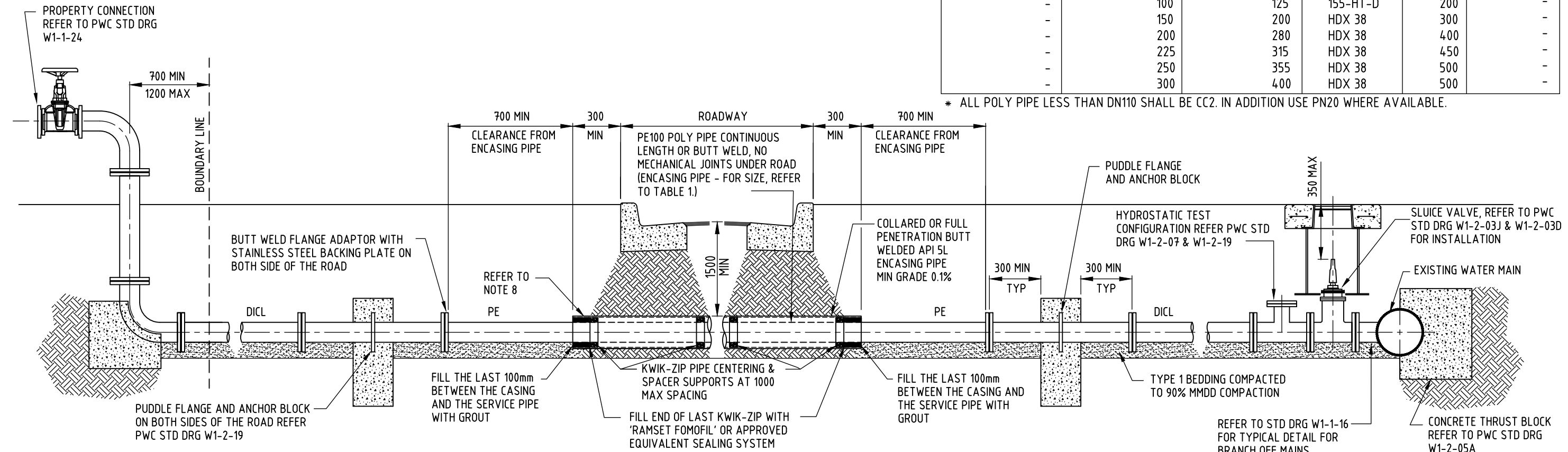


**DN20, DN25 & DN50 HORIZONTAL BORING DETAIL**



**DN100 TO DN300 HORIZONTAL BORING DETAIL**

**NOTES:**

1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. COPPER ALLOY SHALL BE DEZINCIFICATION RESISTANT (DR) TO AS2345.
3. USE SILVER BRAZING ALLOY (MIN 2% SILVER TO AS 1167.1) FOR ALL CAPILLARY JOINTING OF COPPER PIPES AND FITTINGS OR ALTERNATIVELY, FOR HORIZONTAL JOINTS ABOVE GROUND PRESS FITTINGS MAY BE USED.
4. ONLY POWER AND WATER (OR ITS AUTHORISED CONTRACTORS) ARE PERMITTED TO TAP EXISTING IN-SERVICE (LIVE) MAINS OR MAINS THAT HAVE BEEN HYDROSTATICALLY TESTED. WITHIN LICENSED AREAS AND UPON PAYMENT OF THE NECESSARY FEES, POWER AND WATER WILL PERFORM TAPPING OF LIVE MAIN. HOWEVER, EXCAVATION, ALL MATERIALS AND INSTALLATION SHALL BE SUPPLIED BY THE CONTRACTOR.
5. PIPEWORK UNDER ROAD TO BE DISINFECTED AND FLUSHED (PWC TO WITNESS) BEFORE CONNECTION TO MAIN AND INSTALLATION OF WATER METER.
6. ALL STEEL ENCASING PIPES TO BE API 5L WITH A MINIMUM THICKNESS AS CLOSE TO 10mm AS POSSIBLE.
7. ALL PE PIPE INSIDE ENCASING PIPE TO BE CONTINUOUS UNLESS AGREED WITH SUPERINTENDENT.
8. FILL VOID BETWEEN CARRIER PIPE AND BORED HOLE WITH GROUT. GROUTING MIX TO BE 1:1 (SAND:CEMENT) WITH A WATER CEMENT RATIO 1:0.67 BY WEIGHT USING FINE WELL ROUNDED SAND.

**TABLE 1.**

SERVICE / CARRIER PIPE	SERVICE / CARRIER PIPE	SERVICE / CARRIER PIPE	SPACER	ENCASING PIPE	ENCASING PIPE
TYPE 'A' Cu (DN)	FLCL/DICL/PVC (DN)	PE100 CC2 (DN)	KWIK-ZIP MODEL	API 5 (DN)	PN12 PVCU (DN)
20	-	25 *	-	-	50
25	-	32 *	-	-	63
50	-	63 *	-	-	80
-	100	125	155-HT-D	200	-
-	150	200	HDX 38	300	-
-	200	280	HDX 38	400	-
-	225	315	HDX 38	450	-
-	250	355	HDX 38	500	-
-	300	400	HDX 38	500	-

\* ALL POLY PIPE LESS THAN DN110 SHALL BE CC2. IN ADDITION USE PN20 WHERE AVAILABLE.

3	NOTE 8 ADDITION.	J.W.	JAN'24	J.C.	D.C.
2	GENERAL AMENDMENTS 2021.	P.W.	DEC'21	I.L.	D.C.
1	REDRAWN & AMENDED 2020.	P.W.	NOV'20	J.R.	D.C.
0	ISSUED FOR INFORMATION.	A.W.	OCT'18	J.R.	D.C.
NO	DESCRIPTION	DRN	DATE	CKD	APPD
AMENDMENTS					



DES	T.M.	WATER STANDARD DRAWING		
DRN	A.W.	SERVICES		
CHK	J.R.	PROPERTY CONNECTIONS		
APPD	D.C.	THRUST/DIRECTIONAL DRILLING UNDER ROAD		
SCALE	N.T.S.	A3	DRAWING NUMBER	3
ISSUED	OCT'18		W1-1-33	
ALL DIM. IN mm				
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY		