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Federal Express

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JCM 2/28/11

12:19 PM

FROM:

Branch Engineering, Inc.
310 5th Street
Springfield, OR 97477

JCM 2/28/11 12:19 PM

"RFP: Engineering Services for Scoping,
Design, and Installation of the 58th Street
Relief Sanitary Sewer Line & Bypass
Manhole P21046"

CITY OF SPRINGFIELD
Finance Department
Attn: Jayne McMahan, Management Analyst
225 5th Street
Springfield, OR 97477

City of Springfield

Proposal for Professional Engineering Services for Scoping, Design, and Installation of the 58th St. Relief Sanitary Line & Bypass Manhole Project P21046

February 28, 2011



Project Samples

Submitted by :



Branch Engineering, Inc.

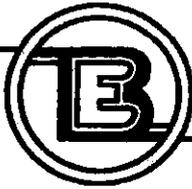
310 5th Street, Springfield, OR 97477

4310 Cherry Avenue, NE Salem, OR 97303

Phone (541) 746-0837 Fax (541) 746-0369 Phone (503) 779-2577

IN ASSOCIATION WITH

RIGHT-OF-WAY ASSOCIATES



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(541) 746-0637
310 5th Street
Springfield, OR 97477

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Salem, OR 97303

www.BranchEngineering.com

Principals
M. Lane Branch, PE
Damien Gilbert, PE
Renee Clough, PE, PLS, AICP
Rene Fabricant, PE, SE
Ronald J. Derrick, PE

February 28, 2011

Attn: Jayne McMahan, Management Analyst
Finance Department
City of Springfield
225 5th Street
Springfield, OR 97477

Re: Proposal for – Professional Engineering Services: Scoping, Design and Installation for the 58th Street Relief Sanitary Sewer Line and Bypass Manhole Project

Branch Engineering Inc. (BEI) is pleased to submit this proposal for Professional Engineering Services for the subject project. We have reviewed the RFP and Addendums 1-3; and I am confident our firm meets and exceeds the experience essential to deliver this project.

Our firm offers the City of Springfield the appropriate level of municipal pipeline experience, that is matched with local knowledge and experience with Springfield's public improvements design standards and procedures. BEI has the technical skills and resources in-house to complete the design and construction administration requirements of the project. Right-of-Way Associates has been added to the team assist with easement acquisition.

BEI has had the pleasure of assisting the City of Springfield with many large capital improvement projects including International Way, Maple Island Road, South 52nd Street, Mill Street, North 22nd Street, South 32nd Street Corridor Improvements, South 'A' St. Storm Sewer, and Sports Way Improvements. We are poised and eager to assist the city with this next capital improvement project.

Key items Branch offers to the project include:

- **Face-to-face direct communication without lost time or expenses**
- **Extensive municipal pipeline experience combined with unmatched local knowledge**
- **Cost effective solutions from a cost efficient company**
- **Long term established relationships with local permitting agencies and local utility companies**

As a medium sized firm, we have the resources to meet the project requirements with a personalized approach. And with our office conveniently located in downtown Springfield we can quickly and economically respond to project needs. Additionally, using well established local businesses helps keep financial resources re-circulating through the local economy and adds a vested interest in a successful project.

We have worked successfully together before for the benefit of Springfield and we look forward to doing it again.

Respectfully submitted,

Lane Branch, PE

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Statement

Branch Engineering, Inc. has thoroughly reviewed the 58th St. Relief Sanitary Sewer Line and Bypass Manhole Request for Proposal and Addendums 1, 2 and 3, and is confident that our team is well qualified to efficiently and effectively complete the scope of services listed in the RFP. This proposal was prepared to include all services (and expenses) requested in the RFP and the three Addendums.

The project schedule with deliverables and completion dates listed in the RFP is as follows:

- | | |
|---|-------------------|
| • Initiate Services | March 21, 2011 |
| • Determine Location, Sizing Analysis and Comparative Cost Analysis | May 12, 2011 |
| • Complete Field Data Collection/Base Development | June 9, 2011 |
| • 30% Design with Estimated Cost | July 24, 2011 |
| • 60% Design with Estimated Cost | August 31, 2011 |
| • 90% Design with Estimated Cost | November 17, 2011 |
| • Complete Bid Documents to City | January 6, 2012 |

We have assembled a seasoned team of professionals with resources that can meet the schedule outlined in the RFP. The Branch Engineering team commits to meet our obligations in the schedule. A portion of the schedule is predicated on thorough and timely agency review responses. We will provide complete and timely submittals to the City of Springfield and other applicable review agencies so they have opportunity to meet the schedule also.



ATTACHMENT 2

Authorization to Legally Bind Proposer

The person executing this Proposal and the instruments referred to herein on behalf of the Proposer have the legal power, right, and actual authority to submit this Proposal, and to bind the Proposer to the terms and conditions of this Proposal.

M. Lane Branch 2/28/11
(Signature of person authorized to bind Proposer) Dated

M. LANE BRANCH
Print Name of Person Signing as authorized to bind Proposer

BRANCH ENGINEERING, INC.
Firm Name

(541) 746-0637
Phone

310 FIFTH STREET
Address

(541) 746-0389
Fax

SPRINGFIELD, OR 97477
City, State, Zip

lane@branchengineering.com
email address



Branch Engineering, Inc.

Branch Engineering, Inc. (BEI) is excited about the prospects of providing engineering services to the City of Springfield. BEI is a multi-discipline firm providing civil, transportation, geotechnical, and structural engineering, along with land surveying. The firm is well established and has a wealth of experience in municipal pipeline projects. Our staff of over 20 includes: 11 professional engineers, and is rounded out with a talented and committed complement of designers, drafters, professional surveyors, and administrative support.

BEI has been proud to call Springfield our home for more than three decades and the firm has been located in our downtown location for nearly 20 years. Although BEI has a long history of working for public agencies, our position of serving municipal clients has never been stronger than it is today. Through our work on recent large municipal pipeline projects in the cities of Florence, Lowell, Coburg, and Veneta, BEI offers a proven track record for pipeline design, permitting, and construction in Lane County. This experience is paramount for cross-jurisdictional coordination with the County and State. Combining this extensive municipal pipeline design experience with unmatched local knowledge of Springfield's design standards and procedures, established good working relationships with local permitting agencies, and the ability to be at "ground zero" responding to project needs in a cost effective and efficient manner gives BEI unique, specialized qualifications for the 58th Street Relief Sanitary Line and Bypass Project.

We have carefully reviewed the Request for Proposals and considered our suitability to effectively and efficiently complete the 58th Street Relief Sanitary Line and Bypass Project. As a medium size local firm we are very selective with our marketing resources in seeking publicly advertised projects. Every principal and employee is part of our production staff and is typically focused on project work. We only pursue a handful of local RFP advertisements a year, and we generally do not respond to out of area RFP advertisements. We are pursuing this project because we are confident we are the 'best match' that will lead to a seamless delivery of this project for our community. We feel certain that we are in a unique position to fully meet the City's requirements. BEI offers:

- **Convenient and direct communication without lost time or expenses**
- **Extensive municipal pipeline experience combined with unmatched local knowledge**
- **Cost effective solutions from a cost efficient company**
- **Established relationships with local permitting agencies and local utility companies**

Convenient Direct Communication

One of the most important elements of a project is clear and open communication. Please notice in our scope of work that we do not put a limit on the number of meetings we budgeted in our proposal. Face-to-face communication between the project manager, the client, and the review agencies is essential to a project. Being conveniently located across the street from Springfield City Hall, and one block away from ODOT's District office, means a face-to-face meeting with the project manager and project engineer can be held at no additional time or expense than a phone call. BEI recently assisted City of Springfield engineer Jan Seiner, P.E. with a portion of the Mill Race improvement project. We had several coordination meetings, held informal reviews of the design concepts, and walked the site together, all without lost travel time and expenses, and many within five minutes of the phone call to schedule the meeting.

Firm Profile and Experience

We never felt the need to spend our resources reviewing the scope of work to make sure a necessary coordination meeting was included in our budget. City staff can walk over anytime to view progress drawings, look over the shoulder of the AutoCAD specialist preparing the drawings, or just stop in to check status. The advantages to a client for having the principal engineer, the project manager, and project engineer located a short walk from their desk are immeasurable. It will not only save time and expense, it will lead to a well coordinated team design effort.

Additionally, as a local firm BEI has a vested interest in a successful project. We rely predominantly on local work. There is no other firm that has more incentive to deliver a successful project than BEI. Being located here in Springfield, we take pride in successful completion of projects within our community. BEI engineering services have recently been retained through our flexible services contract with the City by Jan Seiner, P.E. and Ken Vogeney, P.E. Please inquire with them as to our ease to work with, responsiveness, and our ability to efficiently coordinate effective team oriented designs.

Municipal Experience

BEI is proud of the municipal services focus of our business. We take pride in our role as the City Engineer for the cities of Florence, Veneta, and Lowell, and we have recently supported the city of Coburg. We provide on-call services for a number of other cities including Cottage Grove, Albany, Springfield, and Eugene. Additionally, we enjoy services agreements with the Oregon Department of Transportation, and several School Districts and Universities. Our municipal clients have relied upon us for cost efficient engineering and design services for implementation of their CIP projects. Several of our recent municipal pipeline projects have been highlighted as representative projects herein. Other municipal engineering services we offer are facility master planning, financial planning, fiscal policy development, geotechnical engineering, traffic engineering, development review of privately engineered public improvements, and grant application assistance.

BEI currently has two on-call service contracts with the City of Springfield. The first is a general services on-call agreement that has been used to retain services including project design, development review, geotechnical engineering, and land surveying. We were selected for this work because of our excellent reputation with the city for adherence to the city standards and quality of our work. The second contract is with the Transportation Department to provide on-call transportation services.

BEI has been actively working with municipalities on large pipeline projects. BEI is particularly proud of achievements in the delivery of a new wastewater trunk sewer to the City of Florence. Phase I of a \$5 million replacement and expansion of the gravity trunk sewer in Florence is nearing completion and Phase II is in design. BEI assisted the City with obtaining rapid environmental clearances for the project, leading to a successful application for an ARRA related, zero interest loan through the ODEQ. After BEI completed the alternatives analysis, final design services were initiated. The project consists of upsizing of the existing trunk sewer located within improved streets, including a section in ODOT right-of-way. All ODOT right-of-way permitting was performed by our office; the convenience of face-to-face negotiations with ODOT when adjusting their permit conditions was apparent. The project also included a directional bore for a 21-inch pipe.

The City of Veneta has recently retained BEI to manage a \$17 million water transmission pipeline extension project that will supply the city with water from EWEB facilities. The pipe route includes sections located within ODOT and Lane County rights-of-way and the construction includes multiple directional bores and pavement restoration within improved streets.

Firm Profile and Experience

Springfield Project Experience

Over the past decade, the City of Springfield has been accustomed to seeing BEI in the role of a developer's representative for many of the largest development projects within the City. Due to BEI's size, quality work product, and long term presence in the community, we have been called on to be the project engineer for four of the five large master planned developments within the community. On the master planned development, our knowledge of City standards and procedures led to our selection by the City of Springfield to assist with the review of the project. Below is a brief list of City of Springfield public infrastructure projects that have been completed by BEI.

- 'A' Street Improvements
- Nittany Meadows
- Maple Island Road
- Mt. Gate Phases 1 and 2
- Jasper Meadows Phases 1 - 7
- Marcola Meadows
- Golden Eagle Subdivision
- International Way
- South 46th Street/Daisy Street
- River Glen Subdivision
- 3rd Street/'S' Street
- Marvin Manor Subdivision
- South 'A' Storm Sewer
- Review Services for RiverBend
- Review Services for River Heights
- Review Services for WestWind
- Sports Way
- Cascade Heights
- North 22nd Street
- Mill Street
- South 72nd Street Improvements
- Wild Goose Landing
- 'G' Street
- South 41st Street/Camella Road

We feel confident that BEI has more institutional knowledge about Springfield standards and procedures, and delivered more public improvement infrastructure projects within Springfield than any other engineering firm.

Cost Effective Solutions from a Cost Efficient Company

BEI is a rare local company that is nimble and efficient enough to be competitive with small local engineering firms on private engineering jobs, yet has the municipal pipeline engineering experience of a larger engineering firm. As a local company with the large majority of our work in Lane County, we do not employ marketing staff like larger firms. Polished engineering proposals and marketing are typically directly factored into billing rates to make up for the expense. Although we pride ourselves in preparing good proposals, we believe lower fees benefit our clients and projects more than increasing design fees to allow more in marketing and proposal preparation time.

BEI understands that public agencies are commonly faced with long lists of unmet needs, and smaller communities are particularly challenged during these difficult economic times. However, we are also familiar with finding opportunities to save design and construction costs on projects. For example, in 2008 BEI was retained by the City of Florence to provide engineering services for the construction of a new wastewater force main running the full length of the city's Urban Growth Boundary (UGB) in Lane County right-of-way. The project replaced a rapidly failing two mile long section of pipeline and then extended sewer service another two miles to the northern extent of the UGB. We recognized there was an opportunity to fast track the project to co-locate the main with an Alaskan Cable Landing project which resulted in significant cost savings to the Florence community. In addition to route selection, pipeline design and construction administration, BEI assisted the City with securing and administering a Special Public Works Fund loan through OECDD for the project.

Firm Profile and Experience

We pride ourselves in being up front on our project proposals to avoid budget overruns. Our bill-out rates include all employee overhead, specialized software, and a modest profit margin. When specialized unique expertise is needed on a project, we pass through subconsultant fees to our client with no mark up.

Long Term Working Relationships with Local Permitting Agencies and Utility Companies

Being a local engineering firm, we have established long term working relationships in place with key staff at Lane County, Oregon Department of Transportation, Springfield Utility Board, Northwest Natural Gas, Qwest, Comcast, and Department of Environmental Quality. Through our extensive public improvement project work in Springfield, we are accustomed to typical interactions, roles and responsibilities, and the requirements for local agency permitting and project coordination with utility providers. Due to our location, meetings can be held with these agencies as necessary with minimal project expense.



