

City of Commerce City, Colorado

**REQUEST FOR PROPOSAL CD-02-2020**  
ENVIRONMENTAL POLICY DEVELOPMENT,  
AIR QUALITY MONITORING SERVICES, AND  
WATER QUALITY MONITORING SERVICES

Domenic Martinelli, LEED AP,  
Environmental Planner

City of Commerce City  
7887 E 60th Avenue  
Commerce City, CO 80022

Submitted:  
October 30, 2020



**SPIRIT**  
ENVIRONMENTAL



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#### 4. PROPOSAL FORM

##### I. STATEMENT OF QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. Attach separate sheets or attachments as necessary.

1. Respondent Name: Spirit Environmental, LLC.

2. Trade Name: Spirit Environmental, LLC.

3. Form of Entity: S Corporation

4. Business Address: 20465 State Highway 249, Suite 300,  
Houston, TX 77070

5. Primary Contact: Conor Merrigan

Phone Number: 720-500-3712

Email: cmerrigan@spiritenv.com

6. Year Organized: 2005

7. Where Organized: Texas

8. How many years has Respondent been engaged in the environmental consulting and air quality monitoring business under its present name. Please state the names and dates of any previous business names.

15 years under Spirit Environmental, LLC.

9. Has Respondent been terminated from a contract or project In the last five years? Explain.   

No

10. Has Respondent been party to litigation related to its work In the last five years? Explain.   

No

11. Please identify the number of staff available to work under the contract:

  11   Number of licensed/certified technicians        0   Number of helpers

12. Can Respondent provide 24-hour "on call" emergency coverage? **Yes / No**

\* While 24 -hour on call coverage is not anticipated for any scope items currently, Spirit and/or sampling subcontractors would be able to provide these services if there is a mutually agreed upon need.

13. On-Call Response Time (Fill in Blank and Circle One Time Period)

REGULAR HOURS (M-F, 7:00 a.m. to 5:00 p.m.): M-F, 8AM-5PM MINUTES/HOURS

NIGHT/WEEKEND/HOLIDAY HOURS: N/A MINUTES/HOURS

14. Has Respondent reviewed the draft contract (Attachment A to this RFP) including all insurance requirements? **Yes** / ~~No~~

List any exceptions to the draft contract or state "None": Suggest replacing Warranties provision with Standard of Care (attached) as non-construction contract, suggested edits to Deliverables and Indemnity section attached, and reduce pollution exclusion insurance limit from \$2,000,000 to \$1,000,000.

**II. REFERENCES**

**Reference #1:**

Contact Name: Libby Tart, Senior Long Range Planner  
Business Name: Adams County, Colorado  
Business Address: 4430 South Adams County Parkway, 1st Floor, Suite W2000A, Brighton, CO 80601  
Contact Phone: 720-523-6858  
Contact Email: ltart@spiritenv.com  
Work Description: Spirit has provided Sustainability Support services as part of Comprehensive Plan development in Adams County (ongoing project)

**Reference #2:**

Contact Name: Jenni Grafton, Economic Policy and Development Manager  
Business Name: Department of Economic Development, City of Westminster  
Business Address: 4800 West 92nd Avenue, Westminster, CO 80031  
Contact Phone: 303-658-2105  
Contact Email: jgrafton@CityofWestminster.us  
Work Description: Spirit is providing sustainability consulting on-call services focusing on LEED assurance for Downtown Westminster and regulatory /process recommendations to increase sustainability in the built environment.

**Reference #3**

Contact Name: Jonathan Holley, Environmental Services Department Manager

Business Name: Harris County Flood Control District

Business Address: 9900 NW Freeway, Houston, TX 77092

Contact Phone: 346-286-4155

Contact Email: jonathan.holley@hcfcd.hctx.net

Work Description: Since 2017, held Environmental Services On-call Contract where we provided Phase I ESAs, Soil/Water Sampling, Wetland/Waterbody Delineations, T&E Surveys, Permitting, Regulatory Agency Correspondence, and Compliance

**III. RATES** (Attach rate sheet if applicable) Rate sheet will be provided separately.

**REGULAR** (M-F, 7:00 a.m. to 5:00 p.m.)

- |                | <b><u>INITIAL TERM</u></b> | <b><u>RENEWAL TERM</u></b> (if any) |
|----------------|----------------------------|-------------------------------------|
| 1) CATEGORY    | \$ _____/hour              | _____                               |
| 2) CATEGORY    | \$ _____/hour              | _____                               |
| 3) CATEGORY    | \$ _____/hour              | _____                               |
| 4) OTHER _____ | \$ _____/hour              | _____                               |

**NIGHT/WEEKEND/HOLIDAY**

- |                        |               |       |
|------------------------|---------------|-------|
| 1) CATEGORY            | \$ _____/hour | _____ |
| 2) CATEGORY            | \$ _____/hour | _____ |
| 3) CATEGORY            | \$ _____/hour | _____ |
| 4) OTHER _____         | \$ _____/hour | _____ |
| 6) TRAVEL TIME/EXPENSE | \$ _____/hour | _____ |
| Or Flat Rate           | \$ _____/trip | _____ |

7) MATERIALS COST:

Mark-up \_\_\_\_\_% (expressed as percentage over cost)

Discount \_\_\_\_\_% (explain circumstances when this would apply)

8) ENVIRONMENTAL CHARGES \$ \_\_\_\_\_

9) OTHER (describe, if any): \_\_\_\_\_

## 2020 Fee Schedule



The hourly fee schedule<sup>1</sup> for services performed by Spirit Environmental professionals<sup>2</sup> is as follows; team members anticipated to be primarily assigned to the project are indicated:

<u>Rate Classification</u>	<u>Hourly Rate</u>	<u>Anticipated Project Staff (Primary)</u>
Program Manager	\$160	<b>Conor Merrigan</b>
Senior Project Manager	\$200	Michele Foss
Senior Project Manager	\$173	Brittany Tones
Project Manager II	\$160	
Project Manager I	\$145	
Project Consultant III	\$160	
Project Consultant II	\$128	<b>Keegan Conley, Alex Moore-VanDyke</b>
Project Consultant I	\$115	Holli Williamson, Kim Frauhammer
Project Specialist II	\$105	April Hasse
Project Specialist I	\$90	
Administrative/Graphics	\$70	Lacey Prizler, <b>Caroline Owen</b>

- In addition to the fees quoted above, Spirit Environmental will include associated project costs (“APC”) on each invoice as 5% of total labor fees without itemization. APC accounts for minor miscellaneous expenses such as document printing and reproduction, binders and tabs, computer resources, telephone, postage, shipping, etc.
- Significant project-related expenses such as travel, itemized mileage, lodging, subcontractor services, regulatory application fees, public notice signs and ads, equipment and instrument rental, laboratory services, or certain project equipment will be billed at actual cost to Spirit plus a 10% handling fee. Itemized mileage cost is determined with the standard government rate ([www.gsa.gov/mileage](http://www.gsa.gov/mileage)).

<sup>1</sup> Spirit Environmental, LLC, reserves the right to revise this fee schedule without prior notice.

<sup>2</sup> Professional personnel may include Spirit employees and independent contractors.

**IV. SUBMISSION ACKNOWLEDGEMENT**

IN WITNESS WHEREOF, the below-named Respondent acknowledges that all responses and representations contained in this Proposal, including the Statement of Qualifications, References, Rates, and any attachments, are true and correct. The undersigned person affirms that he or she has authority to sign this Proposal on behalf of Respondent.

Anthony Barlage

Respondent Legal Name

*Anthony Barlage*  
Authorized Signature

Anthony Barlage - Vice President

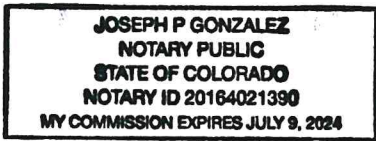
Printed Name & Title

STATE OF COLORADO )  
 ) ss.  
COUNTY OF DENVER )

The foregoing submission was acknowledged before me this 30<sup>th</sup> day of OCTOBER, ~~2020~~ <sup>2020</sup> by ANTHONY BARLAGE.

Witness my hand and official seal.

My Commission Expires 7/9/2024



*Joseph P. Gonzalez*  
Notary Public

## MASTER SERVICES AGREEMENT

THIS MASTER SERVICES AGREEMENT (“Agreement”) is made and entered into effective this \_\_\_\_ day of \_\_\_\_\_, 201\_\_ (the “Effective Date”), by and between the CITY OF COMMERCE CITY, a Colorado home rule municipality whose address is 7887 East 60th Avenue, Commerce City, Colorado (the “City”), and **CONTRACTOR LEGAL NAME**, a **home state Select Entity Type** whose principal business address is **Contractor principal business address** (“Contractor”).

WHEREAS, the City desires to retain the services of Contractor, and Contractor desires to provide services to the City.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained in this Agreement, the sufficiency of which is acknowledged, the parties agree as follows:

### I. SERVICES.

A. Services. At the City’s direction, Contractor will provide **type of services** services for the City on a non-exclusive basis as set forth in Exhibit A and pursuant to Work Orders, as defined below, if applicable (“Services”). The terms and conditions of this Agreement shall apply to the performance of all Services under this Agreement, whether performed with or without a Work Order and notwithstanding the failure of any Work Order to incorporate this Agreement by reference.

1. Work Order Services. A “Work Order” is an order agreed to by the City and Contractor to determine specific Services to be performed (including scope of Services, schedule, and total price) before the performance of Services. Work Orders may be in the form of Exhibit B but must include a specific reference to this Agreement. Work Orders must be executed and authorized as follows: (a) Division Manager (up to \$15,000.00); (b) Department Director (up to \$50,000.00); and (c) City Manager (up to and exceeding \$50,000.00).

2. Invoiced Services. Contractor may perform Services without a Work Order if the scope of Services and the total amount to be billed to the City for such Services are authorized and agreed to by the City before the performance of such Services. Services to be performed without a Work Order must be authorized as follows: (a) Division Manager (up to \$15,000.00); (b) Department Director (up to \$50,000.00); and (c) City Manager (up to and exceeding \$50,000.00).

B. Controlling Terms. This Agreement will control if the terms and conditions of any exhibit, attachment, Work Order, or invoice conflict with the terms and conditions of this Agreement. Additional terms and conditions not specifically relating to the Services (such as unnegotiated or form terms included in any Work Order, Invoice, or attachment), whether or not in conflict with this Agreement, are not agreed to by the City and are declared void and of no force or effect.

C. Contractor Representations. Contractor warrants and represents that it has the requisite authority, capacity, experience and expertise to perform the Services in compliance with the provisions of this Agreement and all applicable laws. Contractor acknowledges that the City is relying on Contractor’s expertise, skill, and knowledge, and that the Contractor’s obligations and liabilities will not be diminished by reason of any approval or review by the City.

~~D. Warranties. Contractor warrants that all work performed under this Agreement will be free from defects in workmanship, equipment, and materials. Upon acceptance of the work, Contractor will transfer the benefit of any applicable manufacturer’s warranty to the City.~~



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D.

**STANDARD OF CARE**

In providing services under this Agreement, the Consultant shall perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances at the same time and in the same or similar locality.

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E. Prosecution of the Services. Contractor will perform all work in a professional and workmanlike manner and will furnish all labor, materials, tools, supplies, machinery, utilities, and other equipment that may be necessary for the completion of the Services. Contractor will monitor, supervise, and otherwise control and be solely responsible for all persons or entities performing work on its behalf.

F. Correction of Errors. Contractor will correct any errors or omissions in its work and any work deemed unsatisfactory or unacceptable by the City promptly and for no additional compensation.

G. Subcontractors. Contractor will not engage subcontractors to perform any part of the Services, other than for the provision of goods, materials or supplies, without the City's express written consent.

H. Licenses & Permits. Contractor and each subcontractor will be responsible to obtain all required licenses and permits, including a City Contractor's license, if required. Contractor will pay any and all license and permit fees.

I. Deliverables.

1. Electronic format. Contractor will provide all reports, surveys, maps, plans, drawings or photographs, or any other materials that lend themselves to production in electronic format ("Deliverables") to the City in both hard copy and electronic formats acceptable to the City, unless otherwise directed by the City in writing. Contractor's failure to do so will constitute a material breach of this Agreement. Contractor will consult with the City to determine acceptable electronic formats before beginning the Services. All Deliverables and other tangible materials produced by Contractor pursuant to this Agreement will at all times be considered the property of the City.

2. Spatial Data. Deliverables including spatial data (GIS/AutoCad) will include geospatial datasets (those generated from GPS, survey data, or other derived geospatial data like orthography) in Environmental Systems Research Institute, Inc.'s ("ESRI") file/personal geodatabase or shapefile format, including a coordinate system projection information or file. Point features will be generated as point shapefiles, linear features will be generated as line shapefiles, and area features will be generated as polygon shapefiles. Any geospatial dataset derived from new or existing geospatial data will be in file/personal geodatabase or shapefile format, along with an explanation of the method used to generate the derived geospatial data. Spatial Coordinate or Survey System will be documented and used, along with a coordinate system projection file for said data. Contractor will provide complete metadata (who, what, when, where, how) for all provided spatial data and related information.

**Insert attached**

3. Digital images. Contractor will provide non-copyrighted, high resolution, illustrative, digital images of project site plans, elevations, renderings, photos, and other Deliverables, as directed by the City, suitable for reproduction of and dissemination in marketing materials and at City Council hearings and public presentations. Contractor will affirm that the images do not violate copyright laws and will indemnify and hold harmless the City from liability for any expense, cost, loss or damage resulting from any claim of copyright infringement arising from the City's use of the images. All images provided will become the property of the City.

J. Rate of Progress. Contractor's rate of progress is a material term of this Agreement. At the City's request, Contractor will provide a progress schedule for the performance of any Services subject to the City's approval.

K. Monitoring and Evaluation. The City reserves the right to monitor and evaluate the progress and performance of Contractor to ensure that the terms of this Agreement are being satisfactorily met in

## I. Deliverables

### 4. Ownership of Instruments of Service

All work product prepared by Contractor pursuant to this Agreement are instruments of service for the Project; they are not intended or represented to be suitable for reuse by The City or others on extensions of the Project or on any other project.

Any reuse without written verification or adaptation by Contractor for the specific purpose intended will be at The City's or others sole risk and without liability or legal exposure to the Contractor. To the extent permitted by law, The City will indemnify and hold harmless Contractor from all claims, damages, losses, and expenses including attorneys' fees arising out unauthorized re-use of work product.

#### IV. INDEMNITY.

Contractor will be liable and responsible for ~~any and all~~ damages to persons or property caused by or arising out of the negligent or willful actions or omissions in the performance of the Services by Contractor, its employees, agents, or other persons acting under Contractor's direction or control. Contractor will indemnify and hold harmless the City, its elected and appointed officials and its employees, agents and representatives (the "Indemnified Parties"), from ~~any and all~~ liability, claims, demands, actions, damages, losses, judgments, costs or expenses, including, but not limited to, <sup>reasonable</sup> attorney fees, which may be made or brought or which may result against any of the Indemnified Parties as a result or on account of the negligent, grossly negligent, willful and wanton, or intentional actions or omissions of Contractor and/or its employees, agents or representatives or other persons acting under Contractor's direction or control. Contractor will include the provisions of this Section in any such subcontracts engaged to perform any part of the Services. The provisions set forth in this Section will survive the completion of the Services and the satisfaction, expiration or termination of this Agreement.

