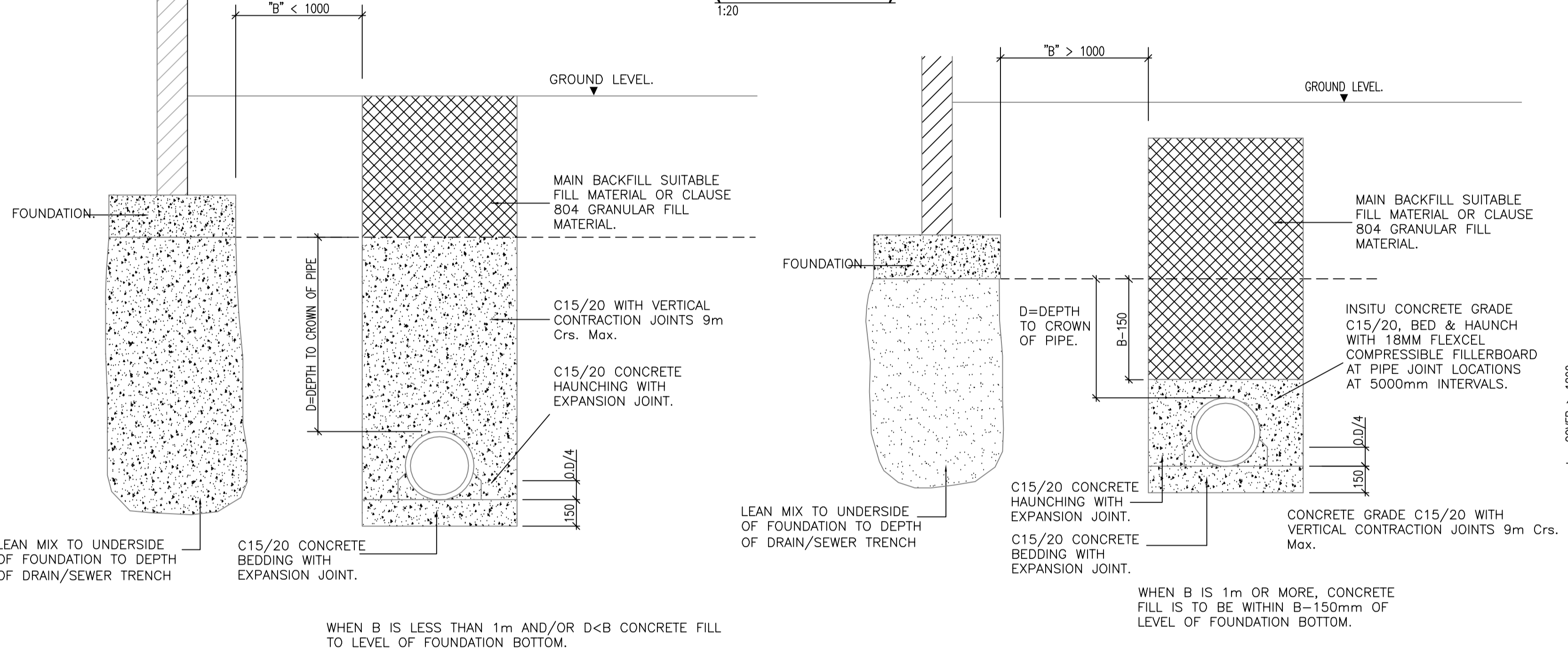


CONCRETE, VC, DRAINS/SEWER IN OPEN SPACES (PLANTED AREAS)
1:20



CONCRETING OF DRAINS LAID NEAR FOUNDATIONS.
1:20

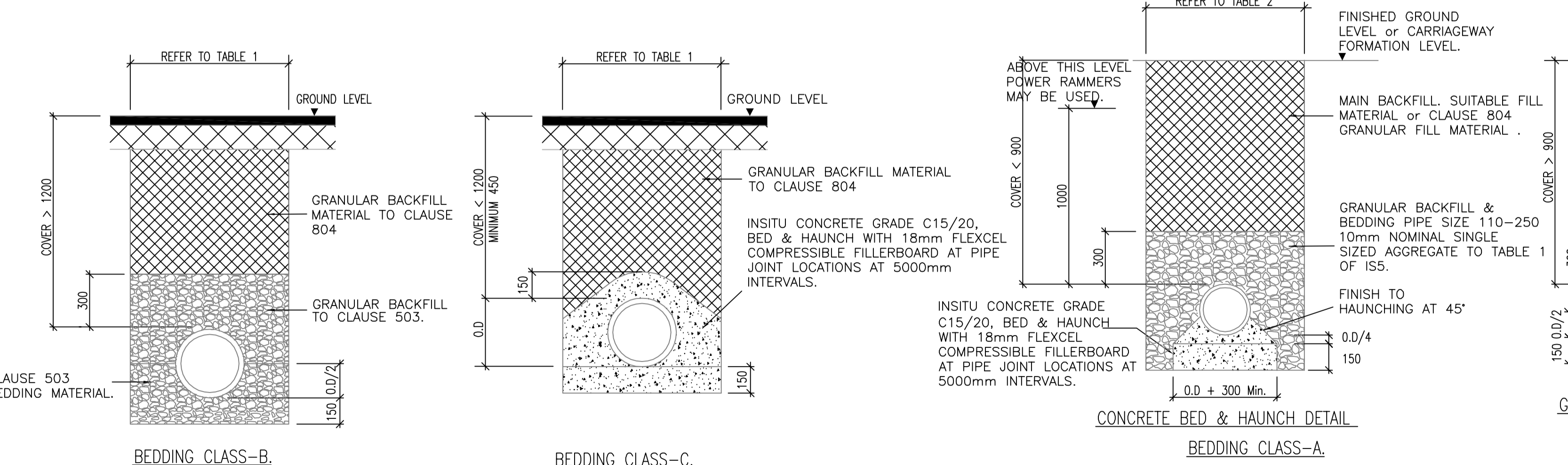


TABLE 1
CONCRETE PIPES : LIMITATIONS ON DEPTH OF COVER. (DEPTHS UP TO 6m)

PIPE DIAMETER. (mm)	100	150	225	300	375	450	525	600
TRENCH WIDTH (MAX) (mm)	650	700	800	900	1150	1250	1350	1450
TRENCH WIDTH (MIN) (mm)	450	500	600	700	950	1050	1150	1250
BEDDING CLASS	A	B	A	B	A	B	A	B
CONCRETE (S & S)								
CLASS-N.	*	*	*	*	*	*	3.0	2.0
CLASS-M.							*	3.0
CLASS-H.					*	*	4.5	4.5

x - NOT USABLE AT ANY DEPTH FOR THAT BEDDING CLASS.
- NO ENTRY INDICATES PIPES NOT NORMALLY AVAILABLE.
* - NO LIMITS TO MAXIMUM COVER.

