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LEE CONSERVANCY
REPORT
ON THE
RIVER STORT NAVIGATION

1884

Engineer's Office,
Enfield Lock,
Middlesex, N.,
25th April, 1884

To
The Chairman and Members of The Lee Conservancy Board

Gentlemen

In accordance with your instructions I have to present my Report on the River Stort Navigation

I have gone over and carefully examined the whole Navigation, its Properties, Lands, Buildings, Locks, Bridges, Weirs and other Works, the state of which will be described under their several headings hereafter .

I am unable to present any reliable or exploratory Plans of the Navigation and Properties to accompany this Report, but will endeavour fully, and as shortly as possible, to describe them sufficient for the purpose of this enquiry.

The River Stort Navigation commences at Bishops Stortford, and running southward past Sawbridgeworth, Harlow, Parndon and Roydon joins the River Lee at Fieldes Weir, a distance of 13½ miles from Bishops Stortford, its fall in this length being 93 feet by means of 15 locks; its available depth or draught does not exceed 3' 6'' in the most favourable seasons, but in the Summer season 3' 3'' might be considered the maximum; many of the pools or lengths of the Navigation form the head pools to the different Mills on the River and are therefore subject and liable to be drawn down to the lowest level available at the Mills, as there does not appear in most cases to be any fixed or recognised level below which they may not be drawn but I am given to understand that of late years there has not been any serious delay or difficulty has arisen on this point. The maximum tonnage or freight carried by the Stort barges does not in the most favourable seasons exceed 60 tons, but about 50 tons may be taken as the full ordinary freight. The principal trade on the River is Malt, from numerous Maltings on the Banks of the River at Stortford and other places, and grain and flour to and from the different Mills on the River, also Agricultural produce, Bricks, Coals, &c. The total yearly average tonnage of toll-paying goods for the 5 years (1875 to 1879) being 45,970 tons, this amount of tonnage will be found on comparison with the average of the 15 years from 1855 to 1869 (viz 45,473 tons), to be only an increase of about 500 tons per annum in 25 years, while the gross tolls and receipts of the Navigation, which for the earlier 15 years averaged £2431. From 1875 to 1879 averaged £2,069, and for the last 4 years to 1883 only £1,626 per annum, - the loss on the latter being partly attributable I believe to the sale of

some of the Navigation property and consequent loss of rent, as I find the rents in 1870 amounted to £554 while in 1882 they only amounted to £162, these facts shewing that the trade on the river has much decreased during the last few years; full details of these returns will be found in Appendix No 1 at the end of this Report.

The Amount of River Lee Tolls collected on the river Stort Trade averaged for the 10 years 1860 to 1869, £2043 per annum while the average for the last 4 years ending 1883 is only £1,442 – this latter average would have been greater but for the reduction of 1d. per ton on the Stort trade, made in 1877. - For details of this trade see Appendix No 2.

The net profit or income derived from the Navigation has varied very much from year to year being entirely dependent on the outlay required, the gross tolls or revenue received being fairly regular, for example in 1860 the net profit was only £45, due I should imagine to some accident or other cause of excessive expenditure as it will be observed that in that year some £600 more than the average yearly expenditure was required, the average net income for the 15 years ending 1869 was £866, while the average income for the 6 years ending 1878 was £708, but the average net income for the last 4 years ending 1882, is only £59, shewing a material decrease in the trade and receipts, and increase in the expenditure, though from the state of the works on the River I am quite convinced that the expenditure for the last 4 years is fully as much as will be required for some considerable time to come to effectually maintain the River and restore the works to a satisfactory condition, and therefore taking the gross average receipts at £1626 there ought to be a sum of not less than £1500 per annum allowed for maintenance, which would give an annual net income on the present receipts of £126.

