STATE OF MONTANA

DEPARTMENT OF ADMINISTRATION
ARCHITECTURE AND ENGINEERING DIVISION
1520 East Sixth Avenue • P.O. Box 200103 • Helena MT 59620-0103
Phone: 406 444-3104 • Fax: 406 444-3399

STATEMENT OF QUALIFICATIONS for Specific Projects (Form 115)

PROJECT FOR WHICH THE FIRM IS SUBMITTING

A/E Project Name & Location (list only one project; provide separate Form 115 for each project):	A/E Project #:
Department of Livestock Veterinary Diagnostic Lab	Combined State Labs Study A/E #2018-50-01

PRIME FIRM INFORMATION

			Name	Email Address
Firm Name:	Iron Horse Architects, Inc.	Contact(s)		
Address: (provide mailing address also, if different)	1900 Grant Street, Suite 1130 Denver, CO 80203	Principal: Project Mgr: Project A/E:	Victoria David Jeff Fleischer Jay Speagle	Victoria.david@ironhorse.email Jeff.fleischer@ironhorse.email Jay.speagle@ironhorse.email
Phone #: Fax #:	720.855.7572			

CATEGORIES OF WORK FOR CONSIDERATION BY *PRIME* FIRM

ARCHITECTURAL:		ENGINEERING:	
General Practice	X	Mechanical	
Historic Restoration	X	Electrical	
Exterior Envelope	X	Structural	
Master Planning/Programming	X	Civil	
Interior Design	X	Environmental	
		AV/Comm/Data/IT	

SPECIALTY/OTHER:		LANDSCAPE ARCH:	
Acoustics		General Practice	
Commissioning		Master Planning	
Construction Management		Environmental	
Geotechnical/Materials Testing			
Haz Materials Testing/Mitigation			

***PRIME* FIRM PROFILE**

Year Firm was established:	2005
# of Offices in Montana (provide address & contact list if more than one):	0

TOTAL PROFESSIONALS/PERSONNEL (provide total & location-specific list):

Architects	9	Mechanical	
A.I.T.	9	Electrical	
Interior Designer		Structural	
Landscape Architect		Civil	
Specification Writer		E.I.T.	
Cost Estimator		Environmental	
Construction Administrator		Energy Analysis	
Production Staff	3	Commissioning	
Accounting	2	Other (provide list)	
Administrative Support	2		

LIST THE FIRM NAME AND ADDRESS FOR EACH OF THE CONSULTANTS ON THIS PROJECT (if different from PRIME above).

ARCHITECT FIRM INFORMATION

Firm Name:	N/A	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)		Principal: Project Mgr: Project A/E:		
Phone #: Fax #:				

MECHANICAL ENGINEER FIRM INFORMATION

Firm Name:	Cator Ruma	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	896 Tabor Street Lakewood, CO 80401	Principal: Project Mgr: Project A/E:	Sean Convery, PE - Principal	sconvery@catorruma.com
Phone #: Fax #:	303-232-6200 303-233-3701			

ELECTRICAL ENGINEER FIRM INFORMATION

Firm Name:	Cator Ruma	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	896 Tabor Street Lakewood, CO 80401	Principal: Project Mgr: Project A/E:	Justin Hafer, PE – Electrical Project Manager	jhafer@catorruma.com
Phone #: Fax #:	303-232-6200 303-233-3701			

STRUCTURAL ENGINEER FIRM INFORMATION

Firm Name:	Martin / Martin	Contact(s)	Name	Email Address
Address:		Principal: Project Mgr:	Paul Doak	pdoak@martinmartin.com

(provide mailing address also, if different)	12499 West Colfax Avenue Lakewood, CO 80215	Project A/E:	Dwight Gilbert Mike Piper (Engineer-of-Record)	dgilbert@martinmartin.com mpiper@martinmartin.com
Phone #: Fax #:	303.431.6100 303.456.9923			

CIVIL ENGINEER FIRM INFORMATION

Firm Name:	Martin / Martin, Inc.	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	12499 West Colfax Avenue Lakewood, CO 80215	Principal: Project Mgr: Project A/E:	Matt Schlageter Phil Krieble Bill Willis (Engineer-of-Record)	mschlageter@martinmartin.com pkrieble@martinmartin.com bwillis@martinmartin.com
Phone #: Fax #:	303.431.6100 303.456.9923			

SPECIALTY CONSULTING FIRM INFORMATION

Firm Name:	N/A	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)		Principal: Project Mgr: Project A/E:		
Phone #: Fax #:				

PROVIDE BRIEF RESUMÉ OF KEY PERSONS OF PRIME FIRM ASSIGNED TO THIS PROJECT (add tables as required)

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year):	Victoria David Principal | Science & Technology Iron Horse Architects, Inc. Sr. Laboratory Planner & Programmer 9	Experience & Qualifications Relevant to This Project:	During the forty years of her career, Ms. David has planned and designed research, development, and manufacturing facilities for a variety of clients both nationally and internationally, including advanced technology, health care, corporate and non-profit research and development, academic, analytical and medical device fields. She served on national juries, presented at numerous national

Active Registrations:	MS Construction Project Management, University of California, Berkeley BA Conceptual Design, San Francisco State University RA: CO, MD, VA, WA AIA LEED Green Associates Assoc. DBIA NCARB		conferences, written several articles for nationally recognized publications and participated on national committees - including LEEDS for Labs - dedicated to disseminating information on industry best practices for laboratory planning and design. Her myriad project roles include project management, strategic facility planning, master planning, laboratory programming, planning and design, project coordination, facility assessment, renovation and new design. • Wyoming Game & Fish Department, Forensics and Fish Health Laboratory • Colorado Department of Agriculture, New Laboratory • Douglas County, Joint Regional Crime Laboratory • Denver Health and Hospital Authority, Office of the Medical Examiner Relocation • Denver Health and Hospital Authority, Outpatient Medical Center • National Institute of Health, National Cancer Institute Office of Research Facilities

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Jeff Fleischer Project Manager Iron Horse Architects, Inc. Project Manager 1 March, University of Colorado RA: CO, WY AIA	Experience & Qualifications Relevant to This Project:	Jeff is a registered architect with 30 years of diverse professional experience. His expertise extends from initial ownership meetings to design, detailing, and construction administration services delivered via traditional design-bid-build to public-private partnership agreements. Jeff has established his professional career as the primary "point of contact" within the team structure. He is responsible for and oversees each project through all phases of design and construction and ensures design team building code compliance. Jeff continually provides leadership as a liaison with ownership teams and the design team to ensure design efforts are met from the project inception to completion. • Colorado Department of Agriculture, New Laboratory • Denver Health and Hospital Authority, Office of the Medical Examiner Relocation

			• Denver Health and Hospital Authority, Outpatient Medical Center • University of Colorado Hospital, Anschutz Cancer Pavilion Addition

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Jay Speagle Project Architect Iron Horse Architects, Inc. Project Architect 1 MArch, University of Colorado Denver RA: CO LEED AP CDT	Experience & Qualifications Relevant to This Project:	Jay is an architect with 23 years of experience on a variety of project types and provides highly technical support to the Iron Horse team. Jay's project type diversity includes projects for Federal and State Governments, healthcare, hospital, clinic, laboratories, He brings a high level of attention to detail during the technical aspects of the design, which translates into a more complete set of construction documents. As a Senior Project Architect at Iron Horse, Jay brings efficiency and a depth of technical knowledge through his experience. • Colorado Department of Agriculture, New Laboratory • Brookhaven Science Associates, LLC, Brookhaven National Laboratory • Nebraska Methodist Health System, Methodist Women's Hospital and Medical Office Building • State of Wyoming, Public Health and Crime Lab • State of Wyoming, State Veterinary Lab Addition • Denver Health and Hospital, Toxicology Lab Renovation

PROVIDE BRIEF RESUMÉ OF KEY PERSONS OF CONSULTING FIRMS ASSIGNED TO THIS PROJECT (add tables as required)

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Sean Convery, PE Mechanical Principal Cator, Ruma & Associates Mechanical Principal 23 BS Mechanical Engineering/1995 Professional Engineer, Colorado	Experience & Qualifications Relevant to This Project:	Colorado State University, Fort Collins, CO • Animal Sciences Building Renovation • Animal Disease Lab Remodel (Large Animal Lab) • James L. Voss Veterinary Teaching Hospital - Multiple Projects • Chronic Wasting Disease Deer Facility (BSL-2) • Arthropod-Borne and Infectious Disease Laboratory (AIDL) Insectary

			• AIDL Renovation • Bioenvironmental Hazards Research Building (BHRB) Phases I, II, III (BSL-3) • Diagnostic Medicine Center (BSL-2 and BSL-3) • New Biology Building - LEED Gold Pending • New Chemistry Building - LEED Gold Pending • Pathology Building HVAC Study (BSL-2 and BSL-3) • Research Innovation Center - LEED Gold (BSL-2) • Rocky Mountain Regional Biocontainment Lab (RBL) (BSL-2 and BSL-3) • RBL Imaging Suite (BSL-3) • Suzanne and Walter Scott, Jr. Bioengineering Building - LEED Gold State of Wyoming, WY • Combined Laboratory Facility (BSL-2/BSL-3), Cheyenne • Veterinary Laboratory Facility (BSL-3), Laramie • National Institute of Standards and Technology, Boulder, CO • Building 1, Wings 3 and 6 Renovation • Wing 3 Customization • University Corporation for Atmospheric Research, Boulder, CO • Foothills Laboratory (FL-0) • University of Wyoming, Laramie, WY • Science Initiative Building • WWAMI Gross Anatomy Laboratory • University of Colorado Boulder, Boulder, CO • Sustainability, Energy and Environment Complex (SEEC) - LEED Platinum Pending • Jennie Smoly Caruthers Systems Biotechnology Building - LEED Platinum • Porter Biosciences Building - Multiple Remodel/Renovation Projects University of Colorado Denver, Anschutz Medical Campus, Aurora, CO • Research Laboratory 1 (R1) - AHU Emergency Repairs - Energy Efficiency Upgrades Phases I-III - BSL-3 Upgrade

			• Research Laboratory 2 (R2) - 5th Floor Exhaust Duct Replacement • Perinatal BARDA Research Facility Large Animal Inhalation Program Plan

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Justin Hafer, PE Electrical Project Manager Cator, Ruma & Associates Electrical Project Manager 13 MS Architectural Engineering/1999 BS Architectural Engineering/1998 Professional Engineer, Colorado and Kansas	Experience & Qualifications Relevant to This Project:	Colorado State University, Fort Collins, CO • Advanced Beam Laboratory • Animal Sciences Building Renovation • Animal Disease Laboratory RTU Replacement • Animal Population Health Institute (APHI) Laboratory • Advanced Beam Laboratory • Glover Laboratory Remodel • JBS Global Food Innovation Center • Anatomy/Zoology Addition (Gross Anatomy) • New Biology Building - LEED Gold Pending • New Chemistry Building - LEED Gold Pending • Plant Environmental Research Center (PERC) Relocation • James L. Voss Veterinary Teaching Hospital (BSL-2 and BSL-3) Multi-Phase Renovation • Suzanne and Walter Scott, Jr., Bioengineering Building - LEED Gold University of Colorado, Boulder, CO • Porter Biosciences Building - Various Upgrades and Remodels • Environmental Science Wing Renovation • Ekeley Laboratory Remodel • Joint Institute for Laboratory Astrophysics (JILA) X-Wing Addition • —LEED® Gold • JILA Laboratory Renovations B-Wing • Ramaley IPHY Building Addition • Chemical Engineering Wing HVAC Upgrades • Electrical Engineering Wing Nano Tech Lab & 214/218 Remodel • Mechanical Engineering Wing HVAC Upgrades • Engineering Building 2nd Floor Lab Remodel • Fiske Planetarium (30 KVA UPS)

			State of Wyoming, Wyoming Fish and Game Department, Laramie, WY • Forensics and Fish Health Laboratory • Metropolitan State University, Denver, CO • Aerospace Engineering Sciences Building • Boise State University, Boise, ID • New Material Science Building

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Matthew B. Schlageter, PE, LEED AP Principal, Civil Engineering Martin/Martin, Inc. Principal-in-Charge 21 BS, Civil Engineering, 1995 CO No. 35253, LEED AP	Experience & Qualifications Relevant to This Project:	Matt has extensive experience addressing design challenges for complex laboratory projects. His hands-on approach and strong communication skills have proven invaluable on many integrated teams and design-build projects, and have produced creative, future-driven solutions to complex problems. Matt has overseen numerous laboratory and technology projects for the National Renewable Energy Laboratory (NREL), National Institute of Standards and Technology (NIST), several higher education campus laboratories for multiple universities, and Lockheed Martin campus development at locations across the globe–Waterton, McMurdo, Sunnyvale, Alice Springs, and Buckley Air Force Base. We are currently working with Iron Horse on a project with the US Department of Agriculture.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Philip M. Krieble, PE Associate, Civil Engineering Martin/Martin, Inc. Project Manager 17 BS, Civil Engineering, 2000; AAS, 1997 CO No. 39790, UT No. 8726891-2202	Experience & Qualifications Relevant to This Project:	Phil has experience in site civil engineering project management and design from development of conceptual plans and master planning to construction documents and administration for water resources, drainage and storm sewer design, street/roadway design and improvements, water/sewer pipeline system design, overlot grading, and entitlement projects. He has worked on numerous industrial, laboratory, and aerospace projects for clients including Lockheed Martin and National Renewable Energy Laboratory. Phil has worked extensively on scientific, higher education, military, and industrial campuses projects across Colorado's Front Range.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	William P. Willis, PE Principal, Civil Engineering Martin/Martin, Inc. Engineer-of-Record 34 BS, Civil Engineering, 1983	Experience & Qualifications Relevant to This Project:	Bill has led numerous projects for a variety of national, state, federal, and municipal clients. He has acted in the capacity of district engineer and/or town engineer for a number of municipalities for more than 30 years. He is extensively involved with design and management of treatment facilities that incorporate lab facilities, GIS mapping, master planning, standards development, opinion of estimated costs, construction

	10 States including MT, No. 17647		administration, and sustainable design. He is a registered Professional Engineer in the State of Montana and has been involved in numerous projects within the State.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Paul Doak, PE, SE, LEED AP Principal, Structural Engineering Martin/Martin, Inc. Principal-in-Charge 36 MS, Civil Engineering, 1985; BS, Civil Engineering, 1981 CO No. 24585, LEED AP	Experience & Qualifications Relevant to This Project:	Paul has served as principal-in-charge and/or project manager for a broad range of structural systems for a variety of facilities and clients. He has worked on several laboratory and research related projects and understands the structural challenges of these projects including special vibration criteria, cost control and adaptability to future renovation. He has experience collaborating with industrial and research clients including Ball Aerospace and Lockheed Martin.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Dwight L. Gilbert, PE Associate, Structural Engineering Martin/Martin, Inc. Project Manager 13 BS, Civil Engineering, 1995 CO No. 34755	Experience & Qualifications Relevant to This Project:	Dwight has been involved in analysis, structural design and construction administration for a variety of industrial and laboratory facilities. His experience includes design and review of structural steel, concrete, masonry, and wood structures subject to vibrational limitations ranging from MRI's and scanning electron microscopes to microchip manufacturing equipment. He has completed design of multiple facilities with a veterinary focus for both the University of Wyoming and Colorado State University, with equipment ranging from monorail systems for movement of large animals to incinerators for disposal of biological waste, as well as more traditional bench-based facilities. He has worked closely with end-users in both research and industrial settings to develop specific solutions to unique laboratory problems.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Michael A. Piper, PE Associate, Structural Engineering Martin/Martin, Inc. Engineer-of-Record 33 MS, Civil Engineering – Structural Emphasis, 2008; BS, Civil Engineering, 1983	Experience & Qualifications Relevant to This Project:	Mike has more than 30 years of structural engineering design experience for government and industrial facilities. He regularly works on basements and underground structures, including situations where temporary and permanent shoring systems are required to protect adjacent structures or where site constraints do not permit sloped excavations and where soil depth (or soil load) conditions have changed during phased construction. His work includes design of supports for newer or heavier equipment, relocation of equipment and modifications to existing structures to

	10 States, including MT. No. 16900		accommodate larger or more complex equipment, as well as design and detailing for new or modified enclosures.

PROJECTS BY PRIME FIRM THAT BEST ILLUSTRATE QUALIFICATIONS RELEVANT TO THIS PROJECT (limit of 5 projects)

Project Name & Location:	Brief Project Description:	GSF, Cost/SF, & Year Completed:	Owner Contact Info:
Colorado Department of Agriculture, New Laboratory Broomfield, Colorado	The Colorado Department of Agriculture (CDA) intends to relocate three laboratories from their current locations in Denver to a new site adjacent to their administrative headquarters in in Broomfield. The design and construction include approximately 6,000 square feet of renovation in the existing building, and a new single-story building of approximately 27,325 GSF square feet. These facilities will provide the functional and programmatic elements that allow the CDA to perform work activities in one location. The co-location of these core laboratories and the resulting synergies that will develop among the department staff will truly enhance the CDA's evolving brand and operational efficiencies. The renovation of the existing administrative building will provide additional office and workstation space to support CDA's increased staff requirements (e.g. marijuana industry regulation support and the Food Safety Modernization	27,325 GSF – New 5,200NSF – Renovation In Progress	Ms. Catherine Robbins Owner's Rep. Wember 303.868.5258

	Act). The planning and design follow CDC/NIH BMBL requirements and USDA Animal and Plant Health Service Quarantine and Containment Guidelines. The laboratory operations are divided into 3 BSL-2 groups: Biochemistry, Microbiology, Animal Health, with the fourth group being a Level 1 Metrology Lab. The BSL-2 labs are arranged to suit the critical process flow of samples from Accessioning to Sample Preparation to Testing and Analysis to Storage. Lab Support spaces include Solvent Storage, Glasswash, Autoclave, PCR, Bacteriology, Serology, Chemical Storage, Freezer and Refrigerator Storage and Field Equipment.		
National Institute of Health, Building 10 Renovation Bethesda, MD	This renovation project provides a fully renovated lab space for the National Cancer Institute Center for Cancer Research to support ongoing scientific research. The BSL-2 level labs are used to support molecular biology with an emphasis on mammalian cell research. The design includes areas for cell culture, bio-informatics analysis, wet bench molecular and genomics studies, and spaces for specialized equipment and instrumentation to support the mission. The existing space is on the 4th floor of the B-Wing and consists of approximately 2,109SF and is design in accordance with the BMBL and the NIH Design Manual.	Lab Sizes Vary 2014-2018	James Galentine National Cancer Institute 240.276.5028 galentij@mail.nih.gov

Wyoming Game and Fish Department, Forensics and Fish Health Laboratory Laramie, WY	Iron Horse provided architectural services for renovations to the Forensics and Fish Health Laboratory for the Wyoming Game and Fish Department in Laramie, Wyoming. The scope of services included development of drawings, specifications, bid documents along with contract administration for the project. Most of the renovations revolved around modern laboratory equipment and related appurtenances. Iron Horse worked directly with the WY Game and Fish department staff to design appropriately for the laboratory functions and desires of the scientists and users. Our team performed intensive studies and assessed the current site conditions developing a program that ensured the sizing of laboratories and utilities would be sufficient for current and future use. This project included the following laboratory types: BSL-2 tissue culture, virology labs, PCR suite, cold room and freezer storage.	17,000SF 2014	Dave Bumann Chief Engineer / Wyoming Game and Fish Department 307.777.4600 David.bumann@wyo.gov
Douglas County, Joint Regional Crime Lab, Colorado	The Joint Regional Crime Lab is a collaboration of the Douglas County Sheriff's Office, the Arapahoe County Sheriff's Office, and the City of Aurora Police Department. The intent of the	25,552SF 2016-2018	Brian Holthaus Senior Project Manager JE Dunn 720.810.7991 Brian.holthaus@jedunn.com

	project is to combine resources from each entity. The new crime lab will help facilitate a faster response to the community, for property crimes to violent crimes in two of the largest counties in Colorado. This project consists of a 26,000SF single story building, designed for future expansion and flexibility within the different laboratories. The program includes Chemistry, DNA, Latent Prints, Firearms and Celebrite Laboratories and their associated support spaces, including an instrument room to accommodate growth in mass spectrometers. There is also a locker area, a multipurpose room specifically designed for tours and training, and several collaboration zones which are designed to encourage idea sharing and case collaboration.		
FDA, Aquaculture Lab Renovation Dauphine Island, AL	The Dauphin Island Gulf Coast Seafood Laboratory (GCSL) facility for the Food and Drug Administration (FDA) has recently completed construction of an elevated concrete slab project. Iron Horse Architects is the lead architect for a BSL-2 fish research facility, designed to meet the program's (CFSAN) following objectives:	1,085SF	Athanasia Mantzouranis FDA 240.620.8475 Athanasia.mantzouranis@fda.hhs.gov

	• Access to flow through seawater systems to support research projects in MHSB and CHSB at the GCSL • A contained area to perform bio-accumulation studies with enteric pathogens or pathogenic vibrio species • A separate area (including cutting stations, large scale grinder, and exhaust hoods) to process frozen fish samples for Ciguatera extractions A contained area to process bio-accumulated pathogens in shellfish for further transport and analysis inside the main GCSL building.		

