called 5/17 1:45

EXHIBIT D

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, Station 10 SHS
(207) 287-5672 FAX (207) 287-4172

PROPERTY LOCATION

>> Caution: Permit Required – Attach In Space Below <<

City, Town, or Location: AUGUSTA

Street or Road: 576 RIVERSIDE DRIVE

Subdivision, Lot #:

AUGUSTA PERMIT # 5967 TOWN COPY

Date Permit Issued: 5/17/07

$ 250.00 + 300.00 = 550.00 ☐ If Double Fee Charged

Local Plumbing Inspector Signature

L.P.I. # 850

OWNER/APPLICANT INFORMATION

Name (last, first, M.I.) Owner

COOPER PROPERTIES LLC

Mailing Address of ■ Owner ☐ Applicant:

P.O. BOX 491 KYSS

PORTLAND, ME 04101

Daytime Tel. #: 871-7084 622-5977

Municipal Tax Map #: 51 Lot #: 11

Owner or Applicant Statement

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a permit.

Signature of Owner/Applicant Date

Caution: Inspections Required

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.

(1st) Date Approved

Local Plumbing Inspector Signature

(2nd) Date Approved

PERMIT INFORMATION

TYPE OF APPLICATION

1. ☐ First Time System
2. ☐ Replacement System
   Type Replaced: _____
   Year Installed: _____
3. ■ Expanded System
   a. ■ Minor Expansion
   b. ☐ Major Expansion
4. ☐ Experimental System
5. ☐ Seasonal Conversion

THIS APPLICATION REQUIRES

1. ■ No Rule Variance
2. ☐ First Time System Variance
   a. ☐ Local Plumbing Inspector Approval
   b. ☐ State & Local Plumbing Inspector Approval
3. Replacement System Variance
   a. ☐ Local Plumbing Inspector Approval
   b. ☐ State & Local Plumbing Inspector Approval
4. ☐ Minimum Lot Size Variance
5. ☐ Seasonal Conversion Approval

DISPOSAL SYSTEM COMPONENTS

1. ☐ Complete Non-Engineered System
2. ☐ Primitive System (greywater & alt toilet)
3. ☐ Alternative Toilet, specify: _____
4. ☐ Non-Engineered Treatment Tank (only)
5. ☐ Holding Tank, _____ Gallons
6. ☐ Non-Engineered Disposal Field (only)
7. ☐ Separated Laundry System
8. ■ Complete Engineered System (2000gpd+)
9. ☐ Engineered Treatment Tank (only)
10. ☐ Engineered Disposal Field (only)
11. ☐ Pre-treatment, specify:
12. ☐ Miscellaneous components

SIZE OF PROPERTY

19.2 ☐ sq. ft. ■ acres

SHORELAND ZONING

☐ Yes ☐ No

DISPOSAL SYSTEM TO SERVE

1. ☐ Single Family Dwelling Unit, No. of Bedrooms: ____
2. ■ Multiple Family Dwelling, No of Units: 24
3. ☐ Other: _____ SPECIFY

Current Use ☐ Seasonal ■ Year Round ☐ Undeveloped

TYPE OF WATER SUPPLY

1. ☐ Drilled Well 2. ☐ Dug Well 3. ☐ Private
4. ■ Public 5. ☐ Other:

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

1. ■ Concrete
   a. ■ Regular
   b. ☐ Low Profile
2. ☐ Plastic
3. ☐ Other: _____

CAPACITY 12,000 gallons

DISPOSAL FIELD TYPE & SIZE

1. ■ Stone Bed 2. Stone Trench
3. ☐ Proprietary Device
   a. ☐ Cluster array c. ☐ Linear
   b. ☐ Regular d. ☐ H-20 loaded
4. ☐ Other:

SIZE 1728 ■ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

1. ☐ No 3. ☐ Maybe
2. ■ Yes >> Specify one below:
   a. ☐ Multi-compartment tank
   b. ■ 4 tanks in series
   c. ☐ Increase in tank capacity
   d. ☐ Filter on tank outlet

DESIGN FLOW

2,800 gallons per day

BASED ON:

