

Estimate of the Probable Expenditure of the Lighthouse Service of the Government of Japan for the 1st Year of Meiji

Remarks		Dollar	Cents	Dollar	Cents	Dollar	Cents
	<u>Lighthouse Establishment</u>						
	<u>Salaries</u>						
Amount of Salary not yet arranged lately \$150 per month	R. Henry Brunton, Chief Engineer per mo. \$600.	7,200	00				
	J. Fisher Assistant do " \$300	3,600	00				
	George Wauchope Secretary " \$300	3,600	00				
	J. Cury Assistant Engineer " \$250	3,000	00				
	do House Attendant " \$50	600	00				
	Robert Page Clerk " \$200	2,400	00				
Services will probably be dispensed with in 6 months.	D. Robertson do for 6 mos only " \$100	600	00				
	A. J. Higgins Godown keeper " \$100	1,200	00				
	J. Murray Carpenter " \$120	1,440	00				
	Henry Blacksmith " \$150	1,800	00				
	J. Mitchell Mason " \$150	1,800	00				
	J. Wallace Lighthouse Inspector " \$150	1,800	00				
	J. Marks Mason " \$150	1,800	00				
Salary raised from \$120. lately Services will probably be dispensed with in 6 mos.	J. Castle Plumber " \$150	1,800	00				
	W. Cassell Carpenter & for 6 mos. " \$100	600	00				
Will probably arrive from England in 3 months	J. M. Gilbert Telegraph Engineer " \$200	2,400	00				
	Lighthouse Inspector for say 9 mos. " \$150	1,350	00				
						\$36,990	00
	<u>Other Expenses</u>						
	Provisions for six Artizans at different Stations @ \$60. per month \$360 per mo.	4,320	00				
	Ordinary Repairs to Dwelling Houses, Offices Yards &c	1,000	00				
	Travelling Expenses of Artizans, Engineers @ 1/2 say \$200. per month	2,400	00				
	Office furnishings, Boys, Messengers, Stationery Coal &c	1,000	00				
	Tools & Machinery, Ropes, Chains, Various articles to be kept in stock, and other material purchased, and work to be done not chargeable to any particular works.	6,600	00	15,320	00	52,310	00
	Carry forward					52,310	00

Remarks

No. 2
Brought Forward

137
52,310 00

Lighthouse Steam Tender Shabon

Officers

Captain A. A. Brown 15 Days in Yokohama
at 350 dol. per month and 15 Days at Sea with
300 dls per month with allowance of \$5 per day

Average 400 dol. per month

4800 00

E. W. Hoaswell Chief Officer \$160 dol. . .

1920 00

J. W. Brooke Second Officer \$100 . . .

1200 00

A. F. McNab Chief Engineer \$260 . . .

3120 00

W. Henry Second Engineer \$180 . . .

2160 00

J. Lucas Third Engineer \$150 . . .

1800 00

1 Boatswain \$75 . . .

900 00

1 Chief Steward \$100 . . .

1200 00

1 Second Do \$85 . . .

1020 00

18,120 00

Manillamen & Chinese

4 Manillamen at \$40 each per month

1920 00

1 Chinese Carpenter at \$35 " "

420 00

1 Head Cook at \$41 " "

492 00

1 Second Do at \$29 " "

348 00

1 Scullion at \$25 " "

300 00

1 Saloon Boy at \$33 " "

396 00

1 Boiler Maker at \$50 " "

600 00

1 No. 1 Fireman at \$28 " "

336 00

6 Firemen at \$23 each per month

1656 00

6468 00

Japanese Crew

1 Boatswain at 44 Boos 44 Boos

1 Pilot at 42 " 42 "

1 Coxswain at 36 " 36 "

17 Smdoos at 34 " 578 "

5 Do at 29 " 135 "

4 Boop at 32 " 128 "

10 Coal Trimmers at 30 " 300 "

10 Firemen at 37 " 370 "

1633 \$408-25 per month 4899 00

Allowance of rice to Japanese Crew - 2 1/4 lbs per day per man

3307 1/2 lbs per month at 5 ct - \$165-37

1984 44

Carry Forward

\$ 31471 44 \$52,310 00

10 dols more than agreement
(required for mess allowance) }
10 dols more than agreement
(required for mess allowance) }

N.B.

