

TRI-COUNTY DISTRICT HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

FISCAL CONTROL NO.

82 3996

ADAMS CITY4301 EAST 72ND AVE.
288-6816**AURORA**15400 EAST 14th PLACE
SUITE 309
341-9370**WEST ADAMS**7475 DAKIN ST.
SUITE 401
428-8543**BRIGHTON**1895 EGBERT ST.
659-4000**ENGLEWOOD**4857 SO. BROADWAY
761-1340**DOUGLAS COUNTY**502 THIRD ST.
688-5145

PERMIT

6752 W Chatfield Ln

TRI-COUNTY DISTRICT HEALTH DEPARTMENT (FILE) NO. 3400PERMIT TO (☒) CONSTRUCT () REMODEL A NON-MUNICIPAL WASTE DISPOSAL SYSTEM FOR Den-lar Construction

(Name)

AT Lot 103 Chatfield East

(Address or Legal Description)

COMPOSED OF 1250 GALLON SEPTIC TANK AND A SOIL ABSORPTION AREA 1300 SQ. FT.

OR

THIS PERMIT SHALL EXPIRE ONE YEAR FROM DATE OF ISSUANCE UNLESS EXTENDED TO A FIXED DATE UPON REQUEST BY THE APPLICANT AND APPROVED BY THE HEALTH OFFICER.

ISSUED BY Samuel Johnson, M.D. PUBLIC HEALTH OFFICER, TRI-COUNTY DISTRICT HEALTH DEPARTMENT BY

(Sanitarian)

DATE February 21, 1979

OWNER MUST ASCERTAIN THAT THIS ENTIRE WASTE DISPOSAL SYSTEM REMAINS OPEN FOR INSPECTION UNTIL IT HAS RECEIVED APPROVAL BY THE TRI-COUNTY DISTRICT HEALTH DEPARTMENT. THE HEALTH OFFICER CANNOT ASSUME RESPONSIBILITY IN CASE OF FAILURE OR INADEQUACY OF A WASTE DISPOSAL SYSTEM BEYOND CONSULTING IN GOOD FAITH WITH PROPERTY OWNER. MALFUNCTIONS MAY BE DUE TO IMPROPER MAINTENANCE AND/OR USAGE, VARIABLE GROUND WATER TABLE, SOIL COMPACTION OR OTHER FACTORS. IN THE EVENT THIS SYSTEM MUST BE SAMPLED TO DETERMINE COMPLIANCE WITH STATE STANDARDS, A FEE OF \$ _____ PLUS _____ MILES AT 10¢ PER MILE WILL BE ASSESSED FOR EACH SAMPLE TAKEN.

PERMIT FEE OF \$ 75.00 FOR NEW SYSTEM. CHECK NO. 551 M.O. NO. _____ CASH _____RECEIVED BY jb DATE 2-21-79

TRI-COUNTY DISTRICT HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

FISCAL CONTR.

ADAMS CITY4301 EAST 72ND AVE.
288-6816**AURORA**15400 EAST 14th PLACE
SUITE 309
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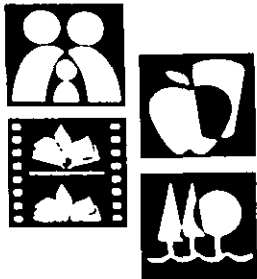
PERMIT

4431

TRI-COUNTY DISTRICT HEALTH DEPARTMENT (FILE) NO. 2400PERMIT TO ☒ CONSTRUCT ☐ REMODEL A NON-MUNICIPAL WASTE DISPOSAL SYSTEM FOR A. H. [unclear]AT 1000 1st St East Douglas County (Name)
(Address or Legal Description)COMPOSED OF 1100 GALLON SEPTIC TANK AND A SOIL ABSORPTION AREA 1100 SQ. FT.
ORTHIS PERMIT SHALL EXPIRE ONE YEAR FROM DATE OF ISSUANCE, UNLESS EXTENDED TO A FIXED DATE UPON REQUEST BY THE APPLICANT AND
APPROVED BY THE HEALTH OFFICER.ISSUED BY [Signature] PUBLIC HEALTH OFFICER, TRI-COUNTY DISTRICT HEALTH DEPARTMENT BY
[Signature] DATE 11-9-70
(Sanitarian)

YOU MUST ASCERTAIN THAT THIS ENTIRE WASTE DISPOSAL SYSTEM REMAINS OPEN FOR INSPECTION UNTIL IT HAS RECEIVED APPROVAL BY
TRI-COUNTY DISTRICT HEALTH DEPARTMENT. THE HEALTH OFFICER CANNOT ASSUME RESPONSIBILITY IN CASE OF FAILURE OR INADE-
QUACY OF A WASTE DISPOSAL SYSTEM BEYOND CONSULTING IN GOOD FAITH WITH PROPERTY OWNER. MALFUNCTIONS MAY BE DUE TO IMPROPER
MAINTENANCE AND/OR USAGE, VARIABLE GROUND WATER TABLE, SOIL COMPACTION OR OTHER FACTORS. IN THE EVENT THIS SYSTEM MUST BE
SAMPLED TO DETERMINE COMPLIANCE WITH STATE STANDARDS, A FEE OF \$ _____ PLUS _____ MILES AT 10¢ PER MILE WILL BE
ASSESSED FOR EACH SAMPLE TAKEN.

PERMIT FEE OF \$ 2000 V.A. FOR NEW SYSTEM. CHECK NO. 114 M.O. NO. _____ CASH _____
RECEIVED BY _____ DATE _____



Chris J. Wiant, M.P.H., Ph.D.
Executive Director

Tri-County Health Department

Serving Adams, Arapahoe and Douglas Counties Permit # 1998-07-000500

**PERMIT TO REPAIR
AN INDIVIDUAL SEWAGE DISPOSAL SYSTEM**
Tri-County Health Department
7000 East Belleview Avenue Suite 301
Englewood, Colorado 80111

Owner Keith E. Lehmann
Location: 6752 W Chatfield Lane Lot 103
Installer: 60000096 DOUGLAS COUNTY SEPTIC

=====

System Requirements:

Design Requirements for: Trench System: Bed System:

See specifications as noted by the Design Engineer

*****Special Conditions*****

*INSTALL PER COLORADO SOIL AND ENGINEERING INC. PROJECT NO.
98-814,, DATED 09-14-98.

=====

A Permit to REPAIR shall expire 2 WEEKS from the date of
issuance unless extended to a fixed date upon request by the Applicant
and approved by the Tri-County Health Department.

This Permit Expires: 10/19/1998

Issued by: Tri-County Health Department on October 5, 1998

OWNER MUST MAKE SURE THAT HIS/HER ENTIRE WASTE DISPOSAL SYSTEM REMAINS
OPEN FOR INSPECTION UNTIL IT HAS RECEIVED APPROVAL BY TRI-COUNTY HEALTH
DEPARTMENT. TRI-COUNTY HEALTH DEPARTMENT CANNOT ASSUME RESPONSIBILITY
IN CASE OF FAILURE OR INADEQUACY OF A WASTE DISPOSAL SYSTEM BEYOND
CONSULTING IN GOOD FAITH WITH THE PROPERTY OWNER.

Permit Fee: 250.00 Payment Method Cash

Received By: Dutton, Becky on 09/15/1998

() Owner Copy () Bldg. Dept. Copy () Installer Copy () H.D. >

For Accounting Use Only:

680-505000

250.00

Fifty years of working to

50

improve the public's health

101 Third Street □ Castle Rock, Colorado 80104-2428
303-663-7650 □ FAX 303-688-8870



Subsurface Investigations
Percolation Testing
Foundation Design
Structural Design
Engineered Septic Systems
Engineering Inspections
Environmental Site Assessments

October 16, 1998

Tri-County Health Department
101 3rd St.
Castle Rock, CO 80104

Subject: Engineered Septic System Inspection Letter
 6752 W. Chatfield Ln.
 Douglas County, Colorado
 Colorado Soil and Engineering Inc., Project Number 98-841

Colorado Soil and Engineering, Inc. made a final inspection of the subject engineered septic system on October 8, 1998. The septic system was low pressure drip irrigation and was installed in accordance with the engineer's plans and specifications and Tri-County Health Department Regulations.

If you have any questions regarding this letter, please feel free to contact the undersigned.

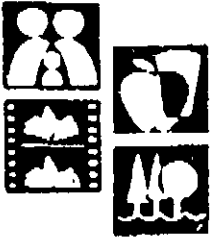
Sincerely,

A handwritten signature in black ink, appearing to read "KW", enclosed within an oval shape.

