



RESOLUTION No. 2014-3120

A RESOLUTION AUTHORIZING THE CITY MANAGER PRO TEM TO EXECUTE AMENDMENT NO. 2 TO THE PROFESSIONAL SERVICES AGREEMENT WITH PARAMETRIX, INC. TO COMPLETE ADDITIONAL UTILITIES RELOCATION DESIGN AND PROJECT MANAGEMENT FOR THE WYNOOSKI TO RIVERFRONT UTILITIES PROJECT IN THE AMOUNT OF \$160,080.00

RECITALS:

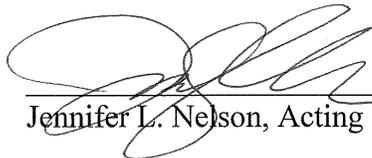
1. On October 24, 2013, the city executed a professional services agreement with Parametrix, Inc., as authorized by Resolution No. 2013-3083 passed by council on October 7, 2013, to complete the city's utilities design on S. Springbrook Road (known as Phase 1G of the Oregon Department of Transportation (ODOT) Newberg-Dundee Bypass Project) and the utilities relocation design for the Wynooski to Riverfront Utilities Project (known as Phase 1E of the ODOT Newberg-Dundee Bypass Project).
2. On January 24, 2014, ODOT authorized the city to perform additional work (design and construction) to resolve the Avalon Mobile Home Park sewer force main conflicts on Sandoz Road.
3. On February 20, 2014, ODOT identified new utility conflicts for the city's existing wastewater conveyance system due to the proposed bridge shoring for the bypass structure over River Street, and required the city to also evaluate the structural integrity for the city's Pacific Street wastewater conveyance system that will be impacted by the bypass project.
4. The above additional wastewater system conflicts create the need for additional consultant design and project management increasing the total contract over 10 percent of the original contract amount. Therefore, staff is requesting the council to authorize the city manager pro tem to execute Amendment No. 2 for the professional services agreement with Parametrix, Inc.
5. Parametrix, Inc. submitted a detailed amendment outlining the scope of work for the proposed Amendment No. 2 with a reasonable phase-by-phase cost breakdown, which is attached as Exhibit A, and hereby adopted and by this reference incorporated.
6. ODOT will reimburse the city for all eligible costs for the additional work requested by ODOT. The reimbursements are subject to ODOT's final review and approval.

THE CITY OF NEWBERG RESOLVES AS FOLLOWS:

The city council, acting as contract review board for the city, does hereby authorize the city manager pro tem to execute Amendment No. 2 for the professional services agreement with Parametrix, Inc. to complete additional utilities relocation design and project management requested by ODOT for the Wynooski to Riverfront Utilities Project in the amount of \$160,080.00.

➤ **EFFECTIVE DATE** of this resolution is the day after the adoption date, which is: March 18, 2014.

ADOPTED by the City Council of the City of Newberg, Oregon, this 17th day of March, 2014.



Jennifer L. Nelson, Acting City Recorder

ATTEST by the Mayor this 20th day of March, 2014.



Bob Andrews, Mayor

SCOPE OF WORK

**City of Newberg
The Springbrook Road Utility Design Project
Amendment 2**

OVERVIEW

The following is a summary of work items that have been added that are beyond the original scope of work for the Professional Services Agreement between the City of Newberg and Parametrix.

- Prepare a second procurement specification and supporting work to allow the City to purchase butterfly valves for the utility relocation construction.
- Redesign the water pipelines at College, 14th, and Waterfront Streets.
- Redesign the water and reuse pipelines at Highway 219.
- Address additional conflicts with Frontier Communications and revise water relocations.
- Assess methods to mitigate conflicts of future bypass bridge footings and embankment fill with City sewers in the vicinity of 11th and 12th Streets. Includes geotechnical support .
- Additional bidding phase services.
- Prepare the final sewer design for the Avalon Mobile Home Park and “conformed” construction documents incorporating the original design, changes from addenda, and the sewer.
- Provide support to the City with allocation of project costs for ODOT reimbursement.
- Additional project management.

The task numbering below is not in sequence because the numbers correspond to tasks in the original scope of work or are tasks for new work.

Task V002. Butterfly Valve Procurement

The original procurement documents were for pipe, fittings, gate valves, and butterfly valves. The bid received was not-responsive for the butterfly valves. So a second bidding document was prepared for procurement of butterfly valves.

