



SMCS/1091-R1/2007

17.03.2008

To

Consultants / Contractors / Project Developers

Dubai

Dear Customer,

Intelligent Metering System (IMS)**Provision for Installation of Electricity and Water Meters in Projects**

In order to improve the services to our customers, Dubai Electricity and Water Authority (DEWA) would like to upgrade our existing metering system (Water and Electricity) to the latest state-of-art metering system with remote/automated meter reading facility. We will be installing the new intelligent Metering System (IMS) in phases in the new and existing installations.


We had issued circular under reference SMCS/1091/2007 dated 09.12.2007 along with sketch indicating the modifications to be made in the dimensional details of metering arrangements. The above sketches are being revised incorporating clarifications requested by customers.

Please refer attached Annexures 1 to 6 for the details and incorporate provision for installation of the new type of electricity and water meters in your projects, accordingly.

Thanking you in anticipation of your full cooperation.

Yours faithfully,

For DUBAI ELECTRICITY & WATER AUTHORITY


(Rashid Bin Humaidan)

Executive Vice President – Customer Services

Encl.: As above.

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Dubai Electricity & Water Authority
IMS (Intelligent Metering System) Project

Field Requirements

A. Commercial & Residential Buildings

1. Install PVC conduit (size shall be minimum 32mm) for 'interconnecting communication cable' between the electrical room/cupboard/metering location and the water meter room/cupboard/metering location with necessary junction boxes and pulling rope.
2. Provide PVC conduit (size shall be minimum 25mm) for 'interconnecting communication cable' between the main water meter chamber and the nearest ground floor electrical service room with necessary junction boxes and pulling rope.
3. For providing 'power line carrier (PLC) communication cable' between the LV panel and the data concentrator, install PVC conduits (size shall be minimum 20mm) from cable trench of each main LV panel to an area near to the DB location in main LV Room to a height of 125cm from the finished floor level, with necessary junction boxes and pulling rope.
4. Provide PVC conduit (size shall be minimum 32mm) for 'telephone communication cable' between the main telephone junction box and the main electrical room (LV Room) with necessary junction boxes and pulling rope.

B. Villa Complex

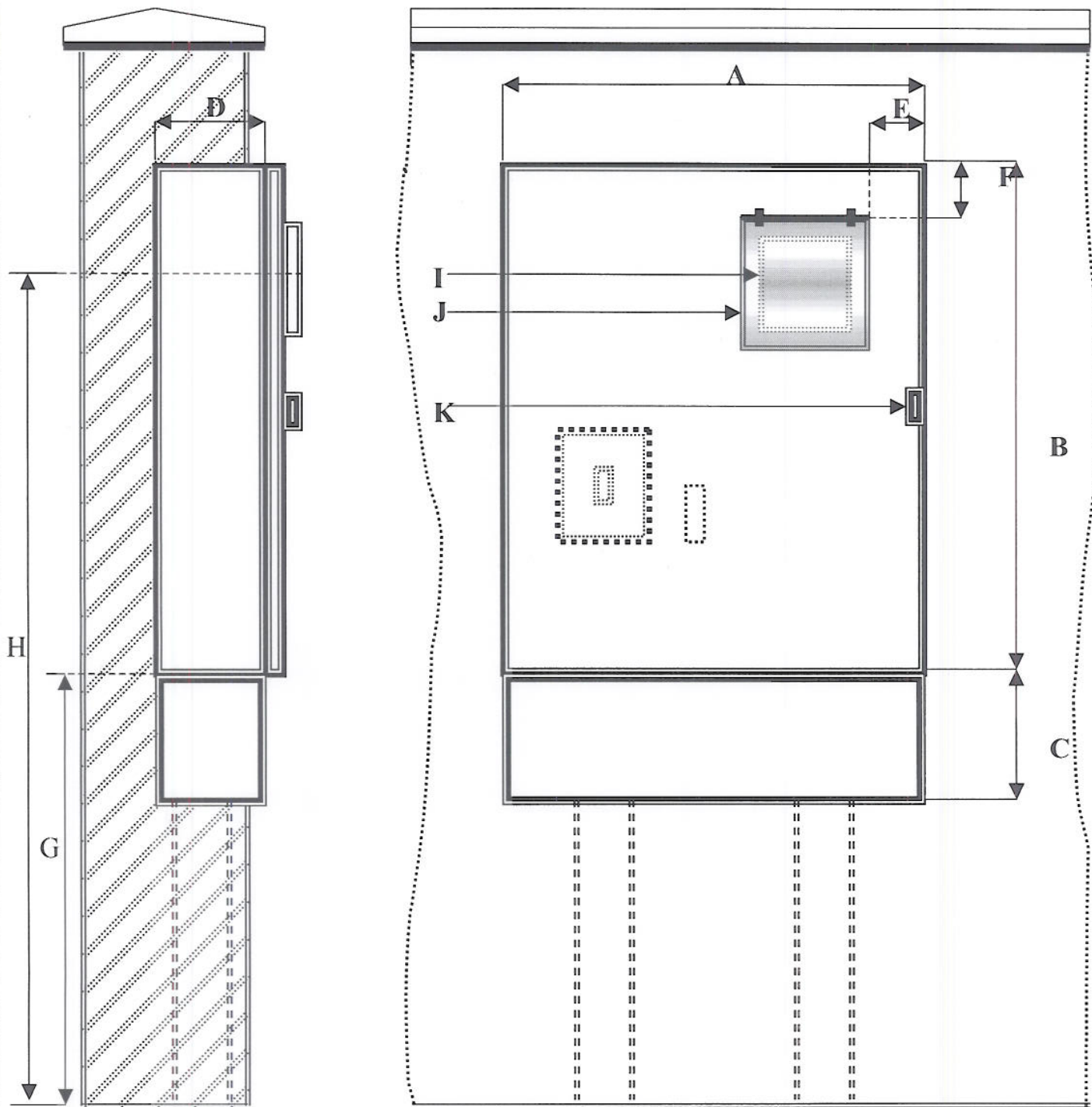
1. Install PVC conduit (size shall be minimum 25mm) for 'interconnecting communication cable' between the electrical and water-metering cabinets of respective premises with necessary junction boxes and pulling rope.
2. Provide PVC conduit (size shall be minimum 32mm) for 'telephone communication cable' between the nearest main telephone junction box and the DEWA transformer platform with necessary junction boxes and pulling rope.



