	List J – Anticipated Requirement of East Yard Materials and Services for the next two years 2015-16 (& 2017-18)			
SR NO	BRIEF DESCRIPTION OF MATERIAL/SERVICES, APPLICABLE DRAWINGS/TECHNICAL SPECIFICATION	ESTIMATED QTY	TENTATIVE PERIOD WHEN MATERIAL/SERVICES REQUIRED	
	Annual Maintenance Contract for Jaldoot Make 4- wheeler battery operated Platform	Service for 1 No	Continuous requirement	
1	Truck Load capacity= 2 Tons Asset No – 300410039	per Year	From Year 2015 Onwards	
	Sr. No 09/ 2010/ SFBT/ 23			
2	Rocol RTD Metal Cutting Compound	50 Cans of 500	Continuous requirement	
		Gms	From Year 2015 Onwards	
3	Permanent Paint Marker (Various Colours)	50 Nos Per Year	Continuous requirement From Year 2015 Onwards	
4	Cutting Insert CNMG 120408 TF IC 907	200 Nos Per Year	Continuous requirement	
4	Cutting insert Civing 120408 if ic 907	200 NOS PEL TEAL	From Year 2015 Onwards	
5	Cutting Insert CNMG 120404 TF IC 907	200 Nos Per Year	Continuous requirement	
			From Year 2015 Onwards	
6	Rabakote Antirust Compound	30 Litres per Year	Continuous requirement	
			From Year 2015 Onwards	
7	WD 40 Compound	10 Cans of 450 ml	Continuous requirement	
		Each Per Year	From Year 2015 Onwards	
8	Cutting Insert CCMT 09 T3 08	200 Nos Per Year	Continuous requirement	
			From Year 2015 Onwards	
9	Cutting Insert CCMT 09 T3 04	200 Nos Per Year	Continuous requirement	
			From Year 2015 Onwards	
10	BI-METAL -M42 COBALT HSS BANDSAW BLADE CONTINUOUS TYPE	40 Nos per Year	Continuous requirement	
	SIZE (L X W X T)=(4674 MM X 34 MM X 1.1 MM) 4/6-TPI TOOTH HARDNESS RC 66-68		From Year 2015 Onwards	
11	LED Torch Light	20 Nos per Year	Continuous requirement	
			From Year 2015 Onwards	
12	Lubrication Oil Super 85 W – 140, 210 Lit	210 Lit Per Year	Continuous requirement	
			From Year 2015 Onwards	
13	Services required for Resistivity Check(ohm-cm), Chlorides & fluorides check(mg/l),	20 water Samples	Continuous requirement	
	turbidity check(matter in suspension-mg/I) of DM Water sample	per Year	From Year 2015 Onwards	
14	Services required for checking contamination level of FHARI (Water based polyglycol)	50 oil Samples per	Continuous requirement	
	Hydraulic oil using NAS 1638 cleanliness standard. The equipment used for checking the	Year	From Year 2015 Onwards	
	cleanliness class must use mesh blockage technology.			