Ken Worthington
Engineering Technician

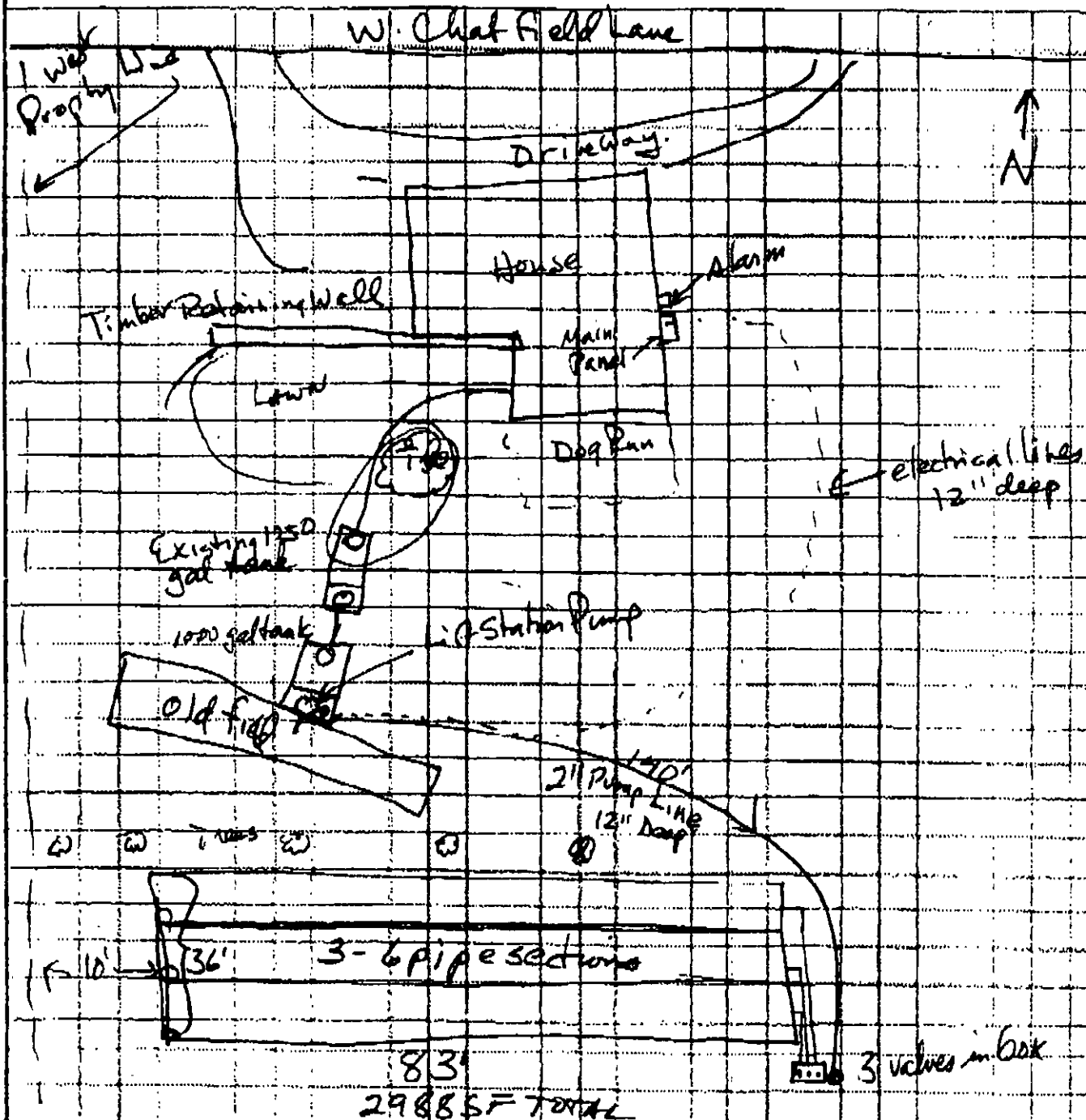


Reviewed by: Tyrone R. Carter, P.E.
Principal



Onsite System
As-Built
Drawing
GARY HOERL

Property Address 6752 W. Chatfield Ln.
Permit # 98-07-500
Date System Completed 10/8/98
Installer's Name NORM JOHNSON
Installer's License # 98-96
Installer's Address and Phone 303 791 7716





ID: 3036888870 SEP 08 '98 9:04 No. 002 P. 02
Tri-County Health Department
 Serving Adams, Arapahoe and Douglas Counties

Permit # 1998-07-00500293141
 Date Paid 9-15-98
 Check # 2793
 Rec'd By bd

Install \$300
 Repair/Expand: \$250

APPLICATION TO:
☐ INSTALL ☒ REPAIR ☐ EXPAND
 AN INDIVIDUAL SEWAGE DISPOSAL SYSTEM

To Be Completed By Applicant Please Type or Print Clearly

Address/Legal Description of Property Served by Proposed System.

Chattfield East Lot 103
6752 W Chattfield Lane

City and Zip Code: Littleton CO 80125

Property Owner KEITH E. LEHMANN

Applicant same

Address 6752 W Chattfield Lane

Address _____

City Littleton State CO

City _____ State _____

Zip 80125 Phone (303) 791-1964

Zip _____ Phone () _____

Installer Norm Johnson - Douglas County Septic

Design Engineer Ty - Colorado Soil

License # _____ Phone (303) 791-7716

Job # _____ Phone (303) 688-9475

Proposed Facility:

Facility Type: ☒ Single Family Residence ☐ Other _____

Lot Size 4 A.

Source/Type of Water Supply: ☒ On Site Well ☐ Community ☐ Other _____

If supplied by community water, give name of supplier: _____

General Information:

Number of bedrooms: (4) Basement: ☐ Full ☒ Walkout Basement Plumbed? ☒ Yes ☐ No

Are Additional Bedrooms Planned? ☐ Yes ☒ No Is this property within 400 feet of a sewer line? NO

If so, will that sewage district provide service? NO (attach letter from sewage district)

Is lot marked and are percolation holes staked? yes

I the undersigned hereby certify that all information and data provided is correct and true to the best of my knowledge. I agree that the construction of this individual sewage disposal system will comply with Tri-County Health Department's Regulation 1-96 and all other applicable laws and regulations.

Applicant's Signature _____

Date _____

☐ Commerce City
 4301 E. 72nd Ave.
 Commerce City, CO 80022
 288-6816

☐ Aurora
 15400 E. 14th Pl.
 Suite 309
 Aurora, CO 80011
 341-9370

☒ Castle Rock
 1411 Third St.
 Castle Rock, CO 80104
 663-7650

☐ Englewood
 4857 S. Broadway
 Englewood, CO 80110
 761-1340

☐ Northglenn
 10190 Baincock St.
 Suite 100
 Northglenn, CO 80053
 452-9547

For Department Use Only
Design Installation Requirements
6752 CHATFIELD LN

All applicable design/installation requirements of Regulation 1-96 shall be complied with in the installation of this system.

System designed for: _____ gallons per day and/or 4 bedrooms

Soils data: (See attached Percolation Test and Soil Data Form)

Average percolation rate: 20 (minutes per inch) Depth to groundwater: >10'

Depth to bedrock: >8' Ground slope: 4 % to NW

Type of disposal area proposed: * Drip Irrigation

Minimum size tank: * gallons Minimum disposal area (DRIP): 3000 square feet

Engineer design required? yes Minimum disposal area (trench): _____ square feet

Maximum depth of disposal area: * (not to exceed depth of percolation test holes)

Minimum depth of installed rock: N/A Minimum No. of Chamber Units: Bed - N/A

Trenches - N/A

Special Permit Conditions: * Install per Colorado Soil
and Eng. Inc Project NO. 98-814, dated 9-14-98.

Design engineer inspection of the completed system required? yes

Site approved by: [Signature] Date: 9/10-5-98

Application reviewed and approved by: [Signature] Date: 10-5-98

Site Visit Comments: Inspection pit was generally consistent
with soil profile report to 8 feet.

Final Inspection

Inspection Date(s): 10-8-98

Septic Tank Size (as built): 1000 gallons + existing 1250 gal.

Disposal Area Type: Drip Irrigation Size (as built): 3000 square feet

Depth At Deepest Point: 22"

Comments: _____

10-14-98

Date Of Final Approval

[Signature]
Environmental Health Specialist



Tri-County Health Department

Percolation Test and Soils Data Form

Property address 6752 W. Chatfield Ln.

Legal description _____

Property Owner:

Name Kieth Lehmann

Address 6752 W. Chatfield Ln. Littleton, CO 80125

Phone 791-1864

Note:

- Percolation Test Form, Site Plan and Grain Size Distribution Curve of the Sample must be submitted with this form.
- For all Lots <5 acres the site plan must include the entire lot. Test locations must be accurately tied to lot corners or other permanent markers.

Saturation and Swelling

- Smear surfaces removed: ☒ Yes ☐ No
- Sand or gravel added: ☐ Yes ☒ No
- Date and time presoak water added:
8/24/98 9:10
- Amount of presoak water added (gallons):
5
- Date and time percolation test is started:
8/25/98 11:15
- Did water remain in hole after the overnight swelling period:

Hole 1	☐ Yes	☒ No
Hole 2	☐ Yes	☒ No
Hole 3	☐ Yes	☒ No
Hole 4	☐ Yes	☒ No

Percolation Rate Measurement

Percolation Rate (min./in.)	Hole 1	<u>16</u>
	Hole 2	<u>20</u>
	Hole 3	<u>16</u>
	Hole 4	<u>27</u>
	Average	<u>20</u>

Groundwater:

- Encountered @ None feet.
- Estimated depth to maximum seasonal water table if not encountered in profile: (10' +)
- Is area believed to be subject to seasonal fluctuations which could result in a seasonal water table within 8' of surface?
☐ Yes ☒ No

Slope determination in absorption area: 4-5% to the NW (direction)

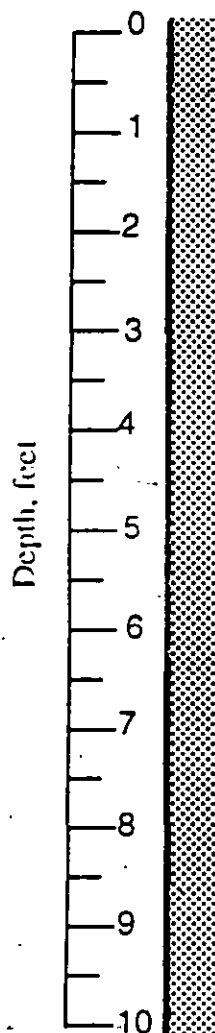
Bedrock:

- Encountered @ None feet.
- Estimated depth if not encountered in profile:
10' +
- Type of bedrock: ☐ Sandstone
☐ Claystone ☐ Siltstone
☐ Other
- Is bedrock fractured or weathered?
☐ Yes ☐ No

Profile Hole Information (Cont.)

(Soils must be classified using Unified System ASTM D2487)

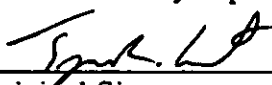
Profile Hole Log



20% clayey SAND(SC), SLIGHTLY MOIST, BROWN

Certification

I certify that the above information is correct and complete to the best of my knowledge and that all tests were performed in accordance with the provisions of Tri-County Health Department Regulation I-96 by myself or under my supervision.


