

#23702

WARREN

Name: TOWN F Indianola

Loc:

Cont: VARNER

Date: March 1926

T.O.: 2435'

Bedrock: 35'

C.5g.....

File Loc: PL9-129-130-131-132-133-134

4-7-77 Indianola #11  
Wagon Reed

hole size

26" 0' - 120.75'  
23" 120.75 - 715.00  
17" 715.00 to 1990.40  
12" (open) 1990.4 to 2435

casing

24" 0 - 120.75'  
18" 120.75 - 715.63'  
14" 715.63 - 1988.70

not quite perfect figures,  
but close enough.  
Grouted all the way

Memo  
5-18-76

## Indianola Municipal #11

I examined the raw cuttings for confirmation of casing point. SS shows up in the 1905-10 sample in minor amounts. The driller's time log shows a distinct break at 1906-1907. This is very likely the top of the St. Peter. The top of the P. du Ch is somewhat dubious. Sample 1930-35 is virtually all St. Peter. Sample 1935-40 contains some free sand, dolomitic SS, grn-red shale, Dolomite (gr, very dense), and a trace of oolitic chert. Samples 1940-50 are similar with increasing amounts of yel brown dolomite and decreasing shale and sandstone. This lower interval 1935-1950 is probably in part the Reads town member. ~~There~~ A good break occurs at 1934-35 on the time log. I called the top of the P. du Ch. at 1934 for casing purposes. It is very likely somewhat lower in actuality. The driller told me that they intended to set the casing to a depth of approximately 1990 ft.

est top Jordan 2362'

Jack Gilmore

PS. we received samples  
from ~1500 to 1950



*OPV*  
STATE OF IOWA

*Dank*

## Office for Planning and Programming

523 East 12th Street, Des Moines, Iowa 50319 Telephone 515/281-3711

February 28, 1975

ROBERT D. RAY  
Governor

ROBERT F. TYSON  
Director

IOWA GEOLOGICAL SURVEY

MAR 05 1975

State Geologist  
Geological Survey  
16 W. Jefferson  
Iowa City, Iowa 52240

PNRS: No. 750681  
Community Development Application  
City of Indianola

Dear Sir:

The State Clearinghouse has received the enclosed preapplication for a discretionary grant under the provisions of the Housing and Community Development Act of 1974 from the above named applicant. The Department of Housing and Urban Development has requested that the Clearinghouse preliminary review made by interested State agencies at the same time HUD is considering the preapplication. Thus, we are reducing the usual review time to 7 days. Please forward any comments that you may have within that period of time so that they can be sent on to HUD together with the Clearinghouse Sign-off Form.

If this preapplication is selected to be given additional consideration in final application form, the applicant will be required by HUD to return the complete application to this Clearinghouse for consideration. It will again be distributed to you so that you may have another opportunity to review it. The review period on the final application will be the regular schedule for A-95 reviews.

Sincerely,

*A. Thomas Wallace*  
A. Thomas Wallace  
Federal Funds Coordinator

ATW/fjc

Enclosure

# DAILY DRILLING REPORT

VARNER WELL AND PUMP CO.

BOX 237

DUBUQUE, IOWA 52001

Date 5/13/76

Job IUDIANAOLA, Iowa

Hole No. 11

Rig No. Brewster

Tour

M

M

DEPTH		TIME START	TIME FINISH	MINUTES	MUD VISCOSITY	MUD WEIGHT	FORMATION	REMARKS
FROM	TO							
1890	1891	6:50	7:10	20				Dolo + Shale @ Chart
	92		7:27	17				
	93		7:50	23				
	94		8:25	35				
	1895		9:45	80				
	96		10:25	40				
	97		11:25	60			Dolo.	
	98		12:45	80				
	99		2:00	75				
	1900		3:15	75			PER RIG	
	01	3:39	4:24	50			Dolo.	
	02		5:29	65			SHALE	
	03		6:42	73				
	04		7:38	56			AIR DRILL PIPE	
	1905	11:40	12:15	35				
	06		12:45	30				
	07		12:51	6			TOP OF SAND!!!	
	08		1:00	9				
	09		1:11	11				
	1910		1:17	6				
	11		1:29	12				
	12		1:43	14				
	13		1:54	11				
	14		2:05	11				
	1915		2:15	10			SAND + PyRITe	
	16		2:25	10				
	17		2:33	8				
	18		2:40	7				
	19		2:51	11				
	1920		3:03	12				Conn @ 1920