1. ■ Table 501.1 (dwelling unit(s))
2. ☐ Table 501.2 (other facilities)
   SHOW CALCULATIONS - for other facilities -
3. ■ Section 503.0 (meter readings)
   ATTACH WATER-METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION DESIGN

8 , D/C , 3/1

At Observation Hole # 2

Depth N/A "

OF MOST LIMITING SOIL FACTOR

DISPOSAL FIELD SIZING

1. ☐ Small - 2.0 sq.ft./gpc
2. ☐ Medium - 2.6 sq.ft./gpd
3. ☐ Medium-Large - 3.3 sq.ft./gpd
4. ■ Large - 4.1 sq.ft./gpd
5. ☐ Extra-Large - 5.0 sq.ft./gpd

PUMPING

1. ■ Not required
2. ☐ May be required
3. ☐ Required >> Specify only for engineered or experimental systems:

DOSE: Gallons

LATITUDE AND LONGITUDE

At center of disposal area

Lat. 44 d 21 m 09 s

Lon. 69 d 44 m 42 s

if gp.s., state margin of error: _____

SITE EVALUATOR STATEMENT

I Certify that on 1/8/06 (date) I completed a site evaluation on this property and state that the data reported is accurate and that the proposed system is in compliance with the Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Albert Frick — 163 — 12/15/2006

Site Evaluator Signature — SE # — Date

ALBERT FRICK — (207) 839-5563 — AFA@MAINERR.COM

Site Evaluator Name Printed — Telephone Number — E-mail Address

Stephen C. DeWick — 2329 — 12-12-06

Professional Engineer Signature — PE # — Date

Stephen C. DeWick — (207) 443-1508 — sdewick@pfe-maine.com

Professional Engineer Name Printed — Telephone Number — E-mail Address

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator

HHE-200 Rev. 8/01

Pine Tree Engineering, Inc.

53 Front Street
Bath, Maine 04530
(207) 443-1508
Fax (207) 442-7029
E-mail: pte@pte-maine.com

February 23, 2007

Mr. James A. Jacobsen
Environmental Specialist IV
DHS Division of Health Engineering
10 State House Station
Augusta, ME 04333-0010

Subject: **576 Riverside Drive**
Replacement Wastewater Disposal System
Augusta, Maine

#00039

Dear Mr. Jacobsen:

Thank you for your February 6th letter and conditional approval. As requested, we are submitting the following:

1.A. The revised site plan with contour lines.
1.B. The goal of adding additional septic tanks is to result in a total in-place volume of 12,000 gallons. The goal will be achieved by:

• Existing built in place tank	6,000 gal.
• First new commercial tank	4,000 gal.
• Second new commercial tank	2,000 gal.
Total:	**12,000 gal.**

1.C. Revised pg. 1 of HHE-200 form with latitude and longitude (Exhibit D).
1.D. The hydraulic conductivity value has been addressed separately by Albert Frick's February 20, 2007 letter to you.

The remaining conditions, 2 through 15, will be complied with as the project moves forward. Additionally, we have included revised and corrected copies of Exhibits A and E.

Please call me if you have questions concerning this information.

Very truly yours,

PINE TREE ENGINEERING, INC.