Original Signature

9/1/98

Date

Colorado Soil & Percolation Tests, Inc.

Company Name

2931 N. US Highway 85, Castle Rock, CO

Address

(303) 688-9475

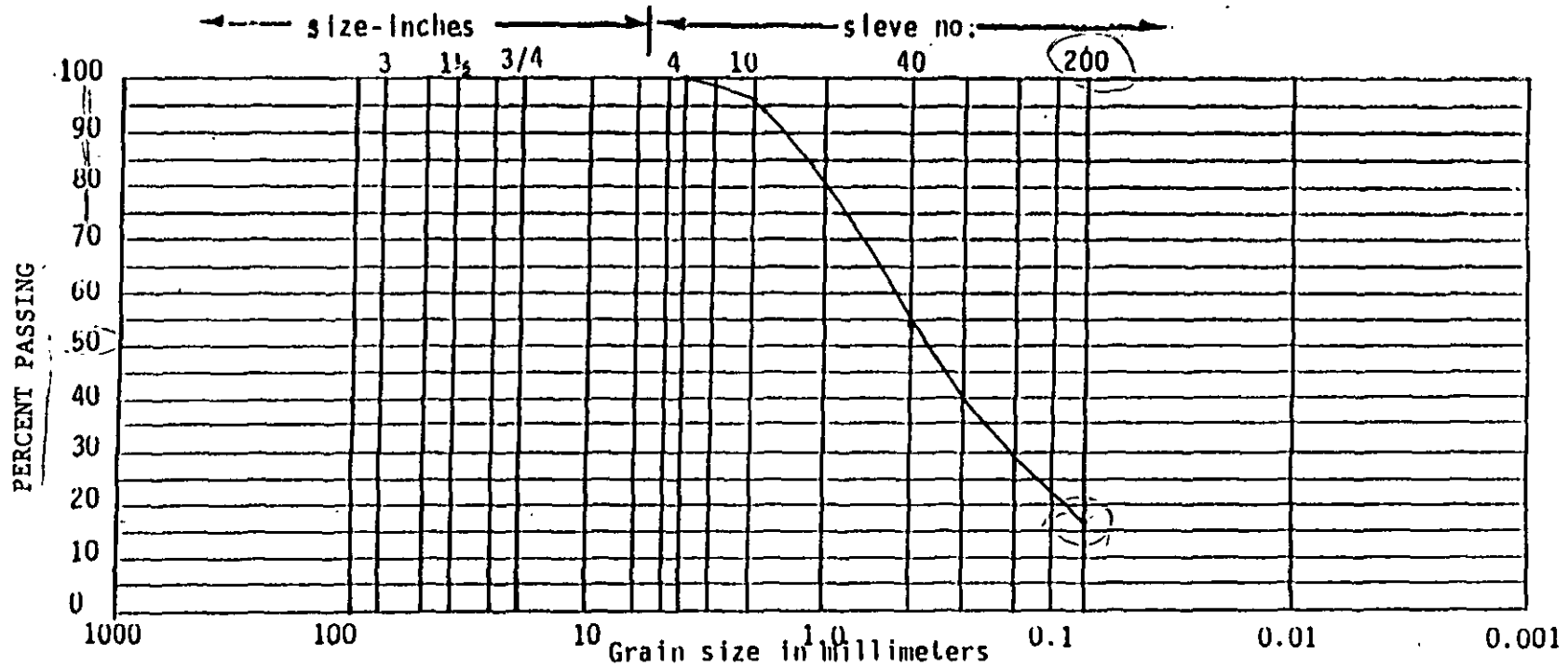
Phone

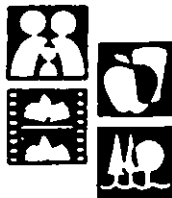


Original Seal

98-841R

U S STANDARD SIEVE SIZE



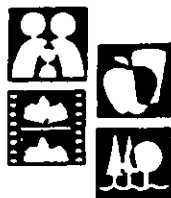


TRI-COUNTY HEALTH DEPARTMENT Percolation Test Result Form

Hole No.	Hole Depth (in.)	Length of Interval (min.)	Water Depth @ Start of Interval (in.)	Water Depth @ End of Interval (in.)	Drop In Water Level (in.)	Percolation Rate @ Final Interval (min./in.)
1	47 ³ / ₈	30	40 ⁵ / ₈	EMPTY	—	
		10	40 ¹ / ₈	41 ¹ / ₂	1 ³ / ₈	
		10	41 ¹ / ₂	42 ⁵ / ₈	1 ¹ / ₈	
		10	42 ⁵ / ₈	43 ⁵ / ₈	1	
		10	43 ⁵ / ₈	44 ³ / ₈	³ / ₄	
		10	44 ³ / ₈	45 ¹ / ₄	⁷ / ₈	
		10	45 ¹ / ₄	45 ⁷ / ₈	⁵ / ₈	16

*Field Notes shall be recorded on this form or in this format; typed copies of field records may be submitted on this form.

*A four hour test must be conducted unless (a) water remains in the hole after the presoak in which case one 30 min. interval is sufficient, (b) the first 6" of water seeps away in <30 minutes in which case a one-hour test of 6 - 10 minute time intervals may be used, (c) the test is being conducted in sand in which case a one-hour test of 6 - 10 minute time intervals may be used, (d) three successive water level drops do not vary by more than 1/16 inch in which case a two hour test may be conducted.

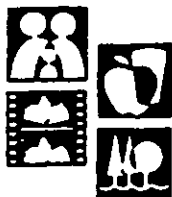


TRI-COUNTY HEALTH DEPARTMENT Percolation Test Result Form

Hole No.	Hole Depth (in.)	Length of Interval (min.)	Water Depth @ Start of Interval (in.)	Water Depth @ End of Interval (in.)	Drop In Water Level (in.)	Percolation Rate @ Final Interval (min./in.)
2	48 1/8	30	41	EMPTY	—	
		10	40 7/8	42 3/4	1 7/8	
		10	42 3/4	44 1/2	1 3/4	
		10	44 1/2	45 3/4	1 1/4	
		10	45 3/4	46 3/4	1	
		10	46 3/4	47 3/8	5/8	
		10	47 3/8	47 7/8	1/2	20

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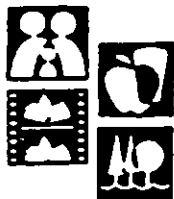


TRI-COUNTY HEALTH DEPARTMENT Percolation Test Result Form

Hole No.	Hole Depth (in.)	Length of Interval (min.)	Water Depth @ Start of Interval (in.)	Water Depth @ End of Interval (in.)	Drop in Water Level (in.)	Percolation Rate @ Final Interval (min./in.)
3	48 ⁵ / ₈	30	41 ¹ / ₂	EMPTY	—	
		10	41 ¹ / ₈	42 ³ / ₄	1 ⁵ / ₈	
		10	42 ³ / ₄	44 ¹ / ₈	1 ³ / ₈	
		10	44 ¹ / ₈	45 ¹ / ₈	1	
		10	45 ¹ / ₈	45 ⁷ / ₈	³ / ₄	
		10	45 ⁷ / ₈	46 ³ / ₄	⁷ / ₈	
		10	46 ³ / ₄	47 ³ / ₈	⁵ / ₈	16

*Field Notes shall be recorded on this form or in this format; typed copies of field records may be submitted on this form.

*A four hour test must be conducted unless (a) water remains in the hole after the presoak in which case one 30 min. interval is sufficient, (b) the first 6" of water seeps away in <30 minutes in which case a one-hour test of 6 - 10 minute time intervals may be used, (c) the test is being conducted in sand in which case a one-hour test of 6 - 10 minute time intervals may be used, (d) three successive water level drops do not vary by more than 1/16 inch in which case a two hour test may be conducted.