PROJECTS BY PRIMARY CONSULTANT(S) THAT BEST ILLUSTRATE QUALIFICATIONS RELEVANT TO THIS PROJECT (limit of 3 projects/firm)

Project Name & Location:	Brief Project Description:	GSF, Cost/SF, & Year Completed:	Owner Contact Info:
Colorado State University Biology Building Fort Collins, CO	Cator, Ruma & Associates is providing mechanical, electrical, and technology program planning, bridging documents and design for a new 152,000-square foot, four-story classroom and biology building on Colorado State University's Fort Collins campus. The building will house research laboratories (including labs for emerging biotechnology), state-of-the-art classroom and teaching facilities, and lounges for students and teachers. This project is targeting LEED Gold. The building is student-funded, and the intent is to create spaces where	152,000 SF $55M Total Construction Cost 2017 Completion	Colorado State University Tracey Abel 970.491.0306

	Biological Sciences and Zoology students can spend their time between classes in study rooms and informal "idea spaces" and the grand entryway and atrium on the southwestern corner. Most of the building is to provide state-of-the-art research laboratories to support the cutting-edge research conducted by faculty, researchers, and graduate students.		
Rocky Mountain Regional Biocontainment Lab	Cator, Ruma & Associates was selected to provide the mechanical and electrical design and construction administration for this project. The Regional Biocontainment Lab at the Foothills Campus of Colorado State University is a state-of-the-art Bioscience Laboratory. The 38,000 finished SF/80,000 SF gross facility contains five separate BSL-3 laboratory containment suites, a full interstitial space housing mechanical and electrical lab services, and a full basement for MEP system access. It also contains a large BSL-2 animal holding/office suite. The building also contains a 5,000 SF class 10,000 CGMP space that utilizes inactivated pathogens and viruses from the adjacent BSL-3 labs to create clinical trial drugs.	38,000SF (finished) $17.4M Project Value 2007	Steve Keiss, Project Manager Colorado State University (970)491-0017 Stephen.keiss@colostate.edu

National Renewable Energy Laboratory Parking Garage and Security Facility Design-Build, Golden, CO	Martin/Martin provided civil engineering services for the design and construction of a $30M, multi-level parking structure and security facility. Services included roadway infrastructure design, traffic engineering, drainage and water quality facilities, campus utility mainline installation coordination, easement development, and negotiations with local utility providers. The structure includes 1,800+ parking spaces for NREL staff and the following features: • Photovoltaic canopy on the top level • Renewable and recycled materials • Natural daylighting to reduce the need for artificial building illumination • Light monitoring and occupancy detection systems to reduce energy when portions of the garage are not being used • System that will lead staff to available parking spaces, and automatically zone off parking locations when demand is lower • Plug-in stations for electric vehicle recharging In addition to the parking structure, the project also includes a new southern site entrance building, a new access road from South Golden Road, and expansion of the campus utility infrastructure. The new site entrance building was designed to meet LEED Platinum and net zero energy goals.	$30M Construction Cost 2012	National Renewable Energy Laboratory Bret Cummock 303.275.4354

	While parking structures do not qualify for LEED certification, the design will maximize energy efficiency of the new NREL parking garage through renewable energy, material selection, and sustainable construction techniques.		

ADDITIONAL RELEVANT INFORMATION (additional attachments, firm information, photos, and/or personnel resumes are acceptable)

SIGNATURE (signature should be that of the firm's principal/owner)

Virginia A. McAllister	
NAME	SIGNATURE
Principal | CEO	2/12/18
TITLE	DATE

The state of Montana makes reasonable accommodations for any known disability that may interfere with an applicant's ability to compete in the application and selection process or that may interfere with an applicant's ability to perform the essential duties of the job. In order for the state to make such accommodations, applicants must make known any needed accommodation to the individual project managers or agency contacts listed. Persons using TDD may call the Montana Relay Service at 1-800-253-4091.

Form is available at http://architecture.mt.gov/.
If you experience problems with this form, please contact the A&E Division at AEDivision@mt.gov or (406) 444-3104.

STATE OF MONTANA

DEPARTMENT OF ADMINISTRATION
ARCHITECTURE AND ENGINEERING DIVISION
1520 East Sixth Avenue • P.O. Box 200103 • Helena MT 59620-0103
Phone: 406 444-3104 • Fax: 406 444-3399

STATEMENT OF QUALIFICATIONS for Specific Projects (Form 115)

PROJECT FOR WHICH THE FIRM IS SUBMITTING

A/E Project Name & Location (list only one project; provide separate Form 115 for each project):	A/E Project #:
Department of Agriculture Analytical Lab	Combined State Labs Study A/E #2018-50-01

PRIME FIRM INFORMATION

		Contact(s)	Name	Email Address
Firm Name:	Iron Horse Architects, Inc.			
Address: (provide mailing address also, if different)	1900 Grant Street, Suite 1130 Denver, CO 80203	Principal: Project Mgr: Project A/E:	Victoria David Jeff Fleischer Jay Speagle	Victoria.david@ironhorse.email Jeff.fleischer@ironhorse.email Jay.speagle@ironhorse.email
Phone #: Fax #:	720.855.7572			

CATEGORIES OF WORK FOR CONSIDERATION BY *PRIME* FIRM

ARCHITECTURAL:		ENGINEERING:	
General Practice	X	Mechanical	
Historic Restoration	X	Electrical	
Exterior Envelope	X	Structural	
Master Planning/Programming	X	Civil	
Interior Design	X	Environmental	
		AV/Comm/Data/IT	

SPECIALTY/OTHER:		LANDSCAPE ARCH:	
Acoustics		General Practice	
Commissioning		Master Planning	
Construction Management		Environmental	
Geotechnical/Materials Testing			
Haz Materials Testing/Mitigation			

PRIME FIRM PROFILE

Year Firm was established:	2005
# of Offices in Montana (provide address & contact list if more than one):	0

TOTAL PROFESSIONALS/PERSONNEL (provide total & location-specific list):

Architects	9	Mechanical	
A.I.T.	9	Electrical	
Interior Designer		Structural	
Landscape Architect		Civil	
Specification Writer		E.I.T.	
Cost Estimator		Environmental	
Construction Administrator		Energy Analysis	
Production Staff	3	Commissioning	
Accounting	2	Other (provide list)	
Administrative Support	2		

LIST THE FIRM NAME AND ADDRESS FOR EACH OF THE CONSULTANTS ON THIS PROJECT (if different from PRIME above).

ARCHITECT FIRM INFORMATION

Firm Name:	N/A	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)		Principal: Project Mgr: Project A/E:		
Phone #: Fax #:				

MECHANICAL ENGINEER FIRM INFORMATION

Firm Name:	Cator Ruma	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	896 Tabor Street Lakewood, CO 80401	Principal: Project Mgr: Project A/E:	Sean Convery, PE - Principal	sconvery@catorruma.com
Phone #: Fax #:	303-232-6200 303-233-3701			

ELECTRICAL ENGINEER FIRM INFORMATION

Firm Name:	Cator Ruma	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	896 Tabor Street Lakewood, CO 80401	Principal: Project Mgr: Project A/E:	Justin Hafer, PE – Electrical Project Manager	jhafer@catorruma.com
Phone #: Fax #:	303-232-6200 303-233-3701			

STRUCTURAL ENGINEER FIRM INFORMATION

Firm Name:	Martin / Martin	Contact(s)	Name	Email Address
Address:		Principal: Project Mgr:	Paul Doak	pdoak@martinmartin.com

(provide mailing address also, if different)	12499 West Colfax Avenue Lakewood, CO 80215	Project A/E:	Dwight Gilbert Mike Piper (Engineer-of-Record)	dgilbert@martinmartin.com mpiper@martinmartin.com
Phone #: Fax #:	303.431.6100 303.456.9923			

CIVIL ENGINEER FIRM INFORMATION

Firm Name:	Martin / Martin, Inc.	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	12499 West Colfax Avenue Lakewood, CO 80215	Principal: Project Mgr: Project A/E:	Matt Schlageter Phil Krieble Bill Willis (Engineer-of-Record)	mschlageter@martinmartin.com pkrieble@martinmartin.com bwillis@martinmartin.com
Phone #: Fax #:	303.431.6100 303.456.9923			

SPECIALTY CONSULTING FIRM INFORMATION

Firm Name:	N/A	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)		Principal: Project Mgr: Project A/E:		
Phone #: Fax #:				

PROVIDE BRIEF RESUMÉ OF KEY PERSONS OF PRIME FIRM ASSIGNED TO THIS PROJECT (add tables as required)

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year):	Victoria David Principal | Science & Technology Iron Horse Architects, Inc. Sr. Laboratory Planner & Programmer 9	Experience & Qualifications Relevant to This Project:	During the forty years of her career, Ms. David has planned and designed research, development, and manufacturing facilities for a variety of clients both nationally and internationally, including advanced technology, health care, corporate and non-profit research and development, academic, analytical and medical device fields. She served on national juries, presented at numerous national

Active Registrations:	MS Construction Project Management, University of California, Berkeley BA Conceptual Design, San Francisco State University RA: CO, MD, VA, WA AIA LEED Green Associates Assoc. DBIA NCARB		conferences, written several articles for nationally recognized publications and participated on national committees - including LEEDS for Labs - dedicated to disseminating information on industry best practices for laboratory planning and design. Her myriad project roles include project management, strategic facility planning, master planning, laboratory programming, planning and design, project coordination, facility assessment, renovation and new design. • Wyoming Game & Fish Department, Forensics and Fish Health Laboratory • Colorado Department of Agriculture, New Laboratory • Douglas County, Joint Regional Crime Laboratory • Denver Health and Hospital Authority, Office of the Medical Examiner Relocation • Denver Health and Hospital Authority, Outpatient Medical Center • National Institute of Health, National Cancer Institute Office of Research Facilities

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Jeff Fleischer Project Manager Iron Horse Architects, Inc. Project Manager 1 March, University of Colorado RA: CO, WY AIA	Experience & Qualifications Relevant to This Project:	Jeff is a registered architect with 30 years of diverse professional experience. His expertise extends from initial ownership meetings to design, detailing, and construction administration services delivered via traditional design-bid-build to public-private partnership agreements. Jeff has established his professional career as the primary "point of contact" within the team structure. He is responsible for and oversees each project through all phases of design and construction and ensures design team building code compliance. Jeff continually provides leadership as a liaison with ownership teams and the design team to ensure design efforts are met from the project inception to completion. • Colorado Department of Agriculture, New Laboratory • Denver Health and Hospital Authority, Office of the Medical Examiner Relocation

			• Denver Health and Hospital Authority, Outpatient Medical Center • University of Colorado Hospital, Anschutz Cancer Pavilion Addition

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Jay Speagle Project Architect Iron Horse Architects, Inc. Project Architect 1 MArch, University of Colorado Denver RA: CO LEED AP CDT	Experience & Qualifications Relevant to This Project:	Jay is an architect with 23 years of experience on a variety of project types and provides highly technical support to the Iron Horse team. Jay's project type diversity includes projects for Federal and State Governments, healthcare, hospital, clinic, laboratories, He brings a high level of attention to detail during the technical aspects of the design, which translates into a more complete set of construction documents. As a Senior Project Architect at Iron Horse, Jay brings efficiency and a depth of technical knowledge through his experience. • Colorado Department of Agriculture, New Laboratory • Brookhaven Science Associates, LLC, Brookhaven National Laboratory • Nebraska Methodist Health System, Methodist Women's Hospital and Medical Office Building • State of Wyoming, Public Health and Crime Lab • State of Wyoming, State Veterinary Lab Addition • Denver Health and Hospital, Toxicology Lab Renovation

PROVIDE BRIEF RESUMÉ OF KEY PERSONS OF CONSULTING FIRMS ASSIGNED TO THIS PROJECT (add tables as required)

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Sean Convery, PE Mechanical Principal Cator, Ruma & Associates Mechanical Principal 23 BS Mechanical Engineering/1995 Professional Engineer, Colorado	Experience & Qualifications Relevant to This Project:	Colorado State University, Fort Collins, CO • Animal Sciences Building Renovation • Animal Disease Lab Remodel (Large Animal Lab) • James L. Voss Veterinary Teaching Hospital - Multiple Projects • Chronic Wasting Disease Deer Facility (BSL-2) • Arthropod-Borne and Infectious Disease Laboratory (AIDL) Insectary

			• AIDL Renovation • Bioenvironmental Hazards Research Building (BHRB) Phases I, II, III (BSL-3) • Diagnostic Medicine Center (BSL-2 and BSL-3) • New Biology Building - LEED Gold Pending • New Chemistry Building - LEED Gold Pending • Pathology Building HVAC Study (BSL-2 and BSL-3) • Research Innovation Center - LEED Gold (BSL-2) • Rocky Mountain Regional Biocontainment Lab (RBL) (BSL-2 and BSL-3) • RBL Imaging Suite (BSL-3) • Suzanne and Walter Scott, Jr. Bioengineering Building - LEED Gold State of Wyoming, WY • Combined Laboratory Facility (BSL-2/BSL-3), Cheyenne • Veterinary Laboratory Facility (BSL-3), Laramie • National Institute of Standards and Technology, Boulder, CO • Building 1, Wings 3 and 6 Renovation • Wing 3 Customization • University Corporation for Atmospheric Research, Boulder, CO • Foothills Laboratory (FL-0) • University of Wyoming, Laramie, WY • Science Initiative Building • WWAMI Gross Anatomy Laboratory • University of Colorado Boulder, Boulder, CO • Sustainability, Energy and Environment Complex (SEEC) - LEED Platinum Pending • Jennie Smoly Caruthers Systems Biotechnology Building - LEED Platinum • Porter Biosciences Building - Multiple Remodel/Renovation Projects University of Colorado Denver, Anschutz Medical Campus, Aurora, CO • Research Laboratory 1 (R1) - AHU Emergency Repairs - Energy Efficiency Upgrades Phases I-III - BSL-3 Upgrade

			• Research Laboratory 2 (R2) - 5th Floor Exhaust Duct Replacement • Perinatal BARDA Research Facility Large Animal Inhalation Program Plan

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Justin Hafer, PE Electrical Project Manager Cator, Ruma & Associates Electrical Project Manager 13 MS Architectural Engineering/1999 BS Architectural Engineering/1998 Professional Engineer, Colorado and Kansas	Experience & Qualifications Relevant to This Project:	Colorado State University, Fort Collins, CO • Advanced Beam Laboratory • Animal Sciences Building Renovation • Animal Disease Laboratory RTU Replacement • Animal Population Health Institute (APHI) Laboratory • Advanced Beam Laboratory • Glover Laboratory Remodel • JBS Global Food Innovation Center • Anatomy/Zoology Addition (Gross Anatomy) • New Biology Building - LEED Gold Pending • New Chemistry Building - LEED Gold Pending • Plant Environmental Research Center (PERC) Relocation • James L. Voss Veterinary Teaching Hospital (BSL-2 and BSL-3) Multi-Phase Renovation • Suzanne and Walter Scott, Jr., Bioengineering Building - LEED Gold University of Colorado, Boulder, CO • Porter Biosciences Building - Various Upgrades and Remodels • Environmental Science Wing Renovation • Ekeley Laboratory Remodel • Joint Institute for Laboratory Astrophysics (JILA) X-Wing Addition • —LEED® Gold • JILA Laboratory Renovations B-Wing • Ramaley IPHY Building Addition • Chemical Engineering Wing HVAC Upgrades • Electrical Engineering Wing Nano Tech Lab & 214/218 Remodel • Mechanical Engineering Wing HVAC Upgrades • Engineering Building 2nd Floor Lab Remodel • Fiske Planetarium (30 KVA UPS)

			State of Wyoming, Wyoming Fish and Game Department, Laramie, WY • Forensics and Fish Health Laboratory • Metropolitan State University, Denver, CO • Aerospace Engineering Sciences Building • Boise State University, Boise, ID • New Material Science Building

