



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

March 23, 2017

Mr. Steve Thompson  
National Park Service  
Outer Banks Group  
1401 National Park Drive  
Manteo, NC 27954

Subject: Special Use Permit for Geotechnical Investigation  
NC-12 – Rodanthe Breach Long-Term Improvements, Bonner Bridge Replacement  
Project Phase IIb in Dare County, North Carolina; TIP Project B-2500B, Federal Aid  
Project No. BRNHF-0012(56); WBS Element 32635.3.FR7

The North Carolina Department of Transportation (NCDOT) Geotechnical Engineering Unit is proposing additional subsurface investigations for the foundation design for the NC-12 Rodanthe Bridge in the Pamlico Sound in Dare County, North Carolina. A completed Special Use Permit Application and appropriate site drawings are attached for your review. As portions of the Cape Hatteras National Seashore will be utilized during this work, approval is required.

A private engineering firm will conduct the investigation. One boring is anticipated in the shallow water of the Pamlico Sound (within the National Park Service Boundary; Sheets 12 and 13). This boring is under the proposed new bridge footprint. It will be accessed from Pea Island National Wildlife Refuge generally under the proposed bridge footprint and was chosen as it minimizes impacts to vegetation and wetlands.

All equipment required to conduct the boring will be delivered to the site via a commercial haul truck. Equipment will be left staged along the shoulder of NC 12 within the existing NCDOT easement, but well off the roadway.

The boring will be performed by a tracked ATV “swamp buggy” type carrier and drill rig designed specifically to access and drill in marshy, near shore, shallow water marine environments. Along with the “swamp buggy”, a smaller ATV tracked drill crew support vehicle will access the boring location and provide safe transport of men, supplies, samples, etc. to and from the drill rig and staging area while the geotechnical boring is in progress. The boring will turn or drive a 4-inch diameter steel casing into the sound bottom, creating minimal disturbance. Other drilling tools will be used to sample the sediment and advance the hold within the steel casing. The steel casing will be removed upon completing the boring. All drilling fluids/mud will be contained in the subsurface and through the steel casing to the surface and in a steel “mud tub” on the drill rig. It will be recirculated as appropriate during drilling. Spoils from the drilling will be contained and transferred into the “mud tub”.

*Mailing Address:*  
NC DEPARTMENT OF TRANSPORTATION  
PROJECT DEVELOPMENT AND  
ENVIRONMENTAL ANALYSIS  
1548 MAIL SERVICE CENTER  
RALEIGH, NC 27699-1548

*Telephone:* (919) 707-6000  
*Fax:* (919) 250-4224  
*Customer Service:* 1-877-368-4968

*Website:* [www.ncdot.gov](http://www.ncdot.gov)

*Location:*  
1000 BIRCH RIDGE DRIVE  
RALEIGH, NC 27610

Spoil from the drilling will be placed back into the boring if practicable, or disposed at an upland location, the specifics of which will be designated by the US Fish and Wildlife Service, if desired.

Once the "swamp buggy" is positioned at the proposed boring location(s), drilling will commence. The borings will be a Standard Penetration Test (SPT) with split barrel soil samples collected at approximately 5 foot intervals until the termination depth of 150 feet below ground surface. A 4-inch steel casing will be installed at the surface and advanced as needed to maintain bore-hole stability during drilling and will be removed upon boring termination. This methodology creates minimal disturbance beyond the bore hole. It is expected that drilling each boring will take up to a maximum of 7 days to complete.

Regulatory Approvals:

NCDOT applied for Nationwide Permit No. 6 from the U.S. Army Corps of Engineers to authorize these activities on March 10, 2017. In addition, NCDOT has obtained a Special Use Permit from the United States Fish and Wildlife Service to authorize these activities within the Pea Island National Wildlife Refuge. We are hereby requesting a Special Use Permit from the National Park Service for this activity. If you have any questions or would like additional information, please contact Michael Turchy at [maturchy@ncdot.gov](mailto:maturchy@ncdot.gov) or (919) 707-6157. A copy of this application will also be posted at <https://xfer.services.ncdot.gov/pdea/PermApps/>.