ADDITIONAL REMARKS, ETC.

APPROVED BY

DRILLER

# DAILY DRILLING REPORT

VARNER WELL AND PUMP CO.

BOX 237 DUBUQUE, IOWA 52001

Date 5/14/26  
 Job INDIANOLA, IOWA  
 Hole No. 11  
 Rig No. BREWSTER  
 Tour M M

DEPTH		TIME START	TIME FINISH	MINUTES	MUD VISCOSITY	MUD WEIGHT	FORMATION	REMARKS
FROM	TO							
1920	1921	3:15	3:22	7			SAND	
	22		3:27	5				
	23		3:32	5				
	24		3:36	4				
	1925		3:40	4				
	26		3:44	4				
	27		3:47	3				
	28		3:50	3				
	29		3:54	4				
	1930		3:58	4				
	31		4:05	7				
	32		4:10	5				
	33		4:15	5				
	34		4:22	7				End Sand 1907-1934 - 28ft
	1935		4:35	17				
	36		5:52	17				
	37		5:12	20				
	38		5:28	16				
	39		5:50	22				Air Pump C.P.S. & New Packing in Outer Side of Pump & REPLACE GUARD
	1940	6:55	7:15	20				
	41		7:41	26				
	42		8:00	19				
	43		8:20	20				
	44		8:44	24				
	1945		9:14	30				
	46		9:35	21				
	47		10:05	30				
	48		10:35	30				
	49		11:00	25				
	1950							Cont @ 1950'

ADDITIONAL REMARKS, ETC.

APPROVED BY \_\_\_\_\_

DRILLER \_\_\_\_\_

FROM

**SHIVE-HATTERY & ASSOCIATES**  
 Civil & Structural Engineers  
 P. O. Box 1050  
 IOWA CITY, IOWA 52240

*Message Reply*

DATE:

4/8/77

**PRIORITY**

- URGENT!
- SOON AS POSSIBLE
- NO REPLY NEEDED

FILE NO.

ATTENTION:

Paul Horick & Jack Gilmore

SUBJECT:

Data on Indianola Well #11

TO

Mr. Paul Horick  
 Iowa Geological Survey  
 123 N. Capital Street  
 Iowa City, Iowa 52242

MESSAGE

Enclosed is a marked copy of the final estimate on Well #11 @ Indianola. This will give you final installed quantities. Also the final cost -  $\approx$  \$326,000, which is considerable.

Will send copies of several prints of drawings of this well when they are run.

SIGNED:

*Marys A. Reed*

DATE OF REPLY:

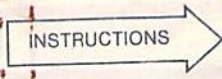
REPLY TO:

REPLY

SIGNED: \_\_\_\_\_

SENDER: MAIL RECIPIENT WHITE AND PINK SHEETS.

RECIPIENT: WRITE REPLY. RETURN WHITE TO SENDER. KEEP THIS PINK COPY.



Sender: Write or type message, pull out yellow sheet, mail the other two by folding in half and inserting in #771 DU-O-VUE envelope.  
Recipient: Write your reply at bottom, mail back white sheet and keep the pink.

