

May 8, 2020

Statement of Qualifications

DESIGN SERVICE-PAVEMENT MANAGEMENT PHASE II

Submitted to:

Brad Sontag
City of Valdez
P.O. Box 307
Valdez, Alaska 99686

Submitted by:

Brad Melocik, PE, PH
DOWL
4041 B Street
Anchorage, Alaska 99503





May 8, 2020

City of Valdez, Alaska
Brad Sontag, Project Manager
P.O. Box 307
Valdez, Alaska 99686

Subject: Design Services - Pavement Management Phase II | Project Number 20-310-1200

Dear Selection Committee:

DOWL is excited for this opportunity to once again work with the City of Valdez (City). The enclosed proposal describes our qualifications to provide services on the Design Services-Pavement Management Phase II project, which was developed from DOWL's 2018 Pavement Management Plan that DOWL completed for the City. The DOWL team differentiates ourselves from the competition by bringing:

- **A trusted team.** The DOWL team includes the familiar faces of Contract Manager Bradley Melocik, PE, PH; Anna Ferntheil, PE; and Eric Voorhees, PE from DOWL; and Davin Blubaugh, PE, LEED AP from RSA Engineering. DOWL has added Project Manager Naomi Hobbs, PE and two experienced Project Engineers, Tobias Lockhart, PE, and Irene Malto, PE, to work with Naomi to deliver this project commencing construction in Spring 2021.
- **Significant roadway and pavement design experience in smaller communities.** DOWL understands that designing and constructing a project in a small urban Alaska community is different than a larger population hub. Construction phasing for access and reliable water and sewer service is necessary to minimize adverse impacts to local homes and businesses. We are committed to working with the community to keep them informed of potential impacts and craft a plan to keep businesses open and accessible by locals and tourists.
- **Support in reducing budget through cost-saving solutions.** DOWL's goal on design projects is to look for opportunities for cost savings without compromising the integrity of the design. We know that these projects are being constructed using funds provided by the City and that any savings goes to additional projects that improve the lives of your residents. We will consider this project successful if we are able to "pay ourselves" by identifying cost savings through minimizing utility impacts, reusing materials, and other methods that improve the bottom line without sacrificing quality.

You have my pledge that I will dedicate the DOWL resources necessary to make this project a complete success. I am authorized to make representations and bind the firm and can be reached at the contact information shown below.

Sincerely,

DOWL

Bradley M. Melocik, PE, PH
Contract Manager
907.865.1223
bmelocik@dowl.com

Note: DOWL hereby acknowledges receipt of Addendum 1, dated April 23, 2020 and Addendum 2, dated April 28, 2020.

I. EXPERIENCE & TECHNICAL COMPETENCE OF KEY PERSONNEL

Introduction and Firm Overview

DOWL is a multi-disciplined consulting firm that has been providing civil engineering and related services in Alaska for nearly 60 years. DOWL maintains in-house expertise in civil engineering, geotechnical engineering, structural engineering, landscape architecture, land surveying, hydrology, Geographic Information Systems (GIS), construction administration services, public involvement, master planning, and environmental services and permitting.

DOWL has offices in Anchorage, Fairbanks, Palmer, and Juneau, Alaska. For this contract, key staff will be working out of the Anchorage and Juneau offices, with travel as needed to Valdez for face-to-face meetings and site visits. Urban or rural, it would be difficult to find a location in this state where DOWL has not made a footprint. Many of our proposed staff have recent relevant experience in Valdez and with other regional clients.

We value our working relationship with the City of Valdez (City) and strive to be the City's consultant of choice for capital improvement projects. After multiple projects with the City and in the surrounding area, we have a clear understanding of how to work effectively and efficiently on your behalf.

DOWL is pleased to provide this proposal in response to your solicitation for pavement engineering, permitting support, and public outreach. DOWL has assembled the most qualified team to meet the City's needs.

DOWL has carefully selected a team of key professionals to be involved in this important contract because of their:

- Technical expertise in their fields
- Experience working with regulatory agencies
- Geographic familiarity with Valdez's unique remote-urban setting
- Commitment to Alaska's communities
- Professional enthusiasm and outside-the-box thinking
- Experience on similar projects

Experience Working with Regulatory Agencies

DOWL is experienced working with regulatory agencies like the Alaska Department of Environmental Conservation (ADEC) and our experience will help keep the City's project on schedule and on budget. DOWL's proposed water, sewer, and stormwater drainage team is made up of Chase Nelson, PE and Chris Maus, PE. They are experienced in getting projects constructed through the ADEC approval process in an efficient manner. Their philosophy is to include ADEC early and often, so that their concerns and comments can be incorporated into the 95% design submittal.

This method has proven effective as many of our projects are approved for construction well before the 30-day review period is up. For projects like the Kanakanak Sewage Lagoon Relocation, which was recently reviewed, ADEC approved construction less than a week after the 95% design was submitted!

Relevant Similar Projects within Seven Years


CORDOVA CITY STREET IMPROVEMENTS, CORDOVA, ALASKA

The City of Cordova listed seven projects constituting 10,850 linear feet of reconstruction on city streets. DOWL was contracted to survey all the roads and design as many as possible within the \$2.2 million budget. Each project had different priorities for curb, gutter, and drainage improvements. It was determined that it would be better to break the street package into two construction seasons and the City of Cordova identified three additional priority streets for design the following construction year.

Working closely in consultation with the City of Cordova, certain streets were identified that could qualify for additional federal grants. DOWL accelerated the work schedule to deliver designs for these sub-projects to meet the grant application deadlines and to secure funding for the planned construction schedule. DOWL tailored these designs to meet the City of Cordova's needs as well as to qualify for (to score high enough) the federal grant funds. Additionally, DOWL assisted with the technical portions of the grant application.

Project Similarities
✓ Rural Alaska
✓ Coastal Location
✓ Similar Project Scopes
✓ Municipal/Public Project

Project Information
Project Size: \$2.2 million (construction cost)
Reference: Samantha Greenwood, City of Cordova, 907.424.6200
Key Personnel: Naomi Hobbs (Project Manager), Willie Stoll (Survey), Jacob Minturn (Transportation Engineer) Eric Voorhees (Civil/Construction Engineer)



I wanted to thank (DOWL) for your time, effort, and energy working on the plans for Adams Avenue. We would not have gotten the grant without you. Adams and Browning are beautiful... Thanks again for all of your help, it's hard to describe how great of an improvement the sidewalks are to Cordova. Pictures really don't do it justice.

- Samantha Greenwood, City of Cordova -

ALEUTIAN HOMES, KODIAK, ALASKA

DOWL has been performing residential, utility improvement, and design work in Kodiak for nearly a decade as part of the Aleutian Homes Subdivision upgrade projects. The 60-year-old subdivision is one of the largest and most densely populated subdivisions in Kodiak. The City of Kodiak recognized the need to upgrade the utilities, including drinking water, sanitary sewer, and storm drain lines, as well as provide upgrades to the roadway and pedestrian facilities.

The Aleutian Homes Subdivision improvements spanned six phases covering approximately 9,000 feet of road improvements, with 8,600 feet of water main (ranging from six- to 20-inch ductile iron pipe [DIP]), 7,700 feet of sanitary sewer (typically eight-inch DIP), and 9,200 feet of storm drain (varied from six-inch CPEP up to five-foot CMP) was included in approximately \$18 million in construction improvements.

One of the key design features in these projects included storm drain and subdrain improvements throughout the subdivision, particularly on Thorsheim Street. Storm drain improvements included a nearly 12-foot-long headwall that directed steady runoff from the hillside above into a new, 36-inch CPEP storm system. The headwall replaced a small caged inlet that was nearing the end of its useful life.

There were two primary subdrains that were installed to help mitigate heavy groundwater movement discovered during geotechnical investigations. The groundwater was observed flowing directly below the pavement surface near the intersection of Oak Avenue and Thorsheim Street and would cause problems during construction. The groundwater was suspected to be flowing from down the hillside and into the subgrade from above Oak Avenue, and then get caught between shallow bedrock and the paved surface.

To solve this problem, DOWL proposed two subdrains to be installed that included a 12-inch subdrain on Oak Avenue, just north of Thorsheim Street, and a 24-inch combination fin/subdrain that extended from the intersection east to connect to the gravity storm drain collection system. The sub drains used were double-walled CPEP pipes with circumferential weep holes wrapped in permeable geotextile fabrics and bedded in granular fill. The 12-inch subdrain was installed directly below the sewer and water mains on Oak Avenue and is used to drain groundwater that would flow along the deep utility trenches. The 24-inch subdrain was installed near the base of the intersection, with the first section as a fin drain, with an impermeable curtain to collect flowing groundwater and direct the water to the subdrain. The 24-inch subdrain was installed below the existing bedrock surface to prevent groundwater from saturating the competent structural road section.

Project Similarities

- ✓ Rural Alaska
- ✓ Coastal Location
- ✓ Similar Project Scopes
- ✓ Municipal/Public Project

Project Information

Project Size: \$18 million (construction cost); 9,000 feet of road improvements, 8,600 feet of water main

Reference: Glen Melvin, City of Kodiak, 907.486.8065

Key Personnel: Brad Melocik (Storm Drainage), Willie Stoll (Survey), Eric Voorhees (CA), Chase Nelson (Water and Sewer), Irene Malto (Design), Anna Ferntheil (Geotech), Jeremiah Holland (Geotech)



DOWL provided revetment dike design and CA services for the City of Valdez on Glacier Stream (shown above). On June 11th, 2019 a glacier outburst event occurred, proving this dike project was timely.

