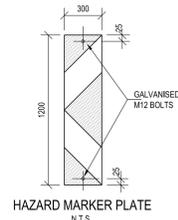


NUMBER PLATE DETAIL : BRIDGE B
1:5

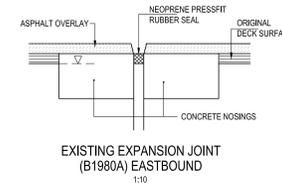
- NUMBER PLATE NOTES**
- GENERAL
 - LETTERS AND NUMERALS SHALL BE TYPE 'B' LETTERS TO DIN 1451 PART 2.
 - THE DATE ON THE BRIDGE NUMBERS SHALL BE THE YEAR IN WHICH THE BRIDGE WAS COMPLETED.
 - THE BRIDGE NUMBERS SHALL HAVE A WHITE BACKGROUND WITH BLACK LETTERS, NUMERALS AND BORDER.
 - MANUFACTURE OF NUMBER PLATES AND TEMPLATES
 - TYPE 1: NUMBER PLATES
 - THE NUMBER PLATES SHALL BE MANUFACTURED FROM NON-METALLIC, UV RESISTANT MATERIAL.
 - TYPE 2: PAINTED NUMBERS
 - THE TEMPLATES FOR THE PAINTED NUMBERS SHALL BE MANUFACTURED FROM VINYL DECAL IN NEGATIVE STENCIL FORM COMPLETE WITH APPLICATION TAPE.
 - CONSTRUCTION
 - TYPE 1: NUMBER PLATES
 - THE BRIDGE NUMBER PLATES SHALL BE POSITIONED AS SHOWN.
 - THE NUMBER PLATE SHALL BE SECURELY FASTENED TO THE INSIDE FACE OF THE SHUTTER BY MEANS OF M10 ANCHOR BOLTS. THE PROTRUDING THREADS OF THE BOLTS SHALL BE COATED WITH AN APPROVED DEBONDING AGENT. ONCE THE CONCRETE HAS SET AND PRIOR TO STRIPPING THE SHUTTER THE M10 ANCHOR BOLTS SHALL BE REMOVED. THE BOLT HOLES SHALL BE MADE GOOD WITH EPOXY FILLER AND THE PAINT WORK TOUCHED UP.



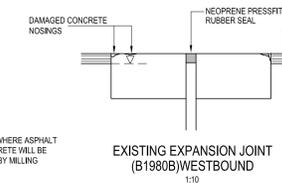
HAZARD MARKER PLATE FOUNDATION
1:20



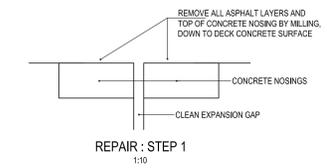
HAZARD MARKER PLATE
N.T.S.



