

Pages 172-224 are Blank

ICE BREAKERS

ICE BREAKERS
GOVERNMENT LIGHT
(WHITE) ON OUTSIDE
ONE

ICE
BREAKER
ARMSTRONG'S
LDG

C. C. C. Co's
COAL LDG

FRY'S OLD
LDG



O. R. R.

K & M



POINT

HENDERSON

PLEASANT
FERRY LDG

FERRY LDG

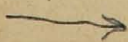
GOVERNMENT LIGHT
ON WHARF BOAT



FERRY LDG

BAR

BRIDGE



FAIR HAVEN

CRAWFORD'S
LDG

3 MILE CREEK

ISAAC LONG'S
LDG

K & M



COFFER
DAM

DAM &
LOCK
No 11
(UNDER CONSTRUCTION)

ICE BREAKERS

DD

WHITE
GOVERNMENT LIGHT ON
OUTSIDE ICE BREAKER

DD

GOVERNMENT
LIGHT (WHITE)



STERRETT'S
LDG

3 MILE
CREEK

N. & M. R. R.



5 MILE
CREEK
McCULLOUGH'S
L'D'G

GOVERNMENT
LIGHT (WHITE)



JNO. POFFENBARGER'S
LD'G

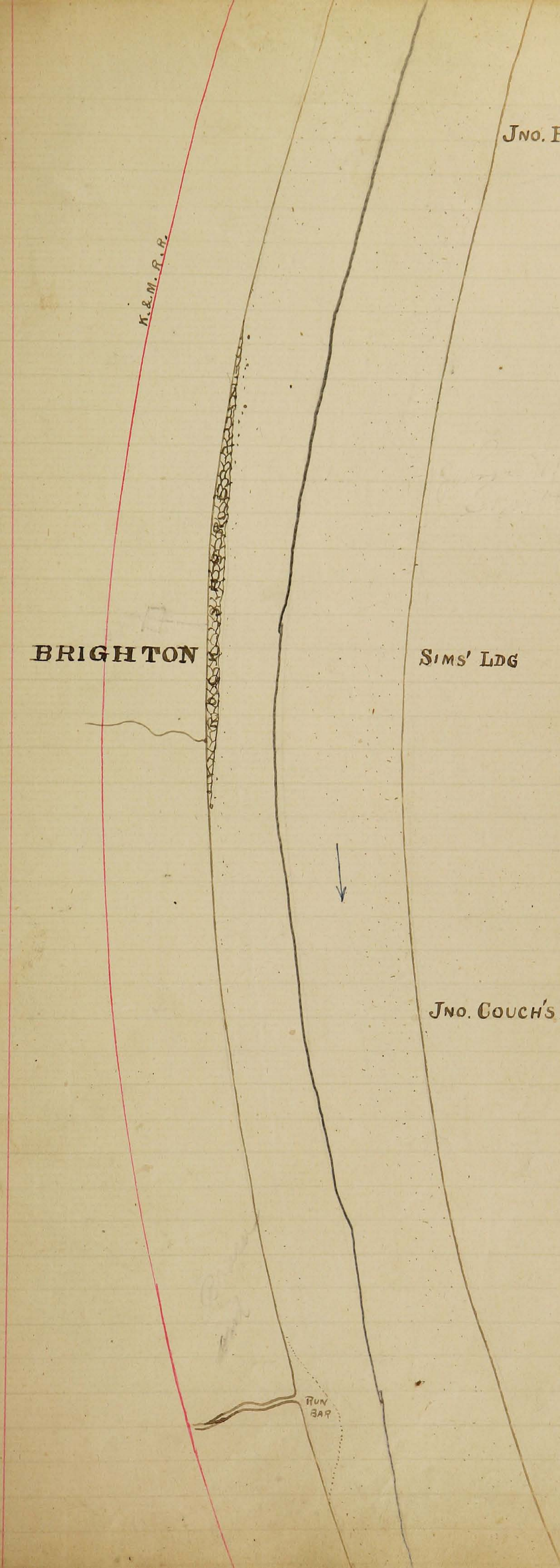
K. & M. R. R.

BRIGHTON

SIMS' LDG

JNO. COUCH'S LD'G

RUN
BAR



K & M. P. R.

JOHN THORNBURG'S
LDG



PARSON'S OF
GOSHORN'S LDG

JOHN POFFENBARGER'S
LDG

GOVERN-
MENT
LIGHT
(WHITE)

RICES
LDG

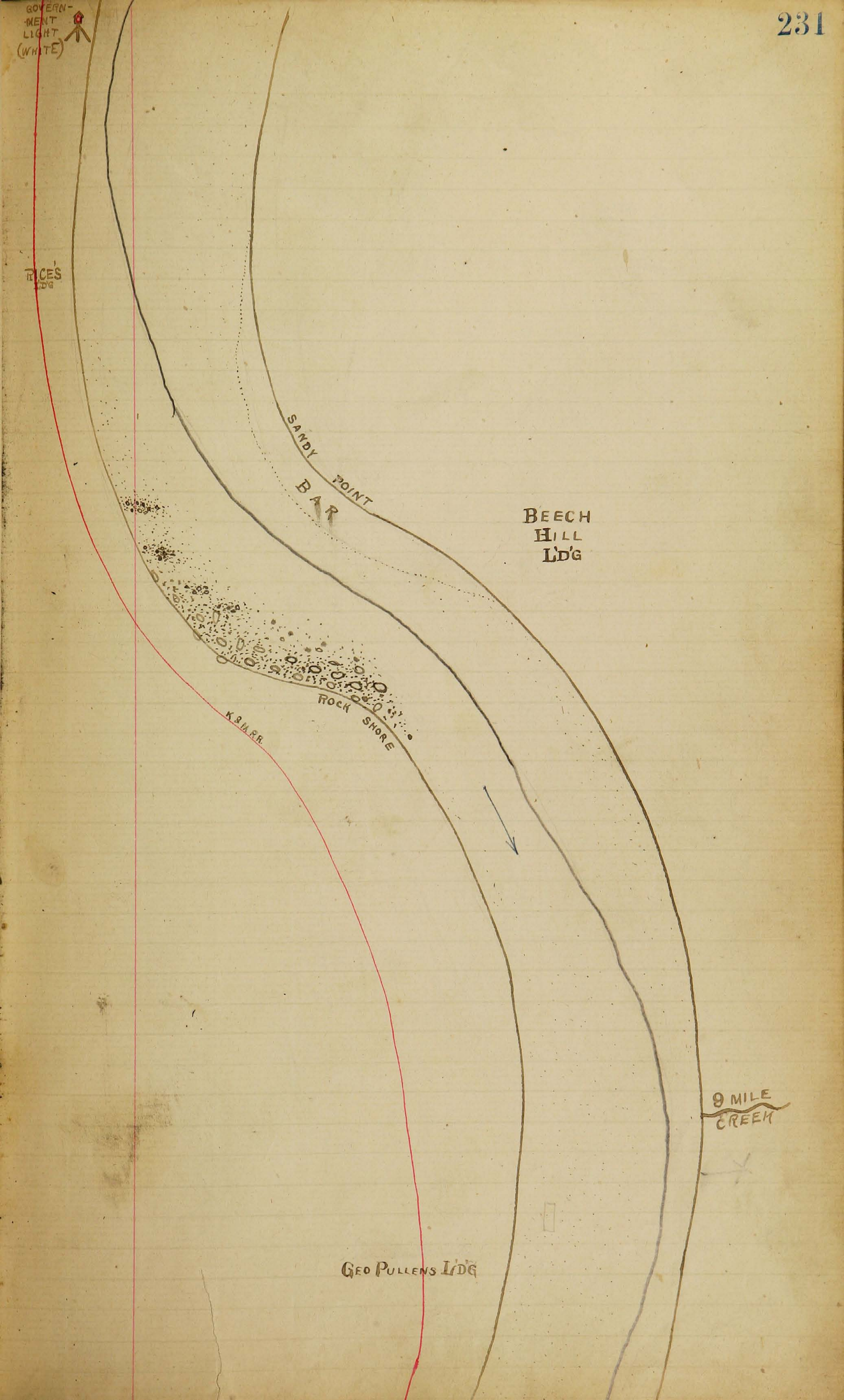
SANDY
POINT
BAR

BEECH
HILL
LDG

KRARR
ROCK
SHORE

9 MILE
CREEK

GEO PULLENS LDG



MRS
CROOKHAMS
LDG

GALLATIN EASTHAM'S LDG

K & M. P. R.



W^H LONG'S
LDG

10 MILE
CREEK

GOVERNMENT
LIGHT (WHITE)



LEON
GOVERNMENT
LIGHT (WHITE)

M. & M. R. R.

ROCKY SHORE

JONES' LDG

13 MILE
CREEK DAM
6 FT

2 1/2 FT
ROCKY
BAR

4 FT
ROCKY
BAR



MAUPIN'S
LOWER
LDG

K&M.R.R.

Handwritten scribbles

GEORGE LONGS LOG

KING'S
MILLS

(4 FT)



WILLIAMSON'S LOG

WILLIAMSON'S LDG

X

JONES' LDG

4 FOOT
ROCKY
BAR



ARMSTRONG'S
LDG

SAM COUCH'S
LDG

K. & M. R. R.

ROBT. DUNN'S LDG

GOVERNMENT
LIGHT (WHITE)
C. W.
MAUPIN'S
LDG 468

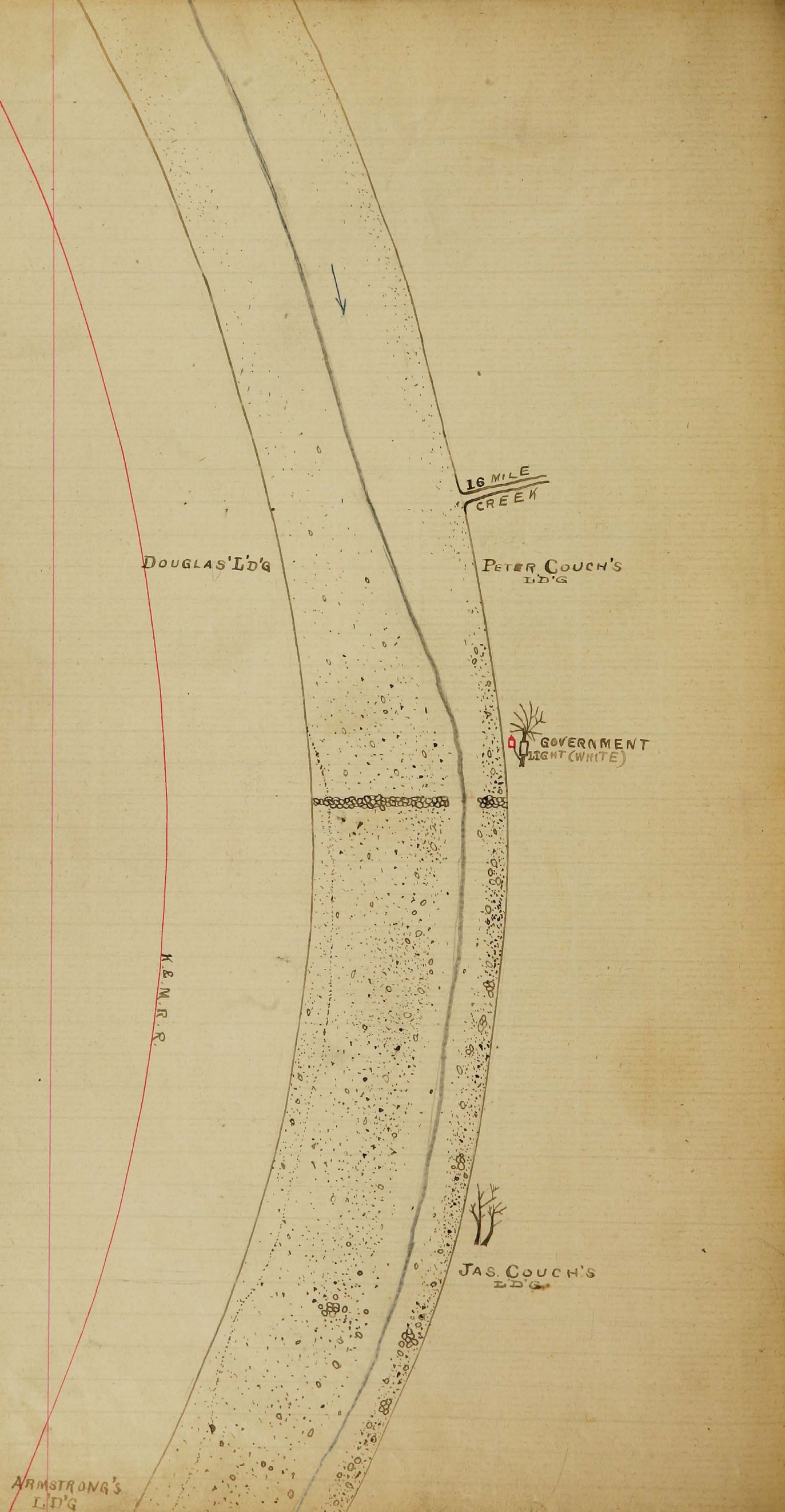


PICKETS

MAUPIN'S
"SOUTH SIDE" LDG

MAUPIN'S
LOWER LDG





DOUGLAS' LD'G

16 MILE
CREEK

PETER COUCH'S
LD'G

GOVERNMENT
LIGHT (WHITE)

H. & N. R. R.

ARMSTRONG'S
LD'G

JAS. COUCH'S
LD'G

GRIMMS LDG
GOVERNMENT LIGHT
(WHITE)



ATBUCKLES
RUN

GEO. SIBBLE'S
LDG

K&M R.R.

"COOPER'S"
DAM

BUD COOPER'S
LDG



HEIGHT OF
"EMERY" DAM
3 FEET

3 1/2 FT
ROCK
LUMP

GOVERNMENT
LIGHT (WHITE)

M.M.P.R.

JAS MORGANS
UPPER LDG

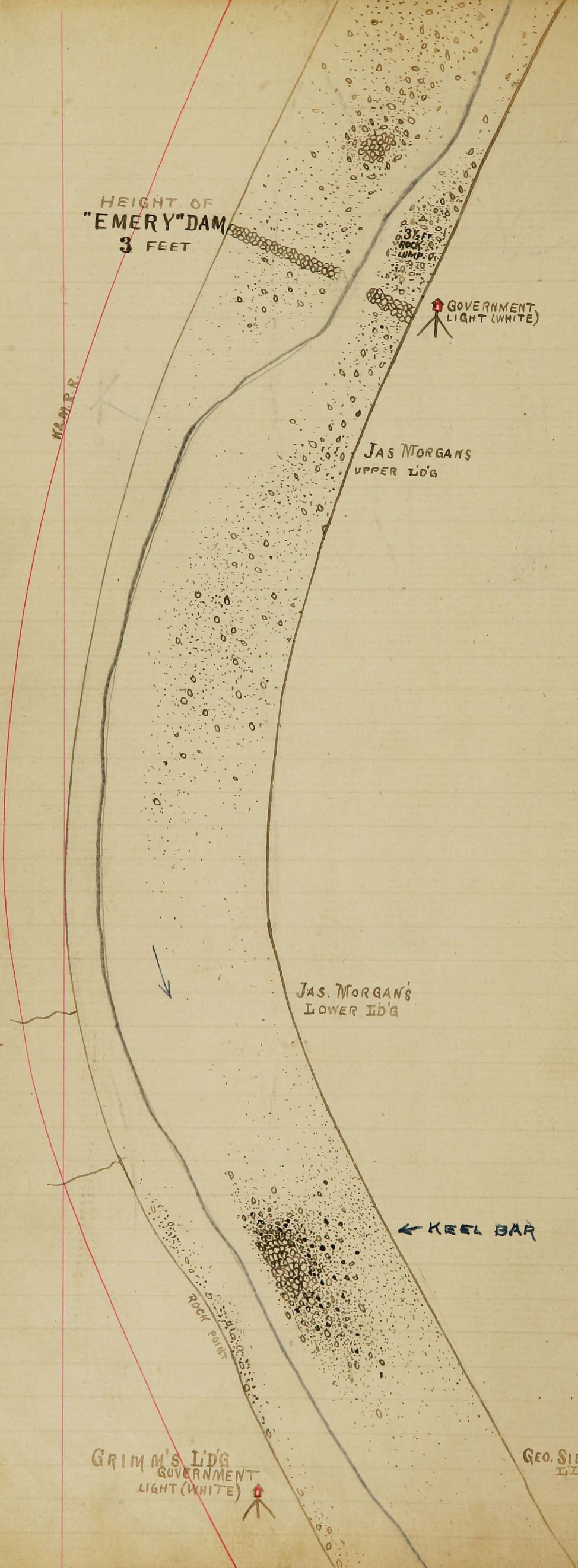
JAS. MORGAN'S
LOWER LDG

← KEEL BAR

ROCK POINT

GRIMM'S LDG
GOVERNMENT
LIGHT (WHITE)

GEO. SIBBLES
LDG



"DEBBY"
DAM

GOVERNMENT
LIGHT (WHITE)

DAM &
LOCK
No 10
(UNDER
CONSTRUCTION)

COFFER
DAM

PIKE CITY
OR
ROBERTSVILLE

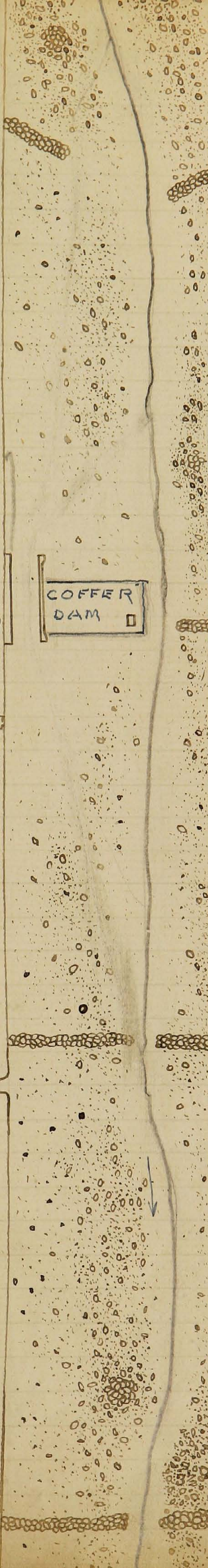
M.&M.R.R.

18 MILE
CREEK

GEN. MCCAUSLAND'S
EDG

HEIGHT OF
"EMERY" DAM
3 FEET

GOVERNMENT
LIGHT (WHITE)



HARVEY'S LDG

HEIGHT OF
"HAINY" DAM
3 FEET HIGH

STERRETT'S
LDG

K. & M. R. R.

GOVERNMENT
LIGHT (WHITE)
ATKISSON'S LDG

"DEBBY" DAM

GOVERNMENT
LIGHT (WHITE)



K.S.M.R.R.

BUFFALO

BUFFALO LD'G

GOVERNMENT LIGHT (WHITE)



BUFFALO MILL LD'G

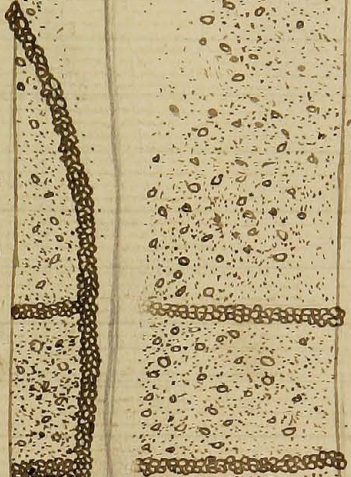
4 FT BAR

RENNER'S LD'G

WEARE'S LD'G

"PLINEY" LD'G

HEIGHT OF BUFFALO DAMS 3 1/2 FEET



C.C. Brown's Ldg

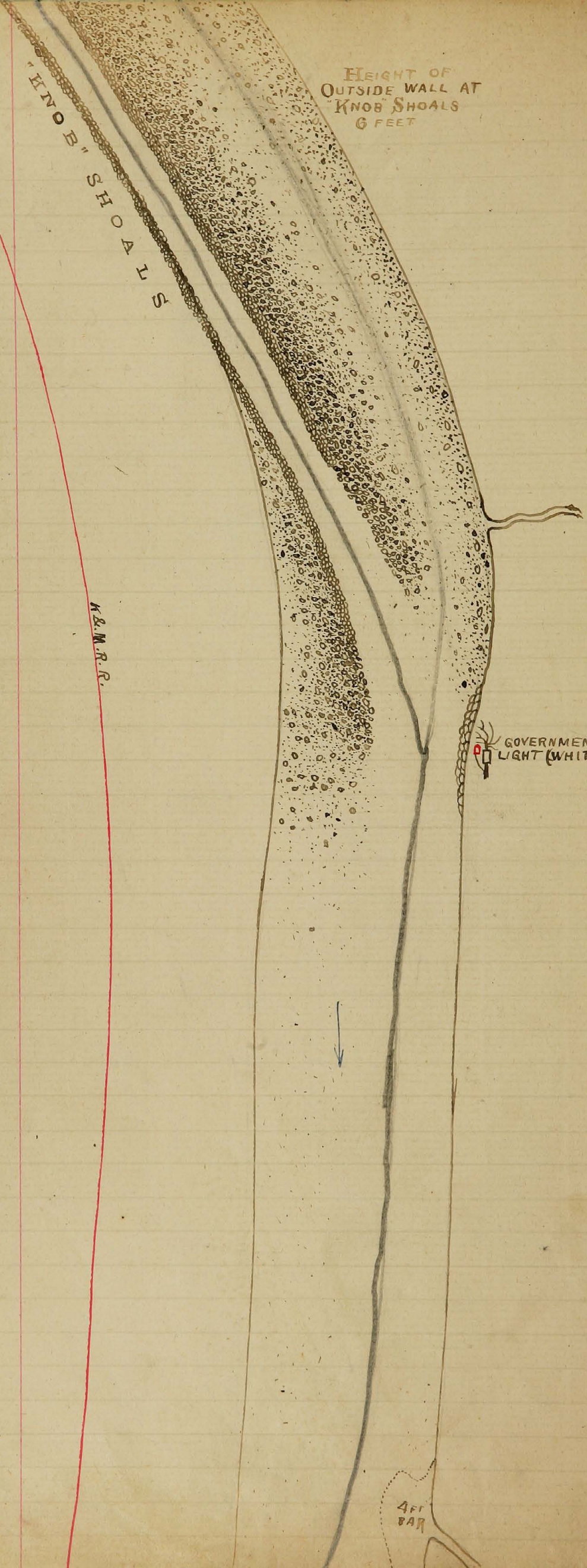
"KNOB" SHOALS

HEIGHT OF
OUTSIDE WALL AT
"KNOB" SHOALS
6 FEET

K&M.R.R.