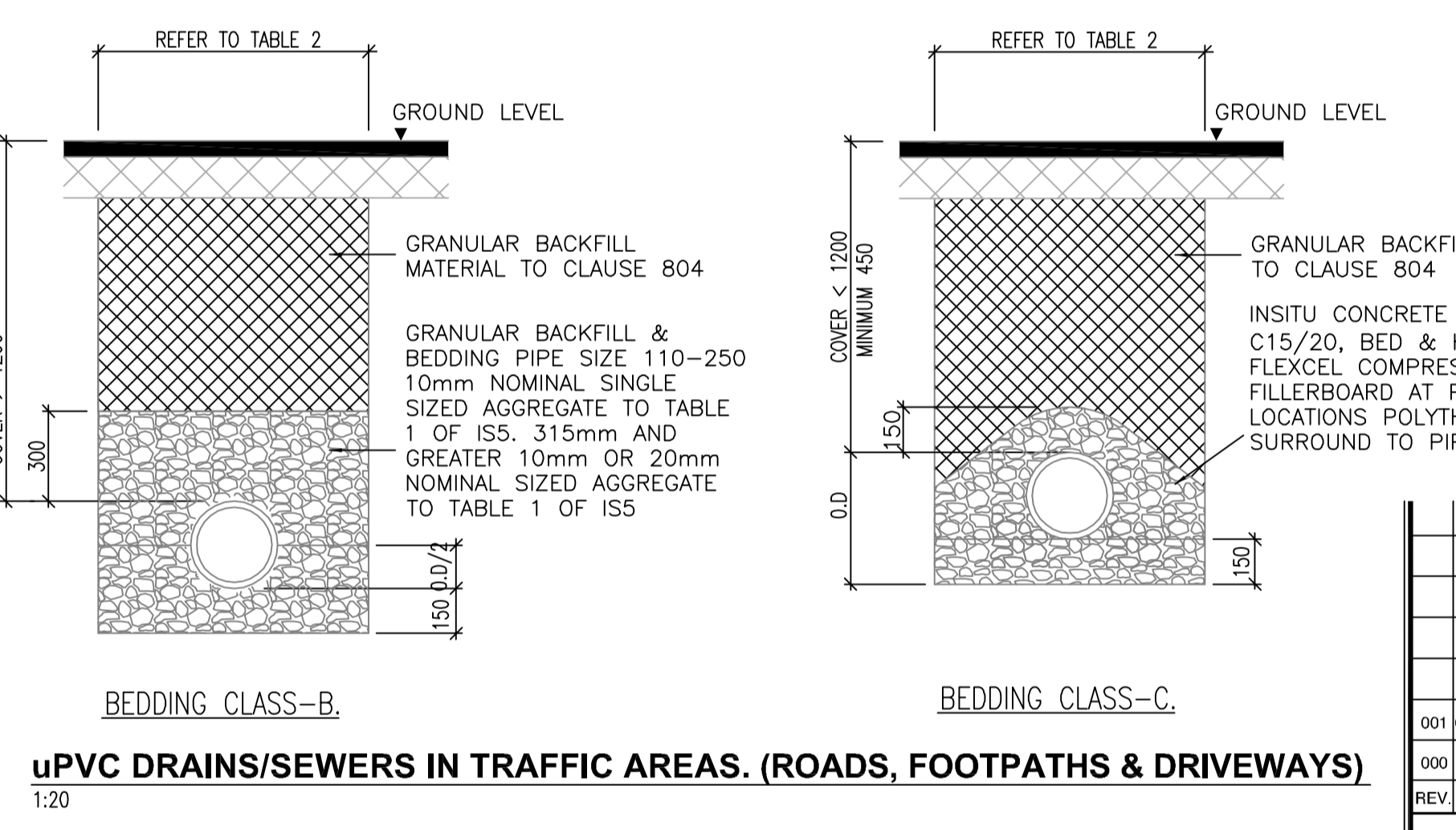


TABLE 2
TRENCH WIDTH FOR uPVC SEWERS

NOMINAL PIPE SIZE (mm)	WIDTH OF TRENCH (mm)	
	MIN.	MAX.
110	450	600
160	450	600
200	600	700
225	600	700
250	600	700
315	700	850
355	750	900
400	800	950
450	850	1000

001	07.12.12	ISSUED FOR PLANNING PERMISSION	LK	DC	JMC	BW	DW
000	AUG/12	ISSUED FOR CLIENT COMMENT	RK	SOD	JMC	BW	DW
REV	DATE	REVISION DESCRIPTION	DRN	PROV	COVER	APP	

PURPOSE OF ISSUE - PRELIMINARY UNLESS INDICATED

TENDER CLIENT APPROVAL CONSTRUCTION AS-BUILT REVISED

Client: **EIRGRID**

Project: **LAOIS KILKENNY REINFORCEMENT PROJECT Coolnabacky 400kV Substation**

Contract: **LAOIS KILKENNY REINFORCEMENT PROJECT**

Drawing Title: **DRAINAGE DETAILS SHEET 2 OF 2 COOLNABACKY 400kV SUBSTATION**

Production Unit: **Civil Building and Environmental**

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ESBI Energy Innovation

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DRAWN	PRODUCED	VERIFIED D.A.	VERIFIED ELECTRICAL	APPROVED	APP'D DATE
L.Kernan	D.Cody	J.MacCarthy	B.Wall	D.Walsh	07.12.2012
CLIENT REF	TC207438	No. of Draw	2	SCALE	As Shown
DRAWING NUMBER	PE610-D002-004-008-001			SHEET	REV

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