#### V. INSURANCE.

A. Required Policies. Contractor will procure and keep in force the following insurance subject to the conditions below, for the duration of this Agreement:

1. Commercial General Liability Insurance. Comprehensive general liability insurance insuring against any liability for personal injury, bodily injury or death arising out of the performance of the Services with at least **One Million Dollars (\$1,000,000)** each occurrence.

2. Products and Completed Operations Insurance. Products and completed operations insurance insuring against any liability for bodily injury or property damage caused by the completed Services, with a combined single limit of at least **One Million Dollars (\$1,000,000)**.

3. Comprehensive Automobile Liability Insurance. Comprehensive automobile liability insurance insuring against any liability for personal injury, bodily injury or death arising out of the use of motor vehicles and covering operations on or off the site of all motor vehicles controlled by Contractor that are used in connection with performance of the Services, whether the motor vehicles are owned, non-owned or hired, with a combined single limit of at least **One Million Dollars (\$1,000,000)**.

4. Professional Liability Insurance. If Contractor is an architect, engineer, surveyor, appraiser, physician, attorney, accountant or other licensed professional, or if it is customary in the trade or business in which Contractor is engaged, or if the City otherwise deems it necessary, errors and omissions professional liability insurance insuring Contractor against any professional liability with a limit of at least **One Million Dollars (\$1,000,000.00)** per claim and annual aggregate.

5. Other Insurance. Workers' compensation insurance (unless Contractor provides a completed Declaration of Independent Contractor Status Form) and other insurance required by applicable law.

The limits of any insurance required by this Agreement will not limit Contractor's liability.

B. Terms of Insurance.

1. Additional Insured. Except for the professional liability policy, if applicable, and workers' compensation policy, **all required insurance policies shall name the City as an additional insured** and will provide that the City, although named as an additional insured, will nevertheless be entitled to

recovery under said policies for any loss occasioned to the City or its officers, employees or agents by reason of the negligence of Contractor or its officers, employees, agents, subcontractors or business invitees. The insurance policies will be for the mutual and joint benefit and protection of Contractor and the City. **Such policies will be written as primary policies not contributing to and not in excess of coverages the City may carry.**

2. Qualification; Deductible. Insurance required by this Section will be with companies qualified to do business in the State of Colorado and may provide for deductible amounts as Contractor deems reasonable for the Services, but in no event greater than **Ten Thousand Dollars (\$10,000.00)**, and Contractor will be responsible for the payment of any such deductible.

3. Cancellation. No such policies will be cancelable or subject to reduction in coverage limits or other modification unless previously approved by the City in writing.

4. Coverage Type. Contractor will identify whether the type of coverage is “occurrence” or “claims made.” If the type of coverage is “claims made,” which at renewal Contractor changes to “occurrence,” Contractor will carry a twelve (12) month tail. Contractor will not do or permit to be done anything that will invalidate the policies.

5. No “Pollution Exclusion.” The insurance required by this Section will cover any and all damages, claims or suits arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of pollutants, and will not exclude from coverage any liability or expense arising out of or related to any form of pollution, whether intentional or otherwise. If necessary, Contractor will secure and maintain either a rider or a separate policy insuring against liability for pollution related damages, claims or suits, as described in subsection ii(a), with at least ~~Two Million Dollars (\$2,000,000)~~ each occurrence, subject to approval by the City, which approval will not be unreasonably withheld.

One Million Dollars (\$1,000,000)

6. Evidence of Coverage. Before commencing work under this Agreement, Contractor will provide certificates of insurance policies indicating that the City is an additional insured and, if necessary, all endorsements evidencing insurance coverage required by this Agreement. The City will not be obligated under this Agreement until Contractor provides acceptable such certificates of insurance and endorsements. If the Term extends beyond the period of coverage for any required insurance, Contractor will, at least ten (10) days before the expiration of any such insurance coverage, provide the City with new certificates of insurance and endorsements evidencing either new or continuing coverage.

C. Subcontracts. Contractor will include the insurance requirements of this Agreement in all subcontracts. Contractor will be responsible if any subcontractor fails to procure and maintain insurance meeting the requirements of this Agreement.

## VI. SALES AND USE TAX.

Unless specifically exempt, all materials provided and equipment used in the performance of Services within the City are subject to City Sales & Use Tax, including services performed on behalf of the City.

A. Contractor Responsible for Tax. Contractor is subject to the tax on all purchases, fabrication, manufacture or other production of tangible personal property used, stored, or consumed in performance of the Services.

## 4. PROPOSAL FORM

### I. STATEMENT OF QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. Attach separate sheets or attachments as necessary.

1. Respondent Name: Air Resource Specialists, Inc.

2. Trade Name: Air Resource Specialists, Inc.

3. Form of Entity: Corporation

4. Business Address: 1901 Sharp Point Drive, Suite F  
Fort Collins, CO 80525

5. Primary Contact: Katrina Winborn-Miller

Phone Number: 970-484-7941 x 273

Email: kwinborn-miller@air-resource.com

6. Year Organized: 1982

7. Where Organized: Colorado

8. How many years has Respondent been engaged in the environmental consulting and air quality monitoring business under its present name. Please state the names and dates of any previous business names.

38 years

no previous business name

9. Has Respondent been terminated from a contract or project in the last five years? Explain.   

No

10. Has Respondent been party to litigation related to its work in the last five years? Explain.   

No

11. Please identify the number of staff available to work under the contract:

11 Number of ~~licensed/certified~~ technicians

9 Number of helpers

12. Can Respondent provide 24-hour "on call" emergency coverage? Yes /  No

\*The type of monitoring we anticipate under this contract should not require 24-hour "on call" emergency service

13. On-Call Response Time (Fill in Blank and Circle One Time Period)

REGULAR HOURS (M-F, 7:00 a.m. to 5:00 p.m.): see below MINUTES/HOURS

NIGHT/WEEKEND/HOLIDAY HOURS: see below MINUTES/HOURS

\* Generally we can respond within one day or less if required. The type of monitoring we anticipate under this contract will very rarely, if ever, require night or holiday work as most instruments can be set up to operate remotely, unattended.

14. Has Respondent reviewed the draft contract (Attachment A to this RFP) including all insurance requirements?  Yes /  No

List any exceptions to the draft contract or state "None": None

**II. REFERENCES**

**Reference #1:**

Contact Name: Cassie Archuleta

Business Name: City of Fort Collins

Business Address: 222 Laporte Avenue, Fort Collins, CO 80521

Contact Phone: 970-416-2648

Contact Email: carchuleta@fcgov.com

Work Description: Air quality, visibility and photographic monitoring

**Reference #2:**

Contact Name: Gregg Thomas

Business Name: Department of Public Health and Environment

Business Address: 200 W. 14th Avenue, Denver, CO 80204

Contact Phone: 720-865-5413

Contact Email: gregg.thomas@denvergov.org

Work Description: Design and operation of three monitoring campaigns to determine air toxics gradients in a neighborhood near Interstate 70

**Reference #3**

Contact Name: Michael Sundblom

Business Name: Pinal County Air Quality Control District

Business Address: P.O. Box 1348, Florence, AZ 85132

Contact Phone: 520-866-6915

Contact Email: michael.sundblom@pinal.gov

Work Description: Technical reviews of air quality permit applications

**III. RATES** (Attach rate sheet if applicable) \* see attached

	<u>INITIAL TERM</u>	<u>RENEWAL TERM</u> (if any)
<b><u>REGULAR (M-F, 7:00 a.m. to 5:00 p.m.)</u></b>		
1) <b>CATEGORY</b>	\$ _____/hour	_____
2) <b>CATEGORY</b>	\$ _____/hour	_____
3) <b>CATEGORY</b>	\$ _____/hour	_____
4) OTHER _____	\$ _____/hour	_____
<b><u>NIGHT/WEEKEND/HOLIDAY</u></b>		
1) <b>CATEGORY</b>	\$ _____/hour	_____
2) <b>CATEGORY</b>	\$ _____/hour	_____
3) <b>CATEGORY</b>	\$ _____/hour	_____
4) OTHER _____	\$ _____/hour	_____
6) TRAVEL TIME/EXPENSE	\$ _____/hour	_____
Or Flat Rate	\$ _____/trip	_____
7) MATERIALS COST:		
Mark-up <u>10</u> % (expressed as percentage over cost)		
Discount <u>N/A</u> % (explain circumstances when this would apply)		
8) ENVIRONMENTAL CHARGES	\$ <u>N/A</u>	_____
9) OTHER (describe, if any): <u>All Other Direct Costs are marked up 10%</u>		_____



Air Resource Specialists and Colorado State University  
2021 Labor Rates

ARS Labor Category	Billing Rate (\$)	Key (in bold) and Support Employees
Principle Investigator	205.00	
Program Manager	185.00	
Sr Scientist	185.00	
Sr IT Specialist	175.00	
Compliance Manager	170.00	<b>Howard Gebhart, Katrina Winborn-Miller</b>
Sr Project Manager	170.00	<b>Mark Tigges</b>
Sr Programmer	155.00	
Project Manager	145.00	
Sr Consultant	145.00	<b>James Wu</b>
Programmer	135.00	
QA Manager	145.00	<b>Christian Kirk</b>
Technical Field Manager	125.00	
Sr Data Analyst	105.00	
Sr Project Scientist	105.00	<b>Emily Bitler</b>
Project Manager I	105.00	
Sr Field Specialist	105.00	Jonathan Furst, Max Abrahamson
Sr Electronics Technician	105.00	Marty Mills
Field Specialist	105.00	
Field Technician	95.00	
Data Analyst	85.00	Emily Wiechman
Project Scientist II	80.00	
Electronics Technician	85.00	Randy Kechter
Data Technician	75.00	Brittany Decker
Technical Assistant	70.00	Genevieve Lariviere
Administrative Assistant	65.00	Belen Lara

\* Other direct costs will be billed to the project based on actual costs plus 10%. Example charges include field supplies, shipping, travel expenses, capital, subcontracts, etc.

\*\* Future year rates are anticipated to escalate by 3% per year.

CSU Labor Category	Billing Rate (\$)	Key Employees
Professor	210.00	<b>Dr. Jeff Collett</b>
PhD Research Scientist	74.00	
Associate/Postdoc	46.00	
Graduate Student	27.00	



#### 4. PROPOSAL FORM

##### I. STATEMENT OF QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. Attach separate sheets or attachments as necessary.

1. Respondent Name: Wright Water Engineers, Inc.

2. Trade Name: Wright Water Engineers, Inc.

3. Form of Entity: Corporation

4. Business Address: 2490 W. 26th Ave., Ste. 100A, Denver, CO 80211

5. Primary Contact: Jane Clary, Vice President

Phone Number: (303) 480-1700

Email: clary@wrightwater.com

6. Year Organized: 1961

7. Where Organized: Denver, CO

8. How many years has Respondent been engaged in the environmental consulting and air quality monitoring business under its present name. Please state the names and dates of any previous business names.

59 years under this name. No prior business names.

9. Has Respondent been terminated from a contract or project in the last five years? Explain.   

No

10. Has Respondent been party to litigation related to its work in the last five years? Explain.   

No

11. Please identify the number of staff available to work under the contract:

  32   Number of licensed/certified technicians        14   Number of helpers

12. Can Respondent provide 24-hour "on call" emergency coverage? **Yes / No**

No

13. On-Call Response Time (Fill in Blank and Circle One Time Period)

REGULAR HOURS (M-F, 7:00 a.m. to 5:00 p.m.): M-F, 8am-5pm MINUTES/HOURS

NIGHT/WEEKEND/HOLIDAY HOURS: N/A MINUTES/HOURS

14. Has Respondent reviewed the draft contract (Attachment A to this RFP) including all insurance requirements? **Yes / No** Yes

List any exceptions to the draft contract or state "None": WWE Attachment provides changes to Warranties (p.1), Deliverables (p.2), Indemnity (p.5), and Qualification; Deductible (p.6) and supporting documentation.

## II. REFERENCES

### **Reference #1:**

Contact Name: Jon Novick

Business Name: City and County of Denver Department of Public Health and Environment

Business Address: 200 W. 14th Ave #2732, Denver, CO 80204

Contact Phone: 720-865-5468

Contact Email: jon.novick@denvergov.org

Work Description: Develop stormwater BMP monitoring program, install equipment, conduct monitoring program. Projects for Denver Public Works included Storm Criteria Manual update and E. coli TMDL work.

### **Reference #2:**

Contact Name: Holly Piza

Business Name: Mile High Flood District

Business Address: 2480 W. 26th Ave., Ste 100A, Denver, CO 80211

Contact Phone: (303) 455-6277

Contact Email: hpiza@udfcd.org

Work Description: Storm drainage criteria and stormwater quality planning. Development of E. coli Toolbox, regulatory consulting for stormwater MS4 permit issues, development of BMP O&M guidance.

### **Reference #3**

Contact Name: Brent Soderlin, P.E., CFM

Business Name: Commerce City Public Works Department

Business Address: 8602 Rosemary St.

Contact Phone: (303) 289-8175

Contact Email: bsoderlin@c3gov.com

Work Description: Update Storm Drainage Criteria Manual

**III. RATES (Attach rate sheet if applicable)** See attached WWE 2020 rate sheet.  
**INITIAL TERM** **RENEWAL TERM (if any)**

**REGULAR (M-F, 7:00 a.m. to 5:00 p.m.)**

- 1) CATEGORY \$ \_\_\_\_\_/hour \_\_\_\_\_
- 2) CATEGORY \$ \_\_\_\_\_/hour \_\_\_\_\_
- 3) CATEGORY \$ \_\_\_\_\_/hour \_\_\_\_\_
- 4) OTHER \_\_\_\_\_ \$ \_\_\_\_\_/hour \_\_\_\_\_

**NIGHT/WEEKEND/HOLIDAY**

- 1) CATEGORY \$ \_\_\_\_\_/hour \_\_\_\_\_
- 2) CATEGORY \$ \_\_\_\_\_/hour \_\_\_\_\_
- 3) CATEGORY \$ \_\_\_\_\_/hour \_\_\_\_\_
- 4) OTHER \_\_\_\_\_ \$ \_\_\_\_\_/hour \_\_\_\_\_

6) TRAVEL TIME/EXPENSE \$ \_\_\_\_\_/hour \_\_\_\_\_

Or Flat Rate \$ \_\_\_\_\_/trip \_\_\_\_\_

7) MATERIALS COST:  
Mark-up \_\_\_\_\_% (expressed as percentage over cost)  
Discount \_\_\_\_\_% (explain circumstances when this would apply)

8) ENVIRONMENTAL CHARGES \$ \_\_\_\_\_ \_\_\_\_\_

9) OTHER (describe, if any): \_\_\_\_\_  
\_\_\_\_\_

**IV. SUBMISSION ACKNOWLEDGEMENT**

IN WITNESS WHEREOF, the below-named Respondent acknowledges that all responses and representations contained in this Proposal, including the Statement of Qualifications, References, Rates, and any attachments, are true and correct. The undersigned person affirms that he or she has authority to sign this Proposal on behalf of Respondent.

Wright Water Engineers, Inc.

Respondent Legal Name

Jane Clary  
Authorized Signature

Jane Clary, Vice President

Printed Name & Title

STATE OF Colorado )

) ss.

COUNTY OF Denver )

The foregoing submission was acknowledged before me this 27 day of October,

2020, by Jane Clary.

Witness my hand and official seal.



My Commission Expires 06-24-2022.

