



## Legislation Details (With Text)

<b>File #:</b>	K-1314-136 CO#6	<b>Version:</b>	1	<b>Name:</b>	Final CO and acceptance of WRF Phase 2 Improvements
<b>Type:</b>	Contract	<b>Status:</b>		<b>Status:</b>	Passed
<b>File created:</b>	8/21/2018	<b>In control:</b>		<b>In control:</b>	City Council
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<b>Title:</b>	CHANGE ORDER NO. SIX (FINAL) TO CONTRACT K-1314-136: BY AND BETWEEN THE NORMAN UTILITIES AUTHORITY AND ARCHER WESTERN CONSTRUCTION, L.L.C. DECREASING THE CONTRACT AMOUNT BY \$72,545.83 FOR A REVISED CONTRACT AMOUNT OF \$52,154,160.17 AND ADDING 61 CALENDAR DAYS TO THE CONTRACT FOR THE WATER RECLAMATION FACILITY PHASE 2 IMPROVEMENTS AND FINAL ACCEPTANCE OF THE PROJECT.				

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**Attachments:** 1. Change Order, 2. CO#6 backup, 3. Release of Claimants, 4. Consent of Surety to Final Payment

Date	Ver.	Action By	Action	Result
9/11/2018	1	City Council		

CHANGE ORDER NO. SIX (FINAL) TO CONTRACT K-1314-136: BY AND BETWEEN THE NORMAN UTILITIES AUTHORITY AND ARCHER WESTERN CONSTRUCTION, L.L.C. DECREASING THE CONTRACT AMOUNT BY \$72,545.83 FOR A REVISED CONTRACT AMOUNT OF \$52,154,160.17 AND ADDING 61 CALENDAR DAYS TO THE CONTRACT FOR THE WATER RECLAMATION FACILITY PHASE 2 IMPROVEMENTS AND FINAL ACCEPTANCE OF THE PROJECT.

**BACKGROUND:** The Wastewater Master Plan (WWMP), adopted by the Norman Utilities Authority (NUA) in 2001, recommended that additional facilities treating an average design flow (ADF) of 21.5 million gallons per day (MGD) would ultimately be needed to serve the area approved for urban development under the City's 2025 Land Use and Transportation Plan. The WWMP recommended expansion of the South Water Reclamation Facility (WRF) from 12 to 17 MGD and construction of a new North WRF with an ultimate ADF of 4.5 MGD.

More recently, staff recommended and the NUA agreed that the South WRF would be rehabilitated and expanded first and the North WRF would be designed and constructed in the future when the sewerage conveyance capacity of the expanded Lift Station D was consumed. Based on this premise, Norman voters approved a rate increase in October 2013, in part for expanded treatment capacity at the South WRF.

**Regulatory Requirements:** Our Oklahoma Pollutant Discharge Elimination System (OPDES) permit for the South WRF issued by the Oklahoma Department of Environmental Quality (DEQ), required construction of new disinfection facilities and compliance with final discharge limits by July 1, 2013. On September 12, 2014, the NUA and DEQ agreed to Consent Order 13-077 which included the following schedule:

1. Complete construction of disinfection facilities by January 1, 2016;
2. Attain compliance with final limits for Fecal Coliform by July 1, 2016;
3. Complete construction of all facilities by January 1, 2017;
4. Attain compliance with final limits for Total Suspended Solids by July 1, 2017.

The NUA completed items 1 and 2 prior to the deadlines imposed by the DEQ and the DEQ agreed construction of the improvements were complete on March 2, 2017. The new facilities attained compliance with discharge parameters before the deadline specified in item 4 and have maintained compliance since that time.

**Engineering Services:** On March 8, 2011, the NUA approved Contract K-1011-148 authorizing Garver Engineering, Inc. (Garver), to proceed with the Engineering Report (ER) and Surveying Phases. The ER was finalized and submitted to the DEQ on November 18, 2011; the DEQ approved the ER on June 27, 2013. On June 12, 2012, the NUA approved Amendment No. 1 authorizing Garver to proceed with the Final Design and Bidding phases. The plans and specifications for the improvements were submitted to the DEQ on August 1, 2013 and the DEQ approved them on November 26, 2013. On April 22, 2014, the NUA approved Amendment No. 2 authorizing Garver to proceed with the construction phase services including construction administration, full-time construction observation through November 2016, preparation of operation and maintenance manuals, equipment start-up and staff training, and implementation of the supervisory control and data acquisition (SCADA) system. On February 14, 2017, the NUA approved Amendment No. 3 authorizing Garver to proceed with design of the WRF Phase 2 Maintenance Additions as well as extending the construction phase services through November 2017.

**Construction:** Bids for the WRF Phase 2 Improvements were received from three pre-qualified contractors on March 27, 2014. Archer Western Construction, LLC (Archer Western) with regional offices in Irving, Texas was the low bidder. On April 22, 2014, the NUA awarded the bid and approved Contract K-1314-136 with Archer Western in the amount of \$48,822,550; the next lowest bid was \$49,978,000 or 2.4% higher. Approved funding for the WRF Phase 2 Improvements is 40.7% from the Sewer Excise Tax (SET) Fund and 59.3% from the Water Reclamation Fund. The majority of the project funding was provided through the Norman Utility Authority's Clean Water Statewide Revolving Fund Loan, Series 2014 (SRF), from the Oklahoma Water Resources Board (OWRB) in an amount up to \$50,300,000. This SRF Loan was approved by the NUA/Council on April 22, 2014 (Resolutions 1314-121 and R-1314-122). Future revenues from the Water Reclamation Fund and the Sewer Excise Tax Fund are dedicated to pay back the SRF loan.