FROM

**SHIVE-HATTERY & ASSOCIATES**  
Civil & Structural Engineers  
P. O. Box 572  
IOWA CITY, IOWA 52240

Message  
Reply

DATE: 7/2/76

PRIORITY	
<input type="checkbox"/>	URGENT!
<input type="checkbox"/>	SOON AS POSSIBLE
<input type="checkbox"/>	NO REPLY NEEDED

ATTENTION: PAUL Horick

TO

PAUL Horick  
IGS  
123 N. CAPITOL ST  
IOWA City, IOWA

SUBJECT: Indianola Pump TEST

MESSAGE

PAUL, Attached drawdown records obtained from wells #9 & #10 during #11 pump test. GRAPAS will follow later. Thanks for your help.

SIGNED: Bill Cook

DATE OF REPLY:	REPLY TO:
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REPLY

SIGNED: \_\_\_\_\_

SENDER: MAIL RECIPIENT WHITE AND PINK SHEETS.  
RECIPIENT: WRITE REPLY. RETURN WHITE TO SENDER. KEEP THIS PINK COPY.

GW Indianola city No. 11  
well folder

June 28, 1976

Mr. William A. McElkiney Jr., President  
Varner Well & Pump Co.  
P.O. Box 237  
121 E. 4th Street  
Dubuque, Iowa 52001

Dear Bill:

Thank you for the complete pumping test record of Indianola city well No. 11. I'm sure the city will be happy with the results. The airline readings apparently are reliable but I was disappointed we couldn't check the water levels with an electric line.

I believe our electric logging people plan to run some surveys on this well but I am not sure when. We keep an open file on these E-log tests and anyone may review them and have copies made on request. Bill Bunker is in charge of this work for the Iowa Geological Survey.

I am looking forward to attend the drilling of the Jordan interval at Knoxville to witness your new technique. Please let me know a day or so in advance.

Very truly yours,

Paul J. Horick  
Chief, Ground Water Division

PJH:ss



STANDARD WATER ANALYSIS REPORT

**Orlando Laboratories, Inc.**

P. O. Box 8025A • Orlando, Florida 32806 • 305/843-1661

RECEIVED  
JUL 1 1976

Report to: Varner Well & Pump Co

Appearance: Clear  
VARNER WELL & PUMP CO.

Date: 24 June 76

Sampled by: Client

Report Number: 11840

Identification: Indianola Well #11 Retest

METHODS

This water was analyzed according to "Standard Methods for the Examination of Water and Wastewater," Latest Edition, APHA, AWWA and WPCF.

RESULTS

Determination	Data Significance	p.p.m.	Determination	Data Significance	p.p.m.
Total Dissolved Solids	x.	<u>770</u>	Total Hardness, as CaCO <sub>3</sub>	x.	<u>230</u>
Phenolphthalein Alkalinity, as CaCO <sub>3</sub>	x.	<u>0</u>	Calcium Hardness, as CaCO <sub>3</sub>	x.	<u>170</u>
Total Alkalinity, as CaCO <sub>3</sub>	x.	<u>264</u>	Magnesium Hardness, as CaCO <sub>3</sub>	x.	<u>60</u>
Carbonate Alkalinity, as CaCO <sub>3</sub>	x.	<u>0</u>	Calcium, as Ca	x.	<u>68</u>
Bicarbonate Alkalinity, as CaCO <sub>3</sub>	x.	<u>264</u>	Magnesium, as Mg	x.	<u>15</u>
Carbonates, as CO <sub>3</sub>	x.	<u>0</u>	Sodium, as Na	x.	<u>160</u>
Bicarbonates, as HCO <sub>3</sub>	x.	<u>322</u>	Iron, as Fe	x.	<u>0.1</u>
Hydroxides, as OH	x.	<u>0</u>	Manganese, as Mn	x.	<u>&lt;0.05</u>
Carbon Dioxide, as CO <sub>2</sub>	x.	<u>23</u>	Copper, as Cu	x.	<u>&lt;0.1</u>
Chloride, as Cl	x.	<u>30</u>	Silica, as SiO <sub>2</sub>	x.	<u>6</u>
Sulfate, as SO <sub>4</sub>	x.	<u>260</u>	Color, PCS		<u>0</u>
Fluoride, as F	x.	<u>2.8</u>	Odor Threshold	x.	<u>0</u>
Phosphate, as PO <sub>4</sub>	x.	<u>1.5</u>	Turbidity, NTU	x.	<u>0.5</u>
pH (Laboratory)	x.	<u>7.4</u>			
pHs	x.	<u>7.3</u>			
Stability Index	x.	<u>7.2</u>			
Saturation Index	x.	<u>0.1</u>			

