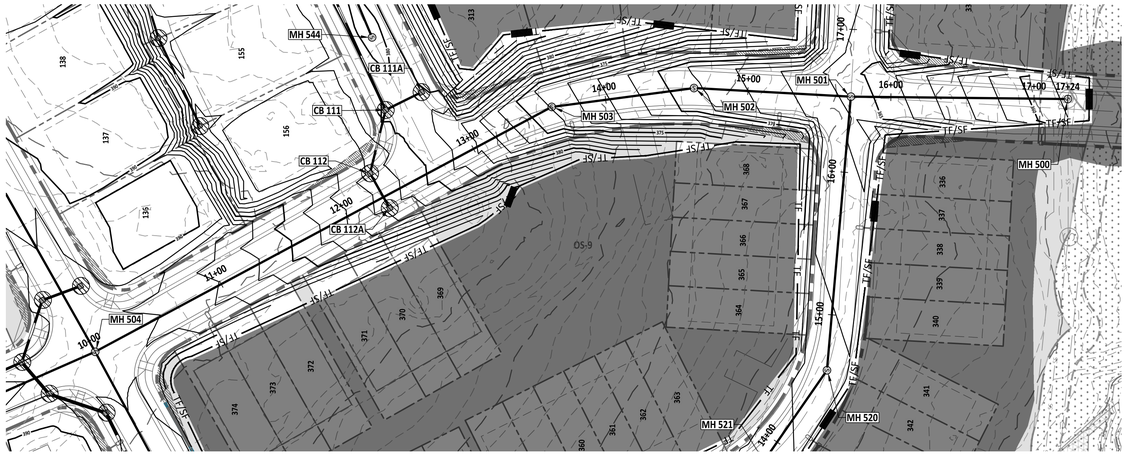
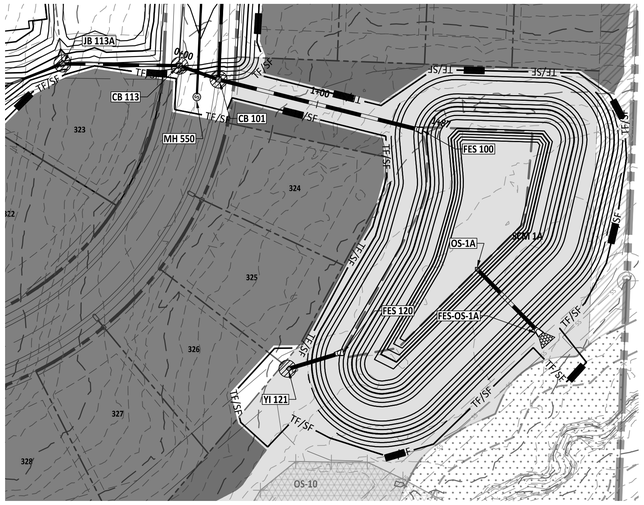


GRAPHIC SCALE

50 0 25 50 100 200

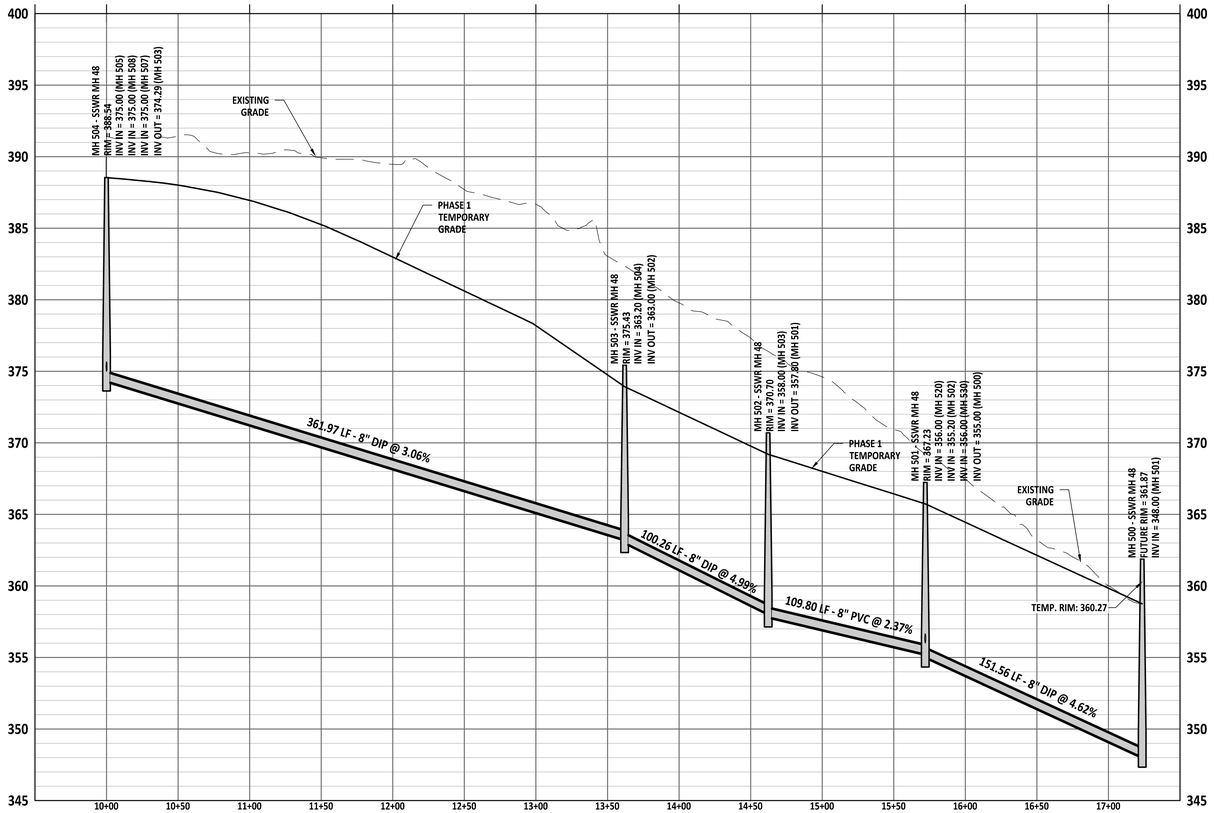
(IN FEET)
1 inch = 50 ft

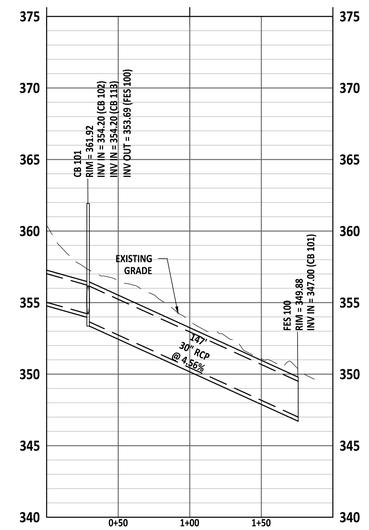


GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft





PROJECT NUMBER = PSP-24-07

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST
C-3881
CERTIFICATE OF AUTHORIZATION

PRELIMINARY
NOT FOR RECORDATION
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
16528
JAXON P. KLEIN
FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE

EROSION CONTROL PLAN & PROFILE PHASE 1

ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PLAN & PROFILE PHASE 1

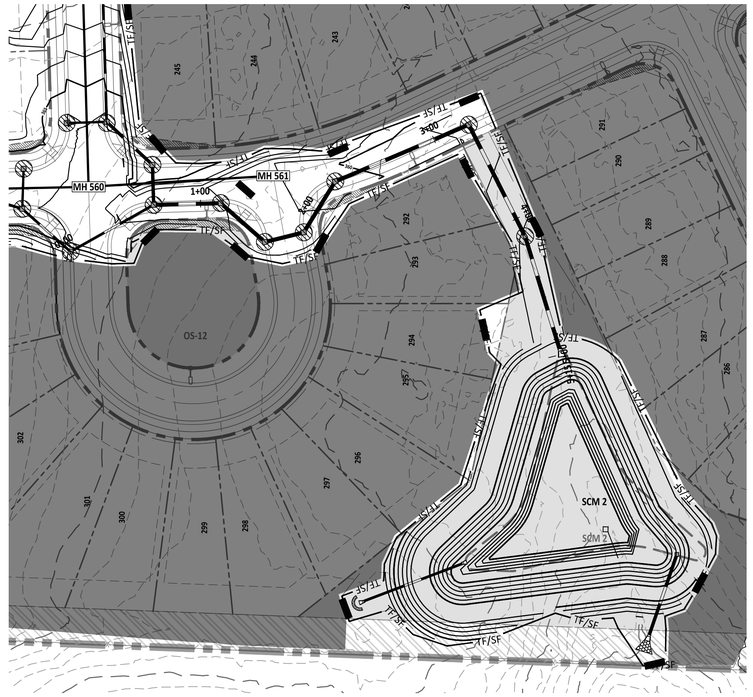
SHEET NO.:
CE-145

North Carolina 811 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merritt Property #BRD\Rpt_ Working Dwgs\Sheets\Construction Set\17- CE-144-146 PLAN & PROFILE PHASE 1.dwg

2025-05-01



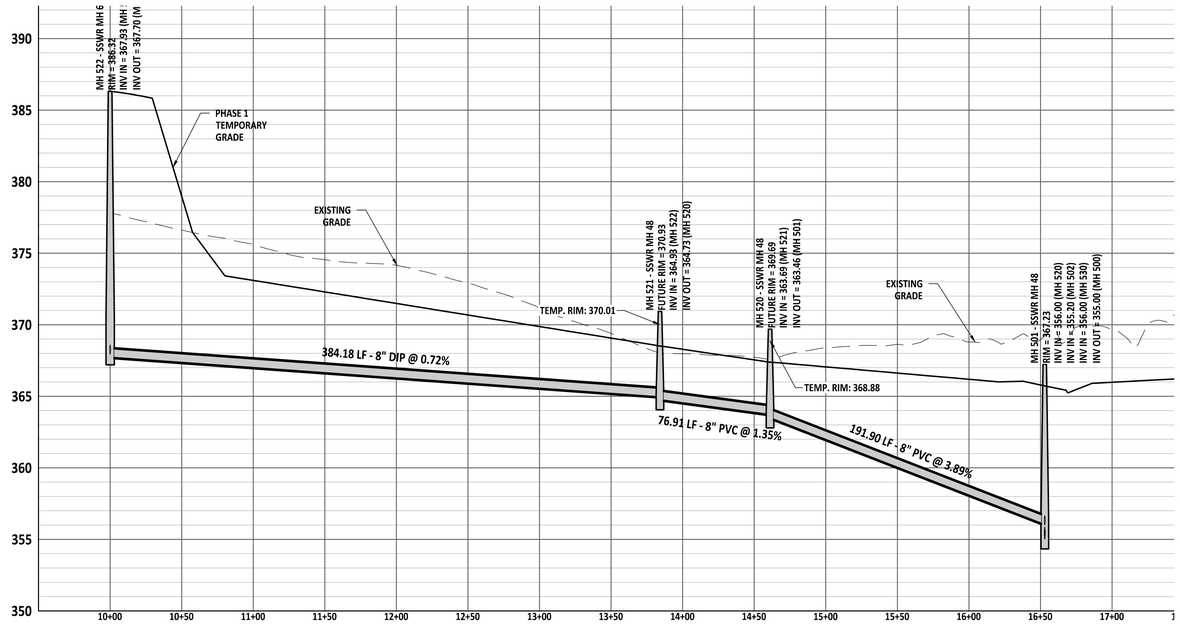


GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)

1 inch = 50 ft

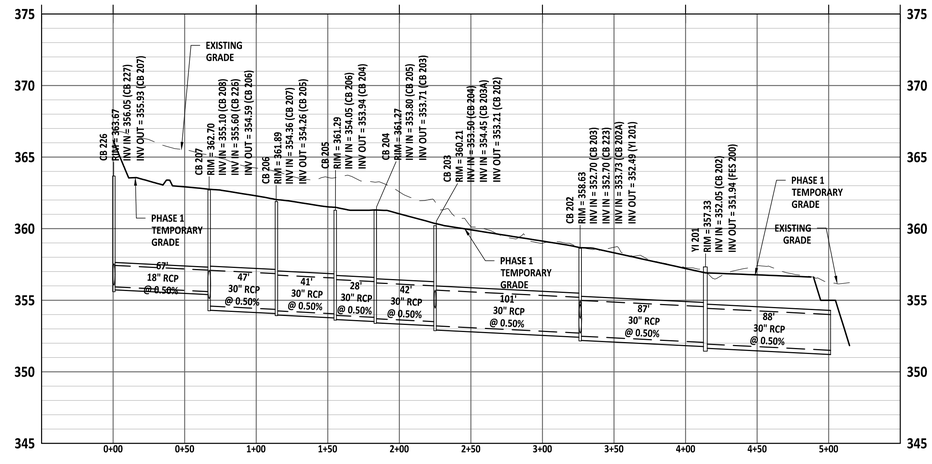


GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)

1 inch = 50 ft



PROJECT NUMBER = PSP-24-07

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERING AND SURVEYING
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST
C-3881
CERTIFICATE OF AUTHORIZATION

PRELIMINARY

PRELIMINARY
NOT FOR BIDDING
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA
36528
ENGINEER
TAYLOR P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE

PLAN & PROFILE PHASE 1

ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:

PLAN & PROFILE PHASE 1

SHEET NO.:

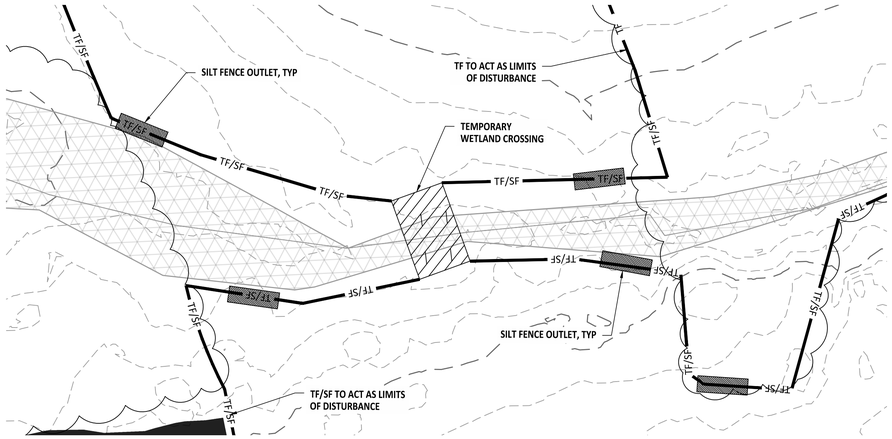
CE-146

North Carolina 811
811

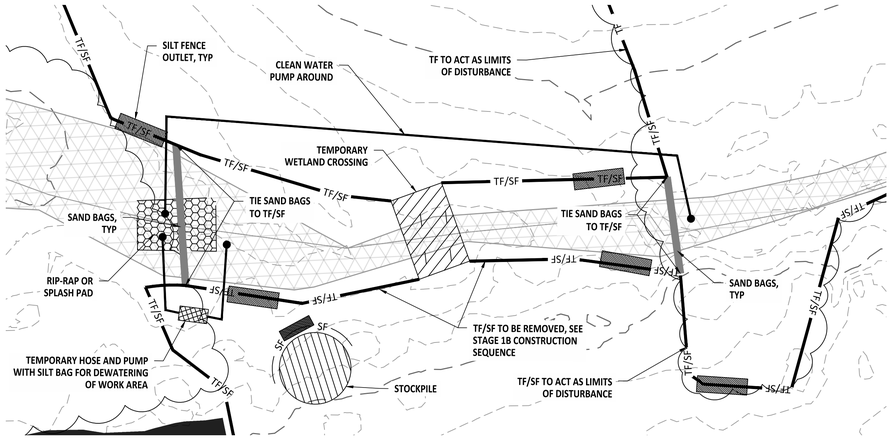
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merrit Property (RBP)\Dwg_Working Dwgs\Sheets\Construction Set\17- CE-144-146 PLAN & PROFILE PHASE 1.dwg

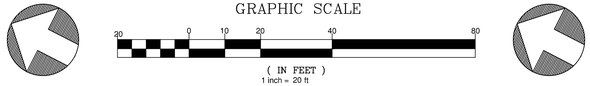
2025-05-01

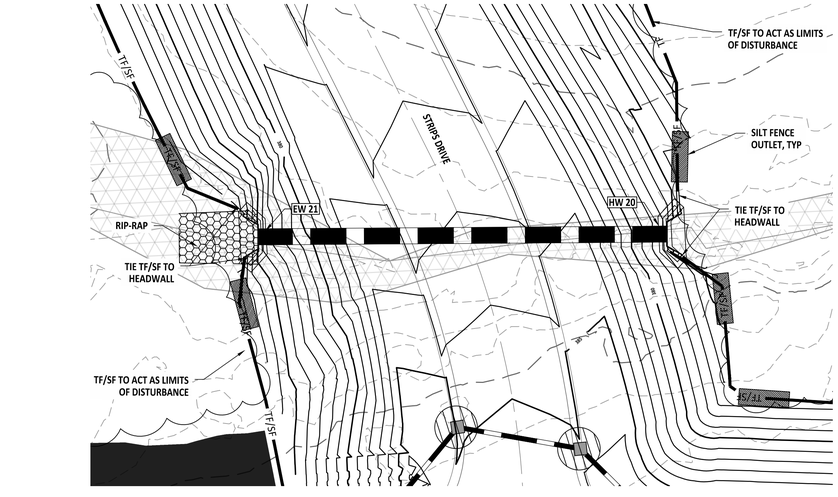


INITIAL CULVERT CROSSING FOR STRIPS DRIVE

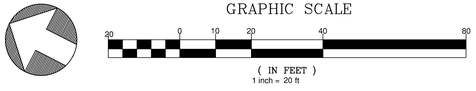


INTERMEDIATE CULVERT CROSSING FOR STRIPS DRIVE





FINAL CULVERT CROSSING FOR STRIPS DRIVE



SEQUENCE FOR CULVERT CROSSING (FOR CLEAN WATER PUMP AROUND)

STAGE 1A CREEK CROSSING INSTALLATION

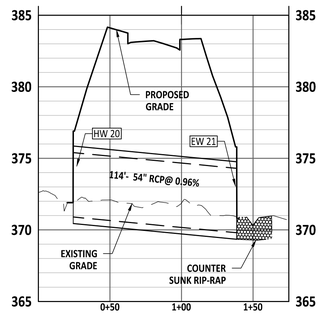
1. CONDUCT MEETING WITH WAKE COUNTY INSPECTOR PRIOR TO PROCEEDING WITH THE STREAM CROSSING CONSTRUCTION.
2. INSTALL THE BRIDGE MAT AND SILT FENCE AS SHOWN IN THE INITIAL STREAM CROSSING.
3. PLACE A TEMPORARY RIP-RAP PAD OR SPLASH PAD AT THE DOWNSTREAM END OF THE TEMPORARY HOSE TO PREVENT EROSION. CONTRACTOR IS RESPONSIBLE FOR SIZING TEMPORARY PAD.
4. DURING A PERIOD OF DRY WEATHER, ADD AN IMPERVIOUS DIKE TO THE UPSTREAM AND DOWNSTREAM ENDS OF THE STREAM CROSSING. USING A PUMP AND HOSE, PUMP THE CLEAN WATER FROM THE UPSTREAM SIDE OF THE CROSSING TO THE DOWNSTREAM SIDE OF THE CROSSING TO DIVERT FLOW AROUND THE WORK AREA.

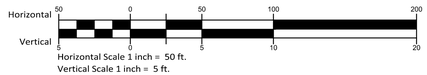
STAGE 1B CREEK CROSSING INSTALLATION

1. OBTAIN PERMISSION FROM THE WAKE COUNTY INSPECTOR TO PROCEED WITH THIS STEP.
2. INSTALL TEMPORARY HOSE AND PUMP AND A SILT BAG TO ALLOW FOR PUMP DOWN OF THE WORK AREA. PUMPS TO BE USED AS NEEDED.
3. ONCE THE STREAM HAS BEEN PUMPED DOWN AND THE SILT FENCE HAS BEEN TIED TO THE SANDBAGS, REMOVE THE SILT FENCE AS SHOWN IN THE INTERMEDIATE STAGE
4. EXCAVATE AREA AND INSTALL PIPE WITH HEADWALLS AND DOWNSTREAM RIP-RAP AS SHOWN.
5. OBTAIN WAKE COUNTY APPROVAL OF THE PIPE INSTALLATION.

STAGE 1C CREEK CROSSING INSTALLATION

1. UPON COMPLETION OF PIPE INSTALLATION, REMOVE TEMPORARY SANDBAGS ON DOWNSTREAM END.
2. REMOVE TEMPORARY SANDBAGS ON UPSTREAM END.
3. INSTALL SILT FENCE AT THE TOE OF SLOPES AND TIE TO ENDWALLS AS SHOWN ON THIS PLAN.
4. COMPLETE FILL AROUND THE PIPE TO A LEVEL AT LEAST TWO (2) FEET ABOVE THE TOP OF THE PIPE TO ALLOW CONSTRUCTION EQUIPMENT TO PASS OVER IT.
5. COMPLETE FILL BRINGING THE AREA TO FINISHED GRADE.
6. INSTALL PAVEMENT AND FOLLOW THE SEEDING SCHEDULE FOR ALL BARE AREAS.
7. REFER TO MAIN CONSTRUCTION SEQUENCE FOR OTHER DETAILS.





