September 13, 2023

Daniel Stranahan
Entelco Corporation
PO Box 822
Clark, Colorado 80428

Re: On-Site Wastewater Treatment System Evaluation
The Clark Store
54173 County Road 129
Routt County, Colorado
Western Slope Geotech Project No. 23-1045

Dear Daniel,

Western Slope Geotech, Inc. (WSG) has completed the On-site Wastewater Treatment System (OWTS) evaluation you requested for the existing Clark Store building located at 54173 County Road 129, Routt County, Colorado. Some information regarding existing and proposed usage in this report was excerpted from a PUD Narrative report prepared for the project by Four Points Surveying and Engineering (2/8/23).

WSG understands the client is proposing a PUD that is intended to help provide the ability to generally expand food and beverage services at the building exterior south side. As a part of the PUD process, a re-subdivision of the property is proposed that will create a 5.0-acre Clark Store PUD parcel (Lot 1 Clark Store PUD). Existing conditions and proposed property boundaries are shown on Figure 1.

The purpose of this evaluation is to describe and quantify existing and proposed building usage and apparent function and suitability of the existing OWTS. WSG's scope of work included review of existing OWTS permit file information, visual evaluation of existing OWTS components, review of a service-provider inspection report and site and preparation of this report summarizing our evaluation and recommendations for future OWTS improvements in light of expanded operations.

EXISTING OWTS DESIGN AND PROPOSED FUTURE USAGE

Existing OWTS Design

Based on WSG's review of existing Routt County Department of Environmental Health (RCDEH) permit file information (94-16), the existing OWTS consists of a gravity-driven septic tank and seepage bed absorption system installed in 1994. Components include two 1,250-gallon septic tanks installed in series and a 77' x 30' seepage (absorption) bed Soil Treatment Area (STA) consisting of gravel and perforated pipe. System design was based on usage including public toilets, restaurant food service (with paper service) and clothes washing for Clark Store employees. A design flow value of 1,740 gpd was used in the design. The OWTS permit file information and design report are included for reference in Appendix A.

The existing septic tanks are situated west of the southwest corner of the Clark Store building and the STA is situated in an open agricultural field roughly 300 feet southwest of the building. System installation apparently occurred in 1994, has reportedly performed adequately and has reportedly received regular maintenance.

Existing and Proposed Wastewater Volumes and Facilities

Existing and past volume of wastewater from the building and the facilities have apparently been fairly consistent over the past nearly 30 years of operation and generally include two (2) public restrooms and a small restaurant facility providing paper-service breakfast and lunch service. Outdoor pizza and ice cream service also occurs at the exterior south side of the building for limited days of the week during the summer season.

Indoor and outdoor seating for guests includes 11 indoor and 14 outdoor seats. The store and building are open for business year-round and services also include a post office and retail alcohol and convenience food store. Restaurant operations have historically operated only during peak building patronage, which is typically from late May through November.

Proposed expanded facility usage would include additional outdoor food and beverage service during May through October and including barbeque/smoked meats and beer and wine sales prepped and served in two outdoor Conex box or custom shed building facilities. Portable outdoor restroom facilities are also planned for the south side exterior area to provide additional wastewater disposal capacity.

Based on WSG's understanding of existing and proposed facility usage, does not believe the wastewater volume directed to the existing OWTS will change significantly with the proposed increase in facility usage. Assuming a peak loading factor of 150 percent of average daily flow, WSG estimates an existing facility wastewater design volume of approximately 1,688 gpd, which generally agrees with reported water usage (see below). Wastewater volume calculations are presented in Appendix B.

Potable Water Supply

WSG understands that potable water for the building is supplied by the same longtime source (Bush Spring & Pipeline Priority No. 15) and we understand is generally located several hundred feet east of County Road 129 and slightly south of the Clark Store building. Records provided to Four Points Surveying and Engineering indicate average water usage of between 1,000 to 2,000 gpd, depending on the season.

OWTS OBSERVATIONS

WSG conducted site visits to the project site on August 16 and 22, 2023 to observe existing site conditions and OWTS components. On both site visits we observed two apparent concrete septic tanks and the STA located at the approximate locations shown on Figure 1. The top (lid) portions of both tanks were exposed and appeared to be in good condition with no apparent structural defects or leakage.

The STA site was mounded above natural surrounding site grades by approximately two to three feet and two apparent observations pipes were observed at the approximate southwest and northeast corners of the STA site. The pipes were not capped and had been broken off by apparent livestock activity. Apparent liquid was noted in the northeast observation pipe and the southwest observation pipe was dry. We also observed one area near the center of the west side of the STA where apparent effluent had surfaced. Lush vegetation was noted to the west of this area.

OWTS EVALUATION AND RECOMMENDATIONS

Based on WSG's review of a system inspection report by Nordic Pumping (8/7/23), the existing septic tanks were reportedly in good structural and operating condition. Inlet and outlet piping was also reportedly in good operating condition. The report indicated leakage at the STA and reported this as STA failure. The report also indicated insufficient

soil cover of the building sewer piping between the tanks and building. Corrective actions in the report include additional soil cover over sewer piping and corrective action at the STA. The report is attached in Appendix C.

