| Dimensional Standards | C-1 | I | PD/Site as whole | PD/ Individual Lots | Notes |
|---|---|---|---|---|---|
| Min. lot size (sq. ft.) | 5,625<br>5,063[6]<br>3,750[7] | 5,625 | N/A | 350 | |
| Density (Min. lot sq. footage per principal dwelling unit) | 2,800<br>2,450[6] | 2,800 | 1,632 | N/A | |
| Min lot size (sq. ft.)—attached units | 2,800<br>2,520[6] | 2,800 | N/A | 350 | |
| Min. lot frontage | 37'-6"<br>25' 7 | 37'-6" | N/A | 16’ | Townhome lot frontage is measured on 1st Street or interior access easement |
| Min. lot frontage—attached units | 20' | 20' | N/A | 16’ | 28’ is narrowest residential building footprint facing 1st Street. |
| Max. lot coverage: structures (additive coverage total for structures uncovered parking cannot exceed 90% except C-2) | 60% 66 % [6] | 60% | 66% | 100% | This does include covered balconies. Additive coverage for structures and uncovered parking/access for the entire site will not exceed 90% |
| Max. lot coverage: uncovered parking/access (additive coverage total for structures and uncovered parking cannot exceed 90% except in C-2) [5] | 60% | 30% | 60% | 80% | 80% is for the HOA lot which is mainly vehicle access, with some landscaping. |
| Min. landscape area | 10% | 10% | 10% | 0% | |
| Min. setback from side lot line for a primary bldg. | 5'** | 5'** | 5’ | 0’ | |
| Min. setback from side lot line for a detached accessory bldg. | 3', 5', or 10'[8] | 3', 5', or 10'[8] | N/A | N/A | No accessory buildings allowed |
| Min. setback from rear lot line: principal bldg. | 5' [2] | 5' [2] | 5’ | 0’ | |
| Min. setback from rear lot line: accessory bldg. | 5' | 5' | N/A | N/A | No accessory buildings allowed |
| Min. setback from front lot line [4] | 10' | 10' | 5’ | 0’ | Commercial building only at 5’. All other buildings along 1st Street have 10’ porch front setback and 15’ building front setback to 1st St. |
| Parking spaces, min. | 19 or 20 | 19 or 20 | 19 | 1 / 3 | 1 per residential unit meets code for inclusionary housing development with site analyzed as a whole. 3 spaces for 700 square foot commercial. |
| Max. building height for a primary bldg. | 35' | 35' | 40’ | 40’ | Portions of buildings over 35’ shall be setback 24’ minimum from 1st St and Monarch Spur property lines |
| Max. building height for a detached accessory bldg. | 25' | 25' | N/A | N/A | |
| Maximum number of stories per Hwy 291 established | 2 | 2 | 3 | 3 | Lots 1-4: 2 story building; Limited Rooftop Access<br>Lots 5-7: 3 story building; Limited Rooftop Access<br>Lots 8-16: 3 story |

Proposed Schedule of Uses:

| **Residential Uses** | **C-1** | **I** | **PD** | **Standards**[1] |
|---|---|---|---|---|
| Accessory buildings and structures. | P | P | P | Sec. 16-4-190(c) |
| Multiple principal residential structures | P | P | P | Sec. 16-4-190(b) |
| Accessory dwelling units | AR | AR | AR | Sec. 16-4-190(c) |
| Duplex dwelling units | P [3] | LR [3] | P | |
| Residential (3—4 units)* | AR [3] | AR [3] | AR | |
| Residential (5—19 units) | LR [3] | LR [3] | AR | |
| Residential (20 or more units) | MR [3] | MR [3] | MR | |
| Single-family dwelling units | AR [3] | AR [3] | AR | |
| One or more dwelling units on the same site as a commercial or industrial use | LR | LR | AR | |
| **Residential Business Uses** | **C-1** | **I** | **PD** | **Standards**[1] |
| Day care, home | P | P | P | Sec. 16-4-190(f) |
| Home Occupations | P | P | P | Sec. 16-4-190(g) |
| Home Businesses | P | P | AR | Sec. 16-4-190(g) AR to allow for review of required parking. |
| Bed & Breakfast Inns | P | AR | AR | AR to allow for review of required parking. |
| Short-term rental units | AR | AR | AR | Sec. 16-4-190(q) Subject to STR regulations in effect at time of STR license application. |
| **Commercial, Personal Service and Office Uses** | **C-1** | **I** | **PD** | **Standards**[1] |
| Eating and drinking establishments | P | LR | AR | AR to allow for review of required parking. |
| Professional offices | P | LR | AR | AR to allow for review of required parking. |
| Retail sales and rental establishments | P | LR | AR | Sec. 16-4-190(m) AR to allow for review of required parking. |

# LIMITED IMPACT & MAJOR IMPACT SUBMITTAL REQUIREMENTS

448 East First Street, Suite 112
Salida, CO 81201
Phone: 719-530-2626 Fax: 719-539-5271
Email: planning@cityofsalida.com

*An application is meant to highlight the requirements and procedures of the Land Use Code. With any development application, it is the responsibility of the applicant to read, understand, and follow all of the provisions of the Land Use Code.*

## 1. PROCEDURE (Section 16-3-80)

**A. Development Process** (City Code Section 16-3-50) Any application for approval of a development permit shall include a written list of information which shall constitute the applicant's development plan, which shall be that information necessary to determine whether the proposed development complies with this Code. The development plan shall include the following, as further specified for each level of review on the pre-application checklist:

1. Pre-Application Conference (Limited Impact and Major Impact Review Applications)
2. Submit Application
4. Staff Review. Staff report or decision forwarded to the applicant (Administrative review)
5. Public Notice
6. Public Hearing with Planning Commission (Limited Impact and Major Impact Review Applications)
7. Public Notice
8. Hearing Conducted by City Council (Major Impact Review)

☑ **B. Application Contents** (City Code Section (16-3-50)

✔ 1. A General Development Agreement completed.

✔ 2. A copy of a current survey or the duly approved and recorded subdivision plat covering the subject lots where the proposal is for development on previously subdivided or platted lots;

✔ 3. A brief written description of the proposed development signed by the applicant;

✔ 4. Special Fee and Cost Reimbursement Agreement completed.

✔ 5. Public Notice.

a) List. A list shall be submitted by the applicant to the city of adjoining property owners' names and addresses. A property owner is considered adjoining if it is within 175 feet of the subject property regardless of public ways. The list shall be created using the current Chaffee County tax records.

b) Postage Paid Envelopes. Each name on the list shall be written on a postage-paid envelope. Postage is required for up to one ounce. Return Address shall be: City of Salida, 448 E. First Street, Suite 112, Salida, CO 81201.

c) Applicant is responsible for posting the property and submittal of notarized affidavits for proof of posting the public notice.

✔ 6. Applications for Limited Impact Review must submit six (**6**) copies of application materials and applications for Major Impact Review must submit twelve (**12**) copies of application materials.

☑ 7. Developments involving construction shall provide the following information:

(i) A development plan map, at a scale of one (1) inch equals fifty (50) feet or larger with title, date, north arrow and scale on a minimum sheet size of eight and one-half (8½) inches by eleven (11) inches, which depicts the area within the boundaries of the subject lot, including:

a. The locations of existing and proposed land uses, the number of dwelling units and the square footage of building space devoted to each use;

b. The location and dimensions, including building heights, of all existing and proposed Buildings or structures and setbacks from lot lines or building envelopes where exact dimensions are not available;

c. Parking spaces;

d. Utility distribution systems, utility lines, and utility easements;

e. Drainage improvements and drainage easements;

f. Roads, alleys, curbs, curb cuts and other access improvements;

g. Any other improvements;

h. Any proposed reservations or dedications of public right-of-way, easements or other public lands, and

i. Existing topography and any proposed changes in topography, using five-foot contour intervals or ten-foot contour intervals in rugged topography.

(ii) 24" x 36" paper prints certified by a licensed engineer and drawn to meet City specifications to depict the following:

a. Utility plans for water, sanitary sewer, storm sewer, electric, gas and telephone lines;

b. Plans and profiles for sanitary and storm sewers; and

c. Profiles for municipal water lines; and

d. Street plans and profiles.

(iii) Developments in the major impact review procedure shall provide a development plan map on paper prints of twenty-four (24) inches by thirty-six (36) inches, with north arrow and scale, and with title and date in lower right corner, at a scale of one (1) inch equals fifty (50) feet or larger which depicts the area within the boundaries of the subject lots and including those items in Section 16-3-40(a) (3).

☑ 8. Any request for zoning action, including review criteria for a requested conditional use (Sec. 16-4-190 ) or zoning variance (Sec. 16-4-180);

☑ 9. Any subdivision request including a plat meeting the requirements of Section 16-6-110;

☑ 10. Any other information which the Administrator determines is necessary to determine whether the proposed development complies with this Code, including but not limited to the following:

(i) A tabular summary of the development proposal, which identifies the total proposed development area in acres, with a breakdown of the percentages and amounts devoted to specific land uses; total number and type of proposed residential units; total number of square feet of proposed nonresidential space; number of proposed lots; and sufficient information to demonstrate that the plat conforms with all applicable dimensional standards and off-street parking requirements.

(ii) A description of those soil characteristics of the site which would have a significant influence on the proposed use of the land, with supporting soil maps, soil logs and classifications sufficient to enable evaluation of soil suitability for development purposes. Data furnished by the USDA Natural Resource Conservation Service or a licensed engineer shall be used. The data shall include the shrink/swell potential of the soils, the groundwater levels and the resulting foundation requirements. Additional data may be required by the City if deemed to be warranted due to unusual site conditions.

(iii) A report on the geologic characteristics of the area, including any potential natural or man-made hazards which would have a significant influence on the proposed use of the land, including but not limited to hazards from steep or unstable slopes, rockfall, faults, ground subsidence or radiation, a determination of what effect such factors would have, and proposed corrective or protective measures.

(iv) Engineering specifications for any improvements.

(v) A plan for erosion and sediment control, stabilization and revegetation.

(vi) A traffic analysis prepared by a qualified expert, including projections of traffic volumes to be generated by the development and traffic flow patterns, to determine the impacts of a proposed development on surrounding City streets and to evaluate the need for road improvements to be made.

(vii) A storm drainage analysis consisting of the following:

(a) A layout map (which may be combined with the topographic map) showing the method of moving storm sewer water through the subdivision shall be provided. The map shall also show runoff concentrations in acres of drainage area on each street entering each intersection. Flow arrows shall clearly show the complete runoff flow pattern at each intersection. The location, size and grades of culverts, drain inlets and storm drainage sewers shall be shown, as applicable.

(b) The applicant shall demonstrate the adequacy of drainage outlets by plan, cross-section and/or notes and explain how diverted stormwater will be handled after it leaves the subdivision. Details for ditches and culverts shall be submitted, as applicable.

(c) The projected quantity of stormwater entering the subdivision naturally from areas outside of subdivision and the quantities of flow at each pickup point shall be calculated.

(viii) Evidence of adequate water supply and sanitary sewer service - Data addressing the population planned to occupy the proposed subdivision and future development phases and other developments that may need to be served by extensions of the proposed water supply and sewage disposal systems. The resulting domestic, irrigation and fire flow demands shall be expressed in terms of gallons of water needed on an average day and at peak time, and the resulting amounts of sewage to be treated shall be expressed in gallons per day.

(ix) An analysis shall be submitted addressing how water for domestic use and for fire flows is to be provided, along with the collection and treatment of sewage generated by the property to be subdivided.

(x) A statement shall be submitted addressing the quantity, quality and availability of any water that is attached to the land.

(xi) A preliminary estimate of the cost of all required public improvements, tentative development schedule (with development phases identified), proposed or existing covenants and proposed maintenance and performance guarantees. The applicant shall submit, at least in summary or outline form, any agreements as may be required by Section 16-2-70, relating to improvements and dedications.

(xii) If intending to use solar design in the development, include a description of the steps that have been taken to protect and enhance the use of solar energy in the proposed subdivision. This shall include how the streets and lots have been laid out and how the buildings will be sited to enhance solar energy usage.

(xiii) If applicable, a report shall be submitted identifying the location of the one-hundred-year floodplain and the drainage ways near or affecting the property being subdivided. If any portion of a one-hundred-year floodplain is located on the property, the applicant shall also identify the floodway and floodway fringe area. The applicant shall also describe the steps that will be taken to ensure that development locating in the floodway fringe area is accomplished in a manner which meets Federal Insurance Administration standards.

(xiv) If applicable, a report shall be submitted on the location of wetlands, as defined by the U.S. Army Corp of Engineers, on or affecting the property being subdivided. The report shall outline the development techniques planned to ensure compliance with federal, state and local regulations.

(xv) A landscape plan, meeting the specifications of Section 16-8-90.

(xvi) If applicable, a description of how the proposal will comply with the standards of any of the overlays.

(xvii) A site plan for parks, trails and/or open space meeting the requirements of Section 16-6-110 below. If an alternate site dedication or fee in lieu of dedication is proposed, detailed information about the proposal shall be submitted.

(xviii) All development and subdivision naming shall be subject to approval by the City. No development or subdivision name shall be used which will duplicate or be confused with the name of any existing street or development in the City or the County;

☐ 11. An access permit from the Colorado Department of Transportation; and

☑ 12. A plan for locations and specifications of street lights, signs and traffic control devices.

**2. REVIEW STANDARDS** (If necessary, attach additional sheets)

The application for Limited or Major Impact Review shall comply with the following standards.

1. **Consistency with Comprehensive Plan**. The use shall be consistent with the City's Comprehensive Plan.

This development represents traditional neighborhood development with a dense mixture of uses taking advantage of existing infrastructure near the center of the city. (Pages 3-4 and 3-5)

2. **Conformance to Code**. The use shall conform to all other applicable provisions of this Land Use Code, including, but not limited to:

   a. Zoning District Standards. The purpose of the zone district in which it is located, the dimensional standards of that zone district, and any standards applicable to the particular use, all as specified in Article 5, Use and Dimensional Standards.

   The proposed subdivision conforms to the concurrently proposed Planned Development.

   b. Site Development Standards. The parking, landscaping, sign and improvements standards.

   Parking, landscaping, sign, and improvements per the concurrently proposed planned development.

3. **Use Appropriate and Compatible**. The use shall be appropriate to its proposed location and be compatible with the character of neighboring uses, or enhance the mixture of complementary uses and activities in the immediate vicinity.

The mixed use on this site provides a transition from commercial downtown to the surrounding residential neighborhoods.

4. **Nuisance**. The operating characteristics of the use shall not create a nuisance and the impacts of the use on surrounding properties shall be minimized with respect to noise, odors, vibrations, glare, and similar conditions.

No nuisances are anticipated.

5. **Facilities**. There shall be adequate public facilities in place to serve the proposed use, or the applicant shall propose necessary improvements to address service deficiencies which the use would cause.

Water main improvements are required to be built by the applicant from I Street to the east edge of the site, per the Planned Development.

6. **Environment**. The use shall not cause significant deterioration to water resources, wetlands, wildlife habitat, scenic characteristics, or other natural features. As applicable, the proposed use shall mitigate its adverse impacts on the environment.

No adverse environmental impacts are anticipated.

# Residences at Salida Bottling Company

# Planned Development & Major Subdivision

**Owner**
Salida Bottling Company, LLC
9707 County Road 163
Salida, CO 81201

**Architecture/Planning**
Craft Design Studio
204 Spooner Lane
Mount Pleasant, SC 29464

Studio Mork
Downingtown, PA

**Civil Engineer/Entitlement**
Crabtree Group, Inc.
325 D St
Salida, CO

# Contents



**Appendices**

# Introduction

Residences at Salida Bottling Company is a Planned Development and concurrent major subdivision of 16 residential units and 1 commercial unit on 0.60 acres at 323 W 1st Street in Salida.

# Existing Conditions

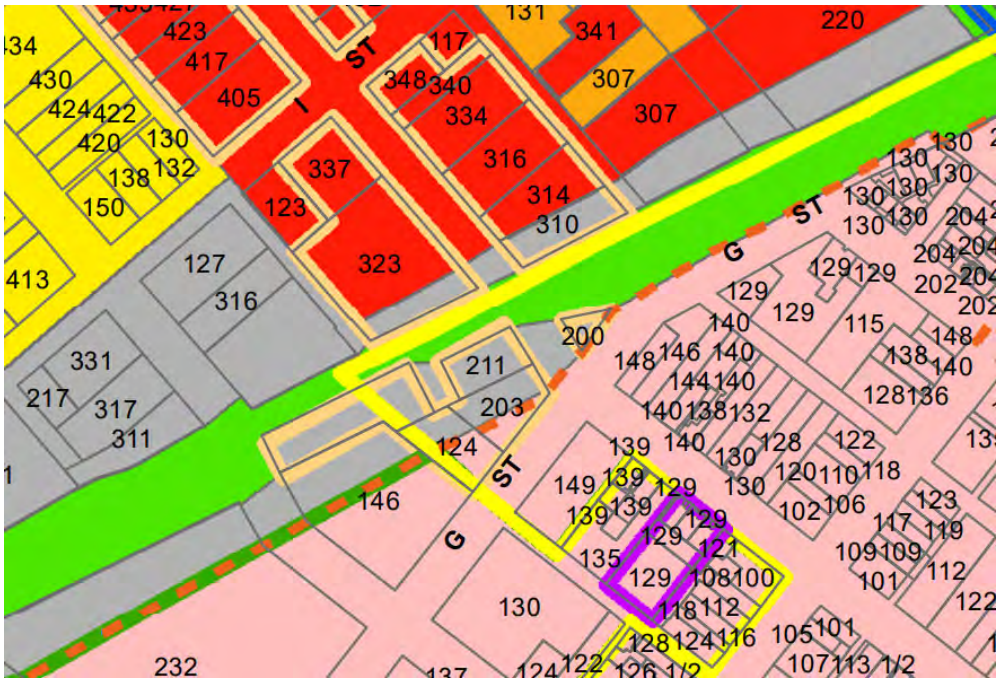
The photo below shows existing conditions at the site.

The subject parcel is currently an unpaved parking lot. As shown on the land survey in Appendix A, the subject parcel is made up of portions of lots 4 and 5 of block 19, all of lots 6 through 9 of block 19, abandoned Denver & Rio Grande Railroad right of way, and abandoned alley right of way, for a total of 8 existing lots as summarized below.

| | Area (SF) | Area (Acres) |
|---|---|---|
| Lot 4 | 997 | 0.02 |
| Lot 5 | 3497 | 0.08 |
| Lot 6 | 3750 | 0.09 |
| Lot 7 | 3750 | 0.09 |

| | | |
|---|---|---|
| Lot 8 | 3750 | 0.09 |
| Lot 9 | 3750 | 0.09 |
| D&RG abandoned ROW | 6322 | 0.15 |
| Alley abandoned ROW | 296 | 0.01 |
| Total | 26112 | 0.60 |

The property is currently split zoned. D&RG abandoned right of way, which makes up 24% of the property, is zoned industrial (gray). The remainder is zoned C-1 Commercial (red). The entire property is within the Highway 291 Established Residential Overlay. See excerpt from zoning map below.




Current vehicle access to the site is from one driveway on 1st Street, and from the public alley behind the site.

## Planned Development Narrative

A planned development plan is included in appendix B. This plan, upon approval, will be recorded with the Chaffee County Clerk to provide a record of the planned development entitlement for the property.

**Sheet 1** of the planned development plan highlights changes to the use schedule and dimensional standards of the underlying zones required for the development. Sheet 1 also includes standard signature blocks for ownership, title report, survey by a professionally licensed surveyor, and city approval. Finally, this sheet includes the owner's method of meeting the inclusionary housing ordinance.

**Sheet 2** of the planned development plan is the site plan, showing 1st Street sidewalk, driveway, and curb and gutter improvements, building setbacks, parking, site dimensions, and ground cover. A table of unit square footage is provided on this sheet to give a general sense of unit size, but these shall not be

construed as minimum or maximum required unit sizes. Landscaping notes address the requirements of Salida Municipal Code section

**Sheet 3** of the planned development plan shows utility layout and underground storm drainage detention. A drainage report is included as Appendix C. Water and sewer lines on site will be owned and maintained by the HOA.

Public Works has indicated that in order to provide adequate fire flow, the existing 4" water main in 1st Street will need to be replaced with an 8" line per city standards prior to any certificates of occupancy being issued in the planned development. This water main upsize will extend from the east end of the 1st Street property frontage, to the existing 8" water main in I Street. Sewer service will require installation of a manhole in the existing 1st Street sewer main. It is anticipated that the city's standard subdivision improvement agreement will be required prior to this work. Survey and engineering design are currently in progress.

Gas, communications, and electric will be connected to existing mains in the public alley behind the site.

## Architecture

The architectural character of the project intends to complement the existing, historic downtown through use of building form, the employment of materials and details consistent with and inspired by the downtown and immediate, adjacent context. Sited adjacent to the downtown, the plan's design emphasizes the pedestrian experience through walkable connections and an emphasis on the public realm.

**Sheets 1-3** of Appendix H shows urban and architectural precedent which balances both the use of the automobile and the pedestrian experience. Specifically, on Sheet 2, the historic Salida Bottling Works building formerly located on the site illustrates both the urban relationship of the historic building frontage as well as the traditional character of the architecture on the site.

**Sheets 4-6** show the building footprints and landscaping on the site. The frontages along First Street are set back slightly from the road, with porches presenting a pedestrian frontage. A ground floor commercial space is located in the south east corner of the site, proximate to the downtown business district. Park-under residences are located in the center and rear of the project site.

**Sheet 7** of Appendix H shows how buildings facing First Street and Monarch Spur Trail will have parapet wall roofs similar to those across First Street; buildings on the interior, towards the back of the development will have pitched roofs in character with the residential streets to the west and north of the site.

**Sheets 8-10** illustrate elevation concepts for the project frontages facing Monarch Spur Trail and First Street. The elevations show distribution of various exterior materials, general architectural character and details, and opening proportions.

Sheets 8-10 are not final architectural elevations and are subject to vary throughout the design process. Elevations shown are intended to give a sense for the character, detailing and height of the proposed project.

**Sheet 11-12** – Height Considerations – Two diagrams show an example of a pitched roof ( 3 story ) house with 35'-0" Height Max. to Ridge. Proposed for Consideration, the Second diagram shows the same house with Ridge Height Max. at 40'-0". This would only be proposed for "pitched roof" residential units tucked back into the block. Sheet 12 shows the "Flat Roof" (Parapeted) Residences proposed. Parapet falls under Max. height of 35'-0". Requesting (with limitatations), Rooftop Access structures to be allowed to extend above 35'-0". Proposed minimal footprint (max. 100 s.f. )

## View Corridor Study

**Sheets 12-13** In recognition of the significance of the view along First Street, viewing the Sawatch Range from the downtown, the view corridor study is intended to provide a sense for the scale of the buildings and the extent to which the project obscures the view of the Conoco gas station from downtown.

## Major Subdivision Plat

See Appendix I for the major subdivision plat requested concurrently with the Planned Development. Note that the dimensional standards requested in the Planned Development are slightly more permissive than the subdivision plat. This is because lot line adjustments for design changes and/or construction tolerances are anticipated.

This subdivision plat does not include the condominium subdivision of two units on Lot 4. The condominium subdivision of two units will be platted after building construction. This is a permitted use per the Planned Development.

## Submittal Requirements Checklist

The following items are required for planned development applications per Salida municipal code Section 16-7-90.

**(1) PD Development Plan**

i-ix. See Appendix B Planned Development Plan.

**(2) Written Narrative**

i. See Appendix A Survey.

ii. See Appendix D Title Policy.

iii. The planning objective is to provide a high quality infill development which will add to the quality of Salida's downtown by providing excellent architecture, commercial space, deed restricted housing, market rate housing, and private open space.

iv. Fee in lieu of parks, trails, and open space shall be paid at time of building permit for each unit. All private open space shall be maintained by the lot owner, which in some cases is the HOA.

v. Phasing shall not be restricted within the development. Safe access shall be provided to all occupied units during construction. Underground utilities for the entire site will need to be installed early in the construction process due to space constraints.

vi. See Appendix E, Geotechnical Report, and Appendix F, Limited Phase II Subsurface Investigation.

vii. See Architectural section above.

viii. See Appendix C, Drainage Report.

ix. See Appendix G, projected water and sewer demand.

x. All utilities are available near the site, and the project is within city limits.

xi. Trip generation from the site:

**PROJECT: Residences at Salida Bottling Company - 323 W 1st St, Salida, CO**

**Summary of Trip Generation**

| Land Use | ITE Code | Intensity | | Rate | Daily Trip Ends | AM Peak-Hour Trip Ends | | | | | | PM Peak-Hour Trip Ends | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | In | | Out | | | | In | | Out | |
| | | | | | | Rate | Total | % | Trips | % | Trips | Rate | Total | % | Trips | % | Trips |
| Single Family Detached Housing | 210 | 0 | DU | 9.57 | 0 | 0.75 | 0 | 25% | 0 | 75% | 0 | 1.01 | 0 | 63% | 0 | 37% | 0 |
| Apartments | 220 | 0 | DU | 6.65 | 0 | 0.51 | 0 | 20% | 0 | 80% | 0 | 0.62 | 0 | 65% | 0 | 35% | 0 |
| Condominiums/Townhouses | 230 | 16 | DU | 5.81 | 93 | 0.44 | 7 | 17% | 1 | 83% | 6 | 0.52 | 8 | 67% | 6 | 33% | 3 |
| Lodging (Hotel) | 310 | 0 | RM | 8.17 | 0 | 0.56 | 0 | 61% | 0 | 39% | 0 | 0.59 | 0 | 53% | 0 | 47% | 0 |
| Office (General) | 710 | 0.7 | GLA | 11.01 | 8 | 1.55 | 1 | 88% | 1 | 12% | 0 | 1.49 | 1 | 17% | 0 | 83% | 1 |
| Retail (Specialty) | 814 | 0.7 | GLA | 44.32 | 32 | 6.84 | 5 | 48% | 2 | 52% | 3 | 2.71 | 2 | 44% | 1 | 56% | 1 |
| **Sub-Totals** | | | | | 133 | | 13 | | 5 | | 9 | | 11 | | 7 | | 5 |
| **Total** | | | | | 133 | | 13 | | 5 | | 9 | | 11 | | 7 | | 5 |

GLA = gross leasable area in KSF

DU = dwelling unit

RM = number of room

*Source: ITE Trip Generation, 8th Edition*

xii. The city's fiscal impacts will be very minor because development of empty lots near the middle of town is the most efficient kind of development. The city will collect sales tax from the commercial unit in the development. Construction of the project will provide sales tax to the city. In addition, the development will provide two units of 80% AMI housing in downtown Salida, which will provide an opportunity for workers to live affordably, near downtown jobs.

# RESIDENCES AT SALIDA BOTTLING COMPANY
# PLANNED DEVELOPMENT PLAN

## PART OF LOTS 4 & 5, ALL OF LOTS 6–9, BLOCK 19, CITY OF SALIDA, COLORADO 81201

## CERTIFICATE OF OWNERSHIP:

KNOW ALL PERSONS BY THESE PRESENTS THAT THE UNDERSIGNED IS THE FEE OWNER OF THE FOLLOWING DESCRIBED PROPERTY:

A TRACT OF LAND LOCATED IN THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER (NW¼SW¼) OF SECTION 32, TOWNSHIP 50 NORTH, RANGE 9 EAST OF THE NEW MEXICO PRINCIPAL MERIDIAN, WITHIN THE CITY OF SALIDA, CHAFFEE COUNTY, COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCING AT THE POINT OF INTERSECTION OF THE NORTH BOUNDARY OF THE SAID NW¼SW¼ WITH THE WESTERLY BOUNDARY OF AN EXTENSION OF WEST THIRD STREET IN THE CITY OF SALIDA, FROM WHENCE THE WEST QUARTER CORNER (BRASS CAP) OF SAID SECTION 32 BEARS SOUTH 89°51'25" WEST 1160.51 FEET;
THENCE SOUTH 41°11'36" EAST ALONG SAID WESTERLY STREET BOUNDARY EXTENSION A DISTANCE OF 39.78 FEET TO THE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED;
THENCE PROCEEDING AROUND SAID TRACT SOUTH 41°11'36" EAST 41.31 FEET;
THENCE SOUTH 33°06'26" WEST 118.81 FEET;
THENCE SOUTH 00°08'35" EAST 39.48 FEET;
THENCE SOUTH 89°51'25" WEST PARALLEL WITH THE SAID NORTH BOUNDARY OF THE NW¼SW¼ A DISTANCE OF 88.17 FEET;
THENCE NORTH 00°08'35" WEST (AT A RIGHT ANGLE TO SAID NORTH BOUNDARY OF THE NW¼SW¼) A DISTANCE OF 170.0 FEET TO THE SOUTHERLY BOUNDARY OF GRAND AVENUE EXTENDED/COLORADO STATE HIGHWAY NO.291;
THENCE NORTH 89°51'25" EAST ALONG SAID SOUTHERLY AVENUE/HIGHWAY BOUNDARY A DISTANCE OF 126.19 FEET TO THE POINT OF BEGINNING.

## ACKNOWLEDGEMENT:

IN WITNESS HEREOF, THE UNDERSIGNED HAVE CAUSED THESE PRESENTS TO BE EXECUTED ON THIS _____ DAY OF

_____ , 20____.

OWNER:

_____

STATE OF COLORADO }
} SS
COUNTY OF CHAFFEE }

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THIS _____ DAY OF _____,

_____

WITNESS MY HAND AND OFFICIAL SEAL

MY COMMISSION EXPIRES _____

NOTARY PUBLIC _____

## CERTIFICATE OF TITLE INSURANCE COMPANY:

I, _____,

REPRESENTING _____ TITLE INSURANCE COMPANY IN THE STATE OF COLORADO DO CERTIFY THAT I HAVE EXAMINED THE TITLE TO THE REAL PROPERTY SHOWN AND DESCRIBED ON THESE PLATS AND FOUND TITLE VESTED IN CONFLUENTE PARK SALIDA, LLC, A COLORADO LIMITED LIABILITY COMPANY, FREE AND CLEAR OF ALL LIENS AND ENCUMBRANCES,

EXCEPT:_____

_____

_____
SIGNATURE

## LAND SURVEYOR'S NOTES:

1) ELEVATIONS SHOWN HEREON BASED UPON N.A.V.D. 88
2) CONTOUR INTERVAL IS 1.0'
3) SITE BENCHMARK IS AN 1 1/2" ALUMINIUM CAP ON NO. 5 REBAR STAMPED L.S. 37937, HAVING AN ELEVATION OF 7059.64'
4) UNDERGROUND UTILITIES SHOWN AS MARKED ON THE SURFACE BY UTILITY NOTIFICATION CENTER OF COLORADO AND OTHERS. LANDMARK SURVEYING AND MAPPING ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF ANY UNDERGROUND UTILITIES DEPICTED HEREON.
5) FIELD WORK PERFROMED ON DECEMBER 21. SITE WAS SNOW COVERED AT TIME OF SURVEY. FEATURES MAY EXIST THAT WERE NOT VISIBLE AT THE TIME OF THE SURVEY.

## LAND SURVEYOR'S STATEMENT:

I, SYDNEY ARTHUR SCHIEREN, A REGISTERED LAND SURVEYOR LICENSED TO PRACTICE IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE BOUNDARY SURVEY AND TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THIS PLANNED DEVELOPMENT PLAN WERE PREPARED UNDER MY DIRECT SUPERVISION AND CHECKING, AND THAT THE SURVEY INFORMATION SHOWN ON THE PLAT CONTAINED HEREIN IS BASED ON A MONUMENTED LAND SURVEY AS SHOWN, AND THAT SAID SURVEYS AND THE KNOWLEDGE PERTAINING TO SAID SURVEYS ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATED THIS _____ DAY OF _____, 20_____.

_____
SIGNATURE

## CITY COUNCIL APPROVAL:

THIS PLANNED DEVELOPMENT PLAN IS APPROVED FOR FILING.

DATED: _____, 20____.

BY:_____
MAYOR

## COUNTY CLERK AND RECORDER'S CERTIFICATE:

THIS PLANNED DEVELOPMENT PLAN WAS FILED FOR RECORD IN THE OFFICE OF THE CLERK AND RECORDER OF CHAFFEE COUNTY, COLORADO, AT _____.M., ON THIS _____ DAY OF _____, A.D. 20__, UNDER RECEPTION NO. _____.

_____
CHAFFEE COUNTY CLERK AND RECORDER

## INCLUSIONARY HOUSING

UNITS 9 AND 10, ON LOTS 9 AND 10, AS SHOWN ON SHEETS 2 AND 3 OF THIS PLANNED DEVELOPMENT PLAN, SHALL BE BUILT BY SALIDA BOTTLING COMPANY AND DEED RESTRICTED TO 80% OF AREA MEDIAN INCOME PER SALIDA MUNICIPAL CODE SECTION 16, ARTICLE 8, THUS SATISFYING THE INCLUSIONARY HOUSING REQUIREMENT FOR THE PLANNED DEVELOPMENT. NO MORE THAN 7 MARKET RATE RESIDENTIAL UNITS IN THE PLANNED DEVELOPMENT MAY RECEIVE CERTIFICATES OF OCCUPANCY PRIOR TO CERTIFICATES OF OCCUPANCY FOR UNITS 9 AND 10.


VICINITY MAP
NO SCALE

## SCHEDULE OF USES

PROPERTY IS CURRENTLY SPLIT ZONED C-1 AND INDUSTRIAL. USES PER THIS PD SHALL BE PER THE "PD" COLUMN BELOW. HIGHLIGHTED CELLS INDICATE DEVIATION FROM EITHER OF THE UNDERLYING ZONES.

Proposed Schedule of Uses:

| **Residential Uses** | **C-1** | **I** | **PD** | **Standards[1]** |
|---|---|---|---|---|
| Accessory buildings and structures. | P | P | P | Sec. 16-4-190(c) |
| Multiple principal residential structures | P | P | P | Sec. 16-4-190(b) |
| Accessory dwelling units | AR | AR | AR | Sec. 16-4-190(c) |
| Duplex dwelling units | P [3] | LR [3] | P | |
| Residential (3—4 units)* | AR [3] | AR [3] | AR | |
| Residential (5—19 units) | LR [3] | LR [3] | AR | |
| Residential (20 or more units) | MR [3] | MR [3] | MR | |
| Single-family dwelling units | AR [3] | AR [3] | AR | |
| One or more dwelling units on the same site as a commercial or industrial use | LR | LR | AR | |
| **Residential Business Uses** | **C-1** | **I** | **PD** | **Standards[1]** |
| Day care, home | P | P | P | Sec. 16-4-190(f) |
| Home Occupations | P | P | P | Sec. 16-4-190(g) |
| Home Businesses | P | P | AR | Sec. 16-4-190(g) AR to allow for review of required parking. |
| Bed & Breakfast Inns | P | AR | AR | AR to allow for review of required parking. |
| Short-term rental units | AR | AR | AR | Sec. 16-4-190(q) Subject to STR regulations in effect at time of STR license application. |
| **Commercial, Personal Service and Office Uses** | **C-1** | **I** | **PD** | **Standards[1]** |
| Eating and drinking establishments | P | LR | AR | AR to allow for review of required parking. |
| Professional offices | P | LR | AR | AR to allow for review of required parking. |
| Retail sales and rental establishments | P | LR | AR | Sec. 16-4-190(m) AR to allow for review of required parking. |

Notes:

1 The standards referenced herein are in addition to all other applicable standards of this Land Use Code

3 An existing dwelling can be modified or rebuilt as a matter of right provided it is in conformance with the dimensional standards of Table 16-F.

* The allowed use is conditional in the SH 291 Corridor Overlay (291 CO). Refer to Section 16-5-50 regarding the SH 291 Corridor (291 CO) District.

## SCHEDULE OF DIMENSIONAL STANDARDS

PROPERTY IS CURRENTLY SPLIT ZONED C-1 AND INDUSTRIAL. HIGHLIGHTED CELLS INDICATE WHERE PD EXCEEDS THE STANDARDS OF EITHER ZONE.

| Dimensional Standards | C-1 | I | PD/Site as whole | PD / Individual Lots | Notes |
|---|---|---|---|---|---|
| Min. lot size (sq. ft.) | 5,625<br>5,063[6]<br>3,750[7] | 5,625 | N/A | 350 | |
| Density (Min. lot sq. footage per principal dwelling unit) | 2,800<br>2,450[6] | 2,800 | 1,632 | N/A | |
| Min lot size (sq. ft.)—attached units | 2,800<br>2,520[6] | 2,800 | N/A | 350 | |
| Min. lot frontage | 37'-6"<br>25' 7 | 37'-6" | N/A | 16' | Townhome lot frontage is measured on 1st Street or interior access easement |
| Min. lot frontage—attached units | 20' | 20' | N/A | 16' | 28' is narrowest residential building footprint facing 1st Street. |
| Max. lot coverage: structures (additive coverage total for structures uncovered parking cannot exceed 90% except C-2) | 60%<br>66% [6] | 60% | 66% | 100% | This does include covered balconies. Additive coverage for structures and uncovered parking/access for the entire site will not exceed 90% |
| Max. lot coverage: uncovered parking/access (additive coverage total for structures and uncovered parking cannot exceed 90% except in C-2) [5] | 60% | 30% | 60% | 80% | 80% is for the HOA lot which is mainly vehicle access, with some landscaping. |
| Min. landscape area | 10% | 10% | 10% | 0% | |
| Min. setback from side lot line for a primary bldg. | 5*** | 5*** | 5' | 0' | |
| Min. setback from side lot line for a detached accessory bldg. | 3', 5', or 10'[8] | 3', 5', or 10'[8] | N/A | N/A | No accessory buildings allowed |
| Min. setback from rear lot line: principal bldg. | 5' [2] | 5' [2] | 5' | 0' | |
| Min. setback from rear lot line: accessory bldg. | 5' | 5' | N/A | N/A | No accessory buildings allowed |
| Min. setback from front lot line [4] | 10' | 10' | 5' | 0' | Commercial building only at 5'. All other buildings along 1st Street have 10' porch front setback and 15' building front setback to 1st Street. |
| Parking spaces, min. | 19 or 20 | 19 or 20 | 19 | 1 / 3 | 1 per residential unit meets code for inclusionary housing development with site analyzed as a whole. 3 spaces for 700 square foot commercial. |
| Max. building height for a primary bldg. | 35' | 35' | 40' | 40' | Portions of buildings over 35' shall be setback 24' minimum from 1st St and Monarch Spur property lines |
| Max. building height for a detached accessory bldg. | 25' | 25' | N/A | N/A | |
| Maximum number of stories per Hwy 291 established residential overlay district | 2 | 2 | 3 | 3 | Lots 1-4: 2 story building; 3rd story rooftop access only. Lots 5-7: 3 story building; 4th story for rooftop access only. Lots 8-16: 3 story. |

Notes:

2 If the property adjoins a residential zone district, setbacks on the side and rear lot line shall be the same as those in the residential zone.

4 A covered porch may encroach into the front yard setback by twenty-five (25) percent.

5 If a front-loaded garage is set back at least ten (10) feet behind the primary street-facing building façade, the lot coverage between the garage entrance and the primary, street-facing building façade shall not be included in the calculation of lot coverage for uncovered parking/access.

6 Standards for inclusionary housing development per Section 16-13-50.

7 Fifteen (15) percent of the single-family lots within an inclusionary housing development may be twenty-five (25) feet by one hundred fifty (150) feet.

8 See Section 16-4-190(c) for a description of side lot line setbacks for all accessory buildings, including ADUs

## NOTES

1. LOT LINE ADJUSTMENTS FOR DESIGN CHANGES AND/OR CONSTRUCTION TOLERANCES ARE ANTICIPATED AND SHALL BE CONSIDERED "PRACTICAL NECESSITIES" PER SECTION 16-6-70 CITY OF SALIDA MUNICIPAL CODE.
2. FEES IN LIEU OF LAND DEDICATION FOR SCHOOL SITES, AND FEES IN LIEU OF OPEN SPACE, SHALL BE PAID AT TIME OF BUILDING PERMIT FOR EACH RESIDENTIAL UNIT.
3. OCCUPANTS OF ANY INCLUSIONARY HOUSING UNITS SHALL NOT BE RESPONSIBLE FOR HOMEOWNER'S ASSOCIATION ASSESSMENTS OR DUES BEYOND THOSE FAIRLY-PRICED SPECIFICALLY FOR UTILITIES, TRASH SERVICES, AND THE LIKE.
4. THE ACCESS EASEMENT SHOWN ON THE SUBDIVISION PLAT SHALL BE CONSIDERED "DIRECT ACCESS ONTO A PUBLIC STREET" PER CITY OF SALIDA MUNICIPAL CODE SECTION 16-8-20 (a).