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Matthew B. Schlageter, PE, LEED AP Principal, Civil Engineering Martin/Martin, Inc. Principal-in-Charge 21 BS, Civil Engineering, 1995 CO No. 35253, LEED AP	Experience & Qualifications Relevant to This Project:	Matt has extensive experience addressing design challenges for complex laboratory projects. His hands-on approach and strong communication skills have proven invaluable on many integrated teams and design-build projects, and have produced creative, future-driven solutions to complex problems. Matt has overseen numerous laboratory and technology projects for the National Renewable Energy Laboratory (NREL), National Institute of Standards and Technology (NIST), several higher education campus laboratories for multiple universities, and Lockheed Martin campus development at locations across the globe–Waterton, McMurdo, Sunnyvale, Alice Springs, and Buckley Air Force Base. We are currently working with Iron Horse on a project with the US Department of Agriculture.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Philip M. Krieble, PE Associate, Civil Engineering Martin/Martin, Inc. Project Manager 17 BS, Civil Engineering, 2000; AAS, 1997 CO No. 39790, UT No. 8726891-2202	Experience & Qualifications Relevant to This Project:	Phil has experience in site civil engineering project management and design from development of conceptual plans and master planning to construction documents and administration for water resources, drainage and storm sewer design, street/roadway design and improvements, water/sewer pipeline system design, overlot grading, and entitlement projects. He has worked on numerous industrial, laboratory, and aerospace projects for clients including Lockheed Martin and National Renewable Energy Laboratory. Phil has worked extensively on scientific, higher education, military, and industrial campuses projects across Colorado's Front Range.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	William P. Willis, PE Principal, Civil Engineering Martin/Martin, Inc. Engineer-of-Record 34 BS, Civil Engineering, 1983	Experience & Qualifications Relevant to This Project:	Bill has led numerous projects for a variety of national, state, federal, and municipal clients. He has acted in the capacity of district engineer and/or town engineer for a number of municipalities for more than 30 years. He is extensively involved with design and management of treatment facilities that incorporate lab facilities, GIS mapping, master planning, standards development, opinion of estimated costs, construction

	10 States including MT, No. 17647		administration, and sustainable design. He is a registered Professional Engineer in the State of Montana and has been involved in numerous projects within the State.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Paul Doak, PE, SE, LEED AP Principal, Structural Engineering Martin/Martin, Inc. Principal-in-Charge 36 MS, Civil Engineering, 1985; BS, Civil Engineering, 1981 CO No. 24585, LEED AP	Experience & Qualifications Relevant to This Project:	Paul has served as principal-in-charge and/or project manager for a broad range of structural systems for a variety of facilities and clients. He has worked on several laboratory and research related projects and understands the structural challenges of these projects including special vibration criteria, cost control and adaptability to future renovation. He has experience collaborating with industrial and research clients including Ball Aerospace and Lockheed Martin.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Dwight L. Gilbert, PE Associate, Structural Engineering Martin/Martin, Inc. Project Manager 13 BS, Civil Engineering, 1995 CO No. 34755	Experience & Qualifications Relevant to This Project:	Dwight has been involved in analysis, structural design and construction administration for a variety of industrial and laboratory facilities. His experience includes design and review of structural steel, concrete, masonry, and wood structures subject to vibrational limitations ranging from MRI's and scanning electron microscopes to microchip manufacturing equipment. He has completed design of multiple facilities with a veterinary focus for both the University of Wyoming and Colorado State University, with equipment ranging from monorail systems for movement of large animals to incinerators for disposal of biological waste, as well as more traditional bench-based facilities. He has worked closely with end-users in both research and industrial settings to develop specific solutions to unique laboratory problems.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Michael A. Piper, PE Associate, Structural Engineering Martin/Martin, Inc. Engineer-of-Record 33 MS, Civil Engineering – Structural Emphasis, 2008; BS, Civil Engineering, 1983	Experience & Qualifications Relevant to This Project:	Mike has more than 30 years of structural engineering design experience for government and industrial facilities. He regularly works on basements and underground structures, including situations where temporary and permanent shoring systems are required to protect adjacent structures or where site constraints do not permit sloped excavations and where soil depth (or soil load) conditions have changed during phased construction. His work includes design of supports for newer or heavier equipment, relocation of equipment and modifications to existing structures to

	10 States, including MT. No. 16900		accommodate larger or more complex equipment, as well as design and detailing for new or modified enclosures.

PROJECTS BY PRIME FIRM THAT BEST ILLUSTRATE QUALIFICATIONS RELEVANT TO THIS PROJECT (limit of 5 projects)

Project Name & Location:	Brief Project Description:	GSF, Cost/SF, & Year Completed:	Owner Contact Info:
Colorado Department of Agriculture, New Laboratory Broomfield, Colorado	The Colorado Department of Agriculture (CDA) intends to relocate three laboratories from their current locations in Denver to a new site adjacent to their administrative headquarters in in Broomfield. The design and construction include approximately 6,000 square feet of renovation in the existing building, and a new single-story building of approximately 27,325 GSF square feet. These facilities will provide the functional and programmatic elements that allow the CDA to perform work activities in one location. The co-location of these core laboratories and the resulting synergies that will develop among the department staff will truly enhance the CDA's evolving brand and operational efficiencies. The renovation of the existing administrative building will provide additional office and workstation space to support CDA's increased staff requirements (e.g. marijuana industry regulation support and the Food Safety Modernization	27,325 GSF – New 5,200NSF – Renovation In Progress	Ms. Catherine Robbins Owner's Rep. Wember 303.868.5258

	Act). The planning and design follow CDC/NIH BMBL requirements and USDA Animal and Plant Health Service Quarantine and Containment Guidelines. The laboratory operations are divided into 3 BSL-2 groups: Biochemistry, Microbiology, Animal Health, with the fourth group being a Level 1 Metrology Lab. The BSL-2 labs are arranged to suit the critical process flow of samples from Accessioning to Sample Preparation to Testing and Analysis to Storage. Lab Support spaces include Solvent Storage, Glasswash, Autoclave, PCR, Bacteriology, Serology, Chemical Storage, Freezer and Refrigerator Storage and Field Equipment.		
National Institute of Health, Building 10 Renovation Bethesda, MD	This renovation project provides a fully renovated lab space for the National Cancer Institute Center for Cancer Research to support ongoing scientific research. The BSL-2 level labs are used to support molecular biology with an emphasis on mammalian cell research. The design includes areas for cell culture, bio-informatics analysis, wet bench molecular and genomics studies, and spaces for specialized equipment and instrumentation to support the mission. The existing space is on the 4th floor of the B-Wing and consists of approximately 2,109SF and is design in accordance with the BMBL and the NIH Design Manual.	Lab Sizes Vary 2014-2018	James Galentine National Cancer Institute 240.276.5028 galentij@mail.nih.gov

Wyoming Game and Fish Department, Forensics and Fish Health Laboratory Laramie, WY	Iron Horse provided architectural services for renovations to the Forensics and Fish Health Laboratory for the Wyoming Game and Fish Department in Laramie, Wyoming. The scope of services included development of drawings, specifications, bid documents along with contract administration for the project. Most of the renovations revolved around modern laboratory equipment and related appurtenances. Iron Horse worked directly with the WY Game and Fish department staff to design appropriately for the laboratory functions and desires of the scientists and users. Our team performed intensive studies and assessed the current site conditions developing a program that ensured the sizing of laboratories and utilities would be sufficient for current and future use. This project included the following laboratory types: BSL-2 tissue culture, virology labs, PCR suite, cold room and freezer storage.	17,000SF 2014	Dave Bumann Chief Engineer / Wyoming Game and Fish Department 307.777.4600 David.bumann@wyo.gov
Douglas County, Joint Regional Crime Lab, Colorado	The Joint Regional Crime Lab is a collaboration of the Douglas County Sheriff's Office, the Arapahoe County Sheriff's Office, and the City of Aurora Police Department. The intent of the	25,552SF 2016-2018	Brian Holthaus Senior Project Manager JE Dunn 720.810.7991 Brian.holthaus@jedunn.com

	project is to combine resources from each entity. The new crime lab will help facilitate a faster response to the community, for property crimes to violent crimes in two of the largest counties in Colorado. This project consists of a 26,000SF single story building, designed for future expansion and flexibility within the different laboratories. The program includes Chemistry, DNA, Latent Prints, Firearms and Celebrite Laboratories and their associated support spaces, including an instrument room to accommodate growth in mass spectrometers. There is also a locker area, a multipurpose room specifically designed for tours and training, and several collaboration zones which are designed to encourage idea sharing and case collaboration.		
FDA, Aquaculture Lab Renovation Dauphine Island, AL	The Dauphin Island Gulf Coast Seafood Laboratory (GCSL) facility for the Food and Drug Administration (FDA) has recently completed construction of an elevated concrete slab project. Iron Horse Architects is the lead architect for a BSL-2 fish research facility, designed to meet the program's (CFSAN) following objectives:	1,085SF	Athanasia Mantzouranis FDA 240.620.8475 Athanasia.mantzouranis@fda.hhs.gov

	• Access to flow through seawater systems to support research projects in MHSB and CHSB at the GCSL • A contained area to perform bio-accumulation studies with enteric pathogens or pathogenic vibrio species • A separate area (including cutting stations, large scale grinder, and exhaust hoods) to process frozen fish samples for Ciguatera extractions A contained area to process bio-accumulated pathogens in shellfish for further transport and analysis inside the main GCSL building.		

PROJECTS BY PRIMARY CONSULTANT(S) THAT BEST ILLUSTRATE QUALIFICATIONS RELEVANT TO THIS PROJECT (limit of 3 projects/firm)

Project Name & Location:	Brief Project Description:	GSF, Cost/SF, & Year Completed:	Owner Contact Info:
Colorado State University Biology Building Fort Collins, CO	Cator, Ruma & Associates is providing mechanical, electrical, and technology program planning, bridging documents and design for a new 152,000-square foot, four-story classroom and biology building on Colorado State University's Fort Collins campus. The building will house research laboratories (including labs for emerging biotechnology), state-of-the-art classroom and teaching facilities, and lounges for students and teachers. This project is targeting LEED Gold. The building is student-funded, and the intent is to create spaces where	152,000 SF $55M Total Construction Cost 2017 Completion	Colorado State University Tracey Abel 970.491.0306

	Biological Sciences and Zoology students can spend their time between classes in study rooms and informal "idea spaces" and the grand entryway and atrium on the southwestern corner. Most of the building is to provide state-of-the-art research laboratories to support the cutting-edge research conducted by faculty, researchers, and graduate students.		
Rocky Mountain Regional Biocontainment Lab	Cator, Ruma & Associates was selected to provide the mechanical and electrical design and construction administration for this project. The Regional Biocontainment Lab at the Foothills Campus of Colorado State University is a state-of-the-art Bioscience Laboratory. The 38,000 finished SF/80,000 SF gross facility contains five separate BSL-3 laboratory containment suites, a full interstitial space housing mechanical and electrical lab services, and a full basement for MEP system access. It also contains a large BSL-2 animal holding/office suite. The building also contains a 5,000 SF class 10,000 CGMP space that utilizes inactivated pathogens and viruses from the adjacent BSL-3 labs to create clinical trial drugs.	38,000SF (finished) $17.4M Project Value 2007	Steve Keiss, Project Manager Colorado State University (970)491-0017 Stephen.keiss@colostate.edu

National Renewable Energy Laboratory Parking Garage and Security Facility Design-Build, Golden, CO	Martin/Martin provided civil engineering services for the design and construction of a $30M, multi-level parking structure and security facility. Services included roadway infrastructure design, traffic engineering, drainage and water quality facilities, campus utility mainline installation coordination, easement development, and negotiations with local utility providers. The structure includes 1,800+ parking spaces for NREL staff and the following features: • Photovoltaic canopy on the top level • Renewable and recycled materials • Natural daylighting to reduce the need for artificial building illumination • Light monitoring and occupancy detection systems to reduce energy when portions of the garage are not being used • System that will lead staff to available parking spaces, and automatically zone off parking locations when demand is lower • Plug-in stations for electric vehicle recharging In addition to the parking structure, the project also includes a new southern site entrance building, a new access road from South Golden Road, and expansion of the campus utility infrastructure. The new site entrance building was designed to meet LEED Platinum and net zero energy goals.	$30M Construction Cost 2012	National Renewable Energy Laboratory Bret Cummock 303.275.4354

	While parking structures do not qualify for LEED certification, the design will maximize energy efficiency of the new NREL parking garage through renewable energy, material selection, and sustainable construction techniques.		

ADDITIONAL RELEVANT INFORMATION (additional attachments, firm information, photos, and/or personnel resumes are acceptable)

SIGNATURE (signature should be that of the firm's principal/owner)

Virginia A. McAllister	
NAME	SIGNATURE
Principal | CEO	2/12/18
TITLE	DATE

The state of Montana makes reasonable accommodations for any known disability that may interfere with an applicant's ability to compete in the application and selection process or that may interfere with an applicant's ability to perform the essential duties of the job. In order for the state to make such accommodations, applicants must make known any needed accommodation to the individual project managers or agency contacts listed. Persons using TDD may call the Montana Relay Service at 1-800-253-4091.

Form is available at http://architecture.mt.gov/.
If you experience problems with this form, please contact the A&E Division at AEDivision@mt.gov or (406) 444-3104.

STATE OF MONTANA

DEPARTMENT OF ADMINISTRATION
ARCHITECTURE AND ENGINEERING DIVISION
1520 East Sixth Avenue • P.O. Box 200103 • Helena MT 59620-0103
Phone: 406 444-3104 • Fax: 406 444-3399

STATEMENT OF QUALIFICATIONS for Specific Projects (Form 115)

PROJECT FOR WHICH THE FIRM IS SUBMITTING

A/E Project Name & Location (list only one project; provide separate Form 115 for each project):	A/E Project #:
Fish, Wildlife & Parks Wildlife Lab	Combined State Labs Study A/E #2018-50-01

PRIME FIRM INFORMATION

Firm Name:	Iron Horse Architects, Inc.	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	1900 Grant Street, Suite 1130 Denver, CO 80203	Principal: Project Mgr: Project A/E:	Victoria David Jeff Fleischer Jay Speagle	Victoria.david@ironhorse.email Jeff.fleischer@ironhorse.email Jay.speagle@ironhorse.email
Phone #: Fax #:	720.855.7572			

CATEGORIES OF WORK FOR CONSIDERATION BY *PRIME* FIRM

ARCHITECTURAL:		ENGINEERING:	
General Practice	X	Mechanical	
Historic Restoration	X	Electrical	
Exterior Envelope	X	Structural	
Master Planning/Programming	X	Civil	
Interior Design	X	Environmental	
		AV/Comm/Data/IT	

SPECIALTY/OTHER:		LANDSCAPE ARCH:	
Acoustics		General Practice	
Commissioning		Master Planning	
Construction Management		Environmental	
Geotechnical/Materials Testing			
Haz Materials Testing/Mitigation			

***PRIME* FIRM PROFILE**

Year Firm was established:	2005
# of Offices in Montana (provide address & contact list if more than one):	0

TOTAL PROFESSIONALS/PERSONNEL (provide total & location-specific list):

Architects	9	Mechanical	
A.I.T.	9	Electrical	
Interior Designer		Structural	
Landscape Architect		Civil	
Specification Writer		E.I.T.	
Cost Estimator		Environmental	
Construction Administrator		Energy Analysis	
Production Staff	3	Commissioning	
Accounting	2	Other (provide list)	
Administrative Support	2		

LIST THE FIRM NAME AND ADDRESS FOR EACH OF THE CONSULTANTS ON THIS PROJECT (if different from PRIME above).

ARCHITECT FIRM INFORMATION

Firm Name:	N/A	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)		Principal: Project Mgr: Project A/E:		
Phone #: Fax #:				

MECHANICAL ENGINEER FIRM INFORMATION

Firm Name:	Cator Ruma	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	896 Tabor Street Lakewood, CO 80401	Principal: Project Mgr: Project A/E:	Sean Convery, PE - Principal	sconvery@catorruma.com
Phone #: Fax #:	303-232-6200 303-233-3701			

ELECTRICAL ENGINEER FIRM INFORMATION

Firm Name:	Cator Ruma	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	896 Tabor Street Lakewood, CO 80401	Principal: Project Mgr: Project A/E:	Justin Hafer, PE – Electrical Project Manager	jhafer@catorruma.com
Phone #: Fax #:	303-232-6200 303-233-3701			

STRUCTURAL ENGINEER FIRM INFORMATION

Firm Name:	Martin / Martin	Contact(s)	Name	Email Address
Address:		Principal: Project Mgr:	Paul Doak	pdoak@martinmartin.com

(provide mailing address also, if different)	12499 West Colfax Avenue Lakewood, CO 80215	Project A/E:	Dwight Gilbert Mike Piper (Engineer-of-Record)	dgilbert@martinmartin.com mpiper@martinmartin.com
Phone #: Fax #:	303.431.6100 303.456.9923			

CIVIL ENGINEER FIRM INFORMATION

Firm Name:	Martin / Martin, Inc.	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	12499 West Colfax Avenue Lakewood, CO 80215	Principal: Project Mgr: Project A/E:	Matt Schlageter Phil Krieble Bill Willis (Engineer-of-Record)	mschlageter@martinmartin.com pkrieble@martinmartin.com bwillis@martinmartin.com
Phone #: Fax #:	303.431.6100 303.456.9923			

SPECIALTY CONSULTING FIRM INFORMATION

Firm Name:	N/A	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)		Principal: Project Mgr: Project A/E:		
Phone #: Fax #:				

PROVIDE BRIEF RESUMÉ OF KEY PERSONS OF PRIME FIRM ASSIGNED TO THIS PROJECT (add tables as required)

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year):	Victoria David Principal | Science & Technology Iron Horse Architects, Inc. Sr. Laboratory Planner & Programmer 9	Experience & Qualifications Relevant to This Project:	During the forty years of her career, Ms. David has planned and designed research, development, and manufacturing facilities for a variety of clients both nationally and internationally, including advanced technology, health care, corporate and non-profit research and development, academic, analytical and medical device fields. She served on national juries, presented at numerous national

Active Registrations:	MS Construction Project Management, University of California, Berkeley BA Conceptual Design, San Francisco State University RA: CO, MD, VA, WA AIA LEED Green Associates Assoc. DBIA NCARB		conferences, written several articles for nationally recognized publications and participated on national committees - including LEEDS for Labs - dedicated to disseminating information on industry best practices for laboratory planning and design. Her myriad project roles include project management, strategic facility planning, master planning, laboratory programming, planning and design, project coordination, facility assessment, renovation and new design. • Wyoming Game & Fish Department, Forensics and Fish Health Laboratory • Colorado Department of Agriculture, New Laboratory • Douglas County, Joint Regional Crime Laboratory • Denver Health and Hospital Authority, Office of the Medical Examiner Relocation • Denver Health and Hospital Authority, Outpatient Medical Center • National Institute of Health, National Cancer Institute Office of Research Facilities

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Jeff Fleischer Project Manager Iron Horse Architects, Inc. Project Manager 1 March, University of Colorado RA: CO, WY AIA	Experience & Qualifications Relevant to This Project:	Jeff is a registered architect with 30 years of diverse professional experience. His expertise extends from initial ownership meetings to design, detailing, and construction administration services delivered via traditional design-bid-build to public-private partnership agreements. Jeff has established his professional career as the primary "point of contact" within the team structure. He is responsible for and oversees each project through all phases of design and construction and ensures design team building code compliance. Jeff continually provides leadership as a liaison with ownership teams and the design team to ensure design efforts are met from the project inception to completion. • Colorado Department of Agriculture, New Laboratory • Denver Health and Hospital Authority, Office of the Medical Examiner Relocation

