MUNICIPAL CORPORATION KOTA-SOUTH, K

Remove Watermark

Wondershare PDFelement

(NIT NO. 11/2022-23) ('G' Schedule) (Cop,

Name of Work :- Construction and Maintenance of Urinal / Community Toilet / Bathroom (Pacakge-3)

Estimated Cost :- Rs. 74.74 Lacs

Tender Cost:- Rs. 3000/-	<b>Completion Period :- 6 Months</b>					
Processing Fees :- Rs. 1000/-						
Earnest Money :- 0.50%	Rs. 37370/-					
2.00%	<b>Rs. 149480/-</b>					
Date of Sale of Tender (Website)	: 22-07-2022 to 12-08-2022					
Date of Sale of Tender	: 22-07-2022 to 12-08-2022					
Date of Receipt EMD/Tender/Possessing Fees	: 16-08-2022 ( Upto 02:00 PM)					
Date of Opening Technical BID	: 16-08-2022 (05:00 PM)					
Date of Opening Financial BID	: तकनिकी बिड परीक्षण के पश्चात्					
Issued						
To:						
C.R. No.	Date					

			Rate Based on RUIDP SOR 2017& Non SOR Iter			
S.N.	Description	Qty.	Unit	Rate	Amount	
1	Earth work in excavation in foundation, trenches etc.	0				
	including dressing of sides and ramming of bottoms,					
	including getting out the excavated material, refilling after					
	laying pipe/ foundation and disposal of surplus excavated					
	material at a lead upto 50m suitable site as per direction					
	of Engineer for following depths, below natural ground /					
	Road top level. In all types soils/ saturated soil such as					
	moorum, sand, sandy silt, clay, black cotton soil, kankar,					
	etc. Depth upto 1.5 m	370.00	Cum	164.00	60680.00	
2	Providing and laying in position cement concrete of					
	specified grade excluding the cost of centring and					
	shuttering - All work upto plinth level : 1:4:8 (1 cement :					
	4 fine/ coarse sand : 8 graded stone aggregate 20 mm					
	nominal size)	51.80	Cum	3120.00	161616.00	
3	Random rubble masonry with hard stone in foundation					
	and plinth : Cement mortar 1:6 (1 cement : 6 coarse sand)	88.80	Cum	3190.00	283272.00	
4	Random rubble dry stone Kharanja (soling) under floor.					
		55.50	Cum	1360.00	75480.00	
5	Providing and laying in position cement concrete of					
	specified grade excluding the cost of centring and					
	shuttering - All work upto plinth level : 1:2:4 (1 cement :					
	2 coarse sand : 4 graded stone aggregate 20 mm nominal					
	size)	74.00	Cum	4700.00	347800.00	
6	Brick work with FPS bricks of class designation 75 in					
	superstructure above plinth level upto two stories in all					
	shapes and sizes in : Cement mortar 1:6 (1 cement : 6					
	coarse sand)	222.00	Cum	4300.00	954600.00	