IMS (Intelligent Metering System) Project – Phase.1

Arrangement of Metering Cabinet On Compound Wall

Annexure-2



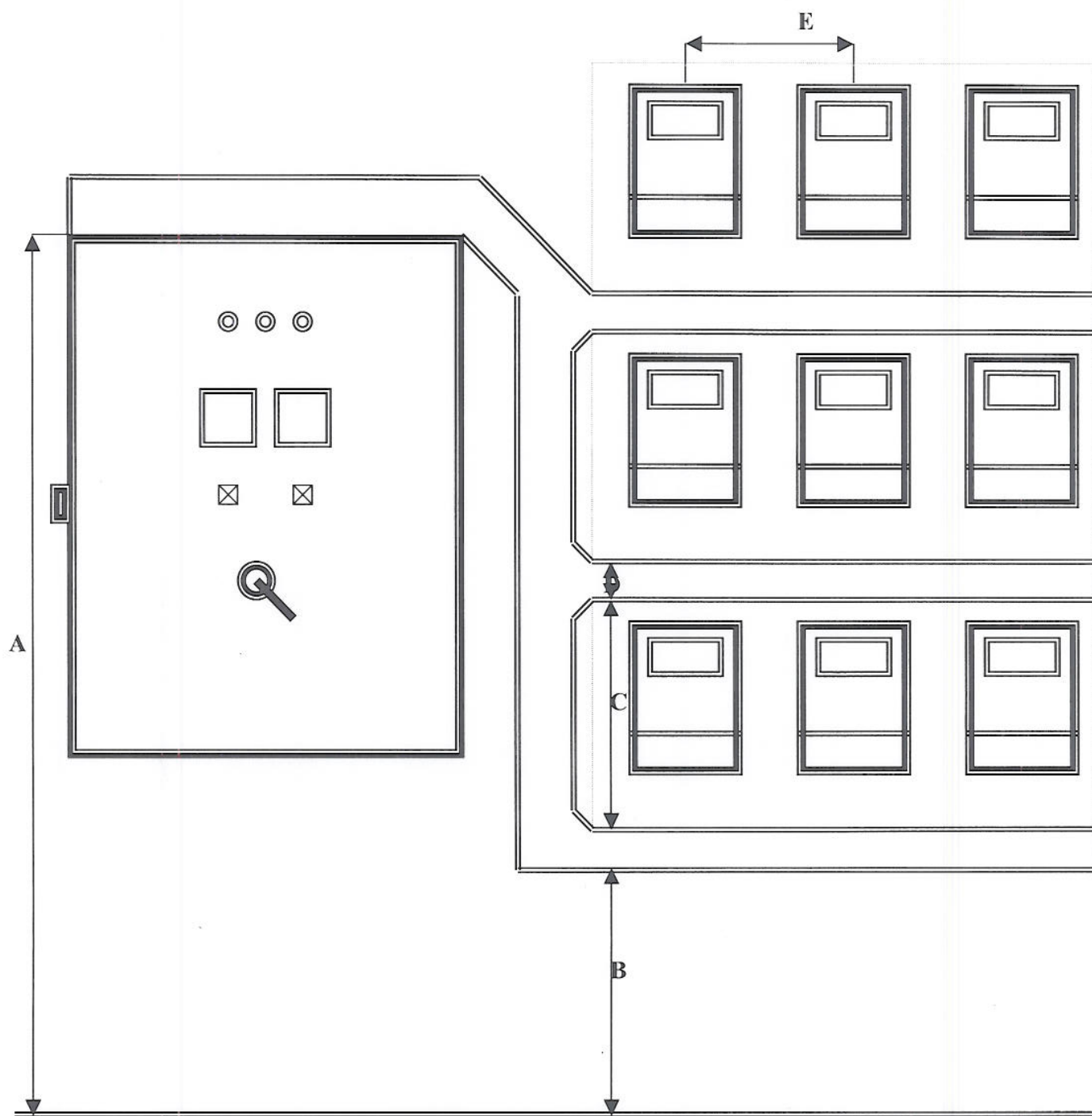
Type of kWh Metering	Dimensions in cm										
	A	B	C	D	E	F	G	H	I	J	K
Direct Connected Metering (Up to 160 Amps)	60	80	25	20	06	06	80 (Min.)	160 (Max.)	Meter Viewing Perspex (Size: 15cm x 15cm)	Protection Cover with Hinges on Top (Size: 20cm x 20cm)	Pad Locking Arrangement (Hole Size: 10mm dia.)
CT. Operated Metering (5A Meter & CT Ratio up to 400/5 Amps)	80	100	30	25	08	08	80 (Min.)	160 (Max.)			

Note: - Meter Viewing Perspex (Min: 5mm thickness) with Hinged Type Protection Cover.
 - CT operated metering: Provide sealable type VT fuses in sealable enclosure.
 - Minimum 2 mtr. clearance shall be maintained between electricity and water service cabinets / points.
 - Refer Annexure: 1, for field requirements.

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IMS (Intelligent Metering System) Project – Phase.1