			• Denver Health and Hospital Authority, Outpatient Medical Center • University of Colorado Hospital, Anschutz Cancer Pavilion Addition

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Jay Speagle Project Architect Iron Horse Architects, Inc. Project Architect 1 MArch, University of Colorado Denver RA: CO LEED AP CDT	Experience & Qualifications Relevant to This Project:	Jay is an architect with 23 years of experience on a variety of project types and provides highly technical support to the Iron Horse team. Jay's project type diversity includes projects for Federal and State Governments, healthcare, hospital, clinic, laboratories, He brings a high level of attention to detail during the technical aspects of the design, which translates into a more complete set of construction documents. As a Senior Project Architect at Iron Horse, Jay brings efficiency and a depth of technical knowledge through his experience. • Colorado Department of Agriculture, New Laboratory • Brookhaven Science Associates, LLC, Brookhaven National Laboratory • Nebraska Methodist Health System, Methodist Women's Hospital and Medical Office Building • State of Wyoming, Public Health and Crime Lab • State of Wyoming, State Veterinary Lab Addition • Denver Health and Hospital, Toxicology Lab Renovation

PROVIDE BRIEF RESUMÉ OF KEY PERSONS OF CONSULTING FIRMS ASSIGNED TO THIS PROJECT (add tables as required)

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Sean Convery, PE Mechanical Principal Cator, Ruma & Associates Mechanical Principal 23 BS Mechanical Engineering/1995 Professional Engineer, Colorado	Experience & Qualifications Relevant to This Project:	Colorado State University, Fort Collins, CO • Animal Sciences Building Renovation • Animal Disease Lab Remodel (Large Animal Lab) • James L. Voss Veterinary Teaching Hospital - Multiple Projects • Chronic Wasting Disease Deer Facility (BSL-2) • Arthropod-Borne and Infectious Disease Laboratory (AIDL) Insectary

			• AIDL Renovation • Bioenvironmental Hazards Research Building (BHRB) Phases I, II, III (BSL-3) • Diagnostic Medicine Center (BSL-2 and BSL-3) • New Biology Building - LEED Gold Pending • New Chemistry Building - LEED Gold Pending • Pathology Building HVAC Study (BSL-2 and BSL-3) • Research Innovation Center - LEED Gold (BSL-2) • Rocky Mountain Regional Biocontainment Lab (RBL) (BSL-2 and BSL-3) • RBL Imaging Suite (BSL-3) • Suzanne and Walter Scott, Jr. Bioengineering Building - LEED Gold State of Wyoming, WY • Combined Laboratory Facility (BSL-2/BSL-3), Cheyenne • Veterinary Laboratory Facility (BSL-3), Laramie • National Institute of Standards and Technology, Boulder, CO • Building 1, Wings 3 and 6 Renovation • Wing 3 Customization • University Corporation for Atmospheric Research, Boulder, CO • Foothills Laboratory (FL-0) • University of Wyoming, Laramie, WY • Science Initiative Building • WWAMI Gross Anatomy Laboratory • University of Colorado Boulder, Boulder, CO • Sustainability, Energy and Environment Complex (SEEC) - LEED Platinum Pending • Jennie Smoly Caruthers Systems Biotechnology Building - LEED Platinum • Porter Biosciences Building - Multiple Remodel/Renovation Projects University of Colorado Denver, Anschutz Medical Campus, Aurora, CO • Research Laboratory 1 (R1) - AHU Emergency Repairs - Energy Efficiency Upgrades Phases I-III - BSL-3 Upgrade

			• Research Laboratory 2 (R2) - 5th Floor Exhaust Duct Replacement • Perinatal BARDA Research Facility Large Animal Inhalation Program Plan

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Justin Hafer, PE Electrical Project Manager Cator, Ruma & Associates Electrical Project Manager 13 MS Architectural Engineering/1999 BS Architectural Engineering/1998 Professional Engineer, Colorado and Kansas	Experience & Qualifications Relevant to This Project:	Colorado State University, Fort Collins, CO • Advanced Beam Laboratory • Animal Sciences Building Renovation • Animal Disease Laboratory RTU Replacement • Animal Population Health Institute (APHI) Laboratory • Advanced Beam Laboratory • Glover Laboratory Remodel • JBS Global Food Innovation Center • Anatomy/Zoology Addition (Gross Anatomy) • New Biology Building - LEED Gold Pending • New Chemistry Building - LEED Gold Pending • Plant Environmental Research Center (PERC) Relocation • James L. Voss Veterinary Teaching Hospital (BSL-2 and BSL-3) Multi-Phase Renovation • Suzanne and Walter Scott, Jr., Bioengineering Building - LEED Gold University of Colorado, Boulder, CO • Porter Biosciences Building - Various Upgrades and Remodels • Environmental Science Wing Renovation • Ekeley Laboratory Remodel • Joint Institute for Laboratory Astrophysics (JILA) X-Wing Addition • —LEED® Gold • JILA Laboratory Renovations B-Wing • Ramaley IPHY Building Addition • Chemical Engineering Wing HVAC Upgrades • Electrical Engineering Wing Nano Tech Lab & 214/218 Remodel • Mechanical Engineering Wing HVAC Upgrades • Engineering Building 2nd Floor Lab Remodel • Fiske Planetarium (30 KVA UPS)

			State of Wyoming, Wyoming Fish and Game Department, Laramie, WY • Forensics and Fish Health Laboratory • Metropolitan State University, Denver, CO • Aerospace Engineering Sciences Building • Boise State University, Boise, ID • New Material Science Building

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Matthew B. Schlageter, PE, LEED AP Principal, Civil Engineering Martin/Martin, Inc. Principal-in-Charge 21 BS, Civil Engineering, 1995 CO No. 35253, LEED AP	Experience & Qualifications Relevant to This Project:	Matt has extensive experience addressing design challenges for complex laboratory projects. His hands-on approach and strong communication skills have proven invaluable on many integrated teams and design-build projects, and have produced creative, future-driven solutions to complex problems. Matt has overseen numerous laboratory and technology projects for the National Renewable Energy Laboratory (NREL), National Institute of Standards and Technology (NIST), several higher education campus laboratories for multiple universities, and Lockheed Martin campus development at locations across the globe–Waterton, McMurdo, Sunnyvale, Alice Springs, and Buckley Air Force Base. We are currently working with Iron Horse on a project with the US Department of Agriculture.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Philip M. Krieble, PE Associate, Civil Engineering Martin/Martin, Inc. Project Manager 17 BS, Civil Engineering, 2000; AAS, 1997 CO No. 39790, UT No. 8726891-2202	Experience & Qualifications Relevant to This Project:	Phil has experience in site civil engineering project management and design from development of conceptual plans and master planning to construction documents and administration for water resources, drainage and storm sewer design, street/roadway design and improvements, water/sewer pipeline system design, overlot grading, and entitlement projects. He has worked on numerous industrial, laboratory, and aerospace projects for clients including Lockheed Martin and National Renewable Energy Laboratory. Phil has worked extensively on scientific, higher education, military, and industrial campuses projects across Colorado's Front Range.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	William P. Willis, PE Principal, Civil Engineering Martin/Martin, Inc. Engineer-of-Record 34 BS, Civil Engineering, 1983	Experience & Qualifications Relevant to This Project:	Bill has led numerous projects for a variety of national, state, federal, and municipal clients. He has acted in the capacity of district engineer and/or town engineer for a number of municipalities for more than 30 years. He is extensively involved with design and management of treatment facilities that incorporate lab facilities, GIS mapping, master planning, standards development, opinion of estimated costs, construction

	10 States including MT, No. 17647		administration, and sustainable design. He is a registered Professional Engineer in the State of Montana and has been involved in numerous projects within the State.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Paul Doak, PE, SE, LEED AP Principal, Structural Engineering Martin/Martin, Inc. Principal-in-Charge 36 MS, Civil Engineering, 1985; BS, Civil Engineering, 1981 CO No. 24585, LEED AP	Experience & Qualifications Relevant to This Project:	Paul has served as principal-in-charge and/or project manager for a broad range of structural systems for a variety of facilities and clients. He has worked on several laboratory and research related projects and understands the structural challenges of these projects including special vibration criteria, cost control and adaptability to future renovation. He has experience collaborating with industrial and research clients including Ball Aerospace and Lockheed Martin.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Dwight L. Gilbert, PE Associate, Structural Engineering Martin/Martin, Inc. Project Manager 13 BS, Civil Engineering, 1995 CO No. 34755	Experience & Qualifications Relevant to This Project:	Dwight has been involved in analysis, structural design and construction administration for a variety of industrial and laboratory facilities. His experience includes design and review of structural steel, concrete, masonry, and wood structures subject to vibrational limitations ranging from MRI's and scanning electron microscopes to microchip manufacturing equipment. He has completed design of multiple facilities with a veterinary focus for both the University of Wyoming and Colorado State University, with equipment ranging from monorail systems for movement of large animals to incinerators for disposal of biological waste, as well as more traditional bench-based facilities. He has worked closely with end-users in both research and industrial settings to develop specific solutions to unique laboratory problems.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Michael A. Piper, PE Associate, Structural Engineering Martin/Martin, Inc. Engineer-of-Record 33 MS, Civil Engineering – Structural Emphasis, 2008; BS, Civil Engineering, 1983	Experience & Qualifications Relevant to This Project:	Mike has more than 30 years of structural engineering design experience for government and industrial facilities. He regularly works on basements and underground structures, including situations where temporary and permanent shoring systems are required to protect adjacent structures or where site constraints do not permit sloped excavations and where soil depth (or soil load) conditions have changed during phased construction. His work includes design of supports for newer or heavier equipment, relocation of equipment and modifications to existing structures to

	10 States, including MT. No. 16900		accommodate larger or more complex equipment, as well as design and detailing for new or modified enclosures.

PROJECTS BY PRIME FIRM THAT BEST ILLUSTRATE QUALIFICATIONS RELEVANT TO THIS PROJECT (limit of 5 projects)

Project Name & Location:	Brief Project Description:	GSF, Cost/SF, & Year Completed:	Owner Contact Info:
Colorado Department of Agriculture, New Laboratory Broomfield, Colorado	The Colorado Department of Agriculture (CDA) intends to relocate three laboratories from their current locations in Denver to a new site adjacent to their administrative headquarters in in Broomfield. The design and construction include approximately 6,000 square feet of renovation in the existing building, and a new single-story building of approximately 27,325 GSF square feet. These facilities will provide the functional and programmatic elements that allow the CDA to perform work activities in one location. The co-location of these core laboratories and the resulting synergies that will develop among the department staff will truly enhance the CDA's evolving brand and operational efficiencies. The renovation of the existing administrative building will provide additional office and workstation space to support CDA's increased staff requirements (e.g. marijuana industry regulation support and the Food Safety Modernization	27,325 GSF – New 5,200NSF – Renovation In Progress	Ms. Catherine Robbins Owner's Rep. Wember 303.868.5258

	Act). The planning and design follow CDC/NIH BMBL requirements and USDA Animal and Plant Health Service Quarantine and Containment Guidelines. The laboratory operations are divided into 3 BSL-2 groups: Biochemistry, Microbiology, Animal Health, with the fourth group being a Level 1 Metrology Lab. The BSL-2 labs are arranged to suit the critical process flow of samples from Accessioning to Sample Preparation to Testing and Analysis to Storage. Lab Support spaces include Solvent Storage, Glasswash, Autoclave, PCR, Bacteriology, Serology, Chemical Storage, Freezer and Refrigerator Storage and Field Equipment.		
National Institute of Health, Building 10 Renovation Bethesda, MD	This renovation project provides a fully renovated lab space for the National Cancer Institute Center for Cancer Research to support ongoing scientific research. The BSL-2 level labs are used to support molecular biology with an emphasis on mammalian cell research. The design includes areas for cell culture, bio-informatics analysis, wet bench molecular and genomics studies, and spaces for specialized equipment and instrumentation to support the mission. The existing space is on the 4th floor of the B-Wing and consists of approximately 2,109SF and is design in accordance with the BMBL and the NIH Design Manual.	Lab Sizes Vary 2014-2018	James Galentine National Cancer Institute 240.276.5028 galentij@mail.nih.gov

Wyoming Game and Fish Department, Forensics and Fish Health Laboratory Laramie, WY	Iron Horse provided architectural services for renovations to the Forensics and Fish Health Laboratory for the Wyoming Game and Fish Department in Laramie, Wyoming. The scope of services included development of drawings, specifications, bid documents along with contract administration for the project. Most of the renovations revolved around modern laboratory equipment and related appurtenances. Iron Horse worked directly with the WY Game and Fish department staff to design appropriately for the laboratory functions and desires of the scientists and users. Our team performed intensive studies and assessed the current site conditions developing a program that ensured the sizing of laboratories and utilities would be sufficient for current and future use. This project included the following laboratory types: BSL-2 tissue culture, virology labs, PCR suite, cold room and freezer storage.	17,000SF 2014	Dave Bumann Chief Engineer / Wyoming Game and Fish Department 307.777.4600 David.bumann@wyo.gov
Douglas County, Joint Regional Crime Lab, Colorado	The Joint Regional Crime Lab is a collaboration of the Douglas County Sheriff's Office, the Arapahoe County Sheriff's Office, and the City of Aurora Police Department. The intent of the	25,552SF 2016-2018	Brian Holthaus Senior Project Manager JE Dunn 720.810.7991 Brian.holthaus@jedunn.com

	project is to combine resources from each entity. The new crime lab will help facilitate a faster response to the community, for property crimes to violent crimes in two of the largest counties in Colorado. This project consists of a 26,000SF single story building, designed for future expansion and flexibility within the different laboratories. The program includes Chemistry, DNA, Latent Prints, Firearms and Celebrite Laboratories and their associated support spaces, including an instrument room to accommodate growth in mass spectrometers. There is also a locker area, a multipurpose room specifically designed for tours and training, and several collaboration zones which are designed to encourage idea sharing and case collaboration.		
FDA, Aquaculture Lab Renovation Dauphine Island, AL	The Dauphin Island Gulf Coast Seafood Laboratory (GCSL) facility for the Food and Drug Administration (FDA) has recently completed construction of an elevated concrete slab project. Iron Horse Architects is the lead architect for a BSL-2 fish research facility, designed to meet the program's (CFSAN) following objectives:	1,085SF	Athanasia Mantzouranis FDA 240.620.8475 Athanasia.mantzouranis@fda.hhs.gov

	• Access to flow through seawater systems to support research projects in MHSB and CHSB at the GCSL • A contained area to perform bio-accumulation studies with enteric pathogens or pathogenic vibrio species • A separate area (including cutting stations, large scale grinder, and exhaust hoods) to process frozen fish samples for Ciguatera extractions A contained area to process bio-accumulated pathogens in shellfish for further transport and analysis inside the main GCSL building.		

PROJECTS BY PRIMARY CONSULTANT(S) THAT BEST ILLUSTRATE QUALIFICATIONS RELEVANT TO THIS PROJECT (limit of 3 projects/firm)

Project Name & Location:	Brief Project Description:	GSF, Cost/SF, & Year Completed:	Owner Contact Info:
Colorado State University Biology Building Fort Collins, CO	Cator, Ruma & Associates is providing mechanical, electrical, and technology program planning, bridging documents and design for a new 152,000-square foot, four-story classroom and biology building on Colorado State University's Fort Collins campus. The building will house research laboratories (including labs for emerging biotechnology), state-of-the-art classroom and teaching facilities, and lounges for students and teachers. This project is targeting LEED Gold. The building is student-funded, and the intent is to create spaces where	152,000 SF $55M Total Construction Cost 2017 Completion	Colorado State University Tracey Abel 970.491.0306

	Biological Sciences and Zoology students can spend their time between classes in study rooms and informal "idea spaces" and the grand entryway and atrium on the southwestern corner. Most of the building is to provide state-of-the-art research laboratories to support the cutting-edge research conducted by faculty, researchers, and graduate students.		
Rocky Mountain Regional Biocontainment Lab	Cator, Ruma & Associates was selected to provide the mechanical and electrical design and construction administration for this project. The Regional Biocontainment Lab at the Foothills Campus of Colorado State University is a state-of-the-art Bioscience Laboratory. The 38,000 finished SF/80,000 SF gross facility contains five separate BSL-3 laboratory containment suites, a full interstitial space housing mechanical and electrical lab services, and a full basement for MEP system access. It also contains a large BSL-2 animal holding/office suite. The building also contains a 5,000 SF class 10,000 CGMP space that utilizes inactivated pathogens and viruses from the adjacent BSL-3 labs to create clinical trial drugs.	38,000SF (finished) $17.4M Project Value 2007	Steve Keiss, Project Manager Colorado State University (970)491-0017 Stephen.keiss@colostate.edu

National Renewable Energy Laboratory Parking Garage and Security Facility Design-Build, Golden, CO	Martin/Martin provided civil engineering services for the design and construction of a $30M, multi-level parking structure and security facility. Services included roadway infrastructure design, traffic engineering, drainage and water quality facilities, campus utility mainline installation coordination, easement development, and negotiations with local utility providers. The structure includes 1,800+ parking spaces for NREL staff and the following features: • Photovoltaic canopy on the top level • Renewable and recycled materials • Natural daylighting to reduce the need for artificial building illumination • Light monitoring and occupancy detection systems to reduce energy when portions of the garage are not being used • System that will lead staff to available parking spaces, and automatically zone off parking locations when demand is lower • Plug-in stations for electric vehicle recharging In addition to the parking structure, the project also includes a new southern site entrance building, a new access road from South Golden Road, and expansion of the campus utility infrastructure. The new site entrance building was designed to meet LEED Platinum and net zero energy goals.	$30M Construction Cost 2012	National Renewable Energy Laboratory Bret Cummock 303.275.4354

	While parking structures do not qualify for LEED certification, the design will maximize energy efficiency of the new NREL parking garage through renewable energy, material selection, and sustainable construction techniques.		

ADDITIONAL RELEVANT INFORMATION (additional attachments, firm information, photos, and/or personnel resumes are acceptable)

SIGNATURE (signature should be that of the firm's principal/owner)

Virginia A. McAllister	
NAME	SIGNATURE
Principal | CEO	2/12/18
TITLE	DATE

The state of Montana makes reasonable accommodations for any known disability that may interfere with an applicant's ability to compete in the application and selection process or that may interfere with an applicant's ability to perform the essential duties of the job. In order for the state to make such accommodations, applicants must make known any needed accommodation to the individual project managers or agency contacts listed. Persons using TDD may call the Montana Relay Service at 1-800-253-4091.

Form is available at http://architecture.mt.gov/.
If you experience problems with this form, please contact the A&E Division at AEDivision@mt.gov or (406) 444-3104.