[Signature]  
Notary Public

**WRIGHT WATER ENGINEERS, INC.  
2021 SCHEDULE OF HOURLY RATES  
SCHEDULE A**

PERSONNEL	RATE PER HOUR
SENIOR PRINCIPAL/CONSULTANT	\$230
PRINCIPAL/CONSULTANT	\$220
SENIOR PROJECT ENGINEER/CONSULTANT	\$197
SENIOR ENGINEER/SCIENTIST CONSULTANT	\$175
ENGINEERING/SCIENTIST PROFESSIONAL I	\$163
ENGINEERING SPECIALIST/CONSULTANT	\$149
ENGINEERING/SCIENTIST PROFESSIONAL II	\$133
ENGINEERING DESIGNER/PROFESSIONAL III	\$122
ENGINEERING TECHNICIAN I	\$109
ENGINEERING TECHNICIAN II	\$95
ENGINEERING TECHNICIAN III	\$92
ENGINEERING TECHNICIAN IV	\$76
ENGINEERING TECHNICIAN V	\$69
◆ Automobile at 60 cents per mile	◆ GIS computer at 20 dollars per hour.
◆ Four-wheel drive/Pick-up truck vehicle at 70 cents per mile	◆ Info water® at 20 dollars per hour.
◆ AutoCAD computer at 15 dollars per hour.	◆ Civil 3D at 25 dollars per hour.
<i>Seven and one-half percent (7.5%) will be added to all reimbursable expenses to cover administration for special consultants, independent laboratory tests, direct printing costs, telephone, supplies, lodging and subsistence, all in-house computer, auto, postage, fax, and travel.</i>	

**TERMS OF PAYMENT:** It is agreed that this account will be billed on a monthly basis. Unless otherwise approved by the Company, payment is due upon receipt of invoice. Mail payment to the main office of the Company at 2490 West 26th Avenue, Suite 100A, Denver, Colorado 80211. If payment is not received, client agrees to pay interest at the rate of 1.5 percent per month on the outstanding balance. This does not constitute a credit arrangement, and in no case, shall the minimum payment be less than 33 percent of the amount billed. If account is placed with an attorney for collection, client agrees to pay court costs and reasonable attorney fees. The liability of Wright Water Engineers, Inc. for losses or damages arising out of the errors, omissions, or negligence of Wright Water Engineers, Inc. while providing professional services shall be limited to the total fee due Wright Water Engineers, Inc. pursuant to this agreement.

## MASTER SERVICES AGREEMENT

THIS MASTER SERVICES AGREEMENT ("Agreement") is made and entered into effective this \_\_\_\_ day of \_\_\_\_\_, 201\_\_ (the "Effective Date"), by and between the CITY OF COMMERCE CITY, a Colorado home rule municipality whose address is 7887 East 60th Avenue, Commerce City, Colorado (the "City"), and CONTRACTOR LEGAL NAME, a home state Select Entity Type whose principal business address is Contractor principal business address ("Contractor").

WHEREAS, the City desires to retain the services of Contractor, and Contractor desires to provide services to the City.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained in this Agreement, the sufficiency of which is acknowledged, the parties agree as follows:

### I. SERVICES.

A. Services. At the City's direction, Contractor will provide type of services services for the City on a non-exclusive basis as set forth in Exhibit A and pursuant to Work Orders, as defined below, if applicable ("Services"). The terms and conditions of this Agreement shall apply to the performance of all Services under this Agreement, whether performed with or without a Work Order and notwithstanding the failure of any Work Order to incorporate this Agreement by reference.

1. Work Order Services. A "Work Order" is an order agreed to by the City and Contractor to determine specific Services to be performed (including scope of Services, schedule, and total price) before the performance of Services. Work Orders may be in the form of Exhibit B but must include a specific reference to this Agreement. Work Orders must be executed and authorized as follows: (a) Division Manager (up to \$15,000.00); (b) Department Director (up to \$50,000.00); and (c) City Manager (up to and exceeding \$50,000.00).

2. Invoiced Services. Contractor may perform Services without a Work Order if the scope of Services and the total amount to be billed to the City for such Services are authorized and agreed to by the City before the performance of such Services. Services to be performed without a Work Order must be authorized as follows: (a) Division Manager (up to \$15,000.00); (b) Department Director (up to \$50,000.00); and (c) City Manager (up to and exceeding \$50,000.00).

B. Controlling Terms. This Agreement will control if the terms and conditions of any exhibit, attachment, Work Order, or invoice conflict with the terms and conditions of this Agreement. Additional terms and conditions not specifically relating to the Services (such as unnegotiated or form terms included in any Work Order, Invoice, or attachment), whether or not in conflict with this Agreement, are not agreed to by the City and are declared void and of no force or effect.

C. Contractor Representations. Contractor warrants and represents that it has the requisite authority, capacity, experience and expertise to perform the Services in compliance with the provisions of this Agreement and all applicable laws. Contractor acknowledges that the City is relying on Contractor's expertise, skill, and knowledge, and that the Contractor's obligations and liabilities will not be diminished by reason of any approval or review by the City.

D. Warranties. ~~Contractor warrants that all work performed under this Agreement will be free from defects in workmanship, equipment, and materials. Upon acceptance of the work, Contractor will transfer the benefit of any applicable manufacturer's warranty to the City.~~

*Add Standard of Care*



Pg 1 Replaces Warranties

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D. STANDARD OF CARE

In providing services under this Agreement, the Consultant shall perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances at the same time and in the same or similar locality.

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E. Prosecution of the Services. Contractor will perform all work in a professional and workmanlike manner and will furnish all labor, materials, tools, supplies, machinery, utilities, and other equipment that may be necessary for the completion of the Services. Contractor will monitor, supervise, and otherwise control and be solely responsible for all persons or entities performing work on its behalf.

F. Correction of Errors. Contractor will correct any errors or omissions in its work and any work deemed unsatisfactory or unacceptable by the City promptly and for no additional compensation.

G. Subcontractors. Contractor will not engage subcontractors to perform any part of the Services, other than for the provision of goods, materials or supplies, without the City's express written consent.

H. Licenses & Permits. Contractor and each subcontractor will be responsible to obtain all required licenses and permits, including a City Contractor's license, if required. Contractor will pay any and all license and permit fees.

I. Deliverables.

1. Electronic format. Contractor will provide all reports, surveys, maps, plans, drawings or photographs, or any other materials that lend themselves to production in electronic format ("Deliverables") to the City in both hard copy and electronic formats acceptable to the City, unless otherwise directed by the City in writing. Contractor's failure to do so will constitute a material breach of this Agreement. Contractor will consult with the City to determine acceptable electronic formats before beginning the Services. All Deliverables and other tangible materials produced by Contractor pursuant to this Agreement will at all times be considered the property of the City.

2. Spatial Data. Deliverables including spatial data (GIS/AutoCad) will include geospatial datasets (those generated from GPS, survey data, or other derived geospatial data like orthography) in Environmental Systems Research Institute, Inc.'s ("ESRI") file/personal geodatabase or shapefile format, including a coordinate system projection information or file. Point features will be generated as point shapefiles, linear features will be generated as line shapefiles, and area features will be generated as polygon shapefiles. Any geospatial dataset derived from new or existing geospatial data will be in file/personal geodatabase or shapefile format, along with an explanation of the method used to generate the derived geospatial data. Spatial Coordinate or Survey System will be documented and used, along with a coordinate system projection file for said data. Contractor will provide complete metadata (who, what, when, where, how) for all provided spatial data and related information.

3. Digital images. Contractor will provide non-copyrighted, high resolution, illustrative, digital images of project site plans, elevations, renderings, photos, and other Deliverables, as directed by the City, suitable for reproduction of and dissemination in marketing materials and at City Council hearings and public presentations. Contractor will affirm that the images do not violate copyright laws and will indemnify and hold harmless the City from liability for any expense, cost, loss or damage resulting from any claim of copyright infringement arising from the City's use of the images. All images provided will become the property of the City.

→ *Insert - Attached*  
J. Rate of Progress. Contractor's rate of progress is a material term of this Agreement. At the City's request, Contractor will provide a progress schedule for the performance of any Services subject to the City's approval.

K. Monitoring and Evaluation. The City reserves the right to monitor and evaluate the progress and performance of Contractor to ensure that the terms of this Agreement are being satisfactorily met in

I. Deliverables

4. Ownership of Instruments of Service

All work product prepared by Contractor pursuant to this Agreement are instruments of service for the Project; they are not intended or represented to be suitable for reuse by The City or others on extensions of the Project or on any other project.

Any reuse without written verification or adaptation by Contractor for the specific purpose intended will be at The City's or others sole risk and without liability or legal exposure to the Contractor. To the extent permitted by law, The City will indemnify and hold harmless Contractor from all claims, damages, losses, and expenses including attorneys' fees arising out unauthorized re-use of work product.

recovery under said policies for any loss occasioned to the City or its officers, employees or agents by reason of the negligence of Contractor or its officers, employees, agents, subcontractors or business invitees. The insurance policies will be for the mutual and joint benefit and protection of Contractor and the City. **Such policies will be written as primary policies not contributing to and not in excess of coverages the City may carry.**

2. Qualification; Deductible. Insurance required by this Section will be with companies qualified to do business in the State of Colorado and may provide for deductible amounts as Contractor deems reasonable for the Services, but in no event greater than **Ten Thousand Dollars (\$10,000.00)**, and Contractor will be responsible for the payment of any such deductible. ( 100,000)

3. Cancellation. No such policies will be cancelable or subject to reduction in coverage limits or other modification unless previously approved by the City in writing.

4. Coverage Type. Contractor will identify whether the type of coverage is "occurrence" or "claims made." If the type of coverage is "claims made," which at renewal Contractor changes to "occurrence," Contractor will carry a twelve (12) month tail. Contractor will not do or permit to be done anything that will invalidate the policies.

5. No "Pollution Exclusion." The insurance required by this Section will cover any and all damages, claims or suits arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of pollutants, and will not exclude from coverage any liability or expense arising out of or related to any form of pollution, whether intentional or otherwise. If necessary, Contractor will secure and maintain either a rider or a separate policy insuring against liability for pollution related damages, claims or suits, as described in subsection ii(a), with at least **Two Million Dollars (\$2,000,000)** each occurrence, subject to approval by the City, which approval will not be unreasonably withheld.

6. Evidence of Coverage. Before commencing work under this Agreement, Contractor will provide certificates of insurance policies indicating that the City is an additional insured and, if necessary, all endorsements evidencing insurance coverage required by this Agreement. The City will not be obligated under this Agreement until Contractor provides acceptable such certificates of insurance and endorsements. If the Term extends beyond the period of coverage for any required insurance, Contractor will, at least ten (10) days before the expiration of any such insurance coverage, provide the City with new certificates of insurance and endorsements evidencing either new or continuing coverage.

C. Subcontracts. Contractor will include the insurance requirements of this Agreement in all subcontracts. Contractor will be responsible if any subcontractor fails to procure and maintain insurance meeting the requirements of this Agreement.

## VI. SALES AND USE TAX.

Unless specifically exempt, all materials provided and equipment used in the performance of Services within the City are subject to City Sales & Use Tax, including services performed on behalf of the City.

A. Contractor Responsible for Tax. Contractor is subject to the tax on all purchases, fabrication, manufacture or other production of tangible personal property used, stored, or consumed in performance of the Services.

Client#: 1083345

WRIGHWAT

ACORD™

**CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY)

8/28/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES FLOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER USI Insurance Services, LLC P.O. Box 7050 Englewood, CO 80155 800 873-8500	CONTACT NAME:	
	PHONE (A/C, No. Ext): 800 873-8500	FAX (A/C, No):
	E-MAIL ADDRESS:	
INSURED Wright Water Engineers, Inc. Waste Engineering, Inc. 2490 W. 26th Ave., Suite 100a Denver, CO 80211	INSURER(S) AFFORDING COVERAGE	
	INSURER A : Hartford Casualty Insurance Company	NAIC # 29424
	INSURER B : Pinnacol Assurance Company	41190
	INSURER C : XL Specialty Insurance Company	37885
	INSURER D : Hartford Underwriters Insurance Company	30104
	INSURER E :	

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:	X	X	34SBAPN5697	12/31/2019	12/31/2020	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (EA occurrence) \$300,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000
	<input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS ONLY	X	X	34UECKW6977	12/31/2019	12/31/2020	COMBINED SINGLE LIMIT (EA accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB <input checked="" type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$10000	X	X	34SBAPN5697	12/31/2019	12/31/2020	EACH OCCURRENCE \$3,000,000 AGGREGATE \$3,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory In NH) If yes, describe under DESCRIPTION OF OPERATIONS below			392762	06/01/2020	06/01/2021	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER
B			N/A	2158422	09/01/2020	09/01/2021	E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
C	Professional Liability Claims Made <i>100,000 deductible</i>	X		DPR9953086	12/31/2019	12/31/2020	\$2,000,000 per claim \$4,000,000 annl aggr.

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

As required by written contract or written agreement, the following provisions apply subject to the policy terms, conditions, limitations and exclusions: The Certificate Holder and owner are included as Automatic Additional Insured's for ongoing and completed operations under General Liability; Designated Insured under Automobile Liability; and Additional Insured under Umbrella / Excess Liability but only with respect to liability arising out of the Named Insured's work performed on behalf of the certificate holder and owner. (See Attached Descriptions)

CERTIFICATE HOLDER  For Proposal Purposes Only	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE  <i>[Signature]</i>

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## DESCRIPTIONS (Continued from Page 1)

The General Liability, Automobile Liability, Umbrella/Excess insurance policies applies on a primary and noncontributory basis. A Blanket Waiver of Subrogation applies for General Liability, Automobile Liability, Umbrella/Excess Liability and Workers Compensation. The Umbrella / Excess Liability policy provides excess coverage over the General Liability, Automobile Liability and Employers Liability.

Please note that Additional Insured status does not apply to Professional Liability or Workers' Compensation.

#### IV. INDEMNITY.

Contractor will be liable and responsible for ~~any and all~~ damages to persons or property caused by or arising out of the negligent or willful actions or omissions in the performance of the Services by Contractor, its employees, agents, or other persons acting under Contractor's direction or control. Contractor will indemnify and hold harmless the City, its elected and appointed officials and its employees, agents and representatives (the "Indemnified Parties"), from ~~any and all~~ liability, claims, demands, actions, damages, losses, judgments, costs or expenses, including, but not limited to, attorney fees, which may be made or brought or which may result against any of the Indemnified Parties as a result or on account of the negligent, grossly negligent, willful and wanton, or intentional actions or omissions of Contractor and/or its employees, agents or representatives or other persons acting under Contractor's direction or control. Contractor will include the provisions of this Section in any such subcontracts engaged to perform any part of the Services. The provisions set forth in this Section will survive the completion of the Services and the satisfaction, expiration or termination of this Agreement.

#### V. INSURANCE.

A. Required Policies. Contractor will procure and keep in force the following insurance subject to the conditions below, for the duration of this Agreement:

1. Commercial General Liability Insurance. Comprehensive general liability insurance insuring against any liability for personal injury, bodily injury or death arising out of the performance of the Services with at least **One Million Dollars (\$1,000,000)** each occurrence.

2. Products and Completed Operations Insurance. Products and completed operations insurance insuring against any liability for bodily injury or property damage caused by the completed Services, with a combined single limit of at least **One Million Dollars (\$1,000,000)**.

3. Comprehensive Automobile Liability Insurance. Comprehensive automobile liability insurance insuring against any liability for personal injury, bodily injury or death arising out of the use of motor vehicles and covering operations on or off the site of all motor vehicles controlled by Contractor that are used in connection with performance of the Services, whether the motor vehicles are owned, non-owned or hired, with a combined single limit of at least **One Million Dollars (\$1,000,000)**.

