

# RISE MAINTEANCE REPAIRS

# DEEPCREEK WATERSHED, DAM NO. 19A STATE DAM ID: YADKI-019 - HIGH HAZARD DAM

## PREPARED FOR

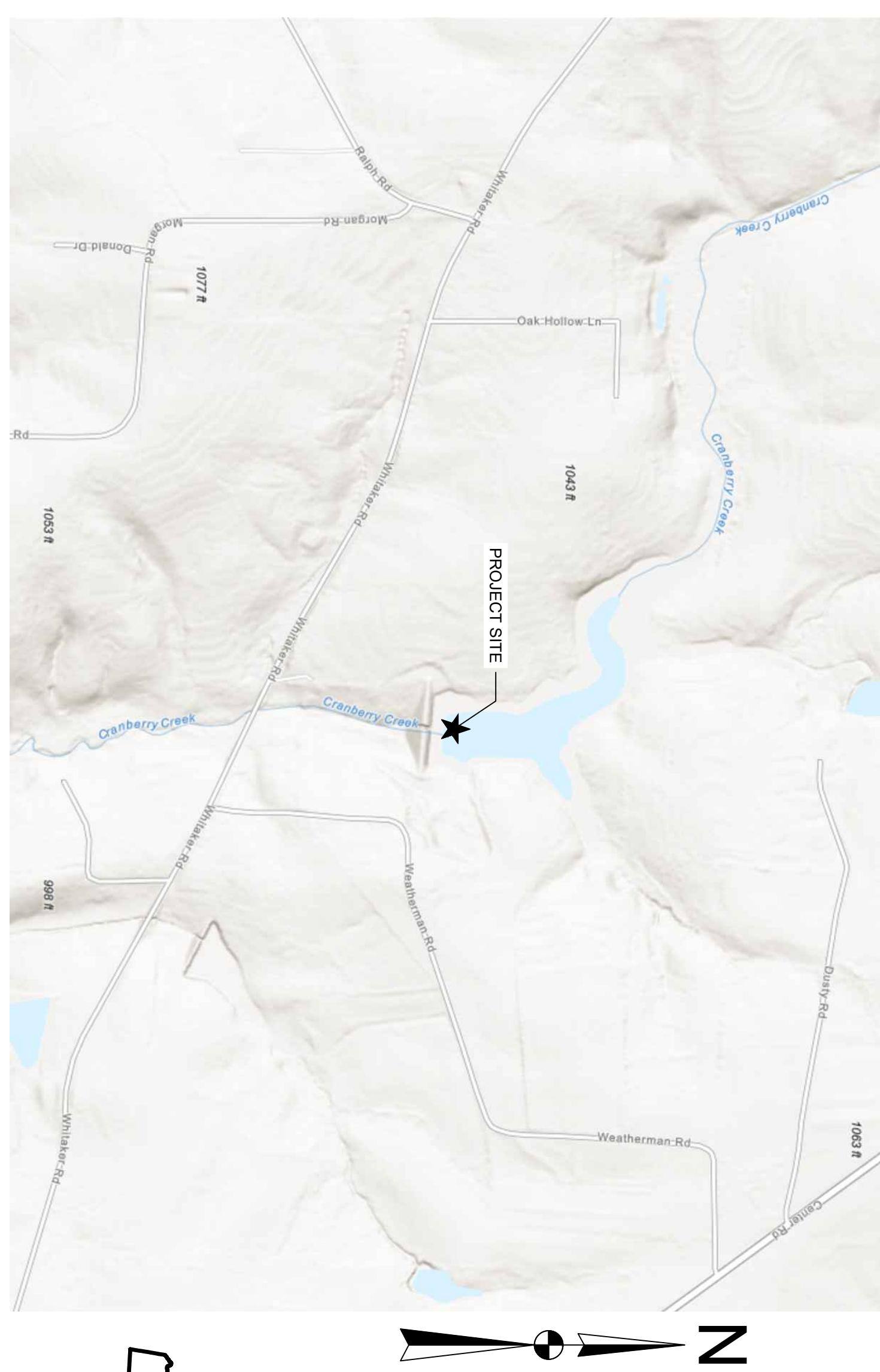
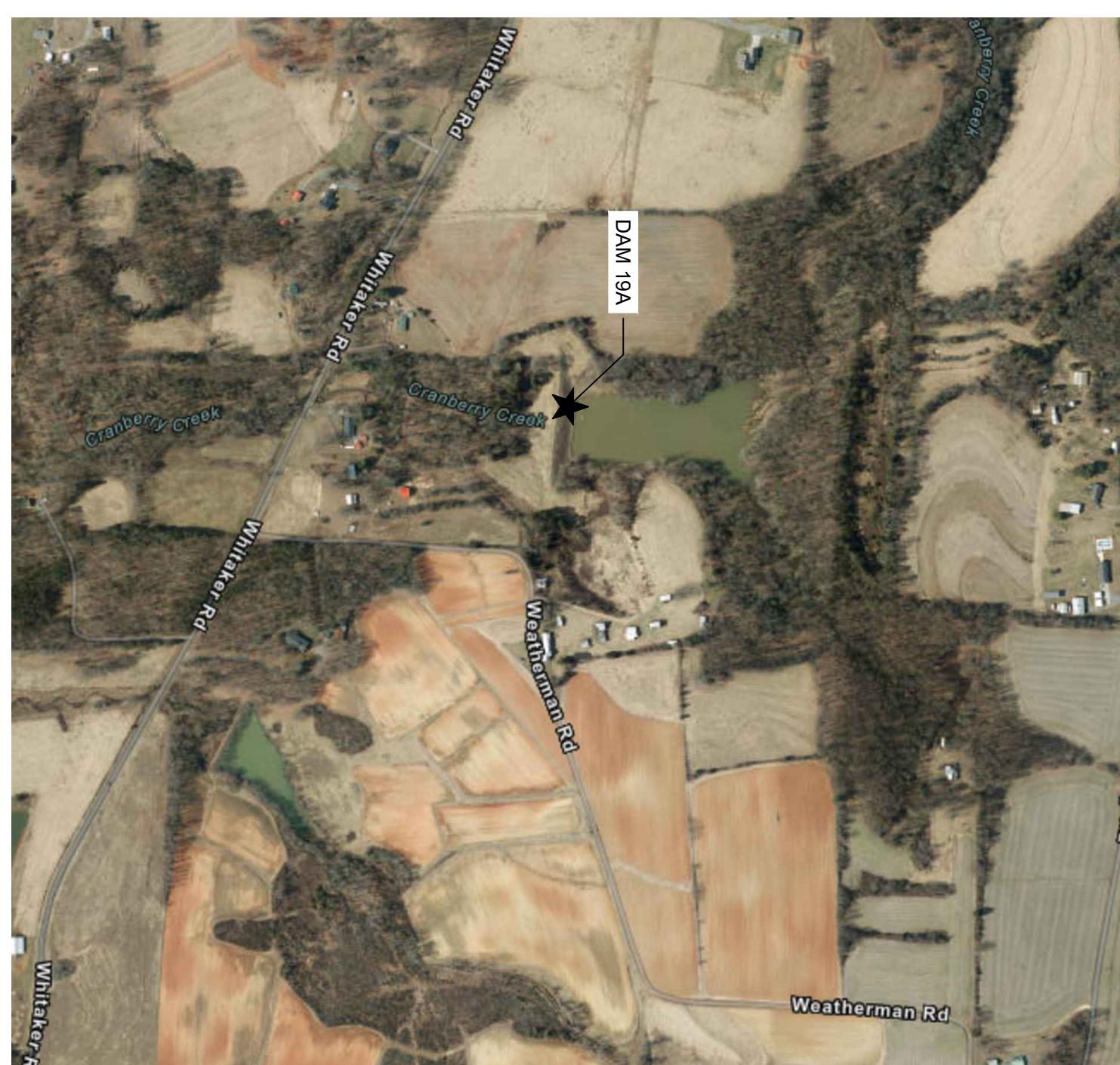
# YADKIN COUNTY SOIL AND WATER CONSERVATION DISTRICT