VALDEZ FLOOD MITIGATION, VALDEZ, ALASKA

DOWL assisted the City in the preparation of plans, specifications, estimate, permitting, Stormwater Pollution Prevention Plan (SWPPP) documents, and construction administration for multiple locations of dike extension and renovation along Glacier Stream, Mineral Creek, and the Lowe River. The projects involved the review of previous studies, scour analysis and riprap sizing, design, and collaboration with resource agencies (Alaska Department of Natural Resources [DNR], United States Army Corps of Engineers [USACE], Alaska Department of Fish and Game [ADFG], and ADEC) for permit approvals.

DOWL prepared gravel extraction plans for Mineral Creek, Glacier Stream, and the Lowe River and worked with the agencies for permit approvals. Currently, these permits have resulted in over 75,000 cubic yards (CY) of excavation from Mineral Creek and Glacier Stream. DOWL and the City are working with DNR on a material sales agreement for the Lowe River near 10 Mile (Alpine Woods). Once the DNR commissioner signs off on the material site, the City will be permitted to extract gravel from the river.

DOWL has provided on-site assistance during construction on a few of the dike repair projects. Eric Voorhees was on-site for approximately 10 days during fall 2014. He determined that an older (2010) survey was out of date and modifications to the design were needed. Eric and Brad worked together to find a workable field solution that met the design intent while maintaining the contractor's schedule. Recent flooding has not compromised the dike, confirming that the present designs are effective. Projects have been completed on budget and on schedule with some revisions to accommodate additional scope or unexpected work.

Brad has been responsible for the flood mitigation from design

Project Similarities

- ✓ Rural Alaska
- ✓ Coastal Location
- ✓ Municipal/Public Project

Project Information

Project Size: Various - \$40,000 to \$1.5 million (construction cost)

Reference: Nate Duval, Scott Benda, City of Valdez, 907.835.5478

Key Personnel: Brad Melocik (Project Manager), Willie Stoll (Survey), Eric Voorhees (CA)

and permitting to presentations to Council and the Flood Task Force. DOWL has shown the ability to provide survey, geotechnical, engineering, and environmental services for the City and to stay on schedule and on budget.

**BENNETT STREET AND AIRPORT ROAD
RESURFACE,
WRANGELL, ALASKA**

DOWL provided design services to resurface Bennett Street, Airport Road, and a short section of Evergreen Avenue in Wrangell, Alaska. Project elements included minor pavement structure and subgrade repairs, Americans with Disabilities Act (ADA) curb ramp improvements, pavement markings, replacement of existing culverts and drainage structures, lighting, and signs. The project widened an existing four-foot sidewalk to five feet. DOWL worked creatively with DOT&PF to comply with the requirements of a preventative maintenance project while maximizing the amount of value added to the project.

Project Similarities
✓ Rural Alaska
✓ Coastal Location
✓ Similar Project Scopes
✓ Municipal/Public Project

Project Information
Project Size: \$4.3 million (construction cost)
Reference: David Pyeatt, DOT&PF, 907.465.4490
Key Personnel: Eric Voorhees (Project Manager), Toby Lockhart (Lead Design), Naomi Hobbs (Transportation Engineer), Irene Malto (Transportation Engineer), Jacob Minturn (Transportation Engineer)

**Team Resumes/
Biographies**

BRAD MELOCIK, PE, PH
Contract Manager

Brad is a manager, licensed engineer, and hydrologist with over 20 years of experience in roadway, water, and planning projects. Brad's knowledge of Valdez, its people, and its engineering challenges make him an excellent choice to oversee the contract for this project. Also, his decade of involvement with Anchorage Tomorrow (Chairperson for two years) and experience with Road Bonds Yes in the Matanuska-Susitna Borough give him insights into bond propositions and working with the public to educate them on the benefits.



NAOMI HOBBS, PE
Project Manager

Naomi serves as DOWL's Juneau office manager and has spent the last 26 years successfully developing Alaska Infrastructure as both a consultant and construction manager. Her experience includes site civil, transportation, and utility design for cities and towns all over Alaska, but especially in the Southeast. Naomi is adept at managing large projects with multiple disciplines and a wide range of tasks. Her direct communication style and pleasant personality make her a successful team leader. Her technical design skills, project



experience in coastal communities, and construction background make her well qualified to lead this project.

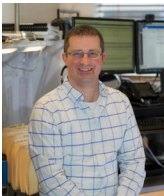
IRENE MALTO, PE, PMP
Project Engineer/Utilities/Permitting

Irene is an experienced transportation engineer and project manager with the ability to lead multi-disciplinary teams to produce quality deliverables. She has over a decade of experience in developing plans, specifications, and estimates, as well as coordinating with local utility companies to identify and mitigate utility conflicts and prepare utility agreements. Irene has worked on several roadway reconstruction projects in Kodiak and southeast Alaska with similar climate and issues as Valdez. Outside of coastal Alaska, Irene has worked on numerous pavement preservation projects and is currently leading a team designing road improvements at over 30 locations damaged by the 2018 Earthquake. Her organizational skills and proficiency in coordination make her especially qualified for this role.



TOBIAS LOCKHART, PE
Project Engineer

Toby is one of our lead engineers in the Juneau office and has been with DOWL for over 15 years. Toby's practical field experience serves him well when designing constructible projects that clearly define the work and how it will be paid for. While his focus has been municipal road reconstruction in coastal towns, his design work also includes a variety of city and state projects, including pedestrian access, preventative maintenance pavement re-surfacing, site development, uplands development for sea walks, and basic subdivision road rebuilds.



JACOB MINTURN, PE
Transportation Design

Jacob is a licensed civil engineer in DOWL's transportation department and has worked on both roadway and civil design projects for the past seven years. Jacob has experience both as a designer and in construction and has been a part of numerous pavement preservation projects during his time at DOWL. His design experience includes geometric roadway design, 3D roadway modeling, roadway and intersection grading, signing and striping, roadway drainage and storm drain, and retaining wall design. Based out of our Palmer office, Jacob often works on small city and borough projects.



CHASE NELSON, PE
Water/Storm/Sewer Engineer

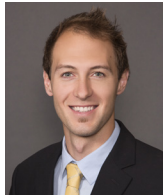
Chase joined DOWL's civil design department in 2008, and focuses on Alaska's remote locations. He regularly works in rural and arctic areas around the state. Chase understands the unique needs and challenges associated with projects in remote and disconnected parts



of coastal Alaska. His expertise and talent is focused in water/stormwater/sewer engineering. Chase has been the project engineer or manager on multiple utility projects in Southeast Alaska and on Kodiak Island.

CHRIS MAUS, PE
Water/Storm/Sewer Engineer

Chris is an engineer with experience in rural water and wastewater. He has authored preliminary engineering reports, technical memoranda, master plan documents, technical specifications, estimates, and contract documents and has expertise in the design, operation, and testing of pilot water systems. His rural and small-community water systems experience spans Montana to Kansas, and more recently small Alaska communities such as Bethel, Kotzebue, and Ketchikan.



JEREMIAH HOLLAND, PE
Geotech/Pavement Design

Jeremiah has extensive experience leading projects related to transportation, infrastructure, land development, mining, and oil and gas. Jeremiah has expertise in geotechnical engineering, arctic ground conditions, rock and soil mechanics, engineering geology, software modeling (including SLIDE, Settle3D, and Phase2), and construction materials testing.



ANNA FERNTHEIL, PE
Geotechnical Engineering/Pavement Design

Anna has eight years of geotechnical and materials inspection and testing experience working for the DOT&PF and DOWL. Her geotechnical experience includes work on roads, airports, and foundations in various Alaskan communities, including Valdez, Homer, Kotzebue, Nome, Soldotna, and Kenai. Anna has been to Valdez many times to attend the Valdez Fire Symposium and Rock and Ice Climbing Festivals, to complete the 2018 pavement survey, and to take advantage of the legendary backcountry skiing opportunities the community has to offer.