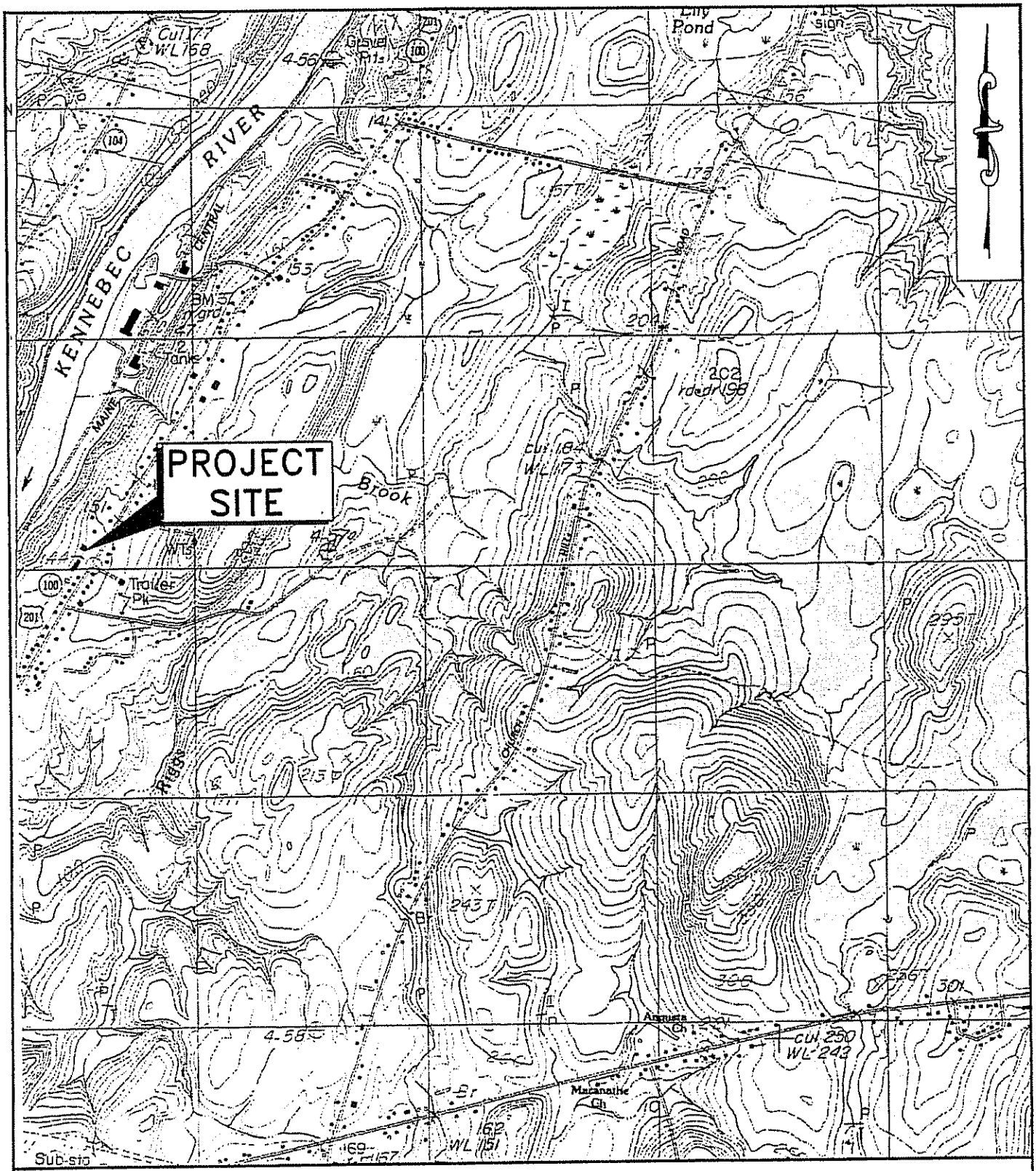
Stephen C. DeWick

Stephen C. DeWick, P.E.
Project Manager

SCD/szd
Enclosures

c: Joseph Cooper, Cooper Properties
Albert Frick, Albert Frick Associates

D:\Corres\00039\Jacobsen2-scd.wpd



2,000' 0 2,000'

SCALE: 1" = 2,000'

EXHIBIT A

COOPER PROPERTIES APARTMENTS

576 RIVERSIDE DRIVE AUGUSTA, MAINE

SOURCE: U.S.G.S.
TOGUS POND QUADRANGLE
7.5 MINUTE SERIES

Pine Tree Engineering

A070054

Maine Department of Health and Human Services

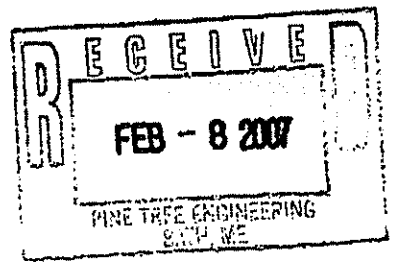
Maine Center for Disease Control and Prevention
286 Water Street, 3rd Floor
11 State House Station
Augusta, ME 04333-0011

John Elias Baldacci
Governor

Brenda M. Harvey,
Commissioner

Dora Anne Mills, MD, MPH
Public Health Director
Maine CDC Director

February 6, 2007



Pine Tree Engineering, Inc.
Attn.: Stephen C. DeWick, P.E.
53 Front Street
Bath, ME 04530

Subject: Approval, Cooper Properties, Inc. Property, 576 Riverside Drive, Augusta

Dear Mr. DeWick:

The Division of Environmental Health has completed a review of a design for an engineered subsurface sewage disposal system design, to serve 576 Riverside Drive. The HHE-200 Form dated 12/18/06 was prepared by you. The system was designed by Pine Tree Engineering, Inc., with a plan signed and stamped by you.

