8:15 pm (7) CONSIDERATION OF THE PURCHASE OF THE RV PARK FOR POSSIBLE LOCATION OF SCHOOL AND OTHER PUBLIC FACILITIES.

The Council met in executive session on December 27, 1995 to review preliminary information concerning the suitability of the RV Park site for public facilities and a potential offer to purchase the property. Preliminary information from David Newton and Associates who completed a geotech investigation of the RV Park site will be available at the Council meeting.

If the Council wishes to take any action regarding the purchase of the RV Park property, an appropriate motion would be in order.

8:20 pm (8) DIRECTION TO COUNCIL SUB-COMMITTEE THAT MAINTAINS COMMUNICATION WITH CAVENHAM FOREST INDUSTRIES.

The City of Cannon Beach has recently been notified that Hanson Industries will sell its division, Cavenham Forest Industries. The Council sub-committee which has been meeting regularly with representatives of Cavenham is seeking some direction from the City Council as it pursues the implications this sale might have for the City of Cannon Beach.

8:30 pm (9) CONSIDERATION OF POTENTIAL CITY POLICY REGARDING BUILDING ENCROACHMENTS INTO PUBLIC RIGHTS OF WAY.

At the December 5 meeting the Council discussed how the City should proceed with building encroachments into street rights-of-way. Staff was instructed to prepare a recommendation for such a policy which is enclosed in the Council packets.

The Council may accept, amend or reject the recommended policy. If Council wishes to instruct staff to prepare an ordinance which reflects City policy on the subject, an appropriate motion would be in order.

FAX Transmittal Memo From:

DAVID J. NEWTON Associates, Inc.

# of pages inc. this one > 11

TO: JOHN WILLIAMS
CITY OF CANNON BEACH

FROM: JOHN CUNNINGHAM

Job #: PROPOSED ELEMENTARY SCHOOL, RV SITE

DATE: JAN. 2, 1996

Phone #: (503) 228-7718

FAX #: 1.503.436.2050

FAX #: (503) 228-7781

DEAR JOHN - HERE'S A DRAFT OF MY PRELIMINARY REPORT FOR THE RV SITE. I'M OUT FOR LUNCH UNTIL 1:30. PLEASE CALL ME WITH YOUR COMMENTS AND I WILL THEN REVISE THIS DRAFT AND FAX YOU A FINAL COPY.

John

DAVID J. NEWTON ASSOCIATES
INCORPORATED
Civil and Geological Engineering Services

January 2, 1996
Project No. 628 101

Mr. John Williams
City Manager
City of Cannon Beach
P.B. Box 368
Cannon Beach, Oregon 97110

PRELIMINARY GEOTECHNICAL INFORMATION
RV SITE FOR PROPOSED ELEMENTARY SCHOOL
345 ELK CREEK ROAD
CANNON BEACH, OREGON

Dear Mr. Williams:

We performed our field investigation of the RV site on December 13th and are now testing soil samples from both the Impact and RV site. As requested, we are providing you with the results of our field investigation and some preliminary conclusions regarding geotechnical conditions at the site. The discussions and conclusions presented here should be considered incomplete until all the laboratory testing and engineering analyses are completed, and our final report issued at the end of January.

As discussed below, it is our opinion that there are no known soil or geologic conditions on the site that preclude developing the property as an elementary school. The site is outside the draft tsunami inundation zone defined for Senate Bill 379. Landsliding and liquefaction hazards do not threaten the site. Amplification of earthquake ground motions is likely because of the soft clayey soils underlying the site, however, designing for these motions is within standard structural engineering practice. At this time, it should be assumed that the school building will be supported on driven timber piles. Shallow foundations can be considered once the exact building location and finish floor elevation are know.

Our soil borings and review of available geologic maps and reports indicate that there are no known geologic conditions that will prevent developing the site as an elementary school provided that standard geotechnical engineering practices are followed.

FIELD INVESTIGATION AND SOIL CONDITIONS

Two exploratory borings were drilled to depths of 31½ feet on the north portions of the RV park. Drilling was stopped at noon on December 13th on account of the wind storm.

Our soil borings and the results of previous soil borings drilled by others indicate that the north portion of the RV park is mantled with fill soils and underlain by at least 50 feet of clayey alluvial soils.

