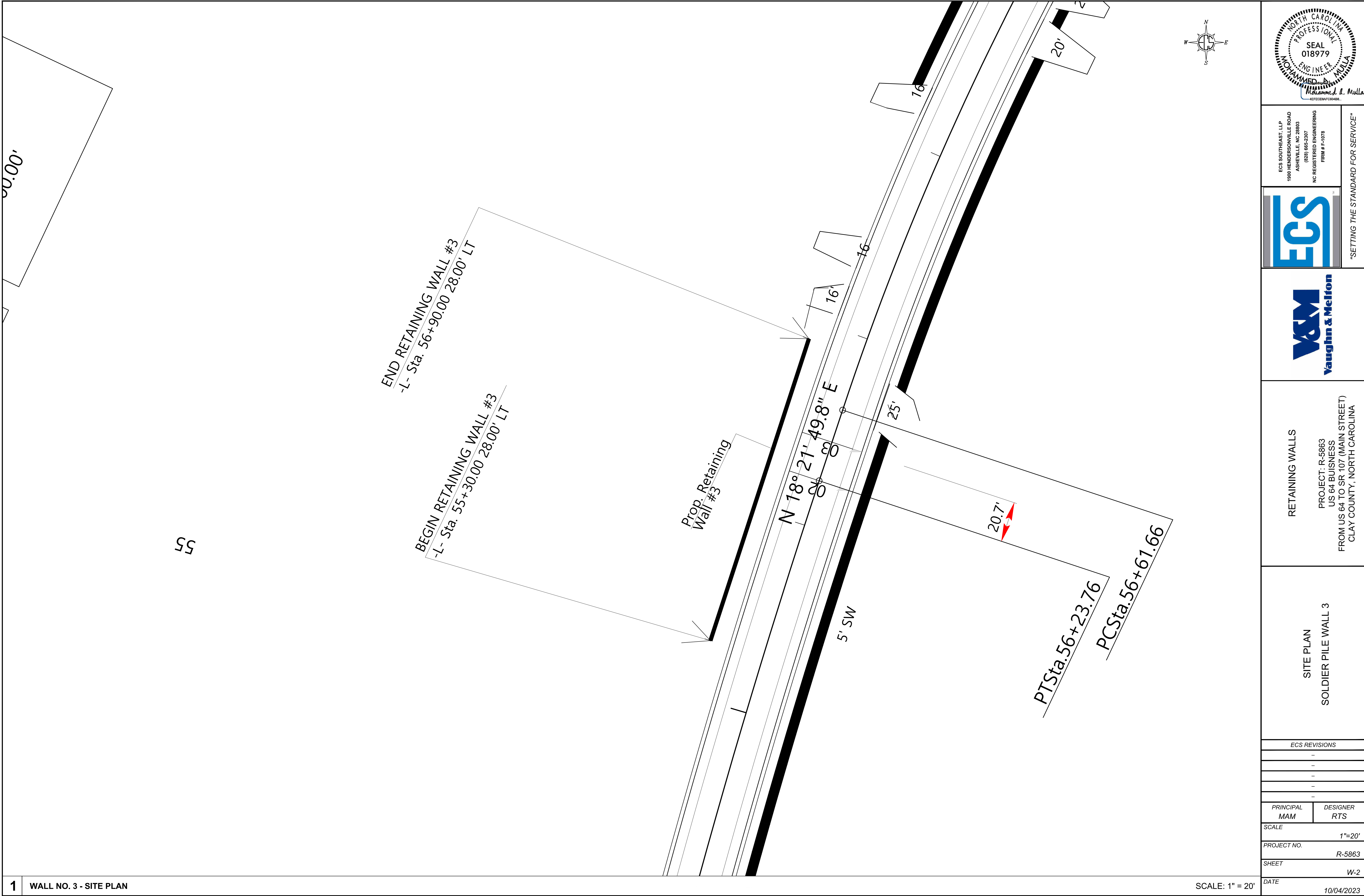
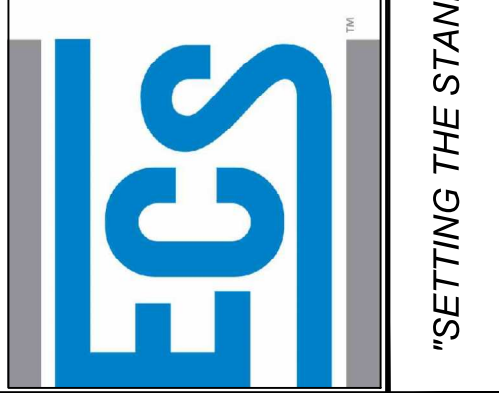




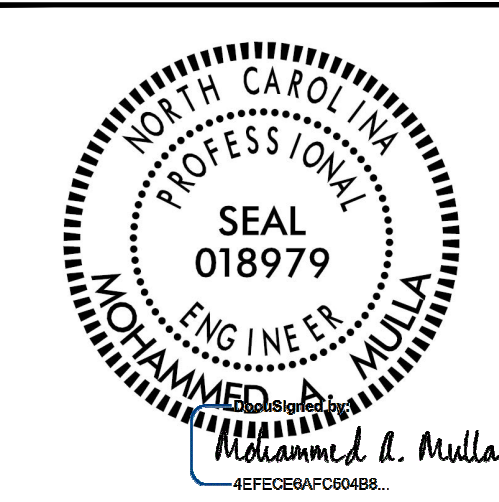
ECS REVISIONS	
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PRINCIPAL	DESIGNER
MAM	RTS
SCALE	
1"=20'	
PROJECT NO.	
R-5863	
SHEET	
W-2	
DATE	
10/04/2023	

