(Mes. No 2996 Wdy 13th Nov/82)

To/
The Secretary to the
Govt of India
Bengal
Bombay

Sir,

I am directed to forward the accompanying copy of a Notification on the subject of the P.W. Workshops at Madras, and to request that the necessary permission may be obtained for its publication in successive issues of the Gazette of India
Calcutta Gazette
Bombay Gazette
up to the 1st February 1883.

Mes No. 2995 Wdy 13/11/82
2996

Dy 9
14/11/82

R.S.
Encl. Extn

Jn 9/11.

Encl. in Receipt Reg

B

Valuation Statement of Machinery and Plant in the Presidency Public Works Workshops.

Description	Number or Quantity	Value		
Crane Travelling large	1	2000	"	"
Cupolas large	2	4000	"	"
Fan Blower large	1	820	"	"
Do Do 3rd Size	1	120	"	"
Forges portable fan	4	400	"	"
Do Do large	2	80	"	"
Force Pump for feeding Boilers large	1	350	"	"
Do Do Do Small	1	150	"	"
Lathe Duplex Surfacing and boring large with face plate 8½' Diameter	1	2000	"	"
Do Screw cutting 30-3" (15" Centre & the other 12")	2	7000	"	"
Do Do 30' and 15" Centre	1	3500	"	"
Do Do 20'-2" and 24" Centre	1	3000	"	"
Do Do 15'-2" and 10" Centre	1	1500	"	"
Do Do 14'-2" and 10" Centre	1	1200	"	"
Do Do 6'-3" and 6" Centre	1	800	"	"
Do Do 6' and 7" Centre	2	2000	"	"
Do Turning 12' and 10" Centre	1	800	"	"
Do Do 8' and 6" Centre	1	300	"	"
Do Wood Turning 8' and 9" Centre	1	300	"	"
Carried Over		30320	"	"

Description	Number or Quantity	Value
Brought Over		30,320 " "
Lathe foot 6' (3 of 6½" 1 and 5" Centres	4	1,200 " "
Do Do 6' and 9" Centre	1	300 " "
Do Do Screw Cutting 5'-3" and 6" Centre	1	800 " "
Do Do Do 5' and 6" Centre	1	800 " "
Do Do Do 4'-6" and 5" Centre	1	800 " "
Do Do Do 3'-6" and 5" Centre	5	2,300 " "
Do Do Glass Polishing of 2½" Centre	1	30 " "
Machine Planing 14'-10"	1	2,000 " "
Do Do 9'	1	1,500 " "
Do Do 2'-9"	1	500 " "
Do Do 2'-9"	1	400 " "
Do Tapping 5'-2"	1	700 " "
Do Mill Boring large	1	1,200 " "
Do Drilling 8'	2	4,000 " "
Do Do 7'	2	1,500 " "
Do Do 6'	3	1,500 " "
Do Do Wall	1	300 " "
Do Slotting large	1	900 " "
Do Do Small	1	500 " "
Do Drilling hand	1	100 " "
Do Plate bending	1	1,000 " "
Do Punching and shearing	1	400 " "
Do Do Do large	1	1,500 " "
Carried Over		54,550 " "

Description	Number or Quantity	Value
Brought Over		54,550 " "
Machine Band Saw	1	350 " "
Do General Joiner	1	1,200 " "
Do Punching large	1	1,000 " "
Do Press fly Embossing	1	100 " "
Do Hammer Steam 7/2 Cwt.	1	2,565 " "
Do Saw Circular Table Complete	1	400 " "
Do Table Iron for Marking	1	100 " "
Anvils	34	408 " "
Do Coopers	2	40 " "
Bellows English	2	40 " "
Benches Carpenters	15	525 " "
Do Small	7	140 " "
Do Filers large	5	500 " "
Bearings 5/2"	3	225 " "
Do 3/2"	3	130 " "
Do 3"	19	570 " "
Do 2¾"	5	150 " "
Do 2⅜"	28	700 " "
Buckets Foundry of Sizes	13	500 " "
Cast Iron Tanks for Water	2	80 " "
Hangers large for 3" Shafting	11	330 " "
Swage Blocks and Stands	14	280 " "
Moulding boxes (at 80 Rs a Ton) Tons about	40	3200 " "
Carried Over		68,083 " "

Description		Number or Quantity	Value	
Brought over			68083	" "
Pulleys	64" × 8"	1	45	" "
Do	63" × 8"	1	40	" "
Do	36" × 18"	1	75	" "
Do	30" × 8"	1	16	" "
Do	27" × 18"	1	53	" "
Do	24" × 9"	1	18	" "
Do	24" × 7"	5	80	" "
Do	24" × 6"	3	60	" "
Do	22" × 12"	5	75	" "
Do	18" × 12"	6	90	" "
Do	16" × 12"	5	60	" "
Do	16" × 9"	1	11	" "
Do	16" × 8"	31	350	" "
~~Do~~	~~16" × 7"~~			
Do	14" × 5"	1	9	" "
Do	12" × 12"	2	16	" "
Do	12" × 8"	1	8	" "
Do	12" × 6"	4	28	" "
Do	9" × 9"	1	6	" "
Water Sprayhe Smiths		26	225	" "
Shafting	3/4"	14	140	" "
Do	3/8"	10	90	" "
Do	3/2"	10	85	" "
Carried Over			69665	" "

Description		Number or Quantity	Value	
Brought Over			69665	" "
Shafting	3" feet	122	854	" "
Do	2 3/4" "	28	210	" "
Do	2 1/2" "	10	70	" "
Do	2 3/8" "	129	645	" "
Surface plates		2	400	" "
Vices	large	26	260	" "
Do	Medium	29	194	" "
Do	Small	16	80	" "
Wall Brackets for Hangers	3"	2	60	" "
Do	Do for Bearings 2 3/8"	1	25	" "
Weetons patent differential Pulley to lift 4 Tons.		1	121	12 "
Standard for 40 H.P. Engine		1	300	" "
Crane for Steam Hammer		1	200	" "
Machine Saw Sharpening		1	350	" "
Cast Iron Stands	large	3	150	" "
Do	Do Do Small	2	25	" "
Total Rupees			73609	12 "

P. W. Smiths
Madras
25 Oct 82

Recommended
Lieut R.E.
Genl. Supt. P.W. Workshops

A

List of Workshop building &c with cost of construction.

Description	Amount	Remarks.
Main Building	91,278 " "	
Engine House	12,463 " "	
Foundry Building	12,752 " "	
Saw Mill Shed	6,792 " "	
Sheds for Stores	47,450 " "	
Smiths Shop (Southern row including latrines)	12,600 " "	
Carpenters Shed	10,330 " "	
Smiths Shop (Northern Row)	10,415 " "	
Cistern and Red Hills water Service pipes	3,050 " "	
Stable, Dining Room and latrines	780 " "	
Total Rs.	2,07,910 " "	

P. W. Workshops
Madras 25 ~~7~~ October ~~September~~ 1882.

Accountant. Lieut R.E.

Exam'd Supt'd P.W. Workshops

C

List of Works ordinarily carried on in the Public Works Workshops.

Manufacture

Steam Boilers, tubular and flue
Dredging Machinery
Boring Apparatus
Gearing for Sluice Shutters, lock gates &c
Wrought iron girders for bridges, roofs &c.
Forgings of all kinds.
Castings of all kinds both Iron and Brass.
Bells for churches &c
Turning, boring and planning &c for forgings and Castings supplied
Archimedian Water lifts
Surki Screens
Pumps deep well and hand
Machines for Special works, such as testing Coir, stone crushing, tile moulding &c.
Scales of every description
Standard weights and measures
Iron roofs
Locks of all kinds
Heliostats, Koorkee and Begbie's pattern
Signalling lamps of all kinds.
Road tracing Instruments
Engine turned Stamps.
Pattern making and other wood work thatis of a special character.

Repairs

Steam Engines, pumps and all kinds of Machinery

Theodolites, levels, Compasses, sextants, &
Barometers and all kinds of Mathematical
Instruments.

Repairs and jobs of the most varied des-
cription.

Plans, Estimates and designs are furnished
when required, and men are sent to any
part of the Presidency with tools for fitting
up work, driving machinery &c.

Vizagapatam
Madras
25 Oct 52

W.C. Baddeley
Lieut R.E.
Genl Supt P.W. Workshops

No. 2.41
6-2-85
7-50

Circular.

1. The Government propose to sell or let the whole of the Workshop land, buildings & machinery and plant, and tenders for the purchase or lease of the same will be received by the undersigned up to 1st February 1883.
2. The premises may be taken over on the Expiration of 4 months, from the date on which a tender is accepted.
3. The accompanying maps show the general arrangement and character of the buildings and also their position with regard to the Madras Railway Stations &c.
   The distance from the Egmore Station of the South Indian Railway is about 3 miles
4. The yard is supplied with water in pipes from the Red Hills tank, there is also a well which gives a fair supply, and & arrangements might be made for a rd connection with the adjoining Govern & wells water works.
5. The buildings are all in fair order, they were completed in 1875 and occupied in 1876.

6.

6. The work carried on comprises a large portion of the Iron work required by the different departments of Government in the Madras Presidency, there is also a demand for work to be done for the public and for ships in the Madras Roads.

7. The outturn during the last 5 years has been as follows.

1877-78—5,73,476 Rs
1878-79—2,58,201 "
1879-80—2,16,876 "
1880-81—2,08,888 "
1881-82—2,34,363 "

8. The book value of the buildings, machinery and plant, is given in the accompanying Statements A and B.

9. List C shows the nature of work hitherto carried on.

10. The Workshop can be inspected on any working day upon application to the undersigned to whom all enquiries should be addressed.

Lieut Baddeley
Lieut R.E
Genl Supdt P.W. Workshops

P.W. Workshops
Madras 25 Oct 1882

Notification.

Public Works Workshop
Madras

The Government propose to sell or let the whole of the Workshop land, buildings, machinery and plant, and tenders for the purchase or lease of the same will be received by the undersigned up to the 1st February 1883.

A circular giving information on the subject will be supplied on application to the undersigned.

All tenders will be submitted to the Chief Engineer P.W.D. who reserves the right of rejecting any or all of the Tenders without assigning any reason.

P.W. Workshop
Madras
25 Oct 1882

Underdown Lieut RE
Agent Supt P.W. Workshops

PRESIDENCY PUBLIC WORKS WORKSHOPS,

Madras 25th October 1882.

No. 1818 W.

From

THE GENERAL SUPERINTENDENT,

PUBLIC WORKS WORKSHOPS,

To

THE Chief Engineer
P.W.D.
Chepauk

SIR,

Enclosures 5
1 Plan sent in a Roll.
Sepauk

With reference to G.O. No 2488 dt 25th September 1882, I have the honor to submit a draft circular with block plan of the P.W. Stores and Workshops and Index map (on the smallest scale available) of the neighbourhood, which I propose distributing in accordance with the terms of the notice to be published in the different Gazettes.

2- The circular should be printed and the map lithographed; twenty copies of each would I think be sufficient. I enclose a draft of the notification which on approval will be published as directed.

I have the honor to be

Sir,

Your most Obedt Servant

Lieut R.E.

Actg Supdt P.W. Workshops

A-Rc 2488A/25-9-82

Public Works Workshops.

From

THE GENERAL SUPERINTENDENT,

P. W. WORKSHOPS,

MADRAS,

To

No. ..... W.

Dated .....
Despd. ..... 188 .
Recd. .....

No. OF ENCLOSURES.

Ga. 2995. 6 lw dy 13/11/82

To Supt

Forwarding copies of Circular and Notification for publication

Ce

30/10

W. For Ordrs.

30.10.82

11 Block plans handed over to Technical Section dy 16/11/82

orby 30/10 Rc 4/11

No 2995

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 13th November 1882

Read the following:—

From the General Supdt PW. Workshops, Madras } A.E. No 1818 dy 25th Oct. 82

The draft Circular and notification are appended for publication.

2. The Notification will be inserted in successive issues of the Fort St George Gazette upto the 1st February 1883, and Copies forwarded from the Secretariat for publication in the Gazette of India, the Calcutta Gazette, and the Bombay Gazette.

3 The Circular and blanks will be lithographed in the Chief Engineer's Office, and a sufficient number of Copies supplied to the General Superintendent for distribution.

(A.E. No 2996 dy 13th Nov 82)

The General Supdt PW. Workshops ✓
Supdy Engr. Fifth Circle ✓
Supdt. Fort St George Gazette ✓
with Copy of Notification ✓

Despd 14-11

Valuation Statement of Machinery and Plant in the Presidency

Public Works Workshops.

Description.	Number or Quantity	Value			Remarks.
Crane Travelling large	I	2000	0	0	
Cupolas large	2	4000	0	0	
Fan Blower large	I	820	0	0	
do. do. 3rd. Size	I	120	0	0	
Forges portable fan	4	400	0	0	
do. do. large	2	80	0	0	
Force Pump for testing Boilers large	I				
do. do. do. small	I	150	0	0	
Lathe Duplex Surfacing and boring large with face plate 8½″ Diameter	I	2000	0	0	
Do. Screw cutting 30-3″ (15″ centre and the other 12′)	2	7000	0	0	
Do. Do. 30′ and 15′ centre	I	3500	0	0	
Do. Do. 20-2″ and 24″ centre	I	3000	0	0	
Do. Do. 15-2″ and 10″ centre	I	1500	0	0	
Do. Do. 14-2″ and 10″ centre	I	1200	0	0	
Do. Do. 6-3″ and 6″ centre	I	800	0	0	
Do. Do. 6′ and 7″ centre	2	2000	0	0	
Do. Turning 12′ and 10″ centre	I	800	0	0	
Do Do. 8′ and 6″ centre	I	300	0	0	
Do. Wood Turning 8′ and 9″ centre	I	300	0	0	
Do. foot 6′ (3 of 6½″ I and 5″ centres	4	1200	0	0	
Do. Do. 6′ and 9″ centre	I	300	0	0	
Carried over		31820	0	0	

Description.	Number or quantity.	Value			Remarks.
Brought Over		31820	0	0	
Lathe foot Screw Cutting 5-3 and 6" centre	I	800	0	0	
Do. Do. Do. 5" and 6" centre	I	800	0	0	
Do. Do. Do. 4-6" and 5" centre	I	800	0	0	
Do. Do. Do. 3-6" and 5" centre	5	2300	0	0	
Do. Do. Glass Polishing of 2½" centre	I	30	0	0	
Machine Planning 14-10"	I	2000	0	0	
Do. Do. 9'	I	1500	0	0	
Do. Do. 2-9"	I	500	0	0	
Do. Do. 2-9"	I	400	0	0	
Do. Tapping 5-2"	I	700	0	0	
Do. Mill Boring large	I	1200	0	0	
Do. Drilling 8'	2	4000	0	0	
Do. Do. 7'	2	1500	0	0	
Do. Do. 6'	3	1500	0	0	
Do. Do. Wall	I	300	0	0	
Do. Slotting large	I	900	0	0	
Do. Do. small	I	500	0	0	
Do. Drilling hand	I	100	0	0	
Do. Plate bending	I	1000	0	0	
Do. Punching and shearing	I	400	0	0	
Do. Do. Do. large	I	1500	0	0	
Do. Band Saw	I	350	0	0	
Do. General Joiner	I	1200	0	0	
Do. Punching large	I	1000	0	0	
Do. Press fly Embossing	I	100	0	0	
Do. Hammer Steam 7½ Cwt.	I	2565	0	0	
Carried Over		59765	0	0	