The Works generally on the River show a judicious outlay of the money expended for the last three or four years and I do not think in the general management that any great saving could be expected either in the working of the Locks or in ordinary repairs on the River, the staff being small and efficient and the works and work-yard presenting an appearance of care and attention. No doubt a saving might be effected in carrying out any larger work such as renewing or improving a lock, by having at command a larger staff of experienced men instead of as is now the case, to depend on hired men who know nothing about the work to be done. Some saving also perhaps might be effected in the Collection of the Tolls.

PROPERTY.- I will now in detail describe the Property Works and State of repair. A considerable portion of the property at Bishops Stortford, formerly belonging to the Navigation, has been sold to Messrs Taylor and others but there is quite sufficient remaining for the effective working of the Trade; there are ample and commodious Wharfs, with Malt & corn shops, a good crane and in South Street there is a convenient repair yard and workshops together with Office & residence for foreman, adjoining it is a new & well-built cottage and garden which is let off & might be sold.

At Sawbridgeworth there is a large & convenient wharf with a good 4 ton crane. At Harlow and Burnt Mill there are also good Wharfs while at Roydon Lock there is a small Carpenters' Shop, Saw-pit & Repair Shed also a well-built 4 stall Stable for the Barge horses. There are several plots or pieces of land on the line of the River which would be useful for the purposes of depositing dredgings, and other requirements of the Navigation.

A full detail of all the property is given in Appendix No 3 together with its state of repair.

LOCKHOUSES.- There are 7 Lockhouses on the Navigation, all of them old, but in very good repair generally. At Brick Lock (the 2nd lock going up the River) is the Toll Collecting Station at which there is a small office. At the lowest lock there is a newly erected wooden Hut or Box for the Lockman – for full particulars see Appendix No 4.

LOCKS.- There are 15 locks on the River and I have divided them into 3 Classes according to their state of repair. In the 1st Class I include those that have recently been thoroughly and satisfactorily repaired and restored and which should not call for any serious outlay for some years, These are 4 in number, viz:

South Mill,
Spellbrook,
Sawbridgeworth,
Sheering,

In the 2nd Class I include those that are in moderate working condition and should not call for extensive repairs for the next 5 or 6 years. These are:

Burnt Mill,
Parndon,
Hunsdon,
Latten,

The remaining 7 locks all require repair urgently and should be taken in hand as soon as possible, viz:

Twyford,
Tedmanbury,
Feake's,
Harlow,
Roydon,
Brick Lock,
Lower Lock.

The thorough repair or renewal of each of these locks ought in my opinion to be done at the rate of not less than one each Summer but if possible two and the sum required to be expended on each would be about £500 which could be taken out of the sum of £1500 before named as required for the yearly outlay. This would in the course of ten years place all the Locks in a thoroughly sound state, after which time the yearly expenditure on the Locks would be considerably reduced. Appendix No 5 gives the state of each lock.

BRIDGES:- These are 50 in number belonging to and maintained by the navigation including all descriptions, viz Public Road, Occupation Road, Towing Path and Foot Bridges; of these 29 are in very good repair and not likely to require repair for some years, 12 in fair condition and will not require extensive repairs for the next few years while 9 require renewal as early as possible. Appendix No 6 gives full particulars and the state of all the Bridges. (See Sect 13 & 15 "Stort Act" 6.Geo:3.c.78)

OVERSHOTS & FLOODGATES:- These are 10 in number including 2 or 3 small overshots. The principal Floodgates or Tumbling Bays have all been recently rebuilt and are in excellent condition and not likely to require any expenditure on them for some time. There

are 3 others that require renewing which might be done out of the ordinary yearly expenditure. See Appendix No 7.

WHARFING:- There is no very great amount of wharfing on the Navigation and its repair and maintenance can be easily accomplished out of the annual expenditure. See Appendix No 8.

TRUNKS & CULVERTS:- There is only one that requires early renewal and if properly done should not cost over £100, after which it will require no further consideration.