Based on WSG's visual evaluation, it appears the perimeter soil cover of the STA seepage bed is compromised resulting in surfacing effluent. It is unknown whether clogging of seepage bed gravel and underlying natural soils has occurred throughout the bed or in portions of the bed, although it is suspected at least at the northeast side of the STA based on observation of standing liquid in one of two inspection pipes. WSG recommends placement of additional soil cover (four to five feet minimum topsoil) over and around the west side of the seepage bed and lush vegetation area to the west. In addition, capping of inspection pipes and additional soil cover over the building sewer piping (near the building) are recommended. Livestock and human activity in the STA area should also be prohibited and periodic monitoring of the STA for surfacing effluent should be conducted. WSG recommends fencing around the STA to prohibit activity in this area.

With corrective actions completed as noted above, WSG believes the existing OWTS should continue to function adequately in the short term and is not an imminent threat to public health. If surfacing effluent is noted after placement of additional soil cover, replacement of the OWTS is recommended. To meet current RCDEH OWTS regulations, additional septic tank capacity and new STA design would likely be required.

LIMITATIONS

This report is based on WSG's understanding of existing and proposed facility usage. This report has been prepared for the exclusive use of WSG's client for the specific application indicated. No warranties, express or implied, are made.

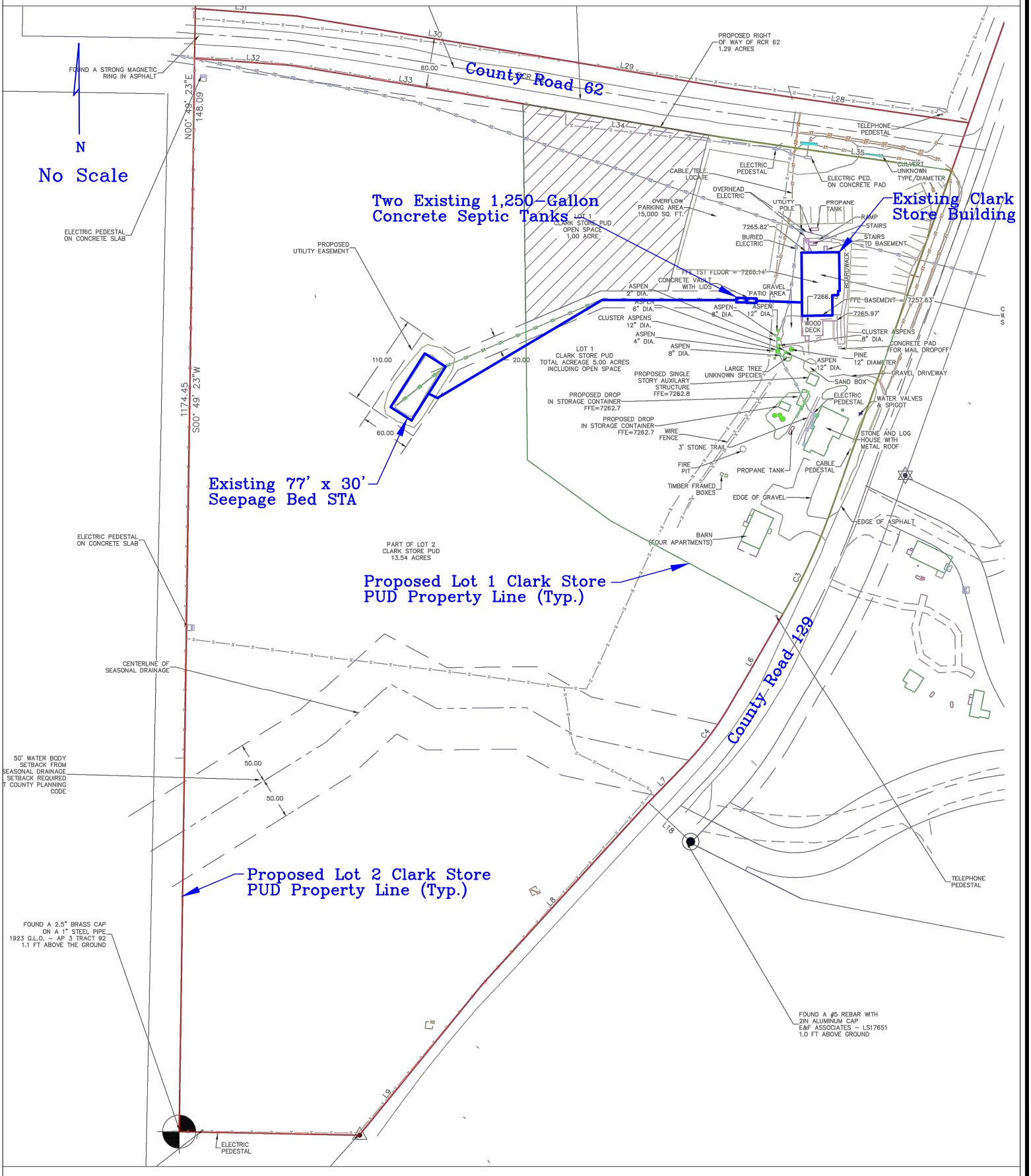
Please be advised that construction or alteration of an OWTS requires a valid permit from the Routt County Department of Environmental Health (970) 870-5588).

