

The City of Olean NY is soliciting proposals for plugging and decommissioning of four (4) potable water wells in the City of Olean. Contractors are to bid each well separately AND as a whole bid; after reviewing proposals and quotes the City of Olean will determine how many wells will be decommissioned and award the contract accordingly. All work must be performed following DEC Well Decommissioning Recommendations, AWWA Standard A100-06, AWWA Standard C654-03, and any other requirements set forth in this solicitation or by applicable regulations.

After reviewing this solicitation, interested Contractors may contact the City of Olean to inspect the sites and discuss the project. Contact information is at the end of this solicitation. New York State Prevailing Wage is required for this project ([PR# 2011003610](#)).

BACKGROUND

The City of Olean searched for potable water sources back in the 1970's to replace the surface water treatment plant which was the sole source of drinking water for the City of Olean at that time. Four (4) of the wells that were drilled and used were removed from service soon after going online due to various factors. Treatment of these wells proved too costly and not in the best interest of the City, so the wells were abandoned to never be used again.

One well (M13) is located near the Allegheny River at 525 East Riverside Drive in the City of Olean. It has been deemed under the influence of the river and cannot be used without filtration and other treatment. This location is readily accessible. Adjacent to the well is a two (2) inch test well that shall also be plugged and removed. The other three wells (M34, M35, and M36) are part of a system located off of West Henley Street (behind "Tops" supermarket and "The Pines" nursing home.) These locations are a little more difficult to access but not unreasonable. There are no buildings to be removed. The building associated with the M34, M35, and M36 system will remain for possible future use as a booster station. Water lines shall be capped and left buried.

Generalized Project Summary

(Only a suggested order of work – contractor will be permitted to set their schedule)

1. Administration
2. Site Preparation
3. Remove all equipment from existing well.
4. Concrete Vault Work.
5. Disinfect well.
6. Well plugging and capping.
7. Site Restoration

1. ADMINISTRATION

Prior to work commencing and after awarding of the contract, the Contractor shall meet with the City of Olean to discuss the work schedule and confirm details of the process. Any discrepancies or other issues shall be resolved prior to work commencing. Only after the City of Olean has given the Contractor written approval shall work commence.

The City of Olean shall obtain all necessary permissions for the contractor to utilize right-of-ways to access the well sites. Written approvals will be given to the Contractor prior to work commencing.

2. SITE PREPARATION

The Contractor shall, at a minimum, install safety fencing in an effort to prevent unauthorized access to the work sites. Public safety is the primary concern. The City of Olean is not responsible for equipment that the Contractor may leave on site during the project.

Silt fencing will be required in locations that have the potential for runoff entering a storm water system or waterway. Details of the Contractors plan shall be finalized in the administrative portion of the project.

3. REMOVE ALL EQUIPMENT FROM EXISTING WELL

Each well contains a submersible well pump that shall be removed. The City of Olean shall ensure that all electrical power to the well is disabled and disconnected at the source. The contractor shall also confirm that the power is disabled prior to work commencing.

All materials, except for dirt and concrete, will be removed from the site by the City of Olean. The Contractor shall coordinate with the City so that materials can be removed from the sites the same day they are pulled. Upon completion of material removal from the well, the Contractor shall place a temporary cover on the well casing to keep foreign material from entering the well.

4. CONCRETE VAULT WORK

Adjacent to each well is a concrete vault containing a swing check valve; the materials in the vault are to be removed. These vaults are circular and approximately eight (8) feet in diameter and eight (8) feet in depth. The water lines shall then be capped with a welded steel plate. (NOTE: If the contractor elects to cut the well casing off at a point below the effluent "tee", the contractor will only need to weld a plate on the casing as described later.) These systems are not under pressure and will not be subject to pressure after this project, so no thrust blocks are required. The concrete vault may either be removed or the lid removed and the vault filled with a suitable fill material approved by the City of Olean.

