



**Addendum #2**

Issue Date: May 1st, 2024  
Bids Due: May 10<sup>th</sup>, 2024  
Time: 1:30 PM  
Location: Civic Center  
325 E. Aspen Ave.  
Fruita, CO 81521

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The items contained in this Addendum are hereby issued to answer questions asked prior to the release of this addendum, to add new bid items, to correct an error in the item description for contract item #10, and to issue a new bid schedule. Please note: This addendum DOES change the completion date for the project but DOES NOT change the bid date or time.

This Addendum shall include the following enclosed items:

- A. Addendum 2 Bid Schedule
- B. Soils Report
- C. List of Pre Ordered Materials
- D. Pre-bid Meeting Attendance List

**Question/Answer Section**

Q1:-There is a bid item for small tree removal, but sheet R1 has a comment “Remove/Dispose of 10 Large Trees Grind Stumps”, can we get a bid item for this? The notes on the demolition plan states that tree less than 12” in diameter are not quantified. Are we to assume that all trees marked on the sheets and quantified are larger than 12” diameter and will need to be removed and ground down as well?

A: That is correct, all trees marked on the sheets will be removed and ground. We are still in the acquisition/appraisal process and each tree will need to be valued in the appraisals, therefore there may be changes to the scope. Attached to this addendum is a new bid item for the 25 Large trees (all demo sheets).

Q2: Can we get clarification on item 11 –“ Sign (Stop/Speed Limit/Etc”)? Is this full removal, remove/Reset, remove/salvage? It appears that some are remove, some are salvaged, and then some are remove/reset.

A: We will be installing all new stop signs at the intersection at J Road, they will be solar flashing signs in all 4 directions. All hardware and posts required to install and activate the signs will be provided by the City of Fruita except for materials needed for concrete footers. The old stop signs will be removed. The Contractor shall remove and reset all other signs.

Q3: Can the unit for item 18 be CY to match its Embankment counterpart?

A: Yes, that is acceptable. The bid schedule has been changed to reflect this.

Q4: The HMA on the project is calling for fiber, is fiber going to be required for the bike path portion of the HMA?

A: No, the bike path will not require fiber. See the new item description for “trail asphalt”.

Q5: On sheet SS9, there is an 8” SDR35 line drawn and says to see Note 2. Is there a bid item for this 8” SDR35 and there is no Note 2 on this sheet.

A: We will provide the bid item with this addendum. Sheets will be modified to include note 2 at a later date. See the new item description for “8” SDR-35”.

Q6: Can you clarify where the 4” service line is to be installed? I am not seeing it on the sewer plans

A: The location of the proposed 4” service line is approximately 38+00 on the Plan & Profile Sheets (although not shown). The installation is still to be determined based on Acquisition negotiations for removing the properties leach field.

Q7: 2 Air Release/Air Vacs are on the bid schedule, but they are not shown on the water plans. Can you clarify where these will be going? I am assuming on both side of the canal but wanted to make sure.

A: The Ar/Av assemblies are shown in profile on sheet 6 of the Ute Water Design Sheets.

Q8: It looks like the fire hydrant is being installed on the existing line on Iron Dr. Is this correct? If so, is Ute Water going to do the hot tap? If they are not going to do the hot tap, what size line are we connecting to?

A: The hydrant is already in place within the multipurpose easement on the NE corner of Iron Drive. There will not be another hydrant installed.

Q9: Can Skiff Avenue be used for construction traffic associated with this project?

A: In a limited manner, as long as it is maintained to the satisfaction of the City Project manager. All materials, equipment, and labor needed to maintain the road will be the responsibility of the contractor and will not be paid for separately.

Q10: Where are you storing the pre ordered materials?

A: The City will store pre ordered materials at the City’s lagoons property on Raptor Rd. near Highway 340. The lagoons property is approximately 3.5 miles from 19 Rd. Please note: the original item descriptions state that pipe will be stored at the City’s wastewater plant. That location has been changed.

Q11: How are we to deal with cabinet for the highway intersection?

A: CDOT is supplying the cabinet. It will be installed on a concrete pad per the plan and profile plans.

Q12: The agenda for the pre bid meeting stated installation of precast box culvert, will there be prestressed lid slabs for the culvert?

A: The walls and floor of the box culvert will be poured in place but the lid slabs may be precast. Lid slabs are not required to be pre-stressed. Please see the box culvert design plans from SGM. SGM will provide all inspections on the box culvert.

Q13: What is the drop-dead date for the box culvert installation to be completed?

A: March 1, 2024

Q14: Will the City allow an early closure North of J Road for underground work to be begin?

A: Because the alignments of the sewer and storm drain north of J Rd. are in a location that is currently an irrigated field we anticipate the conditions to be poor for construction until late fall and beyond. Under the direction of the project manager, we will allow for an early start time with the understanding that the work be done at the contractor's peril. No additional payment will be made for time, equipment, labor or materials needed to mitigate the presence of either surface irrigation water or groundwater encountered during any phase of construction without the express approval of the City's project manager. No additional contract time will be permitted for construction difficulties due to the failure of the Contractor, in the opinion of the City's project manager, to properly mitigate surface or groundwater causing those difficulties.

Q15: Can we get more information on item 37 – 12” CMP Driveway Culvert?

We will install a 12” CMP for in the ditch between the bike path and edge of road on most of the existing driveways along the corridor. Plan and profile sheets show a station and note for each of the locations. We will also install a 12” CMP under the driveways on the West side of the new edge of asphalt, also shown by station label and note on those sheets.

Q16: The City's timeline for completion seems very aggressive and may not be feasible. Because there are liquidated damages associated with the project, would the City consider backing up the completion date for the project?

A: Yes, the City is hereby changing the completion date for the project to July 25<sup>th</sup>, 2025. The intention of the City is to have 19 Rd. fully paved, striped and safely open to vehicular and pedestrian traffic in time for the beginning of the 2025/2026 school year; however, if there are some minor items remaining to be done after this date the City may choose not to enforce liquidated damages for the extra time needed to complete the work. This decision will be at the sole discretion of the City's project manager.

Q17: There appears to be an error in bid item #10 “Small Tree Removal”. The description describes sign installation. Can the City please clarify what is expected for this bid item?

A: The description for bid item #10 is hereby revised as follows:

**Item 10 Small Tree Removal**

This pay item includes furnishing all equipment, materials, and labor necessary to remove and dispose of trees with a trunk diameter of less than 12”. The removal shall include any stump grinding and root removal deemed necessary by the City’s project manager. Please note: small trees are not quantified on the plans and will be removed at the direction of the City’s project manager. In general, the City expects to remove all small trees in the road right-of-way. Payment for this Lump Sum item shall be made in increments upon completion of construction.

Q18: It shows on the plans to set a new utility pole and move a cabinet at the intersection of 19 Rd. and the highway. There is no line item for that work. Is it to be considered incidental to the project?

A: A bid item is hereby being added to the bid schedule. See the new item description for “Highway Intersection Pole/Cabinet Installation”.

Q19: Will the phone line be moved prior to construction?

A: The City is making every effort to have the phone provider to relocate their lines prior to construction. Grand Valley Power has indicated they are working with that company to relocate overhead communication lines. However, the phone provider has not been responsive to multiple requests for relocation of the lines. Bidders please submit your bids with the assumption that the phone line will be moved prior to construction. If no relocation has taken place by the start of construction, the City will negotiate appropriate standby time payment with the Contractor.

Q20: On sheet IR7 it shows a IRMH 1B but that item is not listed on the bid schedule. Can the City please clarify this?

A: A bid item is hereby being added to the bid schedule. See the new item description for “Irrigation Manhole 1B”.

**End of Question/Answer Section**

**New Bid Item Description Section**

The following bid items are hereby added to the bid schedule and contract documents.

**Item 75 Large Tree Removal**

This pay item includes furnishing all equipment, materials, and labor necessary to remove and dispose of trees with a trunk diameter of 12” or larger. The removal shall include any stump grinding and root removal deemed necessary by the City’s project manager. Payment will be made at the unit prices quoted for each tree removed.

**Item 76 8” SDR-35 PVC Sewer Pipe**

This pay item includes furnishing all equipment, materials, and labor necessary to install new 8”

SDR-35 sanitary sewer pipe, including excavation, excavation bracing, excavation de-watering, pipe bedding, backfill and compaction as shown on the construction drawings. Pipe for this pay item will be provided by the City. The contractor will be responsible for delivery of pipe to the project from the City's Lagoons property on Raptor Rd. Payment for this item will be based on unit prices quoted for the actual lineal footage of pipe installed.

**Item 77 Trail Asphalt**

This pay item includes furnishing all equipment, materials, and labor necessary to install an 8'-wide asphalt mat shown on the plans as "Detached 8'-Wide Asphalt Path", and in the applicable City specifications. This asphalt will not require fiber-reinforcement. Asphalt mix shall be Grading SX PG 64-22. Payment for this item will be made at the unit price quoted. Please note: the quantity of item 21 "Hot Mix Asphalt" is hereby reduced to account for the change in asphalt type for the trail.

**Item 78 Highway Intersection Improvements**

This pay item includes furnishing all equipment, materials, CDOT Right-of-Way permits and labor necessary to install a 1200sq ft. raised traffic island and traffic control pole to replace the existing pole on the NW corner of the intersection, as well as a 10' x 10' concrete pad to accommodate the cabinet & meter. The city will supply the pole and the meter, and the cabinet will be supplied by CDOT. Details for these items are found on Sheet 021 of the plans. All wiring and other appurtenances needed to ensure proper functioning of the pole, meter and cabinet shall be considered incidental to this pay item. Payment for this Lump Sum item shall be made in increments upon completion of construction.

**Item 79 Irrigation Manhole 1B**

This pay item includes furnishing all equipment, materials, and labor necessary to provide and install precast 48" manholes, including excavation, excavation bracing, excavation de-watering, bedding, pipe connections, backfill and compaction as shown on the construction drawings. Payment for this item will be based on unit prices quoted for the actual quantity of manholes installed.

**End of New Bid Item Description Section**

**End of Addendum #2**

**City of Fruita**  
**Bid Schedule**  
**19 Road Improvement Project - Addendum 2**  
**Project No. 130-750-77-4730**

No.	Item Description	Quantity	Unit	Unit Cost	Extension
1	Mobilization	1.0	LS		
2	Clear and Grub	5.5	AC		
3	Construction Surveying	1.0	LS		
4	Material Testing	1.0	LS		
5	Stormwater Management	1.0	LS		
6	Traffic Control	1.0	LS		
7	Flashing Stop Sign	4.0	EA		
8	Variable Message Board	6.0	Days		
9	Reset mail box	17.0	EA		
10	Small Tree Removal (12-Inch Dia. and less)	1.0	LS		
11	Sign (Stop/Speed limit/Etc.)	17.0	EA		
12	Remove Fence	4,100.0	LF		
13	Concrete Curb Gutter & Sidewalk Removal	20.0	LF		
14	Concrete Ditch Removal	700.0	LF		
15	Remove/Plug existing ditch culvert	100.0	LF		
16	Remove/reset Irrigation Pump	2.0	EA		
17	Embankment/Fill	13,000.0	CY		
18	Excavation	13,000.0	CY		
19	Class 6 Aggregate Base Course	17,000.0	TON		
20	Asphalt Milling/Disposal	14,000.0	SY		
21	Hot Mix Asphalt	9,275.0	Ton		
22	Curb Ramp Type 1	3.0	EA		
23	Curb Ramp Type 2	1.0	EA		
24	Curb Ramp Type 3	2.0	EA		
25	4"-Wide Solid White Striping	15,000.0	LF		
26	4"-Wide Solid Yellow Striping	14,000.0	LF		
27	Thermoplastic Crosswalk/Stop Bar Markings	4,785.0	SF		
28	Connect to existing manhole	1.0	EA		
29	4-ft Manhole	15.0	EA		
30	12-inch SDR-35	2,769.7	LF		
31	15-inch SDR-35	1,820.7	LF		
32	4-inch Service Line	1.0	EA		
33	Storm Ceptor	2.0	EA		
34	60-inch Storm Manhole	12.0	EA		