Description.	Number or quantity.	Value			Remarks
Brought Over		59765	0	0	
Machine Saw Circular Table complete	I	400	0	0	
Do. Table Iron for marking	I	100	0	0	
Anvils	34	408	0	0	
Do. Coopers	2	40	0	0	
Bellows English	2	40	0	0	
Benches Carpenters	15	525	0	0	
Do. small	7	140	0	0	
Do. Filers large	5	500	0	0	
Bearings 5½"	3	225	0	0	
Do. 3½"	3	130	0	0	
Do. 3"	19	570	0	0	
Do. 2¾"	5	150	0	0	
Do. 2⅜"	28	700	0	0	
Buckets Foundry of Sizes	13	500	0	0	
Cast Iron Tanks for Water	2	80	0	0	
Hangers large for 3" Shafting	11	330	0	0	
Swage Blocks and Stands	14	280	0	0	
Moulding boxes (at 80.a Ton) Tons about	40	3200	0	0	
Pulleys 64" x 8"	I	45	0	0	
Do. 63" x 8"	I	40	0	0	
Do. 36" x 8"	I	75	0	0	
Do. 30" x 8"	I	16	0	0	
Do. 27" x 18"	I	55	0	0	
Do. 24" x 9"	I	18	0	0	
Do. 24" x 7"	5	80	0	0	
Carried Over		68412	0	0	

Description	Number or quantity	Value			Remarks.
Brought Over		68412	0	0	
Pulleys 24" × 6"	3	60	0	0	
Do. 22" × 12"	5	75	0	0	
Do. 18" × 12"	6	90	0	0	
Do. 16" × 12"	5	60	0	0	
Do. 16" × 9"	1	11	0	0	
Do. 16" × 8"	31	350	0	0	
Do. 14" × 5"	1	9	0	0	
Do. 12" × 12"	2	16	0	0	
Do. 12" × 8"	1	8	0	0	
Do. 12" × 6"	4	28	0	0	
Do. 9" × 9"	1	6	0	0	
Water Troughs Smiths	26	225	0	0	
Shafting 5½" feet	14	140	0	0	
Do. 3⅝" "	10	90	0	0	
Do. 3½" "	10	85	0	0	
Do. 3" "	122	845	0	0	
Do. 2¾" "	28	210	0	0	
Do. 2½" "	10	70	0	0	
Do. 2⅜" "	129	645	0	0	
Surface plates	2	400	0	0	
Vices large	26	260	0	0	
Do. Medium	29	194	0	0	
Do. Small	16	80	0	0	
Wall Brackets for Hangers 3"	2	60	0	0	
Do. Do. for Bearings 2⅜"	1	25	0	0	
Carried Over	.	72463	0	0	

Description.	Number or quantity.	Value.			Remarks.
Brought Over		72463	0	0	
Westons patent differential Pulley to lift 4 Tons	1	121	0	0	
Standard for 40 H.P. Engine	1	300	0	0	
Crane for Steam Hammer	1	200	0	0	
Machine Saw Sharping	1	350	0	0	
Cast Iron Stands large	3	150	0	0	
Do. Do. Do. small	2	25	0	0	
Total Rupees	.	73609	0	0	

(Sigd.) W.L.C. Baddeley Lieut. R.E.

Genl. Supt. P.W. Workshops.

P.W. Workshops

Madras 25th. October 1882.

C.

List of Works ordinarily carried on in the P.W.Workshops.

Manufacture.

Steam Boilers, tubular and flue.

Dredging Machinery.

Boring Apparatus.

Gearing for Sluice Shutters, lock gates &ca.

Wrought iron girders for bridges, roofs &ca.

Forgings of all kinds.

Castings of all kinds both Iron and Brass.

Bells for Churches &ca.

Turning, boring and planning &ca. for forgings and Castings supplied.

Archimedian Water lifts.

Surki Screens.

Pump deep well and hand.

Machines for special works, such as testing coin Stone crushing, tile moulding &ca.

Scales of every description.

Standard weights and measures.

Iron roofs.

Locks of all kinds.

Heliostats, Roorkee and Begbies pattern.

Signalling lamps of all kinds.

Road tracing Instruments.

Engine turned Stamps.

Pattern making and other wood work that is of a special character.

Repairs.

Repairs.

Steam Engines, pumps and all kinds of Machinery.

Theodolites, Levels, Compasses, Sextants, Baromateis and all kinds of Mathematical Instruments.

Repairs and jobs of the most varied description.

Plans Estimates and designs are furnished when required, and men are sent to any part of the Presidency with tools for fitting up work, driving machinery &ca.

(Sigd.) W.L.C. Baddeley Lieut. R.E.

Genl. Supt. P.W. Workshops.

P.W. Workshops

Madras 25th. October I882.

C I R C U L A R.

1. The Government propose to sell or let the whole of the Workshops land, buildings Machinery and plant, and tenders for the purchase or lease of the same will be received by the undersigned up to Ist. February I883.

2. The premises may be taken over on the expiration of 4 months, from the date on which a tender is accepted.

3. The accompanying maps shew the general arrangement and character of the buildings, and also their position with regard to the Madras Railway Stations &ca.
The distance from the Egmore Station of the South Indian Railway is about 3 miles.

4. The yard is supplied with water in pipes from the Red Hills tank, there is also a well which gives a fair supply, and arrangements might be made for a connection with the adjoining Seven wells water works.

5. The buildings are all in fair order, they were completed in I875 and occupied in I876.

6. The work carried on comprises a large portion of the Iron work required by the different departments of Government in the Madras Ppresidency, there is also a demand for work to be done for the public and ships in the Madras Roads

7. The outturn during the last 5 years has been as follows.

I877-78 = 573476 Rs.

I878-79 = 258201 "

I879-80 = 216876 "

I880-8I = 208888 "

I88I-82 = 234363 "

8. The

8. The book value of the buildings,Machinery and plant, is given in the accompanying Statements A and B.

9. List C shews the nature of work hitherto carried on.

I0. The Workshop can be inspected on any working day upon application to the undersigned to whom all enquiries should be addressed.

(Sigd.) W.L.C.Baddeley Lieut.R.E.

Genl Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October I882.

A.

List of Workshop buildings with cost of construction:

Description.	Amount.			Remarks.
Main Building	91278	0	0	
Engine House	12463	0	0	
Foundary Building	12752	0	0	
Saw Mill Shed	6792	0	0	
Sheds for Stores	47450	0	0	
Smiths Shop (Southern row including Latrine	12600	0	0	
Carpenters Shed	10330	0	0	
Smiths Shop(Northern Row.)	10415	0	0	
Cistern and Red Hills Water service pipes	3050	0	0	
Stable, Dining Room & Latrines	780	0	0	
Total Rupees	207910	0	0	

(Sigd.)W.L.C.Baddeley Lieut.R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

Valuation Statement of Machinery and Plant in the Presidency Public Works Workshops.

Description.	Number or Quantity	Value			Remarks.
Crane Travelling large	I	2000	0	0	
Cupolas large	2	4000	0	0	
Fan Blower large	I	820	0	0	
do. do. 3rd. Size	I	120	0	0	
Forges portable fan	4	400	0	0	
do. do. large	2	80	0	0	
Force Pump for testing Boilers large	I				
do. do. do. small	I	150	0	0	
Lathe Duplex Surfacing and boring large with face plate 8½ Diameter	I	2000	0	0	
Do. Screw cutting 30-3″(15″ centre and the other 12″)	2	7000	0	0	
Do. Do. 30′ and 15″ centre	I	3500	0	0	
Do. Do. 20′-2″ and 24″ centre	I	3000	0	0	
Do. Do. 15′-2″ and 10″ centre	I	1500	0	0	
Do. Do. 14′-2″ and 10″ centre	I	1200	0	0	
Do. Do. 6′-3″ and 6″ centre	I	800	0	0	
Do. Do. 6′ and 7″ centre	2	2000	0	0	
Do. Turning 12′ and 10″ centre	I	800	0	0	
Do Do. 8′ and 6″ centre	I	300	0	0	
Do. Wood Turning 8′ and 9″ centre	I	300	0	0	
Do. foot 6 (3 of 6½ I and 5″ centres	4	1200	0	0	
Do. Do. 6′ and 9″ centre	I	300	0	0	
Carried over		31820	0	0	

Description.	Number or quantity.	Value			Remarks.
Brought Over		31820	0	0	
Lathe foot Screw Cutting 5-3 and 6" centre	I	800	0	0	
Do. Do. Do. 5 and 6" centre	I	800	0	0	
Do. Do. Do. 4-6" and 5" centre	I	800	0	0	
Do. Do. Do. 3-6" and 5" centre	5	2300	0	0	
Do. Do. Glass Polishing of 2½" centre	I	30	0	0	
Machine Planning 14-10"	I	2000	0	0	
Do. Do. 9'	I	1500	0	0	
Do. Do. 2-9"	I	500	0	0	
Do. Do. 2-9"	I	400	0	0	
Do. Tapping 5-2"	I	700	0	0	
Do. Mill Boring large	I	1200	0	0	
Do. Drilling 2'	2	4000	0	0	
Do. Do. 7'	2	1500	0	0	
Do. Do. 6'	3	1500	0	0	
Do. Do. Wall	I	300	0	0	
Do. Slotting large	I	900	0	0	
Do. Do. small	I	500	0	0	
Do. Drilling hand	I	100	0	0	
Do. Plate bending	I	1000	0	0	
Do. Punching and shearing	I	400	0	0	
Do. Do. Do. large	I	1500	0	0	
Do. Band Saw	I	350	0	0	
Do. General Joiner	I	1200	0	0	
Do. Punching large	I	1000	0	0	
Do. Press fly Embossing	I	100	0	0	
Do. Hammer Steam 7½ Cwt.	I	2565	0	0	
Carried Over		59765	0	0	

Description.	Number or quantity.	Value			Remarks.
Brought Over		59765	0	0	
Machine Saw Circular Table complete	I	400	0	0	
Do. Table Iron for marking	I	100	0	0	
Anvils	34	408	0	0	
Do. Coopers	2	40	0	0	
Bellows English	2	40	0	0	
Benches Carpenters	15	525	0	0	
Do. small	7	140	0	0	
Do. Filers large	5	500	0	0	
Bearings 5½"	3	225	0	0	
Do. 3½"	2	130	0	0	
Do. 3"	19	570	0	0	
Do. 2¾"	5	150	0	0	
Do. 2⅝"	28	700	0	0	
Buckets Foundry of Sizes	12	500	0	0	
Cast Iron Tanks for Water	2	20	0	0	
Hangers large for 3 Shafting	11	330	0	0	
Swage Blocks and Stands	14	280	0	0	
Moulding boxes (at 80.a Ton) Tons about	40	3200	0	0	
Pulleys 64" x 8"	I	45	0	0	
Do. 63" x 8"	I	40	0	0	
Do. 36" x 8"	I	75	0	0	
Do. 30" x 8"	I	18	0	0	
Do. 27" x 18"	I	55	0	0	
Do. 24" x 9"	I	18	0	0	
Do. 24" x 7"	5	30	0	0	
Carried Over		68412	0	0	

Description	Number or quantity	Value			Remarks.
Brought Over		684I2	0	0	
Pulleys 24″×6″	3	60	0	0	
Do. 22″×I2″	5	75	0	0	
Do. I8″×I2″	6	90	0	0	
Do. I6″×I2″	5	60	0	0	
Do. I6″×9″	I	II	0	0	
Do. I6″×8″	3I	350	0	0	
Do. I4″×5″	I	9	0	0	
Do. I2″×I2″	2	I6	0	0	
Do. I2″×8″	I	8	0	0	
Do. I2″×6″	4	28	0	0	
Do. 9″×9″	I	6	0	0	
Water Troughs Smiths	26	225	0	0	
Shafting 5½″ feet	I4	I40	0	0	
Do. 3⅝″ ″	I0	90	0	0	
Do. 3½″ ″	I0	85	0	0	
Do. 3″ ″	I22	845	0	0	
Do. 2¾″ ″	28	2I0	0	0	
Do. 2½″ ″	I0	70	0	0	
Do. 2⅜″ ″	I29	645	0	0	
Surface plates	2	400	0	0	
Vices large	26	260	0	0	
Do. Medium	29	I94	0	0	
Do. Small	I6	80	0	0	
Wall Brackets for Hangers 3″	2	60	0	0	
Do. Do. for Bearings 2⅜″	I	25	0	0	
Carried Over	.	72463	0	0	

Description.	Number or quantity.	Value.			Remarks.
Brought Over		72463	0	0	
Westons patent differential Pulley to lift 4 Tons	I	I2I	0	0	
Standard for 40 H.P.Engine	I	300	0	0	
Crane for Steam Hammer	I	200	0	0	
Machine Saw Sharping	I	350	0	0	
Cast Iron Stands large	3	I50	0	0	
Do. Do. Do. small	2	25	0	0	
Total Rupees	.	73609	0	0	

(Sigd.) W.L.C.Baddeley Lieut. R.E.

Genl.Supt. P.W.Workshops.

P.W.Workshops

Madras 25th.October I882.

Rest of Works ordinarily carried on in the P.W.Workshops.

Manufacture.

Steam Boilers, tubular and flue.

Dredging Machinery.

Boring Apparatus.

Gearing for Sluice Shutters, lock gates &ca.

Wrought iron girders for bridges, roofs &ca.

Forgings of all kinds.

Castings of all kinds both Iron and Brass.

Bells for Churches &ca.

Turning, boring and planning &ca. for forgings and Castings supplied.

Archimedian Water lifts.

Surki Screens.

Pump deep well and hand.

Machines for special works, such as testing coin Stone crushing, tile moulding &ca.

Scales of every description.

Standard weights and measures.

Iron roofs.

Locks of all kinds.

Heliostats, Roorkee and Begbies pattern.

Signalling lamps of all kinds.

Road tracing Instruments.

Engine turned Stamps.

Pattern making and other wood work that is of a special character.

Repairs.

Repairs.

Steam Engines, pumps and all kinds of Machinery.

Theodolites, Levels, Compasses, Sextants, Baromaters and all kinds of Mathematical Instruments.

Repairs and jobs of the most varied description.

Plans Estimates and designs are furnished when required, and men are sent to any part of the Presidency with tools for fitting up work, driving machinery &ca.

(Sigd.) W.L.C. Baddeley Lieut. R.E.

Genl. Supt. P.W. Workshops.

P.W. Workshops

Madras 25th. October 1882.

C I R C U L A R.

1. The Government propose to sell or let the whole of the Workshops land, buildings Machinery and plant, and tenders for the purchase or lease of the same will be received by the undersigned up to Ist. February 1883.

2. The premises may be taken over on the expiration of 4 months, from the date on which a tender is accepted.

3. The accompanying maps shew the general arrangement and character of the buildings, and also their position with regard to the Madras Railway Stations &ca.

The distance from the Egmore Station of the South Indian Railway is about 3 miles.

4. The yard is supplied with water in pipes from the Red Hills tank, there is also a well which gives a fair supply, and arrangements might be made for a connection with the adjoining Seven wells water works.

5. The buildings are all in fair order, they were completed in 1875 and occupied in 1876.

6. The work carried on comprises a large portion of the Iron work required by the different departments of Government in the Madras Ppresidency, there is also a demand for work to be done for the public and ships in the Madras Roads

7. The outturn during the last 5 years has been as follows.

1877-78 = 573476 Rs.

1878-79 = 258201 "

1879-80 = 216876 "

1880-81 = 208888 "

1881-82 = 234363 "

8. The

A 995 Vol 13-1882
2996

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

No. 192.

READ—the following letter from Colonel H. L. PRENDERGAST, R.E., Superintending Engineer, V Circle, to the Chief Engineer, Public Works Department, dated Madras, 13th September 1882, No. 2161 :—

Letter, No. 1447, dated 7th September 1882.
" " 1090, " 8th " "
Lists A, B, C, and D.
One Block Plan.

I have the honor to inform you that I have discussed with the General Superintendent of the Public Works Workshop your memorandum, No. 628, of the 24th ultimo, and Lieutenant Baddeley has given me the enclosed papers on the subject of closing the workshops.

2. The first step has been taken, in the refusal to accept work except for the Public Works Department and with the exception of work in the instrument department. I have also recommended, in my letter, No. 2118, of the 9th instant, that no work should be done after the 30th November for other departments.