PROJECT NUMBER = PSP-24-07

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY

NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 36528 JAKOB P. KLEIN

DO NOT USE FOR CONSTRUCTION

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE

EROSION CONTROL CULVERT CROSSING PHASE 1

ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE: EROSION CONTROL CULVERT CROSSING PHASE 1

SHEET NO.: CE-147

North Carolina 811 811 or 1-800-632-4949
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merrit Property BRD\dwg_Working Dwgs\Sheets\Construction Set\18. CE-147 CULVERT CROSSING PHASE 1.dwg

2025-05-01

EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE504
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

SITE LEGEND	
	PROPERTY BOUNDARY
	PHASELINE
	NEUSE RIVER BUFFER ZONE 1
	NEUSE RIVER BUFFER ZONE 2
	RIGHT-OF-WAY
LOD	LIMITS OF DISTURBANCE
	WETLANDS

SCM 1A
SCM 1B
SCM 1C
SCM 2
SCM 4
SCM 5A
SCM 5B
SCM 5C
SCM 6A
SCM 6B
SCM 7
TSB 1
TSB 2
TSB 3
TSB 4
TSB 5
TSB 6

SITE KEYMAP

SHEET 202
SHEET 201
SHEET 203

GRAPHIC SCALE
150 0 75 150 300 600
(IN FEET)
1 inch = 150 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST
C-3881
CERTIFICATE OF AUTHORIZATION

PRELIMINARY
NOT FOR CONSTRUCTION
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
36528
TAYLOR D. KLEIN
FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL PHASE 2 & 3 STAGE 1 OVERALL
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE: EROSION CONTROL PHASE 2 & 3 STAGE 1 OVERALL

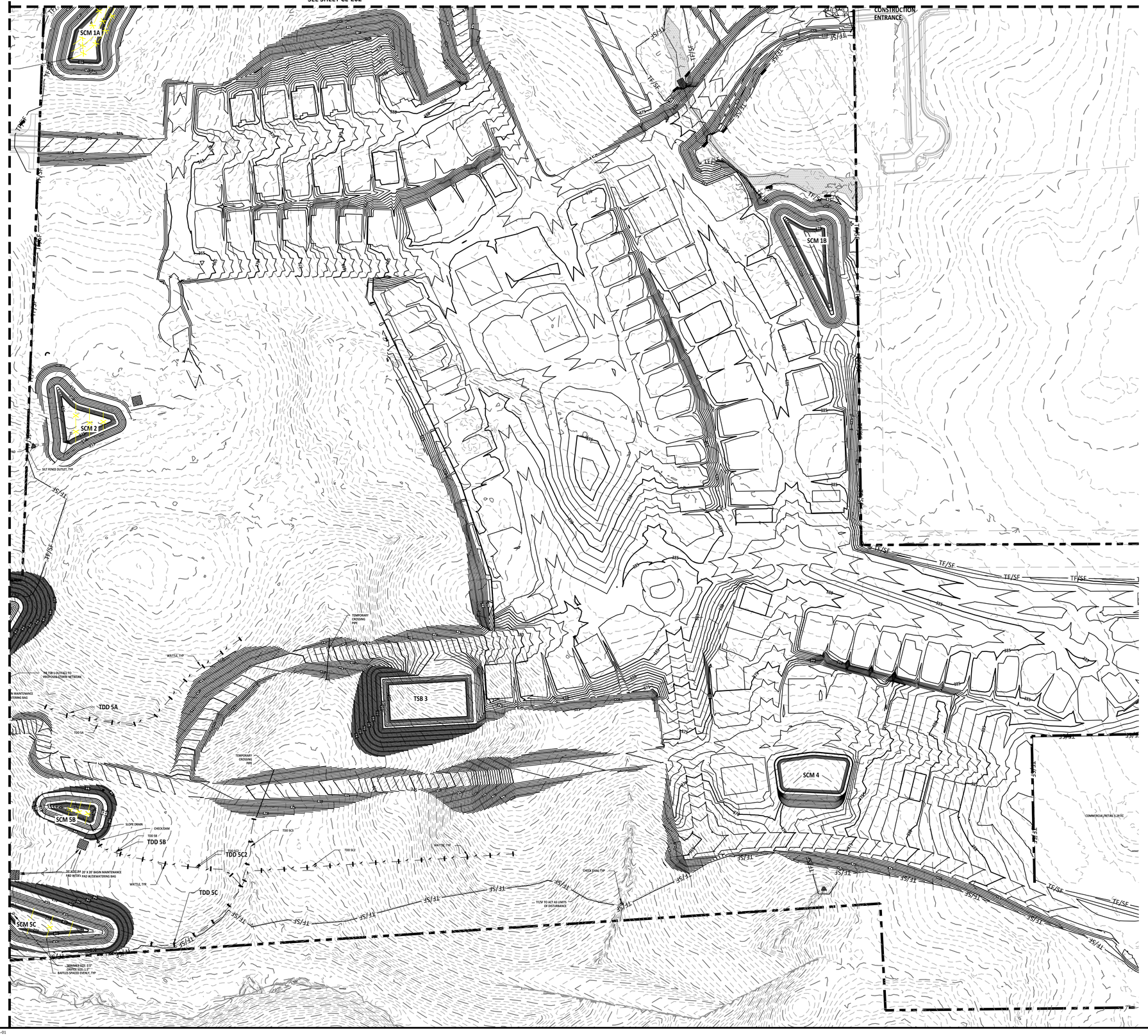
SHEET NO.: CE-200

North Carolina 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

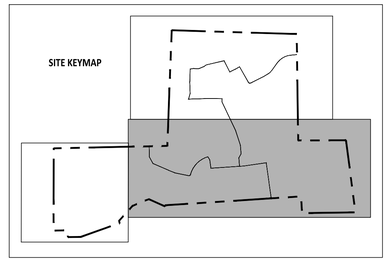
Z:\Jobs\23-0004 Merritt Property 489\Revit_Working Dwgs\Sheets\Construction Set\19_CE 200 Erosion Control Overall Plan.dwg
2025-05-01

SEE SHEET CE-202

SEE SHEET CE-203



SITE KEYMAP



EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE504
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

SITE LEGEND	
	PROPERTY BOUNDARY
	PHASELINE
	NEUSE RIVER BUFFER ZONE 1
	NEUSE RIVER BUFFER ZONE 2
	RIGHT-OF-WAY
LOD	LIMITS OF DISTURBANCE
	WETLANDS

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft

North Carolina 811
Call Before You Dig
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY
NOT FOR CONSTRUCTION
DO NOT USE FOR CONSTRUCTION

NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 36528 JAKOB P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

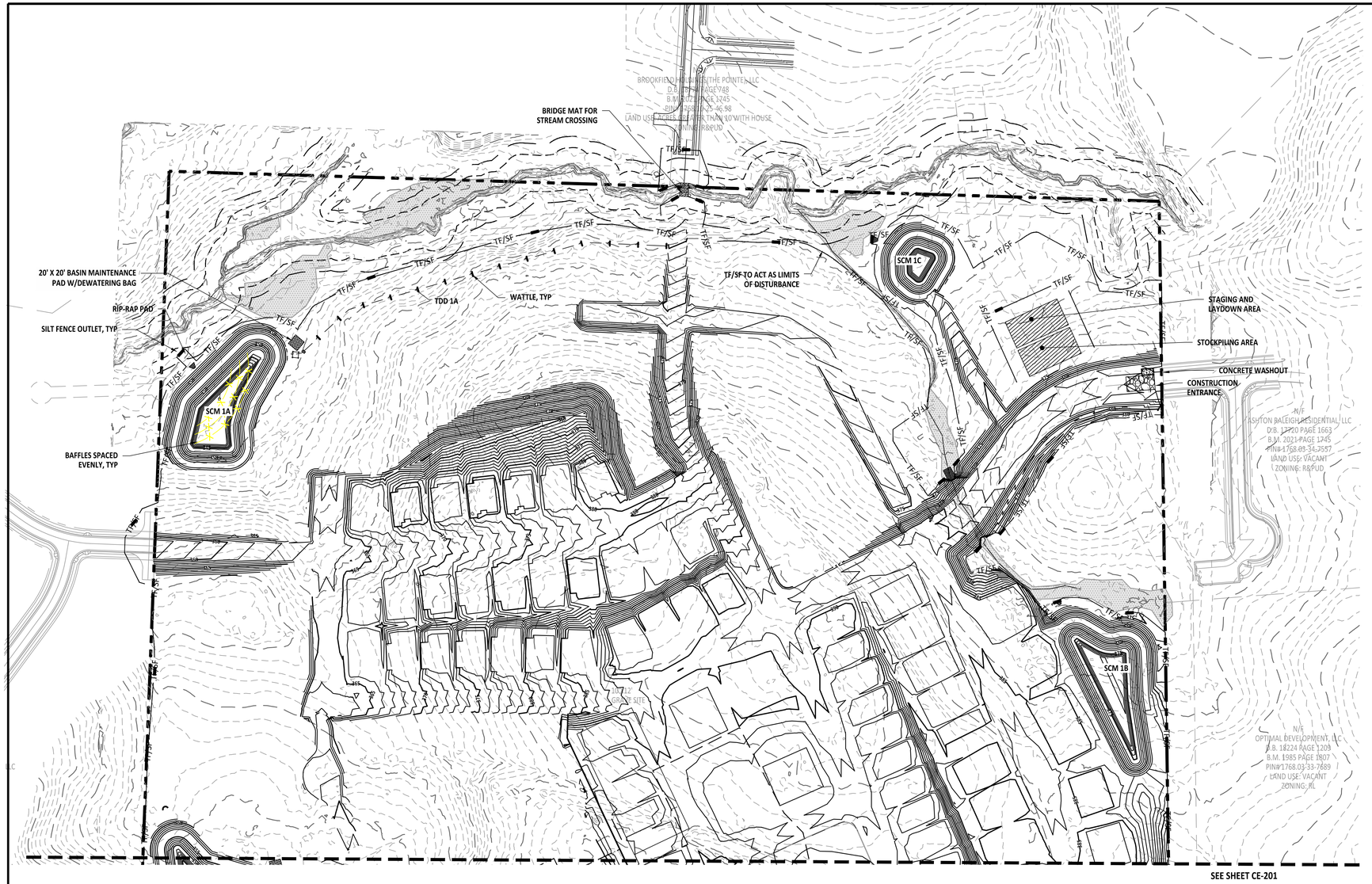
MERRITT RESERVE
EROSION CONTROL
PHASE 2 & 3
STAGE 1
ROLESVILLE RD
WAKE COUNTY NC 27312

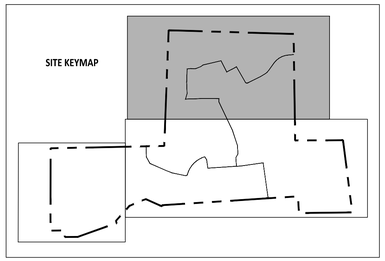
JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 1

SHEET NO.:
CE-201

Z:\Jobs\23-0004 Merritt Property (RBP)\Dwgs_Working Dwgs\Sheets\Construction Set\23-0_CE-201 Erosion Control (1)(0.5scale).dwg
2025-05-01





EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE504
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

SITE LEGEND	
	PROPERTY BOUNDARY
	PHASELINE
	NEUSE RIVER BUFFER ZONE 1
	NEUSE RIVER BUFFER ZONE 2
	RIGHT-OF-WAY
LOD	LIMITS OF DISTURBANCE
	WETLANDS

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA ENGINEERING CERTIFICATION AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY
NOT FOR CONSTRUCTION
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 36528 TAYLOR P. KLEIN
DO NOT USE FOR CONSTRUCTION
FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL
PHASE 2 & 3
STAGE 1
ROLESVILLE RD
WAKE COUNTY NC 27312

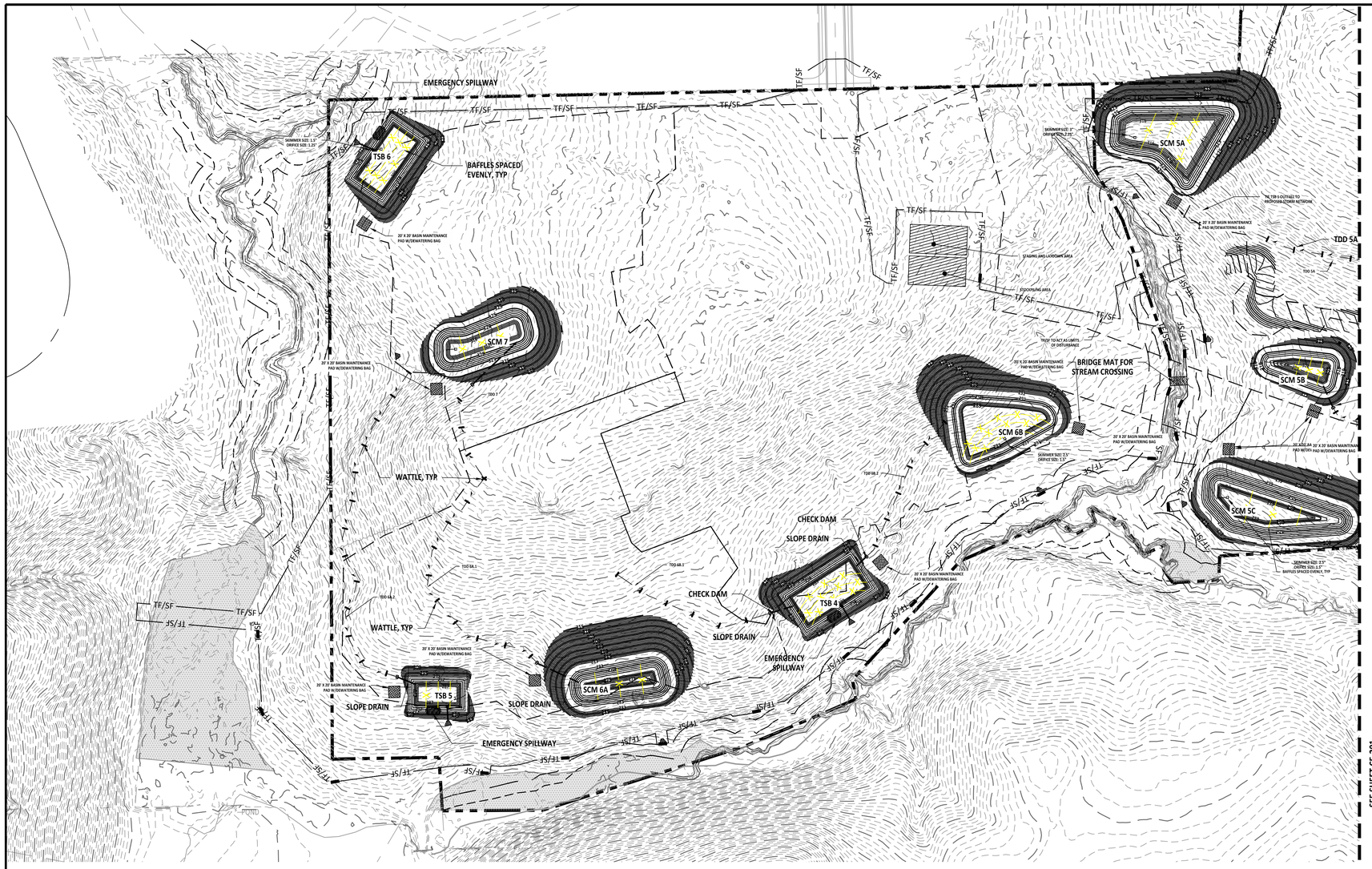
JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

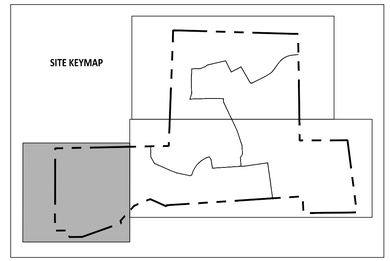
SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 1

SHEET NO.:
CE-202

North Carolina 811 811 or 1-800-MISS UTILITY
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merrit Property @RD\dwg_Working Dwgs\Sheets\Construction Set\CE_201 Erosion Control (100 Scale).dwg
2025-05-01





EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE504
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

SITE LEGEND	
	PROPERTY BOUNDARY
	PHASELINE
	NEUSE RIVER BUFFER ZONE 1
	NEUSE RIVER BUFFER ZONE 2
	RIGHT-OF-WAY
LOD	LIMITS OF DISTURBANCE
	WETLANDS

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERING AND SURVEYING
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST
C-3851
CERTIFICATE OF AUTHORIZATION

PRELIMINARY
NOT FOR BIDDING OR CONSTRUCTION
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
36528
JAXON P. KLEIN
FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL
PHASE 2 & 3
STAGE 1
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 1

SHEET NO.:
CE-203

North Carolina 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merritt Property BRD\Revit_Working Dwgs\Sheets\Construction Set\20_CE 201 Erosion Control (100 Scale).dwg
2025-05-01

EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE504
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

SITE LEGEND	
	PROPERTY BOUNDARY
	PHASELINE
	NEUSE RIVER BUFFER ZONE 1
	NEUSE RIVER BUFFER ZONE 2
	RIGHT-OF-WAY
LOD	LIMITS OF DISTURBANCE
	WETLANDS

SITE KEYMAP

SHEET 212 | SHEET 211 | SHEET 213 | SHEET 216 | SHEET 215 | SHEET 214 | SHEET 217

SCM 1A SCM 1B SCM 1C SCM 2 SCM 3 SCM 4 SCM 5A SCM 5B SCM 5C SCM 6A SCM 6B SCM 7 TSB 1 TSB 2 TSB 3 TSB 7

GRAPHIC SCALE

150 0 75 150 300 600

(IN FEET)

1 inch =150 ft

AMERICAN Engineering

American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY

PRELIMINARY
NOT FOR RECORDATION
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 36528 JAKOB P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:
1	7/25/24	MINOR SITE LAYOUT CHANGES

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE

EROSION CONTROL PHASE 2 & 3 STAGE 2 OVERALL

ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:

EROSION CONTROL PHASE 2 & 3 STAGE 2 OVERALL

SHEET NO.:

CE-210

North Carolina 811 811

*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merritt Property BRT\dwg_Working Dwgs\Sheets\Construction Set\21_CE-210 Erosion Control Overall Plan.dwg

2025-05-01

BROOKFIELD RESIDENTIAL (THE POINTE), LLC
DB 18770 PG 748
BM 2021 PG 1745
PIN# 1782.05-25-4538
LAND USE: ACRES GREATER THAN 10 WITH HOUSE
ZONING: R-8 PUD

BRIDGE MAT

TF/SF TO ACT AS LIMITS OF DISTURBANCE

SILT FENCE OUTLET, TYP

SEE SHEET CE-212

INLET PROTECTION, TYP

STAGING AND LAYDOWN AREA

STOCKPILING AREA

CONCRETE WASHOUT

CONSTRUCTION ENTRANCE

RECORD BOX

TF TO ACT AS LIMITS OF DISTURBANCE

SILT FENCE OUTLET, TYP

SITE KEYMAP

EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE504
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard. Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST
C-3881
CERTIFICATE OF AUTHORIZATION

PRELIMINARY
NOT FOR CONSTRUCTION
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA
36528
ENGINEER
JAKOB P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL PHASE 2 & 3 STAGE 2
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 2

SHEET NO.:
CE-211

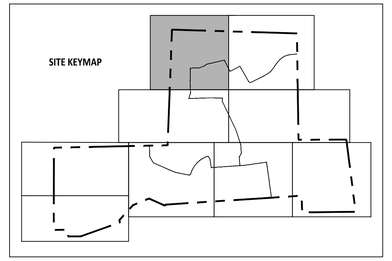
North Carolina 811 811 or 1-800-632-4949
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merritt Property #BR\Dwgs_Working Dwgs\Sheets\Construction Set\23-0_CE 211-214 Erosion Control (SS Scale).dwg

2025-05-01



SITE KEYMAP



EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE504
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST
C-3851
CERTIFICATE OF AUTHORIZATION

PRELIMINARY
PRELIMINARY
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA
36528
ENGINEER
TAYLOR P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL
PHASE 2 & 3
STAGE 2
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 2

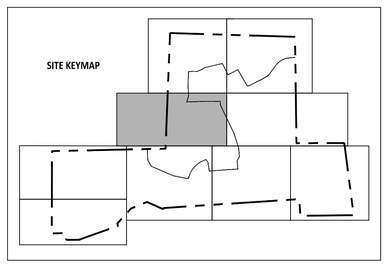
SHEET NO.:
CE-212

North Carolina 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merrit Property (BRD)\dwg_Working Dwgs\Sheets\Construction Set\12. CE 211-214 Erosion Control (50-Scale).dwg
2025-05-01



EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE50
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA ENGINEERING CERTIFICATION OF AUTHORIZATION
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST
C-3881

PRELIMINARY
NOT FOR CONSTRUCTION
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
36528
JAKOB P. KLEIN
DO NOT USE FOR CONSTRUCTION
FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL PHASE 2 & 3 STAGE 2
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 2

SHEET NO.:
CE-213

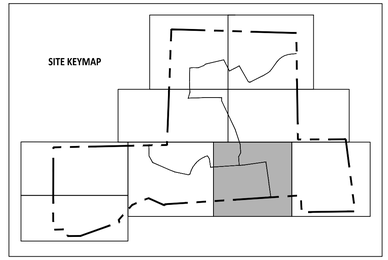
North Carolina 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merrit Property (BRP)\Dwg_Working Dwgs\Sheets\Construction Set\22. CE 211 214 Erosion Control (SS Split).dwg