Hereafter, the term "design engineer" shall refer collectively to Pine Tree Engineering, Inc., its staff, and its representatives unless otherwise specified; and the term "owner" shall refer collectively to 576 Riverside Drive, its staff, and its representatives unless otherwise specified.

Design Flow

The design flow is 2,800 gallons per day (gpd), based upon water use records. The design flow of 2,800 gpd is approved with the notation that the suitability of the design flow is the responsibility of the design engineer.

The records and associated calculations were not included in the application.

Treatment Tank(s)

The design includes one existing 6,000 gallon septic tank according to the signed and stamped plan. However, in the application you prepared, you stated that there are two tanks with a total capacity of 6,000 gallons (question #2).

The design also includes one proposed 6,000 gallon septic tank "or equivalent" according to the signed and stamped plan. However, in the application you prepared, you stated that there will be one additional 2,000 gallon tank and one additional 4,000 gallon tank (question #2).

Disposal Areas

The proposed disposal area consists of four groups of Eljen In-Drains. Each group consists of four rows of 12 units. The proposal includes four nine foot by 48 foot stone and pipe beds, to be located between the In-Drain clusters.

The HHE-200 Form, page 1 provided in the application lacks latitude and longitude, as required by Section 401.6.1 of the Rules. (The Division's search on Google Earth shows an approximate location of 44° 21' 09'' N and 69° 44' 42'' W for the property upon which the system would be installed.)

Soils

The soils are shown as fill over 8-D per the Rules on the ***single*** test pit log prepared by Albert Frick, S.E.

Section 1102.4.1 of the Rules requires three test pits within the footprint of each engineered disposal area. However, the Division is persuaded that since the proposal comprises an expansion, consisting of beds between existing gravel-less beds, this requirement is not significantly compromised.

Well Setback

There are no potable water supply wells reported within 300 feet of the proposal.

Mounding Analysis

The proposed system will not result in groundwater mounding sufficient to intrude into the disposal area, according to the calculations provided by the design engineer.

Site Transmission Analysis

The proposed system design demonstrates that there are sufficient soils down-gradient to prevent the effluent from surfacing within 50 feet of the disposal field, according to the calculations provided by the design engineer.

Interagency Review

The Maine Department of Environmental Protection (MDEP) has reviewed the application and stated that no reason was found to believe the proposal would cause unreasonable adverse impact on resources and uses in the area likely to be affected; the project site is located on a mapped sand and gravel aquifer; and the project site is not located in the watershed of a waterbody most at risk from development.

MDEP also provided the following specific comments: the 68.5 gpd/ ft.^{2} hydraulic conductivity (K) value used in the mounding analysis appears inappropriate, and ought to be in a range between 9.0 gpd/ ft.^{2} 30 gpd/ ft.^{2} pursuant to N.R.C.S. values for Nicholville soils; and the site location is shown incorrectly on the USGS topographic map supplied.

Miscellaneous

No pre-application meeting with the Division took place, as required under Section 1102.1 of the Subsurface Wastewater Disposal Rules.

The plan lacks contour lines pursuant to Section 1102.6 of the Rules.

Findings

The system appears to meet and/or exceed the Rules, except as noted, therefore the design is approved with the following conditions and comments:

1. Prior to issuance of a permit by the Local Plumbing Inspector to install the proposed expansion, the design engineer shall:

   A. Submit to the Division for review and approval a revised site plan with contour lines, and

   B. Submit to the Division for review and approval either a revised site plan showing one additional 2,000 gallon septic tank and one additional 4,000 gallon septic tank; or a revised narrative description which includes one additional 6,000 gallon septic tank. The number of existing tanks shall also be verified, and

   C. Submit to the Division for review and approval a revised page 1 of the HHE-200 Form with latitude and longitude conforming to Section 401.6.1 of the Rules, and

D. Submit to the Division for review and approval a written justification for use of the 68.5 gpd/ ft.^{2} hydraulic conductivity (K) value used in the mounding analysis rather than the range suggested by MDEP.

