1890.

Public Works (~~1900~~) Department.

RAILWAY BRANCH.

G.O., No. 14.60 Ry.

DATED 26th September 90

[Despatch Abstract.]

Classification of the Construction expenditure of State Railways.—Letter from the Govt of India forwarding thirty additional copies of the draft standing orders regarding the—, Communicated to the Consulting Engineer for Railways.

Indexed.

[P. W. Ry. 1,000—7-2-00.]

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
	1264-8	Ry.	26-8-90				

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

No. 344 A.R.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

ACCOUNT.

Railway.

Simla, the 1st July 1890.

Revised Classification of the Construction Expenditure of State Railways.

RESOLUTION.—In supersession of the existing classification of capital expenditure of State Railways, the Government of India has sanctioned the revised classification laid down in the accompanying draft Standing Order, which is under consideration and will be issued in due course. The revised classification should be adopted from the date of the receipt of this order and should be followed in all accounts and returns prepared after this date.

2. In addition to the final heads now prescribed, the head "Loss by Exchange" should be retained in the accounts of those railways in which it now appears for the purpose of exhibiting the charges for exchange to the end of 1884-85, as no distribution of these amounts can possibly be made.

3. The Government of India recognises the difficulty that may be experienced in re-distributing the past charges under the head "Plant" in accordance with the revised classification, and has consequently decided that no re-allocation of the outlay to end of 1888-89 under this head need be made. In the case of all charges subsequent to that period the allocation prescribed by the new classification must be followed.

4. The re-allocation of expenditure to fall in future under "general charges" may be made approximately and at leisure. It is not essential that the charges to end of 1889-90 should be all correctly brought under the new classification before the accounts of that year are closed. What is conveniently possible should be done; but the accounts should not be delayed.

The Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, and the Punjab.
The Chief Commissioners of the Central Provinces, Burma and Assam.
The Resident at Hyderabad.
The Accountant General, Public Works Department.
The Director General of Railways.
The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow, and Central Division.
The Comptroller General.

ORDER—Ordered, that a copy of this Resolution be forwarded to the Local Governments, Administrations and Officers noted in the margin, for information and guidance.

R. C. B. PEMBERTON, Col., R.E.,
Secy. to the Govt. of India.

Documents accompanying.
Draft Standing Order.

G. C. Press, Simla.—No. 205 P. W. D., A.G.—5-7-90.—1,300.

DRAFT STANDING ORDER.

(*Accompaniment to P. W. D. Resolution No.* *A.—R. of 1890.*)

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

STANDING ORDERS.

P. W. D. CODE, VOLUME III, 3RD EDITION.

No.

CHAPTER I.

Chapter I, para. 7.—For the table of Final Heads I to IX on pages 4 and 5, substitute the following :—

MAIN HEADS.	SUB-HEADS.
I.—PRELIMINARY EXPENSES	1. Survey expenses. 2. Plant. 3. Establishment.
II.—LAND—	
III.—FORMATION	1. Earthwork. 2. Tunnels.
IV.—BRIDGE-WORK	1. Large Bridges. 2. Minor Bridges.
V.—FENCING, &C.	1. Fencing. 2. Road crossings. 3. Mile and Gradient posts.
VI.—ELECTRIC TELEGRAPH—	
VII.—BALLAST AND PERMANENT-WAY	1. Ballast. 2. Permanent-way.

Main Heads.	Sub-heads.
VIII.—Stations and Buildings	1. Stations and Offices. 2. Workshops, Store-buildings, &c. 3. Staff quarters. 4. Station machinery.
IX.—Plant	1. Engineering. 2. Locomotive. 3. Carriage and Wagon. 4. Station and office furniture.
X.—Ferries, &c.	1. Ferries. 2. Floating bridges.
XI.—Rolling-stock	1. Locomotive. 2. Carriage and Wagon.
XII.—General Charges	1. Direction or General. 2. Engineering. 3. Stores. 4. Audit and Account. 5. Medical and sanitation.