# YADKIN COUNTY, NC

# PROJECT DESCRIPTION

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THESE DRAWINGS, AND ITS ESTIMATES, ARE FOR THE MAINTENANCE, REPAIRS, AND  
EXISTING FLOOD CONTROL DAM IN YADKIN COUNTY. THE WORK INVOLVES REMOVAL OF  
THE EXISTING HIGH-STAGE TRASH RACK, INSTALLATION OF GALVANIZED STEEL  
HIGH-STAGE TRASH RACK, INSTALLATION OF GALVANIZED STEEL LADDER, SEDIMENT  
REMOVAL AS NEEDED FOR REMOVAL OF THE EXISTING CAST IRON SLIDE GATE, AND THE  
INSTALLATION OF A NEW 20-IN X 20-IN (NOMINAL OPENING) CAST IRON SLUICE GATE AND  
APPURTEANCES.



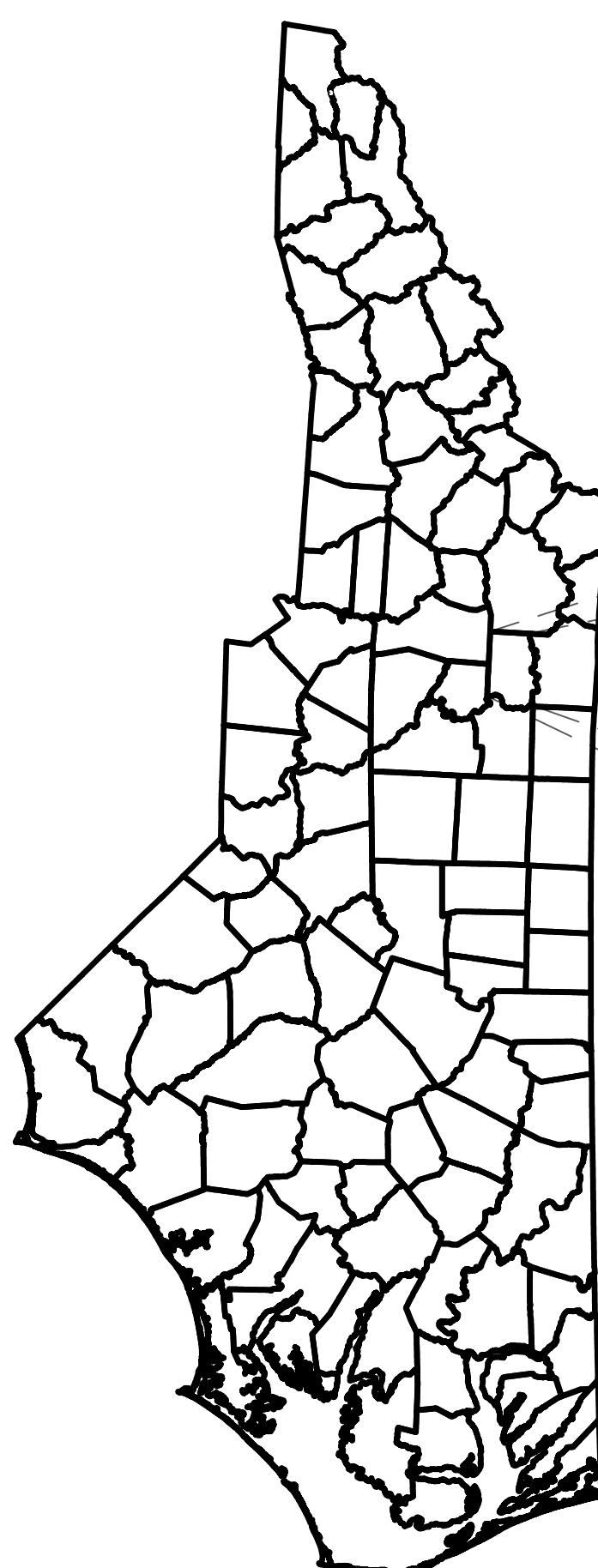
# VICINITY MAP

MAP SOURCE: ARCGIS ONLINE WORLD TOPOGRAPHIC MAP

# LOCATION MAP

MAP SOURCE: ARCGIS ONLINE WORLD TOPOGRAPHIC MAP

# KEY MAP



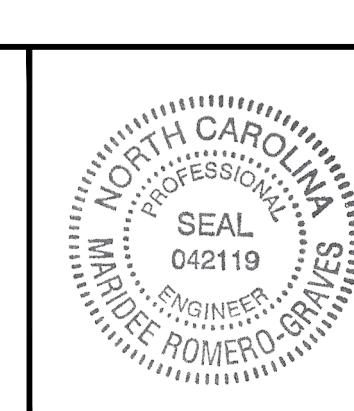
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# RISER MAINTENANCE REPAIRS

## DEEP CREEK WATERSHED, DAM NO. 19A

### YADKIN COUNTY, NORTH CAROLINA

## COVER SHEET



DESIGNED BY: MRG	DRAWN BY: WMH	CHECKED BY: RAS
MARIDEE ROMERO-GRAVES, P.E.		