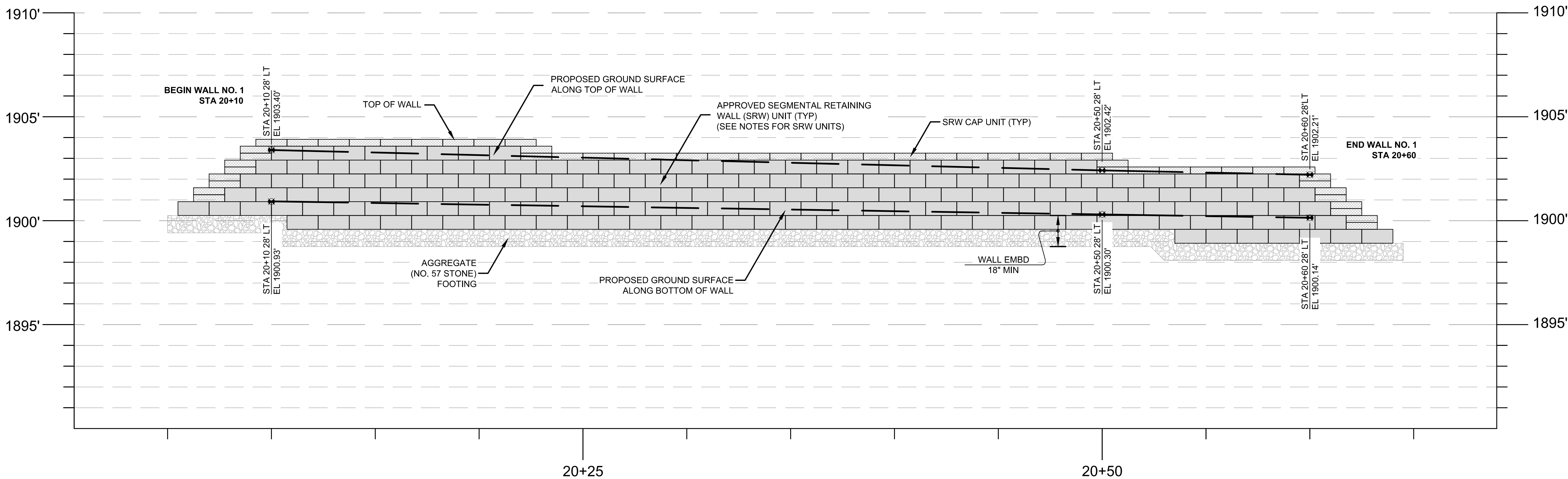
RETAINING WALLS

PROJECT: R-5863
US 64 BUSINESS
FROM US 64 TO SR 107 (MAIN STREET)
CLAY COUNTY, NORTH CAROLINA



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(828) 665-2307
NC REGISTERED ENGINEERING
FIRM # F-1075



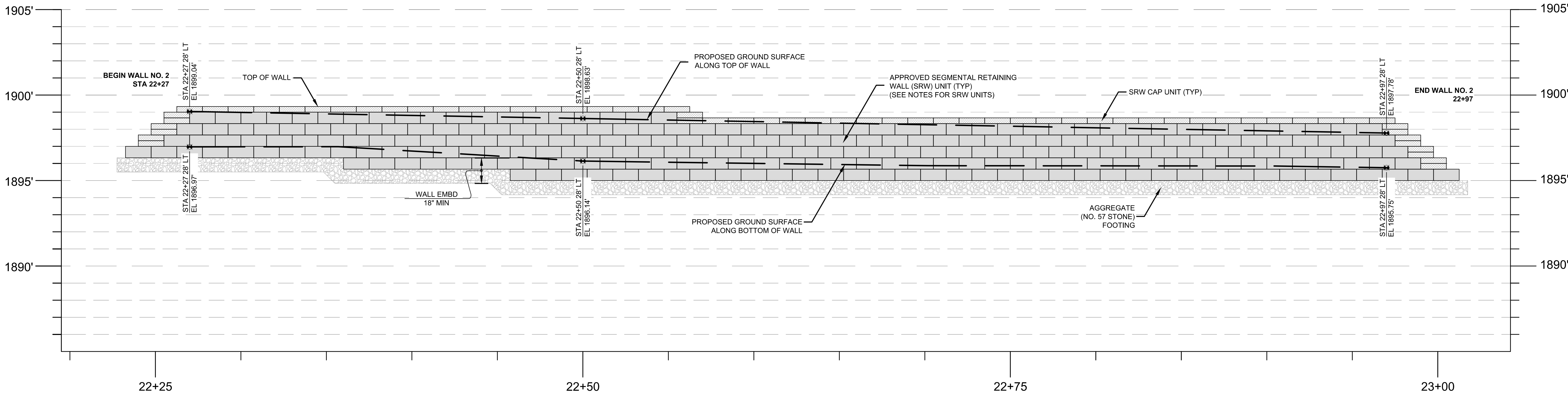


Estimated Quantities	
RW Number	Square Feet
1	208
2	275

- NOTES:**
- REFER TO SHEET RW-102 FOR STANDARD SEGMENTAL GRAVITY RETAINING WALL NOTES AND DETAILS.
 - WALL AREA INCLUDES EMBEDMENT AND CAP BLOCKS.
 - SEGMENTAL RETAINING WALL (SRW) UNITS ARE APPROVED FOR EITHER 2' OR 5' MAXIMUM WALL HEIGHTS. FOR DETAILS AND DIMENSIONS OF APPROVED SRW UNITS AND MAXIMUM WALL HEIGHTS, SEE connect.ncdot.gov/resources/Geological/Pages/Products.aspx

1 WALL NO. 1 - STANDARD SEGMENTAL GRAVITY RETAINING WALL (SRW) PROFILE

SCALE: 1" = 3'



2 WALL NO. 2 - STANDARD SEGMENTAL GRAVITY RETAINING WALL (SRW) PROFILE

SCALE: 1" = 3'



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RETAINING WALLS
PROJECT: R-5863
US 64 BUSINESS
FROM US 64 TO SR 107 (MAIN STREET)
CLAY COUNTY, NORTH CAROLINA

SEGMENTAL GRAVITY
RETAINING WALL

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MAM

DESIGNER
RTS

SCALE

1"=3'

PROJECT NO.