Project: Florence Trunk Sewer-Phase 1

Client: City of Florence, Oregon

Reference: Mike Miller, Public Works Director, 541-997-4106

Status: Under Construction

Key Staff:

Chris Irvin, PE Project Manager/Engineer

Scott Olson, PE QA/QC Manager

Lane Branch, PE Principal in Charge

Mike Dunaway, Civil Designer

Ron Sather, Project Inspector

Ron Derrick, PE, Geotechnical Engineer



Construction Cost: \$1.7 million

Key Features

- Full NEPA Authorization, DEQ/CWSRF/Federal Funding
- Asbestos Pipe Removal, 6 foot to 16 foot sewer depths, High Groundwater/Dewatering
- 8700 lineal feet of 21" through 15" Sanitary Sewer, 300' bore with 36" casing

Project Team and Responsibilities:

1. Branch Engineering, Inc: Project Management, DEQ Funding coordination, NEPA Environmental Clearance documentation, Route Planning, Geotechnical Investigation, Permitting, Civil Design, Construction Management/Inspection
2. Wobbe and Associates: Surveying and Construction Staking

Project Description

Branch Engineering secured zero interest CWSRF funding for the city of Florence in order to replace the city's primary trunk sanitary sewer. Branch Engineering prepared the environmental documentation to satisfy federal NEPA requirements working with federal agencies on a fast-track timeline to secure special financing for "shovel ready" projects. Branch Engineering delivered NEPA documentation in order to obtain a categorical exclusion for the project securing a \$4.9 million zero interest loan for the city. The project involves the removal of the existing 14-inch through 10-inch asbestos cement trunk sewer and construction of nearly 9,000-feet of new 15" through 21" PVC sewer pipeline including manholes, laterals, trench resurfacing, road overlays. The new sewer approaches 20-foot deep in areas. The project involved route planning in order to determine the least cost route for the trunk sewer. This required some removal and replacement; and also some parallel sewers. A 300-foot bore under a dune undeveloped right of way was necessary to avoid costly work within the ODOT right-of-way. Repairs to the existing trunk sewer within the ODOT right-of-way were included in the project.

In order to complete the work Branch obtained the necessary permits from DEQ, City of Florence, and ODOT. The design was challenging, working within developed rights of way with limited as-built data, numerous conflicts, pump station connections, and poor quality data. The project is currently under construction and Branch has been praised by the contractor for high quality and through contract documentation. Branch supplements daily city inspections with the experienced hand of veteran inspector Ron Sather.



Project: Munsel Creek Relief Storm Sewer (Project within Spruce Street LID)

Client: City of Florence, Oregon

Reference: Mike Miller, Public Works Director, 541-997-4106

Status: Construction Ongoing: 2008-Present (Scheduled September 2011 overall completion)

Key Staff:

Scott Olson, PE Project Manager/Engineer

Chris Irvin, PE Assistant Project Manager, QA/QC

Lane Branch, PE Principal in Charge

Jeff Andreason, Civil Designer



Construction Cost: approximately \$1.5 million

Contractor: Phase 1: Ray Wells, Inc (completed 2008)
Phase 2: Jal Construction (completed 2009)
Phase 3: Ray Wells, Inc (completed 2009)
Outfall: Ray Wells, Inc (completed 2010)
Phase 4: Scheduled for advertisement (Spring 2011)

Key Features

- 30" through 48" HDPE Storm Drain, Installed primarily in ODOT and Lane County ROW
- Wetland mitigation, Wetland Banking, ACOE, DSL, Lane County, ODOT permitting
- Approximately 5,000 lineal feet of Storm Drain, 18' Maximum Pipe Depth
- High groundwater/dewatering, New storm outfall on Munsel Creek

Project Team and Responsibilities:

1. Branch Engineering, Inc: LID planning, easement description and acquisition, Project Management, Public involvement, Route Planning, DEQ/Lane County permitting, Stormwater Modeling, Civil Design, Construction Management,
2. Wobbe and Associates: Surveying and Construction Staking
3. PBS Environmental: Wetland delineation, Biological Assessment, JPA preparation
4. Environmental Solutions: Wetland Delineation, JPA preparation

Project Description

The Spruce Street LID was formed to extend utilities including a street, storm drain, sewer, water, to unserved property north of Munsel Lake Road. Due to chronic flooding, a part of the project included the Munsel Creek Relief Storm sewer. The project combined two capital stormwater projects in the city's Stormwater Master plan to relieve existing flooding problems and to provide storm drain service to developing properties. The project was met with permitting and construction challenges that were addressed and the project is moving towards completion the summer of 2011. The project required both temporary and permanent wetland impacts which required preparation of a Biological assessment and individual permit application. Permanent impacts at the beginning of the project were addressed through onsite mitigation and downstream impacts were addressed through wetland banking. The project is primarily located in ODOT right of way but also involved Lane County permitting and multiple easement acquisitions. High groundwater was pervasive in the area.



Project: Rhododendron Drive Force Main

Client: City of Florence, Oregon

Reference: Mike Miller, Public Works Director, 541-997-4106

Status: Successfully Completed 2008

Key Staff:

Scott Olson, PE Project Manager/Engineer

Chris Irvin, PE Assistant Project Manager ,QA/QC

Lane Branch, PE Principal in Charge

Jeff Andreason, Civil Designer



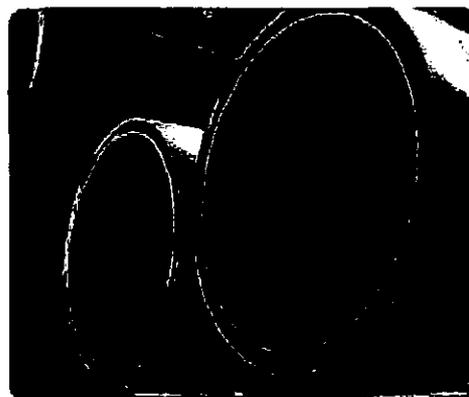
Construction Cost: approximately \$1.5 million

Contractor: Phase 1: H and J Construction

Phase 2: Emery and Sons Construction

Key Features

- Parallel HDPE butt fused Force main
- Sizes 6" through 10" DR21 Pipe
- Numerous air/vac valves and Pump Station connections
- DEQ and Lane County Permitting
- Over 20,000 lineal feet of force main installed



Project Team and Responsibilities:

1. Branch Engineering, Inc.: Project Management, SPWF Funding coordination, Route Planning, DEQ/Lane County permitting, Civil Design, Construction Management
2. Wobbe and Associates: Surveying and Construction Staking

Project Description

Two primary goals drove the Rhododendron Drive Force Main project. First, was to replace an aging and rapidly failing Asbestos Cement wastewater Force main that extended from the sewage treatment plant to near 35th street along Rhododendron Drive. Second, the dual force mains were extended to the northwest extent of the UGB near the Driftwood Shores hotel to provide service to recently annexed property. The project required removing and working around failing asbestos cement pipe, bypass pumping, surface restoration, valving, and air release assemblies.

Complementary to the force main, Branch Engineering designed and oversaw construction of the Fawn View, Bonnet Way, and Heceta Beach Pump Stations which were constructed and connected to the force mains in 2009 and 2010. The Driftwood Shores has abandoned its wastewater treatment system and is now served by city sewer. The project was finished ahead of schedule and under budget largely due to cooperative agreement co-locating the force mains in a trench with fiber optic for large cost savings.



**Project: 52nd Street Gravity Collection System Wastewater Pump Station
(Element of Spruce Street LID)**

Client: City of Florence, Oregon
Reference: Mike Miller, Public Works Director, 541-997-4106
Status: Construction completed 2009

Key Staff:

Scott Olson, PE Project Manager/Engineer
Chris Irvin, PE Assistant Project Manager, QA/QC
Lane Branch, PE Principal in Charge
Jeff Andreason, Civil Designer

Construction Cost: approximately \$400,000

Contractor: Gravity Collection: Ray Wells, Inc (completed 2008)
Pump Station: Jal Construction (completed 2009)

Key Features

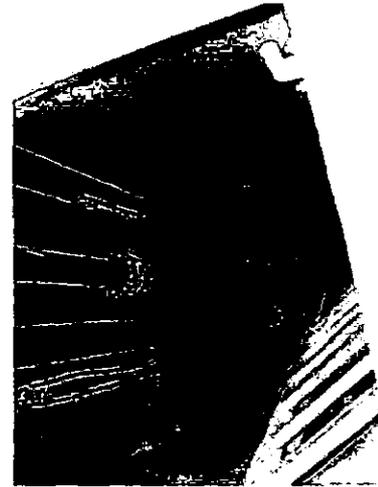
- 22' Deep Wetwell and Gravity Sewer
- Easement Acquisition
- ODOT, DEQ, and City of Florence permitting
- 2,000 feet of deep Sanitary Sewer
- 1,500 feet of 6" Force main
- Duplex 15 hp wastewater pump station
- High groundwater/Dewatering

Project Team and Responsibilities:

1. Branch Engineering, Inc.: Easement description and acquisition, Project Management, Route Planning, DEQ/city of Florence permitting, Hydraulic Modeling, Civil Design, Construction Management,
2. Wobbe and Associates: Surveying and Construction Staking

Project Description

The 52nd Street Pump Station and gravity sewer project was constructed to provide wastewater service to the Spruce Street LID and ultimately the entire northeast portion of the Florence UGB. Groundwater was within a few feet of ground surface for most of the project requiring extensive dewatering. Approximately 300 feet of the sewer was installed at approximately 20' depths. A temporary construction easement was necessary to install the deep pipe and provide room to operate dewatering equipment. The pump station also included installing an odor control system and backup diesel generator. The project was completed adjacent to and within ODOT right of way. The pump station facilities required a conditional use permit from the city of Florence. The pump station has been operation since 2009. The project was completed on time and within budget.





Project: Florence Trunk Sewer- Phase 2

Client: City of Florence, Oregon

Reference: Mike Miller, Public Works Director, 541-997-4106

Status: Current Design Project

Key Staff:

Chris Irvin, PE Project Manager/Engineer

Scott Olson, PE QA/QC Manager

Lane Branch, PE Principal in Charge

Mike Dunaway, Civil Designer

Ron Sather, Project Inspector

Ron Derrick, PE, Geotechnical Engineer



Construction Cost: \$1.9 million

Key Features

- DEQ/CWSRF/Federal Funding
- Asbestos Pipe Removal
- ODOT Permitting
- 9000 lineal feet of 15" through 10" Sanitary Sewer
- 90' bore for 8" Sewer Line
- 90' bore for 8" Water Line
- 6 to 18 feet sewer depths
- High Groundwater/ Dewatering

Project Team and Responsibilities:

1. Branch Engineering, Inc.: Project Management, DEQ Funding coordination, NEPA Environmental Clearance documentation, Route Planning, Permitting, Civil Design, Construction Management/Inspection
2. Wobbe and Associates: Surveying and Construction Staking

Project Description

The second phase of the trunk sewer project involves primarily constructing a parallel 12" and 15" sewer in Oak Street and Highway 101 rights of way. Approximately 9,000 feet of pipe will be installed. Some removal and replacement of the existing 10-inch and 8-inch asbestos cement sewer lines are also included in the project. A waterline and sewer line are required to be bored under Highway 101 as part of the project. The sewer is expected to be deep in places approaching 20' depth along highway 101 at the northern terminus of the project.

Before choosing the current route Branch spent significant effort evaluating different alignments in order to determine the lowest cost, feasible route. In order to complete the work Branch will obtain the necessary permits from DEQ, City of Florence, and ODOT. Additionally, temporary and permanent easements may need to be acquired to complete the boring and deep sewer work along HWY 101. The project is scheduled for construction in the summer of 2011.



Project: Spruce Street Extension (Project within Spruce Street LID)

Client: City of Florence, Oregon

Reference: Mike Miller, Public Works Director, 541-997-4106

Status: Project Complete 2008

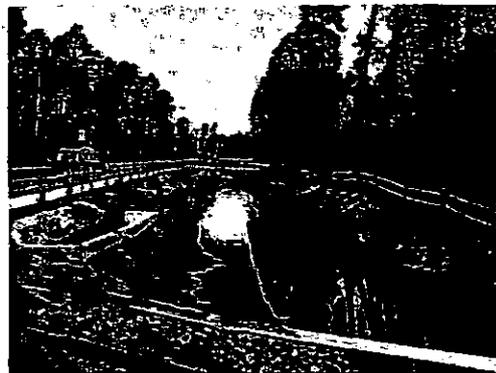
Key Staff:

Scott Olson, PE Project Manager/Engineer

Chris Irvin, PE Assistant Project Manager, QA/QC

Lane Branch, PE Principal in Charge

Jeff Andreason, Civil Designer



Construction Cost: approximately \$700,000

Contractor: Ray Wells, Inc (completed 2008)

Key Features

- Storm Drainage Swale grading and planting
- Wetland mitigation, Wetland Banking
- ACOE, DSL, Lane County permitting
- High groundwater/Dewatering
- 1400' of new street, sidewalk, and utilities



Project Team and Responsibilities:

1. Branch Engineering, Inc: LID planning, easement description and acquisition, Project Management, ACOE/DSL/DEQ/Lane County permitting, Stormwater Modeling, Civil Design, Construction Management
2. Wobbe and Associates: Surveying and Construction Staking
3. Environmental Solutions: Wetland Delineation, JPA preparation, Wetland monitoring

Project Description

The Spruce Street LID was formed to extend utilities including a street, storm drain, sewer, water, to unserved property north of Munsel Lake Road. The project required both temporary and permanent wetland impacts which required preparation individual permit application. Permanent impacts at the beginning of the project were addressed through onsite mitigation. Stormwater management was required including DEQ stormwater review.

Approximately 1400' of new road was constructed after acquiring right of way from adjacent property owners. Branch prepared and managed joint permit applications, Lane county permits, and DEQ stormwater permits. Extensive stormwater design, modeling, and management facilities were necessary to complete the project.



Project: Pioneer Valley Estates Waterline Extension

Client: City of Coburg, Oregon

Reference: Don Schuessler, City Administrator, (541) 682-7850

Status: Project Complete 2004

Key Staff:

Scott Olson, PE Project Manager/Engineer

Jeff Andreason, Inspector

Lane Branch, PE Principal in Charge

Construction Cost: \$150,000

Contractor: Delta Construction

Key Features

- Nearly 5000-feet of 8" C900 waterline
- Installed in road shoulder
- Lane County permitting
- Asbestos pipe disposal
- Connection to existing Hydrants and pressure tank

Project Team and Responsibilities:

1. Branch Engineering, Inc.: Project Management, Civil Design, Construction Management, Construction Staking

Project Description

The PVE Waterline project extended an 8-inch waterline approximately 1 mile north from the city limits to the Pioneer Valley Estates subdivision. The project was necessary in order to replace a failing and contaminated water system owned by the city of Coburg. The project was completed within the road shoulder of north Coburg road, a Lane County road. The project was successfully completed in the fall of 2004.