4. Professional Liability Insurance. If Contractor is an architect, engineer, surveyor, appraiser, physician, attorney, accountant or other licensed professional, or if it is customary in the trade or business in which Contractor is engaged, or if the City otherwise deems it necessary, errors and omissions professional liability insurance insuring Contractor against any professional liability with a limit of at least **One Million Dollars (\$1,000,000.00)** per claim and annual aggregate.

5. Other Insurance. Workers' compensation insurance (unless Contractor provides a completed Declaration of Independent Contractor Status Form) and other insurance required by applicable law.

The limits of any insurance required by this Agreement will not limit Contractor's liability.

#### B. Terms of Insurance.

1. Additional Insured. Except for the professional liability policy, if applicable, and workers' compensation policy, **all required insurance policies shall name the City as an additional insured** and will provide that the City, although named as an additional insured, will nevertheless be entitled to



## PROPOSED APPROACH

Effectively coordinating policy objectives and implementable strategies will take a concurrent focus on measurement, technical analysis, and planning. Spirit Environmental (“Spirit”), with partners in Air Resource Services (“ARS”) and Wright Water Engineers (“WWE”), is uniquely positioned to deliver the full suite of services in a manner consistent with the City of Commerce City (“City”) values. Spirit will ensure a seamless interface, provide support where needed across scope items, and manage the environmental policy documentation scope while ARS manages the air quality monitoring and policy recommendation services scope and Wright Water Engineers manages the water quality policy recommendation and monitoring services scope.

Spirit is currently leading the incorporation of sustainability considerations into the comprehensive plan for Adams County, and will leverage those efforts in this role while providing regional coordination and familiarity with the environmental issues, datasets, and solutions that include the City. Partnering with ARS and Wright Water Engineers provides additional technical depth and capacity to mobilize effectively in order to address the scope items comprehensively and provide a level of built in depth to manage for both anticipated and unanticipated contingencies. All three firms provide efficient, effective, and highly professional levels of service, and will provide Commerce City with best-in-class consulting on all aspects of the desired scope items. A variety of rates are presented in the rate sheets to provide options to maximize cost-effectiveness and Spirit staff will pay close attention to opportunities to utilize lower rate personnel with senior review where practical. In regards to the on-call and 24 hour availability question, the team is willing to provide assurances of responsiveness, either directly or with a subcontractor, once specific services are requested/identified as part of the planning process.

Each individual scope section (or function) is presented below along with approaches based on available information. Possible initial tasks are identified to provide a sense of early project activities, pending discussion with the City project manager. Company overviews, an organizational chart, key team member biographies, and example projects are presented following the preliminary scoping sections.

## ENVIRONMENTAL POLICY DEVELOPMENT

Spirit will lead the environmental policy development scope function by employing a holistic and actionable approach designed to prepare each policy and strategy for success. Spirit proposes to create a comparative framework designed to help the City sort through and prioritize various policy scenarios using, at a minimum the criteria of contribution to community health outcomes, environmental impacts, and community resiliency. Spirit will look to the prior comprehensive plan section, in particular the Environmental Conservation and Stewardship Goals and Policies.

As part of the process to do so, Spirit will evaluate and recommend a vision and policy framework to support organizational sustainability to effectively implement policies and strengthen a culture of collaboration and best practices. To achieve these outcomes, Spirit is proposing to undertake an organizational assessment involving process reviews and interviews with key personnel. The interviews will be designed in tandem with the project manager and serve to catalog current practices and challenges, identify existing data and metrics, gather feedback on environmental and sustainability initiatives, and build buy-in moving forward. As a team, we will rely on data and metrics heavily, and use them to build solid narratives to share as well as tracking progress. For example, as part of our current work with Adams County, we have developed maps showing several environmental conditions that would also be relevant for Commerce City. The following maps have been re-created for Commerce City and demonstrate that 1) over the three-year period from 2017 to 2020, Commerce City is seeing the impacts of climate change in terms of increased temperature differentials and 2) there are higher drinking water risk factors in different parts of the City, which in some cases follow the sub-watersheds.





Figure 1. 2017-2020 Temperature Departure from Normal

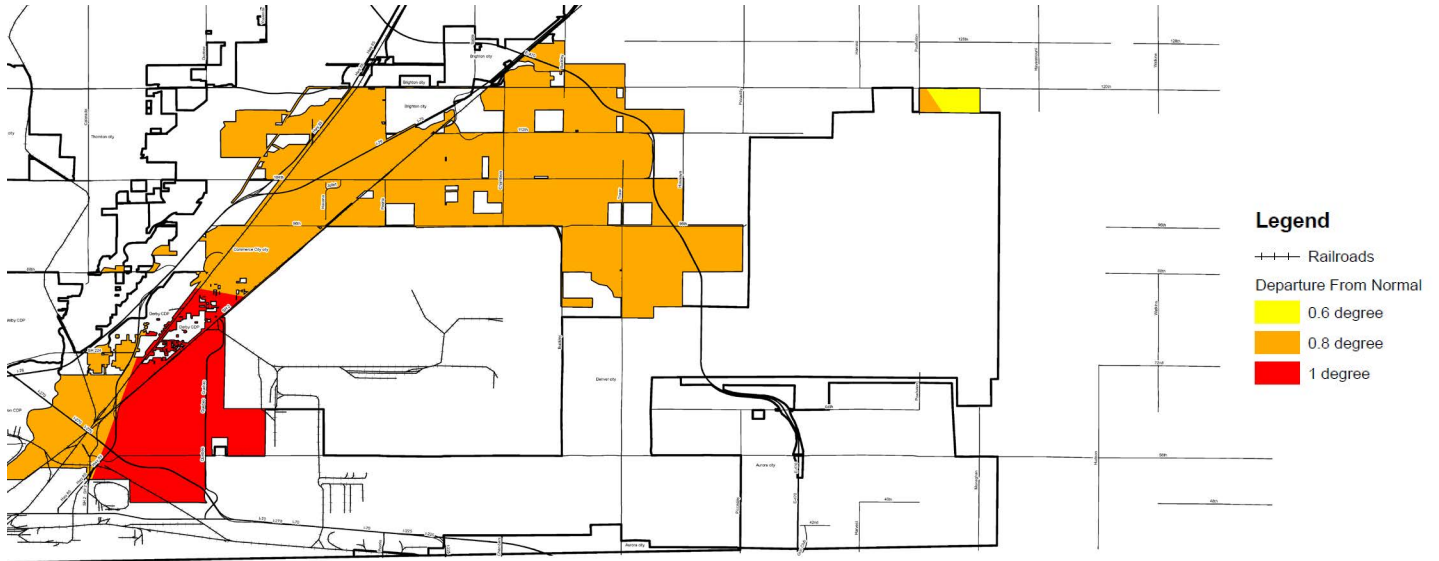
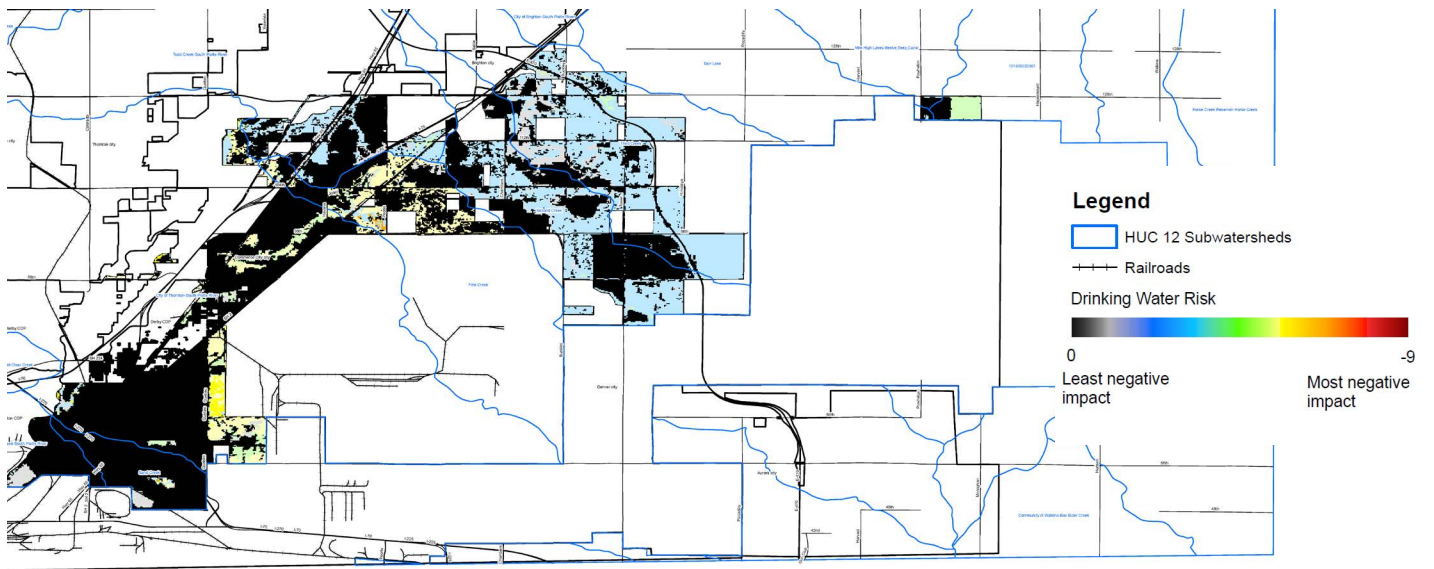


Figure 2. 2017-2020 Drinking Water Risk and Subwatersheds



With a solid foundation built on shared understandings and hard data, Spirit will assist the City in identifying success metrics that will in turn be achieved with policy recommendations and specific strategies to achieve them. Spirit recommends that the overall project objectives be SMART (Specific, Measurable, Achievable, Realistic, and Time-Bound) in nature, and will build a tracking system to support ongoing progress towards the goals with the least effort needed from City staff. The stakeholder groups will be broadened as directed, but Spirit anticipates that they would include utility providers, community groups and gatekeepers, industry representatives, and key members of regional public agencies. As progress continues in tandem on the technical efforts to best measure key environmental indicators, Spirit will facilitate the process to coalesce around those policies best suited to drive long-term community value as well as organizationally for the City. These recommendations would be designed specifically enough to align future sub-plans on common definitions of success, but flexible enough to provide various pathways to get there.



Spirit's approach relies on deep experience working with communities within Colorado and nationally, and a healthy respect for the best practices developed on national levels and in Colorado. Spirit staff are actively working with sustainability efforts in Jefferson County, Adams County, Arvada, Wheat Ridge, and Westminster, and have worked with numerous other communities along the Front Range. Bringing the knowledge from those communities to bear, especially seeing where they struggled as well as found success, will enable the City to "short cut" the process in some cases. State efforts such as the Colorado Water Plan, the Colorado Climate Plan, Colorado EV Plan 2020 and the Greenhouse Gas Pollution Reduction Roadmap (draft released Sep. 30, 2020) can all be referenced, aligned with as practical, and mined for best practices and implementation support. Applied knowledge of national best practice frameworks including LEED for Cities and Communities, the Envision rating system, LEED for neighborhoods and buildings, and the American Planning Association's Comprehensive Plan Standards for Sustaining Places will allow Spirit to evaluate and recommend strategies with strong support systems. Alignment with appropriate frameworks can benefit the City by allowing for an ease of benchmarking, reliance on external parties for updates as well as certifications, and can enable access to technical support for City staff.

Spirit staff and our partners have experience across the spectrum of sustainability, from developing ISO 14001 Environmental Management Systems, achieving green building certifications, managing statewide energy efficiency programs, and developing comprehensive city sustainability plans. In addition to core Spirit staff and our team members, Spirit has additional teaming understandings in place whereby additional resources can be brought in as needed. For example, Jerry Tinianow, former Chief Sustainability Officer of the City and County of Denver, has a strong working relationship with the Spirit team and has agreed in principle to mobilize quickly and support the organizational sustainability component if needed. Facilitating community input and engaging with community members to incorporate concerns and build awareness and support is a crucial part of a successful process, and Spirit will work with city staff, community gatekeepers, and any of our partners to develop inclusive processes to capture genuine input that can be incorporated into the policy recommendations.

Specific responses to each of the topics identified in the RFP are as follows:

### ***Community-wide waste reduction strategies***

Over the past two years, Spirit project engineer and chair of the Arvada Sustainability Advisory Committee, Keegan Conley, oversaw the passage of a single hauler waste and recycling ordinance in Arvada while seeing similar efforts fail in nearby Westminster and Lakewood. Spirit staff members have extensive experience in industrial and municipal waste consulting as it relates to waste minimization initiatives and can support the City in identifying the most successful approaches to working with both the general community as well as specific waste generators to have the greatest waste reduction impact.

### ***Community-wide water reduction strategies***

Spirit proposes to couple knowledge of best practices with the extensive resources available in Colorado to support water conservation efforts and to promote water reuse where possible. Looking at development regulations in regards to landscaping and indoor water use are going to be effective ways to curb water use in new construction in the City, while working with existing users and water providers limit water waste may provide even greater reductions in water consumption. State resources including the Colorado Water Plan, the recently released Growing Water Smart metrics, and technical assistance provided by the Department of Local Affairs ("DOLA") can all help the City look at development regulations, select appropriate success metrics, triggers and indicators, and work with water providers to help residents and businesses save water.

### ***Community-wide energy efficiency strategies***

Spirit will look first and foremost to leverage relationships and common interests with United Power and Xcel Energy in order to accelerate existing energy efficiency programs and rebate opportunities. Spirit will be able to identify the largest community energy users and leverage relationships to explore ways for all parties to capitalize on reduced operational costs, reduced emissions, and increased political capital and/or social license to operate. Spirit project manager Conor Merrigan spent the last five years before coming to Spirit focused largely on developing and supporting implementation for energy action plans for cities and counties along the Front Range as part of Xcel Energy's Partners in Energy program.

### ***Resource efficiency strategies in municipal operations***

Spirit will provide a discrete analysis of municipal operations in order to identify the most cost-effective efficiency strategies. Strategically approaching opportunities will allow for example, the City to replace aging fleet assets with electric vehicles over time, unless a current return on investment analysis demonstrates a clear cost savings in a more wholesale replacement. Should the City look to explore options such as performance contracting to make major capital investments with no upfront costs, Spirit staff have extensive experience guiding public agencies through that process. A municipal sustainability action plan can be created to the extent desired, and Spirit can draw on



existing templates and experience to provide an effective but low cost internal working document and tool or a more polished version depending on what the City prefers.

### ***Green building incentive strategies***

Spirit staff has extensive experience working with both regulatory and incentive-based approaches to a wide suite of green building implementations. Whether the City wishes to explore incentives for LEED, specific aspects of green building such as waste or carbon reduction, or ways to get marquee top performers built in the City, Spirit can help craft policies to get there. Recent and ongoing work in Westminster where Spirit is helping to act as an “owner’s representative” for the City to refine and clarify their LEED silver requirements for their Downtown Westminster projects is a clear precedent and contains many valuable experiences for the City.

### ***Environmental review of land use impacts***

Spirit staff has provided on the ground environmental services for many developments and is experienced with the review processes. As Spirit and the City engage with land use review staff to identify and explore key environmental issues they face, it’s anticipated there will be some natural topics that emerge as priorities such as water quality, air quality, wetlands, and habitat impacts. Spirit is currently engaged reviewing the environmental impacts of land use processes in Adams County as part of their Comprehensive Plan update as well as the Parks, Open Space, and Trails Plan.