35	72-inch Storm Manhole	5.0	EA		
36	24"x24" Catch Basin	9.0	EA		
37	12" CMP Driveway Culvert	500.0	LF		
38	15-inch HDPE	544.5	LF		
39	18-inch HDPE	95.0	LF		
40	24-inch HDPE	2,663.1	LF		
41	30-inch HDPE	2,044.9	LF		
42	48-inch RCP	111.3	LF		
43	12" PVC	1,696.4	LF		
44	18" PVC	66.4	LF		
45	24" PVC	501.8	LF		
46	18" RCP	132.6	LF		
47	24" RCP	474.2	LF		
48	Irrigation Box 1A	1.0	EA		
49	Irrigation Box 2A	1.0	EA		
50	Irrigation Box 3A	1.0	EA		
51	Irrigation Tee 1B	1.0	LS		
52	Irrigation Tee 2B	1.0	LS		
53	Irrigation MH 1C	1.0	LS		
54	Irrigation MH 2C	1.0	LS		
55	12" Gate Valve	1.0	EA		
56	GVIC Removal of Structure	1.0	EA		
57	GVIC Structural Excavation	1,175.0	CY		
58	GVIC Structural Backfill (Class 1)	526.0	CY		
59	GVIC Aggregate Base Course (Class 3)	250.0	CY		
60	Concrete Class D (Bridge)	194.0	CY		
61	Structural Concrete Coating	250.0	SF		
62	Reinforcing Steel	28,300.0	LB		
63	8-inch PVC C-900	1,250.0	LF		
64	2-inch Gate Valve	1.0	EA		
65	Air Release/Air Vacuum	2.0	EA		
66	3/4-inch Service Near	3.0	EA		
67	3/4-inch Service Far	3.0	EA		
68	Fire Hydrant Assembly	1.0	EA		
69	Export Unsuitable Backfill Material	9,700.0	CY		
70	Structural Backfill Material	20,000.0	TON		
71	Trench Stabilization Rock	7,200.0	TON		
72	Reconstruct Existing Driveway	25.0	EA		
73	Seeding	6.0	AC		
74	Force Account	1.0	LS	\$500,000.00	\$500,000.00

75	Large Tree Removal	25.0	EA		
76	8" SDR-35	51.0	LF		
77	Trail Asphalt	725.0	TON		
78	Highway Intersection Improvements	1.0	LS		
79	Irrigation MH 1B	1.0	EA		

Total Base Bid Amount

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**Company Name:** \_\_\_\_\_

**By:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Addendum 1 Acknowledgment:** \_\_\_\_\_

**Addendum 2 Acknowledgment:** \_\_\_\_\_





**Huddleston-Berry**  
Engineering & Testing, LLC

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**GEOTECHNICAL AND GEOLOGIC HAZARDS  
INVESTIGATION  
19 ROAD IMPROVEMENTS  
FRUITA, COLORADO  
PROJECT#00207-0017**

**CITY OF FRUITA  
325 E. ASPEN, SUITE 155  
FRUITA, COLORADO 81521**

**FEBRUARY 8, 2024**

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**Huddleston-Berry Engineering and Testing, LLC  
2789 Riverside Parkway  
Grand Junction, Colorado 81501**

## SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

A geologic hazards and geotechnical investigation was conducted for the 19 Road Improvements project in Fruita, Colorado. The project location is shown on Figure 1 – Site Location Map. The purpose of the investigation was to evaluate the surface and subsurface conditions at the site with respect to geologic hazards and pavement design for the proposed construction. This summary has been prepared to include the information required by civil engineers and contractors involved in the project.

### **Subsurface Conditions (p. 2)**

The subsurface investigation consisted of six borings as shown on Figure 2 – Site Plan. The borings generally encountered 4.5 to 6.0-inches of asphalt pavement above undifferentiated base course, subbase course, and/or grading fill to a depth of 4.0 feet. The fill was underlain by brown, moist to wet, medium stiff to very soft / medium dense to very loose interbedded lean clay and poorly graded sand with silt soils to the bottoms of the borings. Groundwater was encountered at depths of between 8.0 and 14.0 feet at the time of the investigation. The native clay soils were indicated to be slightly plastic and slightly expansive. The native sand soils were indicated to be non-plastic and are anticipated to be slightly collapsible.

### **Geologic Hazards and Constraints (p. 3)**

The primary geologic hazard and constraint at the site is the presence of moisture sensitive soils. However, soft soil conditions may also impact the construction.

### **Summary of Foundation Recommendations**

- *Structural Fill* – Minimum of 24-inches below foundations. The native clay soils are not suitable for reuse as structural fill. Imported structural fill should consist of granular, non-expansive, ***non-free draining*** material with greater than 10% passing the #200 sieve and Liquid Limit of less than 30. However, all proposed imported structural fill materials should be approved by HBET.(p. 4)
- *Bearing Resistance for Strength Limit State* –  $q_{ult} = 450 * \text{Effective Footing Width} + 1,750$  psf. (p. 4)
- *Resistance Factor* – 0.45. (p. 4)
- *Bearing Resistance for Service Limit State* – See Appendix D.

### **Summary of Pavement Recommendations (p. 5)**

ALTERNATIVE	PAVEMENT SECTION (Inches)			
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	TOTAL
A	6.0	14.0	0.0	20.0
B	6.0	6.0	14.0	26.0

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### FIGURES

Figure 1 – Site Location Map

Figure 2 – Site Plan

### APPENDICES

Appendix A – USDA NRCS Soil Survey Data

Appendix B – Typed Boring Logs

Appendix C – Laboratory Testing Results

Appendix D – Bearing Resistance for Service Limit State

## **1.0 INTRODUCTION**

As part of the continued development in Western Colorado, the City of Fruita (City) proposes to improve 19 Road. As part of the development process, Huddlestone-Berry Engineering and Testing, LLC (HBET) was retained by the City to conduct a geologic hazards and geotechnical investigation at the site.

### **1.1 Scope**

As discussed above, a geologic hazards and geotechnical investigation was conducted for 19 Road in Fruita, Colorado. The scope of the investigation included the following components:

- Conducting a subsurface investigation to evaluate the subsurface conditions at the site.
- Collecting soil samples and conducting laboratory testing to determine the engineering properties of the soils at the site.
- Evaluating potential geologic hazards at the site.
- Developing recommendations for pavements.

The investigation and report were completed by a Colorado registered professional engineer in accordance with generally accepted geotechnical and geological engineering practices. This report has been prepared for the exclusive use of the City of Fruita.

### **1.2 Site Location and Description**

The project area includes 19 Road between Highway 6 & 50 and J.2 Road in Fruita, Colorado. The project location is shown on Figure 1 – Site Location Map.

At the time of the investigation, the existing roadway appeared relatively intact with no obvious sign of significant failure. The roadway consisted of one lane in each direction with unpaved shoulders. Within the project area, 19 Road crosses the Independent Ranchman’s Ditch and Palmer Ditch.

### **1.3 Proposed Construction**

The proposed construction is anticipated to consist of widening of 19 Road in the project area. In addition, new sanitary sewer and storm sewer lines are proposed. A new box culvert is also proposed at the crossing of the Independent Ranchman’s Ditch.

## **2.0 GEOLOGIC SETTING**

### **2.1 Soils**

Soils data was obtained from the USDA Natural Resource Conservation Service Web Soil Survey. The data indicates that the soils at the site consist of Sagers silty clay loam, 0 to 2 percent slopes and Sagers silty clay loam, saline, 0 to 2 percent slopes. Soil survey data, including descriptions of the soil units, is included in Appendix A.

### **2.2 Geology**

According to the *Geologic Map of the Fruita Quadrangle, Mesa County, Colorado* (2009), the site is underlain by alluvial mudflow and fan valley fill deposits.

### **2.3 Groundwater**

Groundwater was encountered in the subsurface at depths of between 8.0 and 14.0 feet below the existing ground surface at the time of the investigation.

## **3.0 FIELD INVESTIGATION**

### **3.1 Subsurface Investigation**

The subsurface investigation was conducted on December 6<sup>th</sup>, 2023 and consisted of six borings as shown on Figure 2 – Site Plan. The borings were drilled to a depth of 20.0 feet. Typed boring logs are included in Appendix B. Samples of the native soils were collected during Standard Penetration Testing (SPT) and by bulk sampling methods at the locations shown on the logs.

As indicated on the logs, the subsurface conditions at the site were slightly variable. However, the borings generally encountered 4.5 to 6.0-inches of asphalt pavement above undifferentiated base course, subbase course, and/or grading fill to a depth of 4.0 feet. The fill was underlain by brown, moist to wet, medium stiff to very soft / medium dense to very loose interbedded lean clay and poorly graded sand with silt soils to the bottoms of the borings. As discussed previously, groundwater was encountered at depths of between 8.0 and 14.0 feet at the time of the investigation.

### **3.2 Field Reconnaissance**

The field reconnaissance included walking the site during the subsurface investigation. In general, the site was slightly sloping to the south and no evidence of active landslides, debris flows, rockfalls, etc. was observed.

## **4.0 LABORATORY TESTING**

Selected native soil samples collected from the borings were tested in the Huddlestone-Berry Engineering and Testing LLC geotechnical laboratory for natural moisture content determination, grain size analysis, Atterberg limits determination, maximum dry density and optimum moisture content (Proctor) determination, and California Bearing Ratio (CBR) determination. The laboratory testing results are included in Appendix C.

The laboratory testing results indicate that the native clay soils are slightly plastic. In addition, the CBR results indicate that the clay soils are slightly expansive with up to 1.6% expansion measured in the laboratory.

The native sand soils were indicated to be non-plastic. In general, based upon our experience with similar soils in the vicinity of the subject site, the native sand soils are anticipated to be slightly collapsible.

## **5.0 GEOLOGIC INTERPRETATION**

### **5.1 Geologic Hazards**

The primary geologic hazard at the site is the presence of moisture sensitive soils.

### **5.2 Geologic Constraints**

The primary geologic constraint to construction at the site is the presence of moisture sensitive soils. However, shallow groundwater and associated soft/loose soil conditions may also impact the construction.

### **5.3 Water Resources**

No water supply wells were observed on the property. As discussed previously, shallow groundwater was encountered at the site. However, with proper design and construction, the proposed construction is not anticipated to adversely impact surface water or groundwater.

### **5.4 Mineral Resources**

Potential mineral resources in Western Colorado generally include gravel, uranium ore, and commercial rock products such as flagstone. In general, based upon the current land use, HBET does not believe that any economically recoverable mineral resources are economically recoverable at this site.

## **6.0 CONCLUSIONS**

Based upon the available data sources, field investigation, and nature of the proposed construction, HBET does not believe that there are any geologic conditions which should preclude construction at the site.

## 7.0 RECOMMENDATIONS

### 7.1 Foundations

As discussed previously, a new box culvert is proposed to carry 19 Road across the Independent Ranchman's Ditch. In general, to provide a uniform bearing stratum, it is recommended that the foundations be constructed above a minimum of 24-inches of structural fill.

As discussed previously, the native clay soils have a slight potential for expansion when compacted and introduced to excess moisture. Therefore, the native clay soils are not suitable for reuse as structural fill. Imported structural fill should consist of a granular, non-expansive, ***non-free draining*** material with greater than 10% passing the #200 sieve and Liquid Limit of less than 30. However, all proposed imported structural fill materials should be approved by HBET.

Prior to placement of structural fill, it is recommended that the bottoms of the foundation excavations be scarified to a depth of 9 to 12-inches, moisture conditioned, and compacted to a minimum of 95% of the standard Proctor maximum dry density, within  $\pm 2\%$  of the optimum moisture content as determined in accordance with ASTM D698. However, soft soil conditions may exist in the subgrade and it may be necessary to utilize geotextile and/or geogrid in conjunction with up to 30-inches of additional granular fill to stabilize the subgrade. HBET should be contacted to provide specific recommendations for subgrade stabilization based upon the actual conditions encountered during construction.

Structural fill should extend laterally beyond the edges of the foundation a distance equal to the thickness of structural fill. Structural fill should be moisture conditioned, placed in maximum 8-inch loose lifts, and compacted to a minimum of 95% of the standard Proctor maximum dry density for fine grained soils and modified Proctor maximum dry density for coarse grained soils, within  $\pm 2\%$  of the optimum moisture content as determined in accordance with ASTM D698 and D1557, respectively.