## SHEET INDEX



PD PLAN 12/10/21

PRIVATE ENGINEER'S NOTES TO CONTRACTOR

*THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS.*
*CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE COUNTY, THE CITY, THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.*

PREPARED FOR:
SALIDA BOTTLING CO.
9707 CR 163
SALIDA, CO 81201
PHONE: ----

PREPARED UNDER THE DIRECTION OF:
_____ DATE
WILLIAM B. HUSSEY CRABTREE GROUP, INC
L.C.E. NO. 56989 EXP. DATE 10/31/2023

PREPARED BY:
CRABTREE GROUP INC.
ENGINEERING SMART GROWTH™
325 D STREET SALIDA, CO 81201 PH: 719-539-1675
918 CUYAMA ROAD OJAI, CA 93023 PH: 719-221-1799

SEAL

| DATE | BY | MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|---|---|
| | | | | | |

ENGINEER — REVISION AGENCY

CITY OF SALIDA

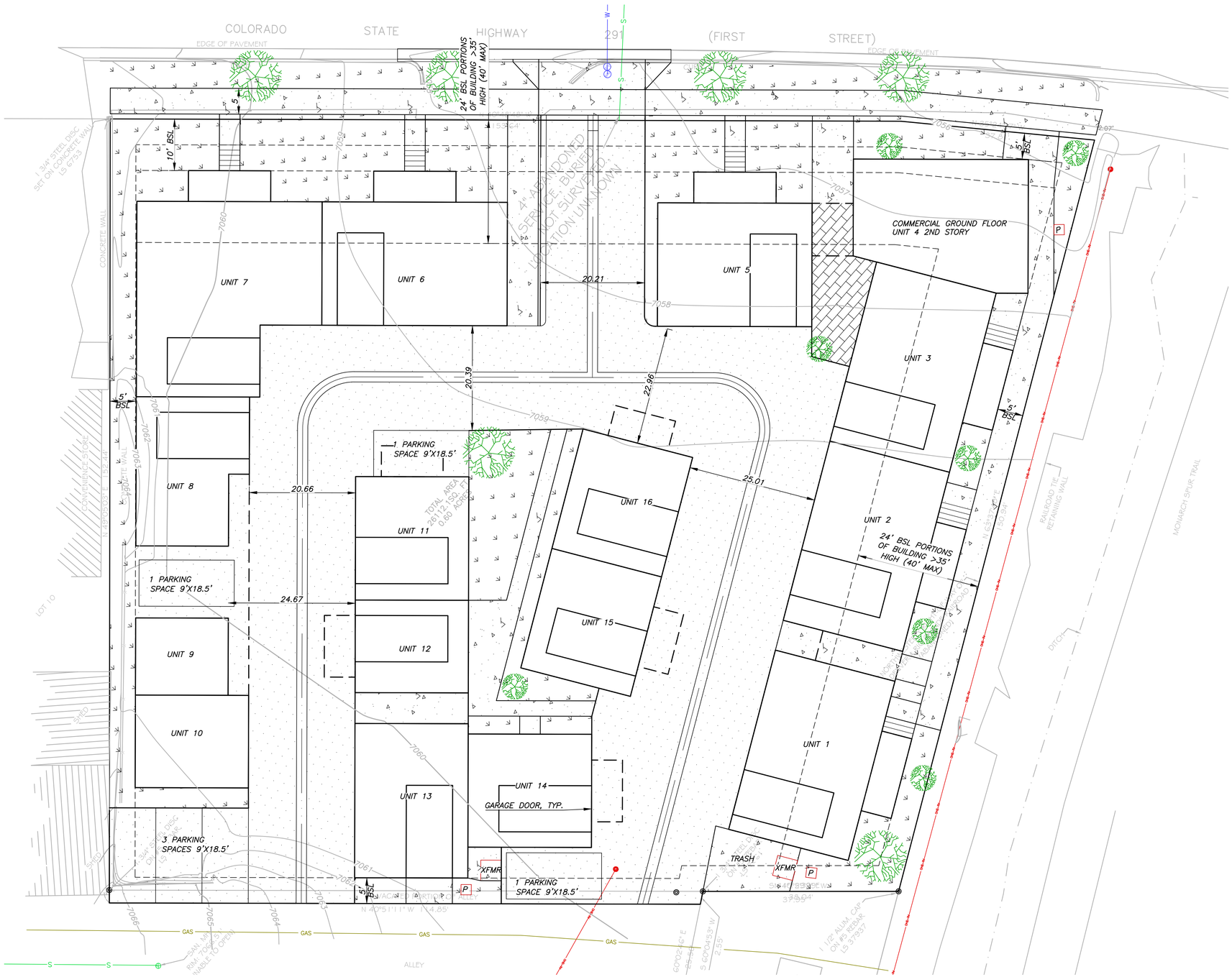
| | |
|---|---|
| DESIGNED BY | WBH |
| DRAWN BY | WBH |
| CHECKED BY | WBH |
| SCALE | NONE |
| DATE | DEC. 2021 |

APPROVED BY:
_____
AGENCY HEAD DATE

BENCHMARK: 1 1/2" ALUM. CAP ON #5 REBAR LS 37937 ELEV.=7059.64'

**RESIDENCES AT SBC**
SALIDA, CO
COVER SHEET
**PD PLAN**
OWNERSHIP, APPROVALS, CODE STUDY

SHEET NO. 1 OF 3 SHTS.
PROJECT NO. 20037




GRAPHIC SCALE

10' 0 10' 20' 30'

(CONTOUR INTERVAL = 1 FOOT)

## LEGEND

- EXISTING WATER MAIN
- EXISTING SANITARY SEWER MAIN
- EXISTING GAS MAIN
- EXISTING OVERHEAD POWER/COMMUNICATION
- EXISTING UTILITY POLE WITH STREET LIGHT
- ASPHALT (OR PERVIOUS PAVERS)
- CONCRETE
- DECORATIVE PAVERS (OPTIONAL)
- LANDSCAPING
- 2' CONCRETE DRAINAGE PAN
- 2.5' CURB AND GUTTER
- LINE OF BUILDING OVERHANG
- BUILDING SETBACK LINE (BSL)
- TREE

| Unit | Square Footage |
|---|---|
| 1 | 1400 |
| 2 | 1400 |
| 3 | 1400 |
| 4 | 850 |
| 5 | 1000 |
| 6 | 1400 |
| 7 | 1400 |
| 8 | 1000 |
| 9 | 1000 |
| 10 | 800 |
| 11 | 800 |
| 12 | 800 |
| 13 | 1000 |
| 14 | 800 |
| 15 | 800 |
| 16 | 800 |
| Commercial | 725 |

*NOTE: UNIT SIZES ARE APPROXIMATE AND SHALL NOT BE CONSTRUED AS MINIMUM OR MAXIMUM FOR THE FINAL ARCHITECTURAL PLANS.*

*LANDSCAPE PLAN REQUIREMENTS PER 16-8-90 (b)*

1. *NO EXISTING TREES ON SITE. IRRIGATION WILL BE PROVIDED WITH BACKFLOW PROTECTION PER PLUMBING CODE, AND DRIP AND SPRINKLER IRRIGATION AS NEEDED.*
2. *THE SITE AS A WHOLE WILL HAVE 2,612 SQUARE FEET OF LANDSCAPE SPACE TO MEET THE C-1 AND INDUSTRIAL ZONE STANDARDS. 60% OF THAT (1568 SF) WILL BE LIVING COVER. A MINIMUM OF 9 TREES WILL BE PLANTED, COUNTING STREET TREES ON 1ST STREET, MEETING THE C-1 MINIMUM OF 1 TREE PER 300 SQUARE FEET OF REQUIRED LANDSCAPE AREA.*
3. *LANDSCAPE WORK AS SHOWN IS ESTIMATED TO COST $40,000. MORE DETAILED ESTIMATES OBTAINED FROM LANDSCAPE CONTRACTORS SHALL SUPERSEDE THIS ESTIMATE.*
4. *EROSION CONTROL WILL MEET CDPHE REQUIREMENTS OF THE GENERAL CONSTRUCTION STORMWATER DISCHARGE PERMIT. SPECIFIC BEST MANAGEMENT PRACTICES WILL BE CHOSEN, INSTALLED, INSPECTED, AND MAINTAINED BY THE CONTRACTOR'S QUALIFIED STORMWATER MANAGER.*
5. *LANDSCAPE MAINTENANCE WILL INCLUDE WEEDING, MOWING, AND TRIMMING. MAINTENANCE WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER, WHICH IN SOME SITE AREAS IS THE HOA.*
6. *ALL PLANTS SHALL BE OF A VARIETY WHICH IS COMPATIBLE WITH LOCAL CLIMATE AND THE SOILS, DRAINAGE AND WATER CONDITIONS OF THE SITE.*

*PRIVATE ENGINEER'S NOTES TO CONTRACTOR*

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE COUNTY, THE CITY, THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

*PREPARED FOR:*
SALIDA BOTTLING CO.
9707 CR 163
SALIDA, CO 81201
PHONE: ----

*PREPARED UNDER THE DIRECTION OF:*
DATE
WILLIAM B. HUSSEY
L.C.E. NO. 56989
CRABTREE GROUP, INC
EXP. DATE 10/31/2023

*PREPARED BY:*
CRABTREE GROUP INC.
ENGINEERING SMART GROWTH™
325 D STREET
SALIDA, CO 81201
PH: 719-539-1675
918 CUYAMA ROAD
OJAI, CA 93023
PH: 719-221-1799

*SEAL*

| DATE | BY | MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|---|---|
| | | | | REVISION | AGENCY |

ENGINEER

*CITY OF SALIDA*

DESIGNED BY WBH
DRAWN BY WBH
CHECKED BY WBH
SCALE 1"=10'
DATE DEC. 2021

APPROVED BY:
AGENCY HEAD DATE

*BENCHMARK:* 1 1/2" ALUM. CAP ON #5 REBAR LS 37937 ELEV.=7059.64'

# RESIDENCES AT SBC

SALIDA, CO

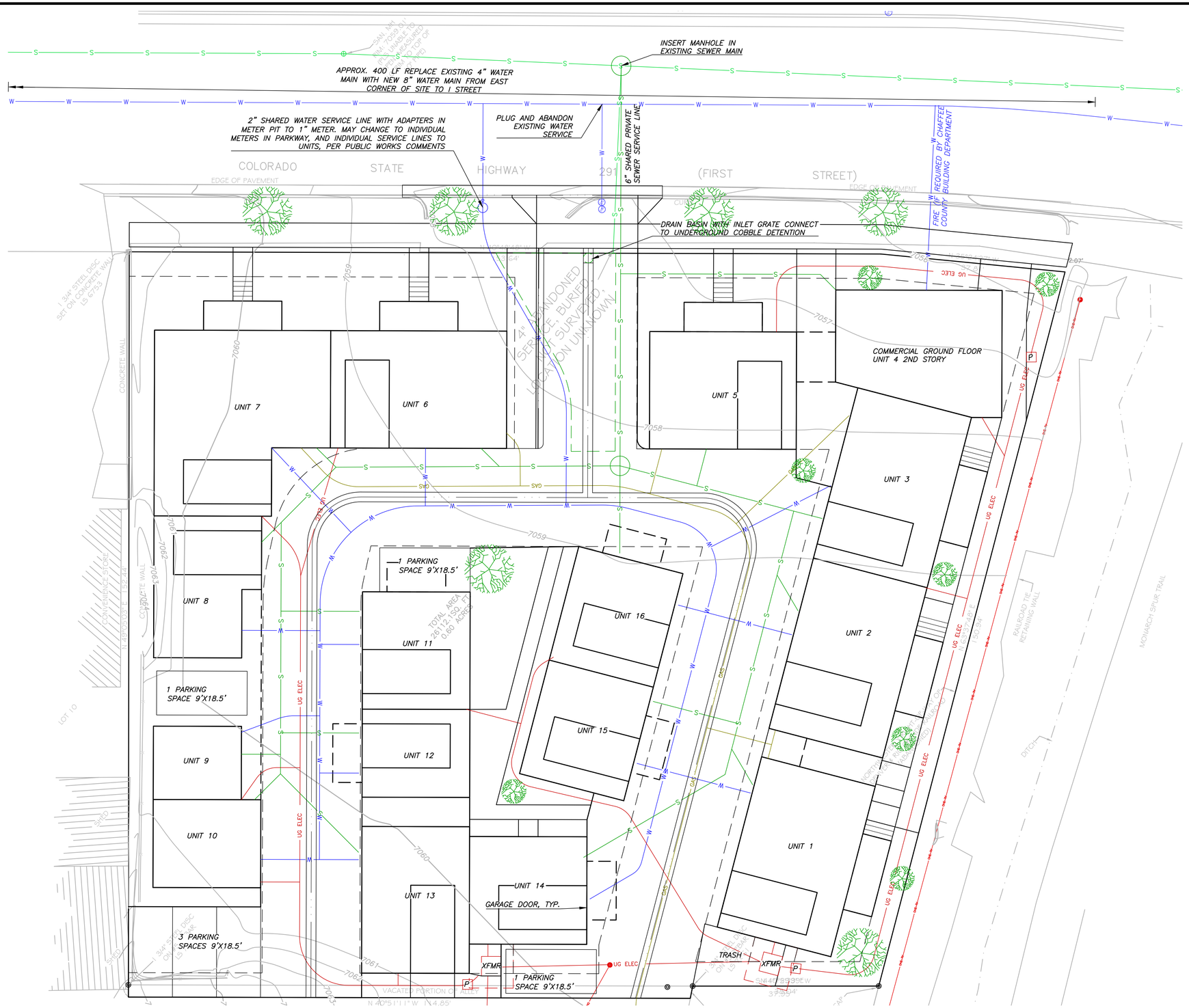
## SITE PLAN

## PD PLAN

GROUND COVER, LAYOUT, LANDSCAPING

SHEET NO. 2 OF 3 SHTS.

PROJECT NO. 20037




GRAPHIC SCALE

10' 0 10' 20' 30'

(CONTOUR INTERVAL = 1 FOOT)

## LEGEND

- EXISTING/PROPOSED WATER LINE
- EXISTING/PROPOSED SANITARY SEWER LINE
- EXISTING/PROPOSED GAS MAIN
- EXISTING OVERHEAD POWER/COMMUNICATION
- NEW UNDERGROUND POWER/COMMS LINE
- XFMR XCEL ENERGY TRANSFORMER
- P XCEL ENERGY PEDESTAL
- LINE OF BUILDING OVERHANG
- UTILITY EASEMENT
- UNDERGROUND COBBLE INFILTRATION AREA, 4.5' DEPTH X 570 SF AT 40% VOIDS = 1026 CF. THIS VOLUME MAY BE SPLIT INTO MULTIPLE BASINS AT FINAL DESIGN.
- TREE

**PRIVATE ENGINEER'S NOTES TO CONTRACTOR**

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS.
CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE COUNTY, THE CITY, THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

**PREPARED FOR:**
SALIDA BOTTLING CO.
9707 CR 163
SALIDA, CO 81201
PHONE: ----

PREPARED UNDER THE DIRECTION OF: _____ DATE

WILLIAM B. HUSSEY — CRABTREE GROUP, INC
L.C.E. NO. 56989 — EXP. DATE 10/31/2023

**PREPARED BY:**
CRABTREE GROUP INC.
ENGINEERING SMART GROWTH™
325 D STREET, SALIDA, CO 81201, PH: 719-539-1675
918 CUYAMA ROAD, OJAI, CA 93023, PH: 719-221-1799

SEAL

| DATE | BY | MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|---|---|
| | | | | REVISION | AGENCY |

ENGINEER

CITY OF SALIDA

DESIGNED BY WBH
DRAWN BY WBH
CHECKED BY WBH
SCALE 1"=10'
DATE DEC. 2021

APPROVED BY:
AGENCY HEAD DATE

BENCHMARK: 1 1/2" ALUM. CAP ON #5 REBAR LS 37937 ELEV.=7059.64'

# RESIDENCES AT SBC
SALIDA, CO

UTILITY PLAN

## PD PLAN
UTILITY LAYOUT

SHEET NO. 3 OF 3 SHTS.
PROJECT NO. 20037


*KYNDANCE MEWS*

*EARLS COURT - MT PLEASANT*

*EARLS COURT - MT PLEASANT*

*KYNDANCE MEWS*

*BROOKLYN MEWS*


*BATHURST MEWS*

URBAN DESIGN IMAGE BOARD
PRINTED ON 11x17)

10.21.21


*SALIDA BOTTLING WORKS SEEN FROM 1ST ST*


*1914 SANBORN SHOWING SALIDA BOTTLING WORKS; NTS*

ARCHITECTURAL DESIGN SITE HISTORY
PRINTED ON 11x17)

10.21.21

*MASONRY DETAILING*


*MASONRY DETAILING*


*MASONRY DETAILING*

*COMMERCIAL FRONTAGE*

*URBAN FLOOR LEVEL RELATIONSHIP*

*URBAN FLOOR LEVEL RELATIONSHIP*

*LANE FRONTAGE FENESTRATION*

ARCHITECTURAL DESIGN IMAGE BOARD
PRINTED ON 11x17)

10.21.21


AERIAL CONTEXT
SCALE: 1" = 50'-0" (PRINTED ON 11x17)

10.21.21

## UNIT DESCRIPTION

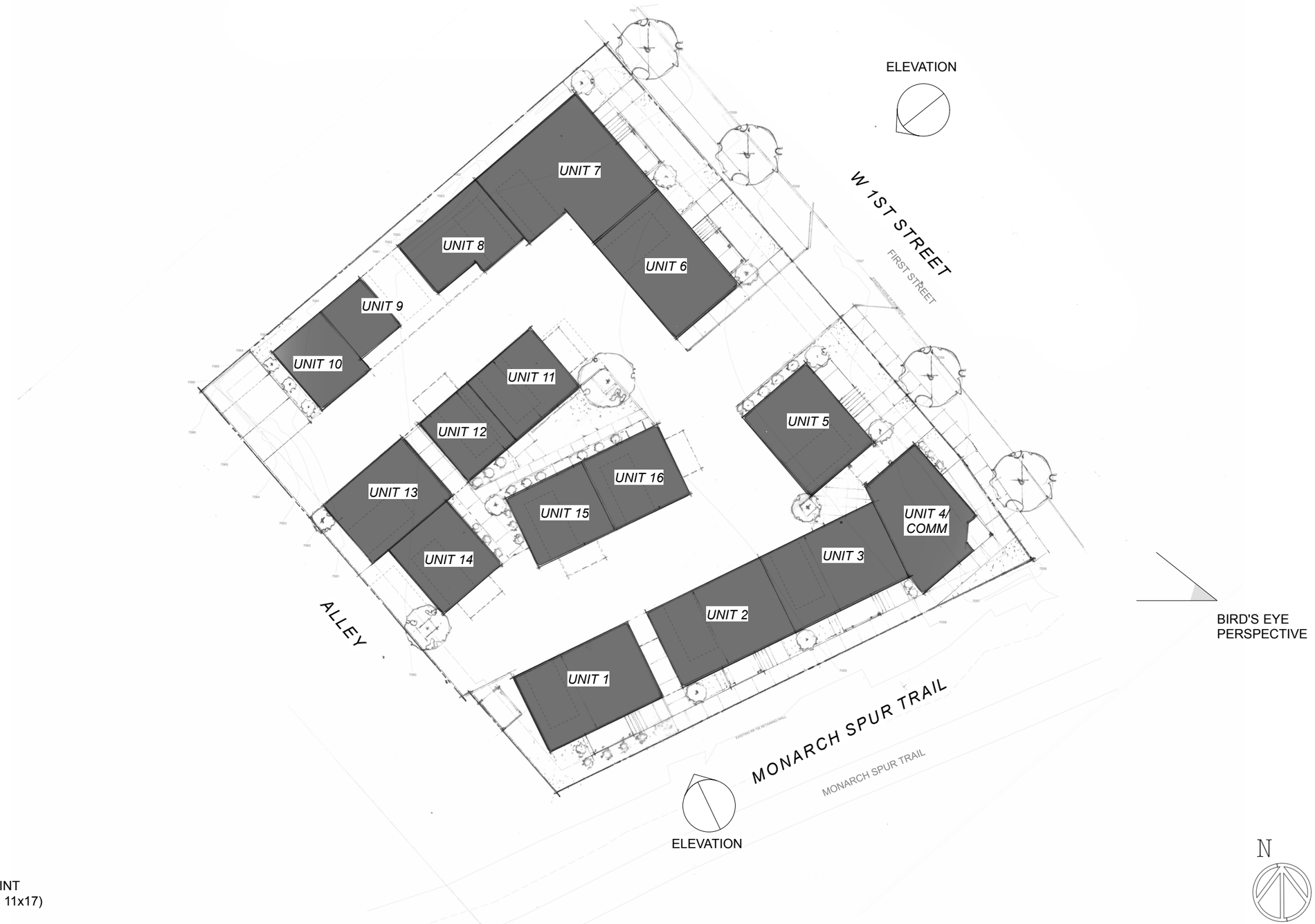
| UNIT # | SQUARE FOOTAGE |
|---|---|
| 1 | 1400 |
| 2 | 1400 |
| 3 | 1400 |
| 4* | 850 |
| 5 | 1000 |
| 6 | 1400 |
| 7 | 1400 |
| 8 | 1000 |
| 9** | 1000 |
| 10** | 800 |
| 11 | 800 |
| 12 | 800 |
| 13 | 1000 |
| 14 | 800 |
| 15 | 800 |
| 16 | 800 |

COMMERICAL*
725

* 2 STORY MIXED-USE BLDG
**AFFORDABLE UNIT


SITE PLAN
SCALE: 1" = 30'-0" (PRINTED ON 11x17)

10.21.21

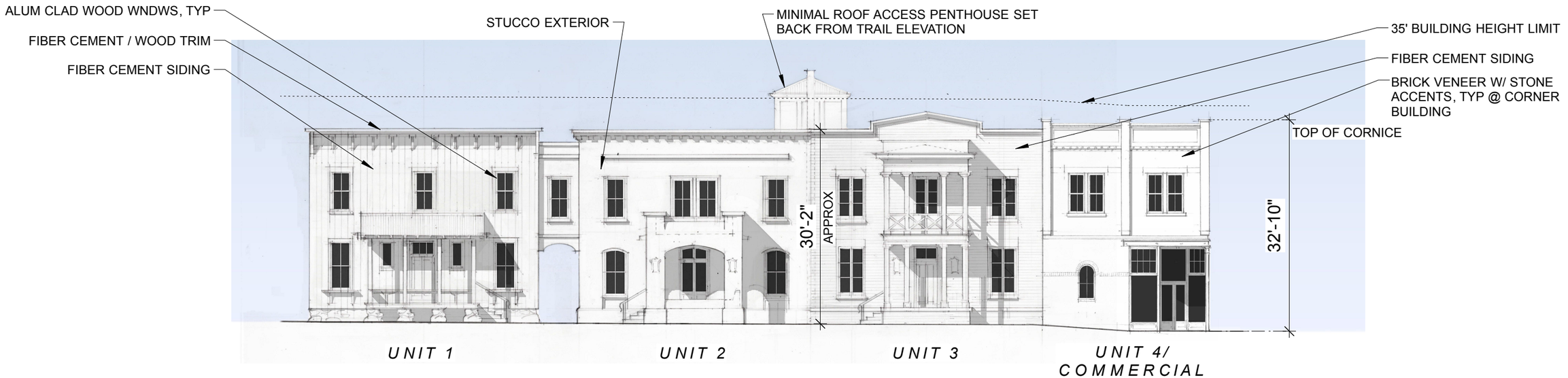



SITE PLAN - BUILDING FOOTPRINT
SCALE: 1" = 30'-0" (PRINTED ON 11x17)

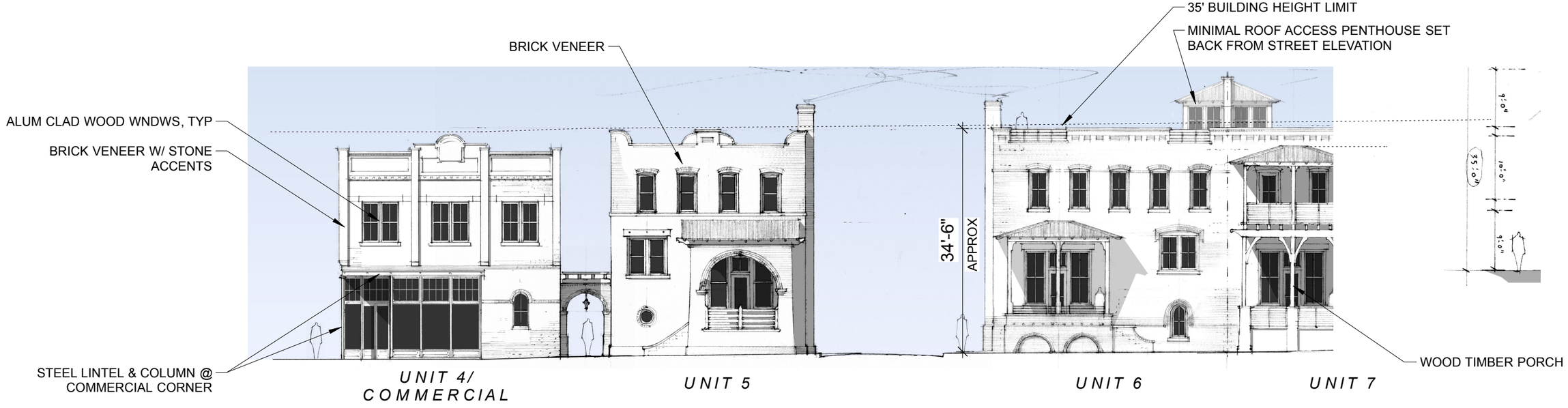
10.21.21


BIRD'S EYE PERSPECTIVE
(PRINTED ON 11x17)

10.21.21




CONCEPTUAL MONARCH SPUR TRAIL FRONTAGE ELEVATION




CONCEPTUAL FIRST STREET FRONTAGE ELEVATION

CONCEPTUAL FRONTAGE ELEVATIONS
SCALE: 1/16" = 1'-0" (PRINTED ON 11x17)

10.21.21



CONCEPTUAL MONARCH SPUR TRAIL FRONTAGE ELEVATION
SCALE: 3/32" = 1'-0" (PRINTED ON 11x17)

10.21.21

UNIT 4/COMMERCIAL

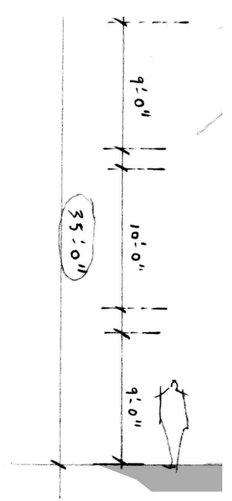
UNIT 5

UNIT 6

UNIT 5

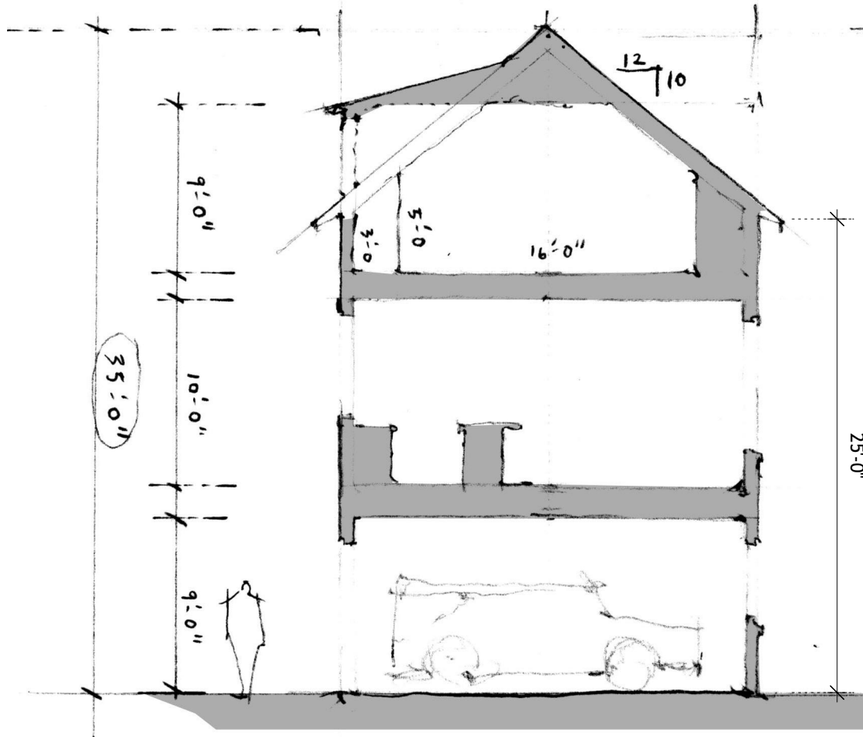
UNIT 6

UNIT 7

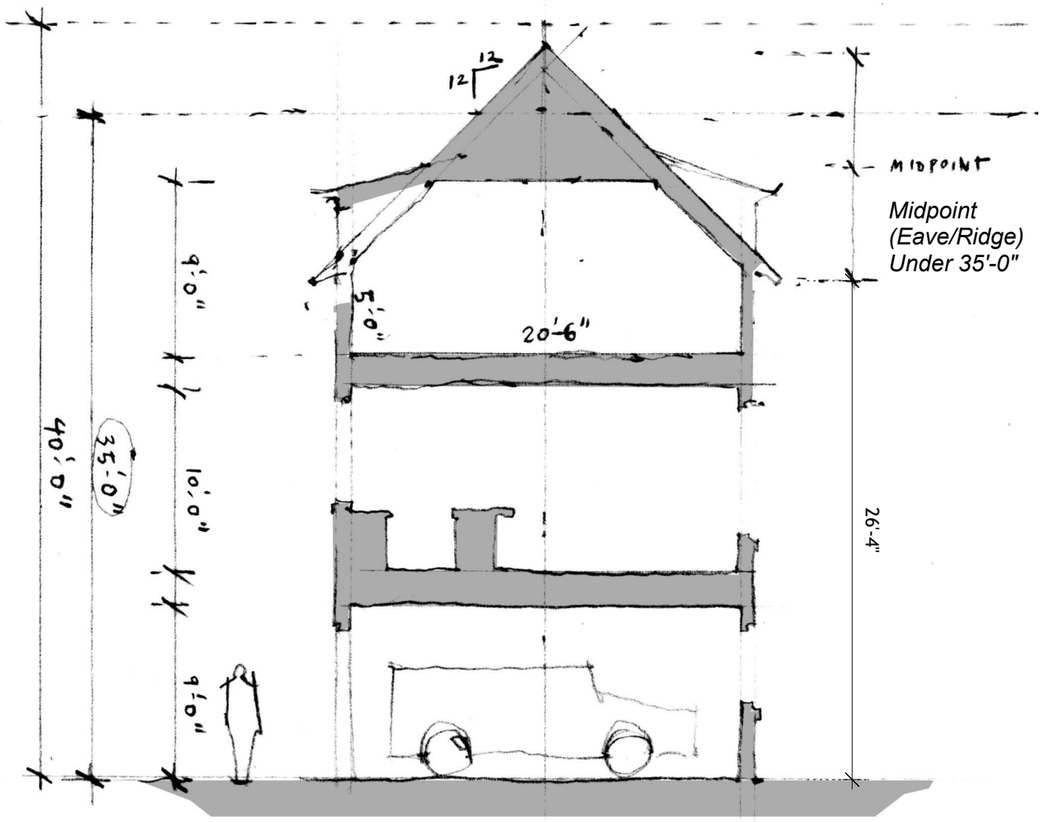



CONCEPTUAL FIRST STREET FRONTAGE ELEVATIONS
SCALE: 3/32" = 1'-0" (PRINTED ON 11x17)

10.21.21




*RIDGE WITH 35'-0" HEIGHT MAX*




*RIDGE WITH 40'-0" HEIGHT MAX*

HEIGHT CONSIDERATION
N.T.S.

10.21.21


*Small Footprint Rooftop Access Penthouse Structure ( Under 100 s.f.)*

*Face of Rooftop Structure 10-0" - 12'-0" Behind Front Face of Building - Not Likely Visible from Frontage*

*PARAPET MAX 35'-0" - Rooftop Access Structure Above (with Limited Footprint)*

HEIGHT CONSIDERATION
N.T.S.

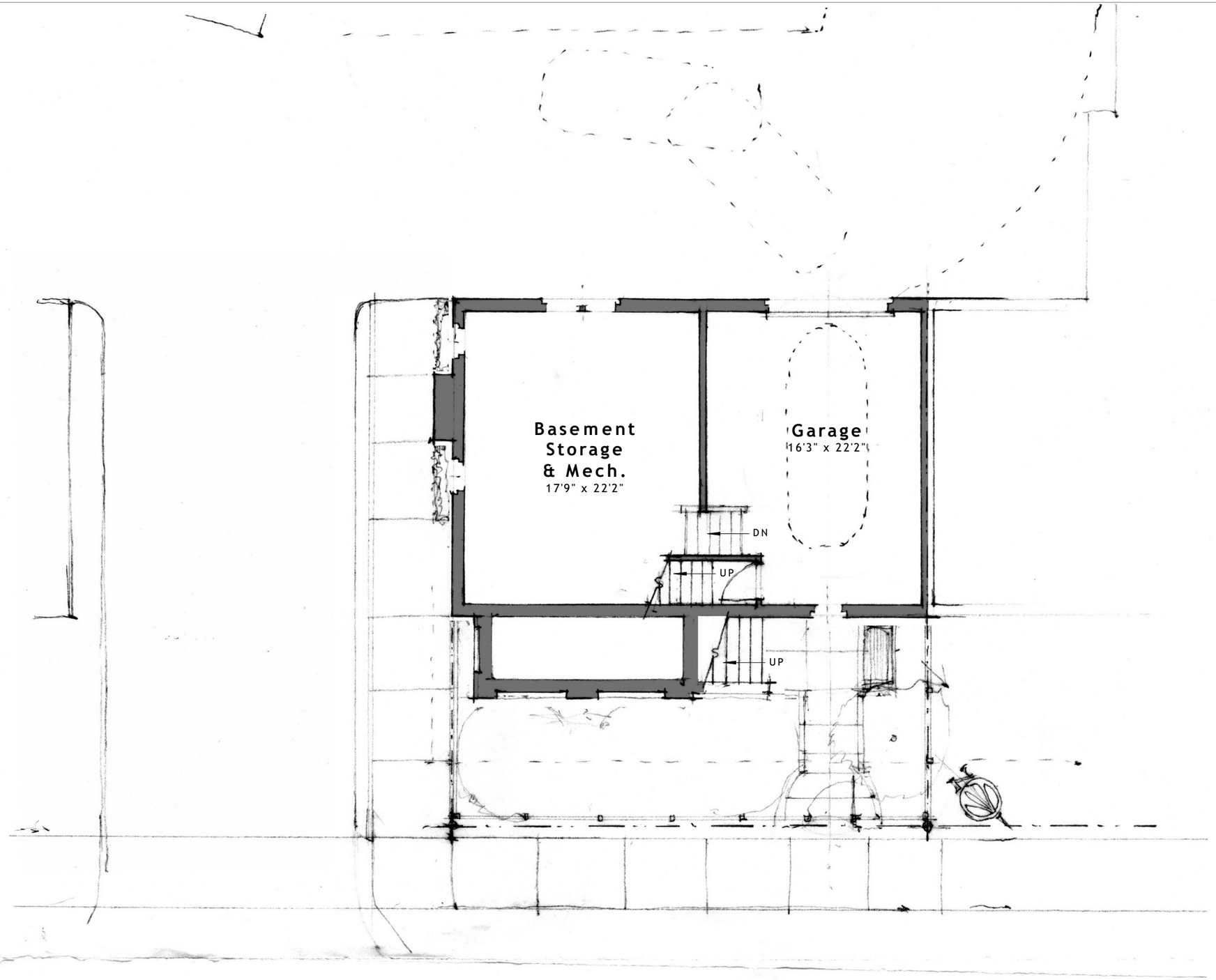
10.21.21


SITE PLAN - AERIAL CONTEXT
SCALE: 1" = 50'-0" (PRINTED ON 11x17)

10.21.21


UNIQUE
HOTEL
Storyville
LAUGHING
LADIES
CAFE
Antiques
First
Bldg
HANDCRAFTED
Jewelry
and
Gifts


UNIQUE
HOTEL
Storyville
LAUGHING
LADIES
CAFE
Antiques
Bldg
HANDCRAFTED
Jewelry
Gifts
586-KVN




Craft Design Studio
204 SPOONER LANE
MOUNT PLEASANT, SC 29464
www.craftdesign-studio.com
704.408.5501 (C)

# Lot 6 House - 1st Street

*Bottling District*

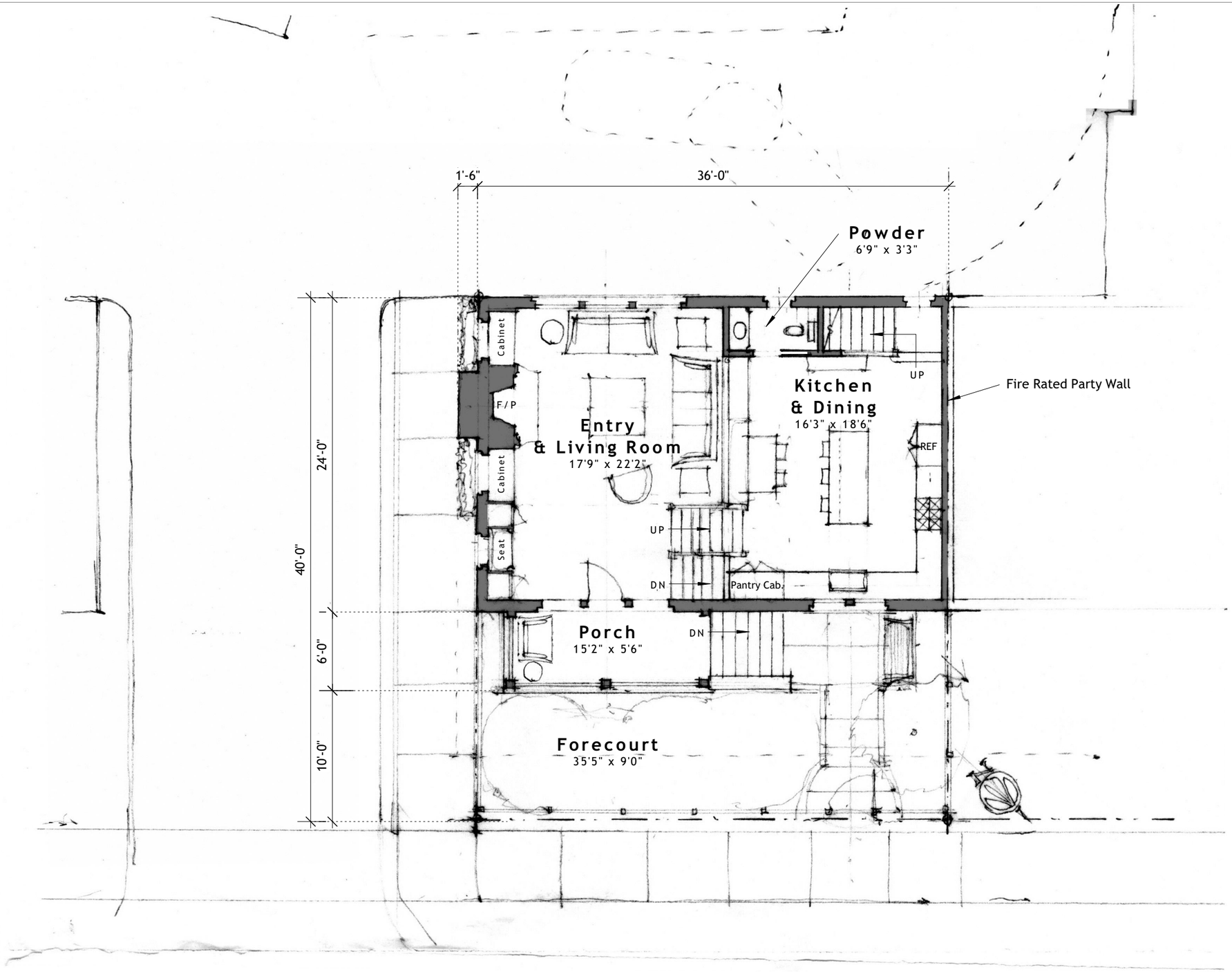
Salida - Colorado

**Basement Level Plan**

1/8" = 1'-0"

**Schematic Design**

12.10.21




Craft Design Studio
204 SPOONER LANE
MOUNT PLEASANT, SC 29464
www.craftdesign-studio.com
704.408.5501 (C)

# Lot 6 House - 1st Street

*Bottling District*

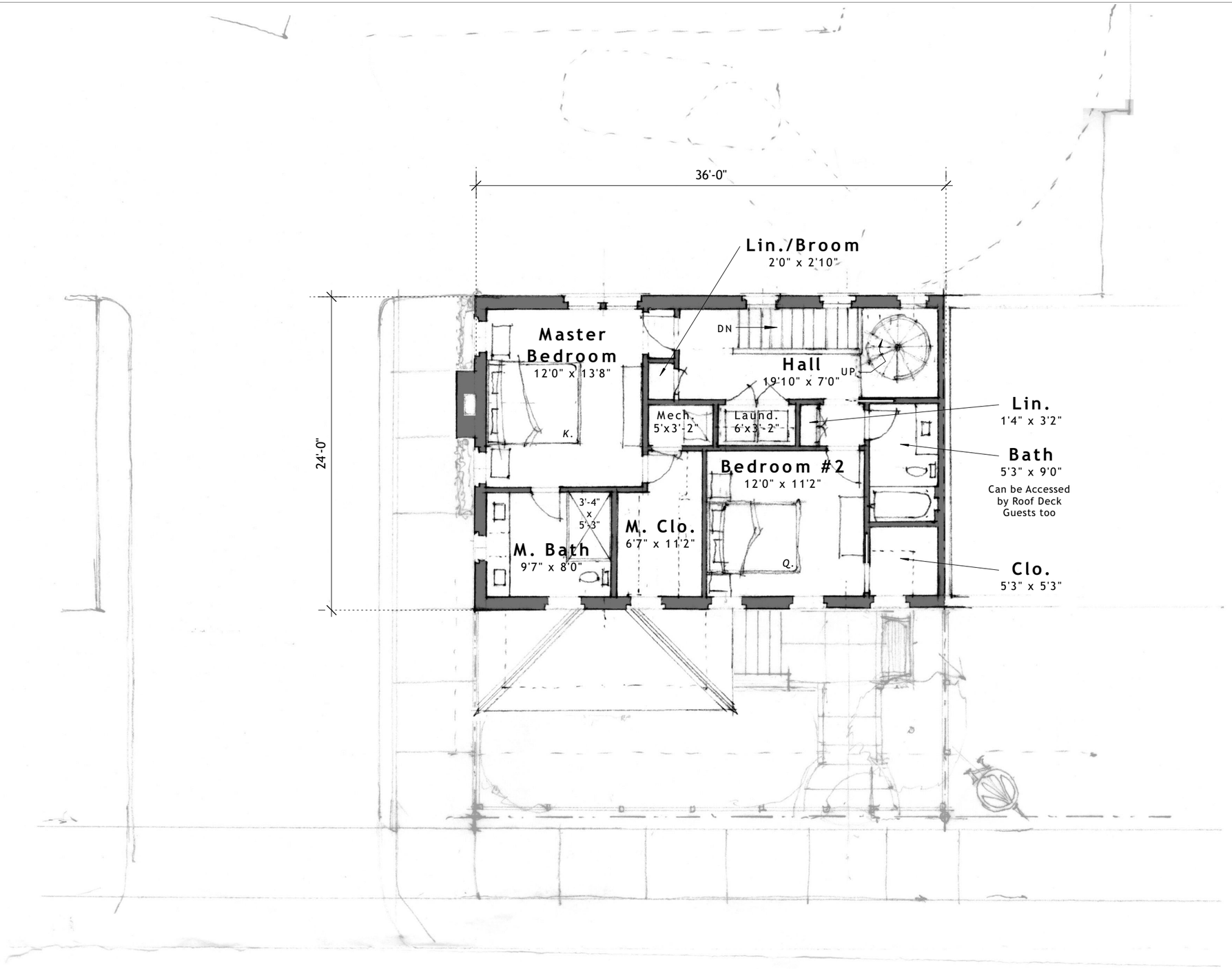
Salida - Colorado

1st Level Plan

1/8" = 1'-0"

Schematic Design

12.10.21




Craft Design Studio
204 SPOONER LANE
MOUNT PLEASANT, SC 29464
www.craftdesign-studio.com
704.408.5501 (C)

# Lot 6 House - 1st Street

*Bottling District*

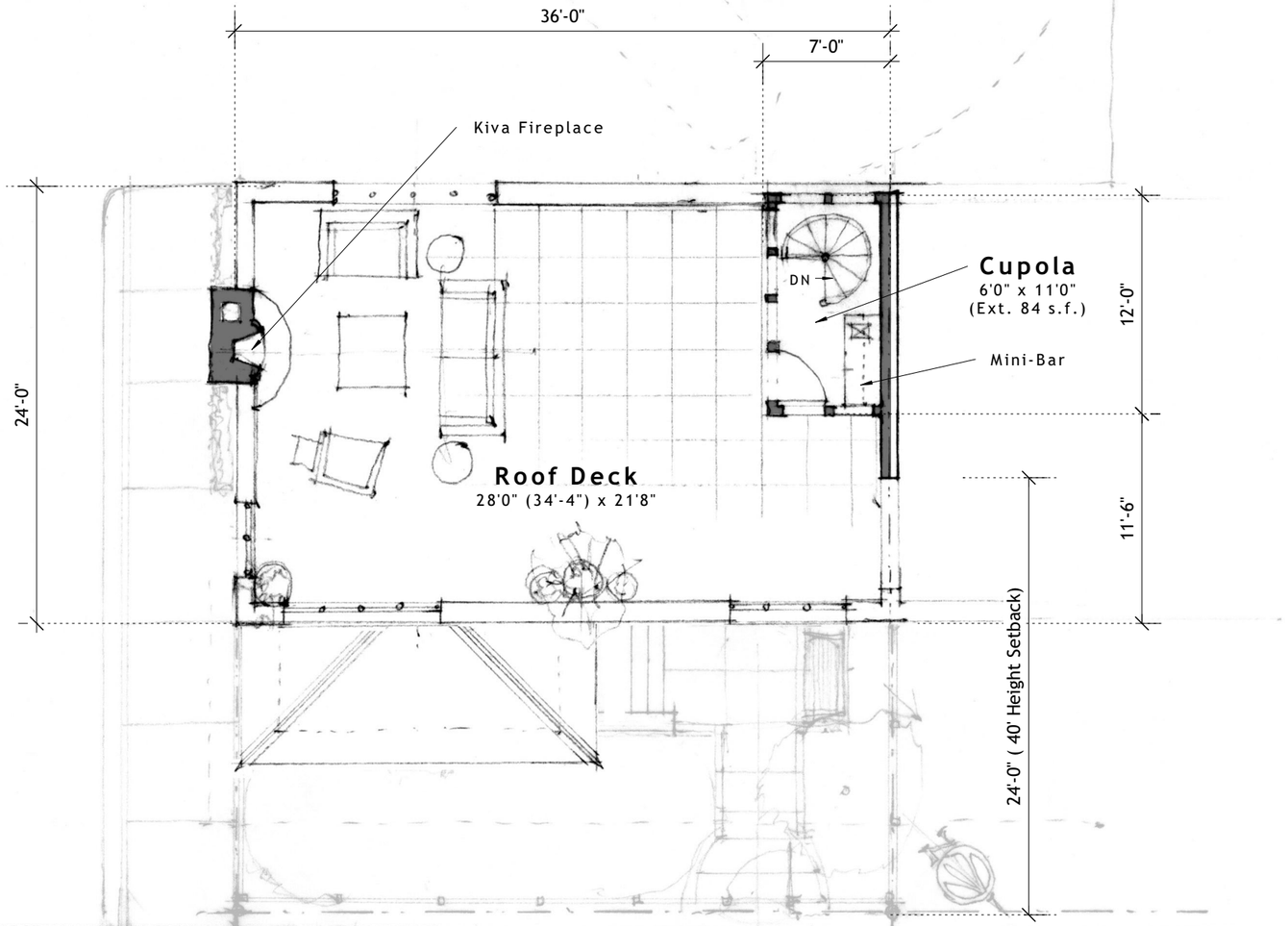
Salida - Colorado

2nd Level Plan

1/8" = 1'-0"

Schematic Design

12.10.21




Craft Design Studio
204 SPOONER LANE
MOUNT PLEASANT, SC 29464
www.craftdesign-studio.com
704.408.5501 (C)

# Lot 6 House - 1st Street

*Bottling District*

Salida - Colorado

Roof Level Plan

1/8" = 1'-0"

Schematic Design

12.10.21


Craft Design Studio
204 SPOONER LANE
MOUNT PLEASANT, SC 29464
www.craftdesign-studio.com
704.408.5501 (C)