5. DISINFECT WELL

After all materials have been removed from the well, the Contractor shall disinfect the well with a solution of calcium hypochlorite containing approximately 65% to 75% available chlorine. Calcium hypochlorite products containing fungicides, algacides, or other disinfectants shall not be used (refer to AWWA Standard C654-03 Section 4.2.) Bacteriological testing of the well will not be required. When finished, any chlorinated water shall be neutralized following AWWA Standard C654-03, Appendix B.

6. FILL WELL WITH APPROVED GROUT OR CEMENT

The wells are drilled wells that go through gravel/sand/clay formations. After confirming the depth of the well screen, the Contractor will fill the screened area of the well with a clean sand or gravel to a point no more than three feet above the top of the well screen.

The contractor shall then fill the well with the previously approved slurry mixture. After the slurry has set, the Contractor shall cut the well casing off at depth no less than two (2) feet below the finished grade. The casing shall then be sealed with a welded steel plate.

7. BACKFILL THE ENTIRE AREA

After approval from the City of Olean, the contractor is to back fill the area with gravel, stone, and native soil. This material shall be compacted at various stages of the backfilling process so as to minimize settling after completion of the project. Final grade shall match the surrounding grade.

The Contractor shall remove all silt fences and other materials upon completion of the backfilling. All disturbed areas around the well areas shall be seeded and immediately covered with straw. This seed mixture will be approved by the City of Olean in the Administrative phase of the project.

SPECIFIC REQUIREMENTS:

1. New York DEC Certified Water Well Driller
2. New York State Prevailing Wage is in effect. **PRC# 2011003610**

CONTACT INFORMATION:

Dale Walker, Senior Operator OR Daniel Gore, Maintenance Supervisor
City of Olean Water Plant
1332 River Street
Olean, NY 14760
(716) 376-5699
dwalker@cityofolean.org

DEADLINE FOR PROPOSALS: JUNE 3rd, 2011. PROJECT MUST BE COMPLETED PRIOR TO OCT. 1, 2011.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Water Supply Well Decommissioning Recommendations

I. Local and regional regulations

Prior to conducting well decommissioning, municipal authorities should be contacted to determine if there are local regulations regarding this activity. In the counties of Nassau and Suffolk, the NYSDEC Region 1 office must be contacted (631-444-0405) prior to any well decommissioning.

II. Written records

Complete and accurate written records of decommissioning operations should be maintained. The information to be recorded should include the original well log and/or construction record, the type of grouting material used, volume of material used, and method of placing grouting material into the well.

Upon decommissioning a well, the record of such action should be sent to the Bureau of Water Resource Management, 625 Broadway, Albany, NY, 12233-3508. Records of Wells decommissioned in Nassau and Suffolk counties must be sent to the Region 1 office (see section I, above).

III. Removal of obstructions

Remove equipment, materials, debris, and obstructions that may interfere with sealing of the well or boring. This may include pumping equipment, drop pipe, packers, etc.

IV. Disinfection

The well should be disinfected using a solution of calcium hypochlorite, such as HTH, containing approximately 65% to 75% available chlorine. Common household bleach may be too weak. Calcium hypochlorite products containing fungicides, algacides, or other disinfectants should be avoided.

V. Casing

Appropriate measurements should be made to verify the depth of the well. Casing with an open annular space should be either grouted in place or removed. For casing removed from a collapsing formation, grout should be pumped through a tremie pipe so that during its removal the bottom of the casing remains submerged in grout.

Where casing is grouted in place, the casing should be cut off at least 24 inches below grade, where practicable. For wells located in a building, upon completion of grouting the casing should be filled to floor level with no less than 12 inches of cement. Casing should be cut off not more than 3 inches from floor level. For wells terminating in a well pit, casing should be cut off not less than twelve inches below the grade established when the pit is filled.