Sincerely,



Philip S. Harris, III, P.E., Manager  
Natural Environment Section

cc: John Pilipchuk, State Engineering Geologist, P.E., Geotechnical Unit  
David Herring, Design Build Unit  
Clay Willis, Division Environmental Officer

Revised NPS Form 10-930  
 OMB No. 1024-0026  
 10-2010  
 Expires 6/30/2013

**National Park Service**  
**Outer Banks Group**  
**1401 National Park Drive**  
**Manteo, NC 27954**  
**(252) 473-2111**



**Revised Application for Special Use Permit**

Please supply the information requested below. Attach additional sheets, if necessary, to provide required information. You will be notified of the disposition of the application and the necessary steps to secure your final permit. For special events, a non-refundable processing fee should be included and your permit may require the payment of cost recovery charges and proof of liability insurance naming the United States of America as also insured. Pursuant to the 2010 NPS Interim Regulations, parks have up to 10 days to process a fully executed application that seeks to engage in a demonstration or the sale or distribution of printed matter.

|  |   |
|--|---|
| Applicant Name: Michael Turchy   | Organization Name: NC Dept. of Transportation |
| Social Security #: not applicable  | Tax ID # not applicable                       |
| Street/Address: 1020 Birch Ridge Drive   | Street/Address: 1020 Birch Ridge Drive        |
| City/State/Zip Code: Raleigh, NC 27610   | City/State/Zip Code: Raleigh, NC 27610        |
| Telephone #: 919-707-6157  | Telephone #: 919-707-6157                     |
| Cell phone #:  | Cell phone #:                                 |
| Fax #: 919-707-6000  | Fax#: 919-707-6000                            |
| E-mail: maturchy@ncdot.gov   | E-mail: maturchy@ncdot.gov                    |
| Responsible person on site during event (Name, address and cell# if not Applicant): Shane Johnson, 4021 Stirrup Creek Drive, Suite 100, Durham, NC 27703; (919) 414-3899 |   |

Description of Proposed Activity (attach diagram, attach additional pages if necessary):  
 Please see attached cover letter

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Requested Location:           Please reference attached map of geotechnical investigation area          

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Dates:

| Event set up will begin:<br>(date and time) | Event will begin:<br>(date and time) | Event will end:<br>(date and time) | Removal will be done:<br>(date and time) |
|---|--------------------------------------|------------------------------------|--|
| 4/10/17 (Approximate)                       | 4/12/17(Approximate)                 | 4/20/17(Approximate)               | 4/20/17(Approximate)                     |
|   |                                      |                                    |  |
|   |                                      |                                    |  |

Maximum Number of Participants           4 companies, 15 people           (Please provide best estimate)

Maximum Number of Vehicles           7 vehicles           (attach parking plan if more than 5 vehicles)

Support Equipment (list all equipment; attach additional pages if necessary)

Rubber tired drill rig, swamp buggy, rubber tired ATV, steel casings, lowboy with trailer, support truck with trailer, various pickup trucks

List support personnel (contractors, etc. including addresses and telephones attach additional pages if necessary. AMEC/Foster Wheeler, 4021 Stirrup Creek Drive, Suite 100, Durham, NC 27703. Contact Shane Johnston (919) 414-3899 NCDOT, 1020 Birch Ridge Rd, Raleigh, NC 27610 Contact: Michael Turchy, (919) 707-6157 RK&K 900 Ridgefield Dr, Suite 350, Raleigh, NC 27609. Contact Matt Cook (919) 878-9560 Three Oaks Engineering, 324 Blackwell Street, Suite 1200, Durham, NC 27701 Contact: Michael Wood, (919) 732-1300