2025-05-01



SITE KEYMAP



EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE504
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY
NOT FOR CONSTRUCTION
NORTH CAROLINA
36528
ENGINEER
JAKOB P. KLEIN
FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL
PHASE 2 & 3
STAGE 2
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 2

SHEET NO.:
CE-214

North Carolina 811 811.com
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

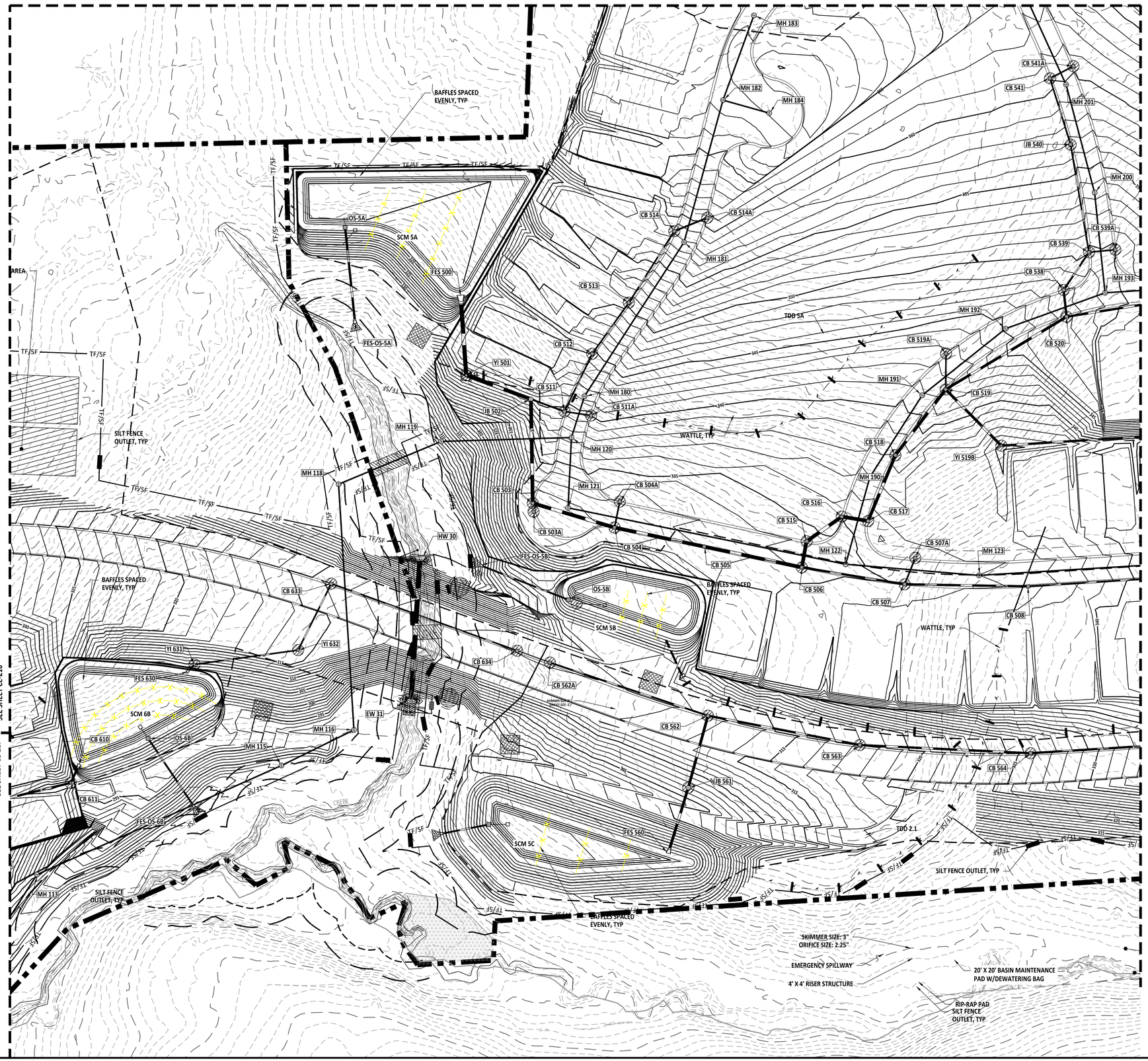
Z:\Jobs\23-0004 Merritt Property BRP\Dwgs_Working Dwgs\Sheets\Construction Set\23 -CE 211-214 Erosion Control (50-Scale).dwg
2025-05-01

SEE SHEET CE-213

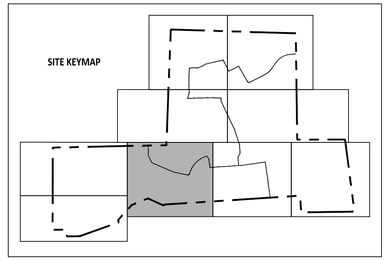
SEE SHEET CE-214

SEE SHEET CE-216

SEE SHEET CE-217



SITE KEYMAP



EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE5(
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)

1 inch = 50 ft

AMERICAN Engineering

American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY

PRELIMINARY
NOT FOR CONSTRUCTION
DO NOT USE FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL ENGINEER 36528 JAKOB P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS USTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL
PHASE 2 & 3
STAGE 2
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 2

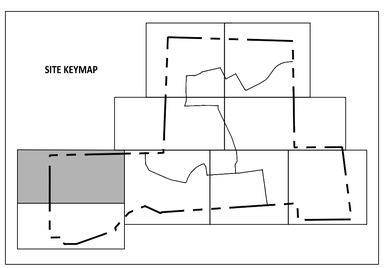
SHEET NO.:
CE-215

North Carolina 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merritt Property #8\Plans_ Working Dwgs\Sheets\Construction Set\23_CE 215-218 Erosion Control (50 Scale).dwg
2025-05-01



EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE504
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
CONCRETE WASHOUT	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA ENGINEERING CERTIFICATE OF AUTHORIZATION
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST
C-3881

PRELIMINARY
NOT FOR CONSTRUCTION
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
36528
JAKOB P. KLEIN
FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
ROLESVILLE RD
WAKE COUNTY NC 27312

EROSION CONTROL PHASE 2 & 3 STAGE 2

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 2

SHEET NO.:
CE-216

North Carolina 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

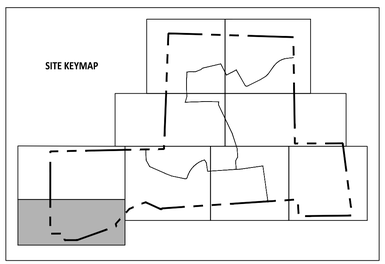
Z:\Jobs\23-0004 Merrit Property (BRT)\dwg_Working Dwgs\Sheets\Construction Set\23- CE 215-218 Erosion Control ISO Sqhd.dwg
2025-05-01

SEE SHEET CE-216

SEE SHEET CE-215



EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE5(
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY
NOT FOR CONSTRUCTION

NORTH CAROLINA 36528 ENGINEER TAYLOR P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL
PHASE 2 & 3
STAGE 2
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 2

SHEET NO.:
CE-217

North Carolina 811 Know what's below. Call before you dig.
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merrit Property (BRD.dwg)_Working Dwgs\Sheets\Construction Set\23. CE 215-218 Erosion Control (50-Scale).dwg
2025-05-01

EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE504
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

SITE LEGEND	
	PROPERTY BOUNDARY
	PHASELINE
	NEUSE RIVER BUFFER ZONE 1
	NEUSE RIVER BUFFER ZONE 2

SCM 1A
SCM 1B
SCM 1C
SCM 2
SCM 3
SCM 4
SCM 5A
SCM 5B
SCM 5C
SCM 6A
SCM 6B
SCM 7
COMMERCIAL/RETAIL 4.27 AC
COMMERCIAL/RETAIL 3.29 AC
POND

SITE KEYMAP

SHEET 222 | SHEET 221 | SHEET 223 | SHEET 226 | SHEET 227 | SHEET 225 | SHEET 224

GRAPHIC SCALE

150 0 75 150 300 600

(IN FEET)
1 inch = 150 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY
NOT FOR CONSTRUCTION
DO NOT USE FOR CONSTRUCTION

NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 36528 JAKOB D KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL PHASE 2 & 3 STAGE 3 OVERALL
ROLESVILLE RD
WAKE COUNTY NC 27312

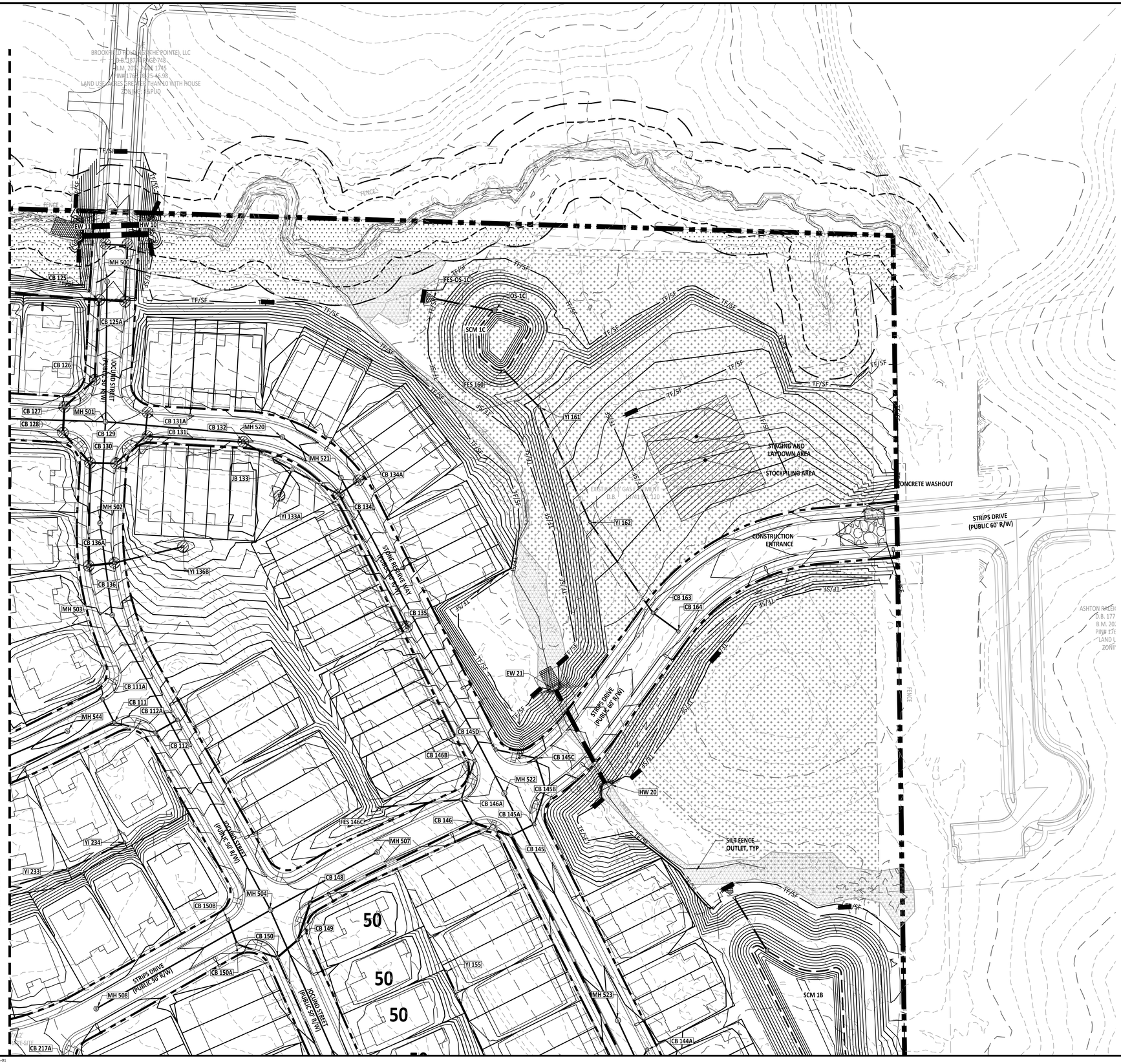
JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

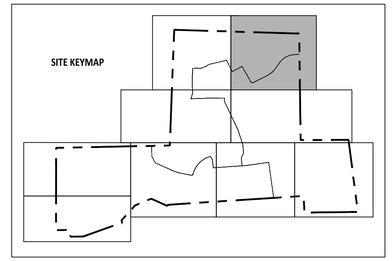
SHEET TITLE: EROSION CONTROL PHASE 2 & 3 STAGE 3 OVERALL

SHEET NO.: CE-220

North Carolina 811 Know what's below. Call before you dig.
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merritt Property BRP\Revit_Working Dwgs\Sheets\Construction Set\24_CE 220 Erosion Control (50 Scale).dwg
2025-05-01





EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE5
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

SITE LEGEND	
	PROPERTY BOUNDARY
	PHASELINE
	NEUSE RIVER BUFFER ZONE 1
	NEUSE RIVER BUFFER ZONE 2

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA ENGINEERING CERTIFICATE OF AUTHORIZATION AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881

PRELIMINARY

PRELIMINARY
NOT FOR BIDDING OR CONSTRUCTION
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 36528
JAXON P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL PHASE 2 & 3 STAGE 3
ROLESVILLE RD
WAKE COUNTY NC 27312

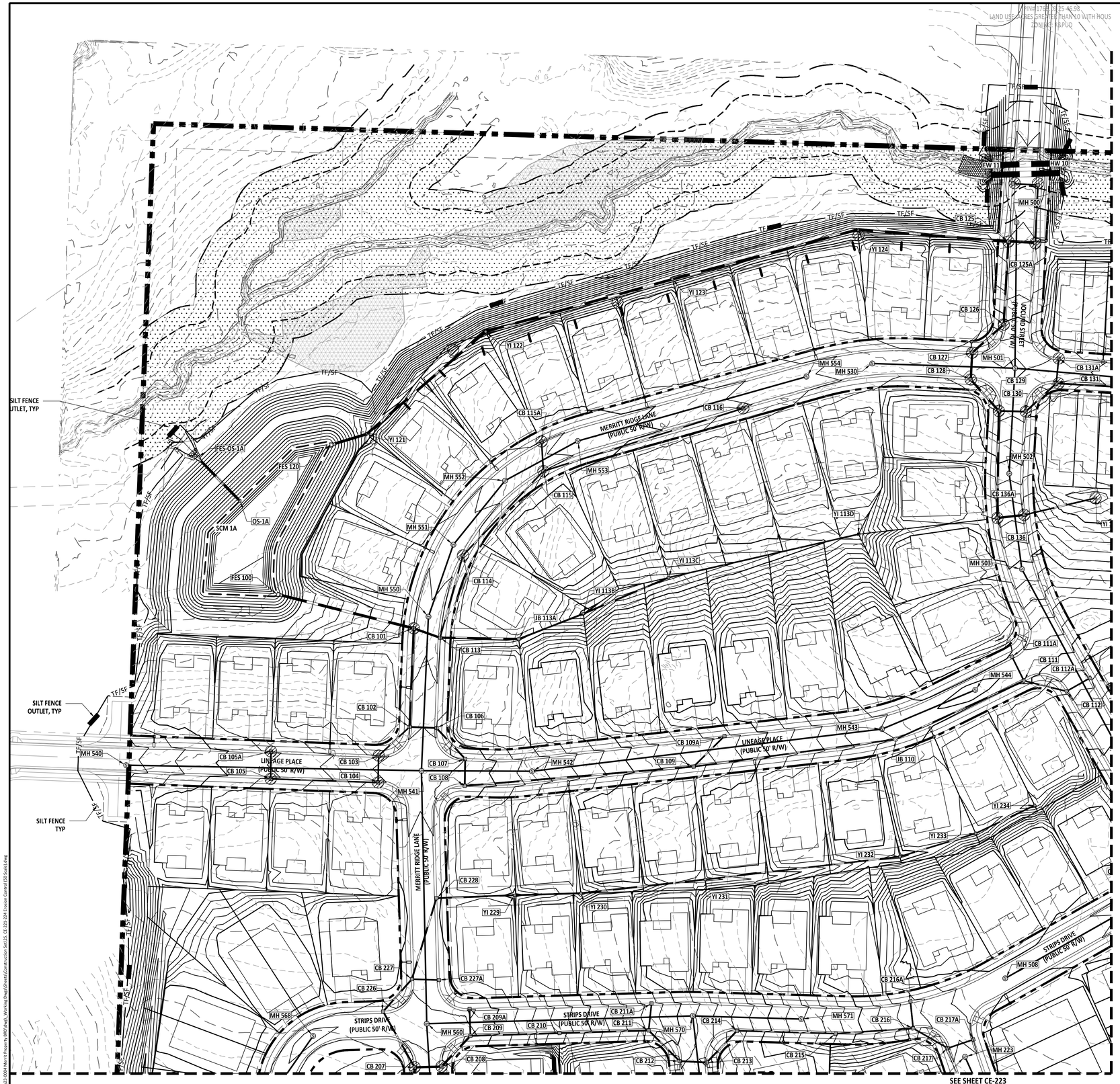
JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

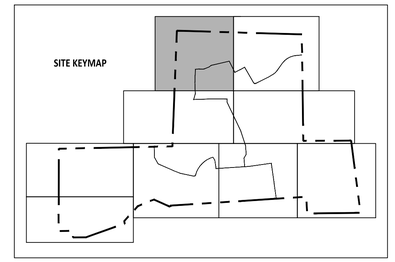
SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 3

SHEET NO.:
CE-221

North Carolina 811 Dial 3 Days Before You Dig
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merrit Property (RBD)\dwg_Working Dwgs\Sheets\Construction Set\25. 04 221-224 Erosion Control (50 Scale).dwg
2025-05-01





EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE504
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

SITE LEGEND	
	PROPERTY BOUNDARY
	PHASELINE
	NEUSE RIVER BUFFER ZONE 1
	NEUSE RIVER BUFFER ZONE 2

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA ENGINEERING CERTIFICATE OF AUTHORIZATION
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881

PRELIMINARY
NOT FOR CONSTRUCTION
DO NOT USE FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 36528 TAYLOR D. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL
PHASE2 & 3
STAGE 3
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PHASE2 & 3 STAGE 3

SHEET NO.:
CE-222

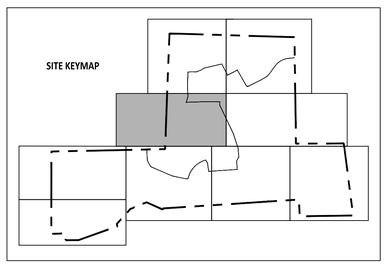
North Carolina 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merritt Property 885\Plans_Working Dwgs\Sheets\Construction Set\25_CE 221-224 Erosion Control (50 Scale).dwg
2025-05-01



EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503

SITE LEGEND	
	PROPERTY BOUNDARY
	PHASELINE
	NEUSE RIVER BUFFER ZONE 1
	NEUSE RIVER BUFFER ZONE 2
	RIGHT-OF-WAY
LOD	LIMITS OF DISTURBANCE
	WETLANDS



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST
C-3881
CERTIFICATE OF AUTHORIZATION

PRELIMINARY
NOT FOR CONSTRUCTION

NORTH CAROLINA
36528
ENGINEER
JAKOB P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL
PHASE 2 & 3
STAGE 3
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 3

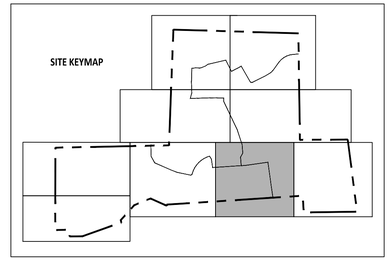
SHEET NO.:
CE-223

North Carolina 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merrit Property (BTD)\Dwg_Working Dwgs\Sheets\Construction Set\CS_CE-221-224 Erosion Control (SD Solid).dwg
2025-05-01



SITE KEYMAP



EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE504
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

SITE LEGEND	
	PROPERTY BOUNDARY
	PHASELINE
	NEUSE RIVER BUFFER ZONE 1
	NEUSE RIVER BUFFER ZONE 2
	RIGHT-OF-WAY
LOD	LIMITS OF DISTURBANCE
	WETLANDS

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA ENGINEERING CERTIFICATION
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST
C-3861
CERTIFICATE OF AUTHORIZATION

PRELIMINARY
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
36528
DAVID P. KLEIN
DO NOT USE FOR CONSTRUCTION
FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL
PHASE 2 & 3
STAGE 3
ROLESVILLE RD
WAKE COUNTY NC 27312