3. The next point (paragraph 9 of Lieutenant Baddeley's letter) is that Public Works officers should refrain from giving orders to the workshop. But I would say nothing about the cost of work, when the workshops are closed the market prices must be accepted, and I would call upon departmental officers to abstain from applying to the workshop generally, or unless they cannot get their requirements elsewhere. There may be some trouble, some delay and extra cost, but these drawbacks are inevitable.

4. There is work now in hand in the workshop, but as it will gradually fall off there can be a reduction made in the number of workmen, while at the same time the machinery can be kept in order. Lieutenant Baddeley considers that it is of much importance that the shops should not be altogether closed; so that on inspection it may be evident that the machinery is in working order.

5. The maintenance of a small workshop will (paragraph 10) be expensive in comparison with the small amount of work to be done. The details will require careful consideration, for it appears to me that when work is generally transferred elsewhere the rest may likewise follow. Still a small workshop will not cause any heavy expense : while at the same time it cannot be expected to be self-supporting. In paragraph 17, Lieutenant Baddeley represents the need of an instrument-maker and a shop for him to carry out repairs. I consider this is highly desirable : but yet in working out the principle of abolition, if the Revenue Survey Department can get

their instruments repaired elsewhere, the Public Works Department can do so also. There may, however, be a small instrument department maintained with a small working shop without much expense.

6. As to reduction of establishment: this should be carried out on the general principle of reduction, such as took place in the Public Works Department recently, transfers being made where practicable. Care should be taken that in all cases three months' notice to quit should be given in good time. In fact, as a precaution, this had better be given to all employed in the workshops.

7. The list of buildings, A, gives the total cost of construction, Rs. 2,07,910. No allowance is made in these figures for depreciation. The value as a selling price will have to be considered before tenders for purchase or rent may be received.

List B is a valuation statement of machinery and plan, amounting to Rs. 81,464. This is the last valuation made nearly five years ago, and must therefore be considered as higher than the present price. It has also been stated lately by the General Superintendent that much of the machinery is old, so that it compares unfavorably in both make and cost with modern machinery. I allude to the reference made by the Superintending Engineer of the II Circle as to defective parts and high cost of articles sent to the Kistna. Hence it must be expected that there will be offers of much less than book value.

List C gives a description of the nature of work done in the workshops: the value is entered in paper D.

The paper D is a draft notice, inviting tenders for purchase or hire of the shops.

8. A serious difficulty arises in the question of the future location of the stores and such minor working shop as may be retained. The machine shop and office rooms are in the main building, the instruments and valuable small stores are in the upper-storey; while the heavy stores are in the separate building, called the store-shed on the block plan, and the State Railway stores are in the store-yard. The machine shop must go with the work-sheds, and it is not possible to divide the main building so that a part might be kept for the Government Stores Department. Hence, if an offer for the whole premises be accepted, the Government property will have to be removed and another place must be found. There are no Government buildings available, and therefore they must be built.

But in the event of no suitable offer being made, the present work-yard and buildings will remain on the hands of the Government, and as this cannot be considered an impossible contingency it will not do to incur the expense of constructing new buildings beforehand. I can only suggest that plans and estimates be made at once for future requirements, and that it be notified in the call for tenders that the premises can be taken over at a future date, say, after the 30th June or from such date as will allow of four months' interval for the construction of the buildings.

9. The Public Works Stores must, it is presumed, be kept up (paragraph 13 to 15) and will require a store-shed, there must be an enclosed yard for heavy stores and the State Railway stores, there must be an instrument shop and workshop. The Government machinery stores can be left where they now are in a part of the old Mint premises. It is desirable that Sub-Engineer Francis should be available to look after the machinery at the General Hospital and the Guindy Water Works, and he might do so as a sub-divisional officer under the Presidency Executive Engineer, having also charge of the repair shop.

10. For the present I would ask for orders on the following points:—

I. Will orders be given to Public Works officers to abstain from making demands on the workshop? Paragraph 3 above.

II. Shall there be a small workshop maintained? } Paragraph 5 above.
III. And an instrument-maker's shop? }

IV. Shall the General Superintendent make a list of establishment to be kept for II and III and for the stores? Paragraph 6 above.

V. Is it contemplated that there should be a new set of buildings, and estimates prepared, as suggested in paragraph 8 above?

Enclosure.

From Lieutenant W. L. C. BADDELEY, R.E., General Superintendent, Public Works Stores and Workshops, to the Superintending Engineer, V Circle, dated Madras, 7th September 1882, No. 1447 W.

With reference to your No. 1952 of 28th August 1882, I have the honor to submit my proposals for carrying into effect the orders of Government in No. 2064 W. of 12th August 1882.

Map.
List of Buildings.
,, of Works.
,, of Machinery, &c.
Draft Circular.
Chief Engineer's letter, No. 628 E., of 24th August 1882.

2. The General Superintendent of the Public Works Stores and Workshops is in charge of the following:—

1. Public Works Stores and Mathematical Instrument Department.
2. Public Works Workshops.
3. State Railway Stores.
4. Government Machinery Stores.
5. Machinery at the General Hospital for working the punkahs, and Water Works at Guindy.

3. The Public Works Stores and the Public Works Workshops occupy the same buildings, all office work connected with State Railway stores is conducted in the Public Works Stores office, and all State Railway stores in the custody of the General Superintendent are stacked in the Public Works store-yard.

4. The mathematical instrument department is usually considered as part of the workshops, but it is now necessary to recognize the difference, for the repair of instruments is totally distinct from repairs to machinery, and it does not follow that because Government wish to close the workshops they should also wish to abolish the mathematical instrument department.

5. The Government machinery stores are situated in a portion of the old Mint which is adjacent to the Public Works Stores and Workshops.

6. The machinery at the General Hospital and the Guindy Water Works is worked by employés of the workshops, and all office work is carried on in the office of the Public Works Workshops.

7. As matters now stand, the iron and heavy goods belonging to the Public Works Stores are kept in the shed marked on plan as "store-shed," while the instruments and other valuable articles are kept in a portion of the upper-storey of the "main building," and the repair of instruments is carried on in a portion of the lower-storey of the same building.

It is impossible to reserve any portion of the present building for the Public Works Stores and mathematical instrument department, for the only building suitable for the purpose is the main building, and this must be given up to the firm which takes over the workshop, for it contains the machine shop and all the office-rooms.

It is difficult in a short letter to anticipate all the suggestions that, from an inspection of the plan, might appear feasible for setting aside a portion of the building for the Public Works Stores and mathematical instrument department; but after careful consideration I am confident that such an arrangement would be impracticable.

8. When the buildings now occupied by the Public Works Stores and Workshops have been sold or leased, it will be necessary for Government to arrange for the custody of the stores, and the performance of the duties connected with—

1. Public Works Stores and Mathematical Instrument Department;
2. State Railway Stores;
3. Government Machinery Stores;
4. Machinery at the General Hospital and Guindy Water Works,

and therefore, when I have submitted my proposals for the abolition of the Public Works Workshops, I shall offer certain suggestions which, I trust, will be found of some value in arranging for carrying on the work detailed above.

9. At present the Public Works Workshop executes a considerable amount of work for *all* departments of Government, and obviously therefore the first step towards reduction is the refusal of all work except for the Public Works Department, and this step has already been taken except in the mathematical instrument department.

Secondly, I would propose sending a circular to every Superintending Engineer for distribution, pointing out the necessity of encouraging private enterprise, and requesting that no work of any kind be sent to the workshop if it can be carried out at a reasonable rate by a private firm.

The result of this will be that a considerable reduction can be made in the number of workmen employed, and yet, as work will not be entirely stopped, the machinery and plant can be kept in working order, so that as soon as a firm comes forward to purchase or rent the concern it can be handed over ready for immediate use.

This is, in my opinion, a most important point, for if the shops were totally closed and the machinery left idle for six months, the depreciation in this climate would be so great that a large portion would become unserviceable, and it requires no argument to prove that an intending purchaser of a large concern like the Public Works Workshops would be more inclined to make a liberal offer for an establishment in working order than for one which had been idle for some time.

10. As regards the maintenance of a small Government shop, except for repairs to mathematical instruments and work of that nature, I am of opinion that it will not be needed, for when once a private firm is established in the workshop buildings, it can easily execute every bit of work, down to the smallest repair; also it must be remembered that a shop which is only to be used by the Department of Public Works for repairs and trifling manufacture must be a most expensive one, for the cost of supervision and the outlay on machinery will be distributed over a very small quantity of work; for example the most trifling repairs will require castings of iron and brass, screws to be cut, surfaces to be planed, and various other processes which are continually in progress in a large shop, all of which will require steam-power, machinery, skilled-labor and supervision.

11. While the operations of the workshops are being steadily reduced in the manner described, the accompanying circular might be distributed in whatever manner Government think best.

12. Assuming that the publication of the views of Government leads to the transfer of the workshop to a private firm, it remains to be considered what is to become of the establishment, and my views on this are—

(1.) Mr. Francis, the Sub-Engineer, should be attached to the Presidency District where his services will be of the greatest value in looking after the machinery at the General Hospital and Guindy Water Works, he will also be available for any work in other districts which may require an experienced Mechanical Engineer.

(2.) Mr. Willis, the Overseer, who is a carpenter by trade, should be posted, if possible, to one of the workshops in the north of the Presidency, if not his services should be utilized whenever a foreman carpenter is required.

(3.) The Maistries are divided into two classes, one consisting of men who have served Government for a large number of years, and the other of men who have only been promoted within the last few years; the former class will probably retire from work when the workshop is transferred, and the latter will find ready employment under the new state of things.

(4.) The workmen, as a rule, will be employed by the firm which takes over the workshop, but there are some who, from length of service or by reason of injuries received while in Government employ, may be entitled to special consideration.

(5.) The clerks, who are not entitled to pensions, will, I hope, be absorbed into other Government offices, as vacancies occur.

13. I have now, I trust, shown how the workshops can be gradually reduced, and eventually handed over to private enterprise with the least inconvenience to the Public Works Department, the least loss to Government, and the least distress to the large number of men who now earn their living in the workshops, and I will therefore proceed to discuss the Public Works Stores.

It is unadvisable to do away with the Public Works Stores, for there must be a central depôt for preparing indents, receiving supplies, storing them, issuing as required, and performing the various duties connected therewith; also in combination with the stores it is absolutely essential that there should be a mathematical instrument department, where every instrument, &c., can be examined before issue, and repaired when necessary.

It will be impossible to reserve any portion of the present building for the Public Works Stores and the mathematical instrument department, and it will therefore be necessary to locate them elsewhere, bearing in mind the following conditions:—

(1.) The store-sheds must be of fairly strong construction, viz., brick in mortar with corrugated iron roof.

(2.) There should be a suitable room for the instrument shop.

(3.) There should be an enclosed yard for storing heavy machines and goods.

(4.) The stores should be as near as possible to the pier.

14. The question as to whether the Public Works Stores are to continue to carry on the work of landing and despatching all State Railway stores which are sent through Madras, will require consideration; in my opinion there is no more economical arrangement than to place the Public Works stores, State Railway stores, and mathematical instrument department under one officer.

15. The Government machinery stores should, I think, be handed over to the Ordnance Department, but if Government are of opinion that the Public Works Department should continue to have charge of all spare machinery belonging to the different departments of Government, this appointment should be combined with that of the Public Works Stores, &c.

16. The machinery at the General Hospital and the Guindy Water Works should be placed in charge of the Executive Engineer, Presidency.

17. I must now revert to the question of keeping up a Government mathematical instrument department in connection with the Public Works Stores, either exclusively for the use of the Public Works Department or for the benefit of all Government departments. At present every instrument issued by the Public Works Stores is first passed through the mathematical instrument department, where it is examined and repaired if necessary; in like manner every instrument returned to store is examined in the mathematical instrument department and classed as "serviceable," "repairable" or "unserviceable." If the mathematical instrument department is abolished it will still be necessary for a mathematical instrument-maker to be attached to the Public Works Stores, but his services will never be fully utilized unless he has a shop in which he can carry out repairs. The mathematical instrument department now repairs all instruments, and executes a great variety of work for all departments of Government, and it is impossible, in my opinion, to propose any better or more economical arrangement than (in connection with the Public Works Stores) to maintain an instrument department for the repair of all Government levels, theodolites, &c., and for the manufacture of scales, seals, badges, weights, measures, &c., and the various other articles which are continually required by all departments of Government.

No. 193.

ORDER—dated 25th September 1882, No. 2488 W., Public Works.

With the letter above recorded the Superintending Engineer, V Circle, submits proposals for giving effect to the decision of Government, recorded in G.O., No. 2064 W., dated 12th August 1882, for restricting the operations of the Public Works Workshops at Madras to the execution of such repairs and trifling manufacture as may be required by the Public Works Department and cannot be executed in the open market, and for disposing of the buildings and plant which would thus become available.

2. It is explained that the first step for the accomplishment of the object in view has already been taken in the refusal to accept work except that required by the Public Works Department and in the instrument shops.

3. These arrangements are approved. Officers of the Public Works Department will now be directed to abstain as far as practicable from giving orders for work at the shops, and no new work for other departments should be accepted after the end of the present year.

4. A small workshop will thus still be required for departmental purposes, and the nucleus of this may, for the present, be organized within the present shops. Tenders will meanwhile be invited for the purchase of the existing buildings and available plant, and as soon as they have been received and decided on, the reduced Government establishment may, if necessary, be removed elsewhere.

5. It may be practicable to have the mathematical instrument work of the department executed in Calcutta, should local firms be unable to take it up. The Surveyor-General will be communicated with on the subject.

6. As regards the disposal of the existing establishment, many of the workmen will no doubt find employment with the firms which will take over the work which the Government are now surrendering, and the others will be absorbed gradually. In any case no immediate action seems necessary, and the details of the process may well be left to be worked out by the Superintending Engineer as circumstances admit.

7. It is premature to issue any definite orders as to erection of new buildings at present. There will be ample time for decision on this question after tenders for taking over existing block and plant have been considered. Tenders may be received up to the 1st February next, and the interval should be utilized in printing and circulating lists, which should be accompanied by a lithograph block plan of the buildings, on a somewhat smaller scale than that sent up, and a small index map of Madras on the same sheet. The index map should show the situation of the shops with reference to a few of the most important places, *e.g.*, the harbour, railway stations, fort, &c.

8. The notices should be published in the *Fort St. George Gazette*, the *Bombay Gazette*, and the *Gazette of India*.

9. The General Superintendent of the Workshops will take the requisite action for giving effect to these orders, submitting drafts of notifications for insertion in the Gazettes outside the Presidency.

(Here enter No. 2489 W., dated 25th September 1882.)

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the General Superintendent, Public Works Workshops, with enclosures.
To Superintending Engineers.
To the Consulting Architect to Government.
" Chief Engineer for Irrigation.
" Consulting Engineer for Railways.
" Examiner, Public Works Accounts.
" Revenue Department.
" Military "
" Public, &c., Departments.

Exd. E. Fernandez.

GENERAL.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated September, 25th.

Recd. *Encl.*

G.O., 25th Sept. 1882, No. 2488 W.

SEPTEMBER.

Public Works Workshops at Madras

Orders on proposals of the Superintending Engineer, V Circle, for restricting the operations of the Public Works Workshops at Madras to the execution of such repairs and trifling manufacture as may be required by the Public Works Department and which cannot be done in the market.

PUBLIC WORKS DEPARTMENT.

General.
Account.

No. 193-A.

LETTER—from

COLONEL R. H. SANKEY, C.B., R.E.,
Secretary to Government, Public Works Department,

To

THE SURVEYOR-GENERAL,
CALCUTTA.

