



CITY OF ALBION CITY COUNCIL MEETING AGENDA

Meetings: First and Third Mondays – 7:00 p.m.

City Council Chambers ♦ Second Floor ♦ 112 West Cass Street ♦ Albion, MI 49224

COUNCIL-MANAGER
GOVERNMENT

Council members and
other officials normally in
attendance.

Garrett Brown
Mayor

Maurice Barnes, Jr.
Council Member
1st Precinct

Lenn Reid
Council Member
2nd Precinct

Sonya Brown
Mayor Pro Tem
Council Member
3rd Precinct

Marcola Lawler
Council Member
4th Precinct

Jeanette Spicer
Council Member
5th Precinct

Andrew French
Council Member
6th Precinct

Sheryl L. Mitchell
City Manager

The Harkness Law Firm
Atty Cullen Harkness

Jill Domingo
City Clerk

NOTICE FOR PERSONS WITH
HEARING IMPAIRMENTS
WHO REQUIRE THE USE OF A
PORTABLE LISTENING DEVICE

Please contact the City
Clerk's office at
517.629.5535 and a listening
device will be provided
upon notification. If you
require a signer, please
notify City Hall at least five
(5) days prior to the posted
meeting time.

AGENDA

STUDY SESSION

**Albion City Hall
Council Chambers
112 West Cass Street
Albion, MI 49224**

**Thursday, August 31, 2017
7:00 p.m.**

PLEASE TURN OFF CELL PHONES DURING MEETING

- I. CALL TO ORDER
- II. ROLL CALL
- III. PUBLIC COMMENTS (Persons addressing the City Council shall limit their comments to **agenda items only** and to no more than three(3) minutes. Proper decorum is required.)
- IV. ITEMS FOR INDIVIDUAL DISCUSSION
 - A. City of Albion 2017 WWTP Improvements-Change Order #3
- V. PUBLIC COMMENTS (Persons addressing the City Council shall limit their comments to no more than three (3) minutes. Proper decorum is required.)
- VI. ADJOURN

Special Council Study Session
City of Albion 2017 WWTP Improvements
August 31, 2017

Purpose of Meeting: Discuss the needed authorization for Change Order No. 3 for the construction project at the WWTP. The major portion of CO #3 is for groundwater dewatering prior to taking clarifier out of service. Other minor changes have occurred that need to be authorized as part of the change order. The breakdown of items in CO #3 is provided on the next page.

Overall Scope of Construction Project: Project includes replacement of 2 influent pumps and controls; replacement of equipment in 2 primary clarifiers; and replacement of 2 sludge pumps.

Project Funding: \$950,000 special legislative grant was received from Michigan Economic Development Corp. (MEDC). Design and construction assistance by Fleis and VandenBrink (\$166,000). Low bid for construction from FHC (\$881,000.) Total project cost: \$1,047,000. City responsible for amount above grant.

Status of Project: As of August 21, 2017, approximately \$500,000 has been spent. This includes design of entire project and installation of new influent pumps. Clarifier equipment to be installed in late September through November. Sludge pumps to be installed in next two weeks.

Description of Groundwater Issue/Solution: Refer to figures at the end of this summary for a cross section view of the clarifiers under typical operating conditions, empty and with groundwater dewatering.

The clarifiers needed to be drained to measure equipment in clarifier to ensure new equipment fits properly in existing tank. During draining, Contractor discovered significant amount of groundwater flowing through pressure relief valves on clarifier floor. Contractor could not fully dewater tank due to the high volume of groundwater entering tank. Subsequent investigation of groundwater levels around the plant found high elevations around the clarifiers and aeration tanks.

F&V had conversations with plant staff during design about tank draining. Staff indicated the tanks had been taken down in the past for maintenance in the past. Based on this information, F&V included requirements in project specifications for Contractor to drain each tank, with the intention that a small amount of groundwater may enter the tank through the pressure relief valves. The Contractor would be responsible to keep the tank empty for anchoring the equipment to the floor of the clarifier.

With the levels of groundwater that exist at the WWTP, there is a concern the hydrostatic uplift could cause the empty tank to “float” (i.e., pushed out of the ground by the upward forces) or the bottom could fail. Both of these would be catastrophic to the plant and require a new clarifier to be built at a significant cost.

The solution to this issue is to install a temporary groundwater dewatering system. A double row of well points (about 160 per clarifier) will be installed to lower the ground water before draining the tank. The well points need to dewater for about 5 weeks for each clarifier, or 9 weeks total.

In order to install the clarifier equipment this year, the dewatering system needs to be installed early September 2017.

Breakdown of Change Order No. 3		
Item	Cost	Comment
Item 1: Overhead Conduit Routing	\$ (1,850.00)	Deduct for modified cable routing
Item 2: Rotation of P3 Suction Valve	\$ 930.00	
Item 3: Replace PV w/ GV (including gear reducer)	\$ -	Offsetting changes
Item 4: Reuse exiting Pump Bases	\$ (1,600.00)	Deduct for reusing existing concrete
Item 5: SS Wye Strainers	\$ 1,470.00	Plant staff desired modification
Item 6: Add pipe support at flow meter	\$ 550.00	
Item 7: Groundwater dewatering around clarifier	\$ 87,550.00	
Item 8: VFD for Sludge Pump	\$ 10,875.00	Existing pump had built-in speed adjustment
Item 9: Sludge Pump Pad	\$ 1,770.00	Braces to keep existing pad from moving
Total Change Order No. 3	\$ 99,695.00	

Figure 1: Primary Clarifier in Operation

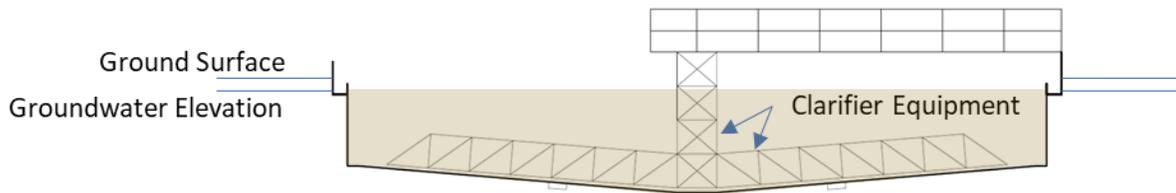


Figure 2: Drained Primary Clarifier

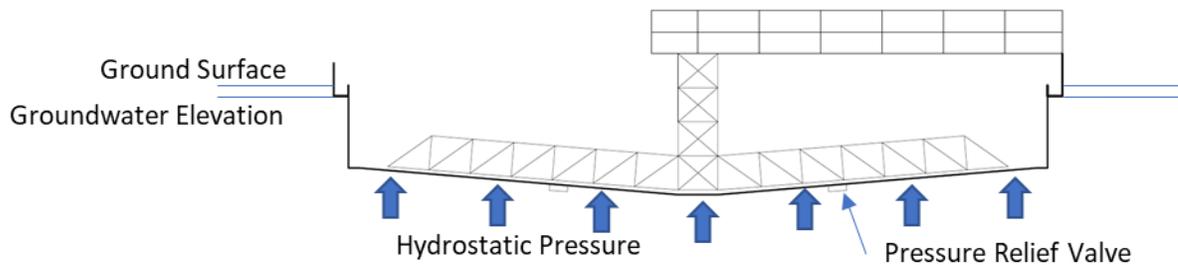


Figure 3: Groundwater Dewatering Around Clarifier

