# SERVICE PLAN ESTIMATE

# FOR

# KRISUMI WATERFALL SUITES (PHASE 2 ) AT GURUGRAM, HARYANA



For KRISUMI CORPORATION PVT. LTD.

Authorised Signatory

mbr

## SERVICE ESTIMATE, DESIGN REPORT AND **CALCULATION OF EXTERNAL DEVELOPMENT WORKS** FOR **KRISUMI WATERFALL SUITES (PHASE 2)** AT SECTOR - 36A

GURUGRAM HARYANA

## DEVELOPED BY

#### M/s. KRISUMI CORPORATION Pvt. Ltd. For KRISUMI CORPORATION PVT. LTD.

morrbir

## Authorised Signatory REPORT

Gurgram town of Haryana State is situated on Delhi - Jaipur National Highway No.8 . ---Being in the national capital Region, the town has fast developing tendency and potential. Further, it has also started sharing the growing Industrial load of Delhi. In order to relieve the growing pressure of population in National Capital of Delhi, Haryana Urban Development Authority has already developed residential sector which are fully inhabited to an extent. Further to the increasing demand Haryana Govt. has planned to develop new sectors at outskirt of Gurugram town. This report and revised estimate is prepared for approval of 3.88 acres' group housing Colony in accordance with revised layout/zoning plan.

#### WATER SUPPLY

At present the source of water supply in this area is HSVP. It has been proposed to construct underground tanks of capacity as per attached details and at location for domestic purpose and for fire protection. The underground tanks will be fed from the HSVP supply, from there water will be supplied by set of variable frequency pump to





each Block' which is now a day universally adopted. The water supply system has been designed as per the Hazen William formula.

#### <u>DESIGN</u>

The scheme has been designed for population considering 5 persons for each flat. The rate of water supply per head/day has been taken as (150+15%) i.e. 172.5 liters per head per day.

#### PUMPING EQUIPMENTS

It has been proposed to install pumping set as described with standby of equal capacity. Standby electric power requirement is added to the main DG Sets in case of electricity failure.

#### SEWERAGE SCHEME

Sewer line from proposed development will be connecting to a centralized Sewage treatment plant with a bypass to HSVP sewer to dispose excess sewage. The sewerage system has been marked on the respective plans.

Sewer lines have been designed for three times average D.W.F in relation to water supply demand. It has been assumed that about 75% of the domestic water supply shall find its way into the proposed sewer. Sewer lines shall be laid to a gradient maintaining minimum 2.46 ft./sec self-cleaning velocity. Sewer line up to 250mm dia has been designed to run half full and above 250mm dia has been designed to run three fourth full at peak flow. Necessary provision for laying SW/RCC pipe sewer line, construction of required number of manholes etc., has been made in the estimate.

Necessary design statement for entire sewerage system has been prepared and attached with estimate. Manning's formula has been used on the design of sewerage system.

#### **STORM WATER DRAINAGE**

We proposed to lay underground R.C.C. NP2 pipe drains with required number of catch basins, manholes and rainwater recharge pits with over flow to the Proposed HSVP storm drain on sector Road. The intensity of rain fall has been taken as <sup>1</sup>/<sub>4</sub>" per hour. R.C.C storm water line will be designed as per Manning's formula.

#### **SPECIFICATIONS**

The work will be carried out in accordance with the standard specifications of P.H as laid down by the Haryana Govt.

#### <u>Roads</u>

Roads have been provided to above zones and estimate is prepared as per revised specifications adopted by Haryana Govt.



For KRISUMI CORPORATION PVT. LTD.

#### Street Lighting

Provision for streets also has been made

#### **Horticulture**

Estimates of plantation, landscaping, signage, etc., have been included.

#### <u>Rates</u>

The estimate has been prepared based on the present market rates.

#### <u>Cost:</u>

The total cost of the 5 Acres scheme, including cost of all services works out to be Rs. **741.27 Lacs** (*Rupees Seven crore forty-one lacs twenty-seven thousand only /-*) including 3% contingencies & 49% departmental charges. Price escalation, unforeseen Admin charts.



For KRISUMI CORPORATION PVT. LTD. homber Authorised Signatory

KRISUMI AT GURUGRAM, HARYANA

ΞŢ.
щ
5
S L
ž
TS
Ę
₹
÷
SI
S.
ŏ
A
Ы

S. No.	Unit Name	Type of Units	Type of Occupancy	No. of T Floor s	Total No. 1 of Units	Population Per Unit	Total Populati on	Water n (LU/pers	Water requirement per capita (Lt/person/day) @172.5 (LPCD)	percapita 2.5 (LPCD)	Wat	Wäter requirement	nent	Total Water Requirem ent (LPD)	Sewage Discharge into STP (LPD)	ischarge (LPD)	Total Sewage Discharge into STP (LPD)
					1072	ANS IN		Cold	Hot	Flushing	Total Cold Water	Total Hot Water	Total Recycled Water		Domestic @ 85%	Flushing @ 95%	
L A	DOMESTIC WATER DEMAND MAIN FOWER	W. C.		and a loss	Turner of	Contraction of the second	Counting A	1 10 T	We are the				INDIA	No.			
( <del>17</del>	1 BHK APARTMENT	1BHK	Residential		128	2	640	76.5	51	45	48960	32640	28800	110400	69360	27360	96720
64	STUDIO APARTMENT	STUDIO	Residential		190	'n	950	76.5	51	45	72675	48450	42750	163875	102956	40612.5	143569
6	PENT HOUSE	Duplex	Residential		2	a	10	76.5	51	45	765	510	450	1725	1084	427.5	1511
<b>**</b> E	Domestic helf Staff						64	20	5	20	1280	320	1280	2880	1360	1216	2576
	TOTAL FOR TOWER,										123680	81920	73280	278880	174760	69616	244376
																and a second second	
32	EWS (Separate STP for EWS and Flushing Water will be supplied from EWS STP1																
	EWS	EWS	Residential		28	2	116	76.5	51	45	8874	5916	5220	20010	12572	4959	17531
14	AN INCODIV GUIDENIA D																
For KRISUMI C	Nursery School 1 (Sewage Discharge will go to EWS STP and flushing water will be received from EWS STP)														-		
Δ	Swimming Pool Makeup Water (Main Swimming Pool 425 Sqmx1.2m deep)							CONSULT	Sents		5650			5650			
	Filter Backwash for WTP							)	11		19000			19000	16150	0	16150
TD.	Filter Backwash for main Swimming Pool			e				)									

Authorised Signatory

Page 1 of 2

KRISUMI AT GURUGRAM, HARYANA

PDA CO4SULTANTS NEW DELHI

S. No.	Unit Name	Type of Units	Type of Type of Occupancy Floor of Units Scorepancy Floor of Units S	No. of 1 Floor s	fotal No. of Units	Population Per Unit	Total Populati on	Water requirement per capita (Ltdperson/day) @1725 (LPCD)	Wate	Water requirement	nent	Total Water Requirem ent (LPD)	Sewage Discharge into STP (LPD)	scharge (LPD)	Total Sewage Discharge into STP (LPD)
	Sub-Total						1,780		1,71,404	87,836	73,280	3,37,740	2,15,552	74,575	2.90.127
	Say in (m <sup>3</sup> /day)								171	88	73	338	216	75	290
Total Gn	1 Total Green Area as/per architectural drawing = 3900 Sqm (Water requirement @ 6 liters/Sqm)	drawing = 3	W) mpS 0068	ater requ	uirement @	0 6 liters/Sqn	(1					NSING			23,400
Grand T	Grand Total of Horticultural Water Demand (in Cum. per Day)	emand (in C	um. per Day	I I I I I	<u> - Initia</u>			Caraba to toole sales a				No.		0	24
Water D	Water Demand for water cooled DG Set (in Cum. per Day)	Set (in Cum.	per Day)									DELHI	NTS		£
Contraction of the		100 m	TOTAL	FOTAL WATER REC	REQUIR	QUIREMENTS FOR ALL PURPOSES	DR ALL PL	RPOSES				)			365
					SAT	SAY IN MLD		THE PARTY OF A VENUE	S X THU	STORE STORE					0 365