15	Services required for calibration of Pall Make PCM 400 Contamination monitor.	2 PCM 400	Continuous requirement	
	Accuracy Required-	machines per year	From Year 2015 Onwards	
	1) Particle Count # +/- 0.2 ISO 4406 Counts of Reference Instrument when Tested with ISO			

	Medium Test Dust (ISO MTD)		
	2) Temperature Calibration of Within +/- 2Deg Celsius of Reference Instruments		
	The Calibration Service Must Include		
	Analysis of engineer's diagnostic report and rectification of any faults found		
	Battery, Power supply and clock check		
	Performance evaluation on calibration fluid		
	Software update to latest release level		
	Check for oil leaks and rectification as necessary		
	Last chance filter replacement		
	• Flush, strip and clean all internal components		
	Relief valve check and reset		
	• If appropriate, the incorporation of any design enhancements introduced since built		
	Replace 6 micron and 14 micron meshes and flush housings		
	• Transducer calibrations		
	Perform production validation procedures		
	Software menu checks		
	Return Equipment to customer		
16	Safe Disposal of Spent oil/ Dirty Oil/ Lubricants used in Engineering workshop Eastyard	10 Drums of 200	Continuous requirement
	G as G as a character and a ch	Liters each per year	From Year 2015 Onwards
17	Blue matching & scraping of rudder hydroplanes cones	15 Rudder cones	Continuous requirement
1 1	blue matering a scraping of radder nyaroptanes cones	per year	From Year 2015 Onwards
18	Scanning of documents	3600 pages per	Continuous requirement
10	Scanning of documents	year	From Year 2015 Onwards
19	Core Cutters - 60mm to 130mm	30 Nos.	Aug-Sep 2015
20	HSS Taper Shank Drill	200 Nos.	Aug-Sep 2015
	'		
21	Torque Wrenches and accessories	28 Nos.	Aug-Sep 2015
22	Triennial Rate contract for Physical and Chemical testing of materials and preparation of test specimens for submarine division.	Total for different	Aug-2018
	Test & Technical specification	type of test: 5000	Aug-2010
	Spec SCI-200031,	nos	
	Chemical analysis of ferrous and non ferrous material- ASTM		
	2. Macrograph NFA 05 – 152 & NF EN 1321		
	3. Cylindrical tensile test-NF EN 10002 –1 & NF EN 876		
	4. Perpendicular tensile tests-NC EN 895		
	5. Side bends-NF EN 910		
	6. Impact test of weld metal -NF EN 100 45 -1 & NF EN 875		
	7. Impact test of heat affected zone-NF EN 100 45 -1 & NF EN 875 8. Hardness testing-NF EN 1043 -1		
	9. 20 point testing for galvanized pipe samples &		
	σ. 20 point testing for gaivantzed pipe samples α		

	10. Zina pavasity for calcanized complex CTF 22.04 10F C	1	
	10. Zinc porosity for galvanized samples STF 33-04-16E C		
	11. Testing of blocks of synthetic foam		
	a)Final density as per NF EN ISO 845		
-00	b)Compressive strength as per DIN EN 826		
23	Triennial Rate contract for Gamma radiography, X-ray, Ultrasonic Testing, Magnetic particle		h 0047
	testing and Dye penetrate testing work on Unit Rate Basis for submarine division. As per		June-2017
	approved NDT Procedure		
	<u>Test</u>	45000	
	1. Gamma radiography	15000nos	
	2. X-ray for piping	25000 nos	
	3. Ultrasonic testing	1500 meters	
	4. Ultrasonic thickness gauging	10000 nos	
	5. Magnetic particle testing	15000 meters	
	6. Dye Penetrate testing	10000 meters	
24	TRCs for hiring services of inspection agencies for Carrying out Inspection of fabrication,		
	Piping, welding, NDT, painting, Insulation etc. works carried out by MDLs contractors &	6000 man days	Sept 2018
	receipt inspection of Procured items etc at MDL's/Contractor's premises for Submarine		
	division		
25	Scanning of Documents	240000 pages	APRIL 2018
26	Photocopying	10000/month	2016-17
		10000/111011111	2010-17
21		20	2017
			2017
		10	
	7. Transmission Densitometer with own light source for measuring optical density 2 to	2	
	4		
	4		
28			
28	4 Mechanical Instruments	2	2017
28	Mechanical Instruments	2	2017
28	Mechanical Instruments 1. Digital Clinometers	6	2017
28	Mechanical Instruments 1. Digital Clinometers 2. Vernier caliper	6 3	2017
28	Mechanical Instruments 1. Digital Clinometers 2. Vernier caliper 3. Digital Thermometer	6 3 2	2017
28	Mechanical Instruments 1. Digital Clinometers 2. Vernier caliper 3. Digital Thermometer 4. Rectangular gauge block set , grade '0'	6 3 2 5	2017
28	Mechanical Instruments 1. Digital Clinometers 2. Vernier caliper 3. Digital Thermometer 4. Rectangular gauge block set , grade '0' 5. Digital micrometer. 0-25mm, Least count 0.001mm	6 3 2 5 5	2017
28	Mechanical Instruments 1. Digital Clinometers 2. Vernier caliper 3. Digital Thermometer 4. Rectangular gauge block set , grade '0'	6 3 2 5	2017
27	NDT instruments 1. welders gauge 2. digital fillet gauge 3. digital depth gauge 4. radiographic viewers 5. temperature gauges(Contact & non contact type) 6. Ultrasonic thickness gauge (for pipes as small as 8mmOD and 1 mm thickness) 7. Transmission Densitometer with own light source for measuring optical density 2 to	20 20 5 2 10	2017

