

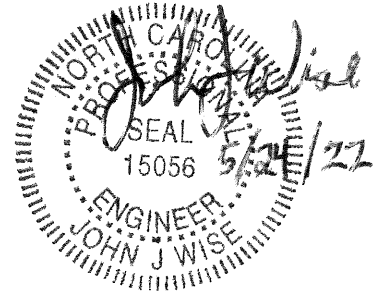
ADDENDA - ADDENDUM NUMBER 1
Section 00 91 13 - Page 1
Yorktown Aquifer - Water-Supply Well RO4
Mainland Water Treatment Plant, Maple, Currituck County, NC

DOCUMENT 00 91 13
ADDENDA
ADDENDUM NUMBER 1

DATE: May 23, 2022

PROJECT: Yorktown Aquifer - Water-Supply Well RO4

PROJECT NUMBER: 165302



OWNER:
The County of Currituck
153 Courthouse Road, Suite 302
Currituck, NC 27929

ENGINEER:
Groundwater Management Associates, Inc.
John J. Wise, P.E.
2205-A Candun Drive
Apex, NC 27523
(919) 363-6310
Firm PE No. C-0854

TO: Prospective Bidders

This Addendum forms a part of the Contract Documents and modifies the Bidding Documents dated April 28, 2022, with amendments and additions noted below.

Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may disqualify the Bidder. This Addendum consists of 9 pages (including attachments).

BID DUE DATE

The Bid Due Date remains 2:00 PM Tuesday May 31, 2022.

CHANGES TO THE BID FORM AND SPECIFICATIONS

- 1. Replace the Bid Form with the attached Bid Form.**

CLARIFICATIONS and RESPONSES TO QUESTIONS

PRE-BID MEETING

1. Several technical issues were discussed at the Pre-Bid Meeting on May 11, 2022. Refer to the attached "Minutes From Pre-Bid Meeting" for a list of technical/bid guidance and general remarks. The "Minutes From Pre-Bid Meeting" are incorporated as part of this Addendum #1.

GENERAL COMMENTS/QUESTIONS (Questions are shown bold and underlined)

1. **Contract term states 150 days from Notice to Proceed, will this be adjusted based on material delivery if any?** If the project is not completed within the "150 days to completion", the Contractor may submit the well material order details (order date and delivery date). The County will take material order delays into consideration if the project does run beyond the 150 days to completion requirement.
2. **Will screens from Alloy Machine Works, Inc. considered an equivalent manufacture?** Yes, as long as the screens comply with the project requirements found on the Figures and in Specification 33 21 13 Section 3.6 A.
3. **Will casing/screens be ordered before or after Geophysical logging? Present global market is unpredictable, and manufacturers can guarantee pricing over 3-5 days.** Figure 3 in the Technical Specifications represents the GMA's best assessment of the well configuration based on existing well RO1 without the benefit of actual data from site RO4. The Contractor is advised that, as stated in Specification 33 21 13 Section 3.5 E, final selection and designation of screen lengths, slot size, and gravel pack size cannot be confirmed until after geophysical logging is performed. The Contractor is encouraged to obtain documentation of material costs used to produce the bid, and retain the documentation for possible use later to support a change order request.
4. **Does GMA anticipate free flow on proposed design? If so, how much?** No. GMA does not anticipate that new production well RO4 will be "free flowing" or artesian. There are a number of Currituck County Yorktown Aquifer wells that supply the RO WTP, and all have static water levels below land surface.
5. **Based on section 33 21 13: Mud and sediment to be controlled on site. Will controlled sediment be authorized to remain onsite?** Yes, sediments can remain on site as long as they can be dried and solidified. The Contractor shall remove mud from the mud pit, then spread it thin in an area away from the well. The mud pit must then be filled with select material as described in Item 9 below. Areas disturbed by the mud pit or by spreading sediments must be restored in accordance with the Permanent Seeding Plan found in Figure 6 in the Technical Specifications.
6. **On well drawing detail 5.1 and 5.2, 14"x12" PVC to SS adapter, will 304 SS adapter be acceptable if 316L SS is not an option from manufacture?** Type 304 Stainless steel is not acceptable for this project due to anticipated chloride concentrations in the groundwater.