7	Providing and laying damp-proof course 40mm thick with		Remove Watermark		Wondershard PDFelement	
	cement concrete 1:2:4 (1 cement : 2 coarse sand : 4					
	graded stone aggregate 12.5mm nominal size).	185.00	~····			
8	Cement plastering including T&P, scaffolding, material					
	and complete labpour, including cost of water, curing,					
	racking of joints etc. with 12 mm cement plaster of mix :					
	1:6 (1 cement : 6 fine/ coarse sand)	2072.00	Sqm	138.00	285936.00	
9	Providing and fixing Granite stone slab mirror polished					
	and machine edge cut in walls, pillars, steps, Shelves,					
	Sills Counters, Floors etc. laid on 12mm (Av.) thick base					
	of cement mortar 1:3 (1 cement : 3 coarse sand) jointing					
	with white cement mortar 1:2 (1white cement : 2 marble					
	dust) with pigment to match the shade of the marble slab					
	including grinding, rubbing and polishing complete. 1501					
	Cm2 to 3600 Cm2 Tiles	55.50	Sqm	2870.00	159285.00	
10	Painting on G.S. sheet with synthetic enamel paint of					
	approved brand and manufacture of required colour to					
	give an even shade : New work (two or more coats)					
	including a coat of approved steel primer but excluding a		~			
11	coat of mordant solution.	758.50	Sqm	79.50	60300.75	
11	Providing and fixing 1mm thick M.S. sheet door with	0° ×	>			
	frame of 40x40x6mm angle iron and 3mm M.S. gusset plates at the junctions and corners, all necessary fittings					
	complete, including applying a priming coat of approved					
	steel primer. Using flats 30x6mm for iagonal braces and					
	central cross piece.	203.50	Sqm	2680.00	545380.00	
12	Providing and fixing white vitreous china flat back or wall					
	corner type lipped front urinal basin of 430x260x350mm					
	and 340x410x265mm sizes respectively with automatic					
	flushing cistern with standard flushpipe and C.P. brass					
	spreaders with brass unions and G.I clamps complete,					
	including painting of fittings and brackets, cutting and					
	making good the walls and floors wherever required : One					
	urinal basin with 5 litre white P.V.C. automatic flushing					
	cistern.	11.00	Nos	3510.00	38610.00	
13	Providing and fixing 1st quality ceramic glazed vitrified					
	tiles of colour standard white, grey, ivory, fume, red					
	brown, light green, light blue, and other light shades with					
	water absorbtion less than or equal to 0.08% confirming					
	to IS: 13753 & IS: 15622 in floor, steps etc laid on bed					
	on neat cement slury finished with flush pointing in the					
	white cement mixed with pigment to match the shade of					
	the tile complete (excluding the the cost of cement plaster					
	on wall and pillar) Size 600mm x 600mm	273.80	Sqm	1310.00	358678.00	

14	Providing, lowering, laying in trenches, aligning, fixing in position and jointing socketed rubber gasket type ISI		Remov	ve Watermark	Wondershare PDFelement	
	marked uPVC pipes of Class III (6 Kg/sqcm) suitable for					
	potable water with rubber ring joints (as per IS 4985-					
	2000) of following outer dia with all accessories					
	(excluding specials) complete including all material,					
	labour, hydraulic testing and commissioning as per					
	Technical Specifications and as per direction of Engineer.					
	110 mm dia	370.00	Mtr	273.00	101010.00	
15	Poly propylene - Random - Co - polymer (PPR) pipes					
1.6	SDR 7.4 - 25 mm outer dia.	370.00	Mtr	82.90	30673.00	
16	Providing and placing on terrace (at all floor levels)					
	polyethylene water storage tank ISI : 12701 marked with					
	cover and suitable locking arrangement and making					
	necessary holes for inlet, outlet and overflow pipes but					
	without fittings and the base support for tank.	22200.00	Ltr	6.50	144300.00	
17	Steel work welded in built up sections/ framed work					
	including cutting, hoisting, fixing in position and applying					
	a priming coat of approved steel primer using structural					
	steel etc. as required. In gratings, frames, guard bar,	S				
	ladder, railings, brackets, gates and similar works.	1850.00	Kg	87.50	161875.00	
18	Providing and fixing PTMT bib cock of approved quality					
	and colour. 15mm nominal bore, 86 mm long. Weighing					
10	not less than 88 gms.	53.00	Nos	101.00	5353.00	
19	Providing and fixing PTMT bib cock of approved quality					
	and colour. 15 mm nominal bore, 122mm long. Weighing not less than 99 gms.	53.00	Nos	143.00	7579.00	
20	Providing and fixing PTMT bib cock of approved quality	33.00	1105	143.00	7379.00	
20	and colour. 15 mm nominal bore, 165mm long. Weighing					
	not less than 110 gms.	53.00	Nos	157.00	8321.00	
21	Providing and fixing water closet squatting pan (Indian					
	type W.C. pan ) with 100mm sand cast Iron P or S trap,					
	10 litre low level white P.V.C. flushing cistern with					
	manually controlled device (handle lever) conforming to					
	IS : 7231, with all fittings and fixtures complete including					
	cutting and making good the walls and floors wherever					
	required : White Vitreous china Orissa pattern W.C. pan					
	of size 580x440mm with integral type foot rests.	25.00	Nos	3570.00	89250.00	
22	Providing and fixing water closet squatting pan (Indian					
	type W.C. pan ) with 100mm sand cast Iron P or S trap,					
	10 litre low level white P.V.C. flushing cistern with					
	manually controlled device (handle lever) conforming to					
	IS : 7231, with all fittings and fixtures complete including					
	cutting and making good the walls and floors wherever					
	required : Stainless Steel AISI-304(18/8) Orissa pattern					
	W.C. pan of size 585x480 mm with flush pipe and		Nac	6000.00	200.40.00	
	integrated type foot rests.	3.00	Nos	6980.00	20940.00	

