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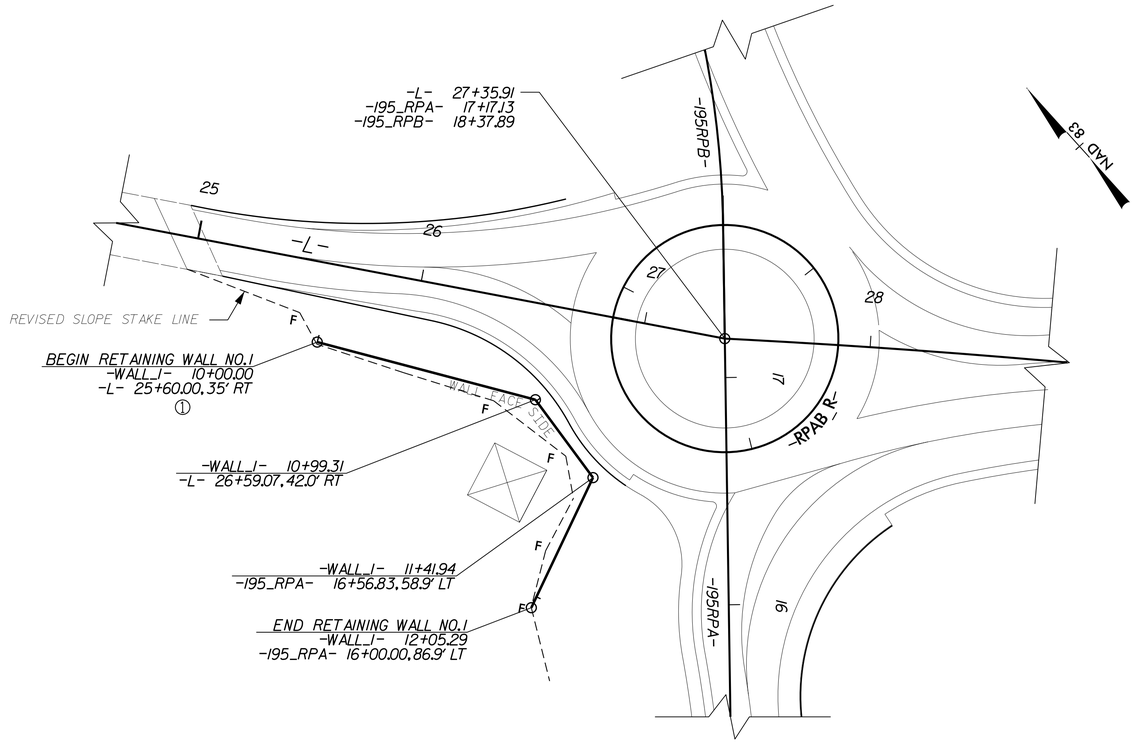
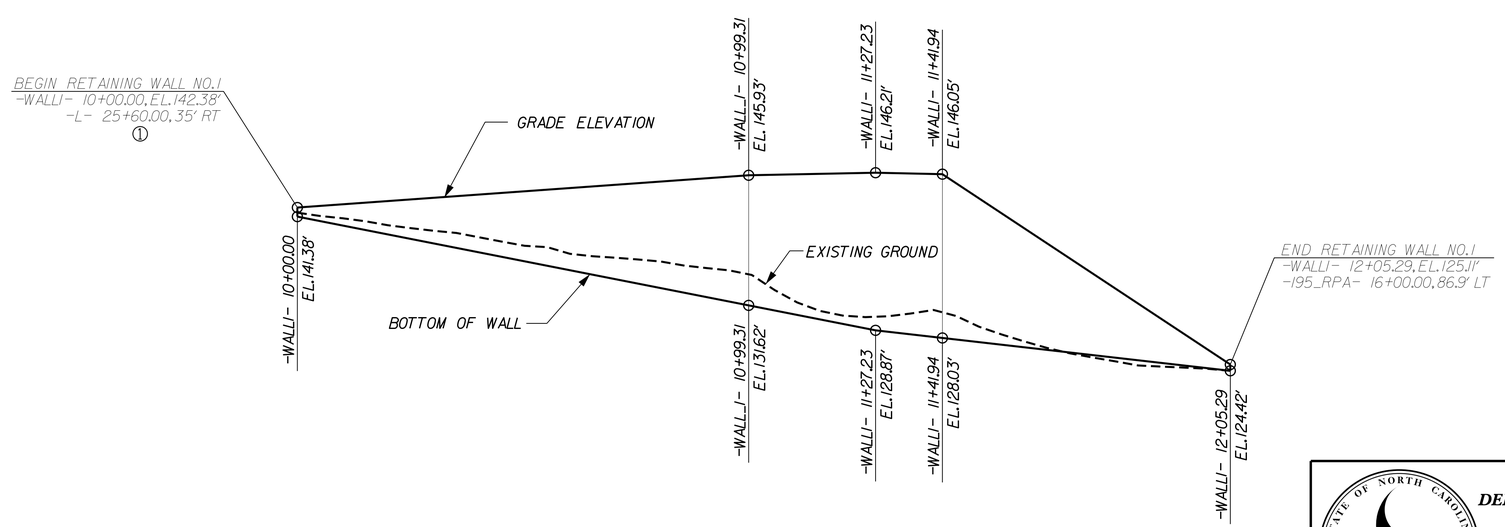
GEOTECHNICAL ENGINEER	ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 032171 ENGINEER JINYOUNG PARK DocuSigned by: A71E0B0C41B4A0... SIGNATURE 10/24/2018 DATE	SIGNATURE DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



PLAN VIEW FOR RETAINING WALL NO.1

ESTIMATED MSE RETAINING WALL QUANTITY	
MSE RETAINING WALL NO.1	2,670 SF



WALL ENVELOPE FOR RETAINING WALL NO.1

EXPOSED WALL FACE VIEW, N.T.S.

PROJECT NO.: 34472.1.4 (R-2582A)

NORTHAMPTON COUNTY

STATION: -L- 26+00.00

SHEET 1 OF 4

PREPARED BY: J. PARK	DATE: 10 / 2018
REVIEWED BY: J. BATTS	DATE: 10 / 2018

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

MSE RETAINING WALL NO. 1
PLAN VIEW AND
WALL ENVELOPE

REVISIONS

NO.	BY	DATE	NO.	BY	DATE
1	J. PARK	10/24/18	3		
2			4		

SHEET NO. W-1

GEOTECHNICAL ENGINEER	ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 032171 ENGINEER JINYOUNG PARK DocuSigned by: A71E0B6C-1B0B4F... SIGNATURE 5/20/2019 DATE	SIGNATURE DATE

