

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director



October 4, 1995

Mr. John R. Isham
Project Hydrogeologist
HDR Engineering, Inc.
Suite 1400
128 S. Tron Street
Charlotte, NC 28202-5001

Fac/Perm/Co ID #	Date	Doc ID#
1602 ^{my}	08/02/2011	DIN 14670

RE: Upgrade Plan for Existing Groundwater Monitoring System
Carteret County Landfill (Permit #16-02)

Dear Mr. Isham,

HDR Engineering, Inc. is authorized by the Solid Waste Section to proceed with installation of the groundwater monitoring wells at the Carteret County Landfill, according to the Upgrade Plan submitted on September 29, 1995.

Three copies of the revised monitoring plan, complete with well construction records, boring logs, abandonment records, and survey information, may be submitted along with the analytical results from the initial sampling event, which may coincide with the regular fall sampling event for all of the wells at the facility.

Sincerely,

Jim Bateson
Hydrogeologist,
Solid Waste Section

cc: Jim Earp; Carteret County
Bobby Lutfy; SWS
Jim Barber; "
Billy Morris "

September 29, 1995



Mr. Jim Bateson
North Carolina Department of Environment
Health and Natural Resources
Division of Solid Waste Management
Solid Waste Section
P. O. Box 27687
Raleigh, North Carolina 27611-7687

Re: Upgrade Plan for Existing Ground-Water Monitoring System
Carteret County Landfill (Permit #16-02)
Carteret County, North Carolina
HDR Project Number: 7908-001-018

Dear Mr. Bateson:

Pursuant to our telephone conversation (and in response to your letter dated July 7, 1995), Wednesday, September 20, 1995, HDR is submitting, on behalf of Carteret County, the following plan for upgrading the existing ground-water quality monitoring system at the above referenced landfill.

Scope of Work

The upgrading of the existing plan will consist of the following components:

1. Permanent abandonment of existing ground-water monitoring wells MW-1 through MW-3 in accordance with North Carolina well abandonment regulations;
2. Reinstall replacement monitoring wells for MW-1 through MW-3 in accordance with current state and Solid Waste Section well construction standards;
3. Install an additional monitoring well downgradient of the existing landfill inside the drainage divide;
4. Obtain new survey data (i.e., casing elevations, northings, eastings, ground elevations, etc.) for each of the new wells by a North Carolina Registered Land Surveyor;
5. Upgrade the existing Water Quality Monitoring Plan to reflect the above-referenced changes to the monitoring system.

Well Placement Rationale

The following section reflects the rationale behind the placement of the proposed monitoring wells referenced in the above section. The attached site plan illustrates the location of each of the proposed wells. Final well positions will be determined in the field based on accessibility.

- Existing monitoring well MW-1 will be abandoned and replaced by MW-1R at the southernmost corner of the landfill to provide background water quality data;
- Existing monitoring well MW-2 will be abandoned and replaced by MW-2R at or about 125 feet north-northwest of the existing landfill for downgradient detection capabilities;
- Existing monitoring well MW-3 will be abandoned and replaced by MW-3R at or about 125 feet north-northwest of the old landfill for downgradient detection capabilities;
- An additional monitoring well (MW-6) will be installed at or about 125 feet north of both the existing and old landfills for downgradient detection capabilities.

Well Installation Details

Each well will be installed to an estimated depth of 20 feet below existing land surface using hollow stem augers. In order to ensure that each well is screened within the more permeable sand-bearing unit beneath the site, split spoon samples will be obtained at 5-foot intervals from ground surface. Each well will be constructed with a 15-foot well screen section with 0.010-inch factory slots. All wells will be constructed in accordance with North Carolina Well Construction Standards (NCAC Title 15A, Subchapter 2C, Section 0.100). The attached well construction schematic illustrates the proposed well construction specifications.

Water Quality Monitoring Plan

The existing Water Quality Monitoring Plan will be revised to reflect the present changes made to the monitoring system. The plan will include new monitoring well construction record drawings and soil boring logs for each well as well as a revised base map depicting the surveyed placement, and casing elevations, for the new wells. A reference to the new

Mr. Jim Bateson
September 29, 1995
Page 3

analytical parameters list (revised C&D and closed MSWLF list), which includes the 8 RCRA metals and 40 volatile organic compounds (VOCs), will also be included in the document.