TOWPATHS:- The Towpaths of the Navigation almost throughout are in a very deplorable state, in fact for the greater portion of the length they can scarcely be termed paths, in many places more like ditches being a simple track way about 3 feet wide worn through the turf to a depth of 1 foot or even more, and in wet weather full of mud. They are without any pretence of ballast or road making surface material and they require reforming almost the entire length of the River, this would require a considerable amount of ballast of which very little is to be found in the River and this no doubt accounts for their state. It would be an expensive work to have to purchase *Ware* or other ballast for the purpose, but we could supply ballast out of the upper portion of the Lee and place the paths in a good condition for a comparatively small cost.

BANKS:- There are several lengths of the River Bank that urgently require raising and strengthening, and this could be done by material dredged out of the River

DREDGING:- There is little if any dredging at all done on the River.

The foregoing, and a reference to the Appendix at the end of this Report will I trust give a correct and comprehensive account of the state of the River, Property, Works, Receipts and Expenditure and I would now suggest what could be economically done to improve its state. First, respecting the shallowness or shoals in the River. It would be in my opinion very inadvisable to attempt to increase the size or depth of the Navigation to admit of 60 tons being carried to Hertford as it would require an outlay of about £6,000 in Dredging the River and deepening the Locks which must necessarily be placed to Capital account. The better plan would be to gradually dredge out the shallowest parts of the River expending £300 or £400 a year out of the Annual Expenditure when it could be afforded and using the dredgings according to their nature either in raising the banks or in the repair of the paths. This would in the course of a few years improve the Navigation without increasing the Capital Expenditure and would also improve the Receipts and Tolls in like manner though I do not anticipate that any very large increase of trade might be expected.

The Tolls charged on the River I believe have not been altered for some years and are as follows - for the full journey to or from Stortford, per ton. Malt 1/4d, Wheat 1/-, Grain 9d, Coals, Flour, Bricks, Sand, &c 4d, Sundries 9d.

In addition to these tolls there is a further charge or Mill Toll of 6d each lock made at 10 locks or 5/- additional per journey on either loaded or empty barges, this Mill Toll being equal to about 2d per ton on all goods. Thus the Stortford Maltster has to pay for all malt sent to London 1/4d Stort Toll, 2d Mill Toll and 11d River Lee Toll total 2/5d per ton, against the Ware Maltster paying only 1/- per ton, a disadvantage of 1/5d per ton; but I confess I do not see any prospect of a reduction of the Stort Tolls as the income at present as shewn by the

returns is so small and the expenditure requisite to earn or maintain it, is so fixed, certain and necessary.

It will be seen by the appended returns that the River Lee Tolls on the Stort Trade amount yearly to nearly the same amount as those collected on the Stort shewing at once the value of the River Stort as a feeder to the Lee and also the vital importance to the Lee of its being efficiently maintained, but so long as this is done by the proprietors I do not perceive much advantage to your Board in acquiring it, though I have not the least doubt that if it could be purchased at a nominal price it might be made a profitable investment by the improvement in the Navigation I have before suggested and the consequent improvement in Tolls both Stort and Lee, though I confess that I see considerable difficulty likely to arise in the application of the Clauses of our 1868 act sections 76 to 87 referring to the Stort, should it become the property of your Board.

I would add that the returns of the Stort Traffic receipts and expenditure are based on the statement given me by the proprietors and have not been verified by examination of their books.