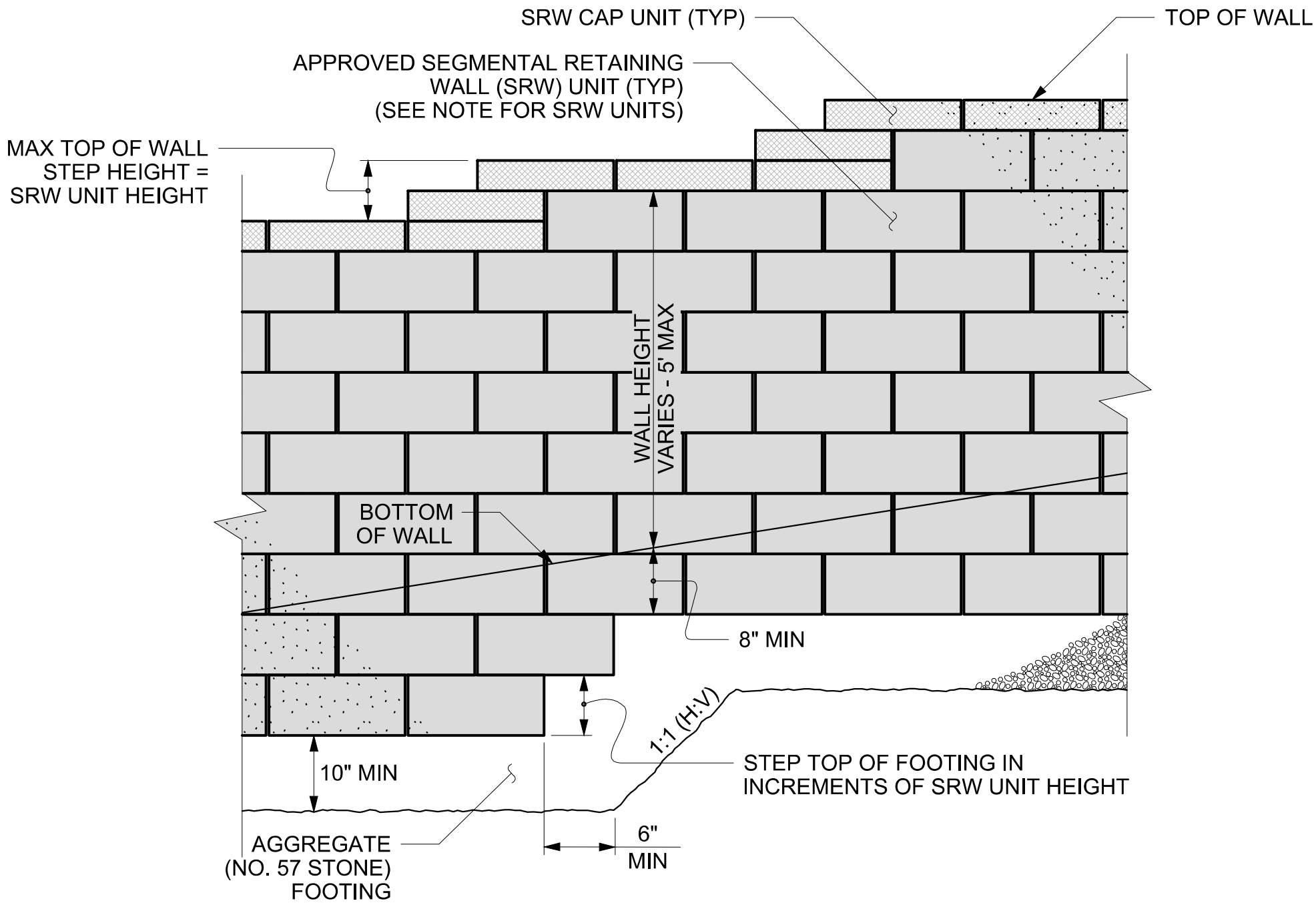
R-5863

SHEET

W-3

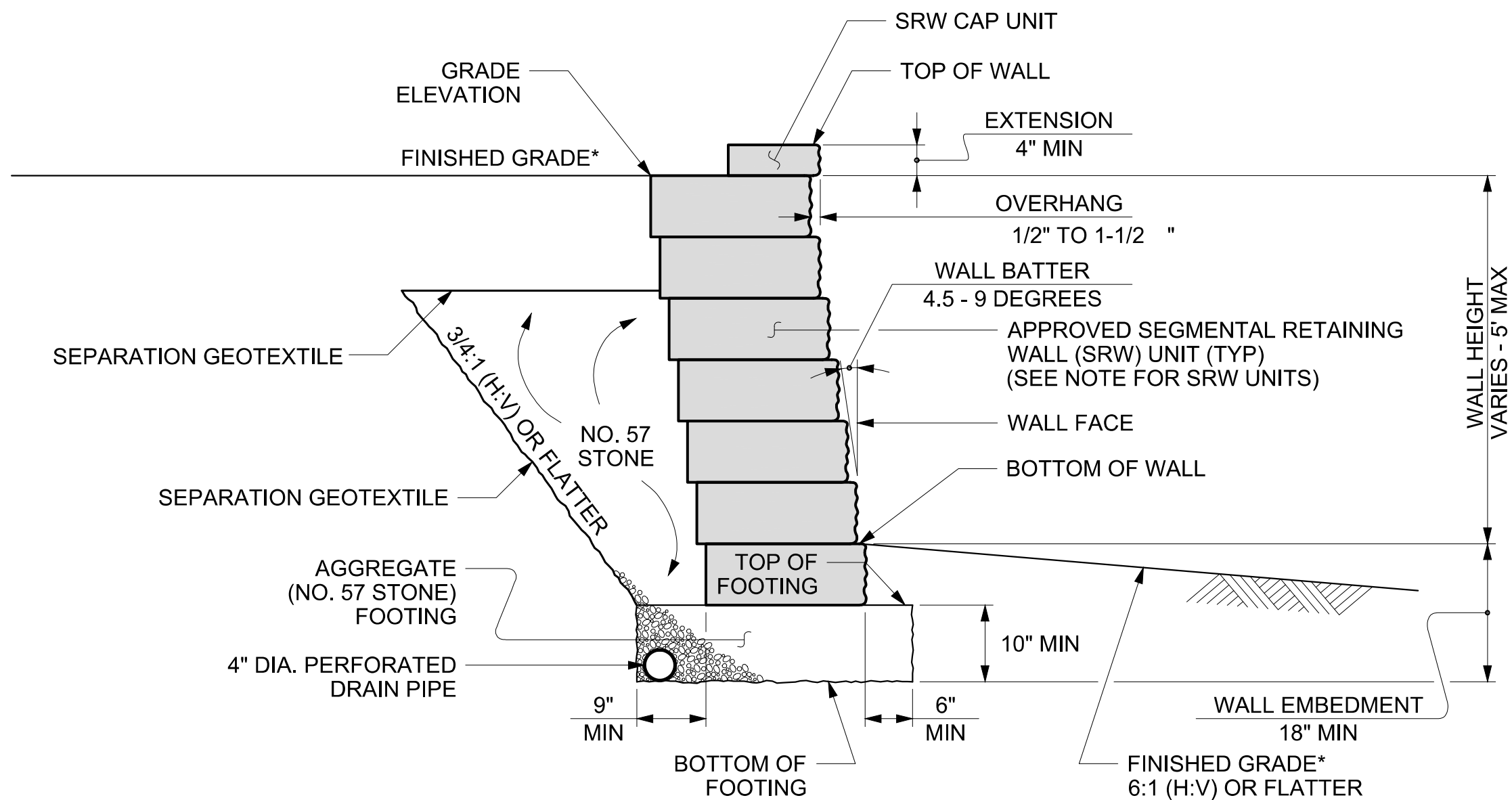
DATE

10/04/2023



1 STANDARD SEGMENTAL GRAVITY WALL - PARTIAL ELEVATION

SCALE: N.T.S.



