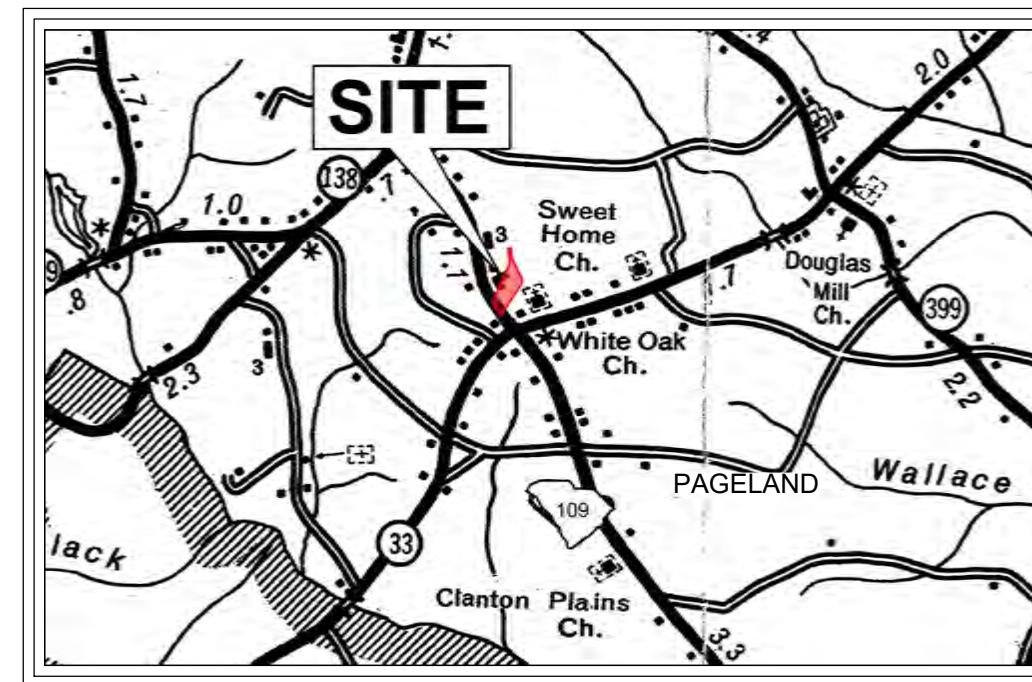


VICINITY MAP
N.T.S.



SITE LOCATION

2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ±3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA



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EROSION AND SEDIMENT CONTROL DETAILS (SHEET 1 OF 2)	C6.0
EROSION AND SEDIMENT CONTROL DETAILS (SHEET 1 OF 2)	C7.0
	C7.1

"I, Benjamin S. Whaley, have placed my signature and seal on the design documents submitted signifying that I accept responsibility for the design of the system. Further, I certify to the best of my knowledge and belief that the design is consistent with the requirements of Title 48, Chapter 14 of the Code of Laws of SC, 1976 as amended, pursuant of Regulation 72-300 et seq. (if applicable), and in accordance with the terms and conditions of SCR100000. "

NPDES PERMIT INFORMATION

NPDES DISTURBED AREA = ± 4.53 ACRES
MAXIMUM LENGTH OF DISTURBED AREA = ± 3,051 LINEAR FEET (LF)

ENGINEER INFORMATION

COMPANY: ALLIANCE CONSULTING ENGINEERS, INC.
CONTACT: BENJAMIN S. WHALEY, P.E.
ADDRESS: P.O. BOX 8147
CITY, STATE: COLUMBIA, SOUTH CAROLINA 29202
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FAX: (803) 779-2079
EMAIL: SWHALEY@ALLIANCECE.COM

DEVELOPER INFORMATION

DEVELOPER: CHESTERFIELD COUNTY ECONOMIC DEVELOPMENT
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EMAIL: KBURCH@CHESTERFIELDCOUNTYSC.COM

OWNER INFORMATION

OWNER: CHESTERFIELD COUNTY
CONTACT: MR. TIM EUBANKS
ADDRESS: 178 MILLS STREET
CITY, STATE: CHESTERFIELD, SC 29709
TELEPHONE: (843) 623-2595 (OFFICE)
(843) 680-2216 (CELL)
EMAIL: TIMEUBANKS@CHESTERFIELDCOUNTY SC.COM

Chesterfield County Board Members

Mr. Kenneth A. Johnson, Chairman
Ms. Mary D. Anderson
Ms. Hattie Burns
Mr. William Rhett Butler
Mr. Benjamin Conklin, Jr.
Mr. Douglas A. Curtis
Mr. Gerald L. Miller
Mr. Bruce E. Rivers
Mr. Ralph E. Watson

Utility Provider Contacts

Water Provider:

Contact: Chesterfield County Rural Water
13598 South Carolina 9 Bypass; Chesterfield, SC
Telephone: (843) 623-6090

Wastewater Provider:

Contact: Chesterfield County Rural Water, Inc.
13598 Highway 9; Chesterfield, SC
Telephone: (843) 623-6090

Electrical Utility Provider:

Contact: Lynches River Electric Cooperative, Inc.
707 S. Arant Street; Pageland, SC
Telephone: (843) 672-6111

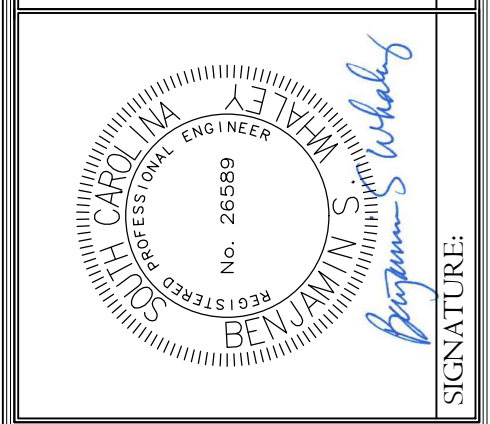
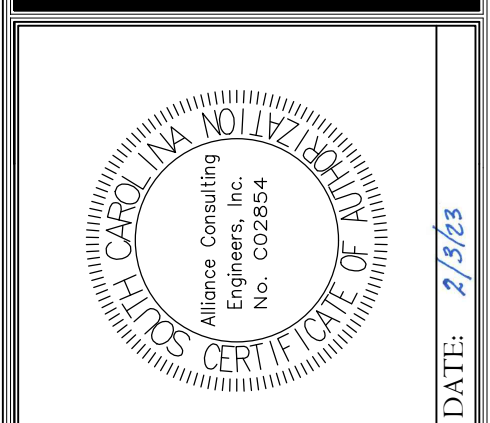
Telecommunications Provider:

Contact: Sand Hill Telephone Cooperative
112 South Main Street
Jefferson, South Carolina
Telephone: (843) 658-3434

Gas Provider:

Contact: Not available

REVISION DATE



ALLIANCE CONSULTING ENGINEERS, INC.
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COLUMBIA, SOUTH CAROLINA 29202-8147
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WWW.ALLIANCECE.COM

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ±3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA
CHESTERFIELD COUNTY SOUTH CAROLINA

JANUARY 2023

Project No. 22210-0013

DWG NO. 01.1588-D27



February 21, 2023 - 10:40:23 AM S:\Projects\2210-0013 C-Fund Rubby Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\C1.0 Existing Conditions and General Notes.dwg

LEGEND

--R/W--	EXISTING RIGHT-OF-WAY (R-O-W)		EXISTING PAVEMENT
--W--	EXISTING WATER MAIN		EXISTING DIRT ROAD
SD	EXISTING STORM DRAINAGE PIPE		LIMITS OF DISTURBANCE
---	EXISTING SIGN		PROPOSED SIGN
---	EXISTING GAS LINE	--R/W--	PROPOSED FUTURE R-O-W
---	EXISTING OVERHEAD ELECTRIC		PROPOSED ASPHALT PAVEMENT
			PROPOSED GRAVEL DRIVE

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NOTE: CAD FILES WILL BE PROVIDED TO CONTRACTOR FOR USE WITH SITE STAKING.

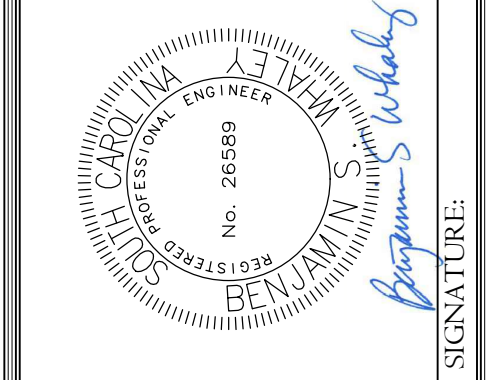
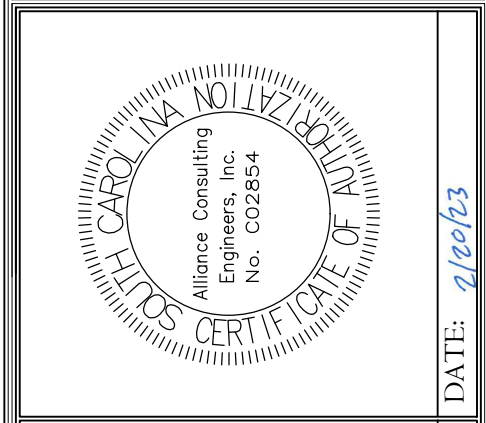
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REVISION	DATE
SCDOT COMMENT - BSW	2.20.23
SCDOT COMMENT - BSW	2.21.23



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 Phone: (803) 779-2078 • Fax: (803) 779-2079

OVERALL SITE PLAN AND GENERAL NOTES

DATE: DECEMBER 2022
 SCALE: 1" = 100'

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE #3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

FILE NAME: C1.0.dwg
REFERENCE FILE: 22210-0013 BASE.dwg
PROJECT NO.: 22210-0013

SHEET: C1.0

DWG NO. 01.1588-D27

STANDARD NOTES

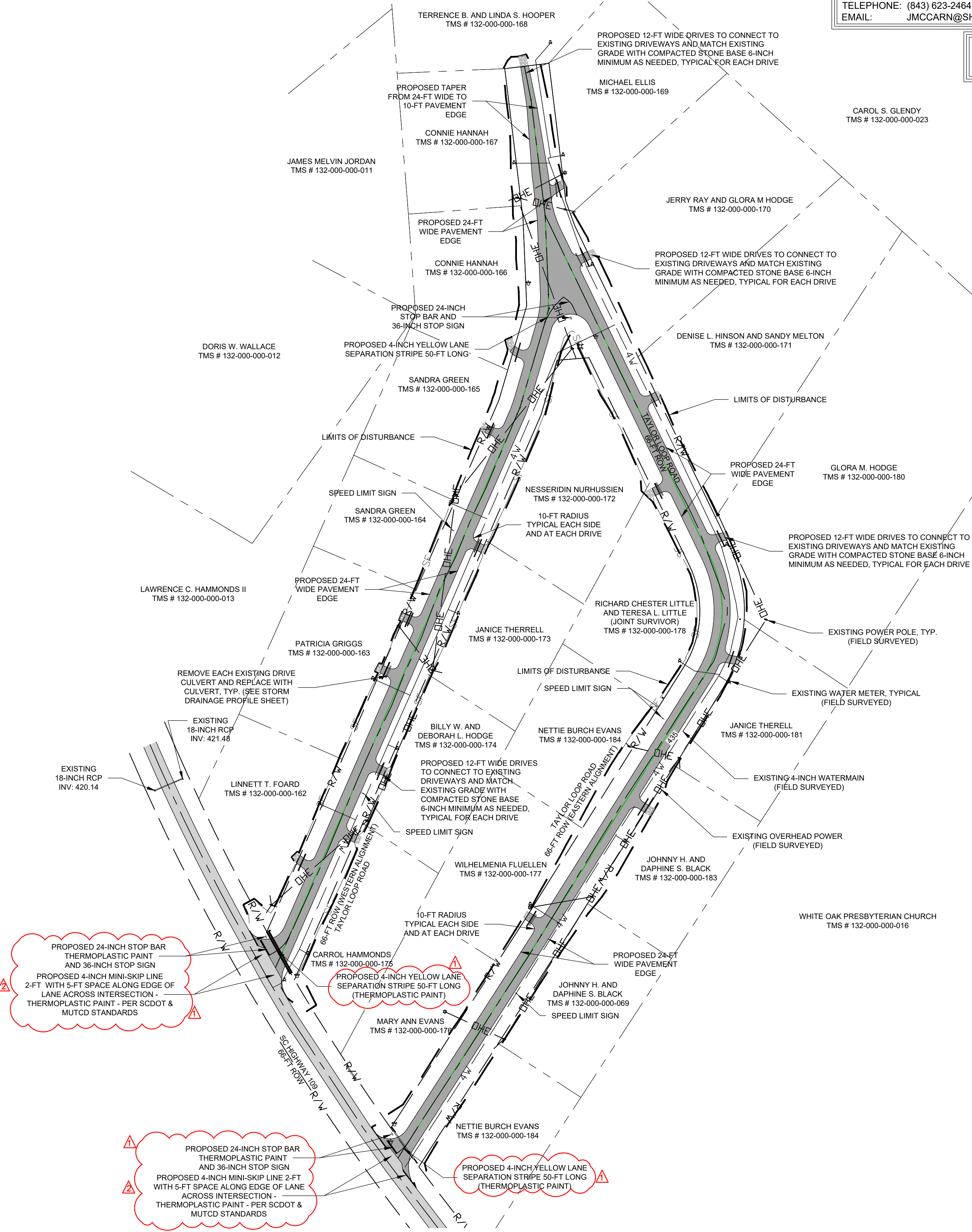
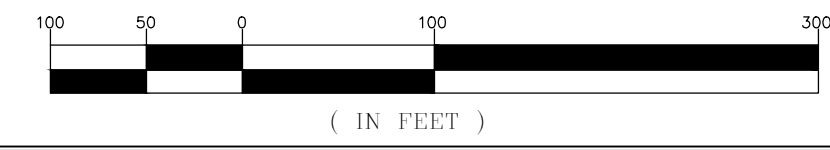
- PRIOR TO THE COMMENCEMENT OF ANY WORK WITHIN THE PROJECT SITE, THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS SHALL POSSESS ALL APPLICABLE PERMITTING AND THE OWNER AND ENGINEER WILL BE GIVEN AT LEAST TWENTY-FOUR (24) HOURS NOTICE BEFORE BEGINNING WORK.
- PROCEDURES / RESPONSIBILITIES**
 - ALL WETLANDS SIGNAGE TO BE INSTALLED PER THE APPROVED CONSTRUCTION DRAWINGS PRIOR TO ANY LAND DISTURBING ACTIVITIES.
 - SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS. IN ADDITION TO HYDROGENATING, IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
 - STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
 - WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
 - WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THE PORTION OF THE SITE.
 - ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
 - PROVIDE SILT FENCE AND OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
 - ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
 - THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
 - RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURES AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C. REG. 72-300 ET SEQ. AND SCR100000.
 - TEMPORARY DIVERSION BERMS AND/OR DITCHES SHALL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
 - ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN NOT BE MAINTAINED BETWEEN THE DISTURBED AREAS AND ALL WOS. A 30-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
 - LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
 - A COPY OF THE OS-SWPPP, INSPECTION RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THE FINAL STABILIZATION IS REACHED.
 - INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE BEEN PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
 - MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL AND REPLACE WITHIN ALL GRASSED AND LANDSCAPED AREAS TO A MINIMUM DEPTH OF 6". IF ADDITIONAL TOPSOIL IS REQUIRED TO MEET THE SPECIFICATIONS, THE CONTRACTOR MUST PROVIDE FROM AN OFF-SITE SOURCE.
 - MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL TO PROVIDE EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
 - MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPs (SEDIMENT BASIN, FILTER BAG, ETC.)
 - THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
 - WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL.
 - WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS.
 - FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
 - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
 - AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
 - IF EXISTING BMPs NEED TO BE MODIFIED OR IF ADDITIONAL BMPs ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SCS WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPs MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
 - A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 29.5 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.
 - AN AS-BUILT SURVEY(S), SIGNED AND SEALED BY A S.C. LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER, SHOULD BE SUBMITTED TO ALLIANCE CONSULTING ENGINEERS FOR DETENTION STRUCTURE(S) ON THIS SITE. THE SURVEY(S) WILL BE PROVIDED BY THE CONTRACTOR TO ALLIANCE CONSULTING ENGINEERS TO SHOW GRADES, CONTOURS, AND DEPTHS FOR ALL STRUCTURE(S) AND SHOULD INCLUDE THE ELEVATIONS AND DIMENSIONS OF ALL OUTLET STRUCTURES, INCLUDING BUT NOT LIMITED TO PIPES, ORIFICES, RISERS, WEIRS, AND EMERGENCY SPILLWAYS.

PROPOSED 24-INCH STOP BAR THERMOPLASTIC PAINT AND 36-INCH STOP SIGN
 PROPOSED 4-INCH MINI-SKIP LINE 2-FT WITH 5-FT SPACE ALONG EDGE OF LANE ACROSS INTERSECTION - THERMOPLASTIC PAINT - PER SCDOT & MUTCD STANDARDS

PROPOSED 4-INCH YELLOW LANE SEPARATION STRIPE 50-FT LONG (THERMOPLASTIC PAINT)

PROPOSED 24-INCH STOP BAR THERMOPLASTIC PAINT AND 36-INCH STOP SIGN
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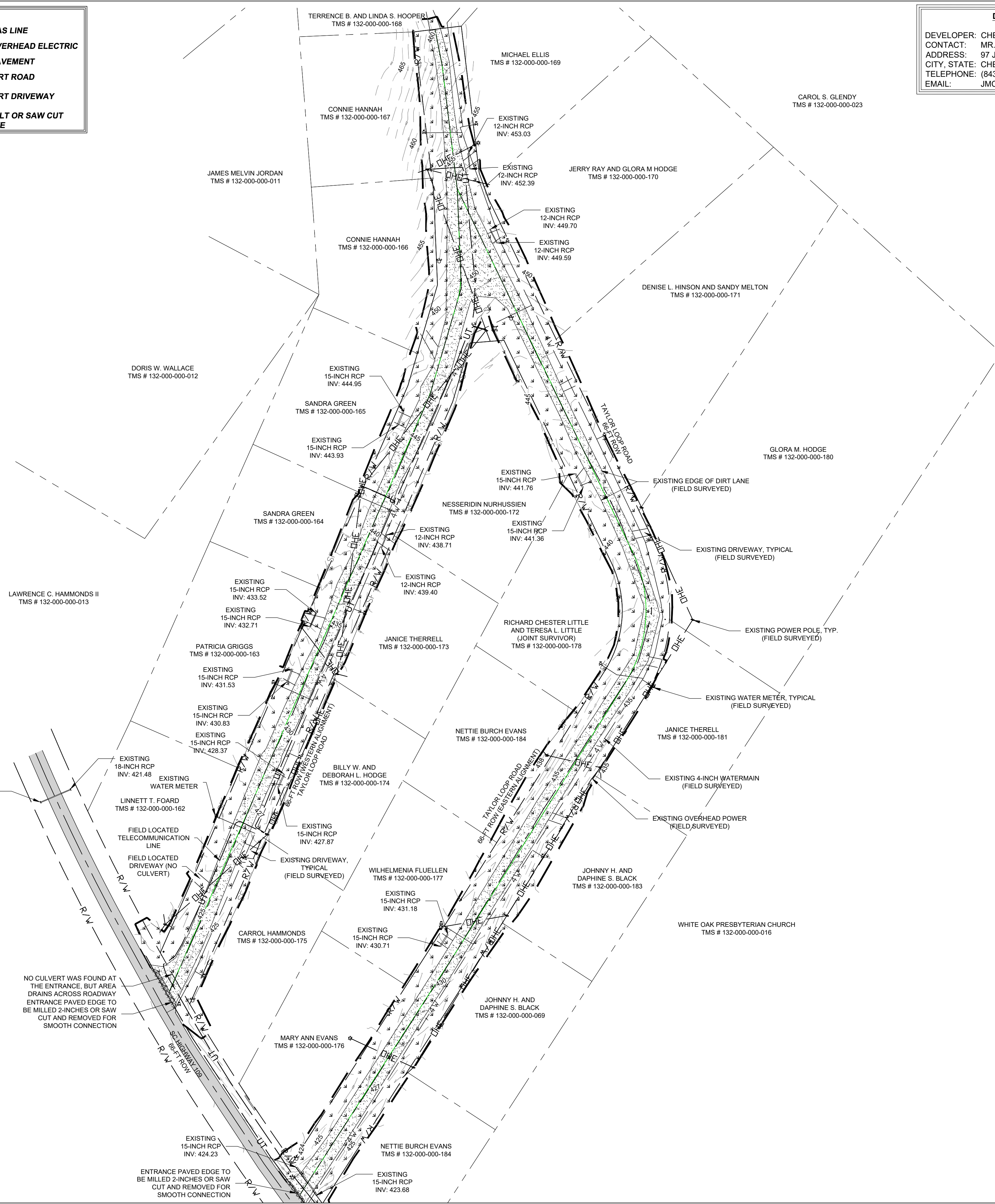
PROPOSED 4-INCH YELLOW LANE SEPARATION STRIPE 50-FT LONG (THERMOPLASTIC PAINT)



February 20, 2023 - 9:07:16 AM S:\Projects\22210-0013 C-Fund Rubby Improv Taylor Loop Colong\Construction Plans\C1.0 Existing Conditions and General Notes.dwg

LEGEND

---R/W---	EXISTING RIGHT-OF-WAY	---	GAS	---	EXISTING GAS LINE
---	185	---	OHE	---	EXISTING OVERHEAD ELECTRIC
---	186	---		---	EXISTING PAVEMENT
---	W	---		---	EXISTING DIRT ROAD
---		---		---	EXISTING DIRT DRIVEWAY
---		---		---	MILL ASPHALT OR SAW CUT AND REMOVE
---		---		---	
---		---		---	
---		---		---	



DEVELOPER INFORMATION

DEVELOPER: CHESTERFIELD COUNTY PUBLIC WORKS
 CONTACT: MR. JEFF McCARN
 ADDRESS: 97 JONES ROAD
 CITY, STATE: CHESTERFIELD, SC 29709
 TELEPHONE: (843) 623-2464 (WORK)
 EMAIL: JMcCarn@SHTC.NET.COM

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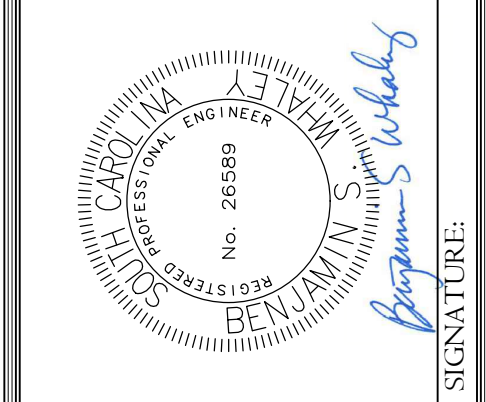
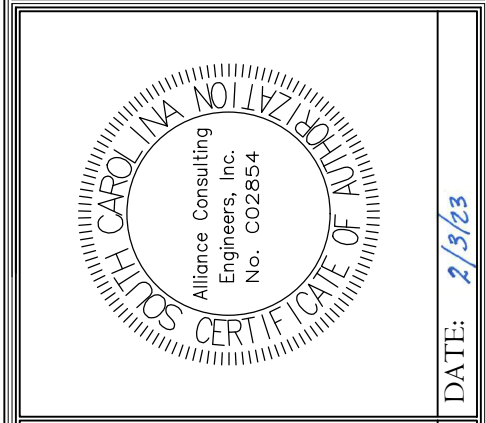
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REVISION	DATE



ALLIANCE CONSULTING ENGINEERS

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 Phone (803) 779-2078 • Fax (803) 779-2079

EXISTING CONDITIONS PLAN

SHEET

DATE: DECEMBER 2022

SCALE: 1" = 80'

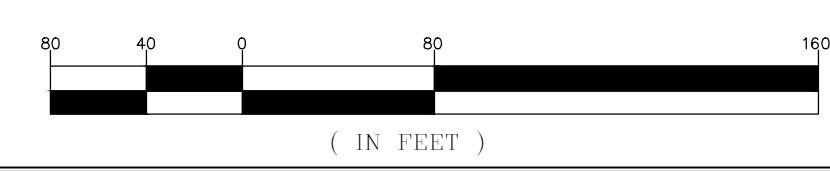
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CHESTERFIELD COUNTY SOUTH CAROLINA

FILE NAME: C1.0.dwg
 REFERENCE FILE: 22210-0013 BASE.dwg
 PROJECT NO: 22210-0013

SHEET C1.1

DWG NO. 01.1588-D27



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LEGEND			
— R/W —	EXISTING RIGHT-OF-WAY (R-O-W)		EXISTING PAVEMENT
— W —	EXISTING WATER MAIN		EXISTING DIRT ROAD
— SD —	EXISTING STORM DRAINAGE PIPE		LIMITS OF DISTURBANCE
—	EXISTING SIGN		PROPOSED SIGN
— GAS —	EXISTING GAS LINE		PROPOSED FUTURE R-O-W
— OHE —	EXISTING OVERHEAD ELECTRIC		PROPOSED ASPHALT PAVEMENT
			PROPOSED GRAVEL DRIVE

- GENERAL NOTES:**
- CONNECT TO THE EXISTING DRIVEWAYS AND MATCH EXISTING GRADES WITH COMPACTED GABC (THE DRIVEWAYS ARE 12-FT WIDE).
 - REMOVE ALL EXISTING CULVERTS AND REPLACE WITH THE CULVERT NOTED ON THE STORM DRAINAGE PROFILE SHEET.
 - CONTRACTOR TO FIELD LOCATE THE EXISTING UTILITIES AND COORDINATE WITH THE SUPPLIERS ON FIELD RELOCATIONS IF PROPOSED CUT SECTION WILL CONFLICT WITH EXISTING UTILITY LOCATION OR DEPTH.
 - ANY EXCESS CUT MATERIAL WILL BE REMOVED FROM THE SITE TO AN APPROVAL LOCATION FOR ACCEPTANCE OF FILL MATERIAL BY SCDHEC.

- REFERENCES:**
- REFERENCE IS MADE TO TOPOGRAPHIC AND UTILITY SURVEY OF THE PROPOSED ROADWAY IMPROVEMENTS SURVEY BY HAYES SURVEYING DATED OCTOBER 14, 2022.
 - REFERENCE IS MADE TO LIDAR DATA PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) NATURAL RESOURCES CONSERVATION SERVICE (NRCS) GEOSPATIAL DATA GATEWAY FOR THE MAJORITY OF THE PROPERTY.
 - REFERENCE IS MADE TO CHESTERFIELD COUNTY GIS RECORDS FOR THE LOCATION OF RIGHT-OF-WAY AND PROPERTY LINES AND NOTE THAT THE PROPERTY LINES ARE APPROXIMATE - NOT FIELD SURVEYED.

OWNER INFORMATION

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 CONTACT: MR. TIM EUBANKS
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 TELEPHONE: (843) 623-2595 (OFFICE)
 (843) 680-2216 (CELL)
 EMAIL: TIMEUBANKS@CHESTERFIELDCOUNTY SC.COM

DEVELOPER INFORMATION

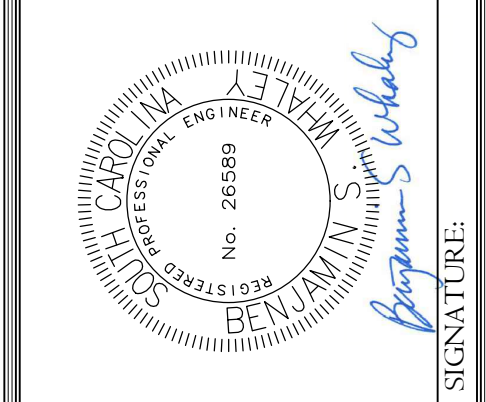
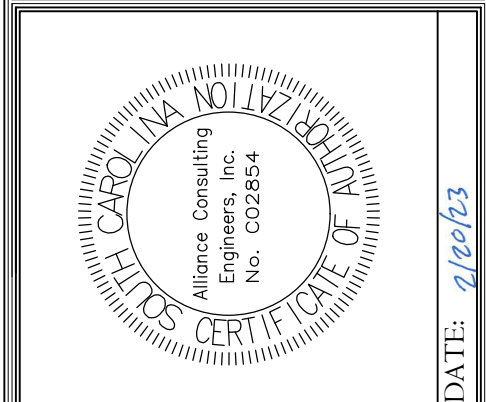
DEVELOPER: CHESTERFIELD COUNTY PUBLIC WORKS
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 EMAIL: JMcCARN@SHTC.NET.COM

ENGINEER INFORMATION

COMPANY: ALLIANCE CONSULTING ENGINEERS, INC.
 CONTACT: BENJAMIN S. WHALEY, P.E.
 ADDRESS: P.O. BOX 8147
 CITY, STATE: COLUMBIA, SOUTH CAROLINA 29202
 TELEPHONE: (803) 779-2078
 FAX: (803) 779-2079
 EMAIL: SSWHALEY@ALLIANCECE.COM

NOTE: CAD FILES WILL BE PROVIDED TO CONTRACTOR FOR USE WITH SITE STAKING.

REVISION DATE	
▲	SCDOT COMMENT - BSW 2.20.23
▲	SCDOT COMMENT - BSW 2.21.23



ALLIANCE CONSULTING ENGINEERS

Alliance Consulting Engineers, Inc.
 Post Office Box 8147, Columbia, South Carolina 29202-8147
 Phone: (803) 779-2078 • Fax: (803) 779-2079

SHEET

EASTERN ALIGNMENT OF TAYLOR LOOP ROAD PLAN AND PROFILE
 STA 0+00 TO 12+00
 (SHEET 1 OF 2)

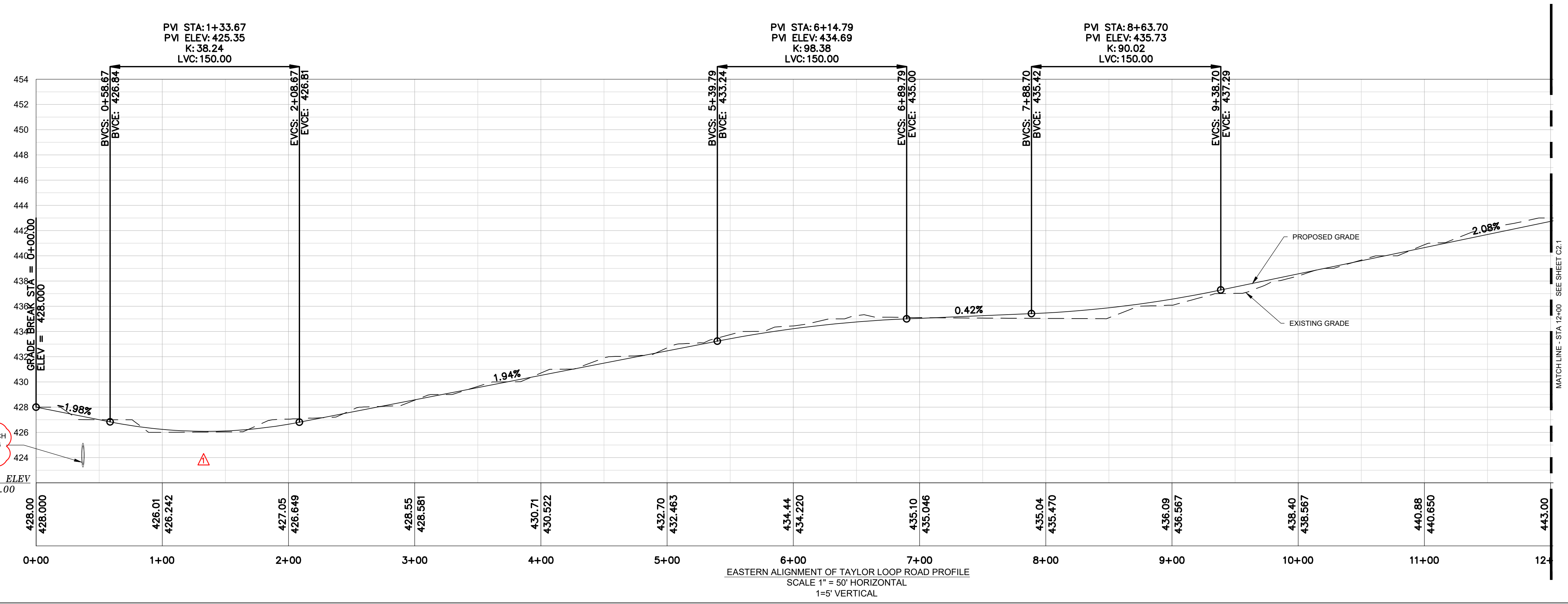
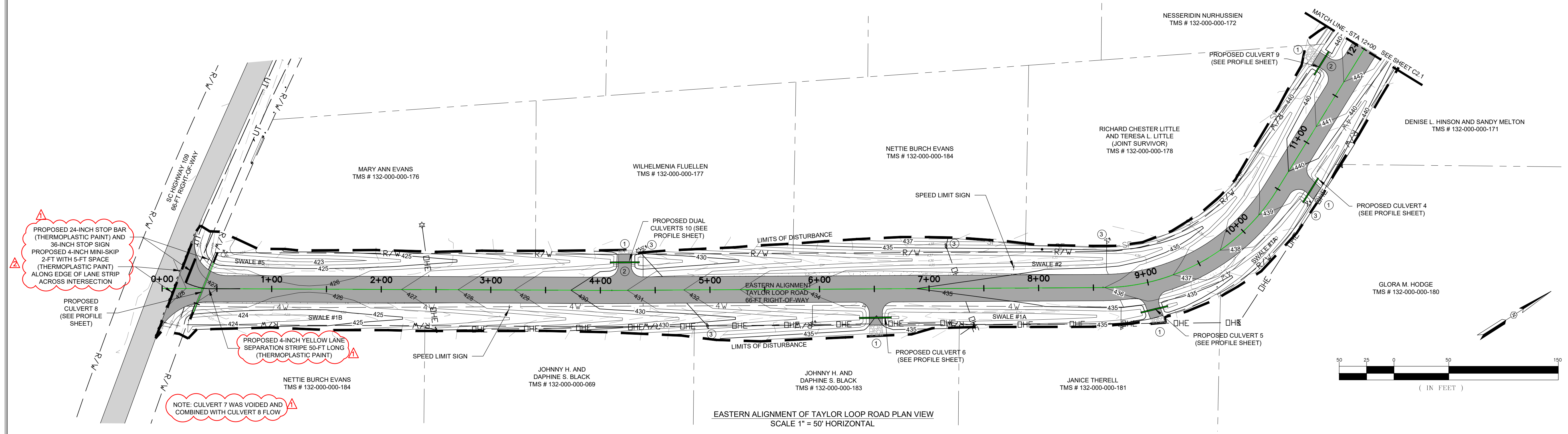
DATE: DECEMBER 2022 SCALE: 1" = 50'

PROJECT

2022 C-FUND ROADWAY IMPROVEMENTS FOR THE #3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

FILE NAME:	C2.0.dwg	SHEET C2.0
REFERENCE FILE:	22210-0013_BASE.dwg	
PROJECT NO.:	22210-0013	

DWG NO. 01.1588-D27



February 20, 2023 - 9:27:21 AM S:\Projects\22210-0013 C-Fund Rubby Improv Taylor Loop Comm of Ruby Chesterfield Colong\Construction Plans\ C2.0 Plan and Profile - Eastern Centerline.dwg
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LEGEND			
---R/W---	EXISTING RIGHT-OF-WAY (R-O-W)		EXISTING PAVEMENT
---W---	EXISTING WATER MAIN		EXISTING DIRT ROAD
---SD---	EXISTING STORM DRAINAGE PIPE		LIMITS OF DISTURBANCE
---	EXISTING SIGN		PROPOSED SIGN
---GAS---	EXISTING GAS LINE		PROPOSED FUTURE R-O-W
---OHE---	EXISTING OVERHEAD ELECTRIC		PROPOSED ASPHALT PAVEMENT
			PROPOSED GRAVEL DRIVE

GENERAL NOTES:

- CONNECT TO THE EXISTING DRIVEWAYS AND MATCH EXISTING GRADES WITH COMPACTED GABC (THE DRIVEWAYS ARE 12-FT WIDE).
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DEVELOPER INFORMATION

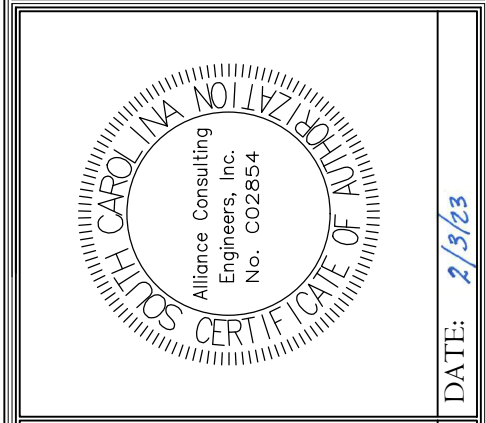
DEVELOPER: CHESTERFIELD COUNTY PUBLIC WORKS
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ENGINEER INFORMATION