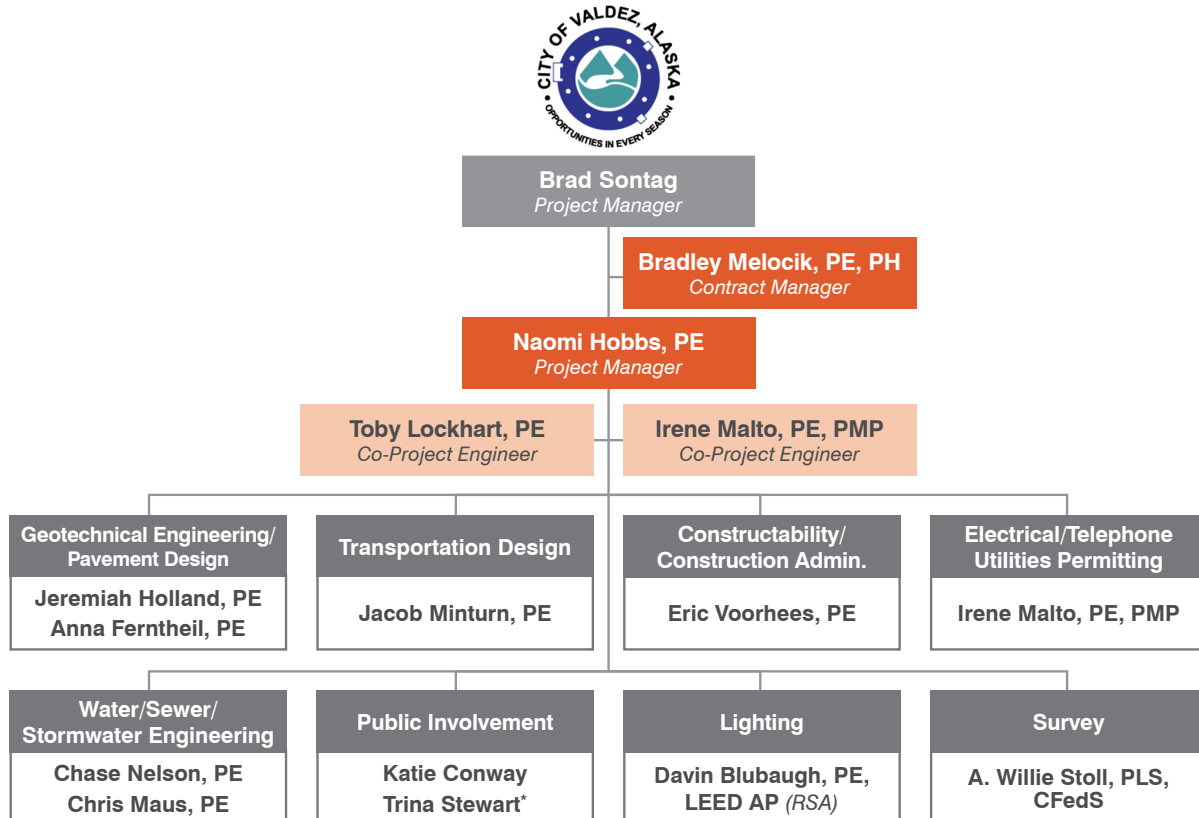


ERIC VOORHEES, PE
Constructability/Construction Administration

Eric has been with DOWL for 13 years, and before that he worked in residential and commercial construction for seven years. During his time with DOWL, he has focused on infrastructure and transportation projects across Alaska – from Ketchikan and Wrangell to Nome and Valdez. Eric's strong working knowledge of construction and his technical background as an engineer give him the edge as a very effective task lead.



TEAM ORGANIZATIONAL CHART



* Available to assist, if necessary.

KATIE CONWAY

Public Involvement

Katie has more than a decade of experience in community engagement and has assisted with a diverse array of community projects, including while working for the Alaska State Legislature and for the Alaska Energy Authority (AEA). During her time at AEA she promoted the purchase and delivery of diversified energy sources to communities around the state. These projects required community buy-in and Katie used her strong planning and clear communication skills to promote successful outreach campaigns. Those skills have served her well at DOWL where she leads our Alaska public involvement efforts. Katie customizes her outreach for each audience and for the needs of the client with a repertoire that includes in-person and online community meetings and events, mailers, websites, and creative outreach methods to get the attention and participation of project stakeholders.



A. WILLIE STOLL, PLS, CFEDS

Survey Lead

Willie has traveled throughout Alaska performing surveys for municipal governments, local entities, and state agencies, and has worked on numerous contracts with the USACE, State of Alaska Department of Transportation and Public Facilities (DOT&PF), and other clients. He is a versatile and highly experienced surveyor.



Subconsultant: RSA Engineering

RSA Engineering, Inc. (RSA) is an Alaska consulting firm specializing in mechanical



and electrical engineering in cold climates. RSA is an employee-owned firm and focuses on applying their technical expertise in a client-centered manner by ensuring their projects are sustainable, affordable, and maintainable for the owner, as well as sensible for the project location. Their staff has provided the full range of consulting services for a wide-variety of projects throughout Alaska for 33 years. This experience includes facilities for local governments, federal government agencies, and private industry.

DAVIN BLUBAUGH, PE, LEED AP

Lighting Design Lead

Davin brings 14 years of design and construction experience to the team, and will provide electrical engineering services as needed. Davin has worked with the City for the past 8 years and has developed a respected reputation with the City's personnel. Davin's Valdez experiences include projects at the Valdez container terminal, small boat harbor, airport, all three schools, the hospital and clinic, city hall, and various well houses and lift stations throughout the city.



Team Time Commitments

As demonstrated in the following chart, DOWL's proposed team has ample time to accommodate the City's proposed work for the Pavement Management Phase II project.

Staff Commitments <i>Time committed to all clients and all contracts</i>	2020			
	Q2	Q3	Q4	2021
Brad Melocik, PE, PH	60	40	30	30
Naomi Hobbs, PE	80	60	50	50
Irene Malto, PE, PMP	50	30	25	15
Toby Lockhart, PE	60	40	20	20
Jacob Minturn, PE	60	50	30	20
Chase Nelson, PE	60	40	20	15
Chris Maus, PE	75	60	50	25
Jeremiah Holland, PE	75	50	25	25
Anna Ferntheil, PE	75	60	40	40
Eric Voorhees, PE	60	60	50	40
Katie Conway	50	50	50	40
A. Willie Stoll, PLS, CFedS	35	30	30	30
Davin Blubaugh, PE (RSA)	70	50	30	25

ii. PROJECT APPROACH AND ABILITY TO MANAGE PROJECT SUCCESSFULLY

Communications with the Design Team

Naomi will be the project manager for this project and will be the main point of contact for the City of Valdez. She will hold regular progress meetings, telephone coordination, and email updates with Brad Sontag, City of Valdez Project Manager, and other City officials, so that progress and upcoming milestones and events are understood and coordinated. Naomi and her project engineers (Irene Malto and Toby Lockhart) will be readily available to meet with Brad in Valdez or by phone/video conference if direction is needed, if work needs to be reviewed, or public presentation support is desired. Work on this project will be completed from both our Anchorage and Juneau offices, with Anchorage-based RSA providing electrical support. Naomi will invite project engineers to partake in project meetings and communications with the City on an as-needed basis.

Communication amongst the design team will be maintained through email, face-to-face meetings, and video conferencing capabilities. Our project organization chart (on page 4) illustrates the clear lines of authority and responsibility for work under this contract. Depending on project demand, Naomi will typically host weekly check-in meetings with her project staff to follow-up on deliverable progress and always keeps an eye on the critical path. She will coordinate with the project engineers assigned to the various project elements and they will continuously work and communicate with the design team daily. This communication structure has worked successfully for previous projects in which she's led from Juneau and coordinated with our Anchorage design team.

Handling Project Demands from Design Review Through Close-out

SCOPE OF WORK

The project scope of work is to provide bid-ready plans, specifications, and an engineer's cost estimate for the proposed road and utility improvements for construction in 2021. We propose dividing the work into the following phases, each concluding with a distinct deliverable:



Phase 1: Survey

We understand that the desire of these projects is to minimize design survey needs and to expedite the schedule for design while maintaining quality. We will do that by working closely with our design team to make sure we collect needed data and nothing more. This involves our design team visiting the site and inspecting project needs. Upon notice-to-proceed (NTP) we can immediately mobilize to the site to initiate the projects. Depending on the timing, we can call on survey staff out of Anchorage or Juneau to mobilize to the site. Our experienced survey team will perform the

horizontal and vertical control as well as topographic survey. We will search for and tie property corners for local subdivisions adjacent to the roadways to establish the ROW, property lines, and easement lines. We will also set a minimum of three control points within the ROW for use during construction. Control points for this project will be 5/8-inch rebar with aluminum caps unless otherwise directed. DOWL will base project elevations on local benchmarks near the project. We will perform differential leveling with a digital level and bar-coded rods to control the project vertically.

DOWL will perform a ground-based topographic survey of the project area. Initially, our plan is to extend the survey laterally to the face of structures on both sides of the street. We will also survey 100 feet in each direction along Cottonwood Dr. and adjacent side streets. Survey limits may be adjusted based on engineer's site visits and discussions with the City project manager. Depending on the optional scope of incorporating the proposed housing development, realignment of Kobuk Dr., and other possible areas identified in the PMP, our surveyors will be equipped to provide the appropriate survey to support the design of those areas. We will do the work with a combination of RTK GPS and conventional methods with a total station. Hard features such as pavement, concrete, and building corners will be located with a total station instrument.

Our surveyor will collect existing planimetry information including roads, building corners, utility poles, trees, and any other visible objects. Sufficient spot elevations will be collected in order to develop one-foot contours within the survey area. Overhead wire and ground elevations will be collected at the centerline of roads and the low point of each span crossing the ROW.

We will locate underground utilities and as-build them to determine size and type of pipe, invert elevations, and direction of flow. We will request locates for buried utilities through the Alaska Dig Line center and identify those that are marked on the ground.

The results of the field survey will be reduced by computer and entered into an AutoCAD file to create basemaps. These files will be used as the basis for the design documents.

Opportunities to reduce costs include using LiDAR or truck mounted GPS for topographic survey data collection. LiDAR is accurate to a few tenths, and truck mounted GPS is accurate to about a tenth; both of these methods will substantially reduce the survey efforts (25% or less of traditional methods) and have the added advantage of improving safety for field survey.

Deliverables: Basemap for project design extents including existing roadway, utilities, and pertinent features.



Phase 2: Geotechnical Investigation

DOWL will begin the soils investigation by obtaining and reviewing existing information about the site from the City and by reviewing our extensive in-house soils library. We have completed investigations for several developments in Valdez and these reports indicate that soils in the City generally tend to consist of several feet of gravelly material over silty sand or sandy silt.

We propose a field exploration program consisting of 10 to 12 boreholes distributed around the three proposed project locations. Boreholes will be advanced 15 to 20 feet in depth.

A DOWL geologist/engineer will log boreholes. Boreholes will target the worst areas of the road that will likely require a dig out to properly repair. Scheduling will be done to minimize impacts to traffic, and to minimize impacts to residents in the Black Gold Subdivision along Cottonwood Dr. Upon completion of the field investigation, samples will be shipped to our partner laboratory in Anchorage for testing. The testing performed will be determined in part by the samples retrieved, but typically includes moisture content and particle size analyses. Once the laboratory testing has been completed, we will issue a technical memorandum outlining the results of our exploration and lab testing, and provide geotechnical engineering and pavement recommendations for the paved traffic areas. Pavement sections will be developed using the Alaska Flexible Pavement Design program and the USACE's pavement design program, PCASE.