GOVERNMENT
LIGHT (WHITE)

4 FT
BAR



WELLS
LDG

5 & 20

CREEK
BAR

CREEK

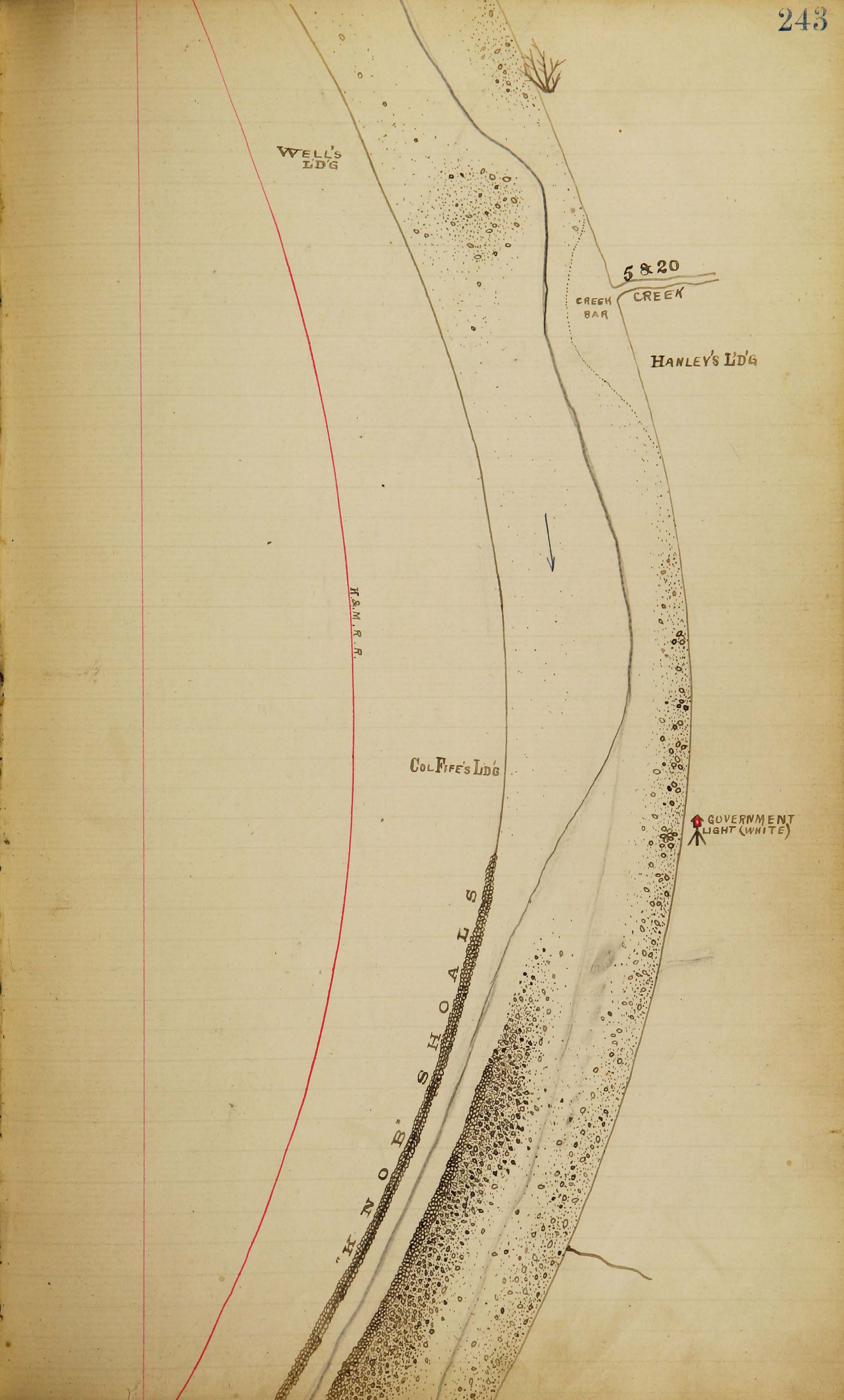
HANLEY'S LDG

F. & M. R. R.

COL FIFE'S LDG

GOVERNMENT
LIGHT (WHITE)

KNOB SHOALS



ROBT. FRAZIER'S
LDG

DAM &
LOCK
No 9
(UNDER
CONSTRUCTION)

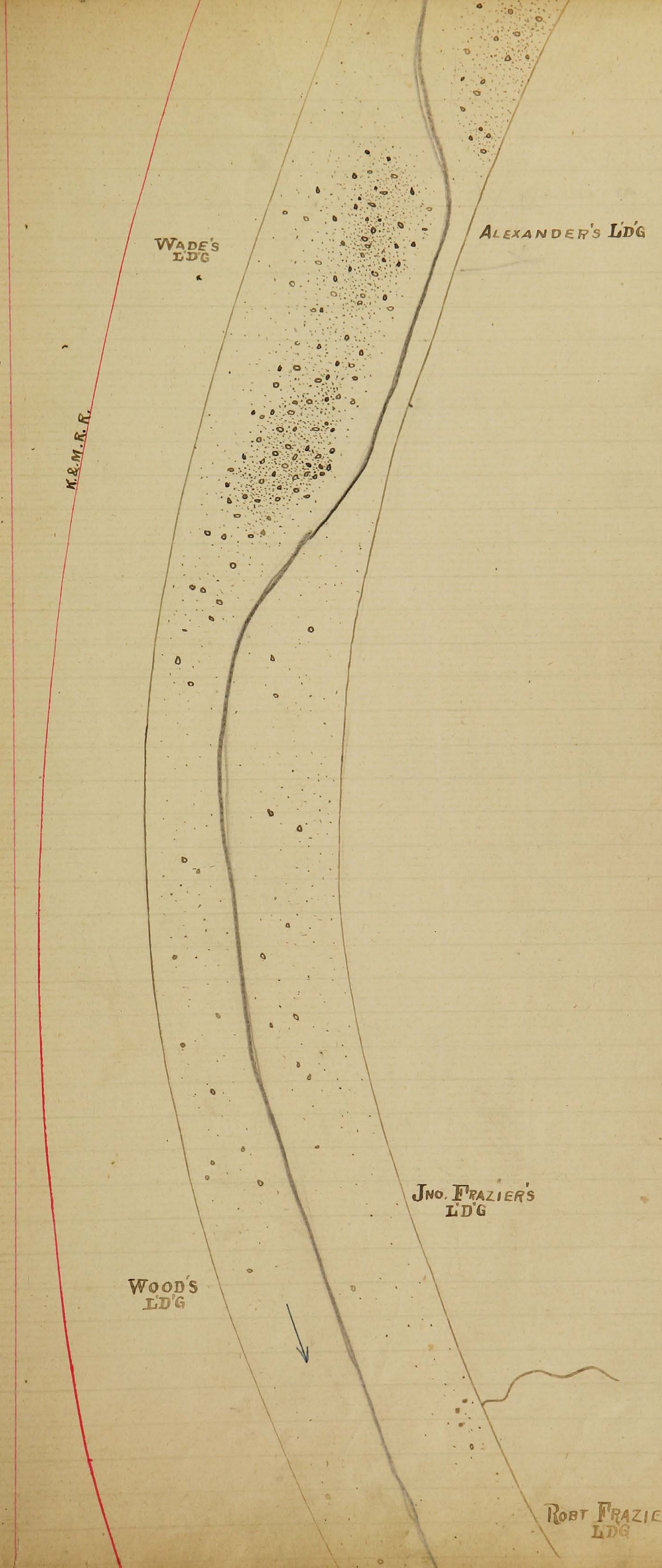


Widow Frazier's

WIDOW FRAZIER'S
LDG
OR WESSON'S

WELLS
LDG





WADE'S
LDG

ALEXANDER'S LDG

M. & M. R. R.

WOODS
LDG

JNO. FRAZIER'S
LDG

ROBT FRAZIER'S
LDG



GUS. VINREUX'S
LDG
AFTERWARD
HUGH LUNSFORDS

JAS. MORRIS'
LDG

M.R.R.R.

CHAS VINTREUX'S
LDG

CAPT. DIDDINGS'S
LDG

MARTIN'S LDG
OR
MIDWAY



ALEXANDER'S LDG



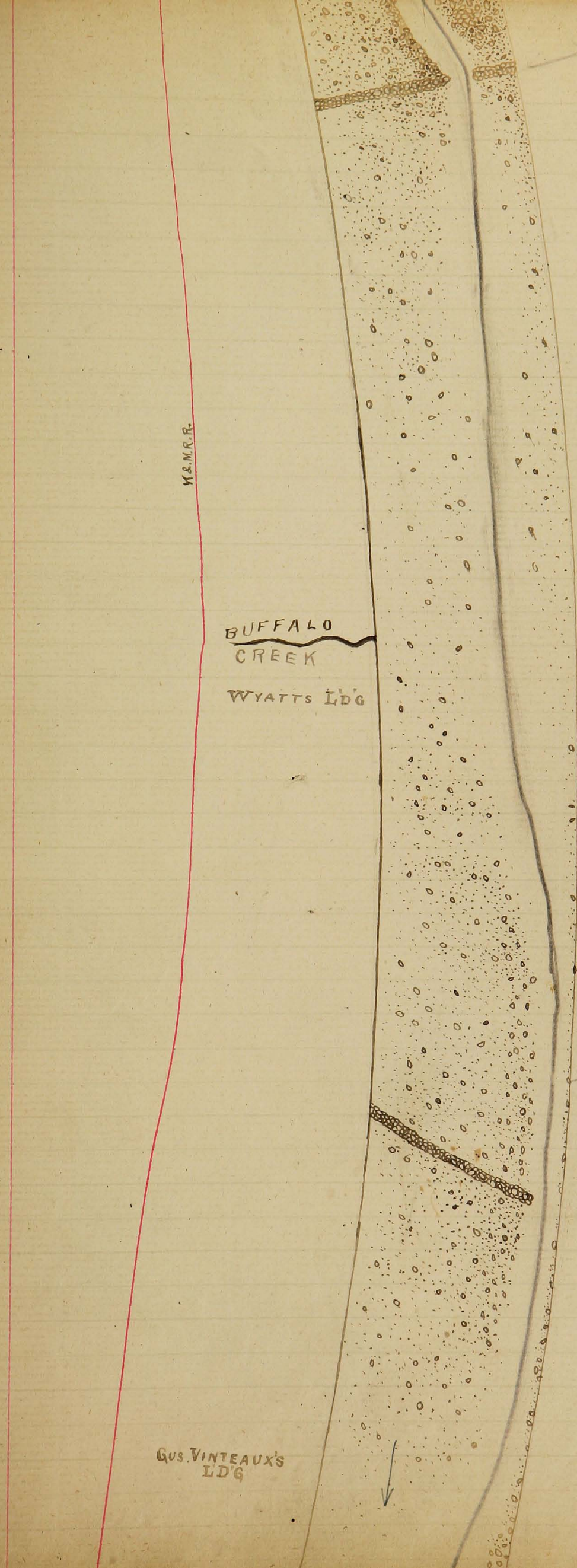
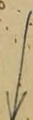
W.S.M.R.R.

BUFFALO
CREEK

WYATTS LDG

THEODORE VINTREAU'S
LDG

GUS VINTREAU'S
LDG



TUCKER'S BRANCH
IDG

TUCKERS' BRANCH

ICE BREAKERS

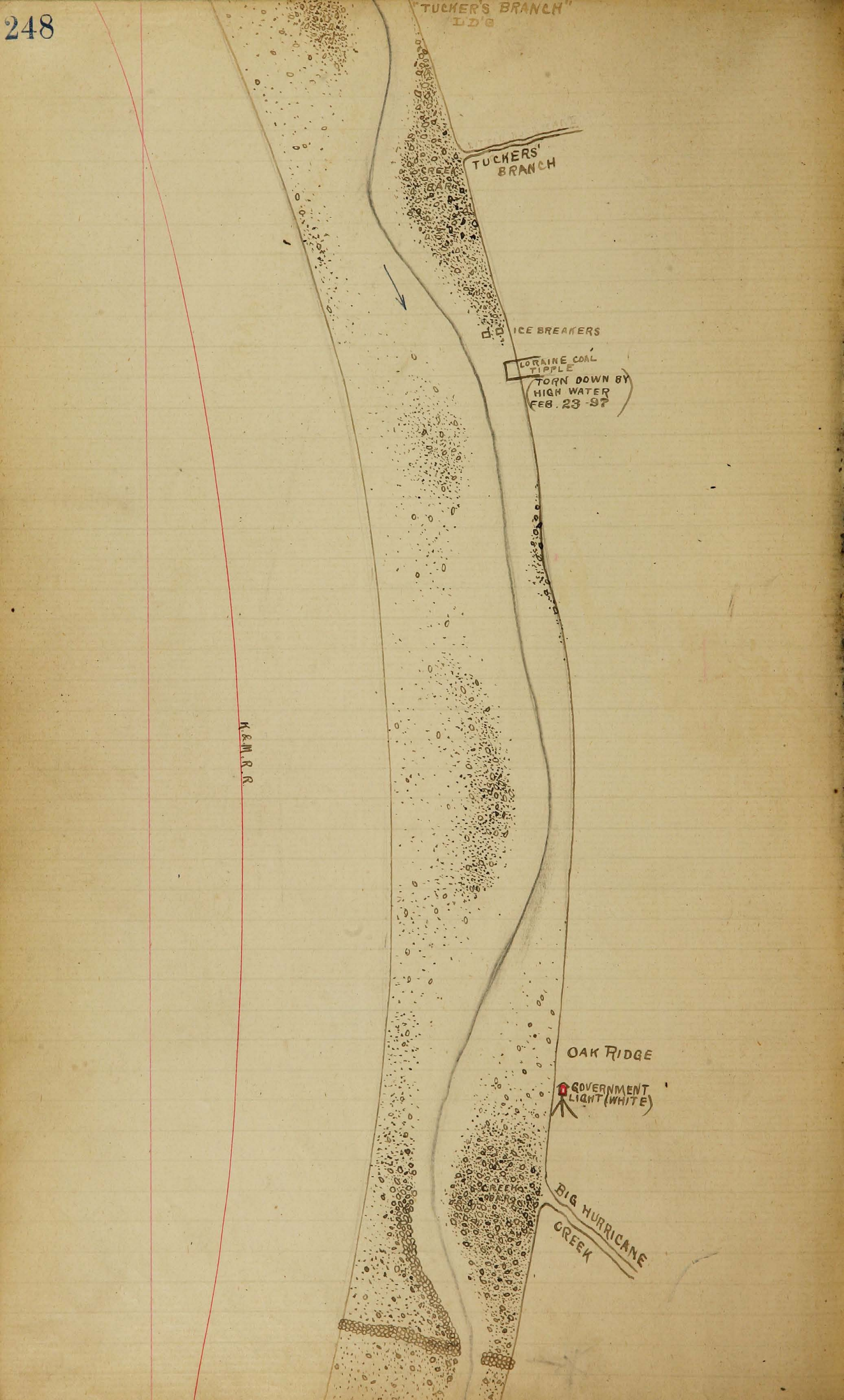
LORAIN COAL
TIPPLE
(TORN DOWN BY
HIGH WATER
FEB. 23 - 97)

K&M.R.R.

OAK RIDGE

GOVERNMENT
LIGHT (WHITE)

BIG HURRICANE
CREEK



LITTLE HURRICANE CREEK

GOVERNMENT LIGHT (WHITE)

WASHINGTON BAR

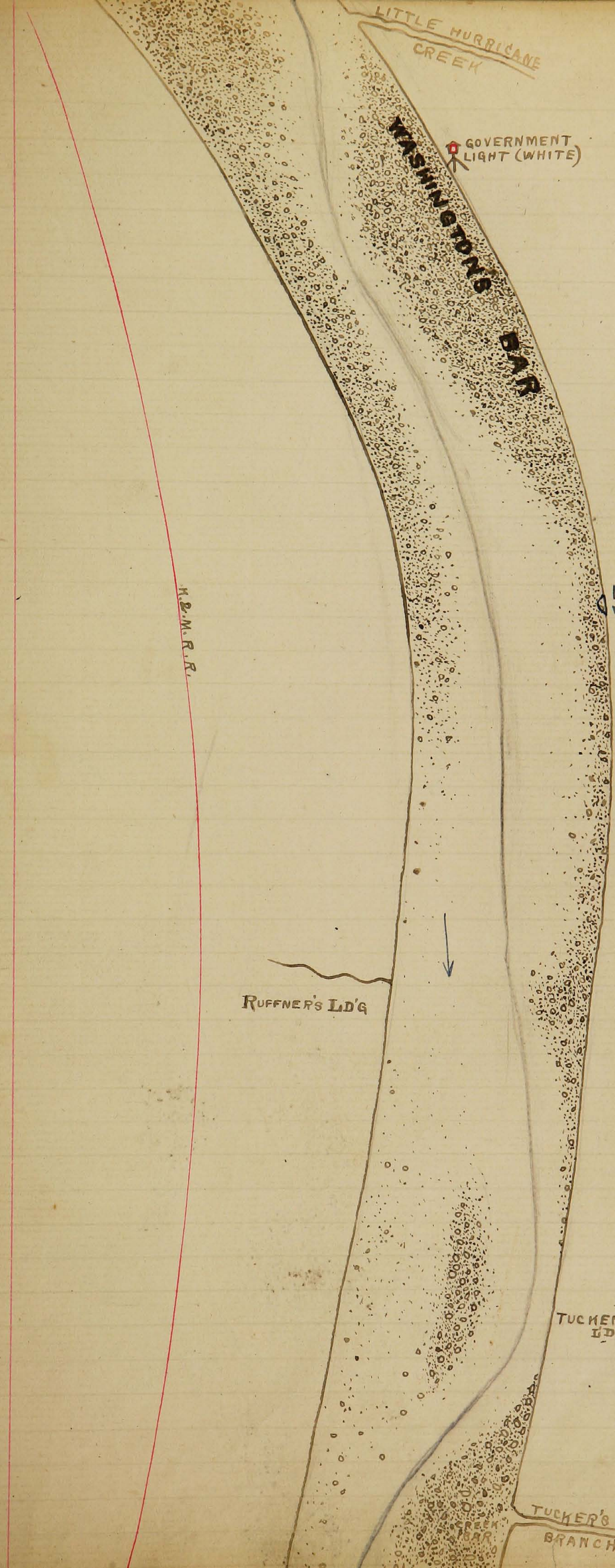
MARKED ROCK WATER GAUGE

N.E.M.R.R.

RUFFNER'S LD'G

TUCKER'S BRANCH LD'G

TUCKER'S BRANCH



GEO. BOYERS
L.D.G.

BAR PHOTOGRAPH



KIMBERLAINS'
IDG

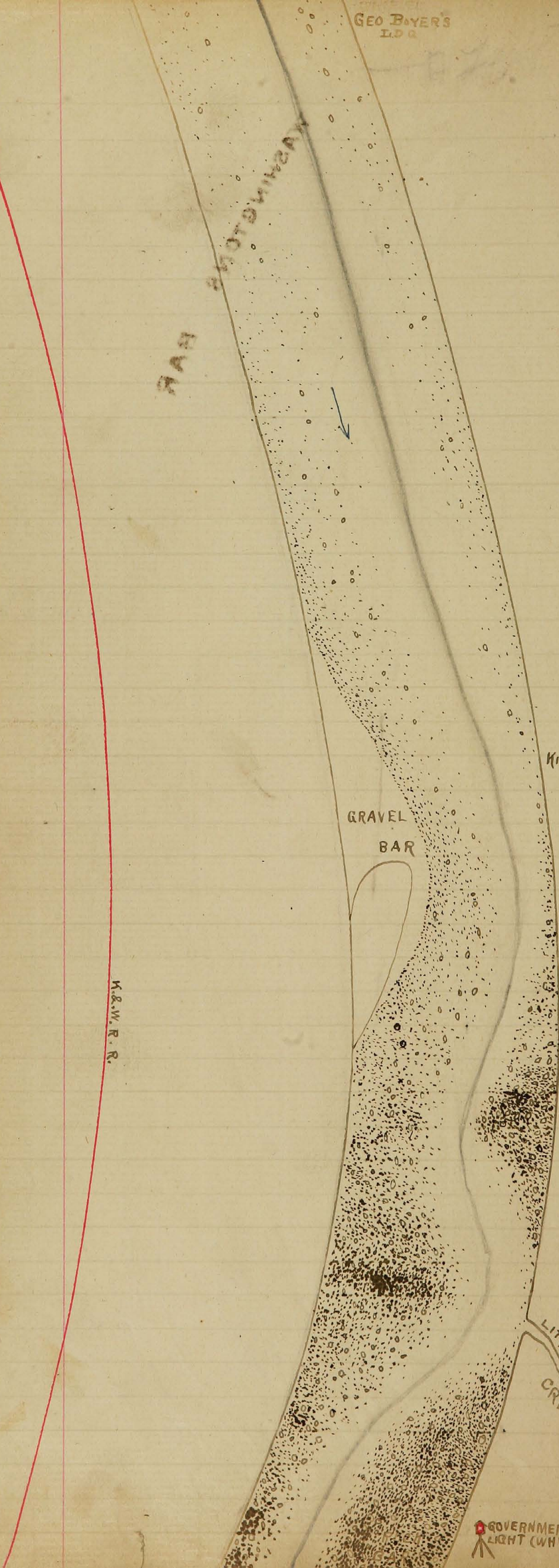
GRAVEL
BAR

PICKETS

M. & W. R. R.

LITTLE HURRICANE
CREEK

GOVERNMENT
LIGHT (WHITE)



COURTNEY CITY

GOVERNMENT LIGHT (WHITE)

RIVERSIDE

K.R.M.R.R.