Arrangement of kWh Meters in Electric Service Room/Cabinet



Dimensions in cm

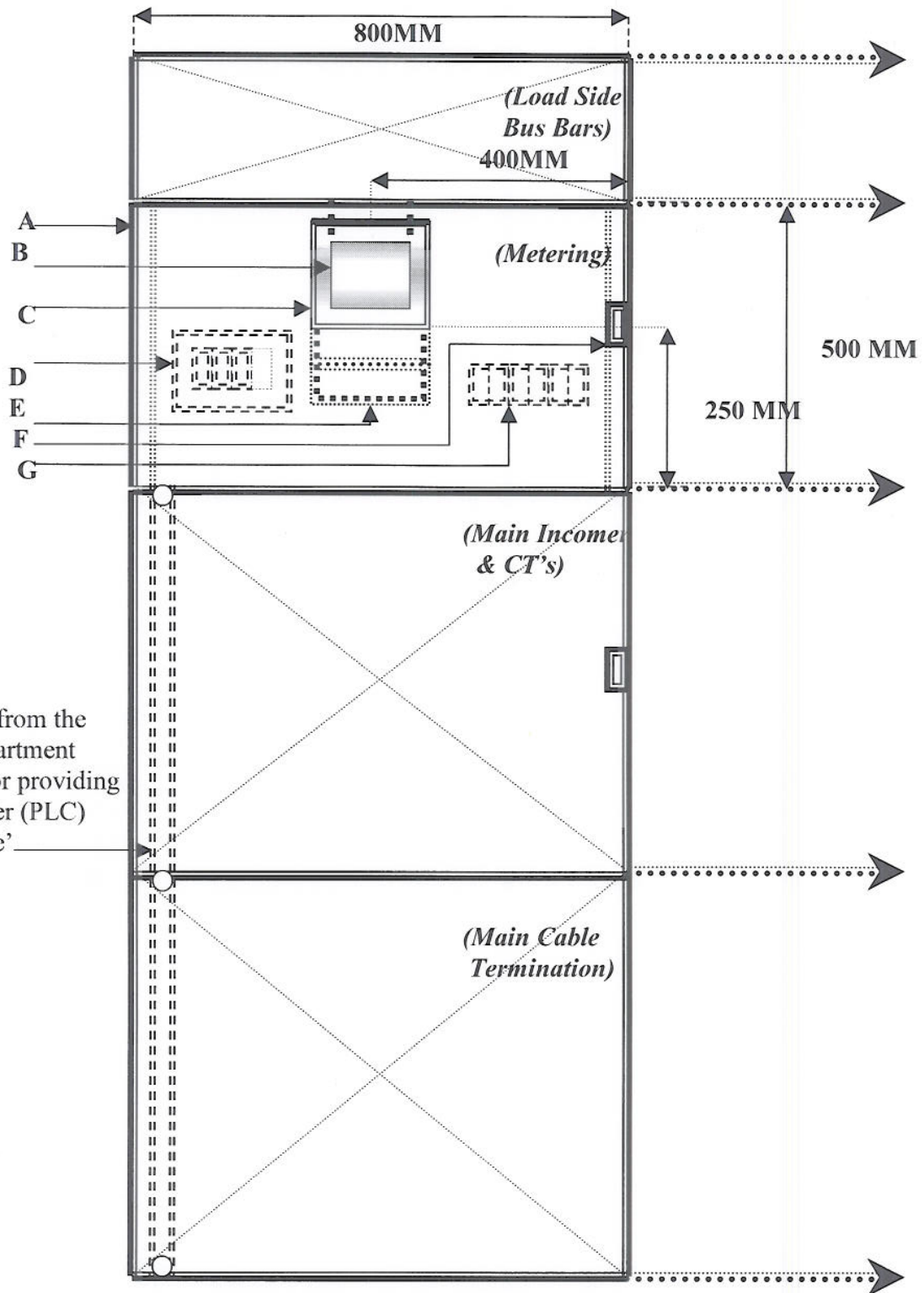
A	B	C	D	E
180 (Max.)	60 (Min.)	50	10	30

Note: Minimum 2 mtr. clearance shall be maintained between electricity and water service cabinets / points.
Refer Annexure: 1, for field requirements.

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IMS (Intelligent Metering System) Project – Phase.1
Arrangement of CT Operated Metering in Pvt. LV Panel
 (Main Incomer Compartment/Section)

Annexure-4



20mm PVC conduit from the kWh metering compartment to the cable trench for providing the 'power line carrier (PLC) communication cable'