WSG appreciates the opportunity to be of service to you on this project. If you have any questions concerning the enclosed information or if we can be of further service to you in any way, please do not hesitate to contact us.

Very Truly Yours,
Western Slope Geotech, Inc.

Harold Schlicht, P.E.
Principal Engineer

Cc: Chris Peters – Routt County Department of Environmental Health



EXISTING CONDITIONS & PROPOSED PUD PLAN

Project Name: Clark Store PUD

Location: 54173 County Road 129, Routt County, CO

WESTERN SLOPE GEOTECH — STEAMBOAT SPRINGS COLORADO

Project No.: 23-1045	Drawn/Checked:HS
Date: 9/6/23	Figure No.: 1

APPENDIX A

Clark Store OWTS (ISDS) Permit File

Northwest Colorado Consultants, Inc.

Engineering - Consultants
Materials Testing

29585 U.S. 40 West, P.O. Box 775226, Steamboat Springs, Colorado 80477

FAX 303-879-7891
303-879-7888

May 12, 1994

Ken Jones
P.O. Box 882
Clark, CO 80428

Job Number 94-1774

Subject: On-Site Sewage Disposal System Design, Clark Store, 54175 County Road #129, Routt County, Colorado.

Gentlemen:

This report presents the results of an on-site sewage disposal system design for the Clark Store located at 54175 County Road 129 in Clark, Colorado. The approximate project site location is shown on Figure #1.

Existing Building & Conditions: We understand that the store is currently served by a septic system located within vacant land southwest of the store building and that underground utility construction in this area last year has effected the operation of the system. In particular we observed what appeared to be effluent ponded at the ground surface, as well as scattered washed rock gravels in the area of the utility construction.

The existing store building currently serves as a retail grocery store and post office with a small sandwich and ice cream business. The store contains two public restrooms consisting of standard flush toilets and sinks. The building also houses an employee laundry facility consisting of two clothes washers and dryers. The laundry facilities are currently available for use by store employees housed in the two cabins located directly south of the store and two cabins on the east side of County Road 129, east of the store. The total number of bedrooms in all the residences is 11.

Site Conditions: The project site is located along the west side of Routt County Road 129 in the townsite of Clark. The site of the proposed septic system occupies vacant land several hundred feet southwest of the store. The land is currently used as irrigated pasture and hay meadow. The site is well vegetated with hay grasses at this time. The approximate location of the existing and proposed features at the site are shown in Figure #2.

The topography of the proposed septic site is fairly consistent with a gentle slope down to the west on the order of 3 percent.

Subsurface Conditions: To investigate the subsurface conditions at the proposed septic site, two (2) test pits were advanced with a backhoe prior to our site visit on May 6, 1994. The approximate test pit locations are shown in Figure #2.

The subsoils encountered generally consisted of a layer of topsoil and organics overlying natural clays and natural sands and gravels. The depth of topsoil in both test pits varied from approximately 24 to 36 inches. Natural clays were encountered beneath the topsoil in both test pits. The natural clays were sandy and occasionally gravelly, low plastic, stiff, moist and reddish brown in color. Based on the spoil piles next to the test pits, it appears that natural sands and gravels were encountered below the clays; however, due to the groundwater levels in the test pits, we were not able to determine at what depth the gravels were encountered.

Free groundwater was encountered in both test pits at the time of the investigation at depths of approximately 4 feet. It should be noted that the groundwater level encountered at the time of this investigation appears to be the maximum seasonal ground water level.

System Design: A set 6 of percolation test holes were advanced within the anticipated limits of the proposed sewage disposal system and a percolation test was conducted. The percolation tests yielded an average percolation rate of approximately 43 minutes per inch for the upper 24 inches of soil. The septic system design presented is based on the existing facilities, as well as, the average percolation rate for the natural soils. Considering the existing facilities and usage we have calculated a peak effluent flow of 1,740 gallons per day (gpd) for the system.

We have provided a conventional absorption bed design to service the facility which should perform adequately, if properly constructed and maintained. The absorption bed design is based on the percolation tests which were conducted on the near surface soils which yielded an average rate of 43 minutes per inch and the peak effluent flow given above.

Based on these design values we have calculated a minimum absorption bed area of 2,282 square feet. We have designed the bed to measure 30' x 77' in plan dimension to provide the necessary bed area. Due to the presence of a high groundwater table, the system must be placed at the existing ground surface elevations. This will require the use of compacted clay fill along the perimeter of the bed to reduce seepage and providing adequate soil cover over the surface of the bed. The absorption bed system design is shown in Figures #3 and #4 and the design calculations and specifications are given in Appendices A and B, respectively.