STATE OF MONTANA

DEPARTMENT OF ADMINISTRATION
ARCHITECTURE AND ENGINEERING DIVISION
1520 East Sixth Avenue • P.O. Box 200103 • Helena MT 59620-0103
Phone: 406 444-3104 • Fax: 406 444-3399

STATEMENT OF QUALIFICATIONS for Specific Projects (Form 115)

PROJECT FOR WHICH THE FIRM IS SUBMITTING

A/E Project Name & Location (list only one project; provide separate Form 115 for each project):	A/E Project #:
Montana Agricultural Extension Station Seed Lab	Combined State Labs Study A/E #2018-50-01

PRIME FIRM INFORMATION

Firm Name:	Iron Horse Architects, Inc.	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	1900 Grant Street, Suite 1130 Denver, CO 80203	Principal: Project Mgr: Project A/E:	Victoria David Jeff Fleischer Jay Speagle	Victoria.david@ironhorse.email Jeff.fleischer@ironhorse.email Jay.speagle@ironhorse.email
Phone #: Fax #:	720.855.7572			

CATEGORIES OF WORK FOR CONSIDERATION BY *PRIME* FIRM

ARCHITECTURAL:		ENGINEERING:	
General Practice	X	Mechanical	
Historic Restoration	X	Electrical	
Exterior Envelope	X	Structural	
Master Planning/Programming	X	Civil	
Interior Design	X	Environmental	
		AV/Comm/Data/IT	

SPECIALTY/OTHER:		LANDSCAPE ARCH:	
Acoustics		General Practice	
Commissioning		Master Planning	
Construction Management		Environmental	
Geotechnical/Materials Testing			
Haz Materials Testing/Mitigation			

***PRIME* FIRM PROFILE**

Year Firm was established:	2005
# of Offices in Montana (provide address & contact list if more than one):	0

TOTAL PROFESSIONALS/PERSONNEL (provide total & location-specific list):

Architects	9	Mechanical	
A.I.T.	9	Electrical	
Interior Designer		Structural	
Landscape Architect		Civil	
Specification Writer		E.I.T.	
Cost Estimator		Environmental	
Construction Administrator		Energy Analysis	
Production Staff	3	Commissioning	
Accounting	2	Other (provide list)	
Administrative Support	2		

LIST THE FIRM NAME AND ADDRESS FOR EACH OF THE CONSULTANTS ON THIS PROJECT (if different from PRIME above).

ARCHITECT FIRM INFORMATION

Firm Name:	N/A	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)		Principal: Project Mgr: Project A/E:		
Phone #: Fax #:				

MECHANICAL ENGINEER FIRM INFORMATION

Firm Name:	Cator Ruma	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	896 Tabor Street Lakewood, CO 80401	Principal: Project Mgr: Project A/E:	Sean Convery, PE - Principal	sconvery@catorruma.com
Phone #: Fax #:	303-232-6200 303-233-3701			

ELECTRICAL ENGINEER FIRM INFORMATION

Firm Name:	Cator Ruma	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	896 Tabor Street Lakewood, CO 80401	Principal: Project Mgr: Project A/E:	Justin Hafer, PE – Electrical Project Manager	jhafer@catorruma.com
Phone #: Fax #:	303-232-6200 303-233-3701			

STRUCTURAL ENGINEER FIRM INFORMATION

Firm Name:	Martin / Martin	Contact(s)	Name	Email Address
Address:		Principal: Project Mgr:	Paul Doak	pdoak@martinmartin.com

(provide mailing address also, if different)	12499 West Colfax Avenue Lakewood, CO 80215	Project A/E:	Dwight Gilbert Mike Piper (Engineer-of-Record)	dgilbert@martinmartin.com mpiper@martinmartin.com
Phone #: Fax #:	303.431.6100 303.456.9923			

CIVIL ENGINEER FIRM INFORMATION

Firm Name:	Martin / Martin, Inc.	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	12499 West Colfax Avenue Lakewood, CO 80215	Principal: Project Mgr: Project A/E:	Matt Schlageter Phil Krieble Bill Willis (Engineer-of-Record)	mschlageter@martinmartin.com pkrieble@martinmartin.com bwillis@martinmartin.com
Phone #: Fax #:	303.431.6100 303.456.9923			

SPECIALTY CONSULTING FIRM INFORMATION

Firm Name:	N/A	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)		Principal: Project Mgr: Project A/E:		
Phone #: Fax #:				

PROVIDE BRIEF RESUMÉ OF KEY PERSONS OF PRIME FIRM ASSIGNED TO THIS PROJECT (add tables as required)

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year):	Victoria David Principal | Science & Technology Iron Horse Architects, Inc. Sr. Laboratory Planner & Programmer 9	Experience & Qualifications Relevant to This Project:	During the forty years of her career, Ms. David has planned and designed research, development, and manufacturing facilities for a variety of clients both nationally and internationally, including advanced technology, health care, corporate and non-profit research and development, academic, analytical and medical device fields. She served on national juries, presented at numerous national

Active Registrations:	MS Construction Project Management, University of California, Berkeley BA Conceptual Design, San Francisco State University RA: CO, MD, VA, WA AIA LEED Green Associates Assoc. DBIA NCARB		conferences, written several articles for nationally recognized publications and participated on national committees - including LEEDS for Labs - dedicated to disseminating information on industry best practices for laboratory planning and design. Her myriad project roles include project management, strategic facility planning, master planning, laboratory programming, planning and design, project coordination, facility assessment, renovation and new design. • Wyoming Game & Fish Department, Forensics and Fish Health Laboratory • Colorado Department of Agriculture, New Laboratory • Douglas County, Joint Regional Crime Laboratory • Denver Health and Hospital Authority, Office of the Medical Examiner Relocation • Denver Health and Hospital Authority, Outpatient Medical Center • National Institute of Health, National Cancer Institute Office of Research Facilities

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Jeff Fleischer Project Manager Iron Horse Architects, Inc. Project Manager 1 March, University of Colorado RA: CO, WY AIA	Experience & Qualifications Relevant to This Project:	Jeff is a registered architect with 30 years of diverse professional experience. His expertise extends from initial ownership meetings to design, detailing, and construction administration services delivered via traditional design-bid-build to public-private partnership agreements. Jeff has established his professional career as the primary "point of contact" within the team structure. He is responsible for and oversees each project through all phases of design and construction and ensures design team building code compliance. Jeff continually provides leadership as a liaison with ownership teams and the design team to ensure design efforts are met from the project inception to completion. • Colorado Department of Agriculture, New Laboratory • Denver Health and Hospital Authority, Office of the Medical Examiner Relocation

			• Denver Health and Hospital Authority, Outpatient Medical Center • University of Colorado Hospital, Anschutz Cancer Pavilion Addition

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Jay Speagle Project Architect Iron Horse Architects, Inc. Project Architect 1 MArch, University of Colorado Denver RA: CO LEED AP CDT	Experience & Qualifications Relevant to This Project:	Jay is an architect with 23 years of experience on a variety of project types and provides highly technical support to the Iron Horse team. Jay's project type diversity includes projects for Federal and State Governments, healthcare, hospital, clinic, laboratories, He brings a high level of attention to detail during the technical aspects of the design, which translates into a more complete set of construction documents. As a Senior Project Architect at Iron Horse, Jay brings efficiency and a depth of technical knowledge through his experience. • Colorado Department of Agriculture, New Laboratory • Brookhaven Science Associates, LLC, Brookhaven National Laboratory • Nebraska Methodist Health System, Methodist Women's Hospital and Medical Office Building • State of Wyoming, Public Health and Crime Lab • State of Wyoming, State Veterinary Lab Addition • Denver Health and Hospital, Toxicology Lab Renovation

PROVIDE BRIEF RESUMÉ OF KEY PERSONS OF CONSULTING FIRMS ASSIGNED TO THIS PROJECT (add tables as required)

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Sean Convery, PE Mechanical Principal Cator, Ruma & Associates Mechanical Principal 23 BS Mechanical Engineering/1995 Professional Engineer, Colorado	Experience & Qualifications Relevant to This Project:	Colorado State University, Fort Collins, CO • Animal Sciences Building Renovation • Animal Disease Lab Remodel (Large Animal Lab) • James L. Voss Veterinary Teaching Hospital - Multiple Projects • Chronic Wasting Disease Deer Facility (BSL-2) • Arthropod-Borne and Infectious Disease Laboratory (AIDL) Insectary

			• AIDL Renovation • Bioenvironmental Hazards Research Building (BHRB) Phases I, II, III (BSL-3) • Diagnostic Medicine Center (BSL-2 and BSL-3) • New Biology Building - LEED Gold Pending • New Chemistry Building - LEED Gold Pending • Pathology Building HVAC Study (BSL-2 and BSL-3) • Research Innovation Center - LEED Gold (BSL-2) • Rocky Mountain Regional Biocontainment Lab (RBL) (BSL-2 and BSL-3) • RBL Imaging Suite (BSL-3) • Suzanne and Walter Scott, Jr. Bioengineering Building - LEED Gold State of Wyoming, WY • Combined Laboratory Facility (BSL-2/BSL-3), Cheyenne • Veterinary Laboratory Facility (BSL-3), Laramie • National Institute of Standards and Technology, Boulder, CO • Building 1, Wings 3 and 6 Renovation • Wing 3 Customization • University Corporation for Atmospheric Research, Boulder, CO • Foothills Laboratory (FL-0) • University of Wyoming, Laramie, WY • Science Initiative Building • WWAMI Gross Anatomy Laboratory • University of Colorado Boulder, Boulder, CO • Sustainability, Energy and Environment Complex (SEEC) - LEED Platinum Pending • Jennie Smoly Caruthers Systems Biotechnology Building - LEED Platinum • Porter Biosciences Building - Multiple Remodel/Renovation Projects University of Colorado Denver, Anschutz Medical Campus, Aurora, CO • Research Laboratory 1 (R1) - AHU Emergency Repairs - Energy Efficiency Upgrades Phases I-III - BSL-3 Upgrade

			• Research Laboratory 2 (R2) - 5th Floor Exhaust Duct Replacement • Perinatal BARDA Research Facility Large Animal Inhalation Program Plan

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Justin Hafer, PE Electrical Project Manager Cator, Ruma & Associates Electrical Project Manager 13 MS Architectural Engineering/1999 BS Architectural Engineering/1998 Professional Engineer, Colorado and Kansas	Experience & Qualifications Relevant to This Project:	Colorado State University, Fort Collins, CO • Advanced Beam Laboratory • Animal Sciences Building Renovation • Animal Disease Laboratory RTU Replacement • Animal Population Health Institute (APHI) Laboratory • Advanced Beam Laboratory • Glover Laboratory Remodel • JBS Global Food Innovation Center • Anatomy/Zoology Addition (Gross Anatomy) • New Biology Building - LEED Gold Pending • New Chemistry Building - LEED Gold Pending • Plant Environmental Research Center (PERC) Relocation • James L. Voss Veterinary Teaching Hospital (BSL-2 and BSL-3) Multi-Phase Renovation • Suzanne and Walter Scott, Jr., Bioengineering Building - LEED Gold University of Colorado, Boulder, CO • Porter Biosciences Building - Various Upgrades and Remodels • Environmental Science Wing Renovation • Ekeley Laboratory Remodel • Joint Institute for Laboratory Astrophysics (JILA) X-Wing Addition • —LEED® Gold • JILA Laboratory Renovations B-Wing • Ramaley IPHY Building Addition • Chemical Engineering Wing HVAC Upgrades • Electrical Engineering Wing Nano Tech Lab & 214/218 Remodel • Mechanical Engineering Wing HVAC Upgrades • Engineering Building 2nd Floor Lab Remodel • Fiske Planetarium (30 KVA UPS)

			State of Wyoming, Wyoming Fish and Game Department, Laramie, WY • Forensics and Fish Health Laboratory • Metropolitan State University, Denver, CO • Aerospace Engineering Sciences Building • Boise State University, Boise, ID • New Material Science Building

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Matthew B. Schlageter, PE, LEED AP Principal, Civil Engineering Martin/Martin, Inc. Principal-in-Charge 21 BS, Civil Engineering, 1995 CO No. 35253, LEED AP	Experience & Qualifications Relevant to This Project:	Matt has extensive experience addressing design challenges for complex laboratory projects. His hands-on approach and strong communication skills have proven invaluable on many integrated teams and design-build projects, and have produced creative, future-driven solutions to complex problems. Matt has overseen numerous laboratory and technology projects for the National Renewable Energy Laboratory (NREL), National Institute of Standards and Technology (NIST), several higher education campus laboratories for multiple universities, and Lockheed Martin campus development at locations across the globe–Waterton, McMurdo, Sunnyvale, Alice Springs, and Buckley Air Force Base. We are currently working with Iron Horse on a project with the US Department of Agriculture.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Philip M. Krieble, PE Associate, Civil Engineering Martin/Martin, Inc. Project Manager 17 BS, Civil Engineering, 2000; AAS, 1997 CO No. 39790, UT No. 8726891-2202	Experience & Qualifications Relevant to This Project:	Phil has experience in site civil engineering project management and design from development of conceptual plans and master planning to construction documents and administration for water resources, drainage and storm sewer design, street/roadway design and improvements, water/sewer pipeline system design, overlot grading, and entitlement projects. He has worked on numerous industrial, laboratory, and aerospace projects for clients including Lockheed Martin and National Renewable Energy Laboratory. Phil has worked extensively on scientific, higher education, military, and industrial campuses projects across Colorado's Front Range.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	William P. Willis, PE Principal, Civil Engineering Martin/Martin, Inc. Engineer-of-Record 34 BS, Civil Engineering, 1983	Experience & Qualifications Relevant to This Project:	Bill has led numerous projects for a variety of national, state, federal, and municipal clients. He has acted in the capacity of district engineer and/or town engineer for a number of municipalities for more than 30 years. He is extensively involved with design and management of treatment facilities that incorporate lab facilities, GIS mapping, master planning, standards development, opinion of estimated costs, construction

	10 States including MT, No. 17647		administration, and sustainable design. He is a registered Professional Engineer in the State of Montana and has been involved in numerous projects within the State.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Paul Doak, PE, SE, LEED AP Principal, Structural Engineering Martin/Martin, Inc. Principal-in-Charge 36 MS, Civil Engineering, 1985; BS, Civil Engineering, 1981 CO No. 24585, LEED AP	Experience & Qualifications Relevant to This Project:	Paul has served as principal-in-charge and/or project manager for a broad range of structural systems for a variety of facilities and clients. He has worked on several laboratory and research related projects and understands the structural challenges of these projects including special vibration criteria, cost control and adaptability to future renovation. He has experience collaborating with industrial and research clients including Ball Aerospace and Lockheed Martin.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Dwight L. Gilbert, PE Associate, Structural Engineering Martin/Martin, Inc. Project Manager 13 BS, Civil Engineering, 1995 CO No. 34755	Experience & Qualifications Relevant to This Project:	Dwight has been involved in analysis, structural design and construction administration for a variety of industrial and laboratory facilities. His experience includes design and review of structural steel, concrete, masonry, and wood structures subject to vibrational limitations ranging from MRI's and scanning electron microscopes to microchip manufacturing equipment. He has completed design of multiple facilities with a veterinary focus for both the University of Wyoming and Colorado State University, with equipment ranging from monorail systems for movement of large animals to incinerators for disposal of biological waste, as well as more traditional bench-based facilities. He has worked closely with end-users in both research and industrial settings to develop specific solutions to unique laboratory problems.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Michael A. Piper, PE Associate, Structural Engineering Martin/Martin, Inc. Engineer-of-Record 33 MS, Civil Engineering – Structural Emphasis, 2008; BS, Civil Engineering, 1983	Experience & Qualifications Relevant to This Project:	Mike has more than 30 years of structural engineering design experience for government and industrial facilities. He regularly works on basements and underground structures, including situations where temporary and permanent shoring systems are required to protect adjacent structures or where site constraints do not permit sloped excavations and where soil depth (or soil load) conditions have changed during phased construction. His work includes design of supports for newer or heavier equipment, relocation of equipment and modifications to existing structures to

	10 States, including MT. No. 16900		accommodate larger or more complex equipment, as well as design and detailing for new or modified enclosures.

PROJECTS BY PRIME FIRM THAT BEST ILLUSTRATE QUALIFICATIONS RELEVANT TO THIS PROJECT (limit of 5 projects)

Project Name & Location:	Brief Project Description:	GSF, Cost/SF, & Year Completed:	Owner Contact Info:
Colorado Department of Agriculture, New Laboratory Broomfield, Colorado	The Colorado Department of Agriculture (CDA) intends to relocate three laboratories from their current locations in Denver to a new site adjacent to their administrative headquarters in in Broomfield. The design and construction include approximately 6,000 square feet of renovation in the existing building, and a new single-story building of approximately 27,325 GSF square feet. These facilities will provide the functional and programmatic elements that allow the CDA to perform work activities in one location. The co-location of these core laboratories and the resulting synergies that will develop among the department staff will truly enhance the CDA's evolving brand and operational efficiencies. The renovation of the existing administrative building will provide additional office and workstation space to support CDA's increased staff requirements (e.g. marijuana industry regulation support and the Food Safety Modernization	27,325 GSF – New 5,200NSF – Renovation In Progress	Ms. Catherine Robbins Owner's Rep. Wember 303.868.5258

	Act). The planning and design follow CDC/NIH BMBL requirements and USDA Animal and Plant Health Service Quarantine and Containment Guidelines. The laboratory operations are divided into 3 BSL-2 groups: Biochemistry, Microbiology, Animal Health, with the fourth group being a Level 1 Metrology Lab. The BSL-2 labs are arranged to suit the critical process flow of samples from Accessioning to Sample Preparation to Testing and Analysis to Storage. Lab Support spaces include Solvent Storage, Glasswash, Autoclave, PCR, Bacteriology, Serology, Chemical Storage, Freezer and Refrigerator Storage and Field Equipment.		
National Institute of Health, Building 10 Renovation Bethesda, MD	This renovation project provides a fully renovated lab space for the National Cancer Institute Center for Cancer Research to support ongoing scientific research. The BSL-2 level labs are used to support molecular biology with an emphasis on mammalian cell research. The design includes areas for cell culture, bio-informatics analysis, wet bench molecular and genomics studies, and spaces for specialized equipment and instrumentation to support the mission. The existing space is on the 4th floor of the B-Wing and consists of approximately 2,109SF and is design in accordance with the BMBL and the NIH Design Manual.	Lab Sizes Vary 2014-2018	James Galentine National Cancer Institute 240.276.5028 galentij@mail.nih.gov

Wyoming Game and Fish Department, Forensics and Fish Health Laboratory Laramie, WY	Iron Horse provided architectural services for renovations to the Forensics and Fish Health Laboratory for the Wyoming Game and Fish Department in Laramie, Wyoming. The scope of services included development of drawings, specifications, bid documents along with contract administration for the project. Most of the renovations revolved around modern laboratory equipment and related appurtenances. Iron Horse worked directly with the WY Game and Fish department staff to design appropriately for the laboratory functions and desires of the scientists and users. Our team performed intensive studies and assessed the current site conditions developing a program that ensured the sizing of laboratories and utilities would be sufficient for current and future use. This project included the following laboratory types: BSL-2 tissue culture, virology labs, PCR suite, cold room and freezer storage.	17,000SF 2014	Dave Bumann Chief Engineer / Wyoming Game and Fish Department 307.777.4600 David.bumann@wyo.gov
Douglas County, Joint Regional Crime Lab, Colorado	The Joint Regional Crime Lab is a collaboration of the Douglas County Sheriff's Office, the Arapahoe County Sheriff's Office, and the City of Aurora Police Department. The intent of the	25,552SF 2016-2018	Brian Holthaus Senior Project Manager JE Dunn 720.810.7991 Brian.holthaus@jedunn.com

	project is to combine resources from each entity. The new crime lab will help facilitate a faster response to the community, for property crimes to violent crimes in two of the largest counties in Colorado. This project consists of a 26,000SF single story building, designed for future expansion and flexibility within the different laboratories. The program includes Chemistry, DNA, Latent Prints, Firearms and Celebrite Laboratories and their associated support spaces, including an instrument room to accommodate growth in mass spectrometers. There is also a locker area, a multipurpose room specifically designed for tours and training, and several collaboration zones which are designed to encourage idea sharing and case collaboration.		
FDA, Aquaculture Lab Renovation Dauphine Island, AL	The Dauphin Island Gulf Coast Seafood Laboratory (GCSL) facility for the Food and Drug Administration (FDA) has recently completed construction of an elevated concrete slab project. Iron Horse Architects is the lead architect for a BSL-2 fish research facility, designed to meet the program's (CFSAN) following objectives:	1,085SF	Athanasia Mantzouranis FDA 240.620.8475 Athanasia.mantzouranis@fda.hhs.gov

	• Access to flow through seawater systems to support research projects in MHSB and CHSB at the GCSL • A contained area to perform bio-accumulation studies with enteric pathogens or pathogenic vibrio species • A separate area (including cutting stations, large scale grinder, and exhaust hoods) to process frozen fish samples for Ciguatera extractions A contained area to process bio-accumulated pathogens in shellfish for further transport and analysis inside the main GCSL building.		