In accordance with LRFD design methodology, for foundation preparation as recommended, a nominal bearing resistance for the strength limit state of  $q_{ult} = 450 \times \text{Effective footing width} + 1,750$  psf may be used. A resistance factor of 0.45 is recommended. Nominal bearing resistance for the service limit state should be in accordance with the attached plot of Bearing Stress versus Effective Footing Width for a maximum total settlement of 1.0-inch included in Appendix D. Foundations subject to frost should be at least 24-inches below the finished grade.

### 7.2 Corrosion of Concrete and Steel

The USDA Soil Survey Data indicates that the site soils have a low to high potential for corrosion of concrete. Therefore, at a minimum, Type I-II sulfate resistant cement is recommended for construction at this site.

The Soil Survey Data also indicates that the site soils have a moderate to high potential for corrosion of uncoated steel. Therefore, buried steel utilities or other buried steel structural elements should consider corrosion in their design.

### 7.3 Lateral Earth Pressures

Any earth retaining structures should be designed to resist lateral earth pressures. HBET recommends that the structures be designed using the following earth pressure coefficients:

#### Native Lean Clay Soils

- $K_a = 0.39$
- $K_p = 2.56$

#### Class 1 Structural Backfill

- $K_a = 0.33$
- $K_p = 3.00$

The earth pressure coefficients above assume horizontal backslope and should be increased where the backslope is not level. Computed lateral earth pressures on the structures should consider surcharge loading from 19 Road.

### 7.4 Excavations

Excavations in the soils at the site may stand for short periods of time but should not be considered to be stable. Trenching and excavations should be sloped back, shored, or shielded for worker protection in accordance with applicable OSHA standards. The soils generally classify as Type C soil with regard to OSHA's *Construction Standards for Excavations*. For Type C soils, the maximum allowable slope in temporary cuts is 1.5H:1V.

### 7.5 Pavements

As discussed previously, 19 Road is proposed to be widened in the project area and this may include reconstruction of part or all of the roadway. The design CBR of the native soils was determined in the laboratory to be less than 2.0. Therefore, the minimum recommended Resilient Modulus of 3,000 psi was used for the seasonally low value for the subgrade soils.

Traffic data was taken from the City of Fruita GIS system. A design AADT of 5,817 was provided for 2020. Using a growth rate of 2%, HBET estimated a 2024 AADT of 6,297.

Based upon the subgrade conditions and estimated traffic loading, M-E asphalt pavement design was completed using the PerRoad design software package. The following table summarizes pavement section alternatives for new pavements.



ALTERNATIVE	PAVEMENT SECTION (Inches)			
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	TOTAL
A	6.0	14.0	0.0	20.0
B	6.0	6.0	14.0	26.0

Prior to pavement placement, it is recommended that the subgrade soils be scarified to a depth of 12-inches; moisture conditioned, and recompact to a minimum of 95% of the standard Proctor maximum dry density, within 0 to -2% of optimum moisture content as determined by AASHTO T-99. However, as discussed previously, soft soils were encountered at the site and this may make compaction of the subgrade difficult. It may be necessary to utilize geotextile and/or geogrid in conjunction with additional granular material to stabilize the subgrade. HBET should be contacted to provide specific recommendations for subgrade stabilization based upon the actual conditions encountered during construction.

New aggregate base course and subbase course should be placed in maximum 9-inch loose lifts, moisture conditioned, and compacted to a minimum of 95% and 93% of the maximum dry density, respectively, at -2% to +3% of optimum moisture content as determined by AASHTO T-180. In addition to density testing, base course should be proofrolled to verify subgrade stability.

It is recommended that Hot-Mix Asphaltic (HMA) pavement conform to CDOT grading SX or S specifications and consist of an approved 100 gyration Superpave method mix design. HMA pavement should be compacted to between 92% and 96% of the maximum theoretical density. An end point stress of 50 psi should be used. In addition, pavements should conform to local specifications.

The long-term performance of the pavements is dependent on positive drainage away from the pavements. Ditches, culverts, and inlet structures in the vicinity of paved areas must be maintained to prevent ponding of water on the pavement.

## 8.0 GENERAL

The recommendations included above are based upon the results of the subsurface investigation and on our local experience. These conclusions and recommendations are valid only for the proposed construction.

As discussed previously, the subsurface conditions encountered in the borings were slightly variable. However, the precise nature and extent of any subsurface variability may not become evident until construction. As a result, it is recommended that HBET provide construction materials testing and engineering oversight during the entire construction process.

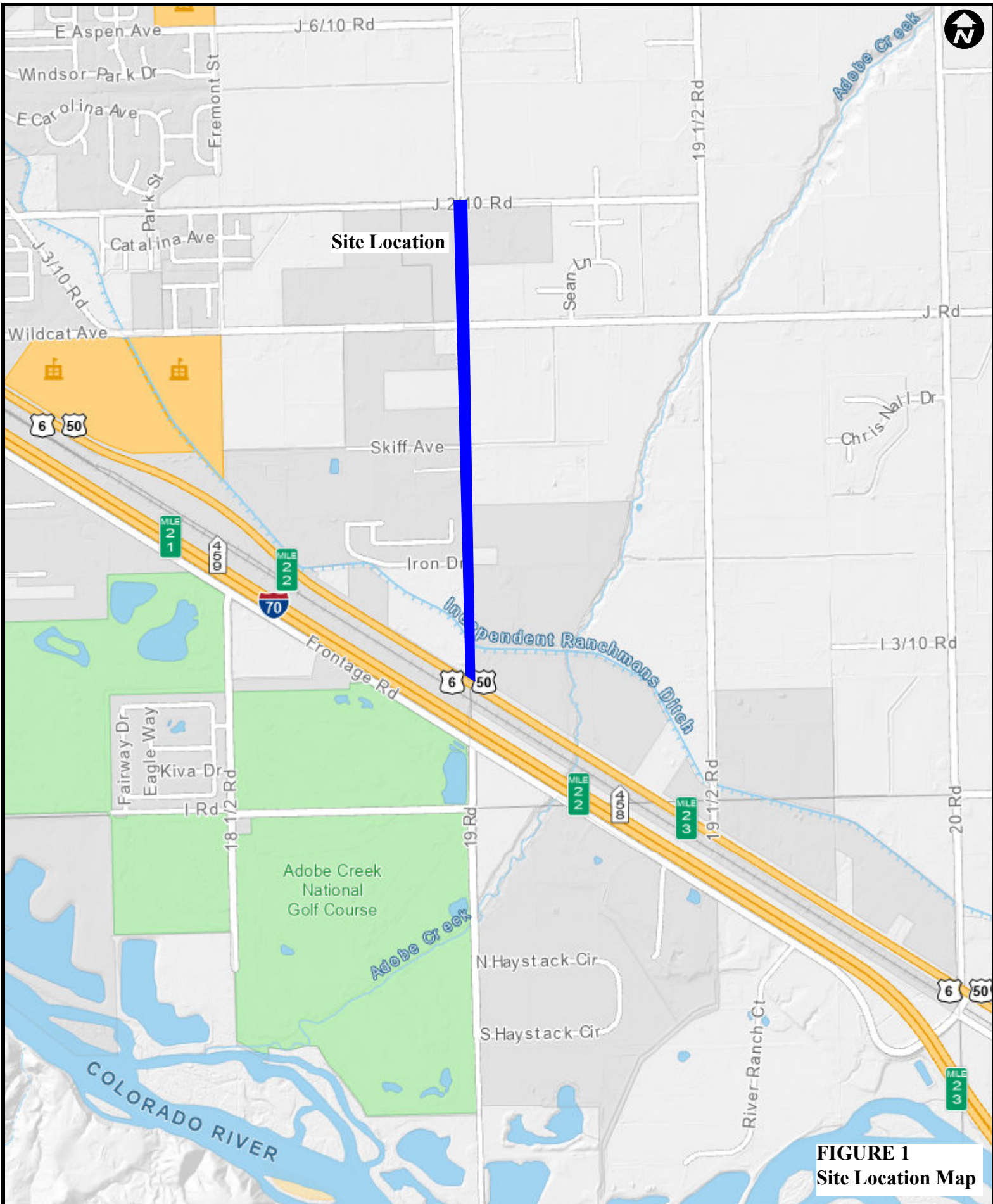
**It is important to note that the recommendations herein are intended to reduce the risk of pavement movement and/or damage, to varying degrees, associated with volume change of the native soils. However, HBET cannot predict long-term changes in subsurface moisture conditions and/or the precise magnitude or extent of volume change. Where significant increases in shallow subsurface moisture occur due to poor grading, improper stormwater management, utility line failure, excess irrigation, or other cause, either during construction or the result of actions of the owner, several inches of movement are possible. In addition, any failure to comply with the recommendations in this report releases Huddleston-Berry Engineering & Testing, LLC of any liability with regard to the pavement and/or structure performance.**

Huddleston-Berry Engineering and Testing, LLC is pleased to be of service to your project. Please contact us if you have any questions or comments regarding the contents of this report.

Respectfully Submitted:  
**Huddleston-Berry Engineering and Testing, LLC**

Michael A. Berry, P.E.  
Vice President of Engineering

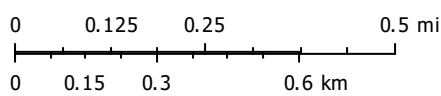
## **FIGURES**



**FIGURE 1**  
**Site Location Map**

**Mesa County Map**

The Geographic Information System (GIS) and its components are designed as a source of reference for answering inquiries, for planning and for modeling. GIS is not intended or does not replace legal description information in the chain of title and other information contained in official government records such as the County Clerk and Records office or the courts. In addition, the representations of location in this GIS cannot be substituted for actual legal surveys. The information contained herein is believed accurate and suitable for the limited uses, and subject to the limitations, set forth above. Mesa County makes no warranty as to the accuracy or suitability of any information contained herein. Users assume all risk and responsibility for any and all damages, including consequential damages, which may flow from the user's use of this information.