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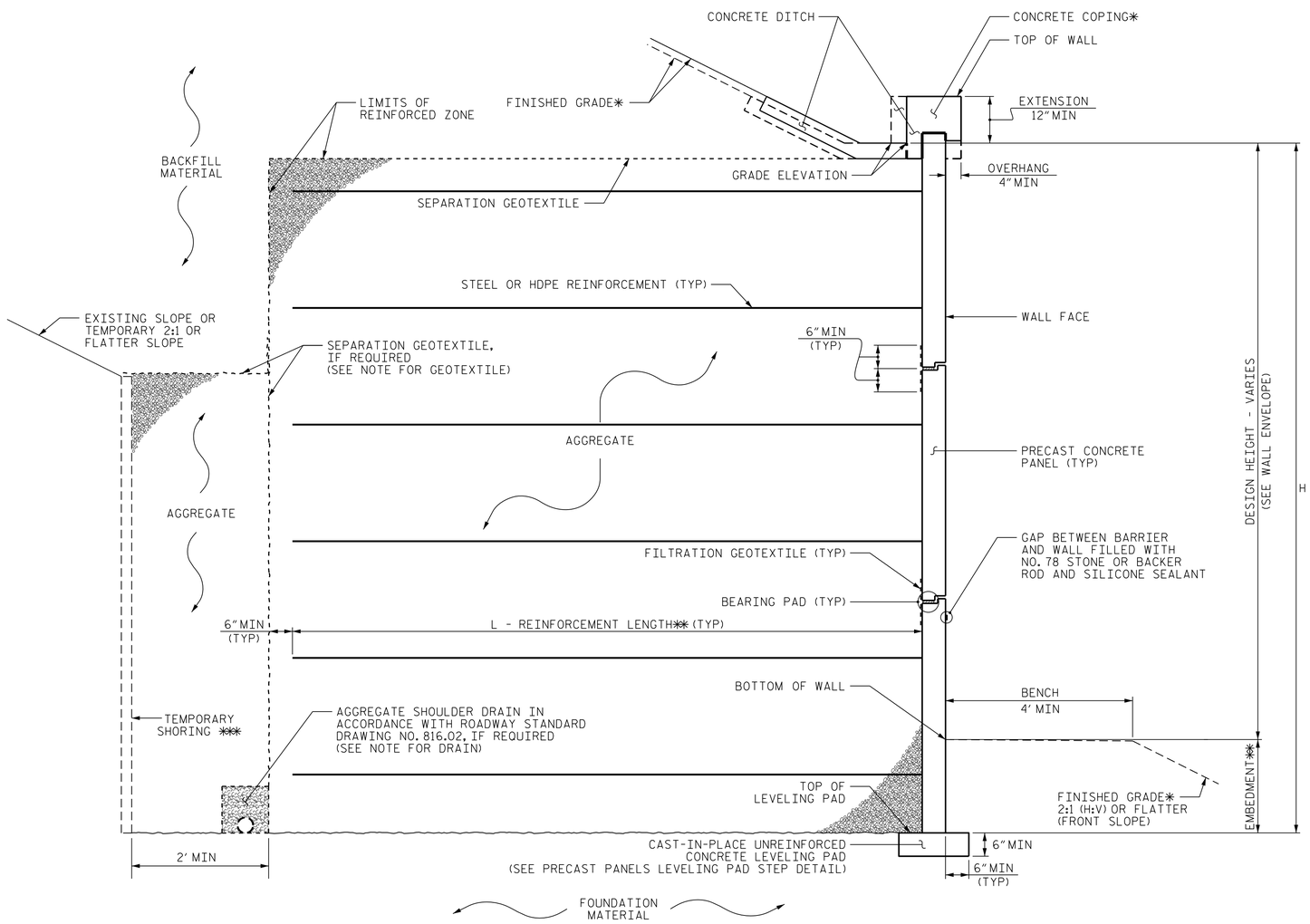
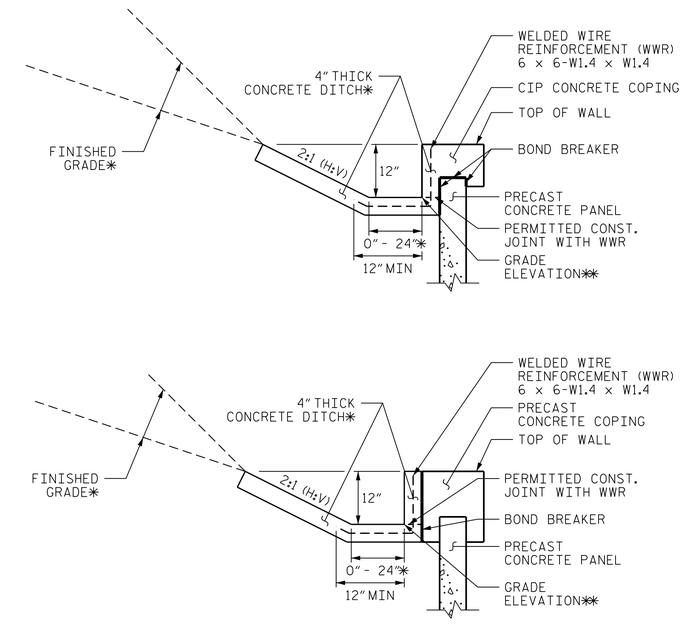


MSE WALL WITH PRECAST PANELS - TYPICAL SECTION

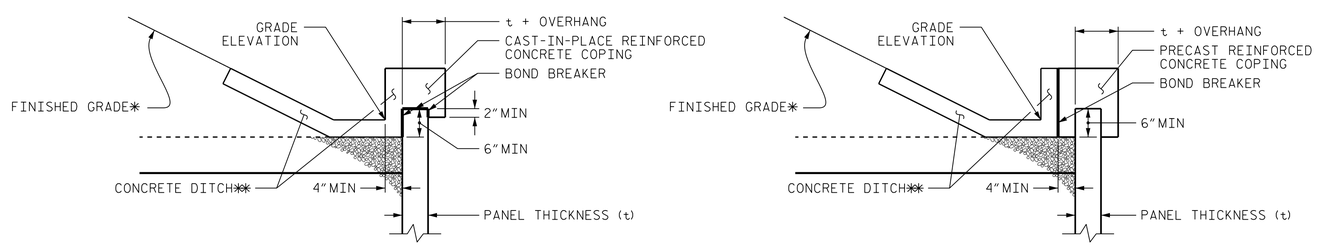
✱ SEE COPING DETAILS AND PLANS FOR FINISHED GRADE OR SLOPE DETAILS.
✱✱ SEE MSE RETAINING WALLS PROVISION AND IF APPLICABLE, MSE WALL NOTES FOR EMBEDMENT AND REINFORCEMENT LENGTH REQUIREMENTS.
✱✱✱ SEE TRAFFIC MANAGEMENT PLANS FOR TEMPORARY SHORING.



① CONCRETE DITCH BEHIND WALL WITH CONCRETE COPING

✱SEE ROADWAY PLANS FOR CONCRETE DITCH AND FINISHED GRADE DETAILS.
✱✱SEE WALL ENVELOPE FOR GRADE ELEVATIONS.

FOR CONCRETE DITCHES, SEE SECTION 850 OF THE STANDARD SPECIFICATIONS.



COPING DETAILS

✱SEE PLANS FOR FINISHED GRADE OR SLOPE DETAILS.
✱✱SEE CONCRETE DITCH BEHIND WALL DETAILS.

PROJECT NO.: 34472.1.4 (R-2582A)
NORTHAMPTON COUNTY
STATION: -L- 26+00.00
SHEET 2 OF 4

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

MSE RETAINING WALL NO. 1 TYPICAL SECTION AND COPING DETAILS WITH PRECAST PANELS

REVISIONS						
NO.	BY	DATE	NO.	BY	DATE	SHEET NO.
1	J. PARK	5/17/19	3			W-2
2			4			

PREPARED BY: J. PARK	DATE: 10 / 2018
REVIEWED BY: J. BATTS	DATE: 10 / 2018

GEOTECHNICAL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 032171 ENGINEER JINYOUNG PARK