- Is this an exercise of First Amendment Rights? [ ] Y [X] N
Are you familiar with/ have you visited the requested area? [X] Y [ ] N
Have you obtained a permit from the National Park Service in the past? [X] Y [ ] N
Do you plan to advertise or issue a press release before the event? [ ] Y [X] N
Will you distribute printed material? [ ] Y [X] N
Is there any reason to believe there will be attempts to disrupt, protest or prevent your event? [ ] Y [X] N
Do you intend to solicit donations, engage in fundraising, or offer items for sale? [ ] Y [X] N

The applicant by his or her signature certifies that all the information given is complete and correct, and that no false or misleading information or false statements have been given.

Signature [Handwritten Signature] Date 03/23/2017

Information provided will be used to determine whether a permit will be issued. Certain activity and event permits require proof of liability insurance naming the United States as an additional insured and are subject to cost recovery and administrative charges which must be paid before the permit is issued.

This completed application should be mailed to the Park address found at the top of this application.

Note that this is an application only, and does not serve as permission to conduct any use of the park. If your request is approved, a permit containing applicable terms and conditions will be sent to the person designated on the application.

NOTICES

Privacy Act Statement: The Privacy Act of 1974 (5 U.S.C. 552a) provides that you be furnished with the following information in connection with information required by this application.

Paperwork Reduction Act Statement: This information is being collected subject to the Paperwork Reduction Act (44 U.S.C. 3501) to allow the park manager to make a value judgment on whether or not to allow the requested use.

Estimated Burden Statement: Public reporting burden for this form is estimated to average 30 minutes per response including the time it takes to read, gather and maintain data, review instructions and complete the form.

| STATE           | STATE PROJECT REFERENCE NO. | SHEET NO.   | TOTAL SHEETS |
|-----------------|-----------------------------|-------------|--------------|
| N.C.            | B-2500B                     | 1           |              |
| STATE PROJ. NO. | F.A. PROJ. NO.              | DESCRIPTION |              |
| 32635.3.FR7     | BRNH-0012(56)               |             |              |
|                 |                             |             |              |
|                 |                             |             |              |
|                 |                             |             |              |
|                 |                             |             |              |



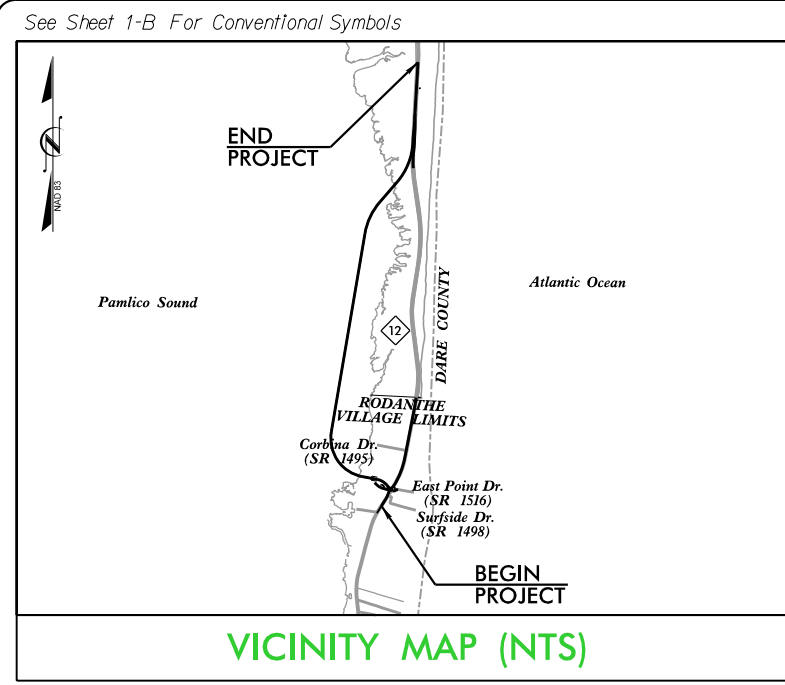
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

