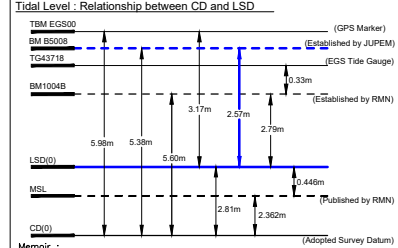


- Legend :**
- 15 2 -18 3 -21 3 : Dencotes elevations below datum
  - 0 3 2 2 7 3 : Dencotes elevations above datum
  - - - : Contour at 1 meter intervals
  - - - : Survey Limits
  - - - : Shore line digitized from CHART MAL 5300
  - - - : Surveyed shore line
  - - - : Traverse line
  - - - : Lot boundaries with lot numbers
  - 158331 : Mangrove
  - : Manhole
  - : Gate
  - - - : Chain Link Fence
  - - - : High Water Mark
  - ▲ : Slope
  - : Building
  - : Properly boundary marker found
  - : Buoy / Beacon



**Memoir :**

- Survey Date
  - Bathymetric Survey 06-22/06/2018
  - Topographic Survey 01-23/06/2018
- Survey Datum & Grid
  - Bathymetric Survey WGS 84 Universal Transverse Mercator, Zone 47 N
  - Topographic Survey Selangor State Cassini
- Drawing Grid : Selangor State Cassini Grid
- Equipment used
 

**Hydrographic Survey**  
 Kongsberg 1200 (2014) EchoSounder Valeport T40 water level recorder  
 C-Max G-GPS system (Globally corrected GPS) low C-View Navigation Operating software package  
 Liason Survey Boat Reg. No. BNK087P and shallow draft fibreglass dinghy

**Topographic Survey**  
 Topcon G5 (Capable of tracking GPS, GLONASS, BeiDou, Galileo, QZSS constellations) Total Station Topcon ES 105  
 GPS South Galaxy G1 (Innovative structure design, 7th centimeter and electronic bubble, NFC function, Advanced datalink, mobile full constellation support and Compass Level)
- All measurements are in metres

**Horizontal control**  
 1) The horizontal position of the survey vessel was located by G-GPS (Globally corrected GPS)  
 C-Max navigation System, surveyed on WGS 84 UTM Zone 47 N coordinates, were later transformed to Selangor State Cassini Grid for final plotting

**Vertical control**  
 2) Horizontal control based on GPS Static Observation, Reduce to Selangor State Cassini (CS) grid projection.

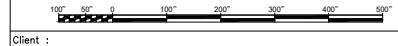
All elevations were reduced to Chart Datum which was 5.60m below BM 1004B, located on the left side of the main entrance at Anglers Resort Jetty, Pulau Indah, Klang, Selangor established by RMN

Revision no.	Date	Drawn by	Interpreted by	Checked by	Remarks
	31/7/2018	Khairani		Mohamad	Final

**Project :**  
**WESTPORTS DEVELOPMENT**  
**PROPOSED EXPANSION OF CONTAINER**  
**TERMINAL CT10-CT19 AND ITS ASSOCIATED**  
**WORKS AT WESTPORTS, PULAU INDAH**  
**SELANGOR DARUL EHSAN**

**Drawing Title :**  
**TOPOGRAPHIC AND BATHYMETRIC SURVEY**

**Drawing Number :** EGS43718/Sheet 1



**Client :**

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**Certified by :**

Gs. Sr. KHARUL SALEH BIN HJ. JAMALUDIN  
 MAMUK, 9706/04/04 Cert A / Off. B. Licensed Land Surveyor No. 458/1858  
 Accredited Hydrographic Surveyor

**EGS06**  
 GPS baseline marker, not embedded  
 on tarroad, painted blue  
 Coordinates : N-2828.848  
 (Selangor State Cassini)  
 E-45835.748  
 Elevation : 6.81m above CD  
 4.056m above LSD

**EGS05**  
 GPS baseline marker, not embedded  
 on tarroad, painted blue  
 Coordinates : N-2828.135  
 (Selangor State Cassini)  
 E-45718.100  
 Elevation : 5.85m above CD  
 3.026m above LSD

Refer Drawing No: EGS43718/Sheet 2

Refer Drawing No: EGS43718/Sheet 3