DocuSigned by: 5/20/2019

ATTORNEY SIGNATURE DATE

ENGINEER

SIGNATURE DATE

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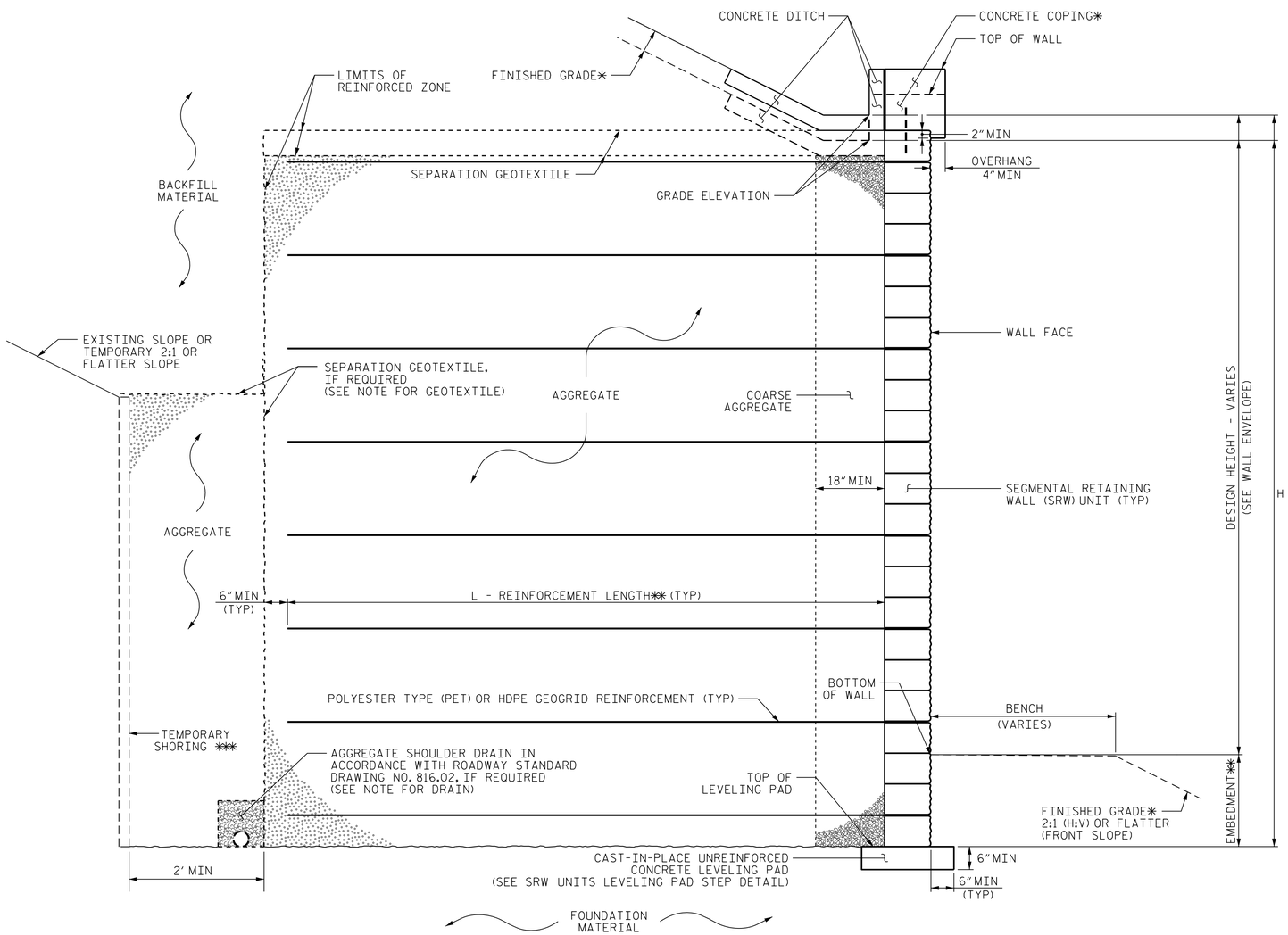
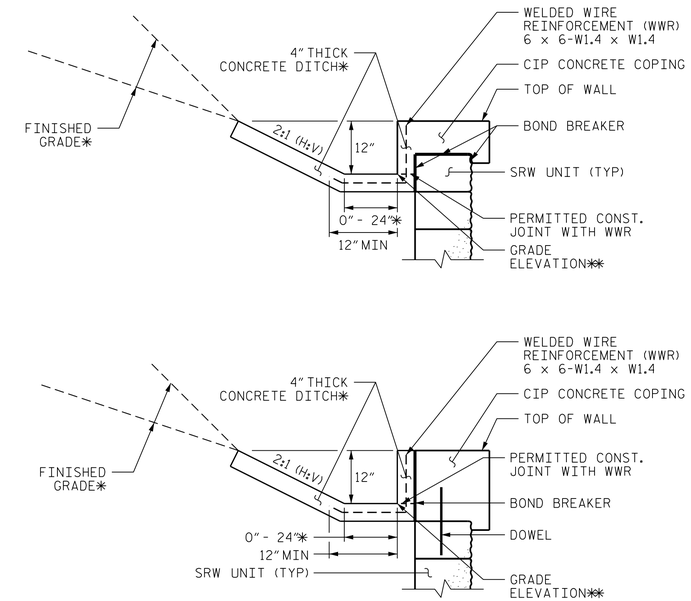


MSE WALL WITH SRW UNITS - TYPICAL SECTION

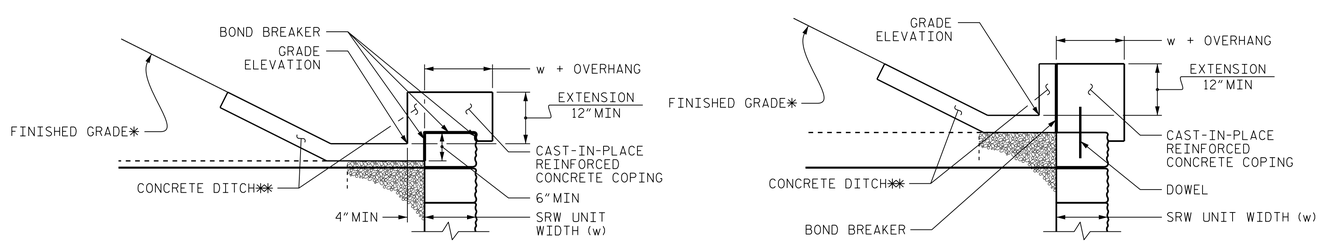
✱ SEE COPING DETAILS AND PLANS FOR FINISHED GRADE OR SLOPE DETAILS.
✱✱ SEE MSE RETAINING WALLS PROVISION AND IF APPLICABLE, MSE WALL NOTES FOR EMBEDMENT AND REINFORCEMENT LENGTH REQUIREMENTS.
✱✱✱ SEE TRAFFIC MANAGEMENT PLANS FOR TEMPORARY SHORING.



① CONCRETE DITCH BEHIND WALL WITH CONCRETE COPING

✱SEE ROADWAY PLANS FOR CONCRETE DITCH AND FINISHED GRADE DETAILS.
✱✱SEE WALL ENVELOPE FOR GRADE ELEVATIONS.

FOR CONCRETE DITCHES, SEE SECTION 850 OF THE STANDARD SPECIFICATIONS.



COPING DETAILS

AT THE CONTRACTOR'S OPTION, CONNECT COPING TO SRW UNITS WITH DOWELS OR EXTEND COPING DOWN BACK OF SRW UNITS.
✱SEE PLANS FOR FINISHED GRADE OR SLOPE DETAILS.
✱✱SEE CONCRETE DITCH BEHIND WALL DETAILS.

PROJECT NO.: 34472.1.4 (R-2582A)

NORTHAMPTON COUNTY

STATION: -L- 26+00.00

SHEET 3 OF 4

PREPARED BY: J. PARK	DATE: 10 / 2018
REVIEWED BY: J. BATTS	DATE: 10 / 2018

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

MSE RETAINING WALL NO. 1 TYPICAL SECTION AND COPING DETAILS WITH SRW UNITS

REVISIONS

NO.	BY	DATE	NO.	BY	DATE
1	J. PARK	5/17/19	3		
2			4		

SHEET NO. W-3

GEOTECHNICAL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 032171 ENGINEER JINYOUNG PARK

DocuSigned by: A71D8BC4A0A4A0... SIGNATURE 10/22/2018 DATE

ENGINEER

SIGNATURE DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NOTES:

FOR MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALLS, SEE MECHANICALLY STABILIZED EARTH RETAINING WALLS PROVISION.

AT THE CONTRACTOR'S OPTION, USE AN MSE WALL SYSTEM WITH SEGMENTAL RETAINING WALL (SRW) UNITS THAT MEET ARTICLE 1040-4 OF THE STANDARD SPECIFICATIONS FOR RETAINING WALL NO. 1.

AT THE CONTRACTOR'S OPTION, USE FINE AGGREGATE IN THE REINFORCED ZONE OF RETAINING WALL NO. 1.

A SEPARATION GEOTEXTILE IS REQUIRED AT THE BACK OF THE REINFORCED ZONE FOR RETAINING WALL NO. 1.

A DRAIN IS REQUIRED FOR RETAINING WALL NO. 1.

BEFORE BEGINNING MSE WALL DESIGN FOR RETAINING WALL NO. 1, SURVEY WALL LOCATION AND SUBMIT REVISED WALL PROFILE VIEW (WALL ENVELOPE) FOR REVIEW. DO NOT START WALL DESIGN OR CONSTRUCTION UNTIL THE REVISED WALL ENVELOPE IS ACCEPTED.