The fill soils ranged from 6½ to 9½ feet thick in our borings and consisted of medium dense clayey gravels and stiff clays. Based on our soil sampler blow counts, the fills appeared to be compacted.

Beneath the fills, the native clay soils are soft to stiff and contain thin lenses to thick layers of highly compressible peat soils.

An accurate measure of the groundwater table could not be obtained during drilling due to the clayey consistency of the soils; however, groundwater is likely present within 3 to 12 feet of the ground surface.

PRELIMINARY CONCLUSIONS

Our soil borings and review of available geologic maps and reports indicate that there are no known geologic conditions that will prevent developing the site as an elementary school provided that standard geotechnical engineering practices are followed.

Tsunami Inundation

Review of the *Draft Tsunami Hazard Map of the Oregon Coast* prepared by the Oregon Department of Geology and Mineral Industries, dated November 27, 1995, indicates that the RV site is above the highest tsunami inundation boundary of approximately elevation +30 feet (Mean Sea Level Datum). The Cannon Beach portion of the map is attached.

Senate Bill 379 was passed by the 1995 Oregon legislature and limits the construction of new essential and special occupancy structures in tsunami inundation zones. Elementary schools are considered special occupancy structures. Based on the attached map, it appears that the RV site complies with the requirement of Senate Bill 379.

Liquefaction

The clayey consistency of the on site soils indicates that the site does not have a potential for liquefaction during strong seismic ground shaking.

Mr. John Williams
City Manager
City of Cannon Beach
January 2, 1996

Landsliding

The gentle relief on the site indicates that landsliding is not a potential seismic hazard at the site.

Strong Ground Shaking

The strength of ground shaking generally decreases with distance from the earthquake source (attenuation), but locally can be much higher due to amplification of earthquake waves as they pass from bedrock into softer overlying materials such as the alluvial soils underlying the RV site. Amplification can result in stronger surface shaking (greater accelerations) and a longer period (or slower "swaying" motion) that can be more damaging than the higher frequency motions that are more typical of those on rock or rock overlain by shallow, stiff soil layers.

Preliminary review of the soil boring logs indicates that the site has a potential to amplify earthquake ground motions. It is our opinion that standard structural engineering methods can be used to design the proposed school building for amplification of seismic shaking. Our final report will provide design recommendations to the structural engineer for increasing earthquake loads due to site effects.

Foundations

For preliminary cost estimating purposes, we recommend assuming that the school building will need to be supported on timber piles driven at least 40 to 50 feet into the underlying clay soils. This recommendation allows the school building to be placed anywhere on the site, and for site grades to be either raised or lowered as determined by the architect during site programming.

It may be possible to support the school building on less expensive shallow foundations if minimal site grading is performed, such as site grades not being raised more than 1 or 2 feet or lowered more than 2 to 4 feet.

The exact type and depth of the foundations will need to be determined when the building location and finish floor elevation is selected. Additional soil borings will be required at that time.

We hope this information meets your needs at this time. Please give us a call if you have any questions.

