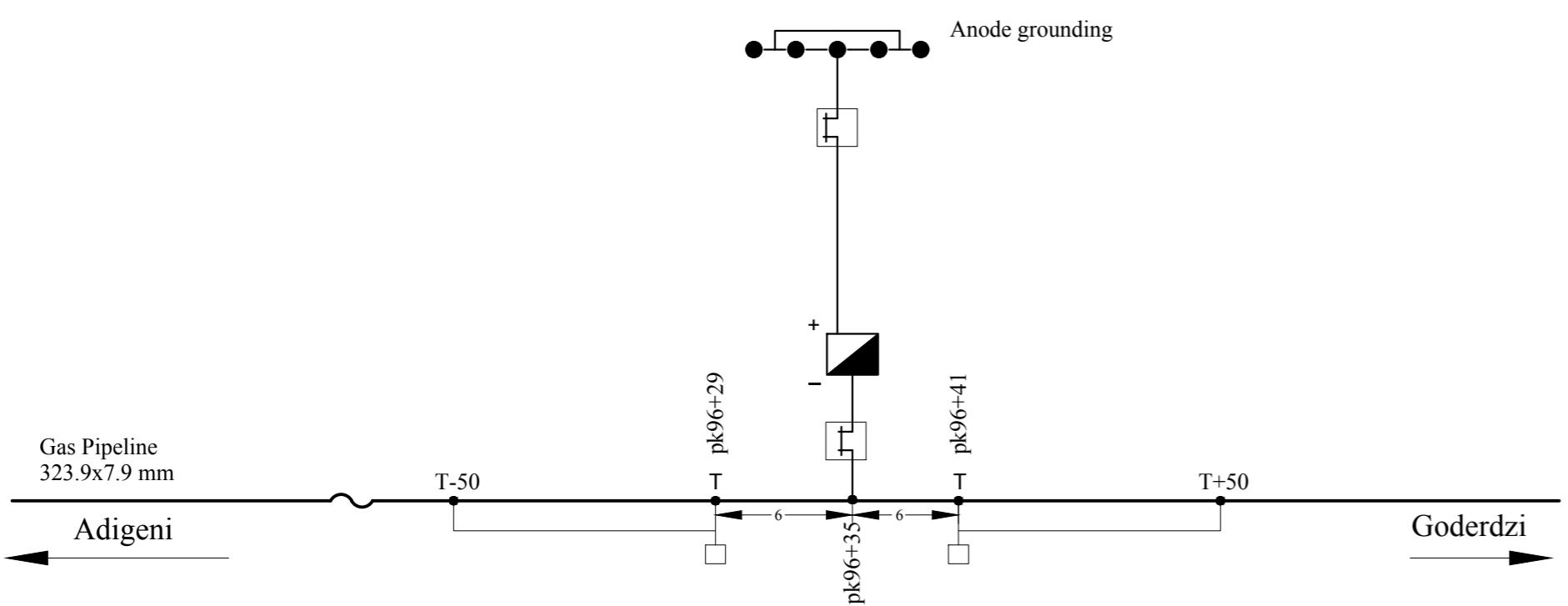


Plan of alignment of cathodic protection device
on main gas pipeline pk96+35



List of cable installation

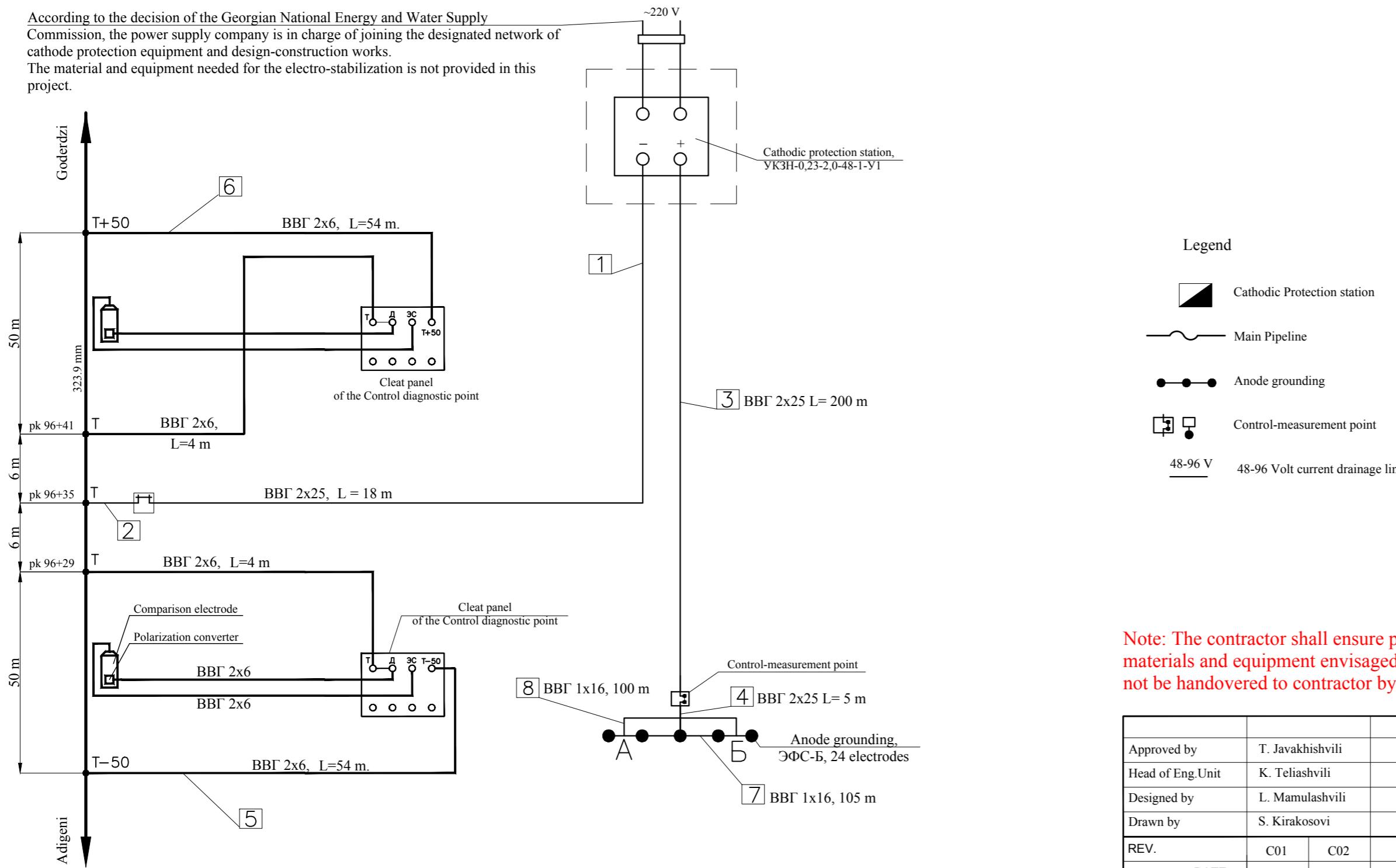
Cable marking	Installation location	Operating voltage	Cable mark	Cable length, m			
				In the trench	On the structure	In the pipe on the support	
1	Cathodic drainage line УКЗН from "minus" bond till drainage Control measurement point (CMP)	48	BBГ 2x25	15	3	-	18
2	Cathodic drainage line from drainage point of the Control measurement point (CMP) to pipeline	48	BBГ 2x25	5	-	-	5
3	Anode drainage line УКЗН from cleat "plus" to the CP	48	BBГ 2x25	200	3	-	203
4	Control measurement point (CMP) - anode grounding	48	BBГ 2x25	5	-	-	5
5	From T and T-50 to the Control diagnostic point	-	BBГ 2x6	58	-	-	58
6	From T and T+50 to the Control diagnostic point	-	BBГ 2x6	58	-	-	58
7	Main cable for anode grounding	48	BBГ 1x16	105	-	-	105
8	Anode grounding points A-B	48	BBГ 1x16	100	-	-	100

Total numbers of cables is: BBГ 2x25 - 226 m ;
BBГ 2x6 - 116 m ;
BBГ 1x16 - 205 m ;

List of works

Nº	Name of works	Unit	Quant.
1	Installation of УКЗН-0,23-2,0-48-1-Y1 type cathodic protection station on horizontal iron-concrete foundation	pcs	1
2	Arrangement of foundation with reinforced concrete set for cathode protection device	«	1
3	Arrangement of fencing for cathode protection station	«	1
4	Arrangement of protective grounding for cathode protection device 15mm diameter 4 x 5 m long steel vertical electrodes, which should be connected at a distance of 0.8-1 meters from the foundation, at the trench with a depth of at least 0.5 meters to the steel contour with a diameter of 10 mm and 15 m long	«	1