Alter the numbers of Suspense Heads on pages 5, 10, and 11 to XIII, XIV, XV, XVI, XVII, XVIII, XIX, *and* XX *respectively.*

[No. , Vol. III,— 6-90.]

Chapter I, para. 9.—For that portion of this paragraph detailing the charges comprised under final heads substitute—

I.—Preliminary Expenses—

Expenses of all kinds connected with the survey and location of the line, preparation of the plans and estimates for the project, and administrative and general charges incurred *before* the work of construction is sanctioned or commenced. This estimate is to be divided into three sub-heads, *viz.*, Survey Expenses, Plant, and Establishment.

Estimates for 'Preliminary Expenses' are to be made out *for the line as a whole,* or for well defined sections or branches of the same.

II.—Land—

Compensation to the owners or occupiers of such land as may be required either permanently or temporarily for the purposes of the Railway, including payments for houses, trees, crops, or other property situated on such land. Land required for the manufacture or stacking of materials, also for the acquisition of materials by quarrying, mining, boring or other operation, and payments for royalty, mining rights, &c., connected with the same. Compensation for damage, loss or injury caused to adjacent property by operations incidental to the construction of the Railway. Salaries, fees, allowances, &c., of Civil Officers and other persons deputed for, or employed on, the valuation, transfer or demarcation of land.

The rent or cost of buildings required for the accommodation of the staff, or for offices, store buildings, &c., for the general purposes of the Railway, is not chargeable to this head.

The land required for each well defined district or section of the Railway is to form the subject of a separate estimate. As items in each estimate the different classes of land, *e.g.*, 'Garden land,' 'Pasture land,' &c., must be shown separately, with the area required and rate for each. The unit of measurement is to be the English acre of 43,560 square feet.

III.—Formation—

Earthwork—

All charges connected with the earthwork in formation of embankments and cuttings (except those included under 'Preliminary Expenses' or 'Land'). Retaining walls, masonry side drains, pitching, turfing, or other protection to such earthwork; tree planting, service roads, also diversions of roads, streams or rivers incidental to the execution of such earthwork. All repairs and maintenance necessary to keep the earthwork in proper order until the opening of the Railway.

Diversions of the Railway in connection with bridges or other works are chargeable to the works concerned.*

* Important diversions of the line for special purposes may be considered as temporary Railways and separately estimated for. Each such case will be considered on its merits according to the purpose for which it is required and other circumstances.

The earthwork required for each well defined district or section of the Railway is to form the subject of a separate estimate. As items in these estimates each class of earthwork or other work is to be given separately with its own quantities, rate and cost. The unit of measurement is to be a thousand cubic feet.

Tunnels—

Each tunnel is to form the subject of a separate estimate, each different class of work appearing as a distinct item with its own quantities, rate and cost.

Diversions of the Railway, plant for rope inclines, and other works required for temporary use during the construction of a tunnel, are chargeable to the estimate of the tunnel concerned.*

IV.—Bridge-work—

Bridges, viaducts, culverts, flood openings, spill causeways, irrigation channels, and all pitching, protection or training works connected with the same. Also diversions of the Railway incidental to the construction of bridges or bridge-works,* and any temporary means provided for crossing a river during the progress of the work.†

Overbridges provided for taking public roads or footways across the Railway are chargeable to 'Road Crossings.'

Bridges having a total waterway of sixty lineal feet or upwards, or having a clear opening of forty lineal feet or upwards in any one span, are classed as 'Large Bridges.' All other works of this nature are classed as 'Minor Bridges.'

For 'Large Bridges' a separate estimate is required for each. For 'Minor Bridges' all the works of this class in each well defined district or section of the Railway will form the subject of one estimate, but the estimate must be framed in such a way that each minor bridge may appear as a distinct item with its own separate quantities and cost clearly shown.

V.—Fencing, &c.—

Fencing—

Fences, walls, palings, hedges, ditches, boundary marks and other means employed for demarcation of, or prevention of trespass upon, the land taken up for the Railway line, stations, &c.