0.365



PROJECT: KRISUMI WATERFALL SUITES (PHASE 2) AT GURUGRAM, HARYANA	REPUBLIC DIVE
SUBJECT: - FINAL ABSTRACT OF COST IN LACS	The second states

Description	Total of sub work	3% Contigencies and PE charges	TOTAL	49% departmental charges price circulation & unforseen admin charges	Grand Total (For 3.88 Acres)
Sub Work-1					
Water Supply	174.17	5.23	179.39	87.90	267.30
Sub Work-2					
Sewerage	70.87	2.13	73.00	35.77	108.76
Sub Work-3					
Drainage Drainage	29.62	0.89	30.51	14.95	45.46
Sub Work-4 Street Lighiting	16.73	0.50	47.00		
Sub Work-5	10.73	0.50	17.23	8.44	25.67
Road Works	Rs. 84.35	2.53	86,88	42.57	129.44
Sub Work-6		2.00	00.00	42.07	125.44
Plantation & Road side Trees	2.76	0.08	2.85	1.40	4.24
Sub Work-7					
Services & Resurfacing of road	104.52	3.14	107.65	52.75	160.40
TOTALS	Rs. 483.01	Rs. 14.49	Rs. 497.50	Rs. 243.77	Rs. 741.27
Cost per Acre (In Lacs)	Rs. 191.05	(EXLUDING TAXES)			
Gross Total=	I				
Gross Total=	Rs. 741.27	(Rupees Seven o	crore forty one	lacs twenty seven thou	isad only /-)



Tambir Authorised Signatory

SUB W	ORK No. 1		WATER SUPPLY
S No.	Heads	Description	Amount (INR)
1	SUB HEAD 1	HSVP Rising Mains	72,06,500.00
2	Sub Head 02	Pumping and Machinery	68,30,000.00
3	Sub Head 03	Domestic Water supply and External Fire-fighting & Fire Hydrant	24,21,250.00
4	Sub Head 04	Flushing/Irrigation Water Supply System	9,59,180.00
		TOTAL	1,74,16,930.00
		O DELHI	Rs. 174.17 Lacs

For KRISUMI CORPORATION PVT. LTD.

Authorised Signatory

## PROJECT: KRISUMI WATERFALL SUITES (PHASE 2) AT GURUGRAM, HARYANA

SUB WORK No. 1	WATER SUPPLY
SUB HEAD 1	HSVP Rising Mains

	Description	Amount (INR)
	1. Providing, laying, jointing and testing GI Heavy Duty pipe lines	
1	Including cost of excavation etc. complete in all respects.	
a)		3,22,000.00
2	Providing and fixing Butterfly valve including cost of surface boxes and masonary chambers etc. complete in all respects	
a)	100 mm dia 1 Nos. @ Rs. 5,500 Each	5,500.00
3	Providing and fixing indicating plates for valve and air valves	
a)	2 Nos. @ Rs. 2,000 each	4,000.00
4	Provision for carriage for materials and other unforeseen items (L/S)	25,000.00
5	Provision for cutting of roads and making good to its original conditions ( L/S)	1,00,000.00
6	Provision for making connection with HSVP (L/S) on Master Road	50,000.00
7	Constraction of UG tanks 670 KL include fire tanks(@ Rs. 10 / Litre)	67,00,000.00
Тс	otal of sub head 1 Carried over to summary of Sub work - 1	72,06,500.00
		Rs. 72.07 Lacs

PAM512 Authorised Signatory

SU	SUB WORK No. 1				WATE	R SUPPLY & F	WATER SUPPLY & FIRE FIGHTING SYSTEM
Su	Sub Head 2					ā	Pumping and machinery
s z	S No. Description						Amount (IND)
-	Providing & installing pumping set of following capacity for Water supply Booster Pumps						
	a) Filter Feed Pump of Capacity 550 LPM @ 35 mtr. Head, 7.5 HP each (1W+1S)	21	2 Nos. @	Rs. 1.50.000.00	each.		3 00 000 00
	b) Hydropneumatic Pumping Capacity 550 LPM @ 160mtr. Head, 40 HP (1W+1S) For Main Tower	2	2 Nos. @	Rs. 2,80,000.00	each		5 60 000 00
	c) Water transfer Pumping Capacity 150 LPM @ 60mtr. Head, 4 HP (1W+1S) For EWS	2	2 Nos. @	Rs. 90,000.00	each.		1,80,000.00
10	Providing & installing pumping set of following capacity for Flushing/Irrigation Pumps						
	a) Hydropneumatic Pumping Capacity 250 LPM @ 160mtr. Head, 15 HP (1W+1S) for Flushing For Main Tower	2	2 Nos. @	Rs. 2.50.000.00	each		5 00 000 00
	b) Hydropneumatic Pumping Capacity 100 LPM @ 45mtr. Head, 2 HP (1W+1S) for Flushing For EWS	2	2 Nos. @	Rs. 80,000.00	each.		1.60.000.00
ľ	0	2 2	2 Nos. @	Rs. 1,25,000.00	each.		2.50.000.00
m	Provisions for chlorination plant complete		1	ŝ	80,000.00	each	80,000.00
4	Providing & installing pumping set of following capacity for fire-fighting Pumps						
	a) Electrical Operated Fire Hydrant Pump @ 2850 LPM discharge & 200m Head, 215 HP	1	1 Nos. @	Rs. 8,00,000.00	each.		8.00.000.00
	b) Electrical Operated Sprinkler Pump @ 2850 LPM discharge & 200m Head, 215 HP	1	Vos. @	Rs. 8,00,000.00	each.		8.00.000.00
	ol Electrical Operated Jockey Pump @ 180 LPM discharge & 200m Head, 15 HP	2	Nos. @	Rs. 2,50,000.00	each.		5,00,000.00
0	d) Electrical Operated Water Curtain Pump @ 1620 LPM discharge & 55m Head, 40 HP	<u> </u>	los. @	Rs. 4,50,000.00	each.		4,50,000.00
	el juescue Operated Fire Prime @ 2850 LPM discharge & 200m Head, 215 HP	-	los. @	Rs. 12,00,000.00	each.		12,00,000.00
4	1						2,00,000.00
0		L.S.					1,50,000.00
ſ	Provision for pipes, valves and specials inside the boosting chamber	L.S.					2,00,000.00
	Provision for electric service connection including electrical fittings for hoosing of a including connection of transformer.						
8							4,00,000.00
	TOTAL CO to SUB WORK - 1						68 20 000 00
							Rs. 68.30 Lacs
					CONS	ALL.	
					たてい		

 $\bigcirc$ 

For KRISUMI CORPORATION PVT. LTD.

Snatory



#### PROJECT: KRISUMI WATERFALL SUITES (PHASE 2) AT GURUGRAM, HARYANA

	WORK No. 1	WATER SUPPL
SUD F		Domestic Water supply and External Fire-fighting & Fire Hydra
No.	Description	Amount (INR)
1	Providing, laying, jointing and testing GI Heavy Duty pipe lines incl respects. (For Domestic Water Distribution)	uding fittings, cost of excavation etc. complete in all
a)	100 mm Pipe 315 Mtr @ Rs. 1,250	3.93.750.0
b)	80 mm Pipe 148 Mtr @ Rs. 910	1.34.680.0
c)	65 mm Pipe 550 Mtr @ Rs. 710	3,90,500,0
d)	50 mm Pipe 0 Mtr @ Rs. 560	0,0
e)	40 mm Pipe 0 Mtr @ Rs. 410	0,0
f)	32 mm Pipe 0 Mtr @ Rs. 340	0.0
	Providing, laying, jointing and testing MS Class C pipe lines includi	ng fittings, cost of excavation etc. complete in all respects. (For External Fire fighting)
a)	150 mm Pipe 418 Mtr @ Rs. 1,390	5,81,020.0
b)	100 mm Pipe 30 Mtr @ Rs. 950	28,500.0
c)	80 mm Pipe 112 Mtr @ Rs. 650	72.800.0
2	Providing and fixing valve including cost of surface boxes and	
a)	150 mm 2 Each @ Rs. 15,000	30,000.0
b)	100 mm 0 Each @ Rs. 12,000	0.0
b)	80 mm 0 Each @ Rs. 8,000	0.0
b)	32 mm 0 Each @ Rs. 5,000	0.0
F	Providing and fixing External Fire Hydrant complete in all respect.	
3	15 Nos @ Rs. 33,000 Each	4,95,000.0
F	Providing and fixing Air realese valve and scour valves.	
4	1 Nos @ Rs. 15,000 Each	15,000.0
	Provision for carriage of materials and other unforeseen items	80,000.0
6 F	Provision for cutting of roads on making good to its oroginal condition	on. (L.S) 1,25,000.0
7 F	Provision for indicating plates for sluice valve as F.H.	
	15 Nos @ Rs. 5,000 Each	75,000.0
	TOTAL CO to SUB WO	RK - 1 24,21,250.00