# DARE COUNTY

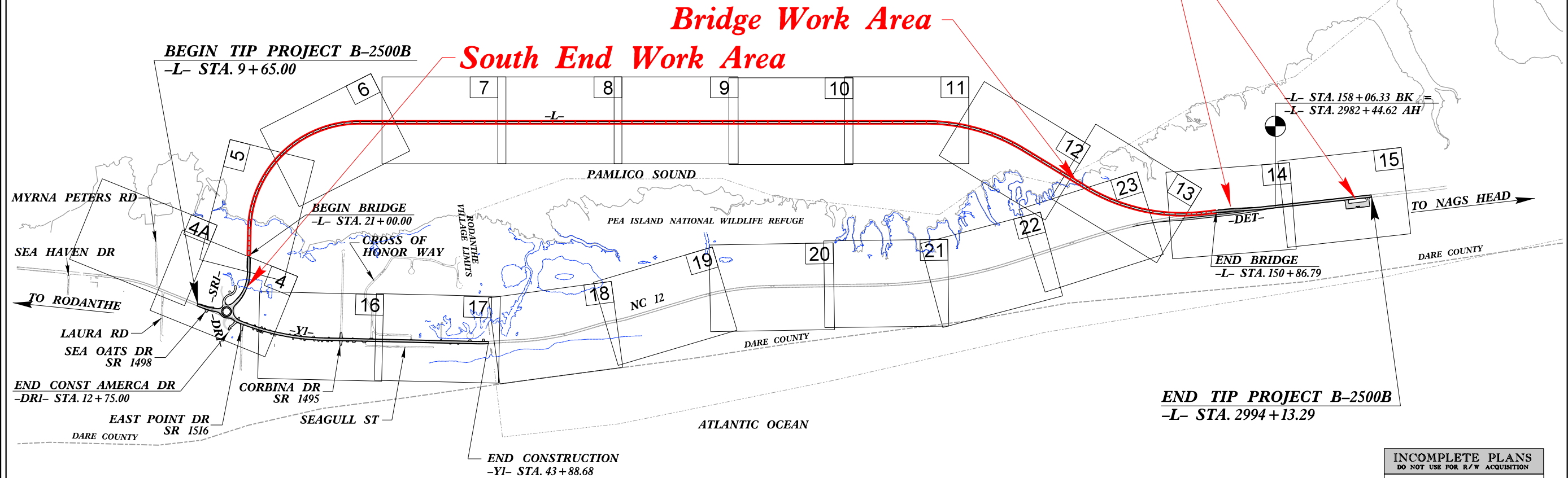
**LOCATION: NC 12 - RODANTHE BREACH LONG TERM IMPROVEMENTS (PHASE IIB)**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNING & STRUCTURES**

## Geotechnical Boring Work Areas



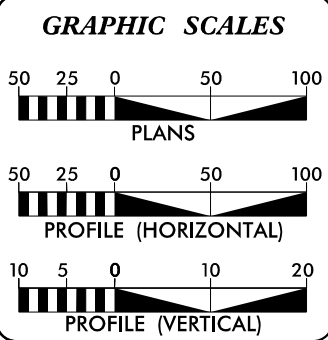
VICINITY MAP (NTS)



**END TIP PROJECT B-2500B**  
-L- STA. 2994+13.29

**INCOMPLETE PLANS**  
DO NOT USE FOR R/W ACQUISITION  
DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.



**DESIGN DATA**  
ADT 2017 = 9,800  
ADT 2037 = 14,200  
V = 40 /60 MPH  
FUNC. CLASSIFICATION =  
RURAL COLLECTOR

**PROJECT LENGTH**  
LENGTH ROADWAY TIP PROJECT B-2500B.....0.572 mi  
LENGTH STRUCTURE TIP PROJECT B-2500B.....2.460 mi  
TOTAL LENGTH TIP PROJECT B-2500B.....3.032 mi