After the grout has consolidated, the top of the casing should be closed and sealed. Steel casings should be sealed with a welded steel plate; PVC casings with a permanently affixed PVC cap.

VI. Screened intervals

The portion(s) of the well occupied by the well screen should be filled with clean sand or gravel (defined as being relatively free of clay and organic matter). The filling should be no less permeable than the formation surrounding the well screen and should extend no more than three feet above the top of the screen.

VII. Grouting of the well.

The entire casing, including riser annular spaces between casings should be filled. Sealing materials should have bearing strength sufficient to prevent subsidence and support traffic or building loads.

Note that the use of too much bentonite in the grout mix can lead to excessive shrinkage and cracking.

- A. Slurry mixture and pumping - When a bentonite slurry, neat cement slurry or concrete slurry is used, it should be placed into the well under pressure via a tremie pipe of at least one inch inside diameter. At the start of operations, the tremie pipe is placed at the bottom of the well to avoid segregation or dilution of sealing materials. The tremie pipe should be submerged in the slurry at all times during slurry placement. The tremie pipe may be raised slowly as grout is introduced to the casing or hole. Placing of grout should be continuous until grout appears at the top of the casing, at which time the tremie pipe may be removed. If the tremie pipe remains at the bottom of the well during grout emplacement, remove the pipe prior to grout hardening.
- B. Cement slurries - Neat cement or concrete slurries should be prepared by adding cement or sand-and-cement to the calculated required volume of clean water. The material should be adequately mixed until it is free of lumps, then immediately pumped into the well without delay.
- C. Coarse grade or pelletized bentonite - Where coarse grade or pelletized bentonite is used, it should be poured slowly into the top of the well to avoid bridging of material in the casing or borehole. Pellets or coarse bentonite should be placed into the well by pouring at an even rate not to exceed fifty pounds per five minute interval. Fine bentonite particles which accumulate in the bottom of the shipping container should not be used. A work pipe or weighted drop string should be placed in the well and the height of accumulated plugging material measured after each 50 pounds of bentonite is placed in the well. If measurement indicates that bridging of plugging material has occurred, a work pipe, drill rods, or other weighted device should be run into the casing to break the bridge. The plugging operation should continue until the bentonite appears at the surface. Water should then be placed into the casing to promote expansion of the bentonite above the static water level.
- D. Additional sealing recommendations for wells or borings in unconsolidated materials.
 1. It is recommended that the portion of a well adjacent to unconsolidated material be filled with bentonite grout, high solids bentonite grout, or neat cement grout. Concrete grout is most appropriate for grouting in the dry portion of the hole.
 2. A dug well 16 inches or greater in diameter may be sealed by pouring at a rate sufficient to completely fill the well without bridging using:
 - a. uniformly mixed dry bentonite powder or granular bentonite and sand in a ratio of one part bentonite to five parts sand;
 - b. clean unconsolidated materials with a permeability of 10⁻⁶ centimeters per second or less; or
 - c. concrete grout.
- E. Additional sealing recommendations for wells or borings in rock - The portion of a well or boring in rock should be grouted with neat cement. Wells penetrating cavernous rock may require placement of a bridge in competent rock over the void. Grout is then placed above the bridge.

VIII. Sealing flowing well.

For flowing wells the integrity of the exterior casing seal should be tested prior to decommissioning the well. To test the seal, the well should be capped for a period of one week and checked for any leakage around the outside of the casing. If any leakage occurs, the casing exterior must be resealed prior to

well decommissioning. Once leakage has been eliminated, the interior of the well casing should be pressure grouted. The Department should be notified when a well cannot be sealed as described.

IX. Site restoration

Well pits should be filled with clean soil to the established grade level. Upon completion of well decommissioning, the site should be restored to a condition that reasonably approaches the original condition of the property prior to the start of work. The work area should be graded to conform to existing ground contours. All materials, debris, tools, machinery, sealing material, grease, or other materials which have accumulated at the site should be removed and/or disposed of properly and in accordance with law.