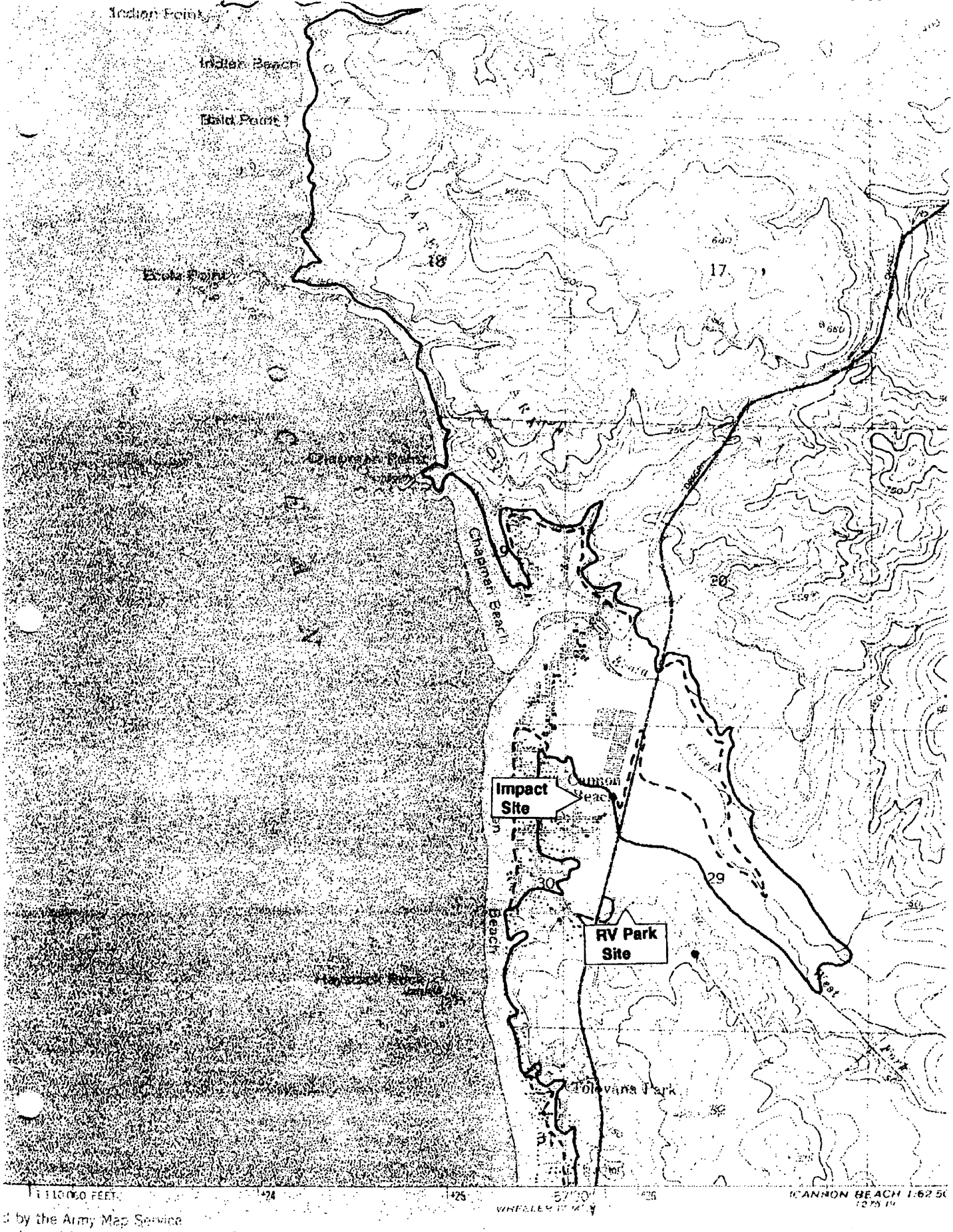
Sincerely,

DAVID J. NEWTON ASSOCIATES, INC.

