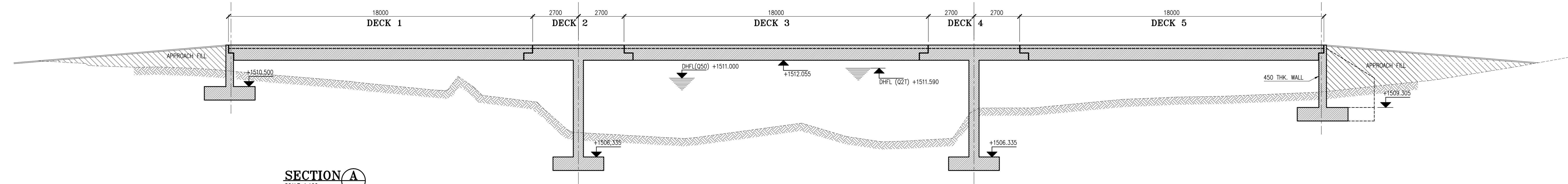
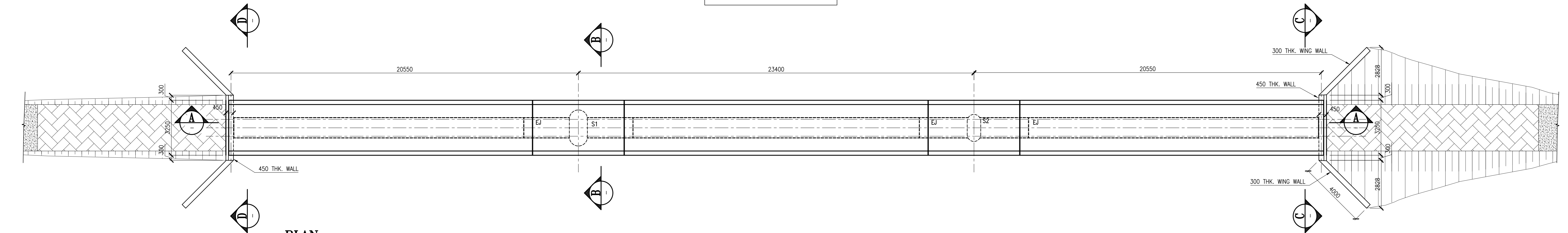


