

TECHNICAL SPECIFICATION FOR THE SUPPLY OF A0 COLOUR LARGE FORMAT PRINTER (PLOTTER)

Issuing Authority: Survey Department of Sri Lanka

Date of Issue: 07th April 2026

1. Invitation for Bids

Bids are invited for the supply, delivery, and installation of professional A0 Colour Large Format Printers (Plotters) as per Section 2. Bidding follows National Competitive Bidding (NCB) per Government Procurement Guidelines 2024.

2. Scope of Work

No.	Task	Description
2.1	Supply	Supply A0 large format printer as per technical requirements.
2.2	Delivery	Deliver to designated Survey Department office(s).
2.3	Install	Unpack, install, and set up at designated location(s).
2.4	Commission	Perform on-site precision calibration and line accuracy verification.
2.5	Train	Provide on-site training on operation, maintenance, and troubleshooting.

3. Technical Specifications

No.	Component	Mandatory Requirement	Bidder's Compliance	Remarks
1	Make & Model	Indicated by bidder.		
2	Country of Origin	Indicated by bidder.		
3	Year of Manufacture	≥ 2025.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Printer Category	Professional technical plotter for A0 / 36-inch media.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	RAM / Memory	≥ 2 GB (4 GB or higher preferred). Must handle complex GIS/CAD layers.	<input type="checkbox"/> Yes <input type="checkbox"/> No	4 GB+ will be viewed favourably
6	Ink Technology	All-Pigment Ink System (CMYK + Matte Black). Dye-based not accepted. Provide ink series name.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7	Waterproofing	Printed output on plain bond paper (80 GSM) must be water-resistant. Definition: No visible ink bleeding, spreading, or loss of line integrity to the naked eye after water exposure.	<input type="checkbox"/> Yes <input type="checkbox"/> No	

8	Anti-Clogging	Printhead must recover after 30 calendar days idle without user intervention. Provide manufacturer documentation.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9	Print Resolution	$\geq 2400 \times 1200$ dpi (optimized).	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	Print Speed (A0 Draft)	≤ 90 seconds on plain paper.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	Media Handling	Roll Feed (36") with auto cutter + Manual Sheet Feed.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12	Media Weight	60 GSM to 300 GSM.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
13	Line Accuracy	$\pm 0.1\%$ or better (e.g., ± 1 mm over 1 meter).	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	Connectivity	Gigabit Ethernet + USB 2.0 + Wi-Fi.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15	OS & CAD Support	Windows 10/11 + macOS + HP-GL/2 & RTL.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16	Scanner (Optional)	If offered, integrated 36" CIS Scanner ≥ 600 dpi. Price separately.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
17	Noise Level	≤ 44 dB(A) during operation.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
18	Control Panel	≥ 3.0 -inch Colour Touchscreen.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
19	Warranty & Uptime	1 year comprehensive (printhead & carriage). Minimum 95% uptime during warranty period. Downtime beyond 5% (approx 18 days/year) triggers service penalty or warranty extension at Department's option.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
20	Spare Parts	Available for at least 5 years from supply date.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
21	Brand New	Brand new, unused, not refurbished.	<input type="checkbox"/> Yes <input type="checkbox"/> No	

4. Mandatory Submission Requirements

No.	Document	Requirement
4.1	Business Registration	Certified copy.
4.2	Manufacturer's Authorisation	Original letter.
4.3	Filled Technical Compliance Table	As per Section 3.
4.4	Official Manufacturer Data Sheet	PDF + public URL.
4.5	Line Accuracy Test Report	ISO 21990/21991 or ANSI/ASME B89.6.2 (or equivalent).
4.6	Price Schedule	As per Section 5.
4.7	Bid Validity Period	Minimum 90 days.
4.8	Delivery Timeline	Days from order confirmation to delivery & installation.

Bid Validity Period (days): _____

Delivery Timeline (days from order confirmation): _____

5. Financial Bid (Bill of Quantities)

Item No.	Description	Quantity	Unit Price (LKR)	Total (LKR)
1	A0 Colour All-Pigment Plotter meeting Section 3, including full-yield ink cartridges (CMYK+Matte Black) and one roll plain bond paper (36" x 150') for testing with 1 year warranty			
2	Delivery, installation, on-site commissioning, and training.	1 Lot		
Total Bid Price (LKR) in words and figures:				

All prices inclusive of all taxes, duties, delivery, installation, commissioning, and training. Prices shall be fixed and valid for the entire contract period.

6. Optional Items (Price Separately)

Item No.	Description	Unit Price (LKR)
1	Extended Warranty: Additional 1 year (2nd year total, same terms as 3.19).	
2	Integrated 36" CIS Scanner (as per 3.16).	_____
3	Heavy-duty Floor Stand with media basket.	_____

7. Technical Evaluation: Sample Print & Water Test

Top 3 bidders provide sample A0 print of departmental cadastral map on standard 80 GSM plain bond paper.

Evaluation Criteria:

Line Accuracy Check: Measure 1-meter line. Pass: $\leq 1\text{mm}$ deviation ($\pm 0.1\%$).

Water Test: Apply clean water drops onto Cyan and Yellow contour lines. Pass: No visible bleeding, spreading, or loss of line integrity to naked eye.

Failure in either test = disqualification.

08. Final Acceptance

Final acceptance after: installation + calibration + network config + A0 print test + line accuracy verification + user sign-off.

No payment until final acceptance.

No.	Acceptance Criteria
8.1	Successful physical installation and on-site precision calibration at the designated Department location.
8.2	Successful network configuration (Gigabit Ethernet to departmental CAD/GIS workstation).
8.3	Successful printing test (A0 colour cadastral map and B&W engineering drawing).
8.4	Successful line accuracy verification (as per Section 7).
8.5	User sign-off by designated departmental staff confirming satisfaction with installation, calibration, and training.

9. Dispute Resolution

Disputes (including borderline water test results) shall first be resolved by mutual consultation within 15 business days. If unresolved, referred to a single arbitrator appointed by the Secretary to the Ministry of Lands and Parliamentary Reforms (or nominee). Arbitration in Colombo under Arbitration Act No. 11 of 1995. Decision final and binding.

10. Declaration & Signature

I declare all information true, no corrupt practices, and agree to tender terms.

Signature:	_____
Name & Designation:	
Company Seal	
Date:	
Witness Signature:	
Witness Name & Designation:	

For clarifications: 0112369244/

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