(Reprinted from the NYS DEC Website, April 25, 2011)

AWWA Standards Referenced:

ANSI/AWWA A100-06: Water Wells

ANSI/AWWA C654-03: Disinfection of Wells

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LAYNE-NEW YORK CO., INC.

1250 WEST ELIZABETH AVE. LINDEN, N. J.

DRILLERS REPORT

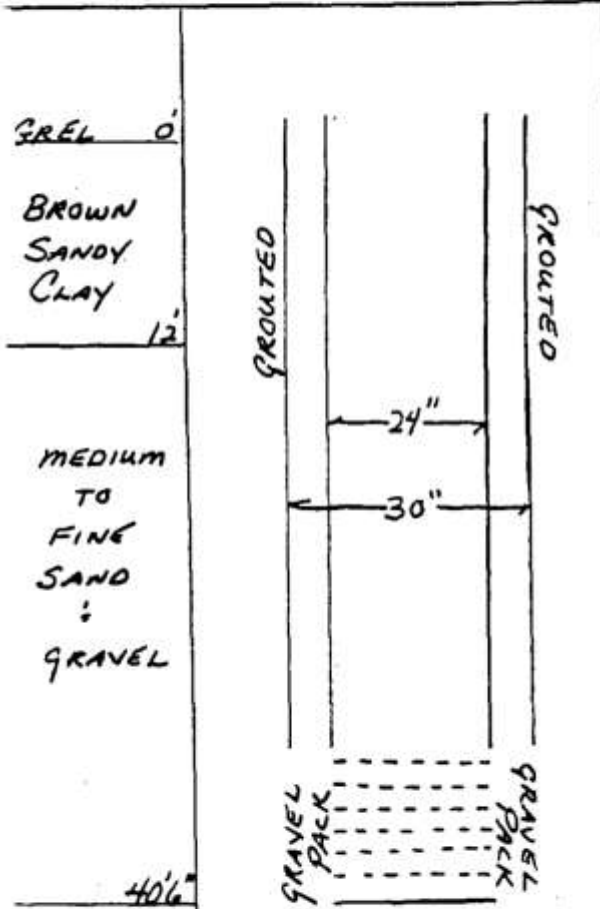
Contract Dept. of Public Works WELL NO. 34m

City Olean County..... State New York

Formation

Sketch of Setting

Remarks ST. FRANCIS PROPERTY



MATERIAL SET

Pipe
 Length — Size — Metal — T. and C. or Welded
35'6" 30" STL
35'6" 24" STL
 Screen { Armco
 { Everdur
 { Stainless S.
5' COOK
 Diameter Top—Diameter Bottom—Length

Cone

Plug SS

Amount Gravel Used 4 BBL..... Size No 5
 " Clay Used { Bags Powdered Reg.
 { Bags Laynite B-3

Date Work Started 12-4-78 Date Pumped 12-20
 On sketch show

- (1) Parts { Std. Rotated
 { Reverse Rotated
 { Cable Tool or Bailed
- (2) Depth of pump pit
- (3) Kind of seals
- (4) Distance from surface to each section of well
- (5) Depth of well after plugging

Did Well clear up? YES..... How soon? 1 HR...

How long agitated? 20 HRS.....

How long pumped? 24 HOURS.....

PRELIMINARY TEST DATA

Static Level 21'..... Date 12-20-78..

Capacity 350..... GPM with Pumping Level of 24

Fill in and sign other side of this report also.

...L.E. Blair.....
 Driller.

LAYNE-NEW YORK CO., INC.

1250 WEST ELIZABETH AVE.

LINDEN, N. J.