Project: Wetleau Drive Utility and Street Extension

Client: City of Lowell, Oregon

Reference: Chuck Spies, City Administrator, City of Lowell, Oregon 541-937-2157

Status: Construction Completed: 2010

Key Staff:

Renee Clough, PE, PLS, AICP Civil Engineer

Mike Dunaway, Designer

Gary Cartier, PLS Project Surveyor

Project Description

- 1080 lineal feet of sanitary sewer (including 540 lineal feet of deep sewer)
- 1500 lineal feet of water main (including 140 lineal feet of minimal sanitary sewer main separation).
- 1450 lineal feet of roadway (350 lineal feet designed by BEI)
- 525 lineal feet of storm sewer

As City Engineer, BEI designed public improvements for two adjacent projects with concurrent construction. The first phase was a team effort with Lane County to design new street and utility infrastructure for the City of Lowell. For the second phase, BEI designed an extension of the phase one roadway, sewers and utilities through an adjoining property to an existing street stub to create street and utility connectivity.

Scope of Work

- *Designed extensions of sanitary sewer, water main, storm sewer, roadway and utilities*
- *Ensured design complied with federal grant and wetland requirements*
- *Coordinated with Lane County on design, bidding and construction inspection*

BEI's role in the public improvements portion of the first phase was to design the extension of the sanitary sewer and water systems and to coordinate with the utility companies to prepare/obtain designs for their facilities. This phase had federal grant funding and extensive wetlands that both contributed non-standard design criteria. BEI concurrently designed an extension of the roadway and utilities that was constructed.



ROWA has provided site acquisition services for water reservoirs, well sites, wastewater treatment plants, lift stations, and pump stations; permanent easements for smaller facilities, pipelines, and access as well as temporary easements for construction and staging for numerous local public agency water and sewer infrastructure projects in Oregon and Washington over the last 20 years.

ROWA is a small company and our organization is designed to provide accountability and effective interaction within the firm and with our clients and other stakeholders. All services in a project are managed by a Coordinator, reporting to the Principal who is the Right-of-Way Manager for all projects.

The Coordinator is the communication link between ROWA, the City, the engineer and other stakeholders and manages the scope, schedule, budget, ROWA staff, ROWA sub-consultants and status reporting. The Coordinator is responsible for Quality Assurance (understanding of the scope of work) and Quality Control (conformance to regulations/accuracy). Responsibilities include developing a schedule for the activities and placement of staff assignments to ensure that we meet goals and deadlines. The Coordinator also makes certain that appropriate records are kept to document acquisition activities and that internal reporting and communications with the Principal / R/W Manager are ongoing.

The Coordinator will assign an internal team to the project consisting of a Project Assistant, at least one Negotiation Agent, and Support Staff as needed by the project.

To assure continuity of service, the Project Assistant supports the Coordinator and is closely involved with the day-to-day activities of the project. This person has a thorough understanding of project needs and status. The Coordinator, Assistant and Support staff are responsible for maintenance of the real estate file, cost estimating related to alignment studies, title coordination, appraisal coordination and closing activities. The Agents are responsible for preliminary contacts and negotiations with property owners.

ROWA key team members include:

- R. David Feinauer, Principal, Acquisition Agent, Relocation Specialist
- Shannon L. Fish – Project Coordinator, Relocation Reviewer
- Nathan R. Pool – Acquisition Agent, Relocation Specialist
- Traci Sherrer – Acquisition Agent, Relocation Specialist

ROWA Representative Projects

City of Aurora

Wastewater Treatment Facility

City of Beaverton

Farmington Road Detention Site

Hanson Well Site Acquisition

Hanson Well Site Acquisition Phase 2

Hanson Well Site Acquisition Phase 3

City of Bend

Hwy 97 N. Transmission Line

Outback to Mt. Washington Transmission Main

City of Coburg

Coburg Water Reservoir & Pipeline System

Coburg Wastewater Treatment Plant & Outfall

City of Dayton

Wellsite Acquisition

City of Fairview

Fairview Wellsite

City of Gervais

Wastewater Treatment Plant

City of Gresham

Springwater Trail Interceptor

Gresham Groundwater

City of Hillsboro

Reservoir Siting Study & Acquisition

City of Junction City

S. Industrial Corridor Water & Sewer Infrastructure

City of Klamath Falls

Klamath Falls Water Reservoir Site Acquisition Project

City of Lake Oswego

Waluga Water Reservoir Expansion

Sewer Treatment Plant Expansion

River Grove Sewer

City of Milwaukie

NE Sewer Project

Portsmouth Force Main Project, City of Portland BES

The Portsmouth Force Main project is part of the Willamette River CSO Program. The pressurized, 66-inch diameter, three mile long pipe will carry combined stormwater and sewage from the Swan Island Pump Station to the existing Portsmouth Tunnel near N Carey Avenue and N Willamette Boulevard. ROWA provided R/W route alignment cost studies, preliminary contacts for Rights of Entry, title coordination, appraisal & appraisal review coordination, and acquisition services for a property located at N. Carey and N. Willamette Blvd. Relocation services were also provided for property owner to move personal property on-site and temporarily use automotive service bays with access on north side of building due to temporary closure of bays on west side of building for shaft construction. A tenant on the same property, a non-profit food co-op, was required to relocate their business to a new location. Locating and securing a suitable replacement location was extremely difficult due to non-profit nature, inability to pay market rent and requirement to stay nearby due to client base.

This was a very sensitive relocation due to the public exposure of the CSO projects, political exposure of the City if a solution could not be identified and delicate nature of the non-profit to ensure their success during and following the relocation of the business. ROWA, along with BES staff, was able to locate a replacement location for the food co-op and successfully relocated the business although it was a complex and lengthy claims process due to the amount of work required to make the location suitable for their business and meet City code. In the second stage of the project, ROWA provided acquisition and relocation services for 11 of the 13 additional properties located on Swan Island and the bluff above. ROWA successfully negotiated a settlement on 8 properties. Linda Birth at PBOT handled acquisition of 2 properties and 3 were forwarded to City Attorney. ROWA provided personal property only relocation services to 3 owner occupants and 5 tenants.

Ash Creek Sewer Project, City of Portland BES

The City inherited the existing sewer line when the properties were annexed into the City and not all properties had easements for the sewer line recorded in County deed records. The existing degraded sewer required replacement to eliminate chronic surcharging and overflows of the Ash Creek sanitary collector sewer. The constructed was completed with a combination of pipe bursting and open trenching. This project provides and example of inter-bureau coordination with PBOT and BES. PBOT prepared the administrative valuations for low value impacts and obtained appraisals for properties with significant impacts. Traci Sheerer conducted negotiations with 22 property owners and acquired 20 by voluntary agreement. The remaining 2 were turned over to PBOT to complete negotiations.

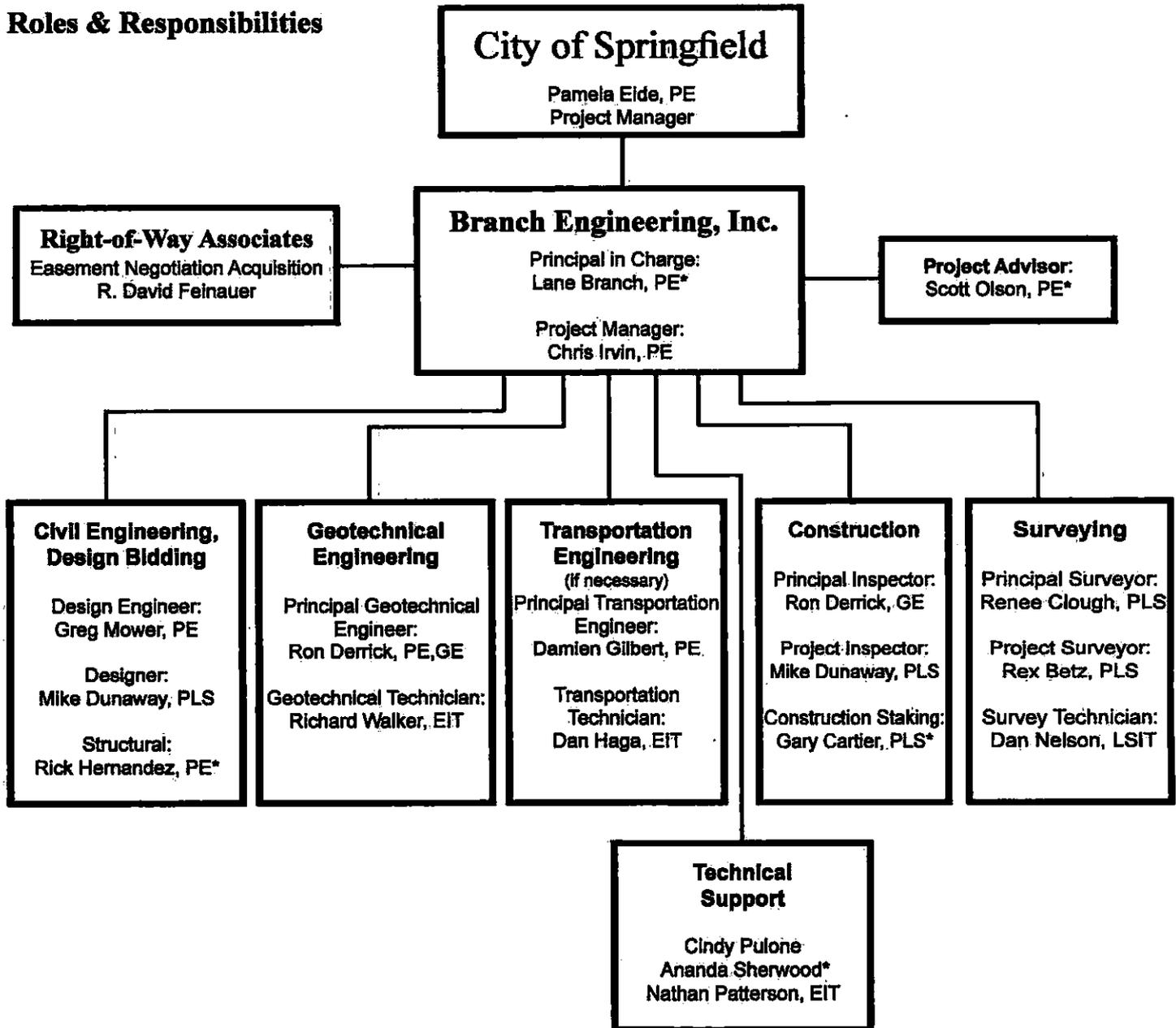
NE Sewer Project, City of Milwaukie

ROWA acquired permanent sewer easements and a pump station easement together with temporary construction easements from 34 properties. The project was constructed in phases and acquisition was done in anticipation of the construction of the upcoming construction segments. ROWA also provided personal property

Team Organization

Branch Engineering has the in-house specialized expertise necessary to skillfully complete the civil design, geotechnical engineering, inspection and land surveying requirements. Right of Way Associates has been added to our team should any easements need to be acquired. Our team is vertically integrated under one roof thus minimizing sub-consultants coordination time, prime consultant mark-ups and giving the principal engineer more authority to control project timing and costs. Below is the proposed organizational chart with a detailed outline of our project team:

Roles & Responsibilities



* Springfield residents working in downtown Springfield

Key Personnel

Branch Engineering, Inc. presents an excellent project team of professionals with extensive experience and the skills necessary for the successful completion of the 58th St. Relief Sanitary Sewer Line and Bypass Manhole project. Refer to the organizational chart referenced previously shows a detailed outline of our project team. Our key personnel are seasoned and experienced at delivering large infrastructure projects which is summarized below and detailed on the individual resumes on the following pages.

Branch Engineering, Inc.

Mr. Lane Branch, P.E. has over 15 years of experience in managing and designing public improvement projects in the city of Springfield. He has also been the principal engineer for many municipal pipeline projects including the Florence Trunk Sewer and Rhody Drive Forcemain, and is managing the Veneta Water Pipeline Project. Lane will be the principal-in-charge for this project and will maintain workflow and schedules, and provide QA/QC reviews.

Scott E. Olson, P.E. will be an advisor to the team as necessary through the duration of the project. Through his past experience as City Engineer for Corvallis, Benton County Engineer, and providing consulting city engineering services to City of Florence and City of Coburg, he brings over 40 years of municipal engineering expertise to the project. His knowledge of capital infrastructure planning and construction will be an asset to the team.

Chris Irvin, PE will be the project manager and the primary point of contact for the City. Over the past six years at Branch Engineering, Chris has been assisting Scott Olson on City of Florence and City of Coburg planning and improvement projects. He has been involved in the design and management for numerous municipal pipeline projects such as the Florence Trunk Sewer, Munsel Creek Relief Storm Sewer, and Rhododendron Drive Forcemain. Chris is skilled in deep sewer design, public bid documents preparation, and contract administration.

Ron Derrick, P.E. will be the geotechnical engineer for the project and will oversee inspection services during the construction phase. Ron has over 24 years of experience in the geotechnical engineering field. He has worked on numerous sewer routing projects and is familiar with the subsurface soil conditions that exist in the Jasper/Natron area. In his six years of experience with City of Salem public works, Ron had oversight of the geotechnical aspects of capital projects, as well as the utility inspection team for the City. Ron has a background in materials testing and special inspection that includes soil, aggregate, concrete and steel as well as ground penetrating radar, seismic reflection studies, pipe line, manhole vacuum testing.

Greg Mower, P.E. will be the design engineer for the project. Greg has over 14 years experience in public infrastructure design.

Key Personnel (continued)

Mike Dunaway, PLS will be the design technician and ACAD drafter for the preparation of the construction drawings. He will also be the chief inspector for the project. Mike has over 16 years of experience with public improvement design and field inspection from his duties within the capital improvements department of the City of Eugene. He has been trained in confined space entry and trench safety by OR-OSHA.

Rex Betz, PLS will be the surveyor manager responsible for field data collection, construction staking, as-builts and legal descriptions. He has been a professional land surveyor for over 30 years. Rex has received numerous comments from the City of Springfield survey department staff commending him on his thoroughness and completeness on numerous survey projects reviewed by city staff.

Right-of-Way Associates, Inc.

R. David Feinauer is a licensed Real Estate Broker in Oregon and Washington and an Oregon Certified General Appraiser. He is the owner and president of Right-of-Way Associates, Inc, which was organized in 1990 as a full service right-of-way acquisition firm emphasizing service to the public sector. He has oversight of all projects including sub-contracted services.

Shannon Fish has been a project coordinator since 2001. She has a background in project management, human resources and accounting with a large property management firm. She is the Managing Coordinator in the office responsible to manage the work of Acquisition Agents, Relocation Specialists, Project Assistants and Support staff.



M. Lane Branch, P.E.
Principal Civil Engineer



Branch
Engineering, Inc.