29	Painting Instruments		
	Dew point meter	2	2017
	2. DFT meter	2	
	3. Probe for DFT meter	2	
30	Electrical Instruments		
	Digital Multimeter	4	
	2. Clamp Meter	4	2017
	3. Meg ohm meter	5	
	4. Continuity Tester	6	
31	Tandberg LTO5 Tape Cartridge: Required for taking daily backups on tapes.		
31	a) Data Cartridge: 20 Nos /month	21 Nos	1st July 2015
	b) Cleaning cartridge: 1 No/month	211105	15t July 2013
	Required on continual basis monthly.		
32	Annual Maintenance Contract of UPS and Batteries of East Yard-Design.		
32	a) 10KVA Emerson UPS: 1 Nos.	4 Nos	20th Jan 2016
	b) 20 KVA Emerson UPS: 3 Nos	4 1105	2011 Jan 2016
	c) 42 AH Batteries: 26 Nos		
	d) 65 AH Batteries: 78 Nos		
33	Annual Maintenance Contract of UPS and Batteries of East Yard-Design.	2 Nos	
33	a) 10KVA Emerson UPS: 1 Nos.14	2 1105	12th Sept 2015
	b) 6KVA Emerson UPS: 1 No		12th 3ept 2013
	c) 26AH Batteries		
34	Services: Triennial Maintenance Contract of Servers Storage and Networking Equipment in	1 AU	
0-	East Yard Design	17.0	12th Sept 2015
	a) Oracle M4000 Servers-2 Nos		12th 00pt 2010
	b) Cisco Switches 3750 -2 Nos		
	c) Cisco Switches 2960 -4 Nos		
	d) EMC VNX 5300 Storage-1 No		
	e) EMC Celera NAS Box-1 No		
	f) Tandberg Tape Library-1 No		
	g) EMC Data domain DD620 - 2 Nos		
	h) SAN Switches -3 Nos		
	i) Backup Server IBM 3550- 1 No		
	j) DNS Server IBM 3650 - 1No		
	k) EMC Networker Software- 1 No		
	I) Red hat Linux OS- 1 No		
	m) Windows Server 2008- 1 No		
	n) KVM switches - 2 Nos		
	o) Network KVM - 2 Nos		
35	Disaster Recovery System	1 AU	1st Jan 2016
36	Up gradation of File Server, Data Domain and Tape Library	1 AU	1st Jan 2016
37	Datacenter Renovation	1 AU	1st Jan 2016
<u> </u>	- state of the sta	1	

38	Various OEM Tools such as Voice Deta Recorder, Laptop, Analyser Analog.	3 items	Sep-15
39	Network cables such as Torpedo Cable Halogen Free, Ethernet AV1 6 PB Filotex & 267 724	5 items	Sep-15
40	Coating (Paints, Primers & Thinner) Chemco International make coating	1 item	Mar-16
41	Battery cells of High AH rating to be installed on board Submarine used to supply DC power to various machineries and main propulsion motor& Connectors for batteries.	3 sets for 3 SMs	Nov-16, Aug-17, May-18
42	Radiated noise & cavitation measurement tools such as Transducer & cable	2 tools & 12 Services	Jul-16
43	Fresh Water Osmosis Plant (PALL)	4 Sets for 4 SMs	Oct-15 to Feb-16
44	Combat System Specific Tools to be used for installation, connectorisation of SONAR, RADAR, Navigational Aids, Under water Sensor/ Transducers, Submarine torpedo fire control system and communication System.	31 items	May-15 to July-16
45	Steel Profiles	53 items	Oct-15
46	Internal Cables- Armoured Power Cables.	6 Balance items	Jul-16
47	Welding Consumables, E69, Size: dia: 3.15 or 3.2mm	1.5 Lakh Nos	Sep-15
48	Welding Consumables, W46, dia:2.4mm	850 Nos	Sep-15
49	Welding Consumables, Solid bare filler rod, W19 9 L, d:1.2mm, N-AlMg5, dia:2mm	58 Kg, 250 Kg	Sep-15