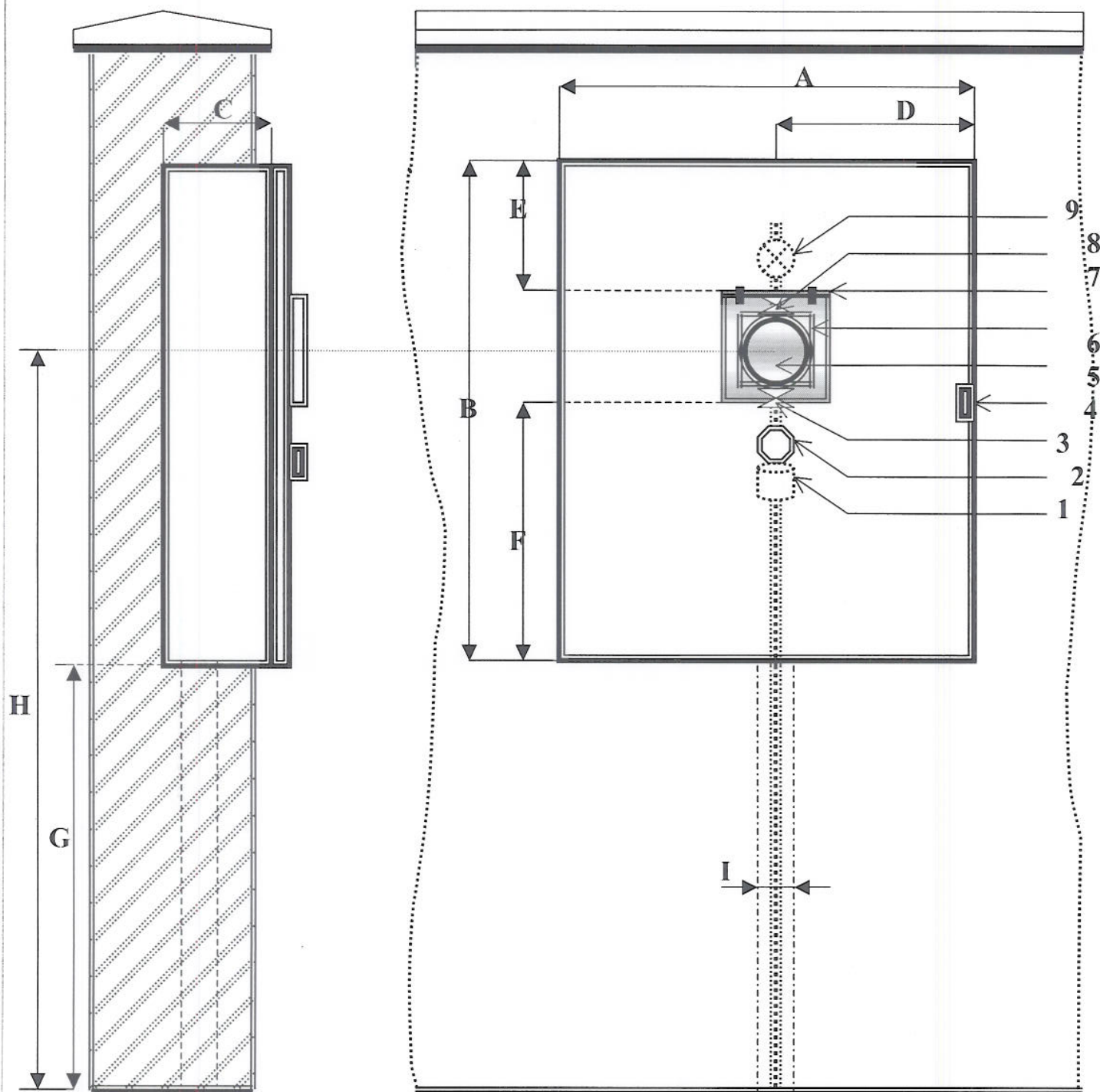
A	B	C	D	E	F	G
CT Operated kWh Metering Compartment	Meter Viewing Perspex (Size: 15cm x 15cm)	Protection Cover with Hinges on Top (Size: 20cm x 20cm)	Sealable Type VT Fuses in Sealable Enclosure	kWh Meter	Pad locking Arrangement (Hole Size: 10mm dia.)	Sealable Type CT's Shorting Terminal Block (RS1&RS2 / YS1&YS2 / BS1&BS2)

Note: - Meter Viewing Perspex (Min: 5mm thickness) with Hinged Type Protection Cover.
 - CT operated metering: Provide sealable type VT fuses in sealable enclosure.
 - Refer Annexure: 1, for field requirements.

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IMS (Intelligent Metering System) Project – Phase.1