SIR,

Adverting to the accompanying copy of Proceedings of Government, under date the 25th September 1882, No. 2488 W., I am directed to inquire whether you would be prepared to undertake the repair of mathematical instruments of the Madras Public Works Department should the local instrument shop be closed; and whether you anticipate that the arrangement would involve undue delay or excessive cost.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

FORT ST. GEORGE,
25th September 1882.

Exd. S. T. Austin.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated September, 25th.

Recd. *Encl.*

25th Sept. 1882, No. 2489 W.

SEPTEMBER.

No. 193-A.

Mathematical Instrument of the Madras Public Works Department.

Enquiring if the Surveyor-General, Calcutta, would undertake the repair of —.

C I R C U L A R.

1. The Government propose to sell or let the whole of the Workshops land, buildings Machinery and plant, and tenders for the purchase or lease of the same will be received by the undersigned up to Ist. February I883.

2. The premises may be taken over on the expiration of 4 months, from the date on which a tender is accepted.

3. The accompanying maps shew the general arrangement and character of the buildings, and also their position with regard to the Madras Railway Stations &ca.
The distance from the Egmore Station of the South Indian Railway is about 3 miles.

4. The yard is supplied with water in pipes from the Red Hills tank, there is also a well which gives a fair supply, and arrangements might be made for a connection with the adjoining Seven wells water works.

5. The buildings are all in fair order, they were completed in I875 and occupied in I876.

6. The work carried on comprises a large portion of the Iron work required by the different departments of Government in the Madras Ppresidency, there is also a demand for work to be done for the public and ships in the Madras Roads

7. The outturn during the last 5 years has been as follows.

I877-78 = 573476 Rs.
I878-79 = 258201 "
I879-80 = 216876 "
I880-8I = 206888 "
I88I-82 = 234363 "

8. The

8. The book value of the buildings, Machinery and plant, is given in the accompanying Statements A and B.

9. List C shews the nature of work hitherto carried on.

IO. The Workshop can be inspected on any working day upon application to the undersigned to whom all enquiries should be addressed.

(Sigd.) W.L.C.Baddeley Lieut.R.E.
Genl Supt.P.W.Workshops.

P.W.Workshops
Madras 25th.October 1882.

Description.	Number or quantity.	Value.			Remarks.
Brought Over		72463	0	0	
Westons patent differential Pulley to lift 4 Tons	I	I2I	0	0	
Standard for 40 H.P.Engine	I	300	0	0	
Crane for Steam Hammer	I	200	0	0	
Machine Saw Sharping	I	350	0	0	
Cast Iron Stands large	3	I50	0	0	
Do. Do. Do. small	2	25	0	0	
Total Rupees	.	73609	0	0	

(Sigd.) W.L.C.Baddeley Lieut. R.E.

Genl.Supt. P.W.Workshops.

P.W.Workshops

Madras 25th.October I882.

A.

List of Workshop buildings with cost of construction:

Description.	Amount.			Remarks.
Main Building	91278	0	0	
Engine House	I2463	0	0	
Foundary Building	I2752	0	0	
Saw Mill Shed	6792	0	0	
Sheds for Stores	47450	0	0	
Smiths Shop (Southern row including Latrine	I2600	0	0	
Carpenters Shed	I0330	0	0	
Smiths Shop(Northern Row.)	I04I5	0	0	
Cistern and Red Hills Water service pipes	3050	0	0	
Stable, Dining Room & Latrines	780	0	0	
Total Rupees	207910	0	0	

(Sigd.)W.L.C.Baddeley Lieut.R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops.

Madras 25th.October I882.

Description.	Number or quantity.	Value			Remarks.
Brought Over		31820	0	0	
Lathe foot Screw Cutting 5'-3" and 6" centre	I	800	0	0	
Do. Do. Do. 5' and 6" centre	I	800	0	0	
Do. Do. Do. 4'-6" and 5" centre	I	800	0	0	
Do. Do. Do. 3'-6" and 5" centre	5	2300	0	0	
Do. Do. Glass Polishing of 2½" centre	I	30	0	0	
Machine Planning I4'-I0"	I	2000	0	0	
Do. Do. 9'	I	I500	0	0	
Do. Do. 2'-9"	I	500	0	0	
Do. Do. 2'-9"	I	400	0	0	
Do. Tapping 5'-2"	I	700	0	0	
Do. Mill Boring large	I	I200	0	0	
Do. Drilling 8'	2	4000	0	0	
Do. Do. 7'	2	I500	0	0	
Do. Do. 6'	3	I500	0	0	
Do. Do. Wall	I	300	0	0	
Do. Slotting large	I	900	0	0	
Do. Do. small	I	500	0	0	
Do. Drilling hand	I	I00	0	0	
Do. Plate bending	I	I000	0	0	
Do. Punching and shearing	I	400	0	0	
Do. Do. Do. large	I	I500	0	0	
Do. Band Saw	I	350	0	0	
Do. General Joiner	I	I200	0	0	
Do. Punching large	I	I000	0	0	
Do. Press fly Embossing	I	I00	0	0	
Do. Hammer Steam 7½ Cwt.	I	2565	0	0	
Carried Over		59765	0	0	

Description.	Number or quantity.	Value			Remarks
Brought Over		59765	0	0	
Machine Saw Circular Table complete	I	400	0	0	
Do. Table Iron for marking	I	I00	0	0	
Anvils	34	408	0	0	
Do. Coopers	2	40	0	0	
Bellows English	2	40	0	0	
Benches Carpenters	I5	525	0	0	
Do. small	7	I40	0	0	
Do. Filers large	5	500	0	0	
Bearings 5½"	3	225	0	0	
Do. 3½"	3	I30	0	0	
Do. 3"	I9	570	0	0	
Do. 2¾"	5	I50	0	0	
Do. 2⅜"	28	700	0	0	
Buckets Foundry of Sizes	I3	500	0	0	
Cast Iron Tanks for Water	2	80	0	0	
Hangers large for 3 Shafting	II	330	0	0	
Swage Blocks and Stands	I4	280	0	0	
Moulding boxes (at 80.a Ton) Tons about	40	3200	0	0	
Pulleys 64" x 8"	I	45	0	0	
Do. 63" x 8"	I	40	0	0	
Do. 36" x 8"	I	75	0	0	
Do. 30" x 8"	I	I6	0	0	
Do. 27" x I8"	I	55	0	0	
Do. 24" x 9"	I	I8	0	0	
Do. 24" x 7"	5	80	0	0	
Carried Over		68412	0	0	

Description	Number or quantity	Value			Remarks.
Brought Over		68412	0	0	
Pulleys 24" × 6"	3	60	0	0	
Do. 22" × 12"	5	75	0	0	
Do. 18" × 12"	6	90	0	0	
Do. 16" × 12"	5	60	0	0	
Do. 16" × 9"	1	11	0	0	
Do. 16" × 8"	31	350	0	0	
Do. 14" × 5"	1	9	0	0	
Do. 12" × 12"	2	16	0	0	
Do. 12" × 8"	1	8	0	0	
Do. 12" × 6"	4	28	0	0	
Do. 9" × 9"	1	6	0	0	
Water Troughs Smiths	26	225	0	0	
Shafting $5\frac{1}{2}$" feet	14	140	0	0	
Do. $3\frac{5}{8}$" "	10	90	0	0	
Do. $3\frac{1}{2}$" "	10	85	0	0	
Do. 3" "	122	845	0	0	
Do. $2\frac{3}{4}$" "	28	210	0	0	
Do. $2\frac{1}{2}$" "	10	70	0	0	
Do. $2\frac{3}{8}$" "	129	645	0	0	
Surface plates	2	400	0	0	
Vices large	26	260	0	0	
Do. Medium	29	194	0	0	
Do. Small	16	80	0	0	
Wall Brackets for Hangers 3"	2	60	0	0	
Do. Do. for Bearings $2\frac{3}{8}$"	1	25	0	0	
Carried Over	.	72463	0	0	

Description.	Number or quantity.	Value.			Remarks.
Brought Over		72463	0	0	
Westons patent differential Pulley to lift 4 Tons	1	121	0	0	
Standard for 40 H.P. Engine	1	300	0	0	
Crane for Steam Hammer	1	200	0	0	
Machine Saw Sharping	1	350	0	0	
Cast Iron Stands large	3	150	0	0	
Do. Do. Do. small	2	25	0	0	
Total Rupees	.	73609	0	0	

(Sigd.) W.L.C.Baddeley Lieut. R.E.

Genl.Supt. P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

List of Works ordinarily carried on in the P.W.Workshops.

Manufacture.

Steam Boilers, tubular and flue.

Dredging Machinery.

Boring Apparatus.

Gearing for Sluice Shutters, lock gates &ca.

Wrought iron girders for bridges, roofs &ca.

Forgings of all kinds.

Castings of all kinds both Iron and Brass.

Bells for Churches &ca.

Turning, boring and planning &ca. for forgings and Castings supplied.

Archimedian Water lifts.

Surki Screens.

Pump deep well and hand.

Machines for special works, such as testing coin Stone crushing, tile moulding &ca.

Scales of every description.

Standard weights and measures.

Iron roofs.

Locks of all kinds.

Heliostats, Roorkee and Begbies pattern.

Signalling lamps of all kinds.

Road tracing Instruments.

Engine turned Stamps.

Pattern making and other wood work that is of a special character.

Repairs.

Repairs.

Steam Engines, pumps and all kinds of Machinery.

Theodolites, Levels, Compasses, Sextants, Barometers and all kinds of Mathematical Instruments.

Repairs and jobs of the most varied description.

Plans Estimates and designs are furnished when required, and men are sent to any part of the Presidency with tools for fitting up work, driving machinery &ca.

(Sigd.)W.L.C.Baddeley Lieut. R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October I882.

C I R C U L A R.

I. The Government propose to sell or let the whole of the Workshops land, buildings Machinery and plant, and tenders for the purchase or lease of the same will be received by the undersigned up to Ist.February I883.

2. The premises may be taken over on the expiration of 4 months, from the date on which a tender is accepted.

3. The accompanying maps shew the general arrangement and character of the buildings, and also their position with regard to the Madras Railway Stations &ca.
The distance from the Egmore Station of the South Indian Railway is about 3 miles.

4. The yard is supplied with water in pipes from the Red Hills tank, there is also a well which gives a fair supply, and arrangements might be made for a connection with the adjoining Seven wells water works.

5. The buildings are all in fair order, they were completed in I875 and occupied in I876.

6. The work carried on comprises a large portion of the Iron work required by the different departments of Government in the Madras Ppresidency, there is also a demand for work to be done for the public and ships in the Madras Roads

7. The outturn during the last 5 years has been as follows.

I877-78	= 573476	Rs.
I878-79	= 258201	"
I879-80	= 216876	"
I880-8I	= 208888	"
I88I-82	= 234363	"

8. The

8. The book value of the buildings, Machinery and plant, is given in the accompanying Statements A and B.

9. List C shews the nature of work hitherto carried on.

IO. The Workshop can be inspected on any working day upon application to the undersigned to whom all enquiries should be addressed.

(Sigd.) W.L.C.Baddeley Lieut.R.E.

Genl Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October I882.

A.

List of Workshop buildings with cost of construction:

Description.	Amount.			Remarks.
Main Building	91278	0	0	
Engine House	12463	0	0	
Foundary Building	12752	0	0	
Saw Mill Shed	6792	0	0	
Sheds for Stores	47450	0	0	
Smiths Shop (Southern row including Latrine	12600	0	0	
Carpenters Shed	10330	0	0	
Smiths Shop(Northern Row.)	10415	0	0	
Cistern and Red Hills Water service pipes	3050	0	0	
Stable, Dining Room & Latrines	780	0	0	
Total Rupees	207910	0	0	

(Sigd.)W.L.C.Baddeley Lieut.R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops.

Madras 25th.October 1882.

Valuation Statement of Machinery and Plant in the Presidency

Public Works Workshops.

Description.	Number or Quantity	Value			Remarks.
Crane Travelling large	I	2000	0	0	
Cupolas large	2	4000	0	0	
Fan Blower large	I	820	0	0	
do. do. 3rd. Size	I	120	0	0	
Forges portable fan	4	400	0	0	
do. do. large	2	80	0	0	
Force Pump for testing Boilers large	I				
do. do. do. small	I	150	0	0	
Lathe Duplex Surfacing and boring large with face plate 8½ Diameter	I	2000	0	0	
Do. Screw cutting 30-3 (15 centre and the other 12)	2	7000	0	0	
Do. Do. 30 and 15 centre	I	3500	0	0	
Do. Do. 20-2 and 24 centre	I	3000	0	0	
Do. Do. 15-2 and 10 centre	I	1500	0	0	
Do. Do. 14-2 and 10 centre	I	1200	0	0	
Do. Do. 6-3 and 6 centre	I	800	0	0	
Do. Do. 6 and 7 centre	2	2000	0	0	
Do. Turning 12 and 10 centre	I	800	0	0	
Do Do. 8 and 6 centre	I	300	0	0	
Do. Wood Turning 8 and 9 centre	I	300	0	0	
Do. foot 6 (3 of 6½ 1 and 5 centres	4	1200	0	0	
Do. Do. 6 and 9 centre	I	300	0	0	
Carried over		31820	0	0	

Description.	Number or quantity.	Value			Remarks.
Brought Over		31820	0	0	
Lathe foot Screw Cutting 5-3" and 6" centre	I	800	0	0	
Do. Do. Do. 5" and 6" centre	I	800	0	0	
Do. Do. Do. 4-6" and 5" centre	I	800	0	0	
Do. Do. Do. 3-6" and 5" centre	5	2300	0	0	
Do. Do. Glass Polishing of 2½" centre	I	30	0	0	
Machine Planning 14-10"	I	2000	0	0	
Do. Do. 9'	I	1500	0	0	
Do. Do. 2-9'	I	500	0	0	
Do. Do. 2-9'	I	400	0	0	
Do. Tapping 5-2'	I	700	0	0	
Do. Mill Boring large	I	1200	0	0	
Do. Drilling 8'	2	4000	0	0	
Do. Do. 7'	2	1500	0	0	
Do. Do. 6'	3	1500	0	0	
Do. Do. Wall	I	300	0	0	
Do. Slotting large	I	900	0	0	
Do. Do. small	I	500	0	0	
Do. Drilling hand	I	100	0	0	
Do. Plate bending	I	1000	0	0	
Do. Punching and shearing	I	400	0	0	
Do. Do. Do. large	I	1500	0	0	
Do. Band Saw	I	350	0	0	
Do. General Joiner	I	1200	0	0	
Do. Punching large	I	1000	0	0	
Do. Press fly Embossing	I	100	0	0	
Do. Hammer Steam 7½ Cwt.	I	2565	0	0	
Carried Over		59765	0	0	

Description.	Number or quantity.	Value			Remarks
Brought Over		59765	0	0	
Machine Saw Circular Table complete	I	400	0	0	
Do. Table Iron for marking	I	100	0	0	
Anvils	34	408	0	0	
Do. Coopers	2	40	0	0	
Bellows English	2	40	0	0	
Benches Carpenters	15	525	0	0	
Do. small	7	140	0	0	
Do. Filers large	5	500	0	0	
Bearings 5½"	3	225	0	0	
Do. 3½"	3	130	0	0	
Do. 3"	19	570	0	0	
Do. 2¾"	5	150	0	0	
Do. 2⅜"	28	700	0	0	
Buckets Foundry of Sizes	13	500	0	0	
Cast Iron Tanks for Water	2	80	0	0	
Hangers large for 3 Shafting	11	330	0	0	
Swage Blocks and Stands	14	280	0	0	
Moulding boxes (at 80.a Ton) Tons about	40	3200	0	0	
Pulleys 64" x 8"	I	45	0	0	
Do. 63" x 8"	I	40	0	0	
Do. 36" x 8"	I	75	0	0	
Do. 30" x 8"	I	16	0	0	
Do. 27" x 18"	I	55	0	0	
Do. 24" x 9"	I	18	0	0	
Do. 24" x 7"	5	80	0	0	
Carried Over		68412	0	0	

Description	Number or quantity	Value			Remarks.
Brought Over		68412	0	0	
Pulleys 24″ × 6″	3	60	0	0	
Do. 22″ × 12″	5	75	0	0	
Do. 18″ × 12″	6	90	0	0	
Do. 16″ × 12″	5	60	0	0	
Do. 16″ × 9″	1	11	0	0	
Do. 16″ × 8″	31	350	0	0	
Do. 14″ × 5″	1	9	0	0	
Do. 12″ × 12″	2	16	0	0	
Do. 12″ × 8″	1	8	0	0	
Do. 12″ × 6″	4	28	0	0	
Do. 9″ × 9″	1	6	0	0	
Water Troughs Smiths	26	225	0	0	
Shafting 5½″ feet	14	140	0	0	
Do. 3⅝″ ″	10	90	0	0	
Do. 3½″ ″	10	85	0	0	
Do. 3″ ″	122	845	0	0	
Do. 2¾″ ″	28	210	0	0	
Do. 2½″ ″	10	70	0	0	
Do. 2⅜″ ″	129	645	0	0	
Surface plates	2	400	0	0	
Vices large	26	260	0	0	
Do. Medium	29	194	0	0	
Do. Small	16	80	0	0	
Wall Brackets for Hangers 3″	2	60	0	0	
Do. Do. for Bearings 2⅜″	1	25	0	0	
Carried Over	.	72463	0	0	

Description.	Number or quantity.	Value.			Remarks.
Brought Over		72463	0	0	
Westons patent differential Pulley to lift 4 Tons	1	121	0	0	
Standard for 40 H.P.Engine	1	300	0	0	
Crane for Steam Hammer	1	200	0	0	
Machine Saw Sharping	1	350	0	0	
Cast Iron Stands large	3	150	0	0	
Do. Do. Do. small	2	25	0	0	
Total Rupees	.	73609	0	0	

(Sigd.) W.L.C.Baddeley Lieut. R.E.