RED

HOUSE

OLD CHANNEL

ROUGH GRAVEL BAR

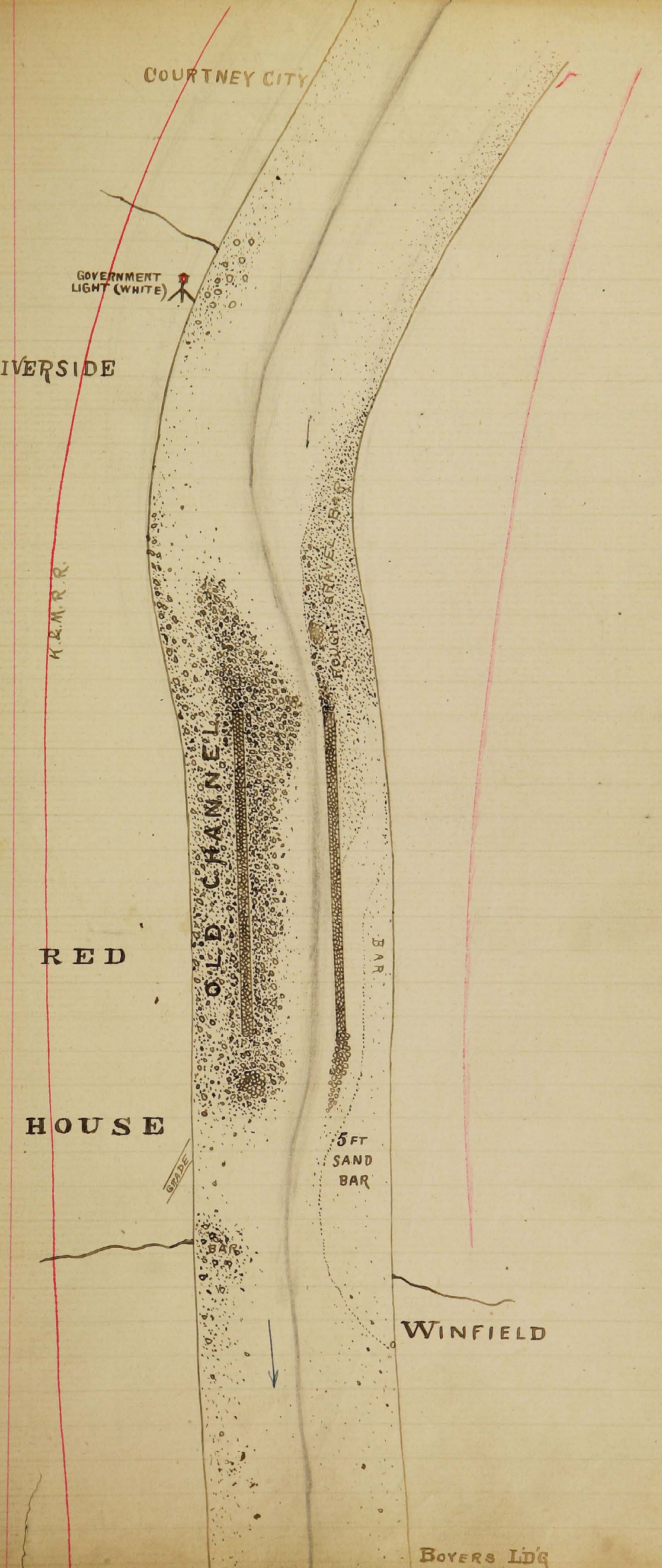
BAR

5 FT SAND BAR

BAR

WINFIELD

BOYERS LDG



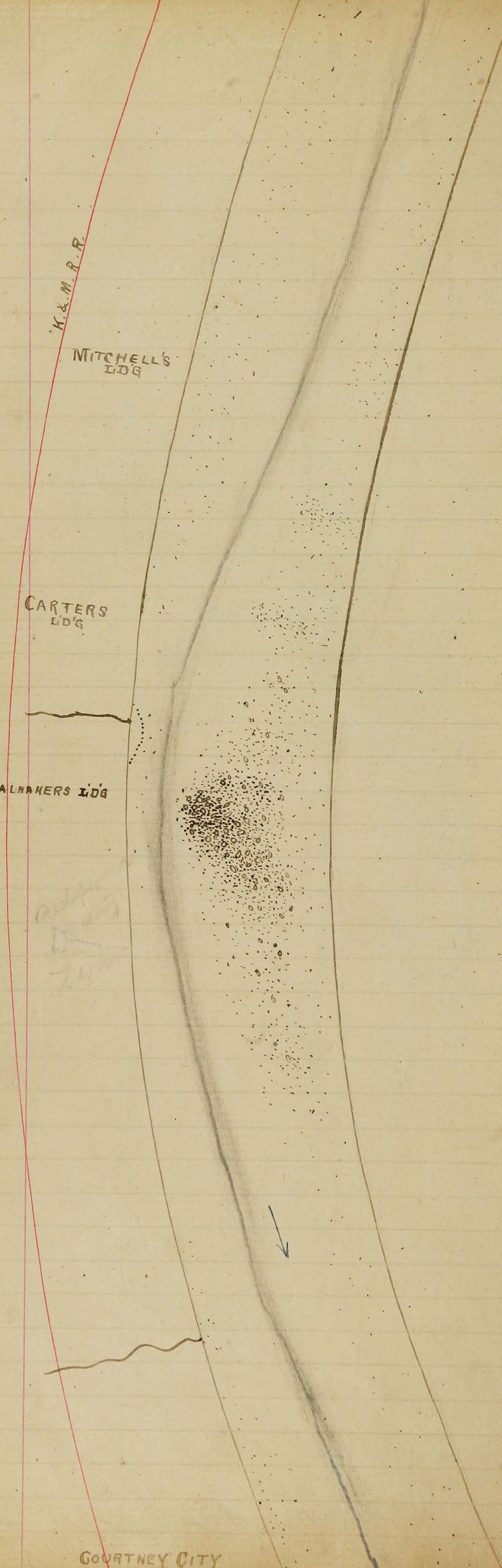
K. & M. R. R.

MITCHELL'S LDG

CARTERS LDG

STALMAHERS LDG

Handwritten notes:
24
11
24



ICE BREAKERS

GOVERNMENT LIGHT (WHITE)
PLYMOUTH COAL TIPPLE
TAKEN AWAY BY HIGH WATER
FEB 23-97

K. & M. R. R.

MARTIN'S LDG

SUMMER'S LDG

MARSHALL'S LDG



K. & M. R. R.

A. C. CHRISTY'S
LDG

SALMON'S
LDG

DAM &
LOCK
No 8

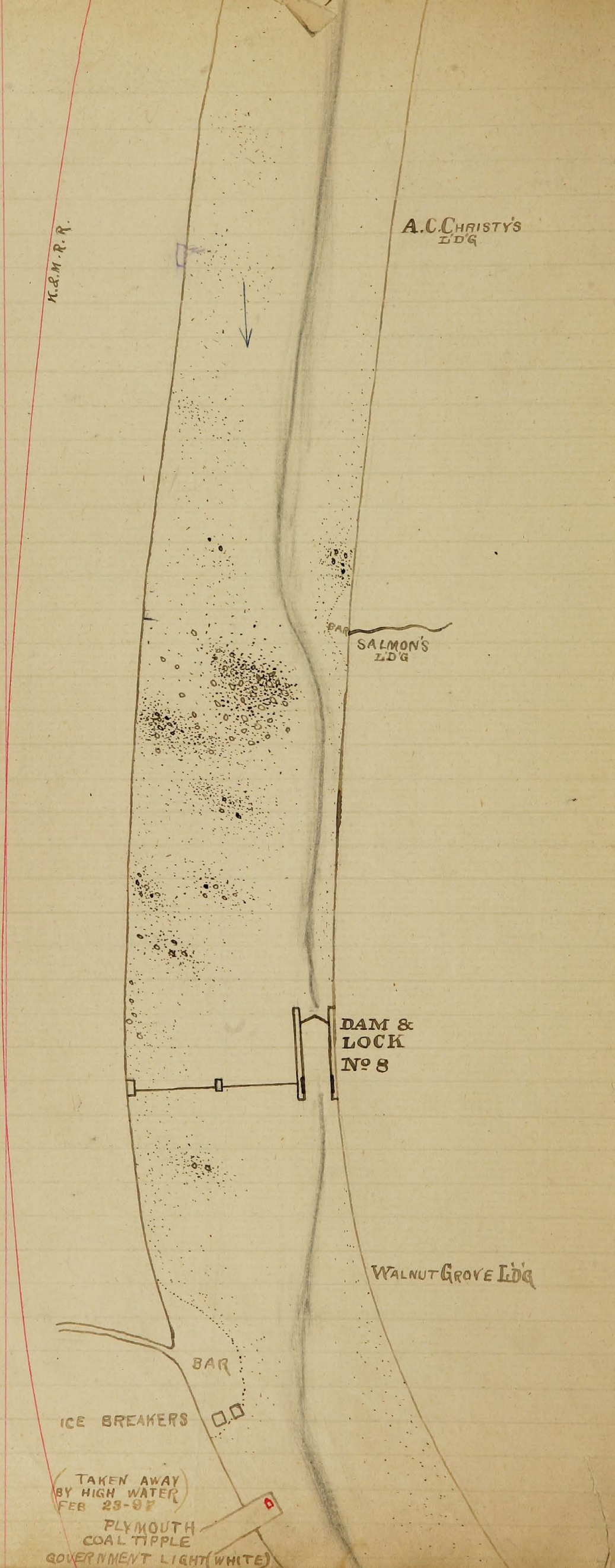
WALNUT GROVE LDG

BAR

ICE BREAKERS

(TAKEN AWAY
BY HIGH WATER
FEB 23-97)

PLYMOUTH
COAL TIPPLE
GOVERNMENT LIGHT (WHITE)



WHARF
BOAT

RAYMOND
CITY

ICE BREAKER

THE
MARMET,
SMITH
CO'S WORKS
& LDG



DR. STEWARTS'
LDG

GOVERNMENT LIGHT (WHITE)

ARMOUR'S CREEK

JAS. MORGAN'S IDG

M.M.R.R.

POCA IDG

POCA

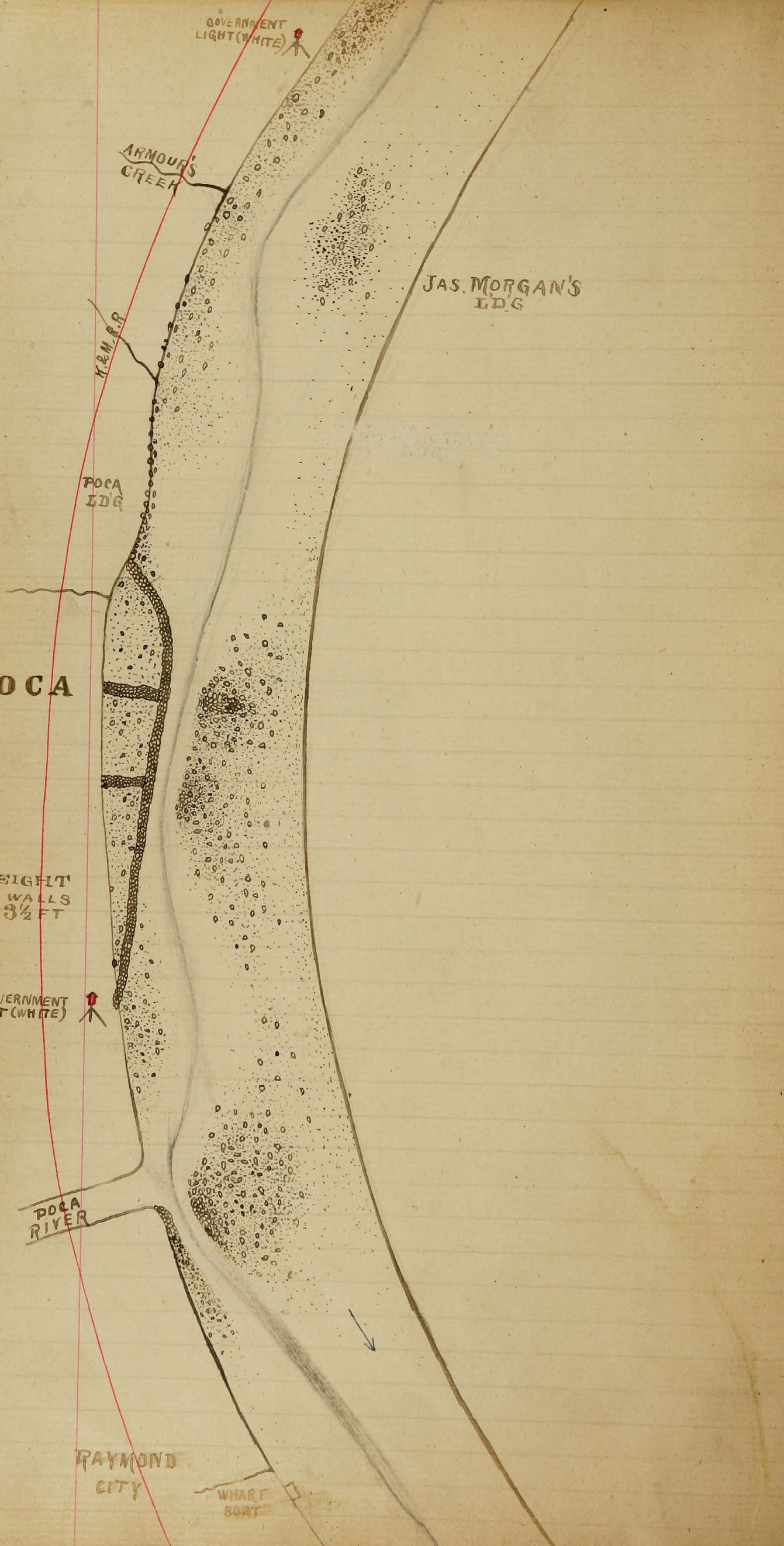
HEIGHT OF WALLS 3 1/2 FT

GOVERNMENT LIGHT (WHITE)

POCA RIVER

RAYMOND CITY

WHARF BOAT



R. T. SIMS
LDG

LEW BOLING'S
LDG

REDMOND RUST'S
LDG

K&M.R.R.

GEO. WRIGHT'S
LDG

GOVERNMENT
LIGHT (WHITE)



GOVERNMENT LIGHT (WHITE)

"STAP" WRIGHT'S LDG

HEIGHT OF ROCK REEF 5 1/2 FT

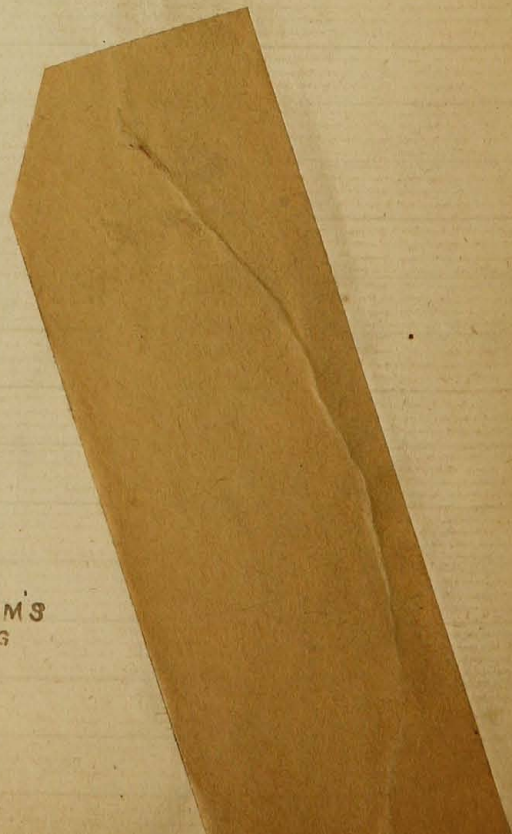
ROCK REEF

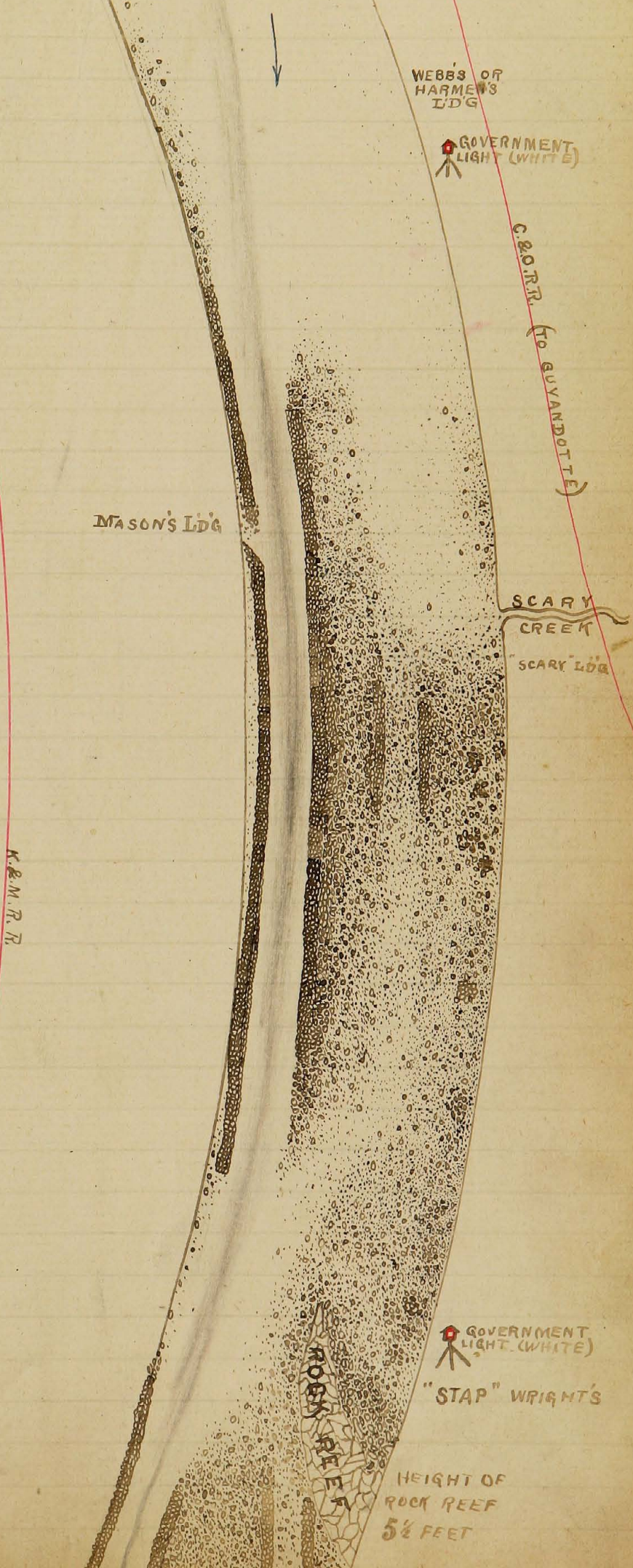
K. & N. R. R.

STONE WALL 2 1/2 FEET

DUDDINGS LDG

R. T. SIMS LDG





WEBBS OR HARMEN'S LDG

GOVERNMENT LIGHT (WHITE)

C. & O. R.R. (TO GUYANODOTTE)

MASON'S LDG

SCARY CREEK
SCARY LDG

K. & N. R. R.

GOVERNMENT LIGHT (WHITE)

"STAP" WRIGHT'S

ROCK REEF

HEIGHT OF ROCK REEF
5 1/2 FEET

GREGORYS
LDG

CAPT JNO RUSTS
LDG

MOHLER
LUMBER
CO.'S
LDG

PICKETS

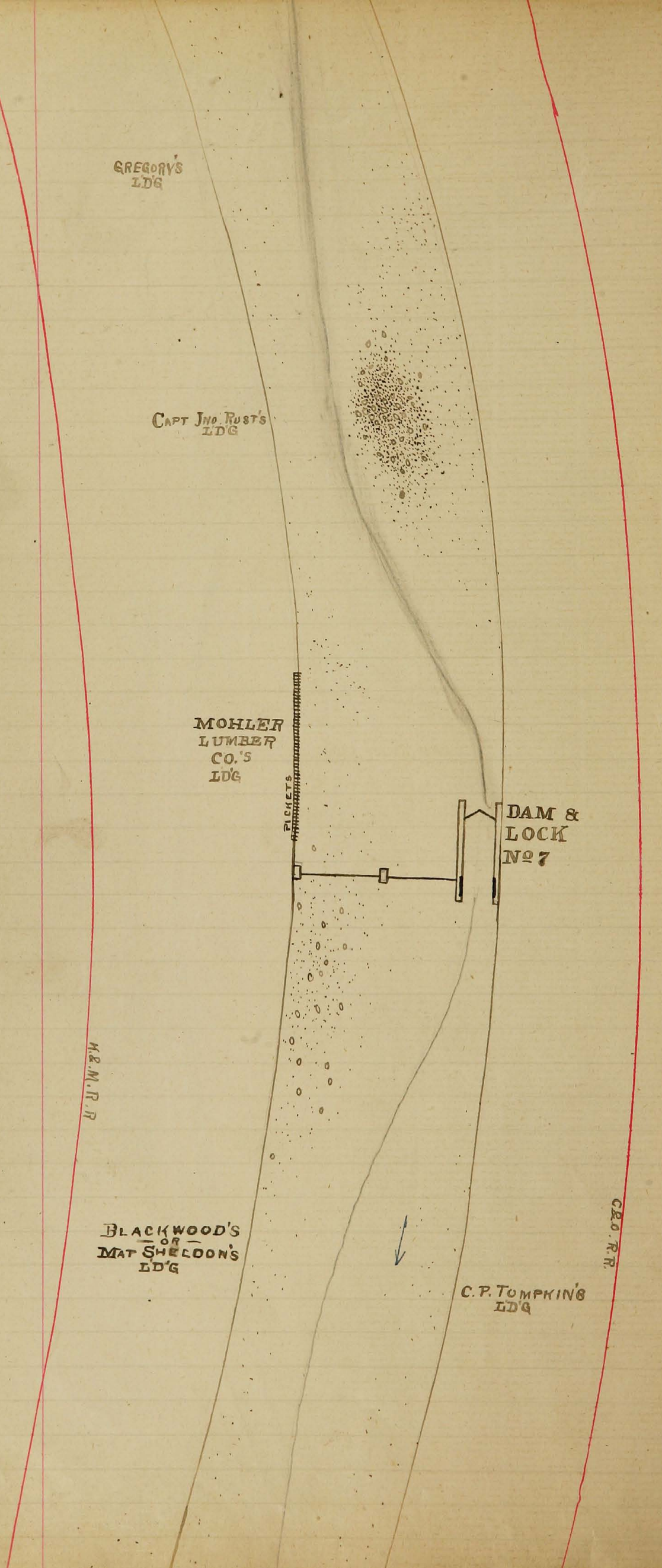
DAM &
LOCK
No 7

M.E.M.R.R.

BLACKWOOD'S
OR
MAT SHELDON'S
LDG

C.P. TOMPKINS
LDG

C.O. R.R.