The activities include contacting vendors to confirm conformance with “Buy America” requirements and ability to deliver within schedule constraints, preparation of technical specifications for butterfly valves, and preparation of documents for bidding. Additional support includes: answer bidder’s questions and prepare addenda, assist City with review of bids, prepare bid tabulation, and provide written recommendation for award. After contract award, this task includes coordinating with supplier, conducting review of technical submittals on valves, and maintaining a submittal log.

Assumptions:

- The procurement document will consist of the following sections: invitation to bid, instructions to bidders, bidder’s checklist, bid form, bid performance bond, agreement, general conditions, supplementary conditions, administrative provisions, submittals, quality control, installation/testing, and reference forms.
- Technical specifications will consist of AWWA butterfly valve section.
- The EJCDC procurement documents will be used as base for documents.

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- To expedite schedule, the Parametrix internal quality control review will be conducted concurrently with City review of draft documents.
- Procurement documents will be provided via email to vendors for bidding. The documents will not be advertised publically.
- The agreement will have a provision for contract assignment to the construction contractor that installs the valves.
- The City will coordinate with winning bidder on obtaining insurance documents, bonds, signatures, and other contract-related items.
- Field or factory observation of materials is not included.
- Up to two submittal reviews will be conducted for each item; the following are anticipated: butterfly valve and actuator for a total of two submittals. Submittals will be processed electronically by emails.

Deliverables:

- Final bid-ready set of procurement documents in PDF format.
- Bid tabulation in spreadsheet format delivered electronically. Email with recommendation on bid award.
- Submittal responses in electronic format.

Task V005. Redesign Water Pipelines at College, 14th, and Waterfront Streets

The City originally directed that the relocation of these 1 and 2 inch polyethylene pipelines be upsized to 12 inch pipelines and added an 8 inch spur to a new hydrant and blowoff. Parametrix also designed a new 330 foot 12 inch waterline crossing from future alignments of Frontage Road to Waterfront Road. Because ODOT would not reimburse the upsizing, the City directed Parametrix on January 14, 2014 that the Frontage/Waterfront crossing be deleted and the waterlines along College/14th/Waterfront be redesigned using 1 and 2 inch polyethylene pipelines. The design plans and profiles were revised accordingly.

Task V006. Redesign Water Crossing at Highway 219

Highway 219 is crossed by 24 inch water and a 10 inch reuse pipelines. The original design had these crossings made using horizontal borings. As a construction cost saving measure, the City requested of ODOT if open cut trench construction would be allowed. On January 22, 2014, ODOT approved this alternative. In addition, new field data from Murray Smith & Associates (MSA) was provided of existing pipeline locations and depths, which changed the points of connection between the new and existing water and reuse pipelines. The alignments and profiles were redesigned. An ODOT permit was also prepared to address night work, traffic control, and lane width restrictions. Added details were added to comply with ODOT required trench and pavement designs.

Task V007. Resolve Frontier Communication Conflicts

The consultant for Frontier Communications notified the City that the proposed relocation of City waterlines was in conflict with their communication conduits and a vault at two locations, west of Highway 219 and on Wynooski Street east of E. 11th. The following work will be conducted to resolve the conflicts:

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- Meet with or participate in conference call with Frontier's consultant to discuss options for resolution.
- Prepare draft and final revisions to two design drawings to accommodate needed changes.
- Advise City's utility-relocation construction contractor of changes. Prepare a request for proposal for costs, if needed, and review contractor's cost.
- Follow-up coordination with Frontier's consultant and construction contractor.

Assumptions:

- Pipe sizes and points of connection will remain the same for revised pipeline locations.
- One site visit by a Parametrix engineer.
- Participate in one conference call and one site visit.

Deliverables:

- Hand markup of proposed design changes for review by City and Frontier's consultant.
- Two revised engineer-stamped drawings for City's construction contractor to implement.