*SEE ROADWAY PLANS FOR FINISHED GRADE DETAILS.

2 TYPICAL CROSS SECTIONS-WALLS 1 AND 2

SCALE: N.T.S.

NOTES:

FOR STANDARD SEGMENTAL GRAVITY RETAINING WALLS, SEE SECTION 454 OF THE STANDARD SPECIFICATIONS.

A FENCE OR HANDRAIL IS REQUIRED ON THE TOP OF RETAINING WALL NO. 1 AND 2. SEE ROADWAY PLANS FOR FENCE OR HANDRAIL ATTACHMENT DETAILS. DO NOT ATTACH FENCES OR HANDRAILS TO STANDARD SEGMENTAL GRAVITY WALLS.

DO NOT USE STANDARD SEGMENTAL GRAVITY WALLS WHEN SURCHARGE LOADS WILL BE WITHIN 5'-6" OF THE BACK OF SRW CAP UNITS FOR WALL HEIGHTS UP TO 4' AND WITHIN 10' OF THE BACK OF SRW CAP UNITS FOR WALL HEIGHTS GREATER THAN 4' TO 5'.

DO NOT USE STANDARD SEGMENTAL GRAVITY WALLS WHEN VERY LOOSE OR SOFT SOIL OR MUCK IS BELOW WALLS. NOTIFY THE ENGINEER IF THESE CONDITIONS ARE ENCOUNTERED AT THE TIME OF CONSTRUCTIONS.

SEGMENTAL RETAINING WALL (SRW) UNITS ARE APPROVED FOR EITHER 2' OR 5' MAXIMUM WALL HEIGHTS. FOR DETAILS AND DIMENSIONS OF APPROVED SRW UNITS AND MAXIMUM WALL HEIGHTS, SEE connect.ncdot.gov/resources/Geological/Pages/Products.aspx

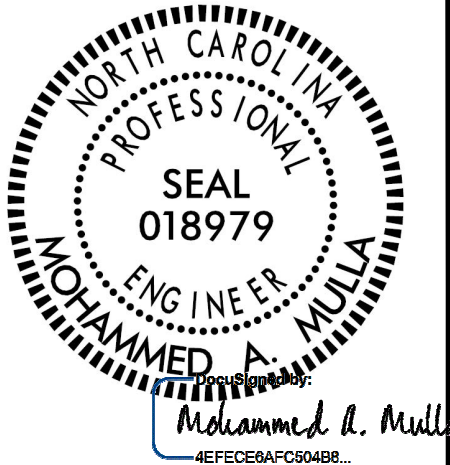
DO NOT MIX APPROVED SRW UNITS FROM DIFFERENT VENDORS ON THE SAME STANDARD SEGMENTAL GRAVITY WALL. USE THE SAME SIZE APPROVED SRW UNITS FOR EACH WALL SECTION.

FREEZE-THAW DURABLE SRW UNITS THAT MEET ARTICLE 1040-4 OF THE STANDARD SPECIFICATIONS ARE REQUIRED.

BEFORE BEGINNING STANDARD SEGMENTAL GRAVITY WALL CONSTRUCTION, SURVEY WALL LOCATIONS AND SUBMIT WALL PROFILE VIEWS (WALL ENVELOPES) FOR REVIEW. FOR WALL ENVELOPES, INCLUDE BOTTOM OF WALL, EXISTING GROUND AND GRADE ELEVATIONS AND OTHER ELEVATIONS AS NEEDED AT INTERVALS OF 25' OR LESS ALONG WALLS. DO NOT START WALL CONSTRUCTION UNTIL WALL ENVELOPES ARE ACCEPTED.

A DRAIN PIPE IS REQUIRED ALONG THE ENTIRE LENGTH OF THE RETAINING WALL NO. 1 AND 2.

DO NOT PLACE NO. 57 STONE FOR FOOTINGS UNTIL EXCAVATION DIMENSIONS AND FOUNDATION MATERIAL ARE APPROVED.