As a Principal of Branch Engineering, Inc., Lane has been a team leader on a wide variety of public infrastructure projects in the southern Willamette Valley. He specializes in planning, designing, permitting, and construction oversight of sewer and street infrastructure in the Eugene-Springfield area. Lane is known for using a collaborative approach with local and state permitting agencies to focus project design and implementation efforts in a constructive and efficient manner. He has managed numerous projects with site infrastructure costs in excess of \$5 million.

REGISTRATION

Professional Civil Engineer
Oregon - #52996PE

EDUCATION

Oregon State University
B.S. Civil Engineering, 1995

SHORT COURSES

XP SWMM Hydraulic Computer Modeling

"Pump Station Design Seminar" Oregon
Chapter of APWA - 2000

"Asphalt Pavement Design" Asphalt
Pavement Institute

"Wetlands Delineation and
Management Training

EXAMPLE PROJECT EXPERIENCE

- **Jasper Meadows Phases 1-7, Springfield Oregon**
Planning and construction of street and sewer infrastructure for a 100-acre development in the Jasper-Natron area. Project included wetland permitting, 10,000 feet of public sanitary sewer piping.
- **City Engineering Services, City of Veneta, Oregon**
Provide variety of municipal engineering services including policy development, facility planning and financing, development review, and project management.
- **Veneta Water Pipeline Project, Veneta, Oregon**
Providing project management services for \$17 million, 9-mile long water transmission pipe.
- **City of Florence - 6th Street Storm Sewer Reconstruction**
Design upsizing of 18-inch through 30-inch storm pipes within an existing improved roadway. Assisted with bid document preparation and construction administration.
- **Spruce Street Phase 2 LID, Florence, Oregon**
Design of 1,500 feet of 42-inch diameter capital storm sewer pipe. Storm pipe is within Highway 101 (ODOT right-of-way).
- **Marcola Meadows, Springfield, Oregon**
Planning and design of street and sewer infrastructure for 100-acre mixed use development.
- **Gravity Trunk Sewer Replacement, Florence, Oregon**
Planning and design of 17,000 lineal feet of 12-inch through 21-inch trunk sewer replacement.
- **MountainGate Phases 1 & 2, Springfield Oregon**
Design of public street and sewer infrastructure for a 71-lot complex hillside residential subdivision. Sewer construction required rock excavation, and dewatering systems.



Chris Irvin, P.E.
Civil Engineer



**Branch
Engineering, Inc.**

An Environmental Engineering graduate of Oregon State University, Mr. Chris Irvin has six years experience in municipal planning, design engineering, and contract administration. He has assisted Mr. Scott Olson in providing city engineering services and project delivery to the cities of Coburg and Florence, in addition to designing stormwater management systems for private clients. Major tasks have included master planning, modeling of stormwater systems, financial planning, capital improvement planning, project budgeting, feasibility analysis, site planning, contract administration, and environmental permitting. Chris welcomes challenging stormwater projects drawing upon graduate level courses in advanced hydrology and experience using computer modeling to develop innovative solutions.

REGISTRATION

Professional Civil Engineer
Oregon - #76413

EDUCATION

Environmental Engineering B.S.
Oregon State University,
Magna cum Laude

TECHNICAL SERVICES OFFERED

- ✓ Stormwater Modeling (EPA SWMM)
- ✓ AutoCAD design and layout
- ✓ Financial Planning and Cost Estimating
- ✓ Stormwater Design and Management Plans
- ✓ Environmental Permitting
- ✓ Water Quality BMP Design
- ✓ Specifications and Contract Administration

EXAMPLE PROJECT EXPERIENCE

Water Master Plan Update, City of Coburg, Oregon
Developed an update of the city's water master plan.

Water Conservation and Management Plan, City of Coburg, Oregon
Developed plan based on state guidelines to implement water conservation strategies.

Spruce Street LID, City of Florence, Oregon
Created a detailed computer model of largest drainage basin in Florence to design proposed pipe system. Produced design report amended City's Stormwater Master Plan. Produced stormwater management plan for environmental permitting. Produced contract documents and administered construction and bidding processes.

Maple Street Stormwater & Sewer Replacement, City of Florence, Oregon
Created SWMM model of aging and deteriorated stormwater system, prioritized pipe replacement priorities, Scoped Project based on budget requirements, produced contract documents, administered bidding and construction processes.

Spruce Village, Florence, Oregon
Designed a unique and extensive stormwater management system with infiltration swales, wetland ponds, subsurface drainage facilities, and a non-traditional street design. Provided detailed Stormwater Plan to the City and regulatory agencies.

Marcola Meadows, Springfield, Oregon
Master Plan and Stormwater Management Plan and Drainage Study.

Water Rate Study, City of Coburg
Worked with staff and citizen committee to update water rates.

Feasibility Study, City of Coburg, Oregon
Analyzed three scenarios for planned water reuse coincident with construction wastewater treatment plant, for technical and financial feasibility over 50 year planning period

Rhododendron Drive Force Main Extension and Replacement, City of Florence, Oregon
Part of design team responsible for replacing failing pressure sewer and extending sewer services with nearly 5 miles of HDPE pipe.

Fawn Ridge Wastewater Pump Stations, City of Florence, Oregon
Designed two wastewater pump stations under very tight timeline. The Fawn View pump station is a critical pump station in the extension of the city's sewer network. Performed design, wrote specifications, permitting, contract documents, and contract administration.



Scott Olson, P.E.
Senior Civil Engineer



**Branch
Engineering, Inc.**

A graduate of Oregon State University, Mr. Scott E. Olson, P.E. has over 36 years of public works management and engineering experience. After 25 years of local government service in the mid Willamette Valley he is now offering consulting services to a variety of public agencies. Responsibilities have included capital improvement planning, utility and transportation system planning, private funded public improvement permitting and construction monitoring, traffic engineering and traffic control systems, pavement management systems, bridge inspection and maintenance management systems, local improvement districts, municipal airport, municipal transit system management, street lighting systems, geographic information systems, public policy analysis and legislative policy development. Mr. Olson's project delivery and designs are known to be practical, and constructible. His approach is grounded in the knowledge gained from his years in the field working as a construction inspector.

REGISTRATION

*Professional Civil
Oregon - #12579PE*

EDUCATION

*Oregon State University
B.S. Geography*

MEMBERSHIPS

*Chair, Bicycle and Pedestrian
Sub-Committee, ODOT / APWA
Joint Specifications and Drawings*

*Technical Advisory Committee,
Transportation System Plan,
City of Albany, Oregon*

Construction Specifications Institute

*Technical Advisory Committee,
North Philomath / West Corvallis
Specific Area Plan*

EXAMPLE PROJECT EXPERIENCE

City Engineer Services, City of Florence, Oregon
Provide variety of municipal engineering services including policy development, facility planning and financing, development review, and project management.

City Engineer Services, City of Coburg, Oregon
Provide variety of municipal engineering services including policy development, facility financing, development review, and project management.

Water Master Plan Update, City of Coburg, Oregon
Developing an update of the water plan to conform with an update of the City's Comprehensive Plan.

Pioneer Valley Estates Water Transmission and Intertie, City of Coburg, Oregon
Design and construction engineering on the 5,000 feet of waterline eliminating a contaminated well source.

Various School Ground / Pavement Renovations, Eugene School District 4J, Eugene, Oregon
Completed pavement renovation and expansions at eight elementary and middle schools over a four year period.

North Highway 101 Local Improvement District Design Road Report, City of Florence, Oregon
Prepared of preliminary design report for the provision of streets and utilities to a 400 acre area of north Florence.

Glenwood Water Master Plan, Springfield Utility Board, Springfield, Oregon
Completed hydraulic model and master plan, for conversion of supply from EWEB to SUB.

Veneta WWTP, Veneta, Oregon
Prepared Reclaimed Water Re-use Plan, Biosolids Management Plan, and O & M Manual conforming to DEQ requirements for the states first Biolac facility, including a hybrid poplar plantation.



Greg A. Mower, P.E.
Civil Engineer



Greg Mower has over 13 years designing and managing civil engineering projects, specializing in residential and commercial development. He has considerable knowledge of the design and construction of streets, water, sanitary sewer and storm sewer systems. He has spent several years as a project manager, working with clients and contractors to coordinate successful design and completion of projects ranging from two lot partitions to a multi-million dollar office complex.

REGISTRATION

*Professional Civil Engineer
 Oregon - #53800PE*

EDUCATION

*Oregon State University
 B.S. Civil Engineering*

SHORT COURSES

- PC SWMM Hydraulic Computer Modeling*
- "Low Impact Residential Land Development"*
- "Storm Sewer System Design"*

EXAMPLE PROJECT EXPERIENCE

The Child Center, New Out Patient Building, Eugene Oregon
 Provided site plan, grading and paving plan, utility hook-ups and grade review, coordination with architect and project management.

Santa Clara Crossing, Eugene, Oregon
 Mixed use commercial development project with on-site utility design and layout for preliminary plans.

Willamalane Parks and Recreation District, Springfield, Oregon
 Provided preliminary engineering support for a two phase improvement at the Jack B. Lively Memorial Park.

High Street Lofts, Eugene, Oregon
 Lead civil engineering on a residential development. Design onsite paving, grading and utilities

Valley River Station, LLC, Eugene, Oregon
 Multi-phased redevelopment of an existing commercial site. Provided civil engineering design for Phase 1 building pad grading, paving and on-site utilities. Phase 2 required coordination with the architect and landscape architect for removal of existing hardscapes and design of new parking and grading around existing building.

Relief Nursery, New Facility, Springfield, Oregon
 Provided site plan, grading and paving plan, utility hook-ups and grade review, coordination with architect and project management.

Les Schwab Tire Retail Store, Molalla, Oregon
 Worked with ODOT to determine Highway 213 frontage requirements and than designed it to ODOT specifications. Designed on-site infrastructure for the building and parking area. Provided grading plan and earth work quantities to contractor.

Corporate 212 Office Complex, Clackamas, Oregon
 Worked closely with client and local jurisdiction to meet strict storm water quality and quantity requirements due to location near a sensitive creek. Design water quality and detention facilities as part of water features of the building. Provided on-site construction management to client and contractor.

Ponte Cino Subdivision Phase 1 and 2, Clackamas, Oregon
 Designed infrastructure for Phase 1 and 2 with Phase 2 being only in the very preliminary stages. Provided layouts for Phase 2 to meet County Code requirements. Designed a regional water quality and detention facility associated with project. Worked with wetland scientists for the filling and mitigation of existing wetlands on site. Followed structural engineer's recommendations for a 20-25 foot high retaining wall for a roadway that crossed a creek.



Ronald Derrick, P.E., G.E.
Principal Geotechnical Engineer



**Branch
Engineering, Inc.**

Mr. Derrick has over 24 years of experience in geotechnical, environmental, and a material engineering consulting and 7 years of municipal civil engineering, land development and land use planning. Geotechnical experience has included subsurface site investigations, earthwork design and management, site assessments, hazardous waste remediation, and landfill design. His geotechnical experience has consisted of building site investigations, foundation design, and construction oversight for residential and commercial projects in Oregon and California. Ron has conducted small to large scale landslide investigations and remediation, deep fill settlement, liquefaction analyses, seismic hazard studies, and design and construction of multi-million cubic yard grading projects. Ron has also has experience in materials testing and special inspections of concrete, asphalt, masonry, structural steel, and various specialty construction methods such as pilings, in-situ pipe replacement, cement treated soils, and subsurface drainage systems, and deep signal pole foundations

REGISTRATION

*Professional Civil / Geotechnical Engineer
Oregon - #16170PE*

*Professional Civil Engineer
California - #46576*

EDUCATION

*University of Idaho
B.S. Geological Engineering*

*University of California, Davis
M.S. Course Work in Civil / Geotechnical /
Environmental Engineering*

PROJECT EXPERIENCE

City of Florence Water Treatment Plant
Performed geotechnical site investigation for replacement of failed concrete slab below two water treatment vessels.

City of Florence Rhododendron Drive
Performed geotechnical site investigation in area of pavement failures and provided mitigation options.

Interpretive Center and Pier, Florence, Oregon
Performed geotechnical site investigation for of parking lot, information center, and pier to extend into Siuslaw River below the Hwy 101 bridge on Bay Street.

Spruce Village, Fawn Ridge East and West, and Park Village Subdivisions, Florence, Oregon
Performed geotechnical oversight and fill evaluations during construction of these residential subdivisions.

Residential Building Lot Grading, Dunes City, Oregon
Geotechnical oversight of cutting and filling of hillside building pads on east side of Siltcoos Lake.

City of Eugene, Lauriewood Golf Course, Eugene, Oregon
Grading and paving plan

40+ Lot Residential Subdivision, Lincoln City, Oregon
Geotechnical investigation for preliminary design of hillside subdivision and public infrastructure.

City of Springfield, Mt. Gate Subdivision
Slope Study Evaluation.

City of Salem, Oregon
Technical reviewer of all geological/geotechnical reports for the City and Marion County under their current ordinances to conform with Statewide Planning Goal No. 7.

North Salem High School, Salem, Oregon
Conducted a Geotechnical investigation and performed foundation excavation oversight for construction of the football stadium replacement bleacher system for both the home and visitor sides. The home side bleachers are adjacent to a creek bank and within an area that had been previously filled.



Richard Walker, EIT
Engineering Intern



Branch
Engineering, Inc

Richard Walker has over 5 years conducting geotechnical investigations, managing construction monitoring and testing, performing geotechnical analysis, and designing civil engineering projects. Over his career, he has gained considerable knowledge and experience of soils mechanics, construction practices, and materials testing techniques. He has spent several years working with clients and contractors to

coordinate successful design and construction of projects ranging from school additions to landslide mitigation to multi-phase subdivisions. He is an ODOT Certified Density Technician. Richard brings a variety of knowledge and skills to the table and welcomes new challenges.

REGISTRATION

Engineer in Training - #79184EIT

*ODOT Certified Density
Technician - #44319*

EDUCATION

*B.S. Civil Engineering,
Portland State University*

COURSES

Soils Mechanics

Geotechnical Design

Slope Stability

*Unit Operations in Water &
Wastewater Treatment*

Environmental Fluid Mechanics

Advanced Reinforced Concrete Design

GIS for Civil Engineers

EXAMPLE PROJECT EXPERIENCE

West Side Elementary and Middle Schools, Salem, Oregon

Managed and provided construction monitoring services for site grading, building pad preparation, and parking lot construction for two new schools on this 50-acre development project.

Kolnonia Center, Eugene, Oregon

Conducted geotechnical investigation and provided geotechnical recommendations for the construction of a new tower structure and several student housing townhomes.

