

# **STORMWATER MANAGEMENT PLAN BAR-X PIPELINE SEGMENT A2** PIPELINE WITHIN FALCON AREA WATER AND WASTEWATER AUTHORITY

SEPTEMBER 2024

EPC Project Number: CDR248

PREPARED FOR Falcon Area Water & Wastewater Authority 2138 Flying Horse Club Dr Colorado Springs, CO 80921

CONTRACTOR: TBD

OPERATOR APPLICANT NAME: TBD Telephone: QUALIFIED STORMWATER MANAGER: TBD Telephone: Email: QUALIFIED STORMWATER MANAGER ALTERNATE: TBD Email:





### STORMWATER MANAGEMENT PLAN

Falcon Area Water & Wastewater Authority Bar-X Pipeline Segment A2

### **TABLE OF CONTENTS**

1		JECT CONTACTS	
2	SITE	LOCATION AND DESCRIPTION	. 3
	2.1	Site Location	3
	2.2	Description of Construction	4
	2.3	Sequence of Construction Activities	
	2.4	Estimates of Excavation	
	2.5	Drainage Characteristics	
	2.6	Soils Description	
	2.7	Existing Vegetation and Percent Ground Cover	8
	2.8	Potential Pollution Sources	
	2.9	Receiving Water and Stream Crossings	9
3	BES	T MANAGEMENT PRACTICES	
	3.1	Erosion and Sediment Controls	
	3.2	SWMP Map	10
	3.3	Final Stabilization and Long-Term Storm Water Management	
	3.4	Material Handling and Spill Prevention	
	3.5	Pollutant Prevention Control Measures	
	3.6	Qualified Stormwater Manager	
	3.7	Inspection and Maintenance	
	3.8	SWMP Availability and Revisions	
	3.9	Non-Stormwater Discharges	13

### Item Numbers refer to SWMP Checklist

Item 2. Correct of Appendices (Ap appears as the t appendix)	px G Appendix R – General Permit Application
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A-2	Item 2. Please add cover pages for current appendices included in document (Appx D, F, G, H, I) and as well as for appendices not yet included in the document (Appx A, B, C, E)



# **1.0 PROJECT CONTACTS**

### Applicant/Owner Information

Name:	Falcon Area Water & Wastewater Authority
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### **Contractor**

Name: TBD Address:

> OPERATOR APPLICANT NAME: Telephone:

QUALIFIED STORMWATER MANAGER: Telephone: Email:

QUALIFIED STORMWATER MANAGER ALTERNATE: Email:

# 2.0 SITE LOCATION AND DESCRIPTION

### **2.1 SITE LOCATION**

The proposed 4.8-mile Bar-X Segment A2 Pipeline begins at the tie in point for the previously constructed Bar-X Segment A1 located within a Xcel Energy easement situated on property owned by El Paso County, and with a corresponding schedule number of 5212000002. The 24" pipeline alignment will follow the Xcel Energy easement and run parallel to the existing power poles from the initial construction point to Hodgen Road, crossing to the North side, total approximately 4.2-miles of 24" pipe. The pipe will then continue on the following alignment decreasing to an 8" line:

- Run North parallel to the Winsome lots
- The 8" pipeline will then continue north parallel to the Winsome lots



- Then turn northeast where the 8" line will connect to the future Winsome Well site 1.

Future pipeline segments will connect to well sites located at Winsome, Bar-X, and Shamrock West; developments located North of Hodgen Road. The laydown yard for the pipeline portion of the project is located at the unplatted Winsome Wells Site, and the end of construction for the project in El Paso County, Colorado. The site is referenced by El Paso County Schedule 5100000524. The Bar-X Pipeline Segment A2 facilities and pipelines will be entirely within existing easements and El Paso County right of way.

The vicinity map in Figure 2-1 below shows the proposed water line location.

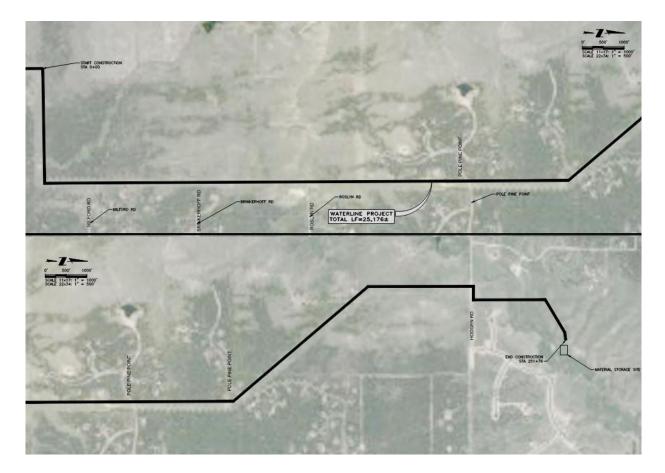


Figure 0-1: Vicinity Map

### 2.2 DESCRIPTION OF CONSTRUCTION

The project generally includes the construction of 4.8 miles of PVC pipe, of which 4.2 miles is 24" diameter and the remaining length is 8" PVC. Of the 4.8 miles of pipeline to be installed within El Paso County, there are 3 total road crossings and are as follows. The 24" pipeline will cross Pole Pine Point at two separate locations, and Hodgen Road. 4.2 miles of the project will be located within the existing Excel Energy easement, and the other portion of the project will be located within existing utility and water easements and acquired easements. Area outside the paved roadways that will be disturbed are generally grazing lands and all disturbed areas will be re-vegetated. Pipeline installation will consist of excavation necessary to properly bed and bury the water line to maintain 6 feet of cover over the pipeline. Trench cuts are expected to be no deeper than 15 feet and generally 6-8 feet. Above ground





Appendix C is miss from this documen

structures include air/vac vault vent piping assemblies and hydrants. There is also a 40,000-gallon equalization tank, to be installed midway. The pipeline will connect the existing A1 segment of the Bar-X pipeline to the proposed Winsome Well Site 1.

### 2.3 SEQUENCE OF CONSTRUCTION ACTIVITIES

The overall planned sequence of construction activities is outlined below with a full schedule included in Appendix C of this report.

	Description	Time Frame
	Construction Staking (ongoing)	November 2024 - May 2025
	Erosion Control BMPs (ongoing)	November 2024 - May 2025
sing	Excavation and Installation of Pipeline	December 2024 – May 2025
nt	Disinfection and Commissioning	May 2025
	Revegetation (ongoing)	May 2025

The overall time period for pipeline installation is November 2024 to May 2025 with final site stabilization by spring 2025. This time schedule could vary depending on the timeline for material procurement and permitting. This project does not require phasing of construction activities.

### 2.4 ESTIMATES OF EXCAVATION

The total acreage of land within the temporary and permanent easements for the pipeline is approximately 46.3 acres. All disturbance and excavation will take place within existing roadway rightof-way, or temporary and permanent easement/revocable license boundaries. Actual disturbed area is anticipated to be 17.4 acres of the total. Disturbed areas within existing roadways will be repaved and any disturbed areas within land with existing vegetation will be revegetated. No permanent changes to the existing grade will be made as a result of the pipeline project.

Area Description	Diameter Of Pipe	Length Of Pipe (Ft)	Total Project Area (Acres)	Total Area of Disturbance (Acres)	Total Area Requiring Revegetation (Acres)	Current Impervious Area (Acres)
El Paso County ROW	24"	22,376	41.10	15.41	15.36	0.05
El Paso County ROW	8″	2,800	5.14	1.93	1.93	0.00

### Table 2.1: Area of Disturbance Summarv

### 2.5 DRAINAGE CHARACTERISTICS

### 2.5.1 PIPELINE

Field surveys and wetland delineations were conducted on October 17, 2019 and September 23, 2024 to identify surface water resources along the proposed alignment. One swale and three emergent wetlands were delineated during the field surveys and are listed from south to north in Table 2.2. Swales are drainages that do not exhibit ordinary high water marks (OHWM) and are therefore unlikely to be considered jurisdictional by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. Please refer to Figure 2-2 for the locations of the swale and wetlands. The project area is considered the area within 25 feet of the proposed waterline (50-foot buffer total).





### Table 2.2: Surface Water Resources within the Project Area

Name	USGS Name	Length in Project	Area of Temporary	Area of Permanent
Name	0303 Name	Area	Impacts	Impacts
Wetland 1	Snipe Creek	54.5 feet	0.02 acre	None
Swale	Kiowa Creek	81.5 feet	None	None
Wetland 2	West Kiowa Creek	50.0 feet	0.07 acre	None
Wetland 3	Tributary to West Kiowa Creek	56.5 feet	0.03 acre	None

The pipeline crosses a drainage facility (storm pipes, inlets, culverts, etc.) as noted in the erosion control plans attached as Appendix A. According to the Federal Emergency Management Agency (FEMA) floodplain shapefiles, most of the Project lies within Zone X, defined as areas outside the 100-year floodplain. The proposed waterline crosses two areas of Zone A, which are areas with a 1 percent annual chance of flooding. These areas are along West Kiowa Creek and its tributary just north of it.

### **2.5.2 LAY DOWN AREA**

The lay down yard does not impose any impact any swales or wetlands and drains to the southeast as shown in Figure 2.2 at the end of the segment A2 pipeline.

Appendix A is missing from this document



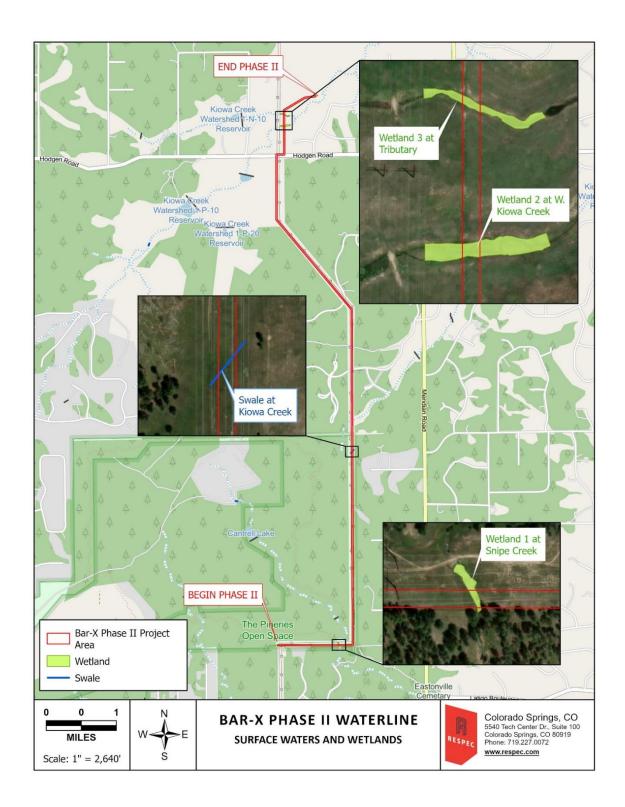


Figure 0-2: Surface Water and Wetlands in Project Area

2.6 SOILS DESCRIPTION



Soils were mapped using the NRCS Web Soil Survey and include the following:

- Alamosa loam, 1-3% slopes (1)
- Elbeth sandy loam, 3-8% slopes (25)
- Elbeth sandy loam, 8-15% slopes (26)
- Holderness loam, 8-15% slopes (36)
- Kettle gravelly loamy sand, 3-8% slopes (40)
- Tomah-Crowfoot loamy sand, 3-8% slopes (92)

These soil types are classified as Hydrologic Soil Group B except for Holderness loam, 8-15% slopes, which is in Hydrologic Soil Group C, and Alamosa loam, 1-3% slopes, which is in Hydrologic Soil Group D.