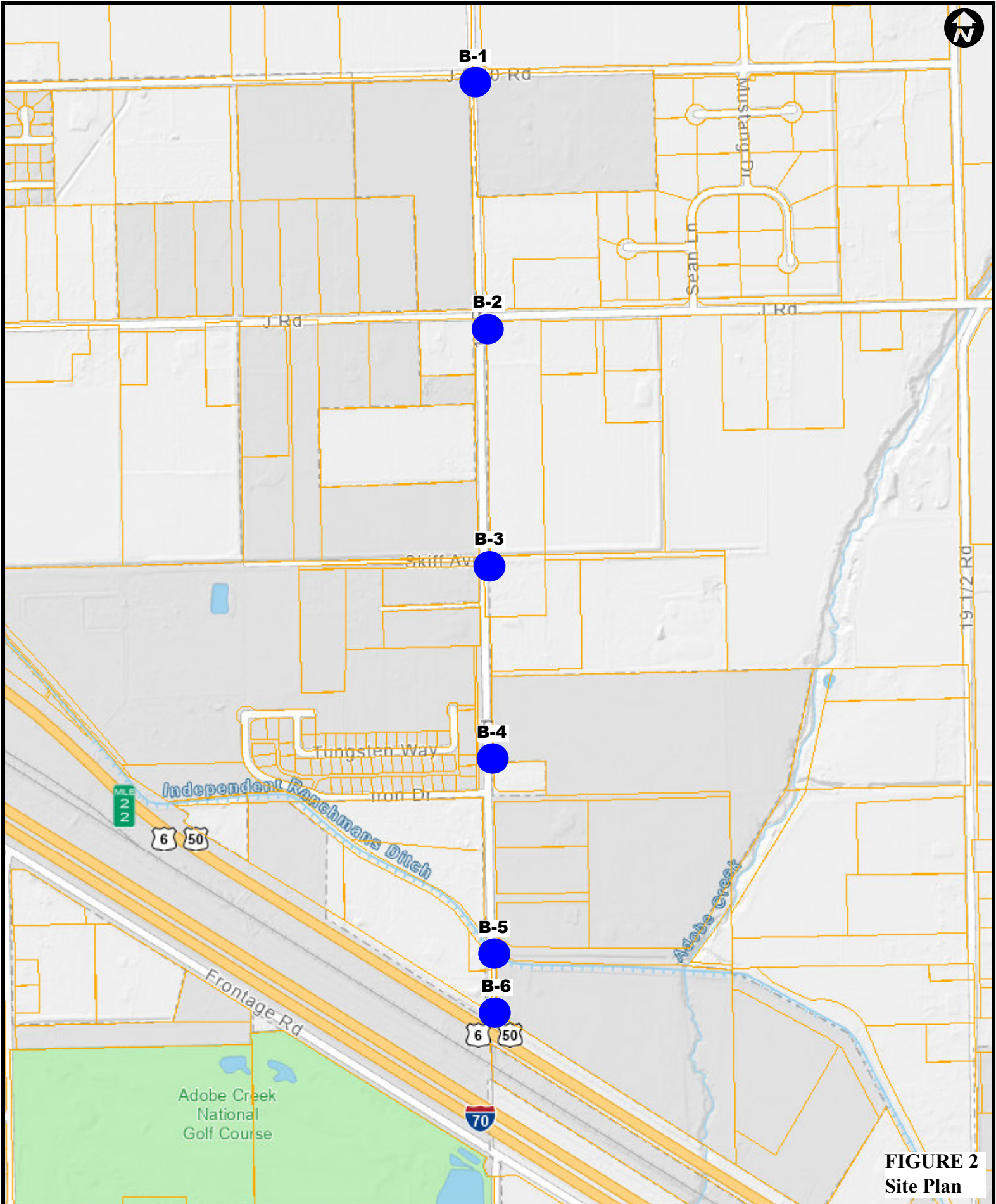
Print Date: December 28, 2023



**Mesa County, Colorado**

**GIS/IT Department**  
gis.mesacounty.us

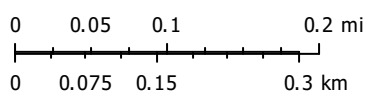




**FIGURE 2**  
**Site Plan**

**Mesa County Map**

The Geographic Information System (GIS) and its components are designed as a source of reference for answering inquiries, for planning and for modeling. GIS is not intended or does not replace legal description information in the chain of title and other information contained in official government records such as the County Clerk and Records office or the courts. In addition, the representations of location in this GIS cannot be substitute for actual legal surveys. The information contained herein is believed accurate and suitable for the limited uses, and subject to the limitations, set forth above. Mesa County makes no warranty as to the accuracy or suitability of any information contained herein. Users assume all risk and responsibility for any and all damages, including consequential damages, which may flow from the user's use of this information.



Print Date: December 28, 2023



**Mesa County, Colorado**

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**APPENDIX A**  
**Soil Survey Data**

## Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named, soils that are similar to the named components, and some minor components that differ in use and management from the major soils.

Most of the soils similar to the major components have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Some minor components, however, have properties and behavior characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

## Report—Map Unit Description

### Mesa County Area, Colorado

#### **BaS—Massadona silty clay loam, saline surface, 0 to 2 percent slopes**

##### **Map Unit Setting**

*National map unit symbol: k06p*



*Elevation:* 4,490 to 4,920 feet  
*Mean annual precipitation:* 6 to 9 inches  
*Mean annual air temperature:* 50 to 55 degrees F  
*Frost-free period:* 140 to 180 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Massadona, saline surface, and similar soils:* 70 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Massadona, Saline Surface**

#### **Setting**

*Landform:* Fan remnants  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Cretaceous source alluvium derived from clayey shale

#### **Typical profile**

*Apz - 0 to 2 inches:* silty clay loam  
*Bwz - 2 to 12 inches:* silty clay  
*Bkyz - 12 to 24 inches:* silty clay  
*BCkyz1 - 24 to 48 inches:* fine sandy loam  
*BCKyz2 - 48 to 60 inches:* silty clay loam

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.07 to 0.21 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 15 percent  
*Gypsum, maximum content:* 2 percent  
*Maximum salinity:* Strongly saline (16.0 to 40.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Low (about 4.7 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 7s  
*Land capability classification (nonirrigated):* 7c  
*Hydrologic Soil Group:* C  
*Ecological site:* R034BY103UT - Desert Clay (Castlevally saltbush)  
*Hydric soil rating:* No

## **Rc—Fruitland sandy clay loam, 0 to 2 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* k0d0  
*Elevation:* 4,490 to 4,890 feet  
*Mean annual precipitation:* 6 to 9 inches  
*Mean annual air temperature:* 50 to 55 degrees F  
*Frost-free period:* 140 to 180 days  
*Farmland classification:* Prime farmland if irrigated

### **Map Unit Composition**

*Fruitland and similar soils:* 90 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Fruitland**

#### **Setting**

*Landform:* Fan remnants  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Cretaceous source alluvium derived from sandstone and shale

#### **Typical profile**

*Ap - 0 to 8 inches:* sandy clay loam  
*C1 - 8 to 30 inches:* gravelly sandy loam  
*C2 - 30 to 60 inches:* sandy loam

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.71 to 2.13 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Moderate (about 7.7 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 7c  
*Hydrologic Soil Group:* B  
*Ecological site:* R034BY115UT - Desert Sandy Loam (Indian Ricegrass)  
*Hydric soil rating:* No

## Tr—Turley clay loam, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* k0d8  
*Elevation:* 4,500 to 4,800 feet  
*Mean annual precipitation:* 6 to 9 inches  
*Mean annual air temperature:* 50 to 55 degrees F  
*Frost-free period:* 140 to 180 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Turley and similar soils:* 90 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Turley

#### Setting

*Landform:* Stream terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Cretaceous slope alluvium derived from sandstone and shale

#### Typical profile

*Ap - 0 to 10 inches:* clay loam  
*C1 - 10 to 20 inches:* fine sandy loam  
*C2 - 20 to 30 inches:* clay loam  
*C3 - 30 to 60 inches:* loam

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.21 to 0.71 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Gypsum, maximum content:* 4 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* High (about 9.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 5e  
*Hydrologic Soil Group:* C  
*Ecological site:* R034BY106UT - Desert Loam (Shadscale)

*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Mesa County Area, Colorado  
Survey Area Data: Version 14, Aug 22, 2023

## Soil Features

This table gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

*Subsidence* is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage, or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

*Potential for frost action* is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, saturated hydraulic conductivity (Ksat), content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

*Risk of corrosion* pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low*, *moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low*, *moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

## Report—Soil Features

Soil Features—Mesa County Area, Colorado									
Map symbol and soil name	Restrictive Layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		<i>Low-RV-High</i>	<i>Range</i>		<i>Low-High</i>	<i>Low-High</i>			
		<i>In</i>	<i>In</i>		<i>In</i>	<i>In</i>			
BaS—Massadona silty clay loam, saline surface, 0 to 2 percent slopes									
Massadona, saline surface		—	—		0	0	Low	High	High
Rc—Fruitland sandy clay loam, 0 to 2 percent slopes									
Fruitland		—	—		0	0	Moderate	Moderate	Low
Tr—Turley clay loam, 0 to 2 percent slopes									
Turley		—	—		0	0	Moderate	Moderate	Low

## Data Source Information

Soil Survey Area: Mesa County Area, Colorado  
 Survey Area Data: Version 14, Aug 22, 2023

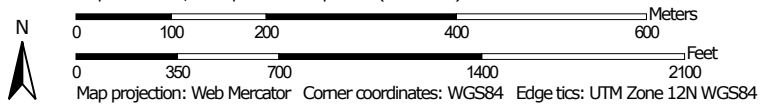


Soil Map—Mesa County Area, Colorado




Soil Map may not be valid at this scale.

Map Scale: 1:7,950 if printed on A portrait (8.5" x 11") sheet.



## 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 1:24,000.

**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: Mesa County Area, Colorado

Survey Area Data: Version 14, Aug 22, 2023

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

Date(s) aerial images were photographed: Jun 24, 2020—Jul 8, 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
BaS	Massadona silty clay loam, saline surface, 0 to 2 percent slopes	1.1	12.6%
Rc	Fruitland sandy clay loam, 0 to 2 percent slopes	2.1	23.7%
Tr	Turley clay loam, 0 to 2 percent slopes	5.8	63.8%
<b>Totals for Area of Interest</b>		<b>9.1</b>	<b>100.0%</b>

**APPENDIX B**  
**Typed Boring Logs**



Huddlestone-Berry Engineering & Testing, LLC  
 2789 Riverside Parkway  
 Grand Junction, CO 81501  
 970-255-8005

# BORING NUMBER B-1

PAGE 1 OF 1

<b>CLIENT</b> City of Fruita	<b>PROJECT NAME</b> 19 Road Improvements
<b>PROJECT NUMBER</b> 00207-0017	<b>PROJECT LOCATION</b> Fruita, CO
<b>DATE STARTED</b> 12/6/23 <b>COMPLETED</b> 12/6/23	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> 4-Inch
<b>DRILLING CONTRACTOR</b> S. McKracken	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> Simco 2000 Truck Rig	▽ <b>AT TIME OF DRILLING</b> 11.0 ft
<b>LOGGED BY</b> TC <b>CHECKED BY</b> MAB	▼ <b>AT END OF DRILLING</b> 11.0 ft
<b>NOTES</b> _____	<b>AFTER DRILLING</b> --

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS			FINES CONTENT (%)
									LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0		ASPHALT (4.5-Inches)										
		Undifferentiated BASE COURSE, SUBBASE COURSE and/or GRADING FILL										
			SS 1	100	5-5-6 (11)							
5		Interbedded Lean CLAY (cl) and Poorly Graded SAND with Silt (sp-sm), brown, moist to wet, soft to very soft / loose to very loose										
			SS 2	78	1-1-2 (3)							
10			SS 3	33	2-1-3 (4)							
15			SS 4	100	1-0-1-1 (1)							
20		Bottom of hole at 20.0 feet.										

GEOTECH BH COLUMNS 00207-0017 19 ROAD IMPROVEMENTS GP.J GINT US LAB.GDT 2/15/24



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 970-255-8005

# BORING NUMBER B-2

PAGE 1 OF 1

<b>CLIENT</b> City of Fruita	<b>PROJECT NAME</b> 19 Road Improvements
<b>PROJECT NUMBER</b> 00207-0017	<b>PROJECT LOCATION</b> Fruita, CO
<b>DATE STARTED</b> 12/6/23 <b>COMPLETED</b> 12/6/23	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> 4-Inch
<b>DRILLING CONTRACTOR</b> S. McCracken	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> Simco 2000 Truck Rig	▽ <b>AT TIME OF DRILLING</b> 8.0 ft
<b>LOGGED BY</b> TC <b>CHECKED BY</b> MAB	▼ <b>AT END OF DRILLING</b> 8.0 ft
<b>NOTES</b> _____	<b>AFTER DRILLING</b> --

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS			FINES CONTENT (%)
									LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0		ASPHALT (6.0-Inches)										
		Undifferentiated BASE COURSE, SUBBASE COURSE and/or GRADING FILL										
			SS 1	83	16-16-13 (29)							
5		Interbedded Lean CLAY (cl) and Poorly Graded SAND with Silt (SP-SM), brown, moist to wet, medium stiff to very soft / medium dense to very loose										
		SS-2: Lab Classified	SS 2	94	2-3-3 (6)			13	NP	NP	NP	11
10												
			SS 3	100	2-1-2 (3)							
15												
			SS 4	17	1-0-0-2 (0)							
20		Bottom of hole at 20.0 feet.										

GEOTECH BH COLUMNS 00207-0017 19 ROAD IMPROVEMENTS GP.J GINT US LAB.GDT 2/15/24



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 Grand Junction, CO 81501  
 970-255-8005

# BORING NUMBER B-3

PAGE 1 OF 1

<b>CLIENT</b> City of Fruita	<b>PROJECT NAME</b> 19 Road Improvements
<b>PROJECT NUMBER</b> 00207-0017	<b>PROJECT LOCATION</b> Fruita, CO
<b>DATE STARTED</b> 12/6/23 <b>COMPLETED</b> 12/6/23	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> 4-Inch
<b>DRILLING CONTRACTOR</b> S. McCracken	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> Simco 2000 Truck Rig	▽ <b>AT TIME OF DRILLING</b> 10.0 ft
<b>LOGGED BY</b> TC <b>CHECKED BY</b> MAB	▼ <b>AT END OF DRILLING</b> 10.0 ft
<b>NOTES</b> _____	<b>AFTER DRILLING</b> --

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS			FINES CONTENT (%)
									LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0		ASPHALT (4.5-Inches)										
		Undifferentiated BASE COURSE, SUBBASE COURSE and/or GRADING FILL										
			SS 1	17	14-12-6 (18)							
5		Interbedded Lean CLAY (CL) and Poorly Graded SAND with Silt (sp-sm), brown, moist to wet, soft to very soft/loose to very loose										
		SS-2: Lab Classified	SS 2	100	0-1-1 (2)			31	28	19	9	91
10			SS 3	83	2-1-2 (3)							
15			SS 4	83	1-1-1-2 (2)							
20		Bottom of hole at 20.0 feet.										