The fencing of detached portions of land occupied for separate purposes, such as general offices, staff quarters, &c., will be charged to the works concerned.

An estimate for fencing is to be made out for each well defined district or section of the Railway. The unit to be adopted is the mile, a mile being taken to mean one mile in length of single fence, not fencing sufficient for both sides of a mile of Railway.

Road Crossings—

Level crossings, with gates, bars, turnstiles, gatekeepers' lodges, approaches, and any signals or other appliances connected with the working of the same.

Also all overbridges provided for taking public roads or footways across the Railway.

An estimate for road crossings, &c., is to be made out for each well defined district or section of the Railway, a separate estimate based on average rates being framed for each different type or class of level crossing proposed.

Mile and Gradient Posts—

Mile-posts and distance marks of all kinds, the numbering of telegraph posts, and gradient posts.

An estimate for mile and gradient posts is to be made out for each well defined district or section of the Railway, the number and rate for each article being clearly shown.

VI.—Electric Telegraph—

The cost of provision of all lines of telegraph as required for the open line, and instruments for working the same, is borne by the Telegraph Department, the Railway paying rent and maintenance charges only.

The cost of the construction of the telegraph, including provision of all instruments and appliances required for the proper equipment and working of the same, must, however, be shown in the estimates for the Railway, the necessary particulars being obtained from the Telegraph Department.

Any special expenditure incurred for temporary lines, &c., required for construction purposes only, is chargeable to the work concerned.

* Important diversions of the line for special purposes may be considered as temporary Railways and separately estimated for. Each such case will be considered on its merits according to the purpose for which it is required and other circumstances.

† Important temporary bridges may be considered as special works and estimated for separately.

VII.—Ballast and Permanent-way—

Ballast—

Includes the provision, and laying on the line, of ballast up to the full section required by the specification, and also maintenance of the same until the opening of the Railway.

An estimate for ballasting is to be made out for each well defined district or section of the Railway. The unit to be adopted is one mile of ballasting complete and up to full section for a single line.

Permanent-way—

Includes the provision and laying of the Permanent-way complete, with all sleepers and fastenings, and maintenance of the line in good running order until the opening of the Railway.

Points and crossings with apparatus, and fittings connected therewith, are to be estimated under 'Station Machinery,' not under 'Permanent-way.' Additional permanent-way required as a reserve for maintenance purposes after the line is opened is not to be included in the estimates for construction.

An estimate for permanent-way is to be made out for each well defined district or section of the Railway. The unit to be adopted is one mile of track complete for a single line of Railway.

VIII.—Stations and Buildings—

Stations and Offices—

Booking Offices, Waiting and Refreshment Rooms, Goods Sheds, Post and Telegraph Offices, Platforms, Latrines for the use of passengers, Administrative Offices, and generally all Station Buildings, Offices and other structures connected with the passenger and goods traffic and general business of the Railway, excepting such as are classed under 'Workshops,' 'Staff Quarters,' or 'Station Machinery.'

Permanent fittings, and furniture specially made to suit a particular building or purpose is chargeable to the estimate for that building or purpose. Ordinary moveable furniture liable to be shifted or transferred from one building to another is to be estimated for under 'Plant —Station and Office Furniture.'

Temporary Offices erected for the use of the staff employed during construction are to be estimated for under

'General Charges,' unless such offices are erected specially for a particular work, in which case their cost is chargeable to the contingencies of that work.

The estimates for stations and offices are to be made up by stations, or by groups of buildings where not intended specially for station purposes; each individual building or structure appearing as a distinct item with its own separate quantities and cost clearly shown.

The cost of platforms and other structures erected at the request of the Military authorities for the special use of troops will be borne by the Military Works Department, and is not chargeable to the estimates for the Railway.