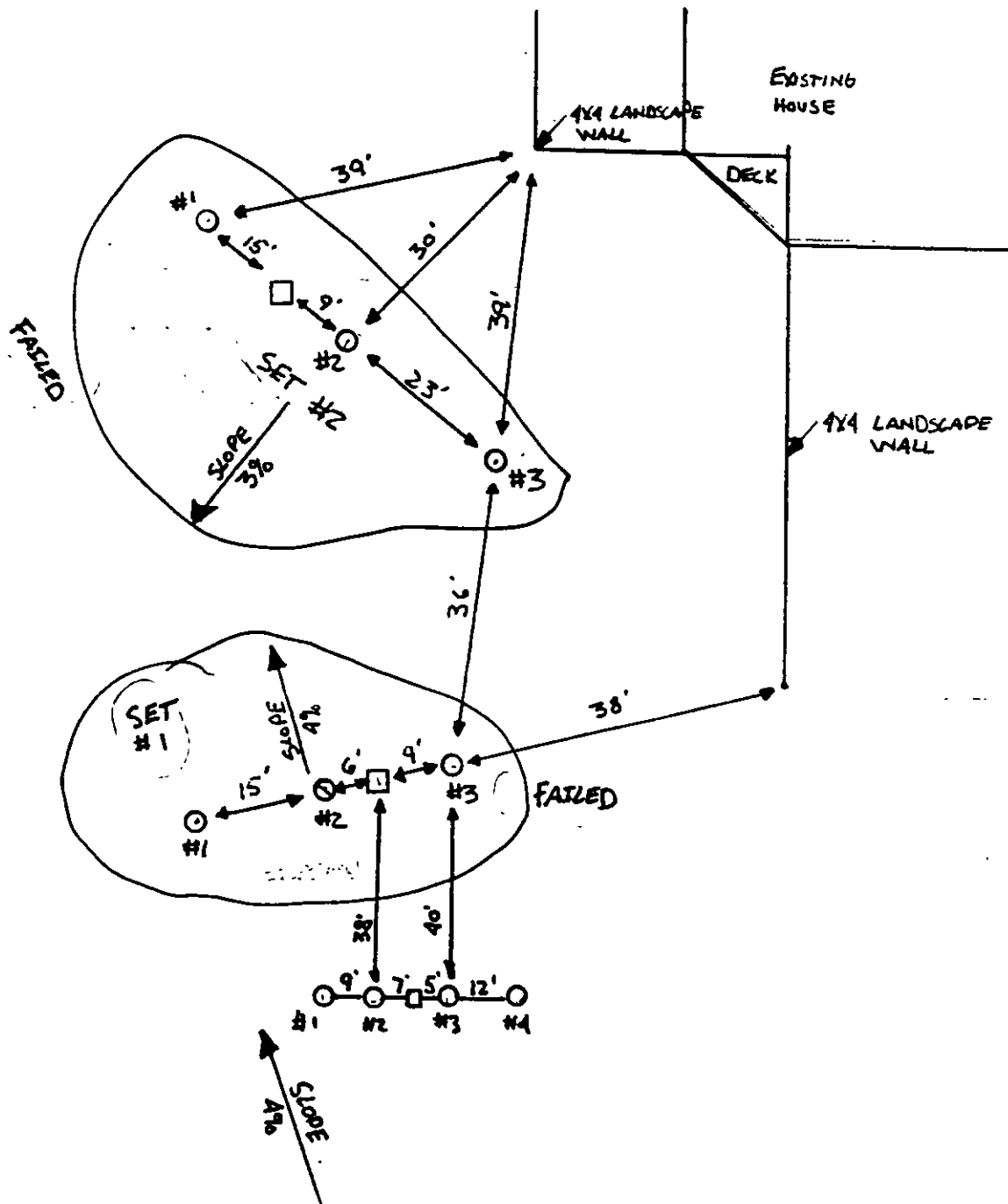
TRI-COUNTY HEALTH DEPARTMENT Percolation Test Result Form

Hole No.	Hole Depth (in.)	Length of Interval (min.)	Water Depth @ Start of Interval (in.)	Water Depth @ End of Interval (in.)	Drop In Water Level (in.)	Percolation Rate @ Final Interval (min./in.)
4	48 1/4	30	40 3/4	EMPTY	—	
		10	40 1/8	41 3/4	1 5/8	
		10	41 3/4	42 7/8	1 1/8	
		10	42 7/8	43 3/4	7/8	
		10	43 3/4	44 1/2	3/4	
		10	44 1/2	45	1/2	
		10	45	45 3/8	3/8	27

*Field Notes shall be recorded on this form or in this format; typed copies of field records may be submitted on this form.

*A four hour test must be conducted unless (a) water remains in the hole after the presoak in which case one 30 min. interval is sufficient, (b) the first 6" of water seeps away in <30 minutes in which case a one-hour test of 6 - 10 minute time intervals may be used, (c) the test is being conducted in sand in which case a one-hour test of 6 - 10 minute time intervals may be used, (d) three successive water level drops do not vary by more than 1/16 inch in which case a two hour test may be conducted.

LOCATION PLAN



LEGEND

- FOUNDATION SOIL TEST HOLE
- PERCOLATION TEST HOLE
- SOIL PROFILE HOLE

1:30

FIGURE 1

BP	PROJECT NUMBER	98-841
ADDRESS/LEGAL		6752 W. CHATFIELD LN.
		DOUGLAS COUNTY, COLORADO

TRI-COUNTY DISTRICT HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION

3400

Reissue

Adams City
4301 E. 72nd Ave.
288-6816

Brighton
1895 Egbert
659-4000

Englewood
4857 So. Broadway
761-1340

Aurora Office
15400 E. 14th Place
341-9370

Castle Rock
502 3rd St.
688-5145

West Adams City
7475 Dakin
428-8543

Reissue of permit # 3400 Original lost
APPLICATION FOR PERMIT TO CONSTRUCT, REMODEL, OR INSTALL A WASTE DISPOSAL SYSTEM

Address (Legal Description) Lot 103 Chattfield East Douglas County
Owner Keith Henmann Address 8793 W. Baseline PI Telephone No. 979-2971
Installed by Benn Backhoe Address _____ Telephone No. _____

GENERAL INFORMATION

Type of Waste System: Residence X Commercial _____ Other _____
Size of Lot 4 A
Percolation Rate #1 15 #2 20 #3 10 #4 _____ #5 _____ #6 _____
Average 15 minutes per inch. Depth of 1st Ground Water _____
Soil Profile 1' to 10' 0-6" Sand Silty Clayey 6-9" Silt Sand Clayey
Source of Domestic Water: Public (name) _____
Private well ✓ Depth _____ Distance from Sewage System _____
Estimated Daily Sewage Flow 450 G.P.D.

RESIDENCE

Number of Bedrooms 3 Tubs or Showers _____ Toilets _____ Lavatory _____ Sinks _____

COMMERCIAL or Other: Attach estimated daily sewage flow data.
Depth of Building Drain _____

CONSTRUCTION INFORMATION

Septic Tank Capacity 1000 gallons. Material Concrete
Inlet Top of Basin Outlet Top of Basin
Soil Absorption System Trench _____ Bed _____ Pit _____
Required Absorption Area in square feet 1100 Filler Material Size 1/2-2 1/2 Depth 12" Total
Distribution Line Material pvc Diameter 3-4 in

For other type disposal system attach complete design and specification data.

Owner or Agent Charles Bayly Date _____

Charles Bayly Tri-County District H.D. Sept 9, 80 Date

Water Pollution Control Comm. _____ Date

Local Building & Zoning _____ Date

Public Water & Sewer District _____ Date

Permit Issued Charles Bayly (health officer) Sept 9, 80 Date

Supporting data (attached) _____ Soil Profile ✓

Plot Plans ✓ Special Design Data _____

Percolation Data ✓

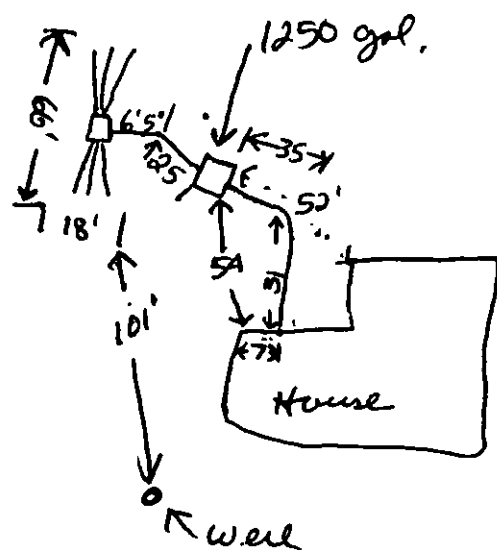
The construction of this nonmunicipal waste disposal system will comply with TCDHD Reg. #2/69 and all other applicable laws, ordinances, standards or resolutions. Charles Bayly Owner.

System inspected and approved (date) 10/6/80 Sanitarian Gary J. Berger

Permit File No. 4431 Fiscal Control No. 6779

10/2/80 System not approved this date. Owner given recommendations to make system acceptable.

field 1188 ft²



lines are 5" to 6' apart N.W. section of leak field is 1" deep.

- Recommend for approved:
- 1) 18" fill on bed
 - 2) Connect pipes together
 - 3) use solid PVC for center section of lines @ least 10' out.
- ~~#1 Dig 2' deep trench at W. end of field fill w/ gravel.~~

10/6/80
approved



LEWIS ENGINEERING COMPANY

6199 SO. ADAMS DR.
LITTLETON CO. 80121
795-2630

PERCOLATION TEST RESULTS

DATE: February 5, 1979

PROJECT NO.: 21-6115

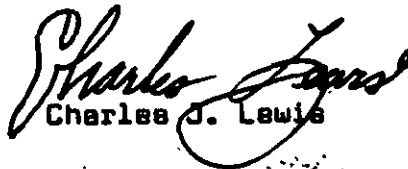
TO: Den Lar Construction
7028 W. Pineview Drive
Littleton, Colo. 80125

SUBJECT: Lot 103 Chatfield East
Douglas County, Colorado

Dear Sir:

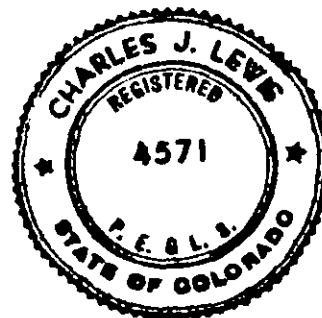
Percolation tests were conducted on the above listed property, as shown on the attached Location Map (Figure 1). The percolation rates of this test are reported in minutes of time per inch of water drop. The field percolation rate is the average rate of all the test holes observed in the proposed leaching area. The results of the soil profile hole is shown on the attached Figure 2.