BAILEY'S LDG

SATTES' FERRY

GOVERNMENT LIGHT (WHITE)

ST ALBANS

STALBANS LDG

COAL RIVER

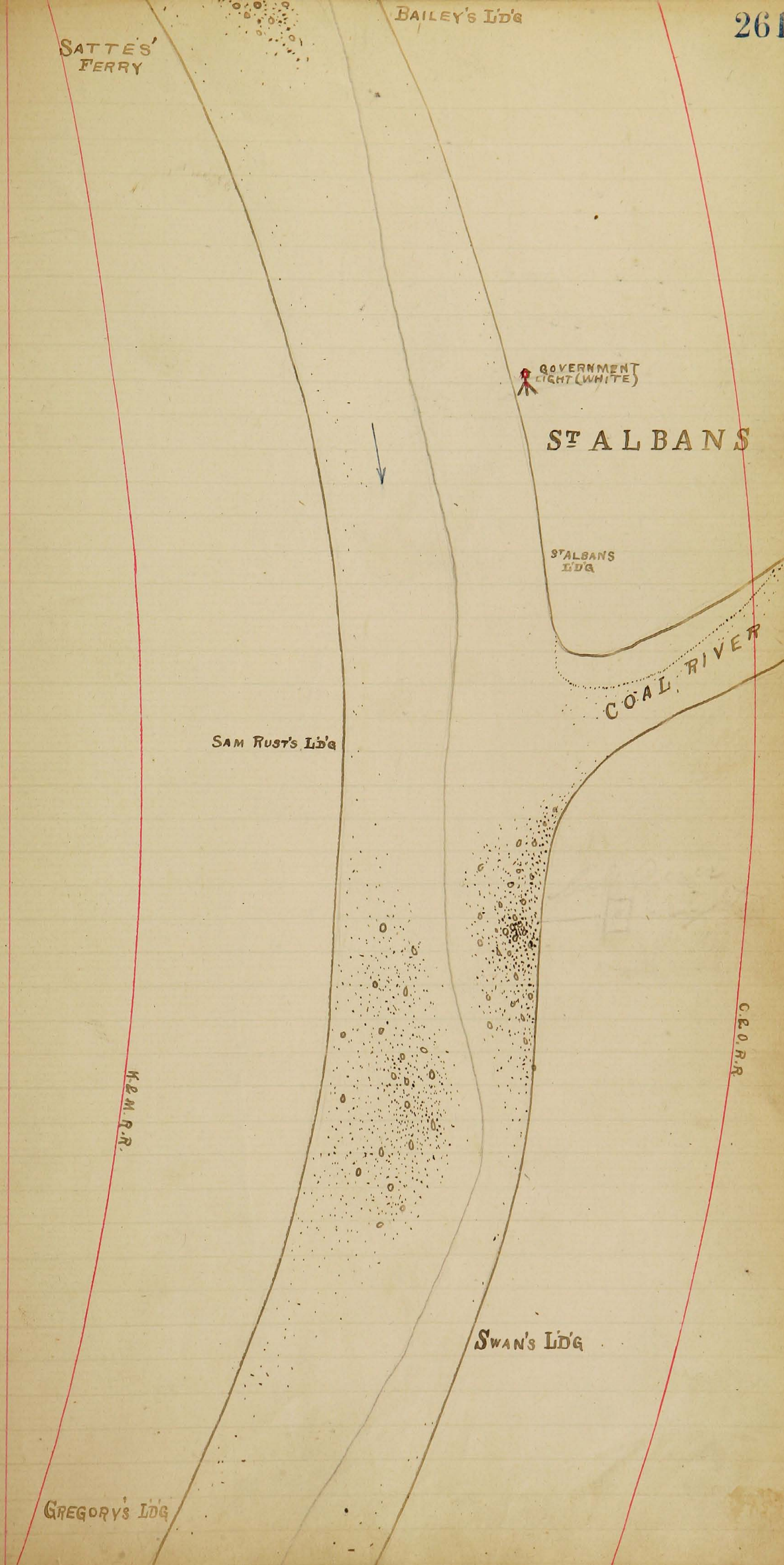
SAM RUST'S LDG

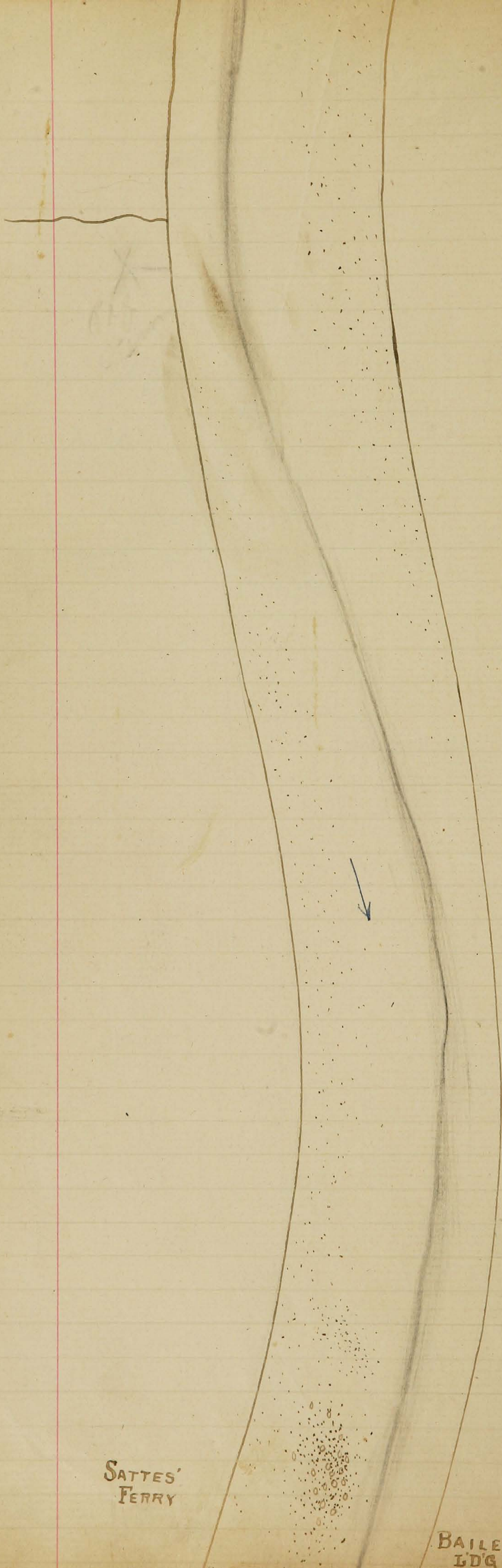
M.M.R.R.

C.O.R.R.

SWAN'S LDG

GREGORY'S LDG





SATTES'
FERRY

BAILEY'S
LDC

[Faint handwritten notes, possibly including 'Bailey's LDC' and other illegible text]

2 3/4 CREEK

GOVERNMENT LIGHT (WHITE)
GOFF'S LDG




M.P.M.R.R.

C.&O.R.R.

← PEELMAPLE SHALLOWS

"PAT" RYAN'S LDG



GOVERNMENT LIGHT (WHITE) 

KANAWHA COUNTY POOR FARM

WVA COLORED INSTITUTE OR "PINEY GROVE" LDG

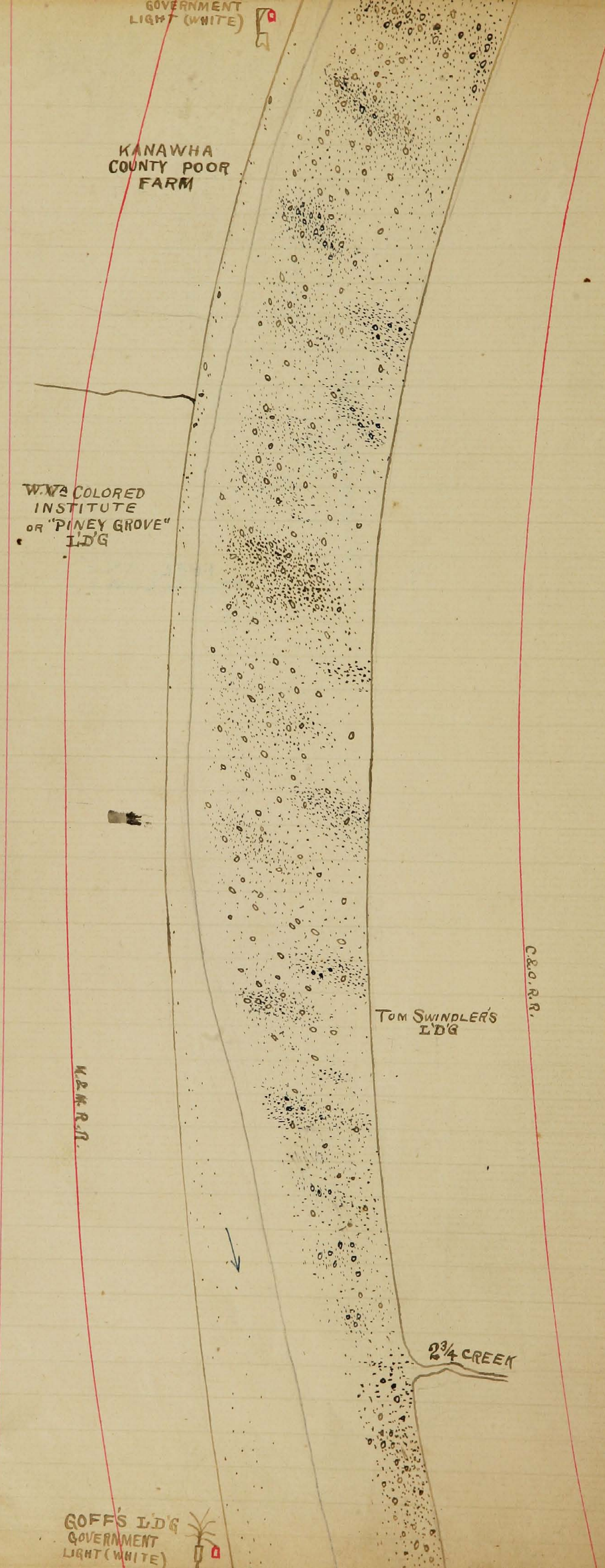
TOM SWINDLER'S LDG

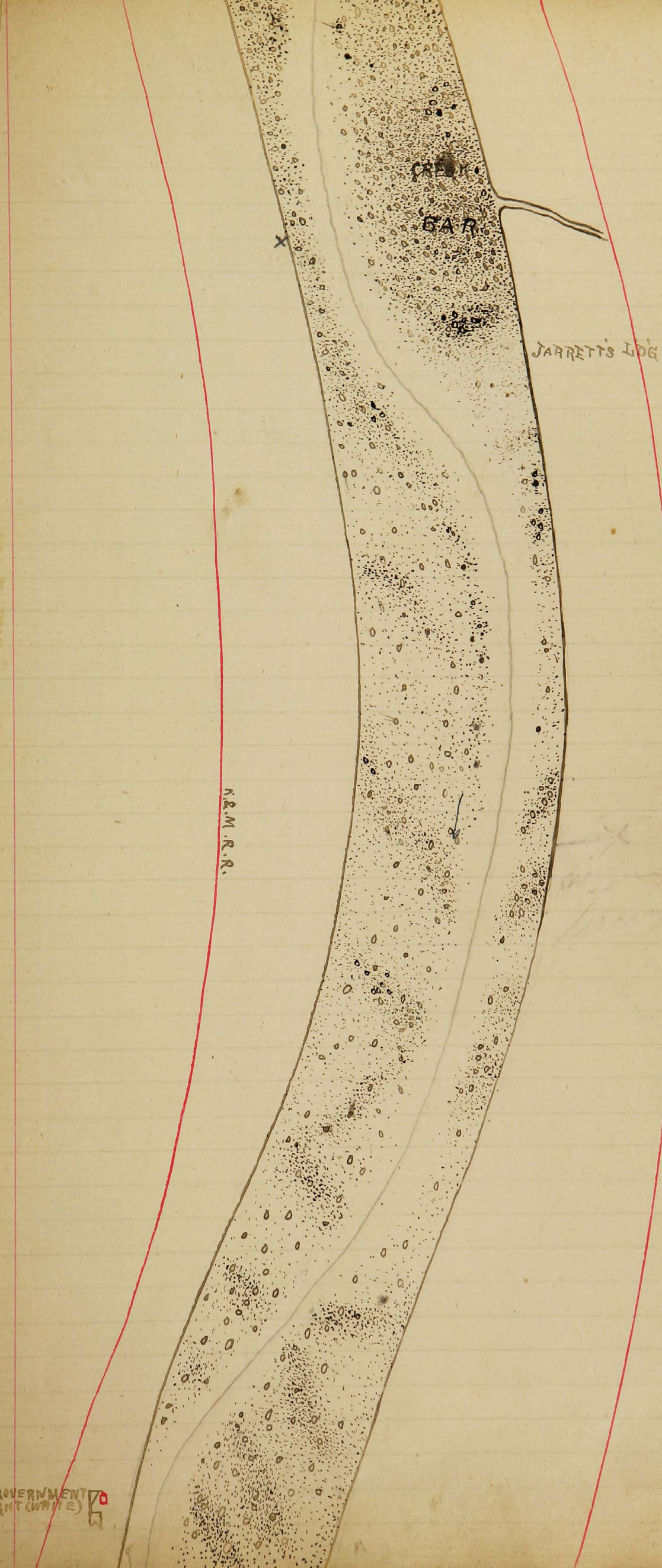
W.M.R.R.

C.&O.R.R.

2 3/4 CREEK

GOFF'S LDG GOVERNMENT LIGHT (WHITE) 





CREEK
BAR

JARRETT'S LOG

K.M.R.R.

C.C.R.R.

GOVERNMENT
LIGHT (WHITE)

SPRING HILL
LDG

THURSTONS
LDG

NEWCOMER
SHALLOWS

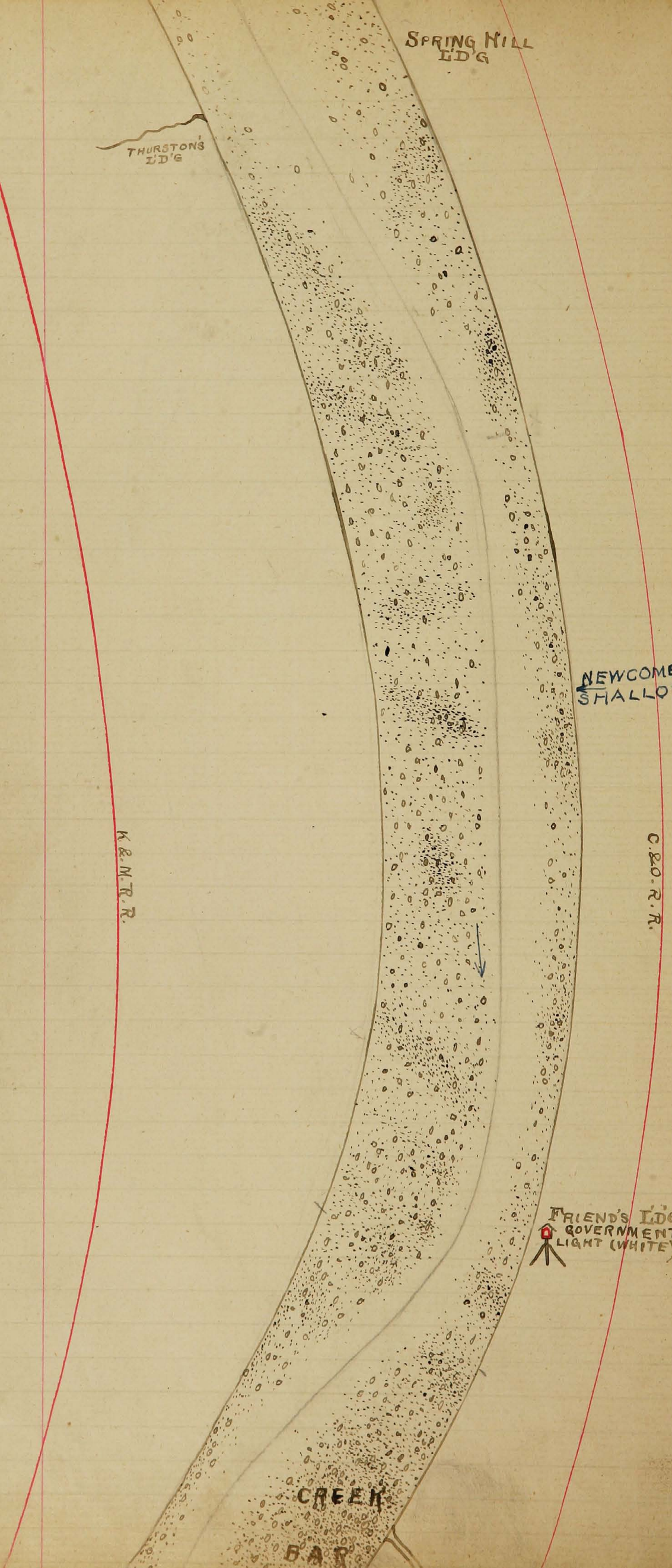
K&N.R.R.

C.&O.R.R.

FRIENDS LDG
GOVERNMENT
LIGHT (WHITE)

CREEK

BAR



FOOT OF TYLER ISLAND

OLD CHANNEL
TYLER

BAR

DAVIS CREEK

PARTIALLY FILLED UP

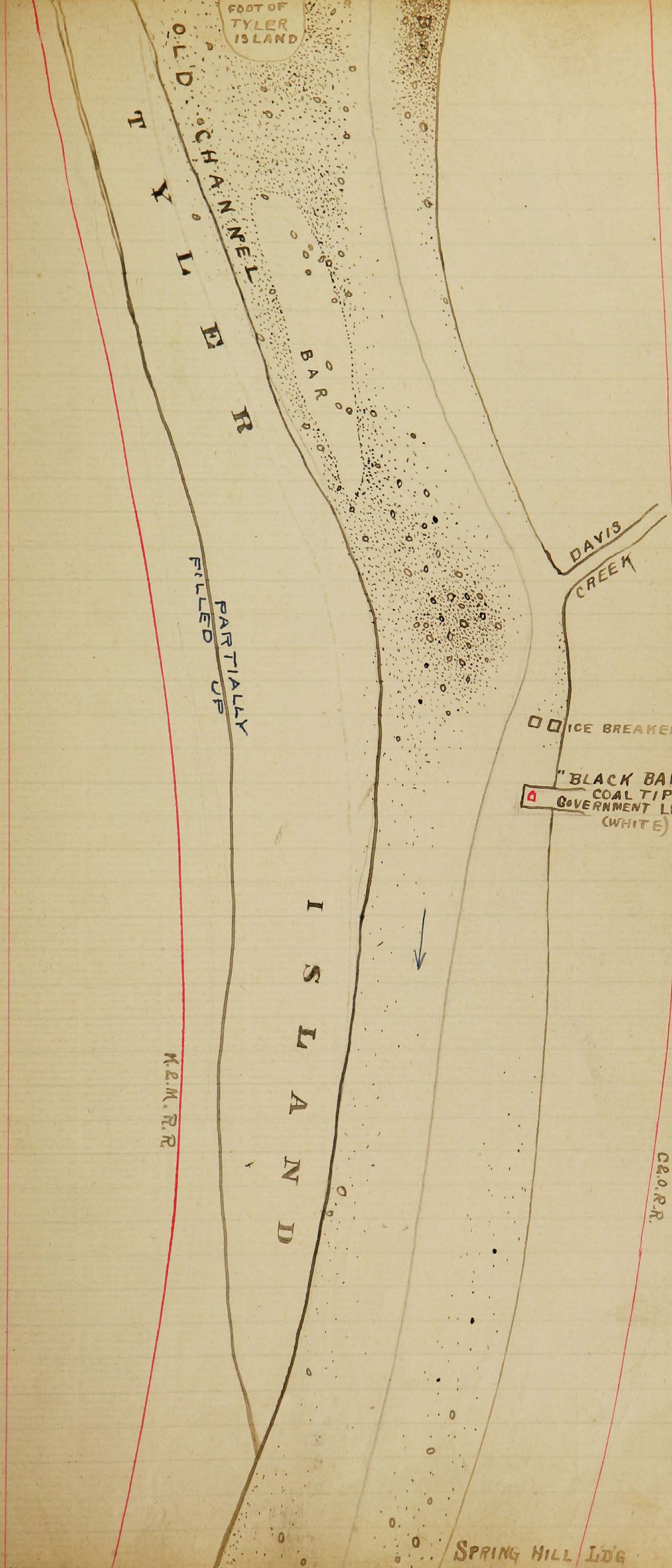
ICE BREAKERS
"BLACK BAND" COAL TIPPLE
GOVERNMENT LIGHT (WHITE)

ISLAND

M.E.M.R.R.

C.E.O.R.R.

SPRING HILL LDG



M.R.R.

SAND BAR

B L A I N E I S L A N D

DAM & LOCK No 6

C.&O.R.R.