Limitations: The procedures and design criteria used in these designs were obtained from the EPA "Design Manual - On-site Wastewater Treatment and Disposal Systems", 1980, as well as, the Colorado Department of Health "Guidelines for Individual Sewage Disposal Systems" (rev. 1988). The sewage disposal system designs presented are based on currently accepted design procedures and the existing

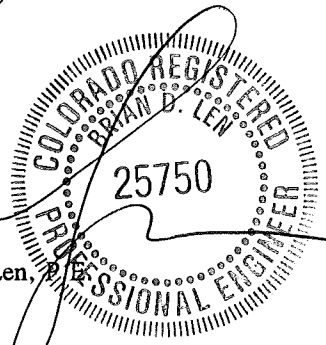
features and usage of the facilities. If the usage of the current facilities or addition of new facilities to those currently in use in the building changes, the septic system design will also most likely change. It should also be noted that all on-site sewage disposal systems require periodic maintenance. The failure of the owner to provide proper periodic inspection and maintenance of the system can be the major cause of failure of the system.

If you have any questions concerning this report or our recommendations, or if we may be of further service, please contact this office.

Sincerely,

NORTHWEST COLORADO CONSULTANTS, INC.

Harold Schlicht

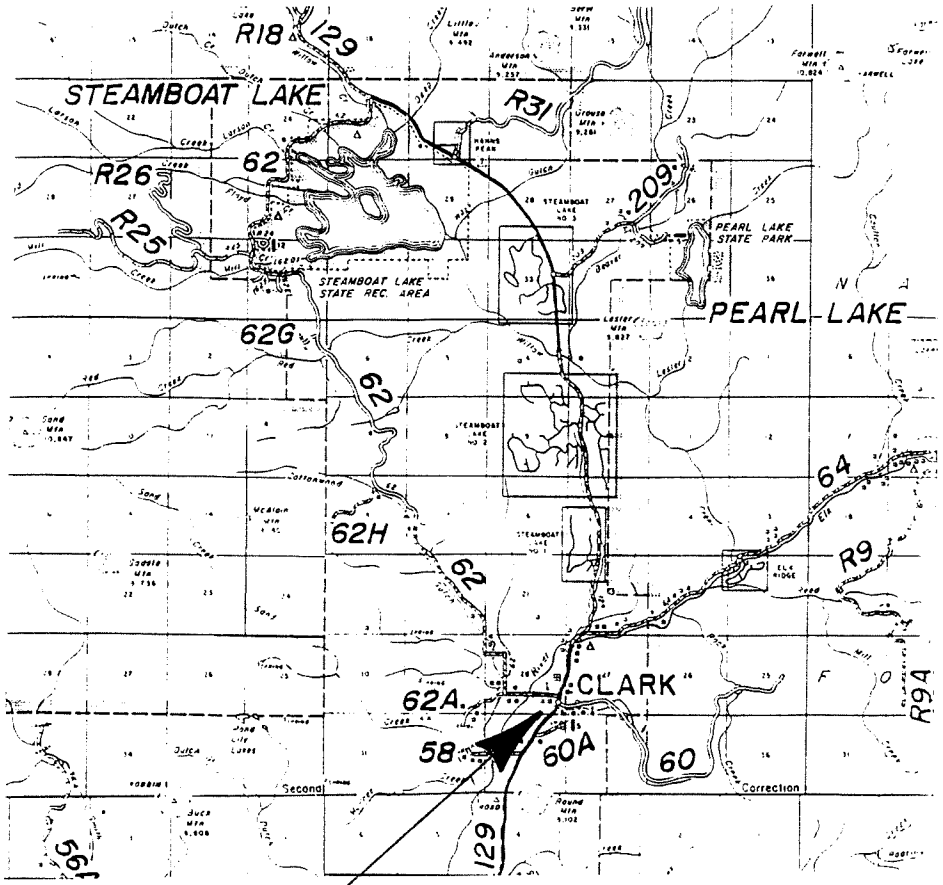


Reviewed by Brian D. Len, P.E.

NORTHWEST COLORADO CONSULTANTS

STEAMBOAT SPRINGS COLORADO

(No Scale)