GEOTECH BH COLUMNS 00207-0017 19 ROAD IMPROVEMENTS GP.J GINT US LAB.GDT 2/15/24



Huddlestone-Berry Engineering & Testing, LLC  
 2789 Riverside Parkway  
 Grand Junction, CO 81501  
 970-255-8005

# BORING NUMBER B-4

PAGE 1 OF 1

<b>CLIENT</b> City of Fruita	<b>PROJECT NAME</b> 19 Road Improvements
<b>PROJECT NUMBER</b> 00207-0017	<b>PROJECT LOCATION</b> Fruita, CO
<b>DATE STARTED</b> 12/6/23 <b>COMPLETED</b> 12/6/23	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> 4-Inch
<b>DRILLING CONTRACTOR</b> S. McCracken	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> Simco 2000 Truck Rig	▽ <b>AT TIME OF DRILLING</b> 11.0 ft
<b>LOGGED BY</b> TC <b>CHECKED BY</b> MAB	▼ <b>AT END OF DRILLING</b> 11.0 ft
<b>NOTES</b> _____	<b>AFTER DRILLING</b> --

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS			FINES CONTENT (%)
									LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0		ASPHALT (4.5-Inches)										
		Undifferentiated BASE COURSE, SUBBASE COURSE and/or GRADING FILL										
			SS 1	39	12-9-5 (14)							
5		Interbedded Lean CLAY (cl) and Poorly Graded SAND with Silt (sp-sm), brown, moist to wet, medium stiff to very soft / medium dense to very loose										
			SS 2	78	2-2-2 (4)							
10			SS 3	100	2-3-3 (6)							
15			SS 4	100	0-0-0-1 (0)							
20		Bottom of hole at 20.0 feet.										

GEOTECH BH COLUMNS 00207-0017 19 ROAD IMPROVEMENTS GP.J GINT US LAB.GDT 2/15/24



Huddlestone-Berry Engineering & Testing, LLC  
 2789 Riverside Parkway  
 Grand Junction, CO 81501  
 970-255-8005

# BORING NUMBER B-5

PAGE 1 OF 1

<b>CLIENT</b> City of Fruita	<b>PROJECT NAME</b> 19 Road Improvements
<b>PROJECT NUMBER</b> 00207-0017	<b>PROJECT LOCATION</b> Fruita, CO
<b>DATE STARTED</b> 12/6/23 <b>COMPLETED</b> 12/6/23	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> 4-Inch
<b>DRILLING CONTRACTOR</b> S. McKracken	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> Simco 2000 Truck Rig	▽ <b>AT TIME OF DRILLING</b> 11.0 ft
<b>LOGGED BY</b> TC <b>CHECKED BY</b> MAB	▼ <b>AT END OF DRILLING</b> 11.0 ft
<b>NOTES</b> _____	<b>AFTER DRILLING</b> --

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS			FINES CONTENT (%)
									LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0		ASPHALT (4.5-Inches)										
		Undifferentiated BASE COURSE, SUBBASE COURSE and/or GRADING FILL										
			SS 1	89	6-6-6 (12)							
5		Interbedded Lean CLAY (cl) and Poorly Graded SAND with Silt (sp-sm), brown, moist to wet, soft to very soft / loose to very loose										
			SS 2	78	1-1-1 (2)							
10			SS 3	78	1-2-1 (3)							
15			SS 4	100	1-1-1-1 (2)							
20		Bottom of hole at 20.0 feet.										

GEOTECH BH COLUMNS 00207-0017 19 ROAD IMPROVEMENTS GP.J GINT US LAB.GDT 2/15/24



Huddlestone-Berry Engineering & Testing, LLC  
 2789 Riverside Parkway  
 Grand Junction, CO 81501  
 970-255-8005

# BORING NUMBER B-6

PAGE 1 OF 1

<b>CLIENT</b> City of Fruita	<b>PROJECT NAME</b> 19 Road Improvements
<b>PROJECT NUMBER</b> 00207-0017	<b>PROJECT LOCATION</b> Fruita, CO
<b>DATE STARTED</b> 12/6/23 <b>COMPLETED</b> 12/6/23	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> 4-Inch
<b>DRILLING CONTRACTOR</b> S. McCracken	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> Simco 2000 Truck Rig	▽ <b>AT TIME OF DRILLING</b> 14.0 ft
<b>LOGGED BY</b> TC <b>CHECKED BY</b> MAB	▼ <b>AT END OF DRILLING</b> 14.0 ft
<b>NOTES</b> _____	<b>AFTER DRILLING</b> --

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS			FINES CONTENT (%)
									LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0		ASPHALT (6.5-Inches)										
		Undifferentiated BASE COURSE, SUBBASE COURSE and/or GRADING FILL										
			SS 1	33	19-25-30 (55)							
5		Interbedded Lean CLAY (cl) and Poorly Graded SAND with Silt (sp-sm), brown, moist to wet, medium stiff to very soft / medium dense to very loose										
			SS 2	0	3-4-4 (8)							
10												
			SS 3	78	2-3-4 (7)							
15												
			SS 4	42	2-1-1-2 (2)							
20		Bottom of hole at 20.0 feet.										

GEOTECH BH COLUMNS 00207-0017 19 ROAD IMPROVEMENTS GP.J GINT US LAB.GDT 2/15/24



**APPENDIX C**  
**Laboratory Testing Results**



Huddlestone-Berry Engineering & Testing, LLC  
 2789 Riverside Parkway  
 Grand Junction, CO 81501  
 970-255-8005

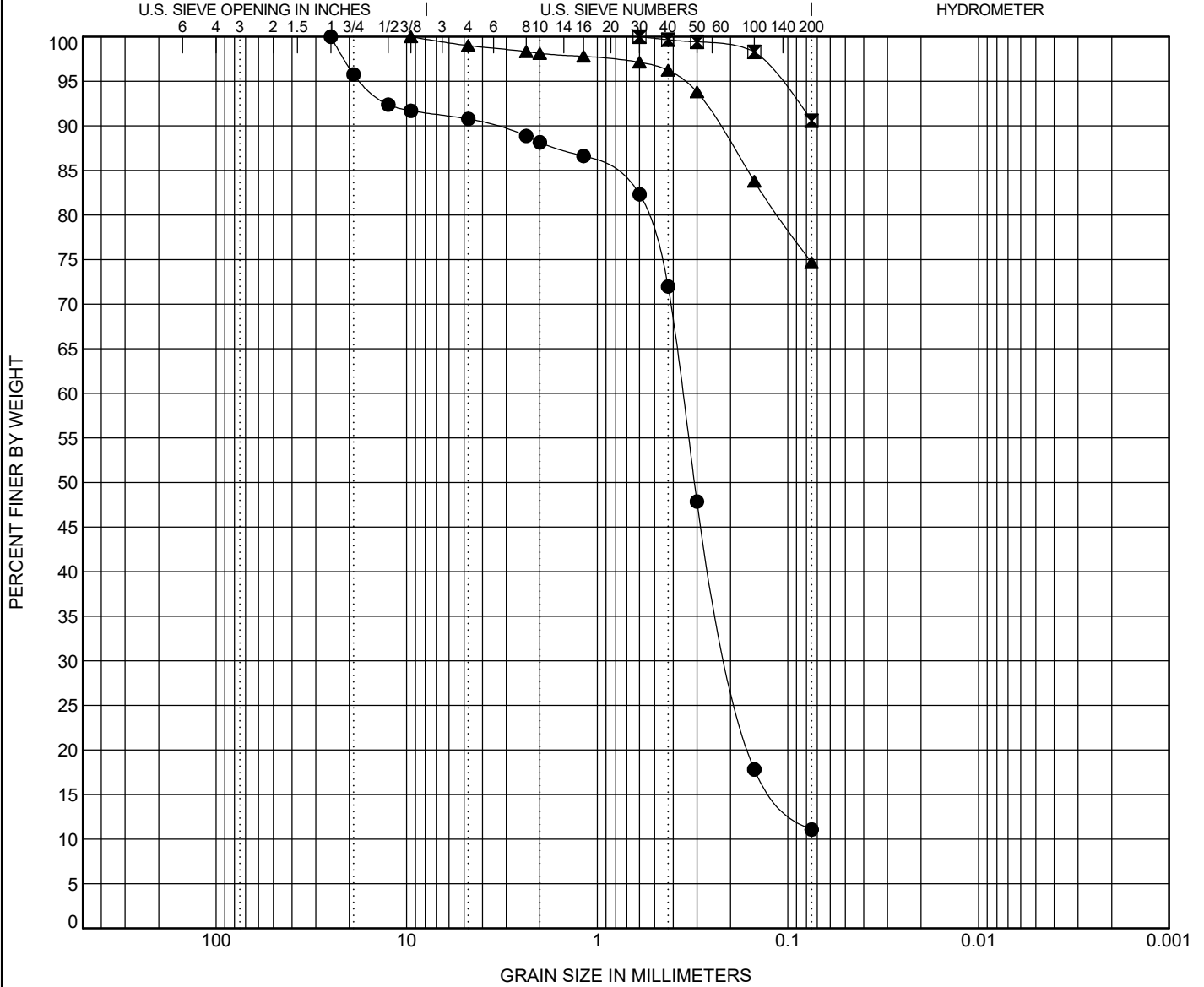
# GRAIN SIZE DISTRIBUTION

CLIENT City of Fruita

PROJECT NAME 19 Road Improvements

PROJECT NUMBER 00207-0017

PROJECT LOCATION Fruita, CO



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification	Classification	LL	PL	PI	Cc	Cu
● B-2, SS-2 12/6	POORLY GRADED SAND with SILT(SP-SM)	NP	NP	NP	1.64	5.32
☒ B-3, SS-2 12/6	LEAN CLAY(CL)	28	19	9		
▲ COMPOSITE 12/6	LEAN CLAY with SAND(CL)	23	14	9		

Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● B-2, SS-2 12/6	25	0.357	0.199		9.2	79.7		11.1
☒ B-3, SS-2 12/6	0.6				0.0	9.4		90.6
▲ COMPOSITE 12/6	9.5				1.0	24.3		74.7

GRAIN SIZE 00207-0017 19 ROAD IMPROVEMENTS.GPJ GINT US LAB.GDT 12/28/23



Huddlestone-Berry Engineering & Testing, LLC  
 2789 Riverside Parkway  
 Grand Junction, CO 81501  
 970-255-8005

