

REFERENCE: R-5014

PROJECT: 41162

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

RETAINING WALL
SUBSURFACE INVESTIGATION

COUNTY DARE
PROJECT DESCRIPTION STRUCTURE NO.1 AND NO.2
ON SR 1217 (COLINGTON ROAD) FROM END TO
US 158 (CROATAN HIGHWAY)
SITE DESCRIPTION RETAINING WALL NO.1 AND
RETAINING WALL NO.2

CONTENTS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LEGEND (SOIL & ROCK)
3	SITE PLAN
4	WALL ENVELOPES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5014	1	4

CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF STUDY, PLANNING AND DESIGN, AND NOT FOR CONSTRUCTION OR PAY PURPOSES. THE VARIOUS FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA AVAILABLE MAY BE REVIEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N. C. DEPARTMENT OF TRANSPORTATION, GEOTECHNICAL ENGINEERING UNIT AT 1919 T07-6850. THE SUBSURFACE PLANS AND REPORTS, FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA ARE NOT PART OF THE CONTRACT.

GENERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARIES ARE BASED ON A GEOTECHNICAL INTERPRETATION OF ALL AVAILABLE SUBSURFACE DATA AND MAY NOT NECESSARILY REFLECT THE ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS OR BETWEEN SAMPLED STRATA WITHIN THE BOREHOLE. THE LABORATORY SAMPLE DATA AND THE IN SITU (IN-PLACE) TEST DATA CAN BE RELIED ON ONLY TO THE DEGREE OF RELIABILITY INHERENT IN THE STANDARD TEST METHOD. THE OBSERVED WATER LEVELS OR SOIL MOISTURE CONDITIONS INDICATED IN THE SUBSURFACE INVESTIGATIONS ARE AS RECORDED AT THE TIME OF THE INVESTIGATION. THESE WATER LEVELS OR SOIL MOISTURE CONDITIONS MAY VARY CONSIDERABLY WITH TIME ACCORDING TO CLIMATIC CONDITIONS INCLUDING TEMPERATURES, PRECIPITATION AND WIND, AS WELL AS OTHER NON-CLIMATIC FACTORS.

THE BIDDER OR CONTRACTOR IS CAUTIONED THAT DETAILS SHOWN ON THE SUBSURFACE PLANS ARE PRELIMINARY ONLY AND IN MANY CASES THE FINAL DESIGN DETAILS ARE DIFFERENT. FOR BIDDING AND CONSTRUCTION PURPOSES, REFER TO THE CONSTRUCTION PLANS AND DOCUMENTS FOR FINAL DESIGN INFORMATION ON THIS PROJECT. THE DEPARTMENT DOES NOT WARRANT OR GUARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTIGATION MADE, NOR THE INTERPRETATIONS MADE, OR OPINION OF THE DEPARTMENT AS TO THE TYPE OF MATERIALS AND CONDITIONS TO BE ENCOUNTERED. THE BIDDER OR CONTRACTOR IS CAUTIONED TO MAKE SUCH INDEPENDENT SUBSURFACE INVESTIGATIONS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO CONDITIONS TO BE ENCOUNTERED ON THE PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM FOR ADDITIONAL COMPENSATION OR FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS ENCOUNTERED AT THE SITE DIFFERING FROM THOSE INDICATED IN THE SUBSURFACE INFORMATION.

- NOTES:
- THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N. C. DEPARTMENT OF TRANSPORTATION AS ACCURATE NOR IS IT CONSIDERED PART OF THE PLANS, SPECIFICATIONS OR CONTRACT FOR THE PROJECT.
 - BY HAVING REQUESTED THIS INFORMATION, THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR INCREASED COMPENSATION OR EXTENSION OF TIME BASED ON DIFFERENCES BETWEEN THE CONDITIONS INDICATED HEREIN AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

PERSONNEL

C. TANG, EI
CATLIN
B. MILLER
T. SPENCEL

INVESTIGATED BY C. TANG, EI
DRAWN BY D. BROWN, PEC. TANG, EI
CHECKED BY C. TANG, EI
SUBMITTED BY D. BROWN, PE
DATE NOVEMBER 2017



DocuSigned by:
Donald W. Brown, Jr.
C06817F5F765NATURE DATE 1/2/2019

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT
SUBSURFACE INVESTIGATION
SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

Main content table with columns: SOIL DESCRIPTION, GRADATION, ROCK DESCRIPTION, TERMS AND DEFINITIONS, SOIL LEGEND AND AASHTO CLASSIFICATION, MINERALOGICAL COMPOSITION, COMPRESSIBILITY, PERCENTAGE OF MATERIAL, GROUND WATER, MISCELLANEOUS SYMBOLS, RECOMMENDATION SYMBOLS, ABBREVIATIONS, EQUIPMENT USED ON SUBJECT PROJECT, FRACTURE SPACING, BEDDING, INDURATION, PLASTICITY, COLOR.