2. The owner must retain the design engineer to oversee construction. The constructed system may not be used unless all pertinent requirements of the Rules have been met.

3. The design engineer shall provide sufficient supervision to assure that the system is constructed as designed and in accordance with the code and other regulations. Attention shall be given to site preparation, fill selection and placement, installation of pipes, mechanical and electrical systems.

4. Construction shall not commence until the owner has obtained the necessary plumbing permit from the LPI, pursuant to Condition #1.

5. The design engineer shall provide the owner and this office with a brief report on the construction including any unexpected conditions encountered and any changes made from the approved drawings. The LPI must not issue the Certificate of Approval until the LPI has received the aforementioned report from the design engineer.

6. The design engineer shall test all systems prior to acceptance by the owner. The testing shall determine whether the components were correctly installed and whether they function as designed. This includes confirmation that flow dividing devices or configurations function as intended.

7. The design engineer, with the concurrence of the LPI shall determine when the site conditions are suitable for construction.

8. Construction shall cease whenever the design engineer determines that the site conditions, or workmanship, or materials are unacceptable.

9. The owner and design engineer shall inform the LPI of the proposed construction schedule and shall also inform the LPI of the progress of construction. They shall cooperate fully with the LPI in scheduling any inspections and providing any equipment necessary for the inspection.

10. The design engineer shall provide the owner with an Operations and Maintenance Manual containing written recommendations for the operation and maintenance of the system including inspection and pumping schedules and record keeping procedures.

11. The owner shall operate the system within the requirements of Rules and the limitations of this design.

12. The owner shall inform the LPI and the design engineer of any operational problem and/or malfunction.

13. The LPI shall inspect the engineered disposal system in accordance with Section 111.0 of the Rules. In addition, the property owner shall retain the design engineer to inspect the construction of the system. The inspection shall be sufficient for the design engineer to determine that the system was installed as designed.

14. This approval is only for the rules administered by this office and it does not consider other federal, state or local regulations. The owner is responsible for compliance with any other pertinent regulations.

15. By accepting this approval and the associated plumbing permit, the owner agrees to comply fully with the conditions of approval and the Subsurface Wastewater Disposal Rules.

Because installation and owner maintenance has a significant effect on the working order of onsite sewage disposal systems, including their components, the Division makes no representation or guarantee as to the efficiency and/or operation of the system.

Sincerely,

James A. Jacobsen, Environmental Specialist IV
Wastewater and Plumbing Control Program
Division of Health Engineering
e-mail: james.jacobsen@maine.gov

xc: File
Richard Dolby, L.P.I.
Albert Frick, SE via e-mail
William Noble, MDEP via e-mail

5967

Project No. 00039
August 6, 2007

Final Inspection
576 Riverside Drive
Augusta, Maine

Date: July 30, 2007 8:00 a.m.

Subject: Septic System Expansion

Present: Russ Stoddard, Cooper Properties
Paul McNaughton, McNaughton Construction
Steve DeWick, Pine Tree Engineering SCD

****

These notes are intended to be a record of the inspection. Any changes that are necessary shall be reported no later than 10 days from receipt of this memorandum, which will then become a record of the inspection.

1. The final placement of loam, seed, fertilizer and mulch was completed in mid-June, 1½ weeks after start of construction.

2. The new septic tanks with covers are in place. The 4,000 gallon tank is equipped with a Zabel filter. The filters for this tank and the old tank are cleaned weekly.

3. The pump station chamber inspected. The high water alarm is situated in the basement under the north rear stairway. The pump is a Meyers Model MD3F capable of pumping 65 gpm at a head of 5 feet. Backup pumps are available from Northeast Mechanical Corp.