737
C

Brought Forward

31471 44 52310 00

Shabor Continued

Stores

Tallow Oil &c average per month	\$ 50	960 00
Paints &c " " "	\$ 70	840 00
Chains, Ropes, Sails, &c	\$ 100	1200 00
Doctors fees Medicines &c	\$ 20	240 00
Small Stores & Ship Furnishings	\$ 100	1200 00

4440 00

Repairs

Ordinary repairs average per month	\$ 170	2040 00
Docking & cleaning expenses during the year		1300 00

3340 00

Coals

Average running 700 miles per month at 3 1/2 cwt per mile 122 1/2 tons per month @ 6 dol \$ 735		8820 00
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8820 00

Total expenditure for "Shabor"

48071 44

Cost of Construction of various works
Completion of Takodate Lightship

Woodwork to complete, caulking, coppering		2,000 00
Painting		350 00
Digging		300 00
Launching		600 00

3,250 00

Completion of Begami Lighthouse

Inside Woodwork & plaster work of Lighthouse & dwelling house, painting, laying out grounds building wall & erecting light apparatus say		2500 00
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2,500 00

Completion of Rock Island Lighthouse

Inside woodwork & plaster work of dwelling house, painting & laying out grounds say		1500 00
Japanese Lightkeeper's house		1500 00
Water tanks & other furnishings required		1500 00

4,500 00

Carry Forward

\$ 10250 00 \$ 100381 44

This item does not include the repair of any breakage whatever ^{wear & tear} _{which} this item includes going to Shant' ghat once during the year with the accompanying expenses

Sakama Coal is now \$ 6 1/4 per ton Kurats at Nagasaki is \$ 5 per ton

This item is merely guessed as it is impossible to calculate what money is required to complete the work

Remarks

This work is not decided on but having been proposed its cost is included in the estimate

Apparatus &c ordered & paid for

This item has been arrived at from a careful comparison of the cost of the other Lighthouses

Apparatus &c ordered & paid for

Apparatus &c ordered & paid for

All material required in the construction of this Lighthouse has already been purchased the labour required in its construction & finishing, painting & erection of lantern &c is all that requires to be done

Apparatus &c ordered & paid for

Brought Forward

Matoya Lighthouse

Removal of Rock Island Temporary Lighthouse

its re-erection preparing site &c pay 500 00

Temporary quarters for European & Japanese Lightkeepers, Furnishings &c 1000 00

Permanent Lighthouse with stone dwellings &c in every respect similar to Tomauyai Sima 12000 00

3rd order apparatus for do with lantern & wrought iron parapet including freight & other charges 5000 00

10,250 00 100381 44

18,500 00

Siwomisaki Lighthouse

Replacing wooden beams altering top of tower and erecting permanent lantern & apparatus 1,000 00

1,000 00

Tomauyai Sima Lighthouse (Isuma)

Probable total cost \$12,000-00

Sum expended to present date \$ 7,500-00

Sum required to complete work 4,500 00

4,500 00

Awadji Lighthouse (Akasi)

Probable total cost say \$14,000-00

Sum expended to present date \$ 9,000-00

Sum required to complete work 5,000 00

5,000 00

Osaka Lighthouse

Preparation of site 500 00

Carpenters & coolies labour 500 00

Painting work 100 00

Oil Tanks & other furnishings 600 00

Japanese Lightkeepers house laying out grounds &c 600 00

2,300 00

Carry Forward

\$41,550 00 \$100,381 44

no 6

Remarks
All material for this Lighthouse has already been purchased. It still requires to be erected and finished up.

Lantern & apparatus ordered & paid for

Brought Forward			137350 00	100381 44
<u>Satanomisaki lighthouse</u>				
European Blacksmith say 3 months at \$50	450 00			
Blacksmith labour	500 00			
coolie labour	2500 00			
Carpenter labour	300 00			
Painting	150 00			
European & Japanese dwelling houses				
laying out grounds &c	5000 00			
Erection of lantern & apparatus	750 00			
			9650 00	

Maintenance of Lighthouses & Buoys

Buoys

The moorings of these buoys may get eaten away or broken or any unforeseen damage may be done to them. The cost of removal of which is not included in this estimate.

2 Buoy at Immonosaki & Buoy at Yokohama				
1 Buoy at Saratoga Spit to be removed & repainted once during the year at \$50 each	350 00			
Repairs to buoys & shackles &c & repairs to moorings	350 00			
			700 00	

Lightships off Treaty Point

European Captain at present receiving \$80 per month but it is proposed to increase it to \$100

Wicks & cleaning stuffs for lantern as well as lamp glasses &c have already been purchased having been sent from England with the apparatus.