23	Providing and fixing white vitreous china pedestal type				Wondershare	
	water closet (European type) with seat and lid, 10 litre		Remove Watermark		PDFelement	
	low level white vitreous china flushing cistern & C.P.					
	flush bend with fittings & C.I. brackets, 40mm flush bend,					
	overflow arrangement with specials of standard make and					
	mosquito proof coupling of approved municipal design					
	complete including painting of fittings and brackets,					
	cutting and making good the walls and floors wherever					
	required : W.C. pan with ISI marked white solid plastic					
	seat and lid.	25.00	Nos	4590.00	114750.00	
24	Providing and fixing P.V.C. waste pipe for sink or wash					
	basin including P.V.C. waste fittings complete. 32 mm dia	23.00	Nos	56.00	1288.00	
25	Providing and fixing in position collapsible steel shutters					
	with vertical channels 20x10x2mm and braced with flat					
	iron diagonals 20x5mm size with top and bottom rail of T					
	iron 40x40x6mm with 40mm dia, steel pulleys complete					
	with bolts, nuts, locking arrangement, stoppers, handles,					
	including applying a priming coat of approved steel		~			
26	primer.	78.75	Sqm	5280.00	415800.00	
26	White Vitreous China Wash basin size 630x450 mm with	2.00	Nos	2050.00	4100.00	
27	a pair of 15 mm C.P. brass pillar taps. Providing and fixing 3 layer PP-R (Poly propylene	2.00	INOS	2030.00	4100.00	
21						
	Random copolymer) pipes SDR 7.4 U V stabilized & anti-					
	microbial fusion welded, having thermal stability for hot					
	& cold water supply including all PP - R plain & brass					
	threaded polypropylene random fittings i/c fixing the pipe					
	with clamps at 1.00 m spacing. This includes testing of					
	joints complete as per direction of Engineer in Charge.					
	Internal work - Exposed on wall. PN - 16 Pipe, 20 mm OD	148.00	Mtr	164.00	24272.00	
28	Providing and fixing 3 layer PP-R (Poly propylene					
	Random copolymer) pipes SDR 7.4 U V stabilized & anti-					
	microbial fusion welded, having thermal stability for hot					
	& cold water supply including all PP - R plain & brass threaded polypropylene random fittings i/c fixing the pipe					
	with clamps at 1.00 m spacing. This includes testing of					
	joints complete as per direction of Engineer in Charge.					
	Internal work - Exposed on wall. PN - 16 Pipe, 25 mm					
	OD	148.00	Mtr	240.00	35520.00	
29	Providing and fixing white vitreous china squatting plate					
	urinal with integral rim longitudinal flush pipe.	23.00	Nos	1930.00	44390.00	
30	Providing and fixing mirror of superior glass (of approved					
	quality) and of required shape and size with plastic					
	moulded frame of approved make and shade with 6 mm					
		2.00	ЪT	751.00	1502.00	
21	thick hard board backing : Rectangular shape 453x357mm	2.00	Nos	751.00	1502.00	
31	Distempering with dry distemper of approved brand and					
	manufacture (two or more coats) and of required shade on new work, over and including priming coat of whiting to					
	give an even shade.	555.00	Sqm	65.50	36352.50	
L	give an even shaue.	555.00	Squi	05.50	50552.50	