I have the honour to be, Gentlemen

Your obedient Servant
(Signed) J Child,
Engineer

Appendices follow

APPENDIX No 1

River Stort Navigation
Account of Tonnage & Revenue

Year	Total Tons	Receipts			Expenditure			Net Income		
		£	s	d	£	s	d	£	s	d
1855	37,660	2,052	8	3	1,016	5	11	1,036	2	4
1856	41,185	2,081	13	6	1,261	11	3	820	2	3
1857	48,234	2,348	19	3	1,277	14	8	1,071	4	7
1858	47,824	2,441	12	0	1,768	14	5	672	17	7
1859	45,742	2,511	18	4	1,870	13	11	641	4	5
1860	45,105	2,201	6	8	2,155	6	11	45	19	9
1861	46,710	2,170	19	10	1,880	3	4	290	16	6
1862	40,127	2,201	15	1	1,158	1	8	1,043	13	5
1863	44,959	2,386	3	8	1,365	8	8	1,020	15	0
1864	43,760	2,843	19	0	1,586	16	5	1,257	2	7
1865	47,537	2,489	10	7	1,479	14	3	1,009	16	4
1866	48,686	3,198	17	2	1,462	13	6	1,736	3	8
1867	50,186	2,403	12	10	1,704	6	9	699	6	1
1868	48,295	2,581	4	5	1,430	17	5	1,150	7	0
1869	46,085	2,558	17	0	2,049	18	2	508	18	10
Average	45,473	2,431	10	6	1,564	11	2	866	19	4
1873		2,170	9	0	1,307	12	0	862	17	0
1874		2,297	6	11	1,383	19	11	913	7	0
1875		2,223	8	2	1,397	3	11	826	4	3
1876		2,233	13	0	1,660	17	0	572	16	0
1877		2,120	8	4	1,475	14	7	644	13	9
1878		2,004	3	0	1,571	19	5	432	3	7
Average		2,175	..	..	1,466	..	..	708	..	..
1879		1,766	9	10	1,767	16	0	4	13	10
1880		1,683	10	0	1,452	10	0	231	0	0
*1881		1,573	18	7	2,175	0	0	0	0	0
1882		1,481	6	2	1,481	3	2	0	3	9
5 years average 1852 to 57		2,162	..	..	1,192	..	..	970	..	..
15 years average 1855 to 69		2,431	..	..	1,564	..	..	866	..	..

Year	Total Tons	Receipts			Expenditure			Net Income		
		£	s	d	£	s	d	£	s	d
6 years average 1873 to 78		2,175	..	..	1,466	..	..	708	..	..
4 years average 1879 to 1882		1,626	6	1	1,601	11	6	58	19	5

* Deficit £136 18 4.

APPENDIX No 2

River Lee Tolls collected on Stort Traffic

Year	Tolls			Tons charged	Tons of manure
	£	s	d		
1860	1,838	0	11	40,621	3,935
1861	1,817	12	4	40,458	5,909
1862	1,937	19	2	42,743	7,216
1863	2,076	15	7	46,489	4,541
1864	2,038	3	1	44,937	5,246
1865	2,168	11	9	47,361	4,786
1866	2,191	8	4	47,768	4,748
1867	2,103	9	5	45,975	4,694
1868	2,231	11	6	48,295	5,231
1869	2,035	7	4	46,085	4,739
10 years average	2,043	7	4	45,073	5,104
1875	2,336	16	10½	49,676	6,205
1876	2,273	7	11	49,147	6579½
*1877	2,054	4	2½	46789¾	6,046
1878	1,906	16	4	43725½	7469½
1879	1,805	19	9¾	40914¼	4091½
5 years average	2,075	9	..	45,970	6,078
1880	1,663	4	6	37,616	6,671
1881	1,405	19	0	31,834	3,975
1882	1,381	14	5	31,486	6,102
1883	1,330	2	5	30,273	6,176
4 years average	1,442	15	1	32,802	5,731