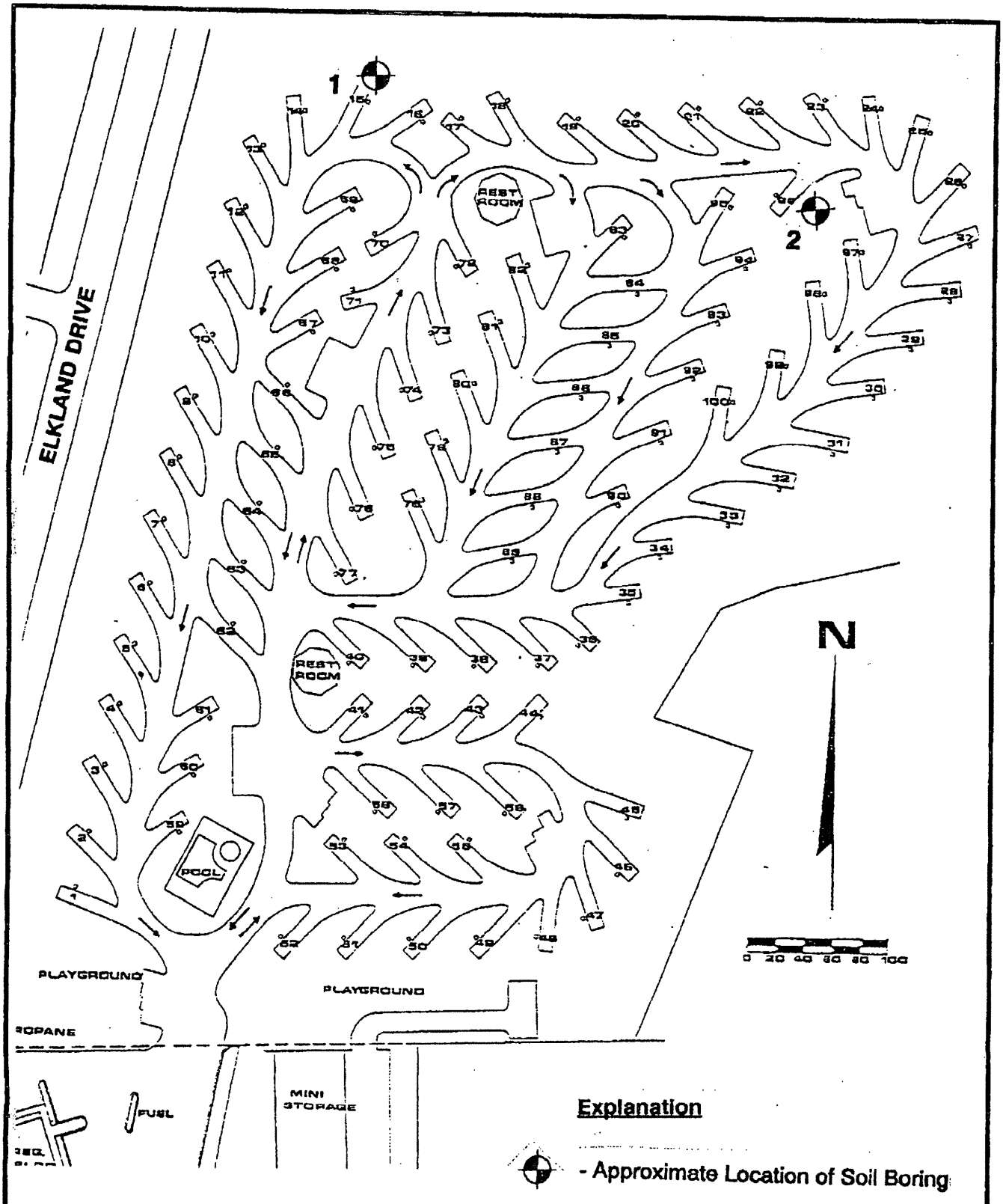
John N. Cunningham, P.E.
Project Geotechnical Engineer

attachements

(1) addressee



by the Army Map Service



DAVID J. NEWTON ASSOCIATES, INC.
CIVIL & GEOLOGICAL ENGINEERING SERVICES
1201 S.W. 12TH AVENUE, SUITE 400 (503) 228-7718
PORTLAND, OREGON 97205 FAX (503) 228-7781

SITE PLAN

DATE	FILE NAME	INITIALS	PROJECT NO.		FIGURE
Dec. 1995			628-101	Cannon Beach RV Park Site Cannon Beach, Oregon	2

Boring Log No. 1

PROJECT: Cannon Beach RV Park Site
DRILL RIG: Solid Stem Auger
INITIAL GW DEPTH: 2½

DATE: 12-11-95
HOLE DIA.: 4 in.
FINAL GW:

LOGGED BY: J. Lawes
SAMPLER: SPT
HOLE ELEV.: 45 ft. MSL

DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	SAMPLE NO.	BLOWS/FT.	REMARKS
LEAN CLAY, black (N2/), wet, soft, roots to 8" depth. (topsoil)	CL		0				
CLAYEY GRAVEL WITH SAND, light gray (2.5YR7/2) with dark brown mottling, wet, medium dense, rounded gravels to 2" max. dimension, (Recent Fill <Qaf>)	Fill		1				
30% dark red (10R3/6), 30% black, 30% reddish-yellow (7.5YR7/8), dense.			2		1-1	13	▼
			3		1-2	31	
subrounded cobbles to 4" max. dimension.			4				
			5				
			6		1-3	34	
PEAT, dark gray (N4/), to black, wet, fibrous, woody debris with SANDY LEAN CLAY as below. (Quaternary peat)	CL		7				
			8		1-4	9	
SANDY LEAN CLAY, very dark gray (N3/), wet, stiff, trace fibers, low plasticity to nonplastic. (Quaternary alluvium <Qal>)	CH		9				
SANDY FAT CLAY, very dark gray (N3/), wet, firm, medium to high plasticity			10				
			11		1-5	5	
			12				
			13		1-6	7	
			14				
No Recovery			15		1-7	11	
			16				
			17				
	CL		18				
			19				
			20				