Signed: Donna Zubish  
Chemist

(To convert ppm to grains per gallon, divide ppm by 17.1 - p.p.m. = mg/l)

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**SHIVE-HATTERY & ASSOCIATES**  
Civil & Structural Engineers  
P. O. Box 1050  
IOWA CITY, IOWA 52240

*Message  
Reply*

DATE:

4/12/77

FILE NO.

**PRIORITY**

- URGENT!**
- SOON AS POSSIBLE
- NO REPLY NEEDED

ATTENTION:

Paul Horick

SUBJECT:

Data on Indianola  
Well #11

|||  
T  
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|||

Mrs. Paul Horick  
Iowa Geological Survey  
123 N. Capitol Street  
Iowa City, Iowa 52242

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Enclosed are several drawings of  
Well #11 with As-Built dimensions  
marked in red for your further infor-  
mation.

Depths in feet given to you recently  
should be more meaningful when you  
know the starting elevations

SIGNED:

*Wayne A. Reed*

DATE OF REPLY:

REPLY TO:

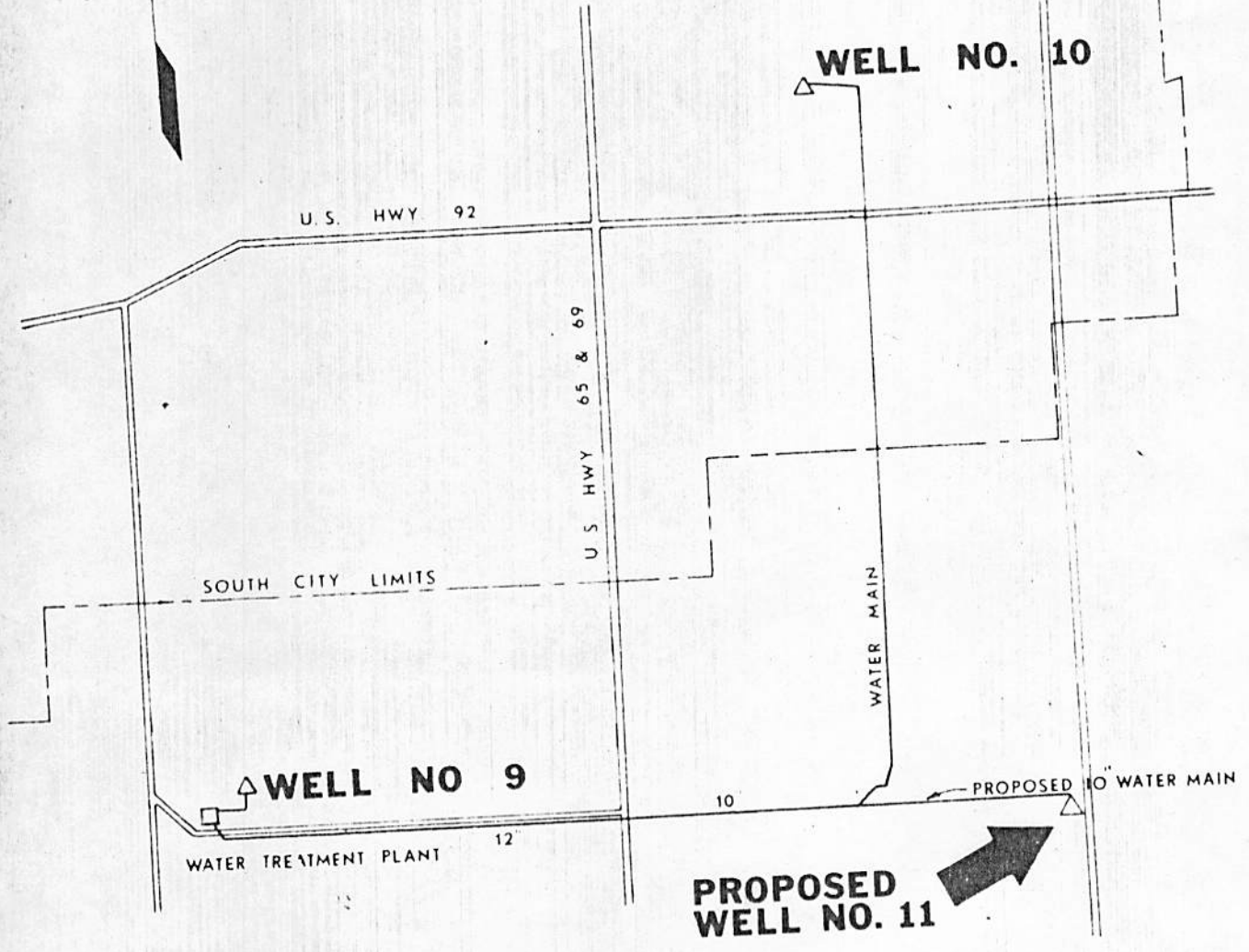
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SIGNED:

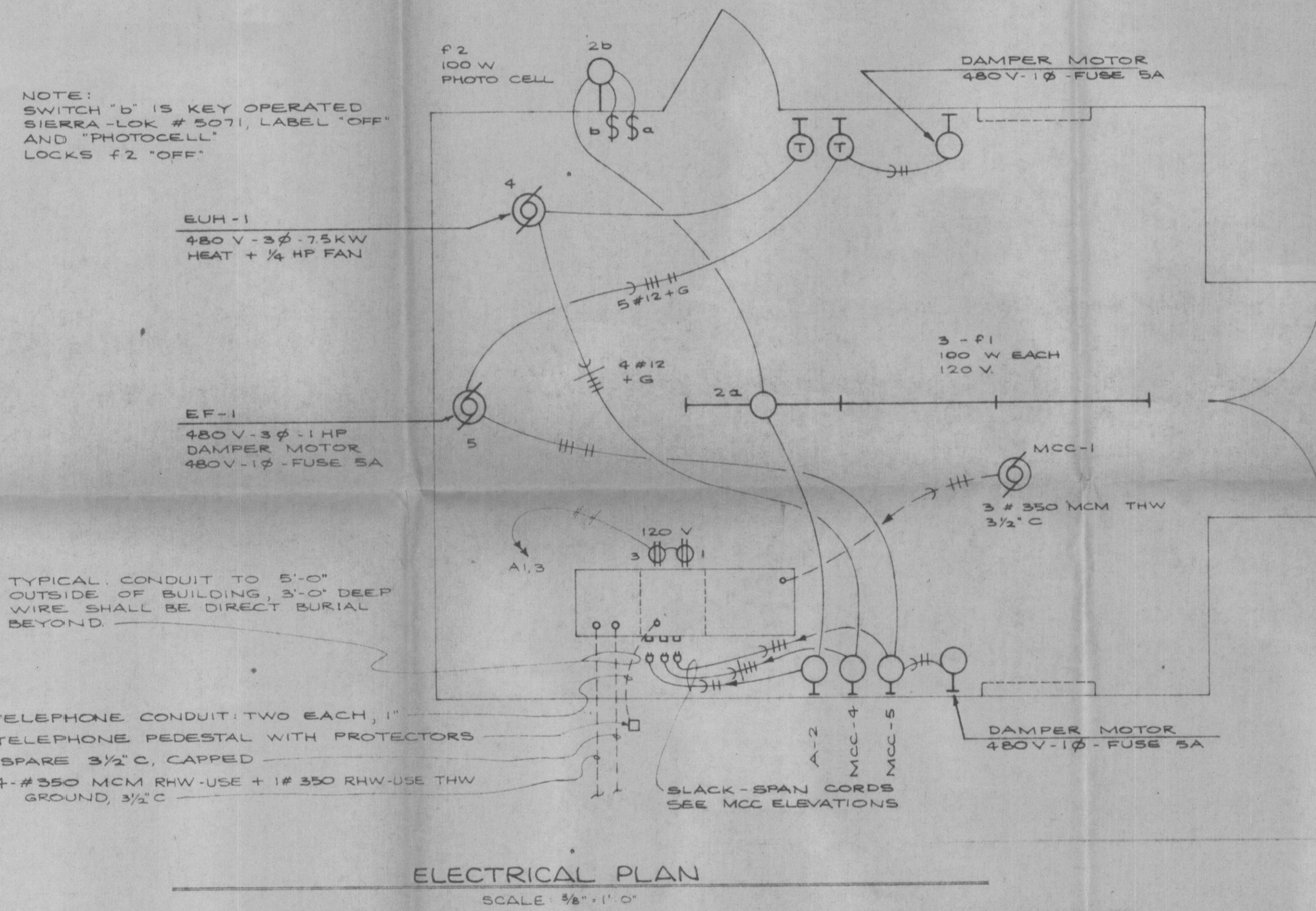
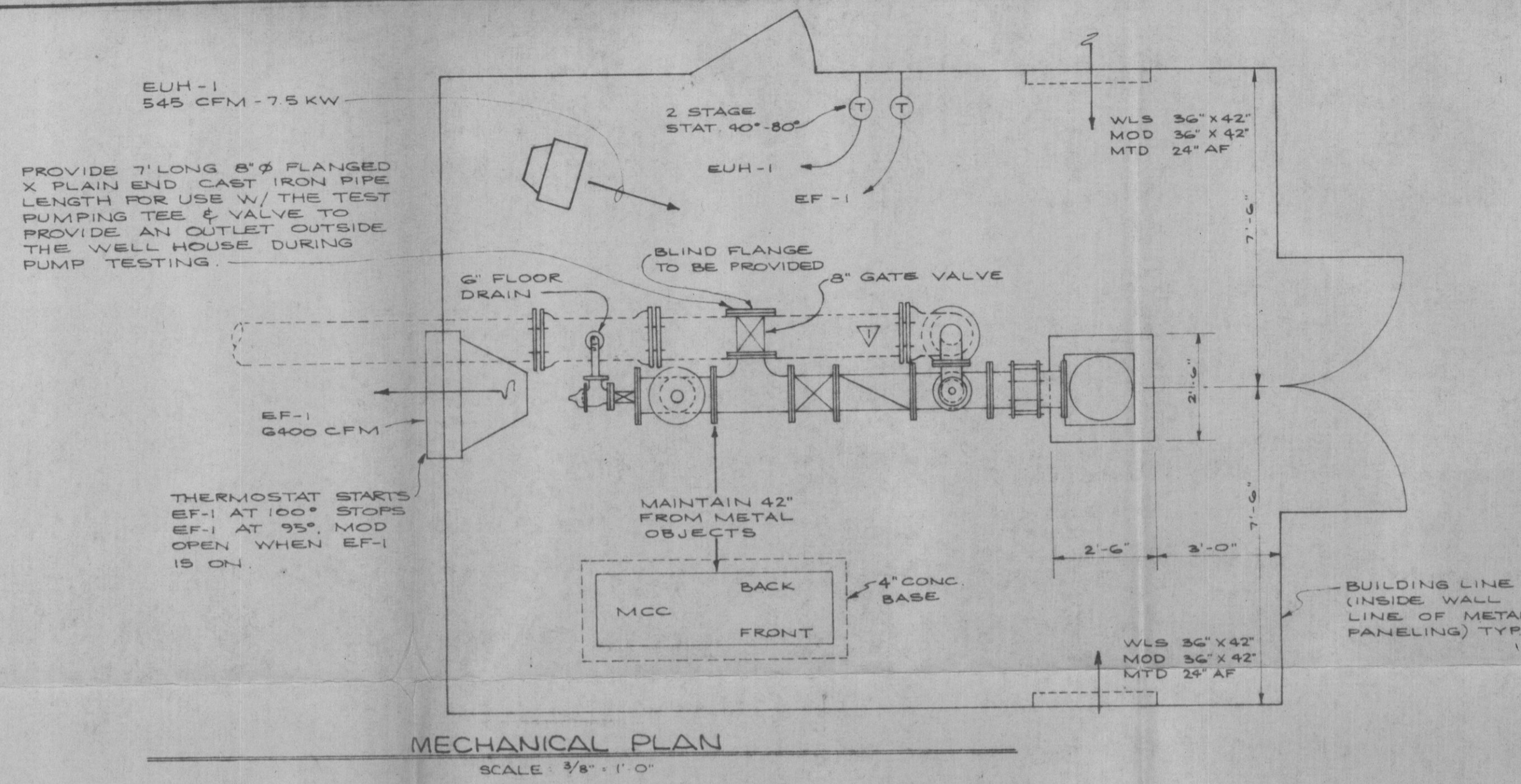
SENDER: MAIL RECIPIENT WHITE AND PINK SHEETS.