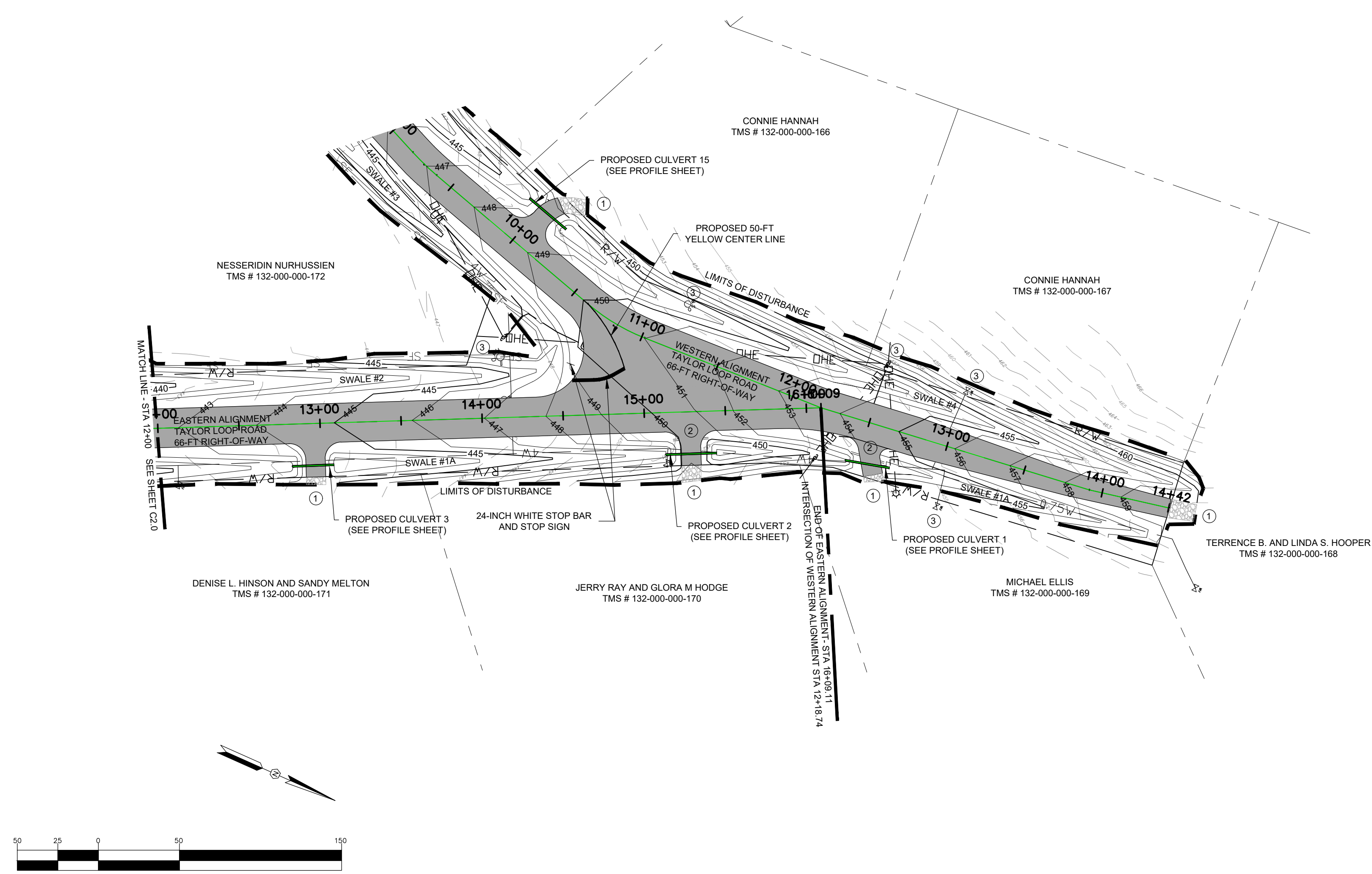
COMPANY: ALLIANCE CONSULTING ENGINEERS, INC.
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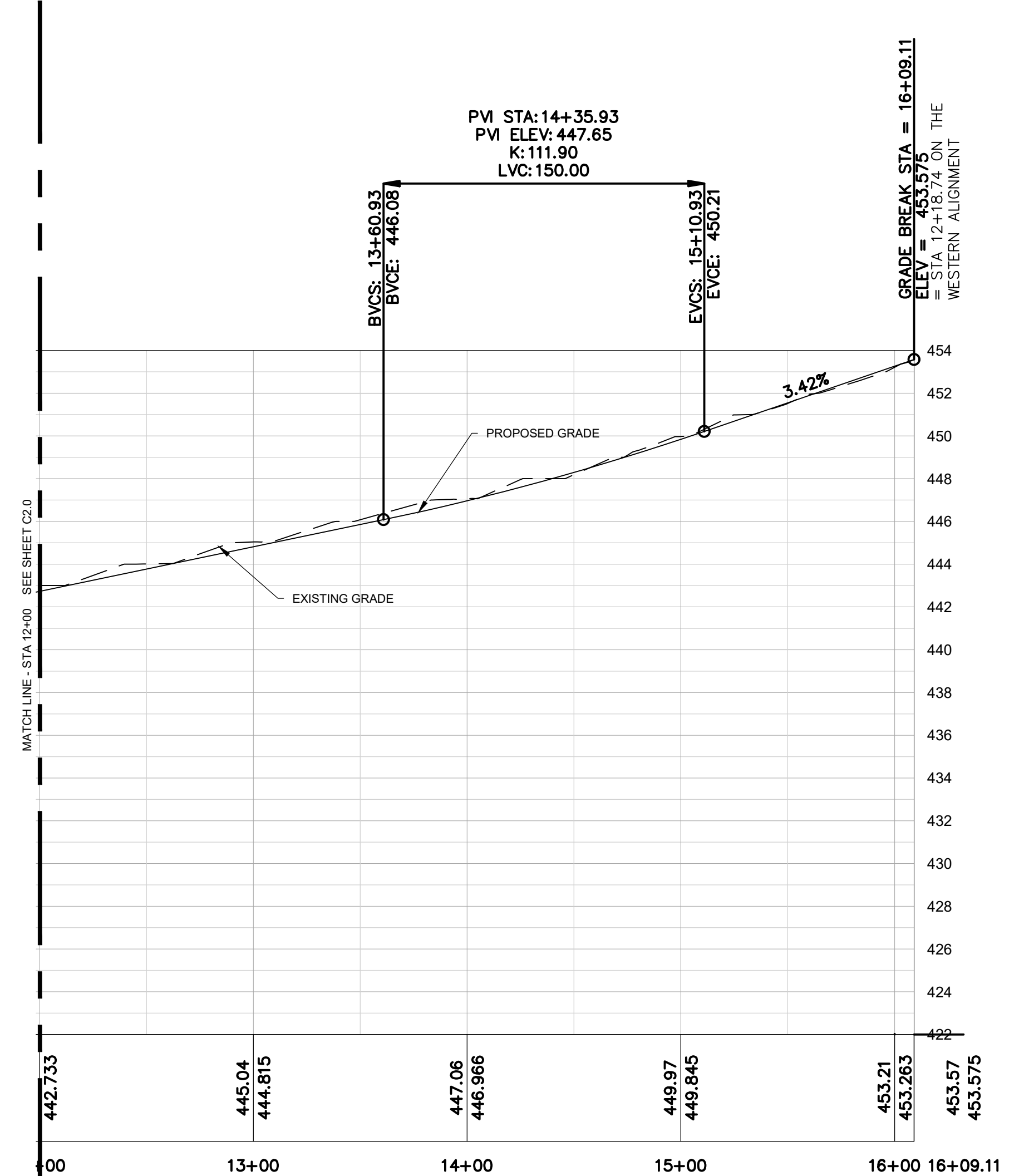
REVISION DATE	



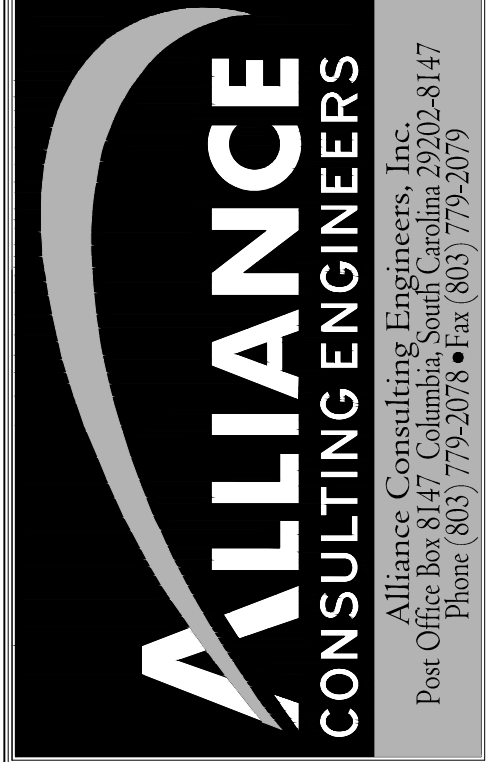
SIGNATURE: *Benjamin S. Whaley*
 DATE: 2/2/23



EASTERN ALIGNMENT OF TAYLOR LOOP ROAD PLAN VIEW
 SCALE 1" = 50' HORIZONTAL



EASTERN ALIGNMENT OF TAYLOR LOOP ROAD PROFILE
 SCALE 1" = 50' HORIZONTAL
 1"=5' VERTICAL



PROJECT: EASTERN ALIGNMENT OF TAYLOR LOOP ROAD PLAN AND PROFILE STA 12+00 TO 16+09.11 (SHEET 2 OF 2)

DATE: DECEMBER 2022
 SCALE: 1" = 50'

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE #3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

CHESTERFIELD COUNTY SOUTH CAROLINA

FILE NAME:	C2.0.dwg	SHEET C2.1
REFERENCE FILE:	22210-0013 BASE.dwg	
PROJECT NO.:	22210-0013	

DWG NO. 01.1588-D27

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LEGEND	
---R/W---	EXISTING RIGHT-OF-WAY (R-O-W)
---	EXISTING WATER MAIN
---SD---	EXISTING STORM DRAINAGE PIPE
---	EXISTING SIGN
---	EXISTING GAS LINE
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING PAVEMENT
---	EXISTING DIRT ROAD
---	LIMITS OF DISTURBANCE
---	PROPOSED SIGN
---	PROPOSED FUTURE R-O-W
---	PROPOSED ASPHALT PAVEMENT
---	PROPOSED GRAVEL DRIVE

GENERAL NOTES:

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DEVELOPER INFORMATION

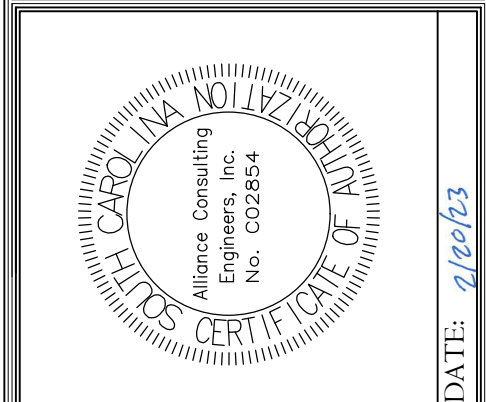
DEVELOPER: CHESTERFIELD COUNTY PUBLIC WORKS
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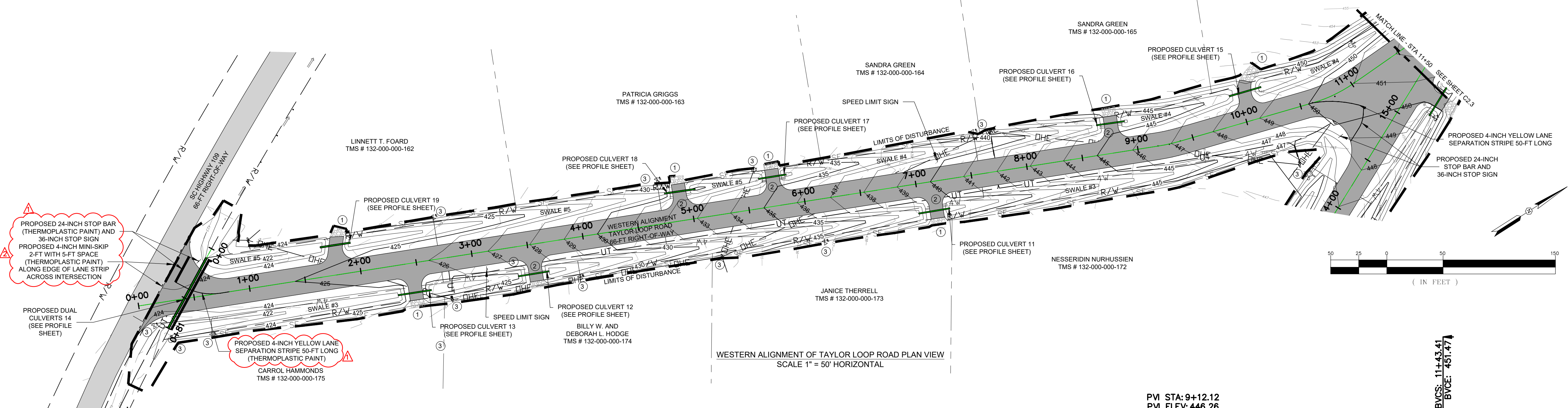
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NOTE: CAD FILES WILL BE PROVIDED TO CONTRACTOR FOR USE WITH SITE STAKING.

REVISION DATE	
▲	SCDOT COMMENT - BSW
▲	2.20.23
▲	SCDOT COMMENT - BSW
▲	2.21.23

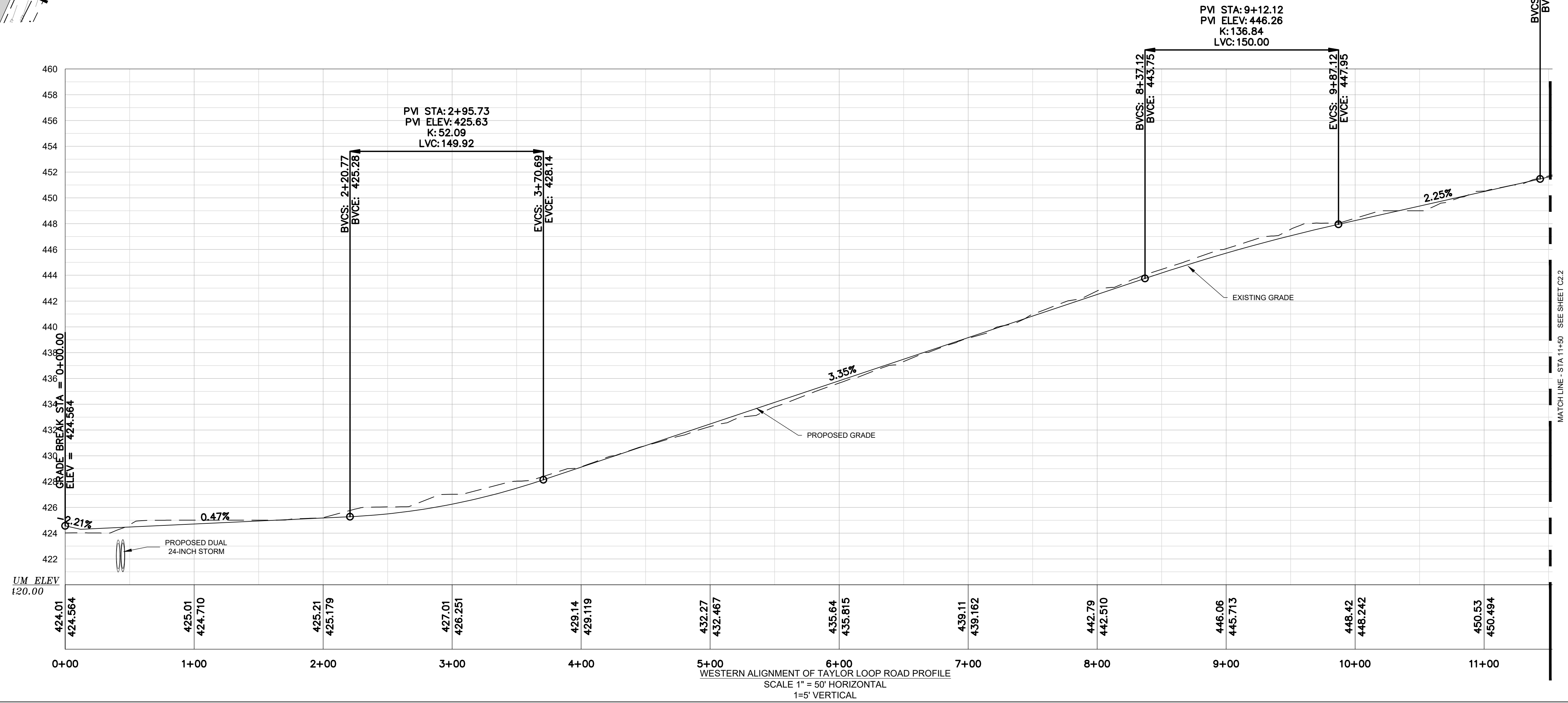
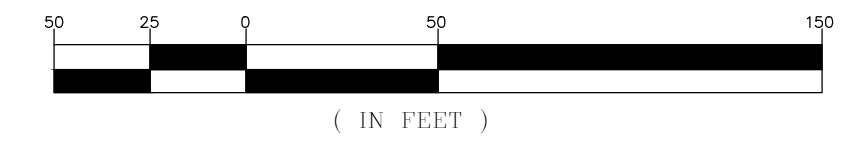