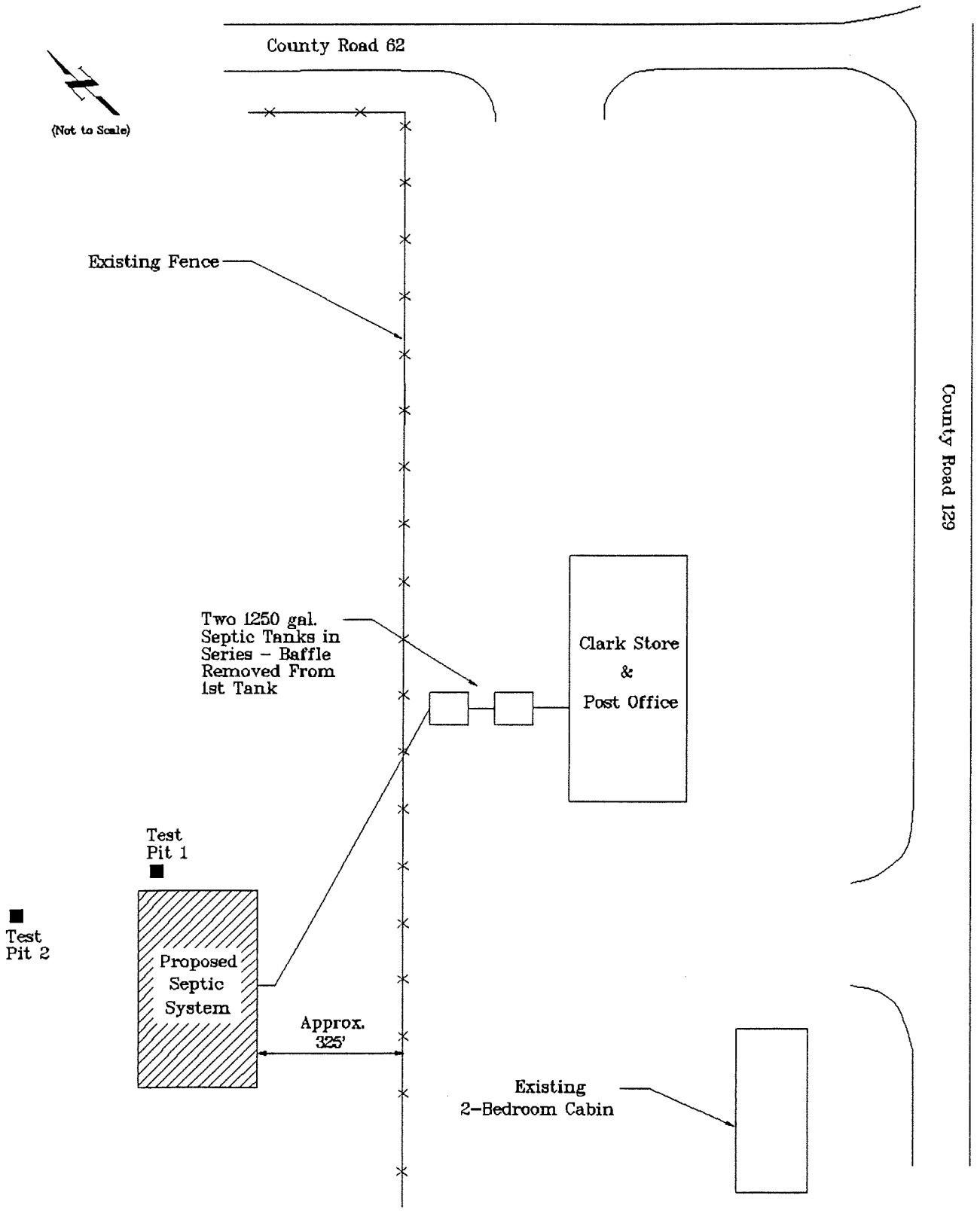
Project Site

VICINITY MAP

Job Name: Clark Store Sewage Disposal System	Job No. 94–1774
Location: 54175 County Road 129, Routt County, CO	Figure #1