# Lot 6 House - 1st Street

*Bottling District*

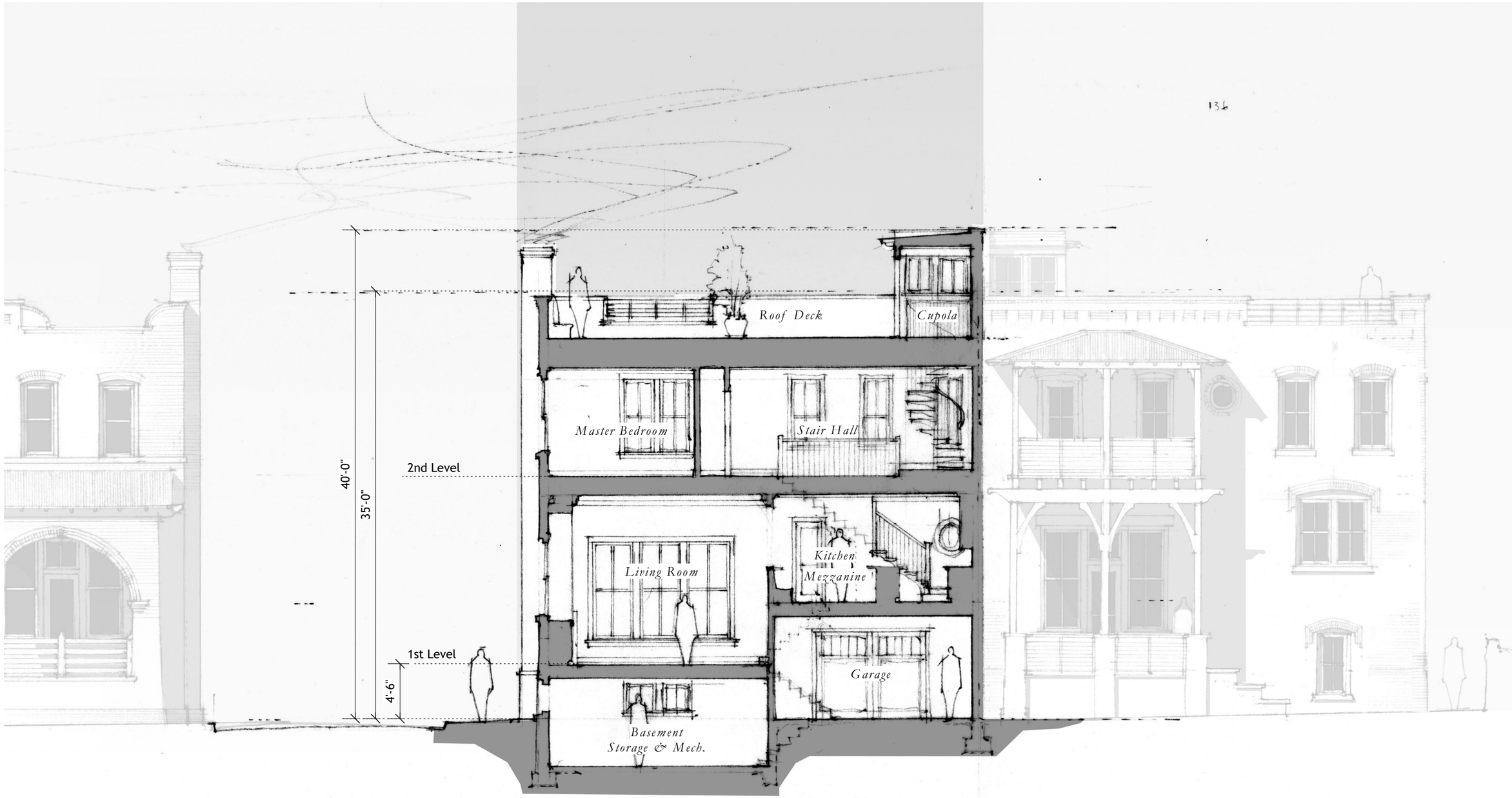
Salida - Colorado

Front Elevation

1/8" = 1'-0"

Schematic Design

12.10.21




Craft Design Studio
204 SPOONER LANE
MOUNT PLEASANT, SC 29464
www.craftdesign-studio.com
704.408.5501 (C)

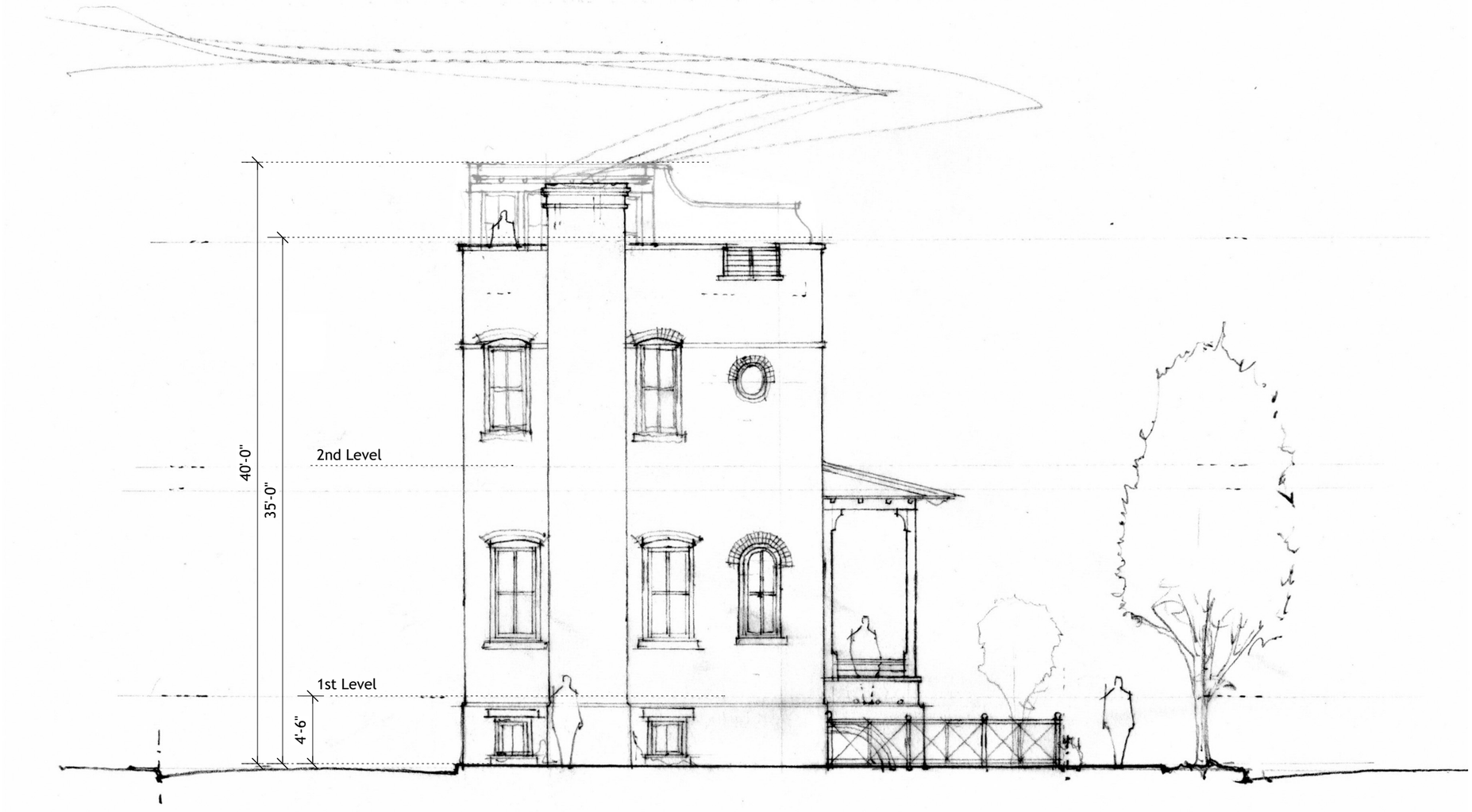
# Lot 6 House - 1st Street

*Bottling District*

Salida - Colorado

**Building Section**
1/8" = 1'-0"

**Schematic Design**
12.10.21




Craft Design Studio
204 SPOONER LANE
MOUNT PLEASANT, SC 29464
www.craftdesign-studio.com
704.408.5501 (C)

# Lot 6 House - 1st Street

*Bottling District*

Salida - Colorado

Left Side Elevation

1/8" = 1'-0"

Schematic Design

12.10.21

# RESIDENCES AT SALIDA BOTTLING COMPANY

## LOCATED IN BLOCK 19
## CITY OF SALIDA
## CHAFFEE COUNTY, COLORADO

## CERTIFICATE OF DEDICATION AND OWNERSHIP

KNOW ALL PERSONS BY THESE PRESENTS THAT SALIDA BOTTLING COMPANY, LLC, THE FEE OWNER OF THE FOLLOWING DESCRIBED PROPERTY:

LOTS NO. 6, 7, 8 AND 9
BLOCK NO. 19
CITY OF SALIDA
CHAFFEE COUNTY, COLORADO
AND
FRACTIONAL LOTS FOUR (4) AND FIVE (5) IN BLOCK 19 OF THE CITY OF SALIDA AND A STRIP OF LAND BETWEEN SAID BLOCK 19 AND THE RIGHT-OF-WAY OF THE DENVER AND RIO GRANDE WESTERN RAILROAD (MONARCH BRANCH) ALL OF WHICH IS MORE PARTICULARLY DESCRIBED AS A TRACT OF LAND LOCATED WITHIN THE CITY OF SALIDA, CHAFFEE COUNTY, COLORADO AND BEING PART OF FRACTIONAL BLOCK NO. 19 OF ORIGINAL SALIDA AND PART OF THE ADJOINING RAILROAD RESERVATION LAND BEING DESCRIBED AS FOLLOWS:
BEGINNING AT THE COMMON CORNER OF LOTS 5 AND 6 OF SAID BLOCK NO. 19 LOCATED ON FIRST STREET;
THENCE SOUTH 48°49'24" WEST ALONG THE COMMON LOT LINE OF SAID LOTS 5 AND 6 FOR A DISTANCE OF 150.00 FEET TO THE NORTHEASTERLY ALLEY BOUNDARY OF SAID BLOCK NO. 19;
THENCE SOUTH 41°11'36" EAST ALONG SAID NORTHEASTERLY ALLEY BOUNDARY 53.76 FEET TO THE NORTHERLY BOUNDARY OF THE DENVER AND RIO GRANDE WESTERN RAILROAD-MONARCH BRANCH;
THENCE NORTH 63°13'57" EAST ALONG SAID RAILROAD BOUNDARY 154.88 FEET TO THE SOUTHWESTERLY BOUNDARY OF SAID FIRST STREET;
THENCE NORTH 41°11'36" WEST ALONG SAID STREET BOUNDARY 92.34 FEET TO THE POINT OF BEGINNING.
TOGETHER WITH
THAT PORTION OF THE FOLLOWING DESCRIBED ALLEY LOCATED WITHIN BLOCK 19, IN THE CITY OF SALIDA, CHAFFEE COUNTY, COLORADO, THAT ABUTS LOTS 5,6,7, 8 AND 9, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE INTERSECTION OF THE NORTHEASTERLY RIGHT-OF-WAY OF SAID ALLEY IN BLOCK 19 AND THE SOUTHEASTERLY BOUNDARY OF SAID BLOCK 19, FROM WHENCE THE INTERSECTION OF SAID SOUTHEASTERLY BOUNDARY OF BLOCK 19 AND THE NORTHEASTERLY RIGHT-OF-WAY OF SECOND STREET BEARS SOUTH 60°24'50" WEST, A DISTANCE OF 178.58 FEET;
THENCE SOUTH 60°24'50" WEST ALONG SAID SOUTHEASTERLY BOUNDARY OF BLOCK 19, A DISTANCE OF 2.69 FEET;
THENCE NORTH 40°46'31" WEST, A DISTANCE OF 215.34 FEET TO THE SOUTHEASTERLY RIGHT-OF-WAY OF 1 STREET;
THENCE NORTH 49°13'29" EAST ALONG SAID RIGHT-OF-WAY OF 1 STREET, A DISTANCE OF 2.42 FEET TO SAID NORTHEASTERLY RIGHT-OF-WAY OF THE ALLEY WITHIN BLOCK 19;
THENCE SOUTH 40°49'58" EAST ALONG SAID NORTHEASTERLY ALLEY RIGHT-OF-WAY, A DISTANCE OF 215.86 FEET TO THE POINT OF BEGINNING.

HAS LAID-OUT, PLATTED AND SUBDIVIDED THE SAME INTO LOTS, OUTLOTS AND EASEMENTS, AS SHOWN ON THIS PLAT UNDER THE NAME AND STYLE OF:

**RESIDENCES AT SALIDA BOTTLING COMPANY**

IN WITNESS WHEREOF THE UNDERSIGNED HAS CAUSED THESE PRESENTS TO BE EXECUTED THIS_____DAY OF_____2022

_____
BY: ERIC WARNER
MANAGER, SALIDA BOTTLING COMPANY, LLC

COUNTY OF _____ )
) SS.
STATE OF _____ )

THE FORGOING DEDICATION WAS ACKNOWLEDGED BEFORE ME THIS___DAY OF _____2022, BY ERIC WARNER. WITNESS MY HAND AND SEAL.

MY COMMISSION EXPIRES_____.

_____
NOTARY PUBLIC

## CERTIFICATION OF TITLE

I _____, A LICENSED TITLE INSURANCE AGENT IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT I HAVE EXAMINED THE TITLE TO THE PROPERTY HEREBY DEDICATED AND AS SHOWN AND DESCRIBED ON THIS PLAT AND FOUND TITLE VESTED IN SALIDA BOTTLING COMPANY, LLC, FREE AND CLEAR OF ALL LIENS AND ENCUMBRANCES EXCEPT AS LISTED BELOW:

_____

DATED THIS ____ DAY OF _____, 2022.

_____
TITLE AGENT

## CLERK AND RECORDER'S CERTIFICATE

THIS PLAT WAS FILED IN THE OFFICE OF THE CLERK AND RECORDER OF CHAFFEE COUNTY, COLORADO, AT _____ __.M. ON THIS _____ DAY OF _____ , 2022 UNDER RECEPTION NUMBER _____.

_____
CHAFFEE COUNTY CLERK AND RECORDER

NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE SURVEYOR'S STATEMENT CONTAINED HEREON.

## ACKNOWLEDGMENT OF LIEN HOLDER

_____, AS LIEN HOLDER, HEREBY ACKNOWLEDGES AND APPROVES THE TERMS, CONDITIONS AND DEDICATION AS DISCLOSED UPON THIS PLAT.

_____ _____
REPRESENTATIVE DATE

COUNTY OF _____ )
) SS.
STATE OF _____ )

THE FORGOING ACKNOWLEDGMENT OF LIEN HOLDER WAS ACKNOWLEDGED BEFORE ME THIS___DAY OF _____2022, BY _____. WITNESS MY HAND AND SEAL.

MY COMMISSION EXPIRES_____.

_____
NOTARY PUBLIC

## CERTIFICATE OF STREET & UTILITY MAINTENANCE

PUBLIC NOTICE IS HEREBY GIVEN THAT NEITHER THE DEDICATED PUBLIC ROADS NOR THE PUBLIC UTILITIES SHOWN ON THIS PLAT WILL BE MAINTAINED BY THE CITY OF SALIDA UNTIL AND UNLESS THE SUBDIVIDER CONSTRUCTS THE STREETS, ROADS AND UTILITIES IN ACCORDANCE WITH THE SUBDIVISION AGREEMENT AS RECORDED AT RECEPTION NO._____, IF ANY, AND THE SUBDIVISION REGULATIONS IN EFFECT AT THE DATE OF THE RECORDING OF THIS PLAT, AND APPROVAL OF THE CITY HAS BEEN ISSUED TO THAT EFFECT. WHEN THE CITY APPROVES A STREET OR UTILITY FOR MAINTENANCE, THE STREET OR UTILITY SHALL BECOME PUBLIC IN ALL SENSES OF THE WORD AND THE SUBDIVIDER HAS NO FURTHER OBLIGATIONS IN REGARDS TO THAT PARTICULAR STREET OR UTILITY.

## CITY COUNCIL APPROVAL

THIS PLAT IS APPROVED FOR FILING AND THE CITY HEREBY ACCEPTS THE DEDICATION OF THE STREETS AND ROADS SHOWN HEREON SUBJECT TO THE "STREET MAINTENANCE" SET FORTH ABOVE, AND FURTHER ACCEPTS THE DEDICATION OF THE EASEMENTS SHOWN HEREON.

SIGNED THIS ____DAY OF _____. 2022.
CITY OF SALIDA

BY:_____
MAYOR

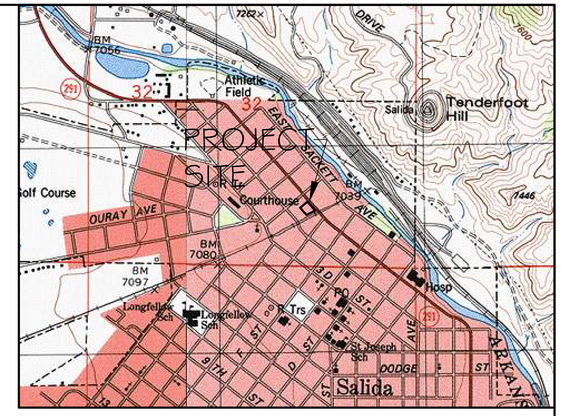
## LAND SURVEYOR'S CERTIFICATE

I, SYDNEY A. SCHIEREN, A REGISTERED LAND SURVEYOR LICENSED TO PRACTICE IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THIS LAND SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION, AND THAT THE PLAT REPRESENTS THE RESULTS OF SAID SURVEY AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

SYDNEY A. SCHIEREN
COLORADO P.L.S. 37937

PRELIMINARY DRAFT
INTENDED FOR REVIEW BY CLIENT AND AGENTS ONLY

COLORADO LICENSED
SYDNEY ARTHUR SCHIEREN
37937
PROFESSIONAL LAND SURVEYOR




VICINITY MAP
NOT TO SCALE

## GENERAL NOTES

1) BASIS OF BEARING FOR THIS SURVEY IS GRID NORTH FROM COLORADO STATE PLANE COORDINATE SYSTEM CENTRAL ZONE, BASED ON G.P.S. OBSERVATIONS ALONG THE NORTH EASTERLY ALLEY RIGHT-OF-WAY IN BLOCK 19, HAVING A BEARING OF NORTH 40°51'11" WEST.
2) LOTS WITHIN "RESIDENCES AT SALIDA BOTTLING COMPANY" SUBJECT TO "RESIDENCES AT SALIDA BOTTLING COMPANY PLANNED DEVELOPMENT" RECORDED AT RECEPTION NO._____
3) FEES-IN-LIEU FOR OPEN SPACE SHALL BE REQUIRED PRIOR TO ISSUANCE OF BUILDING PERMITS FOR EACH UNIT.
4) AS REQUIRED UNDER SECTION 16.6.140 OF THE SALIDA MUNICIPAL CODE, A PAYMENT IN LIEU OF LAND DEDICATION FOR FAIR CONTRIBUTIONS FOR PUBLIC SCHOOL SITES SHALL BE PAID BY THE OWNER OF EACH LOT WITHIN THIS SUBDIVISION PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR ANY NEW RESIDENCE ON SUCH LOT.
5) THE SUBDIVISION HAS COMPLIED WITH CHAPTER 16 OF THE SALIDA MUNICIPAL CODE AND IS SUBJECT TO THE TERMS OF THE EXECUTED SUBDIVISION IMPROVEMENT AND INCLUSIONARY HOUSING AGREEMENT, AS RECORDED AT RECEPTION NO._____
6) BALCONIES, DECKS AND SIMILAR ARCHITECTURAL APPURTENANCES CANNOT ENCROACH INTO ANY UTILITY EASEMENT. EAVES MAY ENCROACH UP TO ____ INCHES INTO THE H.O.A. OUTLOT AND THE PUBLIC ACCESS EASEMENT, BUT CANNOT ENCROACH INTO ANY UTILITY EASEMENT.
7) A COMMON WALL MAINTENANCE AGREEMENT SHALL BE ESTABLISHED AND RECORDED TO RUN WITH THE LAND COMPRISING THE PROPOSED TOWNHOME LOTS.

| |
|---|
| REVISED:DECEMBER 7, 2021 |
| DECEMBER 8, 2021 |
| |
| |
| |
| |
| |
| |
| JOB # 20219 |
| DATE: NOVEMBER 11, 2021 |
| SHEET 1 OF 2 |

RESIDENCES AT SALIDA BOTTLING COMPANY

LOCATED IN BLOCK 19
CITY OF SALIDA
CHAFFEE COUNTY, COLORADO

LANDMARK SURVEYING & MAPPING
P.O. BOX 668 SALIDA, CO 81201
PH (719.539.4021 FAX (719.539.4031

# RESIDENCES AT SALIDA BOTTLING COMPANY

LOCATED IN BLOCK 19
CITY OF SALIDA
CHAFFEE COUNTY, COLORADO

N
W E
S

0' 10' 20' 30'

SCALE
1" = 10'

1 3/4" STEEL DISC SET ON CONCRETE WALL LS 6753

1 3/4" STEEL DISC ON #5 REBAR LS 7661

3/4" STEEL DISC ON #5 REBAR LS 7661

1 1/2" ALUM. CAP ON #5 REBAR LS 37937

UTILITY SHED

DITCH

MONARCH SPUR TRAIL

COLORADO STATE HIGHWAY 291 (aka. FIRST STREET)

EDGE OF PAVEMENT

CURB

CONCRETE WALL

CONVENIENCE STORE

SHED

ALLEY

GAS

5' PUBLIC UTILITY EASEMENT (TYPICAL)

20' PRIVATE ACCESS AND PUBLIC UTILITY EASEMENT

25' PRIVATE ACCESS AND PUBLIC UTILITY EASEMENT

3'x18.5' PARKING EASEMENT FOR LOT 4

6'x20' ELECTRIC EASEMENT

LOT 1
1080 SQ.FT.

LOT 2
1080 SQ.FT.

LOT 3
1084 SQ.FT.

LOT 4
1006 SQ.FT.

LOT 5
1200 SQ.FT.

LOT 6
1440 SQ.FT.

LOT 7
1776 SQ.FT.

LOT 8
638 SQ.FT.

LOT 9
638 SQ.FT.

LOT 10
396 SQ.FT.

LOT 11
528 SQ.FT.

LOT 12
396 SQ.FT.

LOT 13
660 SQ.FT.

LOT 14
528 SQ.FT.

LOT 15
528 SQ.FT.

LOT 16
528 SQ.FT.

OUTLOT
TOTAL AREA
12606 SQ.FT.

## LEGEND

- FOUND MONUMENT AS NOTED
- WATER VALVE
- WATER METER
- POWER POLE
- FENCE
- OVERHEAD UTILITY
- CONCRETE

| AREA TABLE | | |
|---|---|---|
| LOTS | 13,506 SQ.FT. | 0.31 AC |
| OUTLOT | 12,606 SQ.FT. | 0.29 AC |
| TOTAL | 26,112 SQ.FT. | 0.60 AC |

| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | S 40°51'11" E | 27.30' |
| L2 | N 49°11'12" E | 80.91' |
| L3 | N 61°11'12" E | 7.52' |
| L4 | S 40°48'48" E | 29.27' |
| L5 | N 49°10'39" E | 40.00' |
| L6 | S 49°10'39" W | 40.00' |
| L7 | S 40°48'48" E | 39.33' |
| L8 | S 63°37'10" W | 110.59' |
| L9 | S 49°08'49" W | 2.75' |
| L10 | N 49°08'49" E | 10.92' |
| L11 | N 63°37'10" E | 84.10' |
| L12 | N 40°48'48" W | 67.79' |
| L13 | S 61°11'12" W | 7.52' |
| L14 | S 49°11'12" W | 80.89' |
| L15 | S 26°22'12" E | 8.00' |
| L16 | S 26°22'12" E | 9.00' |
| L17 | S 63°37'48" W | 5.22' |
| L18 | S 63°37'48" W | 2.87' |

| CURVE | ARC LENGTH | RADIUS | DELTA ANGLE | CHORD BEARING | CHORD LENGTH |
|---|---|---|---|---|---|
| C1 | 8.38' | 40.00' | 12°00'00" | N 55°11'12" E | 8.36' |
| C2 | 27.23' | 20.00' | 78°00'00" | S 79°48'48" E | 25.17' |
| C3 | 4.19' | 20.00' | 12°00'00" | S 55°11'12" W | 4.18' |

## LAND SURVEYOR'S CERTIFICATE

I, SYDNEY A. SCHIEREN, A REGISTERED LAND SURVEYOR LICENSED TO PRACTICE IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THIS LAND SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION, AND THAT THE PLAT REPRESENTS THE RESULTS OF SAID SURVEY AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

PRELIMINARY DRAFT
INTENDED FOR REVIEW BY CLIENT AND AGENTS ONLY

SYDNEY A. SCHIEREN
COLORADO P.L.S. 37937

COLORADO LICENSED
SYDNEY ARTHUR SCHIEREN
37937
PROFESSIONAL LAND SURVEYOR

NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE SURVEYOR'S STATEMENT CONTAINED HEREON.

REVISED:DECEMBER 7, 2021

JOB # 20219

DATE: NOVEMBER 11, 2021

SHEET 2 OF 2

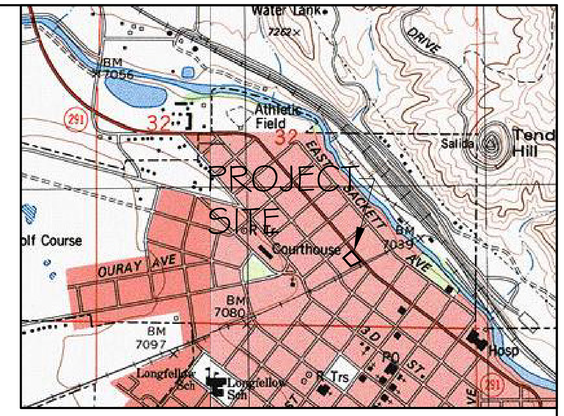
RESIDENCES AT SALIDA BOTTLING COMPANY

LOCATED IN BLOCK 19
CITY OF SALIDA
CHAFFEE COUNTY, COLORADO

LANDMARK
SURVEYING & MAPPING
P.O. BOX 668 SALIDA, CO 81201
PH 719.539.4021 FAX 719.539.4031

# WARNER–HOMER TOPOGRAPHIC SURVEY

PART OF LOTS 4 & 5, ALL OF LOTS 6–9, BLOCK 19, CITY OF SALIDA, COLORADO 81201




VICINITY MAP
NOT TO SCALE

N
W E
S

0' 10' 20' 30'

SCALE
1" = 10'

1 3/4" STEEL DISC SET ON CONCRETE WALL LS 6753

COLORADO STATE HIGHWAY 291 (FIRST STREET)

EDGE OF PAVEMENT

CURB

CONCRETE WALL

152.52'

150.00'

S 40°49'55" E

666.38'

7060

7063

7062

7061

7059

7058

7057

7056

7055

LOT 10

LOT 9

LOT 8

LOT 7

LOT 6

LOT 5

LOT 4

TOTAL AREA
26112.1SQ. FT.
0.60 ACRES

1 1/2" ALUM. CAP ON #5 REBAR LS 16117

N 49°10'02" E

N 40°49'58" W
323.15'

SHED

GAS

SAN. MH
RIM: 7066.51'
(UNABLE TO OPEN)

N 40°46'31" W

ALLEY

VACATED PORTION OF ALLEY

30'

114.42'

SOUTHEASTERLY BOUNDARY OF BLOCK 19

S 35°24'27" E
224.75'

1 3/4" STEEL DISC ON #5 REBAR LS 6753

1 3/4" STEEL DISC ON #5 REBAR LS 7661

2.63'
LIS 60°24'50" W

S 40°49'55" E
38.03'

SITE BENCHMARK
1 1/2" ALUM. CAP
ON #5 REBAR
LS 37937
ELEV.=7059.64'

UTILITY SHED

NORTHWESTERLY RIGHT-OF-WAY OF DENVER & RIO GRANDE RAILROAD (ABANDONED)

N 63°37'10" E

152.48'

RAILROAD TIE RETAINING WALL

DITCH

MONARCH SPUR TRAIL

## GENERAL NOTES

1) ELEVATIONS SHOWN HEREON BASED UPON N.A.V.D. 88
2) CONTOUR INTERVAL IS 1.0'
3) SITE BENCHMARK IS AN 1 1/2" ALUMINIUM CAP ON NO. 5 REBAR STAMPED L.S. 37937, HAVING AN ELEVATION OF 7059.64'
4) UNDERGROUND UTILITIES SHOWN AS MARKED ON THE SURFACE BY UTILITY NOTIFICATION CENTER OF COLORADO AND OTHERS. LANDMARK SURVEYING AND MAPPING ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF ANY UNDERGROUND UTILITIES DEPICTED HEREON.
5) THIS TOPOGRAPHIC SURVEY DOES NOT CONSTITUTE A BOUNDARY SURVEY.
6) FIELD WORK PERFROMED ON DECEMBER 21. SITE WAS SNOW COVERED AT TIME OF SURVEY. FEATURES MAY EXIST THAT WERE NOT VISIBLE AT THE TIME OF THE SURVEY.

## LEGEND

- FOUND MONUMENT AS NOTED
- WV WATER VALVE
- WM WATER METER
- PP POWER POLE
- FENCE
- OVERHEAD UTILITY
- CONCRETE

## LAND SURVEYOR'S CERTIFICATE

I, SYDNEY A. SCHIEREN, A REGISTERED LAND SURVEYOR LICENSED TO PRACTICE IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THIS LAND SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION, AND THAT THE PLAT REPRESENTS THE RESULTS OF SAID SURVEY AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

COLORADO LICENSED SYDNEY ARTHUR SCHIEREN 37937 PROFESSIONAL LAND SURVEYOR

SYDNEY A. SCHIEREN
COLORADO P.L.S. 37937



REVISED:

JOB # 20219
DATE: JANUARY 6, 2020
SHEET 1 OF 1

WARNER–HOMER TOPOGRAPHIC SURVEY

PART OF LOTS 4 & 5, ALL OF LOTS 6–9, BLOCK 19, CITY OF SALIDA, COLORADO 81201

LANDMARK SURVEYING & MAPPING
P.O. BOX 668 SALIDA, CO 81201
PH 719.539.4021 FAX 719.539.4031

OCTOBER 15, 2021

# DRAINAGE REPORT

## RESIDENCES AT SALIDA BOTTLING COMPANY

BILL HUSSEY, PE
Crabtree Group Inc.
Salida, Colorado

Project #20037

719.539.1675
719.221.1799

325 D Street, P.O. Box 924, Salida, CO 81201
422 Main Street Ventura, CA 93001

**crabtreegroupinc.com**

Contents

# 1 INTRODUCTION

Residences at Salida Bottling Company is a proposed development in the City of Salida, at the west corner of Highway 291 (1st Street) and the Monarch Spur Trail. Improvements to the site will include landscaping, pedestrian and vehicle access pavement, and buildings.

# 2 EXISTING CONDITIONS

The subject site is currently a parking lot with road base surface. Existing stormwater flow on site consists of sheet flow from southwest to northeast. There is no evidence of significant off-site generated stormwater runoff entering the site. Runoff generated on site currently discharges to Highway 291, which slopes down from northwest to southeast, and the Salida Ditch, which slopes down from southwest to northeast.

# 3 SOILS

Information for the on-site soils was obtained from the USDA Web Soil Survey (U.S. Department of Agriculture, n.d.). The soils consist of Dominson gravelly sandy loam, which is assigned to Hydrologic Soils Group A. Web Soil Survey data is included in Appendix A.

# 4 PRECIPITATION

Precipitation amounts for the Design Storms was obtained from the NOAA precipitation frequency estimates for the subject area. The Design Storms utilized in the analysis are summarized in 1 below.

**TABLE 1**

| Storm Return Period (yr) | 24-hour Rainfall Amount (in.) |
|---|---|
| 2 | 1.34 |
| 5 | 1.64 |
| 10 | 1.89 |
| 25 | 2.26 |
| 50 | 2.55 |
| 100 | 2.85 |

# 5 RUNOFF ANALYSIS

The runoff Analysis was performed utilizing the methods described in the Natural Resources Conservation Service (NRCS) Technical Release #55 (TR-55), with a Type II storm distribution. Predevelopment peak site runoff for the 25-year, 24 hour is 0.33 cfs. Postdevelopment peak site runoff for the 25-year, 24 hour storm is 0.96 cfs.

Therefore, per TR-55 Figure 6-1, a minimum of 1,020 cubic feet of stormwater detention is needed to mitigate the additional runoff caused by development of the site. Surface detention will be provided per the civil engineering plans.

TR-55 calculations are included in Appendix C.

# 6 CONCLUSION

The development of the site is expected to increase the on-site generated stormwater flows after completion of construction. To mitigate this impact, a minimum of 1,020 cubic feet of on-site stormwater detention is incorporated in the site plan. Incorporation of the stormwater storage into the site design will mitigate the impact of the development to the stormwater flows in the area.

This analysis assumes that the vehicle access lane is asphalt. If pervious pavers are installed, less detention will be required.

Because the site is located at the bottom of the Salida Ditch watershed, it may be beneficial to detain only the 2 year storm on site for water quality purposes, and avoid adding to the peak flow of the Salida Ditch in larger storms.

# APPENDIX A: SOILS REPORT

Soil Map—Chaffee-Lake Area, Colorado, Parts of Chaffee and Lake Counties


Map Scale: 1:579 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 5 10 20 30

Feet
0 25 50 100 150

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

## MAP LEGEND

**Area of Interest (AOI)**

- Area of Interest (AOI)

**Soils**

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Water Features**

- Streams and Canals

**Transportation**

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**

- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Chaffee-Lake Area, Colorado, Parts of Chaffee and Lake Counties
Survey Area Data: Version 14, Sep 2, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 18, 2020—May 21, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| DoD | Dominson gravelly sandy loam, 1 to 9 percent slopes | 0.6 | 100.0% |
| **Totals for Area of Interest** | | **0.6** | **100.0%** |

# Chaffee-Lake Area, Colorado, Parts of Chaffee and Lake Counties

## DoD—Dominson gravelly sandy loam, 1 to 9 percent slopes

### Map Unit Setting

*National map unit symbol:* jq8d
*Elevation:* 7,200 to 8,800 feet
*Mean annual precipitation:* 11 to 16 inches
*Frost-free period:* 75 to 100 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Dominson and similar soils:* 100 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Dominson

#### Setting

*Landform:* Alluvial fans, fan terraces
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Alluvium and/or moderately coarse-textured gravelly outwash

#### Typical profile

*H1 - 0 to 11 inches:* gravelly sandy loam
*H2 - 11 to 60 inches:* very gravelly loamy sand

#### Properties and qualities

*Slope:* 1 to 9 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Somewhat excessively drained
*Runoff class:* Low
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 1 percent
*Available water supply, 0 to 60 inches:* Very low (about 2.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 6s
*Land capability classification (nonirrigated):* 6s
*Hydrologic Soil Group:* A
*Ecological site:* R048AY316CO - Dry Mountain Outwash
*Hydric soil rating:* No

**Minor Components**

**St. elmo**

*Percent of map unit:*
*Hydric soil rating:* No

# Data Source Information

Soil Survey Area: Chaffee-Lake Area, Colorado, Parts of Chaffee and Lake Counties
Survey Area Data: Version 14, Sep 2, 2021

# APPENDIX B: NOAA PRECIPITATION ESTIMATES

**NOAA Atlas 14, Volume 8, Version 2**
**Location name: Salida, Colorado, USA***
**Latitude: 38.5373°, Longitude: -105.9937°**
**Elevation: 7059.85 ft****
* source: ESRI Maps
** source: USGS

**POINT PRECIPITATION FREQUENCY ESTIMATES**

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffery Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

## PF tabular

**PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]**

| Duration | Average recurrence interval (years) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 5 | 10 | 25 | 50 | 100 | 200 | 500 | 1000 |
| 5-min | **0.176** (0.138-0.229) | **0.208** (0.163-0.271) | **0.277** (0.216-0.361) | **0.349** (0.271-0.458) | **0.471** (0.364-0.673) | **0.582** (0.434-0.835) | **0.709** (0.509-1.04) | **0.854** (0.586-1.29) | **1.07** (0.703-1.66) | **1.25** (0.792-1.94) |
| 10-min | **0.257** (0.202-0.335) | **0.305** (0.239-0.396) | **0.405** (0.317-0.529) | **0.511** (0.397-0.671) | **0.689** (0.533-0.985) | **0.853** (0.636-1.22) | **1.04** (0.745-1.53) | **1.25** (0.858-1.89) | **1.57** (1.03-2.43) | **1.83** (1.16-2.84) |
| 15-min | **0.314** (0.246-0.408) | **0.371** (0.291-0.483) | **0.494** (0.386-0.645) | **0.623** (0.484-0.818) | **0.841** (0.650-1.20) | **1.04** (0.775-1.49) | **1.27** (0.909-1.86) | **1.53** (1.05-2.31) | **1.91** (1.26-2.97) | **2.24** (1.41-3.47) |
| 30-min | **0.398** (0.312-0.517) | **0.496** (0.389-0.645) | **0.683** (0.534-0.892) | **0.863** (0.670-1.13) | **1.15** (0.878-1.62) | **1.40** (1.04-1.99) | **1.67** (1.19-2.44) | **1.98** (1.35-2.97) | **2.42** (1.59-3.75) | **2.79** (1.77-4.33) |
| 60-min | **0.461** (0.362-0.600) | **0.602** (0.472-0.783) | **0.850** (0.664-1.11) | **1.07** (0.834-1.41) | **1.41** (1.07-1.96) | **1.69** (1.24-2.37) | **1.99** (1.41-2.87) | **2.31** (1.57-3.44) | **2.76** (1.80-4.24) | **3.12** (1.98-4.84) |
| 2-hr | **0.525** (0.417-0.674) | **0.708** (0.562-0.909) | **1.02** (0.805-1.31) | **1.29** (1.01-1.66) | **1.67** (1.27-2.27) | **1.98** (1.47-2.72) | **2.30** (1.64-3.25) | **2.63** (1.80-3.84) | **3.09** (2.04-4.66) | **3.45** (2.21-5.27) |
| 3-hr | **0.574** (0.460-0.731) | **0.767** (0.613-0.977) | **1.09** (0.868-1.39) | **1.37** (1.08-1.75) | **1.76** (1.34-2.36) | **2.07** (1.54-2.82) | **2.39** (1.72-3.35) | **2.72** (1.88-3.93) | **3.17** (2.10-4.73) | **3.52** (2.27-5.33) |
| 6-hr | **0.714** (0.579-0.896) | **0.905** (0.733-1.14) | **1.23** (0.989-1.55) | **1.50** (1.20-1.90) | **1.89** (1.46-2.50) | **2.19** (1.66-2.95) | **2.51** (1.83-3.46) | **2.84** (1.98-4.04) | **3.28** (2.21-4.82) | **3.63** (2.37-5.41) |
| 12-hr | **0.929** (0.763-1.15) | **1.11** (0.908-1.37) | **1.41** (1.15-1.75) | **1.67** (1.35-2.08) | **2.04** (1.60-2.65) | **2.33** (1.79-3.09) | **2.64** (1.95-3.59) | **2.96** (2.10-4.15) | **3.40** (2.31-4.91) | **3.74** (2.48-5.49) |
| 24-hr | **1.16** (0.966-1.42) | **1.34** (1.11-1.64) | **1.64** (1.36-2.01) | **1.90** (1.56-2.34) | **2.27** (1.80-2.90) | **2.56** (1.99-3.33) | **2.86** (2.14-3.82) | **3.18** (2.28-4.37) | **3.60** (2.49-5.12) | **3.94** (2.64-5.69) |
| 2-day | **1.36** (1.14-1.63) | **1.57** (1.32-1.89) | **1.92** (1.61-2.32) | **2.22** (1.85-2.69) | **2.62** (2.11-3.29) | **2.93** (2.30-3.74) | **3.24** (2.46-4.25) | **3.56** (2.58-4.81) | **3.98** (2.77-5.54) | **4.30** (2.92-6.10) |
| 3-day | **1.47** (1.25-1.75) | **1.71** (1.45-2.04) | **2.10** (1.77-2.51) | **2.42** (2.03-2.91) | **2.86** (2.31-3.55) | **3.19** (2.53-4.03) | **3.53** (2.69-4.58) | **3.87** (2.83-5.17) | **4.31** (3.03-5.95) | **4.65** (3.18-6.53) |
| 4-day | **1.56** (1.33-1.85) | **1.81** (1.54-2.15) | **2.22** (1.89-2.64) | **2.56** (2.16-3.06) | **3.02** (2.46-3.73) | **3.38** (2.68-4.24) | **3.73** (2.86-4.81) | **4.09** (3.00-5.43) | **4.55** (3.21-6.24) | **4.91** (3.38-6.85) |
| 7-day | **1.78** (1.54-2.09) | **2.05** (1.76-2.40) | **2.48** (2.13-2.92) | **2.84** (2.42-3.36) | **3.33** (2.74-4.07) | **3.72** (2.99-4.61) | **4.10** (3.18-5.22) | **4.49** (3.33-5.88) | **5.00** (3.57-6.76) | **5.39** (3.75-7.42) |
| 10-day | **1.98** (1.72-2.31) | **2.27** (1.97-2.64) | **2.73** (2.36-3.18) | **3.11** (2.67-3.65) | **3.64** (3.01-4.40) | **4.04** (3.27-4.97) | **4.45** (3.48-5.62) | **4.86** (3.64-6.32) | **5.41** (3.89-7.24) | **5.82** (4.08-7.94) |
| 20-day | **2.57** (2.26-2.95) | **2.94** (2.59-3.37) | **3.53** (3.10-4.07) | **4.02** (3.50-4.64) | **4.67** (3.92-5.55) | **5.17** (4.24-6.24) | **5.65** (4.47-7.01) | **6.14** (4.65-7.83) | **6.76** (4.92-8.89) | **7.23** (5.13-9.69) |
| 30-day | **3.05** (2.71-3.47) | **3.50** (3.10-3.98) | **4.21** (3.72-4.80) | **4.78** (4.20-5.47) | **5.53** (4.67-6.49) | **6.09** (5.03-7.27) | **6.62** (5.28-8.11) | **7.15** (5.45-9.01) | **7.81** (5.72-10.1) | **8.28** (5.92-11.0) |
| 45-day | **3.65** (3.27-4.11) | **4.18** (3.74-4.71) | **5.02** (4.47-5.67) | **5.68** (5.03-6.44) | **6.53** (5.55-7.57) | **7.14** (5.94-8.43) | **7.72** (6.20-9.34) | **8.27** (6.35-10.3) | **8.94** (6.60-11.5) | **9.41** (6.78-12.3) |
| 60-day | **4.15** (3.74-4.64) | **4.75** (4.27-5.32) | **5.67** (5.08-6.37) | **6.39** (5.69-7.21) | **7.31** (6.24-8.40) | **7.96** (6.65-9.30) | **8.55** (6.90-10.3) | **9.11** (7.03-11.2) | **9.76** (7.24-12.4) | **10.2** (7.39-13.3) |

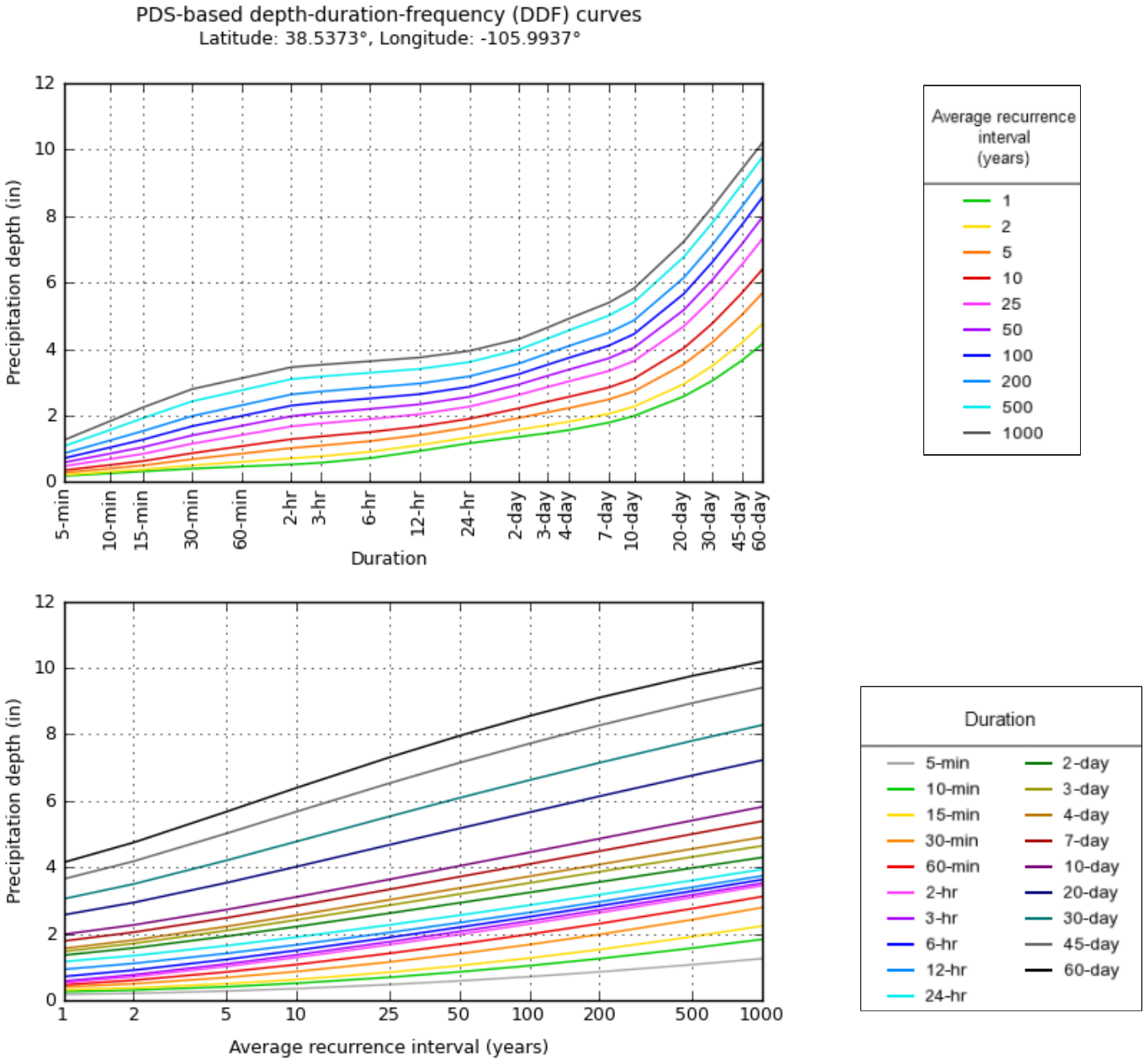
[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Back to Top