PROJECTS BY PRIMARY CONSULTANT(S) THAT BEST ILLUSTRATE QUALIFICATIONS RELEVANT TO THIS PROJECT (limit of 3 projects/firm)

Project Name & Location:	Brief Project Description:	GSF, Cost/SF, & Year Completed:	Owner Contact Info:
Colorado State University Biology Building Fort Collins, CO	Cator, Ruma & Associates is providing mechanical, electrical, and technology program planning, bridging documents and design for a new 152,000-square foot, four-story classroom and biology building on Colorado State University's Fort Collins campus. The building will house research laboratories (including labs for emerging biotechnology), state-of-the-art classroom and teaching facilities, and lounges for students and teachers. This project is targeting LEED Gold. The building is student-funded, and the intent is to create spaces where	152,000 SF $55M Total Construction Cost 2017 Completion	Colorado State University Tracey Abel 970.491.0306

	Biological Sciences and Zoology students can spend their time between classes in study rooms and informal "idea spaces" and the grand entryway and atrium on the southwestern corner. Most of the building is to provide state-of-the-art research laboratories to support the cutting-edge research conducted by faculty, researchers, and graduate students.		
Rocky Mountain Regional Biocontainment Lab	Cator, Ruma & Associates was selected to provide the mechanical and electrical design and construction administration for this project. The Regional Biocontainment Lab at the Foothills Campus of Colorado State University is a state-of-the-art Bioscience Laboratory. The 38,000 finished SF/80,000 SF gross facility contains five separate BSL-3 laboratory containment suites, a full interstitial space housing mechanical and electrical lab services, and a full basement for MEP system access. It also contains a large BSL-2 animal holding/office suite. The building also contains a 5,000 SF class 10,000 CGMP space that utilizes inactivated pathogens and viruses from the adjacent BSL-3 labs to create clinical trial drugs.	38,000SF (finished) $17.4M Project Value 2007	Steve Keiss, Project Manager Colorado State University (970)491-0017 Stephen.keiss@colostate.edu

National Renewable Energy Laboratory Parking Garage and Security Facility Design-Build, Golden, CO	Martin/Martin provided civil engineering services for the design and construction of a $30M, multi-level parking structure and security facility. Services included roadway infrastructure design, traffic engineering, drainage and water quality facilities, campus utility mainline installation coordination, easement development, and negotiations with local utility providers. The structure includes 1,800+ parking spaces for NREL staff and the following features: • Photovoltaic canopy on the top level • Renewable and recycled materials • Natural daylighting to reduce the need for artificial building illumination • Light monitoring and occupancy detection systems to reduce energy when portions of the garage are not being used • System that will lead staff to available parking spaces, and automatically zone off parking locations when demand is lower • Plug-in stations for electric vehicle recharging In addition to the parking structure, the project also includes a new southern site entrance building, a new access road from South Golden Road, and expansion of the campus utility infrastructure. The new site entrance building was designed to meet LEED Platinum and net zero energy goals.	$30M Construction Cost 2012	National Renewable Energy Laboratory Bret Cummock 303.275.4354

	While parking structures do not qualify for LEED certification, the design will maximize energy efficiency of the new NREL parking garage through renewable energy, material selection, and sustainable construction techniques.		

ADDITIONAL RELEVANT INFORMATION (additional attachments, firm information, photos, and/or personnel resumes are acceptable)

SIGNATURE (signature should be that of the firm's principal/owner)

Virginia A. McAllister	
NAME	SIGNATURE
Principal | CEO	2/12/18
TITLE	DATE

The state of Montana makes reasonable accommodations for any known disability that may interfere with an applicant's ability to compete in the application and selection process or that may interfere with an applicant's ability to perform the essential duties of the job. In order for the state to make such accommodations, applicants must make known any needed accommodation to the individual project managers or agency contacts listed. Persons using TDD may call the Montana Relay Service at 1-800-253-4091.

Form is available at http://architecture.mt.gov/.
If you experience problems with this form, please contact the A&E Division at AEDivision@mt.gov or (406) 444-3104.

STATE OF MONTANA

DEPARTMENT OF ADMINISTRATION
ARCHITECTURE AND ENGINEERING DIVISION
1520 East Sixth Avenue • P.O. Box 200103 • Helena MT 59620-0103
Phone: 406 444-3104 • Fax: 406 444-3399

STATEMENT OF QUALIFICATIONS for Specific Projects (Form 115)

PROJECT FOR WHICH THE FIRM IS SUBMITTING

A/E Project Name & Location (list only one project; provide separate Form 115 for each project):	A/E Project #:
Montana Agricultural Extension Station Wool Lab	Combined State Labs Study A/E #2018-50-01

PRIME FIRM INFORMATION

		Contact(s)	Name	Email Address
Firm Name:	Iron Horse Architects, Inc.			
Address: (provide mailing address also, if different)	1900 Grant Street, Suite 1130 Denver, CO 80203	Principal: Project Mgr: Project A/E:	Victoria David Jeff Fleischer Jay Speagle	Victoria.david@ironhorse.email Jeff.fleischer@ironhorse.email Jay.speagle@ironhorse.email
Phone #: Fax #:	720.855.7572			

CATEGORIES OF WORK FOR CONSIDERATION BY *PRIME* FIRM

ARCHITECTURAL:		ENGINEERING:	
General Practice	X	Mechanical	
Historic Restoration	X	Electrical	
Exterior Envelope	X	Structural	
Master Planning/Programming	X	Civil	
Interior Design	X	Environmental	
		AV/Comm/Data/IT	

SPECIALTY/OTHER:		LANDSCAPE ARCH:	
Acoustics		General Practice	
Commissioning		Master Planning	
Construction Management		Environmental	
Geotechnical/Materials Testing			
Haz Materials Testing/Mitigation			

PRIME FIRM PROFILE

Year Firm was established:	2005
# of Offices in Montana (provide address & contact list if more than one):	0

TOTAL PROFESSIONALS/PERSONNEL (provide total & location-specific list):

Architects	9	Mechanical	
A.I.T.	9	Electrical	
Interior Designer		Structural	
Landscape Architect		Civil	
Specification Writer		E.I.T.	
Cost Estimator		Environmental	
Construction Administrator		Energy Analysis	
Production Staff	3	Commissioning	
Accounting	2	Other (provide list)	
Administrative Support	2		

LIST THE FIRM NAME AND ADDRESS FOR EACH OF THE CONSULTANTS ON THIS PROJECT (if different from PRIME above).

ARCHITECT FIRM INFORMATION

Firm Name:	N/A	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)		Principal: Project Mgr: Project A/E:		
Phone #: Fax #:				

MECHANICAL ENGINEER FIRM INFORMATION

Firm Name:	Cator Ruma	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	896 Tabor Street Lakewood, CO 80401	Principal: Project Mgr: Project A/E:	Sean Convery, PE - Principal	sconvery@catorruma.com
Phone #: Fax #:	303-232-6200 303-233-3701			

ELECTRICAL ENGINEER FIRM INFORMATION

Firm Name:	Cator Ruma	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	896 Tabor Street Lakewood, CO 80401	Principal: Project Mgr: Project A/E:	Justin Hafer, PE – Electrical Project Manager	jhafer@catorruma.com
Phone #: Fax #:	303-232-6200 303-233-3701			

STRUCTURAL ENGINEER FIRM INFORMATION

Firm Name:	Martin / Martin	Contact(s)	Name	Email Address
Address:		Principal: Project Mgr:	Paul Doak	pdoak@martinmartin.com

(provide mailing address also, if different)	12499 West Colfax Avenue Lakewood, CO 80215	Project A/E:	Dwight Gilbert Mike Piper (Engineer-of-Record)	dgilbert@martinmartin.com mpiper@martinmartin.com
Phone #: Fax #:	303.431.6100 303.456.9923			

CIVIL ENGINEER FIRM INFORMATION

Firm Name:	Martin / Martin, Inc.	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	12499 West Colfax Avenue Lakewood, CO 80215	Principal: Project Mgr: Project A/E:	Matt Schlageter Phil Krieble Bill Willis (Engineer-of-Record)	mschlageter@martinmartin.com pkrieble@martinmartin.com bwillis@martinmartin.com
Phone #: Fax #:	303.431.6100 303.456.9923			

SPECIALTY CONSULTING FIRM INFORMATION

Firm Name:	N/A	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)		Principal: Project Mgr: Project A/E:		
Phone #: Fax #:				

PROVIDE BRIEF RESUMÉ OF KEY PERSONS OF PRIME FIRM ASSIGNED TO THIS PROJECT (add tables as required)

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year):	Victoria David Principal | Science & Technology Iron Horse Architects, Inc. Sr. Laboratory Planner & Programmer 9	Experience & Qualifications Relevant to This Project:	During the forty years of her career, Ms. David has planned and designed research, development, and manufacturing facilities for a variety of clients both nationally and internationally, including advanced technology, health care, corporate and non-profit research and development, academic, analytical and medical device fields. She served on national juries, presented at numerous national

Active Registrations:	MS Construction Project Management, University of California, Berkeley BA Conceptual Design, San Francisco State University RA: CO, MD, VA, WA AIA LEED Green Associates Assoc. DBIA NCARB		conferences, written several articles for nationally recognized publications and participated on national committees - including LEEDS for Labs - dedicated to disseminating information on industry best practices for laboratory planning and design. Her myriad project roles include project management, strategic facility planning, master planning, laboratory programming, planning and design, project coordination, facility assessment, renovation and new design. • Wyoming Game & Fish Department, Forensics and Fish Health Laboratory • Colorado Department of Agriculture, New Laboratory • Douglas County, Joint Regional Crime Laboratory • Denver Health and Hospital Authority, Office of the Medical Examiner Relocation • Denver Health and Hospital Authority, Outpatient Medical Center • National Institute of Health, National Cancer Institute Office of Research Facilities

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Jeff Fleischer Project Manager Iron Horse Architects, Inc. Project Manager 1 March, University of Colorado RA: CO, WY AIA	Experience & Qualifications Relevant to This Project:	Jeff is a registered architect with 30 years of diverse professional experience. His expertise extends from initial ownership meetings to design, detailing, and construction administration services delivered via traditional design-bid-build to public-private partnership agreements. Jeff has established his professional career as the primary "point of contact" within the team structure. He is responsible for and oversees each project through all phases of design and construction and ensures design team building code compliance. Jeff continually provides leadership as a liaison with ownership teams and the design team to ensure design efforts are met from the project inception to completion. • Colorado Department of Agriculture, New Laboratory • Denver Health and Hospital Authority, Office of the Medical Examiner Relocation

			• Denver Health and Hospital Authority, Outpatient Medical Center • University of Colorado Hospital, Anschutz Cancer Pavilion Addition

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Jay Speagle Project Architect Iron Horse Architects, Inc. Project Architect 1 MArch, University of Colorado Denver RA: CO LEED AP CDT	Experience & Qualifications Relevant to This Project:	Jay is an architect with 23 years of experience on a variety of project types and provides highly technical support to the Iron Horse team. Jay's project type diversity includes projects for Federal and State Governments, healthcare, hospital, clinic, laboratories, He brings a high level of attention to detail during the technical aspects of the design, which translates into a more complete set of construction documents. As a Senior Project Architect at Iron Horse, Jay brings efficiency and a depth of technical knowledge through his experience. • Colorado Department of Agriculture, New Laboratory • Brookhaven Science Associates, LLC, Brookhaven National Laboratory • Nebraska Methodist Health System, Methodist Women's Hospital and Medical Office Building • State of Wyoming, Public Health and Crime Lab • State of Wyoming, State Veterinary Lab Addition • Denver Health and Hospital, Toxicology Lab Renovation

PROVIDE BRIEF RESUMÉ OF KEY PERSONS OF CONSULTING FIRMS ASSIGNED TO THIS PROJECT (add tables as required)

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Sean Convery, PE Mechanical Principal Cator, Ruma & Associates Mechanical Principal 23 BS Mechanical Engineering/1995 Professional Engineer, Colorado	Experience & Qualifications Relevant to This Project:	Colorado State University, Fort Collins, CO • Animal Sciences Building Renovation • Animal Disease Lab Remodel (Large Animal Lab) • James L. Voss Veterinary Teaching Hospital - Multiple Projects • Chronic Wasting Disease Deer Facility (BSL-2) • Arthropod-Borne and Infectious Disease Laboratory (AIDL) Insectary

			• AIDL Renovation • Bioenvironmental Hazards Research Building (BHRB) Phases I, II, III (BSL-3) • Diagnostic Medicine Center (BSL-2 and BSL-3) • New Biology Building - LEED Gold Pending • New Chemistry Building - LEED Gold Pending • Pathology Building HVAC Study (BSL-2 and BSL-3) • Research Innovation Center - LEED Gold (BSL-2) • Rocky Mountain Regional Biocontainment Lab (RBL) (BSL-2 and BSL-3) • RBL Imaging Suite (BSL-3) • Suzanne and Walter Scott, Jr. Bioengineering Building - LEED Gold State of Wyoming, WY • Combined Laboratory Facility (BSL-2/BSL-3), Cheyenne • Veterinary Laboratory Facility (BSL-3), Laramie • National Institute of Standards and Technology, Boulder, CO • Building 1, Wings 3 and 6 Renovation • Wing 3 Customization • University Corporation for Atmospheric Research, Boulder, CO • Foothills Laboratory (FL-0) • University of Wyoming, Laramie, WY • Science Initiative Building • WWAMI Gross Anatomy Laboratory • University of Colorado Boulder, Boulder, CO • Sustainability, Energy and Environment Complex (SEEC) - LEED Platinum Pending • Jennie Smoly Caruthers Systems Biotechnology Building - LEED Platinum • Porter Biosciences Building - Multiple Remodel/Renovation Projects University of Colorado Denver, Anschutz Medical Campus, Aurora, CO • Research Laboratory 1 (R1) - AHU Emergency Repairs - Energy Efficiency Upgrades Phases I-III - BSL-3 Upgrade

			• Research Laboratory 2 (R2) - 5th Floor Exhaust Duct Replacement • Perinatal BARDA Research Facility Large Animal Inhalation Program Plan

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Justin Hafer, PE Electrical Project Manager Cator, Ruma & Associates Electrical Project Manager 13 MS Architectural Engineering/1999 BS Architectural Engineering/1998 Professional Engineer, Colorado and Kansas	Experience & Qualifications Relevant to This Project:	Colorado State University, Fort Collins, CO • Advanced Beam Laboratory • Animal Sciences Building Renovation • Animal Disease Laboratory RTU Replacement • Animal Population Health Institute (APHI) Laboratory • Advanced Beam Laboratory • Glover Laboratory Remodel • JBS Global Food Innovation Center • Anatomy/Zoology Addition (Gross Anatomy) • New Biology Building - LEED Gold Pending • New Chemistry Building - LEED Gold Pending • Plant Environmental Research Center (PERC) Relocation • James L. Voss Veterinary Teaching Hospital (BSL-2 and BSL-3) Multi-Phase Renovation • Suzanne and Walter Scott, Jr., Bioengineering Building - LEED Gold University of Colorado, Boulder, CO • Porter Biosciences Building - Various Upgrades and Remodels • Environmental Science Wing Renovation • Ekeley Laboratory Remodel • Joint Institute for Laboratory Astrophysics (JILA) X-Wing Addition • —LEED® Gold • JILA Laboratory Renovations B-Wing • Ramaley IPHY Building Addition • Chemical Engineering Wing HVAC Upgrades • Electrical Engineering Wing Nano Tech Lab & 214/218 Remodel • Mechanical Engineering Wing HVAC Upgrades • Engineering Building 2nd Floor Lab Remodel • Fiske Planetarium (30 KVA UPS)

			State of Wyoming, Wyoming Fish and Game Department, Laramie, WY • Forensics and Fish Health Laboratory • Metropolitan State University, Denver, CO • Aerospace Engineering Sciences Building • Boise State University, Boise, ID • New Material Science Building

