

EL PASO COUNTY HEALTH DEPARTMENT
COLORADO SPRINGS, COLORADO

SEWAGE DISPOSAL INSPECTION FORM

013
P # 3219

APPROVAL:

YES ☒ NO ☐

8309200011

ENVIRONMENTALIST

DATE April 15, 1985

Rick Mikkich

LOCATION (street number) 10030 W HIGHWAY 24

OCCUPANT Lechner

LEGAL DESCRIPTION Green Mountain Falls, Co.

TYPE OF CONSTRUCTION

NO. OF BEDROOMS

SYSTEM INSTALLED BY

K.O. Armentrout

COMMERCIAL MFG.

Pre cast

SIZE

2500

TYPE OF MATERIAL

Concrete

NO. COMPARTMENTS

two

WIDTH

LENGTH

DEPTH (total)

LIQ. CAP.

2500

DISPOSAL FIELD: BED OR TRENCH DEPTH

WIDTH

LENGTH

SQ. FT.

DISTANCE BETWEEN LINES

ROCK

DEPTH

UNDER

OVER

LEACHING PITS (NO.)

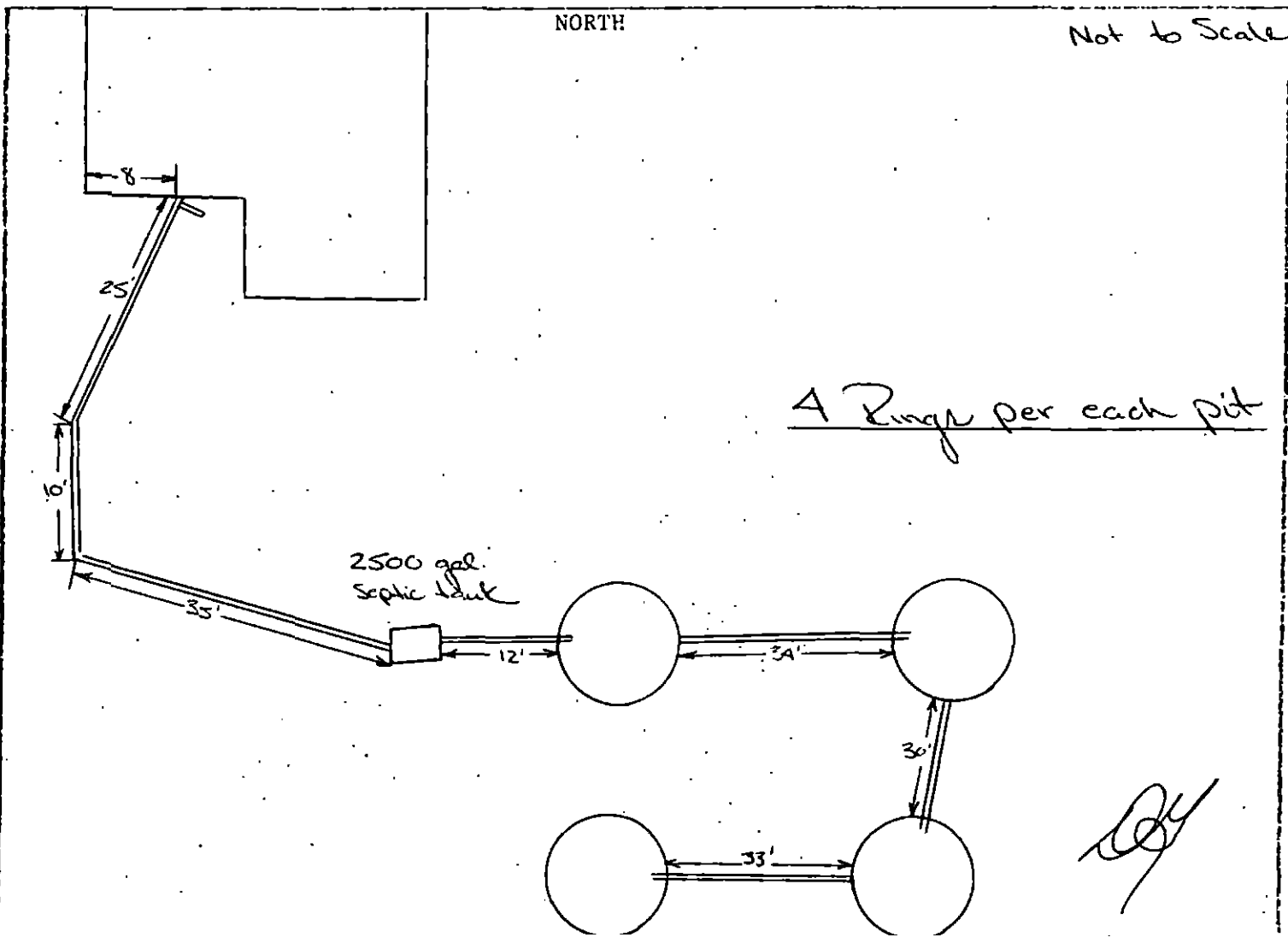
4

LINING MATERIAL

-

CAPACITY SQ. FT.

543



3219

Acres:

EL PASO COUNTY • COUNTY HEALTH DEPARTMENT

-Permit

501 North Foote Avenue • Colorado Springs, Colorado • 578-3125

Water Supply Well

Receipt No.

5621

PERMIT**TO CONSTRUCT, ALTER, REPAIR or MODIFY ANY INDIVIDUAL SEWAGE DISPOSAL SYSTEM**Issued To Fred LechnerDate 3/25/85Address of Property 10090 W. Highway 24, Green Mt. Falls, Phone 684-9044
CO. (Permit valid at this address only)Sewage-Disposal System work to be performed by Armentrout Phone 684-9301

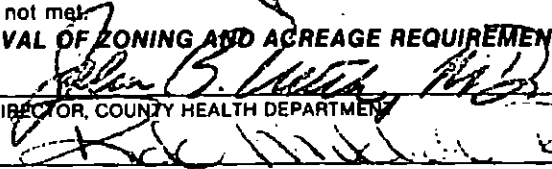