Genl.Supt. P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

List of Works ordinarily carried on in the P.W.Workshops.

Manufacture.

Steam Boilers, tubular and flue.

Dredging Machinery.

Boring Apparatus.

Gearing for Sluice Shutters, lock gates &ca.

Wrought iron girders for bridges, roofs &ca.

Forgings of all kinds.

Castings of all kinds both Iron and Brass.

Bells for Churches &ca.

Turning, boring and planning &ca. for forgings and Castings supplied.

Archimedian Water lifts.

Surki Screens.

Pump deep well and hand.

Machines for special works, such as testing coin Stone crushing, tile moulding &ca.

Scales of every description.

Standard weights and measures.

Iron roofs.

Locks of all kinds.

Heliostats, Roorkee and Begbies pattern.

Signalling lamps of all kinds.

Road tracing Instruments.

Engine turned Stamps.

Pattern making and other wood work that is of a special character.

Repairs.

Repairs.

Steam Engines, pumps and all kinds of Machinery.

Theodolites, Levels, Compasses, Sextants, Baromateis and

all kinds of Mathematical Instruments.

Repairs and jobs of the most varied description.

Plans Estimates and designs are furnished when required,

and men are sent to any part of the Presidency

with tools for fitting up work, driving machinery &ca.

(Sigd.)W.L.C.Baddeley Lieut. R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October I882.

C I R C U L A R.

I. The Government propose to sell or let the whole of the Workshops land, buildings Machinery and plant, and tenders for the purchase or lease of the same will be received by the undersigned up to Ist.February I883.

2. The premises may be taken over on the expiration of 4 months, from the date on which a tender is accepted.

3. The accompanying maps shew the general arrangement and character of the buildings, and also their position with regard to the Madras Railway Stations&ca.

The distance from the Egmore Station of the South Indian Railway is about 3 miles.

4. The yard is supplied with water in pipes from the Red Hills tank, there is also a well which gives a fair supply, and arrangements might be made for a connection with the adjoining Seven wells water works.

5. The buildings are all in fair order, they were completed in I875 and occupied in I876.

6. The work carried on comprises a large portion of the Iron work required by the different departments of Government in the Madras Ppresidency, there is also a demand for work to be done for the public and ships in the Madras Roads

7. The outturn during the last 5 years has been as follows.

I877-78 = 573476 Rs.

I878-79 = 258201 "

I879-80 = 216876 "

I880-8I = 208888 "

I88I-82 = 234363 "

8. The

8. The book value of the buildings, Machinery and plant, is given in the accompanying Statements A and B.

9. List C shews the nature of work hitherto carried on.

IO. The Workshop can be inspected on any working day upon application to the undersigned to whom all enquiries should be addressed.

(Sigd.) W.L.C.Baddeley Lieut.R.E.

Genl Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

A.

List of Workshop buildings with cost of construction:

Description.	Amount.			Remarks.
Main Building	91278	0	0	
Engine House	12463	0	0	
Foundary Building	12752	0	0	
Saw Mill Shed	6792	0	0	
Sheds for Stores	47450	0	0	
Smiths Shop (Southern row including Latrine	12600	0	0	
Carpenters Shed	10330	0	0	
Smiths Shop(Northern Row.)	10415	0	0	
Cistern and Red Hills Water service pipes	3050	0	0	
Stable, Dining Room & Latrines	780	0	0	
Total Rupees	207910	0	0	

(Sigd.)W.L.C.Baddeley Lieut.R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

Valuation Statement of Machinery and Plant in the Presidency Public Works Workshops.

Description.	Number or Quantity	Value			Remarks.
Crane Travelling large	I	2000	0	0	
Cupolas large	2	4000	0	0	
Fan Blower large	I	820	0	0	
do. do. 3rd. Size	I	120	0	0	
Forges portable fan	4	400	0	0	
do. do. large	2	80	0	0	
Force Pump for testing Boilers large	I				
do. do. do. small	I	150	0	0	
Lathe Duplex Surfacing and boring large with face plate 8½″ Diameter	I	2000	0	0	
Do. Screw cutting 30′-3″ (15″ centre and the other 12″)	2	7000	0	0	
Do. Do. 30′ and 15″ centre	I	3500	0	0	
Do. Do. 20′-2″ and 24″ centre	I	3000	0	0	
Do. Do. 15′-2″ and 10″ centre	I	1500	0	0	
Do. Do. 14′-2″ and 10″ centre	I	1200	0	0	
Do. Do. 6′-3″ and 6″ centre	I	800	0	0	
Do. Do. 6′ and 7″ centre	2	2000	0	0	
Do. Turning 12′ and 10″ centre	I	800	0	0	
Do. Do. 8′ and 6″ centre	I	300	0	0	
Do. Wood Turning 8′ and 9″ centre	I	300	0	0	
Do. foot 6′ (3 of 6½″ I and 5″ centres	4	1200	0	0	
Do. Do. 6′ and 9″ centre	I	300	0	0	
Carried over		31820	0	0	

Description.	Number or quantity.	Value			Remarks.
Brought Over		31820	0	0	
Lathe foot Screw Cutting 5-3 and 6 centre	I	800	0	0	
Do. Do. Do. 5 and 6 centre	I	800	0	0	
Do. Do. Do. 4-6 and 5 centre	I	800	0	0	
Do. Do. Do. 3-6 and 5 centre	5	2300	0	0	
Do. Do. Glass Polishing of 2½ centre	I	30	0	0	
Machine Planning 14-10	I	2000	0	0	
Do. Do. 9	I	1500	0	0	
Do. Do. 2-9	I	500	0	0	
Do. Do. 2-9	I	400	0	0	
Do. Tapping 5-2	I	700	0	0	
Do. Mill Boring large	I	1200	0	0	
Do. Drilling 8	2	4000	0	0	
Do. Do. 7	2	1500	0	0	
Do. Do. 6	3	1500	0	0	
Do. Do. Wall	I	300	0	0	
Do. Slotting large	I	900	0	0	
Do. Do. small	I	500	0	0	
Do. Drilling hand	I	100	0	0	
Do. Plate bending	I	1000	0	0	
Do. Punching and shearing	I	400	0	0	
Do. Do. Do. large	I	1500	0	0	
Do. Band Saw	I	350	0	0	
Do. General Joiner	I	1200	0	0	
Do. Punching large	I	1000	0	0	
Do. Press fly Embossing	I	100	0	0	
Do. Hammer Steam 7½ Cwt.	I	2565	0	0	
Carried Over		59765	0	0	

Description.	Number or quantity.	Value			Remarks
Brought Over		59765	0	0	
Machine Saw Circular Table complete	I	400	0	0	
Do. Table Iron for marking	I	100	0	0	
Anvils	34	408	0	0	
Do. Coopers	2	40	0	0	
Bellows English	2	40	0	0	
Benches Carpenters	15	525	0	0	
Do. small	7	140	0	0	
Do. Filers large	5	500	0	0	
Bearings 5½	3	225	0	0	
Do. 3½	3	130	0	0	
Do. 3	19	570	0	0	
Do. 2¾	5	150	0	0	
Do. 2⅞	28	700	0	0	
Buckets Foundry of Sizes	13	500	0	0	
Cast Iron Tanks for Water	2	80	0	0	
Hangers large for 3 Shafting	11	330	0	0	
Swage Blocks and Stands	14	280	0	0	
Moulding boxes (at 80.a Ton) Tons about	40	3200	0	0	
Pulleys 64 x 8	I	45	0	0	
Do. 63 x 8	I	40	0	0	
Do. 36 x 8	I	75	0	0	
Do. 30 x 8	I	16	0	0	
Do. 27 x 18	I	55	0	0	
Do. 24 x 9	I	18	0	0	
Do. 24 x 7	5	80	0	0	
Carried Over		68412	0	0	

Description	Number or quantity	Value			Remarks.
Brought Over		684I2	0	0	
Pulleys 24″ × 6″	3	60	0	0	
Do. 22″ × I2″	5	75	0	0	
Do. I8″ × I2″	6	90	0	0	
Do. I6″ × I2″	5	60	0	0	
Do. I6″ × 9″	I	II	0	0	
Do. I6″ × 8″	3I	350	0	0	
Do. I4″ × 5″	I	9	0	0	
Do. I2″ × I2″	2	I6	0	0	
Do. I2″ × 8″	I	8	0	0	
Do. I2″ × 6″	4	28	0	0	
Do. 9″ × 9″	I	6	0	0	
Water Troughs Smiths	26	225	0	0	
Shafting 5½″ feet	I4	I40	0	0	
Do. 3⅝″ ″	I0	90	0	0	
Do. 3½″ ″	I0	85	0	0	
Do. 3″ ″	I22	845	0	0	
Do. 2¾″ ″	28	2I0	0	0	
Do. 2½″ ″	I0	70	0	0	
Do. 2⅜″ ″	I29	645	0	0	
Surface plates	2	400	0	0	
Vices large	26	260	0	0	
Do. Medium	29	I94	0	0	
Do. Small	I6	80	0	0	
Wall Brackets for Hangers 3″	2	60	0	0	
Do. Do. for Bearings 2⅜″	I	25	0	0	
Carried Over	.	72463	0	0	

Description.	Number or quantity.	Value.			Remarks.
Brought Over		72463	0	0	
Westons patent differential Pulley to lift 4 Tons	I	I2I	0	0	
Standard for 40 H.P.Engine	I	300	0	0	
Crane for Steam Hammer	I	200	0	0	
Machine Saw Sharping	I	350	0	0	
Cast Iron Stands large	3	I50	0	0	
Do. Do. Do. small	2	25	0	0	
Total Rupees	.	73609	0	0	

(Sigd.) W.L.C.Baddeley Lieut. R.E.

Genl.Supt. P.W.Workshops.

P.W.Workshops

Madras 25th.October I882.

W

S

Su

Vi

D

D

Wa

D

List of Works ordinarily carried on in the P.W.Workshops.

Manufacture.

Steam Boilers, tubular and flue.

Dredging Machinery.

Boring Apparatus.

Gearing for Sluice Shutters, lock gates &ca.

Wrought iron girders for bridges, roofs &ca.

Forgings of all kinds.

Castings of all kinds both Iron and Brass.

Bells for Churches &ca.

Turning, boring and planning &ca. for forgings and Castings supplied.

Archimedian Water lifts.

Surki Screens.

Pump deep well and hand.

Machines for special works, such as testing coin Stone crushing, tile moulding &ca.

Scales of every description.

Standard weights and measures.

Iron roofs.

Locks of all kinds.

Heliostats, Roorkee and Begbies pattern.

Signalling lamps of all kinds.

Road tracing Instruments.

Engine turned Stamps.

Pattern making and other wood work that is of a special character.

Repairs.

Repairs.

Steam Engines, pumps and all kinds of Machinery.

Theodolites, Levels, Compasses, Sextants, Baromateis and

all kinds of Mathematical Instruments.

Repairs and jobs of the most varied description.

Plans Estimates and designs are furnished when required,

and men are sent to any part of the Presidency

with tools for fitting up work, driving machinery &ca.

(Sigd.)W.L.C.Baddeley Lieut. R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

CIRCULAR.

1. The Government propose to sell or let the whole of the Workshops land, buildings Machinery and plant, and tenders for the purchase or lease of the same will be received by the undersigned up to 1st.February 1882.

2. The premises may be taken over on the expiration of 4 months, from the date on which a tender is accepted.

3. The accompanying maps shew the general arrangement and character of the buildings, and also their position with regard to the Madras Railway Stations &ca.

The distance from the Egmore Station of the South Indian Railway is about 3 miles.

4. The yard is supplied with water in pipes from the Red Hills tank, there is also a well which gives a fair supply, and arrangements might be made for a connection with the adjoining Seven wells water works.

5. The buildings are all in fair order, they were completed in 1875 and occupied in 1876.

6. The work carried on comprises a large portion of the Iron work required by the different departments of Government in the Madras Presidency, there is also a demand for work to be done for the public and ships in the Madras Roads.

7. The outturn during the last 5 years has been as follows.

1877-78-573476 Rs.

1878-79-258201 "

1879-80-216876 "

1880-81-208888 "

1881-82-234363 "

8 The

8. The book value of the buildings, Machinery and plant, is given in the accompanying Statements A and B.

9. List C shews the nature of work hitherto carried on.

10. The Workshop can be inspected on any working day upon application to the undersigned to whom all enquiries should be addressed.

(Sigd.) W.L.C.Baddeley Lieut.R.E.

Genl.Suptt.P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

A.

List of Workshop buildings with cost of construction:

Description.	Amount.			Remarks.
Main Building	91278	0	0	
Engine House	12463	0	0	
Foundary Building	12752	0	0	
Saw Mill Shed	6792	0	0	
Sheds for Stores	47450	0	0	
Smiths Shop (Southern row including Latrine	12600	0	0	
Carpenters Shed	10330	0	0	
Smiths Shop(Northern Row.)	10415	0	0	
Cistern and Red Hills Water service pipes	3050	0	0	
Stable, Dining Room & Latrines	780	0	0	
Total Rupees	207910	0	0	

(Sigd.)W.L.C.Baddeley Lieut.R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops.

Madras 25th.October 1882.

Valuation Statement of Machinery and Plant in the Presidency Public Works Workshops.