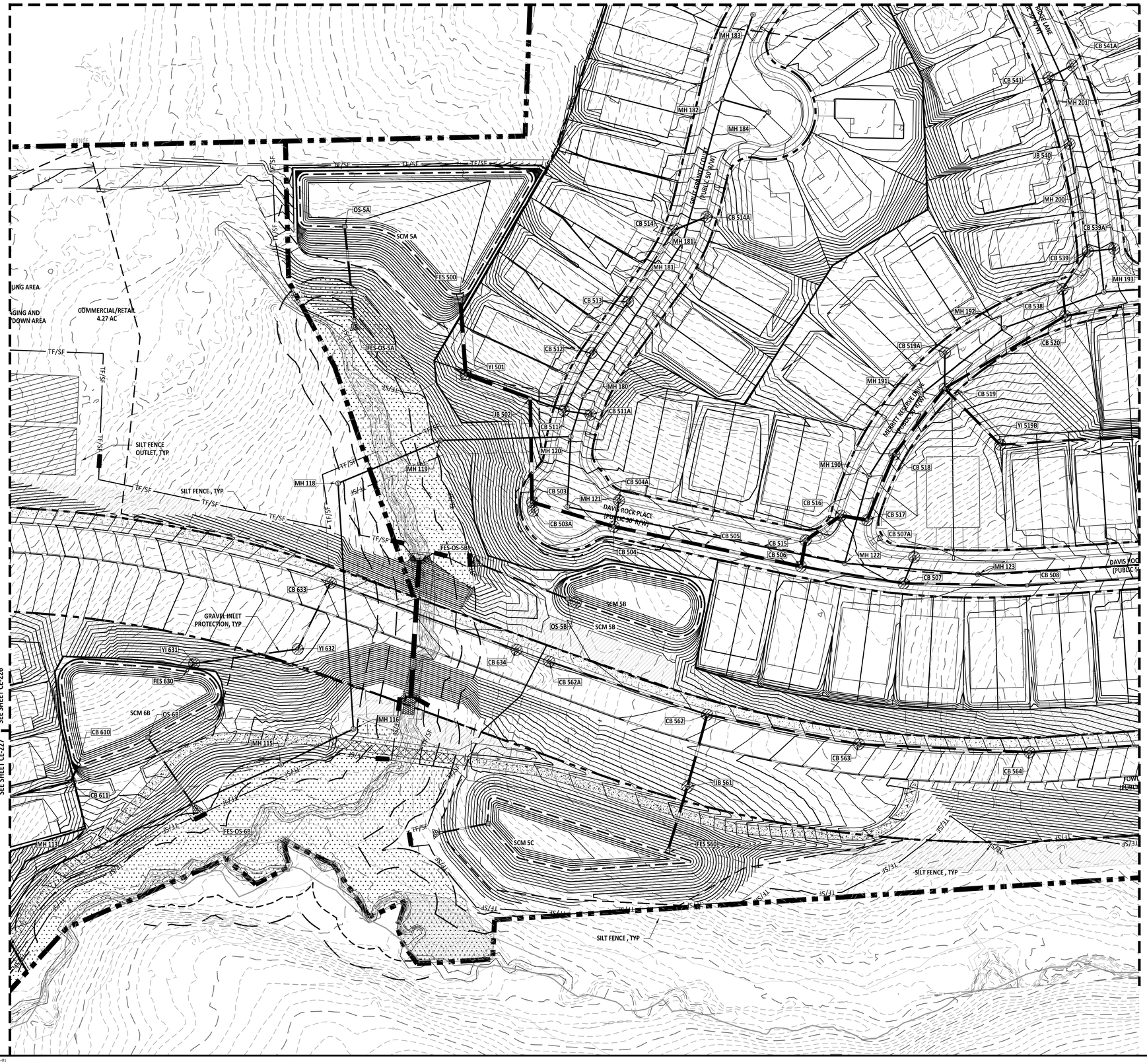
JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

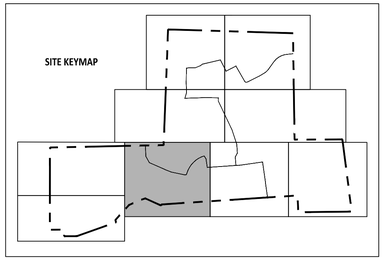
SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 3

SHEET NO.:
CE-224

North Carolina 811 Call Before You Dig
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merrit Property (BRD)\Dwg_Working Dwgs\Sheets\Construction Set\25. CE-223-224 Erosion Control (50 Scale).dwg
2025-05-01





EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	TEMPORARY DIVERSION DITCH	06 / CE500 & CE5
X	BAFFLE	05 / CE501
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE50
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	WATTLE	05 / CE500
	SKIMMER	01 / CE502
	TEMPORARY SKIMMER BASIN	05 & 06 / CE501
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503
	BRIDGE MAT	03 / CE502

SITE LEGEND	
	PROPERTY BOUNDARY
	PHASELINE
	NEUSE RIVER BUFFER ZONE 1
	NEUSE RIVER BUFFER ZONE 2

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA ENGINEERING CERTIFICATION AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY
PRELIMINARY
NOT FOR CONSTRUCTION
DO NOT USE FOR CONSTRUCTION
BRANDON H. KLEIN 36528 ENGINEER
FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL PHASE 2 & 3 STAGE 3

ROLESVILLE RD
WAKE COUNTY NC 27312

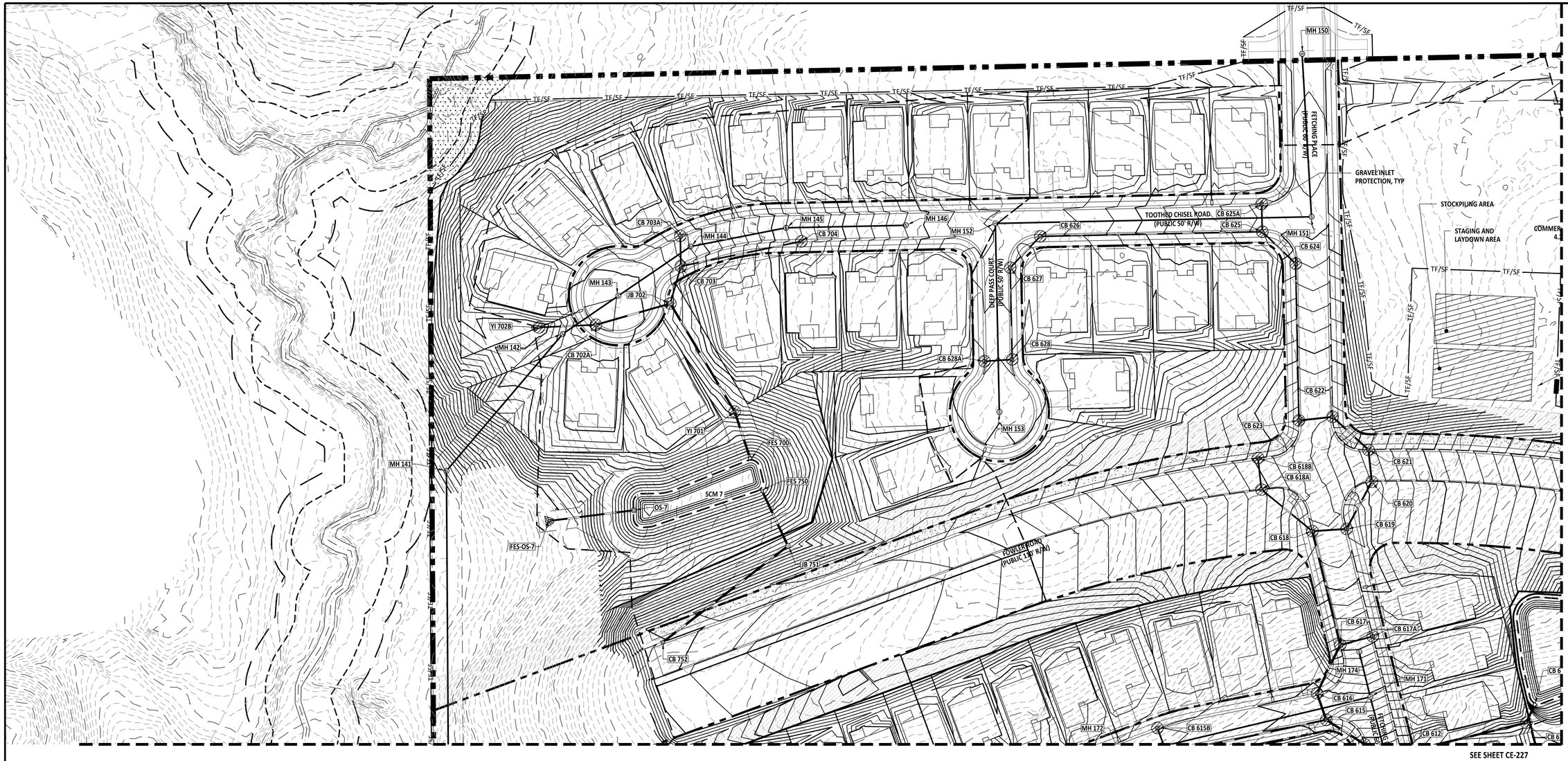
JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 3

SHEET NO.:
CE-225

North Carolina 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

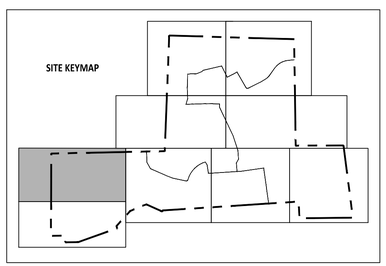
Z:\Jobs\23-0004 Mount Property (BBP)\Proj_ Working Dwgs\Sheets\Construction Set\CE-225 228 Erosion Control (SO Scale).dwg
2025-05-01



EROSION CONTROL LEGEND		REFERENCE DETAIL
TF/SF	SILT FENCE/TREE PROTECTION FENCE COMBO (LOD)	01 / CE501
LOD	LIMITS OF DISTURBANCE	SEE PLANS
TF	TREE PROTECTION FENCE (LOD)	08 / CE502
	SILT FENCE OUTLET	02 / CE501
	SEDIMENT SACK INLET PROTECTION	03 / CE501
	STANDARD PIPE INLET PROTECTION	08 / CE501
	GRAVEL INLET PROTECTION	04 / CE500
	GRAVEL CHECK DAM	03 / CE500
	MAINTENANCE PAD	06 / CE502
	RIPRAP DISSIPATOR	07 & 08 / CE500
	SLOPE DRAIN/DRAINAGE PIPE	09 / CE500
	STAGING AND LAYDOWN AREA	NCG01 / CE503
	CONSTRUCTION ENTRANCE	02 / CE500
	CONCRETE WASHOUT PIT	NCG01 / CE503

SITE LEGEND	
	PROPERTY BOUNDARY
	PHASELINE
	NEUSE RIVER BUFFER ZONE 1
	NEUSE RIVER BUFFER ZONE 2
	RIGHT-OF-WAY
LOD	LIMITS OF DISTURBANCE
	WETLANDS

SITE KEYMAP



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

North Carolina 811 811 or 1-800-632-4949
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY
PRELIMINARY
DO NOT USE FOR CONSTRUCTION

NORTH CAROLINA 36528 ENGINEER TAYLOR P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL PHASE 2 & 3 STAGE 3
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL PHASE 2 & 3 STAGE 3

SHEET NO.:
CE-226

Z:\Jobs\23-0004 Merrit Property (BRT)\dwg_Working Dwgs\Sheets\Construction Set\CE_CE-225-228 Erosion Control (SD Set)-R.dwg
2025-05-01

SEE SHEET CE-226

SEE SHEET CE-225


CB 752
MH 140
EX. MH 39
MH 100
MH 101
MH 102
MH 103
MH 104
MH 105
MH 106
MH 107
MH 160
MH 161
MH 162
MH 163
MH 164
MH 165
MH 170
MH 170A
MH 171
MH 172
MH 173
MH 174
MH 175
CB 603
CB 604
CB 604A
CB 605
CB 605A
CB 612
CB 613
CB 613A
CB 613B
CB 614
CB 615
CB 615A
CB 615B
CB 615C
CB 615D
CB 616
FES 600
SCM 6A
OS-6A
FES-OS-6A
JB 602
YI 601
DEBY CANTON COURT (PUBLIC 30' R/W)
SUTTON RIDGE COURT (PUBLIC 50' R/W)
FLOWING BAR LANE (PUBLIC 60' R/W)
GRAVEL INLET PROTECTION, TYP
SILT FENCE OUTLET, TYP
TF/SF
TF/ST
TF/SF
TF/SF
TF/SF

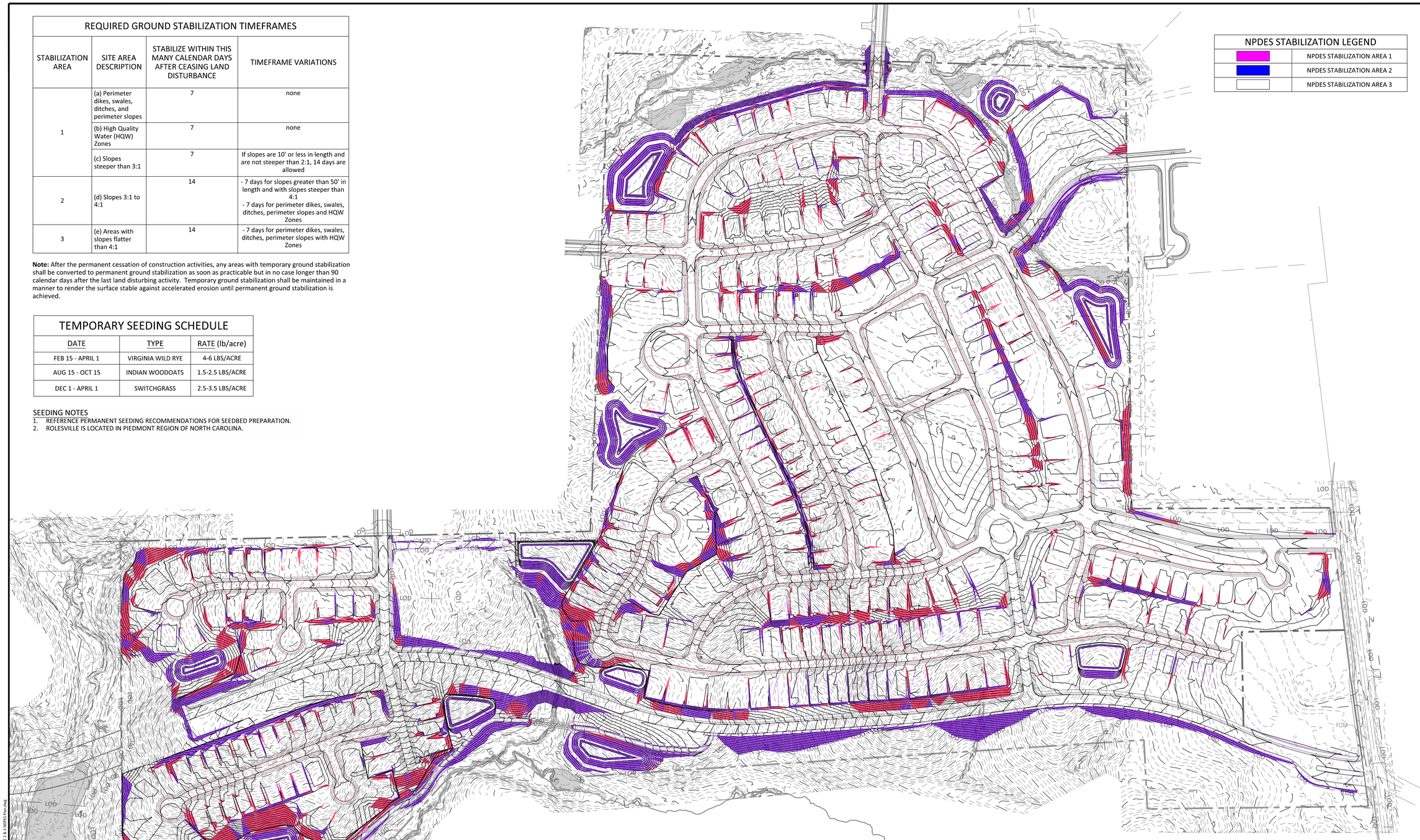
REQUIRED GROUND STABILIZATION TIMEFRAMES			
STABILIZATION AREA	SITE AREA DESCRIPTION	STABILIZE WITHIN THIS MANY CALENDAR DAYS AFTER CEASING LAND DISTURBANCE	TIMEFRAME VARIATIONS
1	(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	none
	(b) High Quality Water (HQW) Zones	7	none
	(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
2	(d) Slopes 3:1 to 4:1	14	- 7 days for slopes greater than 50' in length and with slopes steeper than 4:1 - 7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones
3	(e) Areas with slopes flatter than 4:1	14	- 7 days for perimeter dikes, swales, ditches, perimeter slopes with HQW Zones

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

TEMPORARY SEEDING SCHEDULE		
DATE	TYPE	RATE (lb/acre)
FEB 15 - APRIL 1	VIRGINIA WILD RYE	4-6 LBS/ACRE
AUG 15 - OCT 15	INDIAN WOODOATS	1.5-2.5 LBS/ACRE
DEC 1 - APRIL 1	SWITCHGRASS	2.5-3.5 LBS/ACRE

SEEDING NOTES
1. REFERENCE PERMANENT SEEDING RECOMMENDATIONS FOR SEEDBED PREPARATION.
2. ROLESVILLE IS LOCATED IN PIEDMONT REGION OF NORTH CAROLINA.

NPDES STABILIZATION LEGEND	
	NPDES STABILIZATION AREA 1
	NPDES STABILIZATION AREA 2
	NPDES STABILIZATION AREA 3



NDPES DOCUMENTATION NOTES

1. THIS PAGE IS SUBMITTED TO COMPLY WITH THE NPDES GENERAL STORMWATER PERMIT NCG010000.
2. THIS PAGE CAN BE APPROVED BY THE CITY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000 ONLY.
3. THIS PAGE OF THE APPROVED PLANS IS ENFORCEABLE EXCLUSIVELY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000.
4. THE CITY IS NOT AUTHORIZED TO ENFORCE THIS PAGE OF THE PLANS AND IT IS NOT A PART OF THE APPROVED PLANS FOR PURPOSES OF ENFORCEMENT ACTION UNDER THE CITY CODE.

GRAPHIC SCALE

150 0 75 150 300 600

(IN FEET)
1 inch = 150 ft

PROJECT NUMBER = PSP-24-07

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY
PRELIMINARY
NOT FOR RECORDATION
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 36528 JAKOB P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
PHASE 2 & 3 NDPES PLAN
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

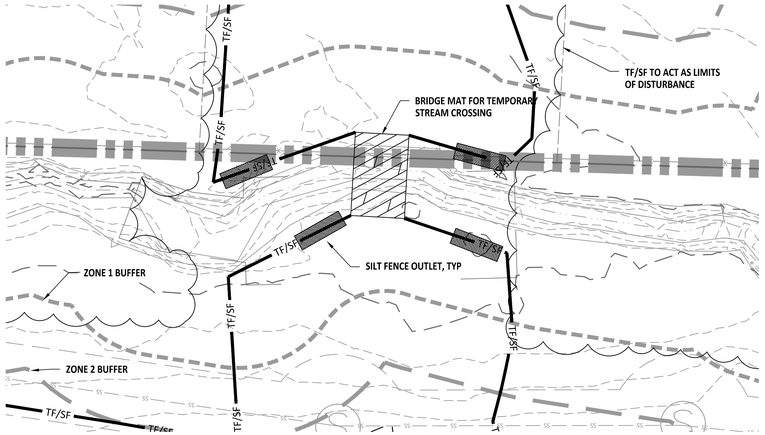
SHEET TITLE:

PHASE 2 & 3
NDPES PLAN

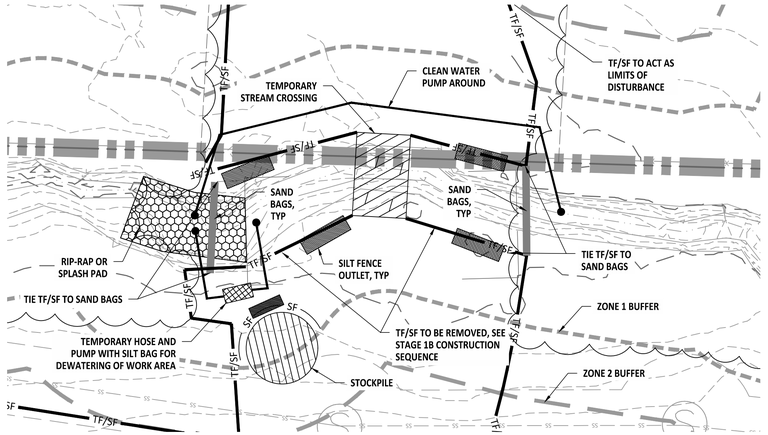
SHEET NO.:
CE-230

North Carolina 811 811 It's the Law!
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merritt Property BRP\Revit_Working Dwgs\Sheets\Construction Set\37. CE 230 PHASE 2 & 3 NDPES Plan.dwg
2025-05-01



INITIAL CULVERT CROSSING FOR JOCUND STREET

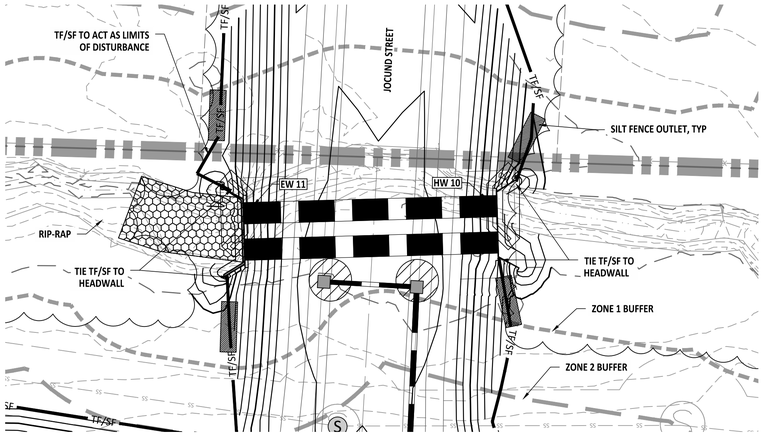


INTERMEDIATE CULVERT CROSSING FOR JOCUND STREET

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft



FINAL CULVERT CROSSING FOR JOCUND STREET

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft

SEQUENCE FOR CULVERT CROSSING (FOR CLEAN WATER PUMP AROUND)

STAGE 1A CREEK CROSSING INSTALLATION

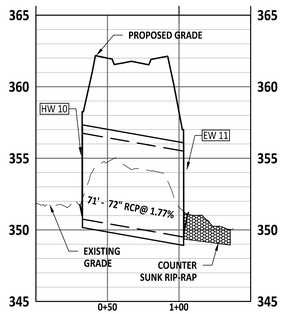
1. CONDUCT MEETING WITH WAKE COUNTY INSPECTOR PRIOR TO PROCEEDING WITH THE STREAM CROSSING CONSTRUCTION.
2. INSTALL THE BRIDGE MAT AND SILT FENCE AS SHOWN IN THE INITIAL STREAM CROSSING.
3. PLACE A TEMPORARY RIP-RAP PAD OR SPLASH PAD AT THE DOWNSTREAM END OF THE TEMPORARY HOSE TO PREVENT EROSION. CONTRACTOR IS RESPONSIBLE FOR SIZING TEMPORARY PAD.
4. DURING A PERIOD OF DRY WEATHER, ADD AN IMPERVIOUS DIKE TO THE UPSTREAM AND DOWNSTREAM ENDS OF THE STREAM CROSSING. USING A PUMP AND HOSE, PUMP THE CLEAN WATER FROM THE UPSTREAM SIDE OF THE CROSSING TO THE DOWNSTREAM SIDE OF THE CROSSING TO DIVERT FLOW AROUND THE WORK AREA.

