

**Blue Bell Broken Arrow  
Waste Water Pre-Treatment Plant  
Broken Arrow, OK  
Job Status Report  
August 2018**



**BRASFIELD  
& GORRIE**  
GENERAL CONTRACTORS

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[www.brasfieldgorrie.com](http://www.brasfieldgorrie.com)

## **PROJECT SUMMARY**

Blue Bell Creameries, Gresham Smith and Partners, and Brasfield & Gorrie have teamed up to design and construct a 10,943 square foot facility capable of pre-treating the existing Blue Bell facility's production waste before entering the municipal sewer system. This facility will house a Waste Water Pre-Treatment system designed and provided by World Water Works, Incorporated. The treatment package will apply the following treatment services;

- Side Hill Screen (SHS): Allows for easy removal of solids from the incoming waste water.
- Equalization (EQ) Tank: This 157,100-gallon tank will allow for the normalization and control of flow coming into the waste water system.
- Dissolved Air Flotation (DAF): Removes suspended solids, fats, oils and grease from the wastewater flow. This is achieved by introducing micro-air-bubbles that cause the suspended materials to float to the surface allowing liquid/solids separation.

The process equipment from World Water Works is scheduled to begin arriving on the jobsite in mid to late September. Upon equipment arrival, Brasfield & Gorrie will begin the installation process. Based on the current schedule, it is projected that the Waste Water Pre-Treatment System will be online starting **March 13, 2019**.

## **PROJECT COSTS**

The current construction amount for the Blue Bell Waste Water Pre-Treatment Plant facility is \$6,919,603. Of that contract amount, \$1,150,184 is designated to the process equipment that will be treating the existing Blue Bell facility wastewater.

## **SCHEDULE**

The final-completion date for the project is currently scheduled for **March 19, 2019**. The critical path for the entire project currently runs through the completion of the concrete foundation work, the EQ Tank construction, and the Erection of the Pre-Engineered Metal Building. Also, to help expedite the schedule, the process equipment was released prior to the start of construction to ensure availability for delivery as needed.



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**Completed/Ongoing activities:**

1. Put erosion control and BMP into place.
2. Grade and excavate land to required elevations to begin concrete work.
3. Identify and relocate existing 6" sanitary sewer line that was incorrectly run through Blue Bell's property instead of a designated easement around the property. This was a 5-day schedule impact.
4. Deep spread footings and continuous footings on the north side of building have been installed.
5. All drilled concrete piers have been put into place (23 total).
6. Completed tank pad construction for the 157,100-gallon EQ Tank.
7. All shallow spread footings and pilasters have been put into place.
8. The ground has been brought up to the proper subgrade elevation using 30" of select fill.
9. In and under electrical and plumbing began the week of August 06, 2018.
10. Currently forming and placing slab on grade rebar in place.

**Upcoming activities:**

1. Pour concrete slab on grade.
2. Erect EQ Tank.
3. Erect Pre-Engineered Metal Building.
4. Set treatment area precast wet well/influent pump station.
5. Install influent pumps and piping.
6. Install World Water Works Equipment.

Enclosed is the updated Overall Project Schedule as of August 13, 2018.



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**Attachments**

Attachment A: Progress Photos

Attachment B: Profile of unidentified 6" Sanitary Sewer line through Blue Bell's property.

Attachment C: Current Overall Project Schedule

## June 2018 – Monthly Progress Photos



## July 2018 – Monthly Progress Photos



## August 2018 – Monthly Progress Photos



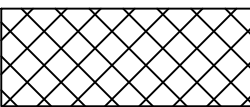
Drawn By: Author  
Checked By: Checker  
Approved By: Approver


PIPE TABLE												
NAME	MATERIAL	DIA.	APPROX. LENGTH	SLOPE	V <sub>FULL</sub>	Q <sub>FULL</sub>	Q <sub>2</sub>	Q <sub>5</sub>	Q <sub>10</sub>	Q <sub>25</sub>	Q <sub>50</sub>	Q <sub>100</sub>
A1	HDPE	6"	50'	0.50%	2.39 FT/SEC	0.47 CFS	1.17 CFS	1.24 CFS	1.29 CFS	1.35 CFS	1.40 CFS	1.45 CFS


UTILITY PROTECTION NOTE


ALL UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. INDIVIDUAL SERVICE LINES ARE NOT SHOWN. THE CONTRACTOR OR SUBCONTRACTOR SHALL NOTIFY OKLAHOMA 811 (PHONE NO. 811, WWW.OKIE811.COM) FORTY- EIGHT HOURS IN ADVANCE OF ANY CONSTRUCTION ON THIS PROJECT. THIS NUMBER WAS ESTABLISHED TO PROVIDE ACCURATE LOCATIONS OF EXISTING BELOW GROUND UTILITIES I.e. CABLES, ELECTRIC WIRES, GAS AND WATERLINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING FAMILIAR WITH ALL UTILITY REQUIREMENTS SET FORTH ON THE PLANS.