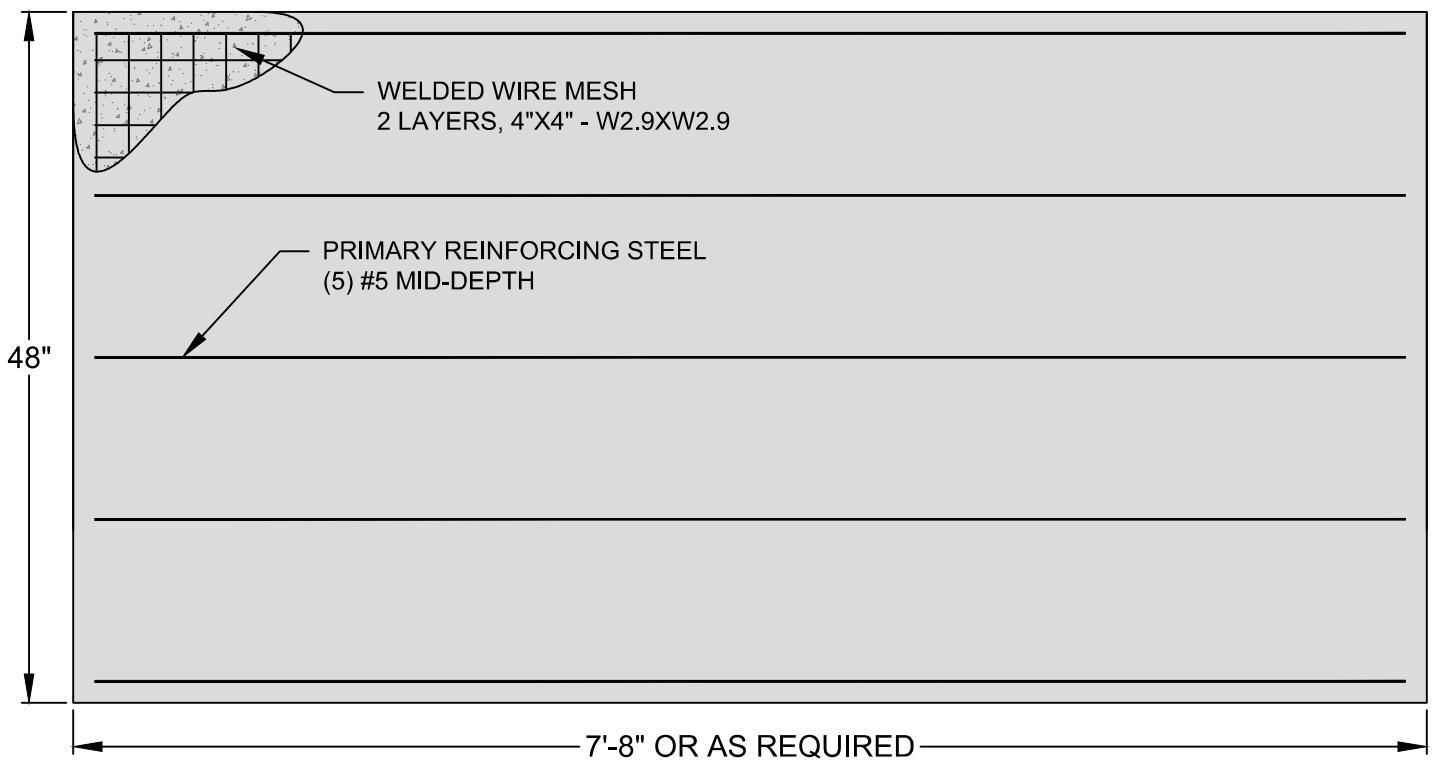
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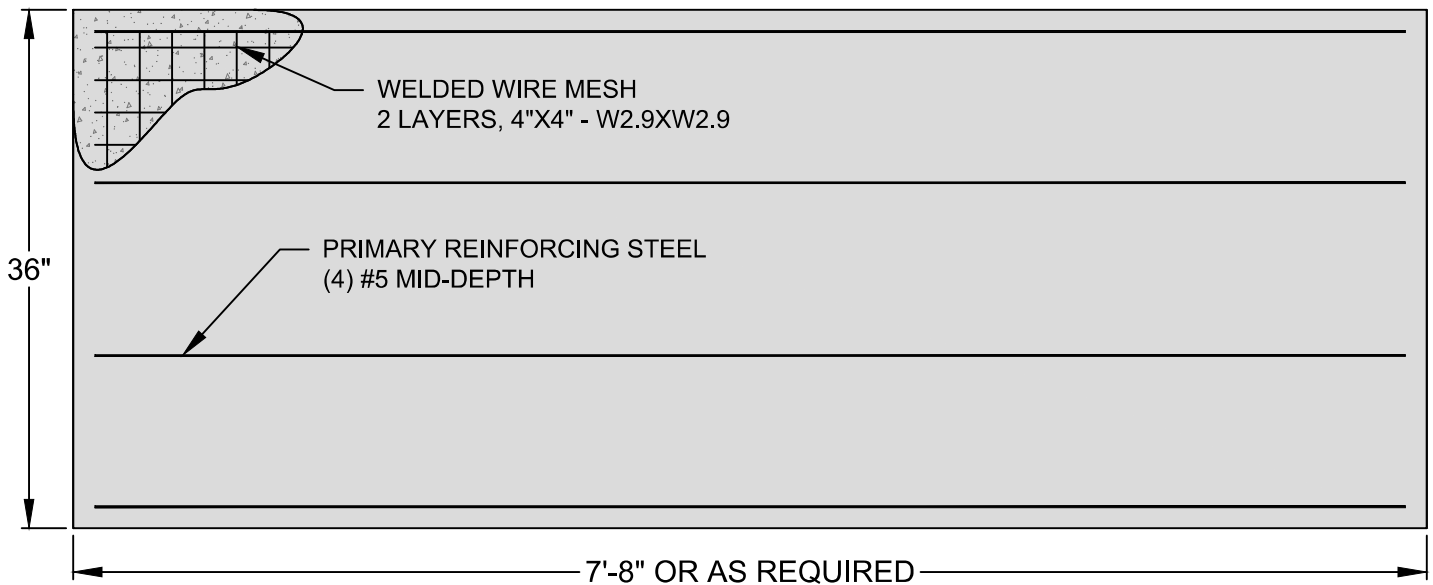
RETAINING WALLS
PROJECT: R-5863
US 64 BUSINESS
FROM US 64 TO SR 107 (MAIN STREET)
CLAY COUNTY, NORTH CAROLINA

SEGMENTAL GRAVITY
RETAINING WALL

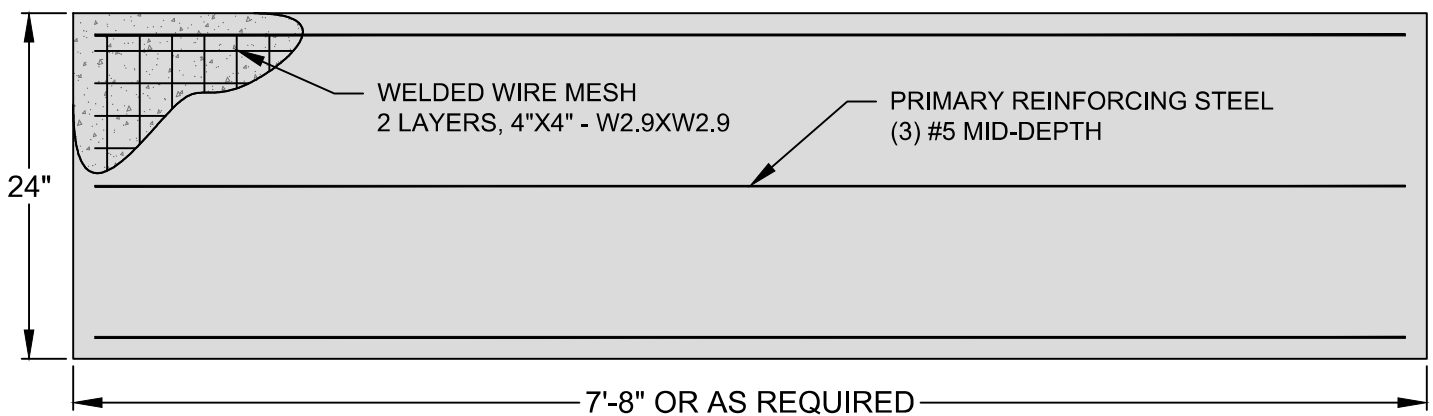
ECS REVISIONS	
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PRINCIPAL	DESIGNER
MAM	RTS
SCALE	
N.T.S.	
PROJECT NO.	
R-5863	
SHEET	
W-4	
DATE	
10/04/2023	