ELEVATION
SCALE 1:100

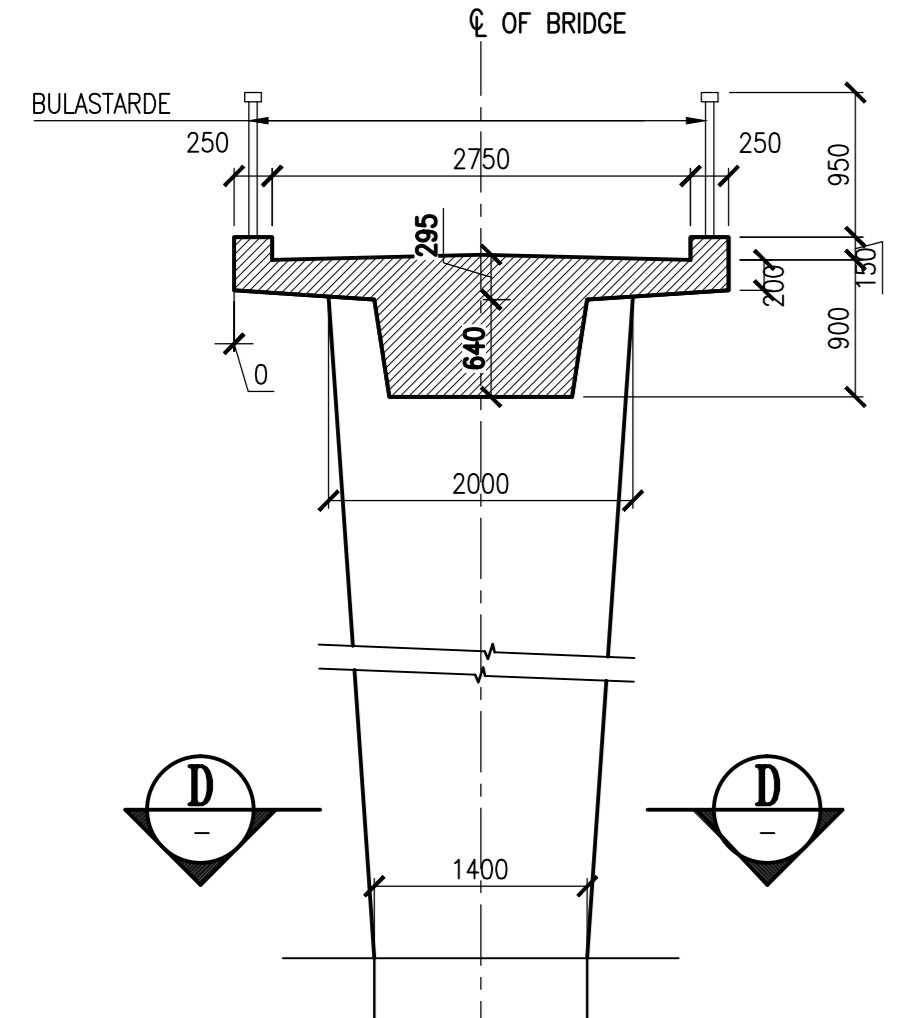


SECTION A
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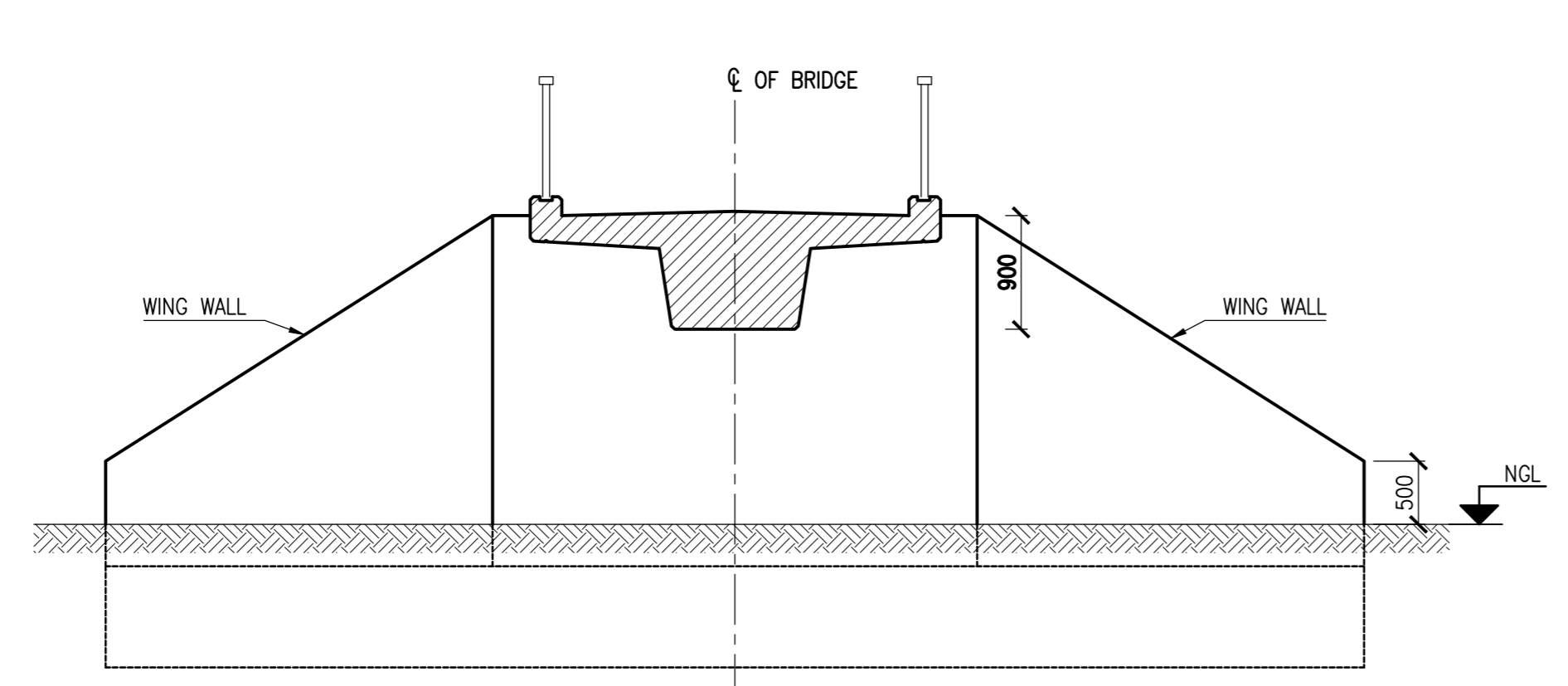
NOTE: DECK 3 TO BE ERECTED FIRST.