## PF graphical



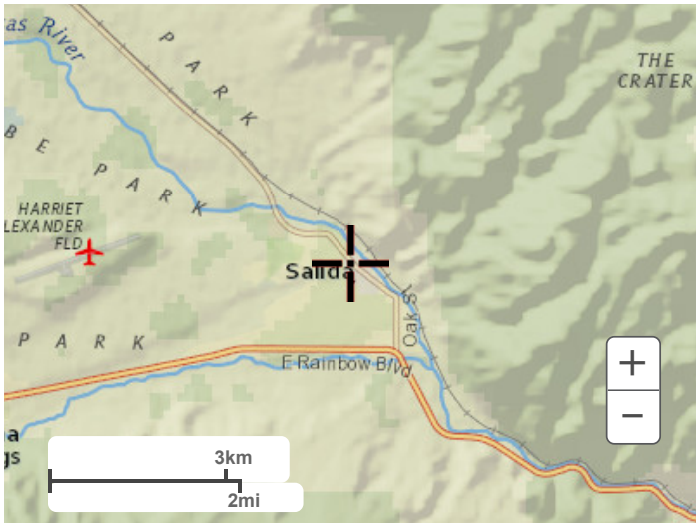

NOAA Atlas 14, Volume 8, Version 2

Created (GMT): Thu Oct 14 15:29:52 2021

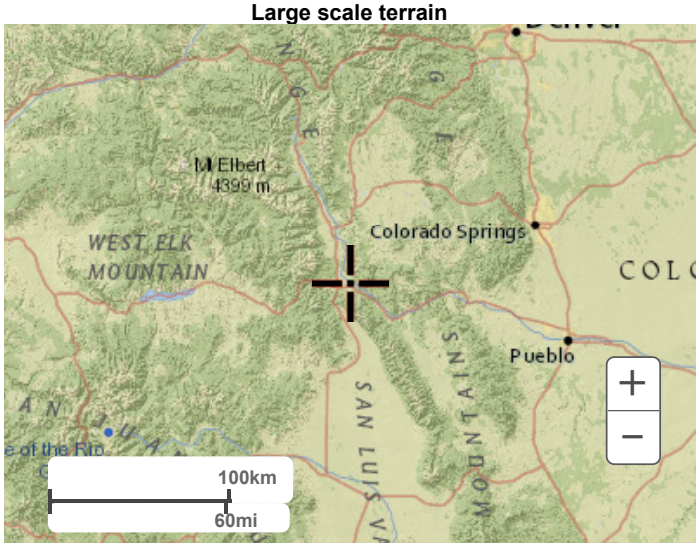
Back to Top

## Maps & aerials

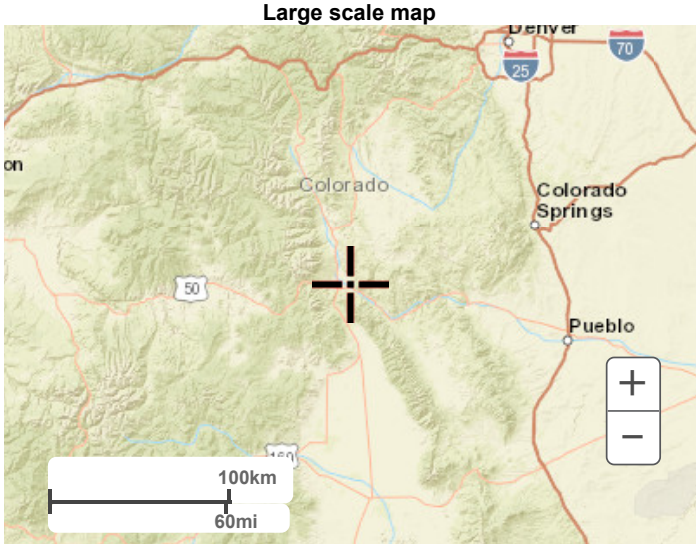
**Small scale terrain**



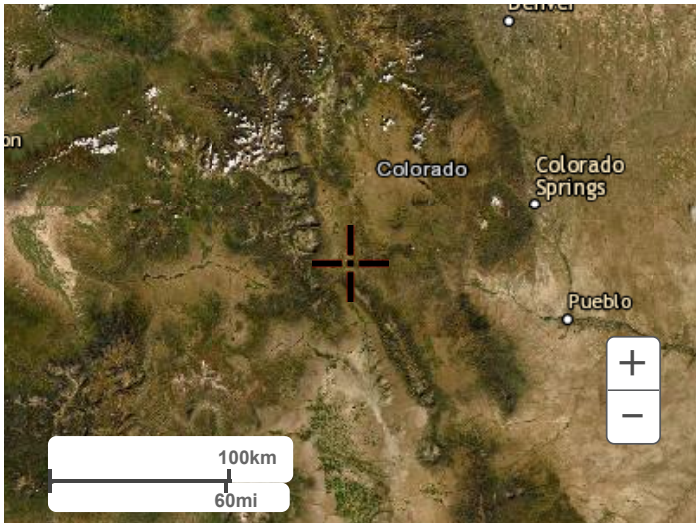

**Large scale terrain**




**Large scale map**




**Large scale aerial**




Back to Top

---

US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

# APPENDIX C: HYDROLOGIC ANALYSIS

CRABTREE GROUP INC.
ENGINEERING SMART GROWTH™

325 D Street
Salida, CO 81201
(719) 539-1675
www.crabtreegroup.net

# DRAINAGE CALCULATIONS

**Project Name:** **Residences at Salida Bottling Company**
**Project #:** 20037
**Location:** Salida, CO

**Client Name:** **Salida Bottling Company**
**Client Address:**
**Client Phone #:**

**Prepared By:** WBH Date: 10/14/2021
**Checked by:** Date:

**Area Name:**

| Storm Return Period (yr) | | 24-hour Rainfall Amount (in.) |
|---|---|---|
| 2 | | 1.34 |
| 5 | | 1.64 |
| 10 | | 1.9 |
| 25 | | 2.27 |
| 50 | | 2.56 |
| 100 | | 2.86 |

Source:

**Rainfall Distribution:** II

# PRE-DEVELOPMENT RUNOFF CALCULATIONS

## Pre-Developed Curve Number

| Land Use Description | HSG | Curve No. | Area (acres) | Area (%) |
|---|---|---|---|---|
| Gravel Road/Parking Lot | A | 76 | 0.60 | 100% |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | **Totals** | **0.60** | **100%** |

**Weighted Curve Number** **76**

## Time to Concentration

### Sheet Flow

| Surface Cover | Length (ft) | Slope ($^{ft}/_{ft}$) | Manning's n | $T_t$ (hrs) |
|---|---|---|---|---|
| Range (natural) | 100 | 0.020 | 0.130 | 0.225 |
| | | | | |

### Shallow Flow

| Surface Cover | Length (ft) | Slope ($^{ft}/_{ft}$) | Velocity Coefficient | $T_t$ (hrs) |
|---|---|---|---|---|
| Unpaved | 100 | 0.020 | 16.135 | 0.012 |
| | | | | |

### Channel Flow

| Length (ft.) | Slope ($^{ft}/_{ft}$) | n-Value | Flow Area ($ft^2$) | Wetted Perimeter (ft) | Tt (hrs) |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |

**Total Travel Time** **0.237**

## Peak Discharge

| Storm | 2-yr | 10-yr | 25-yr | 50-yr | 100-yr |
|---|---|---|---|---|---|
| 24-hr Precipitation (P) | 1.34 | 1.9 | 2.27 | 2.56 | 2.86 |
| Initial Abstraction ($I_a$) | 0.632 | 0.632 | 0.632 | 0.632 | 0.632 |
| $I_a/P$ | 0.471 | 0.332 | 0.278 | 0.247 | 0.221 |
| Unit Peak Discharge ($q_u$) | 386 | 597 | 630 | 649 | 666 |
| Runoff (Q) | 0.13 | 0.36 | 0.56 | 0.73 | 0.92 |
| **Peak Discharge ($q_p$)** | **0.047** | **0.203** | **0.331** | **0.445** | **0.575** |

# POST-DEVELOPMENT RUNOFF CALCULATIONS

## Post-Developed Curve Number

| Land Use Description | HSG | Curve No. | Area (acres) | Area (%) |
|---|---|---|---|---|
| Impervious | A | 98 | 0.52 | 86% |
| Open space (grass cover>75%) | A | 39 | 0.08 | 14% |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | **Totals** | **0.60** | **100%** |

**Weighted Curve Number** **90**

## Time to Concentration

### Sheet Flow

| Surface Cover | Length (ft) | Slope ($^{ft}/_{ft}$) | Manning's n | $T_t$ (hrs) |
|---|---|---|---|---|
| Range (natural) | 100 | 0.020 | 0.130 | 0.225 |
| | | | | |

### Shallow Flow

| Surface Cover | Length (ft) | Slope ($^{ft}/_{ft}$) | Velocity Coefficient | $T_t$ (hrs) |
|---|---|---|---|---|
| | | | | |
| | | | | |

### Channel Flow

| Length (ft.) | Slope ($^{ft}/_{ft}$) | n-Value | Flow Area ($ft^2$) | Wetted Perimeter (ft) | Tt (hrs) |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |

**Total Travel Time (hrs)** **0.225**

## Peak Discharge

| Storm | 2-yr | 10-yr | 25-yr | 50-yr | 100-yr |
|---|---|---|---|---|---|
| **24-hr Precipitation (P)** | 1.34 | 1.9 | 2.27 | 2.56 | 2.86 |
| **Initial Abstraction ($I_a$)** | 0.222 | 0.222 | 0.222 | 0.222 | 0.222 |
| **$I_a$/P** | 0.166 | 0.117 | 0.098 | 0.087 | 0.078 |
| **Unit Peak Discharge ($q_u$)** | 717 | 751 | 765 | 773 | 780 |
| **Runoff (Q)** | 0.56 | 1.01 | 1.33 | 1.58 | 1.86 |
| **Peak Discharge ($q_p$)** | **0.378** | **0.713** | **0.955** | **1.153** | **1.362** |

# MINIMUM DETENTION CALCULATIONS

1. Data:

   Drainage area $A_m$= 0.0009 $mi.^2$

   Rainfall distribution II

| | | 1st Stage | 2nd Stage |
|---|---|---|---|
| 2. Frequency | yr | 2 | 25 |
| 3. Peak Inflow discharge $q_i$ (from Post-Developed worksheet) | cfs | 0.378 | 0.955 |
| 4. Peak outflow discharge $q_p$ (from Pre-Developed worksheet) | cfs | 0.047 | 0.331 |
| 5. Compute $q_p/q_i$ | | 0.12 | 0.35 |
| 6. Vs/Vr ($V_s/V_r=C_0+C_1(q_0/q_i)+C_2(q_0/q_i)^2+C_3(q_0/q_i)^3$) | | 0.53 | 0.35 |
| 7. Runoff, Q (from Post-Developed worksheet) | | 0.56 | 1.33 |
| 8. Runoff Vol. $V_r$ ($V_r=QA_m53.33$) | cu-ft | 1,221 | 2,891 |
| 9. Storage vol, $V_s$ | cu-ft | 645 | 1,013 |
| 10. Maximum storage $E_{max}$ (from plot) | | | |

# Invoice

**Remit payment to:**

Central Colorado Title & Escrow
1055 East Highway 50
Salida, CO 81201

**Billed to:**

Wes Hill & Associates
129 E. U.S. Highway 50
Salida, CO 81201

**Invoice number:** 19-08153
**Invoice date:** January 24, 2019
**Please pay before:**
**Our file number:** 19-08153
**Your reference number:** 323 W 1ST/WARNER

**Property:**

323 West First Street
Salida, CO 81201
Chaffee County

**Brief legal:** PT LOTS 4 & 5 ALL LOTS 6-9 AND PT VAC ALLEY BLK 19 SALIDA

| DESCRIPTION | AMOUNT |
|---|---|
| Owner's Policy (Coverage $900,000.00) | 1,295.00 |
| Loan Policy (Coverage $687,000.00) | 150.00 |
| CO-130 (Extended Coverage) | 85.00 |
| Tax Certificate | 10.00 |
| **Invoice total amount due:** | $ 1,540.00 |

THIS INVOICE IS FOR INFORMATIONAL PURPOSES ONLY. THESE ITEMS WILL BE COLLECTED AT CLOSING FROM BUYER OR SELLER DEPENDING ON THE TERMS OF THE EXECUTED PURCHASE CONTRACT.

NOTES:
Owners Policy Reissue Rate

| First American Title™ | ALTA Commitment for Title Insurance |
|---|---|
| | ISSUED BY<br>**First American Title Insurance Company** |
| **Schedule A** | |

***Transaction Identification Data for reference only:***

Issuing Agent: Brett Eakins
Issuing Office: Central Colorado Title & Escrow
Issuing Office's ALTA® Registry ID: 1076574
Loan ID No.:
Commitment No.: 19-08153
Issuing Office File No.: 19-08153
Property Address: 323 West First Street, Salida, CO 81201

**SCHEDULE A**

1. Commitment Date: January 11, 2019 at 07:45 AM

2. Policy or Policies to be issued:

   (a) ☒ ALTA Owners Policy (06/17/06)
   Proposed Insured: Eric Warner and Kristin Homer
   Proposed Policy Amount: $900,000.00

   (b) ☒ ALTA Loan Policy (06/17/06)
   Proposed Insured: To Be Determined, its successors and/or assigns as their respective interests may appear.
   Proposed Policy Amount: $687,000.00

3. The estate or interest in the Land described or referred to in this Commitment is Fee Simple.

4. The Title is, at the Commitment Date, vested in:

   323 W 1st, LLC, a Colorado limited liability company

5. The Land is described as follows:

   SEE SCHEDULE C ATTACHED HERETO

*This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.*

| First American Title™ | ALTA Commitment for Title Insurance |
|---|---|
| | ISSUED BY<br>**First American Title Insurance Company** |
| **Schedule BI & BII** | |

Commitment No: 19-08153

**SCHEDULE B, PART I**

**Requirements**

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

2. Pay the agreed amount for the estate or interest to be insured.

3. Pay the premiums, fees, and charges for the Policy to the Company.

4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

5. Payment of all taxes and assessments now due and payable as shown on a certificate of taxes due from the County Treasurer or the County Treasurer's Authorized Agent.

6. Evidence that all assessments for common expenses, if any, have been paid.

7. Final Affidavit and Agreement executed by Owners and/or Purchasers must be provided to the Company

8. Warranty Deed sufficient to convey the fee simple estate or interest in the land described or referred to herein, to the Proposed Insured, Schedule A, Item 2A.

9. Deed of Trust sufficient to mortgage the fee simple estate or interest in the land described or referred to herein, to the Proposed Insured, Schedule A, Item 2B.

10. Deed from RJPA Holdings, LLC to 323 W 1st, LLC, a Colorado limited liability company, conveying that portion of subject property described in Quit Claim Deed recorded July 24, 2015 as Reception No. 421429.

11. Please be advised that our search did not disclose any open Deeds of Trust of Record. If you have knowledge of an outstanding obligation, please contact us immediately for further review prior to closing.

12. Recorded Statement of Authority signed by the member (s) of 323 W 1st, LLC, authorized to transact business on behalf of the company.

*This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.*

# Schedule BI & BII (Cont.)

13. A survey in form, content and certification acceptable to the Company as the basis for issuing endorsement Form 110.1, in connection with the Owner's policy to be issued hereunder.

    NOTE: Upon issuance of the policy (following satisfaction of all requirements), exceptions identified in Schedule B.2 as items 1 through 4 will be deleted or insured over and, upon proof of payment of taxes and assessments due and payable, exception 5 will be revised to read: Taxes and assessments for the year 2019 and subsequent years, a lien not yet due and payable.

Commitment No.: 19-08153

**SCHEDULE B, PART II**

**Exceptions**

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

1. Any facts, rights, interests or claims which are not shown by the Public Records, but which could be ascertained by an inspection of the Land or by making inquiry of persons in possession thereof.

2. Easements, or claims of easements, not shown by the Public Records.

3. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, and any facts which a correct land survey and inspection of the Land would disclose, and which are not shown by the Public Records.

4. Any lien, or right to a lien, for services, labor or material theretofore or hereafter furnished, imposed by law and not shown in the Public Records.

5. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I—Requirements are met.

   Note: Exception number 5. will be removed from the policy provided the Company conducts the closing and settlement service for the transaction identified in the commitment

6. Any and all unpaid taxes, assessments and unredeemed tax sales.

7. Unpatented mining claims; reservations or exceptions in patents or in Acts authorizing the issuance thereof.

8. Any water rights, claims of title to water, in, on or under the Land.

# Schedule BI & BII (Cont.)

9. Subject to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of Court and also subject to the right of the proprietor of a vein or lode to extract and remove his ore therefrom, should the same be found to penetrate or intersect the premises hereby granted, as provided by law, in U.S. Patent issued February 12, 1881 and recorded August 4, 1881 in Book 19 at Page 130.

10. NOTE: The following notices pursuant to CRS 9-1.5-103 concerning underground facilities have been filed with the Clerk and Recorder. These statements are general and do not necessarily give notice of underground facilities within the subject property:
a) Mountain Bell Telephone Company - filed October 2, 1981, Reception No. 211211;
b) Public Service Company of Colorado - filed November 2, 1981, Reception No. 211929;
c) Western Slope Gas Company - December 11, 1981, Reception No. 212569 and filed May 24, 1985, Reception No. 234357; (Company name amended to "Western Gas Supply Company" by certificates recorded June 27, 1988 in Book 497 at Page 103); merged with Public Service Company of Colorado per instrument recorded January 25, 1993 in Book 531 at Page 694.
d) Greeley Gas Company - filed November 18, 1981, at Reception No. 212196.
e) Letter from Utility Notification Center of Colorado disclosing local facilities access through "One Call System" recorded September 14, 1988 in Book 498 at Page 950.

11. Any existing leases or tenancies.

| First American Title™ | ALTA Commitment for Title Insurance |
|---|---|
| | ISSUED BY<br>**First American Title Insurance Company** |

# Schedule C

File No.: 19-08153

The Land referred to herein below is situated in the County of Chaffee, State of Colorado, and is described as follows:

Lots No. 6, 7, 8 and 9
Block No. 19
City of Salida
Chaffee County, Colorado
and
Fractional Lots Four (4) and Five (5) in Block 19 of the City of Salida and a strip of land between said Block 19 and the right-of-way of the Denver and Rio Grande Western Railroad (Monarch branch) all of which is more particularly described as a Tract of land located within the City of Salida, Chaffee County, Colorado and being part of fractional Block No. 19 of Original Salida and part of the adjoining railroad reservation land being described as follows:
Beginning at the common corner of Lots 5 and 6 of said Block No. 19 located on First Street;
Thence South 48°48'24" West along the common lot line of said Lots 5 and 6 for a distance of 150.00 feet to the Northeasterly alley boundary of said Block No. 19;
Thence South 41°11'36" East along said Northeasterly alley boundary 53.76 feet to the Northerly boundary of the Denver and Rio Grande Western Railroad - Monarch Branch;
Thence North 63°13'57" East along said railroad boundary 154.88 feet to the Southwesterly boundary of said First Street;
Thence North 41°11'36" West along said street boundary 92.34 feet to the point of beginning.

TOGETHER WITH
THAT PORTION OF THE FOLLOWING DESCRIBED ALLEY LOCATED WITHIN BLOCK 19, IN THE CITY OF SALIDA, CHAFFEE COUNTY, COLORADO, THAT ABUTS LOTS 5,6,7, 8 AND 9, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE NORTHEASTERLY RIGHT-OF-WAY OF SAID ALLEY IN BLOCK 19 AND THE SOUTHEASTERLY BOUNDARY OF SAID BLOCK 19, FROM WHENCE THE INTERSECTION OF SAID SOUTHEASTERLY BOUNDARY OF BLOCK 19 AND THE NORTHEASTERLY RIGHT-OF-WAY OF SECOND STREET BEARS SOUTH 60°24'50" WEST, A DISTANCE OF 178.58 FEET;

THENCE SOUTH 60°24'50" WEST ALONG SAID SOUTHEASTERLY BOUNDARY OF BLOCK 19, A DISTANCE OF 2.69 FEET;

THENCE NORTH 40°46'31" WEST, A DISTANCE OF 215.34 FEET TO THE SOUTHEASTERLY RIGHTOF-WAY OF I STREET;

THENCE NORTH 49°13'29" EAST ALONG SAID RIGHT-OF-WAY OF I STREET, A DISTANCE OF 2.42 FEET TO SAID NORTHEASTERLY RIGHT-OF-WAY OF THE ALLEY WITHIN BLOCK 19;

THENCE SOUTH 40°49'58" EAST ALONG SAID NORTHEASTERLY ALLEY RIGHT-OF-WAY, A DISTANCE OF 215.86 FEET TO THE POINT OF BEGINNING.

>

| First American Title™ | ALTA Commitment for Title Insurance |
|---|---|
| | ISSUED BY<br>**First American Title Insurance Company** |
| **Commitment** | |

**COMMITMENT FOR TITLE INSURANCE**

**Issued By**

***FIRST AMERICAN TITLE INSURANCE COMPANY***

**NOTICE**

**IMPORTANT—READ CAREFULLY:** THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

**COMMITMENT TO ISSUE POLICY**

Subject to the Notice; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and the Commitment Conditions, ***First American Title Insurance Company***, a Nebraska Corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I—Requirements have not been met within six months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

***First American Title Insurance Company***

Dennis J. Gilmore, President

Jeffrey S. Robinson, Secretary

**Central Colorado Title & Escrow**
1055 East Hwy 50
Salida, CO 81201
719.539.1001
719.539.1661 Fax
www.centralcoloradotitle.com

*A Policy-Issuing Agent of First American Title Insurance Company*

**If this jacket was created electronically, it constitutes an original document.**
*This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.*

## COMMITMENT CONDITIONS

1. **DEFINITIONS**
   (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
   (b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
   (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
   (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
   (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
   (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
   (g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
   (h) "Title": The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:
   (a) the Notice;
   (b) the Commitment to Issue Policy;
   (c) the Commitment Conditions;
   (d) Schedule A;
   (e) Schedule B, Part I—Requirements;
   (f) Schedule B, Part II—Exceptions; and
   (g) a counter-signature by the Company or its issuing agent that may be in electronic form.

4. **COMPANY'S RIGHT TO AMEND**
   The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. **LIMITATIONS OF LIABILITY**
   (a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
      (i) comply with the Schedule B, Part I—Requirements;
      (ii) eliminate, with the Company's written consent, any Schedule B, Part II—Exceptions; or
      (iii) acquire the Title or create the Mortgage covered by this Commitment.
   (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
   (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
   (d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
   (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
   (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.

*This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.*

(g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

**6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT**

(a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
(b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
(c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
(d) The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
(e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
(f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

**7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT**

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

**8. PRO-FORMA POLICY**

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

**9. ARBITRATION**

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is $2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at http://www.alta.org/arbitration.

*This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.*

First American Title™

## DISCLOSURE STATEMENT

Pursuant to C.R.S. 30-10-406(3)(a) all documents received for recording or filing in the Clerk and Recorder's office shall contain a top margin of at least one inch and a left, right and bottom margin of at least one-half of an inch. The Clerk and Recorder will refuse to record or file any document that does not conform to the requirements of this section.

NOTE: If this transaction includes a sale of the property and the price exceeds $100,000.00, the seller must comply with the disclosure/withholding provisions of C.R.S. 39-22-604.5 (Nonresident withholding).

NOTE: Colorado Division of Insurance Regulations 8-1-2 requires that "Every title insurance company shall be responsible to the proposed insured(s) subject to the terms and conditions of the title commitment, other than the effective date of the title commitment, for all matters which appear of record prior to the time of recording whenever the title insurance company, or its agent, conducts the closing and settlement service that is in conjunction with its issuance of an owner's policy of title insurance and is responsible for the recording and filing of legal documents resulting from the transaction which was closed.

Pursuant to C.R.S. 10-11-122, the company will not issue its owner's policy or owner's policies of title insurance contemplated by this commitment until it has been provided a Certificate of Taxes due or other equivalent documentation from the County Treasurer or the County Treasurer's authorized agent; or until the Proposed Insured has notified or instructed the company in writing to the contrary.

The subject property may be located in a special taxing district. A Certificate of Taxes due listing each taxing jurisdiction shall be obtained from the County Treasurer or the County Treasurer's authorized agent. Information regarding special districts and the boundaries of such districts may be obtained from the Board of County Commissioners, the County Clerk and Recorder, or the County Assessor.

**NOTE: Pursuant to CRS 10-11-123, notice is hereby given:**

**This notice applies to owner's policy commitments containing a mineral severance instrument exception, or exceptions, in Schedule B, Section 2.**

- **A. That there is recorded evidence that a mineral estate has been severed, leased, or otherwise conveyed from the surface estate and that there is a substantial likelihood that a third party holds some or all interest in oil, gas, other minerals, or geothermal energy in the property; and**
- **B. That such mineral estate may include the right to enter and use the property without the surface owner's permission.**

**NOTE: Pursuant to Colorado Division of Insurance Regulations 8-1-2, Affirmative mechanic's lien protection for the Owner may be available (typically by deletion of Exception no. 4 of Schedule B, Section 2 of the Commitment from the Owner's Policy to be issued) upon compliance with the following conditions:**

- **A. The land described in Schedule A of this commitment must be a single family residence which includes a condominium or townhouse unit.**
- **B. No labor or materials have been furnished by mechanics or material-men for purposes of construction on the land described in Schedule A of this Commitment within the past 6 months.**
- **C. The Company must receive an appropriate affidavit indemnifying the Company against un-filed mechanic's and material-men's liens.**
- **D. The Company must receive payment of the appropriate premium.**
- **E. If there has been construction, improvements or major repairs undertaken on the property to be purchased within six months prior to the Date of the Commitment, the requirements to obtain coverage for unrecorded liens will include: disclosure of certain construction information; financial information as to the seller, the builder and or the contractor; payment of the appropriate premium, fully executed Indemnity Agreements satisfactory to the company, and, any additional requirements as may be necessary after an examination of the aforesaid information by the Company.**

**No coverage will be given under any circumstances for labor or material for which the insured has contracted for or agreed to pay.**

NOTE: Pursuant to C.R.S. 38-35-125(2) no person or entity that provides closing and settlement services for a real estate transaction shall disburse funds as a part of such services until those funds have been received and are available for immediate withdrawal as a matter of right.

NOTE: C.R.S. 39-14-102 requires that a real property transfer declaration accompany any conveyance document presented for recordation in the State of Colorado. Said declaration shall be completed and signed by either the grantor or grantee.

**NOTE: Pursuant to CRS 10-1-128(6)(a), It is unlawful to knowingly provide false, incomplete, or misleading facts or information to an insurance company for the purpose of defrauding or attempting to defraud the company. Penalties may include imprisonment, fines, denial of insurance and civil damages. Any insurance company or agent of an insurance company who knowingly provides false, incomplete, or misleading facts or information to a policyholder or claimant for the purpose of defrauding or attempting to defraud the policyholder or claimant with regard to a settlement or award payable from insurance proceeds shall be reported to the Colorado division of insurance within the department of regulatory agencies.**

NOTE: Pursuant to Colorado Division of Insurance Regulations 8-1-3, notice is hereby given of the availability of an ALTA Closing Protection Letter which may, upon request, be provided to certain parties to the transaction identified in the commitment.

Nothing herein contained will be deemed to obligate the company to provide any of the coverages referred to herein unless the above conditions are fully satisfied.

First American Title™

## Privacy Information

### We Are Committed to Safeguarding Customer Information

In order to better serve your needs now and in the future, we may ask you to provide us with certain information. We understand that you may be concerned about what we will do with such information – particularly any personal or financial information. We agree that you have a right to know how we will utilize the personal information you provide to us. Therefore, together with our subsidiaries we have adopted this Privacy Policy to govern the use and handling of your personal information.

### Applicability

This Privacy Policy governs our use of the information that you provide to us. It does not govern the manner in which we may use information we have obtained from any other source, such as information obtained from a public record or from another person or entity. First American has also adopted broader guidelines that govern our use of personal information regardless of its source. First American calls these guidelines its Fair Information Values.

### Types of Information

Depending upon which of our services you are utilizing, the types of nonpublic personal information that we may collect include:

- Information we receive from you on applications, forms and in other communications to us, whether in writing, in person, by telephone or any other means;
- Information about your transactions with us, our affiliated companies, or others; and
- Information we receive from a consumer reporting agency.

### Use of Information

We request information from you for our own legitimate business purposes and not for the benefit of any nonaffiliated party. Therefore, we will not release your information to nonaffiliated parties except: (1) as necessary for us to provide the product or service you have requested of us; or (2) as permitted by law. We may, however, store such information indefinitely, including the period after which any customer relationship has ceased. Such information may be used for any internal purpose, such as quality control efforts or customer analysis. We may also provide all of the types of nonpublic personal information listed above to one or more of our affiliated companies. Such affiliated companies include financial service providers, such as title insurers, property and casualty insurers, and trust and investment advisory companies, or companies involved in real estate services, such as appraisal companies, home warranty companies and escrow companies. Furthermore, we may also provide all the information we collect, as described above, to companies that perform marketing services on our behalf, on behalf of our affiliated companies or to other financial institutions with whom we or our affiliated companies have joint marketing agreements.

### Former Customers

Even if you are no longer our customer, our Privacy Policy will continue to apply to you.

### Confidentiality and Security

We will use our best efforts to ensure that no unauthorized parties have access to any of your information. We restrict access to nonpublic personal information about you to those individuals and entities who need to know that information to provide products or services to you. We will use our best efforts to train and oversee our employees and agents to ensure that your information will be handled responsibly and in accordance with this Privacy Policy and First American's Fair Information Values. We currently maintain physical, electronic, and procedural safeguards that comply with federal regulations to guard your nonpublic personal information.

### Information Obtained Through Our Web Site

First American Financial Corporation is sensitive to privacy issues on the Internet. We believe it is important you know how we treat the information about you we receive on the Internet.
In general, you can visit First American or its affiliates' Web sites on the World Wide Web without telling us who you are or revealing any information about yourself. Our Web servers collect the domain names, not the e-mail addresses, of visitors. This information is aggregated to measure the number of visits, average time spent on the site, pages viewed and similar information. First American uses this information to measure the use of our site and to develop ideas to improve the content of our site.
There are times, however, when we may need information from you, such as your name and email address. When information is needed, we will use our best efforts to let you know at the time of collection how we will use the personal information. Usually, the personal information we collect is used only by us to respond to your inquiry, process an order or allow you to access specific account/profile information. If you choose to share any personal information with us, we will only use it in accordance with the policies outlined above.

### Business Relationships

First American Financial Corporation's site and its affiliates' sites may contain links to other Web sites. While we try to link only to sites that share our high standards and respect for privacy, we are not responsible for the content or the privacy practices employed by other sites.

### Cookies

Some of First American's Web sites may make use of "cookie" technology to measure site activity and to customize information to your personal tastes. A cookie is an element of data that a Web site can send to your browser, which may then store the cookie on your hard drive.
FirstAm.com uses stored cookies. The goal of this technology is to better serve you when visiting our site, save you time when you are here and to provide you with a more meaningful and productive Web site experience.

---

### Fair Information Values

**Fairness** We consider consumer expectations about their privacy in all our businesses. We only offer products and services that assure a favorable balance between consumer benefits and consumer privacy.
**Public Record** We believe that an open public record creates significant value for society, enhances consumer choice and creates consumer opportunity. We actively support an open public record and emphasize its importance and contribution to our economy.
**Use** We believe we should behave responsibly when we use information about a consumer in our business. We will obey the laws governing the collection, use and dissemination of data.
**Accuracy** We will take reasonable steps to help assure the accuracy of the data we collect, use and disseminate. Where possible, we will take reasonable steps to correct inaccurate information. When, as with the public record, we cannot correct inaccurate information, we will take all reasonable steps to assist consumers in identifying the source of the erroneous data so that the consumer can secure the required corrections.
**Education** We endeavor to educate the users of our products and services, our employees and others in our industry about the importance of consumer privacy. We will instruct our employees on our fair information values and on the responsible collection and use of data. We will encourage others in our industry to collect and use information in a responsible manner.
**Security** We will maintain appropriate facilities and systems to protect against unauthorized access to and corruption of the data we maintain.

January 12, 2021

Mr. Paul Inge
Paul Inge Custom Building
8315 CR 144
Salida, CO 81201

Subject: Geotechnical Engineering Study
323 West 1st Street, Salida, CO

Project No. 20-464

Dear Mr. Inge:

This geotechnical engineering study was performed to provide foundation recommendations for the subject project. As requested, representatives of Mountain Engineering and Testing (MET) visited the subject site on December 21, 2020 to record the subsurface conditions in two exploratory test pits at the site. The project was performed based on our proposal P-20-168 signed on December 17, 2020.

Proposed Construction: This report was compiled for the proposed construction of approximately 16-17 residential 3 story structures with a partial basement 4 to 6 feet deep, at the subject location. Construction of the structures is proposed along the entirety of the lot with parking in the cutting the lot in half (see Figure 1). Grading plans were not provided, however, no significant fills or cuts are anticipated aside from the excavation for the basements.

Foundation loads are anticipated to be light to moderate and typical for the type of construction. If loads, locations or conditions including fills or cuts are significantly different from those described above or depicted in this report, MET should be notified to reevaluate the recommendations contained herein.

Site Conditions**:** The 0.67 acre lot is located on 1st Street one block northeast of downtown Salida, Colorado. The lot is bordered by 1st Street to the northeast, residential and commercial lots to the northwest and southwest and the Monarch Spur trail to the southeast. The area of the proposed buildings footprints is on a graded gravel parking lot that slopes gently to the east (1%-2%). The site has been previously developed for various purposes previous to its current use as a gravel parking lot.

Subsurface Conditions: Subsurface conditions at the site were observed in five test pits dug just outside the proposed footprints of the structures provided on the site plan. The footprints of the structures were not staked in the field prior to MET's arrival on-site. The approximate locations of the test pits are shown on Figure 1. The test pit logs and legend are presented on Figures 2-6.

The density of the native soil was evaluated with a ⅝-inch penetrometer driven into the various strata with blows from a 10-pound hammer falling 12 inches. This test is similar to the standard penetration test described by ASTM D 1586. Depths at which penetrometer testing were performed and the corresponding resistance values are shown on the test pit logs, Figures 2 and 3.



1537 G Street
Salida, CO 81201
(719)539-2312
Fax (719)530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
(719)628-2069
Fax(719)530-9111

The subsurface conditions encountered in Test Pits 1-4 consisted of between 0.5-3.5 feet of loose to medium dense manmade fill at the surface, containing various types of debris and rubble. The fill was underlain by brown medium dense to dense gravely sand with cobble to the end of excavation at 8 feet.

Subsurface conditions encountered in test pit 5 were similar with 2 feet of medium dense manmade fill at the surface underlain by brown medium dense sandy gravel with cobble to the end of excavation at 8 feet. Test pits 1-5 were concluded at depths of 8 feet due to the relative density of the soil and rock content encountered.

A sample of the native gravely sand with cobble was collected from Test Pit 1 at a depth of 4 feet. The results of gradation testing performed on the sample obtained from test pit Test Pit 1 are shown on Figure 7 and the Figure 2 test pit log.

Ground water was not encountered in the test pits at the time of excavation. Seasonal ground water was estimated at a depth greater than six feet. In the limited phase II subsurface investigation performed by AEI Consultants on March 19, 2019 four soil borings were completed. Groundwater was encountered at depth ranging from 18.5-20.5 feet in the 3 boring that depths exceeded 7.5 feet.

Ground water observations by MET and AEI Consultants are based on conditions current at the time of the fieldwork performed and may not be indicative of other times or locations. Ground water levels may fluctuate with varying seasonal and weather conditions. It should be expected that groundwater may be encountered for excavations deeper than explorations contained in this report, particularly on the southern edge of the property during annual high water runoff in the ditch located along the Monarch Spur Trail.

Foundation Recommendations: The presence of manmade fills, rubble, and debris is of particular importance to avoid placement of foundation elements. Foundation elements should only be placed on undisturbed, native soils or compacted structural fill to minimize the potential of differential or excessive settlement. The following design and construction criteria are recommended for a shallow foundation system bearing on the undisturbed, native, dense to very dense gravelly cobble with sand or structural fill with an estimated settlement of less than 0.60 inches. The following design and construction criteria are recommended for a spread footing foundation system.

- Footings (interior and exterior) should have a minimum embedment of 48 inches (minimum partial basement depth) from the native surface and bear on the dense gravelly sand, sandy gravel or on structural fill designed for:
    - An allowable soil bearing pressure of 3,000 psf.
    - An allowable coefficient of friction of 0.41.



1537 G Street
Salida, CO 81201
(719)539-2312
Fax (719)530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
(719)628-2069
Fax(719)530-9111

- Exterior footings and footings beneath unheated areas should be placed at least 24 inches below the exterior grade for frost protection.
- Spread footings should have a minimum width of 16 inches for continuous footings and 24 inches for isolated pads.
- Continuous foundations walls expected to span greater than 8 feet should have additional reinforcement top and bottom sufficient to achieve the expected span, under the maximum expected factored load.
- Subgrade soils disturbed by excavation operations should be re-compacted prior to placement of foundation elements. If the presence of large rocks makes disturbing the native soil below the footing elevation unavoidable, then the rocks should be removed and replaced with compacted structural fill.
- MET recommends a 4-6 inch layer of compacted structural fill be placed on native cobble soils to avoid point loading of rock or cobble on foundation elements.
- If fill material/soils, contaminated soils, rubble, soft or yielding soils, or any deleterious materials are encountered during excavation, MET should be contacted to assess the soil conditions and recommend remedial measures. At a minimum, those soils/materials should be completely removed to native subgrade soils and replaced with compacted structural fill. Any structural fill should be compacted in 6 inch lifts per the recommendations discussed in "Fill Materials" until the desired footing elevation is achieved.
- Compacted fill placed against the sides of the foundations to resist lateral loads should be a granular material. Requirements for fill placed and compacted to resist lateral loads are discussed below in "Fill Materials, Placement and Compaction."
- **Once the excavation is exposed, but prior to placement of any fill or footing formwork, a representative of MET must be called out to verify the nature and density of the foundation excavations to ensure that relatively uniform soil conditions are present and to confirm that MET's recommendations are consistent with actual conditions. If MET is not able to verify the soil conditions, MET cannot be held responsible for recommendations that may be inconsistent with actual conditions.**

Lateral Earth Pressures: The lateral equivalent fluid pressures for soils above a free water surface are recommended below:

| Backfill Material | Active | Passive | At Rest |
|---|---|---|---|
| On-site Gravelly Sand | 34 pcf | 400 pcf | 53 pcf |
| Imported Structural Fill | 34 pcf | 400 pcf | 53 pcf |

All foundation walls should be designed for appropriate surcharge pressures such as adjacent buildings, traffic, construction materials and equipment. The pressures recommended above assume drained conditions behind the walls and a horizontal backfill surface. If water or sloping backfill conditions occur, we should be contacted to reevaluate our recommendations.

The native on-site soils, exclusive of organic matter or other deleterious matter, can be used as foundation wall backfill. However, the on-site materials placed within 3 feet of foundation walls should **not** contain materials greater than 3 inches in diameter.



1537 G Street
Salida, CO 81201
(719)539-2312
Fax (719)530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
(719)628-2069
Fax(719)530-9111

Floor Slabs: A minimum depth of 6 inches of compacted structural fill or gravel is recommended below floor slabs placed in accordance with the recommendations in the "Fill Material, Placement and Compaction" section of this report. Topsoil, fills, and deleterious material; if encountered below slab areas, should be removed and replaced with the structural fill material recommended under the heading “Fill Materials, Placement and Compaction” in this report.

Floor slab control joints should be used to reduce damage due to shrinkage cracking. Joint spacing is dependent on slab thickness and aggregate size, and should be consistent with recognized guidelines such the Portland Cement Association (PCA) and the American Concrete Institute (ACI). A vapor retarder membrane is recommended for slabs with moisture sensitive floor coverings to reduce moisture in the concrete slab. Concrete placement and curing should be in accordance with the American Concrete Institute recommendations. Improper curing techniques and/or high slump concrete can cause excessive shrinkage, cracking and/or curling of the concrete slab. Floor slab control joints should be used to reduce damage due to shrinkage cracking.

Concrete placement and curing should be in accordance with the American Concrete Institute recommendations. Improper curing techniques and/or high slump concrete can cause excessive shrinkage, cracking and/or curling of the concrete slab.

Site Clearing and Subgrade Preparation: Strip and remove existing vegetation, debris, rubble, contaminated soils, and other deleterious materials from the proposed subgrade areas. All exposed surfaces should be free of mounds and depressions that could prevent uniform compaction.

Stripped materials consisting of vegetation and organic materials should be used to revegetate exposed areas after completion of grading operations. Organic materials should only be placed in non-structural areas. **Onsite rounded or subrounded cobble is not suitable for stabilization aggregate or structural fill.**

Fill Materials, Placement and Compaction: The on-site gravel, exclusive of topsoil and materials greater than 3 inches in diameter, will be suitable for use as fill. Only crushed aggregate should be placed below the ground water elevation. **Imported** structural fill should conform to the following:

| **Sieve Size** | **Percent Finer** |
|---|---|
| 2 inch | 100 |
| No. 4 Sieve | 30-70 |
| No. 50 Sieve | 10-50 |
| No. 200 Sieve | 5-20 |

**Plasticity**
Liquid Limit . . . . . 30 max.
Plasticity Index . . . . . 10 max.

Frozen soils should not be used as fill or backfill, and fill should not be placed over frozen ground. The subgrade preparation during winter should follow ACI 306 Chapter 6 when temperatures fall below freezing.



1537 G Street
Salida, CO 81201
(719)539-2312
Fax (719)530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
(719)628-2069
Fax(719)530-9111

The following compaction recommendations are provided for structural fill depths less than five (5) feet. If fill materials are placed in excess of five feet, we should be contacted to review the conditions and provide additional recommendations, if necessary. The compaction and moisture contents shown in the following table are recommended for granular soils.

| FILL AREA | MIN. COMPACTION | MOISTURE CONTENT |
|---|---|---|
| Below Foundations | 98% Std. Proctor (ASTM D698) or 93% Mod. Proctor (ASTM D1557) | Optimum Moisture, +/- 3% |
| Below Floor Slabs | 95% Std. Proctor (ASTM D698) or 90% Mod. Proctor (ASTM D1557) | Optimum Moisture, +/- 3% |
| Landscape & Wall Backfill | 90% Std. Proctor (ASTM D698) | Optimum Moisture, +/- 3% |

Compliance: Performance of the foundations supported on compacted fills or prepared subgrade depend upon compliance with the above earthwork recommendations. To assess compliance, observation and testing of subgrade soils and fill materials should be performed under the direction of the geotechnical engineer.

Surface Drainage: The exterior ground surface within 10 feet of the building should have a minimum positive slope of 6 inches over 10 feet. A minimum slope of 2½ inches over 10 feet is recommended in paved areas. Drains and roof downspouts should discharge well beyond the limits of all backfill.

Subsurface Drain System: Increases in moisture of the subgrade soils increase the risk of foundation settlement, and therefore should be reduced or prevented. A perimeter drain system is recommended to reduce moisture seepage into the subgrade soils. The drain should consist of perforated 4-inch diameter, rigid PVC pipe surrounded with free-draining granular material. To prevent contamination of the free-draining granular material filter fabric consisting of Mirafi 140N or approved equal should be placed between the native soils and the gravel collector. The PVC pipe should have a minimum 1% grade and should be sloped to a sump and pump or to a suitable gravity outlet. Clean outs should be provided at minimum intervals of 50 feet.

Concrete: Based on the granular soils encountered in the test pits, we recommend a Type II cement type. Material testing of the foundation concrete for slump, air content and compressive strength is recommended during placement.