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Matthew B. Schlageter, PE, LEED AP Principal, Civil Engineering Martin/Martin, Inc. Principal-in-Charge 21 BS, Civil Engineering, 1995 CO No. 35253, LEED AP	Experience & Qualifications Relevant to This Project:	Matt has extensive experience addressing design challenges for complex laboratory projects. His hands-on approach and strong communication skills have proven invaluable on many integrated teams and design-build projects, and have produced creative, future-driven solutions to complex problems. Matt has overseen numerous laboratory and technology projects for the National Renewable Energy Laboratory (NREL), National Institute of Standards and Technology (NIST), several higher education campus laboratories for multiple universities, and Lockheed Martin campus development at locations across the globe–Waterton, McMurdo, Sunnyvale, Alice Springs, and Buckley Air Force Base. We are currently working with Iron Horse on a project with the US Department of Agriculture.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Philip M. Krieble, PE Associate, Civil Engineering Martin/Martin, Inc. Project Manager 17 BS, Civil Engineering, 2000; AAS, 1997 CO No. 39790, UT No. 8726891-2202	Experience & Qualifications Relevant to This Project:	Phil has experience in site civil engineering project management and design from development of conceptual plans and master planning to construction documents and administration for water resources, drainage and storm sewer design, street/roadway design and improvements, water/sewer pipeline system design, overlot grading, and entitlement projects. He has worked on numerous industrial, laboratory, and aerospace projects for clients including Lockheed Martin and National Renewable Energy Laboratory. Phil has worked extensively on scientific, higher education, military, and industrial campuses projects across Colorado's Front Range.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	William P. Willis, PE Principal, Civil Engineering Martin/Martin, Inc. Engineer-of-Record 34 BS, Civil Engineering, 1983	Experience & Qualifications Relevant to This Project:	Bill has led numerous projects for a variety of national, state, federal, and municipal clients. He has acted in the capacity of district engineer and/or town engineer for a number of municipalities for more than 30 years. He is extensively involved with design and management of treatment facilities that incorporate lab facilities, GIS mapping, master planning, standards development, opinion of estimated costs, construction

	10 States including MT, No. 17647		administration, and sustainable design. He is a registered Professional Engineer in the State of Montana and has been involved in numerous projects within the State.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Paul Doak, PE, SE, LEED AP Principal, Structural Engineering Martin/Martin, Inc. Principal-in-Charge 36 MS, Civil Engineering, 1985; BS, Civil Engineering, 1981 CO No. 24585, LEED AP	Experience & Qualifications Relevant to This Project:	Paul has served as principal-in-charge and/or project manager for a broad range of structural systems for a variety of facilities and clients. He has worked on several laboratory and research related projects and understands the structural challenges of these projects including special vibration criteria, cost control and adaptability to future renovation. He has experience collaborating with industrial and research clients including Ball Aerospace and Lockheed Martin.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Dwight L. Gilbert, PE Associate, Structural Engineering Martin/Martin, Inc. Project Manager 13 BS, Civil Engineering, 1995 CO No. 34755	Experience & Qualifications Relevant to This Project:	Dwight has been involved in analysis, structural design and construction administration for a variety of industrial and laboratory facilities. His experience includes design and review of structural steel, concrete, masonry, and wood structures subject to vibrational limitations ranging from MRI's and scanning electron microscopes to microchip manufacturing equipment. He has completed design of multiple facilities with a veterinary focus for both the University of Wyoming and Colorado State University, with equipment ranging from monorail systems for movement of large animals to incinerators for disposal of biological waste, as well as more traditional bench-based facilities. He has worked closely with end-users in both research and industrial settings to develop specific solutions to unique laboratory problems.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Michael A. Piper, PE Associate, Structural Engineering Martin/Martin, Inc. Engineer-of-Record 33 MS, Civil Engineering – Structural Emphasis, 2008; BS, Civil Engineering, 1983	Experience & Qualifications Relevant to This Project:	Mike has more than 30 years of structural engineering design experience for government and industrial facilities. He regularly works on basements and underground structures, including situations where temporary and permanent shoring systems are required to protect adjacent structures or where site constraints do not permit sloped excavations and where soil depth (or soil load) conditions have changed during phased construction. His work includes design of supports for newer or heavier equipment, relocation of equipment and modifications to existing structures to

	10 States, including MT. No. 16900		accommodate larger or more complex equipment, as well as design and detailing for new or modified enclosures.

PROJECTS BY PRIME FIRM THAT BEST ILLUSTRATE QUALIFICATIONS RELEVANT TO THIS PROJECT (limit of 5 projects)

Project Name & Location:	Brief Project Description:	GSF, Cost/SF, & Year Completed:	Owner Contact Info:
Colorado Department of Agriculture, New Laboratory Broomfield, Colorado	The Colorado Department of Agriculture (CDA) intends to relocate three laboratories from their current locations in Denver to a new site adjacent to their administrative headquarters in in Broomfield. The design and construction include approximately 6,000 square feet of renovation in the existing building, and a new single-story building of approximately 27,325 GSF square feet. These facilities will provide the functional and programmatic elements that allow the CDA to perform work activities in one location. The co-location of these core laboratories and the resulting synergies that will develop among the department staff will truly enhance the CDA's evolving brand and operational efficiencies. The renovation of the existing administrative building will provide additional office and workstation space to support CDA's increased staff requirements (e.g. marijuana industry regulation support and the Food Safety Modernization	27,325 GSF – New 5,200NSF – Renovation In Progress	Ms. Catherine Robbins Owner's Rep. Wember 303.868.5258

	Act). The planning and design follow CDC/NIH BMBL requirements and USDA Animal and Plant Health Service Quarantine and Containment Guidelines. The laboratory operations are divided into 3 BSL-2 groups: Biochemistry, Microbiology, Animal Health, with the fourth group being a Level 1 Metrology Lab. The BSL-2 labs are arranged to suit the critical process flow of samples from Accessioning to Sample Preparation to Testing and Analysis to Storage. Lab Support spaces include Solvent Storage, Glasswash, Autoclave, PCR, Bacteriology, Serology, Chemical Storage, Freezer and Refrigerator Storage and Field Equipment.		
National Institute of Health, Building 10 Renovation Bethesda, MD	This renovation project provides a fully renovated lab space for the National Cancer Institute Center for Cancer Research to support ongoing scientific research. The BSL-2 level labs are used to support molecular biology with an emphasis on mammalian cell research. The design includes areas for cell culture, bio-informatics analysis, wet bench molecular and genomics studies, and spaces for specialized equipment and instrumentation to support the mission. The existing space is on the 4th floor of the B-Wing and consists of approximately 2,109SF and is design in accordance with the BMBL and the NIH Design Manual.	Lab Sizes Vary 2014-2018	James Galentine National Cancer Institute 240.276.5028 galentij@mail.nih.gov

Wyoming Game and Fish Department, Forensics and Fish Health Laboratory Laramie, WY	Iron Horse provided architectural services for renovations to the Forensics and Fish Health Laboratory for the Wyoming Game and Fish Department in Laramie, Wyoming. The scope of services included development of drawings, specifications, bid documents along with contract administration for the project. Most of the renovations revolved around modern laboratory equipment and related appurtenances. Iron Horse worked directly with the WY Game and Fish department staff to design appropriately for the laboratory functions and desires of the scientists and users. Our team performed intensive studies and assessed the current site conditions developing a program that ensured the sizing of laboratories and utilities would be sufficient for current and future use. This project included the following laboratory types: BSL-2 tissue culture, virology labs, PCR suite, cold room and freezer storage.	17,000SF 2014	Dave Bumann Chief Engineer / Wyoming Game and Fish Department 307.777.4600 David.bumann@wyo.gov
Douglas County, Joint Regional Crime Lab, Colorado	The Joint Regional Crime Lab is a collaboration of the Douglas County Sheriff's Office, the Arapahoe County Sheriff's Office, and the City of Aurora Police Department. The intent of the	25,552SF 2016-2018	Brian Holthaus Senior Project Manager JE Dunn 720.810.7991 Brian.holthaus@jedunn.com

	project is to combine resources from each entity. The new crime lab will help facilitate a faster response to the community, for property crimes to violent crimes in two of the largest counties in Colorado. This project consists of a 26,000SF single story building, designed for future expansion and flexibility within the different laboratories. The program includes Chemistry, DNA, Latent Prints, Firearms and Celebrite Laboratories and their associated support spaces, including an instrument room to accommodate growth in mass spectrometers. There is also a locker area, a multipurpose room specifically designed for tours and training, and several collaboration zones which are designed to encourage idea sharing and case collaboration.		
FDA, Aquaculture Lab Renovation Dauphine Island, AL	The Dauphin Island Gulf Coast Seafood Laboratory (GCSL) facility for the Food and Drug Administration (FDA) has recently completed construction of an elevated concrete slab project. Iron Horse Architects is the lead architect for a BSL-2 fish research facility, designed to meet the program's (CFSAN) following objectives:	1,085SF	Athanasia Mantzouranis FDA 240.620.8475 Athanasia.mantzouranis@fda.hhs.gov

	• Access to flow through seawater systems to support research projects in MHSB and CHSB at the GCSL • A contained area to perform bio-accumulation studies with enteric pathogens or pathogenic vibrio species • A separate area (including cutting stations, large scale grinder, and exhaust hoods) to process frozen fish samples for Ciguatera extractions A contained area to process bio-accumulated pathogens in shellfish for further transport and analysis inside the main GCSL building.		

PROJECTS BY PRIMARY CONSULTANT(S) THAT BEST ILLUSTRATE QUALIFICATIONS RELEVANT TO THIS PROJECT (limit of 3 projects/firm)

Project Name & Location:	Brief Project Description:	GSF, Cost/SF, & Year Completed:	Owner Contact Info:
Colorado State University Biology Building Fort Collins, CO	Cator, Ruma & Associates is providing mechanical, electrical, and technology program planning, bridging documents and design for a new 152,000-square foot, four-story classroom and biology building on Colorado State University's Fort Collins campus. The building will house research laboratories (including labs for emerging biotechnology), state-of-the-art classroom and teaching facilities, and lounges for students and teachers. This project is targeting LEED Gold. The building is student-funded, and the intent is to create spaces where	152,000 SF $55M Total Construction Cost 2017 Completion	Colorado State University Tracey Abel 970.491.0306

	Biological Sciences and Zoology students can spend their time between classes in study rooms and informal "idea spaces" and the grand entryway and atrium on the southwestern corner. Most of the building is to provide state-of-the-art research laboratories to support the cutting-edge research conducted by faculty, researchers, and graduate students.		
Rocky Mountain Regional Biocontainment Lab	Cator, Ruma & Associates was selected to provide the mechanical and electrical design and construction administration for this project. The Regional Biocontainment Lab at the Foothills Campus of Colorado State University is a state-of-the-art Bioscience Laboratory. The 38,000 finished SF/80,000 SF gross facility contains five separate BSL-3 laboratory containment suites, a full interstitial space housing mechanical and electrical lab services, and a full basement for MEP system access. It also contains a large BSL-2 animal holding/office suite. The building also contains a 5,000 SF class 10,000 CGMP space that utilizes inactivated pathogens and viruses from the adjacent BSL-3 labs to create clinical trial drugs.	38,000SF (finished) $17.4M Project Value 2007	Steve Keiss, Project Manager Colorado State University (970)491-0017 Stephen.keiss@colostate.edu

National Renewable Energy Laboratory Parking Garage and Security Facility Design-Build, Golden, CO	Martin/Martin provided civil engineering services for the design and construction of a $30M, multi-level parking structure and security facility. Services included roadway infrastructure design, traffic engineering, drainage and water quality facilities, campus utility mainline installation coordination, easement development, and negotiations with local utility providers. The structure includes 1,800+ parking spaces for NREL staff and the following features: • Photovoltaic canopy on the top level • Renewable and recycled materials • Natural daylighting to reduce the need for artificial building illumination • Light monitoring and occupancy detection systems to reduce energy when portions of the garage are not being used • System that will lead staff to available parking spaces, and automatically zone off parking locations when demand is lower • Plug-in stations for electric vehicle recharging In addition to the parking structure, the project also includes a new southern site entrance building, a new access road from South Golden Road, and expansion of the campus utility infrastructure. The new site entrance building was designed to meet LEED Platinum and net zero energy goals.	$30M Construction Cost 2012	National Renewable Energy Laboratory Bret Cummock 303.275.4354

	While parking structures do not qualify for LEED certification, the design will maximize energy efficiency of the new NREL parking garage through renewable energy, material selection, and sustainable construction techniques.		

ADDITIONAL RELEVANT INFORMATION (additional attachments, firm information, photos, and/or personnel resumes are acceptable)

SIGNATURE (signature should be that of the firm's principal/owner)

Virginia A. McAllister	
NAME	SIGNATURE
Principal | CEO	2/12/18
TITLE	DATE

The state of Montana makes reasonable accommodations for any known disability that may interfere with an applicant's ability to compete in the application and selection process or that may interfere with an applicant's ability to perform the essential duties of the job. In order for the state to make such accommodations, applicants must make known any needed accommodation to the individual project managers or agency contacts listed. Persons using TDD may call the Montana Relay Service at 1-800-253-4091.

Form is available at http://architecture.mt.gov/.
If you experience problems with this form, please contact the A&E Division at AEDivision@mt.gov or (406) 444-3104.

STATE OF MONTANA

DEPARTMENT OF ADMINISTRATION
ARCHITECTURE AND ENGINEERING DIVISION
1520 East Sixth Avenue • P.O. Box 200103 • Helena MT 59620-0103
Phone: 406 444-3104 • Fax: 406 444-3399

STATEMENT OF QUALIFICATIONS for Specific Projects (Form 115)

PROJECT FOR WHICH THE FIRM IS SUBMITTING

A/E Project Name & Location (list only one project; provide separate Form 115 for each project):	A/E Project #:
MSU Regional Pulse Crops Diagnostic Lab	Combined State Labs Study A/E #2018-50-01

PRIME FIRM INFORMATION

			Name	Email Address
Firm Name:	Iron Horse Architects, Inc.	Contact(s)		
Address: (provide mailing address also, if different)	1900 Grant Street, Suite 1130 Denver, CO 80203	Principal: Project Mgr: Project A/E:	Victoria David Jeff Fleischer Jay Speagle	Victoria.david@ironhorse.email Jeff.fleischer@ironhorse.email Jay.speagle@ironhorse.email
Phone #: Fax #:	720.855.7572			

CATEGORIES OF WORK FOR CONSIDERATION BY *PRIME* FIRM

ARCHITECTURAL:		ENGINEERING:	
General Practice	X	Mechanical	
Historic Restoration	X	Electrical	
Exterior Envelope	X	Structural	
Master Planning/Programming	X	Civil	
Interior Design	X	Environmental	
		AV/Comm/Data/IT	

SPECIALTY/OTHER:		LANDSCAPE ARCH:	
Acoustics		General Practice	
Commissioning		Master Planning	
Construction Management		Environmental	
Geotechnical/Materials Testing			
Haz Materials Testing/Mitigation			

***PRIME* FIRM PROFILE**

Year Firm was established:	2005
# of Offices in Montana (provide address & contact list if more than one):	0

TOTAL PROFESSIONALS/PERSONNEL (provide total & location-specific list):

Architects	9	Mechanical	
A.I.T.	9	Electrical	
Interior Designer		Structural	
Landscape Architect		Civil	
Specification Writer		E.I.T.	
Cost Estimator		Environmental	
Construction Administrator		Energy Analysis	
Production Staff	3	Commissioning	
Accounting	2	Other (provide list)	
Administrative Support	2		

LIST THE FIRM NAME AND ADDRESS FOR EACH OF THE CONSULTANTS ON THIS PROJECT (if different from PRIME above).

ARCHITECT FIRM INFORMATION

Firm Name:	N/A	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)		Principal: Project Mgr: Project A/E:		
Phone #: Fax #:				

MECHANICAL ENGINEER FIRM INFORMATION

Firm Name:	Cator Ruma	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	896 Tabor Street Lakewood, CO 80401	Principal: Project Mgr: Project A/E:	Sean Convery, PE - Principal	sconvery@catorruma.com
Phone #: Fax #:	303-232-6200 303-233-3701			

ELECTRICAL ENGINEER FIRM INFORMATION

Firm Name:	Cator Ruma	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	896 Tabor Street Lakewood, CO 80401	Principal: Project Mgr: Project A/E:	Justin Hafer, PE – Electrical Project Manager	jhafer@catorruma.com
Phone #: Fax #:	303-232-6200 303-233-3701			

STRUCTURAL ENGINEER FIRM INFORMATION

Firm Name:	Martin / Martin	Contact(s)	Name	Email Address
Address:		Principal: Project Mgr:	Paul Doak	pdoak@martinmartin.com

(provide mailing address also, if different)	12499 West Colfax Avenue Lakewood, CO 80215	Project A/E:	Dwight Gilbert Mike Piper (Engineer-of-Record)	dgilbert@martinmartin.com mpiper@martinmartin.com
Phone #: Fax #:	303.431.6100 303.456.9923			

CIVIL ENGINEER FIRM INFORMATION

Firm Name:	Martin / Martin, Inc.	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)	12499 West Colfax Avenue Lakewood, CO 80215	Principal: Project Mgr: Project A/E:	Matt Schlageter Phil Krieble Bill Willis (Engineer-of-Record)	mschlageter@martinmartin.com pkrieble@martinmartin.com bwillis@martinmartin.com
Phone #: Fax #:	303.431.6100 303.456.9923			

SPECIALTY CONSULTING FIRM INFORMATION

Firm Name:	N/A	Contact(s)	Name	Email Address
Address: (provide mailing address also, if different)		Principal: Project Mgr: Project A/E:		
Phone #: Fax #:				

PROVIDE BRIEF RESUMÉ OF KEY PERSONS OF PRIME FIRM ASSIGNED TO THIS PROJECT (add tables as required)

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year):	Victoria David Principal | Science & Technology Iron Horse Architects, Inc. Sr. Laboratory Planner & Programmer 9	Experience & Qualifications Relevant to This Project:	During the forty years of her career, Ms. David has planned and designed research, development, and manufacturing facilities for a variety of clients both nationally and internationally, including advanced technology, health care, corporate and non-profit research and development, academic, analytical and medical device fields. She served on national juries, presented at numerous national

Active Registrations:	MS Construction Project Management, University of California, Berkeley BA Conceptual Design, San Francisco State University RA: CO, MD, VA, WA AIA LEED Green Associates Assoc. DBIA NCARB		conferences, written several articles for nationally recognized publications and participated on national committees - including LEEDS for Labs - dedicated to disseminating information on industry best practices for laboratory planning and design. Her myriad project roles include project management, strategic facility planning, master planning, laboratory programming, planning and design, project coordination, facility assessment, renovation and new design. • Wyoming Game & Fish Department, Forensics and Fish Health Laboratory • Colorado Department of Agriculture, New Laboratory • Douglas County, Joint Regional Crime Laboratory • Denver Health and Hospital Authority, Office of the Medical Examiner Relocation • Denver Health and Hospital Authority, Outpatient Medical Center • National Institute of Health, National Cancer Institute Office of Research Facilities

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Jeff Fleischer Project Manager Iron Horse Architects, Inc. Project Manager 1 March, University of Colorado RA: CO, WY AIA	Experience & Qualifications Relevant to This Project:	Jeff is a registered architect with 30 years of diverse professional experience. His expertise extends from initial ownership meetings to design, detailing, and construction administration services delivered via traditional design-bid-build to public-private partnership agreements. Jeff has established his professional career as the primary "point of contact" within the team structure. He is responsible for and oversees each project through all phases of design and construction and ensures design team building code compliance. Jeff continually provides leadership as a liaison with ownership teams and the design team to ensure design efforts are met from the project inception to completion. • Colorado Department of Agriculture, New Laboratory • Denver Health and Hospital Authority, Office of the Medical Examiner Relocation