- Hydrologic Soil Group B are soils having moderate infiltration rates when thoroughly wetted, consisting chiefly of moderately deep or deep, moderately well or well drained soils with moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission.
- Hydrologic Soil Group C are soils having slow infiltration rates when thoroughly wetted, consisting chiefly of (1) soils with a layer that impedes the downward movement of water, or (2) soils with moderately fine or fine textures and slow infiltration rate. These soils have a slow rate of water transmission.
- Hydrologic Soil Group D are soils having very slow infiltration rates when thoroughly wetted, consisting chiefly of (1) clayey soils with high swelling capacity or potential, (2) soils with a high permanent water table, (3) soils with claypan or clay layer at or near the surface, and (4) shallow soils over nearly impervious materials. These soils have a very slow rate of water transmission.

Any potential erosion impacts on discharge during construction will be mitigated by installing BMPs as discussed in Section 3.

The geotechnical evaluation report by Entech Engineering, Inc, dated 3/30/2022, notes that soils along the alignment were comprised of silty to clayey sand, very sandy clay, silty sandstone bedrock, and very sandy claystone bedrock. A total of five (5) exploratory borings were drilled to a depth of approximately 15 feet through the ground along the new pipeline alignment.

### 2.7 EXISTING VEGETATION AND PERCENT GROUND COVER

The lay down area will be staged on a construction site that was previously disturbed, developed, and utilized for spoils and does not have any substantial vegetation, roughly 0-5%. Any area utilized by the contractor for the purpose of a laydown yard will be reseeded and stabilized.

The majority of the pipeline will be installed in areas that are vegetated, varying from 60-100% along the pipeline. A field survey was completed by a qualified biologist and vegetation identified included introduced and native grass and herbaceous species, such as side oats grama (Bouteloula curtipendula), hairy grama (B. hirsuta), little bluestem (Schizachyrium scoparium), western wheatgrass (Pascopyrum smithii), creeping bentgrass (Agrostis stolonifera), aster (Aster sp.), western ragweed (Ambrosia psilostachya), yarrow (Achillea millefolium),common mullein (Verbascum thapsus),



pepperweed (Lepidium virginicum), sweet yellow clover (Melilotus officinalis), and prickly pear (Opuntia polycantha). Shrub and tree species observed include ponderosa pine (Pinus ponderosa) and grayleaf willow (Salix glauca).

### **2.8 POTENTIAL POLLUTION SOURCES**

Pollutant sources which shall be evaluated for potential to contribute to stormwater discharge from the subject site may include the following:

- Disturbed and stored soils
- Vehicle tracking of sediments
- Management of contaminated soils
- Loading and unloading operations
- Non-industrial waste sources such as worker trash and portable toilets
- Other areas or procedures where potential spills can occur

Construction dewatering is not anticipated within the limits of construction since no groundwater was encountered during soils testing for the geotechnical report. Should it be required, BMPs shall be implemented immediately, and the contractor shall obtain a Construction Dewatering Permit from the Colorado Department of Public Health and Environment (CDPHE) and comply with all conditions of the permit.

### **2.9 RECEIVING WATER AND STREAM CROSSINGS**

The pipeline alignment crosses one swale (dry drainage channel) with intermittent flows and three emergent wetlands within creek channels. These channels will be protected; no portable toilets or equipment storage will occur in any channels. Wetland 1, which lies within Snipe Creek, drains to the southeast to Black Squirrel Creek, which ultimately flows to the Arkansas River. The swale at Kiowa Creek, and Wetlands 2 and 3 (West Kiowa Creek and its tributary) flow north to the South Platte River.

The proposed waterline crosses one area of Zone A, which are areas with a 1 percent annual chance of flooding. This area is along Black Squirrel Creek. See applicable floodplain maps attached in Appendix H.

## **3.0 BEST MANAGEMENT PRACTICES**

### **3.1 EROSION AND SEDIMENT CONTROLS**

All erosion and sediment control measures will be implemented in a manner that will protect properties and public facilities from adverse effects of erosion and sedimentation as a result of construction activities. Control measures include any best management practice or other method used to prevent or reduce the discharge of pollutants to state waters. Control measures include, but are not limited to, best management practices. Control measures can include other methods such as the installation, operation, and maintenance of structural controls and treatment devices. To prevent an increase in sediment load downstream of the pipeline easement, control measures will be implemented during the construction life of this project. Erosion control socks and earthen berms will be placed at areas shown on the erosion control plan. All disturbed areas will be reseeded with a native seed mix and watered until a mature stand is established. This project does not rely on control measures owned or operated by another entity.



### 3.2 SWMP MAP

An Erosion Control Plan was prepared and submitted for the proposed pipeline construction and is included as *Appendix A*. The location of erosion control facilities is shown on the plans. The Erosion Control Plan will serve as the SWMP site map. The Erosion Control Plan will be amended as needed to implement additional control measures over and above those included. All construction control measures/BMP details are included as details in the erosion control drawings found in *Appendix A*. Further information can be found in the El Paso County DCM, Volume 2 and ECM.

### **3.3 FINAL STABILIZATION AND LONG-TERM STORM WATER MANAGEMENT**

Soil erosion control measures for any disturbed land area shall be completed within twenty-one (21) calendar days after final earth disturbance has been completed. An area that is going to remain in an interim state for more than 45 days shall also be seeded. All temporary soil erosion control measures and BMPs shall be maintained until permanent soil erosion control measures are implemented. Vegetative cover density shall be a minimum of 70% of pre-disturbed levels to be considered stabilized.

### **3.4 MATERIAL HANDLING AND SPILL PREVENTION**

During construction, the largest possible source of non-storm water pollution would be leakage of oils and other fluids from construction equipment and vehicles. If mobile fuel trucks are used to service equipment, absorbent materials and containers for the storage of used absorbent material will be nearby. Place debris, overburden, soil stockpiles and waste materials away from areas of runoff. The Spill Prevention Plan is included in *Appendix G*.

This project does not anticipate utilizing batch plants.

### **3.5 POLLUTANT PREVENTION CONTROL MEASURES**

There are multiple Best Management Practices than can be employed to prevent or mitigate the source of pollutants and contamination of storm water runoff. They include:

- Wind erosion shall be controlled by spraying site roadways and/or temporary stabilization of material stockpiles. Each dump truck hauling material to or from the site will be required to be covered with a tarpaulin.
- If needed, snow removal and/or stockpiling will be considered prior to placement at the site. Snow stockpiles must be kept away from any stormwater conveyance system (i.e. inlets, ponds, outfall locations, road surfaces, etc.)
- All refuse dumpsters and receptacles shall be equipped with functional lids to prevent rain and snow from entering. Lids must be closed when dumpsters and receptacles are not actively in use. Construction trash and debris removal from the site will be regularly scheduled.
- Storage containers, drums, and bags shall be stored away from direct traffic routes to prevent accidental spills. Ensure packages and containers are intact.
- Bulk storage of petroleum products or other liquid chemicals that is 55 gallons or greater must have secondary containment or equivalent protection to contain spills and prevent spilled material from entering state waters.
- Empty drums shall be covered to prevent collection of precipitation.





- Containers shall be stored on pallets to prevent corrosion of containers, which can result when containers come in contact with moisture on the ground.
- Tracking control must be implemented by the contractor to prevent unnecessary soil from entering paved surfaces. The measures to be used will be preventing equipment in the construction area from moving off-site. If the contractor cannot do this, then a vehicle tracking pad will be required according to El Paso County specifications. Brooms and shovels may be required for tracking control.
- Portable restroom facilities will be used by the construction crew during the construction phase. Portable restroom facilities will be located a minimum of 10 feet from stormwater inlets and 50 feet from state waters. They will be secured at all four corners to prevent overturning and cleaned on a weekly basis. They will be inspected daily for spills.
- A concrete washout area will be provided for placement of thrust blocks.
- Staging area will be used to contain storage of materials. This is on an existing site owned by FAWWA.
- Silt fence shall be installed as necessary, according to the erosion control drawings in Appendix A. This shall help protect any trees and land outside of the right-of-way by retaining the soil on the disturbed land in the construction boundary.
- Earthen Berm will be placed along the pipeline where applicable. This shall help protect the land outside of the disturbed site.
- Erosion control sock shall be placed around fire hydrants and air-vac vaults to help with erosion around the sites.

The contractor is certainly not limited to these measures which may require adjusting the BMP's as the project progresses and implement further controls as prudence and good judgment deem necessary.

### **3.6 QUALIFIED STORMWATER MANAGER**

The Qualified Stormwater Manager is an individual knowledgeable in the principles and practices of erosion and sediment control and pollution prevention and has the skills to assess conditions at construction sites that could impact stormwater quality, and the effectiveness of stormwater controls implemented to meet the requirements of the stormwater discharges associated with construction activity permit. A copy of the signed SWMP permit application is included in *Appendix B*.

### **3.7 INSPECTION AND MAINTENANCE**

All control measures shall remain in effective operating condition and protected from activities that would reduce their effectiveness. Control measures must be maintained in accordance with good engineering, hydrologic and pollution control practices.

A thorough inspection of the storm water management system shall be performed every 14 days as well as within 24 hours of any rain or snowmelt event that causes surface erosion. If any system deficiencies are noted, correction actions must begin immediately. Documentation of inspection must be made available if requested. Areas to be inspected for evidence, or the potential for pollutants

leaving the construction site boundaries and discharging to state waters include:

Construction site perimeter

Item 25. Self-inspection reports as part of the SWMP records must be available to the EPC SW Inspector on-site or electronically at all times



- All disturbed areas
- Designated haul routes
- Material and waste storage areas exposed to precipitation
- Locations where stormwater has the potential to discharge offsite
- Locations where vehicles exit the site

In addition, implemented control measures shall be inspected to confirm they are in operational condition and are adequate to minimize pollutant discharges. Repairs and maintenance may include, but are not limited to, the following:

- Erosion of side slopes or loose erosion control socks shall be repaired.
- Any accumulated trash or debris shall be removed from protected areas.

An Operation and Maintenance Inspection Record form is included in *Appendix D*. The following items must be documented by contractor as part of the site inspections and kept within this report. Completed inspected records shall be kept in *Appendix E* of this SWMP and kept onsite.

- Inspection date
- Name(s), title(s), and signature(s) of personnel making inspection
- Weather conditions at the time of inspection
- Phase of construction at the time of inspection
- Estimated acreage of disturbance at the time of inspection
- Location(s) of discharges of sediment or other pollutants from site
- Location(s) of control measures that need to be maintained
- Location(s) of control measures that fail to operate as designed or proved inadequate
- Location(s) where additional control measures are needed that were not in place at time of inspection
- Description of the minimum inspection frequency utilized when conducting each inspection
- Deviations from the minimum inspection schedule
- Signed statement of compliance added to the report after corrective action has been implemented

30-day inspections must take place on this site where construction activity is complete, but vegetative cover is still being established.

### **3.8 SWMP AVAILABILITY AND REVISIONS**

A hardcopy of this SWMP is to be retained onsite or be onsite when construction activities are occurring unless another location is approved by the Division. Records of the SWMP changes made that include the date and identification of the changes must be kept at the site within this report. The SWMP should be viewed as a "living document" throughout the lifetime of the project. This SWMP shall be revised by informing Engineer of deviations to the original plan. Engineer will then update this report and all applicable drawings, forms, tables, etc. as deemed necessary. Revisions to the SWMP are required when the following occurs:

- A change in design, construction, operation, or maintenance of the site requiring implementation of new or revised control measures
- The SWMP proves ineffective in controlling pollutants in stormwater runoff in compliance with the permit conditions
- Control measures identified in the SWMP are no longer necessary and are removed
- Corrective actions are taken onsite that result in a change to the SWMP





The provisions of the SWMP as written and updated must be implemented from commencement of construction activity until final stabilization is complete.