32	Providing and applying plaster of paris putty of 2 mm		Remove Watermark		Wondershar	
	thickness over plastered surface to prepare the surface even and smooth complete	555.00			PDFelement	
33	Reinforced cement concrete work in walls (any	555.00	~ 1		0//20100	
	thickness), including attached pilasters, buttresses, plinth					
	and string courses, fillets, columns, pillars, piers,					
	abutments, posts and struts etc. upto two stories excluding					
	cost of centring, shuttering, finishing and reinforcement :					
	1:1 <sup>1</sup> / <sub>2</sub> :3 (1 cement : 1 <sup>1</sup> / <sub>2</sub> coarse sand : 3 graded stone					
	aggregate 20 mm nominal size)					
		107.30	Cum	5360.00	575128.00	
34	Centring and shuttering with plywood or steel sheet upto					
	two stories or height upto 7.5 metre above plinth level					
	including strutting, propping etc. and removal of form for					
	: Suspended floors, roofs, landings, balconies and access platform.	000.00	q	207.00	254056.00	
25		888.00	Sqm	287.00	254856.00	
35	Reinforcement for R.C.C. work at all levels including straightening, cutting, bending, placing in position and					
	binding all complete. Thermo-Mechanically Treated bars.					
	omanig an complete. Thermo meenanearly fromed bars.	11100.00	Kg	51.50	571650.00	
36	Providing and fixing on wall face Unplasticised Rigid		8	51.00	2.1020.00	
	PVC Single socketed pipes rain water pipes conforming to	0				
	IS : 13592 Type A including jointing with seal ring					
	conforming to IS: 5382 leaving 10 mm gap for thermal					
	expansion. 110 mm diameter	75.00	Mtr	253.00	18975.00	
37	Providing and fixing 1st quality MAT & GLOSSY					
	finished ceramic tiles colour such as standard white, grey,	9				
	ivory, fume, red brown, light green, light blue, and other					
	light shades with water absorbtion less than or equal to 0.08% confirming to IS : 13753 & IS : 15622 in floor,					
	steps etc laid on bed on neat cement slury finished with					
	flush pointing in the white cement mixed with pigment to					
	match the shade of the tile complete (including the the					
	cost of cement mortar bed 1:4) Size 250mm x 375mm					
		1239.50	Sqm	770.00	954415.00	
38	Providing and fixing of precast concrete interlocking tiles					
	of desired shape of M 30 grade manufactured from fully					
	computerized automatic stationery hydraulic viebro					
	pressed machine and fully computerized automatic					
	batching plant of class A1/A2 as per BS 6717:2001. The CC interlocking paving blocks be laid on average 50mm.					
	thick bed of coarse sand and the joint is to be filled with					
	fine sand. Laying procedure on compacted sub-base as					
	defined. Complete job is to be executed as per the					
	instruction of Engineer incharge. The rates to be inclusive					
	of all lead & Lifts etc. complete as per specifications.					
	Tensile splitting strength, abrasion and braking load etc.					
	as per BS 6717:2001, Grey cement. 80mm thick					
		296.00	Sqm	578.00	171088.00	

39	Viring of light point / fan point / exhaust fan point / call ell point with 1.5 sq. mm FR PVC insulated unsheathed		Remov	ve Watermark	Wondershare PDFelement
	1.1kV grade flexible copper conductor and 1.5 sq.mm FR PVC insulated copper earth conductor (IS:694) of				
	approved make in double lock/ ISI marked single lock pvc				
	casing capping & it's accessories, 18 SWG M.S. box with				
	earth terminal, screwless cage connectors for neutral				
	looping in switch board & false ceiling point, 6 A switch 3.0 mm thick phenolic laminated sheet, zinc plated / brass				
	screws, cup washers, making connections, testing etc. as				
	required. Medium point (up to 6 mtr.)				
		148.00	Point	322.00	47656.00
40	P&F 240/415 V MCB of breaking capacity not less than	140.00	Tom	522.00	47050.00
	10 KA (B/ C/ D tripping characteristic) ISI marked IS				
	8828(1996)]/ conforming to IEC 60898 in existing				
	board/sheets including making connections with lugs,				
	testing etc. as required. Single pole & neutral MCB. 6 A				
	to 32 A rating	25.00	Nos	466.00	11650.00
41	Providing & Laying XLPE insulated / P.V.C. sheathed				
	cable of 1.1 KV grade with aluminium conductor Armoured of IS:7098-I/1554-1 approved make in ground				
	as per IS:1255 including excavation of 30cmx75cm size	9.			
	trench, 25 cm thick under layer of sand, second Class				
	bricks covering, refilling earth, compaction of earth,				
	making necessary connection, testing etc. as required of				
	size. 4 core	296.00	Mtr	140.00	41440.00
42	P & F of IP20 LED Recessed/ Surface Mounted Round/	5			
	squure Non Dimmable Downlight with die-cast aluminum				
	housing & Heat sink for heat dissipation, high purity reflector with external driver having efficiency > 85% and				
	in compliance to IEC standards. (supplied together with				
	luminaire) Power consumption of =<				
	7w/10w/8w/12w/15w/18W with 100/500/750/1100/1250				
	lumens, system lumen, efficeancy of 70 lm / Watt or 100				
	lm / Watt output suitable to replace $1x18W$ /				
	2x18w/2x26w CFL downlights, life time of 50000 Burning Hours with 70% of initial Lumen maintained.				
	CCT 3000° K, 4000° K and 6000° K. Fixture shall be CE				
	Compliance. LED downlight 8 W				
		65.00	Nos	688.00	44720.00
43	P&F of thermoplastic/ PVC cable junction boxes (United/	05.00	1105	000.00	44720.00
	HPL make) of following sizes including clamps for				
	holding the box, cost of DIN rail for MCB mounting,				
	connectors for cables terminals, threaded cable glands				
	made of polyamide material etc. complete in all respect.				
	175mm X 150mm X100mm	25.00	Nos	450.00	11250.00
44	Stainless Steel (Grade 304) work welded in built up sections/ framed work/ sheet work including cutting,				
	hoisting, fixing in position and applying a priming coat of				
	approved steel primer using structural steel etc. as				
	required. In gratings, frames, guard bar, ladder, railings,				
	brackets, gates, sheet work and similar works. Non SOR				
	Item	134.00	Kg	619.00	82946.00
	TOTAL				7474392.25