A DOWL engineer visited the sites during the preparation of the Pavement Management Plan and assessed the damage along Cottonwood Dr. and adjacent streets and found that while most of the adjacent streets were in need of pavement rehabilitation, Cottonwood Dr. needed more to address the damaged pavement and underlying base course issues. Replacing the pavement and underlying base course will be adequate for most sections of the road in areas with no water, sewer, or storm drain upgrades. Isolated areas with severe damage may require a dig out section to maximize the life of the new pavement. A full reconstruction is assumed for portions of road where water, sewer, and storm drain work is being performed. The reconstruction of the sidewalk will also be necessary to address the numerous cracks observed and to properly upgrade it to ADA standards and install curb ramps for pedestrians. Recommendations for drainage will also be provided. Geotechnical analysis and recommendations can also be performed for the additional housing development areas and the proposed realignment of Kobuk Drive.

We anticipate being able to begin work within two weeks of receiving NTP, depending on drilling contractor availability. Field work is anticipated to take three days. A draft report will be issued within six weeks of completion of field work. The report can be finalized within two weeks of receiving comments from the client.

Deliverables: Geotechnical recommendations report and soils data resulting from boreholes.



Phase 3: Concept Design

The Concept Design phase will include plan views, conceptual designs of the road improvements,

and any utility replacement alignments for review and feedback. These concept designs will be supplemented with a brief engineer's report detailing preliminary engineering recommendations on project specific decisions, such as water and sewer main material type, and burial depth. The engineer's report also will provide important background information for ADEC approval to construct applications. The engineer's report will be accompanied by an engineer's estimate.

The concept designs will be produced with input from the City and stakeholders. The intent of the conceptual designs is to gather feedback and put those ideas into a format that can be conveyed into the design phase. Most importantly, at this point various alternatives can be evaluated that will allow DOWL to put together a cost evaluation for the City's consideration. We recommend a meeting in Valdez to review the concepts and budgets to make sure that the final designs move forward quickly.

When determining the appropriate bond amount, these estimates will give valuable input to how many projects should be considered for construction, and if additional areas, such as the housing development areas at Woodside Dr. and Whalen Dr. as well as the realignment of Kobuk Dr., are palatable to residents and City Council.

DOWL has already started researching these projects by collecting geotechnical data and as-built information. We plan on starting as soon as we have NTP. After the kick-off meeting, and while the survey and geotechnical investigations are taking place, we will begin developing and compiling concepts using existing LiDAR and aerial photos.

Deliverables: Development of conceptual plans at a 35% design level and cost evaluation of alternatives.



Phase 4: Plans, Specifications, and Estimate

Prior to the final design submittal, DOWL will submit for review and discussion an informal pre-final submittal, near the 95% design completion, to finalize design components. This will be an over-the-shoulder review intended to be efficient and accommodate comments from the City.

Black Gold Subdivision

The roads in this subdivision are in disrepair due to poor subsurface and pavement conditions.

Cottonwood Drive

Improvements along Cottonwood Drive, especially the water and sewer utility improvements, will need to be coordinated with the residents along that corridor. Both the water and sewer utilities are known to have significant issues and need to be replaced. Coordination with the residents may include performing the work during a time that's less disruptive to them when temporarily shutting down water and sewer services or when switching services over to new lines. Additionally, traffic control and construction phasing will be included to allow access to homes.

Housing Development Areas

We understand that Woodside Drive and Whalen Drive need

to be extended for the proposed housing development areas. DOWL has already submitted plans to the City for work on Whalen Dr. and is familiar with the needs there. Along with these extensions, water and sewer utilities as well as drainage design will be included. DOWL will work with the City to identify water and sewer alignments that maximize separation for public and environmental health protection, but also take into consideration future development and maintenance activities.

Kobuk Drive

The proposed realignment of Kobuk Dr. will be coordinated with the waterfront masterplan. This roadway is the sole access to S. Harbor Road and improving its design and functionality of access and utilities is a priority for the City.

Special Provisions will be prepared based on the City Standard Specifications (April 2003 edition). An engineer's estimate will be included with each submittal, matching the standard pay items based on the standard specifications.

Deliverables: Development of 95% design plans for review. Finalization of special provisions, estimate, and Issued for Construction Plans.



Phase 5: Permitting

Critical path for most water and sewer improvement projects is usually obtaining ADEC Approval to Construct. Technically, ADEC has 30 days to review and comment on engineered plan systems, but we have found 30 days is not realistic without significant involvement before the submittal and request for review. We will begin meeting with ADEC as soon as we have schematic designs complete, to brief them on our design proposal and seek early feedback. At the 95% level we will organize a pre-application meeting with them to go over our request for approval to construct and explain any separation waiver requirements. In the past, we have had success with expediting a review, by involving ADEC early on as a team member, instead of a regulatory hurdle.

At approximately 95% design completion DOWL will prepare and submit applications to the ADEC for Approval to Construct the proposed water mains. With early coordination, this design review by ADEC typically takes approximately 30 days to complete, but can move much quicker with pre-approval procedures. The ADEC design review is a regulatory requirement.

Deliverables: Approval to Construct Submittal and ADEC Approval.



Phase 6: Construction Administration

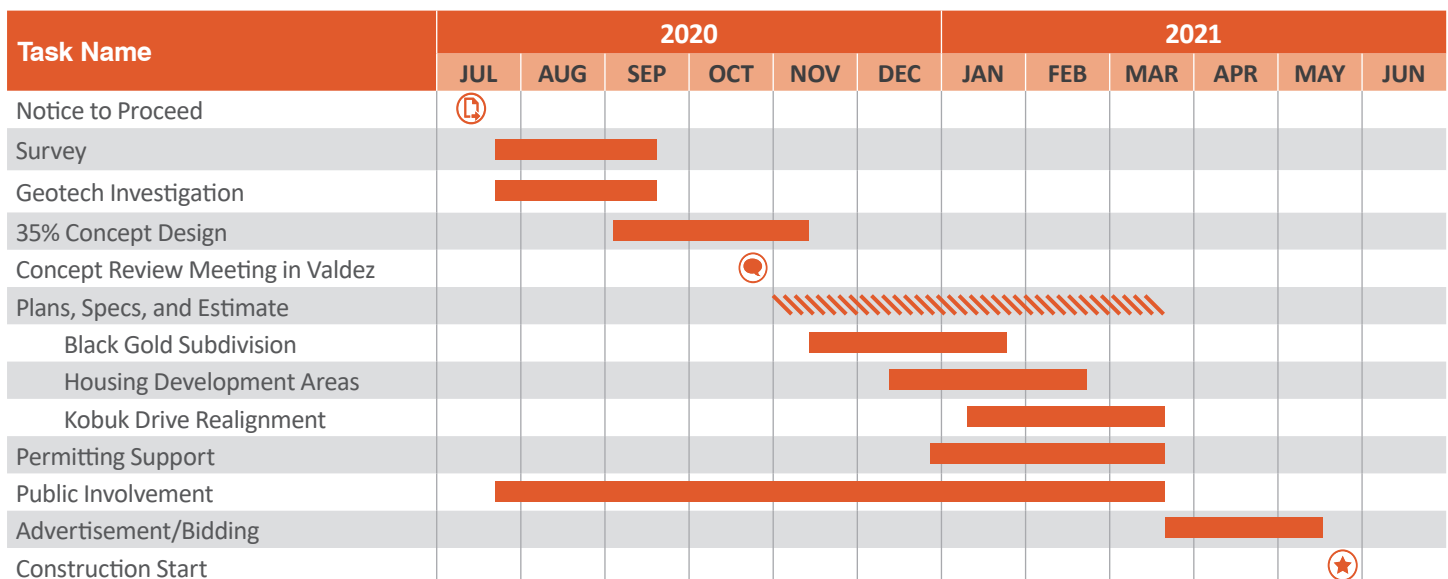
DOWL is available to provide assistance during all phases of the construction project, including bidding the project and selecting a qualified and cost-effective construction contractor and providing construction administration during the construction.

On-site Inspection

Depending on the size and phasing of the proposed project, DOWL will work with the City to determine an appropriate level of oversight for the given project. Historically DOWL has provided construction oversight for many City projects, including the 2016 City Streets project. DOWL's construction oversight can be tailored to each project and typically includes construction field staff providing inspection and observation of the contractor's daily activities, with a focus on ensuring the contract documents are followed, identifying and quickly resolving any conflicts that arise during construction, and overall protecting the interests of the City. DOWL's staff focuses on working with the construction contractor to proactively identify critical path items and facilitate their completion, such as making sure permit commitments are followed, approved materials are used for construction, and TCP requirements are implemented. DOWL will document progress using inspections reports submitted regularly to the City project manager.

We are experienced in providing Owner's Representative services and can oversee this portion of the project with a third-party inspection team.

PRELIMINARY PROJECT SCHEDULE



SWPPP Inspection

Agency requirements for the SWPPP inspection and reporting are becoming a more important part of the construction of projects. Without thorough, detailed documentation all involved parties can be held accountable for fines. DOWL can write SWPPP documents, provide SWPPP inspections through our field inspector, or assist the City with other reviews as needed.

Pay Request Preparation/Pay Item Reporting

DOWL can assist in the review of contractor pay requests and reporting of pay quantities as needed by the City. DOWL field staff have monitored pay quantities on federally funded projects, which are known to have some of the most stringent reporting requirements. DOWL staff have monitored pay quantities for non-federally funded projects and are able to save local staff time when preparing progress estimates for contractors.

