



NOTES:

GUARDRAILS AND PIPING

1. GUARDRAILS MUST COMPLY WITH AS 1657-1992.
2. MATERIAL TO BE 6060 ALUMINIUM OR SIMILAR.
3. ALL PIPES ARE TO BE SEALED TO PREVENT INGRESS OF MOISTURE.
4. ALL DIMENSIONS ARE IN MM UNLESS STATED OTHERWISE.
5. ALL WELDS TO AS/NZS 1665.
6. GIVEN DIMENSIONS APPLY TO MOST PUMP STATIONS, BUT SHOULD BE CHECKED ON SITE BEFORE FABRICATION.
7. ALL MATERIALS SHALL BE OF THE FOLLOWING MINIMUM PROPERTIES.

COMPONENT	MINIMUM DIMENSION
POST	50 x 6 TUBE
TOP RAIL	50 x 6 TUBE
INTERMEDIATE MEMBERS	50 x 6 TUBE
TOE BOARD & L PLATE	100 x 6mm FLAT BAR
EQUAL CHANNEL	20 x 20 x 3
GUARDRAIL PROTRUSION	10mm ROD

HANDRAILS

1. HANDRAILS SHALL BE CONSTRUCTED TO BENT 50mm OD ALUMINIUM TUBE WITH 6.0mm WALL THICKNESS.
2. THE HANDRAILS POSTS SHALL BE BOLTED DIRECTLY INTO THE SURFACE. ALTERNATIVELY, LUGS MAY BE INSTALLED TO BOTTOM OF L PLATE AND CAST DIRECTLY INTO SURFACE. USE BITUMINOUS PAINT ON WETTED SURFACES.

GENERAL LAYOUT

1. THE 'C' LUGS ON THE REAR GUARD RAIL CAN BE USED TO SECURE THE HATCH OPEN.
2. GUARDRAILS CONNECT TO SUPPORT POSTS USING THE PROTRUSIONS AND SLOTS.
3. LID MUST CONNECT TO HANDRAIL VIA CHAIN.
4. WHERE FALL FROM HEIGHT SIGNIFICANT, IT IS RECOMMENDED TO INCREASE HEIGHT OF GUARD RAIL TO MAX HEIGHT.

2	GENERAL AMENDMENTS 2021.	PW	JUNE'21	JR	DC
1	REDRAWN IN CAD	AW	FEB'2020	JR	DC
NO	DESCRIPTION	DRN	DATE	CKD	APPD
AMENDMENTS					



DES	PB	WATER STANDARD DRAWING		
DRN	DG	MISCELLANEOUS		
CHK	PB	GUARDRAILS, HANDRAILS AND SUPPORT POSTS		
APPD	JP	ALUMINIUM		
SCALE	N.T.S.	A3	DRAWING NUMBER	2
ISSUED	APR 2008			
ALL DIM. IN mm		CAD PRODUCT - DO NOT AMEND MANUALLY		AMDT