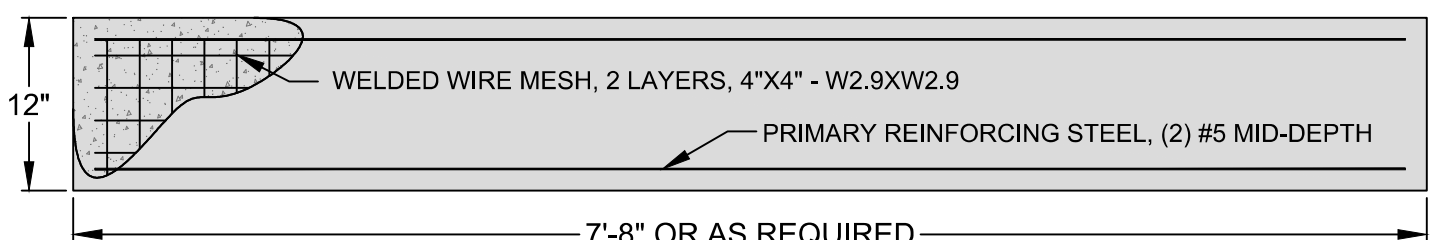
A 4 FOOT PRECAST CONCRETE PANEL - FRONT VIEW
NTS



B 3 FOOT PRECAST CONCRETE PANEL - FRONT VIEW
NTS



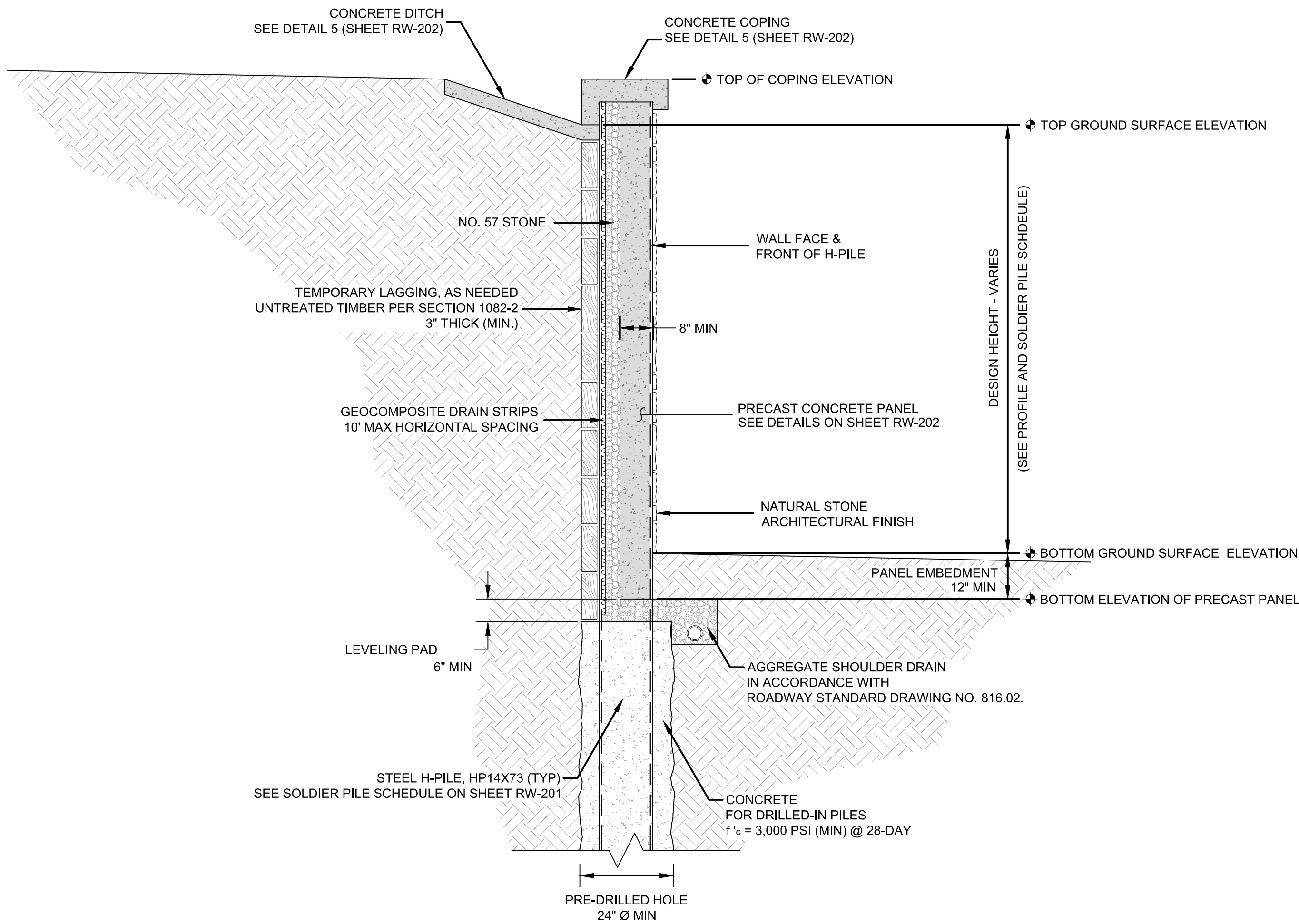
C 2 FOOT PRECAST CONCRETE PANEL - FRONT VIEW
NTS



D 1 FOOT PRECAST CONCRETE PANEL - FRONT VIEW