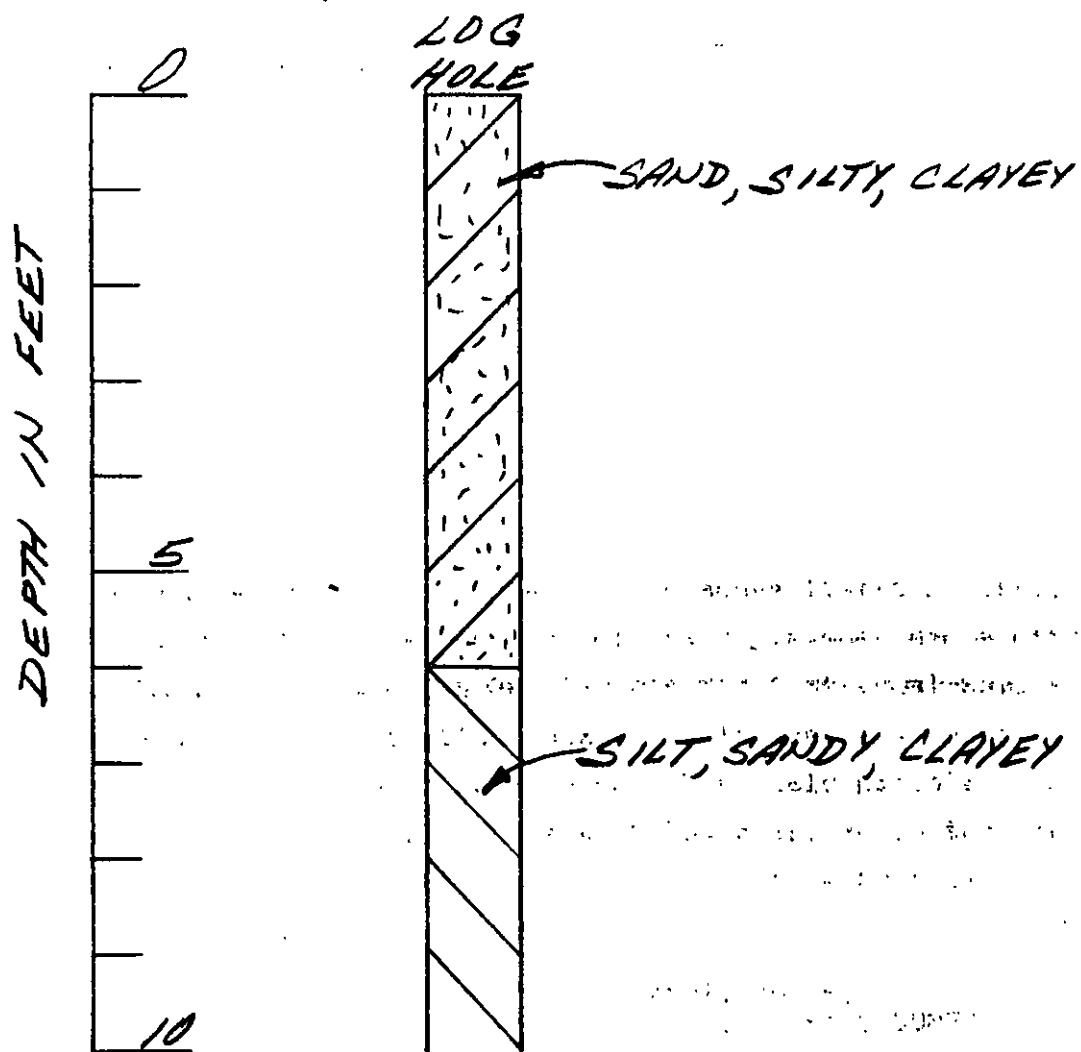
Sincerely yours,
LEWIS ENGINEERING COMPANY


Charles J. Lewis

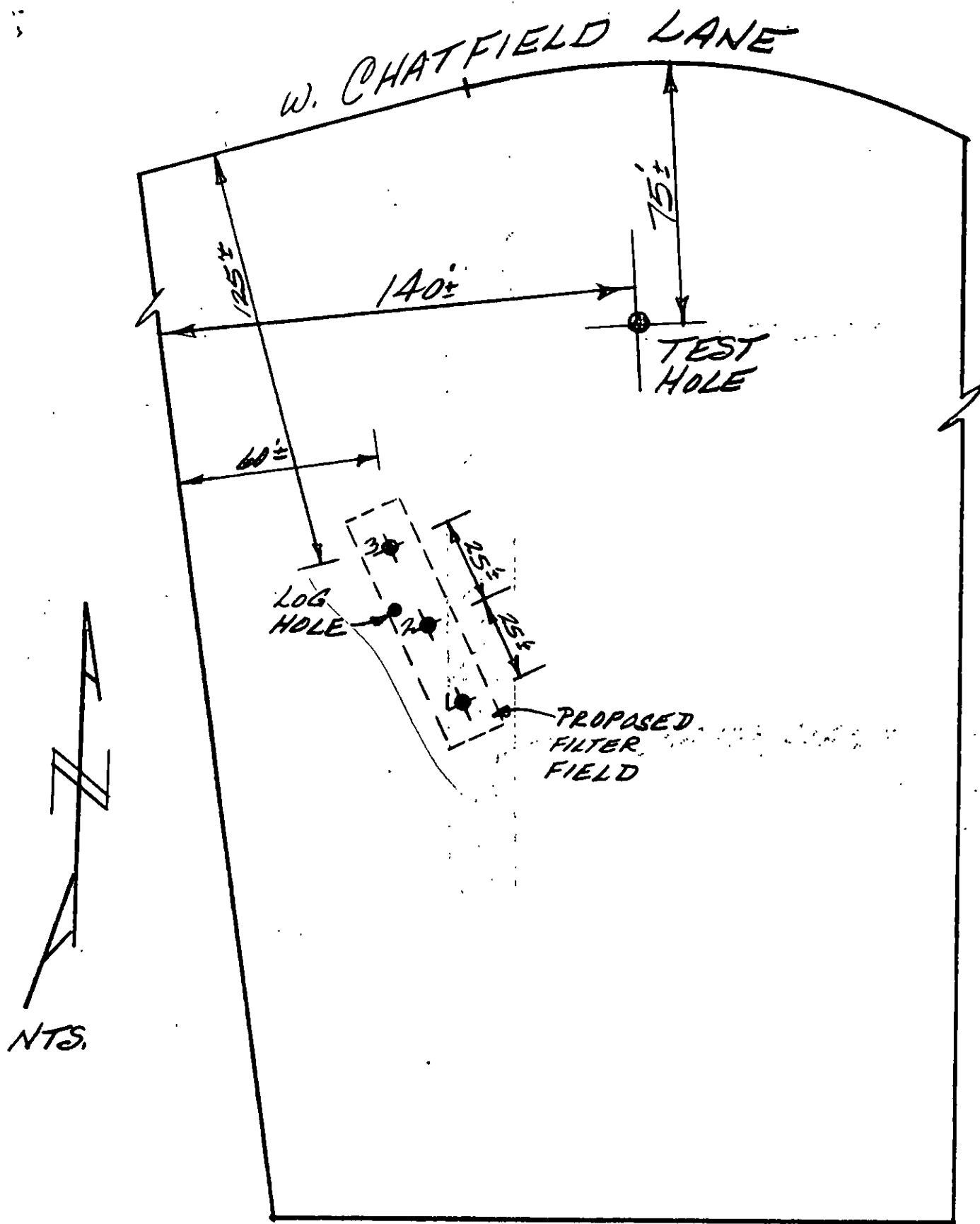
PERCOLATION TEST HOLE #1 ---- 36" deep
percolation rate = 15 minutes per inch
PERCOLATION TEST HOLE #2 ---- 36" deep
percolation rate = 20 minutes per inch
PERCOLATION TEST HOLE #3 ---- 36" deep
percolation rate = 10 minutes per inch
FIELD PERCOLATION RATE = 15 minutes per inch

LEWIS ENGINEERING COMPANY
6199 SOUTH ADAMS DRIVE
LITTLETON, COLORADO 80120





LOG OF LOGHOLE



LOT 103
CHATFIELD EAST
LOCATION OF TEST HOLE

FIGURE 1

ENVIRONMENTAL HEALTH DIVISION

Adams City
4301 E. 72nd Ave.
288-6816

Brighton
1895 Egbert
659-4000

Englewood
4857 So. Broadway
761-1340

Aurora Office
15400 E. 14th Place
341-9370

Castle Rock
502 3rd St.
688-5145

West Adams City
7475 Dakin
428-8543

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

#333
license

Address (Legal Description) LOT 103 Chert Field East
Owner DEM-LAR CONST Address 7028 W. VINEVIEW Telephone No. 755-1382
Installed by LARRY W. HANMAN Address SAME Telephone No. 755-0134

GENERAL INFORMATION

Type of Waste System: Residence ☒ Commercial ☐ Other ☐
Size of Lot 4 ACRES
Percolation Rate #1 15 #2 20 #3 10 #4 #5 #6
Average 20 minutes per inch. Depth of 1st Ground Water
Soil Profile 1' to 10' 1-6 SILTY SAND 6-10 SILT SAND
Source of Domestic Water: Public (name)
Private well Depth 375' Distance from Sewage System 130'
Estimated Daily Sewage Flow G.P.D.

RESIDENCE

Number of Bedrooms 4 Tubs or Showers 3 Toilets 4 Lavatory 4 Sinks 1

COMMERCIAL or Other: Attach estimated daily sewage flow data.

Depth of Building Drain 8" Pvc

3" Per foot

CONSTRUCTION INFORMATION

Septic Tank Capacity 1250 gallons Material Concrete
Inlet T Outlet T
Soil Absorption System Trench Bed 1300 Pit
Required Absorption Area in square feet Filler Material Size 1/2" Depth 36"
Distribution Line Material Pvc Diameter 3"

For other type disposal system attach complete design and specification data.

Owner or Agent DEM-LAR-CONST + Plumbing Date 2-21-79
Dennis Fisher

Tri-County District H.D. Date

Water Pollution Control Comm. Date

Local Building & Zoning Date

Public Water & Sewer District Date

Permit Issued Ray L. H. Hove (health officer) 2-21-79 Date

Supporting data (attached) Soil Profile

Plot Plans Special Design Data

Percolation Data

The construction of this nonmunicipal waste disposal system will comply with TCDHD Reg. #2/69 and all other applicable laws, ordinances, standards or resolutions. Owner.