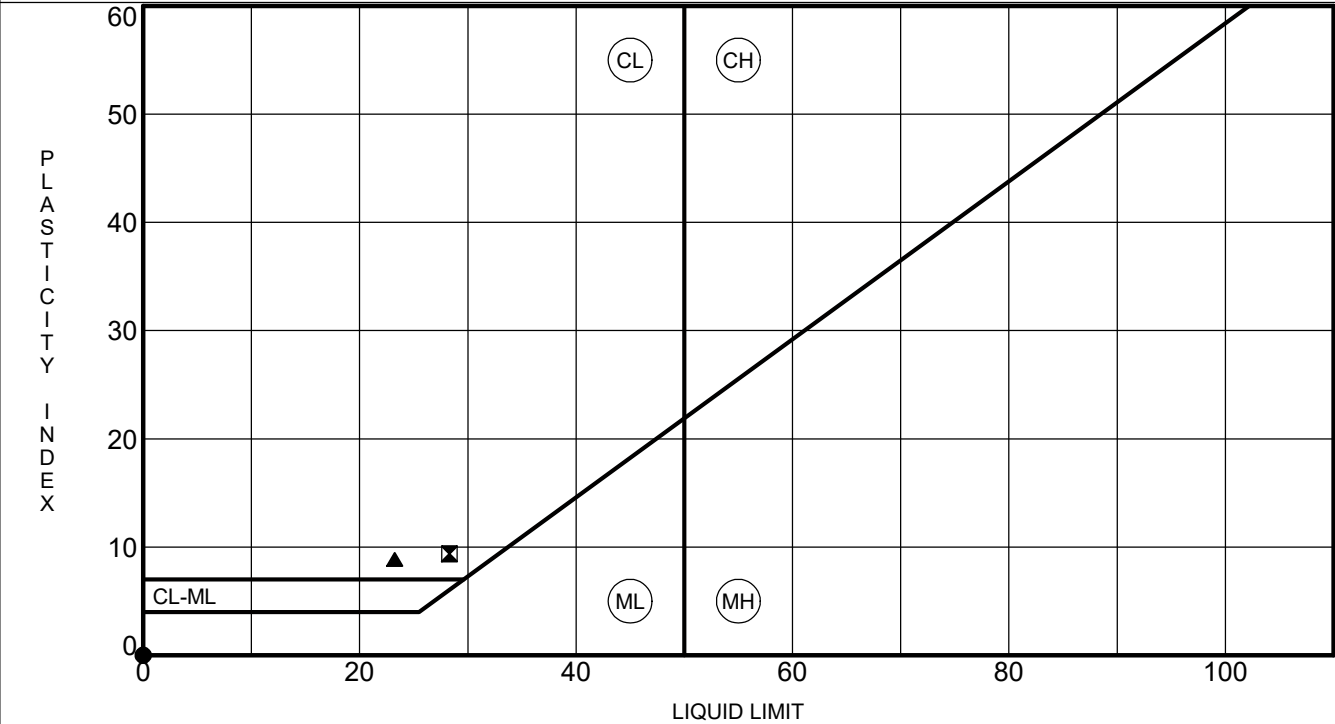
## ATTERBERG LIMITS' RESULTS

**CLIENT** City of Fruita

**PROJECT NAME** 19 Road Improvements

**PROJECT NUMBER** 00207-0017

**PROJECT LOCATION** Fruita, CO



Specimen Identification	LL	PL	PI	#200	Classification
● B-2, SS-2      12/6	NP	NP	NP	11	POORLY GRADED SAND with SILT(SP-SM)
▣ B-3, SS-2      12/6	28	19	9	91	LEAN CLAY(CL)
▲ COMPOSITE      12/6	23	14	9	75	LEAN CLAY with SAND(CL)

ATTERBERG LIMITS 00207-0017 19 ROAD IMPROVEMENTS.GPJ GINT US LAB.GDT 12/28/23



Huddlestone-Berry Engineering & Testing, LLC  
 2789 Riverside Parkway  
 Grand Junction, CO 81501  
 970-255-8005

# MOISTURE-DENSITY RELATIONSHIP

CLIENT City of Fruita

PROJECT NAME 19 Road Improvements

PROJECT NUMBER 00207-0017

PROJECT LOCATION Fruita, CO

Sample Date: 12/6/2023  
 Sample No.: 23-0770  
 Source of Material: COMPOSITE  
 Description of Material: LEAN CLAY with SAND(CL)  
 Test Method (manual): ASTM D698A

## TEST RESULTS

Maximum Dry Density 115.5 PCF  
 Optimum Water Content 13.0 %

### GRADATION RESULTS (% PASSING)

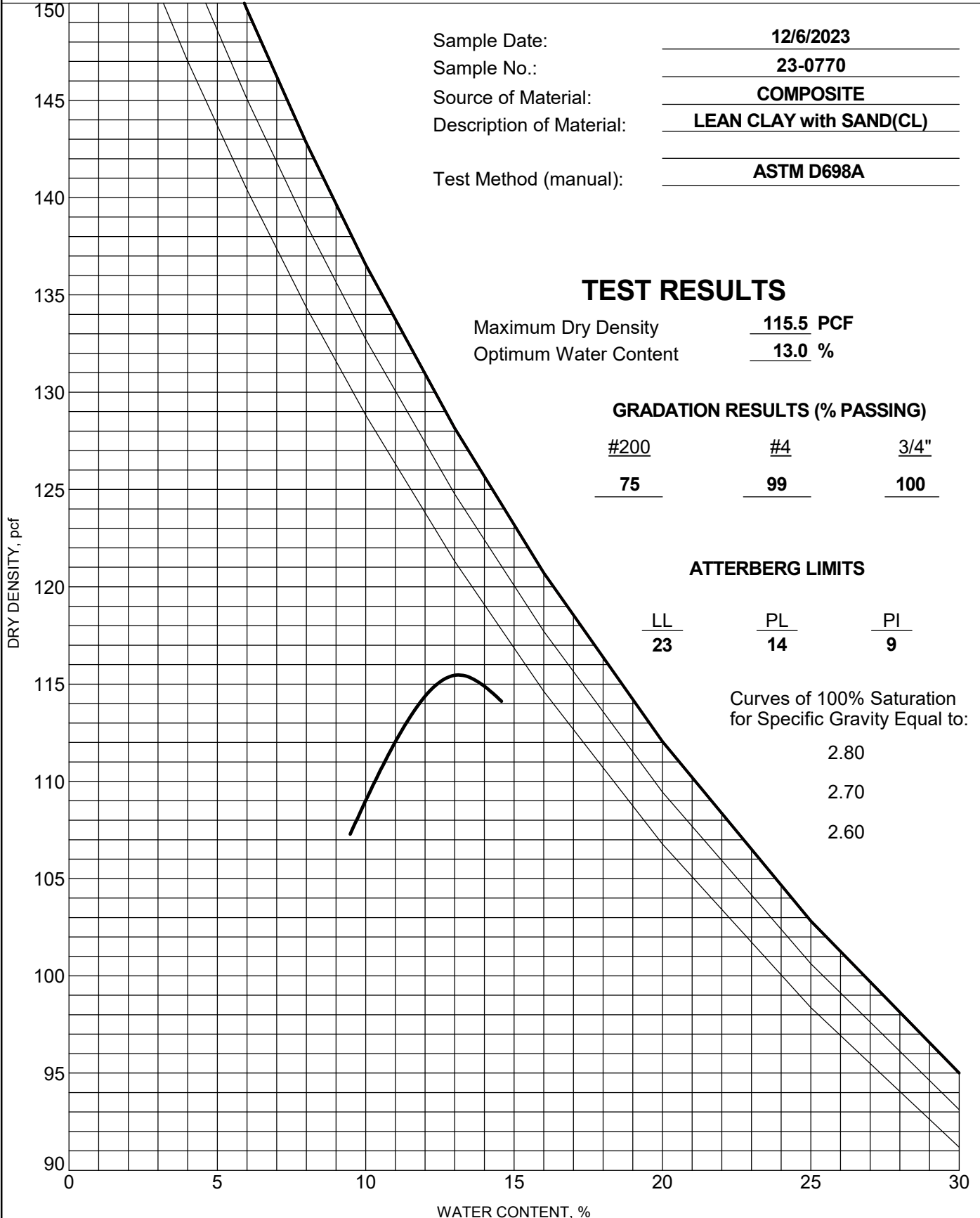
#200	#4	3/4"
<u>75</u>	<u>99</u>	<u>100</u>

### ATTERBERG LIMITS

LL	PL	PI
<u>23</u>	<u>14</u>	<u>9</u>

Curves of 100% Saturation  
 for Specific Gravity Equal to:

2.80  
 2.70  
 2.60





**Project No.:** 00207-0017  
**Project Name:** 19 Road Improvements  
**Client Name:** City of Fruita  
**Sample Number:** 23-0770      **Location:** COMPOSITE

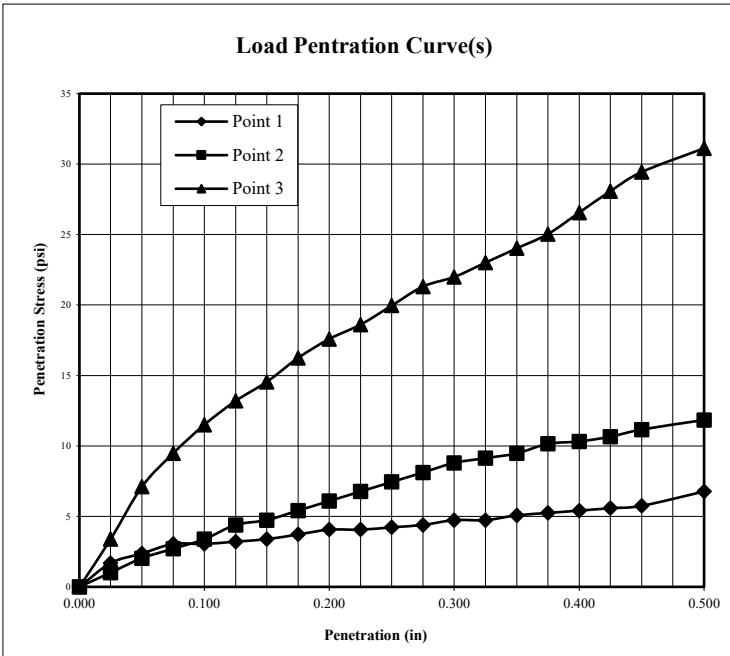
**Authorized By:** Client      **Date:** 12/06/23  
**Sampled By:** TC      **Date:** 12/06/23  
**Submitted By:** WDA      **Date:** 12/28/23  
**Reviewed By:** MAB      **Date:** 02/05/24

**Compaction Method** ASTM D698, Method A

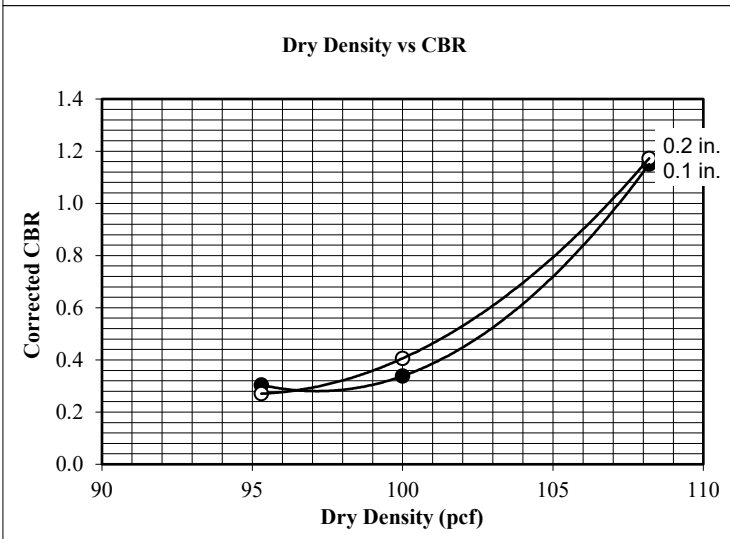
**Maximum Dry Density (pcf):** 115.5  
**Opt. Moisture Content (%):** 13.0  
**Sample Condition:** Soaked  
**Remarks:**

Blows per Compacted Lift:				Point 1	Point 2	Point 3
Surcharge Weight (lbs):				10.0	10.0	10.0
Dry Density Before Soak (pcf):				95.3	100.0	108.2
Dry Density After Soak (pcf):				94.5	98.5	106.5
Moisture Content (%)	Bottom Pre-Test			12.2	12.4	12.7
	Top Pre-Test			11.8	11.9	12.0
	Top 1" After Test			24.0	23.3	21.0
	Average After Soak:			22.7	23.1	18.7
Percent Swell After Soak:				0.8	1.5	1.6