abi Authorised Signatory

#### PROJECT: KRISUMI WATERFALL SUITES (PHASE 2 ) AT GURUGRAM, HARYANA

SUB WORK No. 1	WATER SUPPLY
Sub Head 4	Flushing/Irrigation System

S No.	Description										Amo	unt (INR)
	Providing, laying	, jointing and tes	ting GI H	eavy Du	ty pipe lines in	cluding	fittin	gs, cost c	of excava	tion		
	etc. complete in	all respects. (Fo	r Flushin	g Water	Supply)					L	_	
1		· · · · ·		-	1	_						
a)	100	mm Pipe	0	Mtr @	Rs. 1,250							0.
b)	80	mm Pipe	156	Mtr @	Rs. 910							1,41,960.
c)	65	mm Pipe	0	Mtr @	Rs. 710							0.
d)	50	mm Pipe	0	Mtr @	Rs. 560							0.
e)	40	mm Pipe	0	Mtr @	Rs. 410							0.
f)	32	mm Pipe	0	Mtr @	Rs. 340							0.
g)	25	mm Pipe	0	Mtr @	Rs. 305							0.
	Providing and fix all fittings, e.g. c recommendatior 25 mm OD	ouplings, tees, b	ends, redu Hydrant \	ucers an Nater Se	id screwed add upply)	ptors,	solve	ent welde	d joint a	s per n	nanufa	cturers'
				Mtr @	Rs. 200				_			0.
	32 mm OD			Mtr @	Rs. 250							13,750.
- /	40 mm OD			Mtr @	Rs. 320					_		36,160.
d)	50 mm OD		0	Mtr @	Rs. 380							0.
	63 mm OD			Mtr @	Rs. 480		_					0.
.7	75 mm OD		0	Mtr @	Rs. 575							0.
31	90 mm OD		384	Mtr @	Rs. 850							3,26,400.
g)	110 mm OD		0	Mtr @	Rs. 1,050							0.
2	Providing and fix all respects.	ing valve includir	ng cost of	surface	boxes and ma	sonry (	cham	bers etc.	complet	e in		
a)	80	mm	1	Each @	Rs. 13,000							13,000.0
b)	65	mm			Rs. 10,000							0.0
C)	40	mm			Rs. 8,000						_	0.0
d)	32	mm			Rs. 5,000							0.0
e)	25	mm	27	Each @	Rs. 830							22,410.0
3	Providing and fix				-							
_			s. 6,500 e									1,75,500.0
4	Providing and fixi	ng air release va	lve and s	cour								
_		L.:	S									80,000.0
5	Provision for carr	iage of materials	and othe	r unfore:	seen items							1,50,000.0
		тс	DTAL CO	to SUB	WORK - 1							9,59,180.0
											Rs	. 9.59 Lac



For KRISUMI CORPORATION PVT. LTD.

Authorised Signatory

## PROJECT: KRISUMI WATERFALL SUITES (PHASE 2 ) AT GURUGRAM, HARYANA

SUB	WORK No. 2			_			SEV	ERAGE SCHEME
S No.	Description							Amount (INR)
1	Providing, Lowering, jointing and cu of excavation etc. complete in all re	itting SW spects as	pipe lii per st	nes in andar	to trer d sec	nches inclu tion.	uding cost of Manholes & Cost	
a)	150 mm dia	0	Mtr.	@	Rs. 6	350	CILA Class (Bye Pass Line)	0.00
b)	200 mm dia	0	Mtr.	@	Rs. 7	750	SW Pipe	0.00
c)	250 mm dia		Mtr.	@	<b>Rs</b> . 1	,050	SW Pipe	42,000.00
2	Provision for carriage of material (L	.S)						50,000.00
3	Provision for making connection wit	h HSVP s	sewer l	ne.				50,000.00
4	Providing STP (Main Tower) of	330	KLD	or		0.33 MLD		51,15,000.00
5	Providing STP (EWS) of	20	KLD	or		0.02 MLD		15,00,000.00
6	Provision for providing oblique function	ion. (L.S)						80,000.00
7	Provision for Temporary timbering 8	Road Cu	ut carri	es (L.	S)			1,50,000.00
8	Provision for providing vent shaft at	suitable p	olaces	as pe	r P.H.	requireme	ents (L.S.)	1,00,000.00
	TOTAL CO	to FINAL	ABST	RAC	T OF	QUANTIT	Y	70,87,000.00
								Rs. 70.87 Lacs





## PROJECT: KRISUMI WATERFALL SUITES (PHASE 2 ) AT GURUGRAM, HARYANA

SUB	WORK No. 3		STC	RM WATER DRAINAGE
S No.	Description			Amount (INR)
1			ipe with specials into trenches class NP-2 cts, excavation backfil, disposal at surplus &	
a)	150 mm dia	163 Mtr.	@ Rs. 650	1,05,950.0
b)	250 mm dia	336 Mtr.	@ Rs. 910	3,05,760.0
c)	300 mm dia	30 Mtr.	@ Rs. 1,225	36,750.00
d)	350 mm dia	94 Mtr.	@ Rs. 1,650	1,55,100.00
e)	400 mm dia	67 Mtr.	@ Rs. 2,000	1,34,000.00
f)	450 mm dia	10 Mtr.	@ Rs. 2,430	24,300.00
2	Provision for lighting	and watching		1,00,000.00
3	Provision for road g			1,00,000.00
4	Provision for rainwa places. (4 nos@45		rrangements with Desilting chamberat suitable	18,00,000.00
5	Provision for timberi	ng & shoring (L	S.)	1,00,000.00
6	to its original conditi	on (L.S.)	h HSVP Mains on master road and making goo	d 1,00,000.00
	ΤΟΤΑ	L CO to FINAL	ABSTRACT OF QUANTITY	29,61,860.00
				Rs. 29.62 Lacs



Emiber Authorised Signatory

### Street Lightning

## PROJECT: KRISUMI WATERFALL SUITES (PHASE 2) AT GURUGRAM, HARYANA

	RK No. 4			EXTERNAL LI	GHIING
S.No.	Discription	UM	Qant.	Rate	Amount
1_	Supply of GI octagonal tubular pole complete with 150 watt sodium vapour lamp , single arm complete with single phase 16 Amp mcb. & 16 amp Three phase connector suitable to				
	accommodate 4x6 two no cables (Make: Bajaj)				
a.	6.0M height GI octagonal tubular pole with single arm	Set	42	25000	1050000
2	Supply, laying of PVC insulated, PVC sheathed armoured power cable of 1.1 kV grade of following sizes directly burried in ground with sand / brick protection including excavation @ 750mm below ground level.				
a.	4x6 mm2 AI. Armoured Cable	RM	1500	178	267000
3	Cable end termination of the PVC insulated Aluminium conductor armoured cable of 1100 voltage grade, including cost of all crimping lugs and compression glands, cable socket insulation tape sealing compound etc.				
a.	4x6 mm2 Al. Armoured Cable	Sets	90	250	22500
4	Supply and fixing in position the following GI Strip / wire including providing all fixing accessories and effectively proper connections.				
а.	8 SWG GI wire	RM	150	20	3000
	Supplying and installing of earthing stations at locations as called for with 40mm dia GI medium class 4.5 M length pipe with 40x20mm reducer and C.I. funnel with 20 G C.I. wire mesh, masonry chamber with cone base C.I. manhole cover with frame (300x300mm) and packing the mixture of charcoal and salt around pipe complete as per IS - 3043 alongwith G.I. test link		CONSUL VOL DELHI	THUIS S	
	enclosure, complete and as per specifications.	Nos.	6	5500	33000
	Providing and laying of 3 core x 2.5 sqmm flexible cable from pole MCB to pole Lamp	RM	0		