System inspected and approved (date) Sanitarian

Permit File No. 3400 Fiscal Control No. 5198



LEWIS ENGINEERING COMPANY

6199 SO. ADAMS DR.
LITTLETON CO. 80121
795-2630

PERCOLATION TEST RESULTS

DATE: February 5, 1979

PROJECT NO.: 21-6115

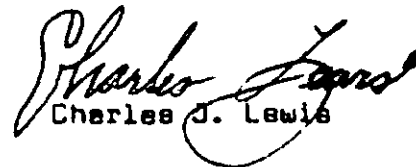
TO: Den Lar Construction
7028 W. Pineview Drive
Littleton, Colo. 80125

SUBJECT: Lot 103 Chatfield East
Douglas County, Colorado

Dear Sir:

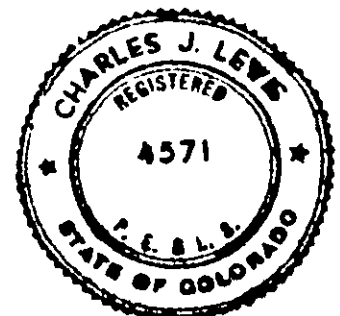
Percolation tests were conducted on the above listed property, as shown on the attached Location Map (Figure 1). The percolation rates of this test are reported in minutes of time per inch of water drop. The field percolation rate is the average rate of all the test holes observed in the proposed leaching area. The results of the soil profile hole is shown on the attached Figure 2.

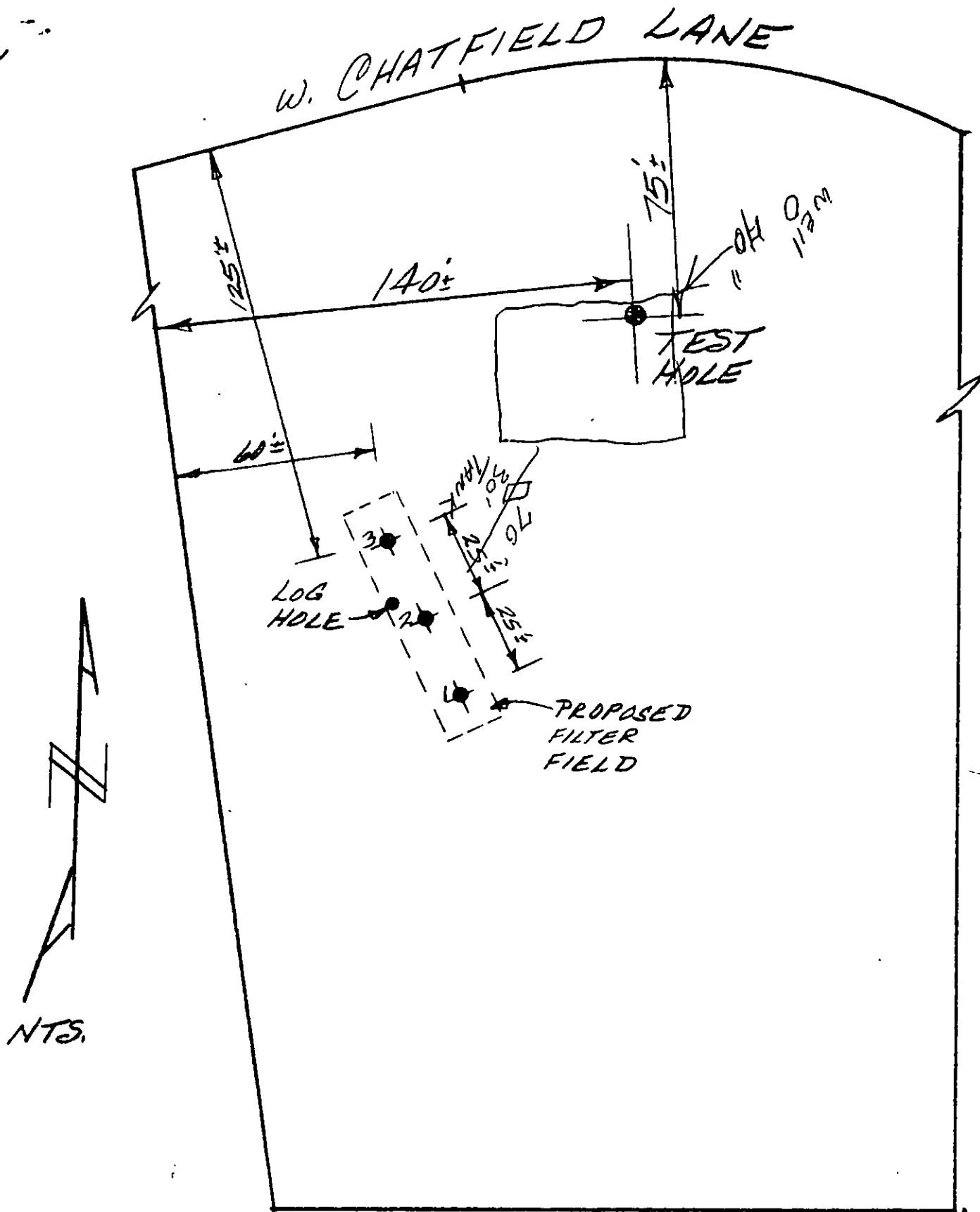
Sincerely yours,
LEWIS ENGINEERING COMPANY


Charles J. Lewis

PERCOLATION TEST HOLE #1 ---- 36" deep
percolation rate = 15 minutes per inch
PERCOLATION TEST HOLE #2 ---- 36" deep
percolation rate = 20 minutes per inch
PERCOLATION TEST HOLE #3 ---- 36" deep
percolation rate = 10 minutes per inch
FIELD PERCOLATION RATE = 15 minutes per inch