Sample Data								
Point 1			Point 2			Point 3		
Dist. (in)	Load (lbs)	Stress (psi)	Dist. (in)	Load (lbs)	Stress (psi)	Dist. (in)	Load (lbs)	Stress (psi)
0.000	0	0	0.000	0	0	0.000	0	0
0.025	5	2	0.025	3	1	0.025	10	3
0.050	7	2	0.050	6	2	0.050	21	7
0.075	9	3	0.075	8	3	0.075	28	9
0.100	9	3	0.100	10	3	0.100	34	12
0.125	10	3	0.125	13	4	0.125	39	13
0.150	10	3	0.150	14	5	0.150	43	15
0.175	11	4	0.175	16	5	0.175	48	16
0.200	12	4	0.200	18	6	0.200	52	18
0.225	12	4	0.225	20	7	0.225	55	19
0.250	13	4	0.250	22	7	0.250	59	20
0.275	13	4	0.275	24	8	0.275	63	21
0.300	14	5	0.300	26	9	0.300	65	22
0.325	14	5	0.325	27	9	0.325	68	23
0.350	15	5	0.350	28	9	0.350	71	24
0.375	16	5	0.375	30	10	0.375	74	25
0.400	16	5	0.400	31	10	0.400	79	27
0.425	17	6	0.425	32	11	0.425	83	28
0.450	17	6	0.450	33	11	0.450	87	29
0.500	20	7	0.500	35	12	0.500	92	31



Penetration Data								
Point 1			Point 2			Point 3		
Dist. (in)	Load (lbs)	Stress (psi)	Dist. (in)	Load (lbs)	Stress (psi)	Dist. (in)	Load (lbs)	Stress (psi)
0.000	0	0	0.000	0	0	0.000	0	0
0.025	5	2	0.025	3	1	0.025	10	3
0.050	7	2	0.050	6	2	0.050	21	7
0.075	9	3	0.075	8	3	0.075	28	9
0.100	9	3	0.100	10	3	0.100	34	12
0.125	10	3	0.125	13	4	0.125	39	13
0.150	10	3	0.150	14	5	0.150	43	15
0.175	11	4	0.175	16	5	0.175	48	16
0.200	12	4	0.200	18	6	0.200	52	18
0.225	12	4	0.225	20	7	0.225	55	19
0.250	13	4	0.250	22	7	0.250	59	20
0.275	13	4	0.275	24	8	0.275	63	21
0.300	14	5	0.300	26	9	0.300	65	22
0.325	14	5	0.325	27	9	0.325	68	23
0.350	15	5	0.350	28	9	0.350	71	24
0.375	16	5	0.375	30	10	0.375	74	25
0.400	16	5	0.400	31	10	0.400	79	27
0.425	17	6	0.425	32	11	0.425	83	28
0.450	17	6	0.450	33	11	0.450	87	29
0.500	20	7	0.500	35	12	0.500	92	31



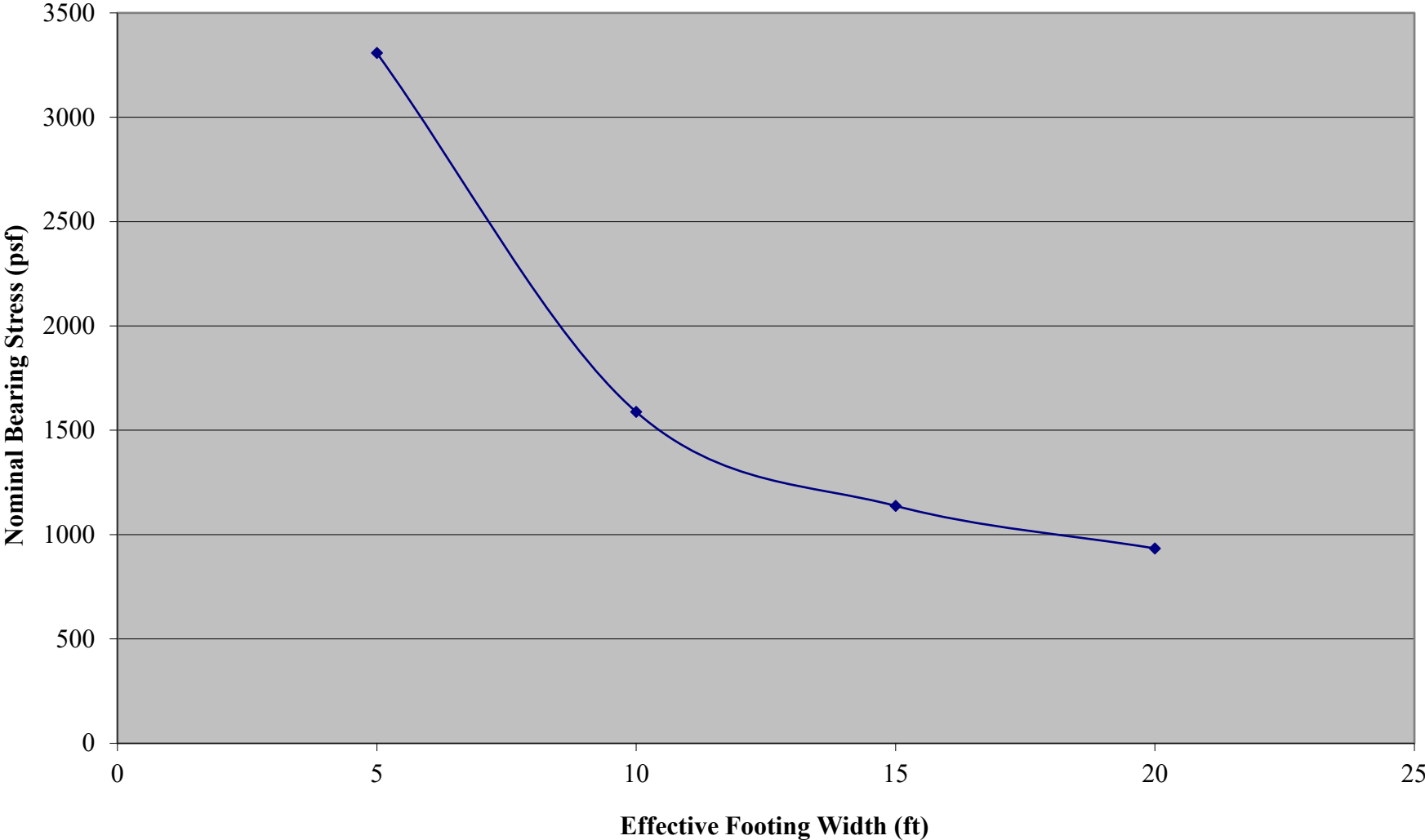
Corrected CBR @ 0.1"		
0.3	0.3	1.2
Corrected CBR @ 0.2"		
0.3	0.4	1.2

Penetration Distance Correction (in)		
0.000	0.000	0.000

**Figure:** \_\_\_\_\_

**APPENDIX D**  
**Bearing Resistance for Service Limit State**

# LRFD Service Limit State





FERGUSON WATERWORKS #2745  
 2868 I-70 BUSINESS LOOP  
 GRAND JCT, CO 81501-0000

Phone: 970-243-4604  
 Fax: 970-241-6622

<b>Deliver To:</b> <b>From:</b> Dwayne Hall <b>Comments:</b>
--

13:20:12 APR 30 2024

FERGUSON WATERWORKS #2745  
 Order Confirmation  
 Phone: 970-243-4604  
 Fax: 970-241-6622

**Order No:** 1506609      **Req Date:** 05/01/24      **Ship Via:** DIRECT DELIVERY SERVIC  
**Order Date:** 04/01/24      **Terms:** NET 10TH PROX  
**Writer:** DFH

**Sold To:** CITY OF FRUITA      **Ship To:** CITY OF FRUITA  
 325 E ASPEN AVE STE 155      900 E KIEFER AVE  
 FRUITA, CO 81521      CHRIS DEHMEL 970-858-8377  
 FRUITA, CO 81521

**Cust PO#:** 000123433      **Job Name:** 19 IRRIGATION

Item	Description	Quantity	Net Price	UM	Total
A30650020DW	STORM DRAIN 30X20 F2648 W/TITE SLD HDPE PIPE	1720	39.786	FT	68431.92
A24650020DW	24X20 F2648 W/TITE SLD HDPE PIPE	1260	26.728	FT	33677.28
A15650020DW	15X20 F2648 W/TITE SLD HDPE PIPE	500	13.150	FT	6575.00
N2824AGS	24 DRN BASIN SWR Note: Drain basin price based on 5ft height	7	1682.330	EA	11776.31
SP-A1569AG	15 ADAPTER W/SDR35 BELL	1	349.880	EA	349.88
			<b>Net Total:</b>		\$120810.39
			<b>Tax:</b>		\$0.00
			<b>Freight:</b>		\$0.00
			<b>Total:</b>		\$120810.39

**WARRANTY PROVISIONS**

The purchaser's sole and exclusive warranty is that provided by the manufacturer, if any. Seller makes no express or implied warranties. SELLER DISCLAIMS ALL EXPRESS OR IMPLIED WARRANTIES INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL SELLER BE LIABLE FOR ANY INCIDENTAL, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING DIRECTLY OR INDIRECTLY FROM THE OPERATION OR USE OF THE PRODUCT. SELLER'S LIABILITY, IF ANY, SHALL BE LIMITED TO THE NET SALES PRICE RECEIVED BY SELLER. Complete Terms and Conditions are available upon request or can be viewed on the web at <https://www.ferguson.com/content/website-info/terms-of-sale>

**LEAD LAW WARNING:** It is illegal to install products that are not "lead free" in accordance with US Federal or other applicable law in potable water systems anticipated for human consumption. Products with \*NP in the description are NOT lead free and can only be installed in non-potable applications. Buyer is solely responsible for product selection. Buyer shall accept delivery of products within 60 days of Seller receiving the products at Seller's warehouse. If Buyer causes or requests a delay in delivery of the products, Buyer may be subject to storage fees and additional costs caused by such delay. Seller reserves the right to requote the products and reschedule the delivery date, subject to manufacturer's lead times and price increases, if Buyer is unable to accept delivery within 60 days.



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Scan the QR code or use the link below to complete a survey about your orders:

<https://survey.medallia.com/?bidsorder&fc=2745&on=57192>



Run Date: 4/29/24

Preshipment Notification



Customer #	209807
Order #	U560125
Date Ordered	03/18/24
Job #	19 ROAD
Job Name	19 RD PIPE
Customer Reference	
Purchase Order #	0000123434
Method of Shipment	DIRECT
Contract Order #	U560086
Ordered By	
Ship Via	

**Sold To:**  
 CITY OF FRUITA  
 325 E ASPEN AVE STE 155  
 FRUITA, CO 81521 2298

**Ship To:**  
 CITY OF FRUITA  
 19 ROAD IMPROVEMENTS- PIPE  
 19 ROAD & HWY 50  
 CHRIS 970-210-0716  
 FRUITA, CO 81521

**Branch:**  
 GRAND JUNCTION CO  
 Branch - 241  
 3026 I-70 Business Loop  
 Grand Junction, CO 81504  
 Phone: 970-628-7104

Bid Seq#	Product Code	Description	Qty Ordered	Qty Shipped	Qty B/O	Net Price	UOM	Ext Price
30	022425W	24 PVC C900 DR25 PIPE (G) 20' PC165	540		540		FT	
40	021825W	18 PVC C900 DR25 PIPE (G) 20' PC165	80		80		FT	
50	021225W	12 PVC C900 DR25 PIPE (G) 20' PC165	1640		1640		FT	
160	04153514	15 PVC SDR35 SWR PIPE (G) 14'	1862		1862		FT	
170	04123514	12 PVC SDR35 SWR PIPE (G) 14'	1106		1106		FT	
230	020818W	8 PVC C900 DR18 PIPE (G) 20' PC235	1300		1300		FT	
250	020818W	8 PVC C900 DR18 PIPE (G) 20' PC235	80		80		FT	

Terms in accordance with shipping manifest.