Workshops, Store-buildings, &c.——

Erecting, Fitting or Pattern shops, Foundries, Smithies and other buildings specially intended for the construction, erection or repair of locomotive engines or carriage and wagon stock, or for other mechanical work required for the purposes of the Railway after opening for traffic. All permanent foundations in such buildings for heavy tools or machinery, also columns, chimneys, pits and other structures forming an integral part of the building itself as distinguished from articles of plant and machinery separately fitted up or erected therein. Also all offices, out-buildings, enclosure walls, roads, &c., belonging to, or in connection with, the workshops, and all store-buildings and store-yards either for workshops or for general purposes.

Lines of rail laid into workshops are to be estimated for under 'Permanent-way' and points and crossings under 'Station Machinery.'

A small workshop attached to an engine-shed for carrying out petty repairs to running engines is to be estimated for as a part of the engine-shed under the sub-head 'Station Machinery.'

Temporary Workshops for construction purposes are not chargeable to this head but to the estimate for the work concerned.

Estimates for Workshops are to be made out for each group or set of buildings separately; the individual buildings or structures in each group appearing as distinct items, each having its own separate quantities and cost clearly shown.

Staff Quarters—

Quarters for the residence of the staff employed on the open line, also buildings connected with their instruction,

*amusement or general accommodation, such as Schools, Institutes, Recreation-rooms, Swimming-baths, Gardens, Hospitals, Dispensaries, Running-rooms, and all out-buildings, wells, fences, roads and other works required in connection therewith.**

Temporary quarters erected for the accommodation of the staff employed during construction are to be estimated for under 'General Charges' unless such quarters are erected specially for a particular work, in which case their cost is chargeable to the contingencies of that work.

Estimates for staff quarters are to be made out for each group or set of buildings separately, the individual buildings or structures in each group appearing as distinct items, each having its own separate quantities and cost clearly shown.

Station Machinery—

All machinery and arrangements in use at stations for watering, fuelling, and turning of engines;—repairing, cleaning, and examination of running locomotives and carriage and wagon stock;—loading, unloading and weighing of goods;—shunting or transfer of rolling-stock from one line to another, and starting, stopping and crossing of trains. Under this head, therefore, are classed such items as engine-sheds, wells, reservoirs, tanks and tank-houses, pumps, piping, water-cranes, ashpits, turntables, fuel-stages, carriage-sheds, carriage-examining pits, traversers, points and crossings, and special sleepers for the same, hydraulic machinery, capstans, platform cranes, weigh-bridges, buffer-stops, scotch-blocks, signals, &c., &c.

Estimates for station machinery are to be made out by stations, each individual structure or appliance appearing as a distinct item, with its own separate quantities and cost clearly shown.

IX.—PLANT—

Engineering—

Tools, machinery, instruments, live-stock, camp equipage, trollies, and appliances of all kinds required for the Engineer Department or for Engineers' Workshops for the open line.

* Gatekeepers' lodges at level crossings are an exception to this rule.

Engineers' plant required for construction purposes is not to be included under this head, but is chargeable to the estimates for the works concerned. On the completion of a work the plant will be sold or returned into Store at a depreciated value and the account of the work credited. *

An estimate for Engineering plant is to be made out for each well defined district or section of the Railway. Each class of article must appear as a separate item, with the number required and cost clearly shown.

Locomotive—

Tools, machinery, instruments and appliances of all kinds required in connection with Locomotive workshops or for the purposes of the Locomotive Department, including all work in the erection, fitting, painting, &c., of the same.

Foundations in workshops for heavy machine tools, also chimneys, pits and other works forming an integral part of the building itself, will be provided for in the estimate for the building under 'Workshops, &c.' The arrangements for washing-out engines, and fittings connected with water-supply for a running shed will be provided for in the estimate for the shed under 'Station Machinery.'

A separate estimate for Locomotive Plant is to be made out for each different workshop or purpose for which the plant is intended. In these estimates each class of article must appear as a separate item, with the number required, rate and cost clearly shown.

Carriage and Wagon—

The same rules as for Locomotive Plant.