This Permit is issued in accordance with 25-10-106 Colorado Revised Statutes 1973, as amended. PERMIT EXPIRES upon completion of installation of sewage-disposal system or at the end of six (6) months from date of issue—whichever occurs first—(unless work is in progress). This permit is revokable if all stated requirements are not met.

—THIS PERMIT DOES NOT DENOTE APPROVAL OF ZONING AND ACREAGE REQUIREMENTS—**\$145.00**

PERMIT FEE (NOT REFUNDABLE)

September 25, 1985

DATE OF EXPIRATION


 DIRECTOR, COUNTY HEALTH DEPARTMENT

ENVIRONMENTALIST

NOTE: LEAVE ENTIRE SEWAGE-DISPOSAL SYSTEM UNCOVERED FOR FINAL INSPECTION. 48 HOUR ADVANCE NOTICE REQUIRED.

SEPTIC TANK:	TRENCH SYSTEM:	BED SYSTEM:	SEEPAGE PIT SYSTEM:
total square feet	total square feet		total square feet
<u>2500</u> gallons	ft. of trench _____ inches wide		
	ft. of trench _____ inches wide	total square feet	rings or _____ diam. x _____ w/d

NOTES: Install as per engineer design. Based on actual water usage.
Design for 1170 gallons per day maximum usage.

The Health Office shall assume no responsibility in case of failure or inadequacy of a sewage-disposal system, beyond consulting in good faith with the property owner or representative. Free access to the property shall be authorized at reasonable times for the purpose of making such inspections as are necessary to determine compliance with requirements of this law.