Authorised Signatory

Street Lightning

7       Making suitable size of base with cement concrete(1:36) (one cement, 3 coarse sand, 6 graded stone aggregate) including excavation of one fifth of the total length of pole, ramming etc. , along with the 4 nos J type foundation bolt of 750mm long of dia 20mm and with suitable sizes of pipe for incoming and out going cables         a       6.0M height Gl octagonal tubular pole with single arm         a       6.0M height Gl octagonal tubular pole with single arm         a       6.0M height Gl octagonal tubular pole with single arm         b       Supply and thing of floor/ wall mounting/free standing, totally enclosed compart- mentalized, cubical, dust, vermin proof external lighting pane fabricated out of 2mm trick coid rolled carbon annealed, sheet steel, internally straightened with 35mm x35mm x6mm angle iron frame work with hinged centre opening type double doors, (fabricated out of 2mm CRCA sheet steel) The fabricated panel with following Mounting:         Supplying and mounting including making comeactions / intercomeation with exclusion of following items inside the panel.       Incomer         in MCCB 4 pole vertical mounting 63 Amps, 25kA, 415 V, 50 Hz, (Y-195) AC supply rest.       INCCB 4 pole vertical mounting 63 Amps, 25kA, 415 V, 50 Hz, (Y-195) AC supply rest.         ii)       MCCB 4 pole vertical mounting 63 Amps, 25kA, 415 V, 50 Hz, (Y-195) AC supply rest.       Incomer         iii)       MCCB 4 pole vertical mounting 63 Amps, 25kA, 415 V, 50 Hz, (Y-195) AC supply rest.       Incomer         ii)       MCCB 4 pole vertical mounting 63 Amps, 25kA, 415 V, 50 Hz, (Y-195) AC supply rest.       Incomer	<b></b>				
arm     Nos.     42     3500     147000       3     Feeder Pillar	7	concrete (1:3:6) (one cement, 3 coarse sand, 6 graded stone aggregate) including excavation of one fifth of the total length of pole, ramming etc. , along with the 4 nos J type foundation bolt of 750mm long of dia 20mm and with suitable			
Supply and tixing of floor/ wall mounting/free standing, totally enclosed compart-mentalized, cubical, dust, vermin proof external lighting panel fabricated out of 2mm thick cold rolled carbon annealed, sheet steel, internally straightened with 35mm x8mm angle iron frame work with hinged centre opening type double doors, (fabricated panel with P-65 as enclosure protection as per specification.         External Lighting Panel with IP-65 as enclosure protection s per specification.         External Lighting Panel with following Mountings:         Supplying and mounting including making connections / interconnection with lugs / glands testing and commissioning of following items inside the panel.         Incomer         i) Aluminum bus strips of high electrolytic conductivity 100A, 3- Phase with neutal, 415V, 50 Hz, (+/-10%) AC supply riset.         ii) MCCB 4 pole vertical mounting 63 Amps, 25kA, 415 V, 3 phase, AC supply with in built overload, short circuit, Earth fault protection & ON/OFF indication on the front-1No.         iii) Resistance type phase indicating (R-Y-B) lamps provided with MCB's protections and individual toggle switches having lens and lamp visible from the front-1set.         iv) 1 Set of (0-500V) voltmeter with selector switch & Control MCB's.         v) 1 Set ef of 5-2A) ammeter with selector switch & Control MCB's.         v) 1 Set ef of 5-2A, AP MCB's 3 Sets of 32A, AP MCB's 3 Sets of 32A, AP MCB's         it sets of 32A, AP MCB's 4 Nos. 32A, AP MCB's         it sets of 32A, AP MCB's 3 Sets of 32A, AP MCB's         it me switch for operation on 24 hrs basis & 4P aluminium sub bus bars of 32A ratings.	a.		42	3500	147000
Supply and tixing of floor/ wall mounting/free standing, totally enclosed compart-mentalized, cubical, dust, vermin proof external lighting panel fabricated out of 2mm thick cold rolled carbon annealed, sheet steel, internally straightened with 35mm x8mm angle iron frame work with hinged centre opening type double doors, (fabricated panel with P-65 as enclosure protection as per specification.         External Lighting Panel with IP-65 as enclosure protection s per specification.         External Lighting Panel with following Mountings:         Supplying and mounting including making connections / interconnection with lugs / glands testing and commissioning of following items inside the panel.         Incomer         i) Aluminum bus strips of high electrolytic conductivity 100A, 3- Phase with neutal, 415V, 50 Hz, (+/-10%) AC supply riset.         ii) MCCB 4 pole vertical mounting 63 Amps, 25kA, 415 V, 3 phase, AC supply with in built overload, short circuit, Earth fault protection & ON/OFF indication on the front-1No.         iii) Resistance type phase indicating (R-Y-B) lamps provided with MCB's protections and individual toggle switches having lens and lamp visible from the front-1set.         iv) 1 Set of (0-500V) voltmeter with selector switch & Control MCB's.         v) 1 Set ef of 5-2A) ammeter with selector switch & Control MCB's.         v) 1 Set ef of 5-2A, AP MCB's 3 Sets of 32A, AP MCB's 3 Sets of 32A, AP MCB's         it sets of 32A, AP MCB's 4 Nos. 32A, AP MCB's         it sets of 32A, AP MCB's 3 Sets of 32A, AP MCB's         it me switch for operation on 24 hrs basis & 4P aluminium sub bus bars of 32A ratings.	8	Fooder Biller			_
<ul> <li>i) Aluminium bus strips of high electrolytic conductivity 100A, 3- Phase with neutal, 415V, 50 Hz, (+/- 10%) AC supply -1set.</li> <li>ii) MCCB 4 pole vertical mounting 63 Amps, 25kA, 415 V, 3 phase, AC supply with in built overload, short circuit, Earth fault protection &amp; ON/OFF indication on the front-1No.</li> <li>iii) Resistance type phase indicating (R-Y-B) lamps provided with MCB's protections and individual toggle switches having lens and lamp visible from the front -1set.</li> <li>iv) 1 Set of (0-500V) voltmeter with selector switch &amp; 100/5A ratio CTs.</li> <li>Outgoings</li> <li>4 Nos. 32A, 4P MCB's</li> <li>3 Sets of 32A, DP MCB's, with 32A 4P contactor, A/M selector switch, ON / OFF push buttons, time switch for operation on 24 hrs basis &amp; 4P aluminium sub bus bars of 32A ratings.</li> <li>For KRISUMI CORPORATION PVT. TD.</li> </ul>	8	Supply and fixing of floor/ wall mounting/free standing, totally enclosed compart- mentalized, cubical, dust, vermin proof external lighting panel fabricated out of 2mm thick cold rolled carbon annealed, sheet steel, internally straightened with 35mm x35mm x6mm angle iron frame work with hinged centre opening type double doors, (fabricated out of 2mm CRCA sheet steel) The fabricated panel with IP-65 as enclosure protection as per specification. External Lighting Panel with following Mountings: Supplying and mounting including making connections / interconnection with lugs / glands testing and commissioning of following items			
conductivity 100A, 3- Phase with neutal, 415V, 50 Hz, (+/- 10%) AC supply -1set.         ii)       MCCB 4 pole vertical mounting 63 Amps, 25kA, 415 V, 3 phase, AC supply with in built overload, short circuit, Earth fault protection & ON/OFF indication on the front- 1No.         iii)       Resistance type phase indicating (R-Y-B) lamps provided with MCB's protections and individual toggle switches having lens and lamp visible from the front -1set.         iv)       1 Set of (0-500V) voltmeter with selector switch & Control MCB's.         v)       1 Set of (0-63A) ammeter with selector switch & 100/5A ratio CTs.         Outgoings       4 Nos. 32A, 4P MCB's         4 Nos. 32A, 4P MCB's       5 Sets of 32A, DP MCB's, with 32A 4P contactor, A/M selector switch, ON / OFF push buttons, time switch for operation on 24 hrs basis & 4P aluminium sub bus bars of 32A ratings.					
<ul> <li>415 V, 3 phase, AC supply with in built overload, short circuit, Earth fault protection &amp; ON/OFF indication on the front- 1No.</li> <li>iii) Resistance type phase indicating (R-Y-B) lamps provided with MCB's protections and individual toggle switches having lens and lamp visible from the front - 1set.</li> <li>iv) 1 Set of (0-500V) voltmeter with selector switch &amp; Control MCB's.</li> <li>v) 1 Set of (0-63A) ammeter with selector switch &amp; 100/5A ratio CTs.</li> <li>Outgoings</li> <li>4 Nos. 32A, 4P MCB's</li> <li>3 Sets of 32A, DP MCB's, with 32A 4P contactor, A/M selector switch, ON / OFF push buttons, time switch for operation on 24 hrs basis &amp; 4P aluminium sub bus bars of 32A ratings.</li> <li>For KRISUMI CORPORATION PVT. TD.</li> </ul>	i)	conductivity 100A, 3- Phase with neutal, 415V,			
<ul> <li>iii) Resistance type phase indicating (R-Y-B) lamps provided with MCB's protections and individual toggle switches having lens and lamp visible from the front -1set.</li> <li>iv) 1 Set of (0-500V) voltmeter with selector switch &amp; Control MCB's.</li> <li>v) 1 Set of (0-63A) ammeter with selector switch &amp; 100/5A ratio CTs.</li> <li>Outgoings <ul> <li>4 Nos. 32A, 4P MCB's</li> <li>3 Sets of 32A, DP MCB's, with 32A 4P contactor, A/M selector switch, ON / OFF push buttons, time switch for operation on 24 hrs basis &amp; 4P aluminium sub bus bars of 32A ratings.</li> </ul> </li> <li>For KRISUMI CORPORATION PVT. TD.</li> </ul>	1 · · ·	415 V, 3 phase, AC supply with in built overload, short circuit, Earth fault protection & ON/OFF			
& Control MCB's.         v)       1 Set of (0-63A) ammeter with selector switch & 100/5A ratio CTs.         Outgoings         4 Nos. 32A, 4P MCB's         3 Sets of 32A, DP MCB's, with 32A 4P contactor, A/M selector switch, ON / OFF push buttons, time switch for operation on 24 hrs basis & 4P aluminium sub bus bars of 32A ratings.         For KRISUMI CORPORATION PVT. TD.		Resistance type phase indicating (R-Y-B) lamps provided with MCB's protections and individual toggle switches having lens and lamp visible			
100/5A ratio CTs.         Outgoings         4 Nos. 32A, 4P MCB's         3 Sets of 32A, DP MCB's, with 32A 4P contactor,         A/M selector switch, ON / OFF push buttons,         time switch for operation on 24 hrs basis & 4P         aluminium sub bus bars of 32A ratings.         For KRISUMI CORPORATION PVTTD.	iv)				
4 Nos. 32A, 4P MCB's         3 Sets of 32A, DP MCB's, with 32A 4P contactor,         A/M selector switch, ON / OFF push buttons,         time switch for operation on 24 hrs basis & 4P         aluminium sub bus bars of 32A ratings.         For KRISUMI CORPORATION PVT. TD.	· · ·	100/5A ratio CTs.		CONSULT	
3 Sets of 32A, DP MCB's, with 32A 4P contactor, A/M selector switch, ON / OFF push buttons, time switch for operation on 24 hrs basis & 4P aluminium sub bus bars of 32A ratings. For KRISUMI CORPORATION PVT. LTD.				a DELHI S	
11 1.5		3 Sets of 32A, DP MCB's, with 32A 4P contactor, A/M selector switch, ON / OFF push buttons, time switch for operation on 24 hrs basis & 4P	 For KRISUMI CC	DRPORATION PVT.	TD.