RECIPIENT: WRITE REPLY. RETURN WHITE TO SENDER. KEEP THIS PINK COPY.

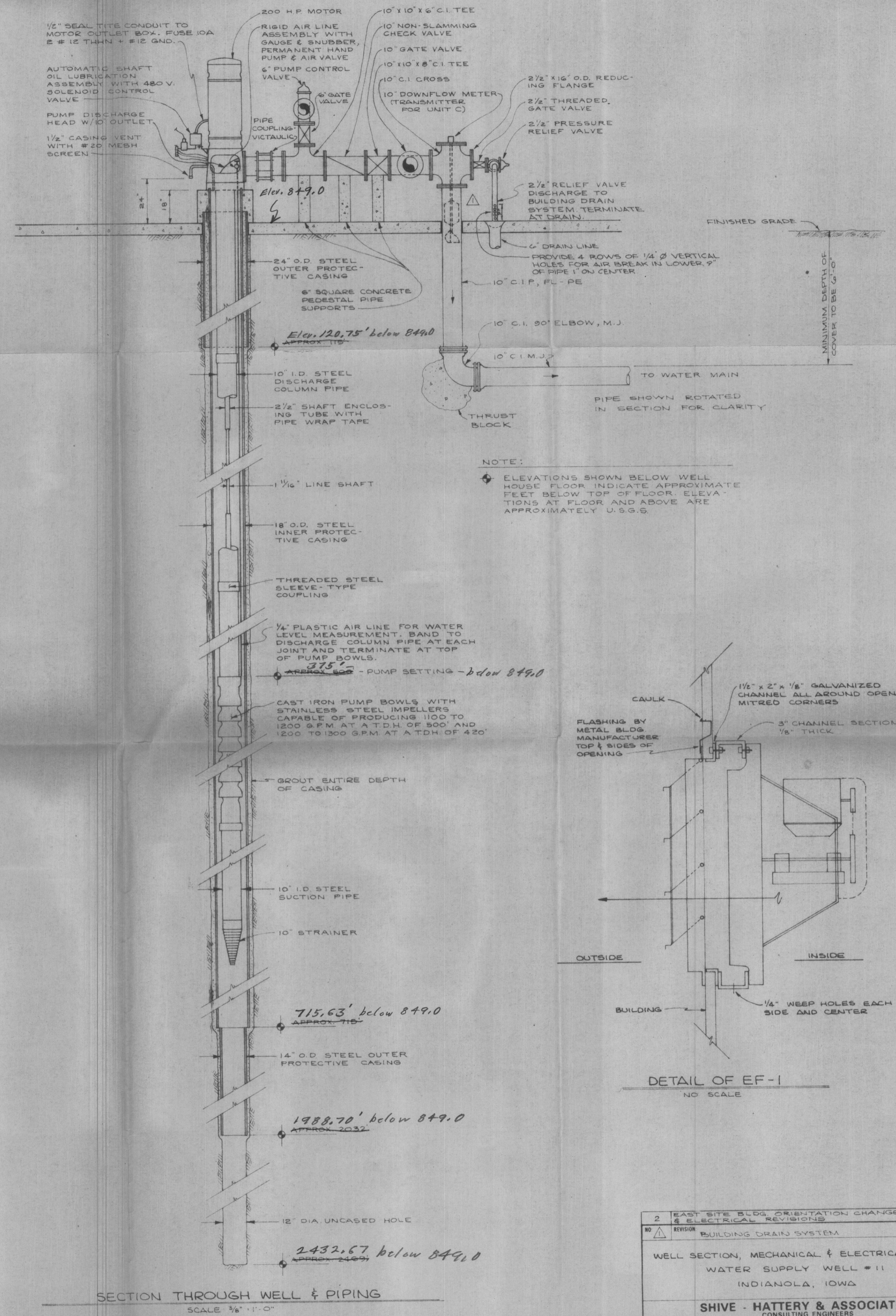
# INDIANOLA, IOWA PROPOSED WELL NO. 11



SCALE: 1" = 2000'



EQUIPMENT SCHEDULE						
Plan Mark	Item	CFM	RPM	HP	Mfr. & Model	Remarks
EF-1	Exhaust Fan	6400 @ 1/2" SP	653 to 452	1.0	ILG PF 300	480V-3Ø with bolt & wheel guards. Motorized shutter Thermostat Control
EUH-1	Electric Unit Heater	545	1550	7 1/2 KW 1/2 HP 11.9A	ILG #360A H6988 Control #7361 Thermostat	480V. 3Ø heater with contactors transformers for 120 V. fan motor & 24 volt controls
WLS	Wall Louver & Screen	---	---	---	Titus OXL-06 Bronze Anodize	36" Wide x 42" High
MOD	Motorized Damper	---	---	---	Rushkin CD 454 Barber Coleman or Erie 2 Position Operator	36" Wide x 42" High gasketed edger
F1	Light Fixture Surface Mount 50" 2 Lamp	---	---	---	Wakefield WLD 214	Baked enamel open industrial, 120 volt 2-40W FL/RS lamps
F2	Light Fixture Surface Mount of 7'-0"	---	---	---	Holophane #410 with "Prisma-scope" off-on control, 120V	Cast aluminum wall bracket w/ asymmetric glass lens. 1-100W Hg color corrected lamp CWA ballast, 120 V.



In red - As-Built dimensions 4/12/77 WAR

2	EAST SITE BLDG. ORIENTATION CHANGES & ELECTRICAL REVISIONS	1-7-76
NO. 1	REVISION BUILDING DRAIN SYSTEM	DATE 11/19/75
WELL SECTION, MECHANICAL & ELECTRICAL PLANS WATER SUPPLY WELL # 11 INDIANOLA, IOWA		
SHIVE - HATTERY & ASSOCIATES CONSULTING ENGINEERS DES MOINES IOWA CITY		
DRAWN BY L.A.P. D.L.L.	SCALE AS NOTED	FIELD BOOK NONE
APPROVED BY WAR	DATE 8-8-75	PROJECT NO. 474136-4
		SHEET 4 OF 7