*Lee tolls on Stort Trade lowered 1d per ton this year

APPENDIX No 3

Property

Navigation Office and House;	Old House, lath and plaster built. In fair condition. Outbuildings new, brick built
<u>Yard;</u> Containing timber-built and slated workshop and store (By side of Dock) Timber built and slated Shops and Lime Shed;	Iron Entrance gates and brick wall in good condition. In good condition.
Two Timber built and slated Corn Shops Nos 80 & 81 and Wharf in front;	Built about 16 years ago and in fair condition
One Wharf about 120 ft x 90 ft	With Iron 6-Ton Crane, erected last year
22 Corn Shops Nos 1 to 15, and 20, 21, 22, 74 to 77 ;	All Timber-built and tiled in fair condition.
<u>South Mill Overshot;</u>	About 1 acre of land between Old River & Navigation
<u>Spellbrook Overshot;</u>	Small piece of land planted with Willows.
<u>Tedmanbury;</u>	An island about 1 acre planted with Osiers.
<u>Sawbridgeworth;</u>	A good commodious wharf with about 120 feet of Wharf Wall and 150 feet Wood Wharfing, there is a good 4 ton Iron Crane fixed.
<u>Harlow Wharf;</u>	A wharf with ample space, wharfing in fair repair except about 40' next bridge, which requires repair. About ¼ acre of land adjoining towpath a little below Harlow Lock let for 5/- per annum
<u>Latton Lock;</u>	Triangular piece of land about ¾ acre below lock and down to next bridge

Burnt Mill Wharf; Triangular in shape about 120 feet frontage – no Wharfing

Roydon Lock; Timber built and tiled Carpenters Shop, Saw-pit and shed. A brick built and slated 4 stall stable (built 1864). A small triangular piece of land between Roydon Mill & Navigation

APPENDIX No 4

Lockhouses

Lock South Mill; Lockhouse about ¼ mile above (at Bridge No 50) is a brick built and slated Cottage in fair condition with new and commodious outbuildings.

Spellbrook; Brick built and tiled in very good condition, had about 12 feet new end added last year (*actually 1879*).

Sheering; Lockhouse and Shed, lath and plaster built and tiled, old but in fair condition.

Harlow; Lockhouse plaster built and slated (date 1803), wood buildings in fair repair.

Burnt Mill; Plaster & tiled (date 1799) old but in fair condition, sheds timber, recently repaired, new tiled, and an addition in brickwork of a washhouse, with bedroom over

Roydon; 2 stories high, basement brick, upper story plaster, in fair condition.

Brick Lock; Lockhouse (date 1830), office and washhouse, brick built, slated and tiled, one story high with loft over, in very fair condition.

Lower Lock; A new wooden hut about 5' square.

APPENDIX No 5

Locks

- South Mill: Brick ends, open sides, nearly all renewed last year (*actually 1879*) and deepened. Lower gates new, Upper gates old, about to be renewed. Wing walls below, brick, new built, depths over sills sufficient
- Twyford: In bad condition generally, upper and lower gates very old, but in fair repair, brickwork bad repair, side piles bad also. Forebay good. Will require an expenditure of £400 within a short time. Depths over sills sufficient.
- Spellbrook: In very good condition generally. Open sides. Upper gates good. Lower gates moderate. Sills deep enough.
- Tedmanbury: Brickwork upper and lower ends requires considerable repair. Side main piles nearly gone, requires entire new sides. Upper gates new 2 (*actually 6*) years ago, in fair condition, lower gates old, only poor state.
- Sawbridgeworth: Brickwork, upper end requires repair, lower end good. Upper gates nearly new and good; lower gates 10 (*actually 14*) years old, fair. Sides of Chamber very bad, requires renewing. Main piles fair; Wing walls in good condition.
- Sheering: Upper and lower gates and brickwork all in very good condition. Sides renewed 1875. Closed nearly to upper pool level. All in most satisfactory condition. Ample depth over sills.
- Feake's: Upper gates leaky and about to be repaired. Lower gates bad and require renewal. Brickwork upper and lower end requires repair. Open sides very bad require renewal. Will require an outlay of £500 within 3 or 4 years.
- Harlow: Brick built, one side refaced recently, other side requires doing. Upper gates bad, but new ones ready for fixing. Hanging posts bad, require renewing and sill lowering 1 foot; Lower gates deepened in 1859 and new gates in, now in fair condition. This lock will require an outlay of about £500 within a couple of years. Fall about 8 ft. 6 in.
- Latten: Upper gates new 1878 good. Staple posts old but in fair condition. Lower gates (put in 1860) in fair condition. Sides in fair condition. Main piles good, brickwork very bad and requires pointing. Altogether in fair condition. Depth over upper sill 3' 9'', lower 4' 6''.