DESIGN RETAINING WALL NO. 1 FOR THE FOLLOWING:
1) H = DESIGN HEIGHT + EMBEDMENT
2) DESIGN LIFE = 75 YEARS
3) MAXIMUM FACTORED VERTICAL PRESSURE ON FOUNDATION MATERIAL = 4,400 LB/SF
4) MINIMUM REINFORCEMENT LENGTH (L) = 1.0H OR 6 FT, WHICHEVER IS GREATER
5) REINFORCED ZONE AGGREGATE PARAMETERS:

AGGREGATE TYPE*	UNIT WEIGHT (γ) LB/CF	FRICTION ANGLE (ϕ) DEGREES	COHESION (c) LB/SF
COARSE	110	38	0
FINE	115	34	0
* SEE MSE RETAINING WALLS PROVISION FOR COARSE AND FINE AGGREGATE MATERIAL REQUIREMENTS.			

7) IN-SITU ASSUMED MATERIAL PARAMETERS:

MATERIAL TYPE	UNIT WEIGHT (γ) LB/CF	FRICTION ANGLE (ϕ) DEGREES	COHESION (c) LB/SF
BACKFILL	120	30	0
FOUNDATION	115	29	0

DESIGN RETAINING WALL NO. 1 FOR A LIVE LOAD (TRAFFIC) SURCHARGE.

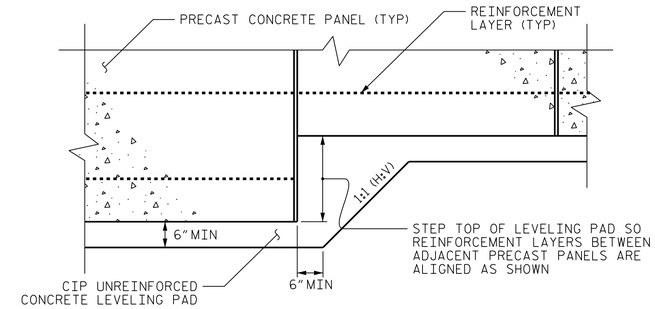
EXISTING OR FUTURE OBSTRUCTIONS SUCH AS FOUNDATIONS, GUARDRAIL, FENCE OR HANDRAIL POSTS, PAVEMENTS, PIPES, INLETS OR UTILITIES MAY INTERFERE WITH REINFORCEMENT FOR RETAINING WALL NO. 1.

DO NOT PLACE LEVELING PAD CONCRETE, AGGREGATE OR REINFORCEMENT FOR RETAINING WALL NO. 1 UNTIL EXCAVATION DIMENSIONS AND FOUNDATION MATERIAL ARE APPROVED.

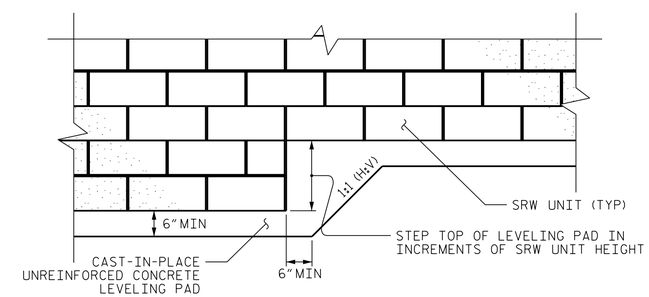
"TEMPORARY SHORING" IS REQUIRED FOR RETAINING WALL NO. 1 IN ACCORDANCE WITH THE TEMPORARY SHORING PROVISION. SEE TRAFFIC_CONTROL PLANS.

AT THE CONTRACTOR'S OPTION, "TEMPORARY SHORING FOR WALL CONSTRUCTION" MAY BE USED TO CONSTRUCT RETAINING WALL NO. 1. SEE MSE RETAINING WALLS PROVISION FOR TEMPORARY SHORING FOR WALL CONSTRUCTION.

FILL THE SPACE BETWEEN TEMPORARY SHORING AND THE BACK OF REINFORCED ZONE WITH THE SAME AGGREGATE USED IN REINFORCED ZONE. NO SEPARATE PAYMENT WILL BE MADE FOR THE AGGREGATE FOR THIS FILL. THE AGGREGATE FOR THIS FILL WILL BE INCIDENTAL TO THE CONTRACT UNIT PRICE FOR MSE RETAINING WALL NO. 1.



PRECAST PANELS LEVELING PAD STEP DETAIL



SRW UNITS LEVELING PAD STEP DETAIL

PROJECT NO.: 34472.1.4 (R-2582A)

NORTHAMPTON COUNTY

STATION: -L- 26+00.00

SHEET 4 OF 4

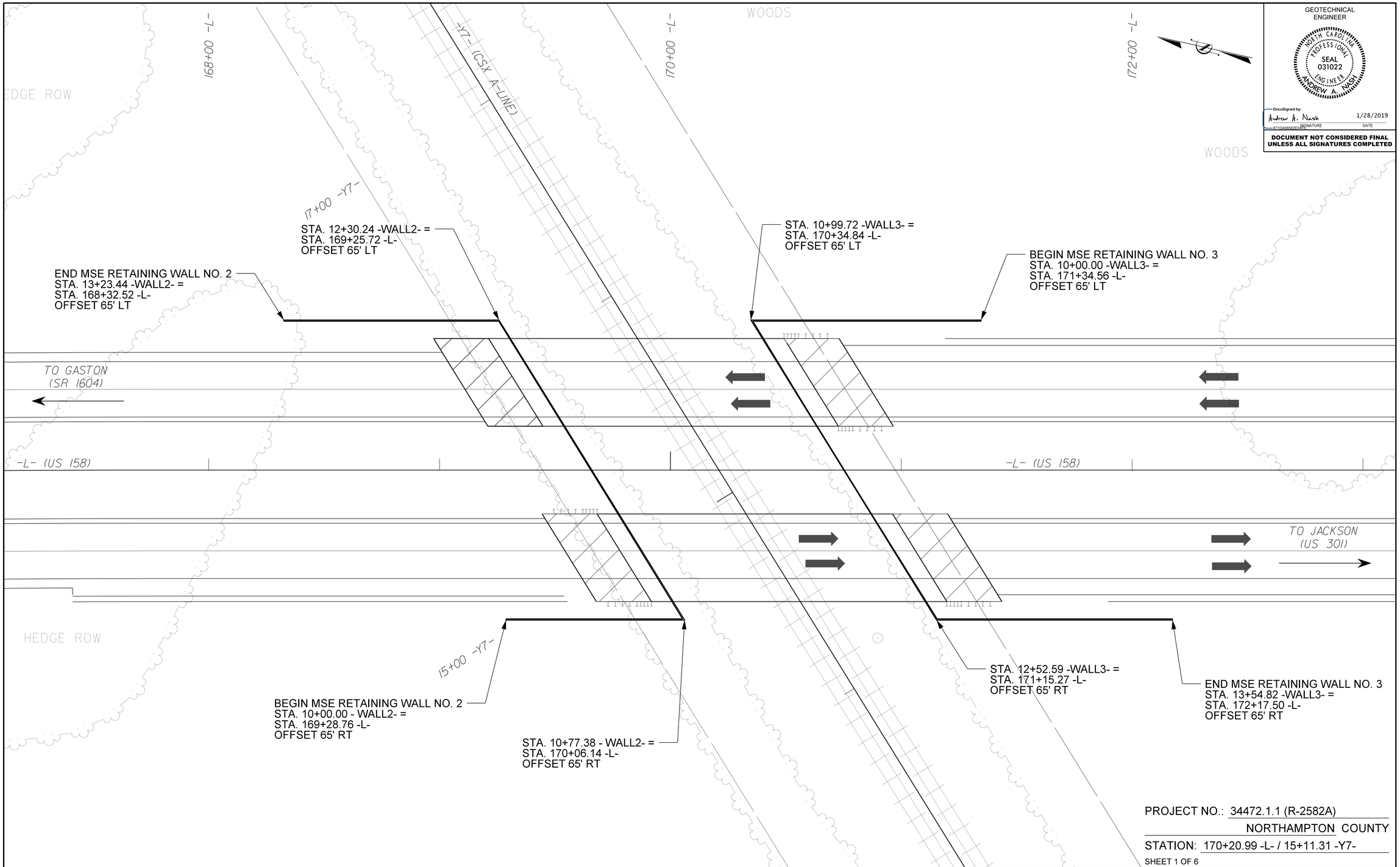
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