### **3.9 NON-STORMWATER DISCHARGES**

Note that a SWMP permit covers stormwater discharges from construction activity and does not include the following: uncontaminated springs, concrete washout water, or landscape irrigation return flow. Discharges resulting from emergency firefighting activities are authorized by a SWMP permit. No non-stormwater discharges are anticipated.

SWMP REVISION AND UPDATES: Administrator will maintain site map to reflect current site conditions, updates shall be made weekly or as needed to show areas of disturbance with dates, areas of cut and fill, control measures installed with dates noting when they are installed or removed. Any changes to the SWMP narrative shall be updated in plan as red-lines and documented in the amendment log to note what was changed, page number, and who made the change.

A-13 RSI-W242.22 BAR-X PIPELINE SEGMENT A2



# APPENDIX G

### SPILL PREVENTION AND RESPONSE PLAN:

- 1. Spill Response Material will be kept on site and stocked.
- 2. Spill/release should be stopped immediately and contained. Such as turn off valves, pumps, stop equipment moving or shut down equipment etc.. Material to be cleaned up immediately, properly stored and labeled until waste material can be properly disposed of.

### 3. Spill is defined as:

- a. <u>Spill or overfill of petroleum that results in a release to the environment that may</u> exceed 25 gallons, or that causes a sheen on nearby surface water;
- b. <u>Spill or overfill of a hazardous substance that results in a release to the environment</u> that equals or exceeds its reportable quantity under CERCLA (40 CFR 302).

If you are unsure if a release needs to be reported, the Colorado Department of Public Health and Environment (the Department) recommends that releases be reported immediately even if the quantity of the release has not yet been determined. Your follow-up report will provide details that explain why the release was or was not reportable.

A spill of any chemical, oil, petroleum product, sewage, etc., which may enter waters of the state of Colorado (which include surface water, ground water, and dry gullies and storm sewers leading to surface water) must be reported immediately to the Colorado Department of Public Health and Environment.

Any accidental discharge to the sanitary sewer system must be reported immediately to the local sewer authority and the affected wastewater treatment plant. Colorado Environmental Release and Incident Reporting Line 1 (877) 518-5608

<u>If a discharge of oil into a navigable water causes a sheen,</u> then the facility must notify the NRC under section 311 of CWA/OPA. National Response Commission 1-800-424-8802

SPILL CLEANUP COORDINATOR:

TBD Cell Phone or Cell Phone

**RSI-W242.22 BAR-X PIPELINE SEGMENT A2** 

# CONSTRUCTION STORMWATER SITE INSPECTION REPORT

Facility Name		Permittee			
Date of Inspection		Weather Conditions			
Permit Certification #		Disturbed Acreage			
Phase of Construction		Inspector Title			
Inspector Name					
Is the above inspector a qualified stormwater manager?					NO
(permittee is responsible	for ensuring that the inspector	r is a qualified stormwater n	nanager)		

### **INSPECTION FREQUENCY**

Check the box that describes the minimum inspection frequency utilized when conducting each insp	ection	
At least one inspection every 7 calendar days		
At least one inspection every 14 calendar days, with post-storm event inspections conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosions		
<ul> <li>This is this a post-storm event inspection. Event Date:</li> </ul>		
Reduced inspection frequency - Include site conditions that warrant reduced inspection frequency		
<ul> <li>Post-storm inspections at temporarily idle sites</li> </ul>		
<ul> <li>Inspections at completed sites/area</li> </ul>		
Winter conditions exclusion		
Have there been any deviations from the minimum inspection schedule?	YES NO	
If yes, describe below.		

### **INSPECTION REQUIREMENTS\***

 Visually verify all implemented control measures are in effective operational condition and are working as designed in the specifications

ii. Determine if there are new potential sources of pollutants

iii. Assess the adequacy of control measures at the site to identify areas requiring new or modified control measures to minimize pollutant discharges

iv. Identify all areas of non-compliance with the permit requirements, and if necessary, implement corrective action \*Use the attached **Control Measures Requiring Routine Maintenance** and **Inadequate Control Measures Requiring** 

**Corrective Action** forms to document results of this assessment that trigger either maintenance or corrective actions

### AREAS TO BE INSPECTED

Is there evidence of, or the potential for, pollutants leaving the construction site boundaries, entering the stormwater drainage system or discharging to state waters at the following locations?

	NO	YES	If "YES" describe discharge or potential for discharge below. Document related maintenance, inadequate control measures and corrective actions Inadequate Control Measures Requiring Corrective Action form
Construction site perimeter			
All disturbed areas			
Designated haul routes			
Material and waste storage areas exposed to precipitation			
Locations where stormwater has the potential to discharge offsite			
Locations where vehicles exit the site			
Other:			

### CONTROL MEASURES REQUIRING ROUTINE MAINTENANCE

Definition: Any control measure that is still operating in accordance with its design and the requirements of the permit, but requires maintenance to prevent a breach of the control measure. These items are not subject to the corrective action requirements as specified in Part I.B.1.c of the permit.

Are there control measures requiring maintenance?	NO	YES	
Are there control measures requiring maintenance?			If "YES" document below

Date Observed	Location	Control Measure	Maintenance Required	Date Completed

### INADEQUATE CONTROL MEASURES REQUIRING CORRECTIVE ACTION

Definition: Any control measure that is not designed or implemented in accordance with the requirements of the permit and/or any control measure that is not implemented to operate in accordance with its design. This includes control measures that have not been implemented for pollutant sources. If it is infeasible to install or repair the control measure immediately after discovering the deficiency the reason must be documented and a schedule included to return the control measure to effective operating condition as possible.

Are there inadequate control measures requiring corrective action?	NO	YES	
Are there inadequate control measures requiring corrective action?			If "YES" document below

Are there additional control measures needed that were not in place at the time of inspection?	NO	YES	
Are there additional control measures needed that were not in place at the time of inspection:			If "YES" document below

Date Discovered	Location	Description of Inadequate Control Measure	Description of Corrective Action	Was deficiency corrected when discovered? YES/NO if "NO" provide reason and schedule to correct	Date Corrected

### **REPORTING REQUIREMENTS**

The permittee shall report the following circumstances orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, and shall mail to the division a written report containing the information requested within five (5) working days after becoming aware of the following circumstances. The division may waive the written report required if the oral report has been received within 24 hours.

All Noncompliance Requiring 24-Hour Notification per Part II.L.6 of the Permit
a. Endangerment to Health or the Environment
Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident (See Part II.L.6.a
of the Permit)
This category would primarily result from the discharge of pollutants in violation of the permit
b. Numeric Effluent Limit Violations
<ul> <li>Circumstances leading to any unanticipated bypass which exceeds any effluent limitations (See Part II.L.6.b of the Permit)</li> </ul>
o Circumstances leading to any upset which causes an exceedance of any effluent limitation (See Part II.L.6.c of the Permit)
<ul> <li>Daily maximum violations (See Part II.L.6.d of the Permit)</li> </ul>
Numeric effluent limits are very uncommon in certifications under the COR400000 general permit. This category of noncompliance only applies if
Numeric erriterit minits are very uncommon in certifications under the convocod general permit. This category of honcomphance only appres in

numeric effluent limits are included in a permit certification.

Has there been an incident of noncompliance requiring 24-hour notification?	

NO	YES	
		If "YES" document below

Date and Time of Incident	Location	Description of Noncompliance	Description of Corrective Action	Date and Time of 24 Hour Oral Notification	Date of 5 Day Written Notification *

\*Attach copy of 5 day written notification to report. Indicate if written notification was waived, including the name of the division personnel who granted waiver.

After adequate corrective action(s) and maintenance have been taken, or where a report does not identify any incidents requiring corrective action or maintenance, the individual(s) designated as the Qualified Stormwater Manager, shall sign and certify the below statement:

"I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit."

Name of Qualified Stormwater Manager	Title of Qualified Stormwater Manager
Signature of Qualified Stormwater Manager	Date
Notes/Comments	





505 ELKTON DRIVE COLORADO SPRINGS, CO 80907 PHONE (719) 531-5599 FAX (719) 531-5238

### SUBSURFACE SOIL INVESTIGATION FAWWA WATER LINE NORTH COLORADO SPRINGS, COLORADO

Prepared for:

Classic Homes 2138 Flying Horse Club Drive Colorado Springs, Colorado 80921

Attn: Loren Moreland

March 30, 2022

Entech Job No. 220531 AAprojects/2022/220531 ssi March 30, 2022

Classic Homes 2138 Flying Horse Club Drive Colorado Springs, CO 80921

Attn: Loren Moreland

Re: Subsurface Soil Investigation FAWWA Water Line North Colorado Springs, Colorado

Dear Mr. Moreland:

As requested, personnel of Entech Engineering, Inc., have performed a Subsurface Soil Investigation for the proposed water transmission line project. The proposed alignment is located west of Goodson Road and Meridian Road and south of Hodgen Road along the overhead powerline easement northwest of Falcon, Colorado, Figure 1. The purpose of the study was to provide general soils, bedrock, and groundwater information for the proposed water transmission line project.

### **Project/Site Conditions**

The project is to consist of the installation of a new water transmission line. Five test borings were drilled along the new pipeline alignment. Drill locations were limited by access constraints. The alignment is gradually sloping from north to south. Vegetation consists of field grasses and weeds with some scattered trees. The majority of the alignment was along a public utility line easement, with some access easements on privately owned property.

### **Field Explorations and Laboratory Testing**

Subsurface conditions at the site were explored by drilling five test borings at the approximate locations shown on Figure 2. The drilling was performed using a truck-mounted continuous flight auger-drilling rig supplied and operated by Entech Engineering, Inc. The borings were drilled to depths of 15 feet below the existing ground surface. Representative soil samples were recovered from each of the borings at approximately 2-to-5-foot intervals in the borings using a 2-inch O.D. split barrel sampler and a California Sampler according to the Standard Penetration Test (ASTM D-1586). Boring logs describing the subsurface conditions encountered in each of the borings are included in Appendix A.

Laboratory testing was completed on selected soil samples recovered from the borings for purposes of determining moisture content, and soil classification. Moisture content testing (ASTM D-2216) was performed on all samples recovered from the borings and the results are shown on the boring logs. Grain-size Analysis Testing (ASTM D-422) and Atterberg Limits Testing (ASTM D-4318) were performed on selected samples to assist in classifying the materials encountered in the borings. Swell/Consolidation Testing (ASTM D-4546) was performed to analyze to expansion/consolidation characteristics of the soil. Soluble sulfate testing was performed on samples to evaluate the soils corrosive characteristics. The laboratory test results are included in Appendix B and are summarized in Table 1.





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### Soils and Bedrock

Two primary soil types and two bedrock types were encountered in the test borings: Type 1: silty to clayey sand (SM, SC), Type 2: very sandy clay (CL), Type 3: silty sandstone bedrock (SM), and Type 4: very sandy claystone bedrock (CL). Bedrock was encountered in the test borings at between 1 and 14 feet which were drilled to depths of 15 feet. The soil was classified in accordance with the Unified Soil Classification System (USCS) using the laboratory test results and the observations made during drilling.

<u>Soil Type 1</u> consists of silty to clayey sand (SM, SC). The sand was encountered in all of the test borings at the surface and extending to 1 to 14 feet bgs. Standard Penetration Testing on the sand resulted in SPT N-values ranging from 9 to 44 blows per foot (bpf), indicating loose to dense states. Water content and grain size testing conducted on samples of the sand resulted in moisture contents of 3 to 16 percent with approximately 16 to 18 percent of the soil size particles passing the No. 200 Sieve. Atterberg limits testing performed resulted in the sands being non-plastic. Swell/Consolidation Testing on the silty to clayey sand resulted in a volume change of -1.0 percent, which indicates a low potential for expansion or consolidation. Soluble sulfate testing performed on the sand resulted in less than 0.01 percent sulfate by weight indicating the sand has negligible potential for below grade concrete degradation due to sulfate attack.