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		<p>RISER MAINTENANCE REPAIRS DEEP CREEK WATERSHED, DAM NO. 19A YADKIN COUNTY, NORTH CAROLINA</p>							<p>DESIGNED BY: MRG      DRAWN BY: WMH      CHECKED BY: RAS</p>			
<p>PROJECT: 22210042000 DATE: JANUARY 2023 DRAWING NO. G-01 SHEET 01 OF 10</p>		<p>COVER SHEET</p>			<p>LICENSE NUMBER C-2599 11A Oak Branch Drive / Greensboro, NC / 27407 T/ 336-274-9456 F/ 336-274-9486 / schnabel-eng.com</p>		<p>MARIDEE ROMERO-GRAVES, P.E. DATE: _____</p>		<p>STATE PROFESSIONAL ENGINEER 042119 REV.      DESCRIPTION      DATE</p>			





## GENERAL NOTES:

**MAINTENANCE NOTES:**

1. MAINTAIN THE STONE PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE.
2. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY.
3. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.
4. PLACE ADDITIONAL COARSE AGGREGATE AS CONDITIONS DEMAND.

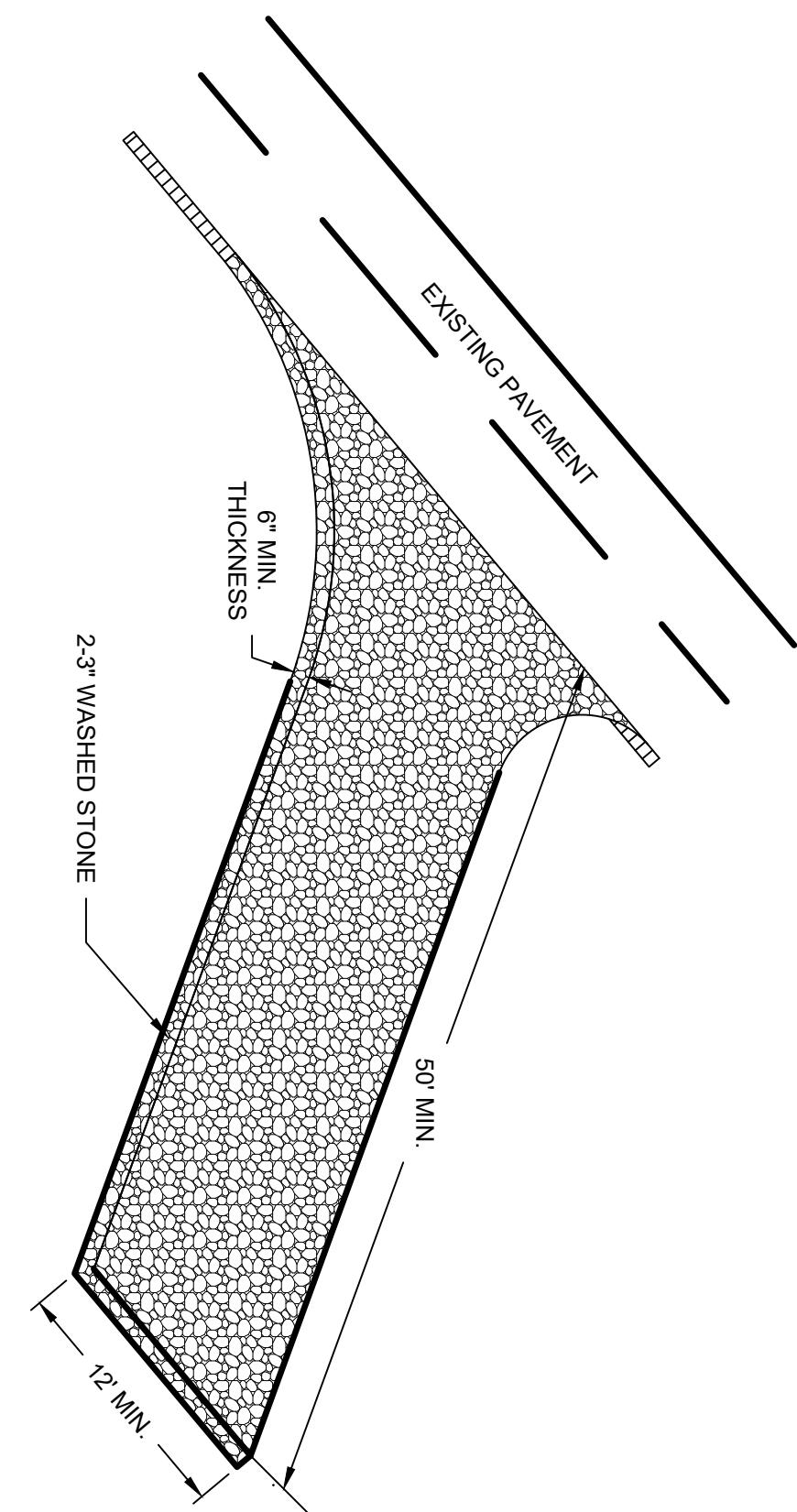
**GENERAL NOTES:**

1. AERIAL PHOTOGRAPH OBTAINED FROM NC ONE MAP 2022.
2. ACCESS ROUTE TO BE RESTORED TO PRE-CONSTRUCTION CONDITIONS FOLLOWING PROPOSED RISER REPAIRS.
3. DRAINAGE AREA AT DAM IS 3.5 SQUARE MILES (2,240 ACRES).
4. CONTACT YADKIN COUNTY TO CONFIRM ACCESS ROUTE THAT WAS AGREED UPON WITH LANDOWNERS.

## 1. CLEAR THE ENTRANCE AND EXIT

2. PLACE GEOTEXTILE OVER CLEARED AREA TO SEPARATE COARSE AGGREGATE FROM SUBGRADE.
3. PLACE WASH STONE TO THE SPECIFIC DIMENSIONS SHOWN ON THE PLANS, AND SMOOTH IT.