El Paso County Health Department
501 North Foote Avenue
Colorado Springs, CO 80909-4598
(303) 636-0125

APPLICATION FOR A PERMIT TO CONSTRUCT, REMODEL, OR INSTALL A SEWAGE DISPOSAL SYSTEM

NAME OF OWNER FRED LECHNER HOME PHONE 6330622 WORK PHONE 684-9044
ADDRESS OF PROPERTY 10096 W. HIGHWAY 24 DATE 3-24-85
LEGAL DESCRIPTION OF PROPERTY SAME
TAX SCHEDULE NUMBER - SYSTEM CONTRACTOR ARMENIA PHONE 6849301
OWNER'S ADDRESS IF DIFFERENT -
TYPE OF HOUSE CONSTRUCTION - SOURCE AND TYPE OF WATER SUPPLY WELL
SIZE OF LOT 1/4 AC MAXIMUM POTENTIAL NUMBER OF BEDROOMS COUNTRY BASEMENT (yes or no)
PERCOLATION TEST RESULTS ATTACHED (yes or no)

A plot plan and accompanying information are essential; it may be drawn on the back of this application or be attached. Please include by measured distance the location of wells including neighbors' wells, springs, water supply lines, cisterns, buildings, proposed structures, property lines, property dimensions, subsoil drains, lakes, ponds, water courses, streams, and dry gulches. Please show the location of the proposed septic system by directions and distances from actual and/or proposed dwellings, structures, or fixed reference objects. Give complete directions to the property from major highways.

Applicant acknowledges that the completeness of the application is conditional upon such further mandatory and additional tests and reports as may be required by the department to be made and furnished by the applicant for purposes of evaluation of the application; and issuance of the permit is subject to such terms and conditions as deemed necessary to ensure compliance with rules and regulations adopted under Article 10, Title 25, C.R.S. 1973 as amended. The undersigned hereby certifies that all statements made, information and reports submitted by the applicant are or will be represented to be true and correct to the best of my knowledge and belief and are designed to be relied on by the El Paso County Health Dept. in evaluating the same for purposes of issuing the permit applied for herein. I further understand that any falsification or misrepresentation may result in the denial of the application or revocation of any permit granted based upon said application and in legal action for perjury as provided by law.

SIGNATURE

[Signature]
FOR FRED

HEALTH DEPARTMENT USE ONLY

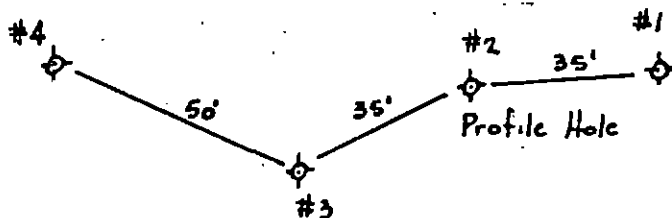
PERMIT NUMBER 3219 RECEIPT NUMBER 5621 DATE TO LAND USE DEPARTMENT N/A
ABSORPTION AREA - TANK CAPACITY 2500 DATE OF SITE INSPECTION 3/25/85
REMARKS: Installed as per engineer designs. Based on
actual water usage. Design for 1170 gpd
maximum usage.

APPLICATION IS APPROVED () DENIED () DATE 3/25/85 ENVIRONMENTALIST [Signature]

10090 W Highway 24 # 8309200011 E

DIAGRAM:

Motel
Office



04-15-1985
Aspen Engineering, Inc.
Fire Protection & Civil Consultants

SOIL PERCOLATION TESTS

CLIENT Kayo Armentrout

TEST LOCATION 10090 West U.S. Highway
24, Motel X, El Paso County, Colorado.

TEST NO. 11-84-152

DATE November 21, 1984

TRIAL NO.	DEPTH START, IN.	START TIME	DEPTH FINISH, IN.	FINISH TIME	TOTAL DROP INCHES	TOTAL DROP TIME, MIN.	MINUTES TO DROP 1 INCH
1	14.0	1131	8.0	1146	6.0	15.0	2.5
2	60.0	1132	56.5	1202	3.5	30.0	8.6
3	14.0	1134	7.5	1154	6.5	20.0	3.1
4	14.0	1135	10.0	1205	4.0	30.0	7.5
AVERAGE							5.4

DATE HOLE SATURATED 11/20/84 TIME 1600

DATE PERCOLATION TEST MADE 11/21/84 TIME 1130

REMARKS:

The proposed absorption field site is located on a moderate southwesterly slope with native grass and scattered trees for ground cover. Organic material mixed with gravel was present in all holes to an average depth of 4" and decomposed Pikes Peak granite of varying densities was present to the final depth of 30" in holes #1, #3 and #4 and 240" (20'-0") in profile hole #2. Moisture content was moderate in all holes, but neither ground water nor bedrock was encountered in any hole.

