



AIA[®]

Document G701/CMa[™] – 1992

Change Order - Construction Manager-Adviser Edition

PROJECT (*Name and address*):
ACME Brick Park
Modelle Ave.
Clinton, OK 73601

CHANGE ORDER NUMBER: 001
INITIATION DATE:

OWNER:
CONSTRUCTION MANAGER:
ARCHITECT:
CONTRACTOR:
FIELD:
OTHER:

TO CONTRACTOR (*Name and address*):
CGC, LLC.
PO Box 509
Purcell, OK 73080

PROJECT NUMBERS: 0522B /
CONTRACT DATE: 2/06/2007
CONTRACT FOR: Bid Pkg # 4

THE CONTRACT IS CHANGED AS FOLLOWS:

Plan design and specifications call for a submersible main pump for retrieving irrigation water from pond. This change order replaces the submersible pump with a vertical turbine. This upgrade allows more efficient use of water supply and greater volume capacity during severe fluctuations of water surface elevation at peak usage months. The cost of the upgrade is \$6,800. This change order also adds a floating intake and filtration system. The filtration system was recommended by the design engineer with the proposed system to be recommended by the irrigation contractor. The filtration system is needed to filter any debris that may enter the irrigation lines and clog the field irrigation heads. The total cost for the filtration system is \$26,000. This Change Order raises the contract amount by \$32,800.00

The original Contract Sum was	\$	284,000.00
Net change by previously authorized Change Orders	\$	0.00
The Contract Sum prior to this Change Order was	\$	284,000.00
The Contract Sum will be increased by this Change Order in the amount of	\$	32,800.00
The new Contract Sum including this Change Order will be	\$	316,800.00

The Contract Time will be increased by Zero (0) days.

The date of Substantial Completion as of the date of this Change Order therefore is

NOTE: This summary does not reflect changes in the Contract Sum, Contract Time or Guaranteed Maximum Price which have been authorized by Construction Change Directive.

NOT VALID UNTIL SIGNED BY THE OWNER, CONSTRUCTION MANAGER, ARCHITECT AND CONTRACTOR.

Value Added Management, LLC
CONSTRUCTION MANAGER (*Firm name*)
PO Box 834, Clinton, OK 73601
ADDRESS

Architects in Partnership, P.C.
ARCHITECT (*Firm name*)
3220 Marshall, Norman, OK 73072
ADDRESS

BY (*Signature*)
Monte Goucher, P.E.
(Typed name) **DATE:**

BY (*Signature*)
Frank Vogel
(Typed name) **DATE:**

CGC, LLC.
CONTRACTOR (*Firm name*)
PO Box 509, Purcell, OK 73080
ADDRESS

City of Clinton
OWNER (*Firm name*)
PO Box Clinton, OK 73601
ADDRESS

BY (*Signature*)
(Typed name) **DATE:**

BY (*Signature*)
City of Clinton
(Typed name) **DATE:**



3/31/08

To: Monte Goucher
Valve Added Management
1779 Marshall Rd.
P.O Box 834
Clinton, Oklahoma 73601

Re: Pump Station Change Order

Monte,

The following is a breakdown of pump station change order:

A) Change main pump form submersible to vertical turbine: Cost: \$6800.00

Justification:

A vertical turbine motor is driven by a motor that is on of the shaft in the pump house and is not submersed underwater. Service of the motor will be less expensive because it will not require a crane. It will also add 2 feet of usable water in the wet well which will add millions of gallons of reserve in the pond. This will also reduce the fill well run time which will reduce pump wear and save electricity.

B) Floating intake and filtration System: Cost: \$26,000.00

Justification:

Sports field irrigation is different than any other type of system. It requires the amount of water of a small golf course irrigation system. Most sport field water sources are usually from city water. We can not use golf irrigation heads because of their physical size is too large on the top. These heads would create an unsafe condition for the players. The sports field irrigation heads have a much smaller physical size and the orifice in the heads is much smaller. These heads are easily clogged with contamination. Pumping from a lake or pond is difficult because of contamination. Anything that can help reduce this contamination is a necessity. The filters proposed are self flushing and the floating intake will reduce siltation at the intake in the pond.

Total change order: \$32,800.00

Thank you,

Steve Schuler
CGC, LLC



101 West 5th
Edmond, Oklahoma
73003

PHONE (405) 285-8871
FAX (405) 285-8872
E-MAIL cgcllc@aol.com

ACME BRICK PARK
BID PACKAGE #4 IRRIGATION
CHANGE ORDER #1 EXPLANATION

When the project was initially bid the design of the irrigation system had not been completed, therefore, no drawings were included in the project plans. AIP retained the services of an engineering firm in Tulsa to design the irrigation and water supply system for the project. Value Added Management, LLC worked with the design engineer, CGC, Inc and the City of Clinton to design and detail an irrigation system that would meet the needs of the City. Also to be determined was the method for supplying the large quantity of water needed to properly irrigate the park during peak watering season. This required the coordination of a test well for ground water availability, water retention and water usage calculations with respect to the existing pond, and a final analysis to determine the optimum method of water delivery and working with the irrigation contractor and electrical contractor for the final design of the pump station and determination of electrical requirements.

The optimum design for the irrigation of the park was determined to be utilizing the large amount of water retained in the existing pond. From previous test wells it was discovered that any ground wells to be used would require a depth of approximately 450' to 500' and would only yield an estimated output of 100 to 125 gallons per minute. The number of wells that would be needed to adequately supply the amount of water needed would be very costly (\$35,000 per well hole) and require numerous pumps, high power usage, and potentially high annual maintenance costs. Utilizing one supply well pumping water into the pond 24/7 would help replenish the pond during peak watering periods.

This design specifications called for centrifugal pump to be installed in a wet well for pulling water out of the supply pond. This style of design will only provide approximately 2 to 3 feet of available water to be pumped out of the pond before the replenishing well would be relied upon for makeup water. There is a concern that the well cannot provide on demand supply during peak usage. Upgrading to a vertical turbine pump provides the advantage of mounting the pump above the wet well (easier maintenance) and creating 6 to 8 feet of available water to be pumped out of the pond during peak usage. This type of system will guarantee water availability and allow for growth in the future. The upgrade for the vertical turbine pump is \$6,800

This change order includes a filtration system to keep debris from the supply pond from entering the irrigation system and subsequently clogging the irrigation heads. The project design engineer recommended that a filtration system be installed and referred the owner to the irrigation contractor for a filtration system best suited for Acme Park conditions. The cost for the floating intake and filtration system is \$26,000.

The total change order amount is \$32,800

*****It should be noted that the pump station electrical and filtration system are part of the basic needs of the park and not an unexpected change or addition to the project even though the means of handling the work contractually is thru a “change order”. The amount of work and effort required to research and design the irrigation/pump system (not addressed in the original plan drawings) has been extensive and not included in the scope of services to be provided by the construction manager, however, I do have the responsibility of protecting the interest of my owner and feel that this system is in the best interest of the taxpayers.**

If you have any questions please feel free to contact me.

Monte Goucher, P.E.
Construction Manager
331-9330