DAVID J. NEWTON ASSOCIATES INCORPORATED

Notes:

Project No. 628-101

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DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	SAMPLE NO.	BLOWS/FT.	REMARKS
LEAN CLAY, very dark gray (N3/), moist, stiff, trace fine sand, mica, small black charcoal fragments.	CL		20–21		1-8	10	
SANDY LEAN CLAY to CLAYEY SAND, very dark gray (N3/), moist to wet, hard, micaceous, medium plasticity.	CL SC		22–26		1-9	19/5"	
FAT CLAY to LEAN CLAY, very dark gray (N3/), moist, stiff to hard.	CH		27–31		1-10		
Bottom of Hole at 31½ feet.			32–40				

DAVID J. NEWTON ASSOCIATES INCORPORATED

Notes:

Project No. 828-101

Boring Log No. 2

PROJECT: Cannon Beach RV Park Site
DRILL RIG: Solid Stem Auger
INITIAL GW DEPTH: 3

DATE: 12-11-95
HOLE DIA.: 4 in.
FINAL GW:

LOGGED BY: J. Lawes
SAMPLER: SPT
HOLE ELEV.: 45 ft. MSL

DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	SAMPLE NO.	BLOWS/FT.	REMARKS
LEAN CLAY, brown (10YR4/4), wet, soft, roots to 8" depth.	CL		0				
LEAN CLAY, light gray (2.5YR7/2), with 10% red-brown mottling, moist, stiff, low plasticity, micaceous. (Recent Fill <Qaf>)	Fill		1				
			2		2-1	9	▼
CLAYEY GRAVEL, 30% dark red, 30% dark gray, 30% light gray, moist to wet, medium dense, rounded gravels to 1½" max. dimension.			3		2-2	17	
			4				
			5				
			6		2-3	12	
			7				
			8		2-4	25	
			9				
FAT CLAY, very dark gray (N3/), moist to wet, soft, medium to high plasticity, trace fine sand, micaceous, trace wood fragments (Recent Alluvium <Qal>)	CH		10				
			11		2-5	3	
			12				
			13		2-6		
			14				
No Recovery			15		2-7	2	
			16				
			17				
			18				
			19				
			20				

DAVID J. NEWTON ASSOCIATES INCORPORATED

Notes:

Project No. 828-101

Boring Log No. 2

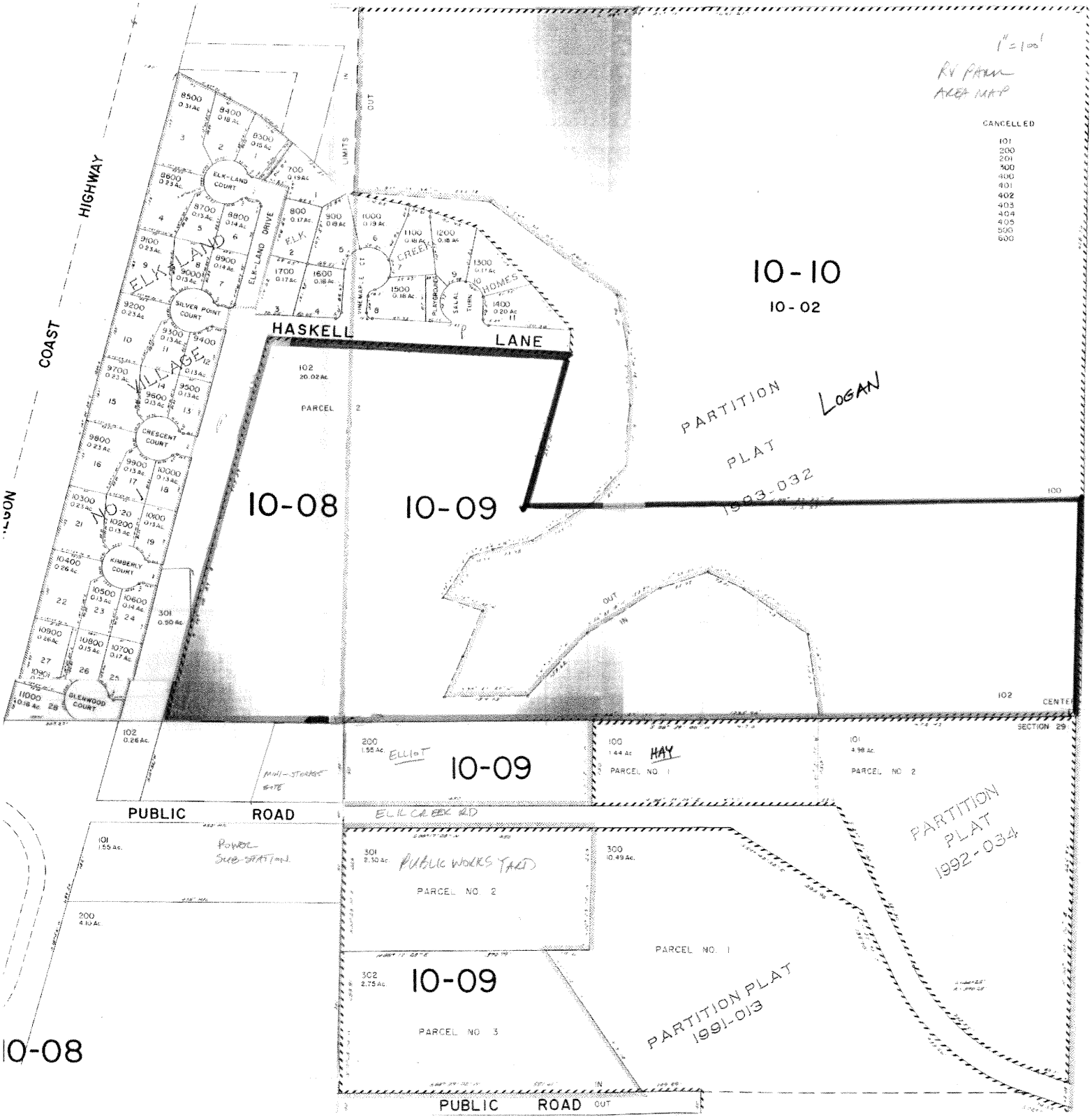
PROJECT: Cannon Beach RV Park Site
DRILL RIG: Solid Stem Auger
INITIAL GW DEPTH: 3
DATE: 12-11-95
HOLE DIA.: 4 in.
FINAL GW:
LOGGED BY: J. Lawes
SAMPLER: SPT
HOLE ELEV.: 45 ft. MSL

DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	SAMPLE NO.	BLOWS/FT.	REMARKS
FAT CLAY, vary dark gray (N2/), moist, firm, trace sand, micaceous, medium to high plasticity.	CH		20–21		2-8	5	
LEAN CLAY, greenish gray (5GY5/1), moist, stiff, low plasticity	CL		22–26		2-9	10	
CLAYEY GRAVEL, very dark gray (N3/), wet, very dense, rounded gravels and cobbles to 3" max. dimension.	GC		27–31		2-10	50/4"	
Bottom of Hole at 31½ feet.			32–40				

DAVID J. NEWTON ASSOCIATES INCORPORATED

Notes:

Project No. 628-101


1" = 100'
RV PARK
AREA MAP
CANCELLED
101
200
201
300
400
401
402
403
404
405
500
600
10-10
10-02
HASKELL LANE
102
20.02 Ac.
PARCEL 2
PARTITION PLAT 1993-032
LOGAN
10-08
10-09
COAST HIGHWAY
ELK-LAND COURT
ELK-LAND DRIVE
SILVER POINT COURT
CRESCENT COURT
KIMBERLY COURT
GLENWOOD COURT
ELK CREEK
PINE MAPLE CT
PLAYGROUND
SALAL TERR.
10 HOMES
VILLAGE
NO. 2
LIMITS IN
LIMITS OUT
102
0.26 Ac.
PUBLIC ROAD
200
1.55 Ac.
ELLIOT
MINI-STORAGE SITE
100
1.44 Ac.
HAY
PARCEL NO. 1
101
4.98 Ac.
PARCEL NO. 2
SECTION 29
ELK CREEK RD
101
1.55 Ac.
POWER SUB-STATION
301
8.30 Ac.
PUBLIC WORKS YARD
PARCEL NO. 2
300
10.49 Ac.
PARCEL NO. 1
PARTITION PLAT 1992-034
200
4.10 Ac.
302
2.75 Ac.
PARCEL NO. 3
PARTITION PLAT 1991-013
PUBLIC ROAD OUT
10-08