Description.	Number or Quantity	Value			Remarks.
Crane Travelling large	I	2000	0	0	
Cupolas large	2	4000	0	0	
Fan Blower large	I	820	0	0	
do. do. 3rd. Size	I	120	0	0	
Forges portable fan	4	400	0	0	
do. do. large	2	80	0	0	
Force Pump for testing Boilers large	I				
do. do. do. small	I	150	0	0	
Lathe Duplex Surfacing and boring large with face plate 8½′′ Diameter	I	2000	0	0	
Do. Screw cutting 30-3′′(15′′ centre and the other 12))	2	7000	0	0	
Do. Do. 30′ and 15′′ centre	I	3500	0	0	
Do. Do. 20′-2′′ and 24′′ centre	I	3000	0	0	
Do. Do. 15′-2′′ and 10′′ centre	I	1500	0	0	
Do. Do. 14′-2′′ and 10′′ centre	I	1200	0	0	
Do. Do. 6′-3′′ and 6′′ centre	I	800	0	0	
Do. Do. 6′ and 7′′ centre	2	2000	0	0	
Do. Turning 12′ and 10′′ centre	I	800	0	0	
Do Do. 8′ and 6′′ centre	I	300	0	0	
Do. Wood Turning 8′ and 9′′ centre	I	300	0	0	
Do. foot 6 (3 of 6½′′ I and 5′′ centres	4	1200	0	0	
Do. Do. 6′ and 9′′ centre	I	300	0	0	
Carried over		31820	0	0	

Description.	Number or quantity.	Value			Remarks.
Brought Over		3I820	0	0	
Lathe foot Screw Cutting 5-3 and 6" centre	I	800	0	0	
Do. Do. Do. 5 and 6" centre	I	800	0	0	
Do. Do. Do. 4-6 and 5" centre	I	800	0	0	
Do. Do. Do. 3-6 and 5" centre	5	2300	0	0	
Do. Do. Glass Polishing of 2½" centre	I	30	0	0	
Machine Planning I4-I0"	I	2000	0	0	
Do. Do. 9'	I	I500	0	0	
Do. Do. 2-9"	I	500	0	0	
Do. Do. 2-9"	I	400	0	0	
Do. Tapping 5-2"	I	700	0	0	
Do. Mill Boring large	I	I200	0	0	
Do. Drilling 8'	2	4000	0	0	
Do. Do. 7'	2	I500	0	0	
Do. Do. 6'	3	I500	0	0	
Do. Do. Wall	I	300	0	0	
Do. Slotting large	I	900	0	0	
Do. Do. small	I	500	0	0	
Do. Drilling hand	I	I00	0	0	
Do. Plate bending	I	I000	0	0	
Do. Punching and shearing	I	400	0	0	
Do. Do. Do. large	I	I500	0	0	
Do. Band Saw	I	350	0	0	
Do. General Joiner	I	I200	0	0	
Do. Punching large	I	I000	0	0	
Do. Press fly Embossing	I	I00	0	0	
Do. Hammer Steam 7½ Cwt.	I	2565	0	0	
Carried Over		59765	0	0	

Description.	Number or quantity.	Value			Remarks
Brought Over		59765	0	0	
Machine Saw Circular Table complete	I	400	0	0	
Do. Table Iron for marking	I	I00	0	0	
Anvils	34	408	0	0	
Do. Coopers	2	40	0	0	
Bellows English	2	40	0	0	
Benches Carpenters	I5	525	0	0	
Do. small	7	I40	0	0	
Do. Filers large	5	500	0	0	
Bearings 5½"	3	225	0	0	
Do. 3½"	3	I30	0	0	
Do. 3"	I9	570	0	0	
Do. 2¾"	5	I50	0	0	
Do. 2⅝"	28	700	0	0	
Buckets Foundry of Sizes	I3	500	0	0	
Cast Iron Tanks for Water	2	80	0	0	
Hangers large for 3 Shafting	II	330	0	0	
Swage Blocks and Stands	I4	280	0	0	
Moulding boxes (at 80.a Ton) Tons about	40	3200	0	0	
Pulleys 64" x 8"	I	45	0	0	
Do. 63" x 8"	I	40	0	0	
Do. 36" x 8"	I	75	0	0	
Do. 30" x 8"	I	I6	0	0	
Do. 27" x I8"	I	55	0	0	
Do. 24" x 9"	I	I8	0	0	
Do. 24" x 7"	5	80	0	0	
Carried Over		684I2	0	0	

Description	Number or quantity	Value			Remarks.
Brought Over		68412	0	0	
Pulleys 24″ × 6″	3	60	0	0	
Do. 22″ × I2″	5	75	0	0	
Do. I8″ × I2″	6	90	0	0	
Do. I6″ × I2″	5	60	0	0	
Do. I6″ × 9″	I	II	0	0	
Do. I6″ × 8″	3I	350	0	0	
Do. I4″ × 5″	I	9	0	0	
Do. I2″ × I2″	2	I6	0	0	
Do. I2″ × 8″	I	8	0	0	
Do. I2″ × 6″	4	28	0	0	
Do. 9″ × 9″	I	6	0	0	
Water Troughs Smiths	26	225	0	0	
Shafting 5½″ feet	I4	I40	0	0	
Do. 3⅝″ ″	I0	90	0	0	
Do. 3½″ ″	I0	85	0	0	
Do. 3″ ″	I22	845	0	0	
Do. 2¾″ ″	28	2I0	0	0	
Do. 2½″ ″	I0	70	0	0	
Do. 2⅜″ ″	I29	645	0	0	
Surface plates	2	400	0	0	
Vices large	26	260	0	0	
Do. Medium	29	I94	0	0	
Do. Small	I6	80	0	0	
Wall Brackets for Hangers 3″	2	60	0	0	
Do. Do. for Bearings 2⅜″	I	25	0	0	
Carried Over	.	72463	0	0	

Description.	Number or quantity.	Value.			Remarks.
Brought Over		72463	0	0	
Westons patent differential Pulley to lift 4 Tons	I	I2I	0	0	
Standard for 40 H.P.Engine	I	300	0	0	
Crane for Steam Hammer	I	200	0	0	
Machine Saw Sharping	I	350	0	0	
Cast Iron Stands large	3	I50	0	0	
Do. Do. Do. small	2	25	0	0	
Total Rupees	.	73609	0	0	

(Sigd.) W.L.C.Baddeley Lieut. R.E.

Genl.Supt. P.W.Workshops.

P.W.Workshops

Madras 25th.October I882.

List of Works ordinarily carried on in the P.W.Workshops.

Manufacture.

Steam Boilers, tubular and flue.

Dredging Machinery.

Boring Apparatus.

Gearing for Sluice Shutters, lock gates &ca.

Wrought iron girders for bridges, roofs &ca.

Forgings of all kinds.

Castings of all kinds both Iron and Brass.

Bells for Churches &ca.

Turning, boring and planning &ca. for forgings and Castings supplied.

Archimedian Water lifts.

Surki Screens.

Pump deep well and hand.

Machines for special works, such as testing coin Stone crushing, tile moulding &ca.

Scales of every description.

Standard weights and measures.

Iron roofs.

Locks of all kinds.

Heliostats, Roorkee and Begbies pattern.

Signalling lamps of all kinds.

Road tracing Instruments.

Engine turned Stamps.

Pattern making and other wood work that is of a special character.

Repairs.

Repairs.

Steam Engines, pumps and all kinds of Machinery.

Theodolites, Levels, Compasses, Sextants, Baromateis and all kinds of Mathematical Instruments.

Repairs and jobs of the most varied description.

Plans Estimates and designs are furnished when required, and men are sent to any part of the Presidency with tools for fitting up work, driving machinery &ca.

(Sigd.) W.L.C. Baddeley Lieut. R.E.

Genl. Supt. P.W. Workshops.

P.W. Workshops

Madras 25th. October 1882.

C I R C U L A R.

1. The Government propose to sell or let the whole of the Workshops land, buildings Machinery and plant, and tenders for the purchase or lease of the same will be received by the undersigned up to Ist. February 1883.

2. The premises may be taken over on the expiration of 4 months, from the date on which a tender is accepted.

3. The accompanying maps shew the general arrangement and character of the buildings, and also their position with regard to the Madras Railway Stations &ca.
The distance from the Egmore Station of the South Indian Railway is about 3 miles.

4. The yard is supplied with water in pipes from the Red Hills tank, there is also a well which gives a fair supply, and arrangements might be made for a connection with the adjoining Seven wells water works.

5. The buildings are all in fair order, they were completed in 1875 and occupied in 1876.

6. The work carried on comprises a large portion of the Iron work required by the different departments of Government in the Madras Ppresidency, there is also a demand for work to be done for the public and ships in the Madras Roads

7. The outturn during the last 5 years has been as follows.

1877-78 = 573476 Rs.
1878-79 = 258201 "
1879-80 = 216876 "
1880-81 = 208888 "
1881-82 = 234363 "

8. The

8. The book value of the buildings, Machinery and plant, is given in the accompanying Statements A and B.

9. List C shews the nature of work hitherto carried on.

10. The Workshop can be inspected on any working day upon application to the undersigned to whom all enquiries should be addressed.

(Sigd.) W.L.C.Baddeley Lieut.R.E.

Genl Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

A.

List of Workshop buildings with cost of construction:

Description.	Amount.			Remarks.
Main Building	91278	0	0	
Engine House	12463	0	0	
Foundary Building	12752	0	0	
Saw Mill Shed	6792	0	0	
Sheds for Stores	47450	0	0	
Smiths Shop (Southern row including Latrine	12600	0	0	
Carpenters Shed	10330	0	0	
Smiths Shop(Northern Row.)	10415	0	0	
Cistern and Red Hills Water service pipes	3050	0	0	
Stable, Dining Room & Latrines	780	0	0	
Total Rupees	207910	0	0	

(Sigd.)W.L.C.Baddeley Lieut.R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops.

Madras 25th.October 1882.

Valuation Statement of Machinery and Plant in the Presidency

Public Works Workshops.

Description.	Number or Quantity	Value			Remarks.
Crane Travelling large	I	2000	0	0	
Cupolas large	2	4000	0	0	
Fan Blower large	I	820	0	0	
do. do. 3rd. Size	I	120	0	0	
Forges portable fan	4	400	0	0	
do. do. large	2	80	0	0	
Force Pump for testing Boilers large	I				
do. do. do. small	I	150	0	0	
Lathe Duplex Surfacing and boring large with face plate 8½″ Diameter	I	2000	0	0	
Do. Screw cutting 30-3″(15″ centre and the other 12″)	2	7000	0	0	
Do. Do. 30′ and 15″ centre	I	3500	0	0	
Do. Do. 20′-2″ and 24″ centre	I	3000	0	0	
Do. Do. 15′-2″ and 10″ centre	I	1500	0	0	
Do. Do. 14′-2″ and 10″ centre	I	1200	0	0	
Do. Do. 6′-3″ and 6″ centre	I	800	0	0	
Do. Do. 6′ and 7″ centre	2	2000	0	0	
Do. Turning 12′ and 10″ centre	I	800	0	0	
Do Do. 8′ and 6″ centre	I	300	0	0	
Do. Wood Turning 8′ and 9″ centre	I	300	0	0	
Do. foot 6′ (3 of 6½″ I and 5″ centres	4	1200	0	0	
Do. Do. 6′ and 9″ centre	I	300	0	0	
Carried over		31820	0	0	

Description.	Number or quantity.	Value			Remarks.
Brought Over		31820	0	0	
Lathe foot Screw Cutting 5-3 and 6 centre	I	800	0	0	
Do. Do. Do. 5 and 6 centre	I	800	0	0	
Do. Do. Do. 4-6 and 5 centre	I	800	0	0	
Do. Do. Do. 3-6 and 5 centre	5	2300	0	0	
Do. Do. Glass Polishing of 2½ centre	I	30	0	0	
Machine Planning 14-10	I	2000	0	0	
Do. Do. 9	I	1500	0	0	
Do. Do. 2-9	I	500	0	0	
Do. Do. 2-9	I	400	0	0	
Do. Tapping 5-2	I	700	0	0	
Do. Mill Boring large	I	1200	0	0	
Do. Drilling 8	2	4000	0	0	
Do. Do. 7	2	1500	0	0	
Do. Do. 6	3	1500	0	0	
Do. Do. Wall	I	300	0	0	
Do. Slotting large	I	900	0	0	
Do. Do. small	I	500	0	0	
Do. Drilling hand	I	100	0	0	
Do. Plate bending	I	1000	0	0	
Do. Punching and shearing	I	400	0	0	
Do. Do. Do. large	I	1500	0	0	
Do. Band Saw	I	350	0	0	
Do. General Joiner	I	1200	0	0	
Do. Punching large	I	1000	0	0	
Do. Press fly Embossing	I	100	0	0	
Do. Hammer Steam 7½ Cwt.	I	2565	0	0	
Carried Over		59765	0	0	

Description.	Number or quantity.	Value			Remarks
Brought Over		59765	0	0	
Machine Saw Circular Table complete	I	400	0	0	
Do. Table Iron for marking	I	100	0	0	
Anvils	34	408	0	0	
Do. Coopers	2	40	0	0	
Bellows English	2	40	0	0	
Benches Carpenters	15	525	0	0	
Do. small	7	140	0	0	
Do. Filers large	5	500	0	0	
Bearings 5½"	3	225	0	0	
Do. 3½"	3	130	0	0	
Do. 3"	19	570	0	0	
Do. 2¾"	5	150	0	0	
Do. 2⅜"	28	700	0	0	
Buckets Foundry of Sizes	13	500	0	0	
Cast Iron Tanks for Water	2	80	0	0	
Hangers large for 3 Shafting	11	330	0	0	
Swage Blocks and Stands	14	280	0	0	
Moulding boxes (at 80.a Ton) Tons about	40	3200	0	0	
Pulleys 64" x 8"	I	45	0	0	
Do. 63" x 8"	I	40	0	0	
Do. 36" x 8"	I	75	0	0	
Do. 30" x 8"	I	16	0	0	
Do. 27" x 18"	I	55	0	0	
Do. 24" x 9"	I	18	0	0	
Do. 24" x 7"	5	80	0	0	
Carried Over		68412	0	0	

Description	Number or quantity	Value			Remarks.
Brought Over		68412	0	0	
Pulleys 24" × 6"	3	60	0	0	
Do. 22" × 12"	5	75	0	0	
Do. 18" × 12"	6	90	0	0	
Do. 16" × 12"	5	60	0	0	
Do. 16" × 9"	1	11	0	0	
Do. 16" × 8"	31	350	0	0	
Do. 14" × 5"	1	9	0	0	
Do. 12" × 12"	2	16	0	0	
Do. 12" × 8"	1	8	0	0	
Do. 12" × 6"	4	28	0	0	
Do. 9" × 9"	1	6	0	0	
Water Troughs Smiths	26	225	0	0	
Shafting 5½" feet	14	140	0	0	
Do. 3⅝" "	10	90	0	0	
Do. 3½" "	10	85	0	0	
Do. 3" "	122	845	0	0	
Do. 2¾" "	28	210	0	0	
Do. 2½" "	10	70	0	0	
Do. 2⅜" "	129	645	0	0	
Surface plates	2	400	0	0	
Vices large	26	260	0	0	
Do. Medium	29	194	0	0	
Do. Small	16	80	0	0	
Wall Brackets for Hangers 3"	2	60	0	0	
Do. Do. for Bearings 2⅜"	1	25	0	0	
Carried Over	.	72463	0	0	

Description.	Number or quantity.	Value.			Remarks.
Brought Over		72463	0	0	
Westons patent differential Pulley to lift 4 Tons	1	121	0	0	
Standard for 40 H.P.Engine	1	300	0	0	
Crane for Steam Hammer	1	200	0	0	
Machine Saw Sharping	1	350	0	0	
Cast Iron Stands large	3	150	0	0	
Do. Do. Do. small	2	25	0	0	
Total Rupees	.	73609	0	0	

(Sigd.) W.L.C.Baddeley Lieut. R.E.

Genl.Supt. P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

List of Works ordinarily carried on in the P.W.Workshops.

Manufacture.

Steam Boilers, tubular and flue.

Dredging Machinery.

Boring Apparatus.

Gearing for Sluice Shutters, lock gates &ca.

Wrought iron girders for bridges, roofs &ca.

Forgings of all kinds.

Castings of all kinds both Iron and Brass.

Bells for Churches &ca.

Turning, boring and planning &ca. for forgings and Castings supplied.

Archimedian Water lifts.

Surki Screens.