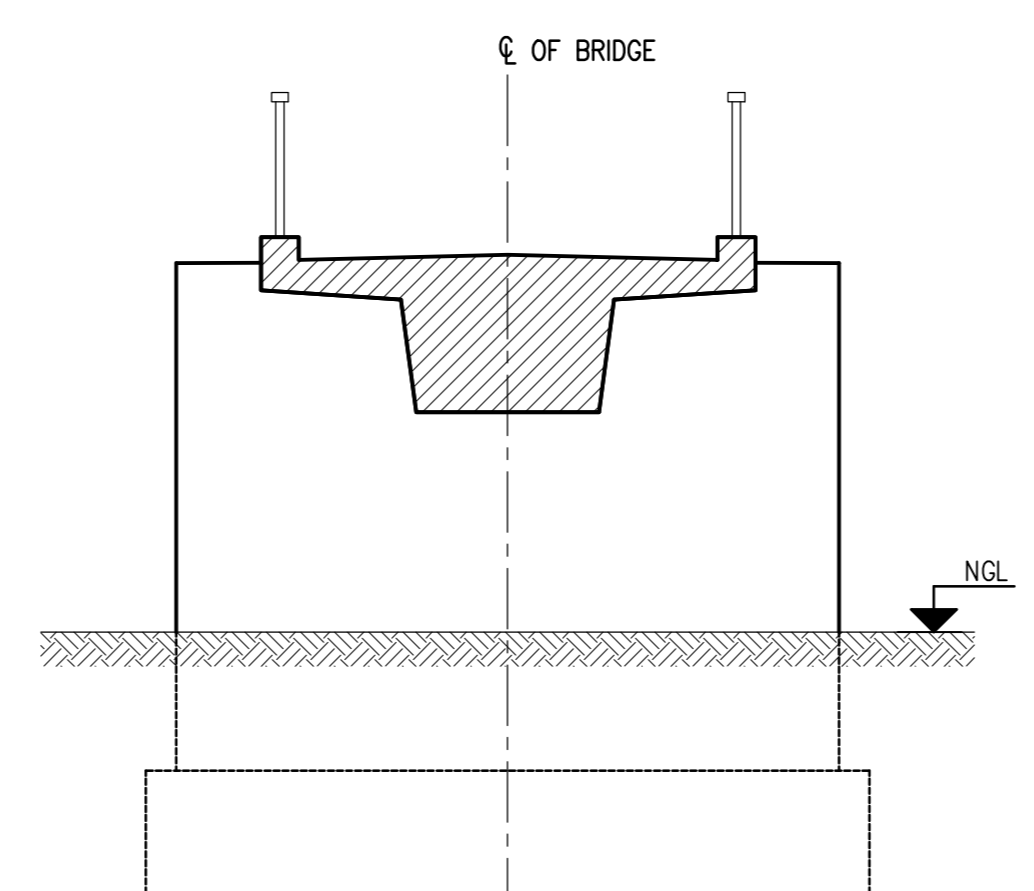
PLAN
SCALE 1:100



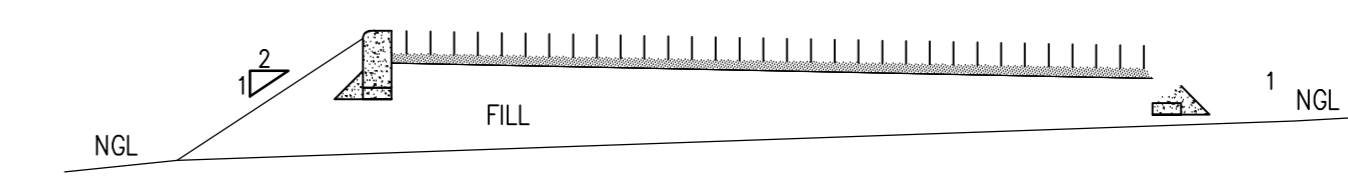
SECTION B
SCALE 1:50



SECTION C
SCALE 1:50



SECTION D
SCALE 1:50



TYPICAL SECTION THRU PAVEMENT
SCALE 1:20

- GENERAL NOTES**
- DESCRIPTION OF THE STRUCTURE**
 - 1.1 THE BRIDGE COMPRISES THREE SIMPLE SUPPORTED SPANS. THE SUBSTRUCTURE CONSISTS OF REINFORCED CONCRETE SOLID PIERS AND ABUTMENTS FOUNDED ON ROCK.
 - LOAD STATEMENT**

THIS PEDESTRIAN BRIDGE HAS BEEN DESIGNED FOR PEDESTRIAN LOADING IN ACCORDANCE WITH TMH7 PART 2 (AS AMENDED 1988) "CODE OF PRACTICE FOR THE DESIGN OF HIGHWAY BRIDGES AND CULVERTS IN SOUTH AFRICA" AND FLOOD ACTION IN ACCORDANCE WITH RECOMMENDATIONS OF CHAPTER 6 VOLUME 1 HYDRAULICS, HYDROLOGY AND ECOLOGY OF THE CSRA GUIDELINES TO THE HYDRAULIC DESIGN AND MAINTENANCE OF RIVER CROSSINGS (1994)
 - STRUCTURAL ANALYSIS AND PARAMETERS**
 - 3.1 METHOD OF ANALYSIS