Central Presbyterian Church, Eugene, Oregon

Conducted geotechnical investigation and provided geotechnical recommendations for the partial demolition of the existing structure and construction of underground parking and several student housing townhomes.

PREVIOUS WORK EXPERIENCE WITH PAST EMPLOYERS

Silverton High School, Silverton, Oregon

Coordinated and conducted geotechnical investigation and provided geotechnical recommendations for the 135,000 square foot expansion onto several feet of undocumented fill. Managed and provided construction monitoring services for site grading, building pad preparation, athletic field and parking lot construction.

Sue Buel Elementary School, McMinnville, Oregon

Coordinated and conducted geotechnical investigation and provided geotechnical recommendations for the construction of this new elementary school. Managed and provided construction monitoring services for site grading, building pad preparation, and parking lot construction.

McMinnville High School, McMinnville, Oregon

Coordinated and conducted geotechnical investigation and provided geotechnical recommendations for the construction of additional classrooms and new athletic fields. Also, managed and provided construction monitoring services for site grading, building pad preparation and athletic field construction.

Washer Elementary School, Lafayette, Oregon

Coordinated and conducted geotechnical investigation and provided geotechnical recommendations for the addition to this elementary school. Also, managed and provided construction monitoring services for site grading, building pad preparation, and asphalt testing.

Portland Saturday Market Waterfront Expansion, Portland, Oregon

Provided construction monitoring and testing services for the expansion of Portland Saturday Market into Portland's Waterfront Park.



Mike Dunaway, P.L.S.
Engineering Technician



**Branch
Engineering, Inc.**

Mike is a designer and ACAD drafter for the preparation of construction drawings. He also serves in the capacity of construction inspector for some projects. Mike has over 16 years of experience with public improvement design and field inspection from his duties within the capital improvements department of the City of Eugene. He has been trained in confined space entry and trench safety by OR-OSHA.

REGISTRATION

*Professional Land Surveyor,
Oregon - #2337*

EDUCATION

*Oregon State University
B. S. Science Degree in Biology*

EXAMPLE PROJECT EXPERIENCE

Marcola Meadows, Springfield, Oregon

Mike is the key engineering designer on this large and important project in Springfield, the design of which is nearly complete. He has prepared signing, striping and roadway illumination plans for a new one-half mile \pm long collector roadway.

Rosewood Subdivision, Eugene, Oregon

Mike was the key civil engineer design technician to complete the design and drafting of the project which is now under construction.

City of Florence, Pedestrian Crossing, Florence, Oregon

Mike was part of a team that designed a pedestrian crossing on highway 101 in Florence that included the first ever on a state highway, a sign with a RRFB (rectangular rapid flashing beacons or strobes)

City of Florence, Trunk Sewer, Florence, Oregon

Mike is currently working on an 8,500' trunk sewer replacement in Florence, Oregon.

ARRA Paving Projects, Lebanon, Florence, & Cottage Grove, Oregon

Designer and draftsman of ARA paving projects and contributing traffic signal loop replacement for these projects

Submitted applications for access permits for ODOT

Highway 99 between Roosevelt and Barger; submitted applications for access permits for 'the Sponsor's project to ODOT to Highway 99; prepared drawings for the application for access permit (ODOT) for the Hoberg project in Florence, Oregon.

PAST EMPLOYMENT BY THE CITY OF EUGENE, OREGON

Mike was employed as a design technician and an inspector for the City of Eugene for 16 years, he was involved in the design and inspection of numerous public improvement projects including several sewer rehabilitation projects. His duties included traffic signal inspection at Willagillespie and Coburg Road; co-inspected signal at Terry and Royal; co-inspected multi-use pathway lighting at Royal and Greenhill; inspected temporary signal at West 11th and Danebo.



RENEE CLOUGH, P.E., P.L.S., A.I.C.P.
Principal Surveyor & Planner



**Branch
Engineering, Inc.**

Mrs. Clough has been working in Civil Engineering and Land Surveying industries since 2001. Mrs. Clough's background is in land development. Her experience includes boundary calculations; obtaining tentative approval for subdivisions and partitions; final platting of subdivisions and partitions; writing legal descriptions; stormwater collection and treatment systems; and parking lot grading. She is also responsible for preparing applications, coordinating with public agencies and clients, overseeing the drafting of maps and plans and supervising the surveying and planning staff at Branch Engineering.

REGISTRATIONS

*Professional Land Surveyor
Oregon- #69162*

*Professional Civil Engineer
Oregon- #69162*

*Certification American Institute of
Certified Planners (AICP) - #024172*

EDUCATION

*Oregon State University
B.S. Civil Engineering, 2001*

*University of Nottingham, England
Exchange student – Civil
Engineering 1 year (2000-2001)*

*Daido Technical Institute, Japan
Exchange student – Civil Engineering (Aug.
2000)*

MEMBERSHIPS

*Professional Land Surveyors of Oregon (8
years): Current Chapter President – Elect,
former Chapter Treasurer /
Secretary (1 year),
2007 Associate Member of the Year*

*Former Student Chapter American
Society of Civil Engineers
(2 years): steel bridge team member (2 years)
and chapter historian (1 year)*

*National Society of Professional Surveyors
(2 years)*

COMMUNITY INVOLVEMENT

*Girl Scouts (22 years): Council Board of
Directors (2 years), Property Committee (2
years)*

*AFS volunteer (8 years):
High School Exchange Student
Host Parent (1 year)*

EXAMPLE PROJECT EXPERIENCE

Santa Clara Crossing, Eugene, Oregon
Existing conditions plan, legal lot review and property line adjustments for new commercial development.

GrainMillers, Junction City, Oregon
Topographic and recorded boundary survey of 100+ acre site for master planning of new industrial campus

Glory Bee Foods, Inc., Eugene, Oregon
Legal lot review and validation to prepare site for new industrial subdivision.

City of Springfield, Oregon
As-built mapping of public facilities, property line adjustment with private land owner and recorded boundary survey.

Valley River Station, Eugene, Oregon
Existing conditions mapping and legal lot report to sue for master planning and engineering design of a new commercial development.

Beacon Pointe, Eugene, Oregon
Tentative approval and final platting of an eight (8) lot residential subdivision with a Goal 5 waterway

Civic Stadium / Eugene School District, Eugene, Oregon
Review ownership history and deed restrictions and prepare mapping for use in litigation

City of Lowell, Oregon
Provide city engineer services

Eugene Water & Electric Board (EWEB), Eugene, Oregon
Topographic and boundary surveying for new construction at multiple sites

City of Eugene, Oregon
Existing conditions plans at multiple sites and property line adjustments with private land owners

Turnberry Subdivision, Eugene, Oregon
Tentative approval and final platting of a 14 lot residential subdivision

Springfield School District, Springfield, Oregon
Existing conditions plan, recorded boundary, easement document preparations and independent check of construction accuracy at two new school

St Vincent de Paul, Lowell, Oregon
Tentative approval, final platting and design of sanitary sewer and utility improvements for a 21 lot low income residential subdivision



Rex Betz, P.L.S.
Survey Manager



Branch
Engineering, Inc.

Mr. Betz, Branch Engineering Survey Manager, was licensed as a Professional Land Surveyor in California in 1983 and Oregon in 1993. His background includes construction; property and ALTA surveying; road right-of-way determination; mapping; preparation of legal descriptions; easements; concurrences; and partition and subdivision plats. As Survey Manager, Mr. Betz is Branch Engineering's point of contact with clients and other jurisdictional agencies and he is responsible for preparing cost estimates and scheduling staff.

REGISTRATION

Professional Land Surveyor
Oregon - #2606

Professional Land Surveyor
California - # 5251

Certified Water Rights Examiner
Oregon - #400

EDUCATION

Cañada College
Redwood City, CA.
A.A., Major University
Studies, 1990

Cañada College
Redwood City, CA.
A.S., Accounting, 1987

Attended, Small Business Administration,
San Francisco State University,
San Francisco, California

SHORT COURSES

Synchro & SlimTraffic Software Training

Walkway Facilities Design

Traffic Calming Techniques

Bikeway Facilities Design

Public ADA Design

MEMBERSHIPS

Professional Land Surveyors of Oregon
(16 years): former Chapter
Treasurer/Secretary (8 years)

COMMUNITY INVOLVEMENT

USA Dance (5 years)

EXAMPLE PROJECT EXPERIENCE

Civic Stadium / Eugene School District, Eugene, Oregon
Review ownership history and deed restrictions and prepare mapping for use in litigation

Eugene Water and Electric Board (EWEB), Eugene, Oregon
Topographic survey of a proposed reservoir site and GPS data to allow comparison of the proposed site to an existing site a mile away

Salem-Keizer School District, Salem, Oregon
Existing conditions plan and boundary calculation for master planning and engineering design of two new schools on a 48 acre site.

Housing and Community Services Agency (HCSA), Eugene, Oregon
ALTA survey and recorded boundary survey for an affordable housing project.

St. Vincent de Paul, Lowell, Oregon
Final platting for a 22 lot affordable housing project for a residential subdivision

MountainGate Subdivision, Springfield, Oregon
71 lot residential subdivision

Jasper Meadows, Springfield, Oregon
Multi-phase residential subdivision, currently eight (8) phases completed

Central Presbyterian Church, Eugene, Oregon
Topographic survey and boundary calculation at tow sites

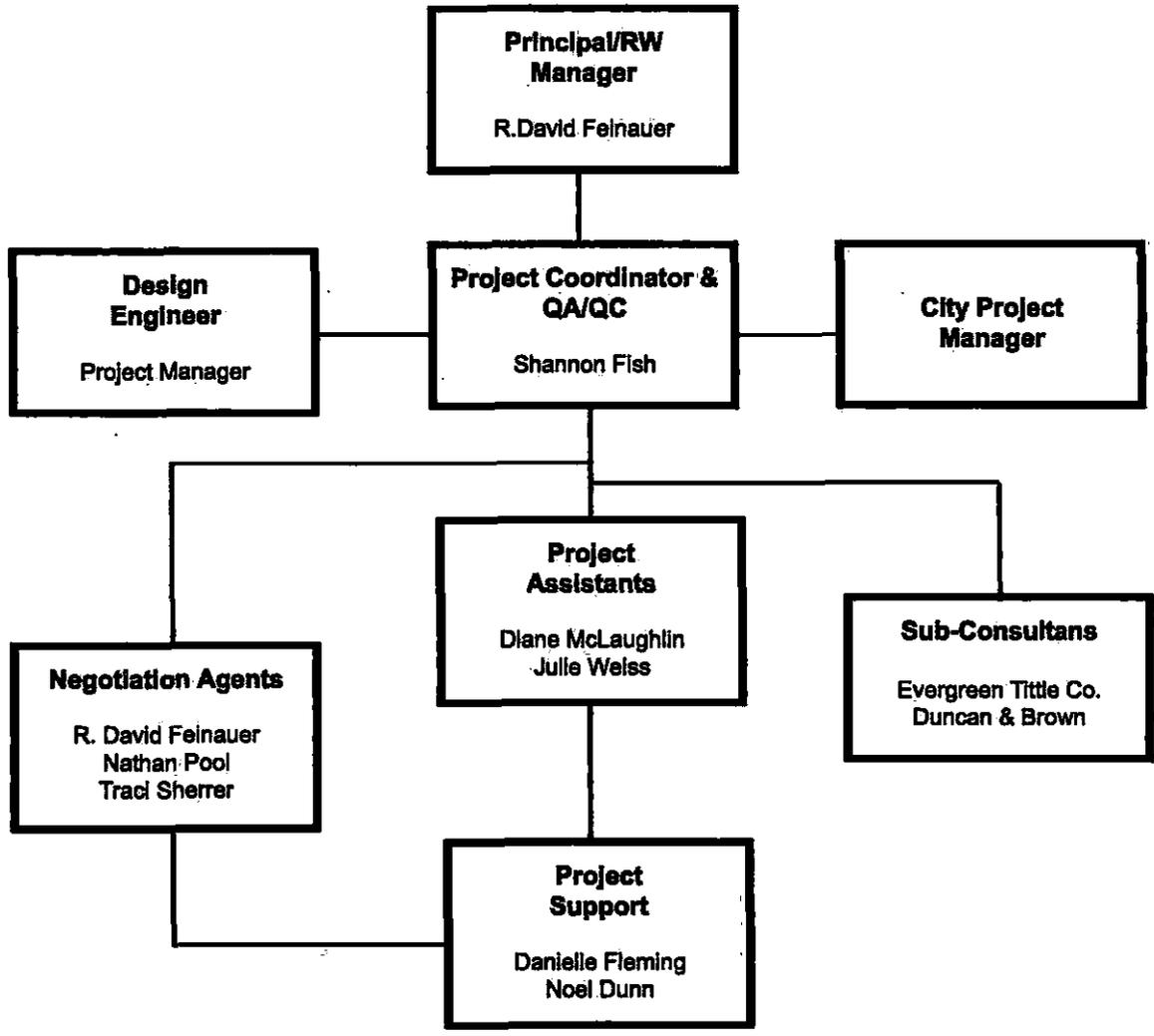
Countrywide Bank, Lane County, Oregon
Elevation certificate and Letter of Map Amendment (LOMA) application

Liberty Professional Center, Springfield, Oregon
Five lot subdivision to be developed with corporation headquarters

Hawes Professional Center, Springfield, Oregon
Topographic Surveying, boundary calculation and construction surveying to support the design and construction of a new corporation headquarters.

Santa Clara Crossing, Eugene, Oregon
Boundary calculation and property line adjustments for a new commercial development

ROWA Organization Chart



ROWA

R. David Feinauer

Right-of-Way Manager, Acquisition Agent & Relocation Specialist

Education

University of Southern
California
Masters, Public
Administration

University of California
at Los Angeles
Real Estate Certificate

Brigham Young
University
B.A., Political Science,

Certifications

Licensed Real Estate
Broker - Oregon &
Washington

State Certified General
Appraiser - Oregon

Affiliations

Member,
International Right-of-
Way Association

Mr. Feinauer has provided appraisal, negotiation, acquisition and relocation services as an employee of a public agency and as a consultant for over 40 years. He is the principal of ROWA which has been in business for 20 years. He is familiar with the processes and requirements of the Uniform Act the ORS regulations that guide public acquisition in the State of Oregon. David has acquired a large number of sites for water reservoirs, wastewater treatment plants, pump stations and associated pipelines. He will be the right-of-way manager in addition to working as a negotiation agent to acquire property rights.

