

DETAILS OF WELL CONSTRUCTION

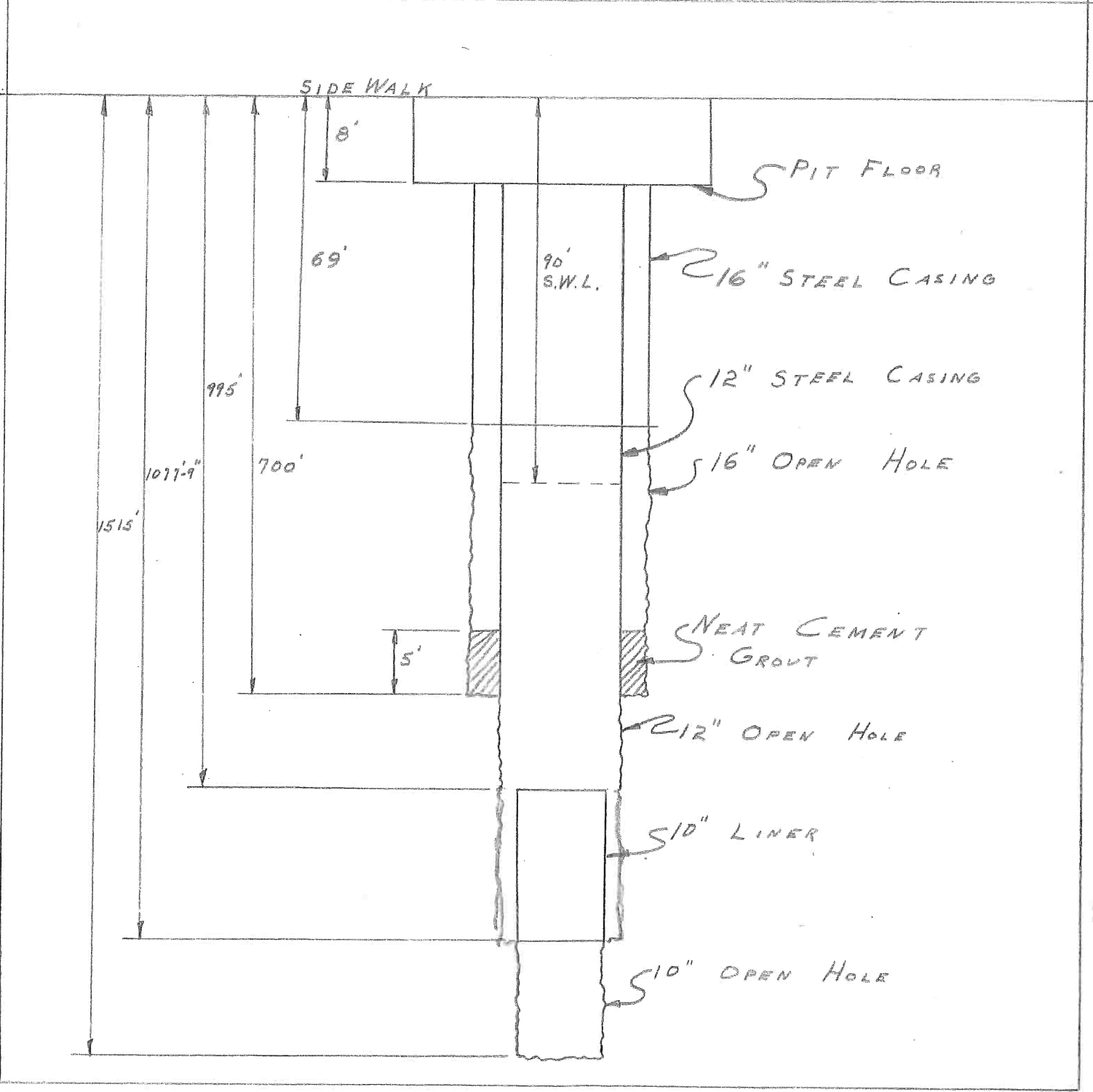
for

HUBBARD ICE & FUEL Co.

June 11, 1956

Layne Western Co.

Ames, Iowa



Well Information for Layne-Western Co.