5	Connection of the cathodic protection device using drainage cable BBГ 2x25	«	1
6	Installation of 24 pcs of grounding electrodes at the depth of 1.5m. In accordance with the project, the trench is processed and filled with soil	«	1
7	Linking of grounding anodes to DC drainage line	pcs	1
8	BBГ 2x25-660 single cable installation at depth of one meter in a trench	m	47
9	Laying cable BBГ 2x6-660 in the trench	m	116
10	Installation of the control-measuring point	pcs	4
11	Equip of control-measuring unit, with permanently operated ОНЕС-1 comparison electrode and linking of BBГ 1x6-660 cable to pipe at distance of 6 m. and 54 m. from drainage point	«	2
12	Installation of one BBГ 1x6-660 cable in anode grounding trench	m	205
13	Excavations of trench in the ground III-th category for the anodic-cable laying.	m ³	305
14	Putting of signal tape in the trench at depth of 0.75 m	m	226

Principal scheme of connections



Note: The contractor shall ensure purchase and installation of all materials and equipment envisaged by the project and which will not be handed over to contractor by GOGC

Approved by	T. Javakhishvili		Adigeni - Goderdzi Gas Main Pipeline Construction Project	
Head of Eng.Unit	K. Teliashvili		Cathodic protection device pk 96+35	
Designed by	L. Mamulashvili		български език	
Drawn by	S. Kirakosovi		DCC NUMBER :	
REV.	C01 C02		SHEET NO. 0360320 №	REV. C02
01/06/2018 / DATE	19/12/18 21/01/19	SCALE:		No: ADGO33-GS3-PL-CPR-00004