### ***Overall environmental review framework for land development***

Expansion of City facilities and/or community land development may require compliance with Section 404 of the Clean Water Act, Section 7 of the Endangered Species Act, and Section 106 of the National Historic Preservation Act. Something as simple as moving dirt can trigger the need for a permit. The Spirit Team is experienced and ready to assist the City with developing policies to support the following tasks: wetland and waterbody delineations; threatened and endangered species surveys; cultural resource surveys; agency correspondence; permitting strategy and preparation; and compliance.

### ***Hazard mitigation strategies and techniques***

Hazardous sites require specific mitigation efforts and can be applied with discretion depending on contaminants and compliance requirements. Spirit staff is familiar with hazardous site compliance and can provide recommendations on best practices, both conventional and innovative, to address these sites. Some of the more innovative approaches could include myco-remediation, uptake via specific plantings, and bioremediation. Additionally, the Spirit Team has personnel experienced in conducting Phase II ESAs to test for soil and groundwater contamination and to provide corrective action. Our team provides an innovative and cost conscientious approach for field screening for chemicals of concern through an analytical data screening process that is time efficient and cost effective. Spirit’s team is also quite experienced in addressing hazardous sites in proximity to public areas and minimizing citizen exposure, and will bring those lessons to bear in assisting the City develop sound policies and strategies.

### ***Brownfield management***

Interfacing with the Brownfields program managed by CDPHE requires a coordinated approach and careful consideration to determine best value of the contaminated site and potential future uses to the community. The Derby area redevelopment appears to be completed, so Spirit would seek to apply lessons learned from that project to future Brownfield project efforts and consider the benefits of local designation versus state/federal designation. Spirit assists clients in achieving closure status with regulatory agencies, by identifying appropriate alternative land uses based on level of contamination, and by providing a holistic approach to brownfield management that encompasses community values. Spirit also guides clients and communities through the policy and strategy processes necessary to implement a framework for completing successful and meaningful future community redevelopment efforts.

### ***Renewable energy incentives***

Renewable energy generation incentivization requires a strategic approach given the role of utilities, appropriateness for different use types, and importance for community resiliency. At the community scale, coupling incentives with opportunities for storage and generation that can serve the community in times of need provides some of the most directly related benefits to align with appropriate incentives. Thinking about sites like the National Western Center with capacity to accommodate large numbers of residents or schools for incentives may provide the City with a greater return on incentives than more generalized incentives layered on the already low cost of solar energy.

### ***Geology and soil management strategies***

Spirit is aware that construction, development, and redevelopment activities may significantly impact soils and potentially sensitive geologic features as much as agricultural land use activities and catastrophic events such as flooding can. Even more importantly, Spirit’s



team recognizes that all of these potential impacts may be encountered within a growing community and may need to be managed simultaneously in an integrated framework. We have assisted municipalities and communities with development and implementation of comprehensive pre-construction/pre-development review procedures and land use, erosion control, and sediment management guidelines and ordinances. Spirit also has extensive experience in identifying appropriate erosion and sediment controls for development and redevelopment activities to assist in soil management and to protect local water quality. Our knowledgeable multidisciplinary team can successfully help you navigate the complex technical, regulatory, and often emotionally-charged issues associated with completing projects involving sensitive geologic features and/or critical natural resources. We have expertise in developing and implementing niche resource protection plans such as Noxious Weed Control Plans, Edwards Aquifer Protection Plans, and similar program plans.

## **AIR QUALITY MONITORING AND POLICY RECOMMENDATION SERVICES**

### *Inventory of community-wide and area-specific air quality impacts of concern*

ARS routinely applies our technical skills to address community-wide air quality impacts. ARS has a broad range of air quality-related skills that help define air quality impact levels, including air quality and meteorological monitoring, air quality modeling, emissions quantification, emissions control technology assessment, etc. These skills will be brought to bear as needed to fulfill any air quality-related task order issued by the City, including creating new, or modifying existing, emission inventories and assessing the resulting air quality impacts.

As part of routine air compliance and air permitting work, ARS quantifies and addresses Clean Air Act criteria pollutants, greenhouse gas pollutants, hazardous air pollutants, and other pollutants of specific concern including those associated with odor issues. Many times, our projects include air quality modeling to determine if emissions from various sources combine and interact with ongoing weather conditions to create negative impacts.

ARS has a long history of providing air quality support to communities within Colorado. ARS staff participated in the development of the original Fort Collins Air Quality Plan in the 1980s, and we participated in collection of air quality data in going back to the Denver Brown Cloud Study. More recently, we have collected air quality data as part of investigations into the ongoing ozone issues on Colorado's Front Range. Earlier this year, ARS developed and implemented an air monitoring study targeting air emissions associated with operations around the Aspen Pitkin County Airport. ARS currently assists communities within Colorado to address air quality problems, including the City of Fort Collins, Garfield County, Pitkin County (Aspen) and others. With each client, ARS works closely with agency staff and other interested stakeholders to identify the problem of interest and then develops a scientifically defensible and cost-effective solution targeting the specific issue of concern.

### *Develop community-wide air quality monitoring plan*

ARS' technical strength is our expertise in air quality and meteorological monitoring. We can develop and implement an air monitoring strategy that addresses the specific needs of the City, following from review of emissions, air quality impact analysis, and collaboration with the City.

We will develop detailed monitoring plans and associated quality assurance plans to ensure that all data meet established scientific guidelines and are collected with known accuracy and precision. ARS can plan all aspects of any air monitoring project including:

- Selection of monitor locations
- Selection of monitoring technology
- Oversee the lease/purchase of equipment
- Installation, calibration and operation of monitoring systems
- Collection and validation of monitoring data
- Presentation of monitoring results

Additionally, ARS can provide public access to validated data via the Internet or other means, as needed or requested.

If the monitoring strategy targets emissions from specific industries or facilities such as oil and gas operations, ARS will rely on our past experience of conducting monitoring for this industry. For example, we have successfully applied EPA Method TO-15 sampling to collect information on speciated organics present in the air around oil and gas operations. Also, ARS recently designed and constructed a mobile air monitoring station currently in use by one oil and gas operator to measure air quality conditions around its operations. The ARS project manager for this project has worked for over 30 years primarily within the oil and gas, oil refining, and petrochemical industrial sectors.



ARS' skills and experience with air monitoring and with the oil and gas industry can be put to use by the City through writing air monitoring guidelines and/or providing technical reviews of monitoring plans submitted to comply with the City's oil and gas regulations.

In all monitoring plans, ARS addresses the project-specific needs including scope, budget, timing, and other important factors. ARS staff work with a variety of monitoring equipment and systems and we understand the pro/cons of different monitoring approaches. In the end, ARS' goal is to plan and implement the best and most cost-effective monitoring approach to meet project-specific objectives.

### ***Community GHG emissions inventory, reduction targets, timeframes and mitigation strategies***

ARS notes that this particular work element overlaps with similar work described under the Environmental Policy Development scope. Any work assigned to ARS under this task will be coordinated with the contractor selected for the Environmental Policy Development task to ensure that the resources under this element are employed in the most cost-effective approach.

ARS' relevant technical skills include quantification and reporting of GHG emissions for a wide range of sources, including combustion sources within commerce and industry as well as mobile sources. ARS is also skilled with various life-cycle-analysis tools that quantify and address GHG emissions and impacts, such as the EPA GREET model.

Also, ARS experience includes evaluating various strategies for mitigating GHG emissions and providing recommendations to clients on how best to reduce GHG emission and associated impacts. For example, ARS' clients in the fuel ethanol industry are required under the Clean Air Act to document that ethanol production at an individual plant has life-cycle GHG emissions below that of conventional gasoline. ARS has developed the analytical tools to quantify life-cycle GHG emissions and provide documentation of the GHG emissions "score" in order to secure US EPA for approval of the plant production pathway.

### ***Air quality guidelines to reduce HAPs, PM, GHGs, odor, and other substances of significant health concern***

ARS is familiar with various emissions reduction strategies for minimizing air emissions to the atmosphere. ARS advises clients on options for reducing pollutants from a variety of pollutant source categories. In some cases, the pollutant reductions are driven by regulatory programs such as New Source Performance Standards ("NSPS"), Best Available Control Technology ("BACT"), Reasonably Available Control Technology ("RACT"), and/or Lowest Achievable Emissions Rate ("LAER"). ARS has performed pollutant control evaluations under these standards as part of air permitting for a large number of clients. ARS has also reviewed BACT and other control technology decisions on behalf of government and NGO clients. For example, ARS reviewed a draft air permit for an asphalt batch plant on behalf of Larimer County/City of Fort Collins and recommended improvements in the pollution controls that were incorporated into the final permit issued by CDPHE. ARS has also written and prepared fugitive dust control plans for facilities where fugitive dust emissions are a primary source of overall emissions, like surface/underground mines and steel mills.

The above skills are transferrable to the City project through development of recommended emissions control strategies and best management practices for implementation by emissions sources located in the City.

### ***Thresholds of significance and screening for projects and plans***

When monitoring projects are focused specifically on public health issues, ARS' work typically involves assessing air quality concentrations to determine if the measured/predicted air quality levels are safe to members of the general public. In some cases, the acceptable levels are well established under the Clean Air Act through the National Ambient Air Quality Standards ("NAAQS"). However, for pollutants not regulated under the NAAQS, ARS reviews the available scientific literature and other information sources to help define acceptable levels for exposure to air pollution. For example, sources describing inhalation exposure to air pollutants include US EPA Reference Concentrations ("RfC") and Guidelines for Immediately Dangerous to Life and Health ("IDLH"). Where the exposure may occur from possible carcinogenic pollutants, the approach is often to use "unit risk factors" to calculate an excess cancer risk to the general population.

ARS has applied this and similar approaches on a project we have completed for the last several years at the licensed RCRA/TSCA incinerator operated by Clean Harbors Environmental Services near the community of Kimball, Nebraska. These skills are also available to support the V City with development of acceptable air quality screening levels and/or significance concentrations.

### ***Air quality modeling guidelines***

ARS's project team members have extensive experience performing air quality modeling projects for various clients, as well as reviewing work performed by others (both the written reports and the modeling input/output digital files). ARS staff are also familiar with current modeling guidelines in effect for both the State of Colorado and the US EPA and we routinely apply air quality models such as the AERMOD model to assess air quality impacts from industrial, commercial, and mobile sources. One member of the ARS project team is also recognized as a technical expert in air quality modeling and provides Expert Witness support in legal and administrative proceedings.



where air quality modeling and other air quality issues are at issue.

In addition, ARS currently holds a contract with Pinal County Air Quality District (“PCAQCD”) in Arizona where ARS supplements District staff by conducting technical reviews of air quality dispersion modeling protocols and air quality modeling submitted by industrial/commercial sources in support of permit applications.

ARS’ air quality modeling skills are available to the City as needed to perform technical tasks such as preparing air modeling guidelines and reviewing air quality modeling data submitted by others.

### ***Community GHG emissions inventory, reduction targets, timeframes and mitigation strategies***

As a natural connection to the Environmental Policy Development scope, Spirit will lead this task drawing on a background of GHG reporting and calculations for individual facilities and knowledge and experience preparing community-wide GHG Inventories and Climate Action Plans. One strategy available to local governments being adopted by peers on the Front Range is to use the suite of tools available through ICLEI for both the inventory and the reduction planning. This provides long term benefits in terms of standardization, benchmarking and technical assistance for the City and provides a lower cost resource to complete and maintain the inventory. Regardless of the mechanism desired, Spirit will capture emissions using GPC aligned methodologies at the BASIC level community wide and account for emissions generated within the geographic boundaries of the City at a minimum and can include more comprehensive or selected scope 1, 2, and 3 emissions as desired. Spirit will evaluate the magnitude of anticipated additional calculations for BASIC+ reporting and advise the City on the value relative to effort of completing that effort. Spirit will then build out future scenarios with reduction strategies and their relative impacts to help the City as part of their overall evaluation of environmental policies and build out the highest priority strategies.

### ***Establishment of Oil and Gas Air Quality Plan Submittal Standards***

ARS’ project team members have extensive experience with clients in various industries, including the oil and gas industry. Our proposed project team is comprised of key staff from our Environmental Compliance Section, and our Air Quality Monitoring Section. ARS’ Environmental Compliance Section focuses on air quality work such as air permitting, emissions quantification and analysis, control technology review and recommendation, and air quality dispersion modeling at both the screening and the detailed analysis levels. Staff in this section also provide expert witness testimony and participate in rulemaking/policy efforts related to air quality. ARS’ Monitoring Section excels at all aspects of air quality monitoring, including the design and specification of the critical elements of an air monitoring project. Thus, ARS is able to assist the City with establishing the elements of oil and gas air quality plans to be submitted to the City. These elements, as noted in the RFP, would include:

- a table of targeted compounds;
- defined regulatory thresholds for acceptable monitoring criteria;
- acceptable methods of sampling site location and technology deployment;
- desired frequency and duration of monitoring;
- definition and requirement of continuous versus periodic monitoring;
- minimum sampling duration;
- quality assurance and quality control requirements and procedures; and
- Identification of potential public health concerns.

ARS would rely on its expertise and past experience, as well as consultation with the City, assessment of existing state and federal regulations, the results of emission inventory analysis, air quality impact analyses, and the results of any air quality monitoring program (if undertaken) to help create these submittal standards.

## WATER QUALITY POLICY RECOMMENDATION AND MONITORING SERVICES

Spirit will work with WWE to provide water quality monitoring services, technical expertise, and policy recommendations related to water quality and watershed improvement strategies at the sub-watershed level (HUCs 8-12). WWE understand that the City's primary areas of focus of monitoring efforts and policy recommendations will be in the industrialized southern areas of Commerce City, particularly along Sand Creek and the South Platte River, as well as new growth and development areas in the city's Northern Range.

To effectively provide these services, Spirit and WWE will build upon the following:

- Long-term monitoring data on the South Platte River that has been conducted by Metro Wastewater and South Platte CURE partners, as well as the Colorado Water Quality Control Division.
- Known water quality impairments on Colorado's 2020 303(d) List, with examples including *E. coli* and selenium on Sand Creek (Segment COSPUS16i) and *E. coli* on the South Platte River.
- An understanding of naturally-occurring pollutants such as selenium, temporary stream standard modifications for arsenic, and site-specific standards for parameters such as dissolved oxygen downstream of Denver International Airport.
- The City's municipal separate stormwater system ("MS4") permit requirements, which are expected to become more rigorous in the next permit renewal. For example, dry weather outfall sampling for parameters such as phosphorus and *E. coli* may be required, among other requirements.
- Monitoring requirements and stormwater management activities related to the Barr-Lake pH and dissolved oxygen Total Maximum Daily Load ("TMDL"), which targets reduction of phosphorus in urban runoff (and other sources).
- Awareness that lack of stormwater outfalls to receiving waters and reliance on stormwater retention in some developed areas are significant stormwater management challenges facing the City.
- Opportunities for stormwater infiltration best practice implementation, particularly areas with sandy soils, along with an awareness that infiltration should not be practiced in areas of known soil contamination.
- In-depth familiarity with the City's forthcoming revised Storm Drainage Criteria Manual, including both new policies and recommended stormwater control measures (also known as best management practices).
- Understanding of the importance of integration of master drainage planning completed by the City and Mile High Flood District ("MHFD"), particularly on tributaries such as First, Second and Third Creeks in developing and/or redeveloping areas.