			• Denver Health and Hospital Authority, Outpatient Medical Center • University of Colorado Hospital, Anschutz Cancer Pavilion Addition

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Jay Speagle Project Architect Iron Horse Architects, Inc. Project Architect 1 MArch, University of Colorado Denver RA: CO LEED AP CDT	Experience & Qualifications Relevant to This Project:	Jay is an architect with 23 years of experience on a variety of project types and provides highly technical support to the Iron Horse team. Jay's project type diversity includes projects for Federal and State Governments, healthcare, hospital, clinic, laboratories, He brings a high level of attention to detail during the technical aspects of the design, which translates into a more complete set of construction documents. As a Senior Project Architect at Iron Horse, Jay brings efficiency and a depth of technical knowledge through his experience. • Colorado Department of Agriculture, New Laboratory • Brookhaven Science Associates, LLC, Brookhaven National Laboratory • Nebraska Methodist Health System, Methodist Women's Hospital and Medical Office Building • State of Wyoming, Public Health and Crime Lab • State of Wyoming, State Veterinary Lab Addition • Denver Health and Hospital, Toxicology Lab Renovation

PROVIDE BRIEF RESUMÉ OF KEY PERSONS OF CONSULTING FIRMS ASSIGNED TO THIS PROJECT (add tables as required)

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Sean Convery, PE Mechanical Principal Cator, Ruma & Associates Mechanical Principal 23 BS Mechanical Engineering/1995 Professional Engineer, Colorado	Experience & Qualifications Relevant to This Project:	Colorado State University, Fort Collins, CO • Animal Sciences Building Renovation • Animal Disease Lab Remodel (Large Animal Lab) • James L. Voss Veterinary Teaching Hospital - Multiple Projects • Chronic Wasting Disease Deer Facility (BSL-2) • Arthropod-Borne and Infectious Disease Laboratory (AIDL) Insectary

			• AIDL Renovation • Bioenvironmental Hazards Research Building (BHRB) Phases I, II, III (BSL-3) • Diagnostic Medicine Center (BSL-2 and BSL-3) • New Biology Building - LEED Gold Pending • New Chemistry Building - LEED Gold Pending • Pathology Building HVAC Study (BSL-2 and BSL-3) • Research Innovation Center - LEED Gold (BSL-2) • Rocky Mountain Regional Biocontainment Lab (RBL) (BSL-2 and BSL-3) • RBL Imaging Suite (BSL-3) • Suzanne and Walter Scott, Jr. Bioengineering Building - LEED Gold State of Wyoming, WY • Combined Laboratory Facility (BSL-2/BSL-3), Cheyenne • Veterinary Laboratory Facility (BSL-3), Laramie • National Institute of Standards and Technology, Boulder, CO • Building 1, Wings 3 and 6 Renovation • Wing 3 Customization • University Corporation for Atmospheric Research, Boulder, CO • Foothills Laboratory (FL-0) • University of Wyoming, Laramie, WY • Science Initiative Building • WWAMI Gross Anatomy Laboratory • University of Colorado Boulder, Boulder, CO • Sustainability, Energy and Environment Complex (SEEC) - LEED Platinum Pending • Jennie Smoly Caruthers Systems Biotechnology Building - LEED Platinum • Porter Biosciences Building - Multiple Remodel/Renovation Projects University of Colorado Denver, Anschutz Medical Campus, Aurora, CO • Research Laboratory 1 (R1) - AHU Emergency Repairs - Energy Efficiency Upgrades Phases I-III - BSL-3 Upgrade

			• Research Laboratory 2 (R2) - 5th Floor Exhaust Duct Replacement • Perinatal BARDA Research Facility Large Animal Inhalation Program Plan

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Justin Hafer, PE Electrical Project Manager Cator, Ruma & Associates Electrical Project Manager 13 MS Architectural Engineering/1999 BS Architectural Engineering/1998 Professional Engineer, Colorado and Kansas	Experience & Qualifications Relevant to This Project:	Colorado State University, Fort Collins, CO • Advanced Beam Laboratory • Animal Sciences Building Renovation • Animal Disease Laboratory RTU Replacement • Animal Population Health Institute (APHI) Laboratory • Advanced Beam Laboratory • Glover Laboratory Remodel • JBS Global Food Innovation Center • Anatomy/Zoology Addition (Gross Anatomy) • New Biology Building - LEED Gold Pending • New Chemistry Building - LEED Gold Pending • Plant Environmental Research Center (PERC) Relocation • James L. Voss Veterinary Teaching Hospital (BSL-2 and BSL-3) Multi-Phase Renovation • Suzanne and Walter Scott, Jr., Bioengineering Building - LEED Gold University of Colorado, Boulder, CO • Porter Biosciences Building - Various Upgrades and Remodels • Environmental Science Wing Renovation • Ekeley Laboratory Remodel • Joint Institute for Laboratory Astrophysics (JILA) X-Wing Addition • —LEED® Gold • JILA Laboratory Renovations B-Wing • Ramaley IPHY Building Addition • Chemical Engineering Wing HVAC Upgrades • Electrical Engineering Wing Nano Tech Lab & 214/218 Remodel • Mechanical Engineering Wing HVAC Upgrades • Engineering Building 2nd Floor Lab Remodel • Fiske Planetarium (30 KVA UPS)

			State of Wyoming, Wyoming Fish and Game Department, Laramie, WY • Forensics and Fish Health Laboratory • Metropolitan State University, Denver, CO • Aerospace Engineering Sciences Building • Boise State University, Boise, ID • New Material Science Building

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Matthew B. Schlageter, PE, LEED AP Principal, Civil Engineering Martin/Martin, Inc. Principal-in-Charge 21 BS, Civil Engineering, 1995 CO No. 35253, LEED AP	Experience & Qualifications Relevant to This Project:	Matt has extensive experience addressing design challenges for complex laboratory projects. His hands-on approach and strong communication skills have proven invaluable on many integrated teams and design-build projects, and have produced creative, future-driven solutions to complex problems. Matt has overseen numerous laboratory and technology projects for the National Renewable Energy Laboratory (NREL), National Institute of Standards and Technology (NIST), several higher education campus laboratories for multiple universities, and Lockheed Martin campus development at locations across the globe–Waterton, McMurdo, Sunnyvale, Alice Springs, and Buckley Air Force Base. We are currently working with Iron Horse on a project with the US Department of Agriculture.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Philip M. Krieble, PE Associate, Civil Engineering Martin/Martin, Inc. Project Manager 17 BS, Civil Engineering, 2000; AAS, 1997 CO No. 39790, UT No. 8726891-2202	Experience & Qualifications Relevant to This Project:	Phil has experience in site civil engineering project management and design from development of conceptual plans and master planning to construction documents and administration for water resources, drainage and storm sewer design, street/roadway design and improvements, water/sewer pipeline system design, overlot grading, and entitlement projects. He has worked on numerous industrial, laboratory, and aerospace projects for clients including Lockheed Martin and National Renewable Energy Laboratory. Phil has worked extensively on scientific, higher education, military, and industrial campuses projects across Colorado's Front Range.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	William P. Willis, PE Principal, Civil Engineering Martin/Martin, Inc. Engineer-of-Record 34 BS, Civil Engineering, 1983	Experience & Qualifications Relevant to This Project:	Bill has led numerous projects for a variety of national, state, federal, and municipal clients. He has acted in the capacity of district engineer and/or town engineer for a number of municipalities for more than 30 years. He is extensively involved with design and management of treatment facilities that incorporate lab facilities, GIS mapping, master planning, standards development, opinion of estimated costs, construction

	10 States including MT, No. 17647		administration, and sustainable design. He is a registered Professional Engineer in the State of Montana and has been involved in numerous projects within the State.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Paul Doak, PE, SE, LEED AP Principal, Structural Engineering Martin/Martin, Inc. Principal-in-Charge 36 MS, Civil Engineering, 1985; BS, Civil Engineering, 1981 CO No. 24585, LEED AP	Experience & Qualifications Relevant to This Project:	Paul has served as principal-in-charge and/or project manager for a broad range of structural systems for a variety of facilities and clients. He has worked on several laboratory and research related projects and understands the structural challenges of these projects including special vibration criteria, cost control and adaptability to future renovation. He has experience collaborating with industrial and research clients including Ball Aerospace and Lockheed Martin.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Dwight L. Gilbert, PE Associate, Structural Engineering Martin/Martin, Inc. Project Manager 13 BS, Civil Engineering, 1995 CO No. 34755	Experience & Qualifications Relevant to This Project:	Dwight has been involved in analysis, structural design and construction administration for a variety of industrial and laboratory facilities. His experience includes design and review of structural steel, concrete, masonry, and wood structures subject to vibrational limitations ranging from MRI's and scanning electron microscopes to microchip manufacturing equipment. He has completed design of multiple facilities with a veterinary focus for both the University of Wyoming and Colorado State University, with equipment ranging from monorail systems for movement of large animals to incinerators for disposal of biological waste, as well as more traditional bench-based facilities. He has worked closely with end-users in both research and industrial settings to develop specific solutions to unique laboratory problems.

Name: Title: Firm Name: Role on This Project: Years w/ This Firm: Education (degree/year): Active Registrations:	Michael A. Piper, PE Associate, Structural Engineering Martin/Martin, Inc. Engineer-of-Record 33 MS, Civil Engineering – Structural Emphasis, 2008; BS, Civil Engineering, 1983	Experience & Qualifications Relevant to This Project:	Mike has more than 30 years of structural engineering design experience for government and industrial facilities. He regularly works on basements and underground structures, including situations where temporary and permanent shoring systems are required to protect adjacent structures or where site constraints do not permit sloped excavations and where soil depth (or soil load) conditions have changed during phased construction. His work includes design of supports for newer or heavier equipment, relocation of equipment and modifications to existing structures to

	10 States, including MT. No. 16900		accommodate larger or more complex equipment, as well as design and detailing for new or modified enclosures.

PROJECTS BY PRIME FIRM THAT BEST ILLUSTRATE QUALIFICATIONS RELEVANT TO THIS PROJECT (limit of 5 projects)

Project Name & Location:	Brief Project Description:	GSF, Cost/SF, & Year Completed:	Owner Contact Info:
Colorado Department of Agriculture, New Laboratory Broomfield, Colorado	The Colorado Department of Agriculture (CDA) intends to relocate three laboratories from their current locations in Denver to a new site adjacent to their administrative headquarters in in Broomfield. The design and construction include approximately 6,000 square feet of renovation in the existing building, and a new single-story building of approximately 27,325 GSF square feet. These facilities will provide the functional and programmatic elements that allow the CDA to perform work activities in one location. The co-location of these core laboratories and the resulting synergies that will develop among the department staff will truly enhance the CDA's evolving brand and operational efficiencies. The renovation of the existing administrative building will provide additional office and workstation space to support CDA's increased staff requirements (e.g. marijuana industry regulation support and the Food Safety Modernization	27,325 GSF – New 5,200NSF – Renovation In Progress	Ms. Catherine Robbins Owner's Rep. Wember 303.868.5258

	Act). The planning and design follow CDC/NIH BMBL requirements and USDA Animal and Plant Health Service Quarantine and Containment Guidelines. The laboratory operations are divided into 3 BSL-2 groups: Biochemistry, Microbiology, Animal Health, with the fourth group being a Level 1 Metrology Lab. The BSL-2 labs are arranged to suit the critical process flow of samples from Accessioning to Sample Preparation to Testing and Analysis to Storage. Lab Support spaces include Solvent Storage, Glasswash, Autoclave, PCR, Bacteriology, Serology, Chemical Storage, Freezer and Refrigerator Storage and Field Equipment.		
National Institute of Health, Building 10 Renovation Bethesda, MD	This renovation project provides a fully renovated lab space for the National Cancer Institute Center for Cancer Research to support ongoing scientific research. The BSL-2 level labs are used to support molecular biology with an emphasis on mammalian cell research. The design includes areas for cell culture, bio-informatics analysis, wet bench molecular and genomics studies, and spaces for specialized equipment and instrumentation to support the mission. The existing space is on the 4th floor of the B-Wing and consists of approximately 2,109SF and is design in accordance with the BMBL and the NIH Design Manual.	Lab Sizes Vary 2014-2018	James Galentine National Cancer Institute 240.276.5028 galentij@mail.nih.gov

Wyoming Game and Fish Department, Forensics and Fish Health Laboratory Laramie, WY	Iron Horse provided architectural services for renovations to the Forensics and Fish Health Laboratory for the Wyoming Game and Fish Department in Laramie, Wyoming. The scope of services included development of drawings, specifications, bid documents along with contract administration for the project. Most of the renovations revolved around modern laboratory equipment and related appurtenances. Iron Horse worked directly with the WY Game and Fish department staff to design appropriately for the laboratory functions and desires of the scientists and users. Our team performed intensive studies and assessed the current site conditions developing a program that ensured the sizing of laboratories and utilities would be sufficient for current and future use. This project included the following laboratory types: BSL-2 tissue culture, virology labs, PCR suite, cold room and freezer storage.	17,000SF 2014	Dave Bumann Chief Engineer / Wyoming Game and Fish Department 307.777.4600 David.bumann@wyo.gov
Douglas County, Joint Regional Crime Lab, Colorado	The Joint Regional Crime Lab is a collaboration of the Douglas County Sheriff's Office, the Arapahoe County Sheriff's Office, and the City of Aurora Police Department. The intent of the	25,552SF 2016-2018	Brian Holthaus Senior Project Manager JE Dunn 720.810.7991 Brian.holthaus@jedunn.com

	project is to combine resources from each entity. The new crime lab will help facilitate a faster response to the community, for property crimes to violent crimes in two of the largest counties in Colorado. This project consists of a 26,000SF single story building, designed for future expansion and flexibility within the different laboratories. The program includes Chemistry, DNA, Latent Prints, Firearms and Celebrite Laboratories and their associated support spaces, including an instrument room to accommodate growth in mass spectrometers. There is also a locker area, a multipurpose room specifically designed for tours and training, and several collaboration zones which are designed to encourage idea sharing and case collaboration.		
FDA, Aquaculture Lab Renovation Dauphine Island, AL	The Dauphin Island Gulf Coast Seafood Laboratory (GCSL) facility for the Food and Drug Administration (FDA) has recently completed construction of an elevated concrete slab project. Iron Horse Architects is the lead architect for a BSL-2 fish research facility, designed to meet the program's (CFSAN) following objectives:	1,085SF	Athanasia Mantzouranis FDA 240.620.8475 Athanasia.mantzouranis@fda.hhs.gov

	• Access to flow through seawater systems to support research projects in MHSB and CHSB at the GCSL • A contained area to perform bio-accumulation studies with enteric pathogens or pathogenic vibrio species • A separate area (including cutting stations, large scale grinder, and exhaust hoods) to process frozen fish samples for Ciguatera extractions A contained area to process bio-accumulated pathogens in shellfish for further transport and analysis inside the main GCSL building.		

PROJECTS BY PRIMARY CONSULTANT(S) THAT BEST ILLUSTRATE QUALIFICATIONS RELEVANT TO THIS PROJECT (limit of 3 projects/firm)

Project Name & Location:	Brief Project Description:	GSF, Cost/SF, & Year Completed:	Owner Contact Info:
Colorado State University Biology Building Fort Collins, CO	Cator, Ruma & Associates is providing mechanical, electrical, and technology program planning, bridging documents and design for a new 152,000-square foot, four-story classroom and biology building on Colorado State University's Fort Collins campus. The building will house research laboratories (including labs for emerging biotechnology), state-of-the-art classroom and teaching facilities, and lounges for students and teachers. This project is targeting LEED Gold. The building is student-funded, and the intent is to create spaces where	152,000 SF $55M Total Construction Cost 2017 Completion	Colorado State University Tracey Abel 970.491.0306

	Biological Sciences and Zoology students can spend their time between classes in study rooms and informal "idea spaces" and the grand entryway and atrium on the southwestern corner. Most of the building is to provide state-of-the-art research laboratories to support the cutting-edge research conducted by faculty, researchers, and graduate students.		
Rocky Mountain Regional Biocontainment Lab	Cator, Ruma & Associates was selected to provide the mechanical and electrical design and construction administration for this project. The Regional Biocontainment Lab at the Foothills Campus of Colorado State University is a state-of-the-art Bioscience Laboratory. The 38,000 finished SF/80,000 SF gross facility contains five separate BSL-3 laboratory containment suites, a full interstitial space housing mechanical and electrical lab services, and a full basement for MEP system access. It also contains a large BSL-2 animal holding/office suite. The building also contains a 5,000 SF class 10,000 CGMP space that utilizes inactivated pathogens and viruses from the adjacent BSL-3 labs to create clinical trial drugs.	38,000SF (finished) $17.4M Project Value 2007	Steve Keiss, Project Manager Colorado State University (970)491-0017 Stephen.keiss@colostate.edu

National Renewable Energy Laboratory Parking Garage and Security Facility Design-Build, Golden, CO	Martin/Martin provided civil engineering services for the design and construction of a $30M, multi-level parking structure and security facility. Services included roadway infrastructure design, traffic engineering, drainage and water quality facilities, campus utility mainline installation coordination, easement development, and negotiations with local utility providers. The structure includes 1,800+ parking spaces for NREL staff and the following features: • Photovoltaic canopy on the top level • Renewable and recycled materials • Natural daylighting to reduce the need for artificial building illumination • Light monitoring and occupancy detection systems to reduce energy when portions of the garage are not being used • System that will lead staff to available parking spaces, and automatically zone off parking locations when demand is lower • Plug-in stations for electric vehicle recharging In addition to the parking structure, the project also includes a new southern site entrance building, a new access road from South Golden Road, and expansion of the campus utility infrastructure. The new site entrance building was designed to meet LEED Platinum and net zero energy goals.	$30M Construction Cost 2012	National Renewable Energy Laboratory Bret Cummock 303.275.4354

	While parking structures do not qualify for LEED certification, the design will maximize energy efficiency of the new NREL parking garage through renewable energy, material selection, and sustainable construction techniques.		

ADDITIONAL RELEVANT INFORMATION (additional attachments, firm information, photos, and/or personnel resumes are acceptable)

SIGNATURE (signature should be that of the firm's principal/owner)

Virginia A. McAllister	
NAME	SIGNATURE
Principal | CEO	2/12/18
TITLE	DATE

The state of Montana makes reasonable accommodations for any known disability that may interfere with an applicant's ability to compete in the application and selection process or that may interfere with an applicant's ability to perform the essential duties of the job. In order for the state to make such accommodations, applicants must make known any needed accommodation to the individual project managers or agency contacts listed. Persons using TDD may call the Montana Relay Service at 1-800-253-4091.

Form is available at http://architecture.mt.gov/.
If you experience problems with this form, please contact the A&E Division at AEDivision@mt.gov or (406) 444-3104.