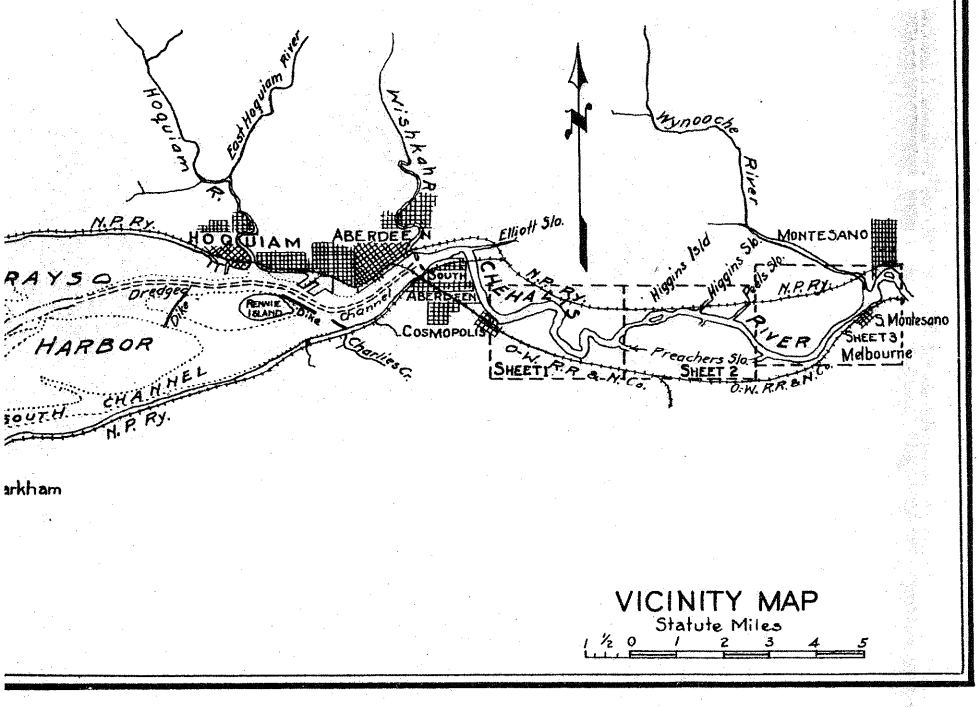


VICINITY MAP
Statute Miles
1 ½ 0 1 2 3 4 5

N.S. 0
E. 56000.