MSE RETAINING WALL NO. 1 NOTES AND LEVELING PAD STEP DETAILS

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1	-	-	3	-	-	W-4
2	-	-	4	-	-	

PREPARED BY: J. PARK	DATE: 10 / 2018
REVIEWED BY: J. BATTS	DATE: 10 / 2018



GEOTECHNICAL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 031022 ENGINEER ANDREW A. NASH

DocuSigned by: Andrew A. Nash 1/28/2019
871DA6858260480... SIGNATURE DATE

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PROJECT NO.: 34472.1.1 (R-2582A)

NORTHAMPTON COUNTY

STATION: 170+20.99 -L- / 15+11.31 -Y7-

SHEET 1 OF 6

Prepared in the Office of:

Terracon
Consulting Engineers and Scientists
2401 BRENTWOOD ROAD, SUITE 107
RALEIGH, NORTH CAROLINA 27604
NC REGISTERED ENGINEERING FIRM: F-0869
NC REGISTERED GEOLOGIC FIRM: C-367

SITE 1 RETAINING WALL PLAN MSE RETAINING WALLS NO. 2 AND NO. 3

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1			3			W-5
2			4			

PREPARED BY: FIELDS, W. D.	DATE: 12/3/18
REVIEWED BY: NASH, A. A.	DATE: 12/3/18

GEOTECHNICAL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 031022 ENGINEER ANDREW A. NASH

DocuSigned by: Andrew A. Nash — 671DA6858260AF... SIGNATURE — 1/28/2019 DATE

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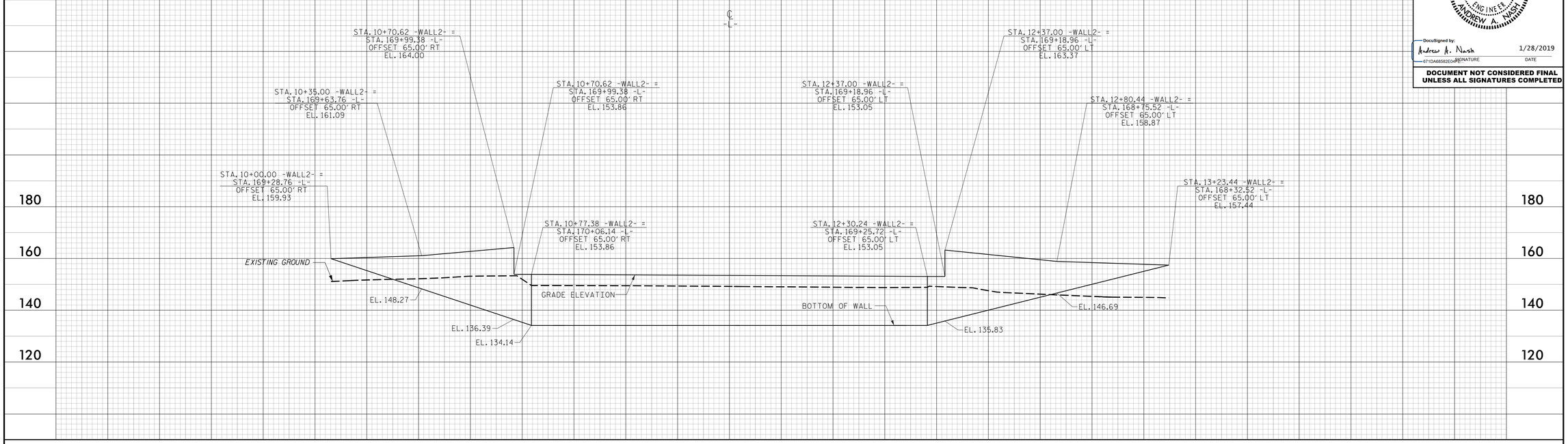
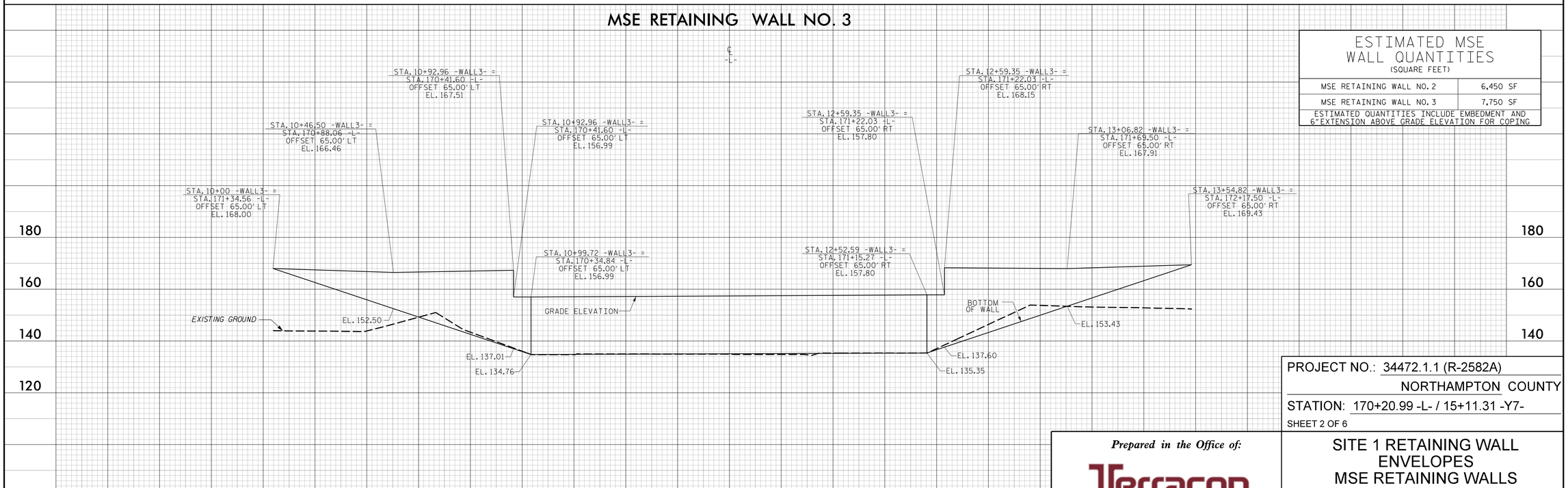
MSE RETAINING WALL NO. 2



MSE RETAINING WALL NO. 3



ESTIMATED MSE WALL QUANTITIES
(SQUARE FEET)

MSE RETAINING WALL NO. 2	6,450 SF
MSE RETAINING WALL NO. 3	7,750 SF

ESTIMATED QUANTITIES INCLUDE EMBEDMENT AND 6"EXTENSION ABOVE GRADE ELEVATION FOR COPING

PROJECT NO.: 34472.1.1 (R-2582A)

NORTHAMPTON COUNTY

STATION: 170+20.99 -L- / 15+11.31 -Y7-

SHEET 2 OF 6

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Consulting Engineers and Scientists
2401 BRENTWOOD ROAD, SUITE 107
RALEIGH, NORTH CAROLINA 27604
NC REGISTERED ENGINEERING FIRM: F-0869
NC REGISTERED GEOLOGIC FIRM: C-367