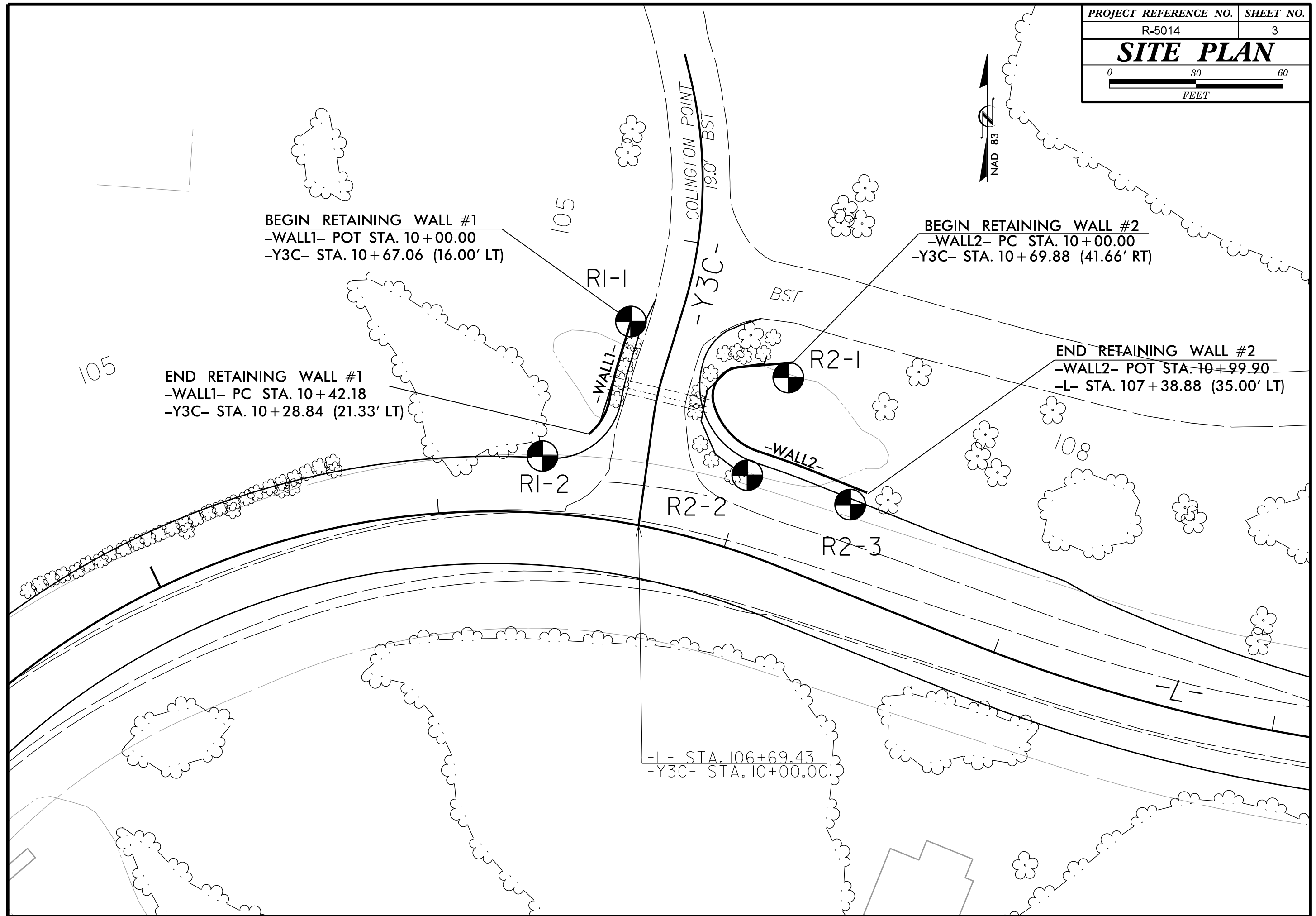
BEGIN RETAINING WALL #1
 -WALL1- POT STA. 10+00.00
 -Y3C- STA. 10+67.06 (16.00' LT)

BEGIN RETAINING WALL #2
 -WALL2- PC STA. 10+00.00
 -Y3C- STA. 10+69.88 (41.66' RT)

END RETAINING WALL #1
 -WALL1- PC STA. 10+42.18
 -Y3C- STA. 10+28.84 (21.33' LT)