7. **Well head completion (Specification 33 21 13 Section 3.8 F): does well vent requested need to be permanent to well casing or temporary on cap? If conditions are favorable and not flowing well.** The well vent may be installed on either the well casing or the well cap.
8. **Can the cut trees and other debris remain on site?** No. Remove timber and cut debris from the site in accordance with Specification 31 10 00 Sections 3.3 and 3.4. The exception to this is "top soil" removed during preparation of the driveway to the well as discussed in the attached "Minutes From Pre-Bid Meeting". Cleared driveway soil may be spread out along the edges of the work (i.e. not hauled off site).
9. **What does the County want the contractor to do about the tree stumps? Completely dig them out, or grind them in place?** The contractor is expected to clear and grub stumps and remove them from the site as part of the site preparation costs and in accordance with Specification 31 10 00 Sections 3.3 and 3.4. Backfill and compact stump holes with material from local barrow pits that is free of rocks larger than 2 inches, debris, and any other deleterious material that might cause settlement. Select material shall conform to ASTM D2487 and Unified Soil Classification group symbols SW, SP, SM, or SC.

CHANGES TO THE FIGURES/DRAWINGS

1. **Replace Figure 4 with the attached figure that shows the location of the driveway entrance moved to the south side of the Heritage Tree.**

END OF DOCUMENT

REVISED
Yorktown Aquifer (YKTA) Water Supply Well R04
Maple Road
Maple, Currituck County North Carolina
(Bid Submission Form)

Description of Service*	Unit Cost	Units	Total
Mobilization/Site Preparation/Tree Protection/Erosion Control/ Restoration/Demobilization/ Etc.	\$_____ lump sum	1	\$
Remove Top 6" of Material Along the Driveway Path and Replace with Imported Fill Sand	\$_____ / yd ³	25 yd ³	\$
Drill and Set Surface Casing	\$_____ / foot	80 feet	\$
Mud Rotary Drilling – Pilot Hole	\$_____ / foot	280 feet	\$
Geophysical Logging – Pilot Hole	\$_____ lump sum	1	\$
Mud Rotary Drilling for YKTA Water Supply Well	\$_____ / foot	280 feet	\$
Construct 14" SDR17 Certa-Lok Casing and Install 14" x 12" Reducer	\$_____ / foot	135 feet	\$
Install 12" 316L Stainless Steel 50-slot Well Screen Rated to 280 feet deep, Including all Gravel Pack and Bentonite Seal	\$_____ / foot	135 feet	\$
Construct 12" Schedule 20, 316L Stainless Steel Tail Piece Below Screen	\$_____ / foot	5 feet	\$
Install Cement Grout	\$_____ / foot	135 feet	\$
Well Development	\$_____ lump sum	1	\$
Aquifer Testing	\$_____ lump sum	1	\$
Disinfection of the Water-Supply Well and Bacteriological Testing	\$_____ lump sum	1	\$
Well Head Completion and Project Closeout	\$_____ lump sum	1	\$
TOTAL BASE BID PRICE FOR YKTA WATER-SUPPLY WELL	--	--	\$

* Compensation for work will be based upon unit rates and actual units incurred to complete the project. Pricing shall include all labor, travel, expenses, materials, and equipment required to complete a turn-key job as specified.

Name of Offering
Firm and Contact: _____

Address: _____

Telephone(s): _____

Contact Email(s): _____

Name and NCWCC
License Number of
Supervising Driller: _____



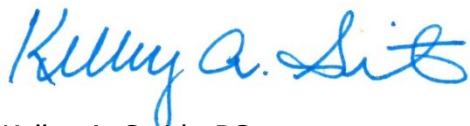
Groundwater Management Associates, Inc.