Keeping Project on Time and Within Budget

The first five phases of the work conclude with distinct milestones. Naomi's primary responsibility will be to manage the DOWL team to keep these milestones on schedule. The DOWL team will follow strict administrative and operational structure to maintain schedules, realistic budgets, and conduct Quality Assurance (QA) and Quality Control (QC).

As project manager, Naomi will keep the project on track and hold all team members accountable for project assignments using the following tools:

- Monthly progress meetings/phone calls with the City project manager followed by brief email notes
- Monthly internal progress meetings to discuss near-term deadlines
- Provide agendas and meeting notices with proper time allotted for the City project manager's review
- Milestone meetings with City staff at key points of the project
- Conduct internal DOWL QC reviews to make sure products are fully vetted before being submitted to the City project manager

As the project manager, Naomi will be the City's single point-of-contact, assign resources to each task, establish and monitor the schedule, and track the budget. Throughout the project, staff changes may be required, and Naomi will communicate these changes to the City. Changes will be seamless from the City's perspective. We have been in business in Alaska for nearly 60 years thanks to excelling in a market where workloads fluctuate greatly. Our process has been developed through years of project management experience. We look forward to completing this project for the City.

Deliverables

PHASE 1 SURVEY

- Concept Design and Estimate
- Survey Control Drawings

PHASE 2 GEOTECHNICAL INVESTIGATION

- Geotechnical memorandum highlighting recommendations for roadways

PHASE 3 CONCEPT DESIGN

- Concept designs and estimates
- Agenda and minutes documenting chosen alternatives
- Engineer's report

PHASE 4 PLANS, SPECIFICATIONS & ESTIMATE

- Bid-ready drawings, special provisions, and engineer's estimate

PHASE 5 PERMITTING

- ADEC Approval to Operate application

iii. PUBLIC OUTREACH

Effective public involvement is crucial to developing a project that meets the community's goals and vision. DOWL is committed to a close working relationship with Valdez stakeholders to successfully design and assist with construction of the Pavement Management Phase II.

DOWL's first task will be to prepare a project-specific list of key stakeholders for the project, including the Community Strategic Plan group, Valdez City Council, Planning and Zoning Commission, Beautification Task Force, resource agencies, and local residents and business owners. Katie Conway will use her extensive community engagement experience to identify appropriate public outreach methods that will maintain an effective dialogue between the project team and stakeholders about project objectives, challenges and opportunities, and the schedule for project implementation. Katie has helped develop and support effective public involvement strategies with local government agencies, industry, stakeholders, and the public through attendance and facilitation of public and industry events. Throughout this project, Katie will support DOWL's project manager, Naomi Hobbs, to provide an effective outreach process and make adjustments if needed for effective project messaging and communication.

Assisting with Bond Promotion

DOWL understands the importance of successfully promoting bond propositions for project funding and is prepared to assist the City with these efforts however possible. A coordinated strategic communications campaign emphasizing the benefits of the work funded with the bond will minimize oppositional arguments and will be critical to success. Even more important is ensuring an adequate level of public awareness about the problem being solved by the project before the bond proposition is even considered. Proactive communication that relies on consistent stakeholder engagement, a recognizably transparent public process, and clear understanding of the public benefit brought by project completion will set the City up for a successful bond proposition campaign. Katie's ability to reach the public where they are through proactive, strategic, and creative public involvement will support project goals as well as bond promotion.

Strategic communications will play a crucial role in building consensus among different stakeholder groups and mitigate opposition risk. Stakeholders include residents in affected

areas, City Council members, state and local permitting and funding agencies, and Valdez community members. Regarding the promotion of public bonds, success will rely on developing key messages as well as identifying local champions and power brokers to advocate for the bonds using those messages. DOWL will work with you to develop a strategic communications plan specifically for this project in coordination with the City.

Gathering Consensus of Citizens Directly Impacted by the Projects

DOWL will employ a three-tiered approach to stakeholder engagement and consensus building.

1. Katie will establish and manage a project Advisory Group made up of representatives from each of the discrete stakeholder groups. This group will meet regularly throughout the duration of the project. The primary purpose of these meetings will be to create a forum for information sharing and discussion. The path to consensus is built on compromising and must include an opportunity for dissent; the Advisory Group will play a critical role in generating consensus as the vehicle for that negotiation.
2. Regular and up-to-date project information will be shared via a project website, public meetings, mailing and advertising, and social media to educate the public about the project's public purpose, goals, and current status.
3. Public feedback will be gathered for consideration by the Advisory Group and project team using an interactive web-based mapping tool, Social Pinpoint. The goal is to make sure the public feels heard, and that people understand clearly what the impact is for them if the project does and does not happen.

Key Stakeholder Concerns

We know that stakeholders will likely be concerned about both corridor-wide and intersection-specific matters, including:

Pedestrian/Non-motorized Facilities

Residents and visitors regularly walk and bike through this area to access Black Gold Park Strip.

Construction Impacts

Work on the roadway will likely coincide with the summer tourist and fishing season in Valdez. Coordination and effective communication will help to address these challenges. Access to the bed and breakfast, park strip, and residential homes will need to be maintained.

Truck Traffic/Detours

Partial road closures and appropriate construction phasing will allow residents and businesses continuous access through the corridor and adjacent side streets. If full closures are necessary for utility repairs detours will be in place to allow access.

Utility Impacts

Connections to water and sewer utilities can be lifelines for residents and businesses. We will design temporary connections to reduce impacts while the contractor is replacing these utilities.

Public Outreach Methods

Katie will prepare a detailed Public Involvement Plan (PIP) that will combine traditional and innovative methods, building on prior outreach (where effective) so all interested voices are heard and documented. Methods include:

MAILING AND EMAIL LISTS

DOWL will develop and maintain a mailing list of interested agencies, organizations, and individuals, including all residents, business owners, organizations, and property owners adjacent to the Phase 1 areas. This list will include both postal and email addresses to provide meeting and project milestone notices (printed flyers and door-hanger) to stakeholders.

ADVERTISING

Flyers and public meeting advertising will be distributed using the online version of the *Valdez Star*, Post Office, Valdez City Library, City Council, and Safeway. Door hangers will be distributed prior to public meetings and prior to construction.

WEBSITE AND INTERACTIVE MAP

A website link will be set up on the City's website (www.valdezak.gov), which will contain background information, Phase II project areas, schedule/timeline, meeting information, links and documents and contact information for the project team. In addition, the project team will use Social Pinpoint, an interactive mapping tool to engage stakeholders and gather input. The interactive map will be accessible via the City's website.

SOCIAL MEDIA

Katie will work with the City's public information team to craft and schedule project-specific content for the City's Facebook page and Twitter feed. Social media advertising campaigns will be initiated in advance of the public open house meetings. Katie is adept at using social media for public outreach, which has saved agencies money when stakeholders are in remote locations or have mobility challenges that make it difficult to attend open house meetings.

PUBLIC PARTICIPATION

The project team will host at least two meetings open to the public. The first meeting will be held during concept design activities. The second meeting will be held following design and evaluation and prior to anticipated construction.

Public Involvement will be ongoing throughout the design process. However, specific outreach will be conducted when the preliminary design is complete. Specifics of the public involvement effort will be finalized through consultation with the City of Valdez.

COVID-19 Impacts

Depending on state and local health mandates and social distancing guidelines, these meetings could be hosted on-line with a virtual host explaining the project and answering questions submitted online and over the phone. Since the pandemic has changed "business as usual," DOWL has been very successful in engaging community stakeholders via virtual and online public meetings.



Contract Manager

Education

Bachelor of Science
Environmental Engineering
University of Florida

Licenses

Professional Engineer:
Alaska #11098-CE

Professional Hydrologist
#09-H-1912

Years of Experience

21

Professional Affiliations

American Institute of
Hydrology • American
Society of Civil Engineers •
Geoprofessional Business
Association

Professional Experience

Brad is a manager, licensed engineer, and hydrologist with over 20 years of experience in roadway, water, and planning projects. Brad's knowledge of Valdez, its people, and its engineering challenges make him an excellent choice to oversee the contract for this project. Also, his decade of involvement with Anchorage Tomorrow (Chairperson for 2 years) and experience with Road Bonds Yes in the Matanuska Susitna Borough give him insights into bond propositions and working with the public to educate them on the benefits.

Project Experience

Valdez Flood Mitigation, Valdez, Alaska. DOWL developed gravel extraction plans to provide the City of Valdez guidance on sustainable river mining practices and locations for annual gravel mining operations in the Lowe River, Mineral Creek, and Glacier Stream. DOWL also has provided plans, specifications and estimates to the City of Valdez for various revetment and dike extensions and upgrades. DOWL assisted in obtaining the necessary permits and coordinating with other stakeholder agencies. Brad is the project manager, and first point of contact, and often leads discussions of the flood task force.

Akutan Harbor Access Road Engineering Design and Survey Services, Akutan, Alaska. DOWL designed a new, two-mile road connecting Akutan with a U.S. Army Corps of Engineers-constructed boat harbor. After evaluating several alignments, a shoreline alignment was selected to improve constructability and cost effectiveness. The project schedule was aggressive, and successfully completed in 15 months. Brad prepared hydrologic and hydraulic report, computed fetch and scour computations, determined rock sizing for revetment along roadway, reviewed designs in the field, and performed field work.

Bogard Road Extension East, Matanuska-Susitna Borough, Alaska. DOWL provided environmental, public involvement, and engineering services to the Matanuska-Susitna Borough on this \$20 million project to provide an additional east-west arterial for traffic across the core area of the borough. Brad was the project manager responsible for maintaining the schedule and budget.