SIGNATURE: *Benjamin S. Whaley*
 DATE: 2/21/23



PROPOSED 24-INCH STOP BAR (THERMOPLASTIC PAINT) AND 36-INCH STOP SIGN
 PROPOSED 4-INCH MINI-SKIP 2-FT WITH 5-FT SPACE (THERMOPLASTIC PAINT) ALONG EDGE OF LANE STRIP ACROSS INTERSECTION

PROPOSED 4-INCH YELLOW LANE SEPARATION STRIPE 50-FT LONG (THERMOPLASTIC PAINT)
 CARROL HAMMONDS TMS # 132-000-000-175



ALLIANCE CONSULTING ENGINEERS
 Alliance Consulting Engineers, Inc.
 Post Office Box 8147, Columbia, South Carolina 29202-8147
 Phone (803) 779-2078 • Fax (803) 779-2079

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE #3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

SHEET: WESTERN ALIGNMENT OF TAYLOR LOOP ROAD PLAN AND PROFILE STA 0+00 TO 11+50 (SHEET 1 OF 2)

DATE: DECEMBER 2022
 SCALE: 1" = 50'

FILE NAME: C2.0.dwg
 REFERENCE FILE: 22210-0013 BASE.dwg
 PROJECT NO: 22210-0013

SHEET: C2.2

DWG NO. 01.1588-D27

February 20, 2023 - 9:28:25 AM S:\Projects\22210-0013 C-Fund Rubby Improv Taylor Loop Comm of Ruby Chesterfield Colodg\Construction Plans\ C2.0 Plan and Profile - Eastern Centerline.dwg
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LEGEND			
---R/W---	EXISTING RIGHT-OF-WAY (R-O-W)		EXISTING PAVEMENT
---W---	EXISTING WATER MAIN		EXISTING DIRT ROAD
---SD---	EXISTING STORM DRAINAGE PIPE	---	LIMITS OF DISTURBANCE
---	EXISTING SIGN		PROPOSED SIGN
---GAS---	EXISTING GAS LINE	---R/W---	PROPOSED FUTURE R-O-W
---OHE---	EXISTING OVERHEAD ELECTRIC		PROPOSED ASPHALT PAVEMENT
			PROPOSED GRAVEL DRIVE

- GENERAL NOTES:**
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DEVELOPER INFORMATION

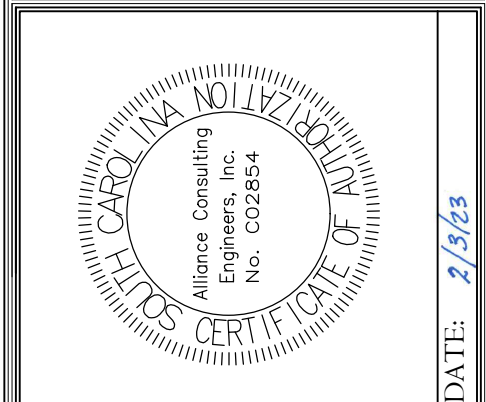
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ENGINEER INFORMATION

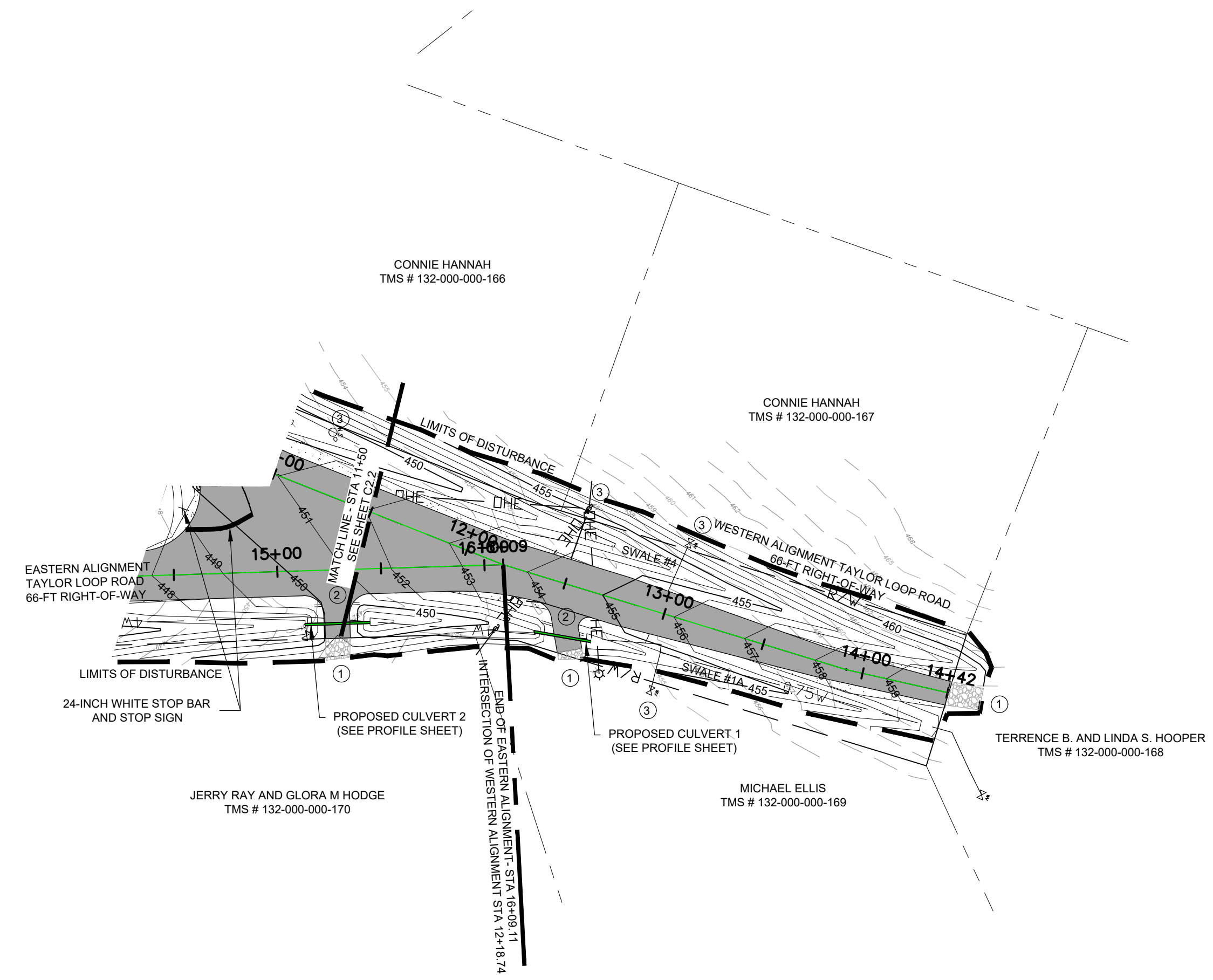
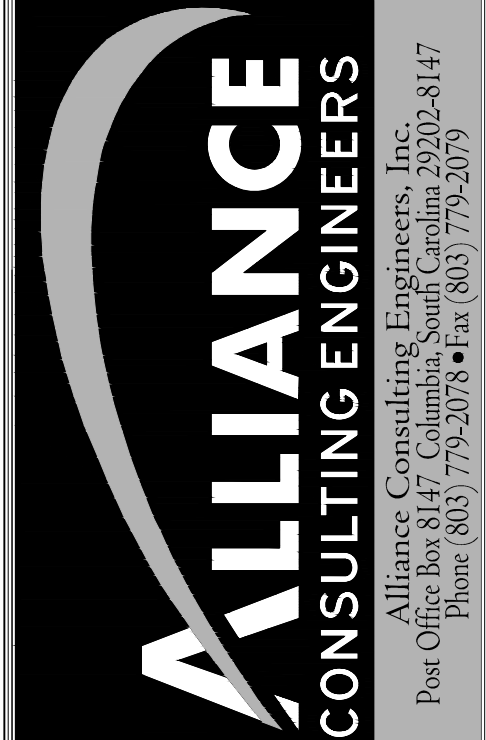
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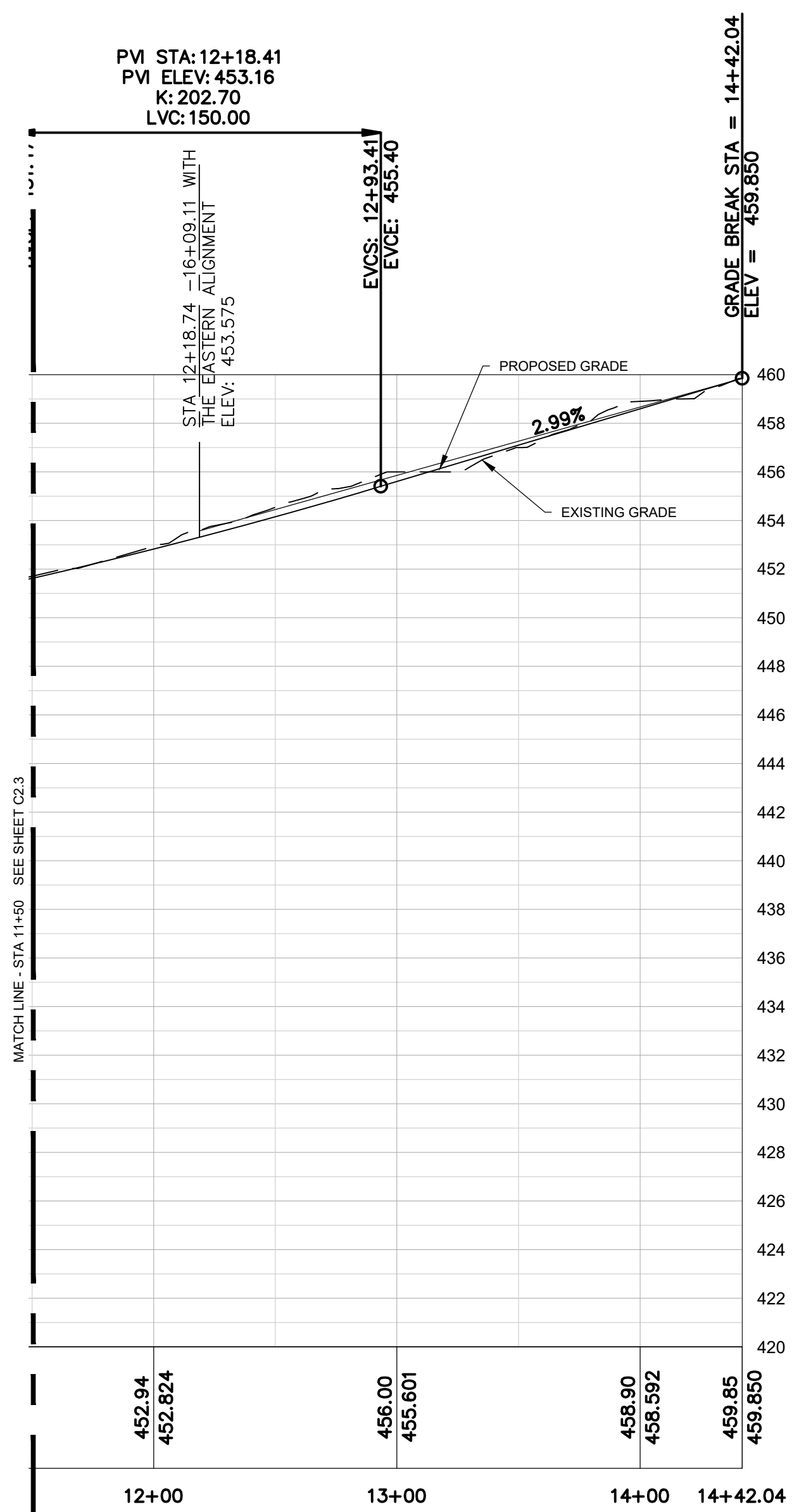
REVISION DATE	