NORTHWEST COLORADO CONSULTANTS

STEAMBOAT SPRINGS COLORADO

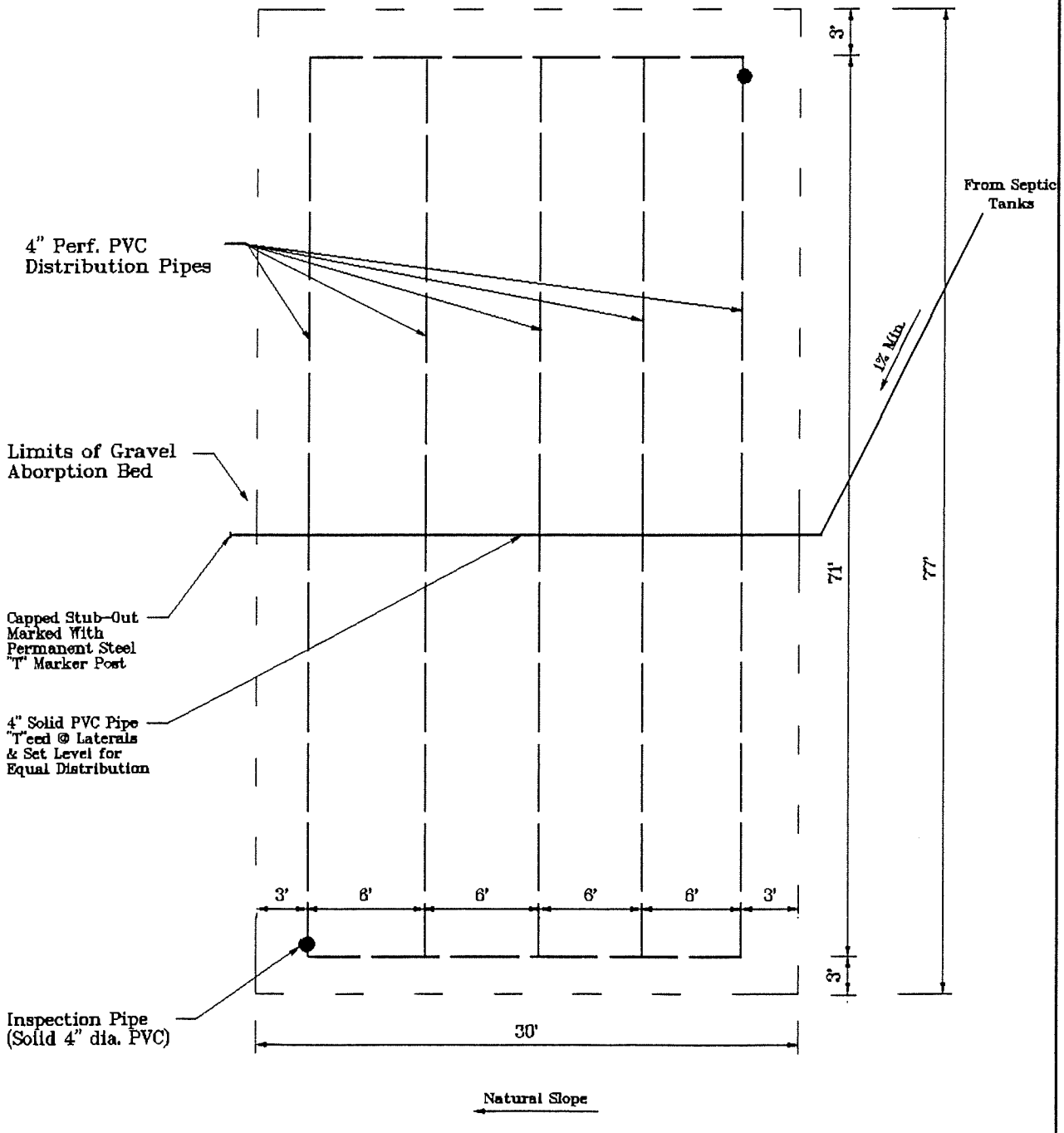


SITE PLAN

Job Name: Clark Store Sewage Disposal System	Job No. 94-1774
Location: 54175 County Road 129, Routt County, CO	Figure #2