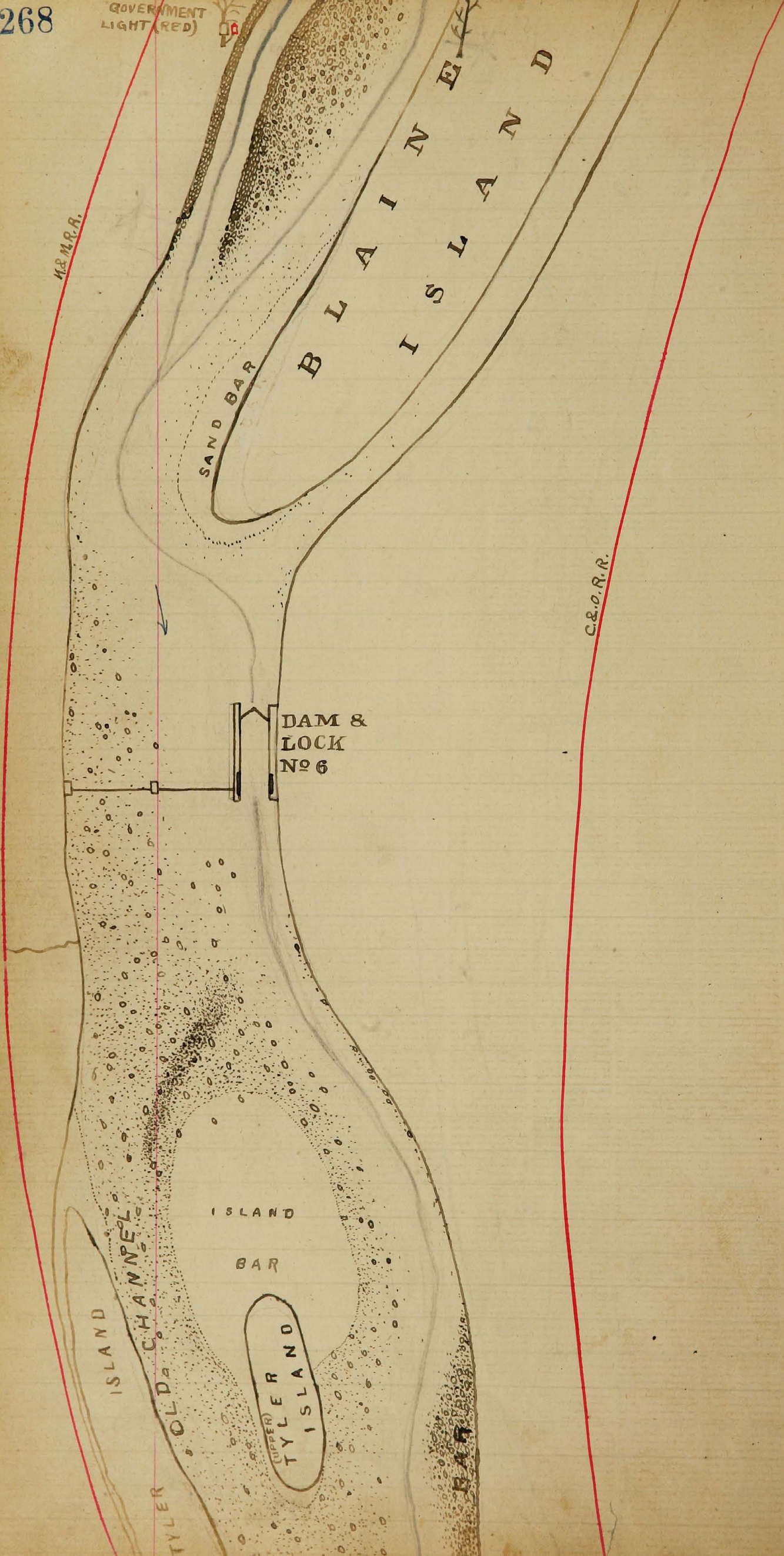
ISLAND CHANNEL

ISLAND BAR

TYLER

(UPPER) TYLER ISLAND

BAR



ISLAND BAR

K&M.R.R.

2 MILE CREEK

TWO MILE CHUTE

GOVERNMENT LIGHT (RED)

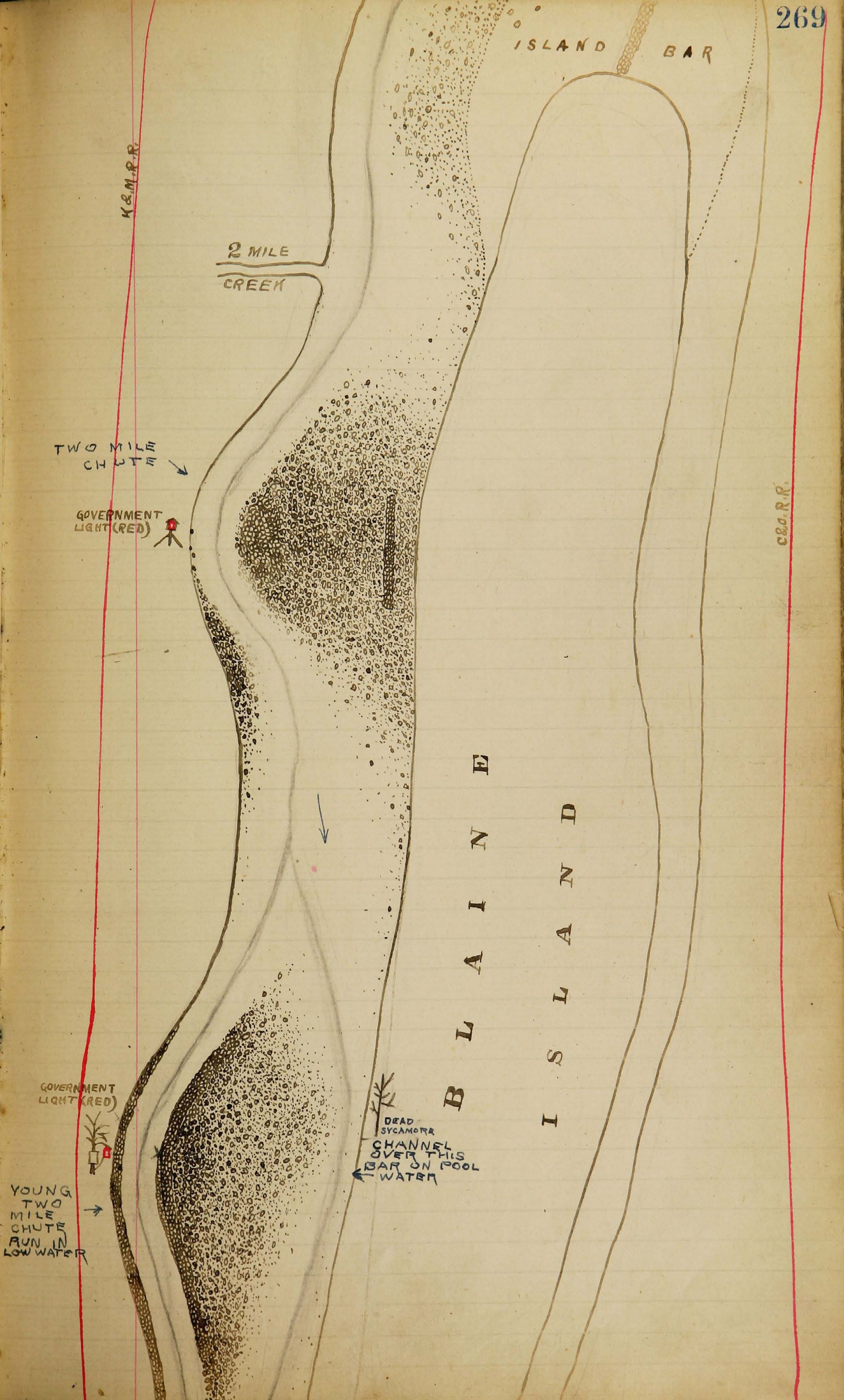
C&O.R.R.

B L A I N E I S L A N D

GOVERNMENT LIGHT (RED)

DEAD SYCAMORE CHANNEL OVER THIS BAR ON POOL WATER

YOUNG TWO MILE CHUTE RUN IN LOW WATER



GOVERNMENT LIGHT (WHITE)

PICNIC GROUNDS



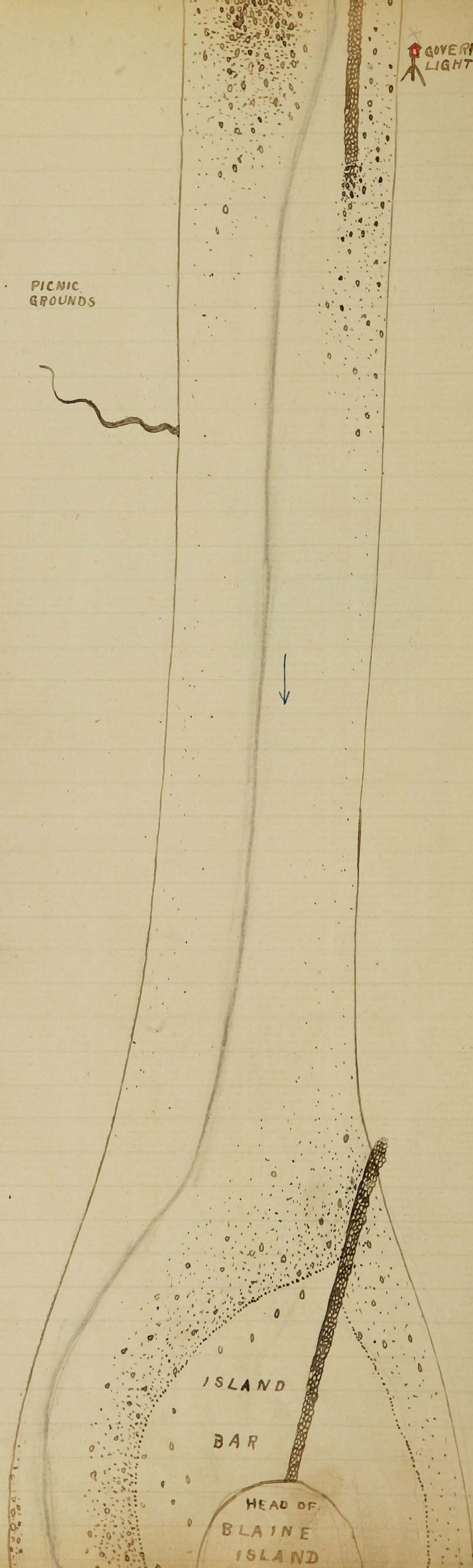
K.B.M. R.R.

K.B.O. R.R.

ISLAND

BAR

HEAD OF
BLAINE
ISLAND



C H A R L E S T O N

LOWER WHARF BOAT

C&O WHARF BOAT

L.A. CARR'S MILL Ldg

ELK RIVER

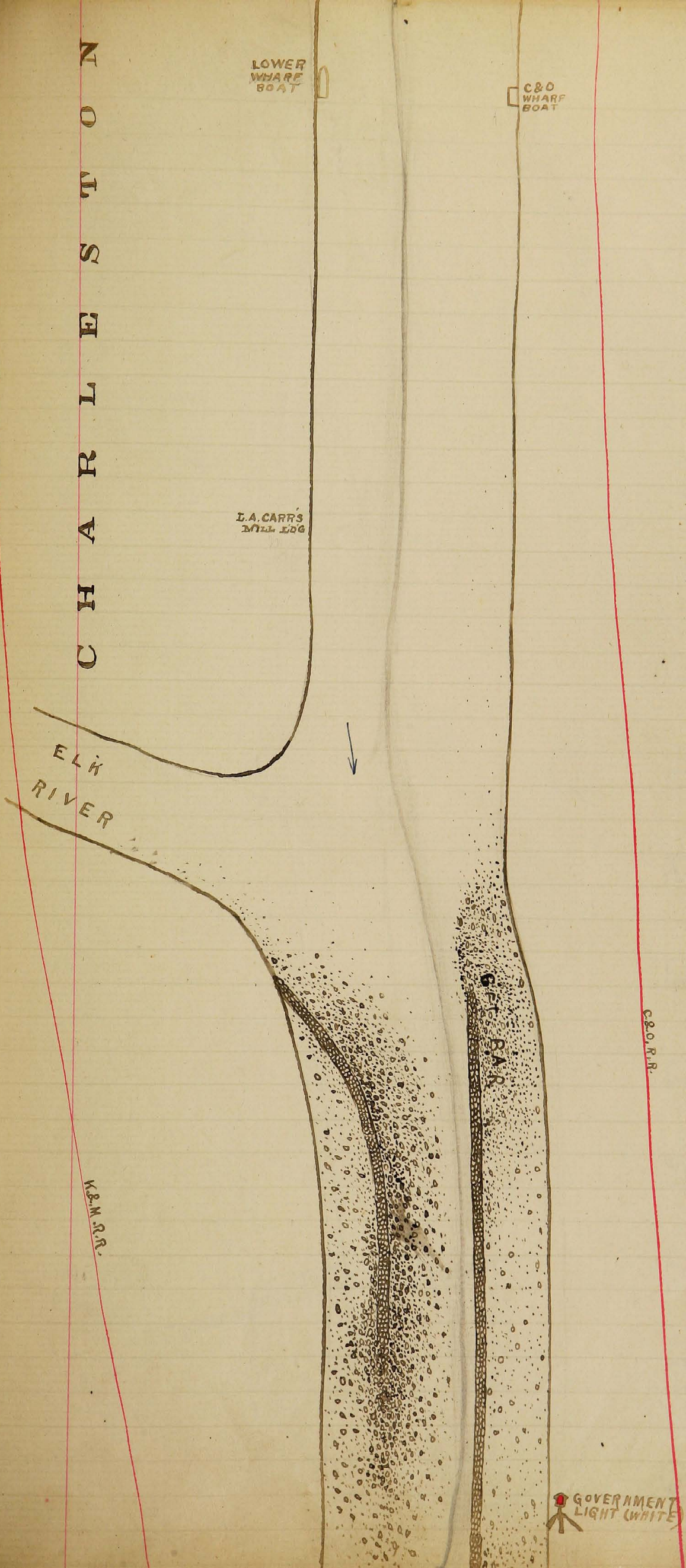


GET BAR

C&O R.R.

W&M R.R.

GOVERNMENT LIGHT (WHITE)

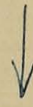


K&M.R.R.

C H A R L E S T O N

PORTER'S FERRY

C.&O.R.R.



K&M DEPOT

UPPER WHARF BOAT

LOWER WHARF BOAT

CHARLESTON BRIDGE
75 FEET HIGH

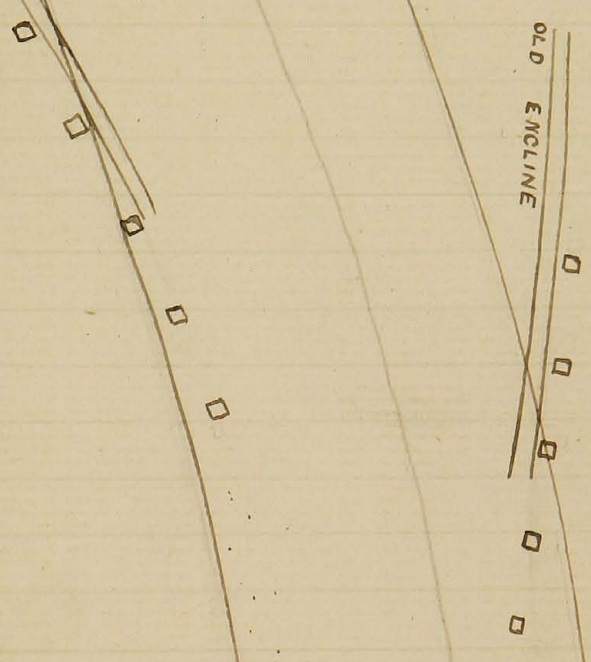
C&O DEPOT

C&O WHARF BOAT



OLD ENCLINE

OLD ENCLINE



N.B.M.R.R.

C.&O.R.R.

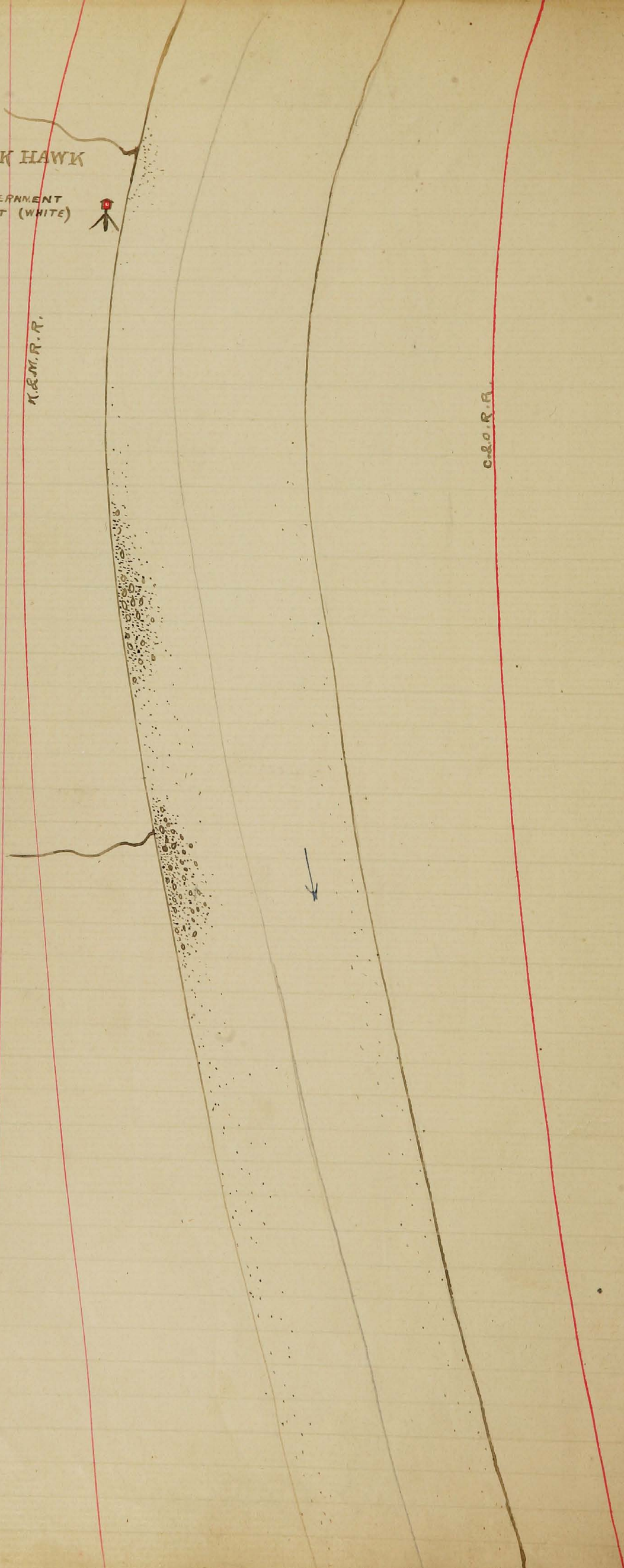
BLACK HAWK

GOVERNMENT
LIGHT (WHITE)



M&M.R.R.

C.O.R.R.



SNOW HILL
LD'G

KANAWHA CITY

K. & M. R. R.

C. & O. R. R.

Bruce's Ldg



GOVERNMENT
LIGHT (WHITE)



CAMPBELL CREEK
COAL CO'S TIPPLE

CCCC Co's Ldg
WHARF BOAT, &
WAYS

M. & M. R.R.

C. & O. R.R.

ICE BREAKERS
OLD "PIONEER"
COAL TIPPLE
(TAKEN AWAY BY
HIGH WATER FEB
23 - 97)

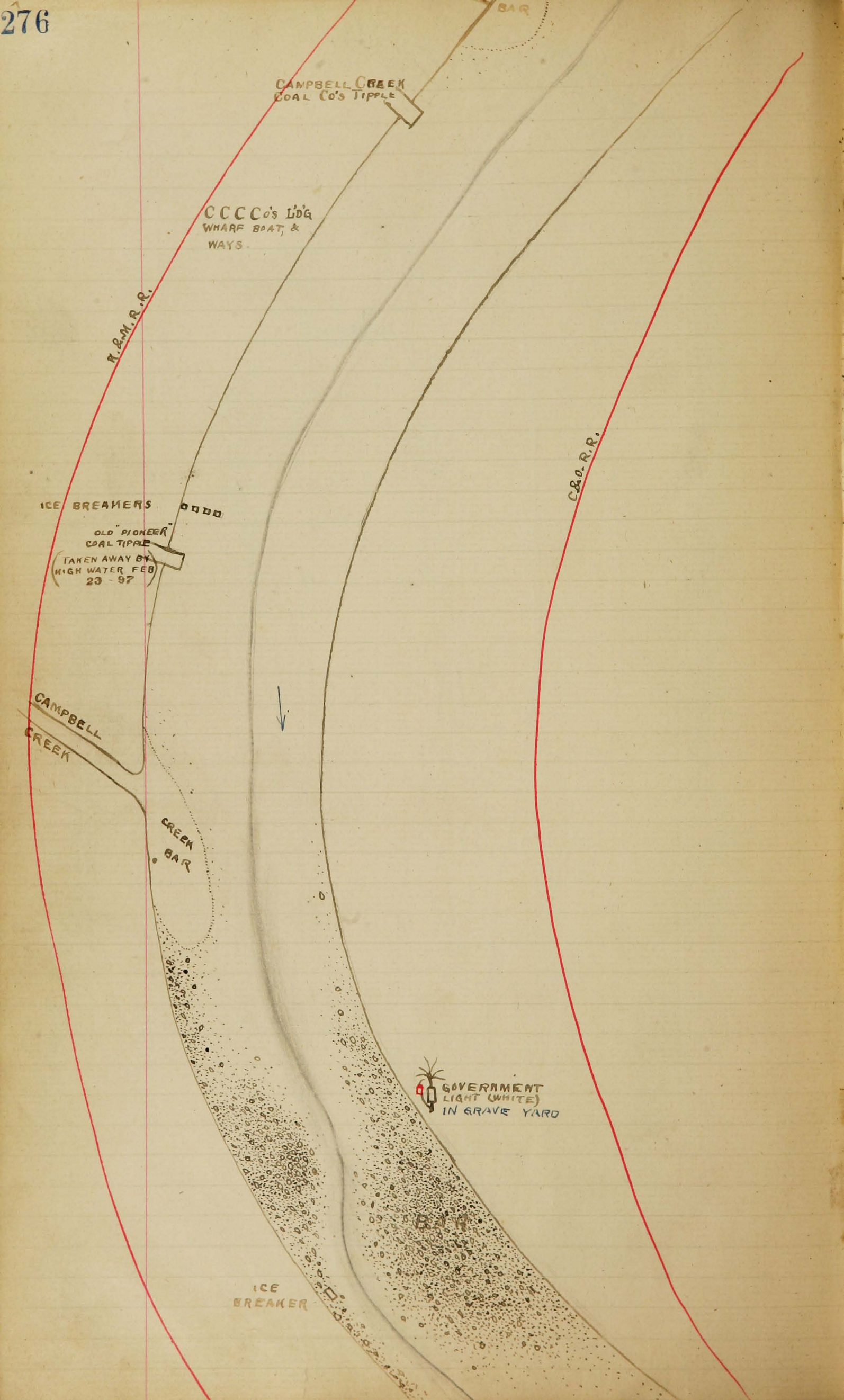


CAMPBELL
CREEK

CREEK
BAR

GOVERNMENT
LIGHT (WHITE)
IN GRAVE YARD

ICE
BREAKER



DICKISON'S
SALT WORKS

K. & M. R. R.

C. & O. R. R.



MALDEN

CHRISTY'S Ldg

MALDEN STATION

GEORGE'S CREEK BAR

ICE BREAKERS

CCCCO's
TIPPLE



ICE BREAKERS

CARKINS'
LDG



OLD "BEN FRANKLIN"
FURNACE LDG
OR LEWIS' LDG

K.R.M.R.R.