**Minutes from Pre-Bid Meeting
Mainland Water Department - Currituck County
Reverse Osmosis Wellfield Expansion
Yorktown Aquifer Production Well RO4**

May 11, 2022 @ 10:00 AM

1. Attendance: please see the attached attendance sheet.
2. Project Summary:
 - a) Bids are being sought to perform a detailed scope of work that includes mobilization, site preparation, drilling, sample collection, well construction, well development, aquifer testing, well completion, site restoration, and demobilization. The Contractor will be observed by the Engineer, Groundwater Management Associates, Inc. (GMA) acting as the Owner's representative.
3. General Discussion:
 - a) Rely on Bid Documents and written Addenda to form basis of bid preparation. Whatever is said during this meeting is meant to be helpful but does not change the Bid Documents. Bidders must rely on published Addenda for official answers to questions that are not currently covered by Bid Documents.
 - b) Bid Due Date: 2:00 PM Tuesday, May 31, 2022
 - c) Tentative schedule of events:
 1. Last Addendum - Last questions due by 2:00 PM Tuesday, May 17, 2022, to allow time for written addendum. We may be able to verbally answer questions after that date but verbal answers can't be relied on when preparing bids.
 2. Receive Bids by 2:00 PM Tuesday, May 31, 2022.
 3. Tentative Notice to Proceed approximately June 28, 2022.
 - d) Time for Final Completion for the project is 150 calendar days from notice to proceed. Liquidated damages have been set at \$250/day.
 - e) Bidders are reminded to read the Invitation to Bid, Instructions to Bidders, Bid Form and Supplements carefully and turn in all requested information.
4. Specific Items to consider:
 - a) Work Hours – 7:00 AM to 7:00 PM.
 - b) Utility Locating - The Contractor shall contact a utility locating service (such as NC One Call Center, etc.) and all public and private utility companies with utilities in the area at least seventy-two (72) hours, but not more than seven (7) days, prior to commencing the work.

- c) Heritage Trees - Heritage Trees are located on the site. Protect Heritage Trees as shown on the Figures and in accordance with Currituck County Unified Development Ordinance (UDO), latest edition, Chapter 7 Environmental Protection Standards.
 - d) Wetlands - Wetlands have been identified west and northwest of the well location. All Work shall be performed so as not to disturb wetlands or allow sediments to be deposited into wetlands. Per the specifications and the drawings/figures, the contractor will be responsible for establishing adequate erosion control measures and protecting the wetlands.
5. Answers to Questions Asked During the Meeting (Questions are shown bold and underlined):
- a) **Can the fencing around the heritage tree be "U" shaped so that the fencing does not encroach into the right-of-way (that tree canopy reaches way out into the road)?** Yes, the tree protection fencing may be installed in a "U" shape. See revised Figure 4 in Addendum #1. The tree protection fencing shall still conform to Figure 7 Detail 7.1.
 - b) **Can we move the driveway entrance, and move the well location 25-50 feet to the south, in order to 1.) straighten out the road, while also 2.) reducing the number of large trees that will need to be removed for entrance road construction?** The driveway entrance location is moved to the south side of the Heritage Tree. See revised Figure 4 in Addendum #1. The location of the well is to remain as staked on site (i.e. don't move the well location).
 - c) **What should the contractor do with the removed site clearing debris? Store on site or have it removed?** Remove timber and cut debris from the site in accordance with Specification 31 10 00 Sections 3.3 and 3.4.
 - d) **What can be used beyond the temporary entrance? Can a "per yd³" line item be added to the bid sheet to include removal of approximately 6 inches of organic material, and replace with fill sand along the driveway to the well site to make it clean and level?** This method is acceptable and a line item will be added to the revised Bid Form in Addendum #1.
 - e) **While clearing the driveway path, can the contractor stockpile soil and leaf litter on site or must it be removed?** Cleared soil and leaf litter removed during preparation of the driveway to the well may be spread out along the edges of the work (i.e. not hauled off site). Areas disturbed by spreading removed driveway materials must be restored in accordance with the Permanent Seeding Plan found in Figure 6.
6. Contractors were invited to visit the well site after the meeting