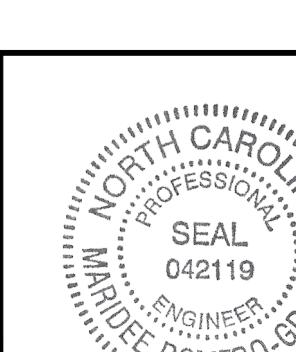
4. PROVIDE DRAINAGE TO CARRY WATER TO A SUITABLE OUTLET



## RISER MAINTENANCE REPAIRS DEEP CREEK WATERSHED, DAM NO. 19A



LICENSE NUMBER C-2599

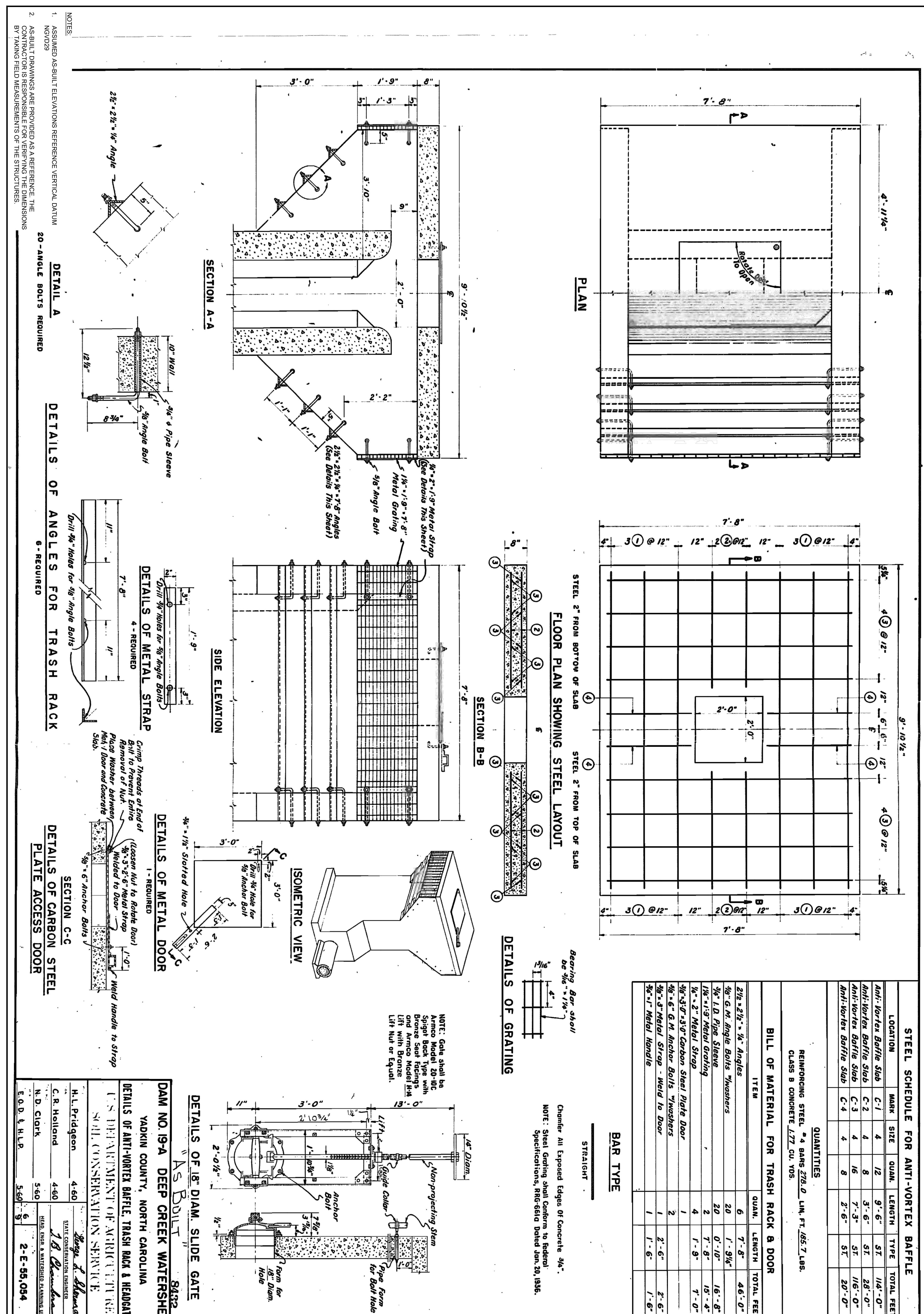


MARIDEE ROMERO-GRAVES, P

DATE: \_\_\_\_\_

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		<p>RISER MAINTENANCE REPAIRS DEEP CREEK WATERSHED, DAM NO. 19A YADKIN COUNTY, NORTH CAROLINA</p>						<p>DESIGNED BY: MRG</p> <p>DRAWN BY: WMH</p> <p>CHECKED BY: RAS</p>	
PROJECT: 22210042.000	DATE: JANUARY 2023	DRAWING NO. G-03	SHEET 03 OF 10	<p>MARIDEE ROMERO-GRAVES, P.E.</p> <p>DATE: _____</p> <p>STATE PROFESSIONAL ENGINEER 042119</p>					