C.&O.R.R.

DICKISON'S SALT
WORKS

RUSH
CREEK

CREEK
BAR

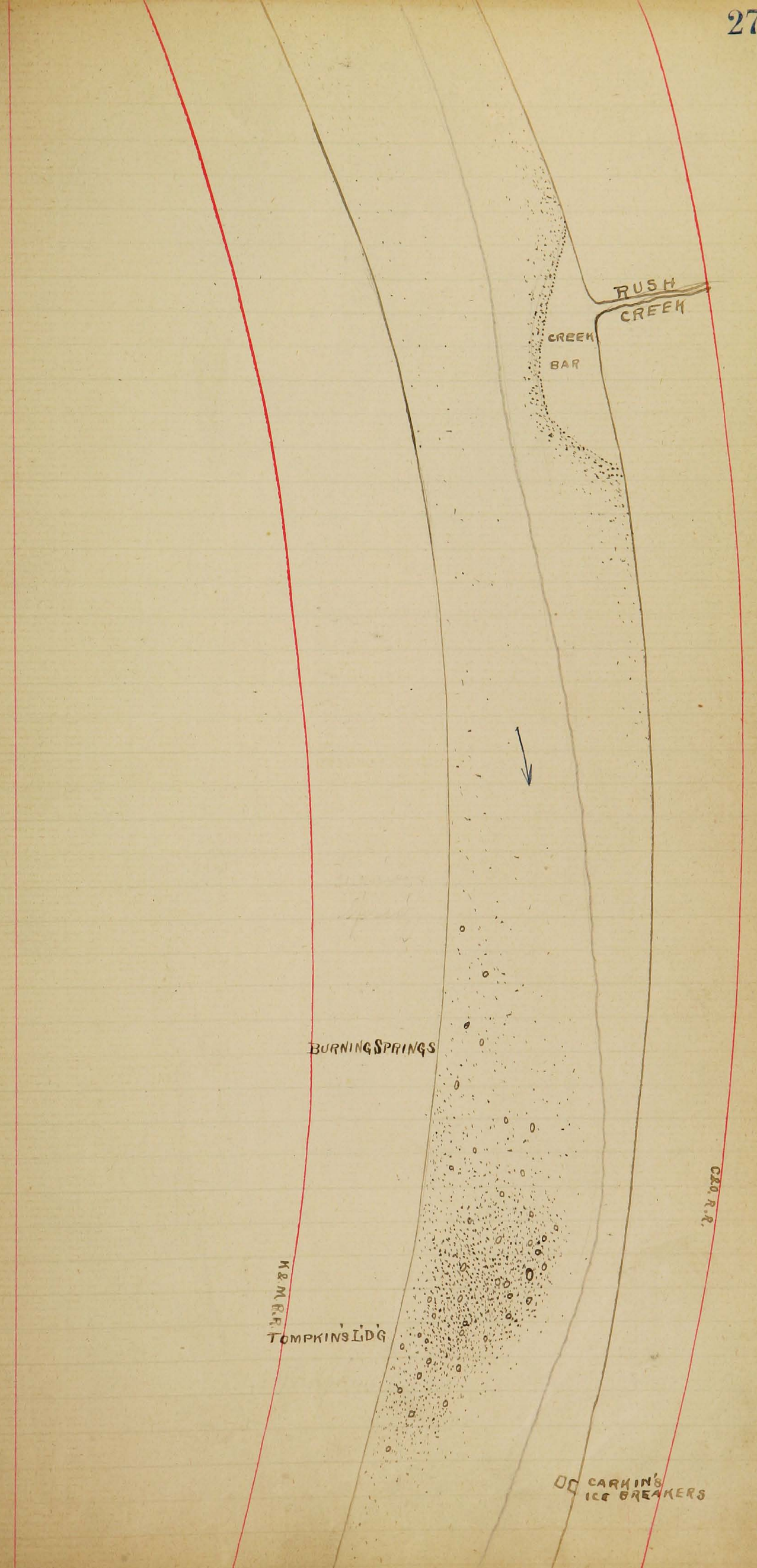


BURNING SPRINGS

N&M R.R.
TOMPKINS LDG

C&O R.R.

□ CARPINS
ICE BREAKERS



GLENN'S CREEK

BAR

CATFISH ISLAND

UPPER L'D'G

BROWNSTOWN

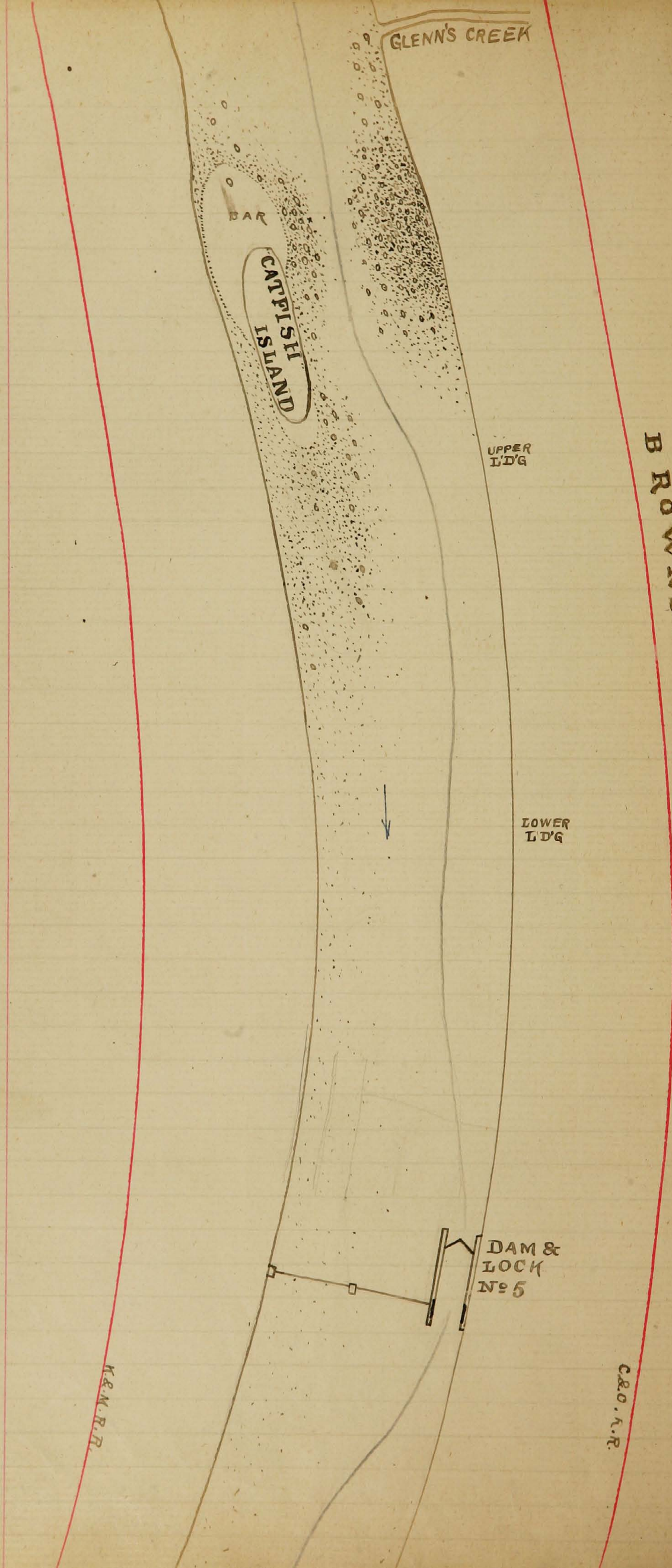
LOWER L'D'G



DAM & LOCK No 5

M&M.R.R.

C&O.R.R.



REYNOLD'S
LDG

HENSON'S
LDG

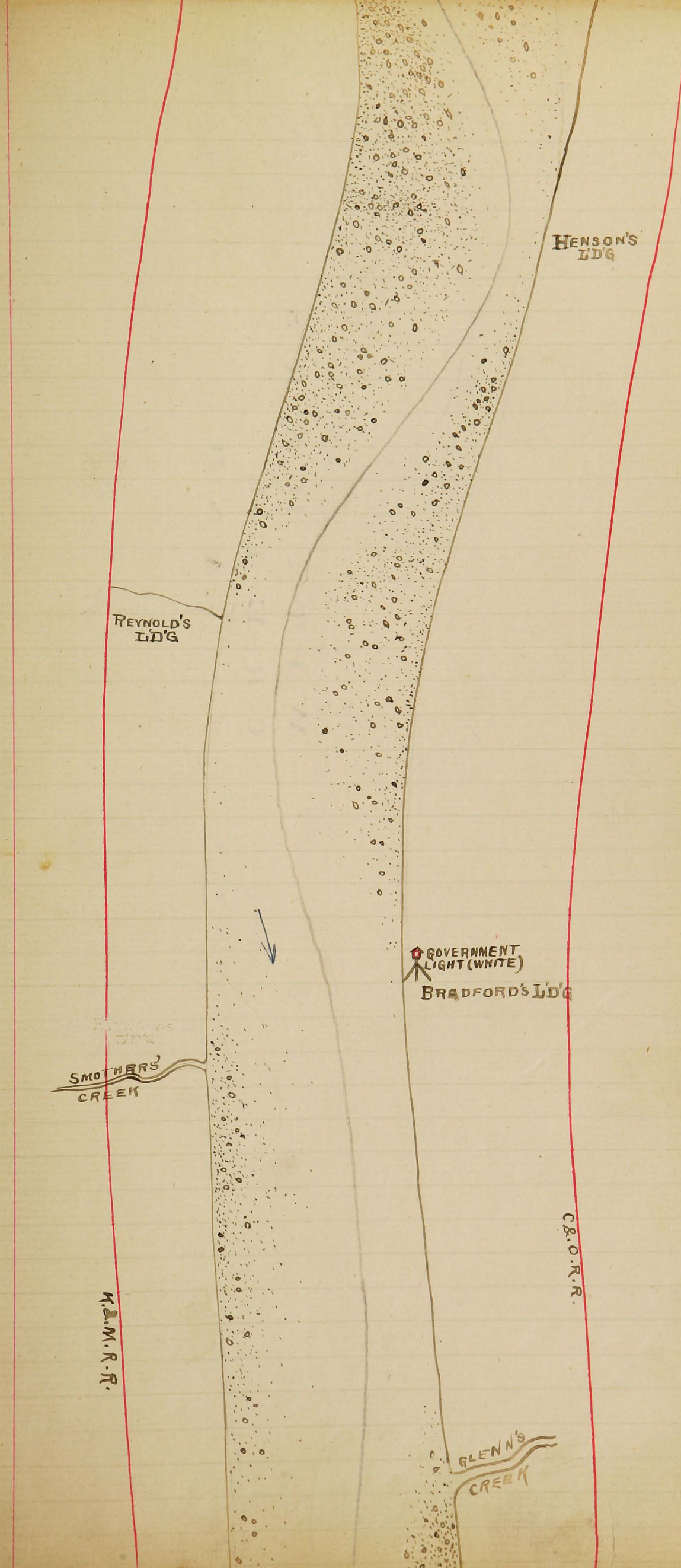
GOVERNMENT
LIGHT (WHITE)
BRADFORD'S LDG

SMOTHERS
CREEK

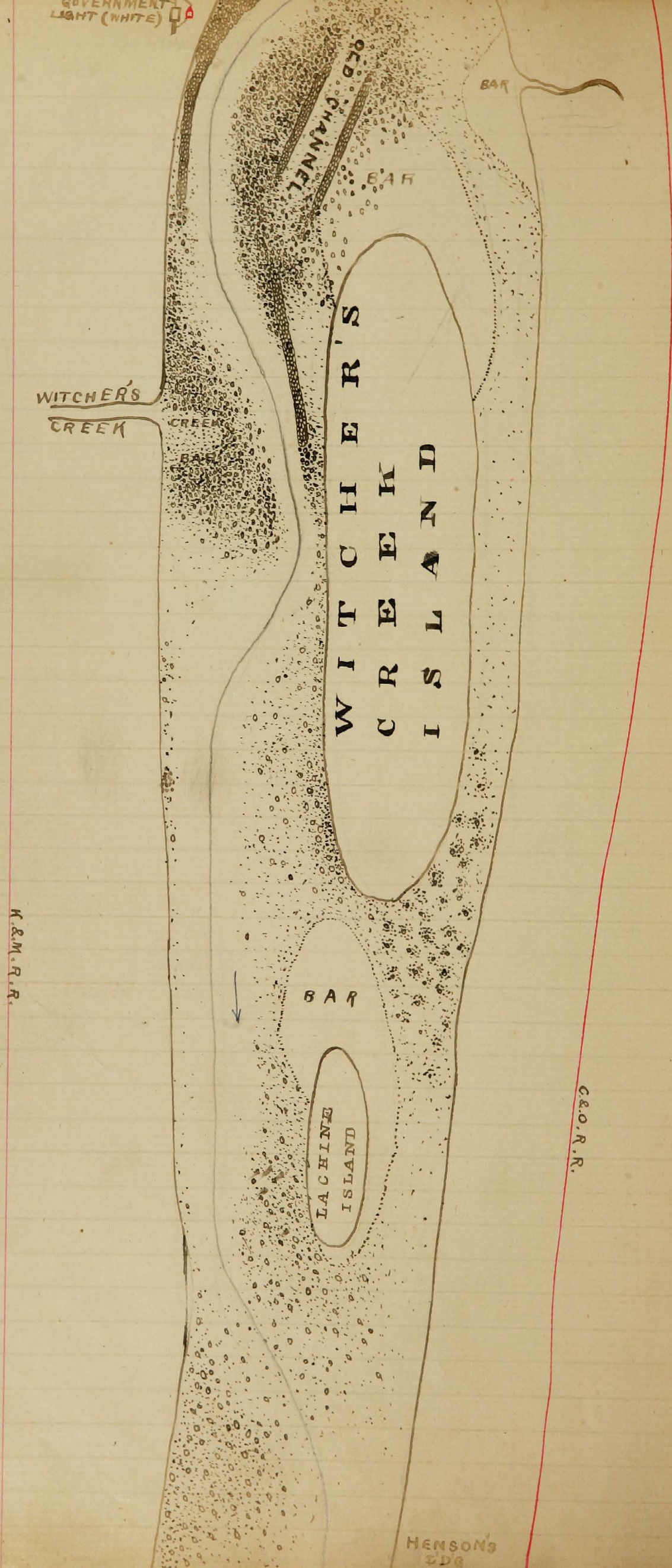
M.M.R.R.

C.O.R.R.

GLENN'S
CREEK

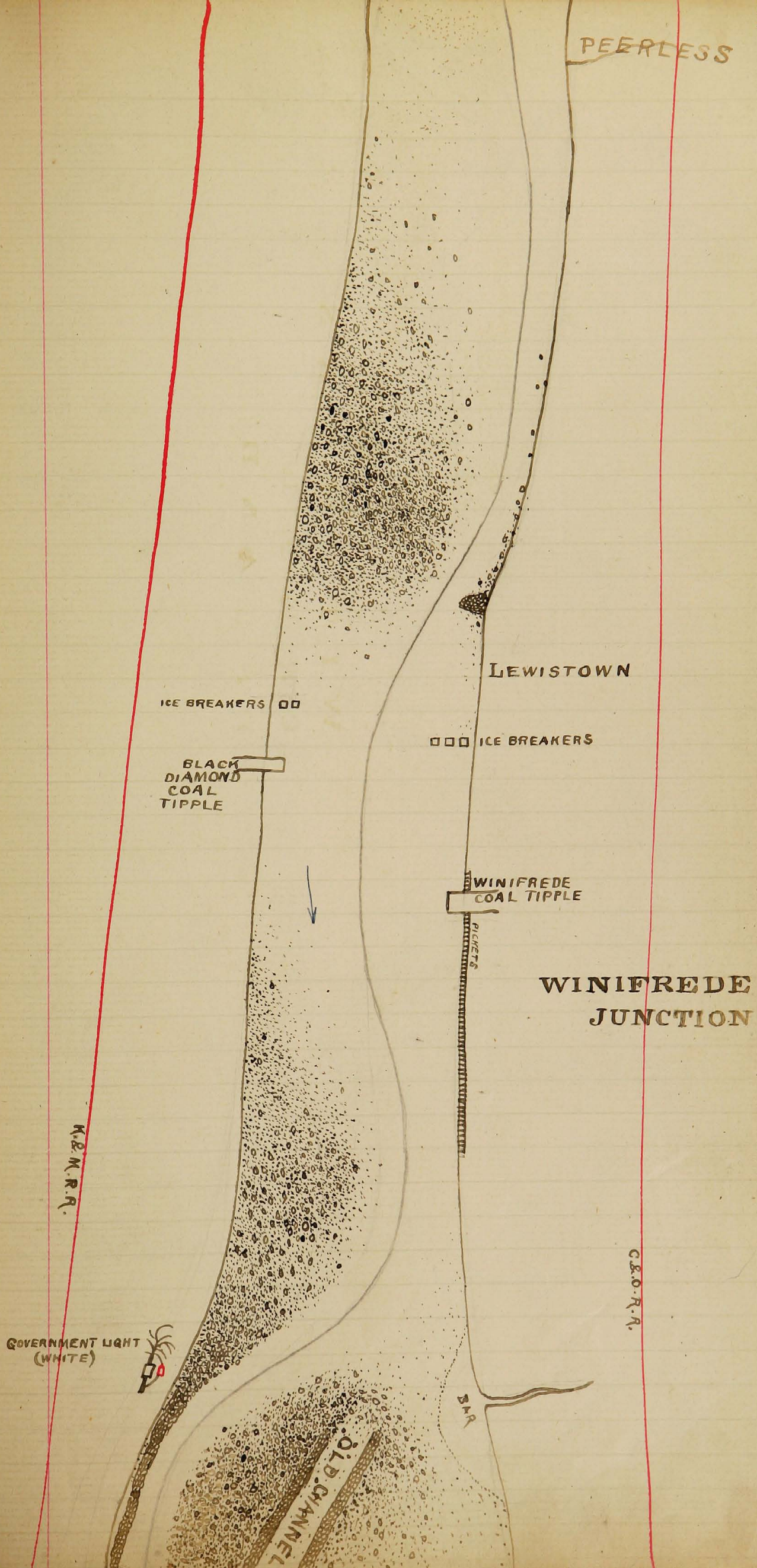


GOVERNMENT LIGHT (WHITE) PA



HENSON'S EDGE

PEERLESS



ICE BREAKERS

BLACK
DIAMOND
COAL
TIPPLE

LEWISTOWN

ICE BREAKERS

WINIFREDE
COAL TIPPLE

WINIFREDE
JUNCTION

M.B.M.R.R.

GOVERNMENT LIGHT
(WHITE)

C.O.R.A.

BAR

OLD CHANNEL

DAM
& LOCK
No 4

PORTER'S
IDG

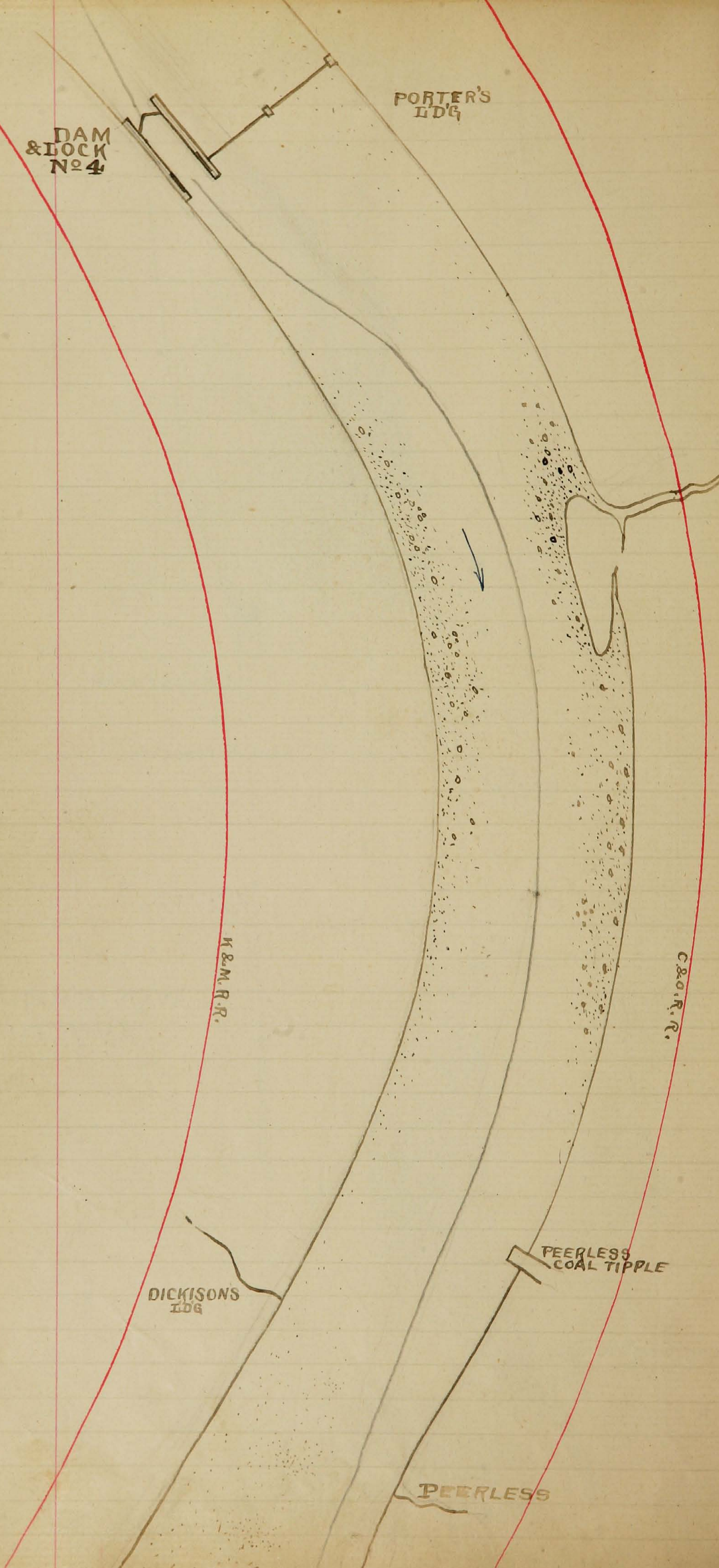
K&M.R.R.

C&O.R.R.