NORTHWEST COLORADO CONSULTANTS

STEAMBOAT SPRINGS COLORADO

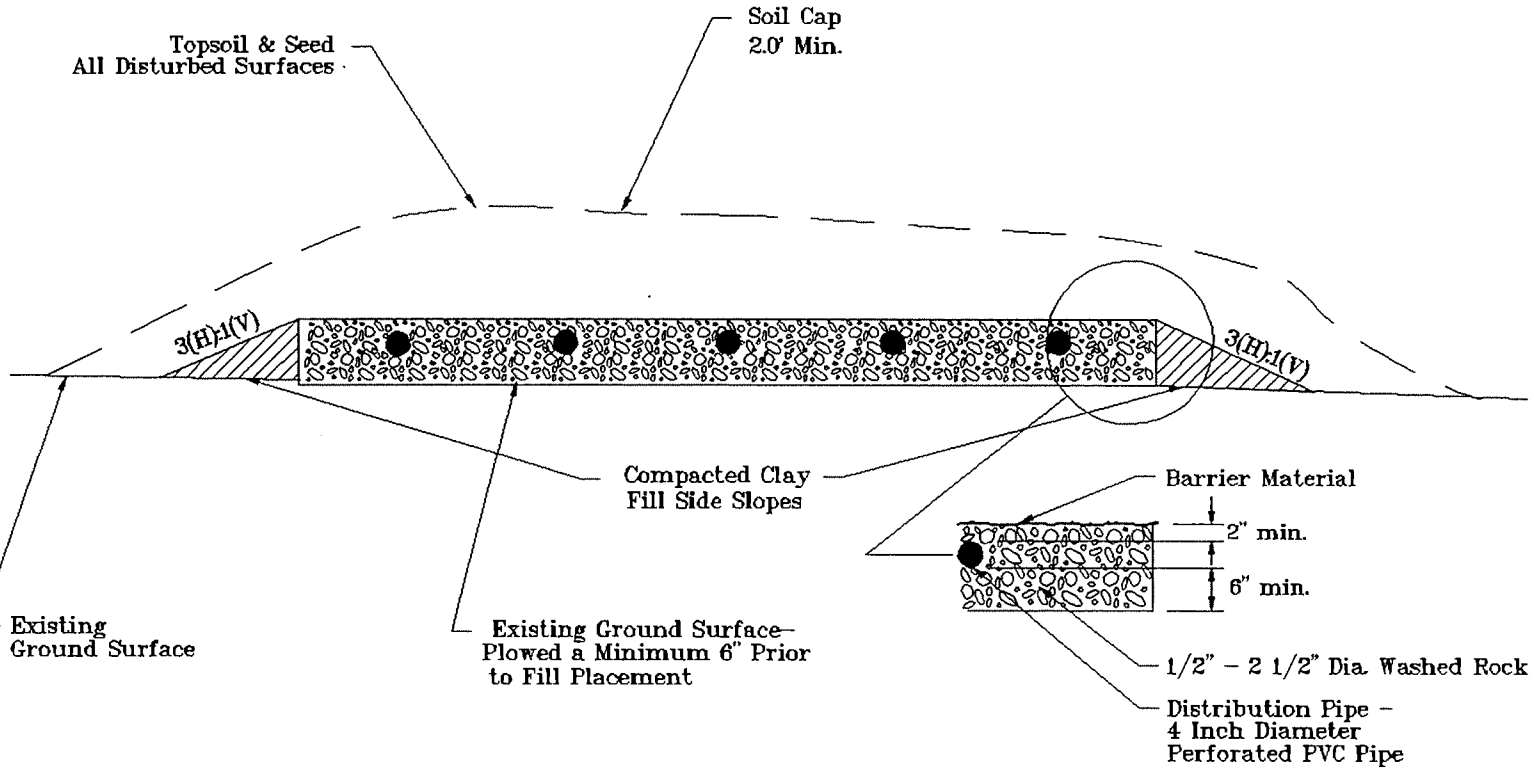


SEEPAGE BED PLAN

Job Name: Clark Store Sewage Disposal System	Job No.: 94-1774
Location: 54175 County Road 129, Routt County, CO	Figure #3

NORTHWEST COLORADO CONSULTANTS

STEAMBOAT SPRINGS COLORADO



SEEPAGE BED CROSS SECTION

Job Name: Clark Store Sewage Disposal System	Job No. 94–1774
Location: 54175 County Road 129, Routt County, CO	Figure #4

APPENDIX A

SUMMARY OF DESIGN CALCULATIONS

A. Sewage Volume Calculations

1) Public Toilets 2 x 400gpd/toilets..... 800 gpd

2) Food Service (with paper service)
1.5gpd/meal x 25 meals .....38 gpd

3) Clotheswashers Servicing 11 Employee Bedrooms
11 bedrooms x 1.5 persons/bedroom x 19.5 gpd ..... 322 gpd

4) Total Average Flow.....1,160 gpd

5) Peak Factor.....x 1.5

6) Peak Flow for Design .....1,740 gpd

B. System Sizing

1) Minimum bed area = $Q(t^{1/2})/5$
..... = $(1995)(33)^{1/2}/5$ = 2,282 ft^2

2) Bed Dimensions A = 30' x 77' ..... = 2,310 ft^2

3) Septic Tank - per EPA and CDH Guidelines ..... Use 2 - 1250 gal minimum tanks.
*Baffles removed from 1st tank.

APPENDIX B

1) All Regulations of the Routt County Department of Environmental Health must be complied with.

2) Periodic inspections must be made by the Engineer or County Sanitarian at the following points during Construction:

a. After subgrade excavation and septic tank installation.

b. After placement of washed rock and pipes, but before pipes are covered.

c. Upon final completion of the project.

3) All PVC pipe, perforated or non perforated, shall conform to ASTM 2729 or better quality. All pipes shall be set level.

4) The soils beneath the pipes entering and leaving a septic or aeration tank which has been excavated shall be backfilled in 6 inch lifts and mechanically compacted. Cast iron pipe or pvc pipe meeting ASTM 3034 SDR 35 or schedule 40 shall be used for 5 feet on either side of the tank.

5) Provide a minimum of 6 inches of soil cover over the septic tank and 12 inches of soils cover over all pipes.

6) All surface drainage shall be ditched and diverted away from sewage disposal areas.

7) All disturbed surfaces, mounds and berms shall be covered with topsoil and heavily seeded.

8) All washed rock shall be covered with straw and untreated building paper or synthetic filter fabric before overlying soils layers are placed.

9) All washed rock will consist of gravel from 0.5 to 2.5 inches in size.

10) Inspection pipes to be constructed of PVC pipe with the portion of the pipe penetrating the gravel bed being perforated.

APPENDIX B

SEWAGE & SEPTIC TANK VOLUME CALCULATIONS

A. Sewage Volume Calculations

1. Public Toilets: 250 gpd/fixture x 2 fixtures= 500 gpd
2. Restaurant (Paper Service): 25 gpd/seat x 25 seats = 625 gpd
3. Average Daily Flow = 1,125 gpd
4. Peak Factor = 1.5
5. Design Flow = 1,688 gpd

B. . System Sizing

1. Septic Tank Sizing: 1,688 gpd x 2 days (detention time) = 3,376-gallons
2. Use two 2,000 gallon tanks in series recommended (4,000-gallons).
3. Existing Septic Tank Capacity: 2-1,250-gallon tanks in series = 2,500-gallons.