**Remove Watermark** 

Wondershare

PDFelement

## **Terms & Conditions:-**

1. Conditional tender shall not be accepted.

2. In case of any error in rates or nomenclature, the same shall be paid as per RUIDP SOR 2017 & Non SOR Item.

3. निविदाओं में भाग लेने वाले संवेदक∕फर्मो द्वारा जमा की जाने वाली टेण्ड़र फीस एवं धरोहर राशि के डी.डी. आयुक्त नगर निगम कोटा—दक्षिण के नाम एवं प्रोसेसिंग फीस (MD RISL) जयपुर के नाम देय होगी। उक्त निविदा शुल्क∕प्रोसेसिंग शुल्क∕धरोहर राशि के डी.डी. नियत समय में जमा कराया जाना होगा।

4. कार्य के विलम्ब की स्थिति में गुणावगुण के आधार पर अनुबन्ध में निहित अधिकतम दर तक शास्ती लगाई जा सकेगी।

5. संवेदक कार्य प्रारम्भ करने से पूर्व, कार्य के दौरान एवं कार्य समाप्ति कार्य स्थल के फोटोग्राफ प्रस्तुत करने होंगे एवं कार्य स्थल पर सूचना बोर्ड स्वयं के खर्चे पर लगाना होगा।

6. संवेदक कार्य प्रारम्भ करने से पूर्व संबंधित सहायक / कनिष्ठ अभियन्ता, संबंधित वार्ड पार्षद / जन प्रतिनिधि को सूचित करेगा एवं उनके सामने गुणवत्ता रिपोर्ट हेतु सेम्पल लिया जाना सुनिश्चित करेंगे।

7. न्यूनतम मजदूरी एक्ट एवं श्रम कानूनो की पालना किया जाना अनिवार्य होगा।

8. निर्माण कार्यो में नियोजित श्रमिको का कर्मचारी भविष्य निधि योजना के अन्तर्गत पंजीयन करना तथा पी.एफ. एवं ई.एस.आई. करा कर संबंधित विभाग (ई.पी.एफ.ओ.) से अदेयता प्रमाण पत्र कार्य के अन्तिम बिल के साथ प्रस्तुत करना होगा।

9. कार्य सम्पादन प्रतिभूति/सुरक्षा निधि की वापसी अनुबन्ध की शर्त संख्या 37 के अनुसार होगी।
10. तृतीय पक्षकार टेस्ट रिपोर्ट प्रत्येक बिल के साथ अधिशाषी/सहायक अभियन्ता से प्रमाणित करा कर प्रस्तुत करनी होगी।

11. संवेदक द्वारा निष्पादित किये जाने वाले अनुबन्ध में यह तथ्य भी स्पष्ट रूप से उल्लेख करेगा कि पी.एफ. और ई.एस.आई. विभाग के किसी प्रकार के दायित्व सृजित होते है तो उसकी समस्त जिम्मेदारी संवेदक की होगी।