Implementation Schedule

In order to install and properly develop the proposed wells at the landfill prior to the next scheduled water quality sampling event scheduled in late October, HDR has tentatively planned to install and develop the referenced wells on October 16 and 17, 1995. The revised water quality monitoring plan will be completed and submitted to the Solid Waste Section within 30 days from the date of the last well completion.

Should you have any questions or comments concerning the information contained within this plan, please do not hesitate to contact me or Eric Wright at (704) 338-1800.

Sincerely,

HDR Engineering, Inc. of North Carolina



John R. Isham
Project Hydrogeologist

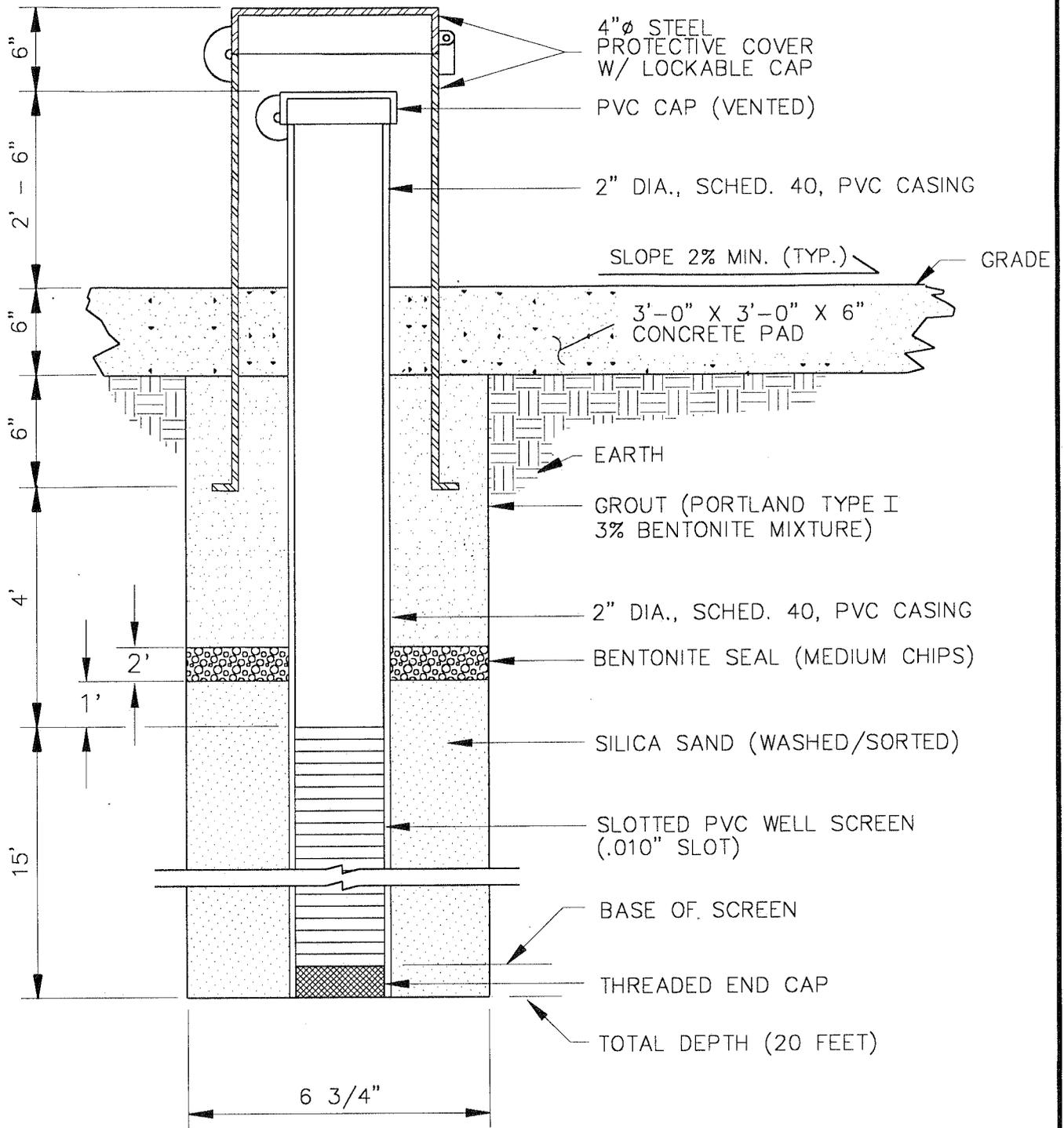
JRI/

attachments

cc: Jim Earp - Carteret County
Eric Wright - HDR Solid Waste Section



FILENAME: P:\CARTERET\MONWELL.DWG 9/22/95



PROPOSED SHALLOW MONITORING WELL

NO SCALE

HDR

HDR Engineering, Inc.