DICKSONS
IDG

PEERLESS
COAL TIPPLE

PEERLESS



GOVERNMENT
LIGHT (RED)



CABIN
CREEK

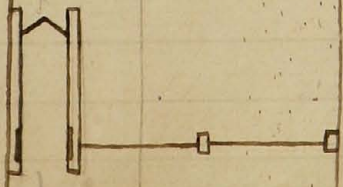
BAR.

CABIN
CREEK
ISLAND

AULTZ'S
LDG



DAM &
LOCK
No 4



PORTER'S
LDG

WATSONS LIDG

MOSEY'S ISLAND

ICE BREAKER

COAL TIPPLE

ICE BREAKER

NORTH COALBURG

COAL TIPPLE

ICE BREAKER

COALBURG



K.P.M.R.R.

C.O.R.R.

ICE BREAKERS

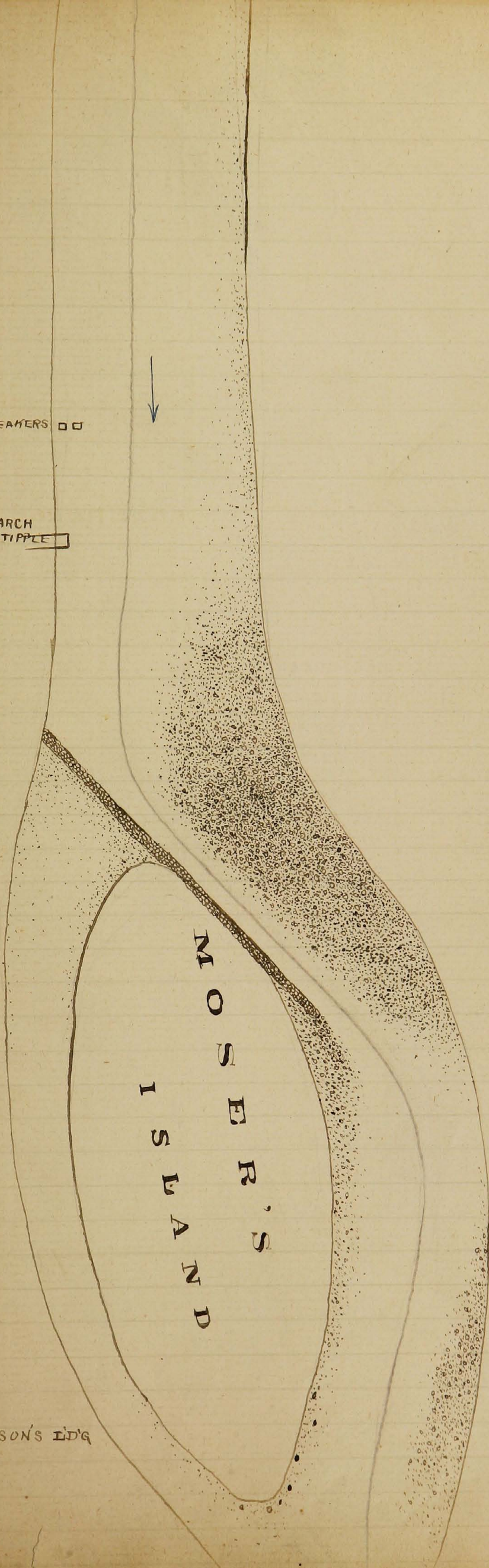
STEVENS' COAL TIPPLE

ICE BREAKERS ○○

MONARCH
COALTIPPLE

M O S S E R ' S
I S L A N D

WATSON'S EDG



KELLY
CREEK COAL
TIPPLE
TAKEN AWAY
BY HIGH WATER
FEB 23 - 97

CEDAR
GROVE

HAMPTON or
EAST BANK

BAR

CEDAR
GROVE COAL
TIPPLE

BAR

ICE BREAKERS

BUCK'S COAL
TIPPLE
TAKEN AWAY BY
(HIGH WATER FEB.
23 - 97)

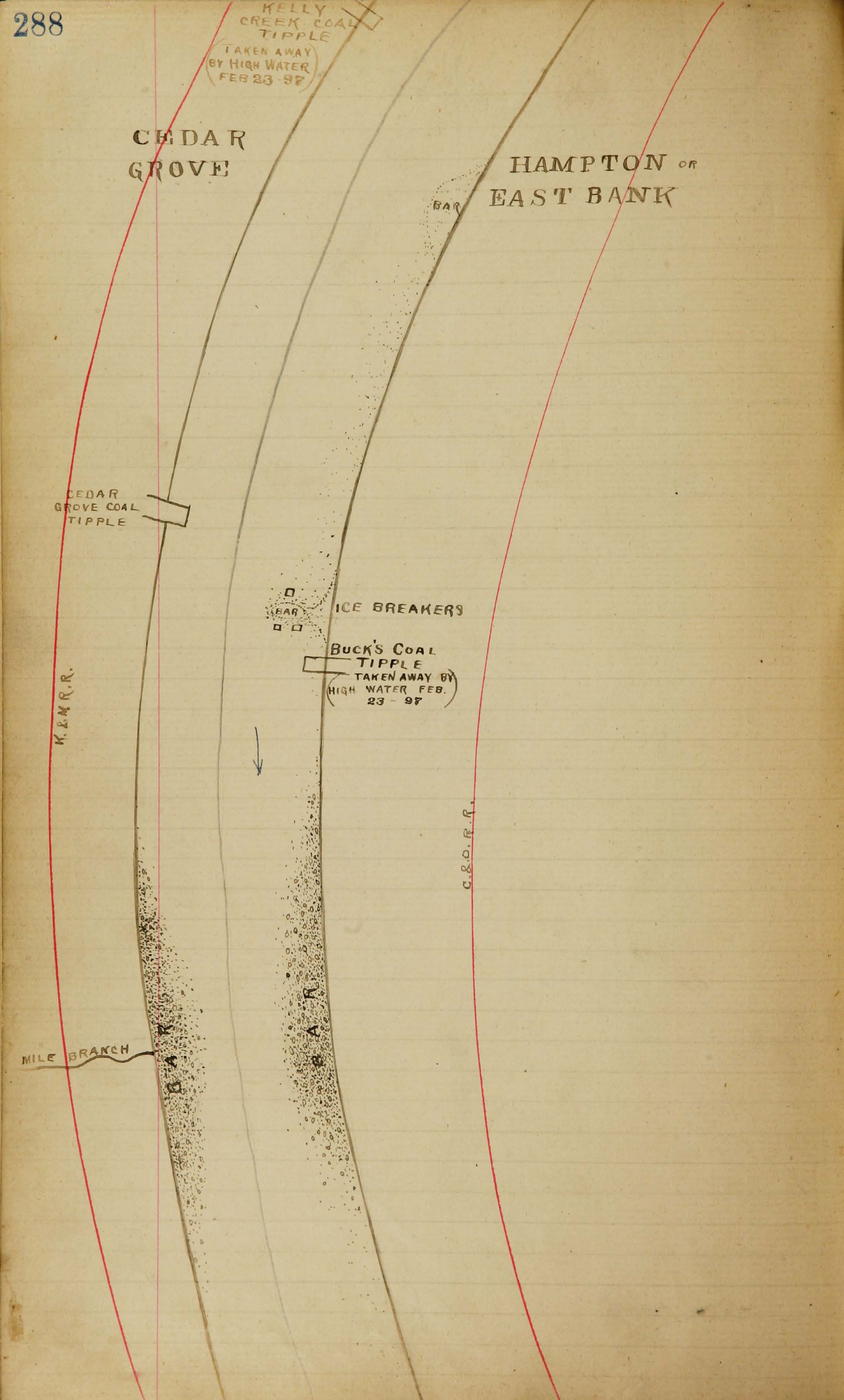
M. & N. R. R.

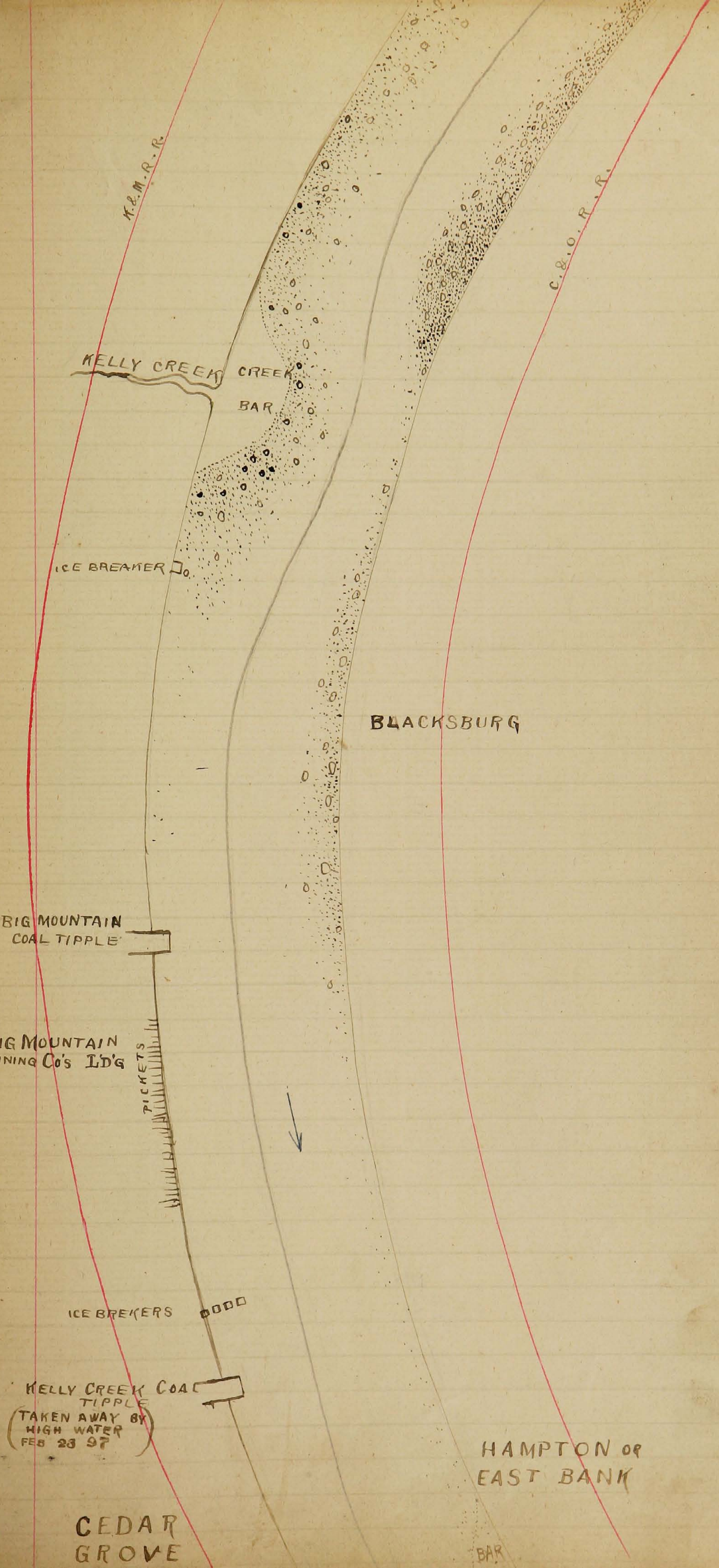


C. & O. R. R.

MILE BRANCH

BAR





K.M.R.R.

C.&O.R.R.

KELLY CREEK CREEK BAR

ICE BREAKER

BLACKSBURG

BIG MOUNTAIN COAL TIPPLE

BIG MOUNTAIN MINING Co's LD'g

PICKETS

ICE BREAKERS

KELLY CREEK COAL TIPPLE
(TAKEN AWAY BY HIGH WATER FEB 23 97)

HAMPTON OR EAST BANK

CEDAR GROVE

BAR

ICE BREAKERS

BELMONT
COAL TIPPLE

BLACK CAT
COAL TIPPLE

M. & M. R. R.

C. & O. R. R.



STATIONARY
DAM &
LOCK
No 3

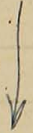
S
A
T

ICE BREAKERS

CROWN HILL
COAL TIPPLE

CROWN
HILL

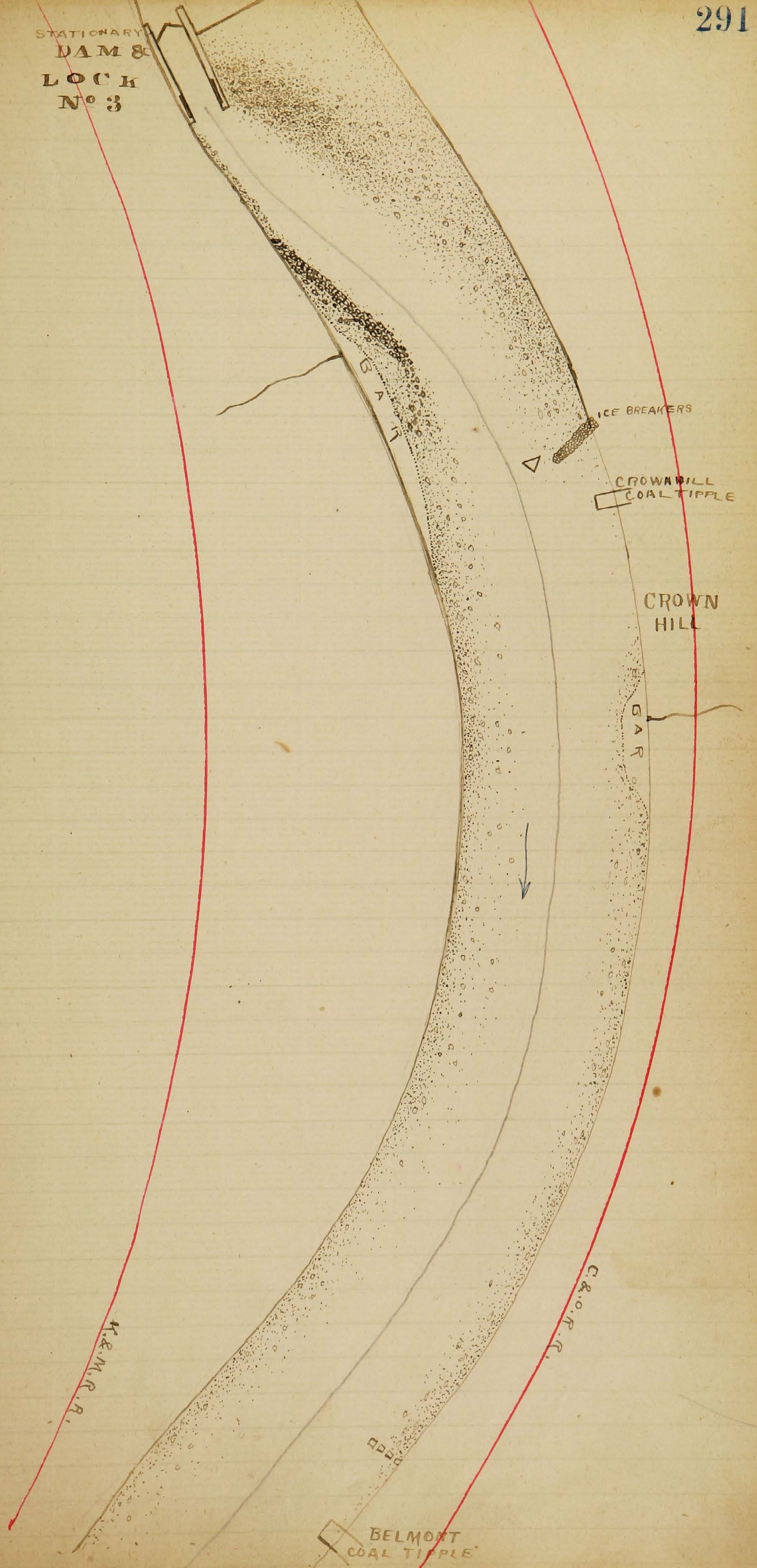
B
A
R



M.
E.
M.
R.
R.

C.
R.
O.
R.
R.

BELMONT
COAL TIPPLE



M. & M. R. R.

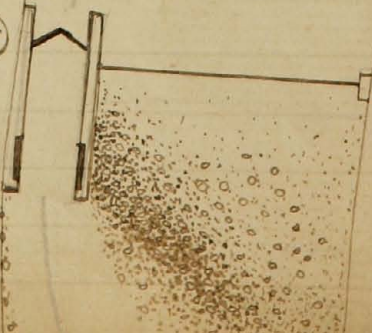
C. & O. R. R.

PAINT CREEK

SUNKEN ISLAND

PAINT CREEK L'D'G

(STATIONARY)
DAM &
LOCK
No 3



HUGHES' CREEK

M.M.R.R.

C.&O. R.R.

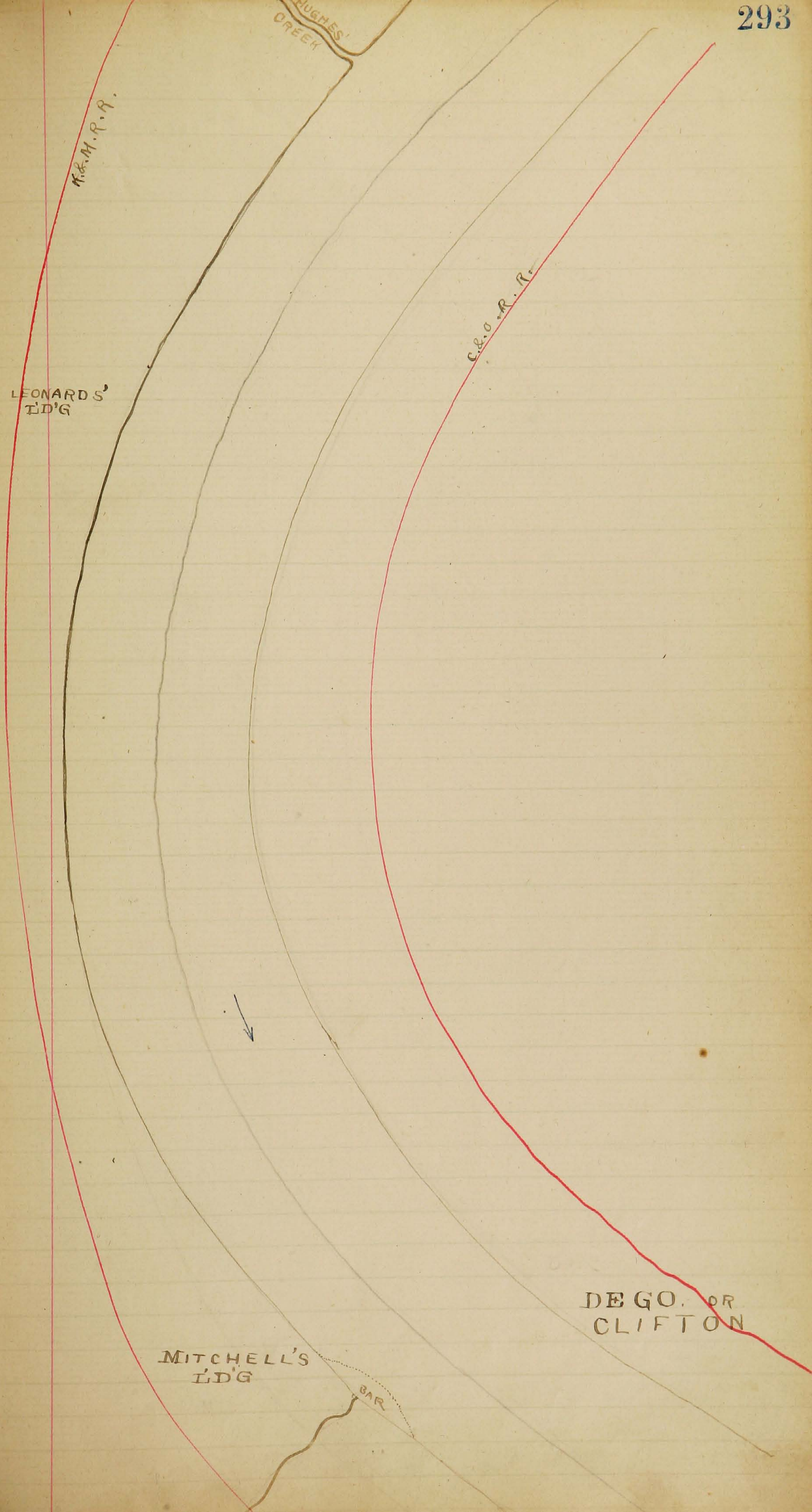
LEONARDS' LD'G



MITCHELL'S LD'G

BAR

DE GO. OR CLIFTON



SUNNEN
SLANDS

HANLEY
L'D'G



□□□

CHESEAPEAKE
COAL TIPPLE

H.R.M.R.R.

C.R.O.R.R.