Forest Highway 43 Road Improvements, Prince of Wales Island, Alaska. DOWL prepared a civil alignment study in cooperation with a separate geotechnical task order for a 12 mile stretch of highway in southeast Alaska. Brad managed the design, coordinating the survey and field investigations, and preparing documentation. Project was surveyed and designed in just nine months.

Sterling Highway: Milepost 157-169 Rehabilitation, Kenai Peninsula Borough, Alaska. Brad was the project manager for this 12-mile federally funded project that rehabilitated the existing surface, replaced existing culverts with a new bridge, realigned and straightened curves, constructed passing and climbing lanes, improved intersections, and widened shoulders.



Project Manager

Education

Docks and Marinas
University of Wisconsin
2008

Bachelor of Science
Civil Engineering
University of Fairbanks
1994

Licenses

Alaska #9959
1999/Professional
Engineer

Alaska 2014/Nuclear
Densometer Safety
Training

Years of Experience

26

Professional Experience

Naomi has been with DOWL since 2007 and serves as the Juneau office manager and transportation engineering manager. Her civil design experience includes subdivision, street, and road design with related site grading and commercial and retail site development, grading, drainage, sewer, and water utility design. Naomi has served as site civil engineering inspector on the installation of commercial facilities development on municipal street and utility construction, including retaining walls, and waterfront construction. Prior to joining DOWL, Naomi spent three years with Marion Hobbs Construction, Inc. and 10 years with R&M Engineering. She has a well-rounded background in practical design and construction methods and her direct communication style and friendly demeanor make her an effective team leader.

Project Experience

Cordova City Streets Improvements, Cordova, Alaska. The City of Cordova listed seven projects constituting 10,850 linear feet of reconstruction. DOWL was contracted to survey all the roads and design as many as possible within the \$2.2 million budget. Each project had different priorities for curb, gutter, and drainage improvements. In further discussions, DOWL and the City decided to break the street package into two construction seasons. Design was tailored for a Federal Grant that the city won for sections of the project. Naomi served as the project manager for this road improvement project.

Captain William Henry Moore Bridge Replacement, Skagway, Alaska. Our team developed the RCC Embankment option. The design includes a 75-foot-wide multi-plate arch to span the Captain William Moore Creek without interrupting flow. The arch will rest on foundations above ordinary high water and serve as form work for the RCC embankment. This approach enables construction without diverting the creek. A close look at the existing rock structure led us away from rock excavation on the north abutment for safety reasons and arch alignment adjustments were made early in the design process. This small adjustment reduced construction costs and eliminated safety concerns of working below an unstable rock mass. A stability analysis confirmed we could narrow the embankment footprint further reducing project costs. This project was completed last year. Naomi led the specialized design team and offered support during construction.

Hoonah Dock and Fuel Site, Hoonah, Alaska. Hoonah Trading Company/Wards Cove Packing Company hired DOWL for engineering and construction administration services to design a new marine fuel facility on the Hoonah waterfront. Services included planning, permitting, conceptual development and design of the new Hoonah Trading Company Fuel Depot, which serves local and transient marine vessels. The work was followed by onsite construction inspection. Naomi served as the project manager.



**Project Engineer/Utilities/
Permitting**

Education

University of Alaska,
Anchorage:
M.S. Project Mgmt./2019
M.S. Civil
Engineering/2019
B.S. Civil
Engineering/2007

License

Alaska #12965 2011/P.E.

Certifications

Project Management
Institute 2018/Project
Management Professional

Alaska #1134
2012/Certified Inspector
of Sediment Erosion
Control

Years of Experience

14

Professional Experience

Irene began her career at DOWL as an engineering intern in 2006. Since then, she has worked to gain valuable experience in the areas of transportation engineering and utility coordination. With over fourteen years of experience, she's lead multiple design projects as the project engineer and lead design engineer. Her expertise lies in working with transportation design, preparing estimates, and writing specifications for city and state projects. In addition to her role as a transportation engineer, Irene has coordinated with local utility companies in support of advanced utility relocations and prepared utility conflict reports (UCRs) and relocation agreements. Irene's strengths include proficiency in communication and facilitating information between the design team and project stakeholders.

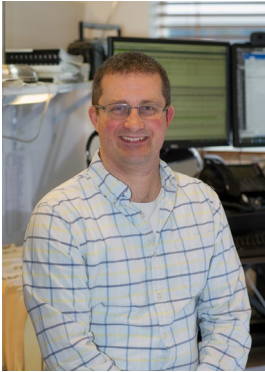
Project Experience

November 2018 Earthquake Repairs, Anchorage, Alaska. As the project engineer in coordination with the Prime Consultant, Irene is working with the DOWL team to monitor, identify, and design repairs needed to address the damage caused by the November 2018 earthquake. Site repairs her team is currently designing span from the Kenai Peninsula north to the Mat-Su Borough and involve straightforward designs such as pavement replacement to more complicated full dig-outs and large diameter culvert replacements.

Seward Highway Milepost 105-107 Windy Corner, Anchorage, Alaska. As the lead design engineer and utility coordinator, Irene is working with the team to design the realignment and reconstruction of the Seward Highway as a divided two-lane highway with safety improvements. She has been coordinating with several subconsultants for the project and facilitating information from the design team and keeping in constant communication throughout the design process.

Haines Highway Reconstruction, Phase 1, Haines, Alaska. As the project engineer, Irene lead a multidisciplinary design team for the reconstruction of approximately 12 miles of road including utility relocations, fish passage culverts, stream mitigation, debris flow structures, rock blasting, roadway realignments, and scenic parking areas.

Aleutian Homes Phase IV Construction Management Services, Kodiak, Alaska. As a field inspector in Kodiak, Irene worked closely with the client, contractor, and design team to monitor and inspect construction activities. Her responsibilities included monitoring the installation of water, sewer, and storm drain lines, as well as field locates for services from adjacent properties. Irene also performed density tests, concrete tests, and waterline disinfection and testing. She coordinated construction questions between the client, contractor, property owners, and local utility companies, as well as detailed inspection reports, test results, photo logs, and plan-sheet markups. During project closeout she field located and created maps for newly installed water and sewer service lines to adjacent homes.



Senior Civil Engineer

Professional Experience

For 15 years Toby has worked for DOWL's Juneau office providing lead design, inspection, and contract administration for numerous street and utility projects in the coastal communities of Juneau, Wrangell and Sitka. Toby began his career as an inspector and has observed first-hand how hard the freeze-thaw cycles common to the Alaska rainforests can be on our streets. Toby's practical field experience serves him well when designing constructible projects with specifications that clearly communicate expectations. With each set of contract documents he strives to provide the owner what they need while being fair to the contractor. While his focus has been municipal road reconstruction, he has also worked on preventative maintenance projects for the state of Alaska as well. He is current as a Certified Erosion and Sediment Control Lead and well versed in the Alaska Department of Conservation plan reviews common to street projects.

Education

Bachelor of Science
Civil Engineering
Montana State University
1996

Licenses

Alaska #12602
2010/Professional
Engineer

Alaska #CEF-11-0442
2019/Certified Erosion
and Sediment Control
Lead

Years of Experience

15

Professional Affiliations

Alaska Society of
Professional Engineers

Project Experience

Downtown Street Improvements – Phases I, II, and III Design and CA&I, Juneau, Alaska. DOWL provided contract administration and inspection (CA&I), survey, and design services on the multi-phased Downtown Street Improvements project for the reconstruction of Front Street, Franklin Street, and Ferry Way. Toby was the lead designer and contract administrator during construction. Careful planning and phasing during design and persistent attention to traffic control and pedestrian routing during construction maximized the value of improvements and minimized impacts on Juneau's critical tourist traffic. DOWL worked closely with the CBJ project manager to provide weekly construction updates via email and host weekly progress meetings open to the public. In between the weekly updates, DOWL worked daily with the contractors to maintain utility services and coordinate business deliveries and other special requests. Toby worked with Arete Construction on both the first and third phases of this high-profile project.

Hollywood Way and New Archangel Street Design, Sitka, Alaska. DOWL provided the survey, geotechnical, and civil design for a full street reconstruction of Hollywood Way. A narrow 2-way corridor was modified into a safer one-way street with curb & gutter and sidewalk. Both the water and sewer mains were reconstructed, and limited storm sewer improvements were also included. The roadway was constructed of a geo-textile supported shot-rock prism through underlying peat. On New Archangel street geotextile was employed to address a belly in the sanitary sewer caused by settlement of underlying peat. The street was also partially reconstructed, and a sanitary sewer manhole infiltration problem was corrected. Toby was the project manager and lead civil designer for both streets.

Wrangell - Bennett Street Rehabilitation and Airport Road Resurfacing Design, Wrangell, Alaska. Toby was the lead designer for this Southcoast DOT preventative maintenance project. Bennett Street was fully reconstructed with improvements to the storm drain system, curb and gutter, sidewalk, and a full replacement of the roadway structural section. The condition of the asphalt along Airport road varied and a combination of base course repair and cold-planing was employed to resurface cost-effectively.



Transportation Engineer

Education

Bachelor of Science
Civil Engineering
University of Alaska,
Anchorage
2015

Associate of Applied
Science
Architectural and
Engineering Technology
University of Alaska,
Anchorage
2013

Licenses

Alaska 2019/Professional
Engineer CE-142120

AK-CESCL exp 2022

Years of Experience

7

Professional Experience

Jacob is a licensed civil engineer in DOWL's transportation department and has worked on both roadway and civil design projects for the past 7 years. Jacob has experience both as a designer and in construction and has been a part of numerous projects for the Department of Transportation & Public Facilities (DOT&PF), as well as others for the Matanuska-Susitna Borough (MSB), Municipality of Anchorage (MOA), and the City of Kodiak. Jacob's design experience includes geometric roadway design, 3D roadway modeling, roadway and intersection grading, signing and striping, roadway drainage and storm drain, and retaining wall design.