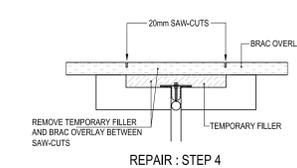
EXISTING EXPANSION JOINT (B1980A) EASTBOUND
1:10



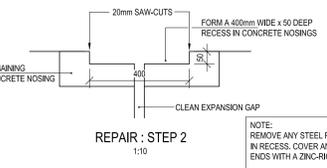
EXISTING EXPANSION JOINT (B1980B) WESTBOUND
1:10



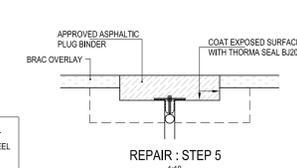
REPAIR : STEP 1
1:10



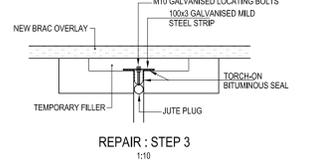
REPAIR : STEP 4
1:10



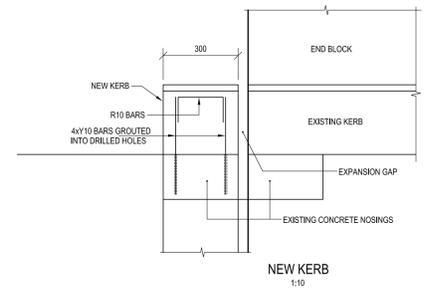
REPAIR : STEP 2
1:10



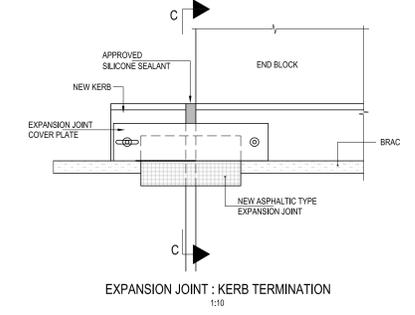
REPAIR : STEP 5
1:10



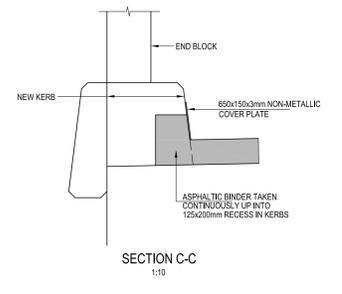
REPAIR : STEP 3
1:10



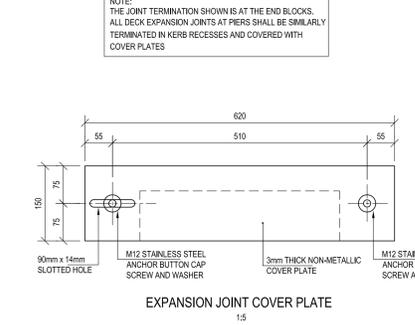
NEW KERB
1:10



EXPANSION JOINT : KERB TERMINATION
1:10



SECTION C-C
1:10



EXPANSION JOINT COVER PLATE
1:5

| No. | DATE | REVISION | CONSULT. ENG. |
|-----|------------|------------------|---------------|
| V1 | 05/10/2021 | ORIGINAL VERSION | JR |

CONSTRUCTION RECORD
WORKS CONTRACT ENGINEER

Name :
Prof. Reg. No. :
Date :

SANRAL PROJECT MANAGER

Name :
Date :

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| DESIGNED BY | | CONSULTANT APPROVAL | |
|----------------|-----------------------|---------------------|-------------|
| NAME | JJ RAUTENBACH | NAME | : J. VENTER |
| Prof. Reg. No. | 910252 | Prof. Reg. No. | : 20010154 |
| CHECKED BY | | | |
| NAME | JJ JANSE VAN RENSBURG | | |
| Prof. Reg. No. | 950018 | | |
| DRAWN BY | | | |
| NAME | D VENTER | | |

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NORTHERN REGION
38 Ida Street
Menlo Park
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0081

Private Bag X17
Lynwood Ridge
0040

Tel: (012) 844 8000

Tel: (012) 6656200

for: SA NATIONAL ROADS AGENCY SOC. LTD.

ACCEPTANCE

THIS ACCEPTANCE IS FOR PROCEDURAL AND ADMINISTRATIVE REVIEW PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OR LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING

PROJECT DESCRIPTION

THE REPAIR AND RESURFACING OF NATIONAL ROAD N12 SECTION 20 FROM PETROPORT (km 20.0) TO OGIES (km 42.2)

BLESBOK RIVER BRIDGE B1981 A&B AT KM 24.682

REPAIR GENERAL LAYOUT : SHEET 2

Date:

| PROJECT NUMBER | N.012-200-2019/2F | |
|------------------------|-----------------------|-------|
| | DRAWING LOCATION DATA | START |
| ROUTE | N12 | N12 |
| SECTION | 20 | 20 |
| DRAWING km DISTANCE | 24.60 | 24.72 |
| DRAWING TYPE | STRUCTURES-BRIDGES | |
| BRIDGE/STRUCTURE No. | B1981 A&B | |
| CONSULTANT DRAWING No. | B1981/R2 | |
| SANRAL DOCUMENT # | | |

SCALE : AS SHOWN

SHEET 2 OF 2

100mm ON ORIGINAL DRAWING