Station and Office Furniture—

All furniture for stations, and for the permanent offices for the open line.† Furniture required for the temporary offices of the staff employed during construction is to be estimated for under 'General Charges.'

Estimates for station and office furniture are to be made out by buildings or sets of buildings for which the furniture is required. Each class of article must appear as a separate item, with the number required, rate and cost clearly shown.

* A complete list, with estimated prices, of all plant required for construction purposes should nevertheless be made out, showing the proposed allocation of cost to the different works.

† Permanent fittings and furniture specially made for a particular building or purpose is, however, chargeable to the estimate for that building or purpose. For example, a fixed counter in a ticket office would be chargeable to the estimate for the building. A chair in the same office would be classed as 'Station and Office Furniture.'

X.—Ferries, &c.—

Ferries of all kinds to be worked by the Railway for the public conveyance of passengers, animals or goods, with all plant, stock, appliances, jetties, wharves, landing stages, &c., connected therewith. Also floating bridges formed on pontoons or boats.

Steamers or boats for the general purposes of the Railway, and not intended for public traffic, are not to be estimated for under this head, but are to be classed as "Plant."

Each ferry or floating bridge is to form the subject of a separate estimate.

XI.—Rolling Stock—

Locomotive—

Locomotive engines and tenders required for the Railway after opening for traffic.

Locomotives obtained for construction purposes only are not to be included under this head, but are to be provided for in the estimate for the work concerned.

The estimate for locomotives is to be made out for the line as a whole. Each class or type of engine is to be shown as a separate item.

Carriage and Wagon—

All Coaching and Goods stock required for traffic purposes, also rolling stock for the Engineer and Locomotive Departments on the open line, such as ballast wagons, rail-carriers, travelling oil or water tanks, break-down trains, travelling cranes, &c.

Trollies of all kinds are to be considered as 'Plant—Engineering.'

Rolling stock obtained specially for construction purposes is not to be included under this head, but is to be provided for in the estimate for the work concerned.

The estimate for carriage and wagon stock is to be made out for the line as a whole. Each class or type of vehicle is to be shown as a separate item.

XII.—General Charges—

All expenditure incidental to the construction of the Railway as a whole, as distinguished from expenditure incurred in connection with particular works.

General charges are to be classified under the following sub-heads according to the department or purpose for which the expenditure is required :—

Direction or General.

Engineering.

Stores.

Audit and Account.

Medical and Sanitation.

For each of these departments the charges will further be allocated according to subject as follows :—

(*a*) *Salaries and Allowances.*—Salaries and allowances of all kinds payable to officers employed on the general work of the Railway, and to their subordinates and office establishments. The pay of servants on the regular staff of the Railway, such as office messengers, watchmen, post-runners, chain-men, &c. The wages of office servants employed on menial work, such as sweepers, punkah-men, water-carriers, &c. Also fees to professional persons, not on the regular staff of the Railway, whose services may be occasionally or periodically required.

The salaries of Foremen or Inspectors specially engaged for a particular work, their office establishment (if any), and the pay of workmen and labourers generally, are chargeable to the work concerned.

(*b*) *Quarters.*—Dwelling-houses erected or acquired for the general staff employed during the construction of the Railway, and not required for the open line.

The cost of temporary quarters erected specially for the staff or workmen employed on a particular work is chargeable to the work concerned.

(*c*) *Office Accommodation.*—Offices erected, acquired or rented for purposes connected with the construction of the Railway, and not required for the open line. Also furniture for use in such offices.

The cost of a temporary office erected specially for a particular work is chargeable to the work concerned.

(*d*) *Instruments.*—All instruments, and apparatus required during the construction of the line,

whether for out-door work or for office use. Also surgical instruments for dispensaries, &c.

The cost of instruments and appliances procured specially for a particular work is chargeable to the work concerned.

(*e*) *Office expenses.*—All contingent expenses connected with the working of offices during the construction of the line, such as the purchase of books, maps, professional papers, stationery, and petty office requirements. Also legal expenses and advertising.