It is recommended that a seepage pit absorption system using drywell ring liners be used with sizing based on the average percolation rate of 5.4.

ASPEN ENGINEERING, INC.

Brooke B. Smith, Jr.
Brooke B. Smith, Jr., P.E.





CLIENT Kayo Armestroust

JOB NO. _____

SUBJECT Septic System Design for 10090 West U.S. Highway 24, Motel X, El Paso

BASED ON County, Colorado.

COMPUTER Brooke Smith

CHK'D BY _____

APP'D BY _____

DATE Nov. 27 19 84

1. Design Criteria:

The existing septic system serving a portion of the motel has failed and it is desired to replace it with a totally new system. According to the owner, Mr. Fred Lechner, the following facilities will be served by the new system:

Living Quarters: 2 Bedroom Apartment with kitchen, 3 people occupy. Auto washer.
Motel Rooms: 5 units with two(2) double beds, 2 units with kitchenettes.
Motel Rooms: 1 unit with one(1) double bed

The above data was supplied to Aspen Engineering, Inc. on Nov. 27, 1984 by the owner, Mr. Fred Lechner.

2. Design Flow:

Living Quarters: $(3 \text{ people} \times 75 \text{ gallons per person per day}) = 225$
Auto washer $0.4(225) = 90$
Motel Rooms: $(4 \text{ people} \times 60 \text{ gallons per person per day} \times 5) = 1200$
Motel Rooms: $(2 \text{ people} \times 60 \text{ gallons per person per day} \times 1) = 120$

Average Daily Flow = 1635 gpd

Maximum Daily Flow: $1635 \text{ gpd} \times 150\% = \underline{2452 \text{ gpd}}$

3. Septic Tank Design:

Septic tank size to be based on an approximate 48 hour detention time at maximum daily flow:

Size: $2452(2) = 4904 \text{ gallons}$. Use: one(1) 5000 gallon 2 compartment tank



CLIENT Kayo Armentrout

JOB NO. _____

SUBJECT Septic System Design

BASED ON _____

COMPUTER Brooke Smith

CHK'D BY _____

APP'D BY _____

DATE Nov. 27 19 84

4. Absorption Field Design:

$$A = Q/T/s$$

$t = 5.4$ from percolation test
(copy attached)

$$A = 2452 \sqrt{5.4} / 5 = 1140 \text{ sq. ft.}$$

Seepage pits are recommended for the site using 7' ϕ x 3' high dry well ring liners installed in a nominal 8' ϕ dug hole.

Absorption area per liner per 8' ϕ hole: $A = \pi d \times h$

$$= (3.14 \times 8) \times 3' = 75.4 \text{ sq. ft.}$$

$$\text{Number of Drywell Rings Req'd: } N = A / 75.4 = 1140 / 75.4 = 15.12 \text{ or } \underline{15 \text{ Rings}}$$

Use: 3 stacks of 5 rings for absorption field.

Profile Hole Depth = 20'-0"

Seepage Pit Depth = 15'-0"

Min. Depth below = 4'-0"

Max. Cover over pit = 1'-0"

20'-0" O.K.