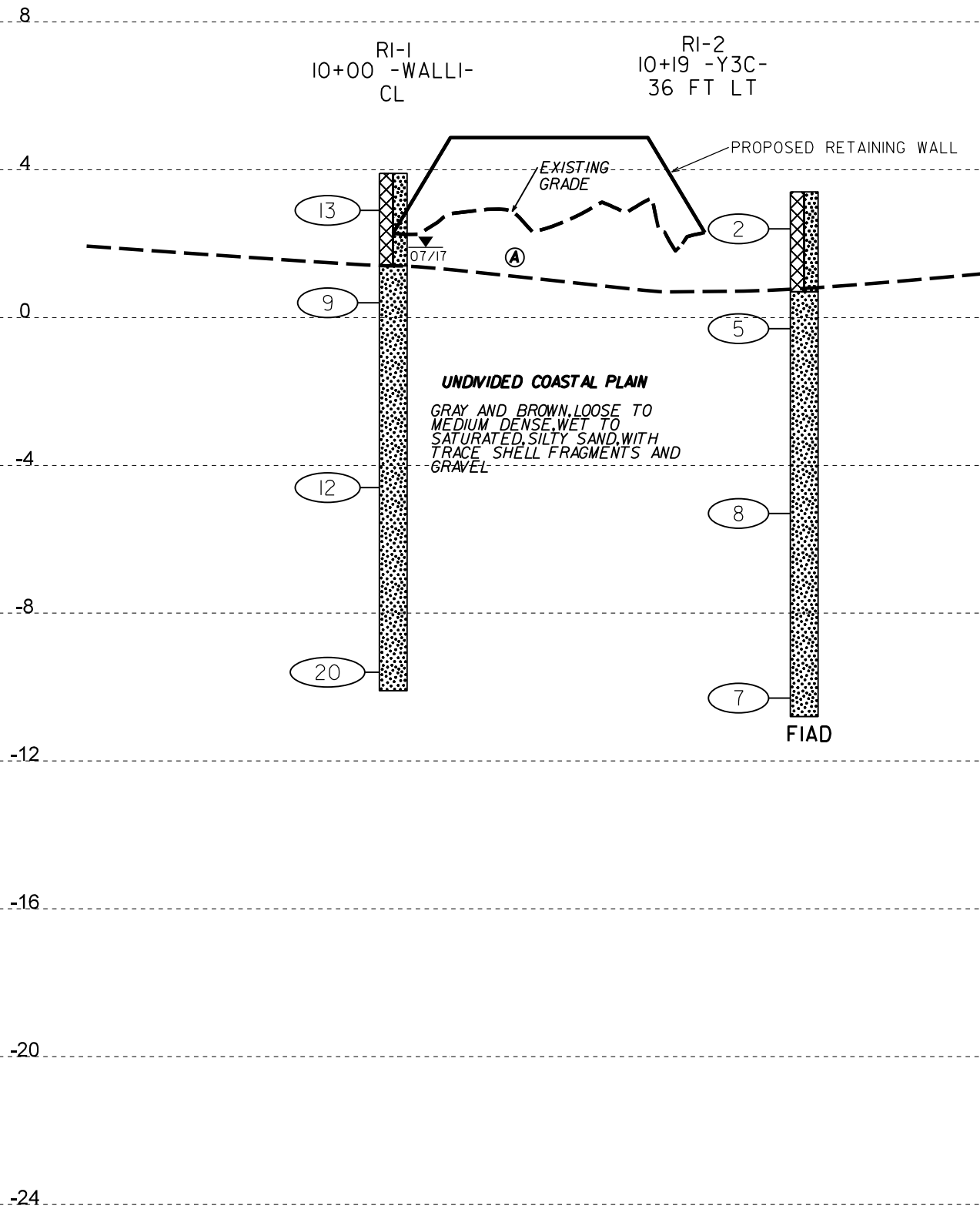
END RETAINING WALL #2
 -WALL2- POT STA. 10+99.90
 -L- STA. 107+38.88 (35.00' LT)

-L- STA. 106+69.43
 -Y3C- STA. 10+00.00



(A) ARTIFICIAL FILL
 BROWN, BLACK AND GRAY, VERY LOOSE TO
 MEDIUM DENSE, MOIST, SILTY SAND, WITH
 TRACE ROOTS

PROFILE ALONG CENTERLINE OF -WALL1-



NOTE: EXISTING GROUND SURFACE CROSS SECTION AT RETAINING WALL NO. 1 TAKEN FROM ELECTRONIC TIN FILE (DATED 03-13-17). INFERRED STRATIGRAPHY IS DRAWN THROUGH THE BORINGS WITH BOTH PROJECTED ONTO THE ENVELOPE.