This sheet is to be filled in and mailed to office upon completion of well

1. Hubbard Ice & Fuel 6/19/56
Name of Job Date
2. Cedar Rapids Iowa
City State
3. Well No. Ice plant Jack Haney
Driller's Name
4. Well location: Under sidewalk outside of ice plant
Give Distance and Direction from Permanent Land Mark so Well can be Accurately Located Several Years from now.
5. Work began 4/16/56; work completed 6/11/56. Number of working days part time two shifts
6. Diameter, length and type of material left in well:
7. X feet of X screen made of X No. X openings.
Shutter, Concrete, Keystone Armeo, Bronze, Stainless Steel, Concrete Mesh
8. 692 feet of 12 inch inside casing made of steel with welded connections.
Armeo, Std. Pipe, Concrete Riveted, Welded, Screw
9. 69 feet of 16 inch outside casing made of steel with welded connections.
Armeo, Std. Pipe Riveted, Welded, Screw
10. 82' x 10" steel pipe T.C. liner 995' to 1077'
yards of gravel used in well. Size
11. Test of well. Did you use test or permanent pump? permanent 10" RKHC 5
Size of Bowl Stages
12. Pump No. _____; geared head No. _____; ratio _____; r. p. m. _____; pulley diam. _____
13. Power used 40; horse power 440; voltage 1750; r. p. m. _____; pulley diam. _____; r. p. m. _____
Electric Motor, Engine
14. Size of orifice 5 inch, by 6 inch. Orifice tube reading _____ inches.
15. Pumping test—measurements from ground level:

Time	G. P. M.	Static	Drawdown	Pumping Level
<u>6 hr</u>	<u>500</u>	<u>90'</u>	<u>25</u>	<u>115</u>
<u>from sidewalk</u>				
16. Recovery in 5 minutes static, in 30 minutes X
17. Customer's pump No. _____ was installed in this well by _____

LOG OF WELL

HUBBARD ICE & FUEL

Cedar Rapids, Iowa

Well under sidewalk at ice house deepened from 419' to 1515'.

All measurements taken from sidewalk.