SIGNATURE: *Benjamin S. Whaley*
 DATE: 2/23/23



WESTERN ALIGNMENT OF TAYLOR LOOP ROAD PLAN VIEW
 SCALE 1" = 50' HORIZONTAL



WESTERN ALIGNMENT OF TAYLOR LOOP ROAD PROFILE
 SCALE 1" = 50' HORIZONTAL
 1-5" VERTICAL

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE #3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

SHEET: WESTERN ALIGNMENT OF TAYLOR LOOP ROAD PLAN AND PROFILE STA 13+00 TO 14+42.04 (SHEET 1 OF 2)

DATE: DECEMBER 2022
 SCALE: 1" = 50'

FILE NAME: C2.0.dwg
 REFERENCE FILE: 22210-0013 BASE.dwg
 PROJECT NO: 22210-0013

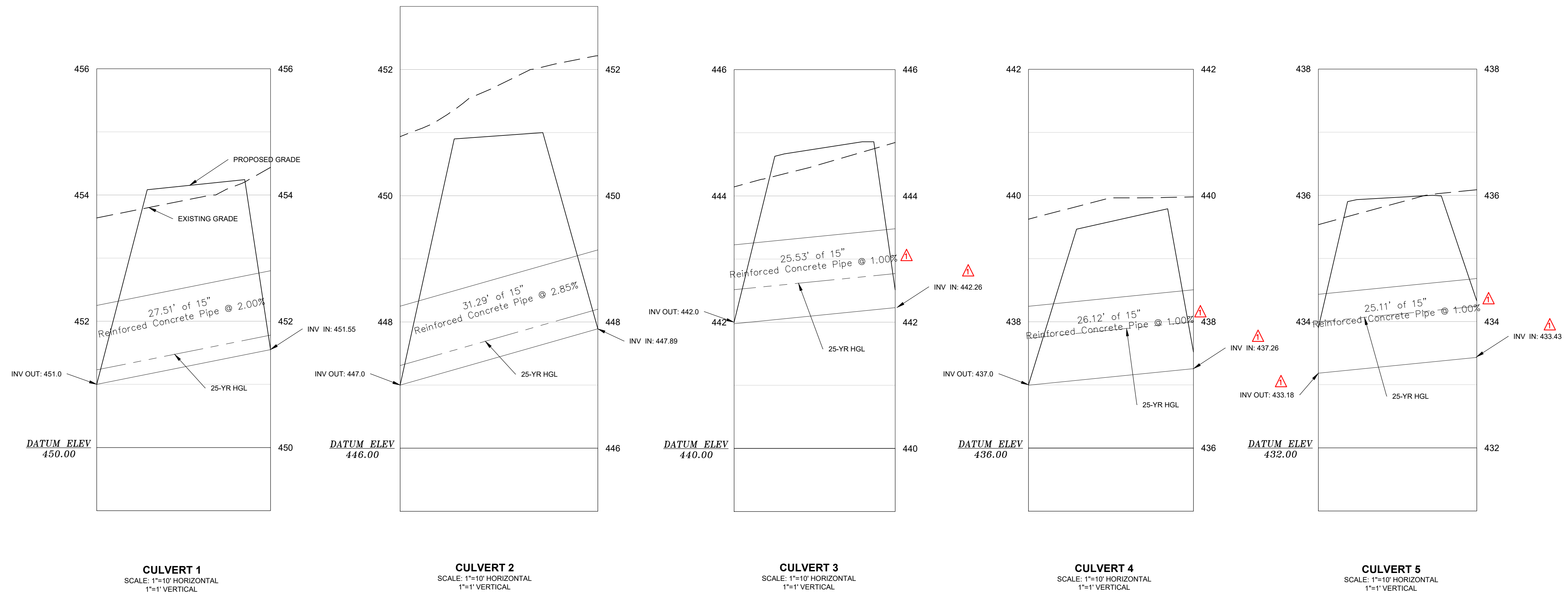
SHEET: C2.3

DWG NO. 01.1588-D27

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February 20, 2023 - 9:37:09 AM S:\Projects\22210\013 C-Fund Rdwy Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\ C2.1 Storm Profile.dwg

LEGEND	
EXISTING GRADE	---
PROPOSED SURFACE	---



NOTE:
SOME CULVERTS WILL REQUIRE CLASS V RCP TO ENSURE STRENGTH FOR COVER LESS THAN 18-INCHES PER SCOD STANDARDS. IF THE CULVERT HAS 18-INCHES OR MORE, CLASS III STANDARD RCP IS ACCEPTABLE.

REVISION DATE	
SCOD COMMENT - BSW	2.20.23

APPROVALS:

ENGINEER BSW	DESIGNER JAM	TRACER/ANALYST JAT	CHECKED BY BSW	APPROVED BY BSW
-----------------	-----------------	-----------------------	-------------------	--------------------

Professional Engineer Seal for Benjamin S. Wilby, No. 26589, State of South Carolina.

SIGNATURE: *Benjamin S. Wilby*

ALLIANCE CONSULTING ENGINEERS
Alliance Consulting Engineers, Inc.
Post Office Box 8147, Columbia, South Carolina 29202-8147
Phone (803) 799-2078 • Fax (803) 799-2079

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUB IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

SHEET: STORM DRAINAGE PROFILES (1 OF 4)

DATE: JANUARY 2023

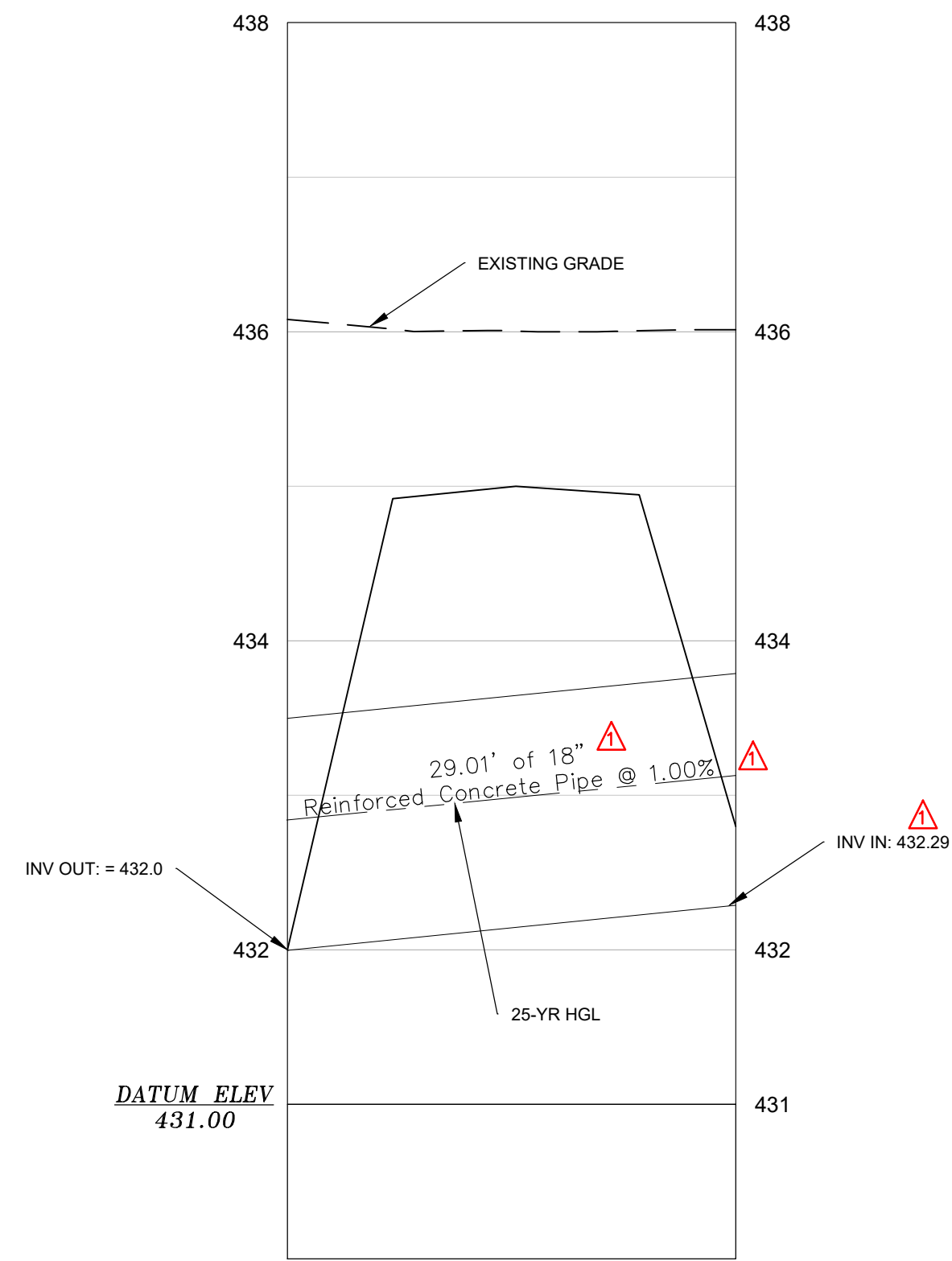
SCALE: 1" = 10'

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REFERENCE FILE: 22210-0013 BASE.dwg
PROJECT NO: 22210-0013

SHEET: C2.4

DWG NO. 01.1588-D27

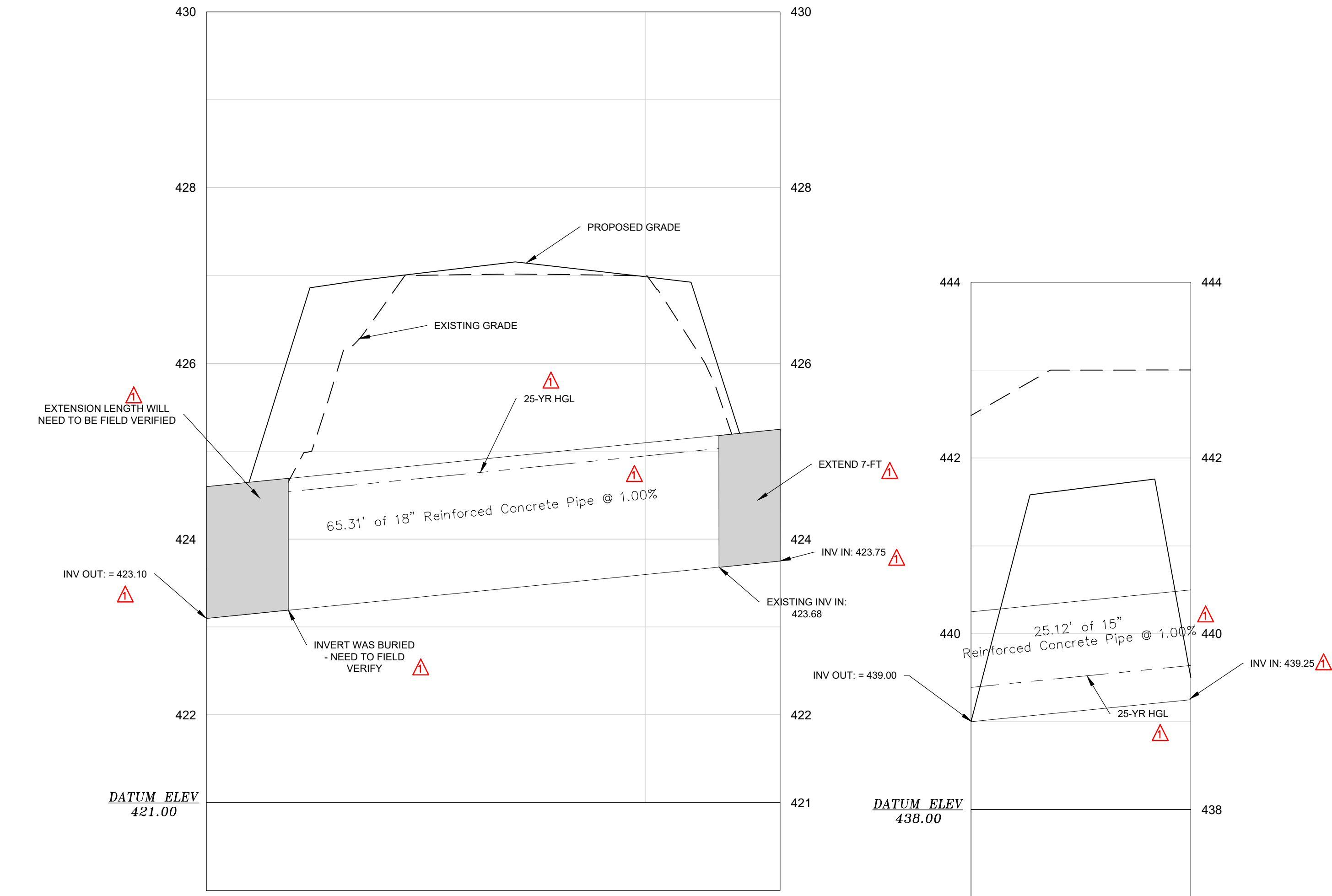
February 20, 2023 - 10:10:07 AM S:\Projects\22210-0013 C-Fund Ruben Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\ C2_1 Storm Profile.dwg
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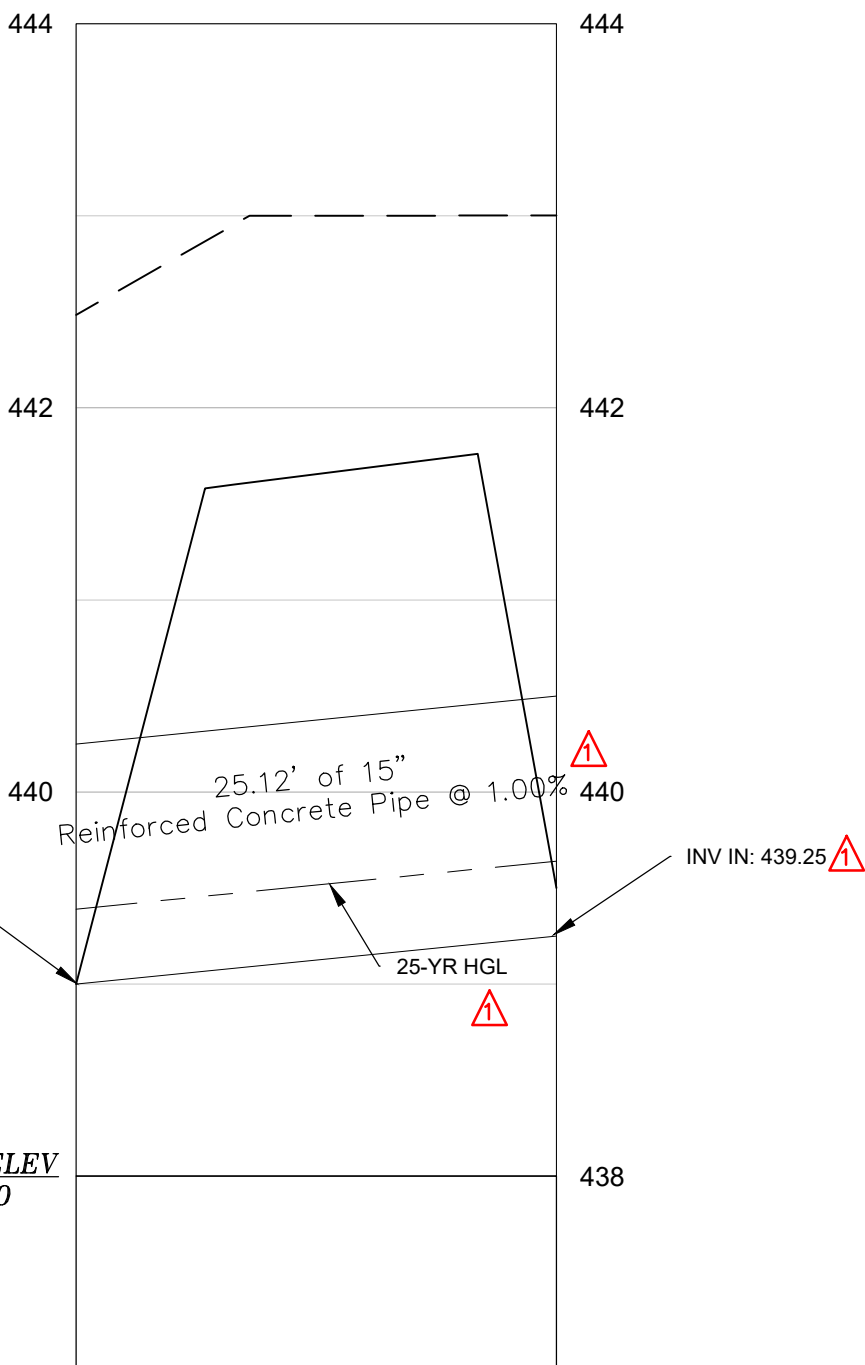
CULVERT 6
SCALE: 1"=10' HORIZONTAL
1"=1' VERTICAL