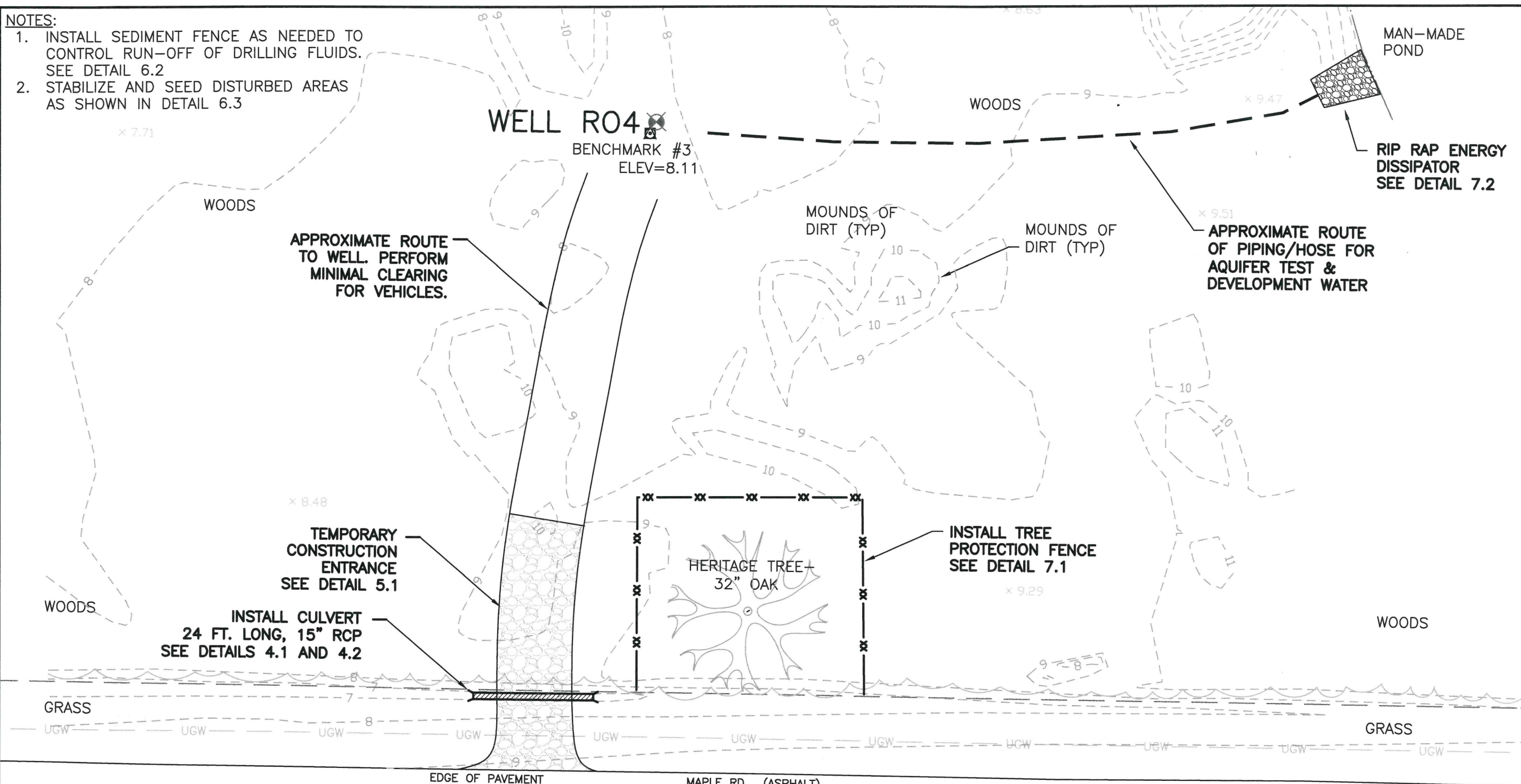
Kelley A. Smith, PG
Project Manager
Groundwater Management Associates, Inc.
4300 Sapphire Court, Suite 100
Greenville, North Carolina 27834

**Currituck County -Mainland Water Dept.
Reverse Osmosis Wellfield Expansion Pre-Bid Meeting
Construction of Yorktown Aquifer Production Well RO4**