Relevant Projects:

- City of Lake Oswego
 - Waluga Park Reservoir Site Expansion
 - Treatment Plant Expansion voluntary acquisition
 - River Grove Sewer
- City of Tigard
 - Bonita Road Pump Station
- City of Gresham
 - Fairview Creek Detention Pond/Storm Water
 - South Hills Reservoir Site Acquisition
 - South Hills Service Level Pump Station (Gabbert Road)
 - Westside 740 Tank Site
 - Butler Road Reservoir Tank Site
- Port of Umatilla
 - Umatilla Regional Water Line
- City of Portland, Bureau of Environmental Services
 - Ash Creek Sewer
 - Columbia Slough Outfall & Consolidated Conduit Projects
 - West Side & East Side CSO
 - Balch Consolidation Conduit
 - Portsmouth Force Main
 - Overflow Treatment Siting Study & Hayden Island Site Acquisition
- City of Portland, Water Bureau
 - Conduit Trestle Vulnerability Project
 - Conduit #5 Property Acquisition
- City of Hillsboro, Water Department
 - Reservoir Siting Study and Site Acquisition
- City of Junction City
 - South Industrial Corridor Water and Sewer Infrastructure
- City of Waldport
 - Waldport South Sewer

ROWA

Education
Certified Bookkeeper

Certifications
SR/WA Exam Passed –
3 Classes scheduled for
2010 to complete for
hours requirement and
apply for designation

Affiliations
Member,
International Right-of-
Way Association

Monthly Board
Meeting / Luncheon
Coordinator,
International Right-of-
Way Association

Shannon L. Fish

Managing Coordinator, Relocation Manager

Shannon Fish joined ROWA as a project coordinator in 2001 and became the Managing Coordinator of all ROWA projects and staff in 2004. Shannon is responsible for the management of Acquisition Agents, Relocation Specialists, Project Assistants and Support staff in addition to sub-consultants. Shannon has extensive experience with Oregon LPA projects, including those that follow the ODOT R/W Manual. Shannon will be responsible for the scope of work, fee estimate, schedule, deliverables and ROWA team to ensure the project has the resources necessary to acquire the rights-of-way to construct the project on time and within budget.

Relevant Projects:

- City of Portland Bureau of Environmental Services
 - Ash Creek Sewer
 - Balch Consolidated Conduit & Pipelines
 - Portsmouth Force Main
 - East Side Combined Sewer Overflow
- City of Portland, Water Bureau
 - Conduit Trestle Vulnerability Project
 - SE 122nd Drive Water Line
 - Bancroft Terrace Water Line
 - Boundary Street Water Line
- City of Bend
 - Highway 97 North Transmission Main
 - Outback to Mt. Washington Transmission Main
- City of Coburg
 - Wastewater Treatment Plant and Outfall Pipeline
- City of Dallesport
 - Wastewater Treatment Facility & Sewer Line Infrastructure
- City of Hillsboro
 - Reservoir Siting Study & Site Acquisitions
- City of Stayton
 - Mill Creek Sewer Project
- City of Tigard
 - 97th Avenue Sanitary Sewer LID
 - 100th Avenue Sanitary Sewer LID
 - Fairview Street Sanitary Sewer LID
- City of Milwaukie
 - NE Sewer
- City of Junction City
 - S. Industrial Corridor Water & Sewer Infrastructure
- City of Klamath Falls
 - Klamath Falls Water Reservoir Site Acquisition Project

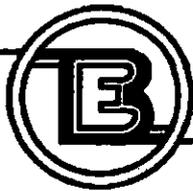
Workload

Branch Engineering monitors workload and staff resources on a weekly basis. Over the next 12 months approximately 30% or \$0.75 million of our firm's capacity at the current staffing level is allocated to contract work. Another 30% is allocated to select work that is not yet contracted. The remaining 40% (\$1.0 million) of the firm's capacity is available to service new clients and projects.

We have reviewed our current backlog and resources relative to meeting the project schedule, and find that Branch Engineering has the ability to respond immediately and complete the work within the desired time frames.

Fee Estimate

The following detailed work plan includes the estimated hours and charge out rates for each job classification expecting to be working on the project. Branch Engineering proposes to perform the work on time plus expenses basis. The total fee amount listed in the work plan can be considered a "not-to-exceed" amount for the project. The design fees are estimated at \$71,822. The level of effort required for bidding, construction administration, and post construction phases is highly variable and largely depends on the how good the contractor is to work with. In our detailed work plan we have conservatively estimated the post design fees and expenses to be \$42,045. This level of effort may be reduced if the contractor allows for a reduced level of supervision and quickly addresses the punch list items.



Branch Engineering, Inc.

Corporate Headquarters
(541) 746-0637
310 5th Street
Springfield, OR 97477

Salem Engineering Office
(503) 779-2577
4310 Cherry Avenue NE
Salem, OR 97303

www.BranchEngineering.com

Principals
M. Lane Branch, PE
Damien Gilbert, PE
Renee Clough, PE, PLS, AICP
Rene Fabricant, PE, SE
Ronald J. Derrick, PE

Hourly Charge-out Rates February 28, 2011

Principal Professional Engineer	\$130 - \$140
Senior Professional Civil Engineer	\$125
Professional Structural Engineer	\$125
Principal Professional Surveyor	\$100
Professional Civil Engineer	\$90 - \$100
Professional Engineer – Structures	\$100
Professional Surveyor	\$70 - \$92
Project Manager – Civil	\$70
Engineering Designer – Civil	\$70
Engineering Designer – Traffic	\$70
Engineering Technician – Civil	\$70
Engineering Technician – Traffic	\$70
Traffic Analyst	\$60
Project Manager – Survey	\$60
AutoCAD Specialist	\$50 - \$60
Construction Inspector	\$60
Administrative Assistant	\$40
Survey Crew	\$120

Reimbursable Expenses

Mileage	\$0.50/mile
Reproduction	At cost

CIVIL

STRUCTURES

TRANSPORTATION

GEOTECHNICAL

SURVEYING

No.	Task	Principal Engineer \$130		Snr. Engineer \$125		Civil Engineer \$90		Designer \$70		Inspector \$80		Geotech. Engineer \$140		Surveyor PLS \$92		Survey Crew \$120		Drafter \$90		Clerical \$40		ROW Agent \$100		ROWA Admn. \$48		Appraiser \$100		Other Expens	Total Hours	Total \$'	Total \$'/Expens	
		HRS.	\$'	HRS.	\$'	HRS.	\$'	HRS.	\$'	HRS.	\$'	HRS.	\$'	HRS.	\$'	HRS.	\$'	HRS.	\$'	HRS.	\$'	HRS.	\$'	HRS.	\$'	HRS.	\$'					
Task 1	Pre-Design	8	650	3	375	38	3,420	50	3,500	0	0	10	1,400	0	0	0	0	12	720	0	0	0	0	0	0	0	0	0	4000	118	10,085	\$14,085
Task 1.1	Data Collection	0	0	0	0	0	0	8	560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	560	\$560	
Task 1.2	Geotechnical Exploration	0	0	0	0	0	0	34	2380	0	0	10	1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4000	44	3,780	\$7,780
Task 1.3	Alternatives Identification and Analysis	5	650	3	375	38	3,420	8	560	0	0	0	0	0	0	0	0	12	720	0	0	0	0	0	0	0	0	0	86	5,725	\$5,725	
Task 2	Field Data Collection	0	0	0	0	4	360	74	6180	0	0	0	0	31	2852	96	11520	0	0	0	0	0	0	0	0	0	0	0	205	19,912	\$19,912	
Task 2.1	Property Records Data Collection	0	0	0	0	2	180	2	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	320	\$320	
Task 2.2	Wetland Delineation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	
Task 2.3	Conduct Field Topographic Survey	0	0	0	0	0	0	0	0	0	0	0	0	31	2852	96	11520	0	0	0	0	0	0	0	0	0	0	0	127	14,372	\$14,372	
Task 2.4	Prepare Base Mapping	0	0	0	0	2	180	72	5040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	5,220	\$5,220	
Task 3	Design	8	1040	16	2080	90	8100	120	8400	0	0	0	0	0	0	0	0	162	9720	0	0	0	0	0	0	0	0	0	386	29,260	\$29,260	
Task 3.1	30% Plans, Specs and Cost Estimate	2	260	6	750	20	1800	40	2800	0	0	0	0	0	0	0	0	41	2460	0	0	0	0	0	0	0	0	0	109	8,070	\$8,070	
Task 3.2	60% Plans, Specs and Cost Estimate	4	520	4	500	24	2160	40	2800	0	0	0	0	0	0	0	0	60	3600	0	0	0	0	0	0	0	0	0	132	9,580	\$9,580	
Task 3.3	90% Plans, Specs and Cost Estimate	2	260	6	750	48	4140	40	2800	0	0	0	0	0	0	0	0	61	3660	0	0	0	0	0	0	0	0	0	155	11,610	\$11,610	
Task 4	Right of Way Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	
Task 4.1	Prepare Easement Documents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	
Task 4.2	Prepare Easement Appraisals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	
Task 4.3	City Authorization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	
Task 4.4	Tender Offers and Negotiations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	
Task 5	Permit Applications	0	0	0	0	26	2340	0	0	0	0	0	0	0	0	0	0	8	480	0	0	0	0	0	0	0	0	0	34	2,820	\$2,820	
Task 5.1	Prepare Permit Applications	0	0	0	0	26	2340	0	0	0	0	0	0	0	0	0	0	8	480	0	0	0	0	0	0	0	0	0	34	2,820	\$2,820	
Phase 6	Bid Documents	0	0	1	125	20	1800	32	2240	0	0	0	0	0	0	0	0	16	960	16	640	0	0	0	0	0	0	0	65	5,765	\$5,765	
Task 6.1	Final Plans	0	0	0	0	4	360	16	1120	0	0	0	0	0	0	0	0	8	480	0	0	0	0	0	0	0	0	0	26	1,960	\$1,960	
Task 6.2	Prepare Bid Document	0	0	1	125	18	1440	16	1120	0	0	0	0	0	0	0	0	8	480	16	640	0	0	0	0	0	0	0	57	3,805	\$3,805	
Task 7	Bid Period Services	8	650	1	125	80	4800	0	0	0	0	0	0	0	0	0	0	0	8	320	0	0	0	0	0	0	0	0	84	5,935	\$5,935	
Task 7.1	Advertise for Bid	0	0	0	0	3	270	0	0	0	0	0	0	0	0	0	0	0	4	160	0	0	0	0	0	0	0	7	430	\$430		
Task 7.2	Respond to Bidders	6	650	1	125	36	3240	0	0	0	0	0	0	0	0	0	0	0	4	160	0	0	0	0	0	0	0	46	4,175	\$4,175		
Task 7.3	Bid Opening and Award	0	0	0	0	11	990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	990	\$990		
Task 8	Construction Administration	1	130	0	0	84	8760	56	3920	322	19320	0	0	0	6	46	5620	0	0	0	0	0	0	0	0	0	0	0	489	34,950	\$34,950	
Task 8.1	Pre-Construction Conference	1	130	0	0	10	900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	1,030	\$1,030		
Task 8.2	Construction Staking	0	0	0	0	2	180	0	0	0	0	0	0	0	0	0	38	4560	0	0	0	0	0	0	0	0	0	0	40	4,740	\$4,740	
Task 8.3	Construction Inspection	0	0	0	0	0	0	0	0	248	14880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	248	14,880	\$14,880		
Task 8.4	Weekly Construction Meeting	0	0	0	0	18	1620	0	0	12	720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	2,340	\$2,340		
Task 8.5	Process Payments to Contractor	0	0	0	0	12	1080	0	0	22	1320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	2,400	\$2,400		
Task 8.6	Material Testing	0	0	0	0	0	0	56	3920	32	1920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	5,640	\$5,640		
Task 8.7	Prepare Change Orders	0	0	0	0	8	540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	540	\$540			
Task 8.8	Final Project Documentation	0	0	0	0	16	1440	0	0	8	480	0	0	0	0	8	960	0	0	0	0	0	0	0	0	0	0	32	2,880	\$2,880		
Task 9	Post Construction	0	0	0	0	4	360	0	0	0	0	0	0	0	0	8	960	8	480	0	0	0	0	0	0	0	0	20	1,800	\$1,800		
Task 9.1	Final Records Certification	0	0	0	0	4	360	0	0	0	0	0	0	0	0	8	960	8	480	0	0	0	0	0	0	0	0	20	1,800	\$1,800		
TOTALS		19	2470	21	2625	206	26840	332	23240	322	19320	10	1400	31	2852	160	18000	206	12360	24	960	0	0	0	0	0	0	4000	1,411	109,887	\$113,887	

PROJECT UNDERSTANDING

The City of Springfield Public Works Department desires professional engineering services for the 58th Street Relief Sanitary Sewer Line & Bypass Manhole project. The sewer will be designed and installed along East Main and 58th Streets. The engineering services will include sewer route determination, for a 4,900-foot long, 20 to 10-foot deep, 15-inch relief sanitary sewer line and bypass manhole. The project may include replacement of an existing 1,000 feet of 8-inch diameter concrete sanitary sewer pipe including residential laterals.

Branch Engineering is prepared to provide all of the necessary services in order to deliver to the city a cost effective sewer bypass of the Thurston Trunk Sewer including; preliminary surveys, investigations, pre-design analysis, soil investigation and cost estimates for two alternative routes. Branch Engineering will meet with affected property owners and agencies as needed. We will identify needed permanent and/or temporary easements acquisitions, assist the City in acquiring necessary easements and or right-of-ways, determine required permits, prepare and submit required permit applications and assist the City in acquiring the permits. After completing the preliminary investigation and design, Branch Engineering will complete design with final drawings, prepare bid packages, and assist in the bid process. During construction, Branch Engineering is offering field engineering services, construction staking, and daily inspections during construction of the project including measurements for payment of pay quantities. At project completion a survey of final construction will be provided including preparation of as-built drawings. The engineer of record will sign off and attest to the final constructed project.

The City of Springfield Wastewater Master Plan (Plan) dated June 2008 notes the proposed 58th Street Relief sanitary sewer line & bypass manhole. The Plan describes the probable parameters for the 58th Street Relief Sanitary Sewer Line & Bypass Manhole. Branch Engineering's analysis will include the calculated elevation of the Flow Control Manhole weir based on hydraulic modeling.

The City of Springfield has established the following objectives for the project:

- ▲ Provide a complete, functioning public Relief Sanitary Sewer Line and Bypass Manhole to serve as a relief sewer for the Thurston Trunk Sewer. The project may or may not include provisions for replacement of 1,000 feet of sanitary sewer and connections for certain properties along 58th Street.
- ▲ The sewer project shall include the evaluation of at least two alternate routes for the bypass sanitary sewer alignment. The evaluation shall consider project feasibility, project duration, and an economic analysis that includes all project costs. The project costs shall include the cost of construction, easement and/or right-of-way acquisition, surveying, permitting, operation, engineering, design, and construction administration including construction inspection.
- ▲ One sewer route to be analyzed would generally follow the south side of Main Street, an ODOT highway, from 54th Street to 58th Street; then north on 58th Street to the Thurston Road Roundabout.