Driller: Jack Haney

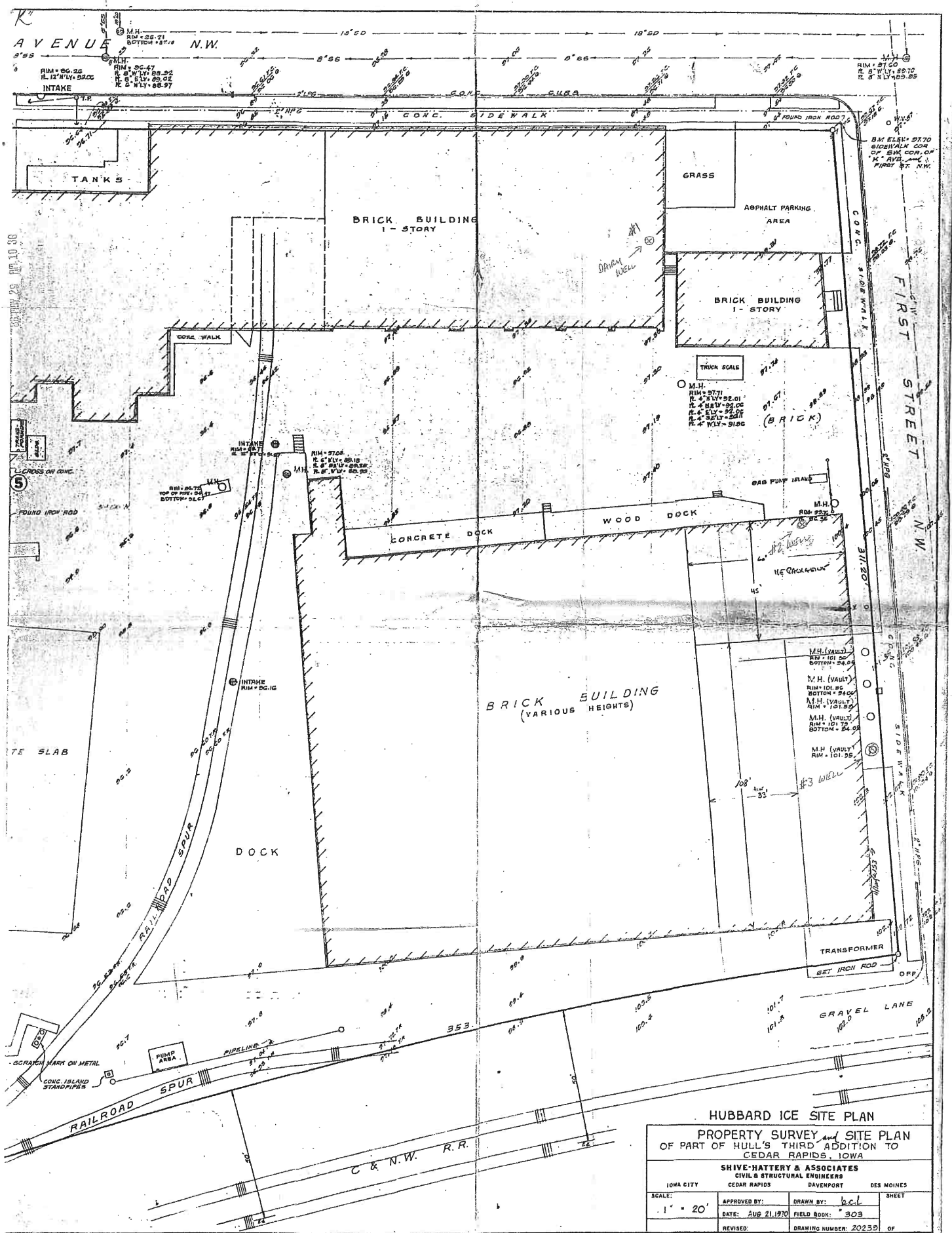
Layne-Western Company

Began 4/16/56

Finished 6/11/56

419	-	425	Mixed shale and limestone, medium
425	-	430	Mixed shale, medium
430	-	450	Mixed shale, medium
450	-	465	Mixed lime and shale, hard
465	-	480	Dark gray shale, medium
480	-	490	Mixed shale & limestone, medium
490	-	540	Gray shale streaks, limestone, medium
540	-	595	Limestone and shale, medium
595	-	630	Brown shale streaks, limestone, medium
630	-	635	Mixed limestone, medium
635	-	670	Mixed limestone & shale, hard
670	-	675	Mixed shale streak, limestone, hard
675	-	685	Gray limestone, medium
685	-	695	Mixed limestone, medium
695	-	725	Brown limestone, medium
725	-	735	Brown limestone, hard
735	-	740	Mixed limestone, medium, water at 735'
740	-	745	Mixed limestone, hard
745	-	765	Mixed shale streaks, limestone, medium - W.L. 94'
765	-	835	Mixed shale streaks, limestone, hard - W.L. 100'
835	-	885	Mixed shale streaks, limestone, medium
885	-	895	Gray limestone, hard
895	-	900	Mixed limestone, hard
900	-	908	Mixed shale, limestone, hard
908	-	913	Gray shale, medium
913	-	920	Gray shale, hard
920	-	975	Gray limestone, hard - W.L. 98'
975	-	980	Gray limestone & shale, medium
980	-	1025	White sand, medium
1025	-	1030	White shale streak, sand, medium - blue shale
1030	-	1035	Mixed sand & limestone, medium - 100' W.L.
1035	-	1075	Gray shale streaks, limestone, hard
1075	-	1115	Gray limestone, hard
1115	-	1130	Gray sandy lime, hard
1130	-	1140	Gray limestone, hard
1140	-	1150	Mixed limestone, hard
1150	-	1170	Mixed shale streaks, limestone, medium
1170	-	1175	Gray limestone and sand, medium
1175	-	1185	Gray limestone, hard - W.L. 95'

1185	-	1205	Gray sandy limestone, hard
1205	-	1220	Gray shale streaks, limestone, hard - W.L. 95'
1220	-	1275	Gray limestone, medium
1275	-	1290	Gray limestone, hard
1290	-	1310	Gray sandy limestone, hard - crevice at 1304
1310	-	1350	Gray fine limestone, hard - W.L. 95'
1350	-	1355	Gray sandy limestone, hard - from side walk
1355	-	1380	Gray limestone, hard
1380	-	1385	Gray limestone, medium
1385	-	1415	Brown limestone, medium
1415	-	1430	White sand, soft
1430	-	1505	White sand, medium
1505	-	1512	Gray sand and limestone, medium
1512	-	1515	Gray limestone - T.D.



HUBBARD ICE SITE PLAN

PROPERTY SURVEY and SITE PLAN
OF PART OF HULL'S THIRD ADDITION TO
CEDAR RAPIDS, IOWA

SHIVE-HATTERY & ASSOCIATES
CIVIL & STRUCTURAL ENGINEERS
CEDAR RAPIDS DAVENPORT DES MOINES

SCALE: 1" = 20'	APPROVED BY:	DRAWN BY: <i>bcl</i>	SHEET
	DATE: AUG 21, 1970	FIELD BOOK: 303	
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