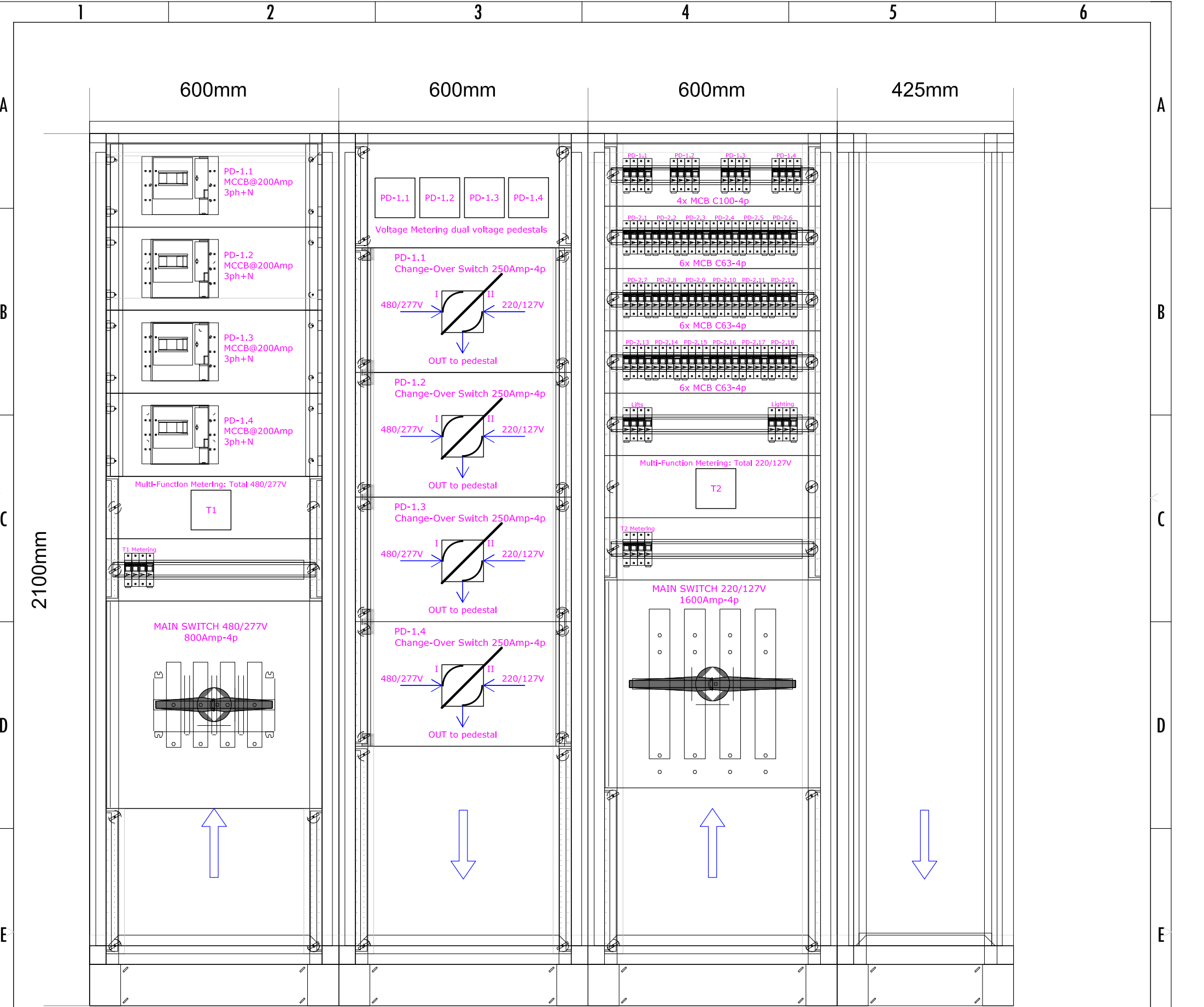




+01 COMPARTMENT 1
3N~60Hz/TN-C-S 480/277V

Feed from:
SEC 480/277 LV-Rack
500Amp (416kVA)

+02 COMPARTMENT 2
CHANGE-OVER SWITCHES

Feeds to:
Dual Voltage Pedestals

+03 COMPARTMENT 3
3N~60Hz/TN-C-S 220/127V

Feed from:
SEC 220/127 LV-Rack
1000Amp (380kVA)

+04 CABLE COMPARTMENT

Feeds to:
Single Voltage Pedestals,
Boat Lifts & Lighting

ALTERNATIVE DESIGN OPTION

- Points of Departure:

 - Utility Company (SEC) supplies 1x transformer for 220/127V power
 - Power requirement currently estimated at ±1000A-3ph (380kVA)
 - Transformer shall feed all single voltage pedestals, boat lifts and Mega Yacht dock lighting
 - Utility Company (SEC) supplies 1x transformer for 480/277V power
 - Power requirement currently estimated at ±500A-3ph (416kVA)
 - Transformer shall feed the Mega Yacht pedestals.
 - Network shall be executed as a TN-C-S system
 - The Estimated/Expected Demand Power is set @ 60% of the Connected Load.
- The Loads shall be fed from 1 Main Distribution Board (MDB):
 - To be located near dock in protective structure to limit cable lengths to pedestals
 - Compartment 1: incoming 480/277V feed from SEC and protection devices for 480/277V-loads (dual voltage pedestals)
 - Compartment 2: change-over switches for dual voltage pedestals and outgoing feeders to these pedestals
 - Compartment 3: incoming 220/127V feed from SEC and protection devices for 220/127V-loads (single voltage pedestals, boats lifts & dock lighting)
- The 4 "Mega Yacht" pedestals shall be dual voltage:
 - Only 1 power source can be used at a time
 - Max. available capacity @480/277V is 200A-3ph
 - Max. available capacity @220/127V is 100A-3ph
 - The remaining pedestals shall be single voltage:
 - Pedestals per ATM design except for the power feed & available power capacity
 - Max. available capacity per pedestal is 63A-3ph @220/127V

DRAFT		Location: Saba, Dutch Caribbean		■ For approval ☐ Final ☐ Construction ☐ As-built	
Project: Black Rock Harbour		Revision Date: By: Revision notes:		Caribbean Engineering & Consultancy Company	
Principal: "Saba Harbour Project"				CECC Engineering Grounddove Road #19 Pointe Blanche St. Maarten Fax: +1721-5423057 Phone: +1721-5423058 info@ceccnv.com www.ceccnv.com	
Drawing: EP-1000b Project #: 2021 005					
Discipline: Electrical					
Subject: Main Distribution Board - Typical View		Date: 19-Nov-2021 Drawn by: JT Checked by: CB Format: A3 Scale: n.t.s.			