LEWIS ENGINEERING COMPANY
6199 SOUTH ADAMS DRIVE
LITTLETON, COLORADO 80120

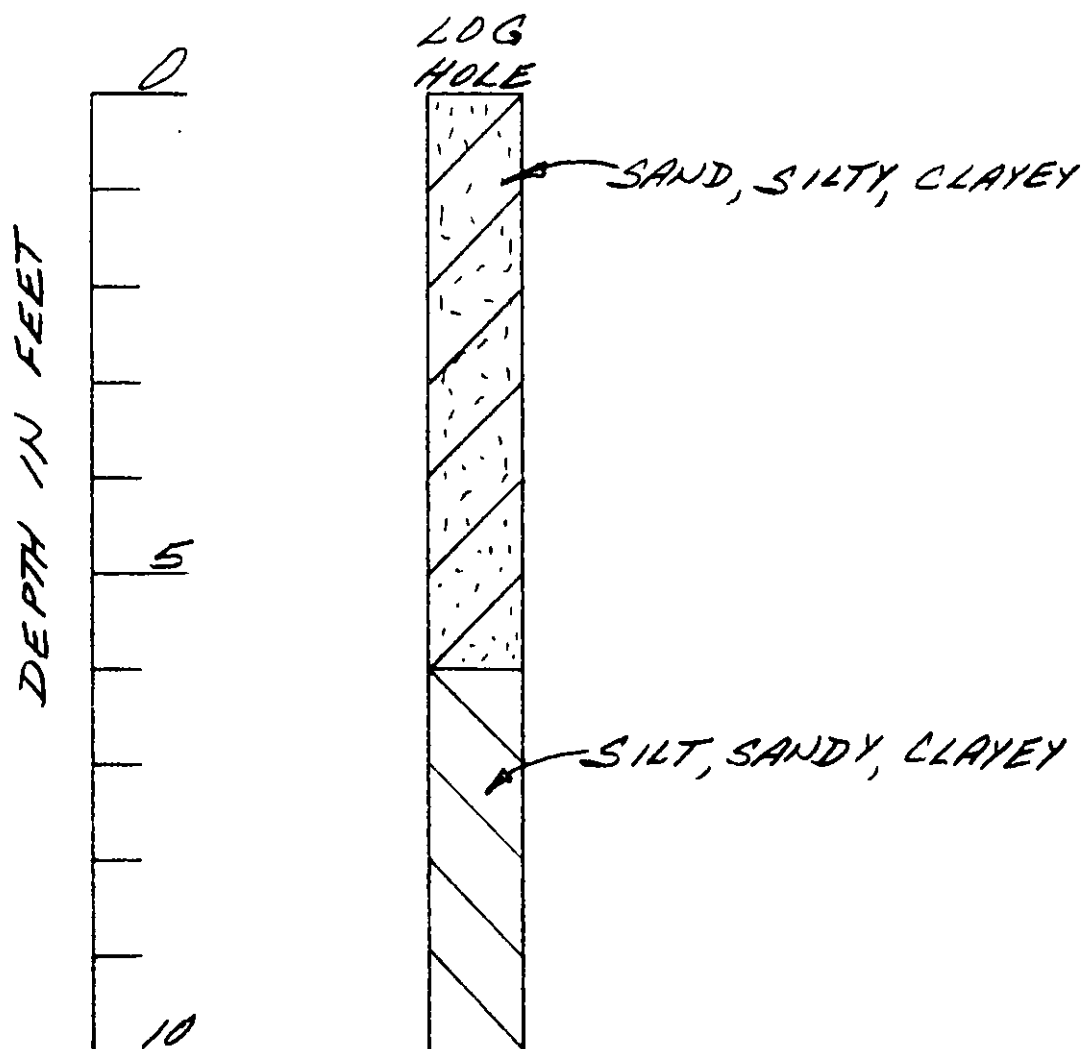




LOT 103
CHATFIELD EAST

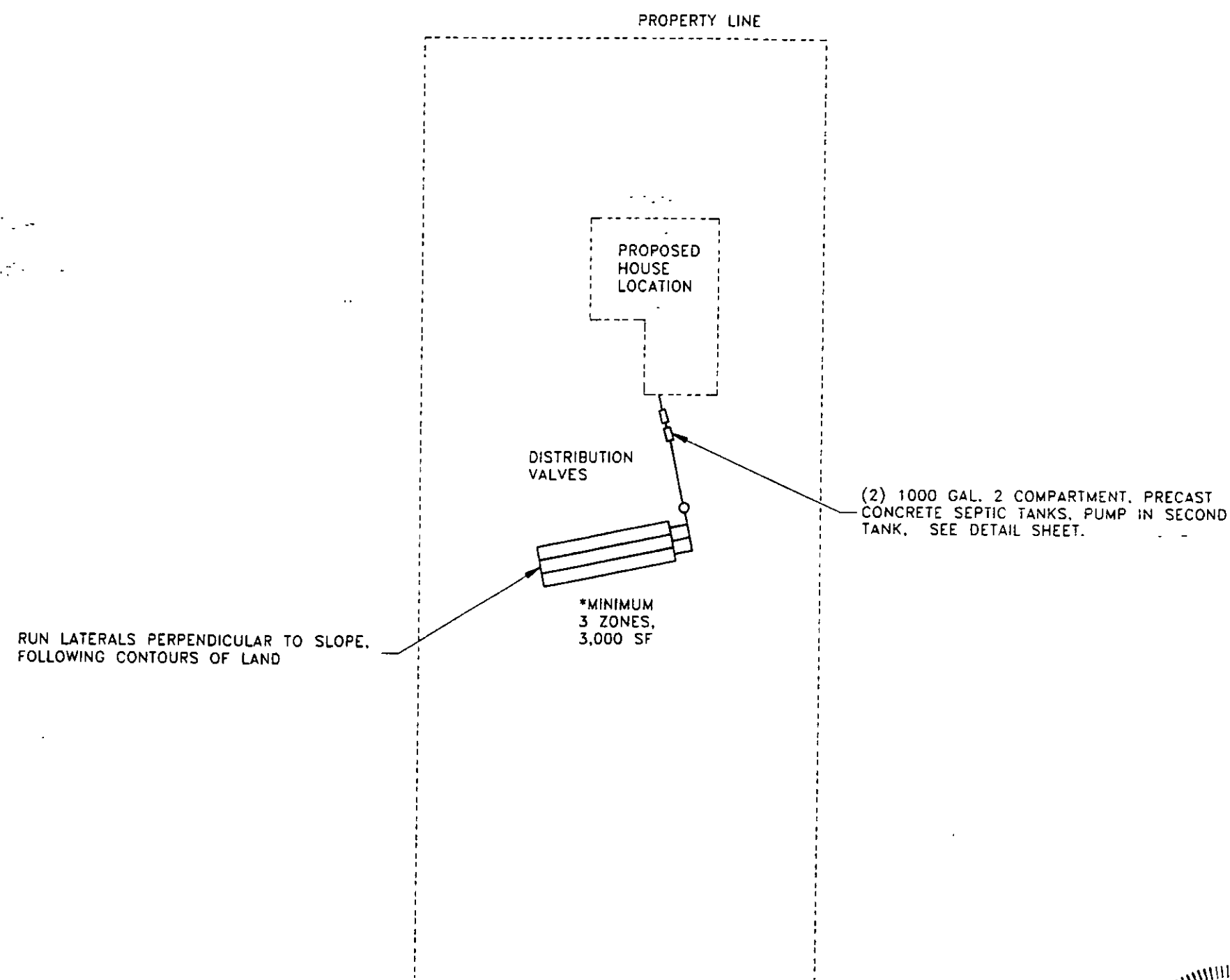
LOCATION OF TEST HOLE

FIGURE 1



LOG OF LOG HOLE

KEITH LEHMANN
6752 W. CHATFIELD LANE.
WILD FIELD ACRES SUBDIVISION
DOUGLAS COUNTY, COLORADO



CALCULATIONS:

FIELD DESIGN

THE DESIGN IS FOR A 4-BEDROOM HOUSE, DAILY LOAD (Q) IS 600 GAL.
AVERAGE PERCOLATION RATE IS 20 (COLO. SOIL AND PERC. 98-814)
MAXIMUM SOIL LOADING RATE (R) IS 0.42
AREA OF FIELD IS $(Q/R)(1.5)(1.6)(0.75)(1.17) = 3,008$ SF USE 3,000 SF

SEPTIC AND PUMPING TANK DESIGN

NUMBER OF LATERALS: $3,000 \text{ SF} / 100 \text{ LF} = 30 \text{ LF}$
 $30 \text{ LF} / 2 \text{ FT/LATERAL} = 15 \text{ LATERALS}$
PUMP SIZING: $1,500 \text{ LF} / 2' \text{ O.C. (HOLE SPACING)} = 750 \text{ HOLES}$
 $750 \times 0.50 \text{ GPM (1/4" DIA. HOLES AT 2' HEAD)} = 375 \text{ GPM AT 10' MAX HEAD}$
USE HYDROMATIC SPD50H (1/2 HP), GOULDS WEO3L (1/3 HP) OR APPROVED SUBSTITUTE. THIS WILL PROVIDE APPROX. 75 GPM AT 10' OF HEAD
USE VOLUME OF 150 GAL. VOLUME OF PIPE SYSTEM IS APPROXIMATELY 138 GAL.
FIELD (ZONE) PIPE: USE 1.5" OR 2" DIA., Class 200 PVC, 1/4" DIA. HOLES AT 24" O.C.
DISTRIBUTION PIPE: USE 2" DIA., SCH. 40 PVC

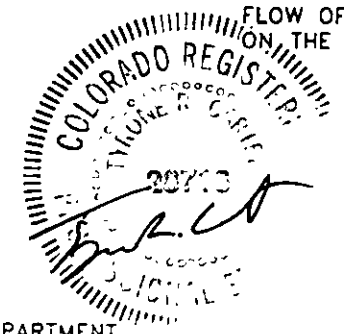
NOTES:

- A SEPTIC SYSTEM IS VULNERABLE TO DAMAGE IN MANY WAYS. EXCESSIVE WATER USE CAN LEAD TO SEVERE DAMAGE TO A SEPTIC DRAINAGE FIELD. EXCESSIVE WATER CAN COME FROM LEAKING TOILETS AND FAUCETS, DRAINING WATER BEDS OR HOT TUBS OR NUMEROUS LOADS OF LAUNDRY IN A DAY. OWNERS ARE ADVISED TO SPACE WATER USAGE OUT EVENLY AND KEEP IT TO A MINIMUM.
- A SEPARATE SEWER CLEANOUT IS REQUIRED OUTSIDE THE HOUSE, WITHIN FIVE FEET OF THE FOUNDATION.
- THE SEPTIC DRAIN FIELD IS NOT SUITABLE FOR PARKING OR DRIVING CARS OR FOR LIVESTOCK USAGE.
- A VACUUM BREAKER IS REQUIRED AT THE HIGH POINT IN THE LINE BETWEEN THE PUMP AND THE DRAIN FIELD SO THIS LINE CAN DRAIN TO PREVENT FREEZING.
- MANY DETAILS OF CONSTRUCTION ARE OMITTED FROM THESE DRAWINGS FOR CLARITY. THE INSTALLER MUST REFER TO LOCAL REGULATIONS CONCERNING OTHER INSTALLATION REQUIREMENTS.
- ELECTRICAL CONNECTIONS ARE NOT PERMITTED IN THE SUMP CHAMBER UNLESS THEY ARE FULLY ENCASED IN A WATER TIGHT JUNCTION BOX OR SEALED IN A MANNER APPROVED BY THE ENGINEER.
- IF THE DRAIN FIELD IS LOCATED AT A HIGHER ELEVATION THAN THE PUMP, INSTALL A SEEPAGE COLLAR AROUND THE PIPE TO PREVENT BACK FLOW THROUGH THE TRENCH FROM THE FIELD TO THE PUMP.
- THE USE OF SO-CALLED "SEPTIC SYSTEM REMEDIES" CAN RESULT IN SEVERE DAMAGE TO THE SYSTEM. WE SPECIFICALLY RECOMMEND AGAINST THEIR USE.
- HOMES WITH WATER SOFTENERS SHOULD HAVE A SEPARATE MINIMUM ONE CUBIC YARD GRAVEL DRAINAGE BED A MINIMUM OF TEN FEET FROM THE FOUNDATION AND THE MAIN SEPTIC DRAIN FIELD TO ACCEPT THE FLOW OF REGENERATING BRINE WHICH MAY HAVE AN ADVERSE AFFECT ON THE MICROORGANISMS WITHIN THE MAIN SEPTIC SYSTEM.