NTS

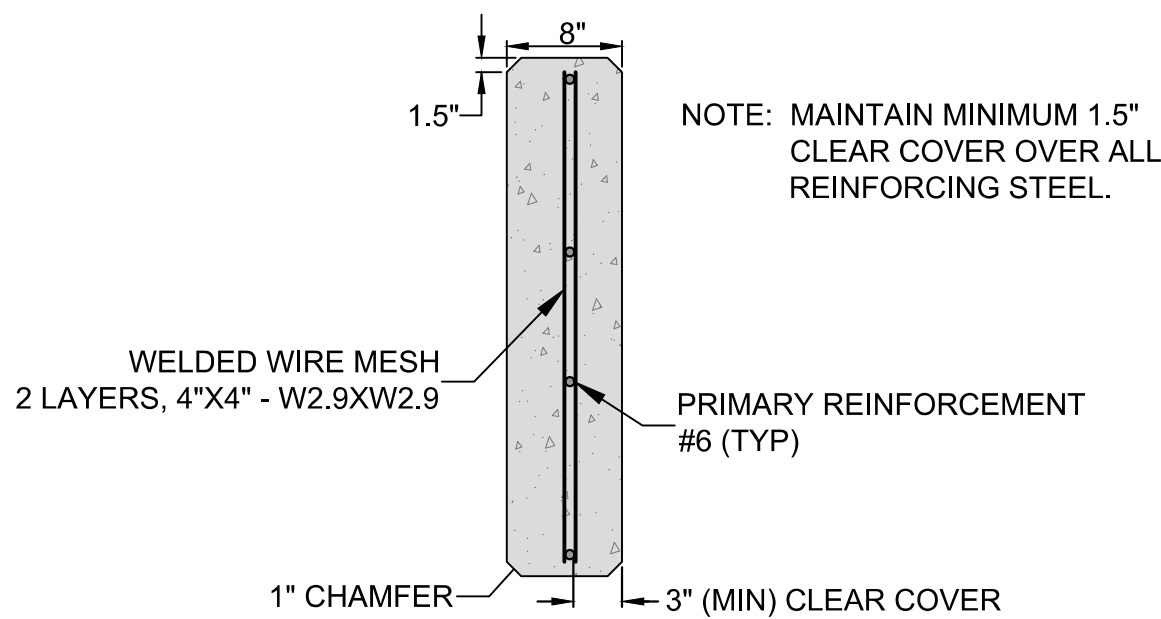
2 PRECAST CONCRETE PANEL DETAILS

SCALE: N.T.S.



1 TYPICAL SOLDIER PILE WALL SECTION WITH PRECAST PANELS

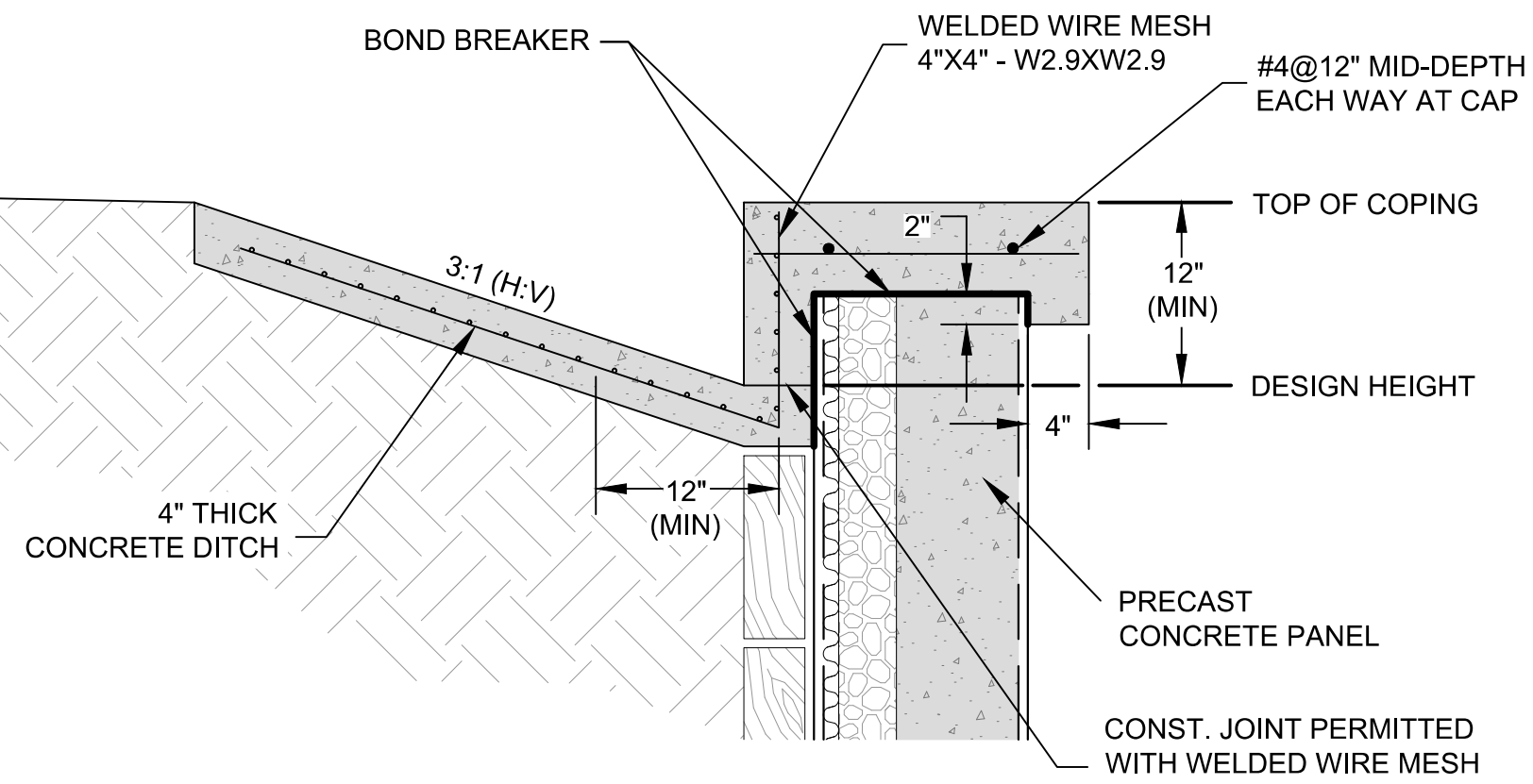
SCALE: N.T.S.



NOTE: MAINTAIN MINIMUM 1.5" CLEAR COVER OVER ALL REINFORCING STEEL.