APPENDIX C

Nordic Pumping Inspection Report

Nordic Pumping, LLC

Onsite Wastewater System Inspection Report

CLARK STORE

Property Address: 54175 County Road 129 Clark, Co 80428
Requested By: – Adam Stier - Manager

COUNTY RECORD SEARCH

County for Records – Routt County

Records enclosed – County permit on file # 94-16

Legal- No legal on county records.

Engineer / Designer – Ed Andrew

Parcel # No parcel number on county records

SITE INSPECTION

Age of system – 1994

Date of Inspection –8/7/2023

Date of last pumping - 8/7/2023 Performed by: Nordic Pumping, LLC

Tank Information – 2, 1250-gallon, double compartment tanks (2500-gallon capacity). Access at all tanks at grade.

Located – Tank is located approximately 45 feet west of the store and connected by 4-inch P.V.C Pipe. It is a 6-inch depth system at the entrance to the tank.

Tank access – Tank is located at grade.

Tank Integrity – Tank appeared to be in excellent condition with no apparent cracks or leakage from the chambers. Ceilings, walls and floors are intact. Metal entrance port was intact. Metal outlet was intact and installed correctly.

Baffles & Tees – Metal baffles on the inlet is in good condition. Baffle wall inside tank is also intact and in good condition.

Core sample completed: Yes

Sludge level – 10 inch
Scum layer – 24 inches

Inlet line – Appears to be installed properly and was running clear at the time of inspection.

Outlet Line – Appears to be installed properly and was running clear effluent to STA field.

Soil Treatment Area (STA) information

Type of system – Gravity fed – 5-line, mounded, approximately 75-feet long each. Components of absorption system – Perforated PVC. Field is approximately 221 feet southwest of the tank.

Soil Conditions at the time of inspection – SEE RECCOMENDATIONS BELOW

STA vegetation was lush and obvious

Inspection ports were found in the mound. (2)

Pumps / siphons:

No pumps or siphons are required in this system.

Photo Log: copy and paste to your browser:

https://www.dropbox.com/scl/fo/ke9w1zva88p24236c49xg/h?rlkey=abrqwn5qv4od59i1spby0ugy6&dl=0

Each photo has description

OBSERVATIONS:

At the time of this inspection, we found the system to be operational. This tank is pumped 2 times a year due to its activity. Nordic Pumping has been the servicer of record for over 8 years. Additionally, there were no signs of historical backups or issues within the tank.

STA field was very obvious. To the west of the field, leakage was obvious.

Tank lids were in acceptable condition.

All hard material was removed from system.

Effluent filter is not installed in the system. (Typical for vintage)

Working toilets were all flushed. Clear water flowed to system at acceptable level with system being dosed within home. No backups of any kind were observed.

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RECOMMENDATIONS:

The following 2 corrections must be fixed as soon as possible:

1) Main line from Store is exposed (not broken) at the fence line between the tank and store. This line should be protected by no less than 18 inches of soil.(SEE PHOTO LOG)
2) The leach field has failed. A large amount of ponding is west of the field. Under no circumstances should livestock or humans have access to the broken field. SEE PHOTO LOG.

Extra care with this septic system (as with all) must be used. NO heavy toilet paper, dental floss, plastic, or cotton products should be introduced to the system under any circumstances.

Due to the fact winter servicing in our area is expensive and sometimes impossible, we recommend this tank be pumped twice a year.

Voles are most likely present in the STA. Vole population has been known to damage STA (leach fields) if not controlled. CSU Extension office at 970-879-0825 can be a great resource for controlling your Vole population.

Weed management is critical to our area. CSU Extension office can issue you a free book on how to identify and eradicate unwanted weeds on your property.

This system needs to be corrected ASAP. (See Recommendations above)

We recommend keeping livestock off the field. Livestock compact the soil and will inhibit the field from functioning correctly.

We recommend that water conservation practices be utilized to avoid hydraulic overload, i.e. spread wash out over the week, no more than 2 loads a day, check for and repair leaking faucets and running toilets regularly, limit the length of showers, etc.

For more tips go to www.nordicpumping.com

Neither Nordic Pumping, LLC nor any of its agents or employees undertake or assume liability to the owner of the above property, or any purchaser of the above property or any lending agency making a loan on the above property in connection with either its examination of the property or in the report.

This is a visual inspection conducted solely for the purpose of detecting health hazards observable at the time of inspection, and does not constitute a warranty that the system is without flaw or that it will continue to function in the future. Inspections requested during periods of rain, snow or when a residence has been unoccupied may be of questionable value.

Thomas J. Alexander
Nordic Pumping, LLC
Certified Inspector ID # 129281TC
NAWT Certified Septic Inspector (www.nawt.org)
CPOW Certified Septic Inspection (www.cpow.net)