**NC DOT CONTACT**  
  
**K. Zak Hamidi, P.E.**  
PROJECT ENGINEER - DESIGN-BUILD GROUP

**PLANS PREPARED BY:**  
**RK&K** RUMMEL, KLEPPER & KAHL, LLP  
900 RIDGEFIELD DRIVE, SUITE 350  
RALEIGH, NORTH CAROLINA 27609  
NC LICENSE NO. F-0112

**FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION**

2012 STANDARD SPECIFICATIONS

**FLATIRON**

**LETTING DATE:**  
JANUARY 25, 2017

**B. Keith Skinner, P.E.**  
PROJECT ENGINEER

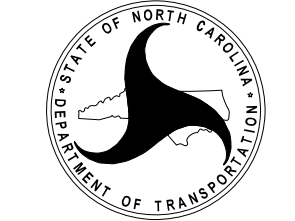
**Brandon J. McInnis, P.E.**  
PROJECT DESIGN ENGINEER

**HYDRAULICS ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.

**ROADWAY DESIGN ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.

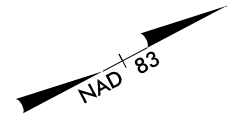



**TIP PROJECT: B-2500B**  
**CONTRACT: C203474**


09/08/19  
3/9/2017  
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fkeys


8/17/99

|   |                        |
|---|------------------------|
| PROJECT REFERENCE NO.<br><i>B-2500B</i>                                 | SHEET NO.<br><i>12</i> |
| RW SHEET NO.  |                        |
| ROADWAY DESIGN ENGINEER   | HYDRAULICS ENGINEER    |
| <b>INCOMPLETE PLANS</b><br>DO NOT USE FOR A/W ACQUISITION               |                        |
| <b>DOCUMENT NOT CONSIDERED FINAL</b><br>UNLESS ALL SIGNATURES COMPLETED |                        |