<u>Soil Type 2</u> classified as very sandy clay (CL). The clay was encountered in Test Boring No. 5 at a depth of 4 feet and extending to 14 feet bgs. Standard Penetration Testing on the clay resulted in N-values of 32 to 39 bpf indicating stiff to very stiff consistencies. Water content and grain size testing resulted in water contents of 11 to 14 percent with 59 percent passing the No. 200 sieve.

<u>Soil Type 3</u> classified as silty sandstone bedrock (SM). The bedrock was encountered in Test Boring Nos. 1, 2, 3, and 4 below the Type 1 sands at 1 to 14 feet and extended to the termination of the borings (15 feet). Shallow bedrock was encountered at 1 to 4 feet in Test Boring Nos. 1, 3, and 4. Standard Penetration Testing resulted in SPT N-values of greater than 50 bpf, indicating very dense states. Water content and grain size testing resulted in 7 to 13 percent water content and 16 to 22 percent of soil size particles passing the No. 200 sieve. Atterberg Limits Testing resulted in no values. Sulfate Testing resulted in less than 0.01 percent soluble sulfate by weight, which indicates a negligible potential for below grade concrete degradation due to sulfate attack.

<u>Soil Type 4</u> classifies as a very sandy claystone bedrock (CL). The claystone was encountered in Test Boring No. 5 at 14 to 15 feet bgs. Standard Penetration Testing resulted in greater than 50 bpf, indicating hard consistencies. Water content and grain size testing resulted in 17 percent water content and 61 percent passing the No. 200 sieve.

The test boring logs are included in Appendix A. Laboratory Test Results are included in Appendix B and are summarized in Table 1.

### Site Soil Conditions

Subsurface conditions encountered in the test borings drilled for the site consisted of silty to clayey sands and very sandy clay overlying sandstone and very sandy claystone bedrock which was encountered at between 1 to 14 feet bgs. Shallow bedrock was encountered in Test Boring

Nos. 1, 3, and 4. The sands were encountered at loose to dense states and the clay was encountered at stiff to very stiff consistencies. The medium dense sands, stiff clays, and very dense sandstone are adequate to support the proposed water transmission line. Any loose or very loose sands encountered at the pipe bedding level may require recompaction.

Excavation of site sand and clay materials should be moderate with rubber-tired equipment. The sandstone bedrock will be difficult and will likely require track-mounted equipment. Site materials are acceptable for use as trench backfill if the sandstone fragments are properly broken down.

Groundwater was not encountered in the test borings, which were drilled to 15 feet. Groundwater may be encountered where the water alignment crosses drainages.

### Utility Trench Backfill

Fill placed in utility trenches should be compacted according to El Paso County specifications. Typically trench backfill is compacted to 95 percent of maximum modified proctor (ASTM D-1557). Fill should be placed in horizontal lifts having a compacted thickness of six inches or less and at a water content conducive to adequate compaction, within  $\pm 2$  percent of optimum water content. Moisture of on-site soils ranged from 3 to 16 percent. No water flooding techniques of any type should be used for compaction or placement of utility trench fill.

We trust that this has provided you with the information you required. If you have any questions or need additional information, please do not hesitate to contact us.

Respectfully Submitted,

ENTECH ENGINEERING, INC.

Stuart Wood. Geologist

SW/el

Encl.

Entech Job No. 220531 AAprojects/2022/220531 ssi



Reviewed by:

Joseph C. Goode, Jr., P.E. President

TABLE

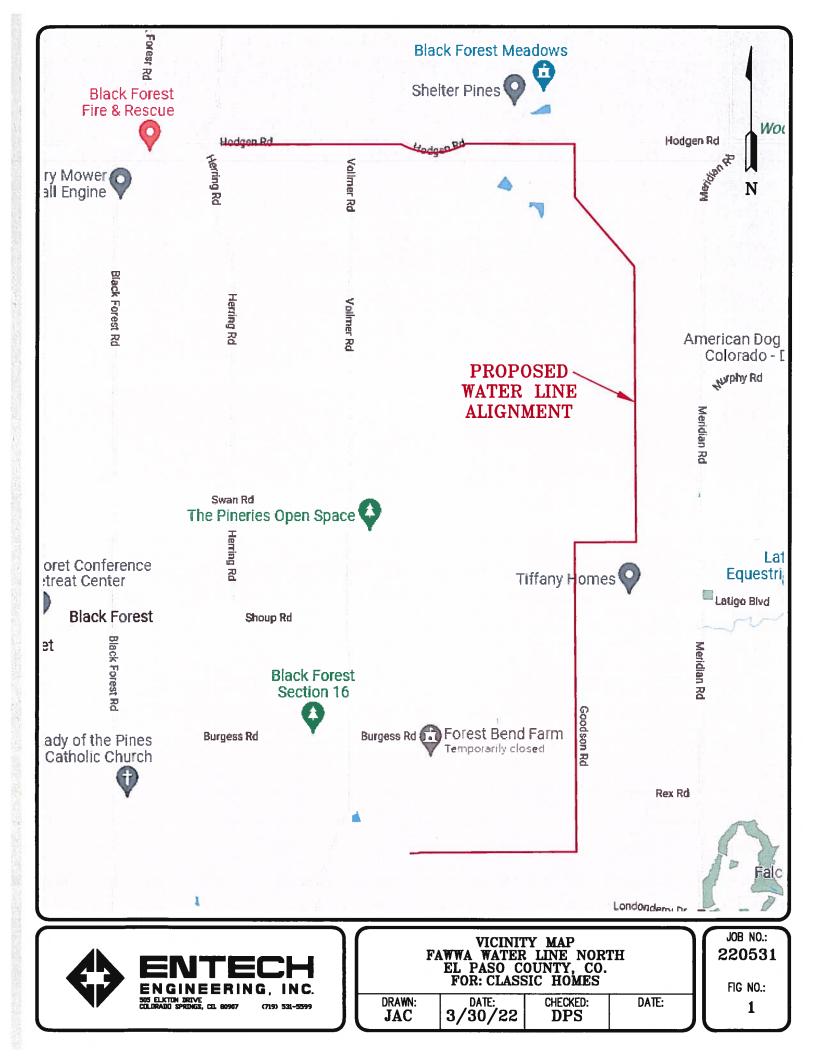
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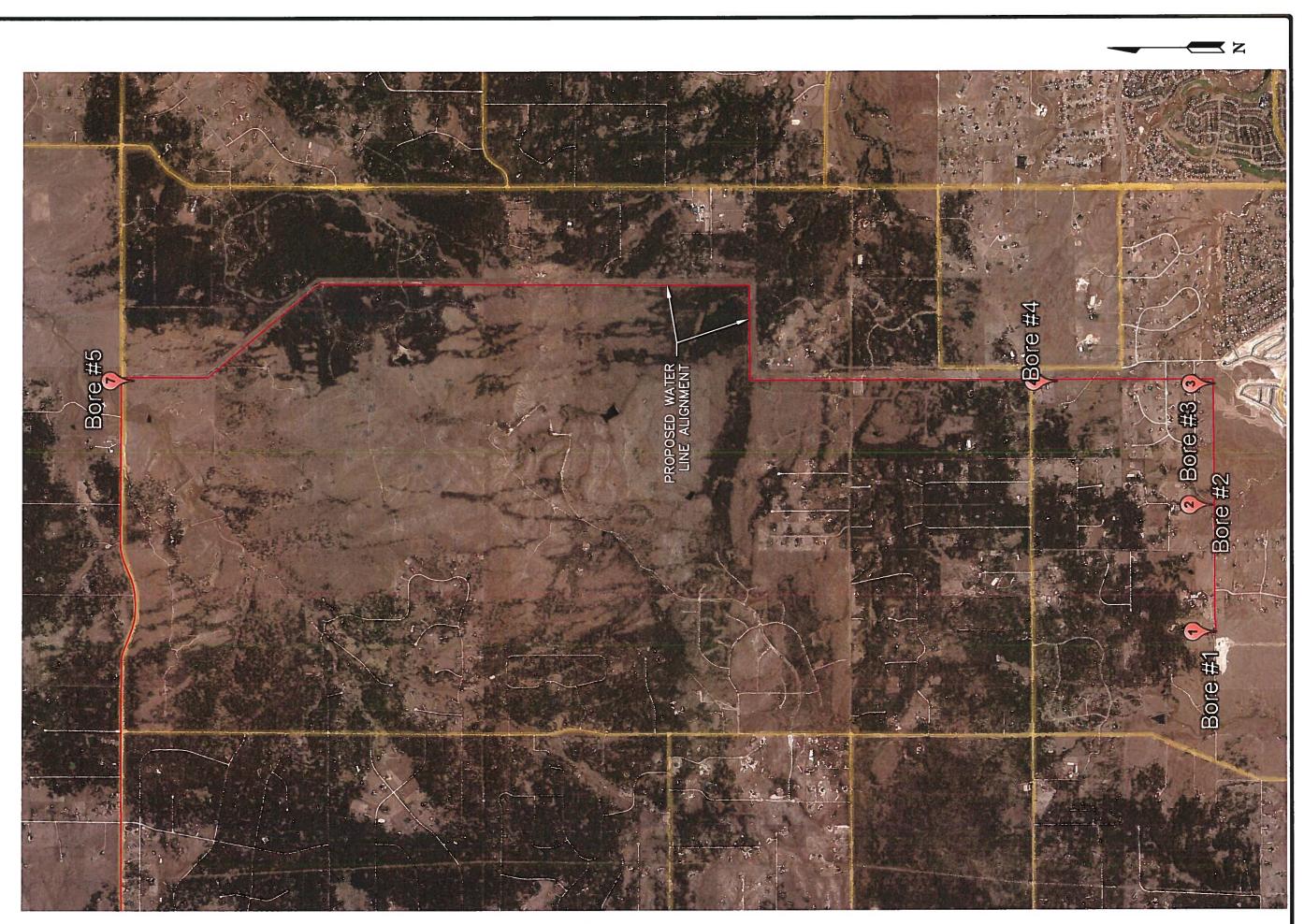
# SUMMARY OF LABORATORY TEST RESULTS

<u>CLIENT</u> CLASSIC COMMUNITIES <u>PROJECT</u> FAWWA WATERLINE <u>JOB NO.</u> 220531

		-		_	T	_	
	SOIL DESCRIPTION	SAND, SILTY	SAND. SILTY	CLAY, VERY SANDY	SANDSTONE, SILTY	SANDSTONE. SILTY	CLAYSTONE, VERY SANDY
	UNIFIED CLASSIFICATION	SM	SM	5	SM	SM	CL
SWELL	CONSOL (%)	-1.0					
FHA	(PSF)						
	SULFATE (WT %)	<0.01	<0.01		<0.01	<0.01	
PLASTIC	INDEX (%)	NP	ЧN		ି NP	ď	
LIQUID	LIMIT (%)	۸۷	Ž		٨٧	N	
PASSING	NO. 200 SIEVE (%)	18.1	15.6	59.1	15.6	21.9	61.0
DRY	(PCF)	113.3			103.7		
	WATER (%)	9.7			9.2		
	DEPTH (FT)	2-3	2-3	10	5	10	15
TEST	Boring No.	-	2	7	ę	4	2
	SOIL	-	-	2	e	n	4