S. 1762.7
E. 56502.6
Brass plug in pavement

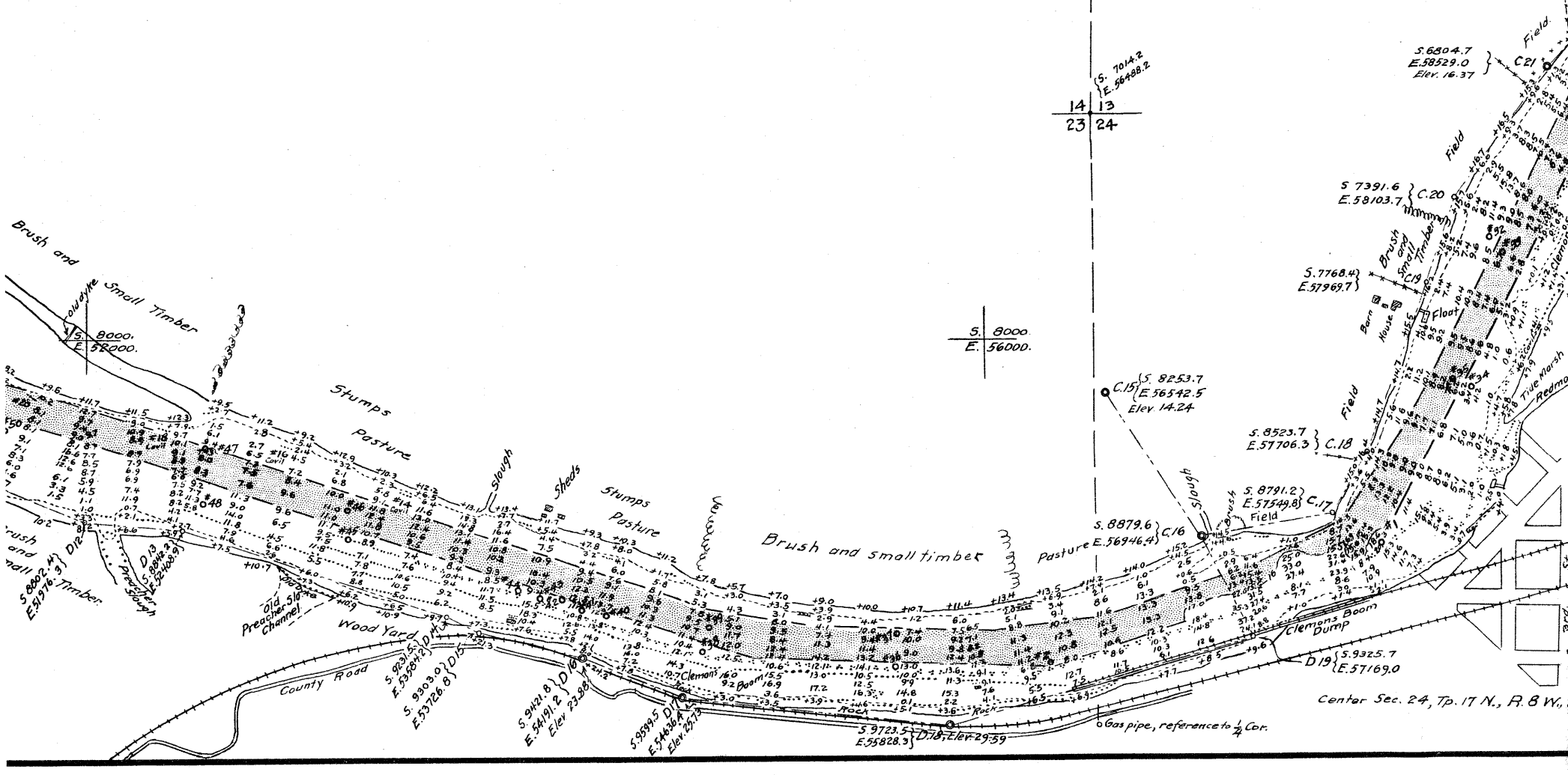
11 12
14 13

○ B.M. Pipe & disc.
U.S. Geo. S. elev., 11.60 (M.S.L.)
U.S.E.D. 18.20 (M.L.L.W.)

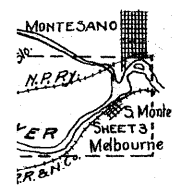
RECORD OF BORINGS.

Made with a rail, 28½ ft. long, driven with a 4200 lb. pile driver hammer.
Location of borings is indicated on the map by numbered circles, thus, ○#6
The plane of reference is mean lower low water. Depths are in feet.