RISER MAINTENANCE REPAIRS  
DEEP CREEK WATERSHED, DAM NO. 19A  
YADKIN COUNTY, NORTH CAROLINA

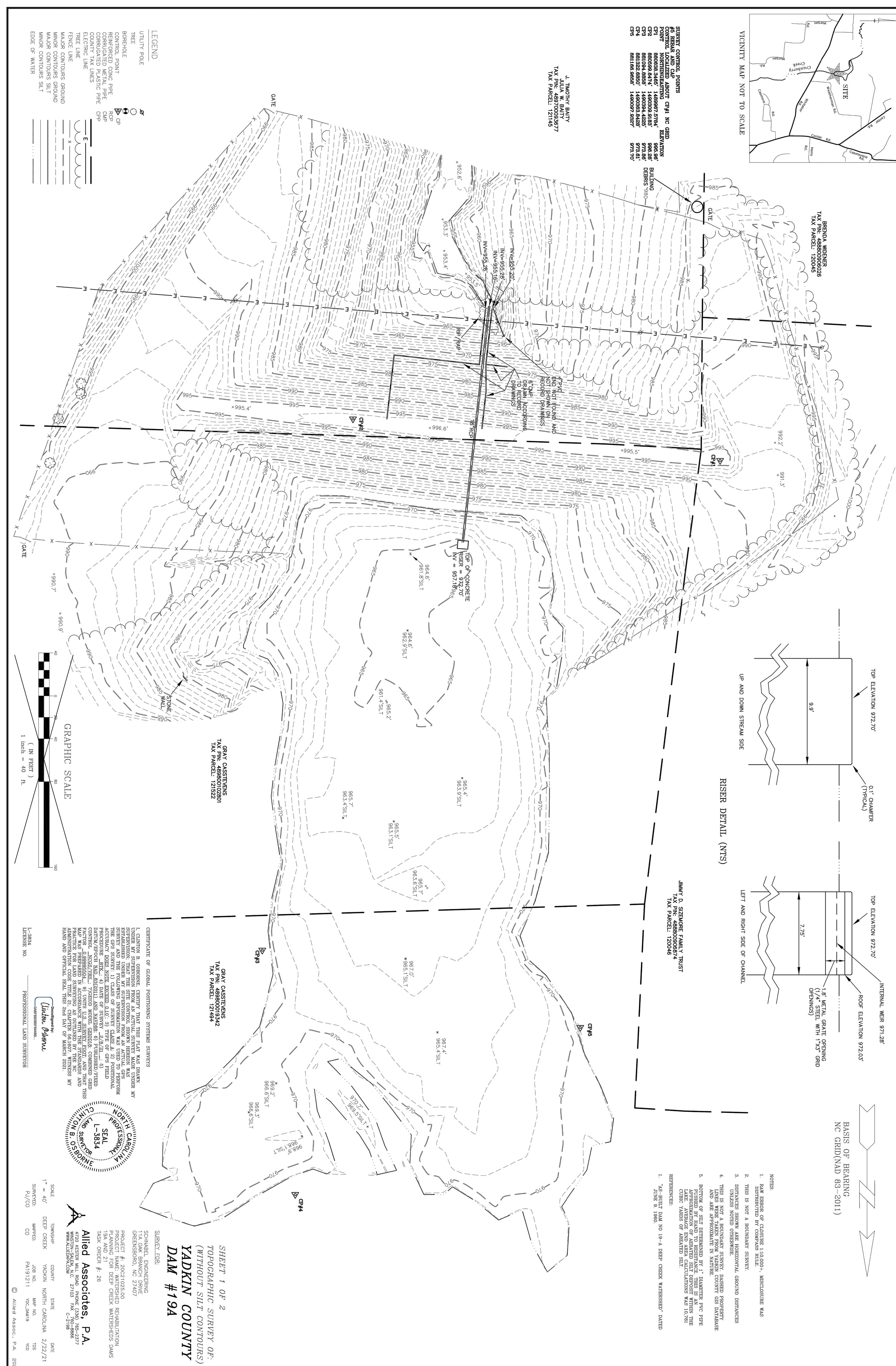
# Schnabel

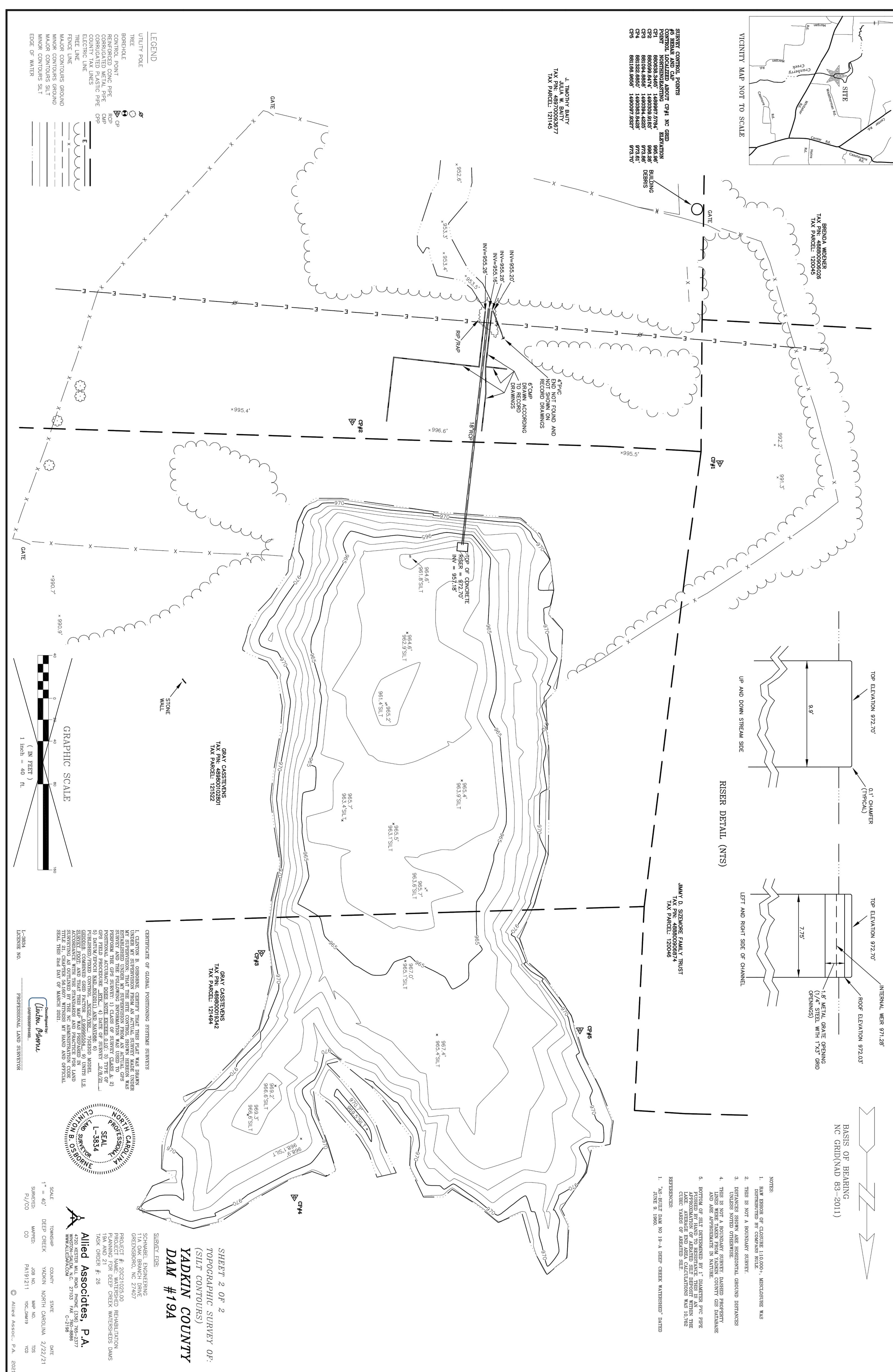
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DESIGNED BY: MRG	DRAWN BY: WMH	CHECKED BY: RAS
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DATE: \_\_\_\_\_  
STATE PROFESSIONAL ENGINEER 04211