CLIENT Kayo Armentrout

JOB NO. _____

SUBJECT Septic System Design

BASED ON _____

COMPUTER Brooke Smith

CHK'D BY _____

APP'D BY _____

DATE Nov. 27 1984

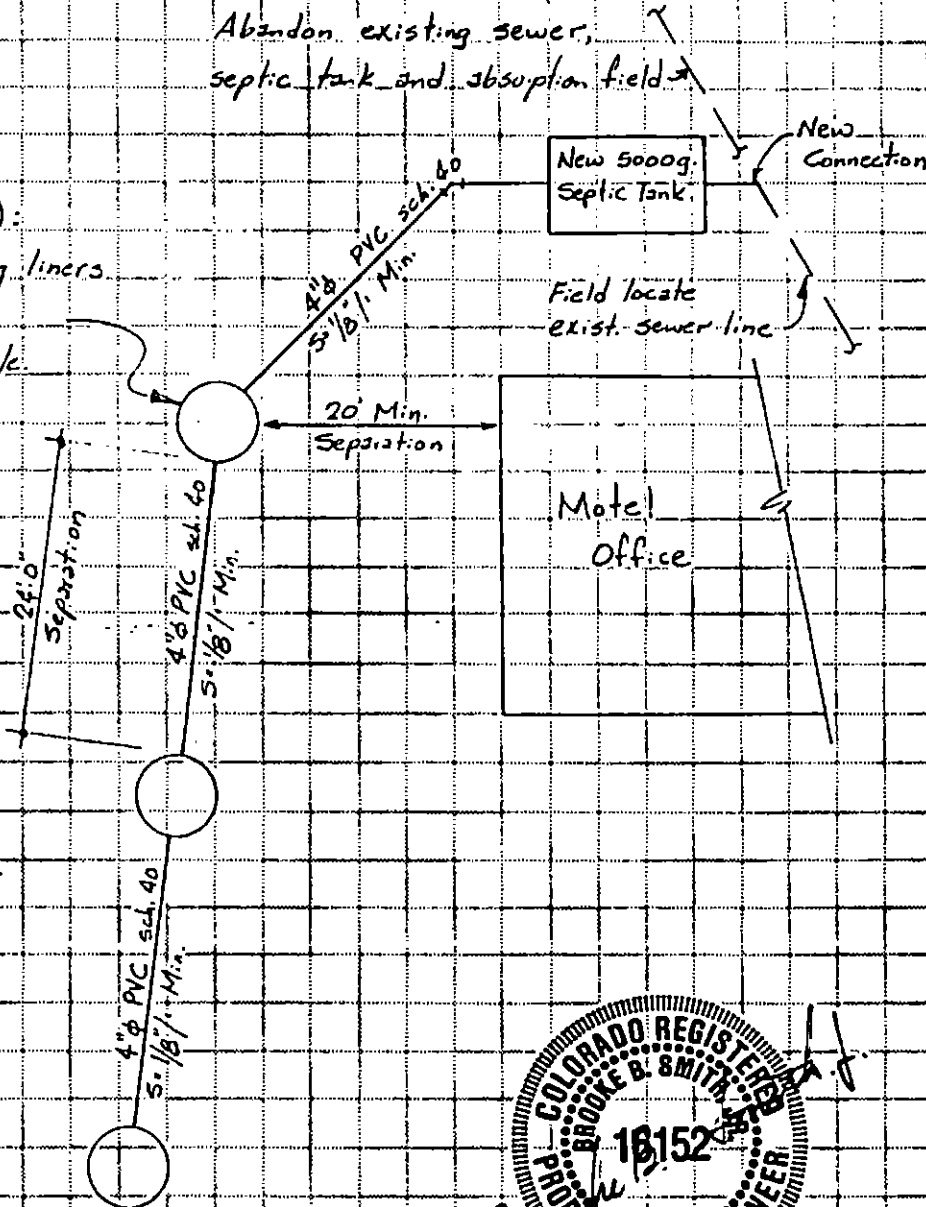
5. Site Arrangement:

Typical Seepage Pit (3 Req'd.):

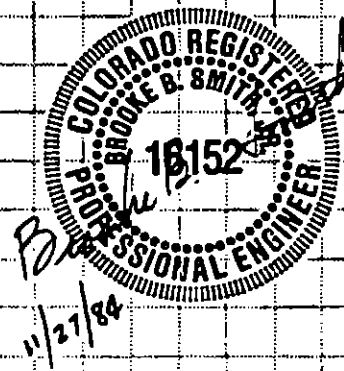
5- 7' x 3' high drywell ring liners

1- Precast Conc. Lid

All in 84 nominal dug hole



Note: Contractor may alter arrangement as necessary to suit site conditions but number of components and required min. distances should not be changed without notifying engineer.