HORIZ. SCALE 0 20 40 (FEET)

VE = 5:1

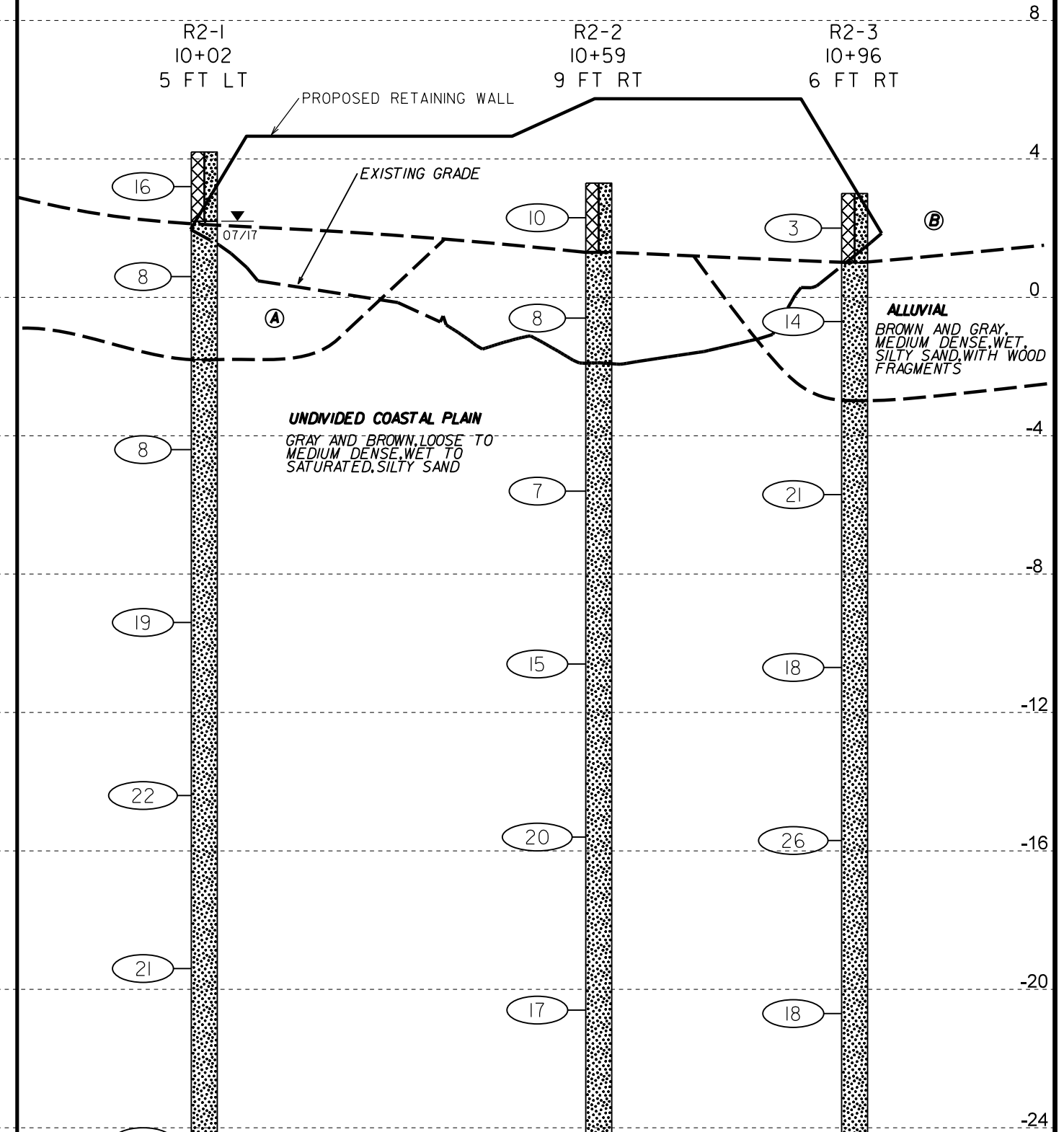
RETAINING WALL ENVELOPE NO. 1

(A) ALLUVIAL
 GRAY AND BROWN, LOOSE,
 WET, SILTY SAND, WITH
 TRACE SHELL FRAGMENTS
 AND WOOD FRAGMENTS

(B) ARTIFICIAL FILL
 GRAY, BLACK AND
 BROWN, VERY LOOSE TO
 MEDIUM DENSE, MOIST
 TO WET SILTY SAND,
 WITH TRACE ROOTS

PROJECT REFERENCE NO.	SHEET NO.
R-5014	4

PROFILE ALONG CENTERLINE OF -WALL2-



NOTE: EXISTING GROUND SURFACE CROSS SECTION AT RETAINING WALL NO. 2 TAKEN FROM ELECTRONIC TIN FILE (DATED 03-13-17). INFERRED STRATIGRAPHY IS DRAWN THROUGH THE BORINGS WITH BOTH PROJECTED ONTO THE ENVELOPE.

HORIZ. SCALE 0 20 40 (FEET)

VE = 5:1

RETAINING WALL ENVELOPE NO. 2