Project Experience

Cordova City Streets Improvements & Paving, 2015-16, Cordova, Alaska. The City of Cordova (City) listed seven projects constituting 10,850 linear feet of reconstruction. DOWL was contracted to survey all the roads and design as many as possible within the \$2.2 million budget. Each project had different priorities for curb, gutter, and drainage improvements. In further discussions, DOWL and the City determined that it would be better to break the street package into two construction seasons and three more priority streets were designed for construction. Jacob was a staff engineer and assisted with general roadway design, intersection grading, plan set preparation and cost estimate.

Old Seward Hwy: Dimond Blvd to Dowling Rd Pavement Preservation, Anchorage, Alaska. The DOT&PF in cooperation with the FHWA proposes to resurface the 1.5-mile section of the Old Seward Highway between Dimond Boulevard and Dowling Road. The proposed project will overlay the existing pavement and will include striping and sign replacements. Pedestrian facilities will be brought into ADA compliance and minor drainage infrastructure repairs will be made. Jacob is the design engineer and is responsible for the roadway design, signing and striping, new ADA curb ramp design and grading, specifications and cost estimate.

Mendenhall Loop Road Capacity Improvements Nancy Street to Back Loop Road, Juneau, Alaska. Mendenhall Loop Road was a high-traffic road through Juneau's main residential area. DOWL provided design services to increase the level of service/road capacity and safety of facilities located on the road from Nancy Street to Mendenhall Boulevard. Jacob was support engineer and assisted with roadway design and grading, roadway/roundabout 3D modeling, roadway drainage, and cost estimates.

Dillingham Downtown Streets Rehabilitation, Dillingham, Alaska. The purpose of this project was to realign and reconstruct three streets and associated pedestrian facilities in the downtown area of Dillingham. Services required for this project included civil engineering design, public involvement, utility relocation and conflict analysis, ROW appraisal, acquisition, and relocation. Jacob was a part of the design team as a staff engineer and was responsible for 3D modeling of the road. He assisted with plan set preparation, retaining walls, roadway grading and drainage, and cost estimate.



**Water/Storm/Sewer
Engineer**

Education

Bachelor of Science
Civil Engineering
Michigan Technology
University

Licenses

Professional Engineer:
Alaska #13867

Certified Erosion and
Sediment Control Lead
Alaska #AGC-14-0395

Years of Experience

11

Professional Experience

Chase joined DOWL's civil design department in 2008 and focuses on Alaska's remote locations. He regularly works in rural and arctic areas around the state. Chase understands the unique needs and challenges associated with projects in remote and disconnected parts of coastal Alaska. His expertise and talent is focused on water/stormwater/sewer engineering. Chase has been the project engineer or manager on multiple utility projects in Southeast Alaska and on Kodiak Island.

Project Experience

Aleutian Homes Phase III CMS, Kodiak, Alaska. The City of Kodiak retained DOWL to provide civil engineering design services for roadway, water, sanitary sewer, and storm sewer along 1,600 feet of existing roadway, which carry key components of the water system servicing the greater Kodiak area. Replacement of utilities required complete replacement of existing roadway cross-section. Chase was a design engineer and served as a field inspector in Phase IV. He was responsible for density tests, concrete tests, and water line disinfection and testing, submittal reviews and approvals, as well as daily project coordination and inspection reports.

Bonanza Area Water & Sewer Improvements, Palmer, Alaska. This water and sanitary sewer main replacement project was needed to serve several blocks in Palmer. DOWL designed more than a mile of water main and more than a mile of sanitary sewer main. The project team successfully met a challenging, accelerated schedule driven by failing water distribution infrastructure. Chase was the project engineer.

City and Borough of Sitka Lake Street and Monastery Street Lift Stations, Sitka, Alaska. Chase was the project engineer for the design-build project involving design and construction of two lift stations. He was responsible for advancing this project through design as fast as possible to get the project to plan review.

Thorne Bay Water & Wastewater Treatment, Thorne Bay, Alaska. DOWL worked with the City of Thorne Bay to develop of recommendations on how to reduce disinfectant by-products (DBPs) in the City's drinking water system. The City has had a long-standing issue with DBPs that has resulted in significant non-compliance. In less than a month, DOWL assembled a Design Study Report to describe immediate and long-term solutions to reduce DBPs and solicit grant funds. DOWL also prepared a study to address fecal coliform exceedance at the wastewater treatment plant. The preparation of these two studies, led to the funding of a major upgrade to the water treatment plant. The project is now managed by Alaska Department of Environmental Conservation and Village Safe Water because of the technical complexity. Chase is the project manager.

City of Bethel Institutional Corridor Water Delivery System, Bethel, Alaska. Chase is the project engineer for the City's Institutional Corridor water delivery system, which will provide water to approximately 20 institutional buildings along the Chief Eddie Hoffman Highway. He was at the forefront of finding ways to reduce the capital cost of the overall project and the project ended up with a construction under-run of \$250,000.



**Geotech/Pavement
Designer**

Education

Bachelor of Science
Geological Engineering
Colorado School of Mines

Master of Science
Geotechnics
Missouri University of
Science and Technology

Licenses

First Aid CPR AED

MSHA: Alaska #032549

Professional Engineer:
Alaska #12636
Colorado #40723
Washington #44483
Arizona #63497

Wilderness and Remote
First Aid #GT5U7S

First Aid CPR AED: Alaska
#GVWTOE

Years of Experience

20

Professional Experience

Jeremiah has extensive experience leading projects related to transportation, infrastructure, land development, mining, and oil and gas. Jeremiah has expertise in geotechnical engineering, arctic ground conditions, rock and soil mechanics, engineering geology, software modeling (including SLIDE, Settle3D, and Phase2), construction materials field and laboratory testing, and project management.

Project Experience

Haines Highway MP3.5 to MP25.3, Haines, Alaska. DOWL provided environmental documentation for the Haines Highway project. The project dealt with wetland and fisheries effects, wildlife habitat issues, cultural resources, and many other sensitive environmental resources. Jeremiah evaluated rock slopes using DIPS, WEDGE, and RocToppo software and provided geotechnical engineering recommendations for approximately 26 rock cut slopes up to 110 feet high with rock stabilization.

Meadow Street Reconstruction, Anchorage, Alaska. Jeremiah managed a geotechnical site investigation and prepared geotechnical engineering recommendations for this project, which included drainage and an insulated road section.

Angoon Road Projects, Angoon, Alaska. Jeremiah managed two preliminary geotechnical site investigations and design recommendations for three miles of proposed road in the remote village of Angoon. Recommendations included identifying suitable quarry sites, mapping deep peat areas, and typical road sections.

King Cove Access Road, Cold Bay, Alaska. Jeremiah performed a geotechnical site investigation along the proposed beach-side road and for several material resource-borrow sites. Boreholes along the beach were inclined 45 degrees and used a casing-advanced underreamer ODEX-type drilling system.

Manokotak Heights Road, Alaska. Jeremiah performed a field evaluation of the current condition of Manokotak Heights Road and potential material resource sites. This was a FHWA project and the evaluation, sampling, and report followed FHWA guidelines.

31 Road Intersection Improvements, Grand Junction, Colorado. DOWL developed the final road design and provided construction-ready plans and specifications for this intersection improvement project. This intersection had been identified as a dangerous section of roadway that carries heavy truck traffic and services the County Landfill and Composting Facility. Improvements included laying back the slope of the roadcuts, lowering the roadway elevation, and widening the intersection to accommodate acceleration and deceleration lanes. Jeremiah was the lead geotechnical engineer, providing slope stability analyses and soil strength parameters for road, retaining wall, and slope grading design, as well as specific site development considerations for the road improvements.



Geotechnical Engineer/
Pavement Design

Education

Bachelor of Science
Civil Engineering
University of Alaska

Licenses

Professional Engineer:
Alaska # 126563

Certified Erosion and
Sediment Control Lead:
Alaska # AGC-20-0074

Emergency Medical
Technician: Alaska
#14076011

Nuclear Densimeter Safety
Training: Alaska

HAZMAT Transportation for
Nuclear Devices: Alaska

First Aid CPR AED: Alaska
#01180644872

Years of Experience

8

Professional Experience

Anna has eight years of geotechnical and materials inspection and testing experience working for the Alaska Department of Transportation & Public Facilities (DOT&PF) and DOWL. Her geotechnical experience includes work on roads, airports, and foundations in various Alaskan communities, including Valdez, Homer, Kotzebue, Nome, Soldotna, and Kenai. Anna has been to Valdez many times to attend the Valdez Fire Symposium, Rock and Ice Climbing Festivals, to complete the 2018 pavement survey, and to take advantage of the area's legendary backcountry skiing opportunities.

Project Experience

City of Valdez Pavement Management Plan, Valdez, Alaska. Anna and a representative from the Valdez Field Maintenance Section surveyed all City-owned roads on foot, noting the pavement condition, maintenance concerns, and drainage problems and assigning a rating. Results from the survey were compiled into a table and a map for presentation to the City of Lopez. A letter report was included that outlined the methods, specific areas of concerns, and the limitations of the survey. The final report was submitted in October 2018. Anna was the lead on this project and performed the field pavement survey and drafted the pavement management plan.