Nº of Boring.	Depth of Water below M.L.L.W.	Bottom of Hole below M.L.L.W.	Probable Classification.	Condition of Driving.
1	10.9	18.4	Sand and gravel	Easy
2	7.3	18.8	Gravel	Hard. Rail clean.
3	4.8	16.8	"	" . " "
4	8.9	15.9	"	Easy to 14.9, then very hard to bottom, 15.9.
5	8.0	16.0	Sand and gravel	Easy to 14.5 except for hard strata 9.5 to 10.0. Hard 14.5 to 16.0
6	8.0	16.0	Soft stone	Very hard 13.0 to 16.0
7	6.4	17.4	Gravel to 15.4. Blue clay & Sand below.	Hard to 11.4. Easy 11.4 to 13.4, then hard to 15.4. Very hard 15.4 to 17.4
8	5.5	16.5	S. and G. to 14.3 Clay & Sand "	Easy to 10.3. Hard 10.3 to 14.3 then very hard to 16.3.
9	3.0	17.5	Gravel to 7.5 Sand or mud below.	Hard to 7.5. Easy 7.5 to 17.5.
10	4.1	18.1	Mud and Sand to 15.8. Gravel below.	Very easy to 15.8 then fairly hard to 18.1.
11	5.8	15.8		Easy to 10.8; then hard to 14.8, then very hard to refusal at 15.8, with 6' drop of hammer.
12	8.3	17.3		Hard to 15.3 (Very hard 15.3 to 17.3; refusal at 17.3. Appears too hard for suction dredge.)
13	9.9	18.4	Coarse Gravel.	Hard to refusal at 18.4
14	12.5	19.5	Clay and sand.	Fairly hard, clay and sand on rail.
15	3.5	20.5		Soft to 13.2, then fairly hard to 17.2, then hard to 20.5 (Final pen. 4" to 2' drop.)
16	5.5	20.0		Same as Nº 15.
17	8.1	19.6		Soft to 17.6 Last 2 ft. fairly hard (Final pen. 6" for drop of 2 ft.)
18	3.7	16.7		Soft to 14.1, thence hard to refusal at 16.7
19	6.3	19.0		Soft to 17.8, thence hard to refusal at 19.0, pen. 4" to ½" for drop of 3'.
20	7.9	19.4		Soft all the way.
21	5.7	16.2		Soft to 15.2, thence very hard to 16.2, pen. varying from 3" to 1" for 3' drop.
22	8.1	18.1		Soft to 17.1, then hard to refusal at 18.1
23	11.1	18.0		Soft to 17.0 " " " " " 18.0
24	12.9	19.9	Gravel	Easy driving.
25	10.7	16.7		Soft to 15.7 then very hard. Last blow, 1" pen. for 4 ft. drop of hammer.
26	10.6	18.6		Fairly hard to 12.6 then soft to 17.6 then hard to refusal at 18.6.
27	9.5	19.0	Coarse Gravel.	Fairly hard all the way.
28	8.3	18.3		Soft all the way.
29	7.0	16.0	Sand & Gravel, 7.0 to 13.0	Easy 7.0 to 13.0 then hard, probably through coarse gra
30	7.9	15.8	Sand and Small Gravel.	Easy all the way.
31	6.8	15.8	Gravel.	Easy to 12.8 then hard to 15.8.
32	10.8	16.3	Sand and small Gravel.	Very easy.
33	8.3	17.3	" " " "	" "
34	6.2	17.2	" " " "	" "
35	8.2	17.2	" " " "	" "
36	12.8	19.0	Sand.	" "
37	7.7	17.7	Sand with some gravel.	" "
38	11.2	18.5	Sand and small gravel.	Easy.
39	9.3	18.3	" " " "	"
40	11.0	19.0	" " " "	"
41	10.6	18.6	" " " "	"
42	11.1	19.1	" " " " to 17.1	Easy to 17.1 Bottom 2 ft hard; about 3" pen. to 3' drop of hammer. - Gravel.
43	11.6	19.6	" " " " " "	" " " Below 17.1 " ; " " " " " " " " "
44	11.2	20.2	" " " " " "	" " " " " " ; " " " " " " " " "
45	10.9	20.4		Very easy. Rail went down by weight of hammer.
46	11.9	19.9	Sand and gravel.	Easy.
47	10.0	20.0	" " "	" .
48	9.3	20.8	" " " to 18.8	Last 2 ft. coarse gravel.
49	5.8	20.8	Soft to 13.8 then coarse gravel.	Very easy to 13.8. Hard 13.8 to 20.8
50	9.3	19.3	" " 15.3 " " "	" " " 15.3 " 15.3 to 19.3