With this background, Spirit and WWE are well equipped to provide the following services to the City:

### *Development of LID stormwater infrastructure guidelines and BMPs*

The project team will build upon recently developed guideline in the Commerce City's forthcoming Storm Drainage Criteria Manual related to stormwater control measures, along with Volume 3 of Mile High Flood District's Urban Storm Drainage Criteria Manual. The City and County of Denver has also completed detailed guidance related to Green Infrastructure implementation that would be useful to the City.

### *Water quality and habitat policy recommendations; review of land development code*

This will be an important task related to integrating criteria in the City's Storm Drainage Criteria Manual that address stormwater quality requirements. Spirit and WWE have experience reviewing land development codes.

### *Point source and non-point source pollution causes, groundwater quality assessment, policy recommendations and remediation strategies*

As part of this effort focused on the southern industrialized portion of Commerce City, it will be important to differentiate between naturally occurring elevated concentrations of pollutants such as selenium and sulfate relative to human-caused sources that can be controlled (e.g., leaking sanitary sewers related to *E. coli*). Additionally, in some cases, stream standards for parameters such as arsenic may not be attainable. Other emerging concerns related to PFAS (related to fire-fighting foam) will be a priority for the City, particularly given increased attention to PFAS issues by the Colorado Water Quality Control Division.

### *Water quality management recommendations for First, Second, and Third Creek*

These will need to be closely integrated with drainage master plans co-developed by the City and MHFD. WWE has direct drainage planning experience with these tributaries and can hit the ground running.



### *Potential future capital investments, green infrastructure projects, or other water quality efforts*

Such project opportunities are often related to City-owned property and rights-of-way along roadways, and WWE and Spirit have extensive experience with right-of-way projects that will inform scoping these projects out. In addition, as these projects are identified, the design engineering, siting considerations, and location analyses can all be provided by the team. Water quality improvements will be targeted and designed with consideration to comprehensive water flows in the areas.

### *Development of a water quality monitoring plan*

These should be integrated with water quality concerns related to the Barr-Milton TMDL, 303(d) impairment listings and MS4 programmatic objectives. The team will identify appropriate monitoring parameters and strategies to provide actionable data for Commerce City.

For water quality monitoring activities, Spirit and WWE are able to conduct monitoring to support the policy recommendations listed above. Based on our understanding of existing monitoring conducted by a variety of entities in the area, we can work with the City to develop monitoring plans and conduct monitoring activities to efficiently answer water quality questions and support the City's MS4 program requirements. We have supported several local area governments in their monitoring programs, particularly related to stormwater BMP (e.g., bioretention, extended detention basins) monitoring, dry weather outfall screening, and instream monitoring to identify pollutant sources. We will be able to fulfill the City's criteria for monitoring including:

- Water quality sampling and monitoring at set frequencies and locations.
- Coordination of laboratory analysis of samples at a certified analytical laboratory (WWE uses Test America).
- Coordination of waste and wastewater disposal from sampling (usually handled by the contract laboratory).
- Data analysis, report writing capabilities, and report preparation (our team is experienced producing routine annual water quality reports, stormwater BMP performance analysis and special studies for municipalities).

## **COMMUNITY ENGAGEMENT APPROACH**

An inclusive community engagement and outreach plan will be developed in partnership with the City utilizing a mixture of internal and external resources. Spirit has informal agreements in place with partners such as Bang the Table! and Bilingual Communications Services, LLC, who are both familiar with the City and can quickly mobilize necessary resources depending on the development of the plan. Spirit will work with City staff to develop an inclusive process with targeted outreach enabling community members to provide input where most valuable, follow along with project updates, and receive responses and feedback for any information they are willing to share.

Working with stakeholders including HOAs, faith organizations, industrial operators, developers, non-profits, and other key figures can be accomplished in various methods, with some remaining engaged throughout the process and others being able to provide input on specific items most affecting them. Xcel Energy's program "Partners in Energy" may provide a template for overall community engagement whereby key stakeholders are invited to a discrete series of planning meetings and then during plan implementation there is a greater degree of engagement based on the needs identified during the planning phase.

### *Stakeholder engagement for strategy finalization*

Experience has taught that providing targeted opportunities for engagement when there are concrete strategies to discuss is much more effective than engaging early in the development process. Also important is meeting people where they are already gathered. Special districts in particular have some regular meetings where consultants and staff members can solicit feedback, so quickly ascertaining when and how the special districts most impacted by these policies are meeting will enable effective communication and feedback. Non-profits and community organizations can generally be coordinated with a bit more organically, though in times of COVID-19 there may be additional need to schedule digital outreach sessions and provide more of an online presence. Members of the Spirit staff and our partners have experience curating and using websites and other digital communication interfaces to solicit and respond to various stakeholder groups.

### *Working groups, advisory committees, community meetings, and workshops*

Following the advisory committee/working group model can be effective as long as the proper representatives are engaged. Spirit will work with City staff early in the engagement period to identify a list of potential participants, incentives to encourage participation, and a clear and flexible process to ensure people can attend and provide input as it makes sense for their specific circumstances. Spirit has a strong network of local resources and has led enough working groups in the past five years to hone in on most effective participants and techniques. Spirit will present a more defined outline of this process early in our process and can clarify prior to contracting if so desired.





Spirit team members practice a technique known as participatory facilitation, whereby staff are both facilitating the discussion, but also engaged with a particular viewpoint and not completely objective. This allows for more robust discussions and has yielded better outcomes than pure facilitation. Additional strategies that have been found effective include: meeting formats that allow for specific mark-ups of relatable strategies, small group interactions, anonymous polling, and providing the ability to rate and prioritize items. These strategies can be employed in all of the desired formats, and Spirit can work with the project manager to identify which are appropriate when.

### *Process for prioritizing insights from under represented/marginalized communities*

This will be developed as part of the plan, but the team will strive to meet people where they are, provide a variety of outreach methods, and even hold more informal meetings in local community gathering places. Team members will look for and present opportunities for strategy adjustments where appropriate and ensure that community members feel heard.

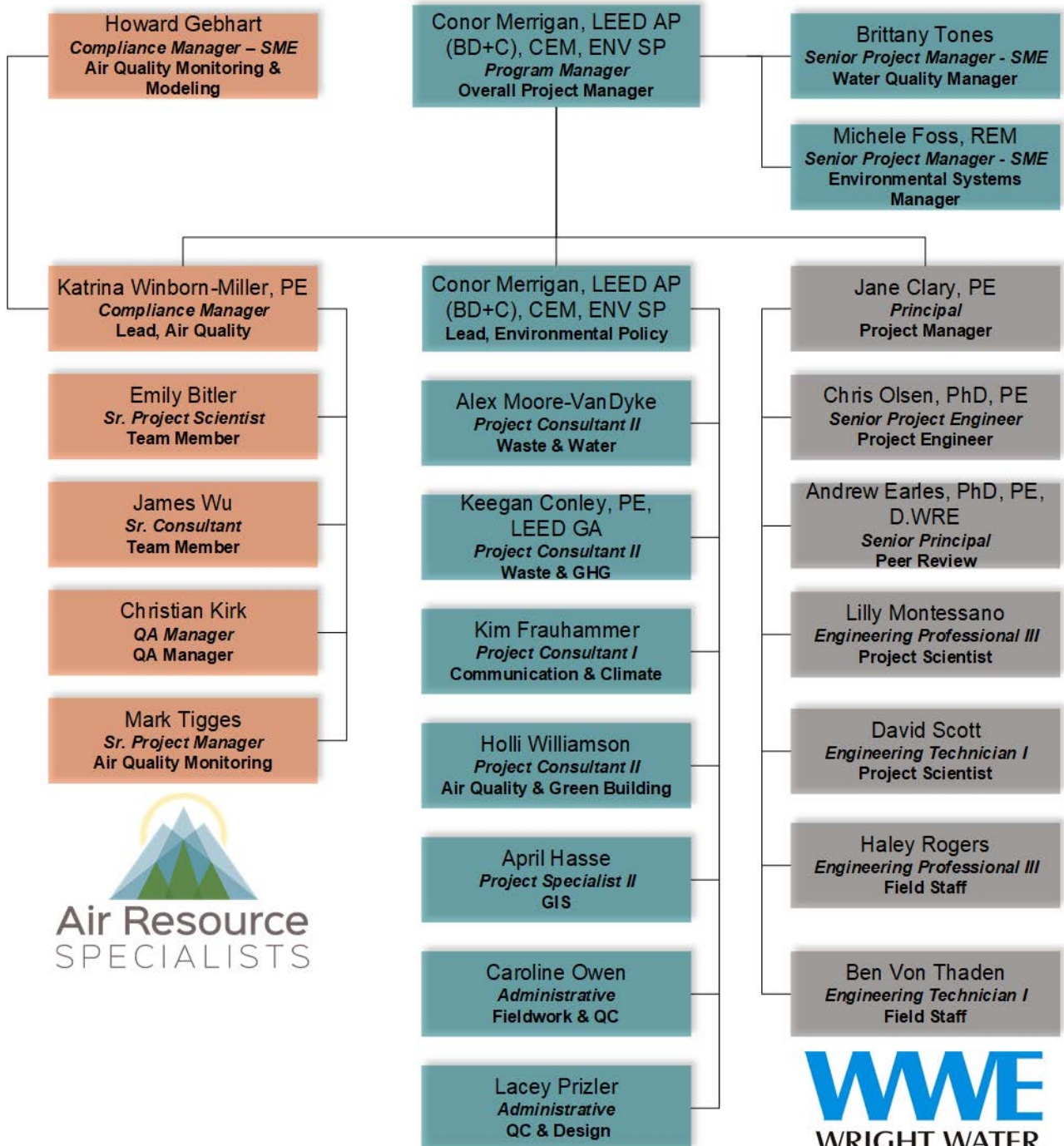
### *Community education campaign*

Once final policy recommendations are determined, engaging key stakeholders and offering ways to support them and their agendas can increase buy-in and demonstrate an alignment of desires that can motivate ongoing participation. Many of the changes are likely to occur at the land use and regulatory levels, but especially those impacting the community and actions undertaken by the City internally can be shared amongst peer communities, within the community as things to be proud of, and to let people know what additional resources allow them to save resources and share their stories. Spirit will consistently look for good stories throughout the engagement, follow up immediately when opportunities present themselves and be prepared to capture them with appropriate releases, follow-up information, etc.



MEET OUR TEAM

TEAM ORGANIZATION CHART





## SPIRIT ENVIRONMENTAL COMPANY OVERVIEW

Spirit Environmental offers multimedia environmental consulting services to a variety of clients with programs in air quality, water, waste, natural and cultural resources, land development, and sustainability. We provide dynamic solutions based on strong analytical capabilities resulting in the highest quality deliverables to our partners. We strive to balance innovative approaches with practical application and work with our clients to provide custom solutions that align with their values. Our team focuses on building mutually beneficial long-term relationships founded on trust. We achieve this by fostering a caring and responsible culture based on the core values of integrity, people, excellence, and continuous improvement. Together, our philosophy and values guide our internal and external interactions to ensure that our services and product quality exceed expectations.

Spirit was founded in 2005 with four air quality consultants in Houston, and has grown to over 50 team members with offices in Colorado, Texas, and Louisiana. Our services have evolved over the years and grown to include a full spectrum of environmental consulting services. Our culture embraces values of sustainability, with a focus on environmental impacts and a strong desire to help our clients set and achieve positive results through science-based and innovative approaches. Our clients range from nonprofit solar companies to large oil companies, municipalities and regulatory agencies. We have maintained a strong technical expertise as we continue to shift to helping discuss the nuance and context associated with strategic planning efforts and stakeholder engagement.

## TEAM PROFILES



**Conor Merrigan, LEED AP (BD+C), CEM, ENV SP, Program Manager, Lead, Environmental Policy**, manages the Sustainability program at Spirit and will be the project manager for the Commerce City effort. He has over 12 years of experience in large scale sustainability planning including municipal sustainability plans, energy action plans, sustainability management plans, climate action plans and sustainability integration into comprehensive planning. His focus is largely on the metrics of sustainability and plan implementation, working with various sustainability rating and reporting frameworks, developing strategic plans at the corporate and government levels, and finding ways to help clients effectively realize significant positive impacts. Conor brings a wealth of experience in facilitating stakeholders

to reach optimal solutions and managing projects to deliver added value while remaining on schedule and budget.

Prior to joining Spirit, Conor worked for two nationally respected sustainability consulting firms, operated his own boutique consulting firm, served the State of Colorado managing the commercial buildings energy efficiency program, and built eco-friendly homes. He is the co-chair of the American Planning Association Colorado Chapter’s Sustainability Committee, a member of the Jefferson County Sustainability Committee, serves on a working group for LEED for Cities, and is a regular contributor and speaker at conferences and in industry publications to advance thought leadership in sustainability.

### Relative Project Experience:

- City of Santa Fe, NM – 25 Year Sustainability Plan
- Partners In Energy (Xcel Energy), Community Energy Plans – Jefferson County, Wheat Ridge, Louisville, Lafayette, and Erie, CO
- City of Longmont, CO – Sustainability Plan
- Kansas City, MO – Missouri Greenhouse Gas Inventory and Climate Action Plan
- National Western Center, CO – Sustainability Services and LEED Campus approach



**Brittany Tones, Senior Project Manager - SME, Water Quality Manager**, has provided multimedia consulting services since 2006 and is the compliance team lead. Currently, she serves as a senior project manager providing multimedia consulting support to municipalities, ports, and tenants including those with operations in the following industries: upstream and midstream oil and gas, aggregate companies, pipe manufacturing/storage, crude oil terminals, chemical manufacturers, coke handling facilities, and food distribution facilities. Brittany has extensive experience in providing consulting support to the Port of Houston Authority, including functioning as the Principal-in-Charge on PHA’s 2-year stormwater management contract during 2018-2020, and is also currently serving as the Principal/Client Manager to

Port Freeport for general environmental services. Additionally, she has assisted the City of Houston as the technical lead on the TMDL Support Contract, served as the MS4/Construction Stormwater specialist for TXDOT on the statewide stormwater contract, and has assisted various cities/districts providing Phase I and II MS4 support on all MCMs. She is an experienced environmental consultant in construction, municipal, and industrial stormwater compliance and has also provided expert witness assistance and support for stormwater litigation. Her



experience in municipal/MS4 stormwater permitting includes annual reporting, IDDE monitoring and manual preparation, illicit discharge and water quality investigations, SWMP/SWQMP preparation and updates, TMDL consultation, bacteria source tracking and sampling studies, public education/outreach, preparation of ordinances and guidelines for LID and BMPs, and developing water quality monitoring plans. Brittany's experience in construction stormwater compliance includes preparation of construction SWPPPs, Erosion and Sediment Control Plans, and BMP Plans, preparation of permit applications, performing weekly inspections, providing and preparation stormwater training for clients on appropriate BMP selection and inspections, construction stormwater compliance assessments, consultation on selection of BMPs, consultation with municipalities on construction stormwater oversight programs, and previously serving as a Certified Professional in Erosion and Sediment Control. Brittany's experience also includes participating as a workgroup member of the Bacteria Implementation Group of the greater Houston area. This stakeholder group was instrumental for preparation of an integrated TMDL Implementation Plan for the impairment of bacteria in the surface water bodies within a seven-county region.