Limitations: This study has been conducted in accordance with generally accepted geotechnical engineering practices in this area for use by the client for design purposes. The conclusions and recommendations submitted in this letter are based upon the data obtained from the exploratory test pits and the proposed type of construction. The nature and extent of subsurface variations across the



1537 G Street
Salida, CO 81201
(719)539-2312
Fax (719)530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
(719)628-2069
Fax(719)530-9111

site may not become evident until excavation is performed. If during construction, fill, soil, rock or water conditions appear to be different from those described herein, this office should be advised at once so reevaluation of the recommendations may be made. We recommend on-site observation of excavations by a representative of the geotechnical engineer.

The scope of services for this project does not include either specifically or by implication any environmental or biological (e.g. mold, fungi, and bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential of such contamination or pollution, other studies should be undertaken.

Please contact me at 719-539-2312 at your convenience if you have any questions of if we can be of further assistance.

Sincerely,

MOUNTAIN ENGINEERING AND TESTING, INC.


Frank J Block, P.E.
Project Engineer

Attachments:

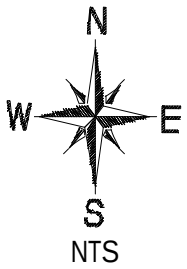
| | |
|---|---|
| Figure 1 | Test Pit Location Plan |
| Figures 2 - 6 | Logs of Exploratory Test Pits |
| Figure 7 | Legend of Test Pit Log |
| Figure 8 | Gradation Test Results |
| Appendix A | General Fill Recommendations |



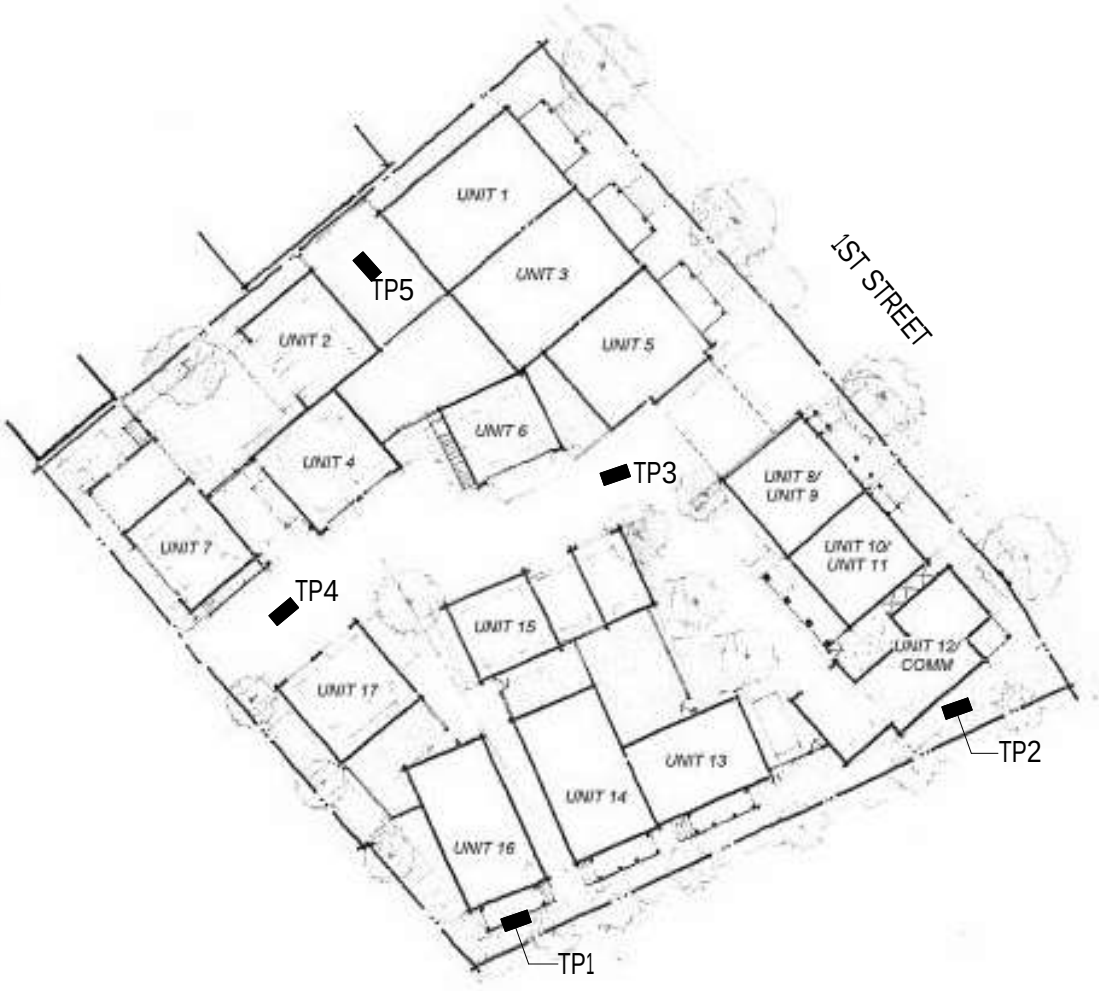
1537 G Street
Salida, CO 81201
(719)539-2312
Fax (719)530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
(719)628-2069
Fax(719)530-9111




NTS




SYMBOLS

TP1 TEST PIT NUMBER AND APPROXIMATE LOCATION

GEOTECHNICAL ENGINEERING STUDY
PROPOSED HOUSING DEVELOPMENT
323 WEST 1ST STREET, SALIDA, CO

TEST PIT LOCATION PLAN

FIGURE: 1

1537 G Street
Salida, CO 81201
( 719) 539-2312
Fax (719) 530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
( 719) 628-2069
Fax (719) 530-9111

# TEST PIT LOG NUMBER TP1

| PROJECT NAME | PROJECT LOCATION | | | PROJECT NUMBER |
|---|---|---|---|---|
| GEOTECHNICAL ENGINEERING STUDY PROPOSED HOUSING DEVELOPMENT | 323 WEST 1ST STREET, SALIDA, CO | | | 20-464 |
| **SURFACE CONDITIONS** | **COORDINATES** | **ELEVATION** | **TOTAL DEPTH** | **WATER DEPTH** |
| GRADED LOT | 38° 32.2268' 105° 59.6207' | 7069 FT | 8 FT | +8 FT |
| **METHOD OF EXCAVATION** | **CONTRACTOR** | **DATE** | **GEOLOGIST** | **CHECKED BY** |
| CAT 308 EXCAVATOR | Y&K EXCAVATION | 12/21/20 | STEFAN WHITING | FRANK BLOCK |

| SAMPLE TYPE & NUMBER | PENETROMETER BLOW COUNTS | DEPTH IN FEET | CLASSIFICATION AND DESCRIPTION OF MATERIAL |
|---|---|---|---|
| | | | MISCELLANIOUS MANMADE FILL, BROWN, LOOSE, VARIOUS DEBRIS CONSISTING OF WOOD, BRICK AND LUMBER, DRY-MOIST. |
| | 50/12" (N=8) | 2 | GRAVELLY SAND WITH COBBLE AND SILT (SM), BROWN, DENSE TO VERY DENSE, WELL GRADED, FINE GRAINED SAND, SUB-ROUNDED GRAVEL TO 3", SUB-ROUNDED COBBLE TO 12", TRACE ROUNDED BOULDERS TO 18", DRY-MOIST. |
| | 100/3" (N=61) | 4 | BULK @ 4 FT<br>+4 = 30.3%; LL = NV<br>-200 = 13.5%; PI = NP<br>WC = 5.3% |
| | | 6 | |
| | | 8 | END AT 8' (REFUSAL) |
| | | 10 | |
| | | 12 | |
| | | 14 | |

FIGURE 2


1537 G Street
Salida, CO 81201
719 539-2312
Fax 719 530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
719 628-2069
Fax 719 530-9111

# TEST PIT LOG NUMBER TP2

| PROJECT NAME | PROJECT LOCATION | PROJECT NUMBER |
|---|---|---|
| GEOTECHNICAL ENGINEERING STUDY PROPOSED HOUSING DEVELOPMENT | 323 WEST 1ST STREET, HOWARD, CO | 20-464 |

| SURFACE CONDITIONS | COORDINATES | ELEVATION | TOTAL DEPTH | WATER DEPTH |
|---|---|---|---|---|
| GRADED LOT | 38° 32.2411' 105° 59.6052' | 7069 FT | 8 FT | +8 FT |

| METHOD OF EXCAVATION | CONTRACTOR | DATE | GEOLOGIST | CHECKED BY |
|---|---|---|---|---|
| CAT 308 EXCAVATOR | Y&K EXCAVATION | 12/21/20 | STEFAN WHITING | FRANK BLOCK |

| SAMPLE TYPE & NUMBER | PENETROMETER BLOW COUNTS | DEPTH IN FEET | CLASSIFICATION AND DESCRIPTION OF MATERIAL |
|---|---|---|---|
| | | 0 | MISCILANIOUS MANMADE FILL, BROWN, LOOSE, VARIOUS DEBRIS CONSISTING OF WOOD, BRICK AND LUMBER, DRY-MOIST. |
| | 95/12" (N=15) | 2 | GRAVELLY SAND WITH COBBLE AND SILT (SM), LIGHT BROWN, MEDIUM DENSE, WELL GRADED FINE GRAINED SAND, SUB-ROUNDED GRAVEL TO 3", SUB-ROUNDED COBBLE TO 12", DRY-MOIST. |
| | 48/12" (N=7) | 4 | |
| | | 6 | |
| | | 8 | END AT 8' (REFUSAL) |
| | | 10 | |
| | | 12 | |
| | | 14 | |

FIGURE 3

1537 G Street
Salida, CO 81201
719 539-2312
Fax 719 530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
719 628-2069
Fax 719 530-9111

# TEST PIT LOG NUMBER TP3

| PROJECT NAME | PROJECT LOCATION | | | PROJECT NUMBER |
|---|---|---|---|---|
| GEOTECHNICAL ENGINEERING STUDY PROPOSED HOUSING DEVELOPMENT | 323 WEST 1ST STREET, HOWARD, CO | | | 20-464 |
| **SURFACE CONDITIONS** | **COORDINATES** | **ELEVATION** | **TOTAL DEPTH** | **WATER DEPTH** |
| GRADED LOT | 38° 32.2445' 105° 59.6173' | 7070 FT | 8 FT | +8 FT |
| **METHOD OF EXCAVATION** | **CONTRACTOR** | **DATE** | **GEOLOGIST** | **CHECKED BY** |
| CAT 308 EXCAVATOR | Y&K EXCAVATION | 12/21/20 | STEFAN WHITING | FRANK BLOCK |

| SAMPLE TYPE & NUMBER | PENETROMETER BLOW COUNTS | DEPTH IN FEET | CLASSIFICATION AND DESCRIPTION OF MATERIAL |
|---|---|---|---|
| | 25/12" (N=4) | 2 | MISCILANIOUS MANMADE FILL, BROWN, LOOSE, VARIOUS DEBRIS CONSISTING OF WOOD, BRICK AND LUMBER, DRY-MOIST. |
| | 100/5" (N=37) | 4 | GRAVELLY SAND WITH COBBLE AND SILT (SM), BROWN, DENSE, WELL GRADED FINE GRAINED SAND, SUB-ROUNDED GRAVEL TO 3", SUB-ROUNDED COBBLE TO 12", TRACE ROUNDED BOULDERS TO 18", DRY-MOIST. |
| | | 6 | |
| | | 8 | END AT 8' (REFUSAL) |
| | | 10 | |
| | | 12 | |
| | | 14 | |

FIGURE 4


1537 G Street
Salida, CO 81201
719 539-2312
Fax 719 530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
719 628-2069
Fax 719 530-9111

# TEST PIT LOG NUMBER TP4

| PROJECT NAME | PROJECT LOCATION | | | PROJECT NUMBER |
|---|---|---|---|---|
| GEOTECHNICAL ENGINEERING STUDY PROPOSED HOUSING DEVELOPMENT | 323 WEST 1ST STREET, HOWARD, CO | | | 20-464 |
| **SURFACE CONDITIONS** | **COORDINATES** | **ELEVATION** | **TOTAL DEPTH** | **WATER DEPTH** |
| GRADED LOT | 38° 32.2371' 105° 59.6291' | 7070 FT | 8 FT | +8 FT |
| **METHOD OF EXCAVATION** | **CONTRACTOR** | **DATE** | **GEOLOGIST** | **CHECKED BY** |
| CAT 308 EXCAVATOR | Y&K EXCAVATION | 12/21/20 | STEFAN WHITING | FRANK BLOCK |

| SAMPLE TYPE & NUMBER | PENETROMETER BLOW COUNTS | DEPTH IN FEET | CLASSIFICATION AND DESCRIPTION OF MATERIAL |
|---|---|---|---|
| | 100/11" (N=17) | 2 | MISCILANIOUS MANMADE FILL, BROWN, MEDIUM DENSE, VARIOUS DEBRIS CONSISTING OF WOOD, BRICK AND LUMBER, DRY-MOIST. |
| | 100/5" (N=37) | 4 | GRAVELLY SAND WITH COBBLE AND SILT (SM), LIGHT BROWN, DENSE, WELL GRADED, FINE GRAINED SAND, SUB-ROUNDED GRAVEL TO 3", SUB-ROUNDED COBBLE TO 12", DRY-MOIST. |
| | | 6 | |
| | | 8 | END AT 8' (REFUSAL) |
| | | 10 | |
| | | 12 | |
| | | 14 | |

FIGURE 5


1537 G Street
Salida, CO 81201
719 539-2312
Fax 719 530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
719 628-2069
Fax 719 530-9111

# TEST PIT LOG NUMBER TP5

| PROJECT NAME | PROJECT LOCATION | | | PROJECT NUMBER |
|---|---|---|---|---|
| GEOTECHNICAL ENGINEERING STUDY PROPOSED HOUSING DEVELOPMENT | 323 WEST 1ST STREET, HOWARD, CO | | | 20-464 |
| **SURFACE CONDITIONS** | **COORDINATES** | **ELEVATION** | **TOTAL DEPTH** | **WATER DEPTH** |
| GRADED LOT | 38° 32.2565' 105° 59.6372' | 7071 FT | 8 FT | +8 FT |
| **METHOD OF EXCAVATION** | **CONTRACTOR** | **DATE** | **GEOLOGIST** | **CHECKED BY** |
| CAT 308 EXCAVATOR | Y&K EXCAVATION | 12/21/20 | STEFAN WHITING | FRANK BLOCK |

| SAMPLE TYPE & NUMBER | PENETROMETER BLOW COUNTS | DEPTH IN FEET | CLASSIFICATION AND DESCRIPTION OF MATERIAL |
|---|---|---|---|
| | | 0 | MISCILANIOUS MANMADE FILL, BROWN, MEDIUM DENSE, VARIOUS DEBRIS CONSISTING OF WOOD, BRICK AND LUMBER, DRY-MOIST. |
| | 100/7" (N=26) | 2 | SANDY GRAVEL WITH COBBLE AND (GW), LIGHT BROWN, MEDIUM DENSE, WELL GRADED, FINE GRAINED SAND, SUB-ROUNDED GRAVEL TO 3", SUB-ROUNDED COBBLE TO 10", DRY-MOIST. |
| | 100/8" (N=23) | 4 | |
| | | 6 | |
| | | 8 | END AT 8' (REFUSAL) |
| | | 10 | |
| | | 12 | |
| | | 14 | |

FIGURE 6


1537 G Street
Salida, CO 81201
719-539-2312
Fax 719-530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
719-628-2069
Fax 719-530-9111

# LEGEND AND NOTES

## PARTICLE SIZE IDENTIFICATION

Clay - Particles finer than 0.005 millimeters.

Silt - Particles finer than 0.074 millimeters and larger than 0.005 millimeters.

Sand - Particles finer than No. 4 Sieve and larger than the No. 200 Sieve .

Gravel - From 1/4-inch to 3 inches in diameter.

Cobble - From 3 to 12 inches in diameter.

Boulder - Larger than 12 inches in diameter.

## SOIL DESCRIPTION MODIFIERS

Trace - Represents 0 to 5 percent by weight.

With (Coarse Grained Material) - Represents 15 to 29 percent by weight.

With (Fine Grained Material) - Represents 5 to 12 percent by weight.

## NOTES

100/6" - (N=15) Indicates the number of blows required to drive a 5/8-inch penetrometer into the various strata with blows from a 10-pound hammer falling 12 inches. Number in parenthesis represents our calculated N-Value.

— — — — Dashed line between materials shown on the test pit logs are approximate and the transitions may be gradual.

DATE ▼ Groundwater level and the date of measurement.

The exploratory test pits were located based on the features shown on site plan.

Test pits are drawn to depth.

The exploratory test pit locations and elevations should be considered accurate only to the degree implied by the method used.

## LABORATORY TEST RESULTS

+4 = Percent retained on No. 4 sieve;
-200 = Percentage passing the No. 200 sieve;
LL = Liquid Limit;
PI = Plasticity Index;
NP = Non-plastic;
MC = Moisture Content (%);
WSS = Water Soluble Sulfates (ppm);
DD = Dry Density (pcf);

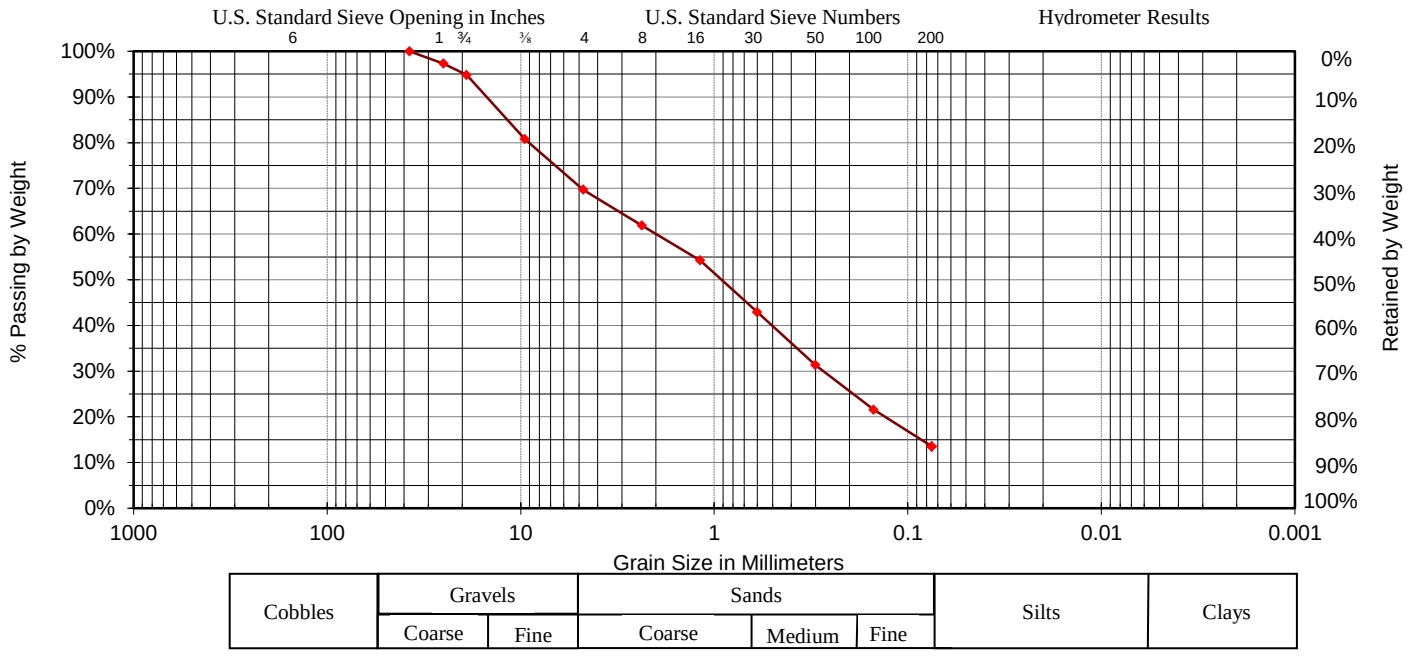
FIGURE: 7

1537 G Street
Salida, CO 81201
( 719) 539-2312
Fax (719) 530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
( 719) 628-2069
Fax (719) 530-9111

# Gradation Test Results
## ASTM C136




| | | | | |
|---|---|---|---|---|
| Date : | 12/28/20 | $D_{10}$ = 0.06 | **USCS Classification (ASTM D2487)** | **Gravel** |
| Sample #: | 1 | $D_{30}$ = 0.28 | SM, Silty Sand with Gravel | 30.3% |
| Sample Use: | Classification | $D_{60}$ = 2.08 | **AASHTO Classification** | **Sand** |
| Source: | Test Pit | $C_C$ = 0.68 | A-1-b | 56.2% |
| Client: | Paul Inge | $C_{U=}$ 37.37 | **Atterberg Classification** | **Silt & Clay** |
| Project Location: | Salida, CO | Liquid Limit= NV | NP, Non-Plastic | 13.5% |
| Test Pit #: | 1 | Plastic Limit= NP | **Water Soluble Sulfates** | **Moisture Content** |
| Depth: | 4 Feet | Plasticity Index= NP | N/A | 5.3% |

**Coarse Section**

| Sieve Size US (in.) | Sieve Size Metric (mm) | Cumulative Percent Retained | Cumulative Percent Passing | Specs Max | Specs Min |
|---|---|---|---|---|---|
| 1.50" | 37.50 | 0% | 100% | | |
| 1.00" | 25.00 | 3% | 97% | | |
| 3/4" | 19.00 | 5% | 95% | | |
| 3/8" | 9.50 | 19% | 81% | | |
| #4 | 4.75 | 30% | 70% | | |

**Fines Section**

| Sieve Size US (in.) | Sieve Size Metric (mm) | Cumulative Percent Retained | Cumulative Percent Passing | Specs Max | Specs Min |
|---|---|---|---|---|---|
| #8 | 2.360 | 38% | 62% | | |
| #16 | 1.180 | 46% | 54% | | |
| #30 | 0.600 | 57% | 43% | | |
| #50 | 0.300 | 69% | 31% | | |
| #100 | 0.150 | 78% | 22% | | |
| #200 | 0.075 | 86.5% | 13.5% | | |

| | | |
|---|---|---|
| Project Name: 323 W 1st Street | Project Number: 20-464 | Figure: 8 |


1537 G Street
Salida, CO 81201
(719)539-2312
Fax(719)530-9111

MOUNTAIN
ENGINEERING AND TESTING, INC.

2035 1/2 Grande Avenue
Monte Vista, CO 81144
(719)628-2069

**Appendix A**
**General Engineered Fill Recommendations**

A. Clearing and Grubbing
    a. Areas where excavation or fill placement will be undertaken shall be cleared of all trees, stumps, roots, brush, rubbish, organic soil, or other objectionable matter as determined by the Soil Engineer. Organic soil which is suitable for topsoil shall be stockpiled for later use in landscaping,

B. Preparation of Area to be Filled
    a. Scarification: After vegetation and other unsuitable material have been removed, the ground surface of the area to be filled shall be scarified to a depth of at least six (6) inches, and the ground surface is free from ruts, ridges and other uneven features.

    b. Benching: Where fills are placed upon hillsides or slopes where the slope ratio of the original ground exceeds 5 horizontal to 1 vertical (20%), the original ground slope shall be stepped or benched, and the surfaces of benches scarified to a depth of at least six (6) inches. Ground slopes which are flatter than 5 horizontal to 1 vertical shall be benched when considered necessary by the Soil Engineer.

    c. Subgrade Compaction: After the foundation for the fill has been scarified and benched as necessary, the ground surface shall be bladed until it is uniform size and brought to the proper moisture content for compaction. The ground surface shall then be compacted to the densities recommended in the geotechnical report.

    d. Existing Earth Fill: Any unsuitable existing fill on the site shall be removed until undisturbed native soil is exposed. The native soil shall then be scarified, prepared, and compacted and suitable structural fill shall be placed, in accordance with these guidelines.

C. Compacted Fill
    a. Fill Materials: Material for fill shall consist of suitable soil as identified in soil reports and/or approved by the Soil Engineer. The fill materials used shall be free of vegetation, frozen material, or other deleterious material. The fill shall no contain particles having a diameter greater than three (3) inches.

    b. Rock: The maximum rock size in fill materials shall be three (3) inches. Large rocks shall not be allowed to nest and voids between rocks shall be carefully filled with properly compacted soil. No large rocks will be permitted within twelve (12) inches of finished grade.

    c. Fill Placement: Fill shall be placed in uniform, level layers which do not exceed six (6) inches thickness after compaction. Each layer shall be placed, mixed, and spread in such a manner as to insure uniformity of each layer, and to prevent the formation of layers or zones of material which differ significantly in characteristics from the surrounding fill.

d. Moisture Control: Prior to compaction, the fill material shall be brought to its Proctor optimum moisture content, plus or minus 3% to insure even and uniform moisture conditions within the layer. The contractor may be required to add water to material in the excavation or borrow areas prior to transporting to the fill if, in the opinion of the Soil Engineer, proper moisture control cannot be obtained by adding water directly to the fill surface.

e. Compaction Procedure: After each layer has been spread, mixed, and brought to the proper moisture content, it shall be mechanically compacted to the recommended density. Other levels of compaction may also be specified by the Soil Engineer depending upon the type of soil encountered. Compaction of each layer shall be continuous over the entire area of the layer, and compaction equipment shall make sufficient passes to insure uniform and adequate compaction of each layer.

f. Compaction of Slopes: The face slopes of fills shall be properly compacted. Compaction on face slopes of fills may be accomplished progressively in increments of three (3) to five (5) feet in fill height, or may be done after the fill is brought to its total height.

D. Quality Control

a. Moisture Density Tests: Prior to commencement of fill operations, a Proctor test, shall be made for each soil material anticipated in the excavation and borrow areas. Additional Proctor tests shall be made during construction if different materials are encountered, or if soil mixtures on the fill warrant additional testing. Occasional single-point density tests shall be performed if necessary to verify the appropriateness of the Proctor values being used.

b. Density Testing: Field density tests shall be made by the Soil Engineer of the compaction of each layer of fill. At least one test shall be made for each layer of fill, and sufficient suitable compaction of each layer has been achieved. Density tests shall be taken in the compacted material below the disturbed surface. When these tests indicate that the density of any layer of fill or portion thereof has not been properly compacted, the particular layer or portion shall be reworked until the required density has been obtained.

E. Seasonal Limits

a. No fill material shall be placed, spread, or rolled while it is frozen or thawing, or during unfavorable weather conditions. When fill operations are interrupted by weather conditions, fill operations shall not be resumed until the moisture content and density of the previously placed fill are tested for density.

AEI Consultants

March 19, 2019

# LIMITED PHASE II SUBSURFACE INVESTIGATION

**Property Identification:**
323 West 1st Street
Salida, Colorado 81201

AEI Project No. 400082

**Prepared for:**
High Country Bank
7360 West Highway 50
Salida, Colorado 81201

**Prepared by:**
AEI Consultants
2420 West 26th Avenue, Suite 400D
Denver, Colorado 80211
(720) 238-4582

Environmental & Engineering Due Diligence

Site Investigation & Remediation

Energy Performance & Benchmarking

Industrial Hygiene

Construction Consulting

Construction, Site Stabilization & Stormwater Services

Zoning Analysis Reports & ALTA Surveys

# TABLE OF CONTENTS

AEI Consultants

March 19, 2019

Mr. Joe Smith
High Country Bank
7360 West Highway 50
Salida, Colorado 81201

**Subject:** **Limited Phase II Subsurface Investigation**
323 West 1st Street
Salida, Colorado 81201
AEI Project No. 400082

AEI Consultants (AEI) prepared the following report to document the results of a Limited Phase II Subsurface Investigation (Phase II) performed at the above referenced property, hereafter referred to as the "Site" (See Figure 1). The investigation was completed in general accordance with the authorized scope of services outlined in AEI's proposal 62462, signed February 21, 2019.

## 1.0 SITE DESCRIPTION

The Site consists of a vacant 0.64-acre gravel-surfaced parking lot. The Site is located on the west side of the intersection of West 1st Street and the Monarch Spur Trail in a mixed commercial and residential area of Salida, Colorado (Figure 2).

The Site is slopes gently to the east with elevations ranging between 7,065 to 7,070 feet above mean sea level. Based on the regional topographic gradient, the direction of groundwater flow beneath the Site is inferred to be to the northeast. The Arkansas River is located approximately 678 feet to the northwest.

Based on a review of the Geologic Map of Colorado, the Site is underlain by the Dry Union Formation, which is comprised of sedimentary deposits of the Tertiary Period. According to the United States Department of Agriculture (USDA) Soil Survey, soils at the Site are described as the Dominson Series. Soils from this series are classified as gravelly sandy loam.

Refer to Section 4.1 below for additional information on the site geology and groundwater conditions.

## 2.0 BACKGROUND

According to a February 4, 2019 Phase I Environmental Site Assessment (ESA) completed by AEI, the Site was developed with several buildings that included warehousing, livery, blacksmiths, outbuilding storage, and a dwelling along West First Street from 1886 through 1904. From 1909 through 1945, the Site was occupied by an auto wrecking business (315 West First Street), the Salida Street Department warehouse (323-327 West First Street), and a beverage bottling operation (309 West First Street). By 1950, with the exception of the auto wrecking and bottling buildings, all of the former structures on the Site had been demolished and replaced with a garage

building occupied by the City of Salida Public Works Department (Salida PWD) (323 West First Street). The two remaining commercial buildings (309 and 315 West First Street) were demolished sometime between 1979 and 1984 and the Site was solely occupied by Salida PWD garage (323 West First Street). The Salida PWD continued to operate on the Site until 2009, when the last remaining building was demolished. The Site has been used as a surface parking lot since that time.

During the Phase I ESA, AEI identified the following concerns:

- According to a 1945 Sanborn map, a former commercial building with frontage along West First Street (315 West First Street), was occupied at the time by an auto wrecking business. The same Sanborn map also depicted two gasoline underground storage tanks (USTs) within the street in front of this building. While the noted location on the map may not correlate to their actual location, the USTs are presumed to have been associated with this former building and business its operations. AEI cannot rule out the possibility that USTs were historically present on the Site as early as 1945. By 1950, a portion of the Site was redeveloped with a commercial garage building. This building was occupied by the Salida PWD until 2009. According to interviews conducted during this AEI assessment and information from prior reports, operations conducted within the former garage building included fleet vehicle/equipment repair, storage, and offices. In particular, Mr. Kevin Nelson, Inspector with the City of Salida, stated that there were no in-ground features present, such as oil change pits, hydraulic lifts, floor drains/trench drains, or oil/water separators within the garage/repair area of the building. However, Mr. Nelson did state that a concrete sump was present in one of the newer (1995) additions to the building that was used to collect snow melt/wash water from any vehicles or equipment brought in to the building. The sump was reported to be connected to the municipal sewer system and no other inline debris collection system (e.g., separator) was reported to be in use with the sump.

  AEI did not uncover any other records regarding the disposition of any former building features during building demolitions. Further, AEI did not uncover any records regarding the removal of the two tanks associated with the former 315 West First Street building. Therefore, based on the unconfirmed disposition of past features of concern, length of time the Site was occupied for automotive wrecking (in at least 1945) and fleet maintenance by the City of Salida (more than 55 years), further investigation of the sump was recommended.

- The Site is listed as a UST site in the regulatory database report and within Colorado Division of Labor and Employment (CDLE) Division of Oil and Public Safety (OPS) records. According to the regulatory database report, the Site is reported to have utilized three galvanized steel USTs that have been permanently closed. The three UST capacities and contents were noted to include the following: one 1,000-gallon gasoline, one 1,000-gallon diesel fuel, and one 500-gallon gasoline.

  Records reviewed from OPS included a two-page UST Notification Form from 1986 noting that the three USTs were still in use at that time, did not contain any internal or external protection, and were owned by the City of Salida. No additional details were reported on the 1986 form. However, a one-page letter enclosed in the OPS files that was sent from the City of Salida to

the OPS noted that the City of Salida has discontinued the use of all three USTs effective March 16, 1990 and that the USTs were planned for removal as soon as possible. However, no additional records were identified during this assessment which confirmed the UST removal date(s), the condition of the USTs at the time of removal, or any subsurface sampling at the time of removal to confirm no release had occurred. Based on the unconfirmed disposition of the USTs and undocumented analysis of the subsurface conditions at the time, AEI recommended additional investigation.

## 3.0 INVESTIGATION EFFORTS

AEI was requested to perform additional investigation, including the collection of soil and groundwater samples in the area of the former USTs and the repair shop, to evaluate if the former operations had adversely impacted the property.

### 3.1 Health and Safety Plan

A site-specific health and safety plan was prepared, reviewed by onsite personnel, and kept onsite for the duration of the fieldwork.

### 3.2 Permitting and Utility Clearance

Drilling permits were not required for this investigation. The public underground utility locating service Colorado 811 was notified to identify public utilities in the work area. Private utility locating was conducted by Ground Penetrating Radar Systems (GPRS) of Denver, Colorado to identify underground utilities on the subject property.

### 3.3 Geophysical Survey

On February 28, 2019, a geophysical survey was conducted by GPRS (Appendix A). The purpose of the survey was to determine if any USTs remain on the Site or to locate disturbed soils that may represent former UST basins. The geophysical survey was conducted using ground penetrating radar (GPR). The geophysical survey did not identify any anomalies indicative of USTs or disturbed soils indicative of a former UST basin.

The client should be aware of the inherent limitations of geophysical surveying methods and that above and underground utilities and other man-made or natural features (i.e. automobiles, debris piles, tree roots, reinforced concrete, certain soil conditions, etc.), if in the area of the survey, may decrease the effectiveness of the survey. The client should be aware that the lack of a detection of a feature from a geophysical survey does not mean that the feature does not exist, only that it was not detected.

### 3.4 Drilling and Soil Sample Collection

On February 28, 2019, four soil borings (SB-1 through SB-4) were advanced by Site Services of Golden, Colorado using a truck-mounted hollow stem auger. The borings were advanced to depths between 14 and 28 feet below ground surface (bgs). The location and purpose of each boring are listed below:

- Boring SB-1 was advanced near the location of the former Salida PWD UST for the collection of soil and groundwater samples.
- Boring SB-2 was advanced near the location of the former UST identified in Sanborn Maps for the collection of soil and groundwater samples.
- Boring SB-3 was advanced near the southern portion of the former Salida PWD building for the collection of soil and groundwater samples.
- Boring SB-4 was advanced near the former Salida PWD UST for the collection of soil samples.

The borings were advanced using 6 5/8-inch outer diameter auger. Soil samples were collected by advancing a five-foot long California split spoon. After each interval, the spoon was retrieved, the spoon barrel disassembled, and the sample liner transferred to the onsite geologist.

Soils from borings SB-1 through SB-4 were evaluated for the purposes of lithologic logging, headspace testing, and sample collection for laboratory analyses. Soil samples were obtained by removing the soil from the split-spoon, placed in four-ounce glass jars, and capped. Upon collection, each sample was labeled with the project name, boring number, sample depth, and date/time of sampling. After labeling, each sample was entered onto chain-of-custody documentation and placed into an iced cooler for transportation to a State of Colorado-certified laboratory for analyses.

Soils were visually inspected for the potential presence of impacted soils. Recovered soils were described on detailed boring logs in general conformance with the United Soil Classification System (USCS). The boring logs for borings SB-1 through SB-4 are presented in Appendix B.

Headspace field measurements were measured with a photoionization detector (PID) equipped with an electrodeless 10.6 eV ultraviolet lamp for detecting the potential presence of organic vapors in the soil samples. To initiate the headspace testing procedure, soil samples were removed from the spoon, placed into labeled, plastic bags, and sealed for conducting the tests. Due to the weather conditions at the time of sampling the plastic bags were placed on the dashboard with the defrost running to assist with the volatilization of any contaminants in the sample. After a sufficient duration of time had elapsed for vapor build-up inside the bags, each bag was then punctured with the PID probe tip to measure the concentration of any gases in the headspace. Measurements of the headspace were obtained in the parts per million (ppm) range for total organic vapors. The results of the headspace tests (PID readings) for borings SB-1 through SB-4 were recorded on the boring logs, presented in Appendix B.

Down-hole equipment was decontaminated prior to drilling and between successive boring locations.

## 3.5 Groundwater Sample Collection

On February 28, 2019, groundwater samples were collected from borings SB-1, SB-2 and SB-3 by inserting temporary PVC casing into the boreholes and collecting the samples using a new PVC tubing and a foot valve.

### 3.6 Boring Abandonment

Following completion of sample collection and removal of tooling, the borings were backfilled with soil cuttings and hydrated bentonite chips and completed at the surface to match the surrounding conditions.

### 3.8 Laboratory Analyses

The soil and groundwater samples were labeled and placed into a cooler with ice following sampling. The samples were transferred under appropriate chain-of-custody documentation to SGS Accutest of Wheat Ridge, Colorado. Laboratory analytical documentation is provided in Appendix C.

Two soil samples from borings SB-1 and SB-4 were analyzed for:

- Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8260
- Polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270

Two soil samples from borings SB-2 and SB-3 were analyzed for:

- Volatile organic compounds (VOCs) by EPA Method 8260
- PAHs by EPA Method 8270

One groundwater sample from boring SB-1 was analyzed for:

- BTEX by EPA Method 8260
- PAHs by EPA Method 8270

Two groundwater samples from borings SB-2 and SB-3 were analyzed for:

- VOCs by EPA Method 8260
- PAHs by EPA Method 8270

### 3.9 Investigation Derived Wastes

No investigation derived waste was created during this investigation.

## 4.0 FINDINGS

The Colorado Department of Public Health and Environment (CDPHE) Hazardous Materials and Waste Management Division has the responsibility for overseeing soil and groundwater cleanups in Colorado.

The soil analytical results were compared with the Environmental Protection Agency (EPA) Regional Screening Levels (RSLs) for Residential sites and the EPA's RSLs for Worker Protection (Commercial sites) (both dated November of 2017), and the CDPHE Groundwater Protection Values Soil Cleanup Table (CGWPVSC) dated March of 2014.

The Colorado Department of Public Health and Environment (CDPHE) Hazardous Materials and Waste Management Division has the responsibility for overseeing soil and groundwater cleanups

in Colorado under a variety of regulatory programs. Soil sampling results were compared to the Soil Remediation Objectives (SROs) listed in the CDPHE's Dry Cleaner Remediation Guidance Document, dated March 2006.

The groundwater analytical results were compared to the Colorado Basic Standards for Groundwater (CBSGW), which were issued by the CDPHE's Water Quality Control Commission (WQCC) in January of 1987, with amended rules taking effect in December of 2016.

The OPS has established the Tier 1 Risk Based Screening Levels (Tier 1 RBSL) for UST-related volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs). The Tier 1 RBSLs were revised in October of 2005 and published in the Petroleum Storage Tank Owner/Operator Guidance Document to assist owners and/or operators in conducting release investigations, performing initial response actions, preparing site characterization reports, and preparing and implementing corrective action plans.

## 4.1 Geology and Hydrogeology

Unconsolidated sediment encountered in each of the borings generally consisted of sands with gravel, cobble and boulders (Appendix B). AEI attempted to collect blow counts in the borings, however due to cobbles and boulders in the subsurface, blow counts exceeded 50 after two to four inches. In boring SB-2 a six-inch thick concrete pad was encountered at 0.4 feet bgs.

Saturated soils were encountered at 19 feet bgs in borings SB-1, SB-2 and SB-3. Groundwater was measured in boring SB-1, SB-2 and SB-3 at depths ranging between 18.5 and 20.5 feet bgs. Groundwater was not encountered in boring SB-4.

## 4.2 Soil Sample Analytical Results

The following information is a summary of the soil sample analytical test results (Appendix C). This information has also been included in Table 1.

- Toluene was reported at a concentration of 0.0019 in boring SB-2. The concentration does not exceed the regulatory screening levels.
- All 18 PAHs were reported in the soil sample collected from boring SB-2. Of the PAHs, only benzo(a)pyrene exceeded any of the regulatory screening levels. The reported concentration of benzo(a)pyrene at 0.159 milligrams per kilogram (mg/kg) exceeded the OPS Tier 1 RBSL for soil exposure of 0.062 mg/kg and the EPA RBSL for residential exposure of 0.11 mg/kg; however, it was below the OPS Groundwater Protection Level of 4.8 mg/kg.
- The reported concentrations of all remaining VOCs and PAHs in the samples from borings (SB-1, SB-3 and SB-4) were below the laboratory method detection limits.

## 4.3 Groundwater Sample Analytical Results

The following information is a summary of the groundwater sample analytical test results (Appendix C). This information has also been included in Table 2.

- Methyl ethyl ketone (MEK) was reported in borings SB-2 and SB-3 at 22.2 and 9.9 micrograms per liter (µg/L), respectively, which do not exceed the regulatory screening levels.
- The remaining VOCs and PAHs were not reported above the laboratory method detection limits.

## 5.0 SUMMARY AND CONCLUSIONS

AEI has completed a Phase II at the Site. The purpose of the Phase II at the Site was to assess the potential for USTs at the Site and to evaluate current conditions related to the former operation of USTs and repair operations associated with the DPW. A total of four borings (SB-1 through SB-4) were advanced at the Site for the collection of soil and groundwater samples. A geophysical survey using GPR was conducted at the site in an attempt to locate any USTs that may remain on the Site or locate disturbed soils indicative of former UST basins.

A summary of the investigation findings includes:

- The geophysical survey did not identify any anomalies indicative of USTs at the Site.
- Toluene was reported at a concentration of 0.0019 mg/kg in the soil sample collected at 8.5 feet bgs in boring SB-2. The concentration of toluene does not exceed any of the regulatory screening levels.
- The remaining VOCs were not reported in soil samples collected from the remaining borings above the laboratory method detection limits.
- All 18 PAHs were reported in boring SB-2, completed at the reported location of the former UST identified in Sanborn Maps from 1945. Of the reported PAHs in boring SB-2, only benzo(a)pyrene exceeded any of the regulatory screening levels. The reported concentration of benzo(a)pyrene at 0.159 mg/kg exceeded the OPS Tier 1 RBSL for soil exposure of 0.062 mg/kg and the EPA RBSL for residential exposure of 0.11 mg/kg but was below the OPS Tier 1 Groundwater Protection Level of 4.8 mg/kg.
- PAHs were not reported in soil samples collected from the remaining borings above the laboratory method detection limits.
- Methyl ethyl ketone was reported in the groundwater samples from borings SB-2 and SB-3 at 22.2 and 9.9 µg/L, respectively, which do not exceed the regulatory screening levels.
- The remaining VOCs and PAHs in groundwater were not reported above the laboratory method detection limits

Although benzo(a)pyrene was reported in boring SB-2 at concentrations exceeding the regulatory levels for soil exposure, this concentration is below the OPS Tier 1 screening level based on groundwater protection. Based on the depth of the impacted soils at 8.5 feet bgs and the lack of groundwater impacts, the only potential exposure route would be to workers during excavation or utility construction. Direct contact with the soil at 8.5 feet bgs appears unlikely. Based on the depth of the impacts and lack of groundwater impacts AEI does not recommend any additional investigation. However it is recommended that a Material Management Plan (MMP) be created for the Site so workers are aware of potential exposure to impacted soils and proper soil management, sampling and disposal protocols are established if the soils are disturbed.

## 6.0 REPORT LIMITATIONS AND RELIANCE

This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the requested information, subject to scope of work for which AEI was retained and limitations inherent in this type of work, but it cannot be assumed that they are representative of areas not sampled. This report should not be regarded as a guarantee that no further contamination beyond that which could have been detected within the scope of this investigation is present beneath the subject property. Undocumented, unauthorized releases of hazardous material, the remains of which are not readily identifiable by visual inspection and are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation.

Any conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document. These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work. No other warranty, either expressed or implied, has been made.

This investigation was prepared for the sole use and benefit of High Country Bank. All reports, both verbal and written, whether in draft or final, are for the benefit of High Country Bank. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of AEI. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with AEI granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against AEI, its officers, employees, vendors, successors or assigns. Reliance is provided in accordance with AEI's Proposal and Standard Terms & Conditions executed by High Country Bank. The limitation of liability defined in the Terms and Conditions is the aggregate limit of AEI's liability to the client and all relying parties.