SITE 1 RETAINING WALL ENVELOPES MSE RETAINING WALLS NO. 2 AND NO. 3

REVISIONS

NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		

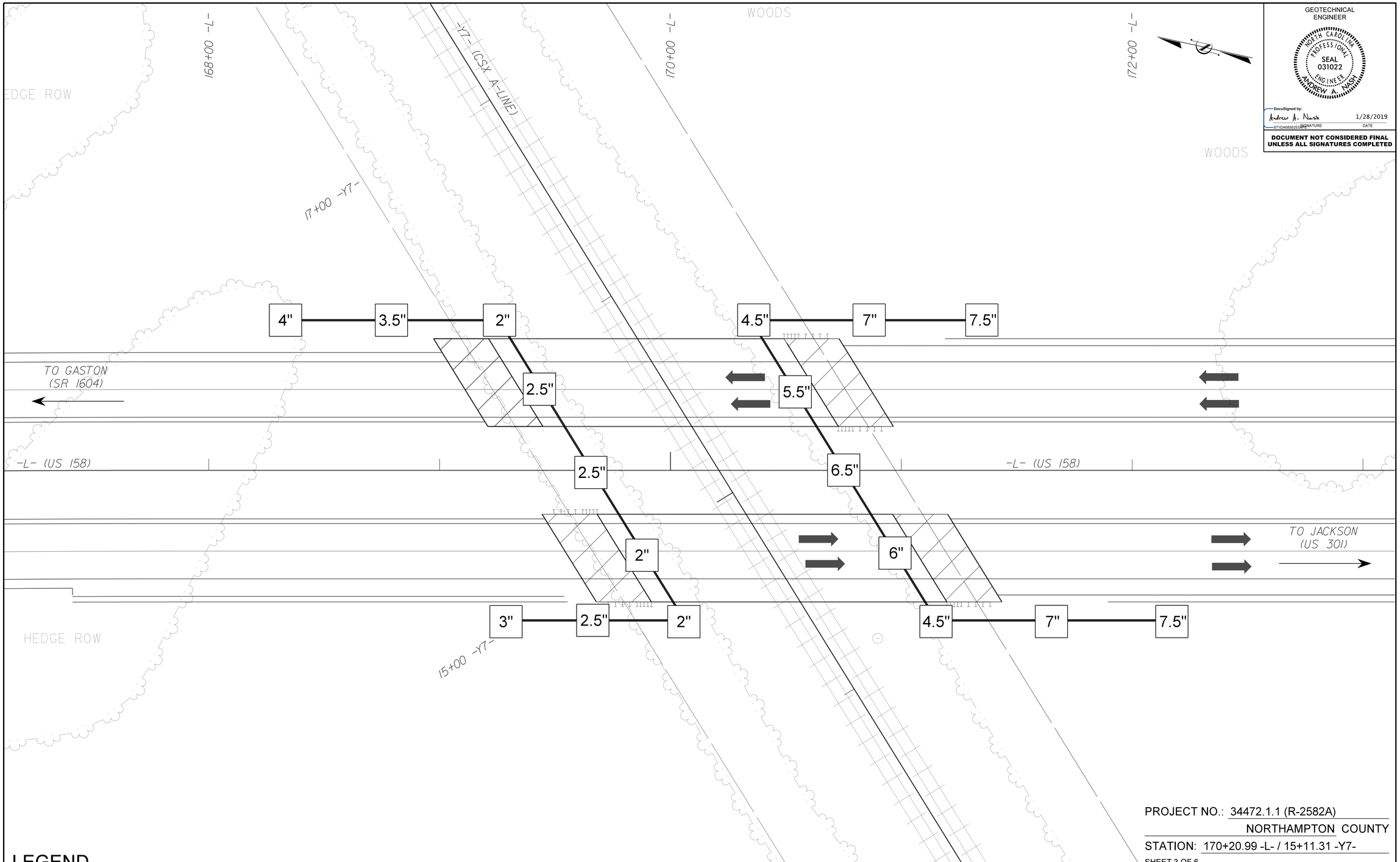
SHEET NO. W-6

PREPARED BY: FIELDS, W. D.	DATE: 12/3/18
REVIEWED BY: NASH, A. A.	DATE: 12/3/18

ENVELOPE HORIZONTAL / VERTICAL SCALE

0 40 80

FEET



GEOTECHNICAL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 031022 ENGINEER ANDREW A. NASH

DocuSigned by: Andrew A. Nash 1/28/2019
871DA685820B4... SIGNATURE DATE

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PROJECT NO.: 34472.1.1 (R-2582A)

NORTHAMPTON COUNTY

STATION: 170+20.99 -L- / 15+11.31 -Y7-

SHEET 3 OF 6

LEGEND

X"	ESTIMATED TOTAL SETTLEMENT AT MSE RETAINING WALL

0 40 80
FEET

PREPARED BY: ALEXANDER, M. J.	DATE: 12/4/18
REVIEWED BY: NASH, A. A.	DATE: 12/4/18

Prepared in the Office of:

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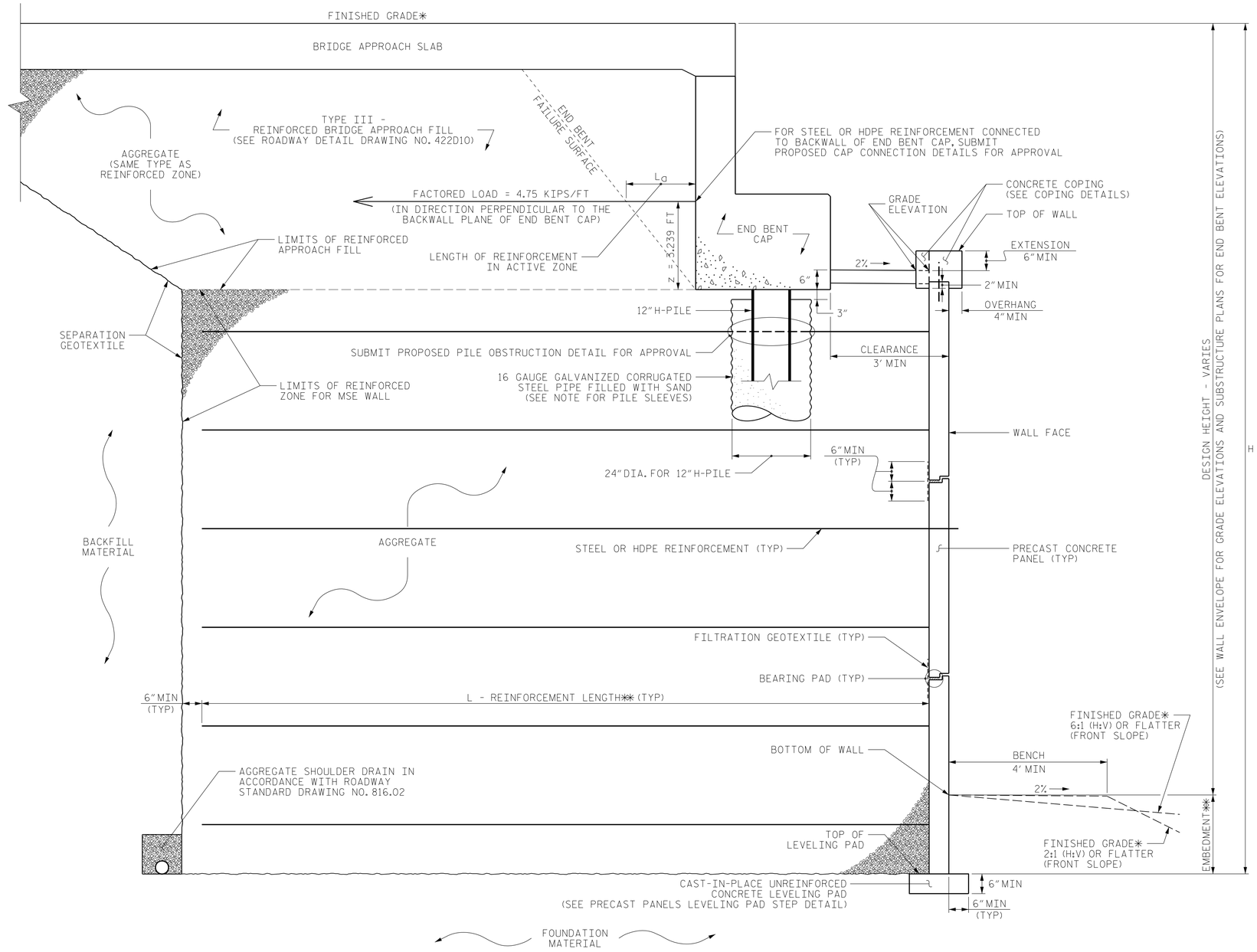
Consulting Engineers and Scientists
2401 BRENTWOOD ROAD, SUITE 107
RALEIGH, NORTH CAROLINA 27604
NC REGISTERED ENGINEERING FIRM: F-0869
NC REGISTERED GEOLOGIC FIRM: C-367