Task V008. Resolve 11th and 12th Street Sewer Conflicts

Overview

There are utility conflicts with the Newberg Dundee Bypass Phase 1E and the City's sanitary sewer system at River Street and 12th Street with the proposed bridge foundations and increased overburden and new retaining walls at Pacific Street and 11th Street. There will also be utility conflicts with the future phase of the Newberg Dundee Bypass in the same areas including the future bridge foundation at 12th Street and River Street and the existing (1985) 30 inch reinforced concrete pipe (RCP) and an existing (1986) 15 inch RCP. The existing 30 inch RCP in Pacific Street will have similar increased overburden as a result of the future phase. The areas below have conflicts with the ODOT bypass project and the future phase of the bypass:

- Increased overburden on an existing (1985) 30 inch RCP under Pacific Street.
- Retaining wall loading on an existing (1985) 30 inch RCP on a parallel alignment.
- Impacts from proposed driven pile bridge foundations on 8 inch concrete and 8 inch clay sanitary lines.
- Future increased overburden on the 30 inch RCP under Pacific Street.
- Future bridge foundation impacts to the existing 30 inch and 15 inch RCP lines on the south side of 12th Street.

The work will consist of four elements: (1) data gathering and development of mitigation strategies, (2) geotechnical support, (3) preparation of design, and (4) coordination with construction contractor to obtain costs and support City in processing a change order.

Subtask V0081 Data Gathering and Development of Mitigation Strategies

This subtask consists of the following elements:

- Collect existing data to assess the sewers and determine the structural integrity of the sewers. The following information is needed from the City and/or ODOT:
 - Sewer record drawings.
 - Sewer manhole invert and rim elevation data.
 - Existing sewer services.

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- ODOT geotechnical data and reports.
- ODOT plans for the Phase 1E bypass design.
- Class of pipe or pipe properties at impact locations.
- Condition assessment of the pipe. TV inspection logs if available.
- Soil characteristics of the bedding, backfill and in situ soil layers.
- Anticipated soil reaction from pile driving and the zone of influence.
- Temporary and permanent loading applied to the overburden and estimated pipe cover depth.
- Review the ODOT survey for areas of concern. Conduct a site visit to observe existing conditions and confirm that relevant surface features are included in the survey (curbs, sidewalks, landscaping, type of pavement, intersecting storm drains, for example).
- Confirm which lots and sewer services will be removed/abandoned in advance of the ODOT bypass construction and which will remain after bypass construction.
- Prepare schematic of existing sewers showing sewer services to be abandoned and those to remain.
- Coordinate with ODOT to obtain temporary construction and future permanent loads, anticipated pile driving equipment, and anticipated construction methods for roadway, bridge, and retaining walls.
- Evaluate mitigation alternatives utilizing the provided information and pipe horizontal and vertical location in relation to temporary and permanent loading. For each alternative, conduct the following:
 - Assess the type of loading (temporary or permanent) in relation to the pipe condition.
 - Prepare scaled figures for each alternative showing the spatial relationship and impact of temporary, permanent and future loading on the utility.
 - Calculate the impacts of the applied loading on the structural integrity of the pipe.
 - Develop relative costs for each mitigation alternative.
 - Estimate the expected duration and impact on construction schedule developed in consultation with the construction contractor.
 - Review constructability with the construction contractor.
 - Consider future maintenance or replacement impacts.
- Develop a preliminary strategy, supporting schematics, and relative costs for mitigating the conflicts. Anticipated mitigation strategies include the following:
 - Do nothing. The projected load on the existing sewers are within acceptable design parameters.
 - Implement measures to protect the sewer from the added load such as removal and replacement of pipe bedding and fill, replacement of fill with geofoam or CLSM, or providing concrete encasement for sewer, for example.
 - Relocate the sewer.
 - Abandon portions of the sewer and provide sewer service through an alternative route not impacted by bypass construction.
- Facilitate a meeting with staff from the City, the construction contractor, and MSA to review options and develop recommended courses of action at each conflict area.
- Prepare a draft technical memorandum documenting recommended course of action for each area. Prepare an opinion of probable construction cost. Finalize technical memorandum after concurrence from the City, contractor, and MSA.

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Assumptions:

- The City will provide the pipe class/properties and all available inspection reports, video logs and repair and maintenance logs for the utilities listed above.
- The City will provide record drawings and documents indicating sewer services to remain and to be abandoned.
- ODOT survey contains rim and invert of sewer manholes up- and downstream of affected areas.
- ODOT will provide estimated temporary construction and future permanent loads.
- ODOT will provide anticipated pile driver equipment data sheets.
- ODOT will provide anticipated construction methods for the roadway, bridges, and retaining walls.
- One site visit will be conducted. Three Parametrix staff will participate in a half-day meeting in Newberg.

Deliverables:

- A concise draft and final technical memorandum in electronic format describing the problem, reviewing mitigation strategies, assessment of pipe structural integrity, and recommended course of action for each area.