Pump deep well and hand.

Machines for special works, such as testing coin Stone crushing, tile moulding &ca.

Scales of every description.

Standard weights and measures.

Iron roofs.

Locks of all kinds.

Heliostats, Roorkee and Begbies pattern.

Signalling lamps of all kinds.

Road tracing Instruments.

Engine turned Stamps.

Pattern making and other wood work that is of a special character.

Repairs.

Repairs.

Steam Engines, pumps and all kinds of Machinery.

Theodolites, Levels, Compasses, Sextants, Baromateis and all kinds of Mathematical Instruments.

Repairs and jobs of the most varied description.

Plans Estimates and designs are furnished when required, and men are sent to any part of the Presidency with tools for fitting up work, driving machinery &ca.

(Sigd.)W.L.C.Baddeley Lieut. R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October I882.

C I R C U L A R.

I. The Government propose to sell or let the whole of the Workshops land, buildings Machinery and plant, and tenders for the purchase or lease of the same will be received by the undersigned up to Ist.February I883.

2. The premises may be taken over on the expiration of 4 months, from the date on which a tender is accepted.

3. The accompanying maps shew the general arrangement and character of the buildings, and also their position with regard to the Madras Railway Stations&ca.
The distance from the Egmore Station of the South Indian Railway is about 3 miles.

4. The yard is supplied with water in pipes from the Red Hills tank, there is also a well which gives a fair supply, and arrangements might be made for a connection with the adjoining Seven wells water works.

5. The buildings are all in fair order, they were completed in I875 and occupied in I876.

6. The work carried on comprises a large portion of the Iron work required by the different departments of Government in the Madras Ppresidency, there is also a demand for work to be done for the public and ships in the Madras Roads

7. The outturn during the last 5 years has been as follows.

I877-78 = 573476 Rs.

I878-79 = 258201 "

I879-80 = 216876 "

I880-8I = 208888 "

I88I-82 = 234863 "

8. The

8. The book value of the buildings, Machinery and plant, is given in the accompanying Statements A and B.

9. List C shews the nature of work hitherto carried on.

10. The Workshop can be inspected on any working day upon application to the undersigned to whom all enquiries should be addressed.

(Sigd.) W.L.C.Baddeley Lieut.R.E.

Genl Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

A.

List of Workshop buildings with cost of construction:

Description.	Amount.			Remarks.
Main Building	91278	0	0	
Engine House	12463	0	0	
Foundary Building	12752	0	0	
Saw Mill Shed	6792	0	0	
Sheds for Stores	47450	0	0	
Smiths Shop (Southern row including Latrine	12600	0	0	
Carpenters Shed	10330	0	0	
Smiths Shop(Northern Row.)	10415	0	0	
Cistern and Red Hill Water service pipes	3050	0	0	
Stable, Dining Room & Latrines	780	0	0	
Total Rupees	207910	0	0	

(Sigd.)W.L.C.Baddeley Lieut.R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops.

Madras 25th.October 1882.

Valuation Statement of Machinery and Plant in the Presidency

Public Works Workshops.

Description.	Number or Quantity	Value			Remarks.
Crane Travelling large	I	2000	0	0	
Cupolas large	2	4000	0	0	
Fan Blower large	I	820	0	0	
do. do. 3rd. Size	I	120	0	0	
Forges portable fan	4	400	0	0	
do. do. large	2	80	0	0	
Force Pump for testing Boilers large	I				
do. do. do. small	I	150	0	0	
Lathe Duplex Surfacing and boring large with face plate $8\frac{1}{2}''$ Diameter	I	2000	0	0	
Do. Screw cutting 30-3″(15″ centre and the other 12″)	2	7000	0	0	
Do. Do. 30′ and 15″ centre	I	3500	0	0	
Do. Do. 20′-2″ and 24″ centre	I	3000	0	0	
Do. Do. 15′-2″ and 10″ centre	I	1500	0	0	
Do. Do. 14′-2″ and 10″ centre	I	1200	0	0	
Do. Do. 6′-3″ and 6″ centre	I	800	0	0	
Do. Do. 6′ and 7″ centre	2	2000	0	0	
Do. Turning 12′ and 10″ centre	I	800	0	0	
Do Do. 8′ and 6″ centre	I	300	0	0	
Do. Wood Turning 8′ and 9″ centre	I	300	0	0	
Do. foot 6 (3 of $6\frac{1}{2}$″ I and 5″ centres	4	1200	0	0	
Do. Do. 6′ and 9″ centre	I	300	0	0	
Carried over		31820	0	0	

Description.	Number or quantity.	Value			Remarks.
Brought Over		31820	0	0	
Lathe foot Screw Cutting 5-3 and 6" centre	I	800	0	0	
Do. Do. Do. 5-3 and 6" centre	I	800	0	0	
Do. Do. Do. 4-6 and 5" centre	I	800	0	0	
Do. Do. Do. 3-6 and 5" centre	5	2300	0	0	
Do. Do. Glass Polishing of 2½" centre	I	30	0	0	
Machine Planning 14-10"	I	2000	0	0	
Do. Do. 9'	I	1500	0	0	
Do. Do. 2-9"	I	500	0	0	
Do. Do. 2-9"	I	400	0	0	
Do. Tapping 5-2"	I	700	0	0	
Do. Mill Boring large	I	1200	0	0	
Do. Drilling 8'	2	4000	0	0	
Do. Do. 7'	2	1500	0	0	
Do. Do. 6'	3	1500	0	0	
Do. Do. Wall	I	300	0	0	
Do. Slotting large	I	900	0	0	
Do. Do. small	I	500	0	0	
Do. Drilling hand	I	100	0	0	
Do. Plate bending	I	1000	0	0	
Do. Punching and shearing	I	400	0	0	
Do. Do. Do. large	I	1500	0	0	
Do. Band Saw	I	350	0	0	
Do. General Joiner	I	1200	0	0	
Do. Punching large	I	1000	0	0	
Do. Press fly Embossing	I	100	0	0	
Do. Hammer Steam 7½ Cwt.	I	2565	0	0	
Carried Over		59765	0	0	

Description.	Number or quantity.	Value			Remarks
Brought Over		59765	0	0	
Machine Saw Circular Table complete	I	400	0	0	
Do. Table Iron for marking	I	100	0	0	
Anvils	34	408	0	0	
Do. Coopers	2	40	0	0	
Bellows English	2	40	0	0	
Benches Carpenters	15	525	0	0	
Do. small	7	140	0	0	
Do. Filers large	5	500	0	0	
Bearings 5½"	3	225	0	0	
Do. 3½"	3	130	0	0	
Do. 3"	19	570	0	0	
Do. 2¾"	5	150	0	0	
Do. 2⅜"	28	700	0	0	
Buckets Foundry of Sizes	12	500	0	0	
Cast Iron Tanks for Water	2	80	0	0	
Hangers large for 3" Shafting	11	330	0	0	
Swage Blocks and Stands	14	280	0	0	
Moulding boxes (at 80.a Ton) Tons about	40	3200	0	0	
Pulleys 64" x 8"	I	45	0	0	
Do. 63" x 8"	I	40	0	0	
Do. 36" x 8"	I	75	0	0	
Do. 30" x 8"	I	16	0	0	
Do. 27" x 18"	I	55	0	0	
Do. 24" x 9"	I	18	0	0	
Do. 24" x 7"	5	80	0	0	
Carried Over		68412	0	0	

Description	Number or quantity	Value				Remarks.
Brought Over		68412	0	0		
Pulleys 24" × 6"	3	60	0	0		
Do. 22" × 12"	5	75	0	0		
Do. 18" × 12"	6	90	0	0		
Do. 16" × 12"	5	60	0	0		
Do. 16" × 9"	1	11	0	0		
Do. 16" × 8"	31	350	0	0		
Do. 14" × 5"	1	9	0	0		
Do. 12" × 12"	2	16	0	0		
Do. 12" × 8"	1	8	0	0		
Do. 12" × 6"	4	28	0	0		
Do. 9" × 9"	1	6	0	0		
Water Troughs Smiths	26	225	0	0		
Shafting $5\frac{1}{2}$" feet	14	140	0	0		
Do. $3\frac{5}{8}$" "	10	90	0	0		
Do. $3\frac{1}{2}$" "	10	85	0	0		
Do. 3" "	122	845	0	0		
Do. $2\frac{3}{4}$" "	28	210	0	0		
Do. $2\frac{1}{2}$" "	10	70	0	0		
Do. $2\frac{3}{8}$" "	129	645	0	0		
Surface plates	2	400	0	0		
Vices large	26	260	0	0		
Do. Medium	29	194	0	0		
Do. Small	16	80	0	0		
Wall Brackets for Hangers 3"	2	60	0	0		
Do. Do. for Bearings $2\frac{3}{8}$"	1	25	0	0		
Carried Over	.	72463	0	0		

Description.	Number or quantity.	Value.				Remarks.
Brought Over		72463	0	0		
Westons patent differential Pulley to lift 4 Tons	1	121	0	0		
Standard for 40 H.P.Engine	1	300	0	0		
Crane for Steam Hammer	1	200	0	0		
Machine Saw Sharping	1	350	0	0		
Cast Iron Stands large	3	150	0	0		
Do. Do. Do. small	2	25	0	0		
Total Rupees	.	73609	0	0		

(Sigd.) W.L.C.Baddeley Lieut. R.E.

Genl.Supt. P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

List of Works ordinarily carried on in the P.W.Workshops.

Manufacture.

Steam Boilers, tubular and flue.

Dredging Machinery.

Boring Apparatus.

Gearing for Sluice Shutters, lock gates &ca.

Wrought iron girders for bridges, roofs &ca.

Forgings of all kinds.

Castings of all kinds both Iron and Brass.

Bells for Churches &ca.

Turning, boring and planning &ca. for forgings and Castings supplied.

Archimedian Water lifts.

Surki Screens.

Pump deep well and hand.

Machines for special works, such as testing coin Stone crushing, tile moulding &ca.

Scales of every description.

Standard weights and measures.

Iron roofs.

Locks of all kinds.

Heliostats, Roorkee and Begbies pattern.

Signalling lamps of all kinds.

Road tracing Instruments.

Engine turned Stamps.

Pattern making and other wood work that is of a special character.

Repairs.

Repairs.

Steam Engines, pumps and all kinds of Machinery.

Theodolites, Levels, Compasses, Sextants, Baromabeis and all kinds of Mathematical Instruments.

Repairs and jobs of the most varied description.

Plans Estimates and designs are furnished when required, and men are sent to any part of the Presidency with tools for fitting up work, driving machinery &ca.

(Sigd.)W.L.C.Baddeley Lieut. R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October I882.

C I R C U L A R.

I. The Government propose to sell or let the whole of the Workshops land, buildings Machinery and plant, and tenders for the purchase or lease of the same will be received by the undersigned up to Ist.February I883.

2. The premises may be taken over on the expiration of 4 months, from the date on which a tender is accepted.

3. The accompanying maps shew the general arrangement and character of the buildings, and also their position with regard to the Madras Railway Stations&ca.

The distance from the Egmore Station of the South Indian Railway is about 3 miles.

4. The yard is supplied with water in pipes from the Red Hills tank, there is also a well which gives a fair supply, and arrangements might be made for a connection with the adjoining Seven wells water works.

5. The buildings are all in fair order, they were completed in I875 and occupied in I876.

6. The work carried on comprises a large portion of the Iron work required by the different departments of Government in the Madras Ppresidency, there is also a demand for work to be done for the public and ships in the Madras Roads

7. The outturn during the last 5 years has been as follows.

I877-78 = 573476 Rs.

I878-79 = 258201 "

I879-80 = 216876 "

I880-8I = 208888 "

I88I-82 = 234363 "

8. The

8. The book value of the buildings, Machinery and plant, is given in the accompanying Statements A and B.

9. List C shews the nature of work hitherto carried on.

10. The Workshop can be inspected on any working day upon application to the undersigned to whom all enquiries should be addressed.

(Sigd.) W.L.C.Baddeley Lieut.R.E.

Genl Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

A.

List of Workshop buildings with cost of construction:

Description.	Amount.			Remarks.
Main Building	91278	0	0	
Engine House	I2463	0	0	
Foundary Building	I2752	0	0	
Saw Mill Shed	6792	0	0	
Sheds for Stores	47450	0	0	
Smiths Shop (Southern row including Latrine	I2600	0	0	
Carpenters Shed	I0330	0	0	
Smiths Shop(Northern Row.)	I04I5	0	0	
Cistern and Red Hills Water service pipes	3050	0	0	
Stable, Dining Room & Latrines	780	0	0	
Total Rupees	207910	0	0	

(Sigd.)W.L.C.Baddeley Lieut.R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops -

Madras 25th.October I882.

Valuation Statement of Machinery and Plant in the Presidency

Public Works Workshops.

Description.	Number or Quantity	Value			Remarks.
Crane Travelling large	I	2000	0	0	
Cupolas large	2	4000	0	0	
Fan Blower large	I	820	0	0	
do. do. 3rd. Size	I	120	0	0	
Forges portable fan	4	400	0	0	
do. do. large	2	80	0	0	
Force Pump for testing Boilers large	I				
do. do. do. small	I	150	0	0	
Lathe Duplex Surfacing and boring large with face plate 8½″ Diameter	I	2000	0	0	
Do. Screw cutting 30-3″(15″ centre and the other 12″)	2	7000	0	0	
Do. Do. 30′ and 15″ centre	I	3500	0	0	
Do. Do. 20′-2″ and 24″ centre	I	3000	0	0	
Do. Do. 15′-2″ and 10″ centre	I	1500	0	0	
Do. Do. 14′-2″ and 10″ centre	I	1200	0	0	
Do. Do. 6′-3″ and 6″ centre	I	800	0	0	
Do. Do. 6′ and 7″ centre	2	2000	0	0	
Do. Turning 12′ and 10″ centre	I	800	0	0	
Do Do. 8′ and 6″ centre	I	300	0	0	
Do. Wood Turning 8′ and 9″ centre	I	300	0	0	
Do. foot 6′ (3 of 6½″ I and 5″ centres	4	1200	0	0	
Do. Do. 6′ and 9″ centre	I	300	0	0	
Carried over		31820	0	0	

Description.	Number or quantity.	Value	Remarks.
Brought Over		31820 0 0	
Lathe foot Screw Cutting 5-3 and 6 centre	I	800 0 0	
Do. Do. Do. 5 and 6 centre	I	800 0 0	
Do. Do. Do. 4-6 and 5 centre	I	800 0 0	
Do. Do. Do. 3-6 and 5 centre	5	2300 0 0	
Do. Do. Glass Polishing of 3½" centre	I	30 0 0	
Machine Planning I4-I0	I	2000 0 0	
Do. Do. 9'	I	I500 0 0	
Do. Do. 2-9'	I	500 0 0	
Do. Do. 2-9"	I	400 0 0	
Do. Tapping 5-2"	I	700 0 0	
Do. Mill Boring large	I	I200 0 0	
Do. Drilling 8'	2	4000 0 0	
Do. Do. 7'	2	I500 0 0	
Do. Do. 6'	3	I500 0 0	
Do. Do. Wall	I	300 0 0	
Do. Slotting large	I	900 0 0	
Do. Do. small	I	500 0 0	
Do. Drilling hand	I	I00 0 0	
Do. Plate bending	I	I000 0 0	
Do. Punching and shearing	I	400 0 0	
Do. Do. Do. large	I	I500 0 0	
Do. Band Saw	I	350 0 0	
Do. General Joiner	I	I200 0 0	
Do. Punching large	I	I000 0 0	
Do. Press fly Embossing	I	I00 0 0	
Do. Hammer Steam 7½ Cwt.	I	2565 0 0	
Carried Over		59765 0 0	