Map 3 of 3, Pg. 2 of 3

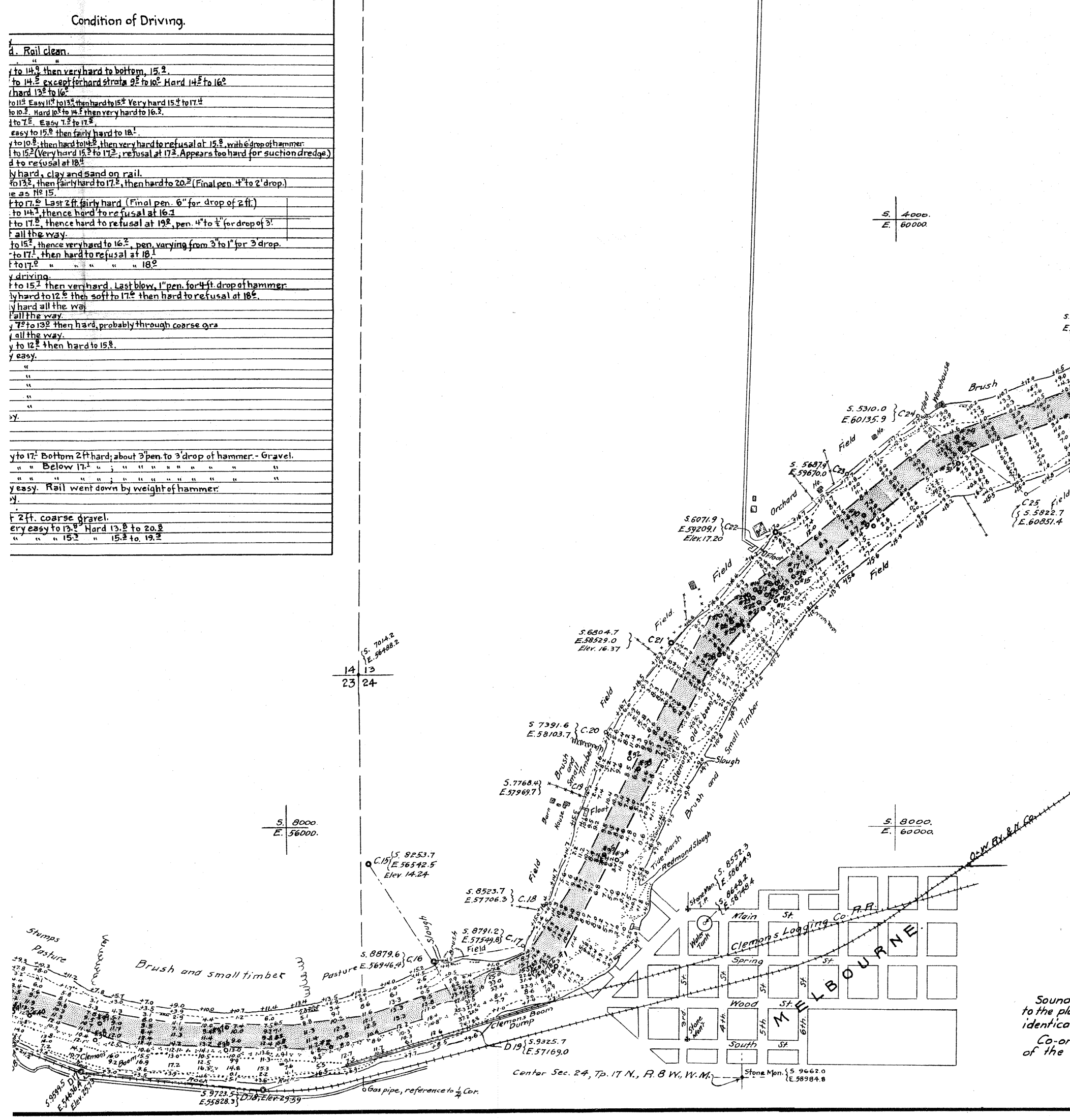


RD OF BORINGS.
g, driven with a 4200 lb. pile driver hammer.
ated on the map by numbered circles, thus, o#6
ean lower low water. Depths are in feet.