**Relative Project Experience:**

- PHA Stormwater Program Management – Principal-in-Charge
- Port Freeport General Environmental Services – Principal-in-Charge
- City of Houston TMDL Support, Bacteria Source Tracking Study, 25 SPCC Plans, and Phase I ESAs
- Texas Department of Transportation State-Wide Stormwater Contract, Construction and MS4 Specialist
- Various Assistance with Phase I and Phase II MS4 communities/districts/universities



**Michele Foss, REM, Senior Project Manager - SME, Environmental Systems Manager**, has provided multimedia consulting services since 1998. Currently, she serves as a senior project manager providing consulting support for a wide variety of industries and service sectors in 22 states, Mexico, and Canada, including hospitals, municipalities, and governmental entities. Michele's municipal stormwater experience includes development and assistance in implementation of several SWMPs and Annual Report Preparation for Phase II MS4s, preparation and consultation on community education and outreach materials for stormwater quality and water conservation education, and development of draft municipal ordinances for regulating activities which impact community water resources. She also

performs IDDE monitoring, TMDL consultations, and evaluates municipal BMP effectiveness. Michele's wastewater experience includes preparation of wastewater permit applications for municipalities and development of appropriate municipal water and wastewater issue management strategies including water audits, conservation programs, and financial incentives. Her project experience includes design assistance and amendment authorizations for space-limited facilities in highly urbanized areas, and she has successfully obtained regulatory agency authorization for indirect non-potable reuse of treated wastewater effluent for several municipalities. Michele frequently audits compliance with industrial and municipal stormwater and wastewater permits in numerous states and help develops Edwards Aquifer Protection Plans and similar niche water quality protection plans.

Michele also supports clients in their waste minimization and overall sustainability program strategization, planning, and implementation efforts. She has conducted waste minimization planning and evaluations for dozens of industrial and municipal clients, including waste audits, and prepared P2 Plans to document and drive waste minimization activities. She also assists clients in impacts and assessment evaluations for environmental management program goal development and tracking and performs third-party compliance assessments in support of management system certifications.

**Relative Project Experience:**

- City of Southside Place Wastewater and Stormwater Permitting and Compliance, Drinking Water Compliance; Corrective Action for Waste Management Unit (Incinerator) Removal and Closure; Public Outreach Assistance; Due Diligence, Legal and Enforcement Support, Sustainability Planning
- Assistance with various Phase II Municipalities with Stormwater BMPs, education and outreach efforts, and water quality pollution prevention ordinances
- Waste audit, pollution prevention planning, development and assistance with implementation of returnable packaging program, stormwater compliance assistance, and ISO 14001 management system design, implementation, and ongoing EMS support for a global lift truck manufacturer
- Regulatory support, including waste management, for Houston Methodist Hospital System



**Keegan Conley, PE, LEED GA, Project Consultant II, Waste & GHG**, air quality and GHG specialist has prepared calculations for air emission recordkeeping and reporting to satisfy the US EPA Greenhouse Gas Reporting Program and Colorado’s Department of Public Health and Environment Regulation No. 7, among other continuing compliance tasks, required periodic reports, and emission inventories. Keegan has experience with emission modeling software such as ProMax, GRI-GLYCalc, E&P Tanks, and environmental compliance software ACTS.

In addition to air quality consulting, Keegan provides sustainability services to cities and general industry. Relevant project experience includes assisting the development of Sustainability Management Plans (“SMP”), preparing corporate sustainability emissions reporting, and LEED green building projects. Additionally, as chair of the Arvada Sustainability Advisory Committee (“ASAC”), Keegan has experience leading a volunteer committee, reviewing and developing metrics of a greenhouse gas inventory at the city level, primary lead turning committee plans into actions and representing Arvada and the Sustainability Committee in sustainability-oriented public events.



**Alex Moore-VanDyke, Project Consultant II, Water & Water**, has provided multimedia environmental compliance and consulting support since 2013. Currently, she serves as a Project Consultant, specializing in compliance permitting for a variety of industries, with experience in annual reporting, waste and sustainability auditing, stormwater and wastewater, and project implementation. Her work includes sustainable procurement, waste stream analysis, federal and state annual reporting stormwater permitting, P2 implementation, environmental footprint assessments, and spill response and reporting.

Her experience in stormwater compliance includes conducting quarterly visual monitoring, routine facility inspections, and benchmark exceedance investigations, preparing stormwater analytical summary letters and benchmark exceedance letters, providing annual employee training, performing benchmark and NEL sampling, updating and revising plans, preparing renewal permit applications and No-Exposure certifications, and providing consultation on erosion, sediment, and structural controls. Prior to joining Spirit, Alex served as an environmental specialist for a federal facility, providing day-to-day reporting, inspecting, and sampling regarding waste, water, and air compliance. She was also part of the Sustainability Team, helping to communicate sustainability goals across campus, review sustainable acquisition documentation, complete waste diversion metrics, and co-manage the compost program. Her previous experience gives her a different view from that of a traditional consultant, making her a valuable asset to the Spirit team.

## AIR RESOURCE SPECIALISTS, INC. COMPANY OVERVIEW

Air Resource Specialists, Inc. has been a leader in the field of air quality for nearly 40 years, making our name in the beginning by operating national visibility and criteria pollutant networks. Since 1982, ARS has successfully conducted a wide range of air quality-related monitoring, auditing, research and environmental compliance projects for federal, state, municipal, and tribal agencies, government-sponsored regional planning organizations, and industrial clients. ARS’ staff includes more than 30 scientists, field specialists, and support personnel with nearly 500 years of combined experience in environmental disciplines.

Past and current ARS clients include, but are not limited to:

**Federal agencies:** US Environmental Protection Agency, National Park Service, US Forest Service, Bureau of Land Management, Bureau of Ocean Energy Management, and Office of Surface Mining Reclamation & Enforcement

**State, county, and municipal agencies in:** Colorado, Wyoming, Arizona, Nevada, Michigan, Illinois, Indiana, Maryland, Minnesota, Nebraska, Missouri, Iowa, and Texas

**Tribes:** Southern Ute, Ute Mountain Ute, Northwest Band of the Shoshone, Navajo, Shoshone-Bannock, Gila River, Salt River Pima-Maricopa, Northern Cheyenne, Fond du Lac Band of Lake Superior Chippewa, Bad River Band of Lake Superior Chippewa, Forest County Potawatomi Community, Kalispel, Haulapai, Northern Arapaho, and Eastern Shoshone

**Regional Planning Organizations:** Western Regional Air Partnership (“WRAP”), Central States Air Resource Agencies (“CenSARA”), Visibility Improvement – State and Tribal Association of the Southeast (“VISTAS”), and Lake Michigan Air Directors Consortium (“LADCO”)

**Private industry:** Aethon Energy, Alton Coal, Anadarko Petroleum, Crestone Peak Resources, Electric Power and Research Institute (“EPRI”), EnCana, Extraction Oil and Gas, ICF International Inc., NV Energy, Shell E&P, Sinclair Casper Refining Company, Warren E&P Inc., and Wood PLC

As is demonstrated by this list of clients, ARS has project management and technical experience in a broad range of government and private arenas. Our staff maintains close, cooperative, and professional working relationships with clients and provide responsive project



management and technical support to a wide array of air quality projects. Services are generally performed out of our corporate offices in Fort Collins, Colorado, which include office, computer, laboratory, and shop facilities fully equipped to meet the most challenging ambient air quality monitoring, auditing, and environmental compliance requirements.

ARS has engaged Dr. Jeff Collett and his group of researchers from the Colorado State University Atmospheric Science Department as a subcontractor to provide laboratory services and non-routine monitoring that may be required under this contract at a later time. ARS has teamed with Dr. Collett on a number of oil and gas-related studies in the last 10 years, to the mutual benefit of both organizations and their clients.

## TEAM PROFILES



**Katrina Winborn-Miller, PE, Compliance Manager, Lead, Air Quality**, has over 28 years of experience in air quality compliance and permitting, specializing in the energy field. She has worked with the oil and gas sector, oil refining and petrochemical production, coal and gas-fired electric utilities, coal gasification, mining, and various chemical production facilities to assist with ongoing environmental compliance issues such as emission inventories and emission reporting, greenhouse gas emission inventory development, stack testing, compliance reporting, Consent Decree implementation and progress reporting, and various air quality-related environmental audits. She has prepared numerous air quality construction permit applications for industrial clients, including both major and minor new construction and modification for both major and minor stationary sources, as well as state and federal operating permit applications. She has worked as in-house environmental staff at two large oil refineries and a coal-fired electric utility station; through these positions, she has gained experience with waste handling, wastewater treatment, and 24-hour on-call/emergency spill and release reporting. She is currently the Manager of the Environmental Compliance Section at Air Resource Specialists, Inc.

Katrina has a bachelor's degree in chemical engineering and a master's degree in environmental policy and management. She is a licensed Professional Engineer in Colorado. She is currently serving on the Larimer County Environmental Science and Advisory Board where she is involved in several environmental issues for the county, including the ongoing development of the county's first Climate Action Plan and recent work to review and comment on the county's revised Comprehensive Plan. Previously, she has served on the City of Ft. Collins Air Quality Advisory Board.



**Howard Gebhart, Compliance Manager - SME, Air Quality Monitoring & Modeling**, has over 39 years' experience in air quality permitting and compliance specializing in issues both technical and regulatory that affect regulated industries. Howard is a senior project manager within the environmental compliance section at ARS, where he provides technical studies and evaluations; and prepares models, client permit applications, air emission calculations, and performs multi-discipline environmental audits. He is very experienced in working with the federal Clean Water Act, Clean Air Act, Resource Conservation and Recovery Act ("RCRA"), and similar programs enacted in states throughout the US. Howard also acts as an Expert Witness in legal proceedings involving the Clean Air Act and is a recognized technical expert in air dispersion modeling.



**James Wu, Senior Consultant, Team Member**, has over 26 years of experience in air quality compliance and permitting and has performed hundreds of stationary and mobile source analyses. He specializes in bringing a variety of complex projects through technical review to agency approval. He currently is the ("GHG") services manager and a project manager in the environmental compliance section at Air Resource Specialists, Inc., and provides technical studies and evaluations, and prepares client permit applications and air quality modeling analyses. James is knowledgeable in the use of many software applications for environmental analyses, including mobile source models MOVES, NONROAD, CAL3QHC, and CAL3QHCR, and stationary source emission models AERMOD, SIMS, and INPUFF. He has managed air quality study projects on mobile and stationary sources for transportation and infrastructure, urban development, power generation, wastewater treatment, industrial, and construction projects. James has a bachelor's degree in chemical engineering.



**Air Resource  
SPECIALISTS**

**Emily Bitler, Senior Project Scientist, Team Member**, has over 7 years of experience assisting clients with the execution of dispersion modeling, regulatory analysis and interpretation, and technical studies and reports. Emily works with clients in the bio-fuel, ethanol, oil and gas, and mining/minerals industries. She creates and manages emission inventories (including GHG inventories), including some for large, complex facilities, and she prepares both construction and operating air permit applications for new and existing facilities. Emily also provides ongoing environmental compliance support to clients, including preparation of emergency incident reports, and prepares applications for Storm Water Pollution Prevention Plans, Risk Management Plans, and discharges under the National Pollutant Discharge Elimination System. She assists clients to create Spill Prevention Countermeasure and Control Plans that also incorporate Facility Response Plan requirements. Emily has a bachelor's degree in environmental science.



**Air Resource  
SPECIALISTS**

**Mark Tigges, Senior Project Manager, Air Quality Monitoring**, has 29 years of experience performing and managing the technical aspects of a variety of visibility, ambient air quality, and meteorological monitoring programs, including performing instrument installation and servicing, data analysis, and reporting. He has worked with multiple air quality agencies in special studies, and he has contributed in training/teaching and technology development. He currently manages the ARS technical field service and laboratory staff, overseeing and coordinating day-to-day network operations including data collection, validation, reporting, and quality control procedures, and he coordinates statistical data analysis and data interpretation/presentation. Mark manages all new site preparations, including on-site power and telephone utility installations, and development of special needs monitoring such as gas and particle speciation in mobile shelters with solar power requirements. He coordinates both regularly scheduled and emergency field service visits to monitoring sites.



**Air Resource  
SPECIALISTS**

**Christian Kirk, QA Manager**, has over 20 years of experience in the design, installation, and operation of air quality monitoring systems. He has worked the past 5 years with managing the development and proper application of quality control standards for air quality monitoring equipment and support systems, and producing and maintaining quality assurance standards and plans. He manages ARS' air quality audit laboratory, and verifies certification for all NIST traceable and EPA traceable standards used in air quality programs. He conducts performance audits for ambient air quality and meteorological monitoring instrumentation and provides on-site training and technical telephone support to clients, network operators, and ARS staff. Christian has experience with fabricating, installing, and maintaining ambient air quality and meteorological monitoring instrumentation and support equipment, as well as experience with data collection, validation, and reporting of air quality data. He has a bachelor's degree in chemistry and has also completed graduate-level coursework in chemistry.



**Dr. Jeff Collett, Professor and Head of the Colorado State University Department of Atmospheric Science**, received his SB in Chemical Engineering from MIT and MS and PhD degrees in Environmental Engineering Science from Caltech. He completed a postdoctoral fellowship in Atmospheric Physics at the Swiss Federal Institute of Technology (ETH-Zurich) and spent 3 years on the Civil and Environmental Engineering faculty at the University of Illinois before coming to CSU in 1994. Dr. Collett is a Fellow of the American Meteorological Society and was appointed in 2019 by Governor Polis to serve on the Regional Air Quality Council. His research includes a wide range of atmospheric chemistry and air quality topics, including studies of the air quality impacts of oil and gas development, wildfires, urban and industrial sources, and agriculture. He has published more than 200 peer-reviewed articles in leading scientific journals and has conducted dozens of air quality field campaigns in North America, Europe, and Asia. Here in Colorado he led major studies of emissions from oil and gas development in the Denver-Julesburg and Piceance Basins and impacts of various air pollution sources on air quality in Broomfield, Garfield County, Weld County, Fort Collins, Timnath, and Rocky Mountain and Mesa Verde National Parks.

## WRIGHT WATER ENGINEERS OVERVIEW

WWE is an employee-owned and operated, full-service water resource, environmental, and civil engineering firm with offices in Denver, Glenwood Springs, and Durango, Colorado. WWE was incorporated in 1961 and has a staff of approximately 45 people who work as senior-level engineers, hydrologists, scientists, biologists, chemists, geologists, and hydrogeologists. WWE combines detailed planning with excellent customer service and project management in the field of water resources engineering.

A significant portion of WWE's work focuses on water resource planning and conservation, water quality evaluations and policy, point source and non-point source pollution identification and strategies to alleviate, watershed management plans, stormwater green infrastructure, stormwater-related consulting for discharge permit compliance, development of construction-phase stormwater management plans, design of post-construction stormwater BMPs, preparing storm drainage criteria manuals, and other related services. WWE has successfully

performed a variety of services towards these aims, such as data collection and analysis; creating reports; community outreach; stakeholder interaction; capital improvement planning, prioritization, and life cycle cost estimation; and policy development.

WWE has assisted local governments and industries on stormwater and water quality issues in multiple states, including Colorado, Nebraska, Missouri, Kansas, Arkansas, California, Washington, and Texas, among others. WWE is characterized by long-term, highly satisfied clients, many of whom have used WWE for 20 years or longer. WWE has been privileged to receive such awards as the 1996 “Colorado Ethics in Business Award” and a similar award at a national level in 1999. Many of WWE’s employees are recognized experts in their respective disciplines and regularly testify as experts, publish, speak at conferences, and teach continuing engineering education. Additional information on WWE’s background, experience, activities, publications, and presentations can be found on their website ([www.wrightwater.com](http://www.wrightwater.com)).