<u>Burnt Mill:</u>	Upper gates require renewing. Lower gates renewed and deepened in 1861 in fair condition. Side timbers and slacker frames &c in poor condition. Lower brickwork requires repair
<u>Parndon:</u>	Upper end of lock renewed 1877. Gates, slackers, wall, &c in good condition. Good depth of water over sill. Sides open in bad condition. Lower gates old and require renewal. Will require an outlay within 5 or 6 years of £450.
<u>Hunsdon:</u>	Lower end gates &c renewed 1873 and deepened 9 inches, in good repair. Sides main piles new, Upper gates old, require renewing. Brickwork only requires a little pointing. About £200 would place lock altogether in a satisfactory condition.
<u>Roydon:</u>	Upper gates & woodwork very bad & requires renewal urgently. Sides of lock open and dilapidated. Lower gates old & require renewal. Brickwork bad. Altogether in bad repair and should have £500 spent on it within a couple of years.
<u>Brick Lock – Toll Collection Lock</u>	Upper gates new. Brickwork partly renewed.. Lower gates, 1 very old and the other about 10 (<i>actually 14</i>) years old, require renewing. Altogether this lock ought to have £300 spent on it within a couple of years. Plenty of depth over sill.
<u>Lower Lock:</u>	Upper and lower gates very old (1850) and in poor condition, will require renewal shortly. Brickwork requires repair, side main piles bad, planking not so bad. This lock will require £400 expending on it within a few years.

APPENDIX no 6

Bridges

<u>No</u>	<u>Date</u>	<u>Description and Condition</u>
50		Cart Bridge very old, oak bearers, brick abutments, very awkwardly built and low, pens up water in flood times, should be rebuilt & widened not less than 6 feet, is quite safe for traffic & might be rebuilt any time convenient at a cost of £800. <i>(London Road Bridge)</i>
49	<i>(1883)</i>	Horse bridge over South Mill Lock, oak bearers, new built & in very good condition. <i>(South Mill Lock tail)</i>
48	1865 <i>(1879)</i>	Horse bridge thoroughly repaired last year (<i>actually 1879</i>) & in good condition. <i>(Twyford lock tail?)</i>
47		Foot bridge, fir moderate repair. <i>(Roley Croke)</i>

- 46 1867 Horse bridge, timber, with brick abutments, in very good condition, renewed
(1883) in 1883. *(Towpath Bridge)*
- 45 1877 Horse bridge, timber, brick abutment, fir bearers, iron rails & posts, good
condition. *(Towpath Bridge)*
- 44 1861 Cart Bridge. Brick abutments. Iron Girders; rebuilt in 1883.
(1883) *(Bridge over river)*
- 43 1852 Cart Bridge. ditto, ditto, oak bearers in good condition, rails & fence also.
(Road Bridge Spellbrook)
- 42 1868 Horse Bridge. Brick abutments, cast iron girders, wood platform, iron rails,
Tedmanbury standards and gates all in very good condition *(Hallingbury Mill head)*
- 41 1849 Cart Bridge. Oak bearers. Old but in fair condition
Tedmanbury Lock *(Tednambury Lock tail)*
- 40 1869 Horse Bridge, brick abutments, 3 spans with iron pier, oak capsills, fir
bearers, iron rails and posts all in good condition *(Hallingbury Mill tail)*
- 39 Horse Bridge, Timber bridge about 12 ft span. Oak bearers. Bad condition.
About to be renewed. *(Towpath Bridge)*
- 38 (1883) Horse Bridge, about 9 ft span, entirely new, iron girders.
(Towpath Bridge)
- 37 1858 Foot Bridge, wood, over river, a half timber on 3 piles, fair repair.
(Kecksey's Bridge)
- 36 1869 Cart Bridge, iron girders, oak planking in good condition.
(Sawbridgeworth lock tail)
- 35 1862 Public Road Bridge, 3 spans together 50 ft. brick abutments. & 2 piers of oak
Sawbridgeworth piles, platform all oak, all in very fair condition.
(Sawbridgeworth Road bridge)
- 34 1851 Horse Bridge about 20 ft. span all fir, abutments of timber in very poor
condition will require renewing within 3 or 4 years. *(Towpath Bridge)*
- 33 1845 Cart Bridge, oak bearers & platform, old but in good condition.
Sheering Lock *(Sheering lock tail)*
- 32 1869 Horse Bridge. Brick abutments, 2 spans, centre pier on iron piles, fir bearers
& planking, iron rails and standards, all in very fair condition.
(Towpath Bridge)