50	Welding Consumables, Solid bare filler rod, W42 4 W3 (dia:1.6mm and 2.4mm) and W19 9 L, d:2.6mm	450 Kg, 80 Kg, 50 Kg	Sep-15
51	Welding Consumables, Solid filler rod, SG-Cu Ni 30Fe(dia:1.6mm)	47 Kg	Sep-15
52	Elbow & Tee Accessories	3 items	Sep-15
53	Add qty-CS & SS Pipes	24 items	Dec-15
54	Various Shipyard Tools such as Pump & filter, Water Meter, Compressor, Densitometer etc.	33 items	Dec-15

55	Oil & Grease	2 items	Jan-16
56	Flux FH11	265 Kg	Sep-15
57	SM-39 tools used for installation, connectorisation and testing of missiles.	10 items	Jul-16
58	Add items-Pitch Diameter rod & Nut	42 items	Dec-15
59	No Quote & Tech rejected Steel Plates & Profiles	7 items	Dec-15
60	Nuts, Bolts & washers	116 items	Dec-15
61	Non Pressure Hull Penetration	5 items	Dec-15
62	PC network such as Rugged Server, Laptop & Desktop	3 items	Sep-15
63	Synthetic Foam	10.5 M3	Dec-15
64	Cast Iron Block: Required services for leveling and installation of Cast Iron blocks in workshop. Size - 7mtr x 7mtr x 210mm thick.	4nos	Dec'2016
65	Hydraulic Press tools: Required goose neck tool for forming of steel materials on press. a. 2000T Hydraulic press machine Goose neck tool. Size -2mtr length, Qty -2nos. b. 500T Hydraulic Press machine Goose neck tool. Size - 2mtr length, Qty-2nos	4nos	Oct'2016
66	Oxy/act regulators, Gousing nozzles, Tip cleaner, Flash back arrester	110 Nos.	Aug-Sep 2015
67	Oxy Acty gas torch, heating torch, LPG gas torch	34Nos.	Aug-Sep 2015
68	Mobile Battery Charger: 1) Input Power Source a) Rated AC Voltage: 415 V 5%. b) Rated Frequency: 50 Hz 2% c) No of Phases: 3 phase (4 wires). d) Protection: Connection cell MT + motor-driven circuit breaker MT. Note: In build Transformer should have efficiency more than 98 %. 2) Output Power a) Rated Output DC Voltage: Adjustable 0 to 550 V b) Rated Output DC Current: Adjustable 0 to 2000 A c) Rating Class: Continuous. d) Ripple: Less than 3 % RMS at full load. 3) Dimension: with in 5X2.5X4 in meters (LXWXH)	1 no	Aug2015
	Mobile Discharge Resistance Unit:	1 nos	

69	This unit is to be used for the load trials and discharge of the 'Scorpene' class submarine		
	propulsion batteries in the shipyard.		March 2016
	a) Nominal voltage: 380V DC		
	b) Maximum voltage: 500V DC		
	c) Minimum voltage: 300V DC		
	d) TOTAL POWER: 1200KW		
	e) Ohm value tolerance: +10 %		
	f) Resistance material: FECRAL		
	Dimension: with in 5X2.5X3.5 in meters (LXWXH)		
	AC Shore Supply:	2 nos	
	1) Input Supply		
70	Input Supply Voltage - 415V +/- 10% 3 Phases		Sep 2015
	Frequency - 50 Hz +/- 4%		·
	Protection – MCCB earth leakage		
	2) Output Requirement		
	Output Voltage - 120 V, 3 Ph, 4 wire. Neutral to be provided which should not be		
	connected to the neutral of input. Frequency - 60 Hz, KVA rating - 50 KVA, Maximum		
	output Power – 45 KW, Power Factor - 0.9, Voltage waveform - Pure sinusoidal		
	DC Shore Supply:	2 nos	
	1) Line Input:		
71	Line voltage - 3 x 440 VAC, +/- 10 %		
	Line Frequency: 50 +/- 4%		Sep 2015
	Protection: MCCB earth leakage to be provided.		