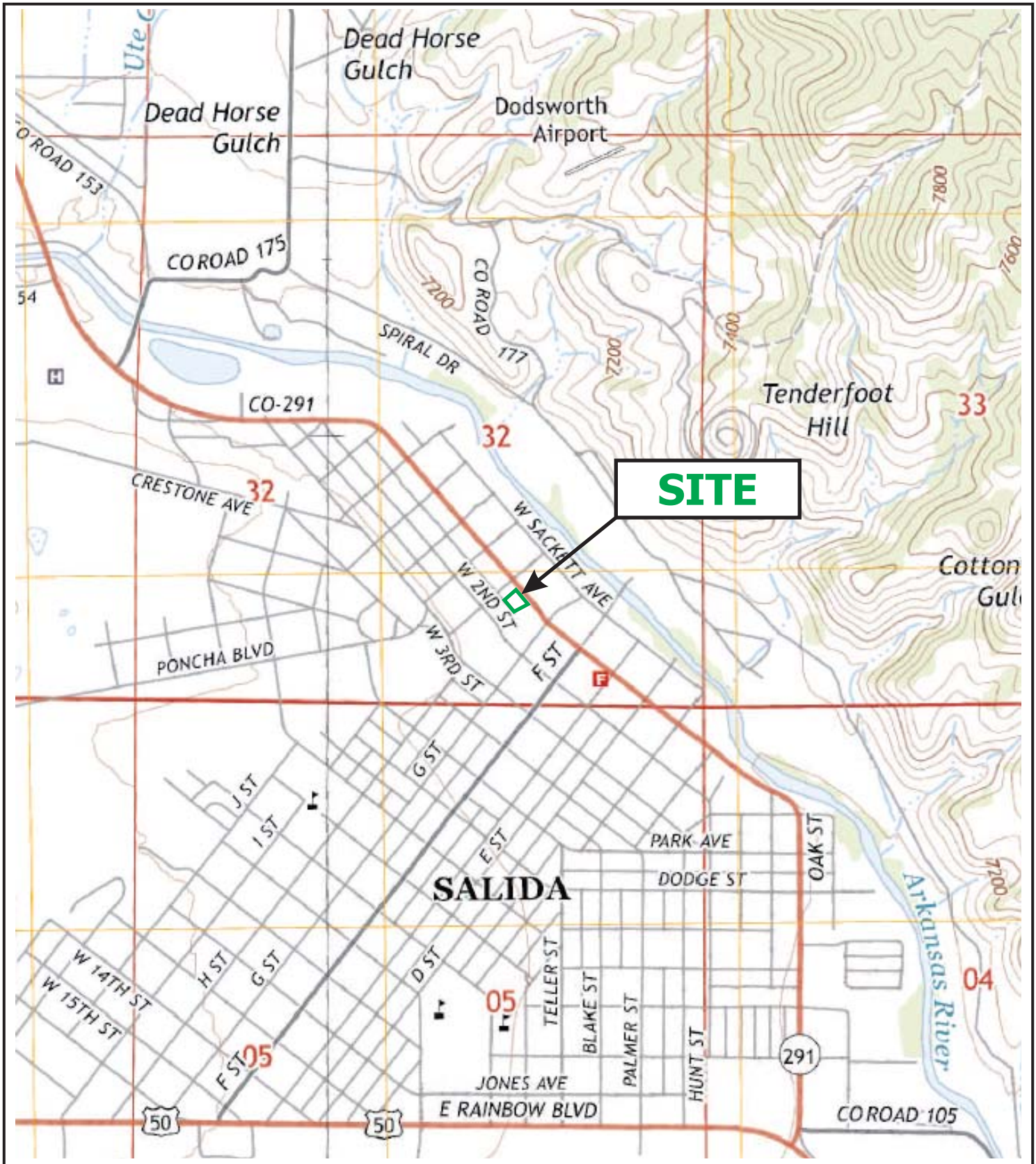
If there are any questions regarding our investigation, please do not hesitate to contact AEI at 720.238.4582.

Sincerely,
**AEI Consultants**

Jason Grubb, PG
Senior Geologist

David Provance, PG
Senior Author

# FIGURES




LEGEND

N

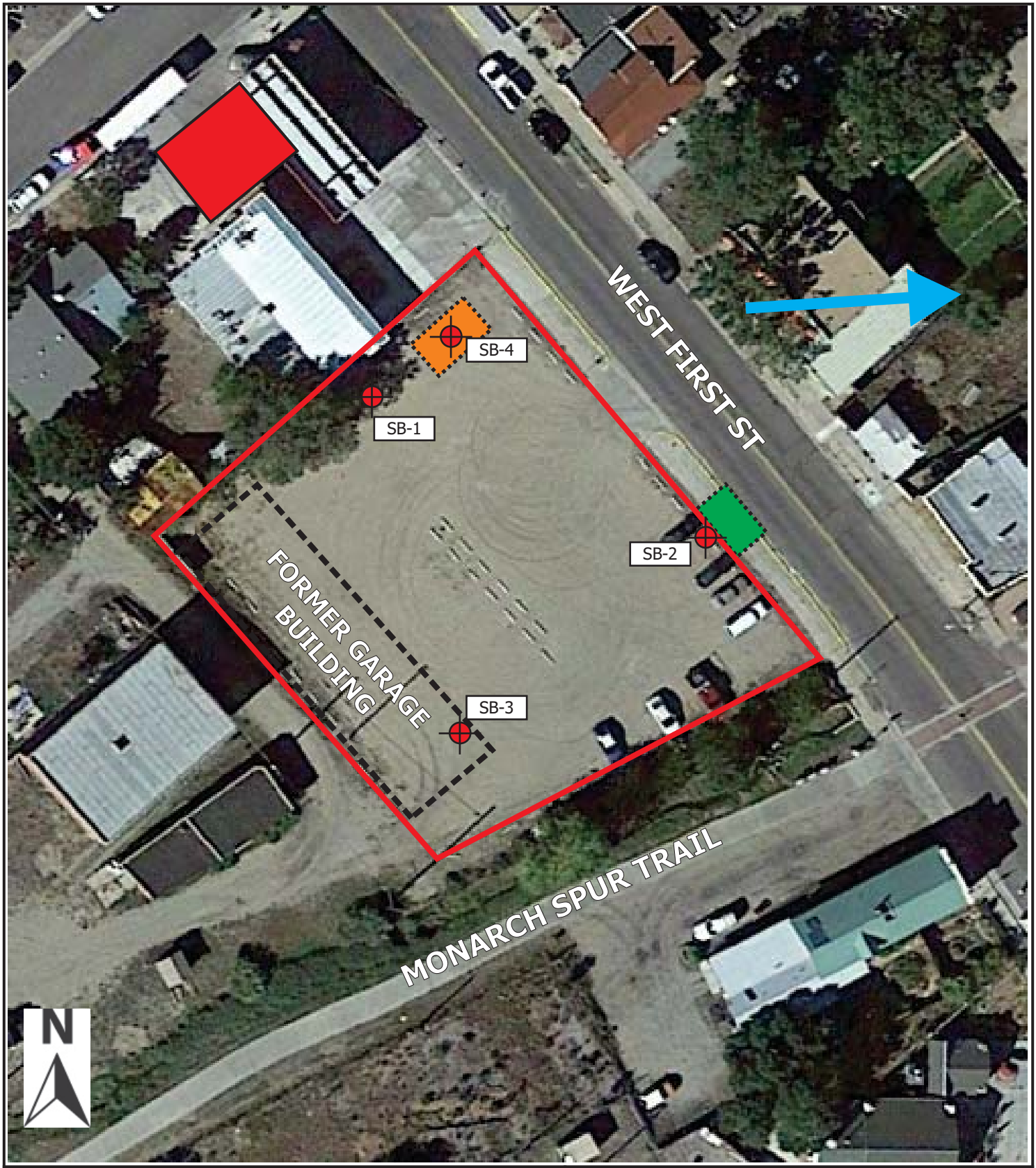
Map: SALIDA EAST, COLORADO
Date: 2013
Source: USGS

**AEI** Consultants
2420 West 26th Avenue, Suite 400D, Denver, Colorado

## SITE LOCATION MAP

323 WEST 1ST STREET
SALIDA, COLORADO 81201

FIGURE 1
Project No. 400846




## LEGEND

- Approximate Property Boundary
- Soil Boring
- Off-Site UST Basin
- Inferred Direction of Groundwater Flow
- Former UST Basin
- 1945 Sanborn UST

**AEI** Consultants

2420 West 26th Avenue, Suite 400-D, Denver, Colorado

# SITE MAP

323 WEST FIRST STREET
SALIDA, COLORADO 81201

FIGURE 2
Project No. 400082

# TABLES

**TABLE 1: SOIL SAMPLE DATA SUMMARY**
**323 West First Street, Salida, Colorado 81201**

| Analysis | Units | SB-1 2/28/2019 14 (feet bgs) | SB-2 2/28/2019 8.5 (feet bgs) | SB-3 2/28/2019 9 (feet bgs) | SB-4 2/28/2019 7.5 (feet bgs) | Comparision Values | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | OPS Tier 1 RBSL | | CDPHE | EPA RSL | |
| | | | | | | Soil Exposure | GW Protection | GWPVSC | Residential | Commercial |
| | | **VOCs** | | | | | | | | |
| Toluene | mg/kg | *< 0.001* | 0.0019 J | *< 0.001* | *< 0.001* | 4000 | 140 | 50 | 490 | 4,700 |
| Remaining VOCs | mg/kg | <MDL | <MDL | <MDL | <MDL | varies | varies | varies | varies | varies |
| | | **PAHs** | | | | | | | | |
| Acenaphthene | mg/kg | *< 0.017* | 0.0659 J | *< 0.017* | *< 0.017* | 3,600 | > Sat | N/A | 360 | 4,500 |
| Acenaphthylene | mg/kg | *< 0.017* | 0.0788 | *< 0.017* | *< 0.017* | N/A | N/A | N/A | N/A | N/A |
| Anthracene | mg/kg | *< 0.017* | 0.115 | *< 0.017* | *< 0.017* | 18,000 | > Sat | N/A | 1,800 | 23,000 |
| Benzo(a)anthracene | mg/kg | *< 0.017* | 0.157 | *< 0.017* | *< 0.017* | 0.62 | 1.6 | 1,000 | 1.1 | 21 |
| Benzo(b)fluoranthene | mg/kg | *< 0.017* | 0.245 | *< 0.017* | *< 0.017* | 0.62 | 4.5 | 1,000 | 1.1 | 21 |
| Benzo(k)fluoranthene | mg/kg | *< 0.017* | 0.0842 | *< 0.017* | *< 0.017* | 6.2 | 4.4 | 1,000 | 11 | 210 |
| Benzo(g,h,i)perylene | mg/kg | *< 0.017* | 0.136 | *< 0.017* | *< 0.017* | N/A | N/A | N/A | N/A | N/A |
| Benzo(a)pyrene | mg/kg | *< 0.017* | **0.159** | *< 0.017* | *< 0.017* | **0.062** | 4.8 | 1,000 | **0.11** | 2.1 |
| Chrysene | mg/kg | *< 0.017* | 0.238 | *< 0.017* | *< 0.017* | 62 | 1.5 | 1,000 | 110 | 2,100 |
| Dibenzo(a,h)anthracene | mg/kg | *< 0.017* | 0.0302 J | *< 0.017* | *< 0.017* | 0.062 | 14 | 1,000 | 0.11 | 2.1 |
| Fluoranthene | mg/kg | *< 0.017* | 0.435 | *< 0.017* | *< 0.017* | 2,300 | > Sat | 1,000 | 240 | 3,000 |
| Fluorene | mg/kg | *< 0.017* | 0.0868 | *< 0.017* | *< 0.017* | 2,400 | > Sat | N/A | 240 | 3,000 |
| Indeno(1,2,3-cd)pyrene | mg/kg | *< 0.017* | 0.147 | *< 0.017* | *< 0.017* | 0.62 | > Sat | 1,000 | 1.1 | 21 |
| 1-Methylnaphthalene | mg/kg | *< 0.024* | 0.11 | *< 0.024* | *< 0.024* | N/A | N/A | N/A | 18 | 73 |
| 2-Methylnaphthalene | mg/kg | *< 0.031* | 0.115 | *< 0.030* | *< 0.031* | N/A | N/A | N/A | 24 | 300 |
| Naphthalene | mg/kg | *< 0.024* | 0.087 | *< 0.024* | *< 0.024* | 850 | > Sat | 23 | 3.8 | 17 |
| Phenanthrene | mg/kg | *< 0.017* | 0.354 | *< 0.017* | *< 0.017* | N/A | N/A | N/A | N/A | N/A |
| Pyrene | mg/kg | *< 0.017* | 0.382 | *< 0.017* | *< 0.017* | 1,800 | > Sat | 1,000 | 180 | 2,300 |

Notes:

| | |
|---|---|
| mg/kg | milligrams per kilogram |
| <MDL | less than the method detection limit |
| NA | not analyzed |
| bgs | below ground surface |
| N/A | not applicable |
| VOCs | volatile organic compounds |
| PAHs | polynuclear aromatic hydrocarbons |
| > Sat | denotes that even at a concentration equal to the saturation of the chemical, a hazard quotient of 1 and a concer risk of $1^{E-6}$ is not exceeded |
| **Bold** | Result exceeds applicable Comparision Value |
| J | estimated value, analyte detected below the quantitation limit |

Comparision Values:
OPS: Colorado Department of Labor and Employment Division of Oil and Public Safety
Tier 1 RBSL: Tier 1 Risk Based Screening Levels
CDPHE: Colorado Department of Public Health and Environment
GWPVSC: Groundwater Protection Values Soil Cleanup
EPA: Environmental Protection Agency
RSL: Risk Based Screening Levels

**TABLE 2: GROUNDWATER SAMPLE DATA SUMMARY**
**323 West First Street, Salida, Colorado 81201**

| Analysis | Units | SB-1<br>2/28/2019<br>20.1<br>(feet bgs) | SB-2<br>2/28/2019<br>18.5<br>(feet bgs) | SB-3<br>2/28/2019<br>20.55<br>(feet bgs) | Comparision Values<br>OPS<br>Tier 1 RBSL | <br>CDPHE<br>CBSGW |
|---|---|---|---|---|---|---|
| | | **VOCs** | | | | |
| MEK | µg/L | NA | 22.2 | 9.9 J | N/A | N/A |
| Remaining VOCs | µg/L | <MDL | <MDL | <MDL | varies | varies |
| | | **PAHs** | | | | |
| PAHs | µg/L | <MDL | <MDL | <MDL | varies | varies |

Notes:

| | |
|---|---|
| µg/L | micrograms per liter |
| <MDL | less than the method detection limit |
| NA | not analyzed |
| bgs | below ground surface |
| N/A | not applicable |
| MEK | methyl ethyl ketone |
| VOCs | volatile organic compounds |
| PAHs | polynuclear aromatic hydrocarbons |
| **Bold** | Result exceeds applicable Comparision Value |
| J | estimated value, analyte detected below the quantitation limit |

Comparision Values:
OPS: Colorado Department of Labor and Employment Division of Oil and Public Safety
Tier 1 RBSL: Tier 1 Risk Based Screening Levels
CDPHE: Colorado Department of Public Health and Environment
CBSGW: Colorado Basic Standards for Groundwater

# APPENDIX A

# GEOPHYSICAL SURVEY REPORT

GPRS SUBSURFACE SCANNING SOLUTIONS

# Subsurface Investigation for Storage Tanks/Utilities

Prepared For: AEI Consultants

**Prepared By:**
**Jordan Bradish**
**Project Manager-CO/WY**
**3/6/2019**

GPRS SUBSURFACE SCANNING SOLUTIONS

March, 6, 2019

**AEI Consultants**
**Attn: Jason Grubb**
**Site: 323 West First St., Salida, CO**

We appreciate the opportunity to provide this report for our work completed on 2/28/2019 at the above address in Salida, CO.

## PURPOSE

The purpose of this project was to search for underground storage tanks (USTs), UST-related piping and/or underground utilities prior to drilling three soil boring locating. The interior of the buildings on site were excluded from the scope of this project.

## EQUIPMENT

- **400 MHz GPR Antenna.** The antenna is mounted in a stroller frame which rolls over the surface. The surface needs to be reasonably smooth and unobstructed in order to obtain readable scans. Obstructions such as curbs, landscaping, and vegetation will limit the feasibility of GPR. The data is displayed on a screen and marked in the field in real time. GPR works by sending pulses of energy into a material and recording the strength and the time required for the return of the reflected signal. Reflections are produced when the energy pulses enter into a material with different electrical properties from the material it left. The strength of the reflection is determined by the contrast in signal speed between the two materials. The total depth achieved can be as much as 8' or more with this antenna but can vary widely depending on the conductivity of the materials. Depths provided should always be treated as estimates as their accuracy can be affected by multiple factors. For more information, please visit: Link
- **Electromagnetic Pipe Locator.** The EM locator can detect the electromagnetic fields from live power or radio frequency signals. It can also be used in conjunction with a transmitter to connect directly to accessible, metallic pipes, risers, or tracer wires. A current is sent through the pipe or tracer wire at a specific frequency and the resulting EM field can then be detected by the receiver. The receiver is moved over the surface without coming in contact with the ground so it is not affected by terrain. Depths provided should always be treated as estimates as their accuracy can be affected by multiple factors. Depths achieved can be as much as 20' depending on the type of signal being traced or methods used. For more information, please visit: Link

## PROCESS

The EM pipe locator was used to connect to accessible, traceable pipes that may be tank-related such as vent pipes or product lines. A current is induced onto the pipe which creates an electromagnetic field that can be traced using the receiver. We can then attempt to trace these pipes to their origin or end point and paint or flag their locations.

Initial GPR scans were collected in order to evaluate the data and calibrate the equipment. Based on these findings, a scanning strategy is formed, typically consisting of scanning the entire area in a grid with 3'-5' scan spacing in order to locate any potential UST's that may remain at the site. With this site, due to obstructions, some area's were limited to shorter scans. The GPR data is interpreted in real time and anomalies in the data are located and marked on the surface along with their depths using spray paint, pin flags, etc. Depths are dependent on the dielectric of the materials being scanned so depth accuracy can vary throughout a site. Relevant scan examples were saved and will be provided in this report.

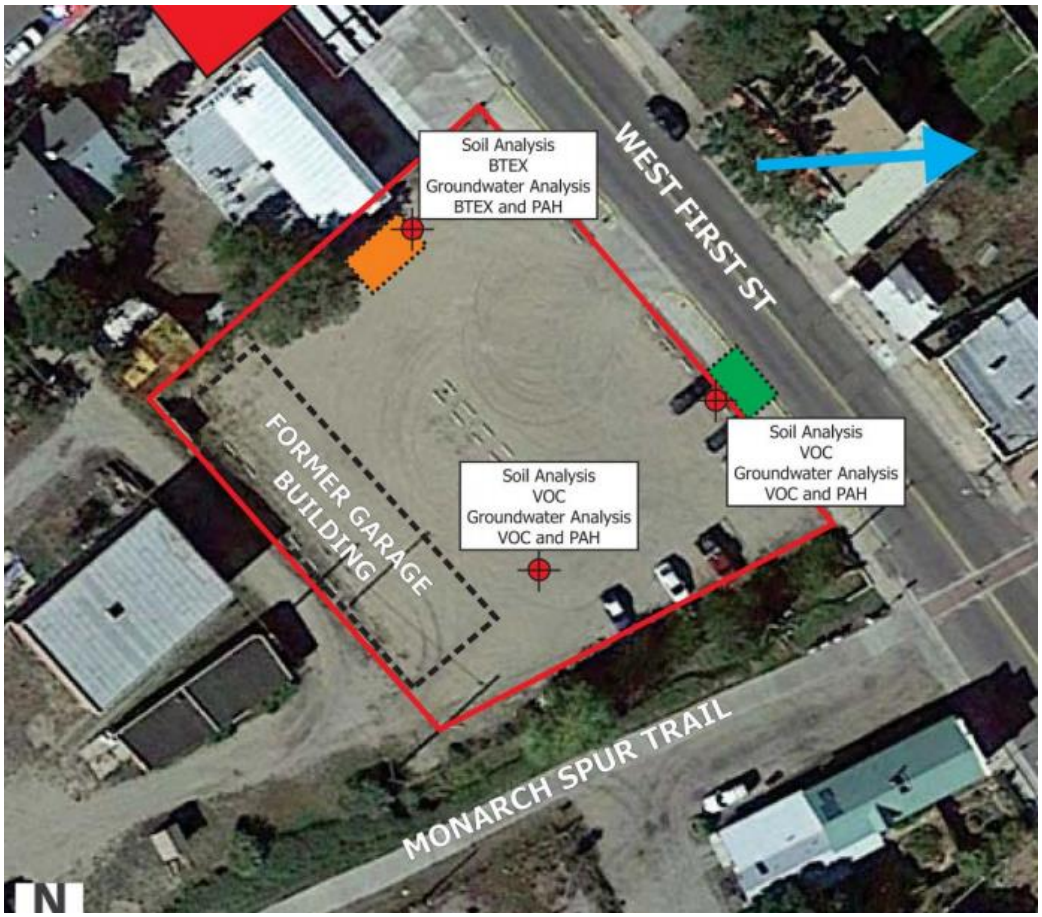
**LIMITATIONS**

Please keep in mind that there are limitations to any subsurface investigation. The equipment may not achieve maximum effectiveness due to soil conditions, above ground obstructions, reinforced concrete, and a variety of other factors. No subsurface investigation or equipment can provide a complete image of what lies below. Our results should always be used in conjunction with as many methods as possible including consulting existing plans and drawings, exploratory excavation or potholing, visual inspection of above ground features, and utilization of services such as One Call/811.

**FINDINGS**

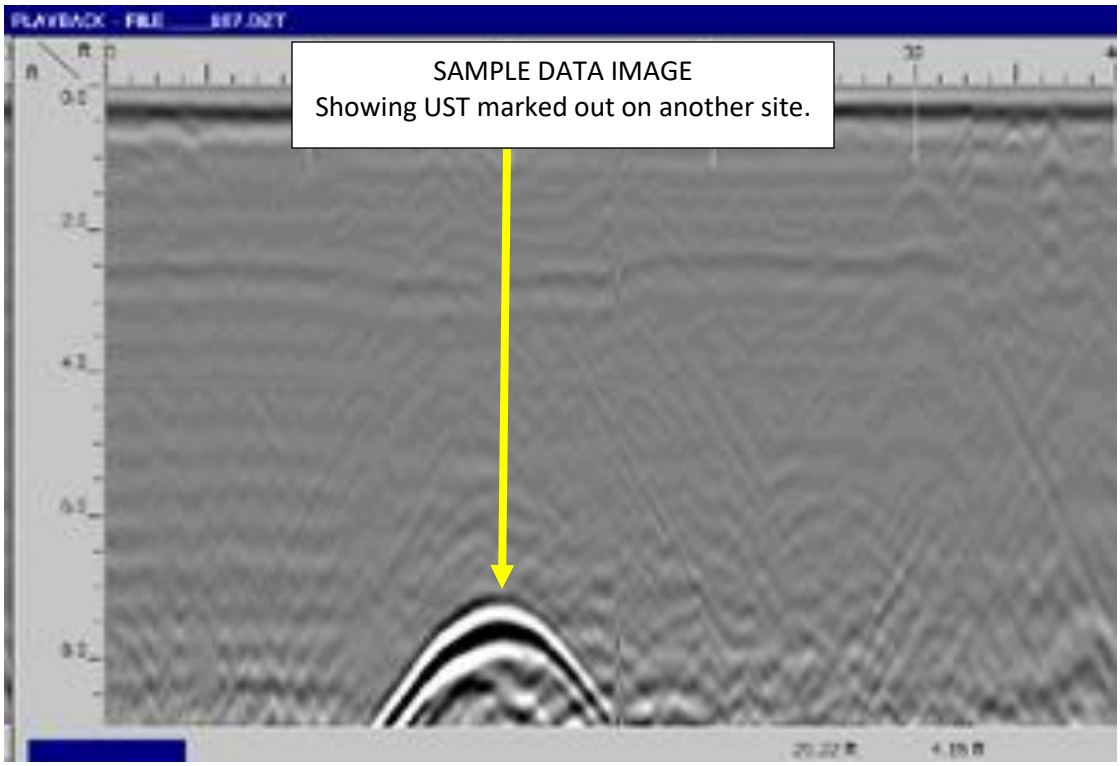
We found that the soil allowed for maximum GPR depth penetration of 2'-3' in most areas. We were able to locate one unknown line with the RD. We were not able to locate any known utilities on site. The data seen on site wasn't consistent with UST data signatures

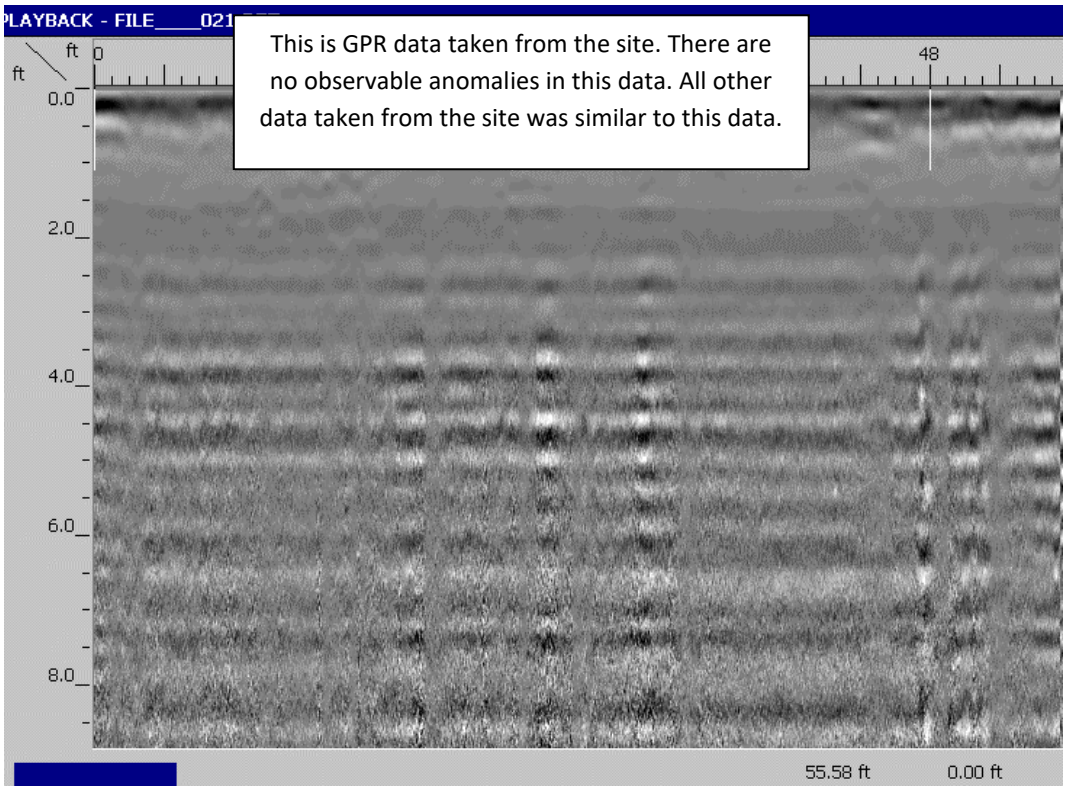
The following pages will provide photos and further explanation of our findings.




| | | | |
|---|---|---|---|
| Scan Area Outlined in Red | N | 323 West First Street | GPRS |


| | | | |
|---|---|---|---|
| Site Map with Findings<br>Red = Unknown Line | N | 323 West First Street | GPRS |


SAMPLE DATA IMAGE
Showing UST marked out on another site.


PLAYBACK - FILE____021
This is GPR data taken from the site. There are no observable anomalies in this data. All other data taken from the site was similar to this data.
ft
0
48
0.0
2.0
4.0
6.0
8.0
55.58 ft
0.00 ft

**CLOSING**

GPRS, Inc. has been in business since 2001, specializing in underground storage tank location, concrete scanning, utility locating, and shallow void detection for projects throughout the United States. I encourage you to visit our website (www.gprsinc.com) and contact any of the numerous references listed.

GPRS appreciates the opportunity to offer our services, and we look forward to continuing to work with you on future projects. Please feel free to contact us for additional information or with any questions you may have regarding this report.

Signed,

*Jordan Bradish*

Jordan Bradish
Project Manager – CO/WY

GPRS SUBSURFACE SCANNING SOLUTIONS

Direct: 720.340.6200
jordan.bradish@gprsinc.com
www.gprsinc.com

# APPENDIX B

# BORING LOGS

AEI CONSULTANTS
2420 West 26th Avenue, Suite 400D
Denver, Colorado 80211
Telephone: 720-238-4582

# BORING NUMBER SB-1



**CLIENT** High Country Bank
**PROJECT NAME** Eric Warner
**PROJECT NUMBER** 400082
**PROJECT LOCATION** Salida, CO
**DATE STARTED** 2/28/19 **COMPLETED** 2/28/19
**GROUND ELEVATION** _____ **HOLE SIZE** 6.25 inches
**DRILLING CONTRACTOR** Site Services
**GROUND WATER LEVELS:**
**DRILLING METHOD** Hollow Stem Auger
**AT TIME OF DRILLING** ---
**LOGGED BY** Jason Grubb **CHECKED BY** David Provance
**AT END OF DRILLING** ---
**NOTES**
**AFTER DRILLING** 20.10 ft

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS | PID DATA (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | COMPLETION |
|---|---|---|---|---|---|---|
| 0 | | | | | (SW) Very fine to coarse sand with sub-angular to sub-round gravel<br>Moist | |
| | | | | | 3.5 | |
| 5 | | | 0.0 | | (SW) Very fine to coarse sand with sub-angular to sub-round gravel and cobbles<br>Moist | |
| 10 | | | 0.0 | | 11.5 | |
| | SB-1 14' | | 0.2 | | Gravel, cobble and boulders with sand<br>Moist | |
| 15 | | | | | 18.0 | |
| | | | 0.2 | | 19.0 (SW) Very fine to coarse grained sand and rounded gravel and cobble<br>Wet | |
| 20 | | | | | (SW) Very fine to coarse grained sand and rounded gravel and cobble<br>Saturated | |
| | | | | | 24.0 | |

Bottom of borehole at 24.0 feet.

AEI CONSULTANTS
2420 West 26th Avenue, Suite 400D
Denver, Colorado 80211
Telephone: 720-238-4582

# BORING NUMBER SB-2



**CLIENT** High Country Bank
**PROJECT NAME** Eric Warner
**PROJECT NUMBER** 400082
**PROJECT LOCATION** Salida, CO
**DATE STARTED** 2/28/19 **COMPLETED** 2/28/19
**GROUND ELEVATION** **HOLE SIZE** 6.25 inches
**DRILLING CONTRACTOR** Site Services
**GROUND WATER LEVELS:**
**DRILLING METHOD** Hollow Stem Auger
**AT TIME OF DRILLING** ---
**LOGGED BY** Jason Grubb **CHECKED BY** David Provance
**AT END OF DRILLING** ---
**NOTES**
**AFTER DRILLING** 18.50 ft

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS | PID DATA (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | COMPLETION |
|---|---|---|---|---|---|---|
| 0 | | | | | 0.4 (SW-SM) Very fine to coarse grained silty sand<br>Moist | |
| | | | | | 0.8 Concrete | |
| | | | 0.2 | | (SW) Very fine to coarse grained sand with sub-rounded to rounded gravel<br>Moist | |
| 5 | | | | | | |
| | SB-2 8.5' | | | | 8.5 | |
| | | | 1.8 | | 9.0 Boulder | |
| 10 | | | | | (SW) Very fine to coarse grained sand with sub-rounded to rounded gravel<br>Moist | |
| | | | 0.9 | | | |
| 15 | | | | | | |
| | | | | | 19.0 | |
| | | | 0.1 | | (SW) Very fine to coarse grained sand with sub-rounded to rounded gravel<br>Saturated | |
| 20 | | | | | | |
| | | | | | 24.0 | |

Bottom of borehole at 24.0 feet.

AEI CONSULTANTS
2420 West 26th Avenue, Suite 400D
Denver, Colorado 80211
Telephone: 720-238-4582

# BORING NUMBER SB-3



**CLIENT** High Country Bank
**PROJECT NAME** Eric Warner
**PROJECT NUMBER** 400082
**PROJECT LOCATION** Salida, CO
**DATE STARTED** 2/28/19 **COMPLETED** 2/28/19
**GROUND ELEVATION** **HOLE SIZE** 6.25 inches
**DRILLING CONTRACTOR** Site Services
**GROUND WATER LEVELS:**
**DRILLING METHOD** Hollow Stem Auger
**AT TIME OF DRILLING** ---
**LOGGED BY** Jason Grubb **CHECKED BY** David Provance
**AT END OF DRILLING** ---
**NOTES**
**AFTER DRILLING** 20.55 ft

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS | PID DATA (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | COMPLETION |
|---|---|---|---|---|---|---|
| 0 | | | | | (SW-SM) Very fine to coarse grained silty sand with subangular to subrounded gravel<br>Moist | |
| 5 | | | 0.0 | | 5.0<br>(SW) Very fine to coarse grained sand with subrounded to rounded gravel, cobbles and boulders<br>Moist | |
| 10 | SB-3 9' | | 0.1 | | | |
| 15 | | | 0.0 | | | |
| 20 | | | 0.0 | | 19.0<br>(SW) Very fine to coarse grained sand with subrounded to rounded gravel, cobbles and boulders<br>Saturated | |
| | | | | | 24.0<br>Bottom of borehole at 24.0 feet. | |

AEI CONSULTANTS
2420 West 26th Avenue, Suite 400D
Denver, Colorado 80211
Telephone: 720-238-4582

# BORING NUMBER SB-4



**CLIENT** High Country Bank
**PROJECT NAME** Eric Warner
**PROJECT NUMBER** 400082
**PROJECT LOCATION** Salida, CO
**DATE STARTED** 2/28/19 **COMPLETED** 2/28/19
**GROUND ELEVATION** _____ **HOLE SIZE** 6.25 inches
**DRILLING CONTRACTOR** Site Services
**GROUND WATER LEVELS:**
**DRILLING METHOD** Hollow Stem Auger
**AT TIME OF DRILLING** ---
**LOGGED BY** Jason Grubb **CHECKED BY** David Provance
**AT END OF DRILLING** ---
**NOTES**
**AFTER DRILLING** ---

| DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS | PID DATA (ppm) | GRAPHIC LOG | MATERIAL DESCRIPTION | COMPLETION |
|---|---|---|---|---|---|---|
| 0 | | | | | (SP-SM) Very fine to medium grained silty sand<br>Moist | |
| | | | 0.2 | | 3.5<br>(SW) Very fine to coarse grained sand with subangular to subrounded gravel and cobble<br>Moist | |
| 5 | | | | | 4.5<br>(SW) Very fine to coarse grained sand with subrounded to rounded gravel, cobble and boulders<br>Moist | |
| | SB-4 7.5' | | 0.1 | | 7.5<br>Refusal at 7.5 feet.<br>Bottom of borehole at 7.5 feet. | |

# APPENDIX C

# LABORATORY ANALYTICAL REPORTS

The results set forth herein are provided by SGS North America Inc.

*e-Hardcopy 2.0*
*Automated Report*

# Technical Report for

## AEI Consultants

Vacant Lot

400082 PO#186735

SGS Job Number: DA13922

Sampling Date: 02/28/19

Report to:

AEI Consultants
2500 Camino Diablo,
Walnut Creek, CA 94597
jgrubb@aeiconsultants.com; jsmith@aeiconsultants.com;
bcampbell@aeiconsultants.com
ATTN: Jason Grubb

Total number of pages in report: **58**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Scott Heideman
Laboratory Director

Client Service contact: Carissa Cumine 303-425-6021

Certifications: CO (CO00049), ID (CO00049), NE (NE-OS-06-04), ND (R-027), NJ (CO007), OK (D9942) UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY (8TMS-L)

Sections: 1 2 3 4 5 6

# Table of Contents

# Sample Summary

AEI Consultants

**Job No:** DA13922

Vacant Lot
Project No: 400082 PO#186735

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| DA13922-1 | 02/28/19 | 10:38 | JG | 03/01/19 | SO | Soil | SB-1 14' |
| DA13922-2 | 02/28/19 | 11:38 | JG | 03/01/19 | AQ | Ground Water | SB-1 GW |
| DA13922-3 | 02/28/19 | 12:12 | JG | 03/01/19 | SO | Soil | SB-2 8.5' |
| DA13922-4 | 02/28/19 | 13:25 | JG | 03/01/19 | AQ | Ground Water | SB-2 GW |
| DA13922-5 | 02/28/19 | 14:22 | JG | 03/01/19 | SO | Soil | SB-3 9' |
| DA13922-6 | 02/28/19 | 15:54 | JG | 03/01/19 | AQ | Ground Water | SB-3 GW |
| DA13922-7 | 02/28/19 | 17:03 | JG | 03/01/19 | SO | Soil | SB-4 7.5' |

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

# Summary of Hits

**Job Number:** DA13922
**Account:** AEI Consultants
**Project:** Vacant Lot
**Collected:** 02/28/19

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| **DA13922-1** | **SB-1 14'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **DA13922-2** | **SB-1 GW** | | | | | |
| No hits reported in this sample. | | | | | | |
| **DA13922-3** | **SB-2 8.5'** | | | | | |
| Toluene | | 1.9 J | 2.2 | 1.1 | ug/kg | SW846 8260B |
| Acenaphthene | | 65.9 J | 72 | 18 | ug/kg | SW846 8270C |
| Acenaphthylene | | 78.8 | 72 | 18 | ug/kg | SW846 8270C |
| Anthracene | | 115 | 72 | 18 | ug/kg | SW846 8270C |
| Benzo(a)anthracene | | 157 | 72 | 18 | ug/kg | SW846 8270C |
| Benzo(b)fluoranthene | | 245 | 72 | 18 | ug/kg | SW846 8270C |
| Benzo(k)fluoranthene | | 84.2 | 72 | 18 | ug/kg | SW846 8270C |
| Benzo(g,h,i)perylene | | 136 | 72 | 18 | ug/kg | SW846 8270C |
| Benzo(a)pyrene | | 159 | 72 | 18 | ug/kg | SW846 8270C |
| Chrysene | | 238 | 72 | 18 | ug/kg | SW846 8270C |
| Dibenzo(a,h)anthracene | | 30.2 J | 72 | 18 | ug/kg | SW846 8270C |
| Fluoranthene | | 435 | 72 | 18 | ug/kg | SW846 8270C |
| Fluorene | | 86.8 | 72 | 18 | ug/kg | SW846 8270C |
| Indeno(1,2,3-cd)pyrene | | 147 | 72 | 18 | ug/kg | SW846 8270C |
| 1-Methylnaphthalene | | 110 | 72 | 25 | ug/kg | SW846 8270C |
| 2-Methylnaphthalene | | 115 | 72 | 32 | ug/kg | SW846 8270C |
| Naphthalene | | 87.0 | 72 | 25 | ug/kg | SW846 8270C |
| Phenanthrene | | 354 | 72 | 18 | ug/kg | SW846 8270C |
| Pyrene | | 382 | 72 | 18 | ug/kg | SW846 8270C |
| **DA13922-4** | **SB-2 GW** | | | | | |
| Methyl ethyl ketone | | 22.2 | 10 | 5.0 | ug/l | SW846 8260B |
| **DA13922-5** | **SB-3 9'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **DA13922-6** | **SB-3 GW** | | | | | |
| Methyl ethyl ketone | | 9.9 J | 10 | 5.0 | ug/l | SW846 8260B |
| **DA13922-7** | **SB-4 7.5'** | | | | | |
| No hits reported in this sample. | | | | | | |

## Sample Results

Report of Analysis

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-1 14' | | |
| **Lab Sample ID:** | DA13922-1 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | SO - Soil | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | 97.9 |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 5V51526.D | 1 | 03/05/19 16:01 | MB | n/a | n/a | V5V2714 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 5.05 g | 5.0 ml |
| Run #2 | | |

**Purgeable Aromatics**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.51 | ug/kg | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 0.51 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | 1.0 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 102% | | 70-131% |
| 2037-26-5 | Toluene-D8 | 97% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | | 70-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 105% | | 70-130% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-1 14' | | |
| **Lab Sample ID:** | DA13922-1 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | SO - Soil | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8270C SW846 3546 | **Percent Solids:** | 97.9 |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G141565.D | 1 | 03/05/19 20:31 | DC | 03/05/19 | OP17541 | E1G2414 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**BN PAH List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 68 | 17 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 68 | 17 | ug/kg | |
| 120-12-7 | Anthracene | ND | 68 | 17 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 68 | 17 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 68 | 17 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 68 | 17 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 68 | 17 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 68 | 17 | ug/kg | |
| 218-01-9 | Chrysene | ND | 68 | 17 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 68 | 17 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 68 | 17 | ug/kg | |
| 86-73-7 | Fluorene | ND | 68 | 17 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 68 | 17 | ug/kg | |
| 90-12-0 | 1-Methylnaphthalene | ND | 68 | 24 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 68 | 31 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 68 | 24 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 68 | 17 | ug/kg | |
| 129-00-0 | Pyrene | ND | 68 | 17 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 60% | | 23-130% |
| 4165-60-0 | Nitrobenzene-d5 | 55% | | 12-131% |
| 1718-51-0 | Terphenyl-d14 | 88% | | 29-141% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-1 GW | | |
| **Lab Sample ID:** | DA13922-2 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 7V59020.D | 1 | 03/05/19 20:53 | CH | n/a | n/a | V7V3009 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

**Purgeable Aromatics**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.50 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 1.0 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 107% | | 70-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 101% | | 70-130% |
| 2037-26-5 | Toluene-D8 | 99% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 105% | | 70-130% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-1 GW | | |
| **Lab Sample ID:** | DA13922-2 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | n/a |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G141533.D | 1 | 03/04/19 21:00 | DC | 03/04/19 | OP17533 | E1G2412 |
| Run #2 | | | | | | | |

| | Initial Volume | Final Volume |
|---|---|---|
| Run #1 | 1020 ml | 1.0 ml |
| Run #2 | | |

**BN PAH List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 2.0 | 0.69 | ug/l | |
| 208-96-8 | Acenaphthylene | ND | 2.0 | 0.59 | ug/l | |
| 120-12-7 | Anthracene | ND | 2.0 | 0.69 | ug/l | |
| 56-55-3 | Benzo(a)anthracene | ND | 2.0 | 0.69 | ug/l | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 2.0 | 0.88 | ug/l | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 2.0 | 0.88 | ug/l | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 2.0 | 0.98 | ug/l | |
| 50-32-8 | Benzo(a)pyrene | ND | 2.0 | 0.98 | ug/l | |
| 218-01-9 | Chrysene | ND | 2.0 | 0.69 | ug/l | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 2.0 | 1.3 | ug/l | |
| 206-44-0 | Fluoranthene | ND | 2.0 | 0.88 | ug/l | |
| 86-73-7 | Fluorene | ND | 2.0 | 0.59 | ug/l | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 2.0 | 1.4 | ug/l | |
| 90-12-0 | 1-Methylnaphthalene | ND | 2.0 | 0.69 | ug/l | |
| 91-57-6 | 2-Methylnaphthalene | ND | 2.0 | 0.69 | ug/l | |
| 91-20-3 | Naphthalene | ND | 2.0 | 0.78 | ug/l | |
| 85-01-8 | Phenanthrene | ND | 2.0 | 0.59 | ug/l | |
| 129-00-0 | Pyrene | ND | 2.0 | 0.69 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 4165-60-0 | Nitrobenzene-d5 | 47% | | 19-130% |
| 321-60-8 | 2-Fluorobiphenyl | 49% | | 20-130% |
| 1718-51-0 | Terphenyl-d14 | 27% | | 13-149% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-2 8.5' | | |
| **Lab Sample ID:** | DA13922-3 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | SO - Soil | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | 92.8 |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 5V51527.D | 1 | 03/05/19 16:25 | MB | n/a | n/a | V5V2714 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 5.00 g | 5.0 ml |
| Run #2 | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 54 | 24 | ug/kg | |
| 107-02-8 | Acrolein | ND | 22 | 16 | ug/kg | |
| 107-13-1 | Acrylonitrile | ND | 11 | 8.6 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.54 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 2.2 | 0.54 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 2.2 | 0.65 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 2.2 | 0.54 | ug/kg | |
| 75-25-2 | Bromoform | ND | 2.2 | 1.1 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 2.2 | 0.54 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 2.2 | 0.54 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 2.2 | 0.54 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 2.2 | 0.54 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 2.2 | 0.54 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 2.2 | 0.54 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 2.2 | 0.86 | ug/kg | |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | 4.3 | 1.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 2.2 | 0.54 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 2.2 | 0.54 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 2.2 | 0.54 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 7.5 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 2.2 | 0.65 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.2 | 0.54 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 2.2 | 0.54 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 2.2 | 0.54 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 2.2 | 0.54 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 2.2 | 0.54 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.2 | 0.54 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 2.2 | 0.54 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 2.2 | 0.54 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 2.2 | 0.54 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 2.2 | 0.54 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 2.2 | 0.54 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-2 8.5' | | |
| **Lab Sample ID:** | DA13922-3 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | SO - Soil | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | 92.8 |
| **Project:** | Vacant Lot | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 142-28-9 | 1,3-Dichloropropane | ND | 2.2 | 0.54 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 2.2 | 0.54 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 2.2 | 0.54 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 2.2 | 0.54 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 2.2 | 0.54 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 2.2 | 0.54 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.2 | 0.59 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 11 | 5.4 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 2.2 | 0.54 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.2 | 0.54 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 2.2 | 0.54 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 2.2 | 0.54 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 2.2 | 0.97 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 2.2 | 0.65 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 4.3 | 3.2 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 11 | 5.4 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 11 | 5.4 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.3 | 3.2 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 2.2 | 0.54 | ug/kg | |
| 100-42-5 | Styrene | ND | 2.2 | 0.54 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 2.2 | 0.54 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 2.2 | 0.54 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 2.2 | 0.54 | ug/kg | |
| 108-88-3 | Toluene | 1.9 | 2.2 | 1.1 | ug/kg | J |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.2 | 1.1 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.2 | 1.1 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.2 | 0.54 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 2.2 | 0.54 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 2.2 | 0.54 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.2 | 1.1 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.2 | 0.54 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.2 | 0.54 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.2 | 0.54 | ug/kg | |
| 108-05-4 | Vinyl Acetate | ND | 11 | 5.4 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 2.2 | 0.54 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.2 | 1.1 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 101% | | 70-131% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-2 8.5' | | |
| **Lab Sample ID:** | DA13922-3 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | SO - Soil | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | 92.8 |
| **Project:** | Vacant Lot | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 99% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | | 70-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 101% | | 70-130% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-2 8.5' | | |
| **Lab Sample ID:** | DA13922-3 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | SO - Soil | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8270C SW846 3546 | **Percent Solids:** | 92.8 |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G141568.D | 1 | 03/05/19 21:56 | DC | 03/05/19 | OP17541 | E1G2414 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.0 g | 1.0 ml |
| Run #2 | | |