- 31 1869 Horse Bridge about 8 ft. span, brick abutments. plate iron girders, very good condition
(*Towpath Bridge*)
- 30 1844 Horse Bridge 2 spans, timber entirely new
(*Towpath Bridge*)
- 29 1865 Horse bridge 2 spans , entirely new.
(1883) (*Towpath Bridge*)
- 28 Cart Bridge over Navigation. Entirely new, brick abutments, cast iron girders
(*Towpath over river*)
- 27 1880 Foot Bridge, small, over lock tail, entirely new, 1880.
(*Feakes lock tail*)
- 26 Horse Bridge over Pincey Brook. Bridge and abutments all timber in fair condition
(*Towpath Bridge*)
- 25 Horse Bridge about 12 ft. span over ditch, all timber & wants renewing.
About 9 ft. span would cost about £50. (*Towpath Bridge*)
- 24 1862 Horse Bridge, over mouth of old dock, 3 spans about 12 feet each, oak piles, timber, all in bad repair & requires renewing at a cost of £150.
(*Towpath Bridge*)
- 23 (1880) Foot Bridge (small) Harlow Lock, renewed 1880. (*Harlow Lock Tail*)
- 22 (1882) Horse Bridge T.P. over old river about 40 ft. long in 2 spans, oak piles in centre, entirely renewed in oak, 1882
(*Towpath Bridge*)
- 21 1847 Horse Bridge, Latten Mills, all timber 3 spans, oak pile piers, bearers oak,
(1878) planking fir, put in 2 (*actually 6*) years ago, all in fair repair.
(*Bridge over River*)
- 20 Foot bridge (small) over lock tail, fair condition. (*Latton Lock tail*)
- 19 1863 Horse Bridge, about 18ft span, old and in bad condition.
(*Towpath Bridge*)
- 18 1867 Cart Bridge, "Mays" over Navigation, 3 spans, brick abutments, oak pile piers and headtrees, brickwork in fair condition, bearers part oak and fir, old but will last for some years. Cost when renewed £400
(*Towpath over river*)
- 17 1878 Horse Bridge, 3 spans on piles, fir all in good condition
(*Over Mill head*)
- 16 1863 Cart Bridge (Public Rd), oak bearers, all in good condition.
(*Burnt Mill Road*)