DRILLERS REPORT

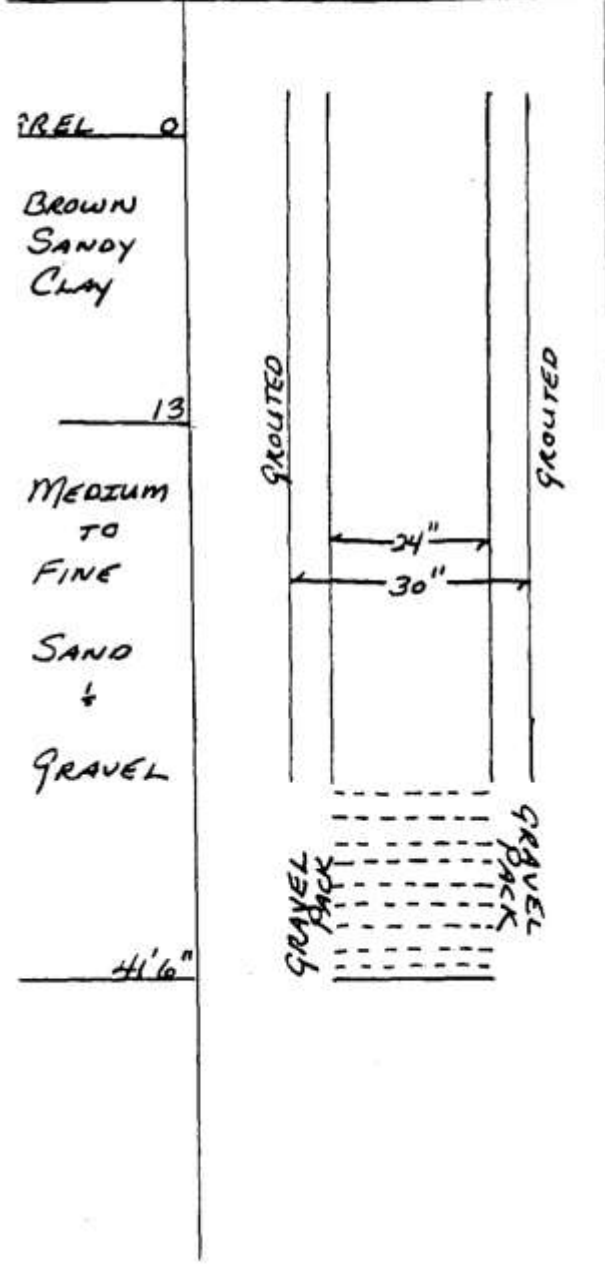
Contract DEPT. OF PUBLIC WORKS WELL NO. 35M

City OLEAN County State NEW YORK

Formation

Sketch of Setting

Remarks ST FRANCIS PROPERTY



MATERIAL SET

Pipe
 Length — Size — Metal — T. and C. or Welded
36'6" 30" STL
36'6" 24" STL

Screen {
 Armco
 Everdur
Stainless S.

Diameter Top—Diameter Bottom—Length

Cone

Plug S.S.

Amount Gravel Used .. 3 BBL Size №5

" Clay Used {
 Bags Powdered Reg.
 Bags Laynite B-3

Date Work Started 11-6-78 .. Date Pumped 12-19-

On sketch show

(1) Parts {
 Std. Rotated
 Reverse Rotated
Cable Tool or Bailed

(2) Depth of pump pit

(3) Kind of seals

(4) Distance from surface to each section of well

(5) Depth of well after plugging

Did Well clear up? YES How soon? .1 HR ...

How long agitated? .17 HR

How long pumped? 32 HRS

PRELIMINARY TEST DATA

Static Level 24' Date 12-20-78

Capacity 350 GPM with Pumping Level of 27

Fill in and sign other side of this report also.

L.E. Blair
 Driller.

LAYNE-NEW YORK CO., INC

1250 WEST ELIZABETH AVE.

LINDEN, N. J.