One European Captain at \$100 per month	1200 00			
One Manila Quartermaster \$30 " "	360 00			
Two Do Do at \$28 & 3-6 per month	672 00			
Six Japanese Seidoes at 30 boos - \$7 1/2 " " \$45 ..	540 00			
Rice for Do 2 1/4 lbs per day 405 lbs @ 5 cents - \$20-25 per "	243 00			
Fish for Do at 2 boos per man per month - 12 boos	36 00			
Paint, Water, coals, and other Stores &c for use of Ships	350 00			
Oil for Light app 30 gals per month - 360 gals minus 67 now in stock - 293 gallons at \$1.20	351 60			
Ordinary repairs & furnishings &c @ \$30 per month	360 00			
			4112 60	

Proposed to be placed on her station on or about the 1st of June. Captain & crew should be engaged one month before the ship is to sail from Yokohama.

Light Stones have been sent from England with lantern &c.

Lightships for Okodate

One European Captain 9 1/2 months at \$100 per mo	950 00			
One " Mate 9 1/2 months at \$80 ..	760 00			
Six Japanese Seidoes at 30 boos \$7 1/2 - \$45 per month	427 50			
Rice for Do 405 lbs @ 5 cents - \$20-25 " "	192 37			
Fish for Do - \$3. - " "	28 50			
Oil for Light app 5 1/2 months @ 80 gals 255 lbs @ \$1.20	306 00			
Ordinary Repairs & furnishings &c @ \$30 per mo	285 00			
Paint, Water, coals, & other stores for use of Ships	350 00			
			3299 37	
<u>Carried Forward</u>			\$8111 97	\$247381 44

Proposed to be lighted on say the 1st April
 Lightkeepers should be appointed 1 month previously
 The salaries of the European Lightkeepers have not yet been decided
 The amount in the estimate is the amount proposed
 Wicks, lamp glasses, &c were sent from England with apparatus

Oil Wicks &c for one year consumption already supplied

Oil Wicks &c for one year consumption already supplied

At present there is a temporary light burning Kerosene oil
 Permanent light will probably be lighted in 6 months from 1st Feb 1871
 Three months Kerosene now in stock

				8,111	97	247381	44
707 Brought Forward							
<u>Segami Lighthouse</u>							
One Principal Lightkeeper at \$110 per month	1,320	00					
One Assistant " at \$85 per month	1,020	00					
Two Japanese Lightkeepers at \$15 each = \$30	360	00					
Oil for light 11 1/2 months at 79 3/4 cals = 908 1/2 lbs at \$1.20	1,090	00					
Fire, light, cleaning stuffs, &c allowed keepers @ \$10	120	00					
Ordinary repairs & furnishings &c at \$15 per mo	180	00					
						4,090	00
<u>Rock Island Lighthouse</u>							
One Principal Lightkeeper at \$120 per month	1,440	00					
One Assistant " @ \$90 " "	1,080	00					
Two Japanese " @ \$15 each = \$30 per mo	360	00					
Fire, light, cleaning stuffs, &c allowed keepers @ \$10	120	00					
Ordinary repairs and furnishings &c @ \$15 "	180	00					
						3,180	00
<u>Oosima Lighthouse</u>							
One Principal Lightkeeper @ \$110 per month	1,320	00					
One Assistant " @ \$85 " "	1,020	00					
Two Japanese Lightkeepers @ \$15 each = \$30 per month	360	00					
Fire, light, cleaning stuffs, &c allowed to keepers @ \$10	120	00					
Ordinary repairs & furnishings @ \$15 per month	180	00					
						3,000	00
<u>Siwomisaki Lighthouse</u>							
One principal Lightkeeper @ \$110 per month	1,320	00					
One Assistant " @ \$85 " "	1,020	00					
Two Japanese Lightkeepers @ \$15 each = \$30 per mo	360	00					
Oil for temporary light 3 months at 60 1/2 cals per mo ^{at 86 cals} 180 1/2	1,444	00					
Colza oil for permanent light 6 months at 79 3/4 cals per month 474 gallons @ \$1.20	568	80					
Fire, light, cleaning stuffs, &c allowed to keepers @ \$10 per mo	120	00					
Ordinary repairs & furnishings &c @ \$15 per month	180	00					
						3,712	80
Carry Forward							
						22,094	77
						247,381	44

no 5

Remarks
Will probably be lighted in 6 months

Wicks glasses & other stores came with the apparatus from England

Will probably be lighted in 6 months

Wicks glasses & other stores came with the apparatus from England

Probably lighted in 3 months

Wicks Glasses & other stores came with the apparatus from England

Probably lighted in 3 months

Wicks Glasses & other stores came with the apparatus from England

At present there is a temporary light burning kerosene oil. Permanent light to be probably lighted in 4 months. Two months kerosene now in stock