THE BRIDGE HAS BEEN DESIGNED USING ELASTIC ANALYSIS AND THE LIMIT STATE APPROACH IN ACCORDANCE WITH TMH7 PART 3.
 - 3.2 DESIGN PARAMETERS

3.2.1 YOUNG'S MODULES:

40 MPa CONCRETE BEAM	E = 25 GPa
REINFORCING BARS	E = 206 GPa
PRESTRESSING STEEL	E = 188 GPa
 - QUALITY OF MATERIALS**
 - 4.1 CONCRETE

ELEMENT	GRADE
DECKS	40/19
BALUSTRADE	40/19
 - 4.2 REINFORCEMENT TO SABS 920
 - 4.3 BEARINGS

ELASTOMERIC BEARINGS - DROP-IN SPANS.
 - 4.4 EXPANSION JOINTS

IN ACCORDANCE WITH DRAWINGS.
- LIMITING CRITERIA**
 - 5.1 FOUNDATIONS

(a) FOUNDATIONS ON SOFT ROCK (DOLERITE)
(b) PERMISSIBLE BEARING PRESSURE = --- KPa
(c) DESIGN BEARING PRESSURE = ---- KPa MAXIMUM
- CONSTRUCTION REQUIREMENTS**
 - 6.1 ARISES

ALL VISIBLE CORNERS TO BE CHAMFERED AS:
25mm x 25mm UNLESS OTHERWISE SHOWN
 - 6.2 CONCRETE COVER

DECK UPPER SURFACES:	40mm
ALL OTHER FACES:	40mm UNLESS OTHERWISE SHOWN
 - 6.3 CONCRETE SURFACE FINISHES

FORMED UNEXPOSED	F1
FORMED EXPOSED EXCEPT PARAPETS AND ENDBLOCKS	F2
PARAPETS AND END BLOCKS	F3
UNFORMED UNEXPOSED	U1
UNFORMED EXPOSED BEARING	U3
BRIDGE DECKS (UPSTAND)	U2
BRIDGE DECK TOP BURLAP-DRAGED AND GROOVED TEXTURE	
- HYDRAULIC NOTES:**

HYDRAULIC INFORMATION:

MEAN ANNUAL PRECIPITATION	740 mm
CATCHMENT AREA	97.36 km ²
1:20 YEAR PEAK DISCHARGE (Q20)	514 m ³ /s
DESIGN RETURN PERIOD FLOOD INTERVAL	50 YEARS
DESIGN PEAK DISCHARGE (Q50 RATIONALMETHOD)	655 m ³ /s
PEAK DISCHARGE (Q2T)	790 m ³ /s
REGIONAL MAXIMUM FLOOD (RMF)	987 m ³ /s
AVERAGE SLOPE (m/m)	0.012
NATURAL DESIGN FLOOD LEVEL (NDFL)	1510.68 m
HIGHEST KNOWN FLOOD LEVEL (HKFL)	- m
NATURAL DESIGN FLOW DEPTH (NDFL)	3.80 m
NATURAL DESIGN FLOW VELOCITY	6.64 m/s
BACKWATER	0.32 m
DESIGN HIGH FLOOD LEVEL	1511.00 m
Q2T FLOOD LEVEL	1511.59 m
RFM FLOOD LEVEL	1513.40m
DESIGN FLOW VELOCITY (VN2)	5.89 m/s
REQUIRED MINIMUM FREEBOARD	0.95 m
DESIGN FREEBOARD	1.00 m
FREEBOARD TO SHOULDER BREAKPOINT	1.37 m
- REFERENCE DRAWINGS**

TITLE	PLAN NUMBER
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No.	DATE	REVISIONS	CHK'D	DATE	DESIGNED	CLIENT	PROJECT	JOHANNESBURG ROADS AGENCY (PTY) LTD	DRAWING No.	13185/S/002/A
A	06/12/12	ISSUED FOR INFORMATION					ALEXANDRA PEDESTRIAN BRIDGE	PRIVATE BAG X70 BRAAMFONTEIN 2017	for: JRA NETWORK & FORWARD PLANNING SENIOR DESIGN ENGINEER	Sheet 1 of 1
					DESIGN CHECKED		DESCRIPTION	66 SAUER STREET JOHANNESBURG 2000	DATE	REVISION NO
					DRAWN	MF	ALTERNATIVE 2		for: THEMBA CONSULTANTS	SCALE: AS SHOWN
					DRAWING CHECKED		PROPOSED CONCRETE BRIDGE GENERAL ARRANGEMENT		DATE	

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