Condition of Driving.

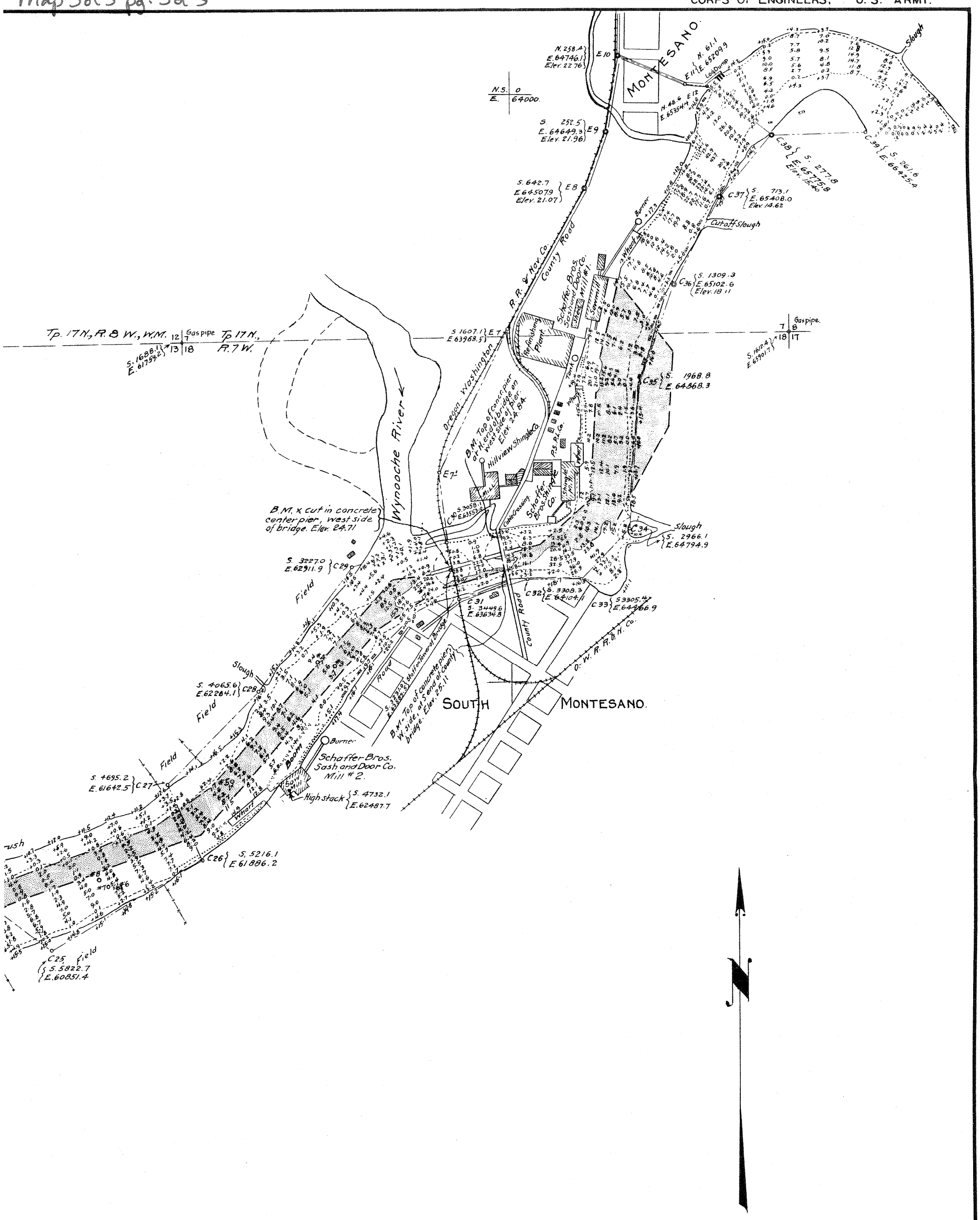
d. Rail clean.
" "
y to 14.9 then very hard to bottom, 15.2.
to 14.5 except for hard strata 9.5 to 10.0 Hard 14.5 to 16.0
hard 13.0 to 16.0
to 11.4 Easy 11.4 to 13.4, then hard to 15.4 Very hard 15.4 to 17.4
to 10.3. Hard 10.8 to 14.5 then very hard to 16.3.
t to 7.5. Easy 7.5 to 17.5.
easy to 15.0 then fairly hard to 18.1.
y to 10.8; then hard to 14.8, then very hard to refusal at 15.8, with 6' drop of hammer.
l to 15.2 (Very hard 15.2 to 17.3; refusal at 17.3. Appears too hard for suction dredge.)
d to refusal at 18.4
ly hard, clay and sand on rail.
to 13.2, then fairly hard to 17.3, then hard to 20.3 (Final pen. 4" to 2' drop.)
e as No 15.
t to 17.0 Last 2 ft. fairly hard (Final pen. 6" for drop of 2 ft.)
to 14.1, thence hard to refusal at 16.1
t to 17.8, thence hard to refusal at 19.2, pen. 4" to ½" for drop of 3'.
t all the way.
to 15.2, thence very hard to 16.2, pen. varying from 3" to 1" for 3' drop.
to 17.1, then hard to refusal at 18.1
t to 17.0 " " " " 18.0
y driving.
t to 15.1 then very hard. Last blow, 1" pen. for 4 ft. drop of hammer.
ly hard to 12.0 then soft to 17.6 then hard to refusal at 18.6.
y hard all the way.
t all the way.
y 7.0 to 13.0 then hard, probably through coarse gra
t all the way.
y to 12.8 then hard to 15.8.
y easy.
"
"
"
"
"
sy.