<p><b>Special Instructions/Comments:</b>          WARNING-HEAVY ITEM-LIFT ASSISTANCE REQ'D          BID # 3334246 C/O # U560086          BID NM: CITY OF FRUITA- PIPE</p>
---

Run Date: 4/29/24

Preshipment Notification



Customer #	209807
Order #	U560278
Date Ordered	03/18/24
Job #	19 ROAD
Job Name	19 RD PIPE
Customer Reference	
Purchase Order #	0000123434
Method of Shipment	OUR TRUCK
Contract Order #	U560086
Ordered By	CHRIS
Ship Via	CORE & MAIN LP

**Sold To:**  
 CITY OF FRUITA  
 325 E ASPEN AVE STE 155  
 FRUITA, CO 81521 2298

**Ship To:**  
 CITY OF FRUITA  
 19 ROAD IMPROVEMENTS- PIPE  
 19 ROAD & HWY 50  
 CHRIS 970-210-0716  
 FRUITA, CO 81521

**Branch:**  
 GRAND JUNCTION CO  
 Branch - 241  
 3026 I-70 Business Loop  
 Grand Junction, CO 81504  
  
 Phone: 970-628-7104

Bid Seq#	Product Code	Description	Qty Ordered	Qty Shipped	Qty B/O	Net Price	UOM	Ext Price
70	21I124M	12 MJ 45 C153 IMP	6	6			EA	
80	21AMF8122012PV	12 EBAA MEGALUG C900IPS 2012PV RED	18	18			EA	
90	21AM12PMLCB	12" COR-BLUE MEGALUG ACC KIT L/GLAND-W/3/4"X4.5" B&N	18	18			EA	
100	8770027500560	LAN 12" MJ NRS GATE VALVE W/ OP NUT OL 700-275-00560	1	1			EA	
110	21AMF8122012PV	12 EBAA MEGALUG C900IPS 2012PV RED	2	2			EA	
120	21AM12PMLCB	12" COR-BLUE MEGALUG ACC KIT L/GLAND-W/3/4"X4.5" B&N	2	2			EA	
130	67T06I	6X1000' DETECTO TAPE IRRIGAT.	3	3			EA	
180	2712CH	12 PVC SDR35 SWR CAP HUB SOLVENT WELD (GLUE)	2	2			EA	
190	67T06S	6X1000' DETECTO TAPE-SEWER	5	5			RL	
	21I12T100M	12X10 MJ TEE C153 IMP	2	2			EA	

Terms in accordance with shipping manifest.

**Special Instructions/Comments:**  
 WARNING-HEAVY ITEM-LIFT ASSISTANCE REQ'D  
 BID # 3334246 C/O # U560086  
 BID NM: CITY OF FRUITA- PIPE



Customer #	209807
Order #	U560309
Date Ordered	03/18/24
Job #	19 ROAD
Job Name	19 RD PIPE
Customer Reference	
Purchase Order #	0000123434-- UTE WTR
Method of Shipment	OUR TRUCK
Contract Order #	U560086
Ordered By	CHRIS
Ship Via	CORE & MAIN LP

**Sold To:**  
 CITY OF FRUITA  
 325 E ASPEN AVE STE 155  
 FRUITA, CO 81521 2298

**Ship To:**  
 CITY OF FRUITA  
 19 ROAD IMPROVEMENTS- PIPE  
 19 ROAD & HWY 50  
 CHRIS 970-210-0716  
 FRUITA, CO 81521

**Branch:**  
 GRAND JUNCTION CO  
 Branch - 241  
 3026 I-70 Business Loop  
 Grand Junction, CO 81504  
  
 Phone: 970-628-7104

Bid Seq#	Product Code	Description	Qty Ordered	Qty Shipped	Qty B/O	Net Price	UOM	Ext Price
220	96TW10HMMWPEBL500R	10GA HMWPE SOLID WIRE BLU 500' ROLL	3	3			RL	
240	020618W	6 PVC C900 DR18 PIPE (G) 20' PC235	20	20			FT	
260	19AT08RBRLK	8 RIEBERLOK REST GSKT SBR FOR C900 PVC C900RLOK08	4	4			EA	
270	5108A236119	8 A2361-19 MJXFLG RW GV OL L/A	2	2			EA	
280	5106A236119	6 A2361-19 MJXF RW GV OL L/ACC	1	1			EA	
290	5102A23628	2 A2362-8 THRD RW GV OL ON 020A236208LN	2	2			EA	
300	21T08AF	8 MJXFLG ADPT C153 USA	1	1			EA	
310	21T082M	8 MJ 22-1/2 C153 USA	2	2			EA	
320	21T08T060F	8X6 MJXFLG TEE C153 USA	1	1			EA	
330	21T084M	8 MJ 45 C153 USA	4	4			EA	
340	60A423543325	A423 5'6"B NST HYD W/STORZ 6MJ 3W OL L/ACC RED A423-543325	1	1			EA	
350	0807S100K	3/4 SOFT K COPPER TUBE 100'	200	200			FT	
360	71BR2S0899IP075	BR2S0899IP075 SAD 8X3/4IP 8.99-9.67 DBL STRAP BRNZ SAD STAINLESS STEEL STRAPS	6	6			EA	
370	3607B25028N	B25028N 3/4 BALL CORP MIPXCTSC AWWA IPXCTS COMP NO LEAD	6	6			EA	
380	59VBBOT363A	36" VLV BOX BTM SLIP 6855 IMP	5	5			EA	
390	59VBT16AC	16T V-BOX SLIP TOP 6855 IMP CASTINGS (IMPORT)	5	5			EA	
400	59VBLWC	5-1/4 V-BOX LID "WATER" CASTINGS (IMPORT)	5	5			EA	
410	21AMF8082008PV	8 EBAA MEGALUG C900&IPS 2008PV RED	17	17			EA	
420	21AMF8062006PV	6 EBAA MEGALUG C900&IPS 2006PV RED	1	1			EA	
430	21AM08PMLCB	8" COR-BLUE MEGALUG ACC KIT	15	15			EA	



Customer #	209807
Order #	U560309
Date Ordered	03/18/24
Job #	19 ROAD
Job Name	19 RD PIPE
Customer Reference	
Purchase Order #	0000123434-- UTE WTR
Method of Shipment	OUR TRUCK
Contract Order #	U560086
Ordered By	CHRIS
Ship Via	CORE & MAIN LP

**Sold To:**  
 CITY OF FRUITA  
 325 E ASPEN AVE STE 155  
 FRUITA, CO 81521 2298

**Ship To:**  
 CITY OF FRUITA  
 19 ROAD IMPROVEMENTS- PIPE  
 19 ROAD & HWY 50  
 CHRIS 970-210-0716  
 FRUITA, CO 81521

**Branch:**  
 GRAND JUNCTION CO  
 Branch - 241  
 3026 I-70 Business Loop  
 Grand Junction, CO 81504  
  
 Phone: 970-628-7104

Bid Seq#	Product Code	Description	Qty Ordered	Qty Shipped	Qty B/O	Net Price	UOM	Ext Price
440	21AM06PMLCB	L/GLAND-W/3/4"X4" B&N 6" COR-BLUE MEGALUG ACC KIT	1	1			EA	
450	21AM08PMLGVCB	L/GLAND-W/3/4"X4" B&N 8" COR-BLUE MEGALUG GV ACC KIT	2	2			EA	
460	21AM06PMLGVCB	L/GLAND-W/3/4"X4" B&N 6" COR-BLUE MEGALUG GV ACC KIT	1	1			EA	
470	24AFBNGF08RAS	L/GLAND-W/3/4"X4" B&N 8X1/8 FLG ACC SET 304SS RR FF GSKT	2	2			EA	
480	24AFBNGF06RAS	6X1/8 FLG ACC SET 304SS RR FF GSKT	1	1			EA	
510	21T08T040F	8X4 MJXFLG TEE C153 USA	2	2			EA	
520	24T04FB20PR	4X2 TAPT BLIND FLG DI PR USA	2	2			EA	
530	21AMF8082008PV	8 EBAA MEGALUG C900&IPS 2008PV RED	4	4			EA	
540	21AM08PMLCB	8" COR-BLUE MEGALUG ACC KIT L/GLAND-W/3/4"X4" B&N	4	4			EA	
550	24AFBNGF04RAS	4X1/8 FLG ACC SET 304SS RR FF GSKT	2	2			EA	
560	91010143C1	1" 143C.1 COMB AIR REL VALVE	2	2			EA	
570	3420B5544ABNL	2 R&W F/P BALL VALVE 5544AB NO LEAD BRASS	2	2			EA	
580	3120N040S304	2X4 304SS NIPPLE	2	2			EA	
590	3110N040S304	1X4 304SS NIPPLE	2	2			EA	
600	30I20B10NL	2X1 BRASS BUSHING NO LEAD (I)	2	2			EA	

Run Date: 4/29/24

Preshipment Notification



Customer #	209807
Order #	U560309
Date Ordered	03/18/24
Job #	19 ROAD
Job Name	19 RD PIPE
Customer Reference	
Purchase Order #	0000123434-- UTE WTR
Method of Shipment	OUR TRUCK
Contract Order #	U560086
Ordered By	CHRIS
Ship Via	CORE & MAIN LP

**Sold To:**  
 CITY OF FRUITA  
 325 E ASPEN AVE STE 155  
 FRUITA, CO 81521 2298

**Ship To:**  
 CITY OF FRUITA  
 19 ROAD IMPROVEMENTS- PIPE  
 19 ROAD & HWY 50  
 CHRIS 970-210-0716  
 FRUITA, CO 81521

**Branch:**  
 GRAND JUNCTION CO  
 Branch - 241  
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 Grand Junction, CO 81504  
  
 Phone: 970-628-7104

Bid Seq#	Product Code	Description	Qty Ordered	Qty Shipped	Qty B/O	Net Price	UOM	Ext Price
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Terms in accordance with shipping manifest.

<b>Special Instructions/Comments:</b> WARNING-HEAVY ITEM-LIFT ASSISTANCE REQ'D BID # 3334246 C/O # U560086 BID NM: CITY OF FRUITA- PIPE
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# MANDATORY PRE-BID MEETING

Monday, April 29<sup>th</sup>, 2024; 1:30 PM

**PROJECT: 19 Rd. Improvements**

**PROJECT NUMBER: 130-750-77-4730**

**BID OPENING: Friday, May 10<sup>th</sup>, 2024; 1:30 PM**

Representative/Company Name	Mailing Address	Phone	E- Mail
Lane Johnson Mountain Valley Construction	2756 WINTERS AVE. Grand Junction CO 81501	970-250-0035	Lane (M) M VC GJ. com
JACOB DAVIS UNITED COMPANIES	2273 REVER Rd GRAND Jct, CO 81505	970-243-4900	Jacob.davis@unitedco.com
DAVID HILLBRAND GOULD CONSTRUCTION	P.O BOX 130 GLENWOOD SPRINGS, CO 81602	970-948-9326	dauid@gouldconstruction.com
Brandon Martinez Spyglass Surveys	1535 Elm Ave Grand Jct, CO 81501	970-852-5565	spyglass Surveys@gmail.com
HAYLEY HUGHES DIRTWORKS CONST. LLC	1010 21 1/2 ROAD G.J., CO 81505	970-256-1691	dirtworksconstruction@gmail.com
TRAVIS MADSEN FNF CONSTRUCTION INC	4901 S. WINDERMERE ST. LITTLETON CO 80120	303-419-2143 M 303-738-5137	Tmadsen@FNFINC.COM



**MANDATORY PRE-BID MEETING**  
**Monday, April 29<sup>th</sup>, 2024; 1:30 PM**

**PROJECT: 19 Rd. Improvements**  
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**BID OPENING: Friday, May 10<sup>th</sup>, 2024; 1:30 PM**

Representative/Company Name	Mailing Address	Phone	E- Mail
Steve Martinez City of Fruita	325 E Aspen Ave, Ste 155 Fruita, CO 81521	(970) 858-8377 (O) (970) 712-2513 (C)	smartinez@fruita.org
Chris Dehmel City of Fruita	325 E Aspen Ave, Ste 155 Fruita, CO 81521	(970) 858-8377 (O) (970) 210-0716 (C)	cdehmel@fruita.org
MARK GREEN M.A. CONCRETE CONS.	2323 RIVER RD GJ CO 81505	970-250-9340 970 243-3210	MARKG@MACONCRETEGJ.COM
JAMES MCKEW Rolland Consulting ENGINEERS	405 RIDGES BLVD G.J. Co. 81507	970-243-8300	JIM@RCEGJ.COM
Kelly J. WASHINGTON K&D CONSTRUCTION, INC.	507 FURUITVALE CT "A" G.J. Co. 81504	970-200-8882	Kelly@KDCONSTRUCTIONINC.COM
Joe Vesco Core + Main	3016 I-70 Business loop GJ Co 81504	970-688-7104	Joe.Vesco@CoreandMain.com
Con-Sy Inc	719 ARROWST Rd Grand Junction Co 81505	970-549-1270 office 976 683-1604 cell	Wayne.consy@gmail.com