CULVERT 7
(THIS CROSSING WAS REMOVED AND COMBINED WITH CULVERT 8 PER SCDOT SUGGESTION)

CULVERT 7
SCALE: 1"=10' HORIZONTAL
1"=1' VERTICAL



CULVERT 8
SCALE: 1"=10' HORIZONTAL
1"=1' VERTICAL



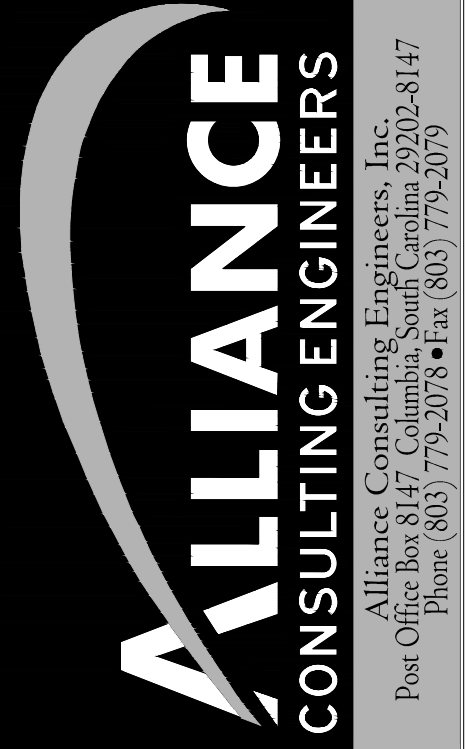
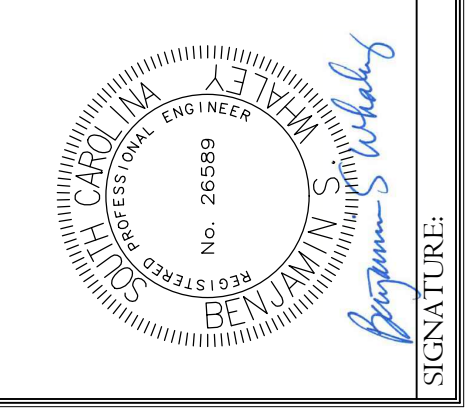
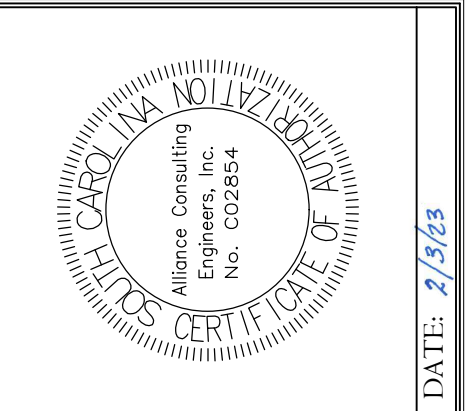
CULVERT 9
SCALE: 1"=10' HORIZONTAL
1"=1' VERTICAL

NOTE:
SOME CULVERTS WILL REQUIRE CLASS V RCP TO ENSURE STRENGTH FOR COVER LESS THAN 18-INCHES PER SCDOT STANDARDS. IF THE CULVERT HAS 18-INCHES OR MORE, CLASS III STANDARD RCP IS ACCEPTABLE.

LEGEND	
EXISTING GRADE	---
PROPOSED SURFACE	---

REVISION DATE	
SCDOT COMMENT - BSW	2.20.23

APPROVALS	ENGINEER	DESIGNER	TRACER/ANALYST	CHECKED BY	APPROVED BY
	BSW	JAM	JAM	BSW	BSW



SHEET: STORM DRAINAGE PROFILES (2 OF 4)
SCALE: 1" = 10'
DATE: JANUARY 2023

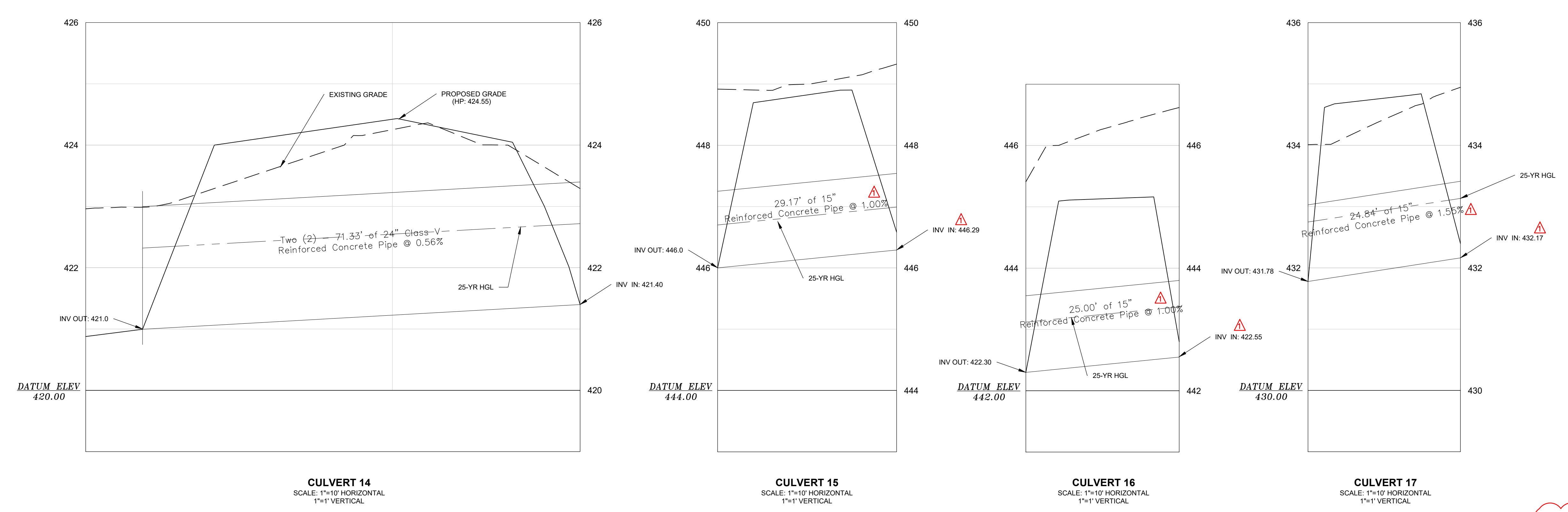
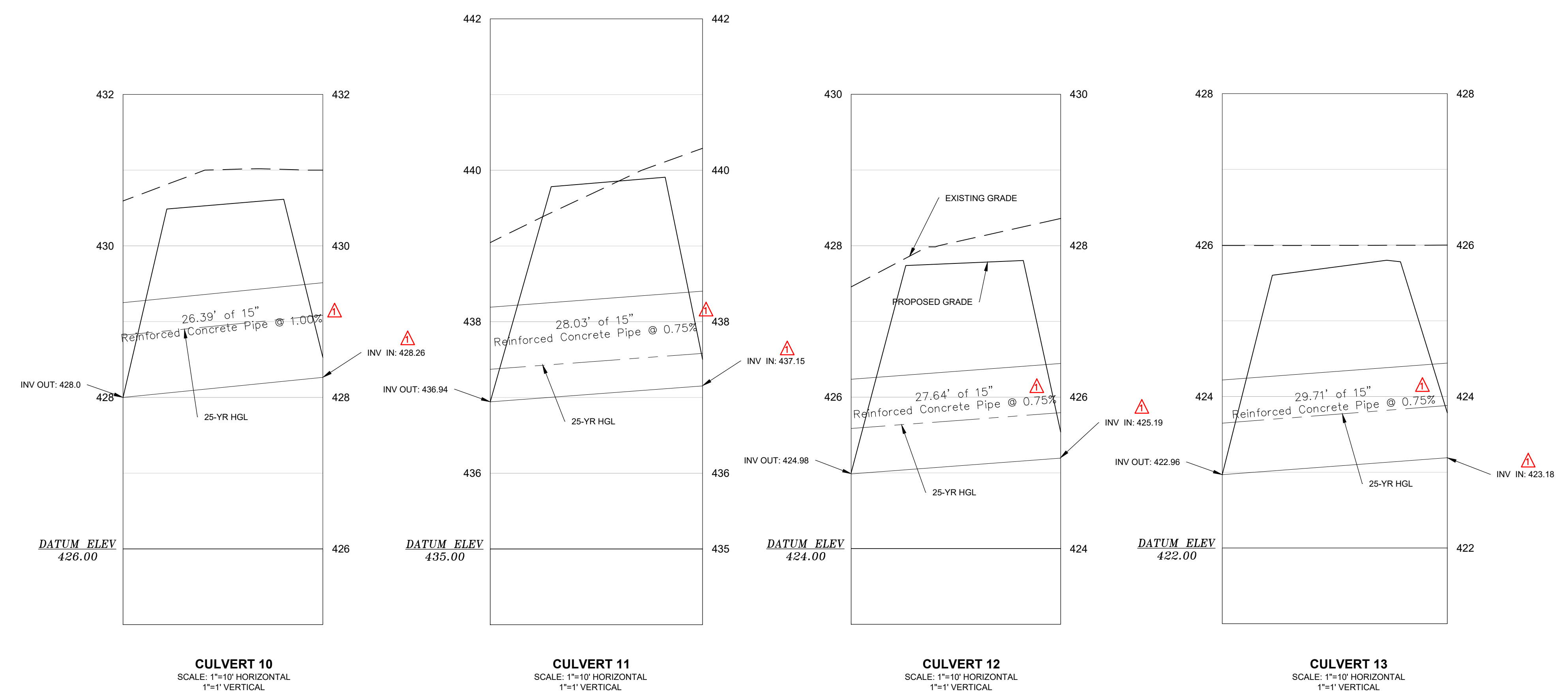
PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA
CHESTERFIELD COUNTY SOUTH CAROLINA