Authorised Signatory

	Sub outgoings				
-	10 Nos. 16A, SP MCB's				-
	External lighting Feeder Pillar as described				
-	above	Set	2	75000	150000
	Total carried to summary				1672500.0
	Say Rs in Lakhs (C/O to Final abstract of cost)				Rs. 16.73



	WORK No. 5					ROAD WOR	ĸ
	Wie	oth in meter	length in meter	Metalled F	ortion	Area in Sqm.	
		6	780	6		4680	
		12.5	85	7.5		638	
						0	
						0	
		Total	865			5318	
			Add 5	% for curves	>	266	
			Total	Area		5583	
S No.	Description						Amount (INR)
1	Provision for leveli	ng & earth filling as	per site condition				
_	Approx	3.3886 Acre	@ Rs. 1,50,000	per acre			Rs. 5,08,29
2a	Soiling stone 300m	m thick (90-63mm)	gauge completed to 7	5mm thick GS	SB specif	ication	
	& Confirming to M	OT Specification (T	able 400-6 grading No	.2			
			able 400-0 grading 140	-2			
2b	D/L OFOreas Abials /		11 11	0			
20	P/L 250mm thick (	compacted) vvBivi v	vith earth as per most	Specification (	using 53-2	22.5	
	size stone aggrega						
2c	50 mm thick pre-m						
			Rs. 67,00,050				
3a	Providing of kerbs						
	and for both sides	on 18 & 24 m wide	roads			oroud	
	865 5%		@ Rs. 350	/M	1 1		Rs. 3,17,88
3b		els of CC1:2 5:5/kg	erb stone on one side of	f road 128, 15	5 m wido	road	13. 3,17,000
•		on 18 & 24 m wide		load			
	865 5%		@ Rs. 400	1/6.4	1 1		D- 2 C2 20
4	Provision for guide	Rs. 3,63,300					
4							
5	Description for all the	Rs. 50,000					
Ð	Provision for plot in	Idicators L.S					
							Rs. 35,000
_	Provision for dema	rcating burgies L.S	6				
6							Rs. 60,000
	Provision for traffic	arrangement L.S	6				
7							Rs. 1,00,000
7							Rs. 1,00,000
7			oreseen items L.S				
7 8	Provision for carria	ge of material & un	oreseen items L.S	each block l	<u> </u>		
7 8	Provision for carria	ge of material & un		o each block L	S.		Rs. 1,00,000
7 8	Provision for carria	ge of material & un	foreseen items L.S		S.		Rs. 1,00,000
7 8	Provision for carria	ge of material & un	oreseen items L.S		<b>.</b> .S.		Rs. 1,00,000 Rs. 2,00,000
7 8	Provision for carria	ge of material & un	foreseen items L.S		S.		Rs. 1,00,000 Rs. 1,00,000 Rs. 2,00,000 84,34,527.50 Rs. 84.35 Lacs



SUB	WORK No. 6 Plantation 8	Road side Trees
S No.	Description	Amount (INR)
1	Development of Green areas	
a	Trenching the ordinary soil up to dept of 60 cm including removal and stacking of serviceable material and disposing of by spreading and leveling within a lead to 50m and making up the trenches area of proper leads by filling with earth mixed with manure before and after flooding trench with water including cost of imported earth and manure	
b	Rough dressing of roof area	
	Grassing with "Doob Grass" including watering and maintenance of lawns for 30 days till the grass a thick lawn, free weeds and fit for moving in rows 7.5m apart in either direction including provision for hedges and barbed wire fencing around park.	
	Approx. 0.586352 Acres Rs. 1,50,000 per Acres	87,952.8
2	Planting Tree	
а		
	145 Trees @ Rs. 1,300 per tree	1,88,500.00
b	Provision of trees, along 18 & 24 M wide roads at 12 Mtr intervals. Both side	
	0 Trees @ per tree	0.00
	GST TOTAL CO to FINAL ABSTRACT OF QUANTITY	2,76,452.85
		Rs. 2.76 Lacs