y to 17.1 Bottom 2 ft hard; about 3" pen. to 3' drop of hammer. - Gravel.
" " Below 17.1 " ; " " " " " " " " "
" " " " " ; " " " " " " " " "
y easy. Rail went down by weight of hammer.
sy.
t 2 ft. coarse gravel.
ery easy to 13.8 Hard 13.8 to 20.8
" " " 15.2 " 15.2 to 19.2



Sounding to the plane identical Co-ordinates of the

Map 3 of 3 pg. 3 of 3



LEGEND

High Water shown thus,
Mean Lower Low Water " "
Railroads " "
Traverse Lines " "
Traverse stations monumented by bronze discs set in concrete shown thus, ◎
Proposed dredged channel, 150' wide, 16' deep, shown thus,

REFERENCE

Soundings and Elevations are in feet and are referred to the plane of Mean Lower Low Water as zero, which datum is identical with that of the Port of Grays Harbor.

Co-ordinates are referred to the origin and meridian of the U.S. Engineers Harbor Line Survey of 1903.

CHEHALIS RIVER, WASHINGTON

IN 3 SHEETS. SHEET NO. 3. SCALE, 1 INCH = 640 FT.

100 FT 0 2 4 6 8 10 12 14 16 18 2000 FT.

U. S. ENGINEER OFFICE, SEATTLE, WASHINGTON. AUGUST, 1927.

Submitted: A. J. M. Baker, Civil Engineer.

Submitted: Jno. S. Butler, Major, Corps of Engineers

To accompany report on Survey directed by River and Harbor Act approved March 3, 1925.

Surveyed by F. S. G.
Drawn by R. A. D.

FILE E/5/5/13

Transmitted with report dated November 22, 1927.