STAGE 1B CREEK CROSSING INSTALLATION

1. OBTAIN PERMISSION FROM THE WAKE COUNTY INSPECTOR TO PROCEED WITH THIS STEP.
2. INSTALL TEMPORARY HOSE AND PUMP AND A SILT BAG TO ALLOW FOR PUMP DOWN OF THE WORK AREA. PUMPS TO BE USED AS NEEDED.
3. ONCE THE STREAM HAS BEEN PUMPED DOWN AND THE SILT FENCE HAS BEEN TIED TO THE SANDBAGS, REMOVE THE SILT FENCE AS SHOWN IN THE INTERMEDIATE STAGE
4. EXCAVATE AREA AND INSTALL PIPE WITH HEADWALLS AND DOWNSTREAM RIP-RAP AS SHOWN.
5. OBTAIN WAKE COUNTY APPROVAL OF THE PIPE INSTALLATION.

STAGE 1C CREEK CROSSING INSTALLATION

1. UPON COMPLETION OF PIPE INSTALLATION, REMOVE TEMPORARY SANDBAGS ON DOWNSTREAM END.
2. REMOVE TEMPORARY SANDBAGS ON UPSTREAM END.
3. INSTALL SILT FENCE AT THE TOE OF SLOPES AND TIE TO ENDWALLS AS SHOWN ON THIS PLAN.
4. COMPLETE FILL AROUND THE PIPE TO A LEVEL AT LEAST TWO (2) FEET ABOVE THE TOP OF THE PIPE TO ALLOW CONSTRUCTION EQUIPMENT TO PASS OVER IT.
5. COMPLETE FILL BRINGING THE AREA TO FINISHED GRADE.
6. INSTALL PAVEMENT AND FOLLOW THE SEEDING SCHEDULE FOR ALL BARE AREAS.
7. REFER TO MAIN CONSTRUCTION SEQUENCE FOR OTHER DETAILS.



Horizontal 50 0 50 100 200

Vertical 5 0 5 10 20

Horizontal Scale 1 inch = 50 ft.
Vertical Scale 1 inch = 5 ft.

PROJECT NUMBER = PSP-24-07

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3851 CERTIFICATE OF AUTHORIZATION

PRELIMINARY
PRELIMINARY
NOT FOR CONSTRUCTION
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA REGISTERED 36528 ENGINEER JAKOB P. KLEIN
FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR DIAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL CULVERT CROSSING
PHASE 2 & 3
ROLESVILLE RD
WAKE COUNTY NC 27312

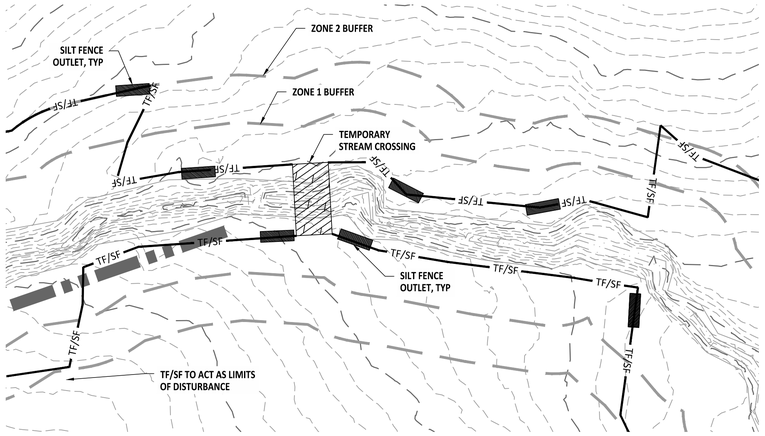
JOB NUMBER: 23-0004
CHECKED BY: BH
DRAWN BY: DH/RC/SM/GE/MA/LL/JB
DATE: 05/01/2025

SHEET TITLE: EROSION CONTROL CULVERT CROSSING PHASE 2 & 3

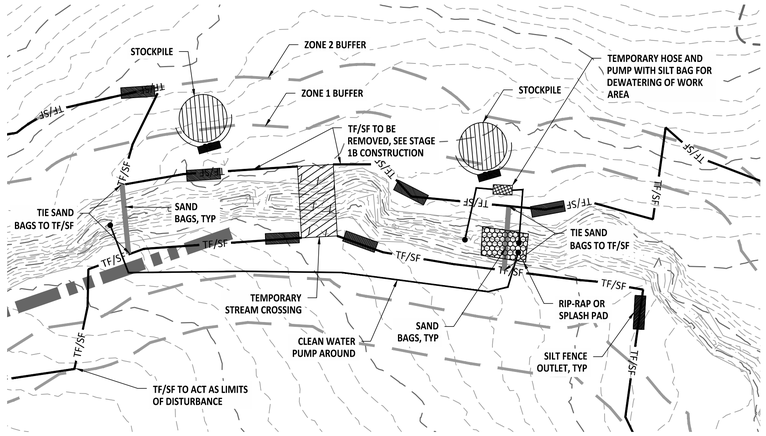
SHEET NO.: CE-240

North Carolina 811 811 Partner
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

T:\Jobs\23-0004 Merritt Property BRP\Revit_Working Dwgs\Sheets\Construction Set\3B CE-240 CULVERT CROSSING PHASE 2 & 3.dwg
2025-05-01



INITIAL CULVERT CROSSING FOR FOWLER ROAD



INTERMEDIATE CULVERT CROSSING FOR FOWLER ROAD

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft

FINAL CULVERT CROSSING FOR FOWLER ROAD

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft

SEQUENCE FOR CULVERT CROSSING (FOR CLEAN WATER PUMP AROUND)

STAGE 1A CREEK CROSSING INSTALLATION

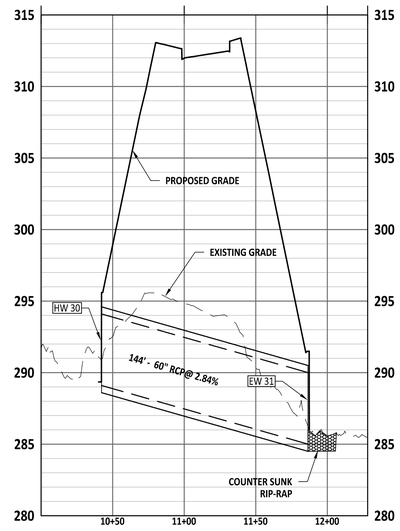
1. CONDUCT MEETING WITH WAKE COUNTY INSPECTOR PRIOR TO PROCEEDING WITH THE STREAM CROSSING CONSTRUCTION.
2. INSTALL THE BRIDGE MAT AND SILT FENCE AS SHOWN IN THE INITIAL STREAM CROSSING.
3. PLACE A TEMPORARY RIP-RAP PAD OR SPLASH PAD AT THE DOWNSTREAM END OF THE TEMPORARY HOSE TO PREVENT EROSION. CONTRACTOR IS RESPONSIBLE FOR SIZING TEMPORARY PAD.
4. DURING A PERIOD OF DRY WEATHER, ADD AN IMPERVIOUS DIKE TO THE UPSTREAM AND DOWNSTREAM ENDS OF THE STREAM CROSSING. USING A PUMP AND HOSE, PUMP THE CLEAN WATER FROM THE UPSTREAM SIDE OF THE CROSSING TO THE DOWNSTREAM SIDE OF THE CROSSING TO DIVERT FLOW AROUND THE WORK AREA.

STAGE 1B CREEK CROSSING INSTALLATION

1. OBTAIN PERMISSION FROM THE WAKE COUNTY INSPECTOR TO PROCEED WITH THIS STEP.
2. INSTALL TEMPORARY HOSE AND PUMP AND A SILT BAG TO ALLOW FOR PUMP DOWN OF THE WORK AREA. PUMPS TO BE USED AS NEEDED.
3. ONCE THE STREAM HAS BEEN PUMPED DOWN AND THE SILT FENCE HAS BEEN TIED TO THE SANDBAGS, REMOVE THE SILT FENCE AS SHOWN IN THE INTERMEDIATE STAGE
4. EXCAVATE AREA AND INSTALL PIPE WITH HEADWALLS AND DOWNSTREAM RIP-RAP AS SHOWN.
5. OBTAIN WAKE COUNTY APPROVAL OF THE PIPE INSTALLATION.

STAGE 1C CREEK CROSSING INSTALLATION

1. UPON COMPLETION OF PIPE INSTALLATION, REMOVE TEMPORARY SANDBAGS ON DOWNSTREAM END.
2. REMOVE TEMPORARY SANDBAGS ON UPSTREAM END.
3. INSTALL SILT FENCE AT THE TOE OF SLOPES AND TIE TO ENDWALLS AS SHOWN ON THIS PLAN.
4. COMPLETE FILL AROUND THE PIPE TO A LEVEL AT LEAST TWO (2) FEET ABOVE THE TOP OF THE PIPE TO ALLOW CONSTRUCTION EQUIPMENT TO PASS OVER IT.
5. COMPLETE FILL BRINGING THE AREA TO FINISHED GRADE.
6. INSTALL PAVEMENT AND FOLLOW THE SEEDING SCHEDULE FOR ALL BARE AREAS.
7. REFER TO MAIN CONSTRUCTION SEQUENCE FOR OTHER DETAILS.



Horizontal 50 0 50 100 200

Vertical 5 0 5 10 20

Horizontal Scale 1 inch = 50 ft.
Vertical Scale 1 inch = 5 ft.

PROJECT NUMBER = PSP-24-07

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY
PRELIMINARY
DO NOT USE FOR CONSTRUCTION

NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 36528 JAKOB P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

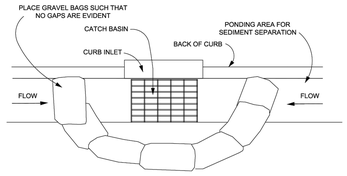
MERRITT RESERVE
EROSION CONTROL CULVERT CROSSING
PHASE 2 & 3
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
EROSION CONTROL CULVERT CROSSING PHASE 2 & 3

SHEET NO.:
CE-241

North 811 Carolina
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm



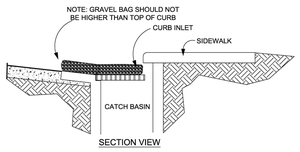
PLAN VIEW

NOTES:

1. PLACE GRAVEL BAG BARRIER ON GENTLY SLOPING STREET, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNNOFF.
2. USE SAND BAGS OF WOVEN GEOTEXTILE FABRIC (NOT BURLAP) AND FILL WITH ¾ INCH (OR SMALLER) GRAVEL. BAGS MUST BE LAYERED SUCH THAT NO GAPS ARE EVIDENT.
3. WHEN INSTALLING CURB INLET PROTECTION DEVICES, **NEVER** BLOCK THE CURB INLET.

MAINTENANCE NOTES:

1. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT (1 INCH OR GREATER), SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.



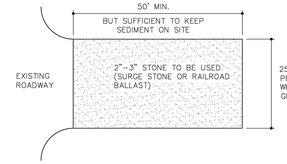
SECTION VIEW

WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

STANDARD GRAVEL BAG CURB INLET PROTECTION

01



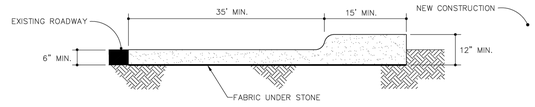
PLAN VIEW

NOTES:

1. INSTALL SILT FENCE OR TREE PROTECTION FENCE TO ENSURE CONSTRUCTION ENTRANCE IS USED BY VEHICLES.
2. IF MUD IS NOT REMOVED FROM TIRES AFTER VEHICLE TRAVELS OVER STONE, THE TIRES OF THE VEHICLE MUST BE WASHED BEFORE ENTERING PUBLIC ROADS.!

MAINTENANCE NOTES:

1. THE GRAVEL CONSTRUCTION ENTRANCE MUST BE MAINTAINED IN A CONDITION TO PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO ADJACENT ROADWAYS.
2. REPLACEMENT OF STONE MAY BE NECESSARY TO ENSURE THE GRAVEL ENTRANCE FUNCTIONS PROPERLY.
3. REPLENISHMENT OF STONE MAY BE NECESSARY.
4. FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE SHOULD BE COMPLETED.
5. ANY MATERIAL TRACKED ONTO THE ROADWAY SHALL BE CLEANED UP IMMEDIATELY.



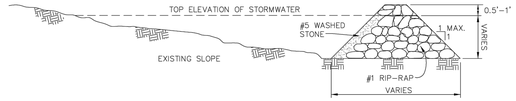
CROSS SECTION

WAKE COUNTY NORTH CAROLINA

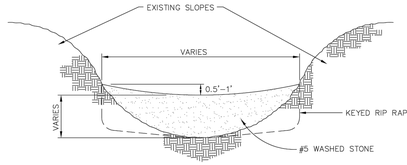
EFFECTIVE: 01/31/08

STANDARD CONSTRUCTION ENTRANCE

02



SIDE VIEW



FRONT VIEW

CONSTRUCTION NOTES:

1. HEIGHT & WIDTH DETERMINED BY EXISTING TOPOGRAPHY AND SEDIMENT STORAGE REQUIRED.
2. KEY RIP RAP INTO THE DAM FOR STABILIZATION.

MAINTENANCE NOTES:

1. INSPECT CHECK DAMS WEEKLY AND AFTER EVERY RAINFALL EVENT OF 1" OR MORE.
2. REMOVE SEDIMENT AND DEBRIS AS NEEDED.
3. MAINTAIN FLOW THROUGH THE CHECK DAM.



STEP SEQUENCE

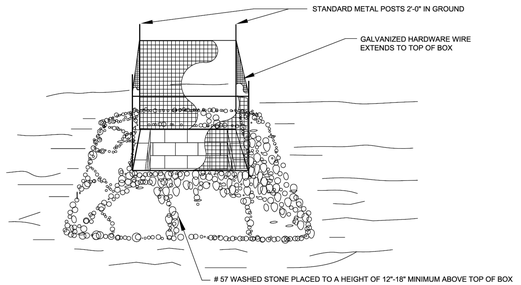
NOTE: REMOVE SEDIMENT ACCUMULATION FROM BEHIND CHECK DAMS TO PREVENT DAMAGE TO CHANNEL VEGETATION. FLOW SHOULD BE MAINTAINED THROUGH THE DAM.

WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

STANDARD CHECK DAM

03



MAINTENANCE NOTES:

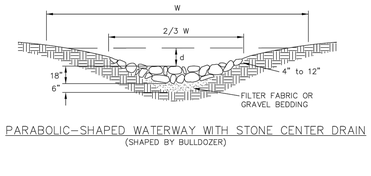
1. REMOVE SEDIMENT WHEN HALF HEIGHT OF STONE AND CLEAR HARDWARE OF DEBRIS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS, TAKING CARE NOT TO DAMAGE OR UNDERCUT HARDWARE DURING SEDIMENT REMOVAL.
2. REPLACE STONE AS NEEDED.

WAKE COUNTY NORTH CAROLINA

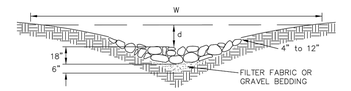
EFFECTIVE: 01/31/08

STANDARD GRAVEL YARD INLET PROTECTION

04



PARABOLIC–SHAPED WATERWAY WITH STONE CENTER DRAIN
(SHAPED BY BULLDOZER)



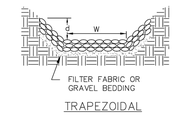
V–SHAPED WATERWAY WITH STONE CENTER DRAIN
(SHAPED BY MOTOR GRADER)

NOTES:

–TO BE USED WHERE EXCESSIVE STORMWATER VELOCITIES PROHIBIT VEGETATIVE LININGS.

–SIZE OF STONE MUST BE DETERMINED BY APPROPRIATE DESIGN PROCEDURE.

–DIMENSIONS FOR d & W VARIES ACCORDING TO DESIGN.



TRAPEZOIDAL

MAINTENANCE NOTES:
–INSPECT RIPRAP DITCH WEEKLY AND AFTER SIGNIFICANT RAIN EVENTS TO SEE IF ANY EROSION AROUND OR BELOW THE RIP RAP HAS TAKEN PLACE. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.
–IF EROSION IS EVIDENT PAST END OF RIPRAP DITCH DUE TO RUNOFF DISCHARGING FROM DITCH, INCREASE DIMENSIONS OF RIPRAP PAD PROVIDED SPACE IS AVAILABLE WITHIN THE APPROVED LIMITS OF DISTURBANCE.
–MAINTAIN ALL VEGETATION ADJACENT TO CHANNEL IN A HEALTHY, VIGOROUS CONDITION TO PROTECT DITCH FROM EROSION AND SCOUR DURING OUT–OF–BANK FLOW.

WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

STANDARD RIP-RAP LINED CHANNELS

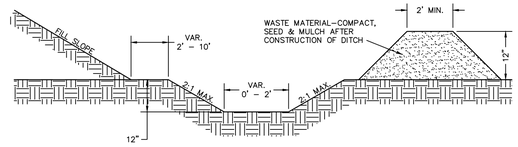
05

NOTES:

1. TEMPORARY DIVERSION DITCH TO BE USED TO INTERCEPT FLOW AND/OR DIVERT TO A SEDIMENT CONTROL MEASURE OR BMP.
2. STABILIZE DIVERSION DITCH BERM WITH TEMPORARY SEEDING, MULCH WITH TAC, AND/OR EROSION CONTROL NETTING.

MAINTENANCE NOTES:

1. INSPECT ONCE A WEEK AND AFTER EVERY 1" RAINFALL.
2. SILT SHALL BE REMOVED WHEN DITCH IS ONE–HALF FULL.
3. DITCH SHALL BE RECONSTRUCTED WHEN DAMAGED BY EQUIPMENT OR COVERED BY FILL.
4. CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED.
5. AFTER DRAINAGE AREA IS PERMANENTLY STABILIZED, PLACE WASTE MATERIAL IN DITCH TO BLEND WITH NATURAL GROUND AND STABILIZE.



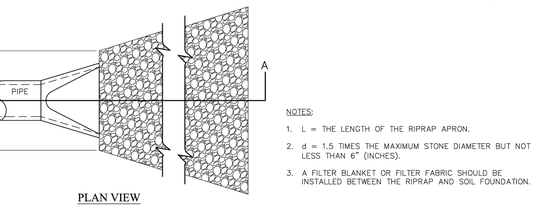
CROSS SECTIONAL VIEW

WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

STANDARD TEMPORARY DIVERSION DITCH

06



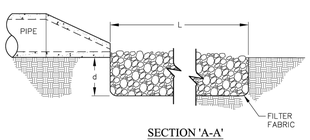
PLAN VIEW

NOTES:

1. L = THE LENGTH OF THE RIPRAP APRON.
2. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6" (INCHES).
3. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.

MAINTENANCE NOTES:

1. INSPECT RIPRAP OUTLET STRUCTURES WEEKLY AND AFTER SIGNIFICANT (1 INCH OR GREATER) RAINFALL EVENTS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE, OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.



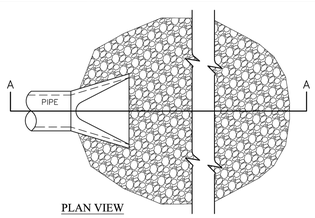
SECTION 'A-A'

WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

STANDARD PIPE OUTLET TO FLAT AREA NO WELL-DEFINED CHANNEL

07



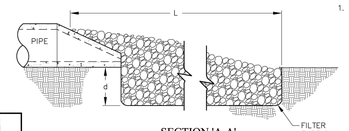
PLAN VIEW

NOTES:

1. L = THE LENGTH OF THE RIPRAP APRON.
2. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6" (INCHES).
3. IN A WELL–DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" (INCHES) ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.