## PROJECT: KRISUMI WATERFALL SUITES (PHASE 2) AT GURUGRAM, HARYANA

SUB WORK No. 7

 $\odot$ 

M/C Charges for Services & Resurfacing of road

S No.	Description		Amount (INR)
1	Provision for M/C charges for water supply, st	rom water drainage, sewerage, Road,	
	Street lighting, Horticulture etc. complete in all		
	establishment charges as per HSVP norms for	10 years completion	
		7,50,000	29,14,500.00
2	Provision for resurfacing of roads after 5 years complete to 25mm thick premix carpet with sea	100mm thick layer 100mm thick BUSG al cost	
	5583.00 sqm Rs. 6	00	33,49,800.00
	Provision for resurfacing of roads after 10 year seal coat with mech.paver	s with 25mm thick premix carpet with	
	Approx. 5583.00 Sqm @ Rs. 7	50 per Sqm	41,87,250.00
	TOTAL CO to FINAL ABST	RACT OF QUANTITY	1,04,51,550.00
			Rs. 104.52 Lacs



× .						PROJE	CT: - KRISI	PROJECT: - KRISUMI WATERFALL SUITES (PHASE 2) AT GURUGRAM, HARYANA	SUITES (PI	HASE 2 ) AT	GURUGRAM	HARYANA							
							BJECT: - I	SUBJECT: - HYDRAULIC CALCULATION FOR DOMESTIC WATER SUPPLY	CULATION F	OR DOMES	TIC WATER SL	Трргу							
Line No		Water Demand		Total water demand Itr /day	Peak water demand@3 of daily water demand Itr /day	Peak Water Demand	Length E of Pipe	Effective Length (actual length+ 25%)	Proposed line dia.	Velocity in m/sec	Frictional head losses	Total Frictional head losses	Fitting Loss @ 10% of pipe length	Total Head Loss	Commulative Frictional head losses	Ground level	Hydraulic Level		Terminal Head
From To	-	Prev.	Total	15	16	47	48	40	00		ę					1		-	
Ш	LPD	LPD	LPD	CPD	LPD	LPM	Mtr	Mtr	MM	Atr/sec	Attr/Mtr	23 Mtr			Mtr	24 Start Mtr Mtr	Mtr	Start El Mtr M	Mtr
3 2	205600	0	205600	205600.0	616800	428.3	44	55	80	1 703	0.04918	2.7046	0.27046	2.97511	2.97511		5 600	+	2 025
2 1(UGT)	τ) 0	205600	205600	205600.0	616800	428.3	104	130	80	1.703	0.04918	6.3928	0.63928	7.03208	7.03208		10.600	-	2.968
EWS 1 UGT	T 14790	0	14790	14790.0	44370	30.8	550	688	65	0.186	0.00103		0.07103	0.78134	0.78134		3.568		2.187
											For KR	For KRISULAL CORPORATION PVT. LTD.	DRPORAT	ORATION PVT. LTD.	LTD.		A DELHI		
																			1

		SUBJE	CT: - MEASURE	EMENT SHE	ET			
S No.		Line No		LE	NGTH OF	PIPES		
	From	То	32 mm	40 mm	50 mm	65 mm	80 mm	100 mm
1	3	2					44	
2	2	1(UGT)					104	
3	EWS	1 UGT		_		550		
a. 111 :	GRAND	TOTAL	0	0	0	550	148	0
1		Municipal Water	Supply Line					26
2		Tanker Water Sup	ply Line					5



NE	Fall in         Ground         Ground         Ground         Invert Level         Invert Level         Depth of Pipe         Depth of         Average           (m)         Level         (Start)         (End)         (Start)         Depth         Depth of         Average           (m)         Level         (Start)         (End)         (Start)         Depth         Depth	Mtr. Mtr Mtr Mtr Mtr Mtr	0.10 0.600 0.600 -0.300 -0.400 0.900 1.000 1.400	1.000 1.015 1	1 045	-0.488 1.045 1.088 1	
SUBJECT: - HYDRAULIC CALCULATION OF SEWERAGE LINE	Gradiant Velocity Design Check for Fal discharge carrying (r capacity	Mtr.	o Xo	o Xo	ð	o NO	
ATION OF SI	y Design discharge	LPS	18.23	18.23	18.23	18.23	
IC CALCUL	nt Velocity	m/Sec	0.74	0.74	0.74	0.74	
		1	200	200	200	200	
JBJECT: -	Proposed	m	250	250	250	250	
SUBJECT: - H	Total Waste Total Waste water ( water ( peak=avera peak=average*3 ge*3 ) )	LPS	2.04	2,04	2,04	2.04	
		LPD	175872	175872	175872	175872	
	Daily waste water (80%) of water consumption	LPD	58624	58624	58624	58624	
	ment	Total	73280	73280	73280	73280	
	Water Requirment	Prev.	0	73280	73280	73280	
		Self	73280	0	0	0	
	Length	Mtr	20	e	9	8.5	
	Line No	əpoN	1 MH 2	2 MH 3	3 MH 4	4 MH 5	1
Ľ	_	monŦ	MH 1	MH 2	MH 3	MH 4	

O,

Ó

For KRISUMI CORPORATION PVT. LTD. 119mp

**Authorised Signatory** V

DELHI IZ

		SUBJECT: - MEASUREM	ENTSHEET
S No.		Line No	LENGTH OF PIPES
	From	То	250 mm
1	MH 1	MH 2	20
2	MH 2	MH 3	3
3	MH 3	MH 4	6
4	MH 4	MH 5	8.5
5	MH 5	STP	2
	GRAND TO	DTAL	39.5
		For KRISUMI CORPORATION P	