CARTERET COUNTY LANDFILL

Date
9/95

Figure
1

MEMO

DATE: 9/20/95

TO: _____

SUBJECT: CANTEDET UPGRADE

2 phone conversations w/ Joan Shan

o HDR.

HE FIXES ATTACHED MAP.

→ OUR ORIGINAL CONSENSUS:

Twin MW-2, 3 WITH 20' WELLS
w/15' SCREENS.

→ His plan on map, but he wondered
if "old landfill" needed downgrad well
(at ~ MW-3)

→ UPSHOT: -Twin MW-3

- FRABBIT 2 wells

From: down grad from

"L.F. to be closed".



North Carolina Department of Environment,
Health, and Natural Resources



Printed on Recycled Paper



FAX TRANSMITTAL SHEET

Date SEPTEMBER 20, 1995

Number of Pages (includes cover page) 2

MESSAGE TO:

Authorization Code 6832
Name JIM BATESON
Firm NCDEHNR SOLID WASTE
City RALEIGH

HDR Project No. 7908-001-018
Telecopy No. (919) 733-0345⁴⁸¹⁰
Telephone No. (919) 733-0345
State NORTH CAROLINA

If you do not receive all the pages, please call (704) 338-1800 as soon as possible.

MESSAGE FROM:

Name: JOHN R. ISHAM

MESSAGE:

JIM: THE ATTACHED MAP DEPICTS THE PROPOSED LOCATIONS FOR THE REPLACEMENT WELLS AT THE CARTERET COUNTY LANDFILL PURSUANT TO OUR TELEPHONE CONVERSATION ON AUGUST 1, 1995. A NEW ISSUE WAS BROUGHT UP BY THE ENGINEER IN OUR OFFICE CONCERNING THE OLD LANDFILL CELL. SHOULD THE PROPOSED WELL PLACEMENT TAKE INTO CONSIDERATION THE OLD LANDFILL AS WELL AS THE CURRENT PORTION BEING MONITORED. I WILL CALL YOU SHORTLY TO DISCUSS THIS ISSUE BEFORE I FINALIZE THE SUMMARY LETTER OUTLINING CARTERET COUNTY'S INTENTIONS CONCERNING THIS MATTER.

ANY GUIDANCE WILL BE APPRECIATED

THANKS!

HDR Engineering, Inc.