- 15 1866 Cart Bridge, Parndon Hall over Navigation , all timber, bad condition (very little used) will require renewing in a few years at a cost of about £400.
(Bridge over river)
- 14 Horse Bridge, cast iron girders & handrail & floor in very good condition.
(Parndon lock tail)
- 13 1872 Horse Bridge, brick abutments, iron girders and hand rails, good condition span 14 ft.
(Parndon Mill tail)
- 12 1876 Horse Bridge, brick abutments, 2 span, iron pile pier, fir bearers, iron rails, good condition.
(Bridge over river)
- 11 1858 Cart Bridge, Mead End, over Navigation, very low, 3 spans, all Timber, old and dilapidated, and will require renewal at a cost of £450 within a few years.
(Bridge over river)
- 10 1868 Cart Bridge, over Hunsdon lock tail, fir bearers & iron rails in fair condition.
(Hunsdon Lock tail)
- 9 1868 Cart Bridge, about 18 ft. span across Navigation, brick abutments, fir bearers , iron rails, all very good condition.
(Bridge over river)
- 8 Cart Bridge over Lock tail (Roydon), oak bearers, old but in moderate condition.
(Roydon lock tail)
- 7 Cart Bridge, 3 spans, about 35 ft. altogether, brick abutments, fir pile piers, oak bearers, planking bad (not much used for carting over), will require renewal within a few years at a cost of about £380. *(Hunsdon Mill tail)*
- 6 (1878) Cart Bridge, Roydon Railway, brick abutments. 1 pier of 3 oak piles & capsills all renewed in 1878 & in very good condition , Fault very low.
(Roydon road bridge)
- 5 1861 Cart Bridge. Brick abutments, iron bearers and rails in good condition, this bridge is the lowest & most awkward bridge on the whole Navigation being almost at right angles with the River and only 6 ft. headway
(Roydon Mill Road)
- 4 1860 Cart Bridge, abutments & timber platform all in good condition. (about to be rebuilt in iron)
(Towpath over river)
- 3 1873 Cart Bridge over Lock tail, iron girders, oak planking and rails very fair condition, planking requires a little repair.
(Brick Lock tail)
- 2 1883 Cart bridge (occupation) over navigation. Iron girders, brick abutments, renewed last year.
(Towpath over river)
- 1 1868 Cart bridge over Lock tail, all fir, in moderate condition. *(Lower Lock tail)*

APPENDIX No 7

Overshots and Floodgates

<u>Name</u>	<u>Description and Condition</u>
South Mill	Three Iron Gates and Standards with Bridge over, built 1868, in very good condition and will not require repair for years.
Above Spellbrook	About 12 ft. long, brick built, in good condition, fall about 18 in.
Spellbrook	All timber, fall about 6 ft., requires entire renewal.
Floodgates below Tedmanbury	About 12 ft. wide, 3 ft. fall, all timber, fair repair.
Floodgates below Tedmanbury	About 9 ft. wide, fall 4 ft. requires renewing
Below Bridge No 30	Floodgates (3 gates) all timber wing and all very dilapidated, requires renewal at a cost of about £250, very little used about 1 ft. fall.
Below Bridge No 29	Overshot about 18 ft. long, all timber, moderate condition.
Latten Mill	Floodgates, 3 gates about 3 ft. 6 in wide each, oak standards, brick abutments, built 1874, fall about 6 ft., in excellent condition.
Roydon Cut	Tumbling Bay, built 1867, 2 gates 5 ft. each, brick abutments, iron standards, bridge over it, oak bearers, all in good condition.
Stort Weir	Rebuilt 1870, brick wings, oak standards, &c., fall about 7 ft. 4 gates about 3 ft. 6 in. each, 2 lift by gear, the others have moveable flash boards all in good condition.

APPENDIX No 8

Wharfing

<u>Place</u>	<u>Description and Condition</u>
Bishops Stortford	The wharfing and banks of Public Wharf are in a fair condition. The banks of Cut & basin adjoining Messrs Taylor's property very bad but their repair devolves on Messrs Taylor. The canal and basin surrounded by Messrs Taylor's property, is still the property of the Navigation.
Feake's Lock	Wharfing below lock requires renewal about 100 ft.

Pishiobury The Railway runs close to Navigation at a place called "The Pinch. The River is very circuitous there; there is about 200 ft. of Wharfing here in very fair condition.

Harlow About 150 ft. of Towpath Wharfing from bridge to lock requires repair.

Below Lower Lock Wharfing requires repair.

Wharfing generally is in fair repair, and considerable amount of new done.