4. Grass was beginning to grow on all four of the new beds and was being mowed at the time of the inspection.

5. The stone filled curtain drain had performed well during recent thundershowers.

6. The attached photos show the site during this final inspection.

The inspection ended at 8:45 a.m.

c: Joseph Cooper, Cooper Properties
Russ Stoddard, Cooper Properties
Gary Fuller, LPI - Augusta
Albert Frick, Albert Frick Associates

PINE TREE
ENGINEERING

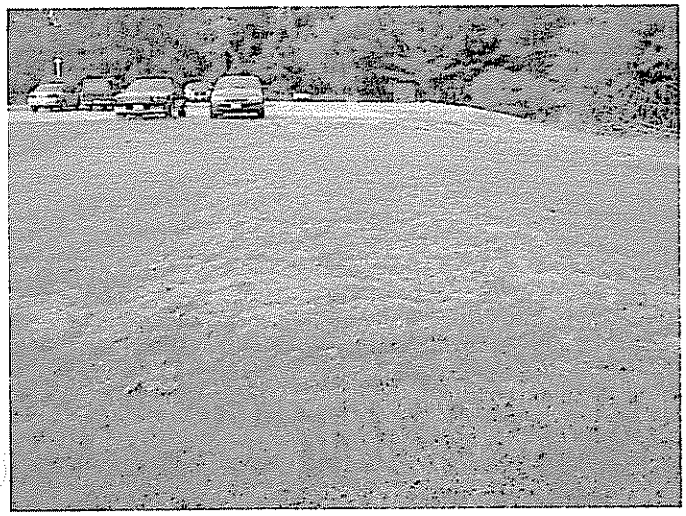
Final Inspection
576 Riverside Drive
Augusta, Maine