Suite 1400
128 South Tryon Street
Charlotte, NC 28202-5001

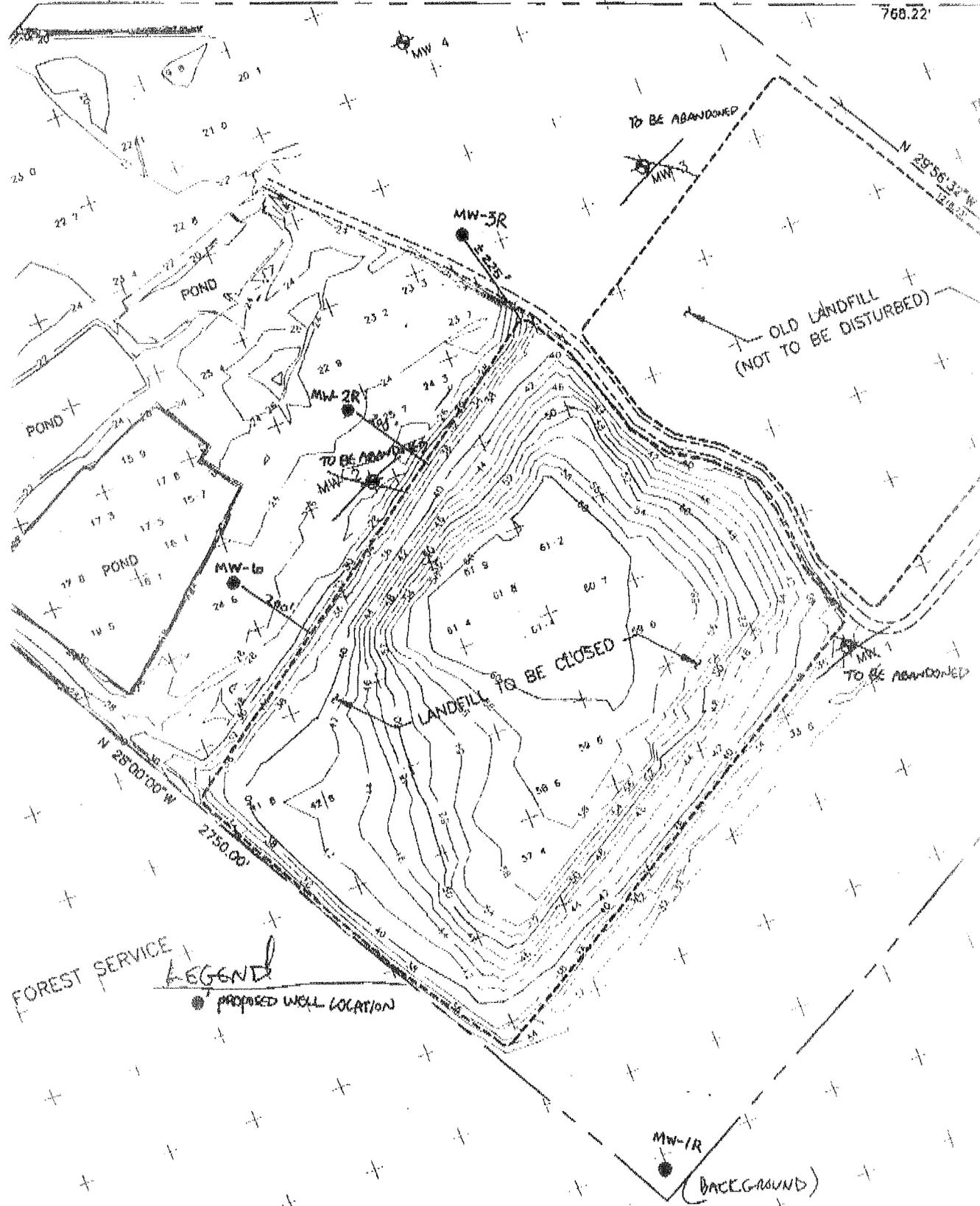
Telephone (704) 338-1800
Fax (704) 338-6760

Sent By: _____
Time Sent: _____

US FOREST SW

S 68°28'00" E 2234.39'

760.22'



FOREST SERVICE

LEGEND
 ● PROPOSED WELL LOCATION

(BACKGROUND)

CARTERET monitoring system upgrade

HDR JOHN ISHAM
(704) 338-6832

PHONE CONVERSATION AUGUST 1ST

NEED NEW SYSTEM:

- Twin MW-2 and MW-3 WITH WELLS WITH 15' SCREEN @ W.T.
- Upgrade well as above
- Drop MW's 1-5, don't abandon, use for w.t. info, vertical gradient.
- Retain SW-1 location
- Mail constituent list.

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director



July 7, 1995

Mr. Gary L. Page
County Manager
Courthouse Square
Beaufort, NC 28516

SUBJECT: Closure of the Carteret County Landfill
Permit #16-02

Dear Mr. Page:

The Solid Waste Section has received and reviewed documentation submitted by your consultant on your behalf regarding the subject facility. Upon review of this information, the Section has determined that the water quality monitoring system needs to be upgraded for post-closure monitoring in order to ensure the early detection of any release of hazardous constituents. Some of the existing monitoring wells are greater than 250 feet from the waste boundary or have design or maintenance conditions that make upgrading of the monitoring system necessary.

Within 60 days of receipt of this letter, Carteret County, or its consultant, needs to submit to the Solid Waste Section a plan for upgrading the water quality monitoring system at the subject facility.

If there are any questions regarding this letter, please call the Solid Waste Section Hydrogeologist at (919) 733-0692.

Sincerely,

A handwritten signature in black ink that reads 'Jim Bateson'. The signature is written in a cursive style with a large initial 'J'.

Jim Bateson,
Hydrogeologist
Solid Waste Section

cc: Bobby Lutfy; Solid Waste Section
Jim Barber; SWS Western Area Engineer