# RISER MAINTENANCE REPAIRS DEEP CREEK WATERSHED, DAM NO. 19A

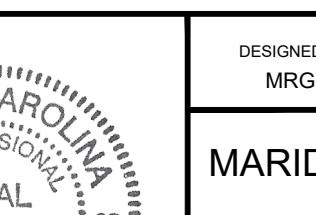


# TOPOGRAPHIC SURVEY GE DAM 16A SHEET 3 GE 3



DATE

STATE PROFESSIONAL ENGINEER 042119

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 <p>Yadkin County North Carolina Established 1850</p>		<p>RISER MAINTENANCE REPAIRS DEEP CREEK WATERSHED, DAM NO. 19A YADKIN COUNTY, NORTH CAROLINA</p>		 <p><b>Schnabel</b> ENGINEERING</p> <p>LICENSE NUMBER C-2599 11A Oak Branch Drive / Greensboro, NC / 27407 T/ 336.274.9456 F/ 336.274.9486 / schnabeleng.com</p>		 <p>NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 042119 MARIDEE ROMERO</p>		<p>DESIGNED BY: MRG</p> <p>DRAWN BY: WMH</p> <p>CHECKED BY: RAS</p> <p>MARIDEE ROMERO-GRAVES, P.E.</p> <p>DATE: _____</p> <p>STATE PROFESSIONAL ENGINEER 042119</p>	
SHEET 07 OF 10	PROJECT: 22210042.000	DATE: JANUARY 2023	DRAWING NO. C-04						

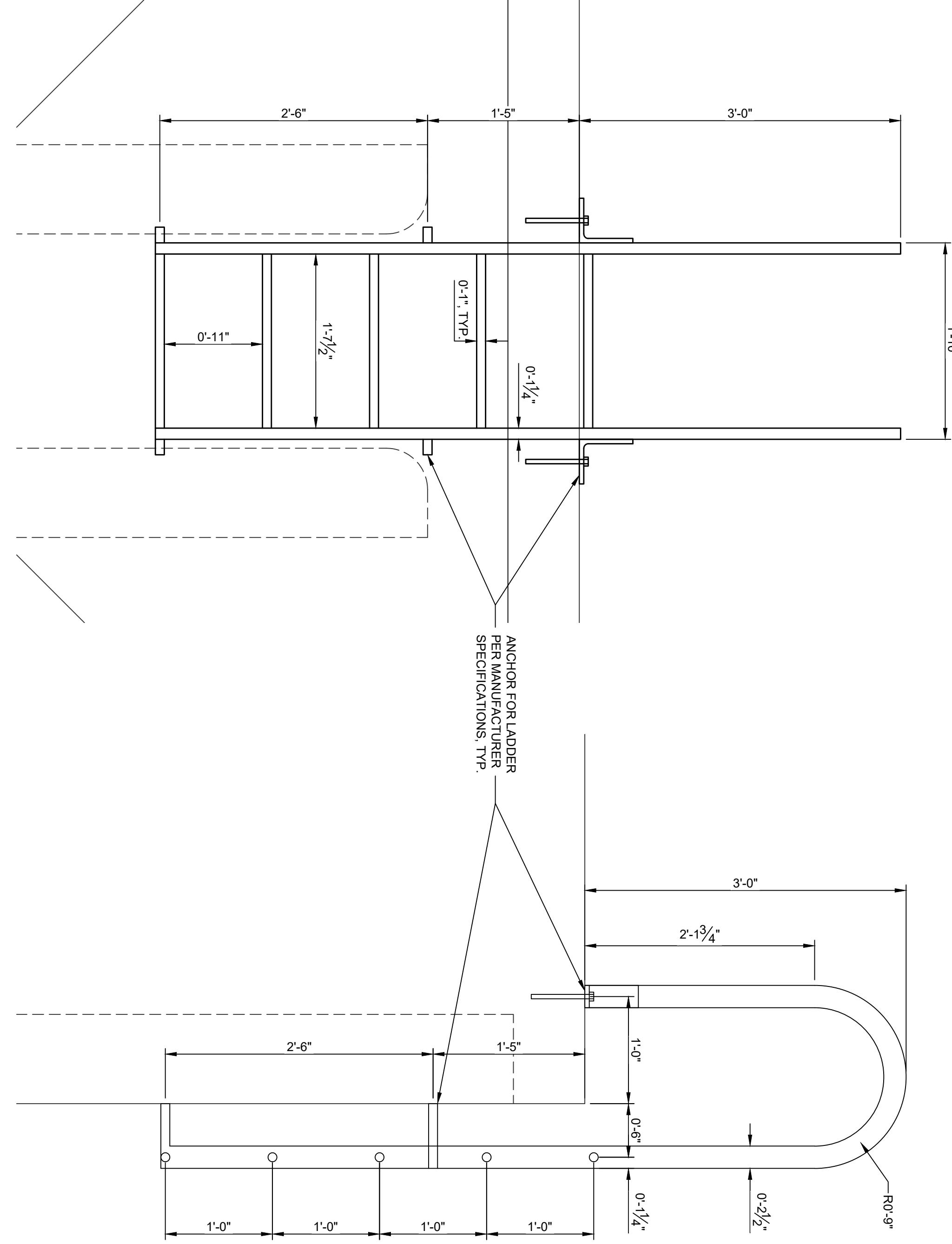


1

PROPOSED LADDER FRONT VIEW  
N.T.S.

2

PROPOSED LADDER SIDE VIEW  
N.T.S.

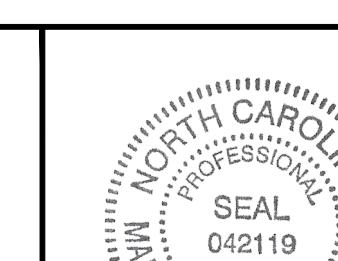


LADDER NOTES:

1. PROVIDE LADDER SHOP DRAWINGS AND INSTALLATION PLAN TO ENGINEER FOR REVIEW AND APPROVAL.
2. ALL WELDING TO BE CONDUCTED IN SHOP BEFORE LADDER IS BROUGHT OUT TO SITE.
3. WELD JOINTS ALL AROUND (UNLESS NOTED OTHERWISE) WITH 70KSI ELECTRODES.
4. ALL COMPONENTS SHALL BE ASTM A36 GALVANIZED STEEL.
5. ADHESIVE ANCHOR SYSTEM WITH  $\frac{3}{8}$ " DIAMETER STAINLESS STEEL THREADED RODS WITH  $\frac{5}{8}$ " MINIMUM EMBEDMENT MAY BE USED AS AN ALTERNATIVE TO KWIK BOLTZ ANCHORS SHOWN ON THE DRAWINGS.