Description.	Number or quantity.	Value	Remarks
Brought Over		59765 0 0	
Machine Saw Circular Table complete	I	400 0 0	
Do. Table Iron for marking	I	I00 0 0	
Anvils	34	408 0 0	
Do. Coopers	2	40 0 0	
Bellows English	2	40 0 0	
Benches Carpenters	I5	525 0 0	
Do. small	7	I40 0 0	
Do. Filers large	5	500 0 0	
Bearings 5½"	3	225 0 0	
Do. 3½"	3	I30 0 0	
Do. 3"	I9	570 0 0	
Do. 2¾"	5	I50 0 0	
Do. 2⅜"	28	700 0 0	
Buckets Foundry of Sizes	I3	500 0 0	
Cast Iron Tanks for Water	2	80 0 0	
Hangers large for 3 Shafting	II	330 0 0	
Swage Blocks and Stands	I4	280 0 0	
Moulding boxes (at 80.a Ton) Tons about	40	3200 0 0	
Pulleys 64" x 8"	I	45 0 0	
Do. 63" x 8"	I	40 0 0	
Do. 36" x 8"	I	75 0 0	
Do. 30" x 8"	I	I6 0 0	
Do. 27" x I8"	I	55 0 0	
Do. 24" x 9"	I	I8 0 0	
Do. 24" x 7"	5	80 0 0	
Carried Over		68412 0 0	

Description	Number or Quantity	Value			Remarks.
Brought Over		68412	0	0	
Pulleys 24″ × 6″	3	60	0	0	
Do. 22″ × 12″	5	75	0	0	
Do. 18″ × 12″	6	90	0	0	
Do. 16″ × 12″	5	60	0	0	
Do. 16″ × 9″	1	11	0	0	
Do. 16″ × 8″	31	350	0	0	
Do. 14″ × 5″	1	9	0	0	
Do. 12″ × 12″	2	16	0	0	
Do. 12″ × 8″	1	8	0	0	
Do. 12″ × 6″	4	28	0	0	
Do. 9″ × 9″	1	6	0	0	
Water Troughs Smiths	26	225	0	0	
Shafting 5½″ feet	14	140	0	0	
Do. 3⅝″ ″	10	90	0	0	
Do. 3½″ ″	10	85	0	0	
Do. 3″ ″	122	845	0	0	
Do. 2¾″ ″	28	210	0	0	
Do. 2½″ ″	10	70	0	0	
Do. 2⅜″ ″	129	645	0	0	
Surface plates	2	400	0	0	
Vices large	26	260	0	0	
Do. Medium	29	194	0	0	
Do. Small	16	80	0	0	
Wall Brackets for Hangers 3″	2	60	0	0	
Do. Do. for Bearings 2⅜″	1	25	0	0	
Carried Over	.	72463	0	0	

Description.	Number or quantity.	Value.			Remarks.
Brought Over		72463	0	0	
Westons patent differential Pulley to lift 4 Tons	1	121	0	0	
Standard for 40 H.P.Engine	1	300	0	0	
Crane for Steam Hammer	1	200	0	0	
Machine Saw Sharping	1	350	0	0	
Cast Iron Stands large	3	150	0	0	
Do. Do. Do. small	2	25	0	0	
Total Rupees	.	73609	0	0	

(Sigd.) W.L.C.Baddeley Lieut. R.E.

Genl.Supt. P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

Repairs.

Steam Engines, pumps and all kinds of Machinery.

Theodolites, Levels, Compasses, Sextants, Barometers and

all kinds of Mathematical Instruments.

Repairs and jobs of the most varied description.

Plans Estimates and designs are furnished when required,

and men are sent to any part of the Presidency

with tools for fitting up work, driving machinery &c.

(Sigd.) W.L.C. Baddeley Lieut. R.E.

Genl. Supt. P.W. Workshops.

P.W. Workshops

Madras 25th. October 1882.

C.

List of Works ordinarily carried on in the P.W.Workshops.

Manufacture.

Steam Boilers, tubular and flue.

Dredging Machinery.

Boring Apparatus.

Gearing for Sluice Shutters, lock gates &ca.

Wrought iron girders for bridges, roofs &ca.

Forgings of all kinds.

Castings of all kinds both Iron and Brass.

Bells for Churches &ca.

Turning, boring and planning &ca. for forgings and Castings supplied.

Archimedian Water lifts.

Surki Screens.

Pump deep well and hand.

Machines for special works, such as testing coin Stone crushing, tile moulding &ca.

Scales of every description.

Standard weights and measures.

Iron roofs.

Locks of all kinds.

Heliostats, Roorkee and Begbies pattern.

Signalling lamps of all kinds.

Road tracing Instruments.

Engine turned Stamps.

Pattern making and other wood work that is of a special character.

Repairs.

C I R C U L A R.

1. The Government propose to sell or let the whole of the Workshops land, buildings Machinery and plant, and tenders for the purchase or lease of the same will be received by the undersigned up to Ist. February I883.

2. The premises may be taken over on the expiration of 4 months, from the date on which a tender is accepted.

3. The accompanying maps shew the general arrangement and character of the buildings, and also their position with regard to the Madras Railway Stations &ca.
The distance from the Egmore Station of the South Indian Railway is about 3 miles.

4. The yard is supplied with water in pipes from the Red Hills tank, there is also a well which gives a fair supply, and arrangements might be made for a connection with the adjoining Seven wells water works.

5. The buildings are all in fair order, they were completed in I875 and occupied in I876.

6. The work carried on comprises a large portion of the Iron work required by the different departments of Government in the Madras Ppresidency, there is also a demand for work to be done for the public and ships in the Madras Roads

7. The outturn during the last 5 years has been as follows.

I877-78 = 573476 Rs.
I878-79 = 258201 "
I879-80 = 216876 "
I880-8I = 208888 "
I88I-82 = 234363 "

8. The

8. The book value of the buildings, Machinery and plant, is given in the accompanying Statements A and B.

9. List C shews the nature of work hitherto carried on.

IO. The Workshop can be inspected on any working day upon application to the undersigned to whom all enquiries should be addressed.

(Sigd.) W.L.C.Baddeley Lieut.R.E.

Genl Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October I882.

A.

List of Workshop buildings with cost of construction:

Description.	Amount.			Remarks.
Main Building	91278	0	0	
Engine House	12463	0	0	
Foundary Building	12752	0	0	
Saw Mill Shed	6792	0	0	
Sheds for Stores	47450	0	0	
Smiths Shop (Southern row including Latrine	12600	0	0	
Carpenters Shed	10330	0	0	
Smiths Shop(Northern Row.)	10415	0	0	
Cistern and Red Hills Water service pipes	3050	0	0	
Stable, Dining Room & Latrines	780	0	0	
Total Rupees	207910	0	0	

(Sigd.)W.L.C.Baddeley Lieut.R.E.

Genl.Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.

Valuation Statement of Machinery and Plant in the Presidency

Public Works Workshops.

Description.	Number or Quantity	Value			Remarks.
Crane Travelling large	I	2000	0	0	
Cupolas large	2	4000	0	0	
Fan Blower large	I	820	0	0	
do. do. 3rd. Size	I	120	0	0	
Forges portable fan	4	400	0	0	
do. do. large	2	80	0	0	
Force Pump for testing Boilers large	I				
do. do. do. small	I	150	0	0	
Lathe Duplex Surfacing and boring large with face plate 8½′′ Diameter	I	2000	0	0	
Do. Screw cutting 30′-3′′(15′ centre and the other 12′)	2	7000	0	0	
Do. Do. 30′ and 15′ centre	I	3500	0	0	
Do. Do. 20′-2′′ and 24′′ centre	I	3000	0	0	
Do. Do. 15′-2′′ and 10′′ centre	I	1500	0	0	
Do. Do. 14′-2′′ and 10′′ centre	I	1200	0	0	
Do. Do. 6′-3′′ and 6′′ centre	I	800	0	0	
Do. Do. 6′ and 7′′ centre	2	2000	0	0	
Do. Turning 12′ and 10′′ centre	I	800	0	0	
Do Do. 8′ and 6′′ centre	I	300	0	0	
Do. Wood Turning 8′ and 9′′ centre	I	300	0	0	
Do. foot 6 (3 of 6½′′I and 5′′ centres	4	1200	0	0	
Do. Do. 6′ and 9′′ centre	I	300	0	0	
Carried over		31820	0	0	

Description.	Number or quantity.	Value			Remarks.
Brought Over		3I820	0	0	
Lathe foot Screw Cutting 5-3 and 6 centre	I	800	0	0	
Do. Do. Do. 5 and 6 centre	I	800	0	0	
Do. Do. Do. 4-6 and 5 centre	I	800	0	0	
Do. Do. Do. 3-6 and 5 centre	5	2300	0	0	
Do. Do. Glass Polishing of 2½ centre	I	30	0	0	
Machine Planning I4-I0	I	2000	0	0	
Do. Do. 9	I	I500	0	0	
Do. Do. 2-9	I	500	0	0	
Do. Do. 2-9	I	400	0	0	
Do. Tapping 5-2	I	700	0	0	
Do. Mill Boring large	I	I200	0	0	
Do. Drilling 8	2	4000	0	0	
Do. Do. 7	2	I500	0	0	
Do. Do. 6	3	I500	0	0	
Do. Do. Wall	I	300	0	0	
Do. Slotting large	I	900	0	0	
Do. Do. small	I	500	0	0	
Do. Drilling hand	I	I00	0	0	
Do. Plate bending	I	I000	0	0	
Do. Punching and shearing	I	400	0	0	
Do. Do. Do. large	I	I500	0	0	
Do. Band Saw	I	350	0	0	
Do. General Joiner	I	I200	0	0	
Do. Punching large	I	I000	0	0	
Do. Press fly Embossing	I	I00	0	0	
Do. Hammer Steam 7½ Cwt.	I	2565	0	0	
Carried Over		59765	0	0	

Description.	Number or quantity.	Value			Remarks
Brought Over		59765	0	0	
Machine Saw Circular Table complete	I	400	0	0	
Do. Table Iron for marking	I	I00	0	0	
Anvils	34	408	0	0	
Do. Coopers	2	40	0	0	
Bellows English	2	40	0	0	
Benches Carpenters	I5	525	0	0	
Do. small	7	I40	0	0	
Do. Filers large	5	500	0	0	
Bearings 5½"	3	225	0	0	
Do. 3½"	3	I30	0	0	
Do. 3"	I9	570	0	0	
Do. 2¾"	5	I50	0	0	
Do. 2⅝"	28	700	0	0	
Buckets Foundry of Sizes	I3	500	0	0	
Cast Iron Tanks for Water	2	80	0	0	
Hangers large for 3 Shafting	II	330	0	0	
Swage Blocks and Stands	I4	280	0	0	
Moulding boxes (at 80.a Ton) Tons about	40	3200	0	0	
Pulleys 64" x 8"	I	45	0	0	
Do. 63" x 8"	I	40	0	0	
Do. 36" x 8"	I	75	0	0	
Do. 30" x 8"	I	I6	0	0	
Do. 27" x I8"	I	55	0	0	
Do. 24" x 9"	I	I8	0	0	
Do. 24" x 7"	5	80	0	0	
Carried Over		684I2	0	0	

Description	Number or quantity	Value				Remarks.
Brought Over		68412	0	0		
Pulleys 24″ × 6″	3	60	0	0		
Do. 22″ × 12″	5	75	0	0		
Do. 18″ × 12″	6	90	0	0		
Do. 16″ × 12″	5	60	0	0		
Do. 16″ × 9″	1	11	0	0		
Do. 16″ × 8″	31	350	0	0		
Do. 14″ × 5″	1	9	0	0		
Do. 12″ × 12″	2	16	0	0		
Do. 12″ × 8″	1	8	0	0		
Do. 12″ × 6″	4	28	0	0		
Do. 9″ × 9″	1	6	0	0		
Water Troughs Smiths	26	225	0	0		
Shafting 5½″ feet	14	140	0	0		
Do. 3 5/8″ ″	10	90	0	0		
Do. 3½″ ″	10	85	0	0		
Do. 3″ ″	122	845	0	0		
Do. 2¾″ ″	28	210	0	0		
Do. 2½″ ″	10	70	0	0		
Do. 2⅜″ ″	129	645	0	0		
Surface plates	2	400	0	0		
Vices large	26	260	0	0		
Do. Medium	29	194	0	0		
Do. Small	16	80	0	0		
Wall Brackets for Hangers 3″	2	60	0	0		
Do. Do. for Bearings 2⅜″	1	25	0	0		
Carried Over	.	72463	0	0		

Description.	Number or quantity.	Value.			Remarks.
Brought Over		72463	0	0	
Westons patent differential Pulley to lift 4 Tons	1	121	0	0	
Standard for 40 H.P. Engine	1	300	0	0	
Crane for Steam Hammer	1	200	0	0	
Machine Saw Sharping	1	350	0	0	
Cast Iron Stands large	3	150	0	0	
Do. Do. Do. small	2	25	0	0	
Total Rupees	.	73609	0	0	

(Sigd.) W.L.C. Baddeley Lieut. R.E.

Genl. Supt. P.W. Workshops.

P.W. Workshops

Madras 25th. October 1882.

List of Works ordinarily carried on in the P.W.Workshops.

Manufacture.

Steam Boilers, tubular and flue.

Dredging Machinery.

Boring Apparatus.

Gearing for Sluice Shutters, lock gates &ca.

Wrought iron girders for bridges, roofs &ca.

Forgings of all kinds.

Castings of all kinds both Iron and Brass.

Bells for Churches &ca.

Turning, boring and planning &ca. for forgings and Castings supplied.

Archimedian Water lifts.

Surki Screens.

Pump deep well and hand.

Machines for special works, such as testing coin Stone crushing, tile moulding &ca.

Scales of every description.

Standard weights and measures.

Iron roofs.

Locks of all kinds.

Heliostats, Roorkee and Begbies pattern.

Signalling lamps of all kinds.

Road tracing Instruments.

Engine turned Stamps.

Pattern making and other wood work that is of a special character.

Repairs.

Repairs.

Steam Engines, pumps and all kinds of Machinery.

Theodolites, Levels, Compasses, Sextants, Baromatels and all kinds of Mathematical Instruments.

Repairs and jobs of the most varied description.

Plans Estimates and designs are furnished when required, and men are sent to any part of the Presidency with tools for fitting up work, driving machinery &ca.

(Sigd.) W.L.C. Saddeley Lieut. R.E.

Genl. Supt. P.W. Workshops

P.W. Workshops

Madras 25th. October 1882.

C I R C U L A R.

1. The Government propose to sell or let the whole of the Workshops land, buildings Machinery and plant, and tenders for the purchase or lease of the same will be received by the undersigned up to 1st. February 1883.

2. The premises may be taken over on the expiration of 4 months, from the date on which a tender is accepted.

3. The accompanying maps shew the general arrangement and character of the buildings, and also their position with regard to the Madras Railway Stations &ca.

The distance from the Egmore Station of the South Indian Railway is about 3 miles.

4. The yard is supplied with water in pipes from the Red Hills tank, there is also a well which gives a fair supply, and arrangements might be made for a connection with the adjoining Seven wells water works.

5. The buildings are all in fair order, they were completed in 1875 and occupied in 1876.

6. The work carried on comprises a large portion of the Iron work required by the different departments of Government in the Madras Ppresidency, there is also a demand for work to be done for the public and ships in the Madras Roads

7. The outturn during the last 5 years has been as follows.

1877-78 - 573476 Rs.

1878-79 = 258201 "

1879-80 = 216876 "

1880-81 = 208888 "

1881-82 = 234363 "

8. The

8. The book value of the buildings, Machinery and plant, is given in the accompanying Statements A and B.

9. List C shews the nature of work hitherto carried on.

IO. The Workshop can be inspected on any working day upon application to the undersigned to whom all enquiries should be addressed.

(Sigd.) W.L.C.Baddeley Lieut.R.E.

Genl Supt.P.W.Workshops.

P.W.Workshops

Madras 25th.October 1882.