SITE 1 ESTIMATED SETTLEMENT ALONG MSE RETAINING WALLS NO. 2 AND NO. 3

REVISIONS

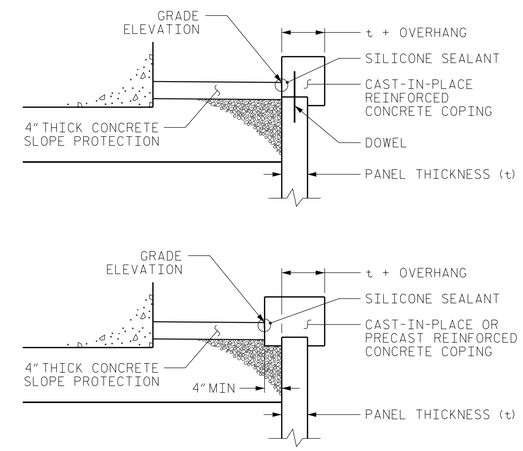
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		

SHEET NO. W-7



MSE ABUTMENT WALL WITH PRECAST PANELS - TYPICAL SECTION

*SEE ROADWAY PLANS FOR FINISHED GRADE DETAILS.
**SEE MSE RETAINING WALLS PROVISION AND IF APPLICABLE,
MSE WALL NOTES FOR EMBEDMENT AND REINFORCEMENT LENGTH REQUIREMENTS.



COPING DETAILS

AT THE CONTRACTOR'S OPTION, CONNECT COPING TO PANELS
WITH DOWELS OR EXTEND COPING DOWN BACK OF PANELS.

GEOTECHNICAL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 031022 ENGINEER ANDREW A. NASH

DocuSigned by: Andrew A. Nash 1/28/2019
671DA85852E0488... SIGNATURE DATE

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PROJECT NO.: 34472.1.1 (R-2582A)
NORTHAMPTON COUNTY
STATION: 170+20.99 -L- / 15+11.31 -Y7-
SHEET 4 OF 6

Prepared in the Office of:
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Consulting Engineers and Scientists
2401 BRENTWOOD ROAD, SUITE 107
RALEIGH, NORTH CAROLINA 27604
NC REGISTERED ENGINEERING FIRM: F-0869
NC REGISTERED GEOLOGIC FIRM: C-367

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

SITE 1 MSE RETAINING WALLS
TYPICAL SECTION AT ABUTMENTS

REVISIONS							SHEET NO.
NO.	BY	DATE	NO.	BY	DATE		
1			3				W-8
2			4				

PREPARED BY: ALEXANDER, M. J.	DATE: 12/12/18
REVIEWED BY: NASH, A. A.	DATE: 12/12/18

GEOTECHNICAL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 031022 ENGINEER ANDREW A. NASH

DocuSigned by: Andrew A. Nash 1/28/2019
671DA8582E0C4A4... SIGNATURE DATE

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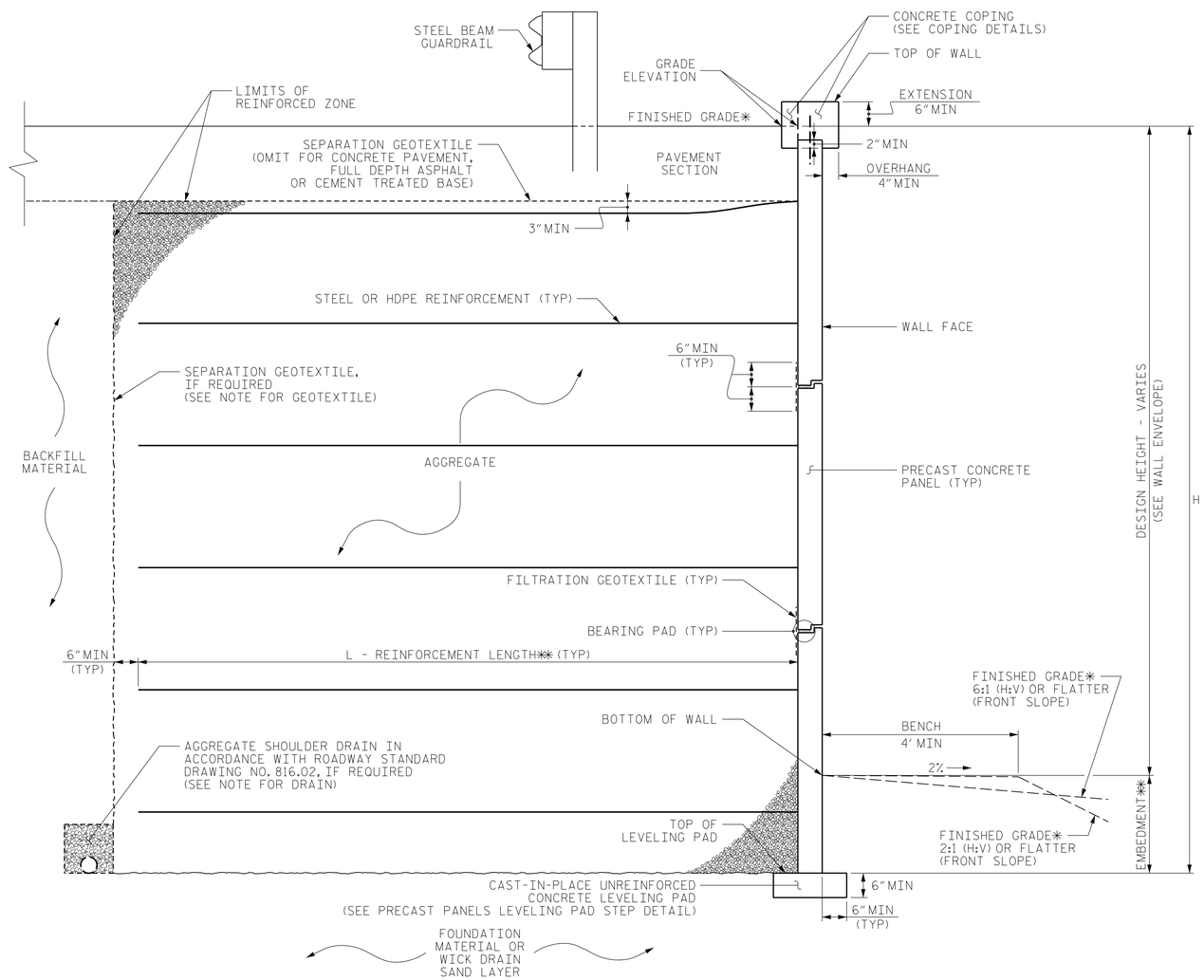
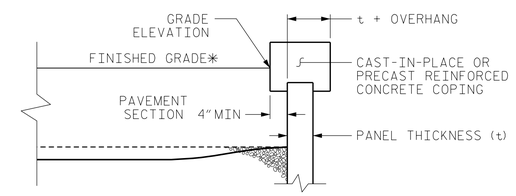
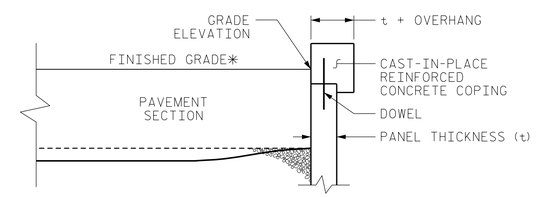


MSE WALL WITH PRECAST PANELS - TYPICAL SECTION

*SEE ROADWAY PLANS FOR FINISHED GRADE DETAILS.
**SEE MSE RETAINING WALLS PROVISION AND IF APPLICABLE, MSE WALL NOTES FOR EMBEDMENT AND REINFORCEMENT LENGTH REQUIREMENTS.





COPING DETAILS

AT THE CONTRACTOR'S OPTION, CONNECT COPING TO PANELS WITH DOWELS OR EXTEND COPING DOWN BACK OF PANELS.
*SEE ROADWAY PLANS FOR FINISHED GRADE DETAILS.