DRILLERS REPORT

Contract City of Olean WELL NO. M-36
 City Olean County..... State New York

Formation	Sketch of Setting	Remarks	
		<u>MATERIAL SET</u>	
		Pipe Length — Size — Metal — T. and C. or Welded 36' 30" — — — 35'8" 24" — — — Screen 5' of 24" { Armco Everdur Stainless S. Diameter Top—Diameter Bottom—Length	
Sandy clay + Gravel		Cone Plug	Amount Gravel Used <u>4 barrel</u> Size..... " Clay Used { Bags Powdered Reg. Bags Laynite B-3
Med to coarse Gravel sand + Boulders		20'	Date Work Started <u>July 31, 80</u> Date Pumped <u>Aug 2</u> On sketch show
Med to fine Gravel sand		35'	(1) Parts { Std. Rotated Reverse Rotated Cable Tool or Bailed (2) Depth of pump pit (3) Kind of seals (4) Distance from surface to each section of well (5) Depth of well after plugging
Med to coarse gravel & sand.		Total depth 40ft	Did Well clear up? <u>Yes</u> How soon? <u>28 hrs</u> How long agitated? <u>30 hrs</u> How long pumped? <u>30 hrs</u>
		<u>PRELIMINARY TEST DATA</u>	
		Static Level <u>19.5" G.L.</u> Date <u>Aug 2, 80</u> Capacity <u>350</u> GPM with Pumping Level of <u>20'</u> <u>Fill in and sign other side of this report also.</u> G.L.	
	 Driller.	



Location – Well Sites M34, M35, and M36



Well M13

No Driller Report Available – Information obtained from other documents.

DETAILS:

