BHEL::HYDERABAD

M&S - P&C DEPARTMENT

TENDER REF.M&S/P&C/2019/36 DT.22/07/2019

NAME OF WORK: Painting of gas pipelines (Oxygen, Nitrogen, Compressor air, LPG) & water pipeline including columns and bridges outside the blocks.

SCOPE OF WORK

PIPELINES LENGTHS OUTSIDE THE BLOCKS

OXYGEN GAS PIPELINE

ID (Inch)	ID (mm)	THICK (mm)	OD (mm)	OD (D) (Meter)	LENGTH (M)	Circumference of pipe (mtr) = pi*D	Surface Area of pipe (Square M) i.e. (Pi*D*L)
3/4"	19	5	29	0.029	70	0.09	6.30
1"	25.4	5	35	0.035	150	0.11	16.50
1 1/2"	38	5	48	0.048	720	0.15	108.00
2"	50.8	5	61	0.061	3220	0.19	611.80
						Total surface area of oxygen gas pipeline (Sq.m)	**742.60**

COMPRESSED AIR PIPELINE

ID (Inch)	ID (mm)	THICK (mm)	OD (mm)	OD (D) (Meter)	LENGTH (M)	Circumference of pipe (mtr) = pi*D	Surface Area of pipe (Square M) i.e. (Pi*D*L)
1 1/2"	38	5	48	0.048	460	0.15	69.00
2"	50.8	5	61	0.061	530	0.19	100.70
3"	76.2	5	86	0.086	1000	0.27	270.00
4"	101.6	5	112	0.112	450	0.35	157.50
6"	152.4	5	162	0.162	760	0.51	387.60
						Total surface area of compressed air pipeline (Sq.m)	**984.80**

NITROGEN GAS PIPELINE

ID (Inch)	ID (mm)	THICK (mm)	OD (mm)	OD (D) (Meter)	LENGTH (M)	Circumference of pipe (mtr) = pi*D	Surface Area of pipe (Square M) i.e. (Pi*D*L)
3/4"	19	5	29	0.029	120	0.09	10.80
1"	25.4	5	35	0.035	220	0.11	24.20
1 1/2"	38	5	48	0.048	950	0.15	142.5
2"	50.8	5	61	0.061	1300	0.19	247
						Total surface area of nitrogen gas pipeline (Sq.m)	**424.50**

COLUMNS AND BRIDGE PIPELINE

Total Surface Area of BRIDGE (Sq. M)	1559
Total Surface Area of COLUMN (Sq. M)	3459
Total surface area of columns & bridges(Sq.m)	**5018.00**

TOTAL SURFACE AREA OF THE PIPELINES OUTSIDE THE BLOCKS (Sq.M)	**7169.90**
TOTAL SURFACE AREA OUTSIDE THE BLOCKS (Sq.M)	**7170**

SIGNATURE & SEAL OF VENDOR