The WRF Phase 2 Improvements added disinfection facilities, expanded the average daily design flow from 12 to 17 MGD, and rehabilitated many existing processes. Archer Western began construction of the improvements on June 2, 2014. The original work was broken into two phases with the disinfection facilities to be completed by November 24, 2015 and all work to be complete by November 18, 2016 (Final Completion).

The NUA has approved Contract Modification Requests (CMR's) included in five (5) change orders to date. Change Order No. 1 (CO#1) extended the contract time by 47 calendar days through January 4, 2017. CO#2 increased the contract amount by \$98,546.78 and approved a time extension of 32 calendar days through February 5, 2017. CO#3 increased the contract amount by \$152,808.92 and approved a time extension of 53 days through March 30, 2017. The NUA approved CO#4 on February 14, 2017 amending the contract by adding new work identified as the WRF Phase 2 Maintenance Additions. CO#4 increased the contract amount by \$2,828,517 (or 5.8% of the original contract amount) for a revised contract amount of \$51,902,422.70 and increased the contract time by 227 calendar days through November 12, 2017. CO#5 increased the contract amount by \$324,283.30 to \$52,226,706.00 and approved a time extension of 124 calendar days for the WRF Phase 2 Improvements through August 1, 2017.

The Disinfection Facilities were placed into operation on October 29, 2015 and these facilities meet discharge disinfection requirements. On March 2, 2017, the DEQ inspector agreed the WRF Phase 2 Improvements were substantially complete and operational. Ancillary items such as paving, yard lighting, fencing, landscaping and final cleanup were complete on August 1, 2017. The most recent construction payment through December 31, 2017 was for a total amount of \$51,746,962.20 or 99.2% of the revised contract amount.

**DISCUSSION:** Proposed CO#6 will decrease the contract amount by \$72,545.83 from \$52,226,706 to \$52,154,160.17 and will grant a time extension of 61 calendar days for the WRF Phase 2 Maintenance Additions. The CMR's in CO#6 are briefly described below and will decrease the contract amount by 0.15% bringing the total increase of all change orders to 6.82% of the original contract amount.

- CMR 85: Modify grit classifier controls and split additional cost of \$15,000 with Contractor for a cost increase of \$7,500;
- CMR 90: Provide explosion proof motors and controls for both new boilers in South Digester complex for a cost increase of \$3,335;
- CMR 91: Accept credit to allow enlargement of concrete pads for Digester Boilers 3 and 4 in lieu of removing and reconstructing the existing pad for a cost savings of \$5,654.25;
- CMR 92: Install aluminum platform and ladders to Primary Sludge Gravity Thickeners 1 and 2 for a cost increase of \$3,432.46 and extend the contract time by four (4) calendar days;
- CMR 93: Install concrete stairs to Primary Sludge Gravity Thickeners 3 and 4 for a cost increase of \$4,440.96 and extend the contract time by four (4) calendar days;

- CMR 94: Accept credit to delete need for grout installation and for reduced effort to remove sludge from four (4) Primary Sludge Gravity Thickeners for a savings of \$23,600;
- CMR 95: Accept credit offered as a part of CO#4 for giving Contractor a Notice to Proceed on the Phase 2 WRF Maintenance Improvements on or before 02/01/16 for a savings of \$50,000;
- CMR 96: Extend contract completion time by fifty-three (53) calendar days to account for equipment delivery delays resulting from a hurricane in Houston area in August 2018 where equipment was being manufactured, offloaded and/or stored;
- CMR 97: Accept credit from Contractor to reimburse NUA for additional costs from Garver for out-of-scope construction observation fees for a savings of \$12,000.

Contract Time Extensions: As noted in CMR's 91, 92 and 96 above, CO#6 also approves a contract time extension totaling 61 calendar days for the WRF Phase 2 Maintenance Additions through January 12, 2018. This time extension does not modify the time of completion for the original WRF Phase 2 Improvements; the final completion date for the original work is August 1, 2017. The two-year maintenance bond (MB-1314-87) for the original work began on August 1, 2017.

NUA staff and Garver have determined that WRF Phase 2 Maintenance Additions were complete on January 12, 2018. However, the two-year maintenance bond (MB-1718-24) for the Maintenance Additions will begin on NUA approval of the project which is expected to be on September 11, 2018.

At this time, the FYE19 construction budget for the WRF Phase 2 Improvements (WW0065) includes contingency funds totaling approximately \$881,000 including \$576,797 in the Water Reclamation Fund (WRF) and \$305,362 in the Sewer Excise Tax (SET). CO#6 will return another \$72,545.83 to the construction accounts increasing the remaining contingency amount for the WRF Phase 2 Improvements to approximately \$953,000.

Upon NUA approval, CO#6 reducing the contract amount for the WRF Phase 2 Improvements by \$72,545.83 will be submitted to the Oklahoma Water Resources Board (OWRB) for approval; the maximum SRF loan amount of \$50,300,000 will not be exceeded.

**RECOMMENDATION:** Recommend the NUA approve Final Change Order No. 6 with Archer Western Construction, LLC decreasing the contract amount for the Water Reclamation Facility Phase 2 Improvements by \$72,545.83 from \$52,226,706 to \$52,154,160.17 and granting a time extension of 61 calendar days through January 12, 2018. Staff also recommends acceptance of both the WRF Phase 2 Improvements and the WRF Phase 2 Maintenance Additions effective January 12, 2018 and recommends authorization to make final payment in the amount of \$407,197.97 to the Contractor.