**FIGURES** 







**APPENDIX A: Test Boring Logs** 

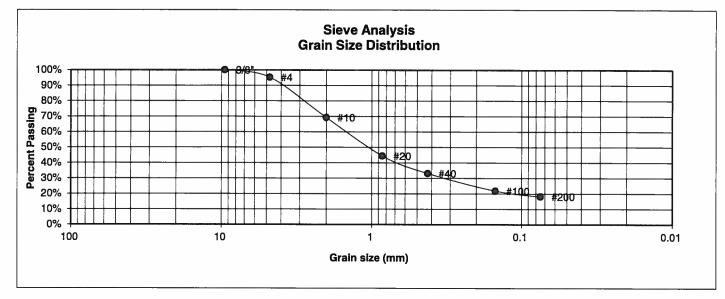
TEST BORING NO.1DATE DRILLED3/24/2022Job #220531	2					CLIENT CL LOCATION FA	2 24/2022 _ASSIC \WWA \	COM				
REMARKS	(#)	es	Blows per foot	Watercontent %	/pe	REMARKS		(#)	ol es	Blows per foot	Watercontent %	be
DRY TO 15', 3/24/22	Depth (ft) Svmbol	Samples	Blows	Watero	Soil Type	DRY TO 15', 3/24/22		Depth (ft)	Symbol Samples	Blows	Waterc	Soil Type
SAND, SILTY, FINE TO COARSE GRAINED, TAN, MEDIUM DENSE, MOIST	 		18	6.5		SAND, SILTY, FINE TO COAR GRAINED, TAN, LOOSE TO DI MOIST	.SE	-		9	4.0	1
SANDSTONE, SILTY, FINE TO COARSE GRAINED, TAN, VERY DENSE, MOIST	5		<u>50</u> 9"	7.4	3			5 -		20	15.5	1
	10		<u>50</u> 9"	13.7	3			10 <b>-</b>		45	12.7	1
	15 -		<u>50</u> 1"	11.5	3	SANDSTONE, SILTY, FINE TO COARSE GRAINED, TAN, VER DENSE, MOIST		15		<u>50</u> 4"	7.6	3
	20 _						1	20 - 				
ENTECH ENGINEERING, I 505 ELKTON DRIVE		107		DRAWN	4:	TEST BORIN		DATE	0-22		22	<sup>3 NO.:</sup> 0531 NO.: <b>A-</b> 1

TEST BORING NO. 3 DATE DRILLED 3/24/202 Job # 220531 REMARKS	2		TEST BORING NO. DATE DRILLED CLIENT LOCATION			ES
DRY TO 15', 3/24/22	Depth (ft) Symbol Samples Blowe per foot	Ar	REMARKS	Denth (ft)		Blows per foot Watercontent %
SAND, SILTY, BROWN SANDSTONE, SILTY, FINE TO COARSE GRAINED, TAN, VERY DENSE, MOIST	5 5 6	." <u>0</u> 6.9 (	1 SAND, SILTY, BROWN SANDSTONE, SILTY, FI 3 COARSE GRAINED, TAN, DENSE, MOIST 3	VERY	5	50 5.9 50 10.8 10.8
	10 5 6	<u>0</u> 10.0 3	3	10		50 8.7 6"
	15 <u>5</u> 2 20	0 7.6 3	3	15 20		50 7" 10.1
					12	2
			TEST BO	RING LOG		JOB N 220

TEST BORING NO. 5 DATE DRILLED 3/29/2022 Job # 220531							TEST BORING NO. DATE DRILLED CLIENT LOCATION	CLASSIC FAWWA						
REMARKS			Τ		~		REMARKS						~~	
DRY TO 15', 3/29/22	Depth (ft)	Symbol	Samples	blows per toot	Watercontent %	Soil Type			Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
SAND, SILTY, FINE TO COARSE GRAINED, TAN, DENSE, MOIST	-	<u>.</u>		-	2	0)				0	0	ш	_>	0)
			4	14 2	2.9	1						81 - 1 57 - 1		
CLAY, VERY SANDY, BROWN, VERY STIFF, MOIST	5		3	39 1	0.6	2			5					
	10		3	32 1	4.1	2			10 - -					
CLAYSTONE, VERY SANDY, RUSTY BROWN, HARD, MOIST	15 20		1	50 0"	7.4	4			15 - - 20 -					
ENTECH ENGINEERING, I 505 ELKTON DRIVE		N R0007			DRAWI	N:	TEST BC			DATE:	-2			ов NO.: 0531 -IG NO.: <b>A-</b> 3

**APPENDIX B: Laboratory Testing Results** 

UNIFIED CLASSIFICATION	SM	CLIENT	CLASSIC COMMUNITIES
SOIL TYPE #	1	PROJECT	FAWWA WATERLINE
TEST BORING #	1	JOB NO.	220531
DEPTH (FT)	2-3	TEST BY	BL



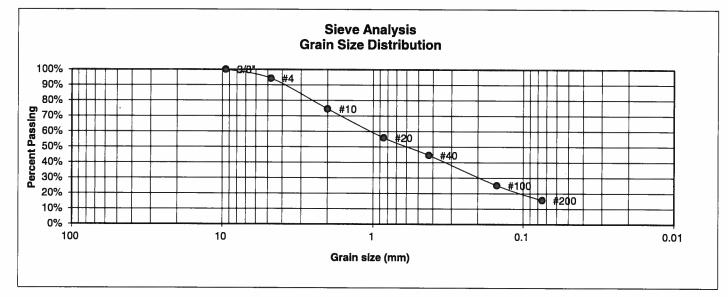
U.S. <u>Sieve #</u> 3" 1 1/2" 3/4" 1/2" 2/0"	Percent <u>Finer</u>	Atterberg <u>Limits</u> Plastic Limit NP Liquid Limit NV Plastic Index NP
3/8"	100.0%	
4	95.3%	Swell
10	69.2%	Moisture at start
20	44.4%	Moisture at finish
40	33.1%	Moisture increase
100	21.8%	Initial dry density (pcf)
200	18.1%	Swell (psf)



LABORATORY TEST RESULTS					
DRAWN:	DATE:	CHECKED:	DATE: 3-30-22		B

NO.; 31 NO.:

UNIFIED CLASSIFICATION	SM	CLIENT	CLASSIC COMMUNITIES
SOIL TYPE #	1	PROJECT	FAWWA WATERLINE
TEST BORING #	2	JOB NO.	220531
DEPTH (FT)	2-3	TEST BY	BL



U.S. <u>Sieve #</u> 3" 1 1/2" 3/4" 1/2"	Percent <u>Finer</u>	Atterberg <u>Limits</u> Plastic Limit NP Liquid Limit NV Plastic Index NP
3/8" 4 10	100.0% 94.2% 74.5%	<u>Swell</u> Moisture at start
20 40 100 200	55.9% 44.6% 25.2% 15.6%	Moisture at finish Moisture increase Initial dry density (pcf) Swell (psf)



[		ATORY TEST	Ì	JOB NO. 220531
	RESUL	.15		FIG NO.:
DRAWN:	DATE:	CHECKED:	DATE: 3-30-22	B-2

IFIED CLASSIFIC/ IL TYPE # ST BORING # PTH (FT)	ATION CL 2 7 10	<u>CLIENT</u> <u>PROJECT</u> <u>JOB NO.</u> <u>TEST BY</u>	CLASSIC COMMUNITIES FAWWA WATERLINE 220531 BL
	G	Sieve Analysis rain Size Distribution	
90%	• • • • • • • • • • • • • • • • • • •	• #10	
80%			
70%			
60%			● #100 ● #200
70% 60% 50% 40%			

1

Grain size (mm)

U.S. <u>Sieve #</u> 3" 1 1/2" 3/4" 1/2" 3/8"	Percent <u>Finer</u>	Atterberg <u>Limits</u> Plastic Limit Liquid Limit Plastic Index
4	100.0%	Swell
10	97.2%	Moisture at start
20	89.1%	Moisture at finish
40	82.2%	Moisture increase
100	68.3%	Initial dry density (pcf)
200	59.1%	Swell (psf)

10



10%

0%

100

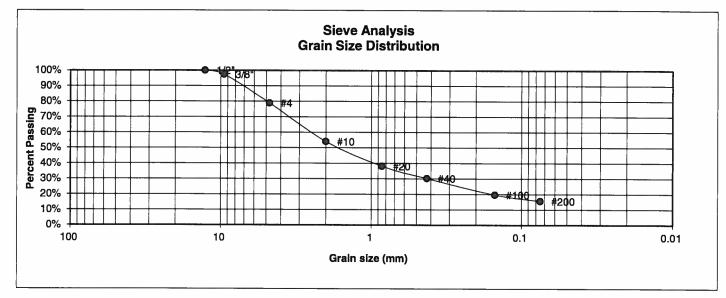
	JOB NO.: 220531 FIG NO.:				
DRAWN:	DATE:	CHECKED.	DATE: 3-30-22	B-3	

T

0.1

0.01

UNIFIED CLASSIFICATION SM	CLIENT	CLASSIC COMMUNITIES
SOIL TYPE # 3	PROJECT	FAWWA WATERLINE
TEST BORING # 3	JOB NO.	220531
DEPTH (FT) 5	TEST BY	BL

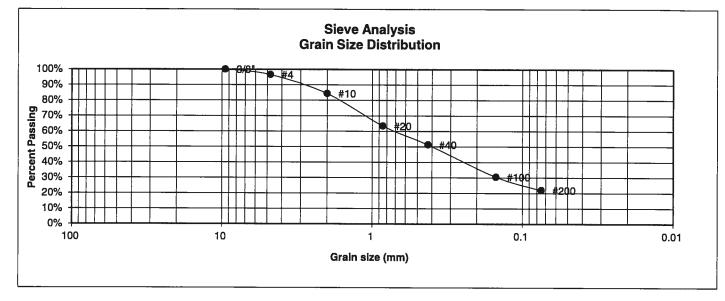


U.S. <u>Sieve #</u> 3" 1 1/2" 3/4" 1/2" 3/8"	Percent <u>Finer</u> 100.0% 97.4%	Atterberg <u>Limits</u> Plastic Limit NP Liquid Limit NV Plastic Index NP
4	78.9%	<u>Swell</u>
10	54.0%	Moisture at start
20	38.1%	Moisture at finish
40	30.2%	Moisture increase
100	19.6%	Initial dry density (pcf)
200	15.6%	Swell (psf)



ENTECH ENGINEERING, INC.	ſ	LABOR RESUL	ATORY TEST		JOB NO.: 220531 FIG NO.:
505 ELKTON DRIVE COLORADO SPRINGS, COLORADO 80907	DRAWN:	DATE:	CHECKED:	DATE: 3-30-22	B-4

UNIFIED CLASSIFICATION	SM	CLIENT	CLASSIC COMMUNITIES
SOIL TYPE #	3	PROJECT	FAWWA WATERLINE
TEST BORING #	4	JOB NO.	220531
DEPTH (FT)	10	TEST BY	BL

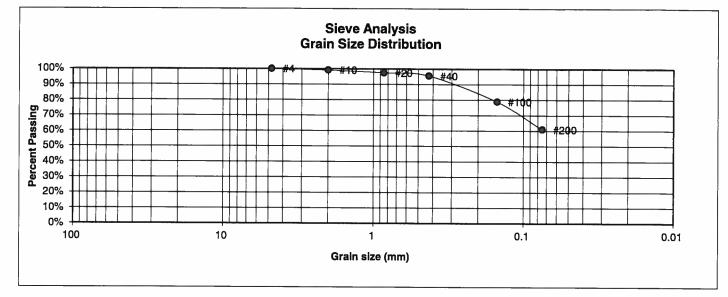


U.S. <u>Sieve #</u> 3" 1 1/2" 3/4" 1/2" 3/8"	Percent <u>Finer</u> 100.0%	Atterberg <u>Limits</u> Plastic Limit NP Liquid Limit NV Plastic Index NP
4	96.6%	<u>Swell</u>
10	84.3%	Moisture at start
20	63.4%	Moisture at finish
40	51.3%	Moisture increase
100	30.5%	Initial dry density (pcf)
200	21.9%	Swell (psf)