**BN PAH List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 65.9 | 72 | 18 | ug/kg | J |
| 208-96-8 | Acenaphthylene | 78.8 | 72 | 18 | ug/kg | |
| 120-12-7 | Anthracene | 115 | 72 | 18 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 157 | 72 | 18 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | 245 | 72 | 18 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | 84.2 | 72 | 18 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 136 | 72 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | 159 | 72 | 18 | ug/kg | |
| 218-01-9 | Chrysene | 238 | 72 | 18 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | 30.2 | 72 | 18 | ug/kg | J |
| 206-44-0 | Fluoranthene | 435 | 72 | 18 | ug/kg | |
| 86-73-7 | Fluorene | 86.8 | 72 | 18 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 147 | 72 | 18 | ug/kg | |
| 90-12-0 | 1-Methylnaphthalene | 110 | 72 | 25 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | 115 | 72 | 32 | ug/kg | |
| 91-20-3 | Naphthalene | 87.0 | 72 | 25 | ug/kg | |
| 85-01-8 | Phenanthrene | 354 | 72 | 18 | ug/kg | |
| 129-00-0 | Pyrene | 382 | 72 | 18 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 72% | | 23-130% |
| 4165-60-0 | Nitrobenzene-d5 | 61% | | 12-131% |
| 1718-51-0 | Terphenyl-d14 | 91% | | 29-141% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-2 GW | | |
| **Lab Sample ID:** | DA13922-4 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 7V59021.D | 1 | 03/05/19 21:17 | CH | n/a | n/a | V7V3009 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 50 | 20 | ug/l | |
| 107-02-8 | Acrolein | ND | 10 | 7.0 | ug/l | |
| 107-13-1 | Acrylonitrile | ND | 5.0 | 4.0 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | 0.50 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | 0.50 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 2.0 | 0.50 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 2.0 | 0.50 | ug/l | |
| 75-25-2 | Bromoform | ND | 2.0 | 0.50 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 75-15-0 | Carbon disulfide | ND | 2.0 | 0.70 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 2.0 | 0.70 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 75-00-3 | Chloroethane | ND | 2.0 | 0.50 | ug/l | |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | 2.0 | 0.50 | ug/l | |
| 67-66-3 | Chloroform | ND | 2.0 | 0.50 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 1.0 | 0.50 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 1.0 | 0.50 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.0 | 3.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 2.0 | 0.50 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.50 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 2.0 | 0.50 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 2.0 | 0.80 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.0 | 0.50 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 2.0 | 0.50 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 2.0 | 0.50 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 2.0 | 0.50 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 2.0 | 0.50 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 2.0 | 0.50 | ug/l | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-2 GW | | |
| **Lab Sample ID:** | DA13922-4 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Vacant Lot | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 142-28-9 | 1,3-Dichloropropane | ND | 2.0 | 0.50 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 2.0 | 1.0 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 2.0 | 0.60 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 2.0 | 0.50 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 2.0 | 0.50 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.0 | 2.0 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | 2.5 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 1.0 | 0.50 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 4.0 | 2.0 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 2.0 | 1.0 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 2.0 | 1.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 4.0 | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 2.5 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | 22.2 | 10 | 5.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.50 | ug/l | |
| 91-20-3 | Naphthalene | ND | 4.0 | 2.0 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.50 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.50 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.50 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.50 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 1.0 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 1.0 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.0 | 1.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 2.0 | 1.0 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | 0.50 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.0 | 3.0 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 1.0 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 108-05-4 | Vinyl Acetate | ND | 10 | 5.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 2.0 | 0.50 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 1.0 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 111% | | 70-130% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-2 GW | | |
| **Lab Sample ID:** | DA13922-4 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Vacant Lot | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-D4 | 101% | | 70-130% |
| 2037-26-5 | Toluene-D8 | 96% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | | 70-130% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-2 GW | | |
| **Lab Sample ID:** | DA13922-4 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | n/a |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G141534.D | 1 | 03/04/19 21:28 | DC | 03/04/19 | OP17533 | E1G2412 |
| Run #2 | | | | | | | |

| | Initial Volume | Final Volume |
|---|---|---|
| Run #1 | 1020 ml | 1.0 ml |
| Run #2 | | |

**BN PAH List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 2.0 | 0.69 | ug/l | |
| 208-96-8 | Acenaphthylene | ND | 2.0 | 0.59 | ug/l | |
| 120-12-7 | Anthracene | ND | 2.0 | 0.69 | ug/l | |
| 56-55-3 | Benzo(a)anthracene | ND | 2.0 | 0.69 | ug/l | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 2.0 | 0.88 | ug/l | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 2.0 | 0.88 | ug/l | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 2.0 | 0.98 | ug/l | |
| 50-32-8 | Benzo(a)pyrene | ND | 2.0 | 0.98 | ug/l | |
| 218-01-9 | Chrysene | ND | 2.0 | 0.69 | ug/l | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 2.0 | 1.3 | ug/l | |
| 206-44-0 | Fluoranthene | ND | 2.0 | 0.88 | ug/l | |
| 86-73-7 | Fluorene | ND | 2.0 | 0.59 | ug/l | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 2.0 | 1.4 | ug/l | |
| 90-12-0 | 1-Methylnaphthalene | ND | 2.0 | 0.69 | ug/l | |
| 91-57-6 | 2-Methylnaphthalene | ND | 2.0 | 0.69 | ug/l | |
| 91-20-3 | Naphthalene | ND | 2.0 | 0.78 | ug/l | |
| 85-01-8 | Phenanthrene | ND | 2.0 | 0.59 | ug/l | |
| 129-00-0 | Pyrene | ND | 2.0 | 0.69 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 4165-60-0 | Nitrobenzene-d5 | 60% | | 19-130% |
| 321-60-8 | 2-Fluorobiphenyl | 59% | | 20-130% |
| 1718-51-0 | Terphenyl-d14 | 22% | | 13-149% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-3 9' | | |
| **Lab Sample ID:** | DA13922-5 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | SO - Soil | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | 98.4 |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 5V51528.D | 1 | 03/05/19 16:48 | MB | n/a | n/a | V5V2714 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 5.00 g | 5.0 ml |
| Run #2 | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 51 | 22 | ug/kg | |
| 107-02-8 | Acrolein | ND | 20 | 15 | ug/kg | |
| 107-13-1 | Acrylonitrile | ND | 10 | 8.1 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.0 | 0.51 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 2.0 | 0.51 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 2.0 | 0.61 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 2.0 | 0.51 | ug/kg | |
| 75-25-2 | Bromoform | ND | 2.0 | 1.0 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 2.0 | 0.51 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | 0.51 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | 0.51 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 2.0 | 0.51 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 2.0 | 0.51 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 2.0 | 0.51 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 2.0 | 0.81 | ug/kg | |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | 4.1 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 2.0 | 0.51 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | 0.51 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | 0.51 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 10 | 7.1 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 2.0 | 0.61 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.51 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 2.0 | 0.51 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 2.0 | 0.51 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 2.0 | 0.51 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 2.0 | 0.51 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.0 | 0.51 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 2.0 | 0.51 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 2.0 | 0.51 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 2.0 | 0.51 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 2.0 | 0.51 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 2.0 | 0.51 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-3 9' | | |
| **Lab Sample ID:** | DA13922-5 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | SO - Soil | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | 98.4 |
| **Project:** | Vacant Lot | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 142-28-9 | 1,3-Dichloropropane | ND | 2.0 | 0.51 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 2.0 | 0.51 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 2.0 | 0.51 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 2.0 | 0.51 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 2.0 | 0.51 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 0.51 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | 0.56 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 10 | 5.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 2.0 | 0.51 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.0 | 0.51 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 2.0 | 0.51 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 2.0 | 0.51 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 2.0 | 0.91 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 2.0 | 0.61 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 4.1 | 3.0 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 10 | 5.1 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | 5.1 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.1 | 3.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 2.0 | 0.51 | ug/kg | |
| 100-42-5 | Styrene | ND | 2.0 | 0.51 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 2.0 | 0.51 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 2.0 | 0.51 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 2.0 | 0.51 | ug/kg | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 1.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 1.0 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.0 | 0.51 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 2.0 | 0.51 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 2.0 | 0.51 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.0 | 1.0 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.51 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.0 | 0.51 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.0 | 0.51 | ug/kg | |
| 108-05-4 | Vinyl Acetate | ND | 10 | 5.1 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 2.0 | 0.51 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | 1.0 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 99% | | 70-131% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-3 9' | | |
| **Lab Sample ID:** | DA13922-5 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | SO - Soil | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | 98.4 |
| **Project:** | Vacant Lot | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 98% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | | 70-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 98% | | 70-130% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-3 9' | | |
| **Lab Sample ID:** | DA13922-5 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | SO - Soil | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8270C SW846 3546 | **Percent Solids:** | 98.4 |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G141562.D | 1 | 03/05/19 19:07 | DC | 03/05/19 | OP17541 | E1G2414 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.0 g | 1.0 ml |
| Run #2 | | |

**BN PAH List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 68 | 17 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 68 | 17 | ug/kg | |
| 120-12-7 | Anthracene | ND | 68 | 17 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 68 | 17 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 68 | 17 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 68 | 17 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 68 | 17 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 68 | 17 | ug/kg | |
| 218-01-9 | Chrysene | ND | 68 | 17 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 68 | 17 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 68 | 17 | ug/kg | |
| 86-73-7 | Fluorene | ND | 68 | 17 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 68 | 17 | ug/kg | |
| 90-12-0 | 1-Methylnaphthalene | ND | 68 | 24 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 68 | 30 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 68 | 24 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 68 | 17 | ug/kg | |
| 129-00-0 | Pyrene | ND | 68 | 17 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 68% | | 23-130% |
| 4165-60-0 | Nitrobenzene-d5 | 61% | | 12-131% |
| 1718-51-0 | Terphenyl-d14 | 90% | | 29-141% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-3 GW | | |
| **Lab Sample ID:** | DA13922-6 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 7V59022.D | 1 | 03/05/19 21:40 | CH | n/a | n/a | V7V3009 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 50 | 20 | ug/l | |
| 107-02-8 | Acrolein | ND | 10 | 7.0 | ug/l | |
| 107-13-1 | Acrylonitrile | ND | 5.0 | 4.0 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | 0.50 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | 0.50 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 2.0 | 0.50 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 2.0 | 0.50 | ug/l | |
| 75-25-2 | Bromoform | ND | 2.0 | 0.50 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 75-15-0 | Carbon disulfide | ND | 2.0 | 0.70 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 2.0 | 0.70 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 75-00-3 | Chloroethane | ND | 2.0 | 0.50 | ug/l | |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | 2.0 | 0.50 | ug/l | |
| 67-66-3 | Chloroform | ND | 2.0 | 0.50 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 1.0 | 0.50 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 1.0 | 0.50 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.0 | 3.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 2.0 | 0.50 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.50 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 2.0 | 0.50 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 2.0 | 0.80 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.0 | 0.50 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 2.0 | 0.50 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 2.0 | 0.50 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 2.0 | 0.50 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 2.0 | 0.50 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 2.0 | 0.50 | ug/l | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-3 GW | | |
| **Lab Sample ID:** | DA13922-6 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Vacant Lot | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 142-28-9 | 1,3-Dichloropropane | ND | 2.0 | 0.50 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 2.0 | 1.0 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 2.0 | 0.60 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 2.0 | 0.50 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 2.0 | 0.50 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.0 | 2.0 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | 2.5 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 1.0 | 0.50 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 4.0 | 2.0 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 2.0 | 1.0 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 2.0 | 1.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 4.0 | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 2.5 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | 9.9 | 10 | 5.0 | ug/l | J |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.50 | ug/l | |
| 91-20-3 | Naphthalene | ND | 4.0 | 2.0 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.50 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.50 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.50 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.50 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 1.0 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 1.0 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.0 | 1.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 2.0 | 1.0 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | 0.50 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.0 | 3.0 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 1.0 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 108-05-4 | Vinyl Acetate | ND | 10 | 5.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 2.0 | 0.50 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 1.0 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 107% | | 70-130% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-3 GW | | |
| **Lab Sample ID:** | DA13922-6 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Vacant Lot | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-D4 | 98% | | 70-130% |
| 2037-26-5 | Toluene-D8 | 99% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 98% | | 70-130% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-3 GW | | |
| **Lab Sample ID:** | DA13922-6 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | n/a |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G141561.D | 1 | 03/05/19 18:39 | DC | 03/04/19 | OP17533 | E1G2414 |
| Run #2 | | | | | | | |

| | Initial Volume | Final Volume |
|---|---|---|
| Run #1 | 1050 ml | 1.0 ml |
| Run #2 | | |

**BN PAH List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 1.9 | 0.67 | ug/l | |
| 208-96-8 | Acenaphthylene | ND | 1.9 | 0.57 | ug/l | |
| 120-12-7 | Anthracene | ND | 1.9 | 0.67 | ug/l | |
| 56-55-3 | Benzo(a)anthracene | ND | 1.9 | 0.67 | ug/l | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 1.9 | 0.86 | ug/l | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 1.9 | 0.86 | ug/l | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 1.9 | 0.95 | ug/l | |
| 50-32-8 | Benzo(a)pyrene | ND | 1.9 | 0.95 | ug/l | |
| 218-01-9 | Chrysene | ND | 1.9 | 0.67 | ug/l | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 1.9 | 1.2 | ug/l | |
| 206-44-0 | Fluoranthene | ND | 1.9 | 0.86 | ug/l | |
| 86-73-7 | Fluorene | ND | 1.9 | 0.57 | ug/l | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 1.9 | 1.3 | ug/l | |
| 90-12-0 | 1-Methylnaphthalene | ND | 1.9 | 0.67 | ug/l | |
| 91-57-6 | 2-Methylnaphthalene | ND | 1.9 | 0.67 | ug/l | |
| 91-20-3 | Naphthalene | ND | 1.9 | 0.76 | ug/l | |
| 85-01-8 | Phenanthrene | ND | 1.9 | 0.57 | ug/l | |
| 129-00-0 | Pyrene | ND | 1.9 | 0.67 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 4165-60-0 | Nitrobenzene-d5 | 54% | | 19-130% |
| 321-60-8 | 2-Fluorobiphenyl | 58% | | 20-130% |
| 1718-51-0 | Terphenyl-d14 | 28% | | 13-149% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-4 7.5' | | |
| **Lab Sample ID:** | DA13922-7 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | SO - Soil | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8260B | **Percent Solids:** | 97.3 |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 5V51529.D | 1 | 03/05/19 17:12 | MB | n/a | n/a | V5V2714 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 5.02 g | 5.0 ml |
| Run #2 | | |

**Purgeable Aromatics**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.51 | ug/kg | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 0.51 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | 1.0 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | | 70-131% |
| 2037-26-5 | Toluene-D8 | 98% | | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | | 70-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 101% | | 70-130% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-4 7.5' | | |
| **Lab Sample ID:** | DA13922-7 | **Date Sampled:** | 02/28/19 |
| **Matrix:** | SO - Soil | **Date Received:** | 03/01/19 |
| **Method:** | SW846 8270C SW846 3546 | **Percent Solids:** | 97.3 |
| **Project:** | Vacant Lot | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G141566.D | 1 | 03/05/19 21:00 | DC | 03/05/19 | OP17541 | E1G2414 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**BN PAH List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 68 | 17 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 68 | 17 | ug/kg | |
| 120-12-7 | Anthracene | ND | 68 | 17 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 68 | 17 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 68 | 17 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 68 | 17 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 68 | 17 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 68 | 17 | ug/kg | |
| 218-01-9 | Chrysene | ND | 68 | 17 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 68 | 17 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 68 | 17 | ug/kg | |
| 86-73-7 | Fluorene | ND | 68 | 17 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 68 | 17 | ug/kg | |
| 90-12-0 | 1-Methylnaphthalene | ND | 68 | 24 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 68 | 31 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 68 | 24 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 68 | 17 | ug/kg | |
| 129-00-0 | Pyrene | ND | 68 | 17 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 81% | | 23-130% |
| 4165-60-0 | Nitrobenzene-d5 | 74% | | 12-131% |
| 1718-51-0 | Terphenyl-d14 | 93% | | 29-141% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

## Misc. Forms

### Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

# CHAIN OF CUSTODY

SGS North America Inc. - Wheat Ridge
4036 Youngfield Street, Wheat Ridge, CO 80033
TEL: 303-425-6021 FAX: 303-425-6854
www.sgs.com/ehsusa

Page 1 of 1

| Bottle Order Control # | FED-EX Tracking # |
|---|---|
| SGS Quote # | SGS Job # DA13922 |

**Client / Reporting Information**

Company: AEI Consultants
Street: 2420 W 26th Ave
City, State: Denver, CO
Project Contact: Jason Grubb
Phone:
Email:
Sampler(s) Name(s): Jason Grubb

**Project Information**

Project Name: Vacant Lot
Street: 323 W 1ST St
City, State: Salida, CO
Project #: 400082
Client Purchase Order #: 186735
Project Manager: Jason Grubb

**Billing Information (if different from Report to)**

Company: AEI
Street Address:
City, State ZIP: Walnut Crk, CA
Attention:

**Requested Analysis (see TEST CODE sheet)**

**Matrix Codes**

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

| Field ID / Point of Collection | Collection Date | Collection Time | Sampled by | Matrix | # of bottles | Number of preserved Bottles: NONE | HCl | NaOH | HNO3 | H2SO4 | DI Water | MEOH | ENCORE | Na2S2O3 | NaHSO3 | BTEX | VOC | PAH | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-1 14' | 2/28 | 10:38 | JG | SO | 2 | 2 | | | | | | | | | | X | | X | 01 |
| SB-1 GW | | 11:38 | JG | GW | 5 | 2 | 3 | | | | | | | | | X | | X | 02 |
| SB-2 8.5' | | 12:12 | JG | SO | 2 | 2 | | | | | | | | | | | X | X | 03 |
| SB-2 GW | | 13:25 | JG | GW | 5 | 2 | 3 | | | | | | | | | | X | X | 04 |
| SB-3 9' | | 14:22 | JG | SO | 2 | 2 | | | | | | | | | | | X | X | 05 |
| SB-3 GW | | 15:54 | JG | GW | 5 | 2 | 3 | | | | | | | | | | X | X | 06 |
| SB-4 7.5' | ↓ | 17:03 | JG | SO | 2 | 2 | | | | | | | | | | X | | X | 07 |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | TB-08 |
| | | | | | | | | | | | | | | | | | | | |

**Turnaround Time (Business days)**

- [ ] Standard 10 Business Days
- [x] 5 Business Days RUSH
- [ ] 3 Business Days RUSH
- [ ] 2 Business Days RUSH
- [ ] 1 Business Day EMERGENC
- Emergency & Rush T/A data available via LabLink. RUSH TAT approval needed.

**Special Reporting Instructions**

- [ ] Report in PPB
- [ ] Report in PPM
- [ ] Report MDLs

**Data Deliverable Information**

- [ ] Commercial "A" (Level 1, Results Only)
- [x] Commercial "B" (Level 2, Results + QC Summary)
- [ ] COMMBN (Results/QC/Narrative)
- [ ] COMMBN+ [Results/QC/Narrative (+ chromatograms)]
- [ ] REDT2
- [ ] FULT1
- [ ] EDD Format _____

**Comments / Special Instructions**

**Sample Custody must be documented below each time samples change possession, including courier delivery.**

| Relinquished by Sampler: 1 | Date/Time: 3/1 15:08 | Received By: 1 | Relinquished By: 2 | Date/Time: | Received By: 2 |
|---|---|---|---|---|---|
| Relinquished by Sampler: 3 | Date/Time: | Received By: 3 | Relinquished By: 4 | Date/Time: | Received By: 4 |

Custody Seal # Intact [x] Not Intact [ ] Absent [ ] | Preserved where applicable [x] | Cooler Temp. °C: 5.1 | Therm. ID: T136 | On Ice [x]

http://www.sgs.com/en/terms-and-conditions

# SGS Accutest Sample Receipt Summary

**Job Number:** DA13922 **Client:** AEI **Project:** VACANT LOT

**Date / Time Received:** 3/1/2019 3:08:00 PM **Delivery Method:** **Airbill #'s:** HD

**Cooler Temps (Initial/Adjusted):** #1: (5.7/5.7);

| Cooler Security | Y | or | N | | Y | or | N |
|---|---|---|---|---|---|---|---|
| 1. Custody Seals Present: | ☑ | | ☐ | 3. COC Present: | ☑ | | ☐ |
| 2. Custody Seals Intact: | ☑ | | ☐ | 4. Smpl Dates/Time OK | ☑ | | ☐ |

| Cooler Temperature | Y | or | N |
|---|---|---|---|
| 1. Temp criteria achieved: | ☑ | | ☐ |
| 2. Cooler temp verification: | Bar Therm; | | |
| 3. Cooler media: | Ice (Bag) | | |
| 4. No. Coolers: | 1 | | |

| Quality Control Preservation | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Trip Blank present / cooler: | ☑ | | ☐ | ☐ |
| 2. Trip Blank listed on COC: | ☑ | | ☐ | ☐ |
| 3. Samples preserved properly: | ☑ | | ☐ | |
| 4. VOCs headspace free: | ☑ | | ☐ | ☐ |

| Sample Integrity - Documentation | Y | or | N |
|---|---|---|---|
| 1. Sample labels present on bottles: | ☑ | | ☐ |
| 2. Container labeling complete: | ☑ | | ☐ |
| 3. Sample container label / COC agree: | ☑ | | ☐ |

| Sample Integrity - Condition | Y | or | N |
|---|---|---|---|
| 1. Sample recvd within HT: | ☑ | | ☐ |
| 2. All containers accounted for: | ☑ | | ☐ |
| 3. Condition of sample: | Intact | | |

| Sample Integrity - Instructions | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Analysis requested is clear: | ☑ | | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | | ☑ | |
| 3. Sufficient volume recvd for analysis: | ☑ | | ☐ | |
| 4. Compositing instructions clear: | ☐ | | ☐ | ☑ |
| 5. Filtering instructions clear: | ☐ | | ☐ | ☑ |

Comments

**DA13922: Chain of Custody**
**Page 2 of 2**

## MS Volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| V5V2714-MB | 5V51520.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-1, DA13922-3, DA13922-5, DA13922-7

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 50 | 22 | ug/kg | |
| 107-02-8 | Acrolein | ND | 20 | 15 | ug/kg | |
| 107-13-1 | Acrylonitrile | ND | 10 | 8.0 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.0 | 0.50 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 2.0 | 0.50 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 2.0 | 0.60 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 2.0 | 0.50 | ug/kg | |
| 75-25-2 | Bromoform | ND | 2.0 | 1.0 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 2.0 | 0.50 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | 0.50 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | 0.50 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 2.0 | 0.50 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 2.0 | 0.50 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 2.0 | 0.50 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 2.0 | 0.80 | ug/kg | |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | 4.0 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 2.0 | 0.50 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | 0.50 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | 0.50 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 10 | 7.0 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 2.0 | 0.60 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.50 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 2.0 | 0.50 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 2.0 | 0.50 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 2.0 | 0.50 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 2.0 | 0.50 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.0 | 0.50 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 2.0 | 0.50 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 2.0 | 0.50 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 2.0 | 0.50 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 2.0 | 0.50 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 2.0 | 0.50 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 2.0 | 0.50 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 2.0 | 0.50 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 2.0 | 0.50 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 2.0 | 0.50 | ug/kg | |

# Method Blank Summary

**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| V5V2714-MB | 5V51520.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-1, DA13922-3, DA13922-5, DA13922-7

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 2.0 | 0.50 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 0.50 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | 0.55 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 10 | 5.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 2.0 | 0.50 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.0 | 0.50 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 2.0 | 0.50 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 2.0 | 0.50 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 2.0 | 0.90 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 2.0 | 0.60 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 4.0 | 3.0 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 10 | 5.0 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | 5.0 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.0 | 3.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 2.0 | 0.50 | ug/kg | |
| 100-42-5 | Styrene | ND | 2.0 | 0.50 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 2.0 | 0.50 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 2.0 | 0.50 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 2.0 | 0.50 | ug/kg | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 1.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 1.0 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.0 | 0.50 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 2.0 | 0.50 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 2.0 | 0.50 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.0 | 1.0 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.50 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.0 | 0.50 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.0 | 0.50 | ug/kg | |
| 108-05-4 | Vinyl Acetate | ND | 10 | 5.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 2.0 | 0.50 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | 1.0 | ug/kg | |

# Method Blank Summary

**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| V5V2714-MB | 5V51520.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-1, DA13922-3, DA13922-5, DA13922-7

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 99% | 70-131% |
| 2037-26-5 | Toluene-D8 | 97% | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 97% | 70-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 101% | 70-130% |

# Method Blank Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| V7V3009-MB | 7V59006.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 50 | 20 | ug/l | |
| 107-02-8 | Acrolein | ND | 10 | 7.0 | ug/l | |
| 107-13-1 | Acrylonitrile | ND | 5.0 | 4.0 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | 0.50 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | 0.50 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 2.0 | 0.50 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 2.0 | 0.50 | ug/l | |
| 75-25-2 | Bromoform | ND | 2.0 | 0.50 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 75-15-0 | Carbon disulfide | ND | 2.0 | 0.70 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 2.0 | 0.70 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 75-00-3 | Chloroethane | ND | 2.0 | 0.50 | ug/l | |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | 2.0 | 0.50 | ug/l | |
| 67-66-3 | Chloroform | ND | 2.0 | 0.50 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 1.0 | 0.50 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 1.0 | 0.50 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.0 | 3.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 2.0 | 0.50 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.50 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 2.0 | 0.50 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 2.0 | 0.80 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.0 | 0.50 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 2.0 | 0.50 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 2.0 | 0.50 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 2.0 | 0.50 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 2.0 | 0.50 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 2.0 | 0.50 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 2.0 | 0.50 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 2.0 | 1.0 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 2.0 | 0.60 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 2.0 | 0.50 | ug/l | |

# Method Blank Summary

**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| V7V3009-MB | 7V59006.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 2.0 | 0.50 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.0 | 2.0 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | 2.5 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 1.0 | 0.50 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 4.0 | 2.0 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 2.0 | 1.0 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 2.0 | 1.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 4.0 | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 2.5 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | ND | 10 | 5.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.50 | ug/l | |
| 91-20-3 | Naphthalene | ND | 4.0 | 2.0 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.50 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.50 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.50 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.50 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 1.0 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 1.0 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.0 | 1.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 2.0 | 1.0 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | 0.50 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.0 | 3.0 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 1.0 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 108-05-4 | Vinyl Acetate | ND | 10 | 5.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 2.0 | 0.50 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 1.0 | 1.0 | ug/l | |

# Method Blank Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| V7V3009-MB | 7V59006.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 112% | 70-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 97% | 70-130% |
| 2037-26-5 | Toluene-D8 | 100% | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 104% | 70-130% |

# Blank Spike Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| V5V2714-BS | 5V51517.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-1, DA13922-3, DA13922-5, DA13922-7

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | Limits |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | 250 | 224 | 90 | 30-198 |
| 107-02-8 | Acrolein | 250 | 198 | 79 | 66-137 |
| 107-13-1 | Acrylonitrile | 125 | 125 | 100 | 70-130 |
| 71-43-2 | Benzene | 50 | 47.9 | 96 | 68-130 |
| 108-86-1 | Bromobenzene | 50 | 45.3 | 91 | 70-130 |
| 74-97-5 | Bromochloromethane | 50 | 50.5 | 101 | 70-130 |
| 75-27-4 | Bromodichloromethane | 50 | 48.8 | 98 | 70-130 |
| 75-25-2 | Bromoform | 50 | 50.0 | 100 | 68-130 |
| 104-51-8 | n-Butylbenzene | 50 | 48.0 | 96 | 68-130 |
| 135-98-8 | sec-Butylbenzene | 50 | 46.7 | 93 | 69-130 |
| 98-06-6 | tert-Butylbenzene | 50 | 45.8 | 92 | 70-130 |
| 75-15-0 | Carbon disulfide | 50 | 54.8 | 110 | 67-130 |
| 56-23-5 | Carbon tetrachloride | 50 | 49.3 | 99 | 67-130 |
| 108-90-7 | Chlorobenzene | 50 | 45.6 | 91 | 70-130 |
| 75-00-3 | Chloroethane | 50 | 50.5 | 101 | 69-130 |
| 110-75-8 | 2-Chloroethyl vinyl ether | 50 | 47.0 | 94 | 68-130 |
| 67-66-3 | Chloroform | 50 | 48.1 | 96 | 70-130 |
| 95-49-8 | o-Chlorotoluene | 50 | 45.3 | 91 | 67-130 |
| 106-43-4 | p-Chlorotoluene | 50 | 45.7 | 91 | 68-130 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 50 | 47.0 | 94 | 68-130 |
| 124-48-1 | Dibromochloromethane | 50 | 48.0 | 96 | 70-130 |
| 106-93-4 | 1,2-Dibromoethane | 50 | 46.7 | 93 | 70-130 |
| 95-50-1 | o-Dichlorobenzene | 50 | 46.0 | 92 | 70-130 |
| 541-73-1 | m-Dichlorobenzene | 50 | 46.3 | 93 | 69-130 |
| 106-46-7 | p-Dichlorobenzene | 50 | 45.0 | 90 | 69-130 |
| 75-71-8 | Dichlorodifluoromethane | 50 | 48.4 | 97 | 33-173 |
| 75-34-3 | 1,1-Dichloroethane | 50 | 49.7 | 99 | 70-130 |
| 107-06-2 | 1,2-Dichloroethane | 50 | 46.8 | 94 | 70-130 |
| 75-35-4 | 1,1-Dichloroethylene | 50 | 51.9 | 104 | 70-130 |
| 156-59-2 | cis-1,2-Dichloroethylene | 50 | 49.9 | 100 | 70-130 |
| 156-60-5 | trans-1,2-Dichloroethylene | 50 | 50.1 | 100 | 69-130 |
| 78-87-5 | 1,2-Dichloropropane | 50 | 47.9 | 96 | 70-130 |
| 142-28-9 | 1,3-Dichloropropane | 50 | 46.2 | 92 | 70-130 |
| 594-20-7 | 2,2-Dichloropropane | 50 | 50.3 | 101 | 67-130 |
| 563-58-6 | 1,1-Dichloropropene | 50 | 49.3 | 99 | 70-130 |
| 10061-01-5 | cis-1,3-Dichloropropene | 50 | 49.7 | 99 | 70-130 |

* = Outside of Control Limits.

# Blank Spike Summary

**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| V5V2714-BS | 5V51517.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-1, DA13922-3, DA13922-5, DA13922-7

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | Limits |
|---|---|---|---|---|---|
| 10061-02-6 | trans-1,3-Dichloropropene | 50 | 48.7 | 97 | 68-130 |
| 100-41-4 | Ethylbenzene | 50 | 46.6 | 93 | 69-130 |
| 87-68-3 | Hexachlorobutadiene | 50 | 47.7 | 95 | 67-130 |
| 591-78-6 | 2-Hexanone | 250 | 240 | 96 | 58-130 |
| 98-82-8 | Isopropylbenzene | 50 | 46.5 | 93 | 70-130 |
| 99-87-6 | p-Isopropyltoluene | 50 | 46.7 | 93 | 70-130 |
| 74-83-9 | Methyl bromide | 50 | 45.2 | 90 | 57-130 |
| 1634-04-4 | Methyl Tert Butyl Ether | 50 | 49.1 | 98 | 70-130 |
| 74-87-3 | Methyl chloride | 50 | 45.9 | 92 | 51-137 |
| 74-95-3 | Methylene bromide | 50 | 50.3 | 101 | 70-130 |
| 75-09-2 | Methylene chloride | 50 | 50.0 | 100 | 69-130 |
| 78-93-3 | Methyl ethyl ketone | 250 | 269 | 108 | 61-136 |
| 108-10-1 | 4-Methyl-2-pentanone | 250 | 248 | 99 | 69-130 |
| 91-20-3 | Naphthalene | 50 | 48.8 | 98 | 70-130 |
| 103-65-1 | n-Propylbenzene | 50 | 46.1 | 92 | 68-130 |
| 100-42-5 | Styrene | 50 | 48.2 | 96 | 70-130 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 50 | 47.0 | 94 | 70-130 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 50 | 46.6 | 93 | 68-130 |
| 127-18-4 | Tetrachloroethylene | 50 | 47.7 | 95 | 68-130 |
| 108-88-3 | Toluene | 50 | 45.7 | 91 | 65-130 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 50 | 47.5 | 95 | 70-130 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 50 | 46.9 | 94 | 70-130 |
| 71-55-6 | 1,1,1-Trichloroethane | 50 | 48.3 | 97 | 68-130 |
| 79-00-5 | 1,1,2-Trichloroethane | 50 | 47.2 | 94 | 70-130 |
| 79-01-6 | Trichloroethylene | 50 | 48.6 | 97 | 70-130 |
| 75-69-4 | Trichlorofluoromethane | 50 | 50.8 | 102 | 70-130 |
| 96-18-4 | 1,2,3-Trichloropropane | 50 | 43.3 | 87 | 68-130 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 50 | 46.4 | 93 | 66-130 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 50 | 46.2 | 92 | 68-130 |
| 108-05-4 | Vinyl Acetate | 250 | 268 | 107 | 70-130 |
| 75-01-4 | Vinyl chloride | 50 | 48.3 | 97 | 65-130 |
| 1330-20-7 | Xylene (total) | 150 | 139 | 93 | 69-130 |

* = Outside of Control Limits.

# Blank Spike Summary

**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| V5V2714-BS | 5V51517.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-1, DA13922-3, DA13922-5, DA13922-7

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 101% | 70-131% |
| 2037-26-5 | Toluene-D8 | 98% | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 98% | 70-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 102% | 70-130% |

* = Outside of Control Limits.

# Blank Spike Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| V7V3009-BS | 7V59004.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|---|---|---|---|---|---|

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 111% | 70-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 96% | 70-130% |
| 2037-26-5 | Toluene-D8 | 98% | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | 70-130% |

* = Outside of Control Limits.

# Blank Spike Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| V7V3009-BS | 7V59009.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | 250 | 189 | 76 | 70-130 |
| 107-02-8 | Acrolein | 250 | 165 | 66 | 10-281 |
| 107-13-1 | Acrylonitrile | 125 | 136 | 109 | 58-136 |
| 71-43-2 | Benzene | 50 | 49.9 | 100 | 70-130 |
| 108-86-1 | Bromobenzene | 50 | 47.7 | 95 | 70-130 |
| 74-97-5 | Bromochloromethane | 50 | 53.7 | 107 | 70-130 |
| 75-27-4 | Bromodichloromethane | 50 | 51.0 | 102 | 70-130 |
| 75-25-2 | Bromoform | 50 | 47.6 | 95 | 61-130 |
| 104-51-8 | n-Butylbenzene | 50 | 53.2 | 106 | 69-130 |
| 135-98-8 | sec-Butylbenzene | 50 | 50.2 | 100 | 70-130 |
| 98-06-6 | tert-Butylbenzene | 50 | 49.4 | 99 | 70-130 |
| 75-15-0 | Carbon disulfide | 50 | 56.8 | 114 | 67-130 |
| 56-23-5 | Carbon tetrachloride | 50 | 54.5 | 109 | 70-130 |
| 108-90-7 | Chlorobenzene | 50 | 49.7 | 99 | 70-130 |
| 75-00-3 | Chloroethane | 50 | 57.0 | 114 | 64-138 |
| 110-75-8 | 2-Chloroethyl vinyl ether | 50 | 48.1 | 96 | 68-130 |
| 67-66-3 | Chloroform | 50 | 55.5 | 111 | 70-130 |
| 95-49-8 | o-Chlorotoluene | 50 | 49.3 | 99 | 70-130 |
| 106-43-4 | p-Chlorotoluene | 50 | 50.1 | 100 | 70-130 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 50 | 52.4 | 105 | 65-130 |
| 124-48-1 | Dibromochloromethane | 50 | 48.8 | 98 | 65-130 |
| 106-93-4 | 1,2-Dibromoethane | 50 | 50.0 | 100 | 70-130 |
| 95-50-1 | o-Dichlorobenzene | 50 | 51.7 | 103 | 63-130 |
| 541-73-1 | m-Dichlorobenzene | 50 | 49.8 | 100 | 65-130 |
| 106-46-7 | p-Dichlorobenzene | 50 | 49.9 | 100 | 68-130 |
| 75-71-8 | Dichlorodifluoromethane | 50 | 54.9 | 110 | 10-200 |
| 75-34-3 | 1,1-Dichloroethane | 50 | 54.1 | 108 | 70-130 |
| 107-06-2 | 1,2-Dichloroethane | 50 | 53.2 | 106 | 67-131 |
| 75-35-4 | 1,1-Dichloroethylene | 50 | 56.4 | 113 | 70-130 |
| 156-59-2 | cis-1,2-Dichloroethylene | 50 | 56.4 | 113 | 70-130 |
| 156-60-5 | trans-1,2-Dichloroethylene | 50 | 55.9 | 112 | 70-130 |
| 78-87-5 | 1,2-Dichloropropane | 50 | 51.2 | 102 | 70-130 |
| 142-28-9 | 1,3-Dichloropropane | 50 | 48.8 | 98 | 70-130 |
| 594-20-7 | 2,2-Dichloropropane | 50 | 53.9 | 108 | 32-148 |
| 563-58-6 | 1,1-Dichloropropene | 50 | 54.3 | 109 | 70-130 |
| 10061-01-5 | cis-1,3-Dichloropropene | 50 | 50.3 | 101 | 68-130 |

* = Outside of Control Limits.

# Blank Spike Summary

**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| V7V3009-BS | 7V59009.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|---|---|---|---|---|---|
| 10061-02-6 | trans-1,3-Dichloropropene | 50 | 49.1 | 98 | 64-130 |
| 100-41-4 | Ethylbenzene | 50 | 49.5 | 99 | 69-130 |
| 87-68-3 | Hexachlorobutadiene | 50 | 55.0 | 110 | 51-134 |
| 591-78-6 | 2-Hexanone | 250 | 219 | 88 | 69-130 |
| 98-82-8 | Isopropylbenzene | 50 | 51.9 | 104 | 70-130 |
| 99-87-6 | p-Isopropyltoluene | 50 | 51.6 | 103 | 70-130 |
| 74-83-9 | Methyl bromide | 50 | 59.2 | 118 | 56-136 |
| 74-87-3 | Methyl chloride | 50 | 59.4 | 119 | 48-147 |
| 74-95-3 | Methylene bromide | 50 | 53.3 | 107 | 70-130 |
| 75-09-2 | Methylene chloride | 50 | 55.2 | 110 | 70-130 |
| 108-10-1 | 4-Methyl-2-pentanone | 250 | 234 | 94 | 70-130 |
| 78-93-3 | Methyl ethyl ketone | 250 | 248 | 99 | 69-130 |
| 1634-04-4 | Methyl Tert Butyl Ether | 50 | 54.4 | 109 | 70-130 |
| 91-20-3 | Naphthalene | 50 | 56.7 | 113 | 61-130 |
| 103-65-1 | n-Propylbenzene | 50 | 48.7 | 97 | 70-130 |
| 100-42-5 | Styrene | 50 | 53.0 | 106 | 70-130 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 50 | 51.2 | 102 | 70-130 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 50 | 49.1 | 98 | 60-130 |
| 127-18-4 | Tetrachloroethylene | 50 | 50.8 | 102 | 70-130 |
| 108-88-3 | Toluene | 50 | 48.8 | 98 | 70-130 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 50 | 55.9 | 112 | 55-130 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 50 | 55.0 | 110 | 65-130 |
| 71-55-6 | 1,1,1-Trichloroethane | 50 | 54.5 | 109 | 70-130 |
| 79-00-5 | 1,1,2-Trichloroethane | 50 | 49.1 | 98 | 68-130 |
| 79-01-6 | Trichloroethylene | 50 | 51.6 | 103 | 70-130 |
| 75-69-4 | Trichlorofluoromethane | 50 | 54.3 | 109 | 68-146 |
| 96-18-4 | 1,2,3-Trichloropropane | 50 | 51.0 | 102 | 70-130 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 50 | 50.0 | 100 | 70-130 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 50 | 51.6 | 103 | 70-130 |
| 108-05-4 | Vinyl Acetate | 250 | 268 | 107 | 49-131 |
| 75-01-4 | Vinyl chloride | 50 | 60.8 | 122 | 57-144 |
| 1330-20-7 | Xylene (total) | 150 | 151 | 101 | 70-130 |

* = Outside of Control Limits.