CONSTRUCTION SEQUENCE

1. THE CONTRACTOR SHALL COORDINATE THEIR PLANS WITH THE ENGINEER AND OWNER AND SCHEDULE TO INSTALL THE WORK ITEMS AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS AND SHOWN ON THE CONSTRUCTION DRAWINGS. THE FOLLOWING SEQUENCE OF WORK ITEMS IS PROVIDED AS A GENERAL GUIDE AND MAY BE MODIFIED BY AGREEMENT BETWEEN ALL PARTIES.
2. CONTRACTOR SHALL INSTALL THE CONSTRUCTION ENTRANCE ALONG THE ROUTE TO THE RISER WORK AREA AND ESTABLISH STAGING AREA AND ASSOCIATED EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS AND THE TECHNICAL SPECIFICATIONS.
3. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND LOWER THE RESERVOIR TO FACILITATE THE WORK IN THE DRY. RESERVOIR SHALL BE MAINTAINED IN A DEWATERED CONDITION UNTIL THE PROPOSED REPAIRS ARE COMPLETE.
4. CONTRACTOR SHALL REMOVE SEDIMENT AND MUD BY MECHANICAL METHODS FROM AREA. SEDIMENT SHALL BE REMOVED UNTIL THE OWNER DESIGNATED DISPOSAL DRAWING C-07. WORK TO BE ACCOMPLISHED IN SAFE WORKING CONDITIONS FOR PERSONNEL. STABILIZING METHODS MAY BE APPLIED TO SLOPES OF THE REMAINING SEDIMENT AND MUD SLOPES.
5. CONTRACTOR SHALL REMOVE THE EXISTING SLIDE GATE, STEEL STEM, STEM GUIDES, AND OPERATOR. PLACE NEW STAINLESS STEEL WEDGE TYPE ANCHOR BOLTS (IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS) AND THE NEW CAST IRON SLIDE GATE, STEEL STEM AND OPERATOR. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF DIMENSIONS BEFORE PLACING ORDER AND FOR PROPER INSTALLATION OF NEW LOW-LEVEL SLIDE GATE AND APPURTENANCES.
6. CONTRACTOR SHALL INSTALL THE NEW STEM GUIDE WITH NEW BOLTS/ANCHORS LOCATED AT LEAST 6-IN FROM ANY EXISTING STEM GUIDE BOLTHOLE. THE CONTRACTOR WILL ALSO INSTALL THE NEW LADDER.
7. CONTRACTOR SHALL REMOVE THE EXISTING HIGH-STAGE GRATING AND TRASH RACK (CUTTING BY TORCH) AND CUT OLD ANCHOR BOLTS TO BE FLUSH WITH TRASH RACK CONCRETE SURFACES.
8. CONTRACTOR SHALL INSTALL NEW HIGH-STAGE GRATING AND TRASH RACK (REPLACE IN KIND) WITH NEW BOLTS/ANCHORS LOCATED AT LEAST 3-IN FROM ANY EXISTING ANCHOR.
9. MANHOLE COVER TO BE REFURBISHED. CONTRACTOR TO VERIFY REFURBISHMENT METHOD IN TECHNICAL SPECIFICATIONS.
10. CONTRACTOR SHALL REMOVE FROM THE SITE ALL ITEMS THAT WERE REMOVED FROM THE RISER, INCLUDING THE OLD STEEL LOW-STAGE TRASH RACK ANGLES, THE OLD GATE, STEM, OPERATOR, AND ANY OTHER WORK DEBRIS.
11. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES, IF ANY ARE USED, REPAIR AND APPLY SEEDING TO ALL DISTURBED AREAS IN THE WORK AREA AND ALONG THE ACCESS ROAD IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS.



STATE PROFESSIONAL ENGINEER 042119

DESIGNED BY:

MRG

DRAWN BY:

WMH

CHECKED BY:

RAS

DATE:

REV.

