

ROAD COMMISSION FOR OAKLAND COUNTY

SPECIAL PROVISION
FOR
ABANDON WATER WELL

RCOC/DESIGN:AP/JO

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RCOC20SP823C
ORG: 04-05-21

a. Description

This work consists of abandoning and plugging an existing drinking water well and removing the existing pitless adapter and appurtenances. The term plugging is defined as filling and sealing the well with an appropriate impervious material. This work shall be done in accordance with the section 823 of the *Michigan Department of Transportation (MDOT) 2020 Standard Specifications for Construction*, except as herein provided.

b. Materials

All plugging materials must conform to Oakland County Health Department requirements for well abandonment, and Michigan Department of Environment, Great Lakes, and Energy (EGLE) regulations.

c. Construction

The abandoned well must be properly filled and sealed. Sealing of abandoned water wells must be in accordance with 1978 PA 368, Part 127, Public Health Code.

The work of abandoning the well must be performed by a well drilling contractor licensed by the State of Michigan and in good standing. Provide a copy of the well driller's registration to the Engineer prior to beginning the work.

Notify the Engineer and local County Health Department to coordinate inspection activities prior to beginning the work. All wells must be abandoned using methods and materials approved by EGLE, the local County Health Department, and the Engineer.

Abandon the water well prior to site grading or building demolition as indicated on the plans. Remove the well casing and properly seal the abandoned well(s) to prevent contamination of the groundwater.

Care shall be taken to protect the casing before and while it is being removed. If the casing is broken during the extraction or cannot be removed with the expenditure of reasonable effort, cut the casing off three feet below finish grade. After the well casing is removed or cut off, use a tremie pipe to pump bentonite slurry into the void from the bottom to the top.

Clear abandoned water wells of obstructions before sealing operations begin to insure an effective bottom-to-top seal. Obstruction removal activities include removal of debris, foreign materials, pumps, packers, seals, pitless adapter connections and drop pipes. Dispose of all debris and excess material as necessary.

The work consists of the removal of all appurtenances and equipment associated with an existing water well including but not limited to pumps, pressure tank, well casing, pipes, electrical equipment and cable, and concrete manhole structure. Removal items shall become the property of the Contractor and removal items shall be disposed of in accordance with the *MDOT 2020 Standard Specifications for Construction* where appropriate.

A permit for the well removal is required by the Oakland County Health Department and shall be obtained prior to commencing the removal. The well head and associated internal piping/wiring/pump shall be removed and disposed. The well casing shall then be filled with a bentonite slurry to seal off the aquifer from the surface. The bentonite slurry mixture shall be pumped to the bottom of the well casing. As the slurry is being pumped, the well casing shall be pulled out at a rate such that the slurry fills the void left by the casing. The depth of the slurry shall be sufficient to adequately seal the aquifer from surface water and contaminant infiltration and shall be determined by the well Contractor with the approval of the Engineer. Once the aquifer has been sealed, the remainder of the well casing shall be removed and the void will be filled with a granular material as supplied by the well Contractor, in compliance with all local, state and national standards. Within 60 days of the completion of abandonment procedure, an "Abandoned Well Plugging Record" shall be filed with the Oakland County Health Department, well Owner, and the Engineer if not the owner, and the Michigan Department of Environment, Great Lakes, and Energy (EGLE)

d. Measurement and Payment

The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Water Well, Abandon.....	Each

Water Well, Abandon includes equipment, labor and materials to remove the pump, pitless adapter, and appurtenances, and all related miscellaneous items required for proper abandonment and backfilling, and sealing of the well as described herein, and in accordance with all local, state and national regulations to complete this item.