HUGHES'
CREEK

C&O
ROUNDHOUSE
AND
YARDS

BAR

ICE BREAKERS



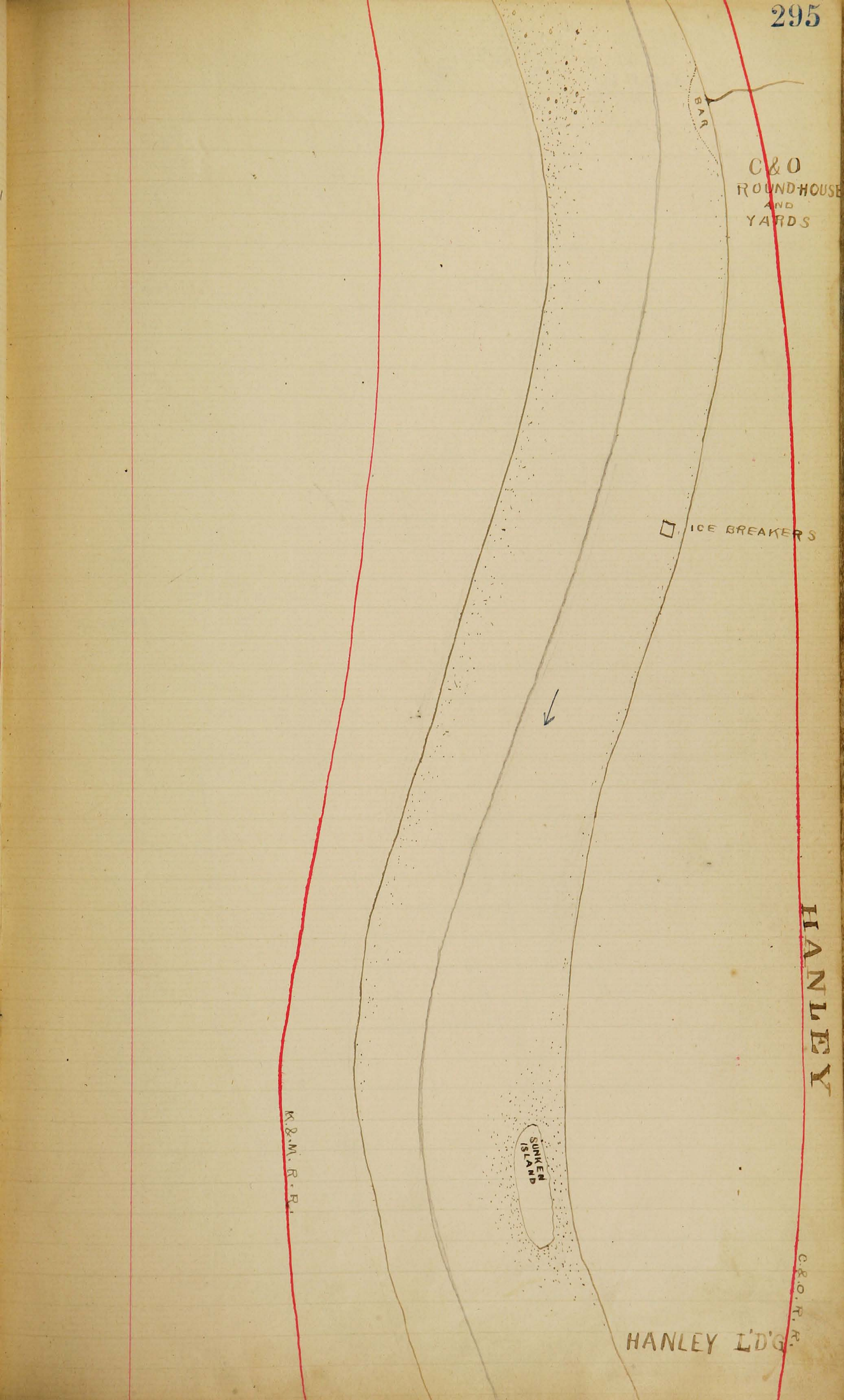
SUNKEN
ISLAND

K. & M. R. R.

HANLEY

HANLEY L'D'G.

C. & O. R. R.



STATIONARY
DAM &
LOCK
No 2

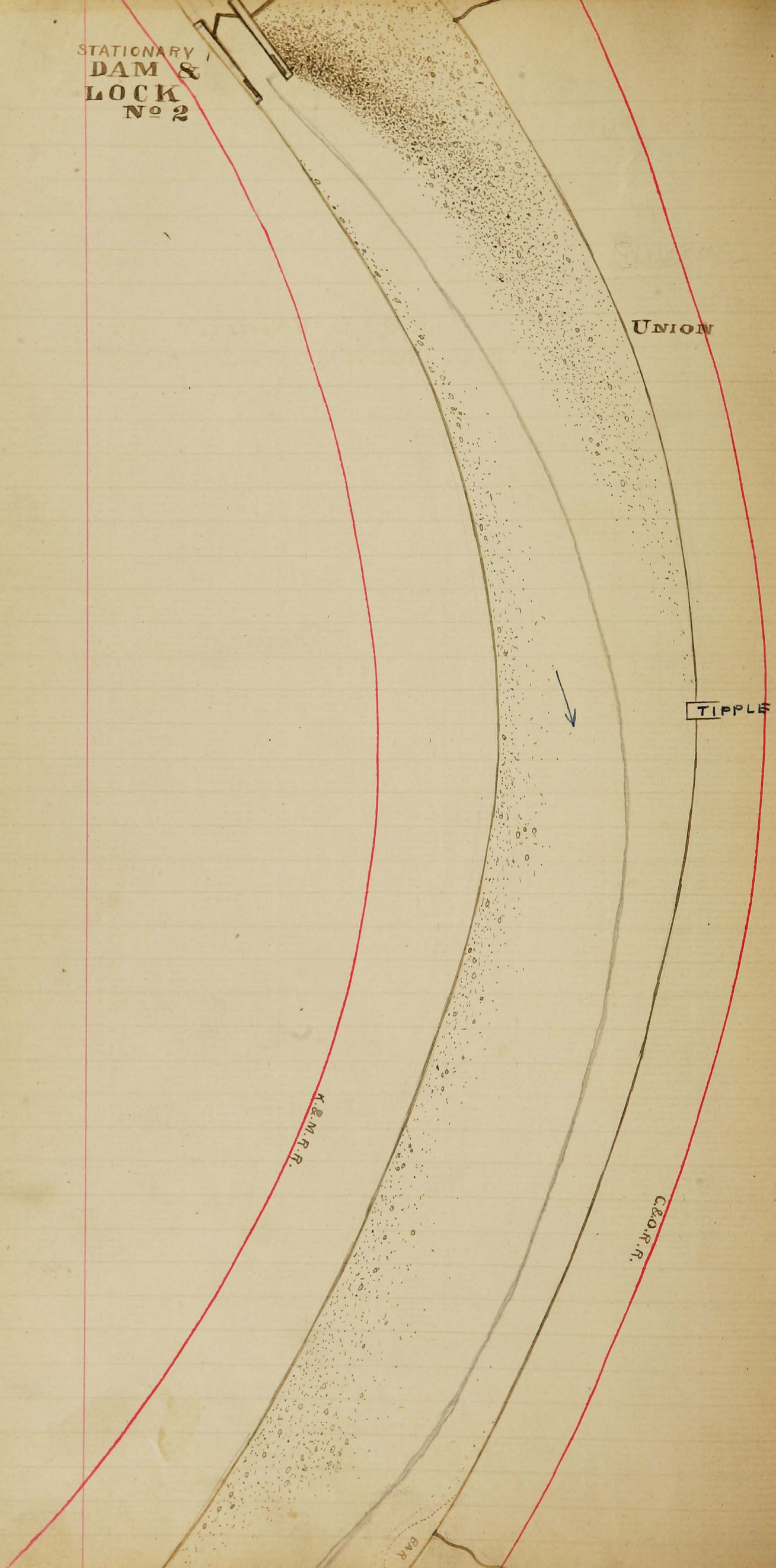
UNION

TIPPLE

K. & M. R. R.

C. & O. R. R.

BANK



SUNKEN ISLAND

FERRY LD'G

COAL VALLEY OR MONTGOMERY CITY

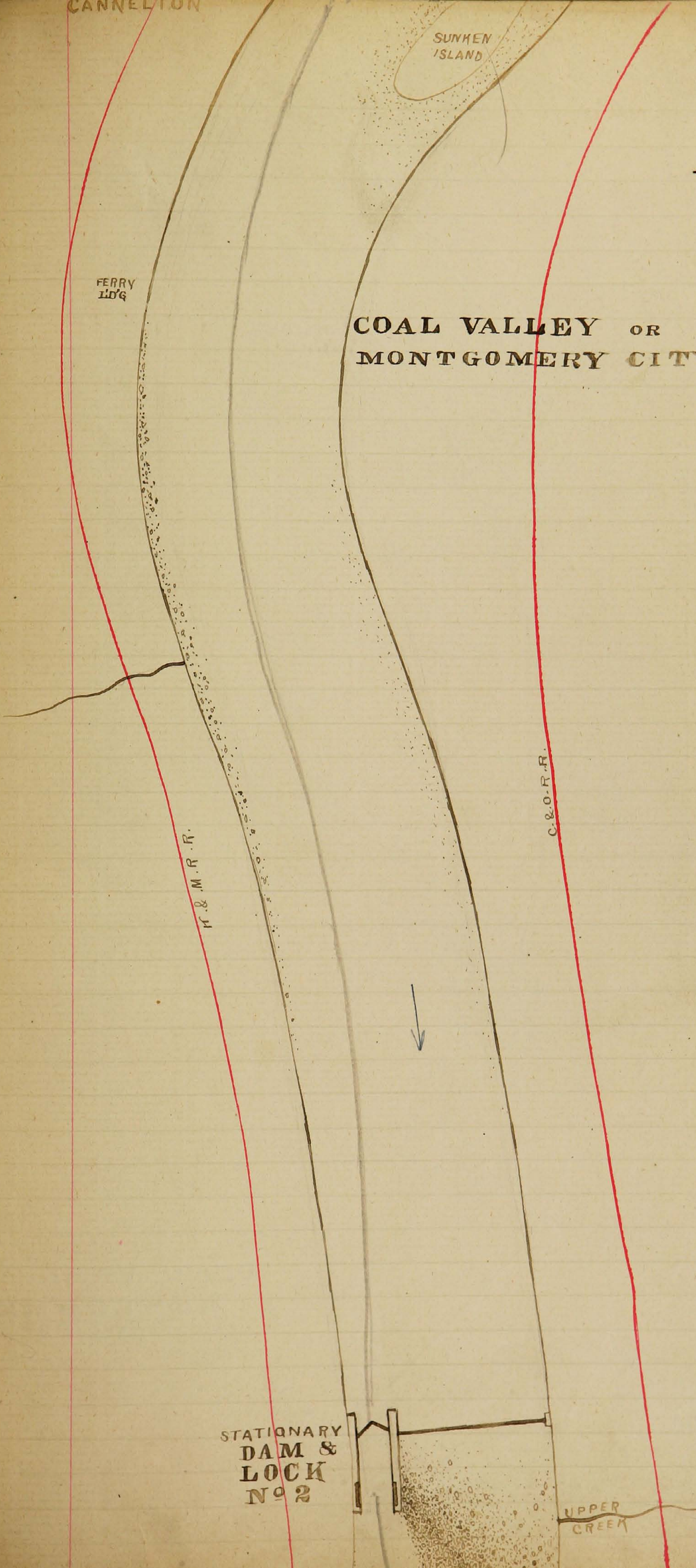
M. & M. R. R.

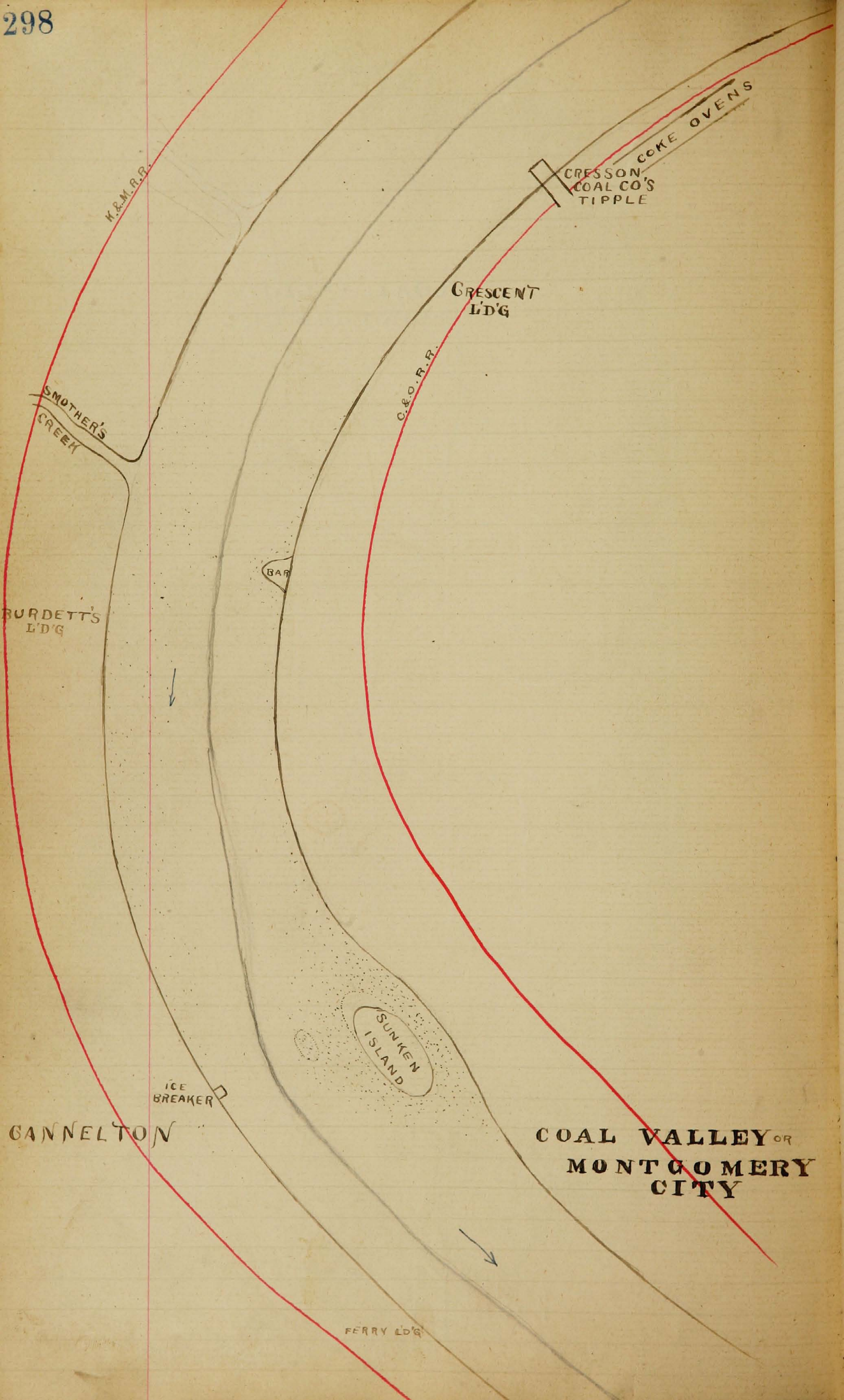
C. & O. R. R.



STATIONARY DAM & LOCK No 2

UPPER CREEK





K&M.R.R.

MILL
1ST

BAR

WRECK OF A
MODEL BARGE

TIPPLE

SON'S

2ND

EAGLE
COAL TIPPLE

C.&O.R.R.

BAR

ICE BREAKERS

ISLANDS

PUMP HOUSE

ICE BREAKERS

BAR

3RD

ICE BREAKERS



CARVER BRO'S
COAL TIPPLE

EDGEWATER
LDG

MOUNT CARBON

MARINE WAYS

BAR

BURDETT'S L'DG

BOOMERS BRANCH BAR

ARMSTRONG'S CREEK

K. & M. R. R.

G. O. R. R.

BAR

1ST

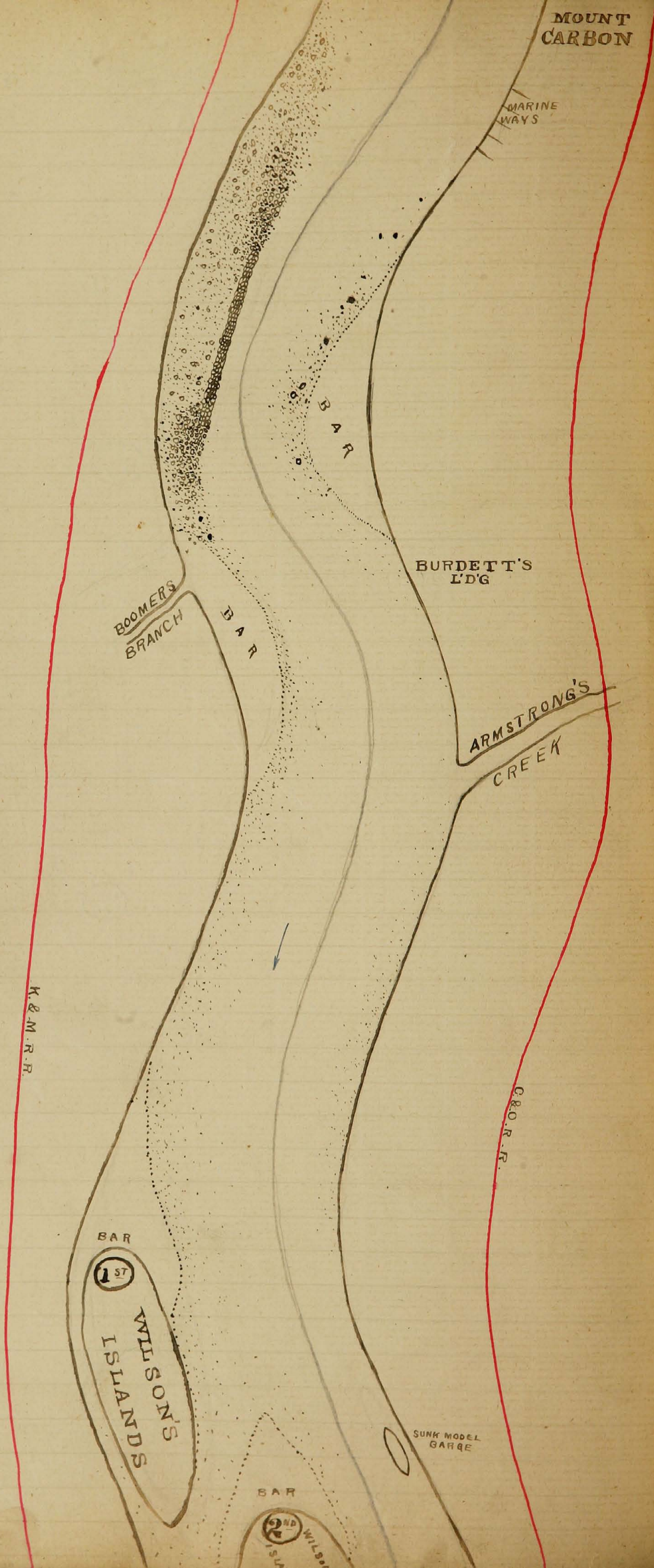
WILSON'S ISLANDS

SUNK MODEL GABE

BAR

2ND

WILSON'S ISLANDS



RAPIDS

ISLAND

RAPIDS

GUTHERIE'S L'D'S

BAR

BAR

K. & M. P. R.

C. & O. P. R.

ICE BREAKERS

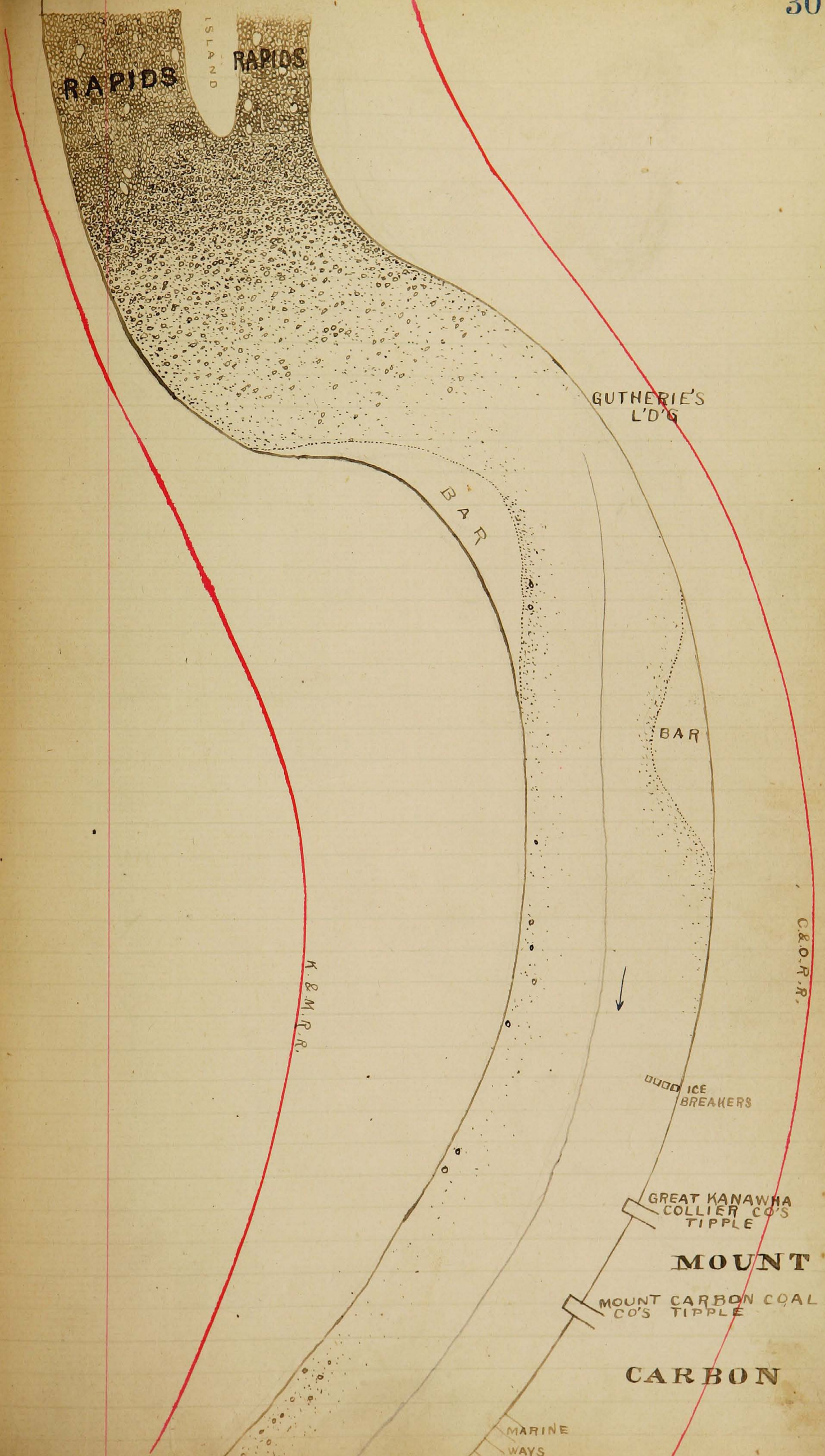
GREAT KANAWHA COLLIERY CO'S TIPPLE

MOUNT

MOUNT CARBON COAL CO'S TIPPLE

CARBON

MARINE WAYS



Dead weight is the tonnage in weight a vessel can carry.

Basis for a cargo ton is usually 40 cu ft.

Displacement represents total weight of ship & all on board, and corresponds to the water displaced

Average example

Gross Tonnage	6000
Net	4000
Deadweight	10000
Displacement	13350

Scantlings = Dimensions of various parts of a ship.


Deadrise = Rise in bottom from keel to bilge

Oxy-acetylene flame 3 Parts oxygen 2-acetylene
for cutting

Quadrant = Attachment on rudder stock head

Sheer = fore & aft curvature

Harboard strake = on each side of keel strake

Stud links 

thwart = Horizontal timbers in stowage

transom = Rounder part of stern aft of stern post

tumble home = inboard sloping in ship side above level of greatest beam