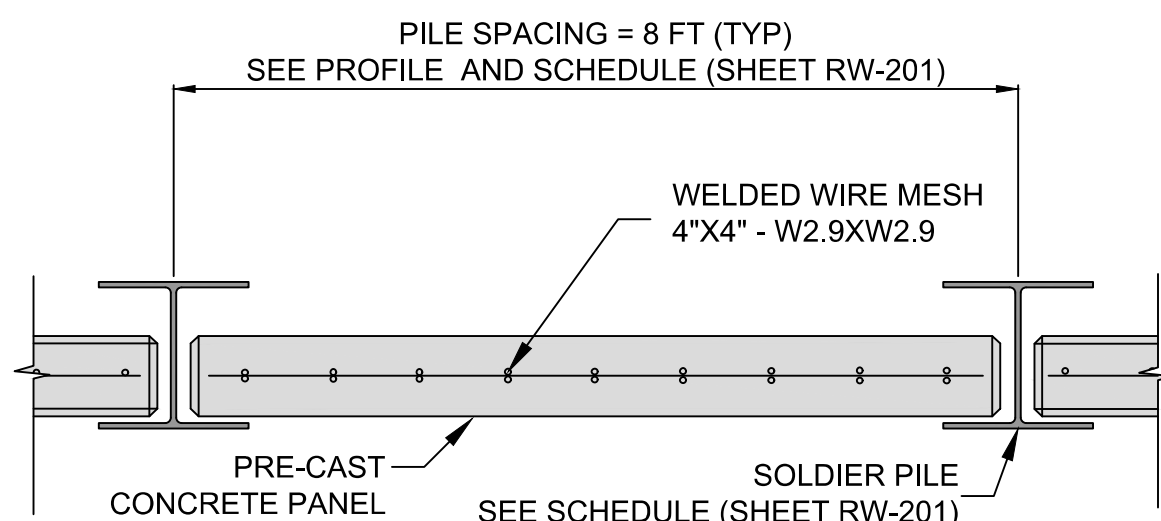
3 TYPICAL PRECAST CONCRETE PANEL - SECTION VIEW

SCALE: N.T.S.



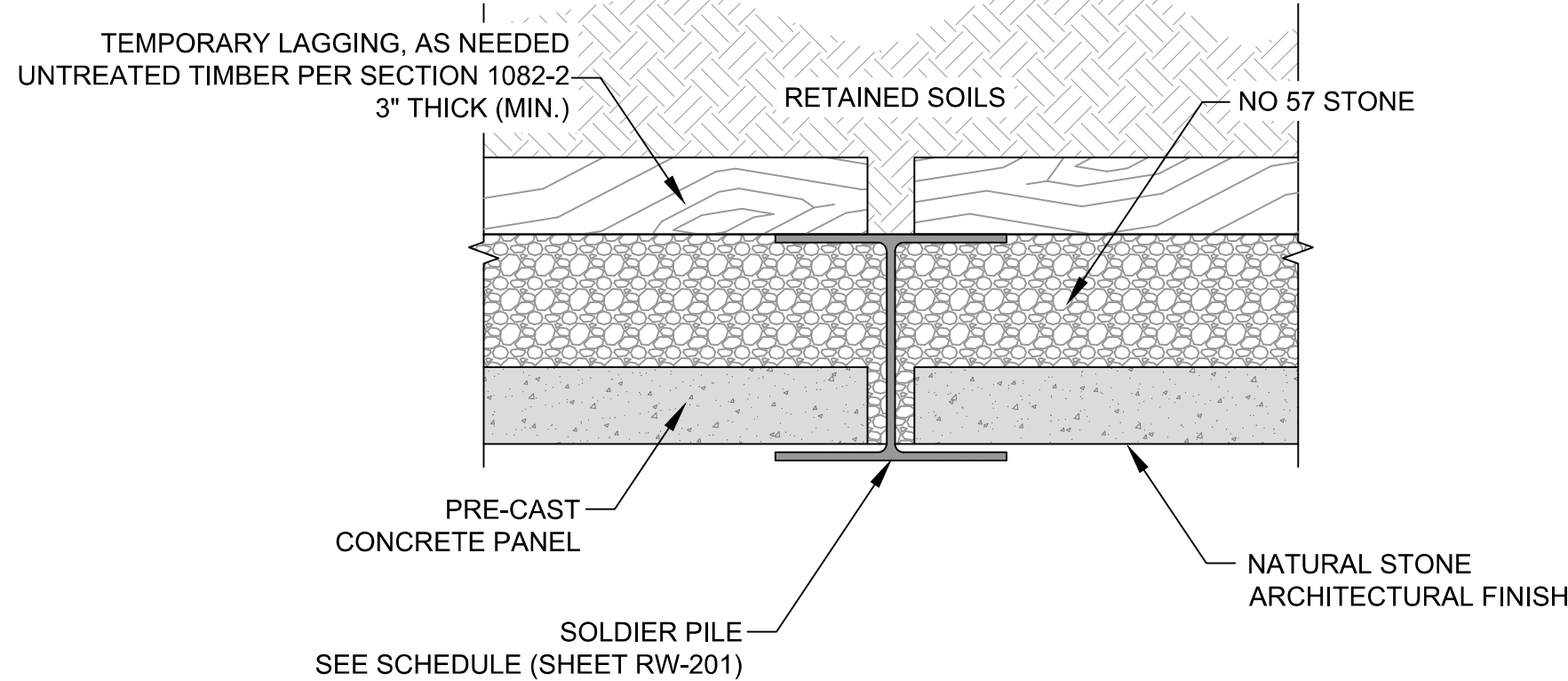
5 CONCRETE COPING AND DITCH DETAIL WITH PRECAST PANELS

SCALE: N.T.S.



4 TYPICAL PRECAST CONCRETE PANEL - PLAN VIEW

SCALE: N.T.S.



6 TYPICAL LAGGING DETAIL WITH PRECAST PANELS

SCALE: N.T.S.



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RETAINING WALLS

PROJECT: R-5863
US 64 BUSINESS
FROM US 64 TO SR 107 (MAIN STREET)
CLAY COUNTY, NORTH CAROLINA

SOLDIER PILE RETAINING WALL

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PRINCIPAL	DESIGNER
MAM	RTS
SCALE	N.T.S.
PROJECT NO.	R-5863
SHEET	W-6
DATE	10/04/2023

		Mohammed A. Mulla (48)FCEC001A/PC00159...	
ECS SOUTHEAST, LLP 1900 HENDERSONVILLE ROAD ASHEVILLE, NC 28803 (828) 865-2387 NC REGISTERED ENGINEERING FIRM # F-1078		"SETTING THE STANDARD FOR SERVICE"	
			
RETAINING WALLS		PROJECT: R-5863 US 64 BUSINESS FROM US 64 TO SR 107 (MAIN STREET) CLAY COUNTY, NORTH CAROLINA	
SOLDIER PILE RETAINING WALL			
ECS REVISIONS			
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PRINCIPAL MAM		DESIGNER RTS	
SCALE		N.T.S.	
PROJECT NO.		R-5863	
SHEET		W-7	
DATE		10/04/2023	