Abbott Road Rehabilitation Phase I, Anchorage, Alaska. Anna performed the geotechnical field investigation for this rehabilitation project. The investigation included test holes, test pits, and peat probes to fully characterize the road prism and surrounding soils. Anna completed the geotechnical report and then performed the pavement design and authored the Geotechnical Recommendations. Anna later performed materials quality assurance for the construction of this road.

Birch Road, Anchorage, Alaska. Anna met with Anchorage maintenance and operations staff and gathered as much field data as possible to design the pavement for this overlay project. She also authored the geotechnical and pavement recommendations.

3rd Street Widening: Design Services, Fairbanks, Alaska. DOWL provided civil engineering design and project management of horizontal and vertical elements of the roadway geometry, for this project. Anna performed pavement review using the DOT&PF's flexible pavement design software

Chiniak Highway, MP 10 to 15, Kodiak, Alaska. Anna completed the geotechnical fieldwork and authored the Geotechnical Report for this resurfacing project.

Seward Highway Milepost 105-107 Windy Corner, Anchorage, Alaska. This project will realign the Seward Highway between mile 105 and 107. The realignment will include the addition of a rest area, relocation of the Alaska Railroad, and expanding the current road into what is currently tidally influenced beaches of Turnagain Arm. Anna completed the geotechnical fieldwork and authored the report for this project during her time at DOT&PF. The logistically complex field work included heli-drilling, off-shore drilling, on-road drilling, and off-road drilling using a standard tracked rig.



**Public Involvement
Manager**

Education

Master of Arts
Applied Anthropology,
Natural Resources &
Communities
Oregon State University
2009

Bachelor of Arts
Psychology, Anthropology
Linfield College
1999

Professional Experience

Katie brings over a decade of public affairs experience in numerous arenas, including the Alaska State Legislature and different roles within the Alaska Energy Authority. Her skill of synthesizing complex information into understandable and actionable items for the general public is a critical ingredient for bringing projects and initiatives to successful completion. Katie is well known for her ability to develop creative methods and strategic messaging for engaging stakeholders depending on the needs and communication styles of the audience. Her vast experience dealing with critical and controversial communications for state and local governments and rural communities is an asset that has positively impacted the public involvement (PI) efforts for DOWL projects.

Project Experience

Midtown Congestion Relief Planning and Environmental Linkages Study, Anchorage, Alaska. Over the last two years, the Midtown Congestion Relief Planning and Environmental Linkages (PEL) Study has worked with the public and other stakeholders, including state and local transportation planners, to explore solutions that will improve safety, access, and mobility for pedestrians, bicyclists, and vehicles traveling to, from, and along the Seward Highway and Midtown. Robust public involvement has been the hallmark of this project in both the development of the PEL as well as in mitigating negative public opinion. As the PI lead since July, Katie has managed advisory groups, deployed creative outreach methods to get the attention of key stakeholders, and facilitated large public meetings.

Anchorage Solid Waste Transfer Station, Anchorage, Alaska. As a subconsultant to Tetra Tech, DOWL is providing a suite of services, including PI, to support the design and construction of the new Central Transfer Station project. This project has an aggressive design and schedule and the project communications must be managed carefully to provide transparency and mitigate negative public opinion. In her role as the PI lead, Katie has worked closely with Tetra Tech and Solid Waste Services to carefully brand the project, develop strategic messaging, and implement a PIP to support project goals. For more information about this project, please visit the website Katie built to showcase it: www.NewSWSCentralTransferStation.com.

Knik-Goose Bay MP .3 to 6.8 PI, Wasilla, Alaska. DOWL is providing design services on a six mile stretch of major arterial road in the fastest growing Borough in Alaska. Crash rates along this section of road are among the highest in the state, so while the public is generally supportive of the redesign, contentious land-use and Right-of-Way issues make a clearly communicated public involvement plan critical to project success. Katie is supporting public involvement efforts on this high-profile project through tasks such as coordinating stakeholder communication, writing project status updates, including to state legislators and the local borough assembly, organizing public meetings, managing project website content, and providing the project team with meeting summaries.



Survey Manager

Education

Bachelor of Science
Civil Engineering
University of Alaska
Anchorage
2004

Licenses

Alaska #12041
2008/Professional Land
Surveyor

Alaska #1509
2011/Certified Federal
Surveyor

Alaska #223 2020/MSHA

UAV Pilot License

Years of Experience

20

Professional Experience

Willie is DOWL's land survey sub-practice area leader. He oversees all the management, staffing, training, and equipment purchases for the group. He joined DOWL in 2000 as a crew surveyor while attaining his bachelor's degree in civil engineering and has since obtained his professional land surveyor (PLS) registration, and his certification as a federal surveyor (CFedS). He has traveled throughout Alaska performing surveys for municipal governments, local entities, and state agencies, and has worked on numerous contracts with the United States Army Corps of Engineers and DOT&PF, amongst other clients.

Project Experience

South Central Firing Range, Chugiak, Alaska. The Municipality of Anchorage contracted DOWL to provide planning, platting, 100% design and construction documents, bidding, and construction administration support services for a new law enforcement shooting range in the Birchwood area of Chugiak. The 34-acre subdivision involved many similar functions anticipated under this contract. This project required retracing original BLM surveys, ANCSA surveyed lands and private subdivision lands.

Dan Creek placer Mine, McCarthy, Alaska. Willie performed a boundary retracement and Record of Survey for a remote Mineral Survey near McCarthy Alaska. Willie successfully searched for evidence of Wood posts set over 100 years ago, and boundaries not visited in decades. This remote survey required flying into the remote site staying in a dry cabin and working around both National Park Service boundaries, and an active Mine site. Willie completed this project under budget and ahead of schedule for Bill Ericksmoen of Dan Creek Placer Mining.

Yagheli Tinitun Subdivision, Eklutna, Alaska. Under contract with the Eklutna Construction Management, LLC; DOWL performed the planning, platting, site design and construction services for the Cook Inlet Tribal Council Recovery Center. Willie was the professional Land surveyor in charge of the field survey, boundary survey and platting. Retracing original BLM cadastral corners from as far back as 1916, Willie recovered the section corners, defined Right-Of-Ways (ROW), easements and Public Land Order (PLO) ROW. The 390-acre subdivision was eventually developed for the recovery center and has adjacent vacant lots for development.

Chugiak Fire Station, Eagle River, Alaska. The project included a 10,000-square-foot, two-story fire station with five apparatus bays, offices, a training room, a workout room, showers, a kitchen, and a laundry room. The fire station is located in Eagle River, Alaska on the Old Glenn Highway. DOWL performed a topographic survey and the platting for this project. The platting included a DNR transfer of lands, a land swap with DOT, and a municipal plat. The final plat being completed in 2019.



**Davin Blubaugh, PE,
LEED AP**

Senior Electrical Engineer

Licensing

EE-13893, Alaska
6201067184, Michigan

Education

B.S. in Electrical
Engineering with an
emphasis on Power
Generation, Power
Transmission and Power
Distribution, Michigan
Technological University,
Houghton, MI, 2006

Davin has 14 years of electrical design and construction experience, 8 years with RSA. He has provided detailed design services for numerous projects which include schools, fish processing plants, office buildings, remote power plants, remote lodges, recreational facilities, residential, and mixed-use buildings. His responsibilities include system conception, layout, code compliance, design analysis, technical specifications, equipment sizing and selection for these projects, as well as site inspections.

Prior to joining RSA, Davin spent six years working in the construction industry as an electrical field engineer on heavy-industrial type facilities. These industrial projects included large power distribution systems and onsite generation, which is Davin's primary area of expertise. His time spent in construction has allowed him to apply practical experiences and first-hand knowledge when it comes to designing the electrical systems for various projects. Davin's relevant experience is below.

Valdez Clinic Generator Addition

Davin is finalizing construction services for this project, which included adding a new diesel generator to provide standby power to the existing Clinic in Valdez. Davin's electrical design included sizing the generator to carry the full load of the clinic, a new automatic transfer switch, and a new automatic load bank permanently connected to the generator to allow for routing tests and generator base loading.

Valdez Fire Station Replacement

Davin provided electrical design services and is currently providing construction administration services for the new Valdez Fire Station. Davin's design included coordination with local utilities for electrical and telecommunications services, electrical distribution for the building, lighting, telecommunications, fire detection and alarm system, and a fire alerting system.

Valdez Container Terminal and Small Boat Harbor LED Lighting Upgrades

Davin provided electrical design and construction administration services to replace high mast fixtures with new LED fixtures at the Container Terminal and Small Boat Harbor in Valdez, Alaska. Lighting calculations were performed to ensure the existing high mast poles could be reused for ultimate cost savings to the City of Valdez. Nearly 150 fixtures on 20 existing high mast poles were successfully replaced to provide even illumination throughout the sites and reduced energy consumption for the City of Valdez.

Valdez Airport West End AHU Replacement – Valdez, AK

Davin worked with the City of Valdez to replace the air handling unit (AHU) serving the west end of the airport. Care was taken during the design to ensure that the replacement unit could be installed without damaging the existing intake, supply, and return air systems. Electrical scope was limited to mechanical support to disconnect equipment to be demolished and provide new electrical connections to the new mechanical equipment.

Valdez Silver Bay Seafoods, Valdez, AK

Davin provided electrical engineering services for Silver Bay Seafood's 67,000 SF seafood processing plant. Electrical design included power distribution and building lighting. The power distribution system utilized five 3,000A services, much of which is used to power the 1,500HP worth of refrigeration compressors, and the rest distributing out to over 500 pieces of equipment requiring electrical connections. The building lighting utilized all energy efficient LED fixtures, sealed and gasketed within the processing areas. This facility was completed in 2016.