	LABOR RESUL	ATORY TEST TS		) (	JOB NO.: 220531 FIG NO.:
DRAWN:	DATE:	CHECKED:	DATE: 2-30-72	11	B-L

UNIFIED CLASSIFICATION	CL	CLIENT	CLASSIC COMMUNITIES
SOIL TYPE #	4	PROJECT	FAWWA WATERLINE
TEST BORING #	7	JOB NO.	220531
DEPTH (FT)	15	TEST BY	BL



4100.0%Swell1099.2%Moisture at start2097.4%Moisture at finish4095.5%Moisture increase10078.8%Initial dry density (pcf)	U.S. <u>Sieve #</u> 3" 1 1/2" 3/4" 1/2" 3/8"	Percent <u>Finer</u>	Atterberg <u>Limits</u> Plastic Limit Liquid Limit Plastic Index
2097.4%Moisture at finish4095.5%Moisture increase10078.8%Initial dry density (pcf)	4	100.0%	<u>Swell</u>
4095.5%Moisture increase10078.8%Initial dry density (pcf)	10	99.2%	Moisture at start
100 78.8% Initial dry density (pcf)	20	97.4%	Moisture at finish
initial dry density (pol)	40	95.5%	Moisture increase
	100 200	78.8% 61.0%	Initial dry density (pcf)

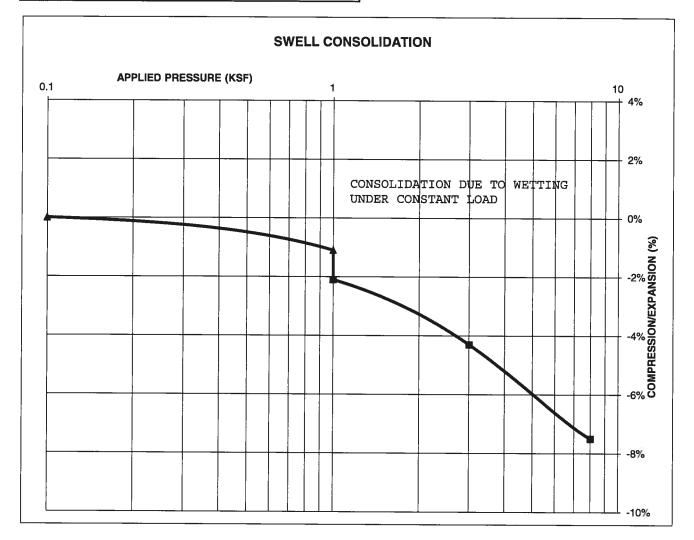


LABORATORY TEST RESULTS		JOB NO.: 220531 FIG NO.:		
DRAWN:	DATE:	CHECKED:	DATE: 3-30-22	B-6

### **CONSOLIDATION TEST RESULTS**

TEST BORING #	1	DEPTH(ft)	2-3
DESCRIPTION	SM	SOIL TYPE	1
NATURAL UNIT DRY	WEIGH	HT (PCF)	113
NATURAL MOISTURE	E CON	TENT	9.7%
SWELL/CONSOLIDA	TION (9	%)	-1.0%

JOB NO.220531CLIENTCLASSIC COMMUNITIESPROJECTFAWWA WATERLINE





SWELL CONSOLIDATION
TEST RESULTS

DRAWN:

DATE:	CHE

ECKED:	
ZNI	

3-30-22

JOB	NO.:
	220531

FIG NO .:

B-7

CLIENT	CLASSIC COMMUNITIES	JOB NO.	220531
PROJECT	FAWWA WATERLINE	DATE	3/29/2022
LOCATION	FAWWA WATERLINE	TEST BY	BL
			•

BORING NUMBER	DEPTH, (ft)	SOIL TYPE NUMBER	UNIFIED CLASSIFICATION	WATER SOLUBLE SULFATE, (wt%)
TB-1	2-3	1	SM	<0.01
TB-2	2-3	1	SM	<0.01
ТВ-3	5	2	SM	<0.01
TB-4	10	2	SM	<0.01
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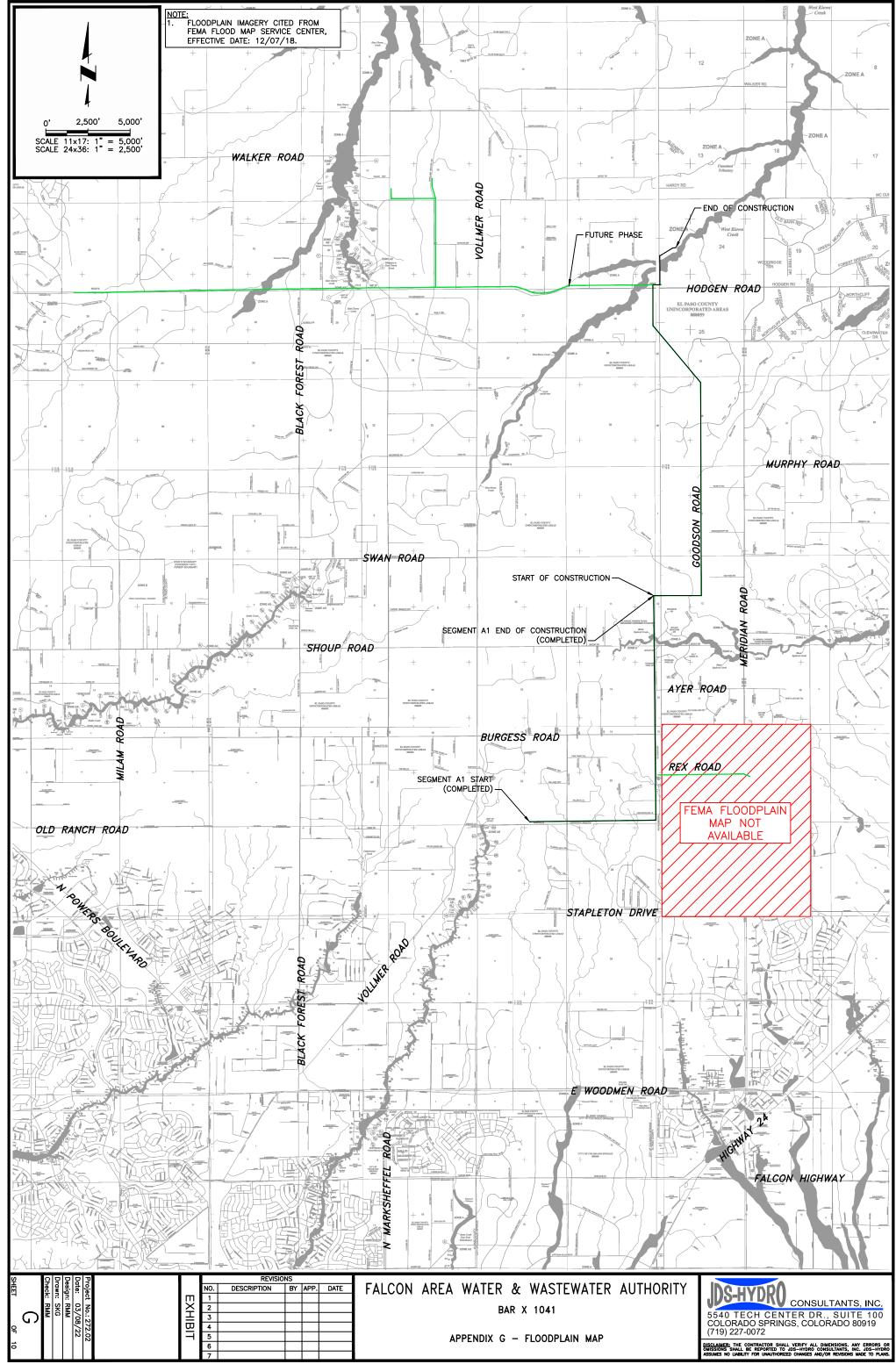


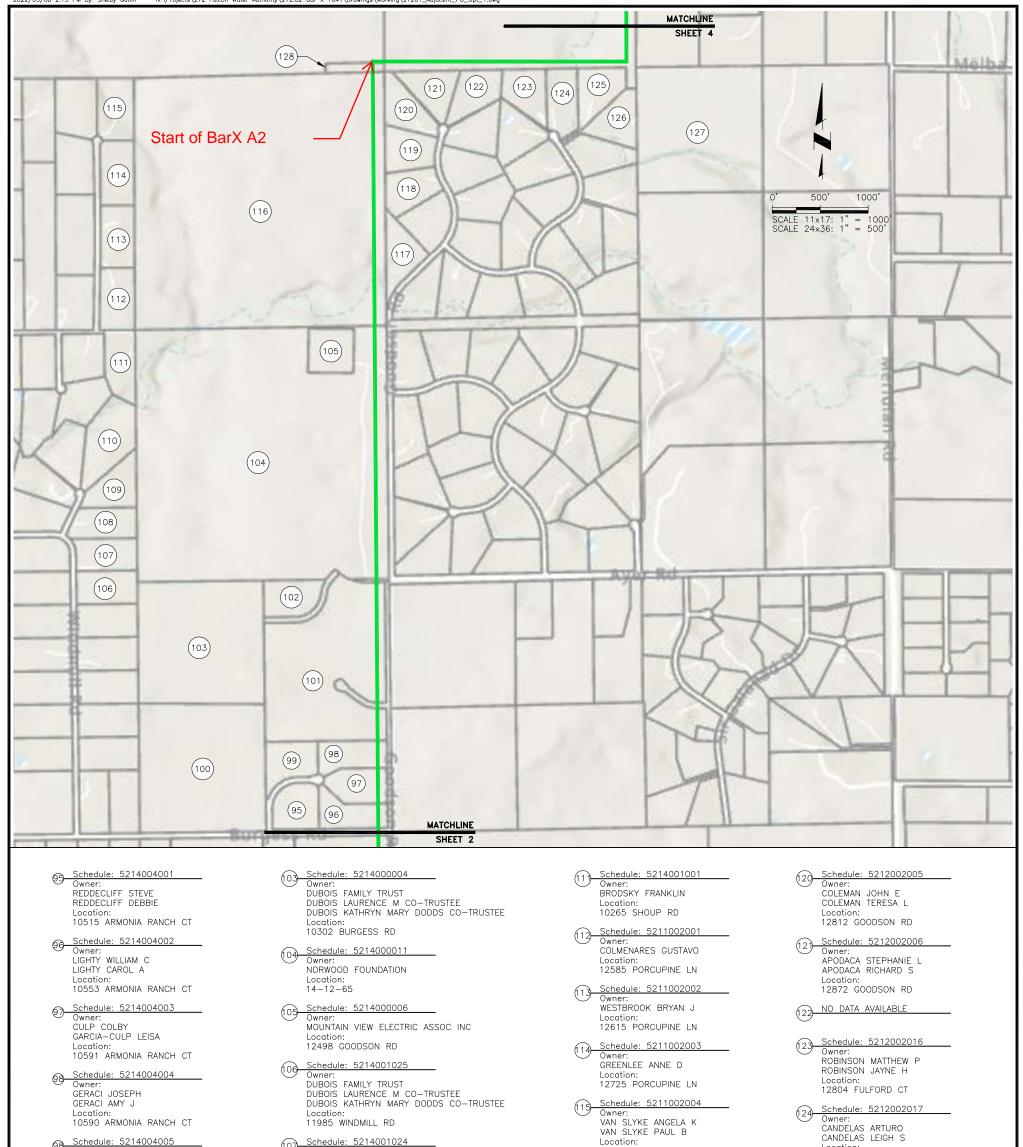
ENGINEERING, INC. 505 ELKTON DRIVE COLORADO SPRINGS, COLORADO 80907

LABORATORY TEST SULFATE RESULTS					
DRAWN:	DATE:		3-30-22	l	

220531 FIG NO.: B-8

JOB NO.:





Schedule: 5214004005 Owner: CHEN CHRISTOPHER 68-POSTOLACHE THEA Location: 10514 ARMONIA RANCH CT Schedule: 5214000005 Owner: GOTTBEHUET CARL W GOTTBEHUET NANCY (100)-Location: 10390 BURGESS RD Schedule: 5214004014 Owner: (10) RUSSELL MATTHEW T RUSSELL JOY M Location 10783 DARK SKY TRL

Schedule: 5214003001 Owner: RUSSELL MATTHEW T (102) RUSSELL JOY M Location: 10612 TWIN PINES RD

- Schedule: 5214001024 Owner: SMITH GAVIN E MCKIERNAN LESLIE D Location: 12035 WINDMILL RD
- Schedule: 5214001023 (108) Owner: KIRK ROBERT J KIRK AMELIA A Location: 12125 WINDMILL LN
- Schedule: 5214001022 Owner: (109) MCMULLEN STEPHANIE MCMULLEN MARTIN Location: 12155 WINDMILL LN
- Schedule: 5214001012 (11) Owner WILKINS STEPHEN G WILKINS LISA M Location: 12185 WINDMILL LN

Location: 12815 PORCUPINE LN

- Schedule: 5211000002 Owner: NORWOOD FOUNDATION (116-Location: SHOUP RD
- Schedule: 5212002001 (11)-Owner DAVIDSON REVOCABLE TRUST Location: 12512 GOODSON RD

Constant Schedule: 5212002003 Owner: SYLVESTER JAMES R SYLVESTER BARBARA L Location: 12692 GOODSON RD

Schedule: 5212002004 (119)-Owner: CRIST DONALD H CRIST WENDY W Location: 12752 GOODSON RD

12803 FULFORD CT

Schedule: 5212002018 Owner: GORDEN JEFFREY S GORDEN SHARON M (125)-Location: 12763 FULFORD CT

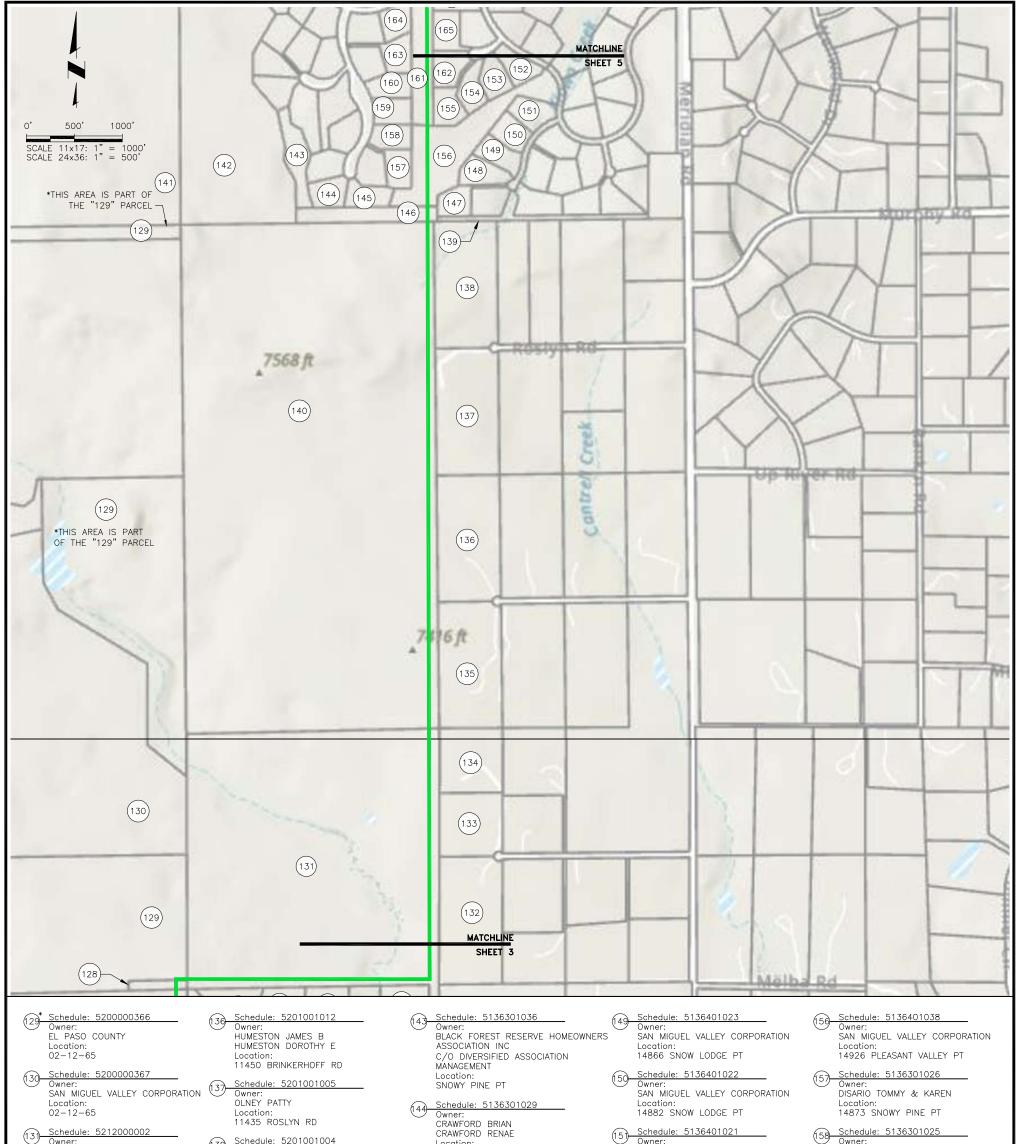
Schedule: 5212002019 Owner: (126)-FRANKS ROBERT T Location: 12723 FULFORD CT

Schedule: 5212000005 Owner: HAGERTY JOSEPH HAGERTY MARY Location: (127)-MERIDIAN RD

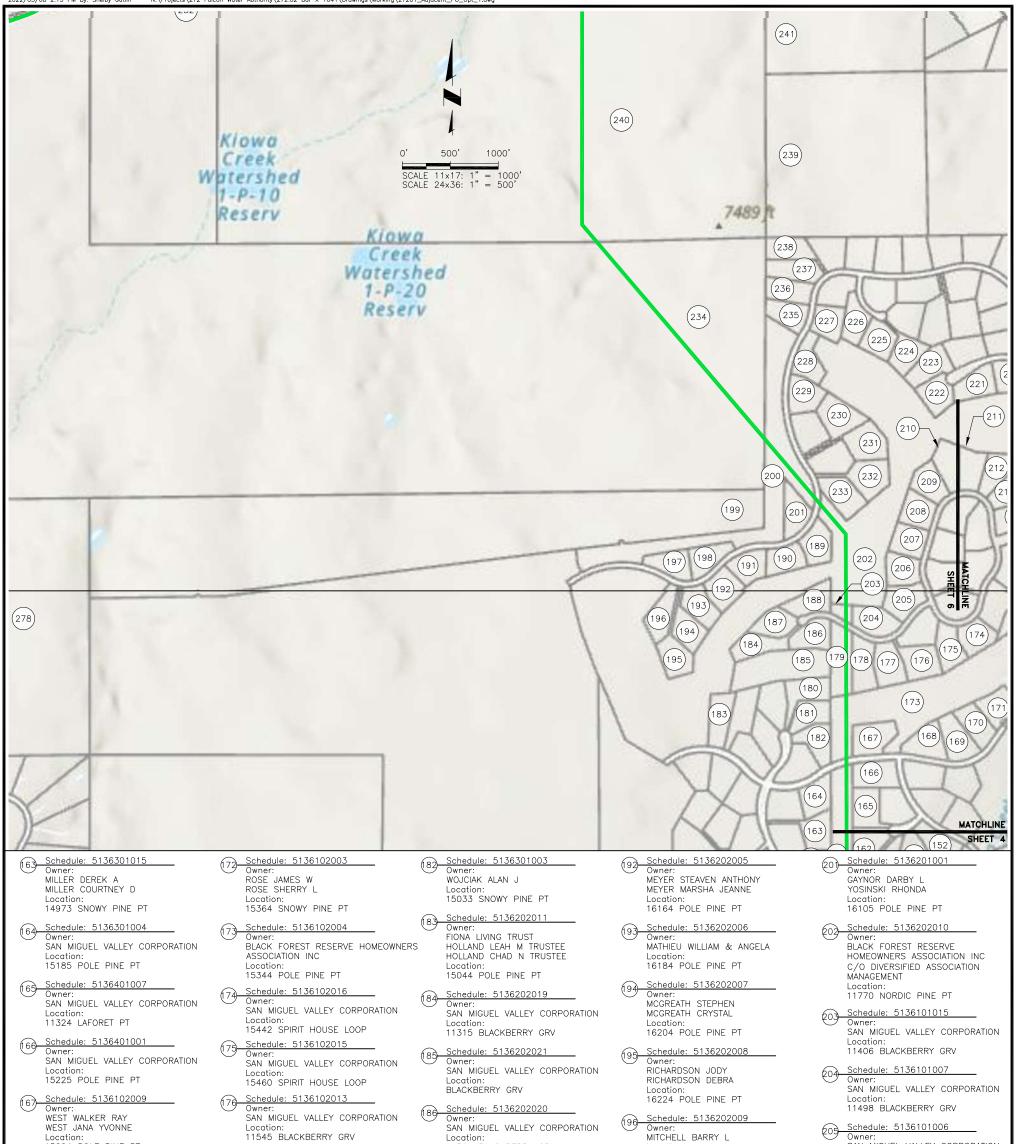
Schedule: 5200000370 (128)-Owner: SAN MIGUEL VALLEY CORPORATION Location: 11-12-65

SHEET 3	Drawn: SKG Check: RMM	Project No.: Date: 03/(	EXH	REVISIONS       NO.     DESCRIPTION     BY     APP.     DATE       1	FALCON AREA WATER & WASTEWATER AUTHORITY BAR X 1041	<b>DS-HYDRO</b> 5540 TECH CENTER DR., SUITE 100
)		272.02 8/22	BIT	4         -	ADJACENT PROPERTY OWNERSHIP OPTION 1	COLORADO SPRINGS, COLORADO 80919 (719) 227-0072 DISCLAMER: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS ANY ERRORS OR DIMESSIONS SHALL BE REPORTED TO JOS-HYDRO CONSULTANTS, INC. JOS-HYDRO ASSUMES NO LABILITY FOR UNAUTHORIZED CHANGES AND/OR REVISIONS MADE TO PLANS.