Wicks glasses & other stores came with the apparatus from England

Brought Forward

Isumi Lighthouse

One Principal Lightkeeper (European) @ \$100 per month	600 00
Three Japanese Lightkeepers @ \$15 ea - \$45 per month	270 00
Oil for light 6 months @ 15 1/4 gal per month @ 91% @ \$1.20	109 80
Fire light cleaning stuffs &c allowed to keepers @ \$10	60 00
Ordinary repairs & furnishings &c @ \$15 per month	90 00
	1129 80

Awadji Lighthouse

One Principal Lightkeeper @ \$110 per month	660 00
One Assistant Do @ \$55 " "	510 00
Two Japanese Lightkeepers @ \$15 each = \$30 per month	180 00
Oil for light 6 months @ 63 gals per month @ 378% @ \$1.20	453 60
Fire light cleaning stuffs &c allowed to keepers @ \$10 per month	60 00
Ordinary repairs & furnishings &c @ \$15 per month	90 00
	1953 60

Hobe Lighthouse

Three Japanese Lightkeepers @ \$15 each \$45 per month	405 00
Oil for light 9 months @ 10 Galls per month @ 90% @ \$1.20	108 00
Fire, light, cleaning stuffs, &c allowed to keepers @ \$5	45 00
Ordinary repairs & furnishings &c @ \$10 per month	90 00
	648 00

Osaka Lighthouse

Three Japanese Lightkeepers @ \$15 ea \$45 per month	405 00
Oil for light 9 months @ 10 Gals @ 90% @ \$1.20	108 00
Fire, light, cleaning stuffs, &c allowed to keepers @ \$5	45 00
Ordinary repairs & furnishings &c @ \$10 per month	90 00
	648 00

Nagasaki Lighthouse

One Principal Lightkeeper @ \$100 per month	1200 00
One Assistant Do @ \$80 " "	960 00
Two Japanese Lightkeepers @ \$15 ea per month \$30..	360 00
Kerosene oil for temporary light 2 months at 35 Galls per month 70 Gallons @ 80 cents	56 00
Oil for permanent light 8 months @ 79% @ \$1.20 @ 632%	758 40
Fire, light, cleaning stuffs, &c allowed to keepers @ \$10 per month	120 00
Ordinary repairs & furnishings &c @ \$15 per month	180 00
	3634 40

Brought Forward

22994 77 247351 44

3634 40
\$30,108 57 \$247,351 44

209

Remarks
At present there is a small apparatus belonging to the Hakodate light ship as a temporary light. The permanent apparatus will probably be lighted in 4 months.

Oil week & already supplied for temporary light leading at end of 4 months 50 gallons of oil for use of permanent light.

Rock Island temporary light will probably be illuminated at Matoya in 3 months.

Brought Forward

Satanomisaki Lighthouse

One Principal Lightkeeper at \$120 per month	1440	00
One Assistant Lightkeeper at \$90 per month	1080	00
Two Japanese Lightkeepers at \$15 per month	360	00
Oil for Permanent light 105 Gals per month		
840 Gallons minus 80 for stocks in hand @ 60¢	912	00
Fire light cleaning stuff & allowed keepers at \$100	120	00
Ordinary repairs & furnishings at \$15 per month	180	00

30,108 27 24,381 44

4,092 00

Matoya Lighthouse (as proposed)

One Principal Lightkeeper at \$110 per month	990	00
Two Japanese do at \$5 each \$30 per month	270	00
Kerosene Oil 9 months at 40 Gals 360 Gals @ 80¢	288	00
Fire light cleaning stuff & allowed keepers at \$10	90	00
Ordinary repairs & furnishing at \$10 per mo	90	00

1,728 00

Probable total expenditure for the year

Dollars 35,928 57
28,331 07

Note The Salaries & other expenses of the Japanese Officers are not included in this estimate.

W. Henry Brantno
Chief Engineer

Reuben Lotis hama
February 1871