Office rent and the cost of office furniture is chargeable under (*c*) '*Office accommodation.*'

Detailed estimates for 'General Charges' will, as a rule, not be required until after construction has commenced, and it has been definitely ascertained what arrangements will be most suitable with reference to the nature of the work, the Engineers to be employed, and other particulars.

[No. Vol. III.— 6-90.]

G. I. C. P. O.—No. 413 P. W. D.—7-7-90.—1,320.

B.
No. 1113 R 31st July 1890.

Comts to the Cons. Engr. for
Secy. for information and
guidance.

Sd/ J. L.
Offg. R.

Consg. Engr.'s No. 13.

OFFICE OF CONSULTING ENGINEER FOR RAILWAYS,

Madras, 14th August 1890.

No. 563

MEMORANDUM.

The undersigned has the honour to request the favour of being furnished for use of the Engineers in charge of the Works on the Villupuram Gudalur State Railway, with 30 additional copies of the draft Standing orders referred to in Government of India P.W.D circular No 344 R dated 1st July last, the 23 spare copies of the above received with G.O. No 1113 R dated 31st July 1890 being inadequate to meet the present demand of the Agent Southern Indian Railway.

Sidney Smith
Major RE
For Offg: Cons: Engr for Rys.

not available

To
The Joint Secy: to Govt.
P.W.D: Rly Branch.

Consg for Secy:
Exr. Gudr Rly: Accts
& P. W. Accts.

Form No. 3.

P.W. Cir. 7713

From

THE CONSULTING ENGINEER
FOR RAILWAYS,
MADRAS,

No. 563

Dated 14 } Augt. 1890.
Received 16 }

No. of Enclosures.

Nil

Subject.

Requesting to be favored with 30 additional copies of the draft Standing Orders referred to in Govt. of India P.W.D. Circular No: 3444 A.R. dated 1st July 1890 re — the revised classification of the construction Expenditure of State Rys:

B — No 1267-68 R dy 26th augt/90

1 no copies available.

1

Nº 1267 R dy 26th augt 90.

Fr. Bus III R dy 25.7.90

Nº 2218/90

Ordered to be forwarded to the Govt. of India for favor of compliance.-

Nº 1268 R dy 26th Augt 90

Forwarded-

Insp. depts to India
26-8-90.

1/1578 R 28-8-90

1113 R dy 31/7/90

16-9-90

(1)

No. 461 A.R.

All communications should be addressed to the Secretary.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

ACCOUNT.
Railway.

To The Joint Secretary to the
Government of Madras,
Public works Department,
Railway Branch.

Simla the 9th September, 1890.

Desp. 10th — Do —

Sir,

With reference to your endorsement no 1268 R of 26th ultimo, I am directed to forward herewith thirty additional copies of the draft Standing order referred to in Public Works Department Resolution no 344 A.R. of 1st July 1890, for use of the Engineers in charge of works on the Villupuram Guntakal State Railway.-

I have the honour to be,
Sir,
Your most obedient Servant,
R. Macdonnell
Offg: Dy. Secy. to Govt of India.

Documents accompanying
30 Copies of Standing order

Fr. Bns. 1113 R dy 31. 7. 90

PWC No. 8736

B dy 16. 9. 90

0/1619

R

10. 12. 0

B

No. 1460 R

PUBLIC WORKS DEPARTMENT,

RAILWAY BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 26th Septr 90

again
READ the following

Progs: of the Madras Govt: P. W. Depte:— } Nos. No. 1267-68 R dy 26. Augt 1890

Read also the following:

Letter from the Govt: of India P. W. D— } Nos. No. 461 AR dy 9th Septr 1890

Forwarded to the Consulting Engineer for Railways with reference to his Memorandum No. 563 dated 14th August 1890

25/9/90

Sd/
Wm. R

To The Comptroller for Rys
with 30 copies of enclosure

R 11/10

B

№ 1260 R 24 Sept 19

Bld. 16/9
Adm. 19/9 R 23/9