Subtask V0082 Geotechnical Support

This scope involves reviewing existing geotechnical report issued by ODOT for the Newberg Dundee Bypass Project, conducting a site visit, assessing potential pipeline settlement, evaluating mitigation approach, and participating design meetings. This subtask consists of the following elements:

- ODOT Geotechnical Report Review and Site Visit. Review existing ODOT geotechnical report for subsurface condition at the potential sewer pipeline settlement areas. A senior geotechnical engineer and a Parametrix senior engineer will conduct a site visit to assess the site condition and attend an onsite meeting with the City, Engineer, and contractor.
- Settlement Assessment and Mitigation Options. Review and assess the potential settlement magnitudes and influence zone for the sewer pipelines caused by the new highway loads. Discuss settlement assessment results with engineer and evaluate potential mitigation alternatives. Attend one meeting with designer to discuss the settlement issue and mitigation alternatives.
- Geotechnical Memorandum. We will summarize existing information review, subsurface condition and settlement assessment, and mitigation approach evaluation in a geotechnical memorandum.

Assumptions:

- ODOT will provide their geotechnical report and supporting boring logs.
- The ODOT geotechnical engineer will be available for discussions of existing subsurface conditions and design criteria.
- No additional subsurface borings, test pits, or testing are needed. The existing subsurface data are available from ODOT and those will be satisfactory to complete the designs described in Amendment 2.
- One site visit and one meeting in Newberg by geotechnical subconsultant.
- Parametrix senior engineer to visit site with geotechnical subconsultant.

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Deliverables:

- A concise draft and final geotechnical memorandum in electronic format.

Subtask V0083 Design

This subtask consists of the following elements:

- Prepare design drawings and details to implement the following mitigation measures:
 - Relocate the manhole to the west on 12th Street west of S. River.
 - Abandon the 8 inch clay sewer in 12th Street. The houses and services to it are being removed for the bypass construction.
 - Relocate sewer service from S.P. Fiber to the existing 30 inch sewer at easternmost manhole at 12th Street and Pacific Street.
 - Design protection measures or relocation for the 30 inch sewer in Pacific Street south of 11th Street where it is under the new bypass embankment.
 - Design protection measures or relocation, if required, for the 30 inch sewer in 11th Street east of Pacific Street where it is parallel to a retaining wall.
- Address temporary pumping, dewatering, and shoring for proposed construction.
- Prepare revisions to the contract Special Provisions to incorporate needed technical specifications for protective measures for design.
- Prepare construction cost estimate.

Assumptions:

- The drawings will be prepared in draft form (90%) for City and MSA review, then finalized and stamped based on City and MSA comments.
- The feasibility of sewer relocations is dependent on existing manhole inverts.
- Existing sewer services to be retained is fixed.
- City standard details will be used for sewer services and manholes.
- The design will be based on ODOT's proposed design for near-term and the future lanes for Phase 1E.

Deliverables:

- Two plan and profile design drawings and two drawings of details will be prepared.
- Special Provisions addressing protective measures, dewatering, and shoring.
- Construction cost estimate.

Subtask V0084 Construction Phase Support

This subtask consists of the following elements:

- Develop a request for proposal for construction contractor to obtain cost for added work.
- Evaluate contractor's proposal and negotiate final cost for change order.
- Support City staff in preparation of formal change order.
- Review construction submittals.

Assumptions:

- One telephone conference with construction contractor.
- Six construction submittals on mitigation measures will be reviewed: dewatering, shoring, mitigation measures (2), backfill, and other.

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- Submittals on manholes, sewer pipe, laterals, and sewer services will not require separate review as they will be the same as done under the general contract.

Deliverables:

- Request for proposal in electronic format.
- Six submittal responses in electronic format.

Phase 4 Bid and Construction Phase Assistance

Tasks 4120/4130. Bidding Assistance for Phase 1E and College Waterfront Designs

Additional level of effort was required during bidding assistance.

- The ODOT-provided survey did not identify all the trees, fences, lighting, curbs, landscaping, and the entrance sign to S.P. Fiber that were along the pipeline alignments. These features will need to either be removed or removed and replaced by the contractor. To avoid construction change order claims, an addendum was issued. To locate these features required review of aerial photographs followed by a site visit to confirm the stations where the features were located along each alignment. Based on field notes, the information was consolidated into text for the addenda affecting six drawings.
- The quantities of owner-purchased materials changed from when the procurement bids were received to when the general construction design was completed. The listing of materials was updated in the bid documents.
- ODOT dictated a sequence of work two days after the documents were advertised.
- Three days prior to the bid opening, ODOT approved an extension of the contract completion date. This required an addendum changing the contract and Special Provisions.