In addition to extensive local stormwater experience, WWE also brings a national perspective to stormwater challenges facing local governments. For more than 20 years, WWE has served a leading role in developing, managing and conducting performance analysis for the International Stormwater BMP Database ([bmpdatabase.org](http://bmpdatabase.org)). The database enables users to evaluate BMP pollutant removal characteristics and assess how differences in BMP design influence the effectiveness of pollutant removal and control runoff rates to receiving waters. The database now has over 750 BMP data sets, along with performance data analysis summaries of individual BMPs and overall BMP categories. Studies include traditional stormwater BMPs, stormwater green infrastructure practices, and over 100 manufactured treatment devices. In recent years, the database project team has worked to develop companion databases including a stream restoration database.

## TEAM PROFILES



**Jane Clary, LEED AP, CPESC, Vice President, Lead, Water Quality**, has worked on diverse water resources projects for 27 years. Jane has broad experience in watershed management, stormwater management, and water quality data analysis, including on-going work in these areas for multiple local governments. She has worked with municipalities and counties in multiple states to develop approaches and guidance for meeting MS4 permit and Total Maximum Daily Load (“TMDL”) requirements and to address water quality issues, particularly for *E. coli* and nutrients. As part of these efforts, she has conducted dry weather screening of stormwater outfalls, conducted microbial source tracking studies, and interacted with the Colorado Water Quality Control Division on various stormwater permit, TMDL and other regulatory issues. Jane is currently working with Commerce City to update its Storm Drainage Criteria Manual. She serves as a Project Manager on the International Stormwater BMP Database project, which she has been involved with for nearly 20 years. She has published or presented over 100 papers and instructed multiple national webinars related to stormwater and water quality issues. Jane recently completed a governor-appointed, three-year term on the Colorado Water Quality Control Commission. Jane earned an MS in environmental science from the University of Colorado and a BS in economics from Vanderbilt University. Jane has a projected monthly availability of 25% over the next year.



**Chris Olson, PhD, PE, Senior Project Manager, Project Oversight**, has over 16 years of experience working in roles including program/project management, client service management, project engineering, and training/teaching. He is skilled in hydrologic, hydraulic, and water quality modeling; life-cycle cost analysis; stormwater BMP/green infrastructure design; and water resource planning. His stormwater management expertise is widely recognized throughout Colorado through his pre-WWE work as the Program Manager for the Colorado Stormwater Center at Colorado State University (“CSU”), teaching courses on stormwater management for the Urban Watersheds Research Institute and CSU, and developing stormwater modeling/cost estimating software for MHFD. Chris manages WWE’s services for stormwater BMP monitoring projects for Denver. He is a registered professional engineer in the state of Colorado and earned his PhD in civil engineering at Colorado State University. Chris has a projected monthly availability of 40% over the next year.



**Andrew Earles, PhD, PE, D.WRE, is a Vice President** and civil engineer with WWE with technical expertise in hydrology/hydraulics, MS4 issues, and permanent stormwater control measure/BMP design. Andrew is experienced with the planning, design, and maintenance of BMPs, as well as hydrologic and hydraulic modeling. Andrew has significant experience in watershed master planning that incorporates hydrology, water quality, and stream restoration objectives. Andrew is currently serving as the project manager for the Commerce City Storm Drainage Criteria Manual update, which has included regularly meeting with Commerce City staff, addressing unique stormwater challenges in the City, and speaking to the City Council with Commerce City staff. Andrew has also played a significant role on recent work for MHFD in Denver to promote runoff reduction approaches for stormwater quality management and developing guidance





to break down barriers to watershed-based planning. He has been significantly involved in advising Denver and MHFD on stormwater-related opportunities and planning efforts as portions of Denver redevelop. Andrew earned his BS in civil engineering at Stanford and an MS and PhD from the University of Virginia prior to joining WWE 20 years ago. Andrew has a projected monthly availability of 15% over the next year. He will provide peer review for the project, particularly related to stormwater BMP planning.



## REPRESENTATIVE PROJECT EXPERIENCE

### SPIRIT ENVIRONMENTAL

#### LEED Owner's Representative Services, City of Westminster, March 2020 – Present

Spirit is acting in an owner's representative role to the City of Westminster, focusing on ensuring the buildings in the Downtown Westminster Area reach LEED silver certification. Spirit is assisting the City to develop processes and language to ensure future projects meet the sustainability goals of the City and helping the City to explore additional options to verify performance and certify the entire sub-area under a LEED certification. In addition to project specific assurance, Spirit has been requested to look into various sustainability implementations that would leverage the City's role to create more significant positive environmental impacts for waste diversion, renewable energy, and water quality efforts.

#### Sustainability support for Comprehensive Plan, Transportation Plan, and Parks, Open Space, and Trails Plan, Adams County, May 2020 – Present

Spirit is supporting Design Workshop in ensuring that sustainability is appropriately considered throughout the suite of plans being developed but focusing on the comprehensive plan. Efforts to date include a climate impact analysis, recommendations for consideration across the plans, content development and review of development regulations.

#### Environmental Consultant- Huron Outfall, Adams County, October 2020 – Present

Spirit is providing environmental consulting in support of engineering services to improve the drainage from the outfall to Clear Creek and improving the adjacent wetlands.

#### Stormwater Management Contract, Port of Houston Authority, July 2018 – July 2020

Spirit served as the Prime on the Port of Houston Authority's 2-year stormwater contract and managed the Port's MS4, industrial, and construction stormwater programs. Services included development of construction stormwater guidelines and contractor oversight; conducting public education/outreach; performing water quality management and sampling; identification and selection of sustainable BMP alternatives targeted for TMDL-specific parameters; floatables management/removal and waste reduction efforts; IDDE program and plan development, monitoring and point-source sampling; TMDL consultation and implementation; inlet marking; performing tenant audits; and conducting water quality exceedance investigations. Additionally, Spirit consulted with the TCEQ to accept alternative water quality BMPs and worked with the Port to strategize and develop an implementation plan for long term water quality management recommendations.

#### Environmental Services On-call Contract, Harris County Flood Control District, 2017 – Present

Spirit has completed work authorizations under this contract since 2017 for assistance with environmental field services, reporting, permitting, and compliance projects. Physically inspected channel, conducted soil and sediment sampling for an approximately 12,400ft length of stream channel, and performed waste characterization analyses to determine appropriate handling and disposition of sediments to be removed during channel maintenance and repair. Also surveyed/documentated floatables.

### AIR RESOURCE SPECIALISTS

#### Air Quality Monitoring Services, City of Fort Collins, 1993 – 2019

ARS has provided a wide variety of monitoring services to the City of Fort Collins, Colorado over the last 30 years:

- From 1993-2019 ARS operated visibility monitoring equipment (transmissometer and nephelometer) to compare against the state's visibility index. At various times during that period ARS also operated high-resolution visibility cameras (35mm and web version) to document visibility impairment.
- In 2017 ARS designed, built, installed and began operating an EPA-style Village Green Bench for the city, which monitors ozone, particulates and meteorology.
- In 2018 ARS developed and began hosting an air quality website page for the city (<https://www.air-resource.net/ftco/>) to make publicly available city air quality data and camera images.
- In 2018 ARS and the city prepared a plan to develop a night sky monitoring network (including dedicated night-time cameras and sky quality meters) to better understand light pollution gradients from city center to rural areas.



### **ProVOC Baseline Monitoring, Denver Department of Environmental Health, 2017 – 2018**

ARS planned and operated two month-long intensive air monitoring campaigns in the Globeville-Elyria-Swansea neighborhoods. This study objective was to provide a baseline for neighborhood exposure to volatile organic compounds (VOCs) prior to the proposed reconstruction and expansion of Interstate 70 through central Denver. VOCs were collected via 24 hour (every 3 days) and seven-day integrated samples. Samples collected by canisters were analyzed via EPA Method TO-15. Concurrent samples collected by sorbent tubes were analyzed via EPA Method TO-11. Both campaigns have been completed and the final project report is currently being assembled for the client.

### **Air Quality Permit/Modeling Application Reviews, Pinal County Air Quality Control District, 2015 – Present**

ARS holds a contract with Pinal County Air Quality Control District (“PACQCD”) in Arizona to assist PACQCD with technical reviews of applications for air quality permits issued to commercial and industrial emission sources regulated by PACQCD. ARS’ efforts focus on the technical review of air quality dispersion modeling. ARS reviews all aspects of the air quality modeling studies on behalf of PACQCD and supplements the internal staff review of these documents and other permit application materials. For example, ARS reviews air quality modeling protocols submitted by applicants and provides comments to applicants on behalf of PACQCD to ensure that modeling plan meets PACQCD guidelines and follows acceptable technical procedures. As part of the permit application review, ARS also reviews the actual air dispersion modeling submittals, including technical review of the modeling methodology and data inputs. The modeling review also includes a thorough examination of the electronic dispersion modeling files submitted by each applicant to verify that the air quality modeling has been performed correctly.

ARS originally held this contract for one five-year period, after which ARS was selected for another five-year contract following a competitive bidding process.

### **Baseline Air Quality Monitoring and Air Quality Monitoring, Crestone Peak Resources, 2018 – Present**

ARS provided baseline air quality monitoring and air quality monitoring services to Crestone Peak Resources in areas surrounding Crestone’s current and future oil and gas operations. Baseline monitoring approach included sampling using EPA Compendium Method TO-15, with collection of 24-hour integrated air samples using Summa canisters and subsequent analysis for approximately 60 speciated hydrocarbon levels by a third-party laboratory.

ARS designed and constructed a mobile air quality monitoring trailer used by Crestone. The trailer includes instrumentation for measurement of ozone (“O<sub>3</sub>”), nitrogen oxides (“NO<sub>x</sub>”), particulate matter sized under 2.5 microns (“PM-2.5”), and total volatile organic compounds (“TVOCs”). Specific to oil and gas exploration and production operations, the trailer also has a start-of-the-art analyzer measuring concentrations of BTEX (benzene, toluene, ethylbenzene, and xylene) on a continuous basis. The trailer measurements are supplemented by sensors monitoring meteorological parameters, e.g., wind speed, wind direction, temperature, etc. The mobile trailer has been operated at multiple Crestone sites across the Colorado Front Range.

### **Colorado State University**

### **Broomfield Air Quality Monitoring Program, City and County of Broomfield, October 2018 – Present**

Partnered with Ajax analytics to monitor air quality in Broomfield during development of several large, multi-well oil and gas pads. CSU responsibilities include collection of weekly time-resolved canisters for analysis of methane and 48 VOCs (air toxics, source markers, and ozone precursors) at 18 locations across Broomfield, mobile monitoring of plumes emanating from wellpads, and operation of a proton transfer reaction mass spectrometer (PTR-MS) for continuous measurement of BTEX at 90 second time resolution to document acute exposure episodes. CSU also provides and analyzes VOC canisters used for grab sample collection by Broomfield staff and residents and for quantifying VOC concentrations during elevated VOC events detected by low cost PID sensors. Dr. Collett regularly advises Broomfield staff on air quality issues and monitoring strategies.

## **WRIGHT WATER ENGINEERS**

### **Commerce City Storm Drainage Criteria Manual, Commerce City, 2019 – 2020**

WWE has been working with the City of Commerce City and the Mile High Flood District (“MHFD”) to update the Commerce City Storm Drainage Criteria Manual, which was last updated in the 1980s. WWE has worked with Commerce City and the MHFD to review the latest criteria from the MHFD’s Urban Storm Drainage Criteria Manual. WWE worked with the City and the MHFD to integrate the latest guidance into the Commerce City Manual, accounting for local preferences and practices. WWE has helped Commerce City work through policy issues related to stormwater outfalls, retention, pumped drainage, and considerations for areas with existing contamination. The manual



is expected to be completed in early 2021 after several work sessions with Commerce City's City Council.

WWE has worked with the MHFD and local governments on similar criteria manual updates for the City and County of Denver and Greenwood Village, and we have assisted other local governments and clients including the Town of Woodland Park, the City of Aspen, the City of Durango, the City of Colorado Springs, and the Fountain Creek Watershed District on similar criteria manual updates. Key staff for the Commerce City Manual update and other criteria manual updates include Dr. Andrew Earles and Jane Clary, supported by project engineers, administrative staff, and graphics staff.

### **On-Call Stormwater Quality Assistance and Stormwater BMP Monitoring, City and County of Denver Department of Public Health and Environment, 2017 – Present**

WWE's on-call stormwater services for the Denver Department of Public Health and Environment ("DDPHE") have addressed various DDPHE objectives related to urban stormwater quality including:

In order to better understand the performance of stormwater BMPs in Denver, WWE designed a stormwater BMP monitoring program, installed and programmed automated monitoring equipment, and performed stormwater monitoring. Monitoring locations have included a bioretention cell in downtown Denver since April 2019 and a retrofitted extended detention basin since August 2020. Monitoring is completely automated using ISCO samplers. Water quality samples are analyzed for a suite of constituents at the inlet and outlet of the BMPs to determine their pollutant removal effectiveness. Inflow and outflow runoff volumes are also estimated to determine runoff reduction effectiveness.

WWE also performed simulated runoff tests to better understand the hydrologic and hydraulic performance of a street side stormwater planter, which is a type of bioretention cell. These tests use carefully controlled discharges of potable water from a water truck to help eliminate uncertainties that are inherent in automated sampling. The factors evaluated as part of these tests include total runoff storage volume, drawdown time, infiltration rate, and runoff reduction. The results of the tests are used to assess design alternatives and maintenance requirements.

WWE performed a desktop analysis to estimate the additional stormwater phosphorus loading that would occur as a result of adding orthophosphate to the potable water supply as a corrosion control technique. The orthophosphate additive was being considered to reduce lead leaching in Denver's potable water supply and there was concern this would increase phosphorus loadings in stormwater. WWE also provided cost estimates to remove the additional phosphorus load using different BMPs.

Various other tasks performed under this contract include testing bioretention media for metals content, reviewing green infrastructure/low impact development designs and *E. coli* mitigation assistance and peer review. WWE's Chris Olson, Jane Clary, and Andrew Earles continue to support this on-going project for Denver.

### **Urban Storm Drainage Criteria Manual, Volume 3, Mile High Flood District, 1969 – Present**

WWE has been involved in development of policy and criteria related to drainage and water quality in the Denver metro area since 1969. The MHFD provides criteria for an area of more than 1,600 square miles encompassing more than 30 municipalities. WWE helped the MHFD (then called the Urban Drainage and Flood Control District) to develop its first Urban Storm Drainage Criteria Manual. As the document has evolved into three volumes, WWE has helped develop the updates. Earlier this decade, WWE assisted MHFD with a major update of Volume 3 of the Urban Storm Drainage Criteria Manual to better integrate runoff volume reduction measures and to ensure that the Manual provides state-of-the-art guidance on construction and post-construction BMPs. WWE revised Volume 3 to include additional text on new BMPs for construction; BMP fact sheets; new and expanded guidance on application of the Universal Soil Loss Equation and BMP selection and planning; and new sections on construction dewatering, construction in waterways, and considerations for linear construction of projects (utilities and roads). The process involved obtaining significant stakeholder input from local governments within the MHFD, the Colorado Stormwater Council, and the general public. Many of the stakeholders that provided input were stormwater managers for local governments, which was very important to the success of the project because acceptance by these individuals is key for widespread use.

WWE is currently in the process of working on a team with the MHFD to update Chapter 4 of Volume 3, which is the chapter that contains stormwater BMP Fact Sheets addressing design, construction and maintenance.