DESCRIPTION



RISER MAINTENANCE REPAIRS  
DEEP CREEK WATERSHED, DAM NO. 19A  
YADKIN COUNTY, NORTH CAROLINA

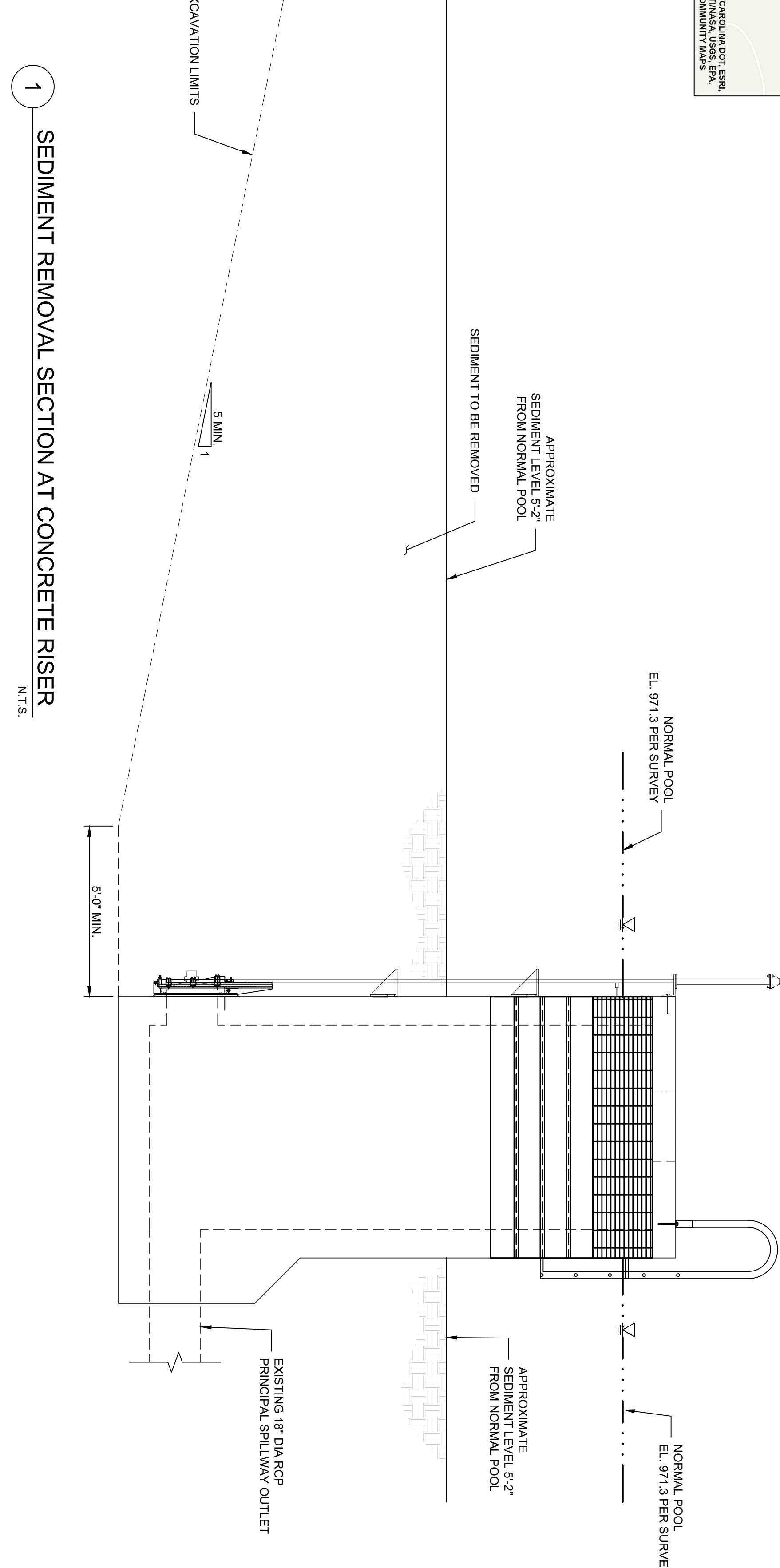
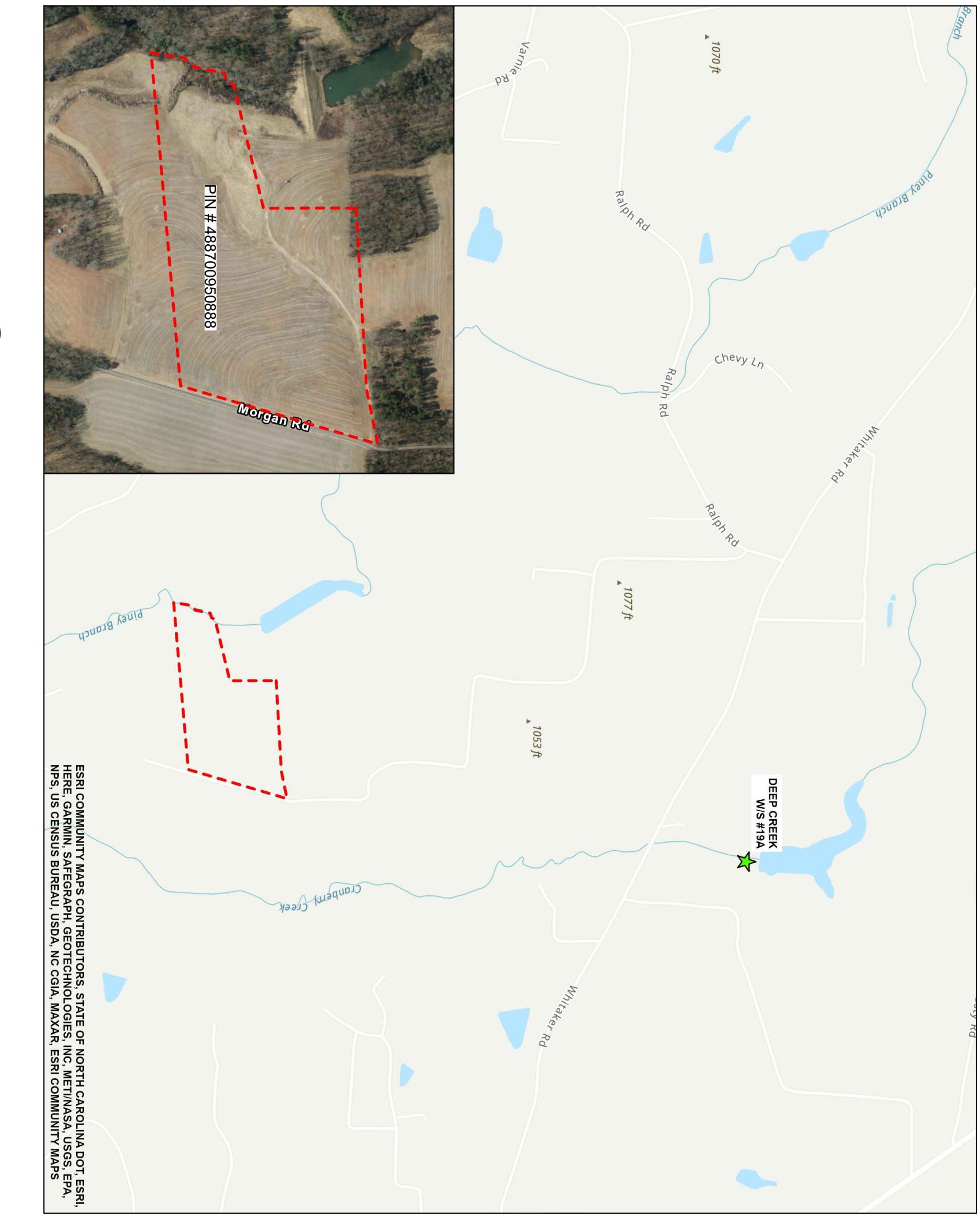


LICENSE NUMBER C-2599

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PROPOSED  
REPLACEMENT DETAILS

PROJECT: 22210042-000
DATE: JANUARY 2023
DRAWING NO. C-06
SHEET 09 OF 10

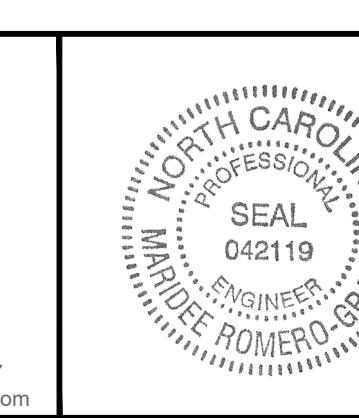


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**RISER MAINTENANCE REPAIRS  
DEEP CREEK WATERSHED, DAM NO. 19  
YADKIN COUNTY, NORTH CAROLINA**

 **Schnabel**  
ENGINEERING

LICENSE NUMBER C-2599



DESIGNED BY: MRG	DRAWN BY: WMH	CHECKED RAS
<b>MARIDEE ROMERO-GRAVES, P</b>		

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DATE: -

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PROJECT: 22210042.000	DATE: JANUARY 2023	DRAWING NO. C-07	SHEET 10 OF 10	 <p>Yadkin County North Carolina Established 1850</p>	<p>RISER MAINTENANCE REPAIRS DEEP CREEK WATERSHED, DAM NO. 19A YADKIN COUNTY, NORTH CAROLINA</p> <p>SEDIMENT REMOVAL PLAN AND SECTIONS</p>	 <p>LICENSE NUMBER C-2599 11A Oak Branch Drive / Greensboro, NC / 27407 T/ 336-274-9456 F/ 336-274-9486 / schnabel-eng.com</p>	 <p>NORTH CAROLINA PROFESSIONAL SEAL 042119 MARIDEE ROMERO-GRAVES ENGINEER</p>	DESIGNED BY: MRG	DRAWN BY: WMH	CHECKED BY: RAS	<p>MARIDEE ROMERO-GRAVES, P.E.</p> <p>DATE: _____</p> <p>STATE PROFESSIONAL ENGINEER 042119</p>