LEGEND


- 


EROSION CONTROL MATTING  
(SEE DETAIL 6, SHEET C901)
- 


PROPERTY LINE
- 

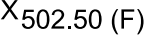
PROPOSED MINOR CONTOUR
- 

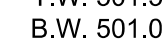
PROPOSED MAJOR CONTOUR
- 

EXISTING MAJOR CONTOUR
- 

EXISTING MINOR CONTOUR
- 

WATERSHED DELINEATION
- 

M.E.F.G.
- 

SPOT ELEVATION  
(F) INDICATES FLUSH CONDITION
- 

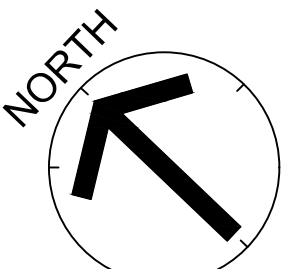
TOP OF WALL SPOT ELEVATION  
BOTTOM OF WALL SPOT ELEVATION

EXISTING IMPERVIOUS = 2.86 AC  
EXISTING PERVIOUS = 9.36 AC  
PROPOSED IMPERVIOUS = 4.40 AC  
PROPOSED PERVIOUS = 7.82 AC

The Route the 6" Sanitary Sewer Line Was Supposed to be installed.

Actual Route of 6" Sanitary Sewer Line Running Through Blue Bell's Property

Temporary reroute of the 6" sanitary sewer line to prevent any further construction delays. delays



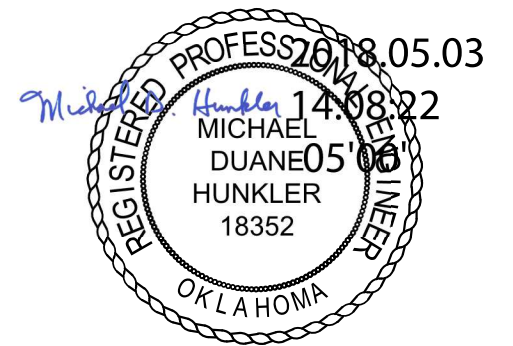
Design Services  
For The Built  
Environment

GRESHAM  
SMITH AND  
PARTNERS

www.greshamsmith.com

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Suite 1400  
Nashville, TN 37201  
615.770.8100

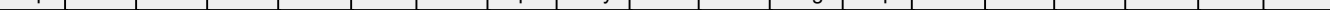
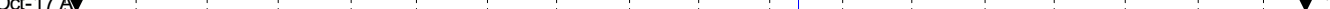




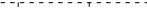


BLUE BELL  
CREAMERIES  
BLUE BELL BROKEN ARROW WASTE  
WATER PRE-TREATMENT PLANT  
8301 EAST HIGHWAY 51  
BROKEN ARROW, OK 74104  
WAGONER COUNTY



Revision		
No.	Date	Description
0	12.14.17	IFC
1	02.06.18	AGENCY COMMENTS
2	05.03.18	AGENCY COMMENTS

GRADING PLAN

C301  
PROJECT: 42334.01  
DATE: 12/14/17

Activity ID	Activity Name	Orig Dur	Activity % Complete	Start	Finish						2018												2019					
						Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
BLUE BELL WWTP - Broken Arrow, OK Construction Schedule FOR BA						06-Oct-17 A  ▼ 19-Mar-19																						
MILESTONE & CONTRACT DATES						06-Oct-17 A  ▼ 19-Mar-19																						
D1040	Contractor Under Contract	0	100%	08-Dec-17 A		08-Dec-17 A 																						
D1050	Design	1	100%	06-Oct-17 A	30-Mar-18 A	06-Oct-17 A  30-Mar-18 A																						
D1060	Permitting	30	100%	08-Jan-18 A	17-May-18 A	08-Jan-18 A  17-May-18 A																						
D1070	6" Sanitary Sewer Line Delay	5	100%	21-May-18 A	25-May-18 A	21-May-18 A  25-May-18 A																						
D1020	Waste Treatment Process Online	25	0%	07-Feb-19	13-Mar-19	07-Feb-19  13-Mar-19																						
D1080	Construction	204	26.47%	28-May-18 A	18-Mar-19	28-May-18 A  18-Mar-19																						
D1030	Final Completion	0	0%		19-Mar-19	 19-Mar-19																						