Protection         Description         Description <thdescription< th=""> <thdescription< th=""></thdescription<></thdescription<>							DESIGN						GROUND LEVEL	D LEVEL	INVERT LEVEL	EVEL	ACTUAL DEPTH	H AVERAGE
1         1	RAIN	LENGTH IN MTS		SELF	ADDL		DISCHARGE IN LPS 10 CIA C=0.45,1=12.5mm/h	DIA OF PIPE MM	SLOPE 11N	(m/sec)	CARRYING CARRYING CAPACITY ((ps)		START	END	START		-	
9         9							-				(a-1)					-		ξų.
9         9	CB2	-0	115 90	0.03	000	600	0.23	150	200	8230	5.30	10(0)	0000	0000	0.150	0,110	1	7L.N. 0
N         N	CB3	91-	1+ 999	0.16	0.03	61.0	157	150	300	D.606	16.30	0.15	0,600	0.097.0	0.110	0.013	H	
1         3	MHM	R	550.51	9,11	0.19	66.0	2.68	250	300	0.606	06.01	0,13	0.000	(1264)	0.043	-0,170	-	12/0
V         No         No </td <td>VIIII</td> <td>10</td> <td>01.04+</td> <td>11.0</td> <td>033</td> <td>HO</td> <td>N SH</td> <td>250</td> <td>JND</td> <td>9,606</td> <td>07.91</td> <td>010</td> <td>0.600</td> <td>0.090</td> <td>0.9.0</td> <td>0.403</td> <td>+</td> <td>1 0.95</td>	VIIII	10	01.04+	11.0	033	HO	N SH	250	JND	9,606	07.91	010	0.600	0.090	0.9.0	0.403	+	1 0.95
1         1	1.00	± ;	19702	500	000	0.05	0.41	121	200	0.528	64.5	600	0090	0.000	6450	(1990))	-	-
1         1	1.110		20.000	110	000	61.0	MI'I	1950		0,606	16.30	0.12	0,600	(100)	(1981)	0,043	+	+
1         0	000	स =	00 H	4000	000	600	0/20	250	300	0 60%	16.30	0.1.8	0.640	0.600	050	0200	+	
1         1	- DIA	: :	202.02	CINU .	170	0.27	2.18	250	34XI	11606	16.30	61.0	0.600	(100)	( (99)	0.035	1	151
1         9.9.         9.	VIEN	1.00	58 202	900	000	410	HO L	350	200	9.528	539	210	0.614.1	0.600	(150)	()()()		+
1         3	HTTH I	-	57.05	5 10		8.0	167	0102	000	0.000	0 01	1114	D.MK	0.600	0.033	0003		
1         3	AII112	r (in	72.44	002	180	0.83	6.75	1m2	NC1 ISI	1020	12.12	100	0.600	0.5600	2010	5120	-	
(1)         (1) <td>MILIG</td> <td>5</td> <td>304.23</td> <td>0.08</td> <td>0.83</td> <td>16.0</td> <td>7.36</td> <td>300</td> <td>151</td> <td>1990</td> <td>UL PC</td> <td>210</td> <td>0000</td> <td>in such</td> <td>CIED.</td> <td>67F0-</td> <td>+</td> <td></td>	MILIG	5	304.23	0.08	0.83	16.0	7.36	300	151	1990	UL PC	210	0000	in such	CIED.	67F0-	+	
0         0	CBIH	15	16.712	0.05	000	0.05	++r0	150	200	0.576	530	0.08	0000	116311	1150	0.075	-	
7         7	CB15	61	148.33	20/02	0.05	010	0.81	150	300	0.528	5.20	0.07	016010	0.500	5.001	0.010		
1         1016         01011         0101         0101         0	MHIG	5	72.HI	0.02	0.10	0.12	0.96	ISU	00E	862.0	5.39	0,63	0,640	0.500	0101	2000	+	
1         2000         000         010	NILLS	2	173.85	0.04	102	1.07	1918	350	100	0.657	33.60	0.03	0.600	0.500	-0110	0.52	$\vdash$	-
1         0         0         0         1         0	MHHM	н	202.82	0.05	000	0.05	0.40	150	300	0.528	5.39	0.07	() (66)	0.500	(151)	Net Yo	-	
7         1010         0100         110         101         1010	6111IN	Ŧ	202.82	0.05	102	461	9:48	350	CN09F	0.657	33.80	Hio	0.600	CHES II.	0.510	0.55		
1         300         010         110         120         010         120         010         120         010         120         010	OTHIC	2	101-10	0.03	171	1.19	9.69	350	100	0.657	33.60	062	0,600	0.500	-0.554	0.57	-	3.16
4         7.07         0.00         1.31         1.32         0.30         0.	1010V	±	202.82	0.05	61.1	121	1010	350	001	0.657	31.60	0.04	0.600	0.500	-0.572	16.1	-	
1         104         010         12         13         130         100         100         100         101         100         101         100         101	RW 112	+	57.95	0.01	1.24	1.26	10.21	350	001	0.657	33.80	0.01	0.600	0.500	-0102	-0.62	_	101
1         1	CCHIN.	'n	97.51	10.0	971	127	10.30	350	100+	0.657	33.60	100	0.660	0200	219.0	962	_	122
1         114         0.00         0.01         0.0	NI1128	10	06511	800	1.27	061	10.53	350	101	455.0	33.60	0.02	0.600	0.60	479'0	1911		
7         0141         0101         0104         01	CB24	13	E8 (2)	100	000	HOR	0.35	150	2400	0.52H	5.37	2010	0.600	0.600	0.150	600		HEU
	CB26	2	11-101	600	004	0/0	0,55	250	300	0.606	16.30	000	11600	0.600	0600	70.0		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	E COLO	a :	76 00	200	0000	700	112	350	000	0.606	16.31	2010	0.600	0.00	0150	0.13	+	+
$\gamma$ <td>VIIV</td> <td>(IF)</td> <td>1.141</td> <td>9000</td> <td>6010</td> <td>0.15</td> <td></td> <td>250</td> <td><b>B</b> ;;</td> <td>0.606</td> <td>16.30</td> <td>900</td> <td>0,000</td> <td>0.600</td> <td>0100</td> <td>101</td> <td>+</td> <td></td>	VIIV	(IF)	1.141	9000	6010	0.15		250	<b>B</b> ;;	0.606	16.30	900	0,000	0.600	0100	101	+	
	MIN	75	301.15	0.0	2F1	0.18	171	151	00	0.645	0291	ano	11600	Didition of	0101	10/0-		-
38         4564         010         016         016         13         39         4564         010 <td>CB3LA</td> <td>16</td> <td>231.79</td> <td>0.06</td> <td>000</td> <td>0.06</td> <td>0.47</td> <td>150</td> <td>an an</td> <td>HLS U</td> <td>111</td> <td>and and</td> <td>0.000</td> <td>0,000</td> <td>10.044</td> <td>0.01</td> <td></td> <td>1.2</td>	CB3LA	16	231.79	0.06	000	0.06	0.47	150	an an	HLS U	111	and and	0.000	0,000	10.044	0.01		1.2
14         20.80         0.05         0.16         0.17         0.10	CB32	38	105.6H	6.10	0.06	0.16	128	250	300	0.6606	16.30	600	0,600	1000	0200	-0112	+	-
(1)         (1) <td>CB33</td> <td>Ŧ</td> <td>202.82</td> <td>0.05</td> <td>0.16</td> <td>120</td> <td>1.60</td> <td>250</td> <td>300</td> <td>0.606</td> <td>16.20</td> <td>600</td> <td>0.66/0</td> <td>050</td> <td>-0.025</td> <td>2010</td> <td>-</td> <td><math>\vdash</math></td>	CB33	Ŧ	202.82	0.05	0.16	120	1.60	250	300	0.606	16.20	600	0.66/0	050	-0.025	2010	-	$\vdash$
II $[3936$ $044$ $044$ $084$ $067$ $329$ $329$ $329$ $060$ $060$ $000$ <th< td=""><td>CB30</td><td>1</td><td>[73 85</td><td>001</td><td>000</td><td>HID</td><td>0.35</td><td>150</td><td>200</td><td>0.528</td><td>5.37</td><td>0.06</td><td>0.600</td><td>0,600</td><td>0.150</td><td>0.00</td><td></td><td></td></th<>	CB30	1	[73 85	001	000	HID	0.35	150	200	0.528	5.37	0.06	0.600	0,600	0.150	0.00		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	6333	11	159.36	0.04	0.04	80.0	2910	150	200	0.528	5.3')	0.06	0.600	0.683	0000	0.04		_
	AI1134	6	10.41	003	R0'0	AT0	0.87	250	JANJ	01606	16.30	0.02	0.600	0.600	-0.070	(A) (I)		
	RW113	5	7244	2000	1.68	1.69	13.76	150	()()+	0.657	33.60	ton	0,600	0.600	-0712	-0.72		1.32
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	AI135	б.	43.46	0.01	149	1.70	1384	NOT-	150	0.677	45.14	0.01	0.600	050	£57.02	0.73	-	_
29         -42013         010         020         0410         150         290         04530         539         0455         539         0455         0400         0456         0405         0405         0455         0435         0415         0405         0415         0405         0415         0405         0415         0405         0415         0405         0415         0410         0415         0410         0415         0410         0415         0410         0415         0410         0415         0410         0415         0410         0415         0411         0410         0415         0411         0410         0410         0411         0410         0411	WHM9	1	246.28	0.06	1.70	176	+E.H.	100	151	0.677	+2.14	10.04	0.600	0,010	4:731	120	+	-
0         0.00         0.01         0.	CBIGA	F) 9	1210	010	000	0.00	140	150	200	0.528	530	0,15	0.600	0.600	0.150	0.0050	-	+
16         2170         016         023         024         270         300         000         010         010         010         010         010         010         010         010         010         010         010         011 <td>RIE3</td> <td>4</td> <td>10 FCF</td> <td>0.0</td> <td>100</td> <td>120</td> <td>1.40</td> <td>250</td> <td>300</td> <td>0.606</td> <td>01.21</td> <td>0.0</td> <td>0000</td> <td>0.600</td> <td>0.005</td> <td>010</td> <td>+</td> <td></td>	RIE3	4	10 FCF	0.0	100	120	1.40	250	300	0.606	01.21	0.0	0000	0.600	0.005	010	+	
11         1936         0.14         2.04         2.08         16.01         4.00	A1139	91	62 182	12.06	0.22	NC ()	16.	12	101	D CINC	01.01	a de	11/2101	in case	6.10E	110	-	0/0
33         478.46         0.12         2.06         2.30         17.80         400         450         0.07         0.06         0.00         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07	OHIW	1	92.021	HIO	101	2,08	10.01	007	150	0.677	15.14	20.0	000	01400	BULOF	0.79	-	
3         13.46         0.01         2.20         3.21         17.97         400         45.11         0.01         0.600         0.600         0.600         0.866         -0.87         13.7           11         11.47         10.1         2.31         12.97         16.0         45.11         0.01         0.600         0.600         0.600         0.866         -0.87         13.7           11         11.47         2.31         3.55         16.97         6.05         0.05         0.600         0.600         0.600         0.600         1.97         1.37	M1141	53	478.08	0.12	2.08	2.30	17.80	001	OST	0.677	45,14	0.07	0.600	0.600	40703	087	-	
III         11187         101         731         735         16.0         0.005         50.0         0.005         0.005         0.005	THUNH	_	13.46	0.01	2.20	221	17.97	011	1251	11627	45.14	0.01	0.600	0.600	-0.866	-0.87		
	PUNNU POINT	8	141.87	1010	221	3.25	18.27	150	2005	0.605	96.85	600	009.0	WE U	0.87	0.00	_	_