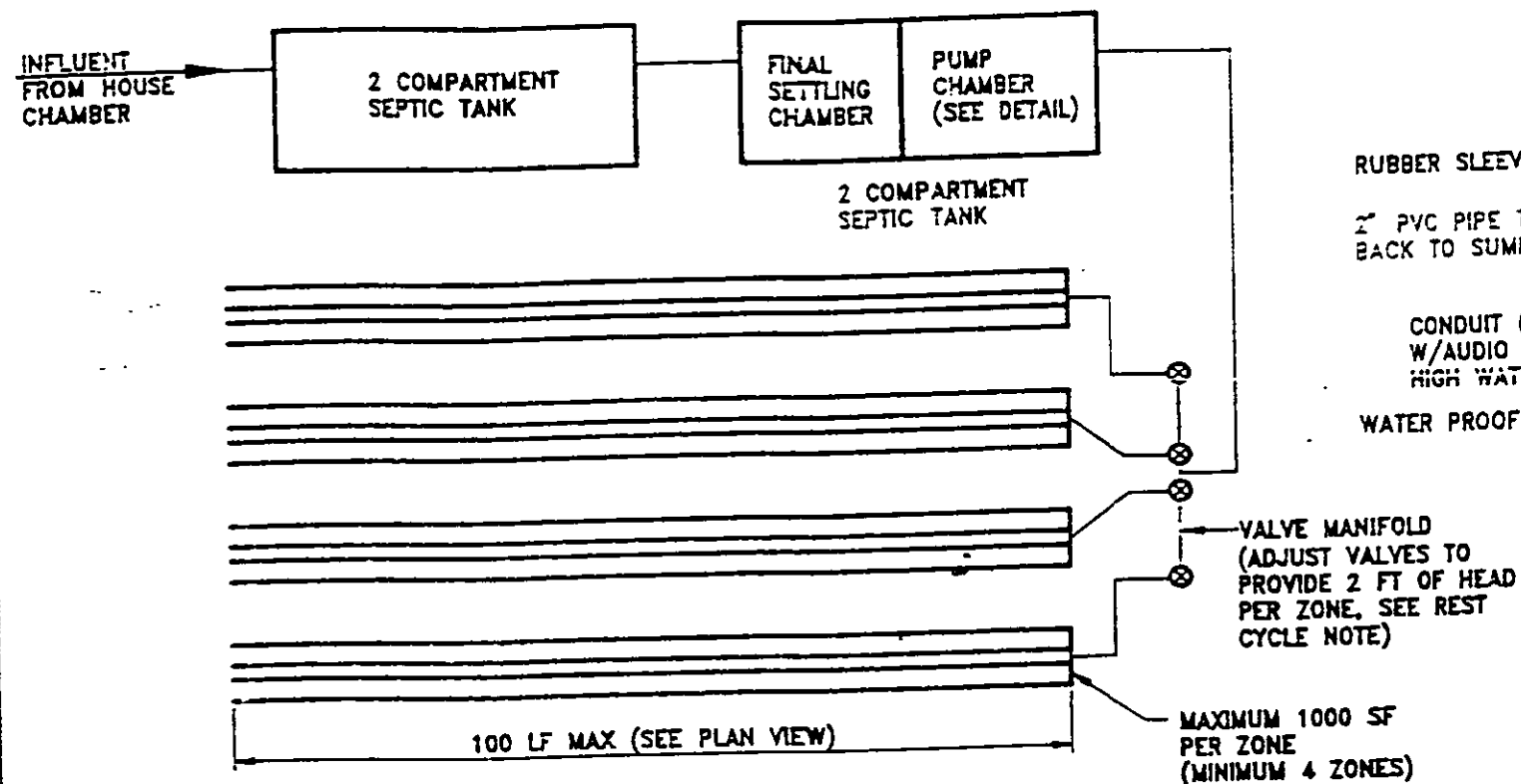
SITE PLAN
SCALE: 1" = 100'

*DISTRIBUTION ZONES SHALL BE A MAXIMUM OF 100 FEET LONG BY 10 FEET WIDE AND CONTAIN FIVE LATERALS PER ZONE. ZONES MAY BE LESS THAN 100 FEET LONG AND 10 FEET WIDE, AS LONG AS THE MINIMUM 3,000 SQUARE FOOT DISTRIBUTION FIELD IS MET.

NOTIFY THE ENGINEER OF THE TIME AND DATE OF BACKHOE PIT OBSERVATION BY THE HEALTH DEPARTMENT



COLORADO SOIL AND ENG., INC.			
2931 N. US HIGHWAY 85 Castle Rock, CO 80104 (303) 688-9475			
Sheet: 1 of 2	PROJECT:	6752 W. CHATFIELD LANE	PROJECT NO.: 98-814
	CALCULATED BY:	TRC	DATE: 9/14/98
	CHECKED BY:	TRC	DATE: 9/14/98



TYPICAL FIELD PLAN

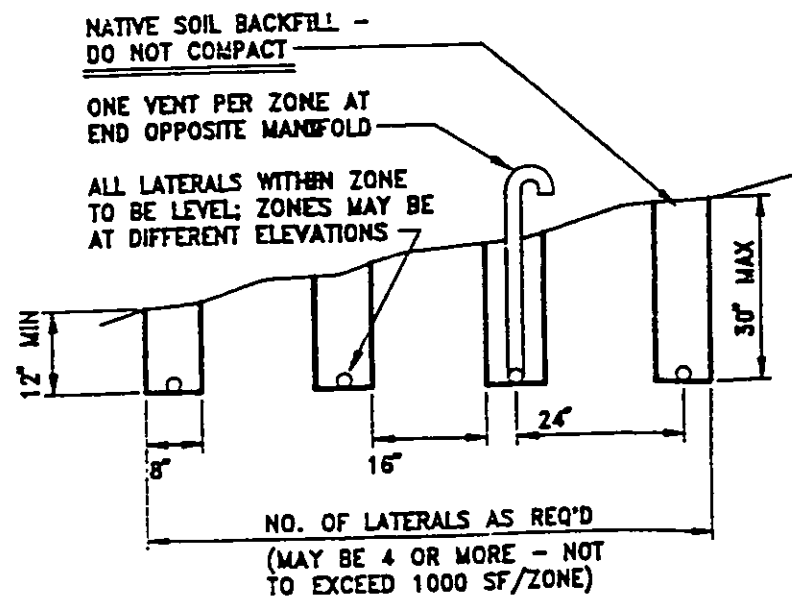
NOT TO SCALE

REST CYCLE NOTE: RESEARCH INDICATES ALLOWING A SEPTIC FIELD TO "REST" FOR SEVERAL MONTHS INCREASES ITS LONG TERM UTILITY. FRONT RANGE ENGINEERING, INC. RECOMMENDS RESTING EACH ZONE FOR THREE TO SIX MONTHS, SYSTEMATICALLY CYCLING THROUGH EACH ZONE SEQUENTIALLY SUCH THAT EACH ZONE OF THE SYSTEM IS IDLED FOR A PERIOD EVERY ONE TO TWO YEARS.

COLO. SOIL AND PERC., INC.

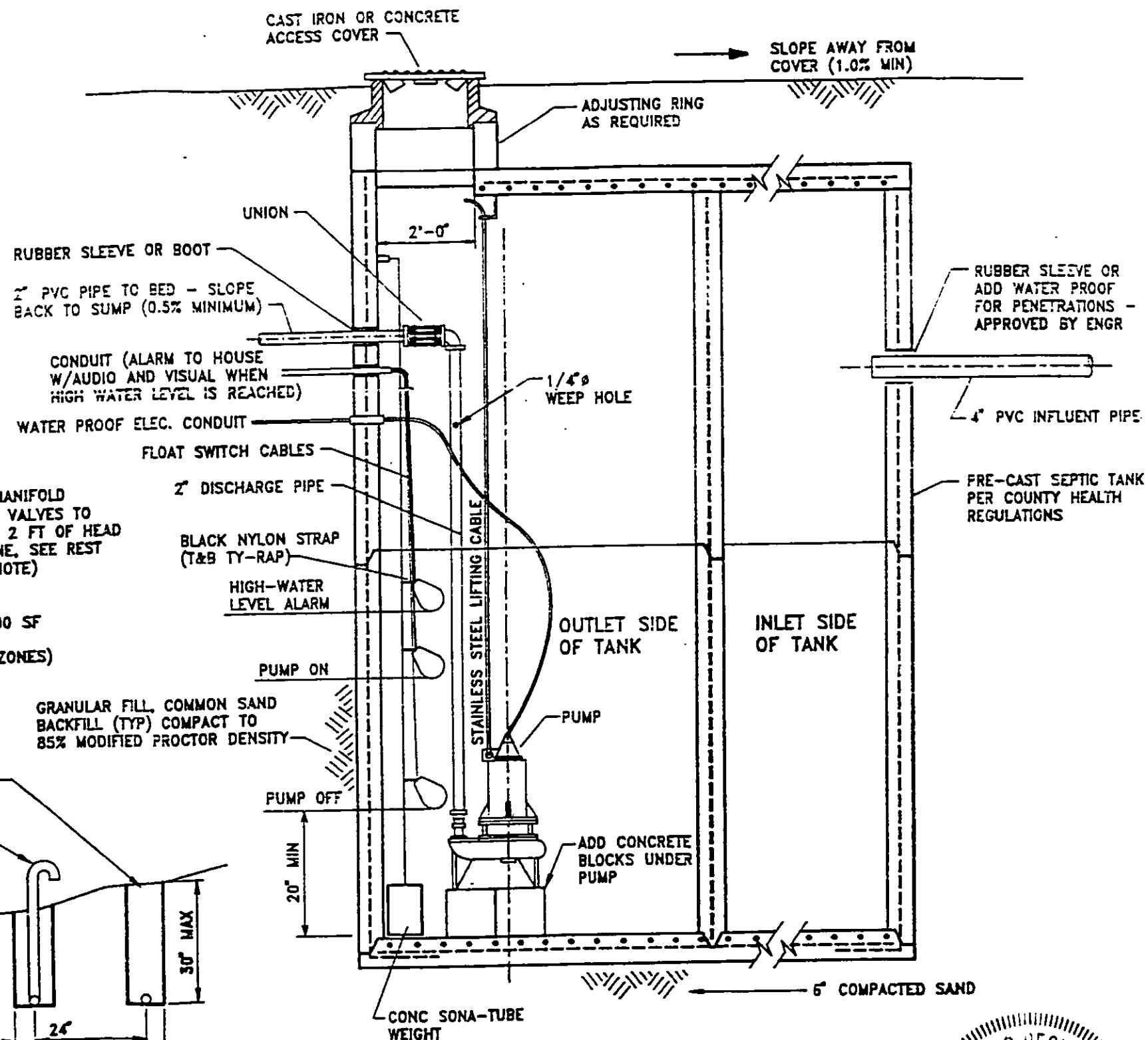
2931 N. US HWY. 85
CASTLE ROCK, CO 80104
(303) 688-9475

PROJECT:	6752 W. Chatfield Lane	PROJ. NO.:	98-214
SHEET:	2062	CALCULATED BY:	TRC
		CHECKED BY:	TRC
		DATE:	9/14/98



TYPICAL ZONE CROSS SECTION

NOT TO SCALE



PUMP CHAMBER SECTION

NOT TO SCALE

NOTE: PUMP AND ALARM TO BE ON SEPARATE CIRCUITS.