	2) Output Ratings:		
	Output Power Range - 0-178 KW, Output Voltage Range - 25-504V, Output Current		
	Range - 0-353A		
	Protection: MCCB to be provided.		
	Portable Power Supply unit 120 V / 60 Hz, 25 KVA	2 nos	
	1) Input Supply		
	Input Supply Voltage: 415V +/- 10%, 3 Phases		
72	Frequency: 50 Hz +/- 4%		
	Protection: MCCB with earth leakage,		Sep 2015
	2) Output Requirement		
	Output Voltage: 120 V, 3 Ph, 4 Wires.		
	Frequency: 60 Hz, KVA rating: 25 KVA, Max. Output Power: 22.50 KW, Power		
	Factor: 0.9		
	Voltage waveform: Pure sinusoidal		
	Protection: MCCB		
73	Procurement of Adhesive cloth Protection tape for Combat system equipments.	200 Sq Mtrs.	Aug-Sep 2015
74	Overhaul and Modernisation of Hausler plate rolling machine	1 no.	Aug-Sep 2015
75	Modernisation & Reconditioning of 200T Hyd press	1 no.	Aug-Sep 2015
76	1. SS working table &	6 nos	Aug-Sep 2015

	2. accessories(Engg)	2 sets	
77	Pr regulator (L&Wn)	4 Nos.	Aug-Sep 2015
78	Tool sets (L&Wn) used for electrical and electronics equipment installation and	4 Nos.	Aug-Sep 2015
	connectorisation of Submarine equipment.		
79	Bore dial gauges	3 AU	Aug-Sep 2015
80	Refurbishment of 500T Hyd press	1 nos	Aug-Sep 2015
81	Tool cabinet for Tool storage (L&Wn)	3 nos	Aug-Sep 2015
82	Essential spares for Orbital tig welding machine M-205 with weld head M9-675 for pipe	127 Nos.	Aug-Sep 2015
	shop)		
83	Spares required for OS 10 crane of ALY	72 Nos.	Aug-Sep 2015
84	Spares for Godrej make 3 T Fork lift	25 Nos.	Aug-Sep 2015
85	Spares for water coolers	25 Nos.	Aug-Sep 2015
86	Spares for EWM make Phonix - 351 Mig welding machine - 40-000748-E0003 control	3 Nos.	Aug-Sep 2015
	Board		
87	Imprinted Vinyl Coated Wall Paper	30 Rolls	Aug-Sep 2015
88	Canvas Hose Pipe with Inside rubber line & Antibacterial growth protection & IS make for	720 Mtrs.	Aug-Sep 2015
	east yard		
69	Pipe Cutting Machine	2 Nos.	Aug-Sep 2015
90	Repair of AC Servo Motor	1 AU	Aug-Sep 2015
91	Essential spares for Orbital tig welding machine	32 Nos.	Aug-Sep 2015
92	Angular brushes	1000 Nos.	Aug-Sep 2015
93	Flash Back Arrester for Gas Cutting Torch End	60 Nos.	Aug-Sep 2015
94	Tig welding torch suitable for REHM make, Mode: Transits 400 Tig welding Machine.	4 Nos.	Aug-Sep 2015
95	Supply & Installation of Telephone sets, Tele-Fax machine & Projector at East-Yard (3rd floor-EY Store Building & 2nd floor D-2 Building)	34,4 and 1 No.	Aug-Sep 2015
96	Supply of Refrigerator at East Yard (3 rd floor-EY Stores Building & 2nd floor-D2 Building)	2 Nos.	Aug-Sep 2015
97	PTFE Resin moulded sheets	54 Nos.	Aug-Sep 2015
98	Canvas bags 17 gauge - 20x12x24"	500 nos	Aug-Sep 2015