PROJECTI - KRUSUMI WATERFALL SUITES (PHASE 2) AT GURUGRAM, HARYANA

0

S No. Line No LENGTH OF PIPES											
No.		Line No	LENGTH OF PIPES								
	From To		150 mm	250 mm	300 mm	350 mm	400 mm	450			
	CBI	CB2	8	200 1111	eee min	550 4111	400 1111	+00			
	CB2	CB3		46							
	CBJ	MIH4		38							
	MFI4	N0-111		31							
	CB5	CB6	14								
	CBo	CB8		37							
_	CB7	CB8		24							
	CB8	CB10		14							
	CB9 CB10	CB10 N0-111	14								
	MHIII	RWH 1		11	+						
_	RWH 1	MH12			5						
_	MH12	NIFLIG		10000	21						
	CB13	CB1+	15								
	CB14	CB15	13								
	CB15	MIH16	5								
	MB116	MITI8				12					
	CB17	MH18	14								
	MI118	MH19				14					
	XII119	MH20				7					
	MH20	MH21		1		14					
	NB121	RWH2				4					
	RWH2 MH22	MH22 MH28				3					
	CB23	CB24	12			8					
	CB24	CB26	12								
	CB25	CB26		7							
	CB26	CB27		17							
	CB27	M0128		7							
	MP128	MI-L34				27					
	CB31	CB31A	16								
	CB31A	CB32		28							
	CB32	CB33		14							
	CB29	CB30	12								
	CB30	CB33	11								
_	CB33	MH34		7							
_	MFE34 RW743	RWH3				5					
_	MH35	MI-135					3				
	CB36	MH39 CB36A	29				17				
	CB36A	CB37		30							
	CB37	CB38		3							
	CB38	MH39		16							
	MI-139	MIH40					11				
	MIH40	MI441					33				
	MIH41	RWH4					3				
	RWH4	DISPOSAL POINT						10			
	GRAND T	OTAL	163	336	30	94	67				
	Ginner	UTAL 1	10.3	3.35	20	94	67	10			

 $\bigcirc$ 

		PROJE	CT: KRISUMI	WATERFALL	SUITES (PHA	SE 2 ) AT GUR	RUGRAM, HA	RYANA	
			EXTE	RNAL GARDEN	HYDRANT ME	ASUREMENT SH	IEET		
S. No.	NODE	NO.			L	ENGTH (IN M)			
	FROM	то	32 OD mm	40 OD mm	50 OD mm	63 OD mm	75 OD mm	90 OD mm	110 OD mm
1	1	2						1	
2	2	3						4	
3	3	6				·		102	
4	4	5	16						
5	5	6		45					
6	6	11						44	
7	7	8	14						
8	8	10		17.5					
9	9	10	2						
10	10	11		20					
11	11	15						100	
12	12	14	9						
13	13	14	4						
14	14	15		17					
15	15	19						93	
16	16	18	9						
17	17	18	1						
18	18	19		13					
19	19	2						39.5	
	_	_							
	TOTAL	ور وكالمحد	55	113	0	0	0	384	0
OTAL	NUMBER	OF GAR	DEN HYDRAN	T = 27 Nos.					
			-	For KRISUM	II CORPORT	rised Signator		CONSU TOA DELL	ANTS -

	-		_			
		Terminal Head		Mtr	3.439	TENTS
		Hydraulic Level	-	Mtr Mtr	5.600 4.039	Decini
		Ground level	End	Mtr	0.600	e ĝ
			Port	Mtr	0.600	VT. L1 Signat
		Commulative Frictional head losees	76	Mtr	1.56126	For KRISUMI CORPORATION PVT. LTD.
		Total Head Loss			1-56126	MICORP
		Fitting Loss © 10% of pipe length			0.14153	or KRISU
HARVANA	ПРРЦ	Total Frictional head losses	23	Mtr	1 4193	
AT GURUGRAM	HING WATER S	Frictional head losses	22	Mtr/Mtr	0.00728	
(PHASE 2)	IN FOR FLUS	Velocity in m/sec	24	Mtr/sec	0.607	÷
FALL SUITES	CALCULATIO	Proposed line dia.	20	MM	80	
PROJECT: - KRISUMI WATERFALL SUITES (PHASE 2) AT GURUGRAM HARVANA	SUBJECT: - HYDRAULIC CALCULATION FOR FLUSHING WATER SUPPLY	Effective Length (actual length+ 25%)	19	Mtr	195	
PROJECT: -	SUBJEC		18	Mtr	156	
		Peak Water Length of Demand Pipe	11	MdJ	152.7	
		Peak water demand@3 of daily water demand Itr /day	16	LPD	219840	
	-	Total water demand ltr /day	15	LPD	73280.0	
		19	11	LPD	73280	
		Water Demand	10	LPD	0	
		4	- 05	LPD	73280	
			To		1 STP	
		Line No	From 1	-	2 1 1	
		S N N	1 Fro	-	1	

S No.		Line No	ECT: - MEASURE		NGTH OF	PIPES		
	From	То	25 mm	32 mm	40 mm	50 mm	65 mm	80 mm
1	2	1 STP						156
2 P P	GRAND	TOTAL	0	0	0	0	0	156
		For KR	SUMI CORPORA		.TD.	CON	SHE'S	

			EXTERNAL F	IRE HYDRANT MB SHEET					
S. No.	NODE	NO.	LENGTH (IN M)						
	FROM	то	80 mm Dia	100 mm Dia	150 mm dia				
1	1	2			35				
2	2	3			17				
3	3	4			87.6				
4	4	8			75				
5	5	7	29						
6	6	7	7						
7	7	8		18.5					
8	8	11			28				
9	9	10	38						
10	10	11		11.5					
11	11	13			64				
12	12	13	20.5						
13	13	14			25.5				
14	14	16			55				
15	15	16	17						
16	16	2			31				
	TOTAL	STITLE D	112	30	418				

#### TOTAL NUMBER OF EFH = 15 Nos.

# For KRISUMI CORPORATION PVT. LTD.



Authorised Signatory