Phase 5 Additional Support

Task 5200. Added Design

This work covers two elements: completing the sewer design for the Avalon Mobile Home Park to conform to recent survey data and updating drawings and Special Provisions that conform to the addenda during bidding.

- Conform Avalon Park Sewer Design to Survey. ODOT's consultant notified the City a week before the construction contract was advertised that they approved the design of a new gravity sewer to address the conflict with a 3 inch force main serving the Avalon Mobile Home Park. Parametrix prepared a draft design utilizing previous site plans in order to allow that new sewer to be bid along with the remainder of the project. The original contract had an allowance for relocating the force main and an allowance for potential added design, and these were used to complete this last-minute design. Concurrently, utility locates and topographic surveying were conducted. The survey topographic map was recently received, and the design plans need to be updated for the contractor to construct it. Work consists of the following:
 - Conduct field surveying and prepare a base map for design.
 - Incorporate the survey file into the base map of the bid set design file.
 - Modify the previous preliminary design to incorporate surveyed field conditions to create a construction-ready design drawing.

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- Update Drawings to Conform to Addenda. The design plans and specifications that were advertised for bidding evolved due to recent changes by ODOT, as well as relevant items indicated by bidders and revisions typical of any design. The plans and specifications need to be updated to consolidate the addenda to enable clear communication and minimize misinterpretation by the contractor, inspectors, the City, and Engineer. This should avoid more costly and time-consuming construction issues. The following items will be updated:
 - The ODOT-provided survey did not identify trees, fences, lighting, curbs, landscaping, and the entrance sign to S.P. Fiber. These features need to either be removed or removed and replaced by the contractor. These were identified by addenda but need to be consolidated onto the six affected drawings.
 - Locations for cathodic protection need to be clarified on five drawings.
 - ODOT dictated a sequence of work two days after the documents were advertised. Also the length of the contract has been extended. These and other miscellaneous items should be updated in a revised Special Provisions section.
 - ODOT's extension of the length of the construction requires that selected provisions in the contract be updated.
 - Miscellaneous addenda items will be added to drawings and Special Provisions.

Assumptions:

- To update the sewer design for Avalon Mobile Home Park will require half a day of engineering and two days of drafting.
- Updating the drawings and Special Provisions to conform to addenda will require one day of engineering and three days of drafting.

Deliverables:

- Updated drawings, Special Provisions, and contract conforming to addenda.

Task V004. ODOT Reimbursement Support

This task includes time to support the City with allocation of projects costs for reimbursement from ODOT. This subtask consists of the following elements:

- Coordinate with City and MSA.
- Meetings with City and MSA to define what qualifies as a reimbursable cost.
- Prepare revised construction cost estimates to conform to areas reimbursed or not reimbursed.
- Quantify construction and procurement cost opinions with regards to reimbursable costs.
- Prepare breakdown of professional services fees to itemize costs to conform to areas reimbursed or not reimbursed.

Task 31. Project Management

The original contract anticipated a project duration of seven months with concurrent design of utility relocations for Phases 1E and 1G. Because utility relocation design for Phase 1G is to be done separately, the duration of project management increased. The completion of the Phase 1G design is expected to go through November 2014, or an additional seven months. The administrative and budget management will be performed by Derik Vowels and the technical design management will be by Tom Nielsen.

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The project management task includes monthly meetings with the City staff, coordinating efforts of team members, preparing the amendment scope of work and fee, reviewing project billings, preparing subconsultant contracts and processing their invoices, preparing monthly progress reports, preparing project correspondence (letters, memos, email, etc.), maintaining written and electronic files, and other administrative tasks.

Monthly progress reports will address work progress, significant findings and unresolved issues, action needed from the City and Parametrix, items and meetings scheduled for the next period(s), and list potential out-of-scope work/issues.

Assumptions:

- The duration for this scope of work through contractor award of Phase 1G is 7 months – April 25, 2014 to November 30, 2014.
- Two Parametrix staff will participate in four progress meetings with City staff in Newberg; the other three progress meetings will be at Parametrix's Portland office.

Deliverables:

- Monthly progress reports and invoices.