MAINTENANCE NOTES:

1. INSPECT RIPRAP OUTLET STRUCTURES WEEKLY AND AFTER SIGNIFICANT (1 INCH OR GREATER) RAINFALL EVENTS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE, OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.



SECTION 'A-A'

WAKE COUNTY NORTH CAROLINA

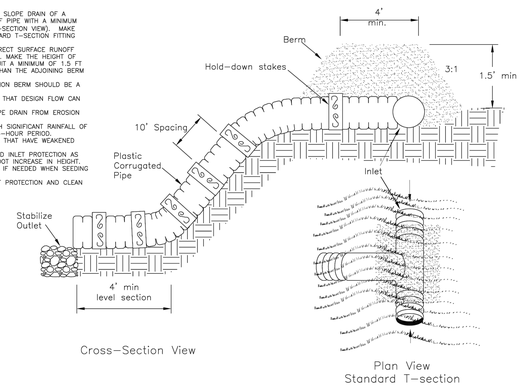
EFFECTIVE: 01/31/08

STANDARD PIPE OUTLET TO WELL-DEFINED CHANNEL

08

MAINTENANCE NOTES:

1. CONSTRUCT THE ENTRANCE TO THE SLOPE DRAIN OF A STANDARD FLARED–END SECTION OF PIPE WITH A MINIMUM 6–INCH METAL TOE PLATE (CROSS–SECTION VIEW). MAKE ALL FITTINGS WATERTIGHT. A STANDARD T–SECTION FITTING MAY ALSO BE USED AT THE INLET.
2. USE AN EARTHEN DIVERSION TO DIRECT SURFACE RUNOFF INTO THE TEMPORARY SLOPE DRAIN. MAKE THE HEIGHT OF THE BERM OVER THE DRAIN CONDUIT A MINIMUM OF 1.5 FT AND AT LEAST 6 INCHES HIGHER THAN THE ADJOINING BERM ON EITHER SIDE.
3. THE LOWEST POINT OF THE DIVERSION BERM SHOULD BE A MINIMUM OF 1 FT.
4. ABOVE THE TOP OF THE DRAIN SO THAT DESIGN FLOW CAN FREELY ENTER THE PIPE.
5. PROTECT THE OUTLET OF THE SLOPE DRAIN FROM EROSION WITH RIPRAP DISSIPATOR.
6. INSPECT SLOPE DRAINS AFTER EACH SIGNIFICANT RAINFALL OF 1 INCHES OR GREATER, OVER A 24–HOUR PERIOD.
7. REBUILD EARTH BERMS AND INLETS THAT HAVE WEAKENED DUE TO SCOURING.
8. EXTEND SLOPE DRAINS AND REBUILD INLET PROTECTION AS SLOPE IS BUILT, AFTER EACH 2–FOOT INCREASE IN HEIGHT.
9. REBUILD OR REPAIR SLOPE DRAINS IF NEEDED WHEN SEEDING AND MULCHING IS PERFORMED.
10. REFURBISH CLASS B STONE OUTLET PROTECTION AND CLEAN AS NEEDED.



WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

STANDARD TEMPORARY SLOPE DRAIN

09

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA ENGINEERING CERTIFICATION
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST
C-3861
CERTIFICATE OF AUTHORIZATION

FOR CONSTRUCTION
PRELIMINARY
DO NOT USE FOR CONSTRUCTION
36528
ENGINEER
JAKOB P. KLEE

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL DETAILS
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:

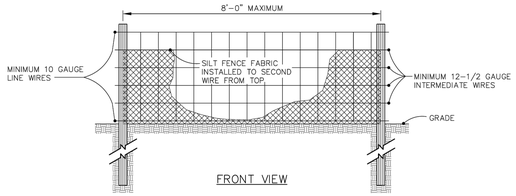
EROSION CONTROL DETAILS

SHEET NO.:

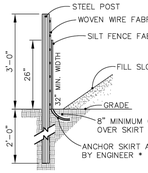
CE-500

North Carolina 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merrit Property BRD\Dwg_Working Dwgs\Sheets\Construction Set\SP_CE 500-504 ESC DETAILS.dwg
2025-05-01



FRONT VIEW



SIDE VIEW

MAINTENANCE NOTES:

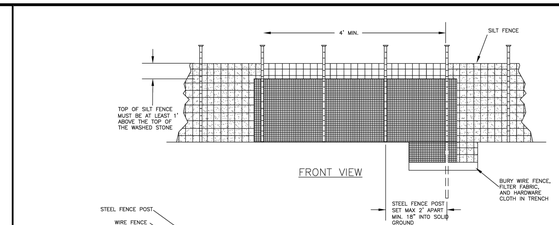
1. INSPECT BAG AFTER EACH SIGNIFICANT RAINFALL OF 1 INCHES OR GREATER, OVER A 24-HOUR PERIODL. MAKE ANY REPAIRS IMMEDIATELY.
2. INSPECT THE SILT FENCE TO BE SURE THE BOTTOM OF THE GEOTEXTILE IS KEYED IN PROPERLY.
3. AT A MINIMUM, REMOVE AND DISPOSE OF ALL SILT ACCUMULATIONS WHEN DEPTH REACHES 1/2 THE HEIGHT OF THE GEOTEXTILE. DO NOT UNDERMINE THE FENCE DURING CLEANOUT.
5. DISPOSE OF SEDIMENT BY HAULING IT TO AN APPROVED WASTE SITE WITH APPROPRIATE PERMEITER PROTECTION.
6. REMOVE AND REPLACE DETERIORATED OR CLOGGED SILT FENCE.
7. REPLACE SILT FENCE REMOVED FOR ACCESS AT THE END OF EACH DAY'S OPERATION.
8. INSTALL ADDITIONAL POSTS OR WIRE BACKING IF FENCE IS SAGGING.

WAKE COUNTY NORTH CAROLINA

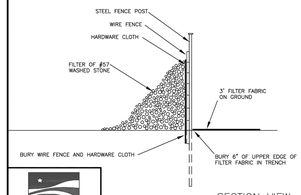
EFFECTIVE: 01/31/08

STANDARD TEMPORARY SILT FENCE

01



FRONT VIEW



SECTION VIEW

MAINTENANCE NOTES:

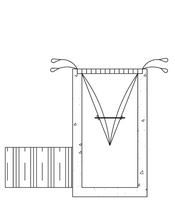
1. INSPECT THE DEVICE PERIODICALLY AND AFTER 1 INCH RAINFALL OVER 24 HOUR PERIOD FOR DAMAGE AND SEDIMENT ACCUMULATION TO CONFIRM THE DEVICE IS FUNCTIONING PROPERLY.
2. AT A MINIMUM, REMOVE SEDIMENT FROM THE DEVICE WHEN ACCUMULATIONS REACH ONE-HALF THE HEIGHT OF THE SEDIMENT CONTROL STONE.
3. REPLACE OR CLEAN THE SEDIMENT CONTROL STONE AS NEEDED TO ALLOW WATER TO DRAIN THROUGH THE DEVICE BETWEEN RAINFALL EVENTS.
4. REPAIR AREAS WHERE OUTLET BECOMES UNDERMINED DUE TO CONCENTRATED FLOWS.

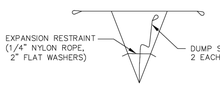
WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

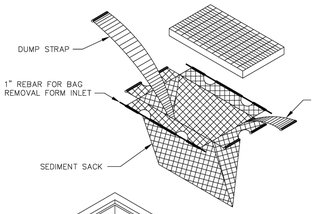
STANDARD SILT FENCE OUTLET

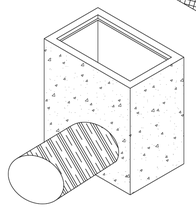
02





BAG DETAIL





MAINTENANCE NOTES:

1. INSPECT BAG AFTER EACH SIGNIFICANT RAINFALL OF 1 INCHES OR GREATER, OVER A 24-HOUR PERIOD.
2. FOLLOW ROAD SAFETY WHILE PERFORMING MAINTENANCE.
3. REPLACE BAG WHEN THEY BECOME CONTAMINATED WITH SEDIMENT AND CONSTRUCTION DEBRIS.
4. WHEN MAINTAINING AND REMOVING INLET PROTECTION DEVICES, EXERCISE CARE TO MINIMIZE SEDIMENT FALLING INTO THE INLET. IMMEDIATELY REMOVE ALL MATERIAL THAT HAS FALLEN INTO INLETS. DEPOSIT SEDIMENT REMOVED FROM THE DEVICE IN A SUITABLE AREA AND STABILIZE.

WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

STANDARD SILT BAG - INLET SEDIMENT CONTROL DEVICE

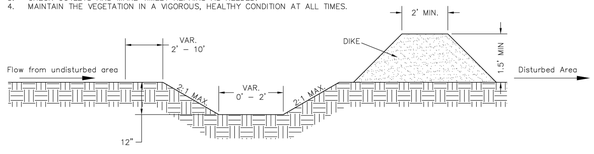
03

NOTES:

1. DIVERSION TO BE USED UPSLOPE OF A CONSTRUCTION SITE TO PREVENT STORM RUNOFF FROM ENTERING THE DISTURBED AREA.
2. IMMEDIATELY LINE AND STABILIZE BEFORE ANY DOWNSLOPE GRADING BEGINS (STABILIZATION MUST OCCUR BEFORE ISSUANCE OF A CERTIFICATE OF COMPLIANCE). STABILIZATION METHOD IS BASED ON VELOCITY OF OFFSITE DRAINAGE.
3. DIVERSIONS SHOULD ONLY BE USED FOR DRAINAGES 5 ACRES OR LESS.
4. ANY SEDIMENT LADEN WATER PRIOR TO STABILIZATION OF THE DIVERSION MUST BE DIVERTED INTO AN APPROVED EROSION AND SEDIMENT CONTROL BMP. CLEAN WATER SHOULD EMPTY INTO AN APPROVED OUTLET DEVICE.

MAINTENANCE NOTES:

1. INSPECT AFTER EVERY RAINFALL DURING THE CONSTRUCTION OPERATION.
2. IMMEDIATELY REMOVE ANY OBSTRUCTIONS FROM THE FLOW AREA, AND REPAIR DIVERSION RIDGE.
3. CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED.
4. MAINTAIN THE VEGETATION IN A VIGOROUS, HEALTHY CONDITION AT ALL TIMES.



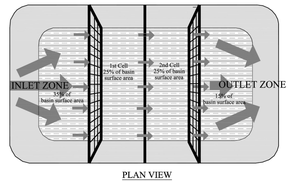
CROSS SECTIONAL VIEW

WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

STANDARD CLEAN WATER DIVERSION

04



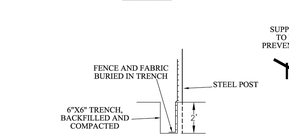
PLAN VIEW

NOTES:

1. BAFFLE MATERIAL SHOULD BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AS FOR SILT FENCE.
2. MOST OF THE SEDIMENT WILL ACCUMULATE IN THE 1ST BAY, WHICH SHOULD BE READILY ACCESSIBLE FOR MAINTENANCE.
3. PROVIDE 3 BAFFLES (USE TWO IF LESS THAN 20 FEET IN LENGTH). PROVIDE 5 BAFFLES FOR DRAINAGE AREAS GREATER THAN 10 ACRES.
4. BAFFLE SHALL BE 700 G/M2 COIR EROSION BLANKET.
5. TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE BERMS.

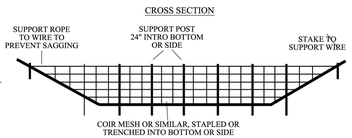
MAINTENANCE NOTES:

1. INSPECT BAFFLES FOR REPAIR ONCE A WEEK AND AFTER EACH 1" RAINFALL.
2. MAINTAIN ACCESS TO BAFFLES AND MAKE ANY REPAIRS IMMEDIATELY.
3. REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL.
4. AVOID DAMAGING BAFFLES DURING CLEANOUT AND REPLACE IF DAMAGED.
5. REMOVE BAFFLES AND SEDIMENT DEPOSITS AFTER CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED.



SECTION VIEW AT OPENING

CROSS SECTION

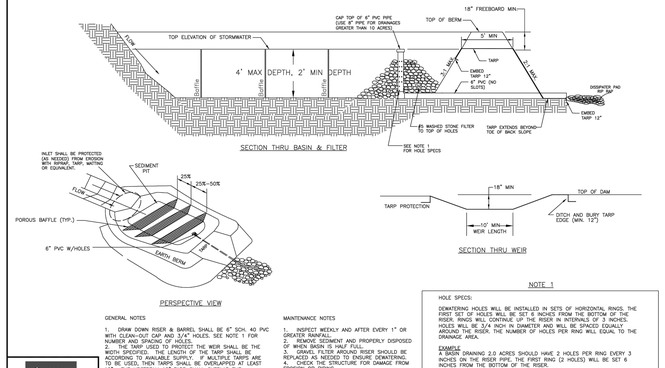


WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

STANDARD BAFFLES DETAIL

05



SECTION THRU BASIN & FILTER

PERSPECTIVE VIEW

SECTION THRU WEIR

NOTE 1

HOLE SPECS:

DEWATERING HOLES WILL BE INSTALLED IN SETS OF HORIZONTAL RINGS. THE FIRST SET OF HOLES WILL BE SET 6 INCHES FROM THE BOTTOM OF THE RISER. RINGS WILL CONTINUE UP THE RISER IN INTERVALS OF 3 INCHES. HOLES WILL BE 3/4 INCH IN DIAMETER AND WILL BE SPACED EQUALLY AROUND THE RISER. THE NUMBER OF HOLES PER RING WILL EQUAL TO THE DRAINAGE AREA.

EXAMPLE

A 10DIA DRAINING 2.0 ACRES SHOULD HAVE 2 HOLES PER RING EVERY 3 INCHES ON THE RISER PIPE. THE FIRST RING (2 HOLES) WILL BE SET 6 INCHES FROM THE BOTTOM OF THE RISER.

NOTE: ROUND DRAINAGE AREA TO THE NEAREST WHOLE NUMBER TO DETERMINE NUMBER OF HOLES.

GENERAL NOTES

1. DRAW DOWN RISER & BARREL SHALL BE 6" SCH. 40 PVC WITH CLEAN-OUT CAP AND 3/4" HOLES. SEE NOTE 1 FOR NUMBER AND SPACING OF HOLES.
2. WEIR SHALL BE CUT AS SHOWN. THE WEIR SHALL BE THE WIDTH SPECIFIED. THE LENGTH OF THE TARP SHALL BE ACCORDING TO AVAILABLE SUPPLY. IF MULTIPLE TARPS ARE TO BE USED, THEN TARPS SHALL BE OVERLAPPED AT LEAST 12". THE UPSTREAM 12" TARP SHALL OVERLAP THE DOWNSTREAM TARP. THE TARP SHALL BE 50 MIL. HEAVY DUTY SILVER TARPAULINS OR EQUIVALENT FOR U.V. RESISTANCE.

MAINTENANCE NOTES

1. INSPECT WEEKLY AND AFTER EVERY 1" OR GREATER RAINFALL.
2. REMOVE SEDIMENT AND PROPERLY DISPOSED WHEN IT REACHES HALF FULL.
3. GRAVEL FILTER AROUND RISER SHOULD BE REPLACED AS NEEDED TO ENSURE DEWATERING.
4. CHECK THE STRUCTURE FOR DAMAGE FROM EROSION OR PIPING.
5. ANY RIP RAP DISPLACED FROM DISSIPATER PAD MUST BE REPLACED IMMEDIATELY.

WAKE COUNTY NORTH CAROLINA

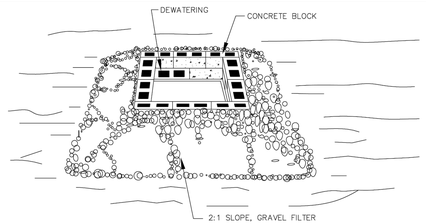
EFFECTIVE: 01/31/08

STANDARD CUSTOM BASIN

06

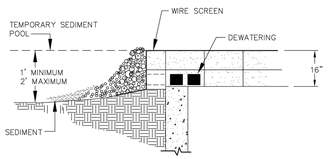
CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE IN THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF BLOCKS AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2x4 WOOD STUDS THROUGH BLOCK OPENINGS.
2. CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2 INCH OPENINGS OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.
3. USE CLEAN GRAVEL, 3/4 TO 1/2 INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.



MAINTENANCE NOTES:

1. INSPECT INLET PROTECTION AND REMOVE SEDIMENT AFTER EACH 1" RAIN EVENT.
2. REMOVE SEDIMENT WHEN VOLUME OF THE BASIN IS REDUCED BY ONE-HALF.
3. GRAVEL SHOULD BE REPLACED AND REPAIRS MADE AS NEEDED.

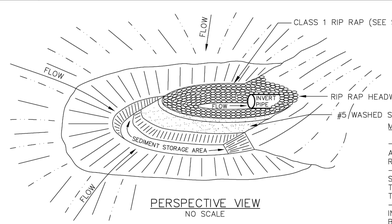


WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

STANDARD BLOCK & GRAVEL DROP INLET PROTECTION

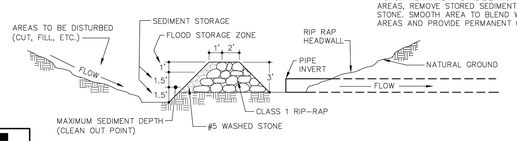
07



PERSPECTIVE VIEW
NO SCALE

MAINTENANCE NOTES:

-INSPECT INLET PROTECTION AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY.
-REMOVE SEDIMENT AND RESTORE THE SEDIMENT STORAGE AREA TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP.
-REFRESH STONE AS NEEDED TO RESTORE TO INITIAL INSTALLATION CONDITIONS WHEN STONE BECOMES CLOGGED OR DISLODGED.
-UPON PERMANENT STABILIZATION OF DRAINAGE AREAS, REMOVE STORED SEDIMENT & TEMPORARY STONE. SMOOTH AREA TO BLEND WITH ADJOINING AREAS AND PROVIDE PERMANENT GROUNDCOVER.



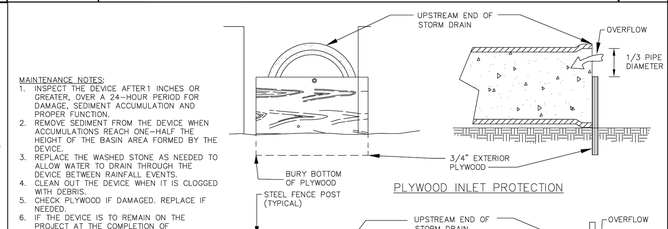
SECTION THRU CATCH BASIN, FILTER AND CULVERT PIPE
NO SCALE

WAKE COUNTY NORTH CAROLINA

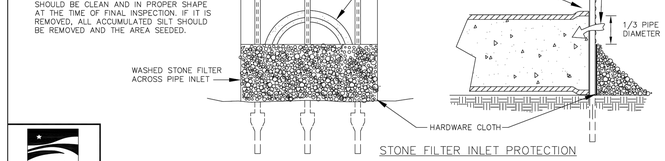
EFFECTIVE: 01/31/08

STANDARD HORSESHOE INLET PROTECTION

08



PLYWOOD INLET PROTECTION



STONE FILTER INLET PROTECTION

MAINTENANCE NOTES:

1. INSPECT THE DEVICE AFTER1 INCHES OR GREATER, OVER A 24-HOUR PERIOD FOR DAMAGE, SEDIMENT ACCUMULATION AND PROPER FUNCTION.
2. REMOVE SEDIMENT FROM THE DEVICE WHEN ACCUMULATIONS REACH ONE-HALF THE HEIGHT OF THE BASIN AREA FORMED BY THE DEVICE.
3. REPLACE THE WASHED STONE AS NEEDED TO ALLOW WATER TO DRAIN THROUGH THE DEVICE BETWEEN RAINFALL EVENTS.
4. CLEAN OUT THE DEVICE WHEN IT IS CLOGGED WITH DEBRIS.
5. CHECK PLYWOOD IF DAMAGED. REPLACE IF NEEDED.
6. IF THE DEVICE IS TO REMAIN ON THE PROJECT AT THE COMPLETION OF CONSTRUCTION ACTIVITIES, THE DEVICE SHOULD BE CLEAN AND IN PROPER SHAPE AT THE TIME OF FINAL INSPECTION. IF IT IS REMOVED, ALL ACCUMULATED SILT SHOULD BE REMOVED AND THE AREA SEEDED.

WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

STANDARD PIPE INLET PROTECTION (PLYWOOD & STONE)

09

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA ENGINEERING CERTIFICATE OF AUTHORIZATION AMERICAN ENGINEERING ASSOCIATES SOUTHEAST P-3881

FOR CONSTRUCTION

PRELIMINARY
DO NOT USE FOR CONSTRUCTION
36528
ENGINEER
TAYLOR P. KLEE

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL DETAILS
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:

EROSION CONTROL DETAILS

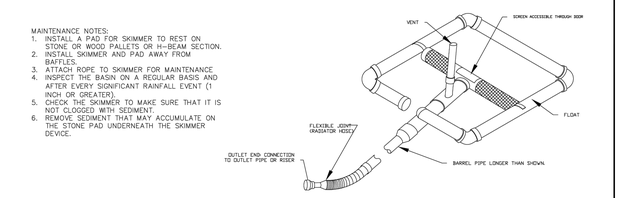
SHEET NO.:

CE-501

North Carolina 811 811 or 1-800
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merritt Property @RD\Dwgs_Working Dwgs\Sheets\Construction Set\30. CE 500-504 ESC DETAILS.dwg

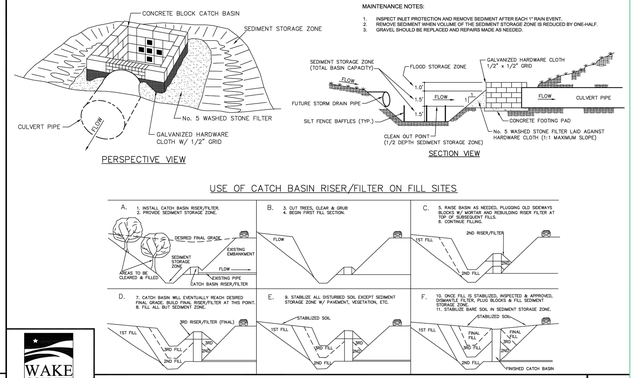
2025-05-01



WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

STANDARD SKIMMER DETAIL | 01



WAKE COUNTY NORTH CAROLINA

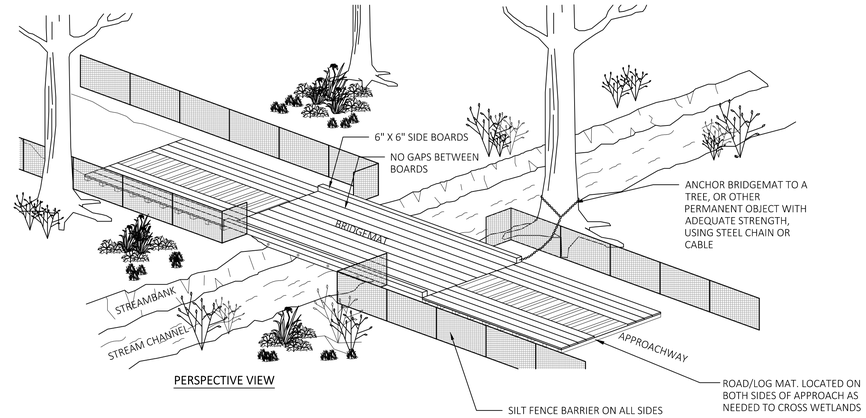
EFFECTIVE: 01/31/08

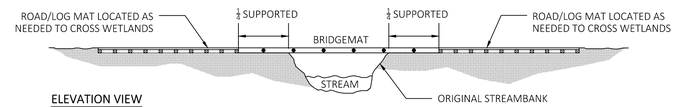
STANDARD CATCH BASIN RISER/FILTER | 02

WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/15

STANDARD SKIMMER ATTACHED TO PERMANENT RISER | 05





INSTALLATION SEQUENCE NOTES:

1. KEEP CLEARING AND EXCAVATION OF THE STREAM BANKS AND BED AND APPROACH TO A MINIMUM.
2. INSTALL AND MAINTAIN A SILT FENCE BARRIER AT ALL PERIMETERS OF DISTURBED APPROACHES INCLUDING ALONG STREAM BANK.
3. KEEP HEAVY EQUIPMENT OUT OF STREAM AT ALL TIMES.
4. INSTALL ROAD/LOG MAT AT FINAL APPROACH TO BRIDGE.
5. STABILIZE EXPOSED MINERAL SOIL WITH TREE TOPS OR BRUSH DURING MAT INSTALLATION, AND SEEDING/MULCH AFTER MAT REMOVAL.
6. INSTALL MATS TO CREATE A MINIMUM TEN FOOT BRIDGE WIDTH.
7. SCHEDULE BRIDGE SECTION INSTALLATION FOR PERIOD OF DRY WEATHER. REMOVE SILT FENCE ALONG STREAM BANK ONLY AS NECESSARY TO ALLOW BRIDGE INSTALLATION AND REINSTALL SILT FENCE ALONG STREAM BANK TO EDGE OF BRIDGE FOLLOWING BRIDGE INSTALLATION.
8. INSTALL ROAD/LOG MATS ON OPPOSITE SIDE OF NEWLY INSTALLED BRIDGE. INSTALL AND MAINTAIN A SILT FENCE BARRIER ALONG ALL DISTURBED AREAS.

MAINTENANCE NOTES:

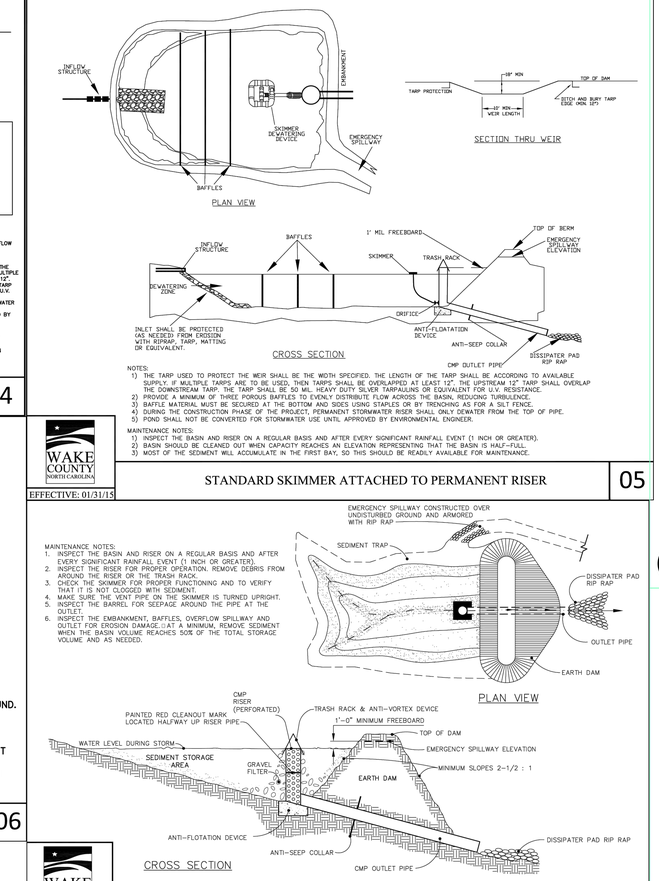
1. KEEP MATS' SURFACE FREE OF MINERAL SOIL AND DEBRIS THAT COULD ENTER STREAM.
2. PERIODICALLY CHECK MAT HARDWARE; RE-TIGHTEN NUTS AND CABLE CLAMPS AS NECESSARY TO MAINTAIN BRIDGE STRENGTH AND INTEGRITY.
3. CHECK AND MAINTAIN SILT FENCE BARRIERS ON A DAILY BASIS.
4. IMMEDIATELY REMOVE ANY DEBRIS WHICH ENTERS THE STREAM AT THE CROSSING LOCATION.

REMOVAL NOTES:

1. CLEAN OFF BRIDGE SURFACE.
2. REMOVE MATS BY USING MAT CABLE LOOP OR SKIDDER GRAPPLE.
3. PERMANENTLY STABILIZE DISTURBED PORTIONS OF STREAM BANK AND APPROACH ROADS WITH MULCH.

3 TEMPORARY BRIDGE MATT

NOT TO SCALE — P-RE-R-R230004-04



NOTE 1

HOLE SPECS:

DEWATERING HOLES WILL BE INSTALLED IN SETS OF HORIZONTAL RINGS. THE FIRST SET OF HOLES WILL BE SET 6 INCHES FROM THE BOTTOM OF THE RISER. RINGS WILL CONTINUE UP THE RISER IN INTERVALS OF 3 INCHES. HOLES WILL BE 3/4 INCH IN DIAMETER AND SPACED EVENLY AROUND THE RISER. DEPENDING ON THE NUMBER OF HOLES PER RING, WILL EQUAL TO THE DRAINAGE AREA.

EXAMPLE:
A BASIN DRAINING 2.0 ACRES SHOULD HAVE 2 HOLES PER RING EVERY 3 INCHES ON THE RISER PIPE. THE FIRST RING (2 HOLES) WILL BE SET 6 INCHES FROM THE BOTTOM OF THE RISER.

NOTE: ROUND DRAINAGE AREA TO THE NEAREST WHOLE NUMBER TO DETERMINE NUMBER OF HOLES.

GENERAL NOTES:

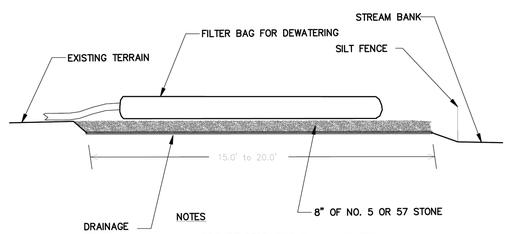
1) SILT BAG REQUIRED WHEN DEWATERING BASIN.
2) PROVIDE A MINIMUM OF THREE POROUS BAFFLES TO EVENLY DISTRIBUTE FLOW ACROSS THE BASIN, REDUCING TURBULENCE.
3) BAFFLE MATERIAL MUST BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AS FOR A SILT FENCE.
4) THE TARP USED TO PROTECT THE WEIR SHALL BE THE WIDTH SPECIFIED. THE LENGTH OF THE TARP SHALL BE ACCORDING TO AVAILABLE SUPPLY. IF MULTIPLE TARPS ARE TO BE USED, THEN TARPS SHALL BE OVERLAPPED AT LEAST 12". THE UPSTREAM 12" TARP SHALL OVERLAP THE DOWNSTREAM TARP. THE TARP SHALL BE 50 MIL. HEAVY DUTY SILVER TARPAULINS OR EQUIVALENT FOR U.V. RESISTANCE.
5) DURING THE CONSTRUCTION PHASE OF THE PROJECT, PERMANENT STORMWATER RISER SHALL ONLY DEWATER FROM THE TOP OF PIPE.
6) POND SHALL NOT BE CONVERTED FOR STORMWATER USE UNTIL APPROVED BY ENVIRONMENTAL ENGINEER.

MAINTENANCE NOTES:
1) INSPECT THE BASIN AND RISER ON A REGULAR BASIS AND AFTER EVERY SIGNIFICANT RAINFALL EVENT (1 INCH OR GREATER).
2) BASIN SHOULD BE CLEANED OUT WHEN CAPACITY REACHES AN ELEVATION REPRESENTING THAT THE BASIN IS HALF-FULL.
3) MOST OF THE SEDIMENT WILL ACCUMULATE IN THE FIRST BAY, SO THIS SHOULD BE READILY AVAILABLE FOR MAINTENANCE.

WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/15

STANDARD CUSTOM BASIN ATTACHED TO PERMANENT RISER | 04



NOTES

1. PROVIDE STABILIZED OUTLET TO STREAM BANK.
2. WOOD PALLETS MAY BE USED IN LIEU OF STONE AND GEOTEXTILE AS DIRECTED. A SUFFICIENT NUMBER OF PALLETS MUST BE PROVIDED TO ELEVATE THE ENTIRE FILTER BAG FOR DEWATERING ABOVE NATURAL GROUND.

MAINTENANCE NOTES

1. REPLACE AND DISPOSE OF FILTER BAG(S) WHEN IT IS ⅔ FULL OF SEDIMENT OR WHEN IT IS IMPRCTICAL FOR BAG TO FILTER SEDIMENT.
2. PROVIDE A SUFFICIENT QUANTITY OF FILTER BAGS TO CONTAIN SILT FROM PUMPED EFFLUENT.

NOT TO SCALE

WAKE COUNTY NORTH CAROLINA

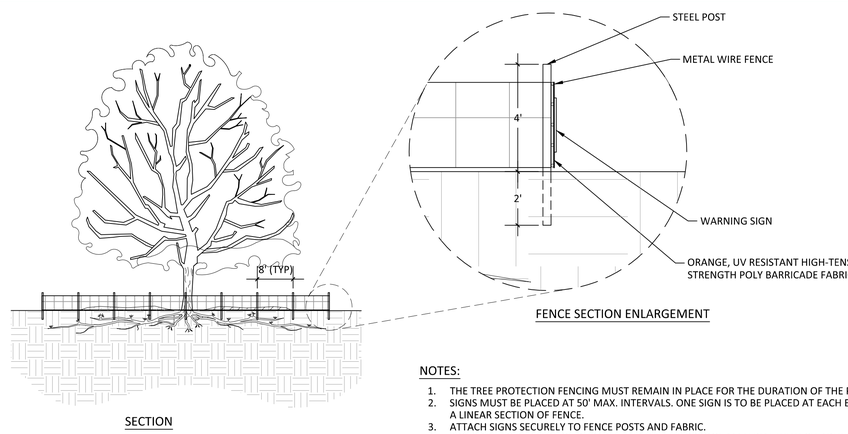
EFFECTIVE: 01/31/08

STANDARD FILTER BAG FOR DEWATERING ACTIVITIES | 06

WAKE COUNTY NORTH CAROLINA

EFFECTIVE: 01/31/08

STANDARD RISER-BARREL SEDIMENT BASIN | 07



NOTES:

1. THE TREE PROTECTION FENCING MUST REMAIN IN PLACE FOR THE DURATION OF THE PROJECT
2. SIGNS MUST BE PLACED AT 50' MAX. INTERVALS. ONE SIGN IS TO BE PLACED AT EACH END OF A LINEAR SECTION OF FENCE.
3. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
4. SIGNS ARE TO BE MADE OF DURABLE AND WEATHERPROOF MATERIAL WITH CLEARLY LEGIBLE LETTERS.
5. TREE PROTECTION FENCE IS TO BE REMOVED ONCE CONSTRUCTION IS COMPLETE.

8 TREE PROTECTION FENCE

NOT TO SCALE — P-RE-R-R230004-03

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

FOR CONSTRUCTION

PRELIMINARY DO NOT USE FOR CONSTRUCTION

NORTH CAROLINA 36528 ENGINEER JAKOB P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL DETAILS
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:

EROSION CONTROL DETAILS

SHEET NO.:

CE-502

North Carolina 811 811 It's the Law
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merrit Property (BRD)\dwg_Working Dwgs\Sheets\Construction Set\SR_CE 500-504 ESC DETAILS.dwg

2025-05-01

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual day rainfall information is available, record the cumulative rain measurement for those un-attended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDCs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This General Permit as well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

(a) Visible sediment deposition in a stream or wetland.

(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).

(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

(d) Anticipated bypasses and unanticipated bypasses.

(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• ***Within 24 hours,*** an oral or electronic notification. • ***Within 7 calendar days,*** a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	• ***Within 24 hours,*** an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• ***A report at least ten days before the date of the bypass, if possible.*** The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• ***Within 24 hours,*** an oral or electronic notification. • ***Within 7 calendar days,*** a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)]	• ***Within 24 hours,*** an oral or electronic notification. • ***Within 7 calendar days,*** a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis.

NORTH CAROLINA *Environmental Quality*

PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

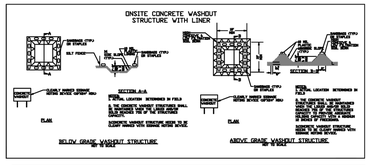
1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NORTH CAROLINA *Environmental Quality*

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

FOR CONSTRUCTION
PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION
JACOB P. KLEIN 36528 ENGINEER
FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL DETAILS
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:

EROSION CONTROL DETAILS

SHEET NO.:

CE-503

North Carolina 811 — It's the Law
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merritt Property (BRP)\dwg_Working Dwgs\Sheets\Construction Set\10_CE-500-504 ESC DETAILS.dwg

2025-05-01

Figure 1. Minimum Anchor Pattern

Maximum Design Conditions			Anchor Pattern
Shear Stress	Velocity	Wave Heigth	
<= 6 lbs/ft2	<= 14 ft/s	6 in.	F
> 6-8 lbs/ft2	> 14-18 ft/s	12 in.	G
> 8 lbs/ft2	> 18 ft/s	18 in.	H

Figure 2. Minimum Anchor Type

Soil Type	Anchor Type
Clay-Clay Loam	10 in Wire Staple
Silt Loam - Loam	10 in Wire Staple
Sandy Loam	12 in Wire Staple
Sand / Muck <= 6 in	12in Rebar Staple
Sand / Muck 6-12 in	18 in Rebar Staple
Sand / Muck 12-18 in	24 in Earth Anchor + 12 in Rebar Staple
Sand / Muck > 18 in	36 in Earth Anchor + 18 in Rebar Staple

Figure 3. Anchor Patterns for use with Wire/Rebar Staples

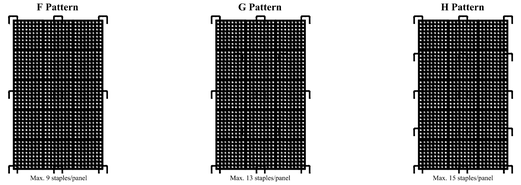
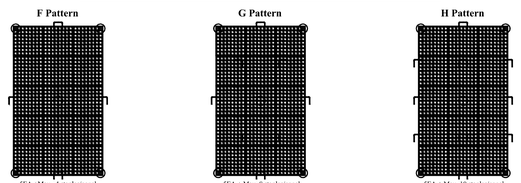


Figure 4. Anchor Patterns for use with Combination of Earth Anchors and Staples



NORTH AMERICAN GREEN
5401 St. Wendel - Cynthiana Rd. PH: 800-772-2040
Poseyville, IN 47633 www.nagreen.com

Disclaimer:
The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

Drawn on: 5-4-17

ShoreMax™

ANCHORING GUIDE

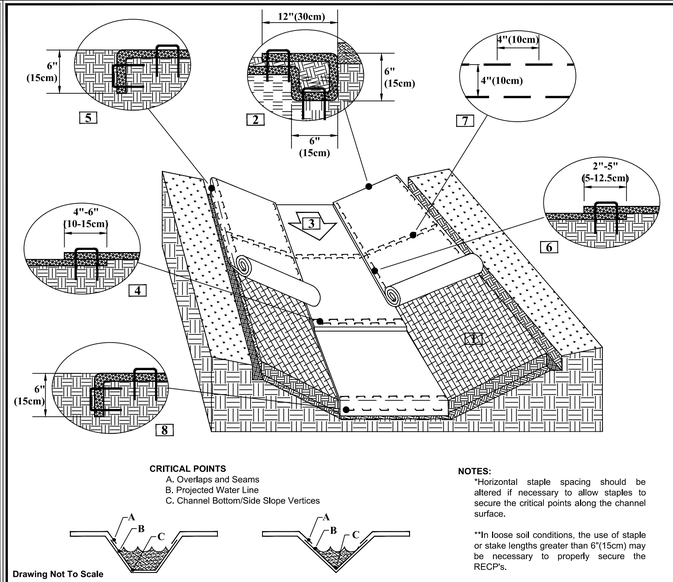
1. When installing ShoreMax mat, the anchor pattern (figure 3 or 4) should be selected based on the expected maximum design conditions (shear stress, velocity, or wave impact) (figure 1).
2. Anchor selection should be based on the soil type and pull-out strength required (figure 2). In soft, highly erodible soils percussion earth anchors may be necessary, Earth anchors can be installed in conjunction with rebar staples (figure 4).
3. When using percussion earth anchors, position anchors in each corner and the center of the panel. Place staples in the appropriate pattern through remainder of mat. Staples can be shared between two adjacent panels.

***Note:**
Number of staples used per panel can be reduced by 30-40% when sharing staples between panels.

▭ - Wire/Rebar Staple

⊕ - Percussion Earth Anchor

Drawing Not To Scale



CRITICAL POINTS
A. Overlaps and Seams
B. Projected Water Line
C. Channel Bottom/Side Slope Vertices

Drawing Not To Scale

NOTES:
*Horizontal staple spacing should be altered if necessary to allow staples to secure the critical points along the channel surface.

**In loose soil conditions, the use of staple or stake lengths greater than 6"(15cm) may be necessary to properly secure the RECP's.

NORTH AMERICAN GREEN
5401 St. Wendel - Cynthiana Rd. PH: 800-772-2040
Poseyville, IN 47633 www.nagreen.com

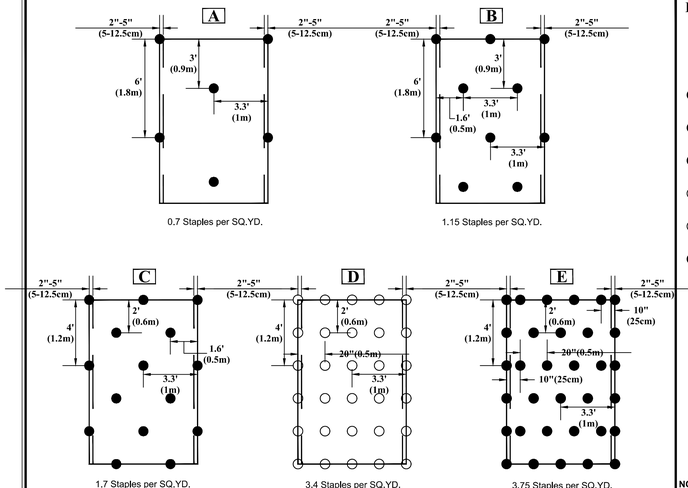
Disclaimer:
The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

Drawn on: 5-4-17

CHANNEL INSTALLATION DETAIL

1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the channel by anchoring the RECPs in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12"(30cm) of RECPs extended beyond the up-slope portion of the trench. Use ShoreMax mat at the channel/culvert outlet as supplemental scour protection as needed. Anchor the RECPs with a row of staples/stakes approximately 12"(30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12" apart across the width of the RECPs.
3. Roll center RECPs in direction of water flow in bottom of channel. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
4. Place consecutive RECPs end-over-end (Shingle style) with a 4"-6" overlap. Use a double row of staples staggered 4" apart and 4" on center to secure RECPs.
5. Full length edge of RECPs at top of side slopes must be anchored with a row of staples/stakes approximately 12"(30cm) apart in a 6"(15cm) deep X 6"(15cm) wide trench. Backfill and compact the trench after stapling.
6. Adjacent RECPs must be overlapped approximately 2"-5" (5-12.5cm) (Depending on RECPs type) and stapled.
7. In high flow channel applications a staple check slot is recommended at 30 to 40 foot (9 -12m) intervals. Use a double row of staples staggered 4"(10cm) apart and 4"(10cm) on center over entire width of the channel.
8. The terminal end of the RECPs must be anchored with a row of staples/stakes approximately 12" (30cm) apart in a 6"(15cm) deep X 6"(15cm) wide trench. Backfill and compact the trench after stapling.