Arrangement of Water Metering Cabinet On Compound Wall

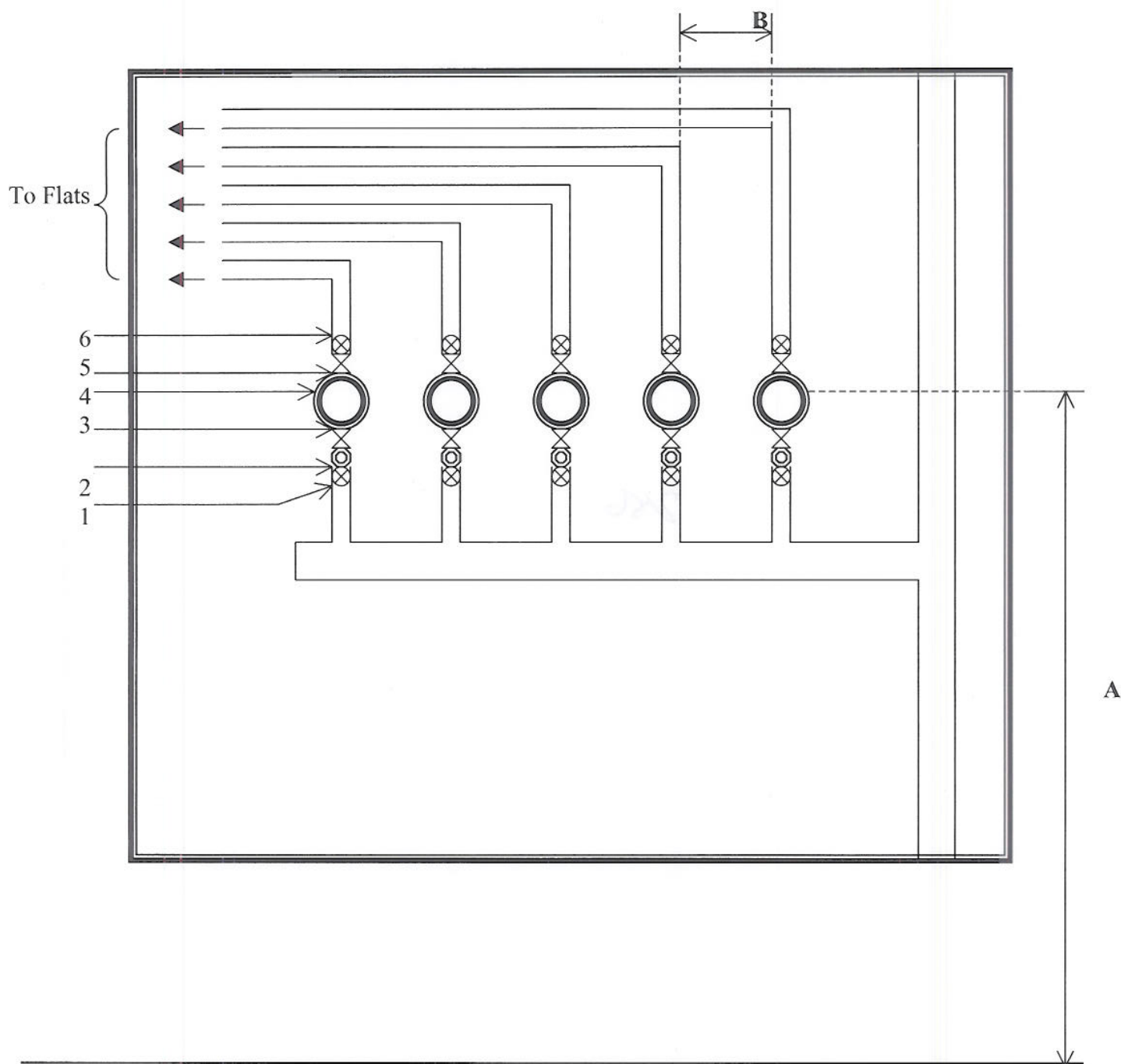


Dimensions in cm								
A	B	C	D	E	F	G	H	I
60	80	20	30	20	40	70 (Min:)	120 (Max:)	7.5 (dia:)
1	2	3	4	5	6	7	8	9
G.M.P.F. Adaptor (1" x 1/2")	G.M. Stop Cock (1/2")	Inlet Nozzle	Pad Locking Arrangement (Hole Size: 10mm dia.)	Water Meter	Meter Viewing Perspex (Size: 15cm x 15cm)	Protection Cover with Hinges on Top (Size: 20cm x 20cm)	Outlet Nozzle	Gate Valve (Consumer Side)

Note: - Meter Viewing Perspex (Min: 5mm thickness) with Hinged Type Protection Cover.
 - Minimum 2 mtr. clearance shall be maintained between electricity and water service cabinets / points.
 - Refer Annexure: 1, for field requirements.

Ans 17/12

IMS (Intelligent Metering System) Project – Phase.1 **Arrangement of Water Meters in Metering Room/Cabinet**



Dimensions in cm		Water Meter & Associated Parts					
A	B	1	2	3	4	5	6
120 (Max:)	20 (Min:)	Gate Valve (Supply Side)	Stop Cock	Inlet Nozzle	Water Meter	Outlet Nozzle	Gate Valve (Consumer Side)

Note: Minimum 2 mtr. clearance shall be maintained between electricity and water service cabinets / points.
Refer Annexure: 1, for field requirements.

Signature