2022/03/08 2:13 PM By: Shelby Gatin N:\Projects\272 Falcon Water Authority\272.02 Bar X 1041\Drawings\Working\27201\_Adjacent\_P0\_0pt\_1.dwg

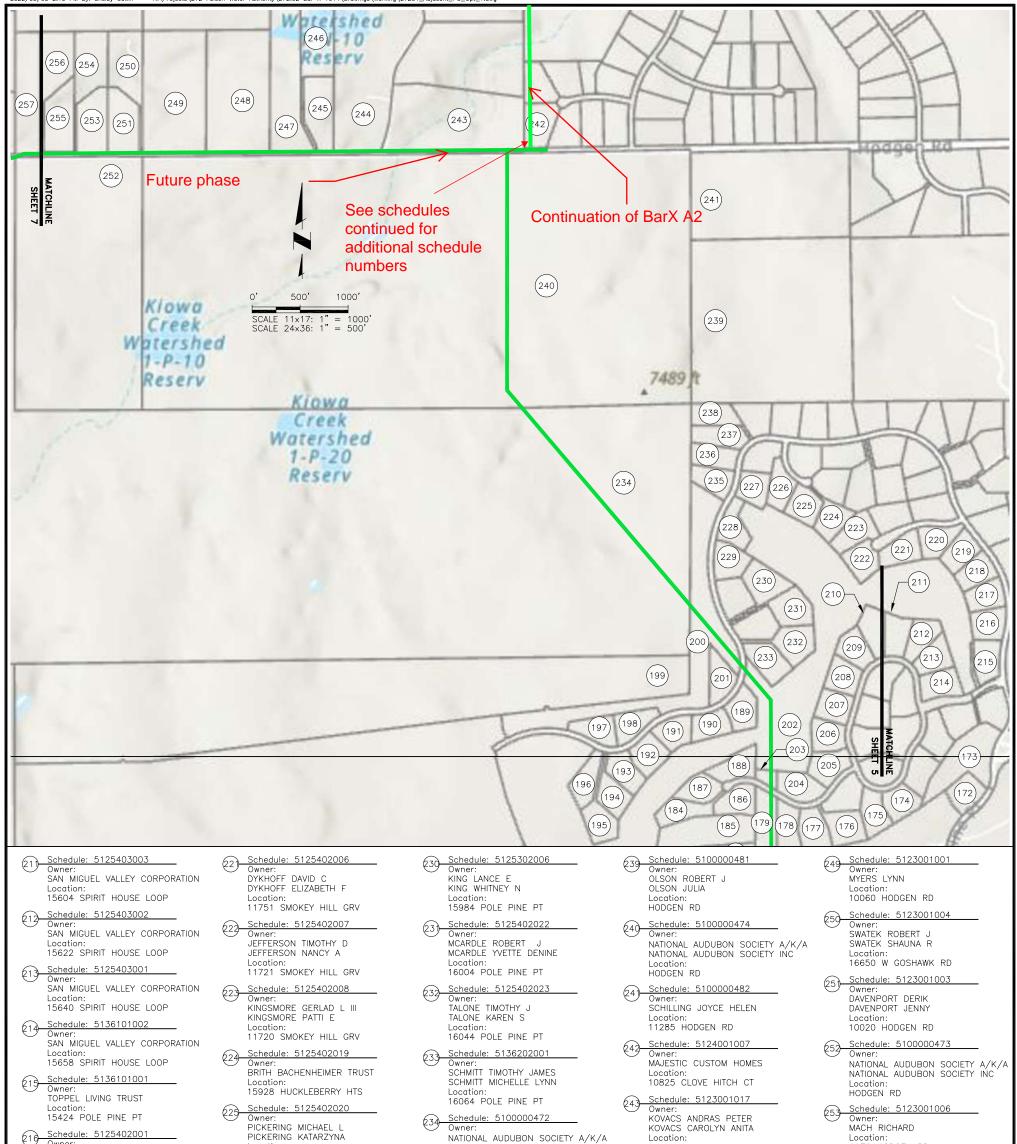


EL PASO COUNTY SAN MIGUEL VALLEY CORPORATION SAN MIGUEL VALLEY CORPORATION Owner: POLSON SANDRA L TRUST 14834 SNOWY PINE PT Location: Location: Location: Schedule: 5136301030 Owner: 14898 SNOW LODGE PT 14893 SNOWY PINE PT 12-12-65 Location (145)-11430 ROSLYN RD Schedule: 5136301024 Owner: KECK TIMOTHY L KECK MARLINDE M Schedule: 5212001003 Schedule: 5136401012 Owner: LEE DOUGLAS E SCHAFFER ALBERT M SCHAFFER DARELEEN E (159) (152) (132) Owner: KNOLL EDWARD L Schedule: 5136401039 (139) Owner: SAN MIGUEL VALLEY CORPORATION Location Location: 14946 PLEASANT VALLEY PT KNOLL DEBBIE K 14833 SNOWY PINE PT Location: 14913 SNOWY PINE PT Location: 14839 SNOW LODGE PT Location: 11415 MILFORD RD Schedule: 5136301037 Owner: BLACK FOREST RESERVE HOMEOWNERS ASSOCIATION INC (146) Schedule: 5136401011 Schedule: 5212001010 Owner: (153) Schedule: 5201000001 Owner: OSTERHAUS BRIAN Schedule: 5136301017 (160) (133)-(140) Owner: Owner EL PASO COUNTY SAN MIGUEL VALLEY CORPORATION WORRALL GARY R MIDKIFF BRANDON C/O DIVERSIFIED ASSOCIATION Location: 14933 SNOWY PINE PT WORRALL JANE F MANAGEMENT Location Location: Location: 11420 MILFORD RD 01-12-65 11345 LAFORET PT Location: SNOWY PINE PT Schedule: 5100000443 Schedule: 5136401010 Owner: ROMERO GILBERT Schedule: 5136301016 (16) (154) Owner: BLACK FOREST RESERVE Schedule: 5212001009 Owner Schedule: 5136401025 (134)-SAN MIGUEL VALLEY CORPORATION (147)-Owner: Owner: SAN MIGUEL VALLEY CORPORATION ROMERO MONICA Location: 11325 LAFORET PT HOMEOWNERS ASSOCIATION INC. BRANDSMA LIVING TRUST Location: C/O DIVERSIFIED ASSOCIATION POLE PINE PT Location: 11430 MILFORD RD Location 14834 SNOW LODGE PT MANAGEMENT Schedule: 5136300001 Owner: SAN MIGUEL VALLEY CORPORATION Location: 15205 POLE PINE PT Schedule: 5201001013 Owner: (142)-Schedule: 5136401024 Owner: Schedule: 5136401009 (135)-(155)-(148)-Owner: HUGH M & KAREN M HUXTABLE FAMILY TRUST WSB PROPERTY 6 LLC Schedule: 5136401008 SAN MIGUEL VALLEY CORPORATION Location: POLE PINE PT (162) Owner: SAN MIGUEL VALLEY CORPORATION Location: Location: 14850 SNOW LODGE PT 11455 BRINKERHOFF RD Location: 11305 LAFORET PT Location: 11304 LAFORET PT \*PARCEL CONTAINS MULTIPLE LOCATION LISTINGS PER EL PASO COUNTY ASSESSOR WEBSITE DESCRIPTION BY APP. DATE FALCON AREA WATER & WASTEWATER AUTHORITY )S-HYDR() NO. Π CONSULTANTS, INC. XHIBIT RMM SKG 2 BAR X 1041 5540 TECH CENTER DR., SUITE 100 COLORADO SPRINGS, COLORADO 80919 フ 3 ĝ 4 ADJACENT PROPERTY OWNERSHIP (719) 227-0072 5 6 OPTION 1 DISCLAIMER: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY ERRORS OF OMISSIONS SHALL BE REPORTED TO JDS-HYDRO CONSULTANTS, INC. JDS-HYDRO ASSUMES NO LUABILITY FOR UNAUTHORIZED CHANGES AND/OR REVISIONS MADE TO PLANS



15224 POLE PINE PT Schedule: 5136102008 Owner: JARAMILLO LUCAS M JARAMILLO ASHLEY N Location: 15264 POLE PINE PT Schedule: 5136102007 Owner: LORD JAMES C LORD JAMES C LORD LAURIE L Location: 15284 POLE PINE PT Schedule: 5136102006 Owner: BOUTELLE GARY H BOUTELLE GARY H BOUTELLE GARY H BOUTELLE GARY H BOUTELLE KIMBERLY A HULK Location: 15304 POLE PINE PT Schedule: 5136102005 Owner: ADDINGTON PAUL W ADDINGTON PAUL W ADDINGTON PAUL W ADDINGTON LISA L Location: 15324 POLE PINE PT	17       Schedule: 5136102012         Owner:       SAN MIGUEL VALLEY CORPORATION Location:         11499       BLACKBERRY GRV         17       Schedule: 5136102011         Owner:       SAN MIGUEL VALLEY CORPORATION Location:         11453       BLACKBERRY GRV         173       Schedule: 5136102011         Owner:       SAN MIGUEL VALLEY CORPORATION Location:         11453       BLACKBERRY GRV         173       Schedule: 5136102010         Owner:       SAN MIGUEL VALLEY CORPORATION Location:         11407       BLACKBERRY GRV         11407       BLACKBERRY GRV         IT       (80         Schedule: 5136202014       Owner:         BOSS FAMILY LIVING TRUST Location:       15073 SNOWY PINE PT         180       Schedule: 5136202015         Owner:       BURT CHRISTOPHER K BURT LORI ANNE Location:         BURT LORI ANNE Location:       15053 SNOWY PINE PT	SAN MIGUEL VALLEY CORPORATION Location: 11314 BLACKBERRY GRV N Schedule: 5136202017 N SAN MIGUEL VALLEY CORPORATION Location: 11360 BLACKBERRY GRV Schedule: 5136202002 Schedule: 5136202002	
Project No.: 272.02 Dede:: 03/08/22 Desin: RMM Drawn: SKG Check: RMM Check: RMM	REVISIONS           NO.         DESCRIPTION         BY         APP.         DATE           1         -         -         -         -         -           2         -         -         -         -         -         -           3         -	FALCON AREA WATER & WASTEWATER AUTHORITY BAR X 1041 ADJACENT PROPERTY OWNERSHIP OPTION 1	DS-HYDRO CONSULTANTS, INC. 5540 TECH CENTER DR., SUITE 100 COLORADO SPRINGS, COLORADO 80919 (719) 227-0072

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Location: 15464 POLE PINE PT C18 Schedule: 5125402003 Owner: DALE HARRELL QUIMBY LIVING TRUS Location: 15484 POLE PINE PT C19 Schedule: 5125402004 Owner: SHULL PAUL STEPHEN SHULL CECILIA ANNE Location: 15504 POLE PINE PT C20 Schedule: 5125402005 Owner: ZARI JOSEPH PAUL ZARI STACY LYNN Location: 11781 SMOKEY HILL GRV	5T (28) (29)	Schedule: 5125302002 Owner: MELBARDIS BRADLEY JOHN MELBARDIS NICOLE CHRISTINE Location: 15904 POLE PINE PT Schedule: 5125302003 Owner: PARKER MARY-PAT REVOCABLE TRI BOHLEY JANET L LIVING TRUST Location: 15924 POLE PINE PT Schedule: 5125302004 Owner: VARONIN JOSEPH VARONIN SHERRY Location: 15944 POLE PINE PT REVISIONS	239- JJST (23)- (23)-	Schedule: 5125301004 Owner: DONNER CRAIG A DONNER KATHY L Location: 15885 POLE PINE PT Schedule: 5125301003 Owner: HEIDRICH LEVI A HEIDRICH HEATHER Location: 15865 POLE PINE PT Schedule: 5125301002 Owner: BORE SIGVARD Location: 15845 POLE PINE PT	240- 241)- 243-	Owner: REHERMAN FRANK P REHERMAN STACY L Location: 10440 HODGEN RD Schedule: 5123001012 Owner: THOMAS LUCAS R THOMAS LUCAS R THOMAS KELLY B Location: 10410 HODGEN RD Schedule: 5123001018 Owner: BREESE TERRY L Location: 10350 HODGEN RD Schedule: 5123001002 Owner: LISA ANN KUKULA LIVING TRUST Location: 10220 HODGEN RD	Owner: DIBRELL CHARLES IV DIBRELL JESSICA Location: 9940 HODGEN RD Schedule: 5123001020 Owner: LOYD GREGORY D LOYD REBEKAH L Location: 9930 HODGEN RD
rroject No.: 272.02 Joate: 03/08/22 Joans: RMM Jreans: SKG Ineck: RMM	EXHIBIT 5 6	. DESCRIPTION BY APP. DATE	FALC	CON AREA WATER & M bar x adjacent proper optio	1041 RTY OWN		DS-HYDRO CONSULTANTS, INC. 5540 TECH CENTER DR., SUITE 100 COLORADO SPRINGS, COLORADO 80919 (719) 227-0072