24" Outer Steel Casing

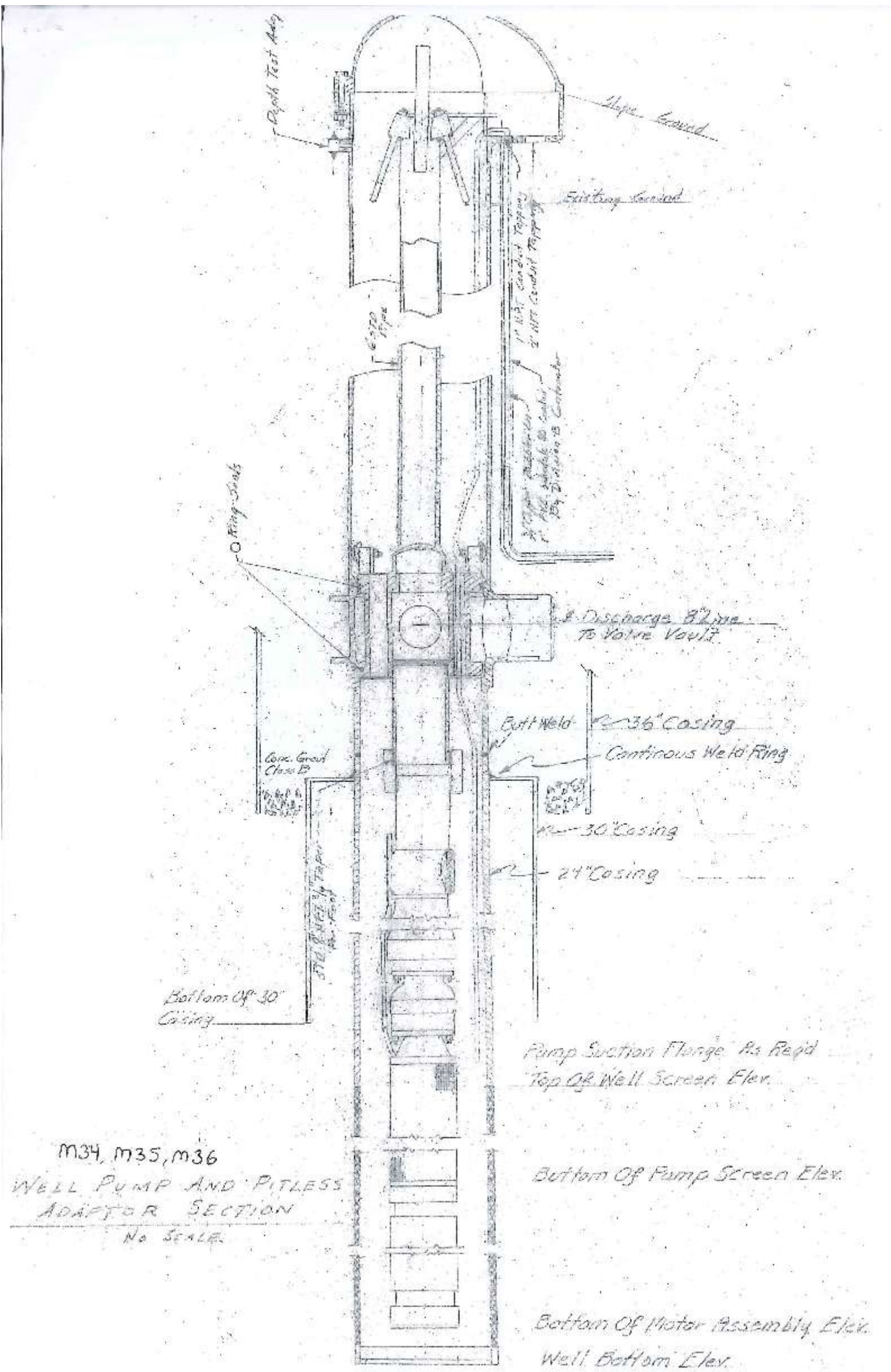
18" Inner Steel Casing

53.2' Depth to Bottom of 24" Casing

58.2' Depth to Bottom of 18" Casing

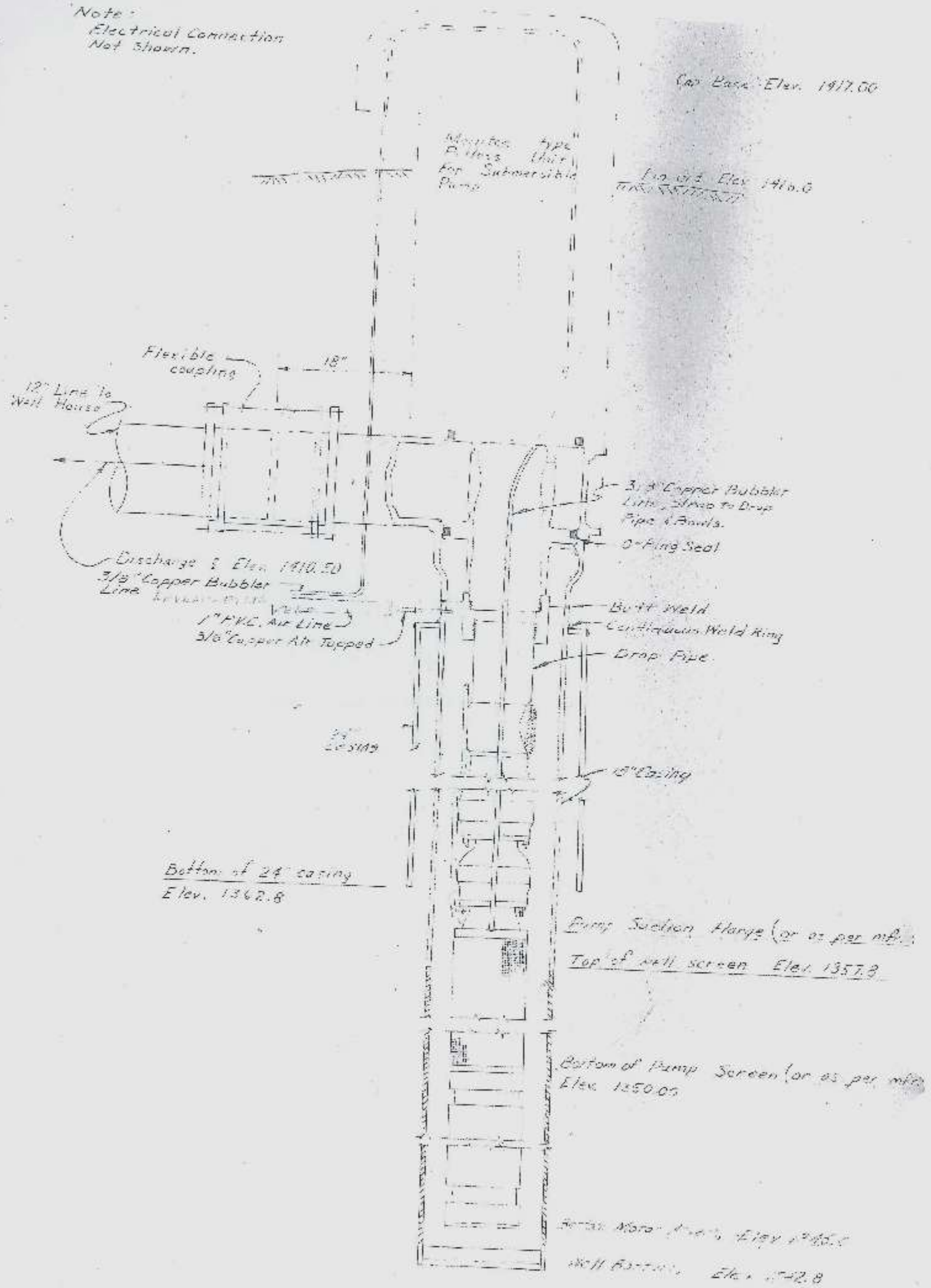
15' of 18" Screen

TOTAL DEPTH OF WELL FROM GRADE: 73.2'



This drawing is a design drawing and may not reflect actual construction

Note:
Electrical Connection
Not Shown.



M13
WELL PUMP AND FITTINGS
ADAPTOR SECTION
NO SCALE

This drawing is a design drawing and may not reflect actual construction

Please Send Bids to:

**City of Olean
Department of Public Works
Municipal Building, P.O. Box 668
Olean, NY 14760**

(RE Well Decommissioning Project)

Attach a signed copy of the non-collusion statement that follows.

Proposals must be received by the City of Olean no later than Friday, June 3, 2011.

BID PROPOSAL FOR CITY OF OLEAN WATER DIVISION
WELL DECOMMISSIONING PROJECT.

AUTHORIZED SIGNATURE: _____

OFFICIAL TITLE _____

BIDDER'S NAME: _____

ADDRESS: _____

TELEPHONE NUMBER: _____

DATED: _____

QUOTES FOR PROJECT COSTS:

Well Site M13 Decommissioning Cost: _____

Well Site M34 Decommissioning Cost: _____

Well Site M35 Decommissioning Cost: _____

Well Site M36 Decommissioning Cost: _____

Cost for ALL Sites to be Decommissioned: _____

NON-COLLUSIVE BIDDING CERTIFICATION

BY SUBMISSION OF THIS BID OR PROPOSAL, THE BIDDER CERTIFIES THAT:

- [1] This bid or proposal has been independently arrived at without collusion with any other bidder or with any competitor or potential competitor.
- [2] This bid or proposal has not been knowingly disclosed and will not be knowingly disclosed, prior to the opening of bids or proposals for this project, to any other bidder, competitor or potential competitor.
- [3] No attempt has been or will be made to include any other person, partnership or corporation to submit or not to submit a bid or proposal.
- [4] The person signing this bid or proposal certifies that he fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties of perjury, affirms the truth thereof, such penalties being applicable to the bidder as well as to the person signing in its behalf,

BIDDER

BY: _____

DATED: _____