



# City of Norman, OK

Municipal Building  
Council Chambers  
201 West Gray  
Norman, OK 73069

## Master

**File Number: K-1314-110 Amend 1**

**File ID:** K-1314-110 Amend 1

**Type:** Contract

**Status:** Consent Item

**Version:** 1

**Reference:** Item No. 22

**In Control:** City Council

**Department:** Utilities Department

**Cost:** \$298,600.00

**File Created:** 09/26/2014

**File Name:** Contract Amendment for Design, Bidding and  
Construction of Robinson Water Line

**Final Action:**

**Title:** AMENDMENT NO. ONE TO CONTRACT NO. K-1314-110: BY AND BETWEEN THE NORMAN UTILITIES AUTHORITY AND ALAN PLUMMER ASSOCIATES, INC., INCREASING THE CONTRACT AMOUNT BY \$298,600 FOR A REVISED CONTRACT AMOUNT OF \$398,500 TO PROVIDE ADDITIONAL ENGINEERING SERVICES FOR THE FINAL DESIGN, BIDDING, AND CONSTRUCTION PHASES FOR THE ROBINSON WATER LINE REPLACEMENT PROJECT BETWEEN 24TH AVENUE N.W. AND 36TH AVENUE N.W. AND BUDGET TRANSFER FROM RIGHT-OF-WAY TO DESIGN WITHIN THE PROJECT ACCOUNT.

**Notes:** ACTION NEEDED: Acting as the Norman Utilities Authority, motion to approve or reject Amendment No. One to Contract No. K-1314-110 with Alan Plummer Associates, Inc., increasing the contract amount by \$298,600 for a revised contract amount of \$398,500; and, if approved, authorize the execution thereof and transfer \$32,401 from Project No. WA0195, Robinson Under I-35, Right-of-Way (031-9360-462.60-01) to Design (031-9360-462.62-01).

ACTION TAKEN: \_\_\_\_\_

**Agenda Date:** 10/14/2014

**Agenda Number:** 22

**Attachments:** Amd K-1314-110.pdf, Table 1-3 Evaluation  
Matrix.pdf, Figure 1-2, Alignment 1, Figure 1-3  
Recommended Alignment.pdf, Figure 1-4, Alignment  
3, PR Alan Plummer.pdf

**Project Manager:** Mark Daniels, Utilities Engineer

**Entered by:** mark.daniels@normanok.gov

**Effective Date:**

### History of Legislative File

Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:

### Text of Legislative File K-1314-110 Amend 1

Body

**BACKGROUND:** The Robinson Water Line Replacement Project (WA0195) will provide replacement of approximately 5,300 feet of deteriorated 24-inch water line along Robinson generally between 36th Avenue NW and 24th Avenue NW. This cast iron water line was constructed in the early 1970's and has had numerous

leaks resulting in significant loss of water and damage to the overlying or adjacent roadway. Repairs to this large diameter water line are very expensive, time consuming for Norman Utilities Authority (NUA) and Norman Public Works staff and are disruptive to drivers in a very high-traffic area as repairs are completed.

Request for Proposal (RFP) 1314-28 was distributed to consultants and fourteen (14) proposals were received. The review team selected Alan Plummer and Associates, Inc. (APAI), with offices in Oklahoma City and Fort Worth, Texas, as most qualified consultant for the project. On January 28, 2014, the NUA approved Contract K-1314-110 with APAI in the amount of \$99,900 for preliminary design, surveying and geotechnical services associated with the construction of approximately 5,300 feet of water line along Robinson, crossing I-35 and between 24th and 36th Avenues NW.

At the completion of the preliminary design phase, the NUA will select the “best” alternative for providing a reliable, appropriately sized, water transmission line serving western Norman and considering the impact on the future ODOT I-35 ramp realignment project to be completed in the future by others. Preliminary design equates to a design completion of about 30%.