# Blank Spike Summary

**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| V7V3009-BS | 7V59009.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 110% | 70-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 99% | 70-130% |
| 2037-26-5 | Toluene-D8 | 99% | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | 70-130% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| DA13920-1MS | 5V51523.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |
| DA13920-1MSD | 5V51524.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |
| DA13920-1 | 5V51522.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-1, DA13922-3, DA13922-5, DA13922-7

| CAS No. | Compound | DA13920-1 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 277 | 364 | 131 | 279 | 327 | 117 | 11 | 5-239/30 |
| 107-02-8 | Acrolein | ND | | 277 | 174 | 63 | 279 | 152 | 54 | 13 | 5-183/30 |
| 107-13-1 | Acrylonitrile | ND | | 139 | 140 | 101 | 140 | 128 | 92 | 9 | 37-162/30 |
| 71-43-2 | Benzene | ND | | 55.5 | 50.2 | 90 | 55.8 | 45.6 | 82 | 10 | 48-130/30 |
| 108-86-1 | Bromobenzene | ND | | 55.5 | 41.5 | 75 | 55.8 | 38.6 | 69 | 7 | 27-136/30 |
| 74-97-5 | Bromochloromethane | ND | | 55.5 | 54.5 | 98 | 55.8 | 48.1 | 86 | 12 | 58-130/30 |
| 75-27-4 | Bromodichloromethane | ND | | 55.5 | 50.0 | 90 | 55.8 | 45.3 | 81 | 10 | 47-130/30 |
| 75-25-2 | Bromoform | ND | | 55.5 | 48.4 | 87 | 55.8 | 44.8 | 80 | 8 | 33-130/30 |
| 104-51-8 | n-Butylbenzene | ND | | 55.5 | 30.3 | 55 | 55.8 | 30.1 | 54 | 1 | 5-168/30 |
| 135-98-8 | sec-Butylbenzene | ND | | 55.5 | 33.2 | 60 | 55.8 | 32.4 | 58 | 2 | 12-149/30 |
| 98-06-6 | tert-Butylbenzene | ND | | 55.5 | 34.9 | 63 | 55.8 | 34.3 | 61 | 2 | 20-147/30 |
| 75-15-0 | Carbon disulfide | ND | | 55.5 | 56.0 | 101 | 55.8 | 49.8 | 89 | 12 | 37-143/30 |
| 56-23-5 | Carbon tetrachloride | ND | | 55.5 | 48.3 | 87 | 55.8 | 43.6 | 78 | 10 | 37-136/30 |
| 108-90-7 | Chlorobenzene | ND | | 55.5 | 42.8 | 77 | 55.8 | 40.9 | 73 | 5 | 26-130/30 |
| 75-00-3 | Chloroethane | ND | | 55.5 | 54.8 | 99 | 55.8 | 54.2 | 97 | 1 | 43-148/30 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | | 55.5 | 53.1 | 96 | 55.8 | 53.9 | 97 | 1 | 56-134/30 |
| 67-66-3 | Chloroform | ND | | 55.5 | 51.1 | 92 | 55.8 | 46.5 | 83 | 9 | 56-130/30 |
| 95-49-8 | o-Chlorotoluene | ND | | 55.5 | 39.0 | 70 | 55.8 | 36.7 | 66 | 6 | 5-202/30 |
| 106-43-4 | p-Chlorotoluene | ND | | 55.5 | 37.7 | 68 | 55.8 | 36.7 | 66 | 3 | 5-227/30 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 55.5 | 45.9 | 83 | 55.8 | 43.1 | 77 | 6 | 7-187/30 |
| 124-48-1 | Dibromochloromethane | ND | | 55.5 | 47.3 | 85 | 55.8 | 44.8 | 80 | 5 | 41-130/30 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 55.5 | 51.1 | 92 | 55.8 | 47.2 | 85 | 8 | 51-132/30 |
| 95-50-1 | o-Dichlorobenzene | ND | | 55.5 | 36.7 | 66 | 55.8 | 35.4 | 63 | 4 | 12-139/30 |
| 541-73-1 | m-Dichlorobenzene | ND | | 55.5 | 37.0 | 67 | 55.8 | 35.9 | 64 | 3 | 13-139/30 |
| 106-46-7 | p-Dichlorobenzene | ND | | 55.5 | 35.5 | 64 | 55.8 | 35.2 | 63 | 1 | 13-136/30 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 55.5 | 51.0 | 92 | 55.8 | 49.5 | 89 | 3 | 26-173/30 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 55.5 | 54.0 | 97 | 55.8 | 48.5 | 87 | 11 | 58-130/30 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 55.5 | 51.1 | 92 | 55.8 | 46.4 | 83 | 10 | 59-130/30 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 55.5 | 54.1 | 97 | 55.8 | 48.6 | 87 | 11 | 55-130/30 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 55.5 | 53.1 | 96 | 55.8 | 48.6 | 87 | 9 | 55-130/30 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 55.5 | 54.3 | 98 | 55.8 | 48.6 | 87 | 11 | 49-130/30 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 55.5 | 51.4 | 93 | 55.8 | 46.0 | 82 | 11 | 59-130/30 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 55.5 | 49.5 | 89 | 55.8 | 46.2 | 83 | 7 | 55-130/30 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 55.5 | 54.0 | 97 | 55.8 | 47.6 | 85 | 13 | 43-136/30 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 55.5 | 49.4 | 89 | 55.8 | 45.8 | 82 | 8 | 42-132/30 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 55.5 | 50.4 | 91 | 55.8 | 45.5 | 81 | 10 | 40-133/30 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| DA13920-1MS | 5V51523.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |
| DA13920-1MSD | 5V51524.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |
| DA13920-1 | 5V51522.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-1, DA13922-3, DA13922-5, DA13922-7

| CAS No. | Compound | DA13920-1 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 55.5 | 49.0 | 88 | 55.8 | 45.8 | 82 | 7 | 40-130/30 |
| 100-41-4 | Ethylbenzene | ND | | 55.5 | 42.9 | 77 | 55.8 | 40.1 | 72 | 7 | 25-144/30 |
| 87-68-3 | Hexachlorobutadiene | ND | | 55.5 | 20.4 | 37 | 55.8 | 19.9 | 36 | 2 | 5-153/30 |
| 591-78-6 | 2-Hexanone | ND | | 277 | 292 | 105 | 279 | 266 | 95 | 9 | 43-149/30 |
| 98-82-8 | Isopropylbenzene | ND | | 55.5 | 39.0 | 70 | 55.8 | 37.6 | 67 | 4 | 21-143/30 |
| 99-87-6 | p-Isopropyltoluene | ND | | 55.5 | 33.9 | 61 | 55.8 | 32.5 | 58 | 4 | 12-151/30 |
| 74-83-9 | Methyl bromide | ND | | 55.5 | 51.6 | 93 | 55.8 | 51.4 | 92 | 0 | 5-167/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | | 55.5 | 55.1 | 99 | 55.8 | 50.1 | 90 | 10 | 66-130/30 |
| 74-87-3 | Methyl chloride | ND | | 55.5 | 48.1 | 87 | 55.8 | 48.6 | 87 | 1 | 34-162/30 |
| 74-95-3 | Methylene bromide | ND | | 55.5 | 52.1 | 94 | 55.8 | 47.7 | 85 | 9 | 55-130/30 |
| 75-09-2 | Methylene chloride | ND | | 55.5 | 54.0 | 97 | 55.8 | 49.2 | 88 | 9 | 58-130/30 |
| 78-93-3 | Methyl ethyl ketone | ND | | 277 | 324 | 117 | 279 | 303 | 109 | 7 | 41-169/30 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 277 | 275 | 99 | 279 | 251 | 90 | 9 | 54-147/30 |
| 91-20-3 | Naphthalene | ND | | 55.5 | 33.7 | 61 | 55.8 | 33.5 | 60 | 1 | 5-164/30 |
| 103-65-1 | n-Propylbenzene | ND | | 55.5 | 37.2 | 67 | 55.8 | 36.1 | 65 | 3 | 21-144/30 |
| 100-42-5 | Styrene | ND | | 55.5 | 43.6 | 79 | 55.8 | 41.2 | 74 | 6 | 12-159/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 55.5 | 46.0 | 83 | 55.8 | 42.6 | 76 | 8 | 38-131/30 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 55.5 | 48.4 | 87 | 55.8 | 44.1 | 79 | 9 | 33-149/30 |
| 127-18-4 | Tetrachloroethylene | ND | | 55.5 | 43.2 | 78 | 55.8 | 39.6 | 71 | 9 | 27-134/30 |
| 108-88-3 | Toluene | 4.3 | | 55.5 | 48.4 | 79 | 55.8 | 45.1 | 73 | 7 | 34-130/30 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 55.5 | 25.4 | 46 | 55.8 | 25.8 | 46 | 2 | 5-157/30 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 55.5 | 27.5 | 50 | 55.8 | 28.2 | 51 | 3 | 5-164/30 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 55.5 | 49.8 | 90 | 55.8 | 45.6 | 82 | 9 | 45-130/30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 55.5 | 49.5 | 89 | 55.8 | 46.4 | 83 | 6 | 30-152/30 |
| 79-01-6 | Trichloroethylene | ND | | 55.5 | 47.6 | 86 | 55.8 | 43.3 | 78 | 9 | 31-147/30 |
| 75-69-4 | Trichlorofluoromethane | ND | | 55.5 | 51.0 | 92 | 55.8 | 50.0 | 90 | 2 | 55-133/30 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 55.5 | 48.1 | 87 | 55.8 | 43.4 | 78 | 10 | 51-134/30 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 55.5 | 38.8 | 70 | 55.8 | 36.1 | 65 | 7 | 5-174/30 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 55.5 | 38.0 | 68 | 55.8 | 35.9 | 64 | 6 | 26-138/30 |
| 108-05-4 | Vinyl Acetate | ND | | 277 | 136 | 49 | 279 | 112 | 40 | 19 | 5-158/30 |
| 75-01-4 | Vinyl chloride | ND | | 55.5 | 53.8 | 97 | 55.8 | 52.7 | 94 | 2 | 55-138/30 |
| 1330-20-7 | Xylene (total) | ND | | 166 | 129 | 77 | 167 | 120 | 72 | 7 | 24-143/30 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| DA13920-1MS | 5V51523.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |
| DA13920-1MSD | 5V51524.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |
| DA13920-1 | 5V51522.D | 1 | 03/05/19 | MB | n/a | n/a | V5V2714 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-1, DA13922-3, DA13922-5, DA13922-7

| CAS No. | Surrogate Recoveries | MS | MSD | DA13920-1 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 103% | 104% | 99% | 70-131% |
| 2037-26-5 | Toluene-D8 | 98% | 100% | 99% | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | 100% | 101% | 70-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 102% | 102% | 98% | 70-130% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| DA12204-5MS | 7V59007.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |
| DA12204-5MSD | 7V59008.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |
| DA12204-5 | 7V59012.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Compound | DA12204-5 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 250 | 302 | 121 | 250 | 286 | 114 | 5 | 60-133/30 |
| 107-02-8 | Acrolein | ND | | 250 | 158 | 63 | 250 | 178 | 71 | 12 | 10-281/30 |
| 107-13-1 | Acrylonitrile | ND | | 125 | 128 | 102 | 125 | 134 | 107 | 5 | 47-151/30 |
| 71-43-2 | Benzene | ND | | 50 | 51.6 | 103 | 50 | 49.8 | 100 | 4 | 67-130/30 |
| 108-86-1 | Bromobenzene | ND | | 50 | 49.3 | 99 | 50 | 48.2 | 96 | 2 | 70-130/30 |
| 74-97-5 | Bromochloromethane | ND | | 50 | 54.5 | 109 | 50 | 51.5 | 103 | 6 | 70-130/30 |
| 75-27-4 | Bromodichloromethane | 8.6 | | 50 | 57.5 | 98 | 50 | 58.2 | 99 | 1 | 70-130/30 |
| 75-25-2 | Bromoform | 0.85 | J | 50 | 47.3 | 93 | 50 | 47.8 | 94 | 1 | 60-130/30 |
| 104-51-8 | n-Butylbenzene | ND | | 50 | 52.2 | 104 | 50 | 49.3 | 99 | 6 | 51-143/30 |
| 135-98-8 | sec-Butylbenzene | ND | | 50 | 49.4 | 99 | 50 | 48.7 | 97 | 1 | 69-130/30 |
| 98-06-6 | tert-Butylbenzene | ND | | 50 | 49.1 | 98 | 50 | 48.1 | 96 | 2 | 47-158/30 |
| 75-15-0 | Carbon disulfide | ND | | 50 | 52.7 | 105 | 50 | 56.0 | 112 | 6 | 64-130/30 |
| 56-23-5 | Carbon tetrachloride | ND | | 50 | 52.3 | 105 | 50 | 53.9 | 108 | 3 | 70-130/30 |
| 108-90-7 | Chlorobenzene | ND | | 50 | 50.1 | 100 | 50 | 48.1 | 96 | 4 | 70-130/30 |
| 75-00-3 | Chloroethane | ND | | 50 | 58.8 | 118 | 50 | 57.8 | 116 | 2 | 58-139/30 |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | | 50 | 49.7 | 99 | 50 | 51.8 | 104 | 4 | 10-174/30 |
| 67-66-3 | Chloroform | 6.3 | | 50 | 58.7 | 105 | 50 | 59.6 | 107 | 2 | 70-130/30 |
| 95-49-8 | o-Chlorotoluene | ND | | 50 | 50.2 | 100 | 50 | 47.9 | 96 | 5 | 70-130/30 |
| 106-43-4 | p-Chlorotoluene | ND | | 50 | 50.4 | 101 | 50 | 49.2 | 98 | 2 | 70-130/30 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 50 | 48.8 | 98 | 50 | 47.8 | 96 | 2 | 62-130/30 |
| 124-48-1 | Dibromochloromethane | 5.7 | | 50 | 54.5 | 98 | 50 | 53.9 | 96 | 1 | 65-130/30 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 50 | 50.2 | 100 | 50 | 49.9 | 100 | 1 | 70-130/30 |
| 95-50-1 | o-Dichlorobenzene | ND | | 50 | 50.5 | 101 | 50 | 48.4 | 97 | 4 | 63-130/30 |
| 541-73-1 | m-Dichlorobenzene | ND | | 50 | 49.4 | 99 | 50 | 48.4 | 97 | 2 | 65-130/30 |
| 106-46-7 | p-Dichlorobenzene | ND | | 50 | 49.5 | 99 | 50 | 47.7 | 95 | 4 | 66-130/30 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 50 | 54.9 | 110 | 50 | 54.0 | 108 | 2 | 10-200/30 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 50 | 55.8 | 112 | 50 | 54.7 | 109 | 2 | 61-130/30 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 50 | 47.4 | 95 | 50 | 51.8 | 104 | 9 | 63-135/30 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 50 | 50.5 | 101 | 50 | 55.0 | 110 | 9 | 67-130/30 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 50 | 54.7 | 109 | 50 | 52.8 | 106 | 4 | 70-130/30 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 50 | 53.0 | 106 | 50 | 55.7 | 111 | 5 | 70-130/30 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 50 | 49.5 | 99 | 50 | 51.9 | 104 | 5 | 70-130/30 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 50 | 50.6 | 101 | 50 | 49.0 | 98 | 3 | 70-130/30 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 50 | 51.3 | 103 | 50 | 53.7 | 107 | 5 | 32-153/30 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 50 | 53.8 | 108 | 50 | 53.9 | 108 | 0 | 70-130/30 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 50 | 52.0 | 104 | 50 | 52.2 | 104 | 0 | 68-130/30 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| DA12204-5MS | 7V59007.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |
| DA12204-5MSD | 7V59008.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |
| DA12204-5 | 7V59012.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Compound | DA12204-5 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 50 | 51.8 | 104 | 50 | 50.4 | 101 | 3 | 64-130/30 |
| 100-41-4 | Ethylbenzene | ND | | 50 | 49.9 | 100 | 50 | 47.8 | 96 | 4 | 69-130/30 |
| 87-68-3 | Hexachlorobutadiene | ND | | 50 | 51.2 | 102 | 50 | 49.0 | 98 | 4 | 41-140/30 |
| 591-78-6 | 2-Hexanone | ND | | 250 | 245 | 98 | 250 | 256 | 102 | 4 | 69-130/30 |
| 98-82-8 | Isopropylbenzene | ND | | 50 | 51.6 | 103 | 50 | 48.9 | 98 | 5 | 70-130/30 |
| 99-87-6 | p-Isopropyltoluene | ND | | 50 | 51.7 | 103 | 50 | 49.2 | 98 | 5 | 70-130/30 |
| 74-83-9 | Methyl bromide | ND | | 50 | 64.8 | 130 | 50 | 61.1 | 122 | 6 | 47-147/30 |
| 74-87-3 | Methyl chloride | ND | | 50 | 60.8 | 122 | 50 | 60.3 | 121 | 1 | 48-147/30 |
| 74-95-3 | Methylene bromide | ND | | 50 | 50.6 | 101 | 50 | 52.0 | 104 | 3 | 70-130/30 |
| 75-09-2 | Methylene chloride | ND | | 50 | 50.5 | 101 | 50 | 53.8 | 108 | 6 | 70-130/30 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 250 | 248 | 99 | 250 | 257 | 103 | 4 | 70-130/30 |
| 78-93-3 | Methyl ethyl ketone | ND | | 250 | 275 | 110 | 250 | 295 | 118 | 7 | 69-130/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | | 50 | 51.9 | 104 | 50 | 53.1 | 106 | 2 | 69-130/30 |
| 91-20-3 | Naphthalene | ND | | 50 | 51.0 | 102 | 50 | 50.6 | 101 | 1 | 55-130/30 |
| 103-65-1 | n-Propylbenzene | ND | | 50 | 49.9 | 100 | 50 | 48.3 | 97 | 3 | 62-132/30 |
| 100-42-5 | Styrene | ND | | 50 | 50.3 | 101 | 50 | 48.6 | 97 | 3 | 70-130/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 50 | 49.9 | 100 | 50 | 47.9 | 96 | 4 | 70-130/30 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 50 | 48.2 | 96 | 50 | 48.4 | 97 | 0 | 60-130/30 |
| 127-18-4 | Tetrachloroethylene | ND | | 50 | 51.5 | 103 | 50 | 49.3 | 99 | 4 | 67-130/30 |
| 108-88-3 | Toluene | ND | | 50 | 47.0 | 94 | 50 | 47.8 | 96 | 2 | 70-130/30 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 50 | 51.8 | 104 | 50 | 49.9 | 100 | 4 | 52-130/30 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 50 | 52.2 | 104 | 50 | 49.5 | 99 | 5 | 60-130/30 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 50 | 52.0 | 104 | 50 | 53.7 | 107 | 3 | 70-130/30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 50 | 51.0 | 102 | 50 | 49.3 | 99 | 3 | 68-130/30 |
| 79-01-6 | Trichloroethylene | ND | | 50 | 51.4 | 103 | 50 | 51.9 | 104 | 1 | 70-130/30 |
| 75-69-4 | Trichlorofluoromethane | ND | | 50 | 55.9 | 112 | 50 | 53.6 | 107 | 4 | 54-157/30 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 50 | 50.4 | 101 | 50 | 52.1 | 104 | 3 | 70-130/30 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 50 | 51.4 | 103 | 50 | 48.7 | 97 | 5 | 65-130/30 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 50 | 50.7 | 101 | 50 | 49.0 | 98 | 3 | 44-155/30 |
| 108-05-4 | Vinyl Acetate | ND | | 250 | 277 | 111 | 250 | 285 | 114 | 3 | 47-133/30 |
| 75-01-4 | Vinyl chloride | ND | | 50 | 60.8 | 122 | 50 | 59.7 | 119 | 2 | 55-144/30 |
| 1330-20-7 | Xylene (total) | ND | | 150 | 147 | 98 | 150 | 143 | 95 | 3 | 67-130/30 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| DA12204-5MS | 7V59007.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |
| DA12204-5MSD | 7V59008.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |
| DA12204-5 | 7V59012.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Surrogate Recoveries | MS | MSD | DA12204-5 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 106% | 108% | 102% | 70-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 102% | 101% | 103% | 70-130% |
| 2037-26-5 | Toluene-D8 | 100% | 100% | 98% | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 97% | 100% | 100% | 70-130% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| DA12204-5MS | 7V59010.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |
| DA12204-5MSD | 7V59011.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |
| DA12204-5 | 7V59012.D | 1 | 03/05/19 | CH | n/a | n/a | V7V3009 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Compound | DA12204-5 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|

| CAS No. | Surrogate Recoveries | MS | MSD | DA12204-5 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 105% | 104% | 102% | 70-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 102% | 103% | 103% | 70-130% |
| 2037-26-5 | Toluene-D8 | 96% | 102% | 98% | 70-130% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | 98% | 100% | 70-130% |

* = Outside of Control Limits.

## MS Semi-volatiles



### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP17533-MB | 1G141528.D | 1 | 03/04/19 | DC | 03/04/19 | OP17533 | E1G2412 |



**The QC reported here applies to the following samples:** **Method:** SW846 8270C

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 2.0 | 0.70 | ug/l | |
| 208-96-8 | Acenaphthylene | ND | 2.0 | 0.60 | ug/l | |
| 120-12-7 | Anthracene | ND | 2.0 | 0.70 | ug/l | |
| 56-55-3 | Benzo(a)anthracene | ND | 2.0 | 0.70 | ug/l | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 2.0 | 0.90 | ug/l | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 2.0 | 0.90 | ug/l | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 2.0 | 1.0 | ug/l | |
| 50-32-8 | Benzo(a)pyrene | ND | 2.0 | 1.0 | ug/l | |
| 218-01-9 | Chrysene | ND | 2.0 | 0.70 | ug/l | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 2.0 | 1.3 | ug/l | |
| 206-44-0 | Fluoranthene | ND | 2.0 | 0.90 | ug/l | |
| 86-73-7 | Fluorene | ND | 2.0 | 0.60 | ug/l | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 2.0 | 1.4 | ug/l | |
| 90-12-0 | 1-Methylnaphthalene | ND | 2.0 | 0.70 | ug/l | |
| 91-57-6 | 2-Methylnaphthalene | ND | 2.0 | 0.70 | ug/l | |
| 91-20-3 | Naphthalene | ND | 2.0 | 0.80 | ug/l | |
| 85-01-8 | Phenanthrene | ND | 2.0 | 0.60 | ug/l | |
| 129-00-0 | Pyrene | ND | 2.0 | 0.70 | ug/l | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 4165-60-0 | Nitrobenzene-d5 | 79% | 19-130% |
| 321-60-8 | 2-Fluorobiphenyl | 73% | 20-130% |
| 1718-51-0 | Terphenyl-d14 | 86% | 13-149% |

# Method Blank Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP17541-MB | 1G141557.D | 1 | 03/05/19 | DC | 03/05/19 | OP17541 | E1G2414 |



**The QC reported here applies to the following samples:** **Method:** SW846 8270C

DA13922-1, DA13922-3, DA13922-5, DA13922-7

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 67 | 17 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 67 | 17 | ug/kg | |
| 120-12-7 | Anthracene | ND | 67 | 17 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 67 | 17 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 67 | 17 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 67 | 17 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 67 | 17 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 67 | 17 | ug/kg | |
| 218-01-9 | Chrysene | ND | 67 | 17 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 67 | 17 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 67 | 17 | ug/kg | |
| 86-73-7 | Fluorene | ND | 67 | 17 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 67 | 17 | ug/kg | |
| 90-12-0 | 1-Methylnaphthalene | ND | 67 | 23 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 67 | 30 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 67 | 23 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 67 | 17 | ug/kg | |
| 129-00-0 | Pyrene | ND | 67 | 17 | ug/kg | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 82% | 23-130% |
| 4165-60-0 | Nitrobenzene-d5 | 76% | 12-131% |
| 1718-51-0 | Terphenyl-d14 | 93% | 29-141% |

# Blank Spike Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP17533-BS | 1G141529.D | 1 | 03/04/19 | DC | 03/04/19 | OP17533 | E1G2412 |

**The QC reported here applies to the following samples:** **Method:** SW846 8270C

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 50 | 34.3 | 69 | 48-130 |
| 208-96-8 | Acenaphthylene | 50 | 39.1 | 78 | 48-130 |
| 120-12-7 | Anthracene | 50 | 40.9 | 82 | 64-130 |
| 56-55-3 | Benzo(a)anthracene | 50 | 42.5 | 85 | 68-130 |
| 205-99-2 | Benzo(b)fluoranthene | 50 | 43.5 | 87 | 68-130 |
| 207-08-9 | Benzo(k)fluoranthene | 50 | 43.4 | 87 | 67-130 |
| 191-24-2 | Benzo(g,h,i)perylene | 50 | 42.3 | 85 | 66-130 |
| 50-32-8 | Benzo(a)pyrene | 50 | 43.6 | 87 | 66-130 |
| 218-01-9 | Chrysene | 50 | 42.4 | 85 | 65-130 |
| 53-70-3 | Dibenzo(a,h)anthracene | 50 | 44.3 | 89 | 64-130 |
| 206-44-0 | Fluoranthene | 50 | 42.4 | 85 | 63-130 |
| 86-73-7 | Fluorene | 50 | 39.8 | 80 | 57-130 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 50 | 44.6 | 89 | 64-130 |
| 90-12-0 | 1-Methylnaphthalene | 50 | 32.5 | 65 | 36-130 |
| 91-57-6 | 2-Methylnaphthalene | 50 | 31.4 | 63 | 32-130 |
| 91-20-3 | Naphthalene | 50 | 30.3 | 61 | 29-130 |
| 85-01-8 | Phenanthrene | 50 | 40.5 | 81 | 64-130 |
| 129-00-0 | Pyrene | 50 | 42.0 | 84 | 70-130 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 4165-60-0 | Nitrobenzene-d5 | 73% | 19-130% |
| 321-60-8 | 2-Fluorobiphenyl | 74% | 20-130% |
| 1718-51-0 | Terphenyl-d14 | 81% | 13-149% |

* = Outside of Control Limits.

# Blank Spike Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP17541-BS | 1G141558.D | 1 | 03/05/19 | DC | 03/05/19 | OP17541 | E1G2414 |



**The QC reported here applies to the following samples:** **Method:** SW846 8270C

DA13922-1, DA13922-3, DA13922-5, DA13922-7

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | Limits |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 1670 | 1570 | 94 | 55-130 |
| 208-96-8 | Acenaphthylene | 1670 | 1600 | 96 | 55-130 |
| 120-12-7 | Anthracene | 1670 | 1550 | 93 | 70-130 |
| 56-55-3 | Benzo(a)anthracene | 1670 | 1600 | 96 | 70-130 |
| 205-99-2 | Benzo(b)fluoranthene | 1670 | 1610 | 97 | 70-130 |
| 207-08-9 | Benzo(k)fluoranthene | 1670 | 1630 | 98 | 70-130 |
| 191-24-2 | Benzo(g,h,i)perylene | 1670 | 1680 | 101 | 70-130 |
| 50-32-8 | Benzo(a)pyrene | 1670 | 1620 | 97 | 70-130 |
| 218-01-9 | Chrysene | 1670 | 1620 | 97 | 70-130 |
| 53-70-3 | Dibenzo(a,h)anthracene | 1670 | 1740 | 104 | 70-130 |
| 206-44-0 | Fluoranthene | 1670 | 1590 | 95 | 70-130 |
| 86-73-7 | Fluorene | 1670 | 1590 | 95 | 62-130 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 1670 | 1710 | 103 | 70-130 |
| 90-12-0 | 1-Methylnaphthalene | 1670 | 1510 | 91 | 47-130 |
| 91-57-6 | 2-Methylnaphthalene | 1670 | 1510 | 91 | 46-130 |
| 91-20-3 | Naphthalene | 1670 | 1500 | 90 | 45-130 |
| 85-01-8 | Phenanthrene | 1670 | 1530 | 92 | 70-130 |
| 129-00-0 | Pyrene | 1670 | 1550 | 93 | 70-130 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 85% | 23-130% |
| 4165-60-0 | Nitrobenzene-d5 | 77% | 12-131% |
| 1718-51-0 | Terphenyl-d14 | 92% | 29-141% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP17533-MS | 1G141531.D | 1 | 03/04/19 | DC | 03/04/19 | OP17533 | E1G2412 |
| OP17533-MSD | 1G141532.D | 1 | 03/04/19 | DC | 03/04/19 | OP17533 | E1G2412 |
| DA12204-4 | 1G141530.D | 1 | 03/04/19 | DC | 03/04/19 | OP17533 | E1G2412 |

**The QC reported here applies to the following samples:** **Method:** SW846 8270C

DA13922-2, DA13922-4, DA13922-6

| CAS No. | Compound | DA12204-4 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | | 50 | 33.1 | 66 | 50 | 37.6 | 75 | 13 | 31-130/30 |
| 208-96-8 | Acenaphthylene | ND | | 50 | 38.0 | 76 | 50 | 43.2 | 86 | 13 | 31-130/30 |
| 120-12-7 | Anthracene | ND | | 50 | 39.9 | 80 | 50 | 43.7 | 87 | 9 | 38-140/30 |
| 56-55-3 | Benzo(a)anthracene | ND | | 50 | 41.3 | 83 | 50 | 43.5 | 87 | 5 | 44-149/30 |
| 205-99-2 | Benzo(b)fluoranthene | ND | | 50 | 42.6 | 85 | 50 | 44.6 | 89 | 5 | 44-153/30 |
| 207-08-9 | Benzo(k)fluoranthene | ND | | 50 | 42.4 | 85 | 50 | 45.0 | 90 | 6 | 44-151/30 |
| 191-24-2 | Benzo(g,h,i)perylene | ND | | 50 | 42.1 | 84 | 50 | 44.5 | 89 | 6 | 45-149/30 |
| 50-32-8 | Benzo(a)pyrene | ND | | 50 | 42.5 | 85 | 50 | 45.3 | 91 | 6 | 40-148/30 |
| 218-01-9 | Chrysene | ND | | 50 | 42.3 | 85 | 50 | 44.3 | 89 | 5 | 40-153/30 |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | | 50 | 43.4 | 87 | 50 | 46.6 | 93 | 7 | 43-153/30 |
| 206-44-0 | Fluoranthene | ND | | 50 | 42.0 | 84 | 50 | 44.5 | 89 | 6 | 42-148/30 |
| 86-73-7 | Fluorene | ND | | 50 | 38.2 | 76 | 50 | 42.6 | 85 | 11 | 34-134/30 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | | 50 | 43.7 | 87 | 50 | 45.9 | 92 | 5 | 42-153/30 |
| 90-12-0 | 1-Methylnaphthalene | ND | | 50 | 32.2 | 64 | 50 | 37.3 | 75 | 15 | 25-130/30 |
| 91-57-6 | 2-Methylnaphthalene | ND | | 50 | 31.6 | 63 | 50 | 36.7 | 73 | 15 | 23-130/30 |
| 91-20-3 | Naphthalene | ND | | 50 | 29.6 | 59 | 50 | 34.8 | 70 | 16 | 21-130/30 |
| 85-01-8 | Phenanthrene | ND | | 50 | 39.2 | 78 | 50 | 42.9 | 86 | 9 | 42-140/30 |
| 129-00-0 | Pyrene | ND | | 50 | 41.8 | 84 | 50 | 43.3 | 87 | 4 | 46-148/30 |

| CAS No. | Surrogate Recoveries | MS | MSD | DA12204-4 | Limits |
|---|---|---|---|---|---|
| 4165-60-0 | Nitrobenzene-d5 | 66% | 77% | 74% | 19-130% |
| 321-60-8 | 2-Fluorobiphenyl | 68% | 79% | 73% | 20-130% |
| 1718-51-0 | Terphenyl-d14 | 79% | 82% | 78% | 13-149% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** DA13922
**Account:** AEICCOD AEI Consultants
**Project:** Vacant Lot

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP17541-MS | 1G141563.D | 1 | 03/05/19 | DC | 03/05/19 | OP17541 | E1G2414 |
| OP17541-MSD | 1G141564.D | 1 | 03/05/19 | DC | 03/05/19 | OP17541 | E1G2414 |
| DA13922-5 | 1G141562.D | 1 | 03/05/19 | DC | 03/05/19 | OP17541 | E1G2414 |

**The QC reported here applies to the following samples:** **Method:** SW846 8270C

DA13922-1, DA13922-3, DA13922-5, DA13922-7

| CAS No. | Compound | DA13922-5 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | | 1690 | 1270 | 75 | 1690 | 1280 | 76 | 1 | 10-167/30 |
| 208-96-8 | Acenaphthylene | ND | | 1690 | 1440 | 85 | 1690 | 1440 | 85 | 0 | 10-167/30 |
| 120-12-7 | Anthracene | ND | | 1690 | 1510 | 89 | 1690 | 1510 | 89 | 0 | 22-143/30 |
| 56-55-3 | Benzo(a)anthracene | ND | | 1690 | 1620 | 96 | 1690 | 1580 | 93 | 3 | 15-152/30 |
| 205-99-2 | Benzo(b)fluoranthene | ND | | 1690 | 1660 | 98 | 1690 | 1630 | 96 | 2 | 17-155/30 |
| 207-08-9 | Benzo(k)fluoranthene | ND | | 1690 | 1600 | 94 | 1690 | 1620 | 96 | 1 | 10-172/30 |
| 191-24-2 | Benzo(g,h,i)perylene | ND | | 1690 | 1670 | 99 | 1690 | 1680 | 99 | 1 | 10-153/30 |
| 50-32-8 | Benzo(a)pyrene | ND | | 1690 | 1650 | 97 | 1690 | 1660 | 98 | 1 | 19-151/30 |
| 218-01-9 | Chrysene | ND | | 1690 | 1640 | 97 | 1690 | 1610 | 95 | 2 | 21-147/30 |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | | 1690 | 1740 | 103 | 1690 | 1740 | 103 | 0 | 16-152/30 |
| 206-44-0 | Fluoranthene | ND | | 1690 | 1610 | 95 | 1690 | 1590 | 94 | 1 | 14-151/30 |
| 86-73-7 | Fluorene | ND | | 1690 | 1440 | 85 | 1690 | 1460 | 86 | 1 | 10-196/30 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | | 1690 | 1690 | 100 | 1690 | 1730 | 102 | 2 | 15-153/30 |
| 90-12-0 | 1-Methylnaphthalene | ND | | 1690 | 1300 | 77 | 1690 | 1300 | 77 | 0 | 10-199/30 |
| 91-57-6 | 2-Methylnaphthalene | ND | | 1690 | 1310 | 77 | 1690 | 1300 | 77 | 1 | 10-188/30 |
| 91-20-3 | Naphthalene | ND | | 1690 | 1260 | 74 | 1690 | 1280 | 76 | 2 | 10-194/30 |
| 85-01-8 | Phenanthrene | ND | | 1690 | 1500 | 89 | 1690 | 1490 | 88 | 1 | 22-144/30 |
| 129-00-0 | Pyrene | ND | | 1690 | 1560 | 92 | 1690 | 1540 | 91 | 1 | 16-152/30 |

| CAS No. | Surrogate Recoveries | MS | MSD | DA13922-5 | Limits |
|---|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 73% | 73% | 68% | 23-130% |
| 4165-60-0 | Nitrobenzene-d5 | 66% | 67% | 61% | 12-131% |
| 1718-51-0 | Terphenyl-d14 | 92% | 90% | 90% | 29-141% |

* = Outside of Control Limits.

## Water Demand Estimate and Meter Sizing Using Fixture Values

(Based on AWWA M22 Manual, Second Edition)

| | |
|---|---|
| Project | CHT River Ridge Lot 1 |
| Residential, Non-Residential, M.F. | Residential Multi-Family |
| Pressure Zone at Project | 60 |

| Fixture or Appliance | Fixture Value (at 60 psi) | Number of Fixtures | Subtotal Fixture Value | UPC DFU | DFU Total |
|---|---|---|---|---|---|
| Toilet (tank) | 4 | 30 | 120 | 4 | 120 |
| Toilet (flush valve) | 35 | 0 | 0 | | 0 |
| Urinal (wall or stall) | 16 | 0 | 0 | | 0 |
| Urinal (flush valve) | 35 | 0 | 0 | | 0 |
| Shower (single head) | 2.5 | 16 | 40 | 2 | 32 |
| Sink (lavatory) | 1.5 | 30 | 45 | 1 | 30 |
| Kitchen Sink | 2.2 | 16 | 35.2 | 2 | 32 |
| Utility Sink | 4 | 1 | 4 | 2 | 2 |
| Dishwasher | 2 | 17 | 34 | 2 | 34 |
| Bathtub | 8 | 9 | 72 | 2 | 18 |
| Clothes Washer | 6 | 16 | 96 | 3 | 48 |
| | | | | | 316 |
| Hose connections (with 50 ft of hose) | | | | | |
| 1/2 in. | 5 | | 0 | | |
| 5/8 in. | 9 | | 0 | | |
| 3/4 in. | 12 | | 0 | | |
| Miscellaneous | | | | | |
| Bedpan washers | 10 | | 0 | | |
| Drinking fountains | 2 | | 0 | | |
| Dental units | 2 | | 0 | | |
| Combined Fixture Value | | | 446.2 | | |
| Demand (gpm) - See Curves | | | 43 | | |
| Pressure Adjustment Factor | | | 1 | | |
| Total Adjusted demand (gpm) | | | **43** | | |
| Minimum Meter Size | | | 1" | | |
| Service Line Velocity (fps) | | | **6.4** | | |
| **Minimum Service Size (HDPE)** | | | **2"** | | |

| | 800 SF | 1000 SF | 1400 SF | COMMERCIAL |
|---|---|---|---|---|
| | 1 | 2 | 3 | 1 |
| | | | | |
| | | | | |
| | | | | |
| | 1 | 1 | 1 | |
| | 1 | 2 | 3 | 1 |
| | 1 | 1 | 1 | |
| | | | | 1 |
| | 1 | 1 | 1 | 1 |
| | | 1 | 1 | |
| | 1 | 1 | 1 | |

6" sewer at 1% OK up to 700 DFU

Approved by: _____

calculated
user inputted

# HRRMC reports six current hospitalizations from COVID-19

**by D.J. DeJong**
*Mail Staff Writer*

Heart of the Rockies Regional Medical Center reported six hospitalizations for COVID-19 as of Wednesday.

That brings the total of hospitalizations for patients suffering from the virus to 12 for the month, with nine in the past 14 days.

November ties with December, July and October for most hospital stays for those with COVID-19 since the pandemic started.

September saw the most hospitalizations with 14.

HRRMC reported that 72 percent of its capacity was filled as of Wednesday.

November has also seen a surge of cases within the county to the highest number in one month at 376 cases.

Chaffee County Public Health reported 169 of those cases were detected in the last 14 days. No cases were added to the county's dashboard Thursday due to the holiday.

Of the pandemic total of 2,243 cases, 219 or about 9.76 percent have been breakthrough cases among those who had previously been vaccinated. That number falls within predictions of efficacy made by the Centers for Disease Control and Prevention.

Reinfections account for 14 cases or 0.62 percent of all cases in the county.

Colorado Department of Public Health and Environment stated, "Slowing the spread of COVID-19 will decrease the daily number of cases and hospitalizations that occur in Colorado. Preventing hospitalizations will help make sure our hospitals have the staff and equipment they need."

Top of the list of tips for prevention from the state health department is getting vaccinated, followed by nonpharmaceutical protocols such as masking, distancing and staying home if sick.

The fully vaccinated rate for the state is currently 73.23 percent.

Chaffee County is listed as 13th in the state for full vaccinations at a rate of 75.8 percent for those ages 12 and older. Data including ages 5-11 have not yet been reported by the state.

# Poncha Springs trustees approve budget

**by D.J. DeJong**
*Mail Staff Writer*

Poncha Springs trustees approved the 2022 budget as presented by Town Administrative Officer Brian Berger at their meeting Monday.

Total expenditures for 2022 are projected to be $3,338,655.

The total amount breaks down to:

General fund
$912,246

Enterprise fund
$629,903

Conservation Trust Fund
$3,500

Capital projects fund
$1,828,655

Among items added to the draft budget were a public works truck, highway visual and safety improvements and $2,000 to pay for parade expenses in expectation that the Fourth of July and Veterans Day parades in 2021 will be continued in the new year.

Following a public hearing, trustees approved a site plan for a building planned for Crossroads Retail Park Lot 10, which will include two retail spaces and three dwelling spaces.

Trustees recently adopted a measure in the land use code requiring a broken roof line for aesthetic reasons. The plan presented by Mark Bourget called for a flat facade.

The plan was approved with the proviso that the roof line on the front facade be elevated to conform to the land use code.

Trustees approved as presented a preliminary plat for Tailwind II Phase 1.

There was some discussion about possible inclusion of a park in the new development.

A limit of 1,000 people for special events in the town of Poncha Springs was set along with adoption of the Poncha Springs event center policy.

The policy aims to better document public safety for events in the town, including security, emergency plans and traffic control plans.

Trustees approved final payment to Electric Power and Process and acceptance of the water infrastructure improvement project, the well No. 7 addition.

Trustees also voted to move their next regular meeting from Dec. 27 to Dec. 13.



## Legal Notice

PUBLIC NOTICE

Sangre de Cristo Electric Association, Inc.
29780 US Highway 24 N., P.O. Box 2013, Buena Vista, CO 81211

Sangre de Cristo Electric Association's Wildfire Mitigation Rate Rider, approved by the board of directors October 29, 2020 to pay for costs associated with augmented vegetation management efforts to reduce the risk of wildfires near SDCEA power lines, will increase from $6.00 per month to $7.00 per month January 1, 2022 through December 2022. Rate Schedule No. 13 is available to members for examination by signing in to their respective account(s) on the SDCEA's website, myelectric.coop. Once signed in, visit My Profile>Documents. The rate schedules and explanations are also available by calling toll-free during regular business hours, 844-395-2412.
Published in The Mountain Mail November 26, 2021

PUBLIC NOTICE

ADVERTISEMENT FOR BIDS

Submit Bids To:
Town of Poncha Springs, Attn. Brian Berger
333 Burnett Avenue or PO Box 190
Poncha Springs, CO 81242
Office Phone: (719) 539-6882

Sealed BIDS for construction of the 2022 East Poncha Avenue will be received at the Poncha Town Hall, 333 Burnett Avenue, Poncha Springs, CO until 1:30 PM, Date: January 19, 2022. At which time, they which time they will be open and read. The project consists of street rehabilitation for East Poncha Avenue from Poncha Springs Lane to La Plata Street. The rehabilitation consists of removal of existing asphalt, new curb & gutter, sidewalk and asphalt.

Bid Bond, Performance/Payment and Warranty Bonds are required. The project is tax-exempt; the contractor will be provided with the tax-exempt number for materials purchases.

A pre-bid conference call meeting will be held on Wednesday December 15th,2021 at 10:00 am Contractors requesting bid documents will be provided with a Zoom video/telephone conference call number and ID by email to join the call or may attend in person at the Poncha Springs Town Hall. Last day for bid questions is January 11, 2022, at 12:00 pm. All bid questions shall be submitted in writing by email to tvandaveer@crabtreegroupinc.com. Responses to questions and Addendums will be sent to all contractors who have requested bid documents.

Contractors are required to have the capability to communicate via email and submit project documentation by Dropbox. The Town reserves the right to modify or cancel this bid process at any time.

Copies of the Plans and Specifications are available. Electronic copies by email are available at no charge to qualified contractors registered in good standing with the Secretary of State. Qualified contractors' email requests for electronic copies shall use the subject line of 2022 East Poncha Avenue Project and must be sent to both of the following emails addresses: jdeluca@crabtreegroupinc.com , & tvandaveer@crabtreegroupinc.com. All other requests for documents shall be to Poncha Springs via CORA public records request.

Brian Berger
Administrator
Published in The Mountain Mail November 19, 23, 26, 30, 2021

PUBLIC NOTICE

NOTICE OF PUBLIC HEARING BEFORE THE PLANNING COMMISSION FOR THE CITY OF SALIDA CONCERNING A MAJOR IMPACT REVIEW APPLICATION

TO ALL MEMBERS OF THE PUBLIC AND INTERESTED PERSONS: PLEASE TAKE NOTICE: that on December 14, 2021 at or about the hour of 6:00 p.m., public hearings will be conducted by the City of Salida Planning Commission at City Council Chambers, 448 East First Street, Suite 190, Salida, Colorado and online at the following link: https://attendee.gotowebinar.com/rt/1909092342220683277. The hearing concerns Major Impact Review applications for the property described as "Part of Lots 4 & 5, All of Lots 6-8, Block 19, City of Salida", also known as 323 West First Street. The applications have been submitted by Salida Bottling Company, LLC represented by Erick Warner.

The applicant is requesting:
A. Approval of a Planned Development overlay zone for the above described 0.6 acres currently split-zoned Commercial (C-1) and Industrial (I) and in the Hwy 291 Established Residential Overlay. For the overall site, the purpose is to create a subdivision with townhome lots fronting off of a private drive, to increase allowed density, to increase allowed building heights, to increase allowed number of building stories, and to decrease the front setback. On the individual townhome lots, the request also includes: to increase the maximum lot coverage for structures, to decrease minimum lot size, to decrease minimum lot frontage, to decrease minimum landscape area, and to decrease setbacks. On the HOA owned outlot, the request is to increase the maximum lot coverage for uncovered parking/access.
B. Approval of a Major Subdivision to split the above described 0.6 acre parcel into 16 townhome lots and 1 outlot, with the intention of 1 townhome lot to be further split in the future into 1 residential condominium and 1 commercial condominium. This will result in a total of 16 residential units, ,1 commercial unit, and 1 HOA owned and managed outlot for the common areas containing the private drive, landscaping, pedestrian access and parking.

Any recommendations by the Planning Commission for the Planned Development and Major Subdivision shall be forwarded to the City Council for review and public hearings.

Interested persons are encouraged to attend the public hearings. Further information on the application may be obtained from the Community Development Department, (719) 530-2631.

*Please note that it is inappropriate to personally contact individual City Councilors or Planning Commissioners, outside of the public hearing, while an application is pending. Such contact is considered ex parte communication and will have to be disclosed as part of the public hearings on the matter. If you have any questions/comments, you should email or write a letter to staff, or present your concerns at the public meeting via the above GoToWebinar link so your comments can be made part of the record.
Published in The Mountain Mail Nov. 26, 2021

PUBLIC NOTICE

NOTICE OF PUBLIC HEARING BEFORE THE PLANNING COMMISSION AND CITY COUNCIL FOR THE CITY OF SALIDA CONCERNING ANNEXATION AND ZONING APPLICATIONS

TO ALL MEMBERS OF THE PUBLIC AND INTERESTED PERSONS: PLEASE TAKE NOTICE: that on December 14, 2021 at or about the hour of 6:00 p.m., a public hearing will be conducted by the City of Salida Planning Commission at City Council Chambers, 448 East First Street, Suite 190, Salida, Colorado and online at the following link: https://attendee.gotowebinar.com/rt/1909092342220683277

The hearing is regarding applications for Annexation and Zoning submitted by and on behalf of Jeff Kriebel, Thomas Clegg, and Wendell Winger, for the properties located at 7543 County Road 141, 7547 County Road 141 and 7551 County Road 141.

The City is currently considering a petition to annex and zone the subject properties into the City. The general purpose of the application is to consider the applicant's request to zone the property Medium Density Residential (R-2).

Any recommendation by the Planning Commission for the Annexation and Zoning shall be forwarded to the City Council for review and a public hearing scheduled for February 01, 2022, at or about the hour of 6:00 p.m. at City Council Chambers and online at the following link: https://attendee.gotowebinar.com/register/6382995264411204366.

Interested persons are encouraged to attend the public hearing. Further information on the applications may be obtained from the Community Development Department, (719) 530-2626.

*Please note that it is inappropriate to personally contact individual City Councilors or Planning Commissioners, outside of the public hearing, while an application is pending. Such contact is considered ex parte communication and will have to be disclosed as part of the public hearings on the matter. If you have any questions/comments, you should email or write a letter to staff, or present your concerns at the public meeting via the above GoToWebinar link so your comments can be made part of the record.
Published in The Mountain Mail Nov. 26, 2021

PUBLIC NOTICE

NOTICE OF PUBLIC HEARING BEFORE THE CITY OF SALIDA PLANNING COMMISSION CONCERNING AN ORDINANCE TO AMEND CHAPTERS 6 AND 16 OF THE SALIDA MUNICIPAL CODE REGARDING ADULT ENTERTAINMENT ESTABLISHMENTS AND SEXUALLY ORIENTED BUSINESSES

TO ALL MEMBERS OF THE PUBLIC AND INTERESTED PERSONS: PLEASE TAKE NOTICE that a public hearing will be held on Tuesday, December 14th, 2021 at or about the hour of 6:00 p.m. by the City of Salida Planning Commission at City Council Chambers, 448 East First Street, Suite 190, Salida, CO and online at: https://register.gotowebinar.com/rt/1909092342220683277 to consider amendments to Chapter 16 of the Salida Municipal Code regarding adult entertainment establishments and sexually-oriented businesses. A subsequent hearing will also be heard by the Salida City Council at a later date to be determined and duly noticed. Interested persons are encouraged to attend the public hearings online or in person. Further information on the application may be obtained from either the City Clerk's Office or the Community Development Department.

Published in The Mountain Mail Nov. 26, 2021