12. वित्त विभाग की अधिसूचना दिनांक 22.10.2021 अनुसार आर.टी.पी.पी. नियम 2013 Additional Performance Security के लिये नियम 75 ए जोडा गया है। Work Performance Guarantee के रूप में कार्य आदेश जारी करने से पूर्व ली जावेगी तथा इसे कार्य के संतोषजनक रूप से पूर्ण होने के पश्चात् निर्धारण दोष निवारण अवधि के उपरान्त कार्य की स्थिति संतोषजनक पाये जाने पर ही संवेदक को रिफन्ड की जावेगी।

तकनिकी बिड खोलने की तिथि पर किसी भी कारण वश अवकाश होने पर आगामी कार्य दिवस पर प्राप्त व खोली जावेगी।
 संवेदक निविदा से संबंधित निविदा शुल्क / प्रोसेसिंग शुल्क / धरोहर राशि के डी.डी. इत्यादि फर्म के नाम से बनवाये।

15. निविदा में भाग लेने वाले संवेदको को निविदा शुल्क / प्रोसेसिंग फीस / धरोहर राशि के डी.डी. / ऑन लाईन जमा रसीद की प्रति अनिवार्य रूप से नगर निगम कोटा–दक्षिण कोष में जमा करना होगा जो कि वापस नही किये जायेंगे।

16. सम्पूर्ण निविदा प्रक्रिया आरटीपीपी एक्ट 2012 एवं नियम 2013 के अधीन होगी।

17. संवेदक को नियोजित श्रमिको का कर्मचारी भविष्य निधि योजना के अन्तर्गत पंजीयन करना तथा पी.एफ. एवं ई.एस.आई. करा कर संबंधित विभाग (ई.पी.एफ.ओ.) से अदेयता प्रमाण पत्र कार्य के अन्तिम बिल के साथ प्रस्तुत करना होगा।

18. संवेदक को तकनिकी बिड में पी.एफ. एवं ई.एस.आई के रजिस्ट्रेशन की प्रति संलग्न करनी होगी।

19. नगरीय विकास एवं आवासन विभाग राजस्थान सरकार द्वारा जारी आदेश क्रमांक प.01 (24) नविवि / 1 / 2020 लूज जयपुर दिनांक 20.09. 2021 अनुसार विकास कार्यो की निविदाओं में संवेदको द्वारा बी.एस.आर. दर से कम डालने पर अन्तर राशि (AT PAR की दर से जितनी कम है) वर्क परफोरमेंस गारन्टी के रूप में कार्यादेश जारी होने से पूर्व जमा करानी होगी।

20. अनुबन्ध करने में असमर्थ रहने अथवा कार्य करने में असमर्थ रहने पर नियमो के अन्तर्गत आपकी रिस्क एण्ड कोस्ट पर नगर निगम को कार्य करने का / जमा योग्य अर्नेस्ट मनी की शास्ती लगाने की कार्यवाही करने का नगर निगम को अधिकार सुरक्षित रहेगा।

I / We hereby agree to execute the work :

At the Rate <u>%</u>Above/Below (in words)

At the Rate <u>%</u>Above/Below (in Figures)

<u>—प्रारूप—</u> <u>(लेटरहेड)</u>

सहमति–पत्र

श्रीमान अधिशाषी अभियन्ता, नगर निगम कोटा–दक्षिण।

विषय : अपनी निविदा हेतु सहमति के संबंध में।

प्रसंगः निविदा क्रमांक.....

महोदय,

विषयान्तर्गत निवेदन है कि मैं सत्यनिष्ठा पूर्वक अपनी निम्न सहमति प्रस्तुत करता हूँ :--

- (1) निविदा प्रपन्न पर मेरे स्वयं के हस्ताक्षर है।
- (2) निविदा दर स्वयं मेरे द्वारा भरी गई है।
- (3) मेरे द्वारा प्रस्तुत रजिस्ट्रेशन मेरा स्वयं का है एवम् पूर्णतया वैध है।
- (4) कार्य मेरे द्वारा ही सम्पादित किया जायेगा एवं इसे Sublet नहीं किया जायेगा।
- (5) किसी भी प्रकार की गलत जानकारी के लिये में स्वयं उत्तरदायी रहूँगा।

दिनांक : .....

(हस्ताक्षर संवेदक मय सील)