Work began February 14, 2014 with a kickoff meeting attended by APAI, NUA, and Public Works staff. After consultation with the Oklahoma Department of Transportation (ODOT), three alternative alignments for the water line were ultimately evaluated. During the preliminary design process, staff found it necessary to subdivide the original project scope into two sections in an attempt to remain within the existing project budget. The main reason for the cost escalation was to comply with the ODOT requirement to encase the water line within the entire ODOT right-of-way (about 2,400 feet in Alignment 2A).

A technical memorandum entitled Robinson Water line Replacement Engineering Report was prepared and is available for review. Each alignment was evaluated utilizing an alternative ranking matrix shown as Table 1-3 which included criteria such as land/right-of-way acquisition, environmental impacts, transportation and utility impacts, engineering design, socio-economic impacts, as well as capital and annual operational costs. The three alignments are illustrated on Figures 1-2, 1-3 and 1-4. The estimated construction cost in millions (M), including a 20% contingency, is summarized below:

- ☐ Alignment 1A and 1B: \$1.96M + \$1.33M = \$3.29M
- ☐ Alignment 2A and 2B: \$2.88M + \$1.36M = \$4.24M
- ☐ Alignment 3A and 3B: \$2.34M + \$1.24M = \$3.58M

For all alternatives, the existing 24-inch transmission line was upsized to 30-inch and the existing 12-inch water line under I-35 south of Robinson would be eliminated. Some improvements to the existing 12-inch water line in the immediate area are also included. The new water line will improve water transmission to western Norman and be constructed of non-corrosive materials such as PVC or HDPE to greatly reduce the probability of future line breaks. Since the water line is in the area of the proposed I-35 ramp realignment west of Robinson, the design work will be closely coordinated with the Public Works Department and the Oklahoma Department of Transportation (ODOT). The water line crossing under Brookhaven Creek is to be directionally drilled with HDPE piping to minimize floodplain and other environmental impacts.

Both NUA staff and APAI recommend selection of Alignment 2 even though it has the highest capital cost. Other factors noted in the evaluation matrix such as reduced length of water line, better system hydraulics, reduced operation and maintenance costs, and reduced traffic impacts lead to recommending Alignment 2 for construction.

**DISCUSSION:** The proposed amendment to existing Contract K-1314-110 will authorize APAI to provide final design, bidding and construction management for the water line identified as Alignment 2A; sub consultants will provide geotechnical, surveying and traffic control assistance. The amendment is written so that Alignment 2B could be added and designed in the future if approved by the NUA. The project schedule is shown in Attachment A, the work scope is detailed in Attachment B and the proposed cost is detailed in Attachment C to the contract.

Amendment No. 1 will increase the contract amount by \$298,600; it includes lump sum amounts of \$143,700 for final design services, \$29,000 for bidding services, \$60,500 for construction phase services; an allowance of

up to \$65,400 is also included for sub consultants to perform surveying, geotechnical and traffic control related engineering services. The contract amount was negotiated by staff and equates to a final design cost of about 7.2% of the construction estimate. Final design is expected to be complete in about 7 months with bidding expected in summer 2015. The bidding and construction phase services equate to about 3.1% of the construction estimate.

The Fiscal Year Ending 2015 project budget for Robinson Water line Replacement (WA0195) includes \$266,199 in Design (account 031-9360-462.62-01); \$56,000 in Land/ROW (account 031-9360-462.60-01) and \$2,676,000 in Construction (account 031-9360-462.61-01). To fully fund the contract, it is necessary to transfer \$32,401 from the Land/ROW account to the Design account. This would provide a balance of \$298,600 to fund the amendment.

**RECOMMENDATION:** Staff recommends the NUA approve Amendment No. 1 to Contract K-1314-110 totaling \$298,600 with Alan Plummer and Associates, Inc. for final design, bidding and construction phase services for the Robinson Water line Relocation project (WA0195). Staff also recommends transfer of \$32,401 from Land/ROW (account 031-9360-462.60-01) to Design (account 031-9360-462.62-01) to fund the amendment.