New bed No. 1

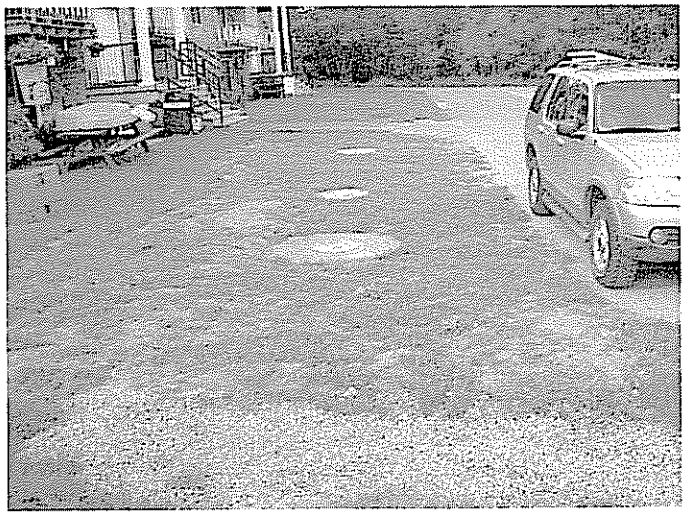
New bed No. 4

New bed No. 2

Curtain drain on north

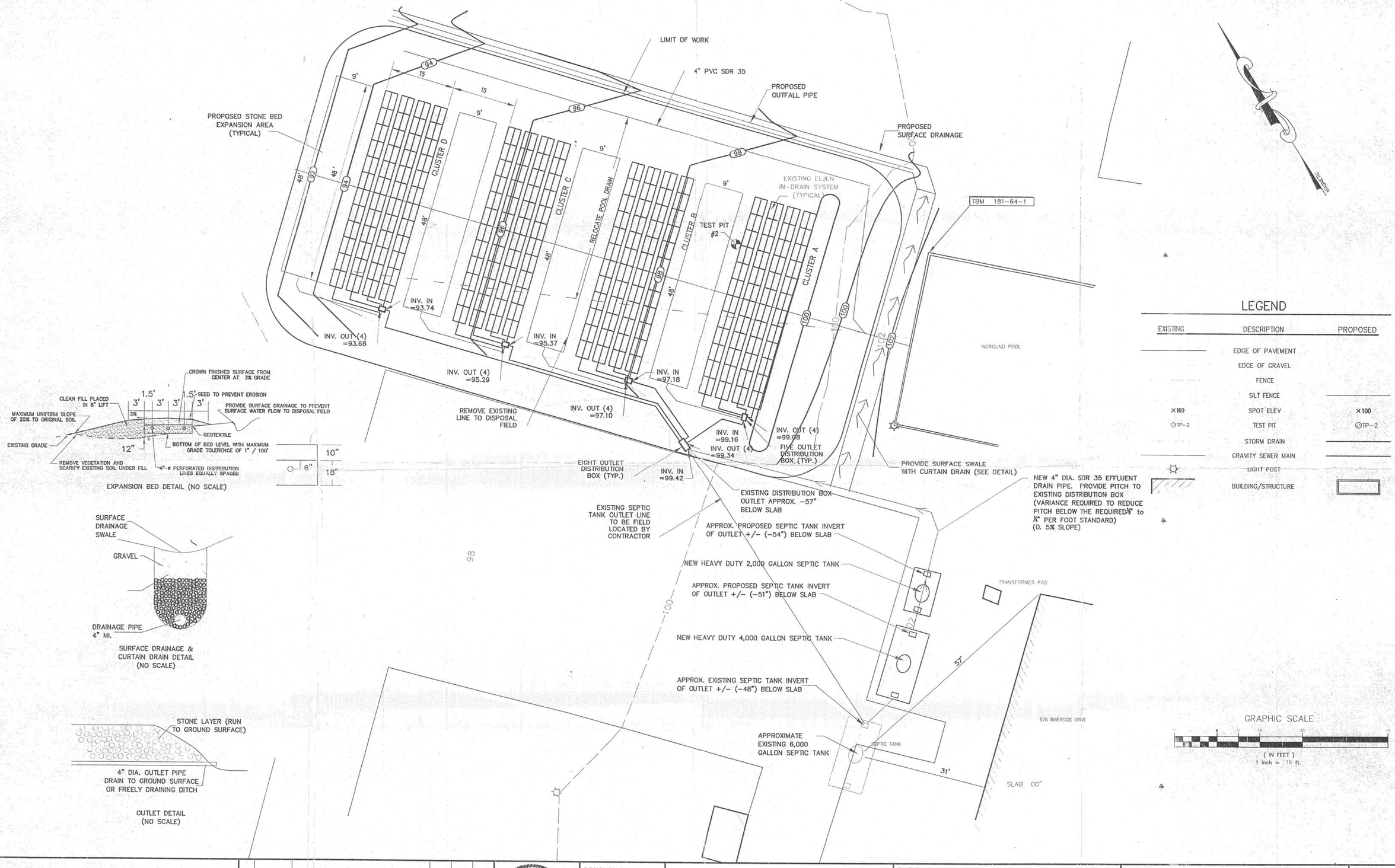


New bed No. 3



New tank covers and pump station

Photos by S. C. DeWick, July 30, 2007



EXPANSION BED DETAIL (NO SCALE)

SURFACE DRAINAGE & CURTAIN DRAIN DETAIL (NO SCALE)

OUTLET DETAIL (NO SCALE)

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	EDGE OF PAVEMENT	
	EDGE OF GRAVEL	
	FENCE	
	SILT FENCE	
×103	SPOT ELEV	×100
⊙TP-2	TEST PIT	⊙TP-2
	STORM DRAIN	
	GRAVITY SEWER MAIN	
	LIGHT POST	
	BUILDING/STRUCTURE	

GRAPHIC SCALE

(IN FEET)
1 inch = 10 ft.

REV	DATE	STATUS	BY	CHKD	APPD
1	2-9-07	PROPOSED CONTOURS ADDED	ARA	CJM	SCD

STATE OF MAINE
STEPHEN C. DEWICK
No. 2329
REGISTERED PROFESSIONAL ENGINEER
12-18-06

DESIGNED BY:	SCD
DRAWN BY:	ARA
CHECKED BY:	AF
APPROVED BY:	SCD
DATE:	12-18-06

Pine Tree Engineering
Civil/Environmental Engineering • Surveying
53 Front Street
Bath, Maine 04530
Tel: (207) 443-1508
Fax: (207) 442-7029

CLIENT
COOPER PROPERTIES
P.O. BOX 491
PORTLAND, ME 04112

PROJECT
576 RIVERSIDE DRIVE
SUBSURFACE WASTEWATER SYSTEM

TITLE
REVISED SITE PLAN

SCALE	1" = 10'
PROJECT NO.	00039
DRAWING NO.	00039SITE.DWG
SHT. 1 of 1	REV. 1