**GEOTECHNICAL BORING WORK AREA** 

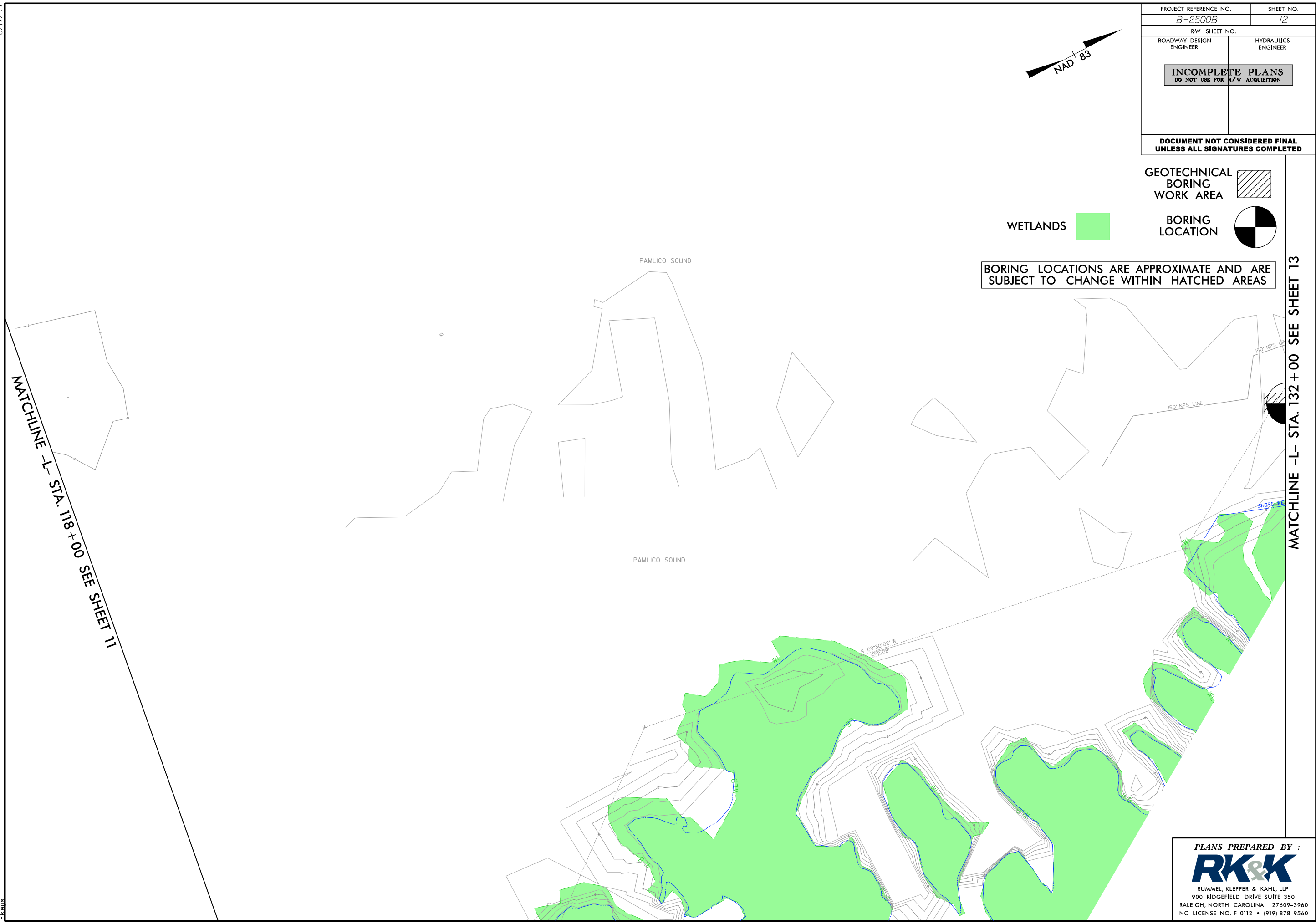
**WETLANDS** 

**BORING LOCATION** 

**BORING LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO CHANGE WITHIN HATCHED AREAS**

MATCHLINE -L- STA. 118 + 00 SEE SHEET 11

MATCHLINE -L- STA. 132 + 00 SEE SHEET 13



3/9/2017 R:\Hydro\Permits\Environmental\Drawings\NetonWide\B2500B\_Hyd\_psh12.dgn




**PLANS PREPARED BY :**  
  
 RUMMEL, KLEPPER & KAHL, LLP  
 900 RIDGEFIELD DRIVE SUITE 350  
 RALEIGH, NORTH CAROLINA 27609-3960  
 NC LICENSE NO. F-0112 • (919) 878-9560

8/17/99

BORING LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO CHANGE WITHIN HATCHED AREAS

|   |                     |
|---|---------------------|
| PROJECT REFERENCE NO.<br>B-2500B                          | SHEET NO.<br>13     |
| RW SHEET NO.  |                     |
| ROADWAY DESIGN ENGINEER                                   | HYDRAULICS ENGINEER |
| <b>INCOMPLETE PLANS</b><br>DO NOT USE FOR A/W ACQUISITION |                     |