Rocking X Motel Water Used

Date	Meter Reading	Gals. Used	
	458543		
9-7-83	494795	36252	
10-1-83	515495	20,700	900 G.P.D.
11-3-83	543677	28,182	854 G.P.D.
12-1-83	564251	20,574	643
1-2-84	583223	18,972	592
2-4-84	604475	21,252	644
3-1-84	618227	13,752	443
4-1-84	639059	20,832	672
5-2-84	661193	22,134	714
6-1-84	687953	26,760	836
7-10-84	725833	37,880	971
8-1-84	747337	21,504	977
9-4-84	779222	31,885	937
10-2-84	811338	32,116	1147
11-1-84	839526	28,188	939
12-1-84	858936	19,410	647
1-4-85	879621	20,685	626

Manager's quarter - 2 bedroom house

Motel room - 5 units w/ 4 people per.
1 unit w/ 2 people per.

Sewage Flow

Manager's - 4 people @ 75 gpd = 300

Motel - (5) 4 people @ 60 gpd = 1200

2 people @ 60 gpd = 120

1620

Maximum daily flow $1620 \times 1.50 = \underline{\underline{2430}}$

$$A = \frac{2430 \sqrt{5.4}}{5} = 1129 \text{ sq. ft.}$$

$$1129 \div 66 \approx 17 \text{ Rings}$$

5000 gal septic tank



EL PASO COUNTY HEALTH DEPARTMENT

501 NORTH FOOTE AVENUE • COLORADO SPRINGS, CO 80909-4598

ADMINISTRATIVE OFFICES: 501 NORTH FOOTE, 80909-4598 • 636-0199
DRUG TREATMENT PROGRAM: 710 SOUTH TEJON, 80903 • 636-0150
VITAL STATISTICS: 27 EAST VERMILIO, 80903 • 471-5762

March 12, 1985

Fred Lechner
Hi-Vu Campground
10090 West Highway 24
Green Mountain Falls, Colorado 80819

On January 24, 1985, Kayo Armentrout supplied me with water usage information on Motel X from September 1983 to January 1985. This information will be used to calculate sewage disposal system requirements for your facility.

Mr. Armentrout indicated that he would be able to begin construction on this system early this spring when soil conditions allow. Until that time it will be necessary that you have the existing system pumped as often as necessitated by current usage to eliminate sewage flowing on the surface of the ground.

If you have any questions, please call.

Sincerely,

FOR THE DIRECTOR, ENVIRONMENTAL HEALTH
SERVICES

Rick Miklich
Environmental
Environmental Health Services
578-3133

cc: Kayo Armentrout

RM:ad

CHARLES R. JOHNSON
ENGINEER — GEOLOGIST

4102 Flintridge Circle
Colorado Springs, CO 80907
(303) 598-4361

December 11, 1984

Mr. Kayo Armentrout
P. O. Box 223
Green Mountain Falls, Colo. 80819

Dear Mr. Armentrout:

At your request, I have calculated the expected flow of sewage that can be expected from a new septic sewage system being installed at Motel X, 10090 West Highway 24 in El Paso County, Colorado.

The following facilities will be served by the new septic tank system:

Managers Quarters: A 2 bedroom apartment with kitchen, 3 occupants,
with an automatic washer.

Motel Rooms: 5 units with two double beds, 2 units with kitchenettes.
1 unit with one double bed.

ESTIMATED FLOW OF SEWAGE:

Managers Quarters:	3 persons @ 60 gallons per day per person	180 gpd
	Automatic washer (0.4 x 180)	72 gpd
Motel Rooms:	5 rooms with 4 persons @ 60 gpd X 80% occupancy	960 gpd
	1 room with 2 persons @ 60 gpd X 80% occupancy	<u>96 gpd</u>
	Total	1308

Maximum daily flow = 1308 times 120% = 1570

I have examined the percolation test results and the septic system design and found them to be satisfactory.

Respectfully submitted,

Charles R. Johnson
Charles R. Johnson, PE 8621