Name	Organization	Phone and E-Mail Address
Kelley A. Smith	GMA	Kelley A. Smith 252.758.3310 kelley@gma-nc.com
Kyle Jefferys	A.C. Schultes of Carolina	910-285-7405 # Kyle @ acschultesnc.com Connie @ acschultesnc.com
Bill Masette	Masette Well Pump	252-209-4676 <i>DMasette@</i>
Chase Brinkley	County of Currituck	252-232-6060 <i>notmail@</i> Chase.Brinkley@currituckcounty.nc.gov
Anthony Casollo	COUNTY OF CURRITUCK	252-232-6061 Anthony.Casollo@currituckcounty.nc.gov
W. H. Rumsay	Currituck County	252-340-1745 w.h.rumsay@currituckcounty.nc.gov
ERIC WEATHERLY	Currituck County	252-232-6035 eric.weatherly@currituckcounty.nc.gov

NOTES:

1. INSTALL SEDIMENT FENCE AS NEEDED TO CONTROL RUN-OFF OF DRILLING FLUIDS. SEE DETAIL 6.2
2. STABILIZE AND SEED DISTURBED AREAS AS SHOWN IN DETAIL 6.3



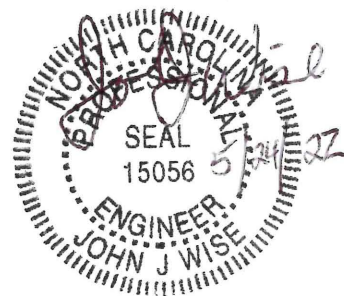
TOPOGRAPHIC SURVEY NOTES:

1. THIS TOPOGRAPHIC SURVEY IS BASED ON A SURVEY PERFORMED BY DEWBERRY ENGINEERS INC. ON MARCH 28-29, 2022.
2. HORIZONTAL CONTROL (NAD83/2011) AND VERTICAL CONTROL (NAVD88) ESTABLISHED BY GPS OBSERVATIONS AND COMPUTED USING NORTH CAROLINA GEODETIC SURVEY VIRTUAL REFERENCE STATION SERVICE (VRS).
3. NORTH ARROW IS GRID NORTH AND ALL DISTANCES ARE GROUND DISTANCES. PROJECT LOCALIZED ON GPS #2. COMBINED GRID FACTOR (GRID TO GROUND) EQUALS 0.99992269829688.
4. LOCATIONS OF UTILITIES SHOWN ON THIS SURVEY WERE DETERMINED BY OBSERVED EVIDENCE, LOCATION OF ABOVE GROUND UTILITY APPURTENANCES, AND UTILITY MARKINGS (PAINT, ETC.) PROVIDED BY NC 811 (TICKET #A220690126). THESE MARKINGS WERE OBSERVED DURING THE COURSE OF THIS SURVEY, WERE FIELD LOCATED, ARE SHOWN FOR INFORMATIONAL PURPOSES, AND SHOULD BE FIELD VERIFIED IF CRITICAL. UNDERGROUND UTILITIES NOT SHOWN, MAY EXIST.

5. NO BOUNDARY SURVEY WAS PERFORMED. PROPERTY LINES TAKEN FROM CURRITUCK COUNTY GIS AND SHOWN FOR INFORMATIONAL PURPOSES ONLY.
6. SUBJECT PROPERTY IS NOT LOCATED WITHIN A FLOOD HAZARD AREA AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY ACCORDING TO FLOOD INSURANCE RATE MAP 3720896600L, BEARING AN EFFECTIVE DATE OF 12/21/18. FLOOD HAZARD LINES SHOWN WERE TAKEN FROM NORTH CAROLINA FLOOD RISK INFORMATION SYSTEM.

- LOCATION OF WATER SUPPLY WELL R04
- SPOT ELEVATION
- SURVEY CONTROL POINT
- UNDERGROUND WATER
- TOPOGRAPHIC CONTOUR
- R/W
- TREELINE
- TREE PROTECTION FENCE

GMA SITE MAP IS BASED ON SURVEY DATA AND MAP PROVIDED BY: DEWBERRY ENGINEERS, INC. 2610 WYCLIFF ROAD, SUITE 410 RALEIGH, NC 27607



PE FIRM# C-0854



WELL SITE R04 SITE FEATURES
CURRITUCK COUNTY MAINLAND WELL R04
MAPLE, CURRITUCK COUNTY, NC

FIGURE 4
DATE 4/14/22
REVISED 5/18/22
PROJECT 165302



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