PROJECT APPROACH OUTLINE

Task 1 - Pre-Design

Investigation, data collection, and pre-design will be performed in sufficient detail to determine sewer routing, permitting and easement needs, along with project cost estimates for each option. Branch Engineering will perform a soil exploration of the proposed sewer route. The results of the soil explorations will be documented in a geotechnical engineering report prepared and stamped by Ron Derrick, P.E., a Geotechnical Engineer licensed in the State of Oregon. A soil exploration program will be prepared for approved by the City. Branch will then conduct and pay for testing/borings necessary for the project.

Route location engineering will include investigations to determine the minimum sewer depths, the required permits, determination of bedrock and water table elevation, and cost estimates of alternate sewer routes to determine the most economically feasible route.

Branch Engineering will present the results of said tasks along with a sewer route recommendation to City staff. With the input of City staff, a sewer route selection report will be prepared that includes a report of the background, investigations, data collection, pre-design tasks, cost estimates, and the selected sewer route with justifications for that selection. Five copies of the report will be presented to the City. Branch Engineering is prepared to present and/or assist the City Engineer with the project presentation to City Council. This may include graphics and presentation materials as desired by the city.

Task 1.1 Data Collection

Sub-Task 1.1.A Acquire Aerial Mapping

Sub-Task 1.1.B Develop Boundary Overlay

The initial phase of data collection will involve gathering all known base mapping from the City of Springfield, Lane County, ODOT, LCOG and the utility companies. In addition, all of the available as built drawings of the project area will be acquired. Base aerial photography and property boundaries will be obtained and compiled into a base map with contours, critical features, known utilities, etc. The project's length will be walked identifying possible areas of environmental or engineering concern photographing critical features such as culverts, swales, steep slopes, possible wetlands, obstacles, etc. Any critical elements effecting preliminary design will be located and added to the base mapping.

Task 1.2 Geotechnical Exploration

Sub-Task 1.2.A Prepare soil exploration proposal

Sub-Task 1.2B Complete Soil Borings and Testing

Sub-Task 1.2C Prepare Geotechnical Report

Project Approach

Branch Engineering Inc. has conducted several geotechnical investigations between the 5000 and 6400 blocks of Main Street in Springfield in addition to having designed and overseen construction of numerous utility line projects within a ½-mile radius of the intersection of Hwy 105 and Main Street. Our experience is consistent with Oregon Water Resources Department well logs in the area indicating the presence of "Bar-Run" gravels within 3- to 6-feet of the surface along the Main Street between 53rd and 58th Streets and increasing to 7- to 9-feet heading north on 58th Street. The static ground water levels in the project area fluctuate between 9- and 15-feet below the surface elevation with seasonal and annual changes in precipitation and the water level in the McKenzie River system approximately 1-mile north of the area. Branch Engineering Inc. proposes to install 5- to 8- small diameter piezometers along the preliminary sewer line alignments to augment existing data, measure ground water levels, and assess subsurface flow rates.

Ron Derrick, Branch Engineering's Principal Geotechnical Engineer will coordinate the geotechnical data collection and preparation of a geotechnical report summarizing findings. The critical elements of the investigation will be the establishment of groundwater levels, depth to bedrock, and establishment of soil profiles throughout the project. Past experience has also indicated a possibility of encountering large boulders that are difficult and expensive to deal with. Areas with high likelihood of encountering boulders will be established so design can be modified accordingly.

Task 1.3 Alternatives Identification and Analysis

Sub-Task 1.3.A Identify 3 Alternative Alignments

Sub-Task 1.3.B Establish Probable Depths: sewer, bar run, water table

Sub-Task 1.3.C Determine Easement / Permit Requirements

Sub-Task 1.3.D Develop Alternatives

Sub-Task 1.3.E Route Recommendation-Present to city staff

Sub-Task 1.3.F Prepare Route Selection Report

At least 3 separate alignments will be identified and evaluated for consideration by the city. Alignment considerations will include; depth to ground water, depth to bar run, trenching depths, existing pavement conditions and probable pavement restoration costs, availability of rights-of-way and easements, overall construction costs, and environmental permitting.

Branch Engineering has performed a preliminary review of the route alignment illustrated in the City of Springfield Wastewater Master Plan. The general route alignment on Main Street and 58th Street will result in a sewer depth in the 15 – 20 feet deep range for a large portion project. This route alignment is also along a fully improved high traffic corridor with some commercial business in the area. Early in the study phase Branch Engineering will work with City staff to establish the objective with this alignment. In a brief review of potential alternate alignments through the neighborhoods and vacant land west of 58th Street it became obvious alternate routes are available that will result in shallower pipe depths, less impact to commercial businesses, and less disruption to major traffic corridors. A schematic illustration of the project route alignment and an alternate lower cost alignment is shown on the following figure. We are adaptive to meet any and all City objectives with this project and will, at the City's direction, explore lower cost route alternatives. At a minimum, three route alternatives will be explored, including the project route on Main Street and 58th Street.

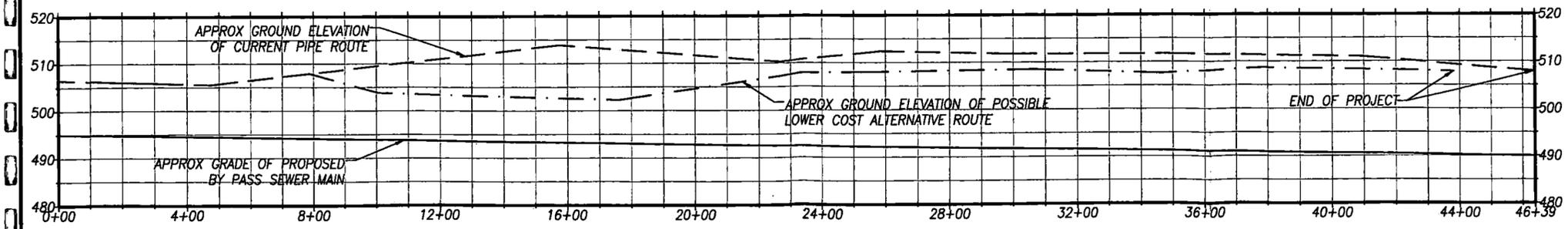
PLAN AND PROFILE EXHIBIT FOR
**58TH STREET SANITARY
 SEWER BY PASS**
 SPRINGFIELD, LANE COUNTY, OREGON
 PLAN SCALE 1"=500'
 FEBRUARY 23, 2011



CURRENT PROJECT PIPE ROUTE



POSSIBLE LOWER COST ALTERNATIVE ROUTE



PROFILE

H: 1"=300'
 V: 1"=20'

Branch Engineering, Inc.
 310 Fifth Street
 Springfield, Oregon 97477
 (541)748-0637 FAX (541)746-0389
 branchadmin@branchengineering.com
 Civil • Structures • Transportation • Surveying

Task 2 - Field Data Collection/Presentation

Branch Engineering will provide a design topographic survey for the limits of the City project to include the following: Determine property and rights-of-way lines to ensure improvements are located within said lines and, when easement or right of way acquisition is involved, in sufficient detail to write legal description for acquisitions. Branch is very familiar with completing surveying projects in Springfield and will coordinate with the City in collecting the preliminary survey information. We will establish on-site vertical control based on City approved datum and base benchmark datum will be noted on the final drawings. Temporary bench marks will be established every 500 feet for future location and construction work with materials approved by the City. The survey will field locate all public utilities as marked on the ground and from visible components, including those located in the abutting street right-of-ways. Rim and invert elevations will be shown on all storm and sanitary manholes, curb inlets, utility vaults and catch basins.

Additional information will include the location, size, depth and operating pressure of water and gas mains, steam and other facilities as available from the operating authority. Surface spot elevations to the nearest 0.1 foot will be taken at 50 foot intervals along the length of the proposed sewer. All trees size 2" and larger in diameter having a tree canopy within 30 feet of the proposed construction will be located and labeled with the common name on the drawings. All other above ground permanent man-made features (buildings, signs, posts, poles, landscaped areas, etc) within 15 feet on either side of the right-of-way or easement will be located.

The drawings will be developed with City supplied mapping for the project such as 2008 digitized aerial maps and as built construction drawings. The engineering will comply with the City of Springfield's recently adopted Engineering Design Standards and Procedures Manual. Branch Engineering is intimately familiar with the city's standards and procedures and utilized the manual on a routine basis. The drawings will be prepared using City approved software at a scale of 1 inch=20 feet. Drawings will be provided in electronic format as well as with signed and sealed vellum and paper copies – one each. Electronic format development will be coordinated with the City and in conformance with the Engineering Design Standards and Procedures Manual.

Task 2.1 Property Records Data Collection

Subtask 2.1.A RLID Download

Subtask 2.1.B Collect Data at City

Subtask 2.1.B Collect Data from Utilities

With an established recommended sewer route, detailed property reports and supporting documentation can be compiled. Information will be compiled from RLID, city and county records, utility records, and others as may be necessary. Some additional field verification of constraints will likely be necessary.

Task 2.2 Wetland Delineation

Subtask 2.2.A Property Owner Permission

Subtask 2.2.B Flag Wetlands

Subtask 2.2.C Complete Wetland location survey and mapping

Subtask 2.2.D Prepare Wetland Delineation Report

Subtask 2.2.E Submit concurrence request to DSL and ACOE

Project Approach

If the selected alignment will impact possible wetlands, a wetland delineation will be completed as soon as practical upon completion of the route selection. For purposes of the fee estimate we have assumed a project contained within existing pavements and therefore needed wetland delineation would be completed as additional services. Branch has ongoing working relationships with several local wetland specialists and would seek assistance on this task from the provider with immediate availability and acceptable to the city.

Task 2.3 Conduct Field Topographic Survey

Sub-Task 2.3.A Utility Locates

Sub-Task 2.3.B Coordinate with the City for preliminary survey information

Sub-Task 2.3.C Establish Horizontal Control and Rights of Way and Property Boundaries

Sub-Task 2.3.D Establish Vertical Control Network

Sub-Task 2.3.E Topographic Location Survey

Shortly after the City selects an alignment utility locates will be requested and rights of entry secured from affected property owners notified of the upcoming survey. Concurrently vertical controls will be established the length of the project.

Branch Engineering employs three licensed land surveyors with extensive experience in Springfield. Our field crew utilizes robotic total stations with data collectors for gathering field data. The data collectors download directly to the software program Autodesk Civil 3d, which creates an AutoCAD drawing consistent with City of Springfield's standard GIS layering system. This seamless data collection technique maximizes efficiency and minimizes errors associated with data to drawing conversions.

With the project located in high traffic corridors, traffic control measures will be necessary to complete the survey. Our survey crew is supported by an in-house transportation department with years of experience in preparation of traffic control plans consistent with the MUTCD (Manual of Uniform Traffic Control Devices). The project is adjacent to Thurston High School, which generates spikes in traffic in the area. Survey data will be collected at times to minimize traffic disruptions to the school and neighboring commercial developments.

Task 2.4 Prepare Base Mapping

Subtask 2.3.A Prepare Property Base on State Plain Coordinates

Subtask 2.3.B Plot Existing Utility Locates and Record Utility and As-Built Data

Subtask 2.3.C Prepare Ortho-rectified Aerial Base

Subtask 2.3.D Plot Existing Improvements

Subtask 2.3.E Prepare Plan and Profile Drawings

Base mapping will be established using the City's standard AutoCAD drafting standards. All utilities will be shown including size type and depth. If insufficient information is available for any existing utilities, then additional field verification such as TV inspection and potholing will be coordinated with each utility. The preliminary plan and profile will be inserted on the base mapping to establish any need for additional information prior to turning in final documentation. When the base mapping is determined to be complete electronic and hard copies in the City's standard formatting will be delivered for review. The base plans will be created and an 1" = 20' scale.

Phase 3. Design

Upon selection of the sewer route, Branch Engineering will prepare a detailed cost estimate including permit requirements, including those required by ODOT, BPA, and Lane County. The City will assist in determining pipeline grades to meet the requirements of the Master Planning of sewers in the area. Branch will meet with all affected utilities in the area.

After City approval of the pipeline sizing, route, and requirements above, construction drawings and bid packages, easement appraisals and acquisitions will begin, and applications for permits prepared. Branch will prepare 30%, 60% and 90% construction contract drawings and specifications and cost estimates and hold 30%, 60% and 90% design-meetings with the City. Branch will apply for and obtain permitting such as those required by ODOT and Lane County, etc. The City will assist in determining pipeline grades to meet the requirements of the Master Planning of sewers in the area. The Consultant shall determine sewer hookup locations. When the design is determined to be 100% completed by the City including full compliance with permit conditions, if any, a final cost estimate will be prepared and presented to the City.

In addition to the 30%, 60%, 90% and Final plan set submittals, our location allows for quick check-in meetings and informal concept reviews. These informal reviews help streamline the formal review process and will minimize changes to the plans.

The project sewer alignment is along a high traffic corridor with traffic signals and other traffic control devices. Branch Engineering's civil design staff is supported by an in-house transportation department with experience in traffic signal design, street lighting and traffic management plans. Should loop detection devices, signal poles or street lights be impacted, or temporary traffic control be necessary for the project, Branch has the resources to efficiently incorporate traffic engineering into the project.

Branch Engineering utilizes XP SWMM for hydraulic modeling of sewer systems. The program includes a weir analysis component that will be necessary to model the Bypass Manhole. Additionally, Branch Engineering has in-house structural engineers for any unique vault, weir, or anti-floatation measures that may need to be designed into the project.

Branch will participate in the public process associated with the project and is prepared to provide plan view designs for the public review early in the design process. If needed Branch will stake alternative routes of the sewer in the field to represent to the property owners the location of the construction. The proposed fee anticipates attending two meetings with the general public regarding the sewer design to receive public testimony. Several meetings with the individual property owners are anticipated to properly coordinate the easement needs with the affected property owner.

Task 3.1 Prepare 30% Plans, Specifications and Cost Estimate

Subtask 3.1.A Identify Permits Required

Subtask 3.1.B Prepare Plan and Profile Drawings of Proposed Sewer

Subtask 3.1.C Prepare 30% Cost Estimate

Subtask 3.1.D QA/QC In House Peer and City Staff Review

Subtask 3.1.E Conduct Public Meeting

Work on construction plans will begin immediately after City approval of sewer alternative to meet the City's schedule. As soon as possible during design, preliminary plans will be sent to all affected agencies for preliminary comments and permits as applicable. Simultaneously, permit drawings will be created for use in obtaining ACOE and DSL permitting if necessary. Right of way acquisition will be the highest priority as this is expected to be the most likely source of project delay. Environmental permitting cannot begin until property rights are established for the length of the project. An initial internal review will be completed prior to issuing 30% plan set.