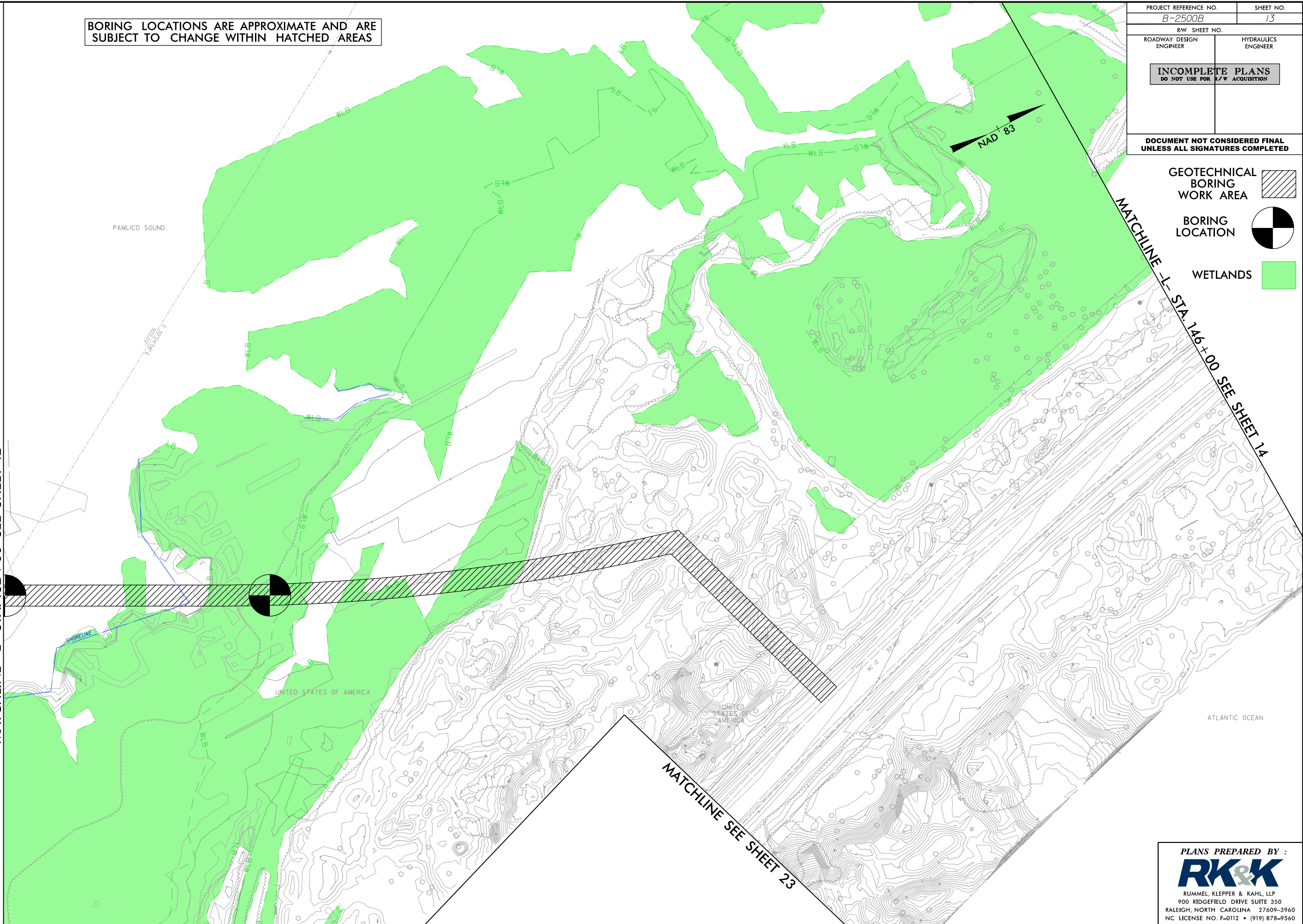
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

- GEOTECHNICAL BORING WORK AREA 
- BORING LOCATION 
- WETLANDS 

MATCHLINE -L- STA. 132 + 00 SEE SHEET 12

MATCHLINE -L- STA. 146 + 00 SEE SHEET 14

MATCHLINE SEE SHEET 23



3/9/2017 R:\Hydro\lics\PERMITS\_Environmental\Drawings\NetonWide\B2500B\_Hyd\_psh13.dgn

PLANS PREPARED BY :

**RK&K**

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 900 RIDGEFIELD DRIVE SUITE 350  
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 NC LICENSE NO. F-0112 • (919) 878-9560