PROJECT NO.: 34472.1.1 (R-2582A)
NORTHAMPTON COUNTY
STATION: 170+20.99 -L- / 15+11.31 -Y7-
SHEET 5 OF 6

Prepared in the Office of:
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Consulting Engineers and Scientists
2401 BRENTWOOD ROAD, SUITE 107
RALEIGH, NORTH CAROLINA 27604
NC REGISTERED ENGINEERING FIRM: F-0869
NC REGISTERED GEOLOGIC FIRM: C-367

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

SITE 1 MSE RETAINING WALLS TYPICAL SECTION WITH GUARDRAIL

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	W-9
1			3			
2			4			

PREPARED BY: ALEXANDER, M. J.	DATE: 12/4/18
REVIEWED BY: NASH, A. A.	DATE: 12/4/18

GEOTECHNICAL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 031022 ENGINEER ANDREW A. NASH

DocuSigned by: Andrew A. Nash 1/28/2019
671DA6B5B0E4... SIGNATURE DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NOTES:

FOR MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALLS, SEE MECHANICALLY STABILIZED EARTH RETAINING WALLS PROVISION.

FOR TYPE III REINFORCED BRIDGE APPROACH FILL, SEE BRIDGE APPROACH FILLS PROVISION AND ROADWAY DETAIL DRAWING NO. 422D10.

FOR STEEL BEAM GUARDRAIL, SEE ROADWAY PLANS AND SECTION 862 OF THE STANDARD SPECIFICATIONS.

A SEPARATION GEOTEXTILE IS REQUIRED AT THE BACK OF THE REINFORCED ZONE FOR RETAINING WALLS NO. 2 AND 3.

A DRAIN IS REQUIRED FOR RETAINING WALLS NO. 2 AND 3.

BEFORE BEGINNING MSE WALL DESIGN FOR RETAINING WALLS NO. 2 AND 3 SURVEY WALL LOCATION AND SUBMIT A REVISED WALL PROFILE VIEW (WALL ENVELOPE) FOR REVIEW. DO NOT START WALL DESIGN OR CONSTRUCTION UNTIL THE REVISED WALL ENVELOPE IS ACCEPTED.

PILE SLEEVES ARE REQUIRED AROUND PILES FOR SITE 1 END BENTS NO. 1 AND 2 LOCATED AT APPROXIMATELY STATIONS 169+58 AND 170+83 -L-, RESPECTIVELY.

DESIGN RETAINING WALLS NO. 2 AND 3 FOR THE FOLLOWING:
1) H = DESIGN HEIGHT + EMBEDMENT
2) DESIGN LIFE = 100 YEARS
3) MAXIMUM FACTORED VERTICAL PRESSURE ON FOUNDATION MATERIAL = 6,550 PSF (WALL 2); 7,250 PSF (WALL 3)
4) MINIMUM REINFORCEMENT LENGTH (L) = 0.7H OR 6 FT, WHICHEVER IS LONGER
5) MINIMUM EMBEDMENT = 2 FT OR H/10, WHICHEVER IS GREATER

6) REINFORCED ZONE AGGREGATE PARAMETERS:

AGGREGATE TYPE*	UNIT WEIGHT (γ) PCF	FRICTION ANGLE (ϕ) DEGREES	COHESION (c) PSF
COARSE	110	38	0
* SEE MSE RETAINING WALLS PROVISION FOR COARSE AGGREGATE MATERIAL REQUIREMENTS.			

7) IN-SITU ASSUMED MATERIAL PARAMETERS:

MATERIAL TYPE	UNIT WEIGHT (γ) PCF	FRICTION ANGLE (ϕ) DEGREES	COHESION (c) PSF
BACKFILL	120	32	0
FOUNDATION	115	30	0

DESIGN RETAINING WALLS NO. 2 AND 3 FOR A LIVE LOAD (TRAFFIC) SURCHARGE.

DESIGN REINFORCEMENT CONNECTED TO SITE 1 END BENT CAPS FOR FACTORED LOAD AND LENGTH OF REINFORCEMENT IN ACTIVE ZONE (L_a) SHOWN. CAST REINFORCEMENT OR CONNECTORS INTO CAP BACKWALL FOR SITE 1 END BENTS NO. 1 AND 2 LOCATED AT APPROXIMATELY STATIONS 169+58 AND 170+83 -L-, RESPECTIVELY. MAINTAIN A CLEARANCE OF AT LEAST 3" BETWEEN REINFORCEMENT OR CONNECTORS AND REINFORCING STEEL IN CAP.

EXISTING OR FUTURE OBSTRUCTIONS SUCH AS FOUNDATIONS, GUARDRAIL, FENCE OR HANDRAIL POSTS, PAVEMENTS, PIPES, INLETS OR UTILITIES MAY INTERFERE WITH REINFORCEMENT FOR RETAINING WALLS NO. 2 AND 3.

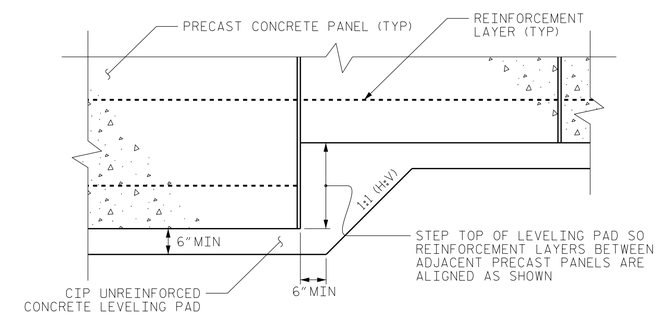
FOUNDATIONS FOR SITE 1 END BENTS NO. 1 AND 2 LOCATED AT APPROXIMATELY STATIONS 169+58 AND 170+83 -L-, RESPECTIVELY, WILL INTERFERE WITH REINFORCEMENT FOR RETAINING WALLS NO. 2 AND 3. SEE "FOUNDATION LAYOUT" SHEET FOR FOUNDATION LOCATIONS.

INSTALL PILE SLEEVES FOR SITE 1 END BENT NO. 1 LOCATED AT APPROXIMATELY STATION 169+58 -L- WHILE CONSTRUCTING RETAINING WALL NO. 2. OBSERVE A 1 MONTH WAITING PERIOD AFTER CONSTRUCTING THE MSE ABUTMENT WALL TO WITHIN 1 FT OF THE BOTTOM OF CAP ELEVATION. THEN, INSTALL PILES THROUGH THE CORRUGATED STEEL PIPES AND FILL PIPES WITH LOOSE UNCOMPACTED SAND BEFORE CONSTRUCTING END BENT CAPS.

INSTALL PILE SLEEVES FOR SITE 1 END BENT NO. 2 LOCATED AT APPROXIMATELY STATION 170+83 -L- WHILE CONSTRUCTING RETAINING WALL NO. 3. OBSERVE A 1 MONTH WAITING PERIOD AFTER CONSTRUCTING THE MSE ABUTMENT WALL TO WITHIN 1 FT OF THE BOTTOM OF CAP ELEVATION. THEN, INSTALL PILES THROUGH THE CORRUGATED STEEL PIPES AND FILL PIPES WITH LOOSE UNCOMPACTED SAND BEFORE CONSTRUCTING END BENT CAPS.

DO NOT PLACE LEVELING PAD CONCRETE, AGGREGATE OR REINFORCEMENT FOR RETAINING WALLS NO. 2 AND 3 UNTIL EXCAVATION DIMENSIONS AND FOUNDATION MATERIAL ARE APPROVED.

AT THE CONTRACTOR'S OPTION, "TEMPORARY SHORING FOR WALL CONSTRUCTION" MAY BE USED TO CONSTRUCT SITE 1 RETAINING WALLS NO. 2 AND 3. SEE MSE RETAINING WALLS PROVISION FOR TEMPORARY SHORING FOR WALL CONSTRUCTION.



PRECAST PANELS LEVELING PAD STEP DETAIL

PROJECT NO.: 34472.1.1 (R-2582A)
NORTHAMPTON COUNTY
STATION: 170+20.99 -L- / 15+11.31 -Y7-
SHEET 6 OF 6

PREPARED BY: ALEXANDER, M. J.	DATE: 12/12/18
REVIEWED BY: NASH, A. A.	DATE: 12/12/18

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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

SITE 1 MSE RETAINING WALLS NOTES AND LEVELING PAD STEP DETAIL

REVISIONS

NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		

SHEET NO. W-10