Task 3.2 Prepare 60% Plans, Specifications and Cost Estimate

Subtask 3.2.A Update Wetland Impacts

Subtask 3.2.B Prepare 60% Plan and Profile Drawings

Subtask 3.2.C Prepare 60% Cost Estimate

Subtask 3.2.D Prepare 60% Specifications

Subtask 3.2.E City Staff Review and Comments

Subtask 3.2.F Conduct In House Peer Review of Design

Input from city staff and public comments will be included in the 60% plan set. A detailed internal review will be completed prior to submitting 60% plan set.

A face-to-face meeting will be held with the City to review any comments and questions generated from the 30% plan review. Comments will be solicited and received from the utility companies in the area, with meetings held as necessary. The 60% plan set will incorporate any comments from review and utility agencies.

Task 3.3 Prepare 90% Complete Plans, Specifications and Cost Estimate

- Subtask 3.3.A Update Wetland Impacts**
- Subtask 3.3.B Prepare Complete Plan and Profile Drawings**
- Subtask 3.3.C Prepare Complete Cost Estimate**
- Subtask 3.3.D Prepare Complete Specifications**
- Subtask 3.3.E QA/QC In House Peer and City Staff Review**
- Subtask 3.3.F Conduct Public Meeting**

The 90% review submittal will be a complete bid package for final review by the city. A final internal review will be completed prior to submitting 90% plan set. A face-to-face meeting will be held with the City to review any comments and questions generated from the 60% plan review. The 90% plan set will incorporate any comments from the review and utility agencies.

Task 3.4 Prepare Final Plans,

- Subtask 3.4.A Update Final Plans**
- Subtask 3.4.A Update Final Specifications**
- Subtask 3.4.A Update Final Cost Estimate**

Upon receipt of comments from the city the plans, specs, and estimates will be completed. Final drawings will be printed and one vellum, one paper, and one electronic copy delivered to the City. A face-to-face meeting will be held with the City to review any comments and questions generated from the 90% plan review. The Final plans will incorporate any comments from the review and utility agencies.

Phase 4 Easement and Right of Way Acquisition

Branch Engineering proposes to utilize the services of Right of Way Associates, real estate specialists focused exclusively on public property acquisitions if sewer easements in locations outside of existing rights of way are needed. It is not known at this time if additional right of way will be necessary and so the base not to exceed fee proposal assumes no easement acquisitions will be necessary. If additional easement are needed, ROWA will be activated as an additional service.

The easement acquisitions will be conducted in accordance with Oregon law and city expectations and will include: Work with City Engineering staff regarding communications and interactions with City residents or property owners; Coordinate with City Survey staff regarding preparation of easement documents; and Preparation of maps and legal descriptions as necessary for easement acquisition. The legal description will be placed on a City supplied standard easement form, and a map will be included in the easement document. If administrative acquisitions are not possible a certified and City approved property appraiser will be employed to establish the value of the proposed acquisition area. With administrative acquisitions, the avoidance of formal appraisals often allows the cost avoidance to be shared with the effected property owners to the benefit of the city as well.

Additional work may include: coordination of easement acquisition with a title company; order and review title reports; and setup closing at the title company; and making the compensation offer (with prior City approval) for easement to the property owner and report and coordinate same with the City. Acquired easements will then be recorded and executed documents presented to the City.

Task 4.1 Prepare Easement Documents

Subtask 4.1.A Prepare legal descriptions

Subtask 4.1.B Acquire Title Report

Subtask 4.1.C Prepare R.O.W. Map

Branch will employ Right of Way Associates, a real estate specialist, to acquire sewer easements in locations outside of existing rights of way. Legal descriptions will be prepared by Rex Betz, PLS and will begin immediately after city approval of a sewer alignment. Right of Way Associates will begin the right of way acquisition process immediately after City approval of alignment. Right of way map and easement descriptions will be prepared by Branch Engineering.

Task 4.2 Prepare Easement Appraisals

Subtask 4.2.A Select and Retain Appraiser

Subtask 4.2.B Conduct Appraisals

Subtask 4.2.C Complete Appraisal Reviews

It is expected that Duncan Brown will conduct the easement appraisals for the project. City may choose an alternate appraiser if necessary.

Task 4.3 City Authorization

Subtask 4.3.A Prepare Proposed Acquisition Report

Subtask 4.3.B City Council Authorization

Acquisition report will be prepared by ROWA as soon as possible to maintain project time line.

Task 4.4 Tender Purchase Offers and Easement Negotiations

Subtask 4.4A Prepare letters of offer

Subtask 4.4B Property owner negotiations / easement acquisition

Subtask 4.4.C Record Easements

Branch Engineering anticipates staking the proposed route of the sewer in the field to represent to the property owners the location of the construction. Several meetings with the individual property owners are anticipated to coordinate the easement needs with the affected property owner. Compensation offers (with prior City approval) will be made for the easement to the property owner and reported to the City. It is expected that closings will be setup at the title company. Acquired easement documents will be recorded at Lane County and presented to the City.

Phase 5 Permit Applications

Branch Engineering is very familiar with the preparation of permit applications and will apply for project permits at the earliest possible time. As a minimum, permits will be required by ODOT, and Lane County, as well as all other permits that might be required.

Task 5.1 Prepare Permit Applications

Subtask 5.1.A Prepare Permit Drawings

Subtask 5.1.B Submit Wetland Concurrence Requests

Subtask 5.1.C Prepare Permit Applications

Subtask 5.1.D Property Owner Concurrence

Subtask 5.1.E Respond to agency / public concerns

Branch Engineering will prepare applications and apply for all permits necessary to comply with all city, county, state and federal agency requirements for the project. As a minimum, permits will be required by ODOT, and a Lane County Facility Permit. If necessary, an Army Corps of Engineers and Division of State Lands, Joint Permit Application for wetland impacts will be prepared. Branch will prepare erosion control plans to comply with the City of Springfield's DEQ 1200-CA permit.

Branch Engineering typically interacts with ODOT and Lane County on a weekly basis. Should the selected route alignment require permits from ODOT or Lane County, our transportation staff will assist with securing the permits.

Phase 6 Bid Documents

Branch Engineering will prepare bid packages and contract documents suitable for bidding (including but not limited to drawings, special provisions, and bid proposals) of the project. We will submit to the City reproducible construction plans and the master copy of the project bid book. All of the above shall be in accordance with applicable State laws, City codes, City of Springfield Engineering Design Standards and Procedures, and the City of Springfield Standard Construction Specifications, 1994 Edition as amended, and as modified by contractual special conditions.

Branch will assist in the bid process and provide engineering services. The bid documents will be prepared in the City's bidding format on City supplied standard bid document forms. Twenty sets of bid documents will be submitted to the City, one electronic set of the project drawings and specifications in PDF format for bidding purposes.

Task 6.1 Final Plans

Subtask 6.1.A Prepare Final Drawings

Task 6.2 Prepare Bid Document

Branch Engineering will prepare technical specifications and construction documents based on City of Springfield Standards and Technical Specifications. Branch Engineering will rely on the city to provide standard front end contractual forms. It is expected that proposal will be based on unit price bids with pre-negotiated pricing for any unforeseen circumstances that may occur in the field in order to reduce change orders. Unit pricing for dewatering costs will be included to minimize change orders.

Phase 7 Bid Period Services

Branch will send letters notifying utility companies and affected parties of the pre-bid meeting, attend and record pre-bid meeting. We will be available to answer project questions presented by bidders during the bidding for the project. The City will advertise for bids in the Register Guard and DJC, hold a bid opening, check bids and bid bonds, award and process the contract, and send the Notice to Proceed to the Contractor.

Task 7.1 Advertise for Bid

Sub-Task 7.1.A Prepare Ads

Branch Engineering will assist in the bid process and provide engineering services.

Task 7.2 Respond to Bidders

- Sub-Task 7.2.A Bid Doc's. To Plan Centers**
- Sub-Task 7.2.B Pre-Bid Meeting**
- Sub-Task 7.2.C Respond to Bidder Inquiry**
- Sub-Task 7.2.D Prepare Addendum**

Branch Engineering will provide engineering assistance in the bid period by conducting a pre-bid meeting, responding to bidder inquiries, and preparing addendums as necessary.

Task 7.3 Bid Opening and Award

- Sub-Task 7.3.A Conduct Bid Opening**
- Sub-Task 7.3.B Bid Review**
- Sub-Task 7.3.C Notice of Intent to Award**

Branch will assist the city as necessary to review bids, determine lowest responsive bidder, and recommend award of contract.

Phase 8 Construction Administration

Branch will be responsible for the design of the project throughout construction and will be responsible for the Project oversight working at the direction of the City Project Manager to assure the successful construction and completion of the project. We will provide general engineering review of the work to assure conformance with the design and will perform construction staking, inspections during construction of the project, measurements for payment of pay quantities, survey of final construction, preparation of as built drawings, and attest to the final constructed project. This shall include the following:

- 1) Coordinating with property owners, contractors, subcontractors, utility companies, ODOT, LTD, School District, USPS, and consulting engineering firms during preconstruction, construction and final project documentation; hold and record a pre-construction meeting with utility companies, contractor, and affected agencies;
- 2) Promptly informing City Project Manager when issues develop with parties listed in 1) above;
- 3) Filming a pre-construction video of the construction site, monitoring and inspecting the construction and contractor's schedule, temporary and permanent traffic control, and legal documents;
- 4) Provide daily routine and timely construction inspections;
- 5) Ordering and directing construction material testing and reviewing testing results for conformance with the project;
- 6) Maintaining daily and weekly inspection reports of construction activities;
- 7) Conduct and record weekly construction meetings with City and Contractor;
- 8) Assuring construction pay quantities are measured and documented prior to backfill or burying;
- 9) Determining construction progress payments;
- 10) Prepare and administer change of work orders. All construction contract change orders shall be approved by the City Engineer and signed by both the City Engineer and the Consultant;
- 11) When construction is complete and before final payment, the Consultant shall remeasure the unit quantities contained in the contract and calculate a final payment amount.

Task 8.1 Pre-Construction Conference

Sub-Task 8.1.A Schedule and Notice Pre-Construction Conference

Sub-Task 8.1.B Conduct Pre-Construction Conference

Sub-Task 8.1.C Prepare Pre-Construction Conference Minutes

Branch Engineering will coordinate with property owners, contractors, subcontractors, utility companies, ODOT, LTD, School District, USPS, and consulting engineering firms during preconstruction, construction and final project documentation; and will hold and record a preconstruction meeting with utility companies, contractor, and affected agencies.

Task 8.2 Construction Staking

Sub-Task 8.2.A Establish Pipeline Offsets

Sub-Task 8.2.B Mark Easement Limits

Branch Engineering will provide construction staking, inspections during construction of the project, measurements for payment of pay quantities, survey of final construction, preparation of as built drawings, and attest to the final constructed project. The survey crew is few minutes drive from the site and assist quickly when the need arrives.

Task 8.3 Construction Inspection

- Sub-Task 8.3.A Prepare Pre-Construction Video**
- Sub-Task 8.3.B Daily Site Visits and Documentation**
- Sub-Task 8.3.C Weekly Inspection Report**
- Sub-Task 8.3.D General Engineering Review**

Branch Engineering will be responsible for the successful construction and completion of the project and will provide general engineering review of the work to assure conformance with the design. An experienced inspector will provide daily observation of the construction to assure conformance with contract performance requirements. A pre-construction video of the construction site will be prepared. Branch will provide daily routine and timely construction inspections, ordering and directing construction material testing and reviewing testing results for conformance with the project requirements. Daily and weekly inspection reports of construction activities will be maintained. Our proposal assumes a 6 week construction period, which a field inspector will be dedicated to the project approximately 6 hours per day during the construction period.

Task 8.4 Weekly Construction Meeting

- Sub-Task 8.4.B Prepare Meeting Documentation and Distribute**

Branch will schedule and attend meetings with City and Contractor. Branch Engineering will conduct and record meetings.

Task 8.5 Process Payments to Contractor

- Sub-Task 8.5.A Complete Remeasure of Work Completed**
- Sub-Task 8.5.B Review Contractor Payroll and report to BOLI**
- Sub-Task 8.5.C Prepare Progress Payment Recommendation**

Branch Engineering will be responsible for assuring construction pay quantities are properly measured and documented prior to backfill or burying and determine construction progress payments.

Task 8.6 Material Testing

- Sub-Task 8.6.A Trench Backfill Material and Density**
- Sub-Task 8.6.B Pavement Compaction**
- Sub-Task 8.6.C Pipe and Manhole Testing**

Branch Engineering will provide daily routine and timely construction inspections, ordering and directing construction material testing and reviewing testing results for conformance with the project requirements.

Task 8.7 Prepare Change Orders

Sub-Task 8.7.A Prepare Change Orders as Needed

Branch Engineering will prepare and administer change of work orders. Branch Engineering will consult with the City Engineer in addressing change order requests.

Task 8.8 Final Project Documentation

Sub-Task 8.8.A Remeasure Final Quantities

Sub-Task 8.8.B Prepare Final Contractor Payment

Sub-Task 8.8.C Review Contractor Final Submittals

When construction is complete and before final payment, Branch engineering will survey and re-measure the unit quantities contained in the contract and calculate a final payment amount.

Phase 9 Post Construction

Upon completion of the project, all records pertaining to the project shall be attested to by the Consultant and submitted in detail to the City Engineer.

Task 9.1 Final Records Certification

Sub-Task 9.1 As-Built Drawings

Sub-Task 9.2 Testing Certification

Final records will include, at minimum the following:

- 1) As-built transparencies,
- 2) As-built drawings on disc compatible with the City's electronic system in an AutoCAD format,
- 3) Laboratory and field test reports certified by the engineer, and
- 4) Inspection diaries and other documents related to the project.

The as built drawings in hard copy and electronic files will conform to the requirements in the City's Design Manual and be submitted to the City.

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Project: Wetlean Drive Utility and Street Extension
Chuck Spies, City Administrator, City of Lowell, Oregon
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Project: Pioneer Valley Estates Waterline Extension
Don Schuessler, City Administrator, City of Coburg, Oregon
541-682-7850

Mark Fletcher, ODOT Region 2 Construction
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Ron Bradsby, PE, PLS, City Engineer, City of Cottage Grove, Oregon
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