STAPLE PATTERN GUIDE



- 4:1 Slopes (A)
- 3:1 Slopes (B)
- 2:1 Slopes (C)
- 1:1 & Steeper Slopes (D)
- Medium/High Flow Channel (D)
- High Flow Channel And Shoreline (E)

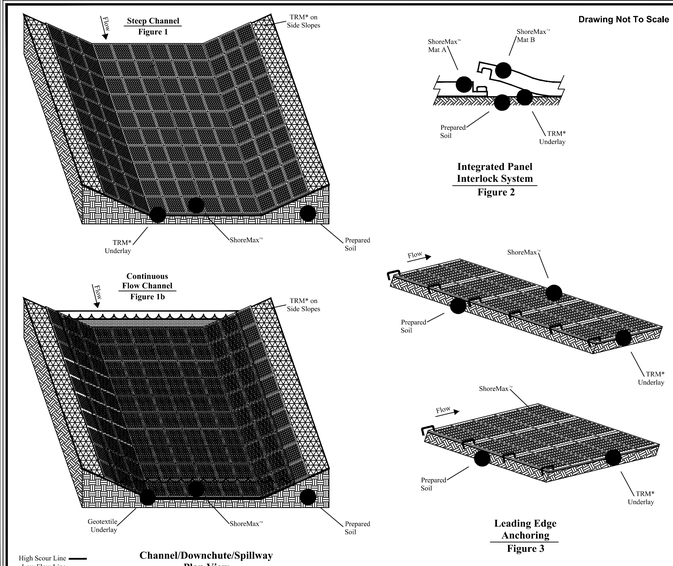
NOTES:
* Use ECMDS© for more accurate staple pattern selection.

NORTH AMERICAN GREEN
5401 St. Wendel - Cynthiana Rd. PH: 800-772-2040
Poseyville, IN 47633 www.nagreen.com

Disclaimer:
The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

Drawn on: 5-4-17

Drawing Not To Scale



Channel/Downchute/Spillway Plan View

NORTH AMERICAN GREEN
5401 St. Wendel - Cynthiana Rd. PH: 800-772-2040
Poseyville, IN 47633 www.nagreen.com

Disclaimer:
The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

Drawn on: 5-4-17

Drawing Not To Scale

ShoreMax™

STEEP CHANNEL/ CHUTE/SPILLWAY DETAIL

* ShoreMax mats can be installed over a variety of underlayments including: sod, turf reinforcement mats (TRMs), geotextiles, and in some cases erosion control blankets (ECBs).

1. Prepare soil before installing erosion control products, including any necessary application of lime, fertilizer, and seed (when installing TRM or ECB underlayment).
2. Install turf reinforcement mat (TRM) over prepared soils according to manufacturer's recommendations.
3. Place ShoreMax mat in the bottom of the channel over the installed TRM (figure 1). The ShoreMax mat should be installed up to the appropriate elevation on the side slope as determined by the engineer. When using multiple panels, connect the panels using the Integrated Panel Interlock System (figure 2). ShoreMax mat can be laid in either direction.
4. For channels carrying continuous water flows, an appropriate geotextile should be placed under the ShoreMax mat for submerged applications (figure 1b).
5. Place staples/anchors in the appropriate pattern. Perimeter staples can be shared between two adjacent panels. In soft or highly erodible soils, percussion earth anchors may be required. View ShoreMax Anchoring Guide, for additional details.
6. At beginning of channel and areas where significant concentrated flows are directed onto the ShoreMax mat, place 1 staple/pin per linear foot along the leading edge of the ShoreMax system, resulting in 1 staple/pin on each corner and gridline (figure 3).

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450 919-469-1101
Raleigh, NC 27607

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3861 CERTIFICATE OF AUTHORIZATION

FOR CONSTRUCTION

PRELIMINARY NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 36528 DO NOT USE FOR CONSTRUCTION JAYCE P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
EROSION CONTROL DETAILS
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

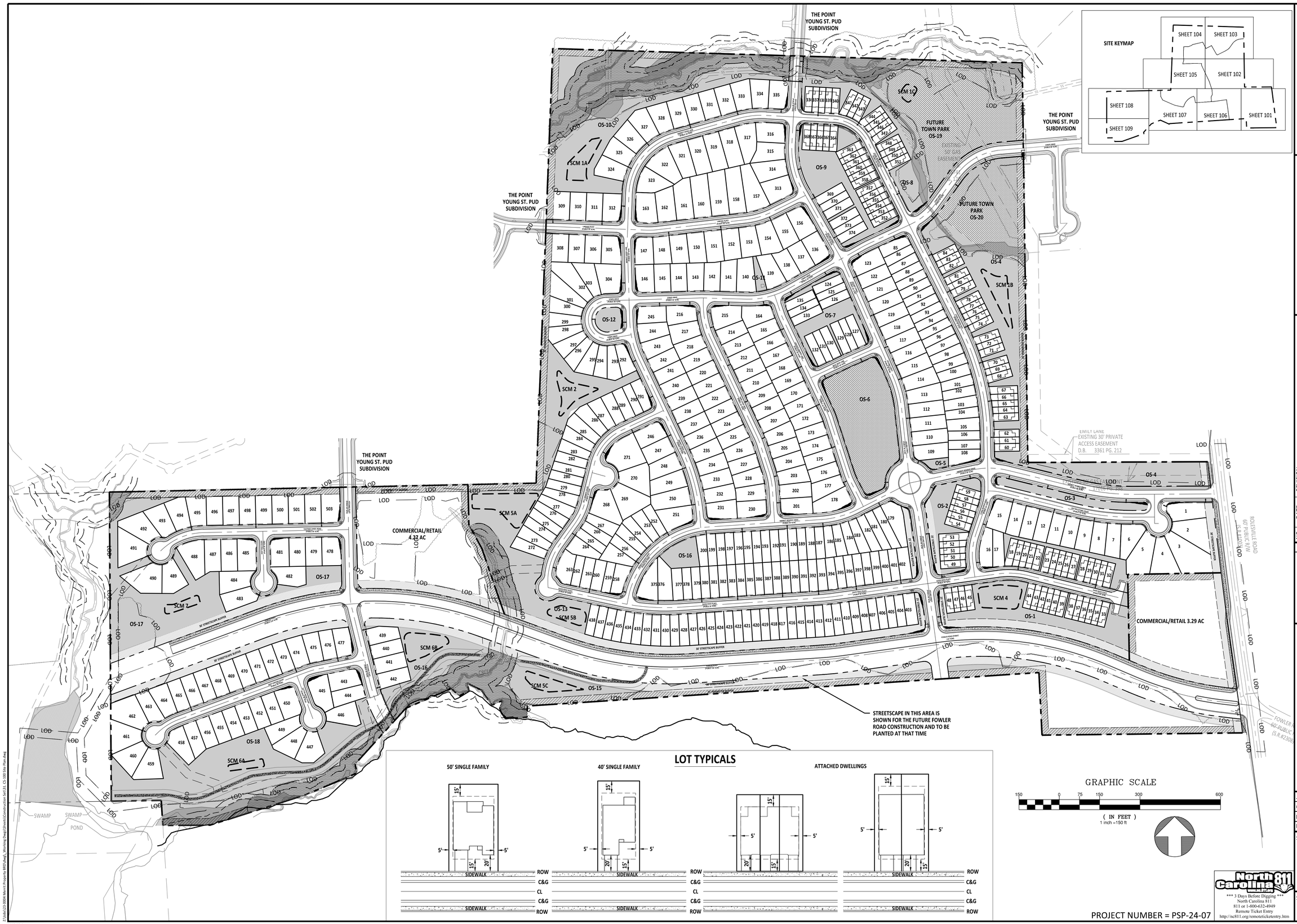
SHEET TITLE:
EROSION CONTROL DETAILS

SHEET NO.:
CE-504

North Carolina 811 one call center
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23.0004 Merrit Property BRD\Dwg_Working Dwgs\Sheets\Construction Set\30. CE 500-504 ESC DETAILS.dwg

2025-05-01



SITE KEYMAP

LOT TYPICALS

GRAPHIC SCALE

150 0 75 150 300 600

(IN FEET)
1 inch =150 ft

PROJECT NUMBER = PSP-24-07

North 811 Carolina
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA ENGINEERING CERTIFICATE OF AUTHORIZATION
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST
C-3881

PRELIMINARY
NORTH CAROLINA
REGISTERED
16528
ENGINEER
JAKOB P. KLEIN
DO NOT USE FOR CONSTRUCTION
FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE

SITE PLAN OVERALL

ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:

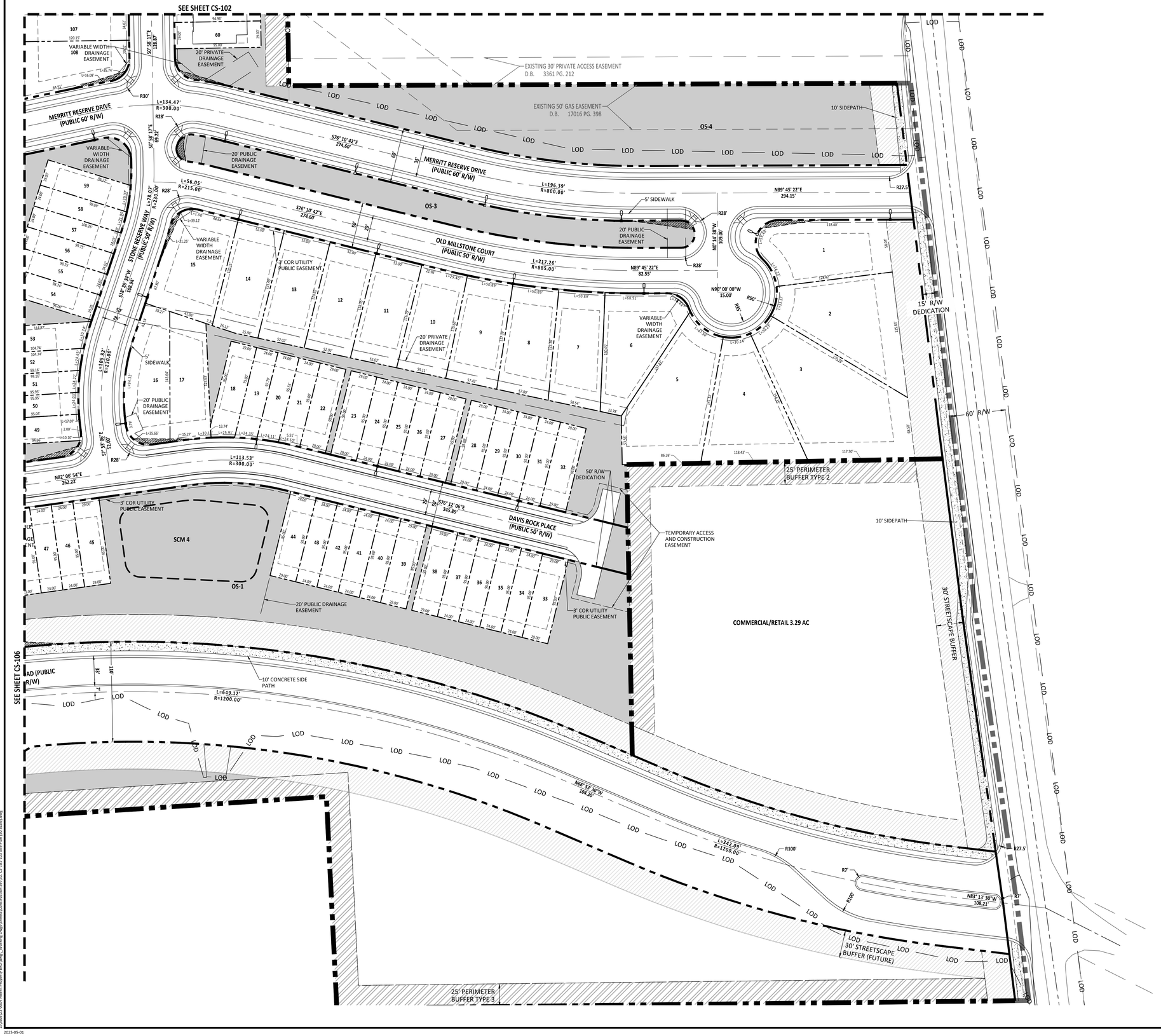
SITE PLAN OVERALL

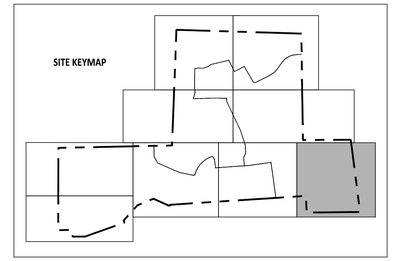
SHEET NO.:

CS-100

Z:\Jobs\23-0004 Merritt Property 885\Revit_ Working Dwgs\Sheets\Construction Set\31. CS-100 Site Plan.dwg

2025-05-01





SITE PLAN LEGEND	
PROPOSED LOT LINES	
RIGHT OF WAY	
CENTERLINE	
CURB AND GUTTER	
10 X 70 SIGHT TRIANGLE	
SCM LOCATIONS	
SETBACKS	
PASSIVE OPEN SPACE PROVIDED: 28.07 ACRES TOTAL REQUIRED: 10.45 ACRES	
ACTIVE OPEN SPACE PROVIDED: 7.31 ACRES TOTAL REQUIRED: 10.45 ACRES	
30' STREETSCAPE BUFFER	
PERIMETER BUFFER	
NEUSE RIVER BUFFER	
EXISTING WETLAND	

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

PROJECT NUMBER = PSP-24-07

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY
PRELIMINARY
NOT FOR CONSTRUCTION
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 36528 JACOB P. KLEIN
FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE
SITE PLAN
ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:
SITE PLAN

SHEET NO.:
CS-101

North Carolina 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merritt Property BBP\Revit_Working Dwgs\Sheets\Construction Set\12. CS-101-103 Site Plan 150 Scale1.dwg
2025-05-01

SEE SHEET CU-104

SEE SHEET CU-103

SEE SHEET CU-105

SEE SHEET CU-106

SEE SHEET CU-101

OS-11

OS-7

OS-6

OS-5

OS-4

OS-3

OS-2

SCM 1B

STRIPS DRIVE (PUBLIC 50' R/W)

JOCUND STREET (PUBLIC 50' R/W)

CRACKED GRANITE LANE (PUBLIC 50' R/W)

BENT IRON LANE (PUBLIC 50' R/W)

STONE RESERVE WAY (PUBLIC 50' R/W)

MERRITT RESERVE DRIVE (PUBLIC 60' R/W)

OLD MILLSTONE COURT (PUBLIC 50' R/W)

SIDEWALK

VARIABLE WIDTH DRAINAGE EASEMENT

20' PRIVATE DRAINAGE EASEMENT

20' PUBLIC DRAINAGE EASEMENT

25' PERIMETER BUFFER TYPE 3

EXISTING 30' PRIVATE ACCESS EASEMENT
D.B. 3361 PG. 212

EXISTING 50' GAS EASEMENT
D.B. 17016 PG. 398

LOD

N/F
OPTIMAL DEVELOPMENT, LLC
D.B. 18224 PAGE 1209
B.M. 1985 PAGE 1807
PIN# 1768.03-33-7689
LAND USE: VACANT
ZONING: RL

SITE KEYMAP

SITE PLAN LEGEND	
PROPOSED LOT LINES	
RIGHT OF WAY	
CENTERLINE	
CURB AND GUTTER	
10 X 70 SIGHT TRIANGLE	
SCM LOCATIONS	
SETBACKS	
PASSIVE OPEN SPACE PROVIDED: 28.07 ACRES TOTAL REQUIRED: 10.45 ACRES	
ACTIVE OPEN SPACE PROVIDED: 7.31 ACRES TOTAL REQUIRED: 10.45 ACRES	
30' STREETSCAPE BUFFER	
PERIMETER BUFFER	
NEUSE RIVER BUFFER	
EXISTING WETLAND	

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA AMERICAN ENGINEERING ASSOCIATES SOUTHEAST C-3881 CERTIFICATE OF AUTHORIZATION

PRELIMINARY

PRELIMINARY
NOT FOR RECORDATION
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 36528 JAKOB P. KLEIN

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE

SITE PLAN

ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:

SITE PLAN

SHEET NO.:

CS-102

PROJECT NUMBER = PSP-24-07

North Carolina 811 Know what's below. Call before you dig.
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merrit Property (BRD\Dwg_Working Dwgs\Sheets\Construction Set\12. CS-102-103 Site Plan (SD Scale).dwg

2025-05-01

N/F
BROOKFIELD HOLDINGS(THE POINTE), LLC
D.B. 18774 PAGE 748
B.M. 2021 PAGE 1745
PIN# 1768.10-25-46.98
LAND USE: ACRES GREATER THAN 10 WITH HOUSE
ZONING: R&PUD

TEMPORARY CONSTRUCTION EASEMENT

MATCH 11' EXISTING LANES AND REMOVE HAMMERHEAD

JOCUND STREET (PUBLIC 50' R/W)

VARIABLE WIDTH DRAINAGE EASEMENT

20' PRIVATE DRAINAGE EASEMENT

OS-9

STONE RESERVE WAY (PUBLIC 60' R/W)

OS-8

EXISTING WETLAND (TYP)

SCM 4C

FUTURE TOWN PARK OS-19

EXISTING 50' GAS EASEMENT
B.B. 16741 PG 120

25' PERIMETER BUFFER TYPE 1L

STRIPS DRIVE (PUBLIC 60' R/W)

FUTURE TOWN PARK OS-20

3' COR UTILITY PUBLIC EASEMENT

OS-4

SCM 1B

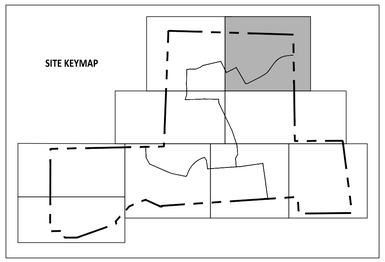
5' SIDEWALK

N/F
ASHTON RALEIGH RESIDENTIAL, LLC
D.B. 17720 PAGE 1663
B.M. 2021 PAGE 1745
PIN# 1768.03-34-7557
LAND USE: VACANT
ZONING: R&PUD

SEE SHEET CS-104

SEE SHEET CS-102

SITE KEYMAP



SITE PLAN LEGEND	
PROPOSED LOT LINES	
RIGHT OF WAY	
CENTERLINE	
CURB AND GUTTER	
10 X 70 SIGHT TRIANGLE	
SCM LOCATIONS	
SETBACKS	
PASSIVE OPEN SPACE PROVIDED: 28.07 ACRES TOTAL REQUIRED: 10.45 ACRES	
ACTIVE OPEN SPACE PROVIDED: 7.31 ACRES TOTAL REQUIRED: 10.45 ACRES	
30' STREETSCAPE BUFFER	
PERIMETER BUFFER	
NEUSE RIVER BUFFER	
EXISTING WETLAND	

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft

PROJECT NUMBER = PSP-24-07

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
4020 Westchase Boulevard, Suite 450
Raleigh, NC 27607
919-469-1101

NORTH CAROLINA
AMERICAN ENGINEERING ASSOCIATES SOUTHEAST
C-3881
CERTIFICATE OF AUTHORIZATION

PRELIMINARY

PRELIMINARY
NOT FOR RECORDATION
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA
REGISTERED
36528
ENGINEER
JAKOB P. KLEM

FOR INFORMATION, ONLY

NO.	DATE	REVISION:

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

MERRITT RESERVE

SITE PLAN (50 SCALE)

ROLESVILLE RD
WAKE COUNTY NC 27312

JOB NUMBER:	23-0004
CHECKED BY:	BH
DRAWN BY:	DH/RC/SM/GE/MA/LL/JB
DATE:	05/01/2025

SHEET TITLE:

SITE PLAN (50 SCALE)

SHEET NO.:

CS-103

North Carolina 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

Z:\Jobs\23-0004 Merritt Property (BRD)\dwg_Working Dwgs\Sheets\Construction Set\CS - CS-101-103 Site Plan (50 Scale).dwg
2025-05-01