FILE NAME:	C2.dwg	SHEET C2.5
REFERENCE FILE:	22210-0013 BASE.dwg	
PROJECT NO.:	22210-0013	

DWG NO. 01.1588-D27

February 20, 2023 - 10:18:25 AM S:\Projects\22210-0013 C-Fund Ruby Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\ C2.1 Storm Profile.dwg
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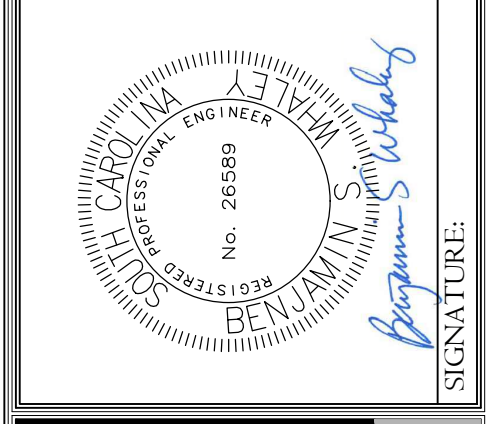
LEGEND	
EXISTING GRADE	---
PROPOSED SURFACE	---



NOTE:
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REVISION DATE	
SCDOT COMMENT - BSW	2.20.23

APPROVALS	
ENGINEER	BSW
DESIGNER	JAM
CHECKER	JAM
APPROVED BY	BSW



ALLIANCE CONSULTING ENGINEERS
 Alliance Consulting Engineers, Inc.
 Post Office Box 8147, Columbia, South Carolina 29202-8147
 Phone (803) 779-2078 • Fax (803) 779-2079

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY, IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

SHEET: STORM DRAINAGE PROFILES (3 OF 4)

DATE: JANUARY 2023

SCALE: 1" = 10'

FILE NAME:	C2.dwg
REFERENCE FILE:	22210-0013
BASE.DWG	
PROJECT NO.:	22210-0013

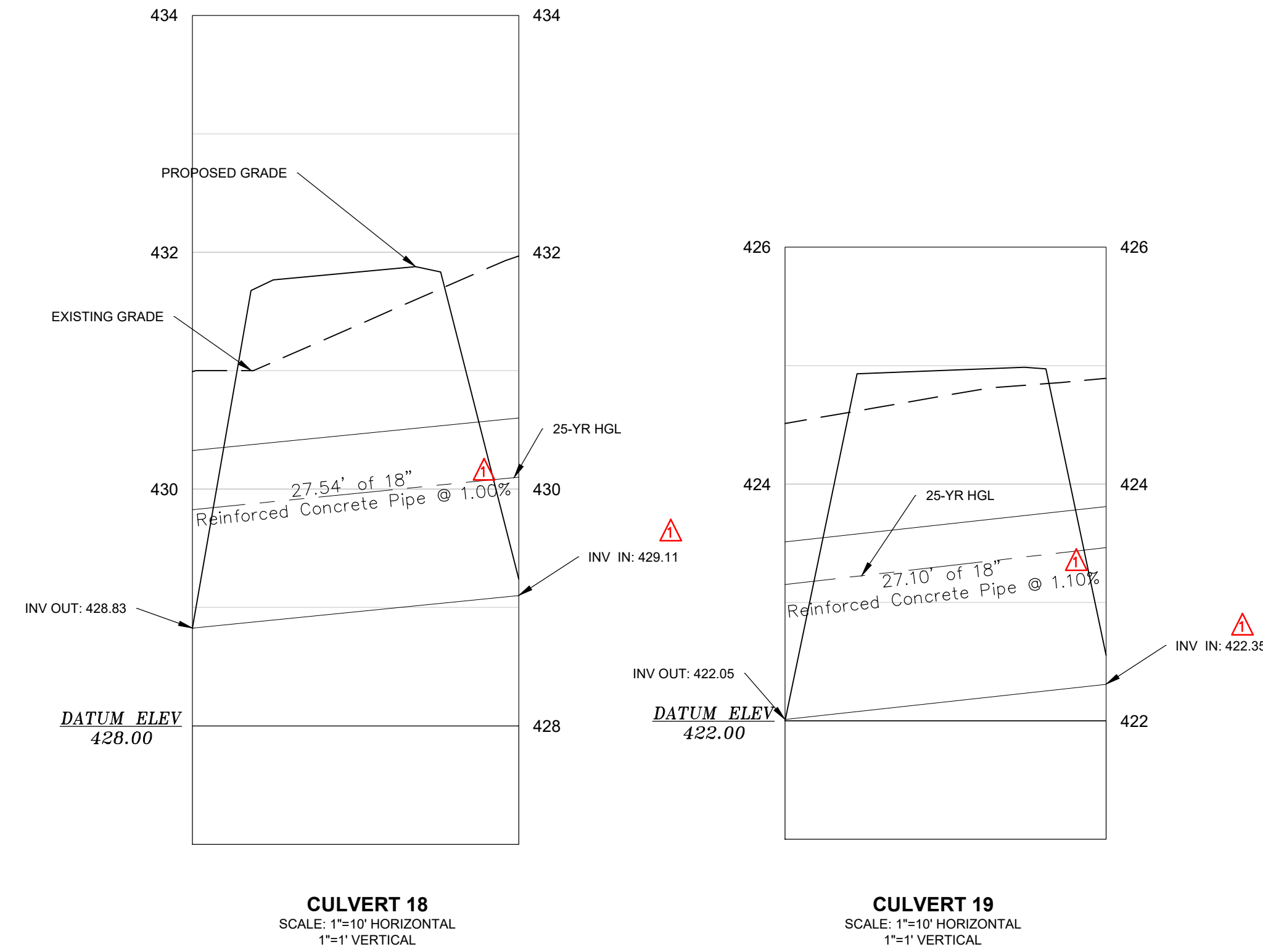
SHEET C2.6

DWG NO. 01.1588-D27

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LEGEND	
EXISTING GRADE	---
PROPOSED SURFACE	---



NOTE:
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REVISION	DATE
SCDOT COMMENT - BSW	2.20.23

ENGINEER	BSW
DESIGNER	JAM
CHECKER	JAM
APPROVED BY	BSW

	DATE: 2/23/23
--	---------------

STORM DRAINAGE
PROFILES (4 OF 4)

SCALE: 1" = 10'

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY, IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

SHEET: C2.7

FILE NAME:	C2.dwg
REFERENCE FILE:	22210-0013 BASE.dwg
PROJECT NO.:	22210-0013

DWG NO. 01.1588-D27

February 20, 2023 - 10:29:05 AM S:\Projects\22210-0013 C-Fund Ruby Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\C3.0 Erosion Control & Sed - Ph 1.dwg
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LEGEND	
---	EXISTING CONTOUR MINOR
---	EXISTING CONTOUR MAJOR
---	EXISTING PROPERTY LINE
---	EXISTING RIGHT-OF-WAY
---	EXISTING FENCE
---	EXISTING WATER MAIN
---	EXISTING WASTEWATER GRAVITY LINE
---	EXISTING WASTEWATER FORCE MAIN
---	EXISTING NATURAL GAS MAIN
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING UNDERGROUND ELECTRIC
---	EXISTING TELECOMMUNICATIONS
---	EXISTING STORM DRAINAGE
---	EXISTING FENCE
---	EXISTING PAVEMENT
---	LIMITS OF DISTURBANCE
---	PROPOSED CONTOUR MAJOR
---	PROPOSED CONTOUR MINOR
---	PROPOSED STORM DRAINAGE
---	PROPOSED PAVEMENT

LEGEND	
TCE	PROPOSED SILT FENCE
TCE	TEMPORARY CONSTRUCTION ENTRANCE
SL	PROPOSED RIP RAP
SL	PROPOSED SILT LOG
IP	INLET PROTECTION
OP	OUTLET PROTECTION
OP	PROPOSED GRASSING
OP	EROSION CONTROL MATTING (NORTH AMERICAN GREEN S150)
RCD	ROCK CHECK DAM

CONSTRUCTION SEQUENCE

- RECEIVE LAND DISTURBANCE PERMIT FROM SCDHEC.
- NOTIFY SCDHEC REGIONAL OFFICE AND CHESTERFIELD COUNTY ROAD MAINTENANCE 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- PRE-CONSTRUCTION MEETING WILL BE HELD ON SITE WITH THE SCDHEC REPRESENTATIVE, OWNER AND CONTRACTOR TO DISCUSS THE MEASURES AND HOW TO FOLLOW THE OS-SWPPP STANDARDS BEFORE WORK BEGINS.
- CLEARING AND GRUBBING ONLY AS NECESSARY ALONG THE LIMITS OF DISTURBANCE FOR INSTALLATION OF PERIMETER CONTROLS, TEMPORARY SEDIMENT CONTROL MEASURES, AND BEST MANAGEMENT PRACTICES (BMP) (e.g., CONSTRUCTION ENTRANCE, SILT FENCE, INLET AND OUTLET PROTECTION WITH RIP-RAP).
- INSTALL PERIMETER EROSION AND SEDIMENT CONTROL DEVICES.
- VERIFY LOCATION OF EXISTING UNDERGROUND UTILITIES WITHIN THE RIGHT-OF-WAY AND HAVE RELOCATED, EXISTING UTILITIES WITHIN THE WORK ZONE WILL NEED TO BE COORDINATED WITH THE SUPPLIERS PHYSICALLY LOCATED AND VERIFIED BEFORE ANY CONSTRUCTION PROCESS BEGINS.
- CUT ROAD GRADE DOWN TO SUBGRADE AND INSTALL SUB-BASE STONE AND COMPACTED TO MAINTAIN TRAFFIC ACCESS TO THE EXISTING HOMES (ALL EROSION AND SEDIMENT CONTROL MEASURES FOR THESE AREAS MUST BE INSTALLED INITIALLY). DUE TO THE TOTAL DISTURBED AREA IS OVER FIVE (5) ACRES, THE GRADING AND ROADSIDE DITCHES WILL NEED TO BE STABILIZED WITH SEEDING/MATTING NEW DITCH SLOPES AND SILT LOGS FOR EVERY FIVE HUNDRED (500) FT OF CONSTRUCTION BEFORE MOVING TO THE NEXT SECTION TO ENSURE THE AREAS HAS EROSION MEASURES IN PLACE FOR WATER QUALITY AND MAINTAIN SEDIMENT FROM MOVING OFF SITE.
- ONCE THE ROAD SUBGRADE/SUBBASE HAS BEEN ESTABLISHED, GO THROUGH AND CUT IN THE NEW DITCH LOCATION AND SET DRIVEWAY CULVERTS THROUGH THE ROADWAY. MAINTAIN ACCESS THROUGHOUT THE CONSTRUCTION PROCESS.
- INSTALL EROSION CONTROL INLET CONTROL FOR PIPE INLETS OR BASINS AND MATTING ON SLOPES TO BEGIN STABILIZATION. INSTALL SWALE LININGS AND CHECK DAMS AFTER THE SWALES HAVE BEEN FINE GRADED.
- ONCE SHOULDERS ARE ESTABLISHED AND SUBBASE FOR DRIVES AND ROADWAY SET AND PROOF ROLL PASSED, PAVEMENT SURFACE WILL BE COMPLETED AND STRIPING OF THE ENTRANCE STOP BAR AND LANE SEPARATION AS SOON AS POSSIBLE TO FINALIZE THE ROADWAY.
- INSTALL PERMANENT SEEDING AND REMAINING RIP-RAP OUTLET PROTECTION.
- MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES FOR THE EXTENT OF THE PROJECT.
- ONCE THE SITE HAS REACHED 70% STABILIZATION PER SCDHEC REQUIREMENTS, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER ENTIRE ROADWAY IS FINALLY STABILIZED (SCDHEC/CHESTERFIELD COUNTY INSPECTION RECOMMENDS THAT THE PROJECT OWNER/OPERATOR HAVE THE SWPPP PREPARER (IF APPLICABLE) OR REGISTRATION EQUIVALENT APPROVE THE REMOVAL OF THE TEMPORARY STRUCTURES).

GENERAL NOTE:
 SEDIMENT ACCUMULATING WITHIN THE PROPOSED SWALES UPSTREAM OF THE SILT LOGS AND INLET PROTECTION AT THE DRIVEWAY CULVERTS ARE TO BE CLEANED AFTER EACH 0.5-INCH STORM EVENT OR AS NEEDED TO ENSURE CULVERTS DON'T GET SEDIMENT BLOCKING FLOW. IF SEDIMENT GETS INTO THE PIPE SYSTEM, THE SEDIMENT WILL BE REMOVED.

DEVELOPER INFORMATION
 DEVELOPER: CHESTERFIELD COUNTY PUBLIC WORKS
 CONTACT: MR. JEFF McCARN
 ADDRESS: 97 JONES ROAD
 CITY, STATE: CHESTERFIELD, SC 29709
 TELEPHONE: (843) 623-2464 (WORK)
 EMAIL: JMCCARN@SHTC.NET.COM

ENGINEER INFORMATION
 COMPANY: ALLIANCE CONSULTING ENGINEERS, INC.
 CONTACT: BENJAMIN S. WHALEY, P.E.
 ADDRESS: P.O. BOX 8147
 CITY, STATE: COLUMBIA, SOUTH CAROLINA 29202
 TELEPHONE: (803) 779-2078
 FAX: (803) 779-2079
 EMAIL: SSWHALEY@ALLIANCECE.COM

TOTAL ROAD ROW AREA: 4.45 ACRES
 TOTAL DISTURBED AREA: 5.30 ACRES

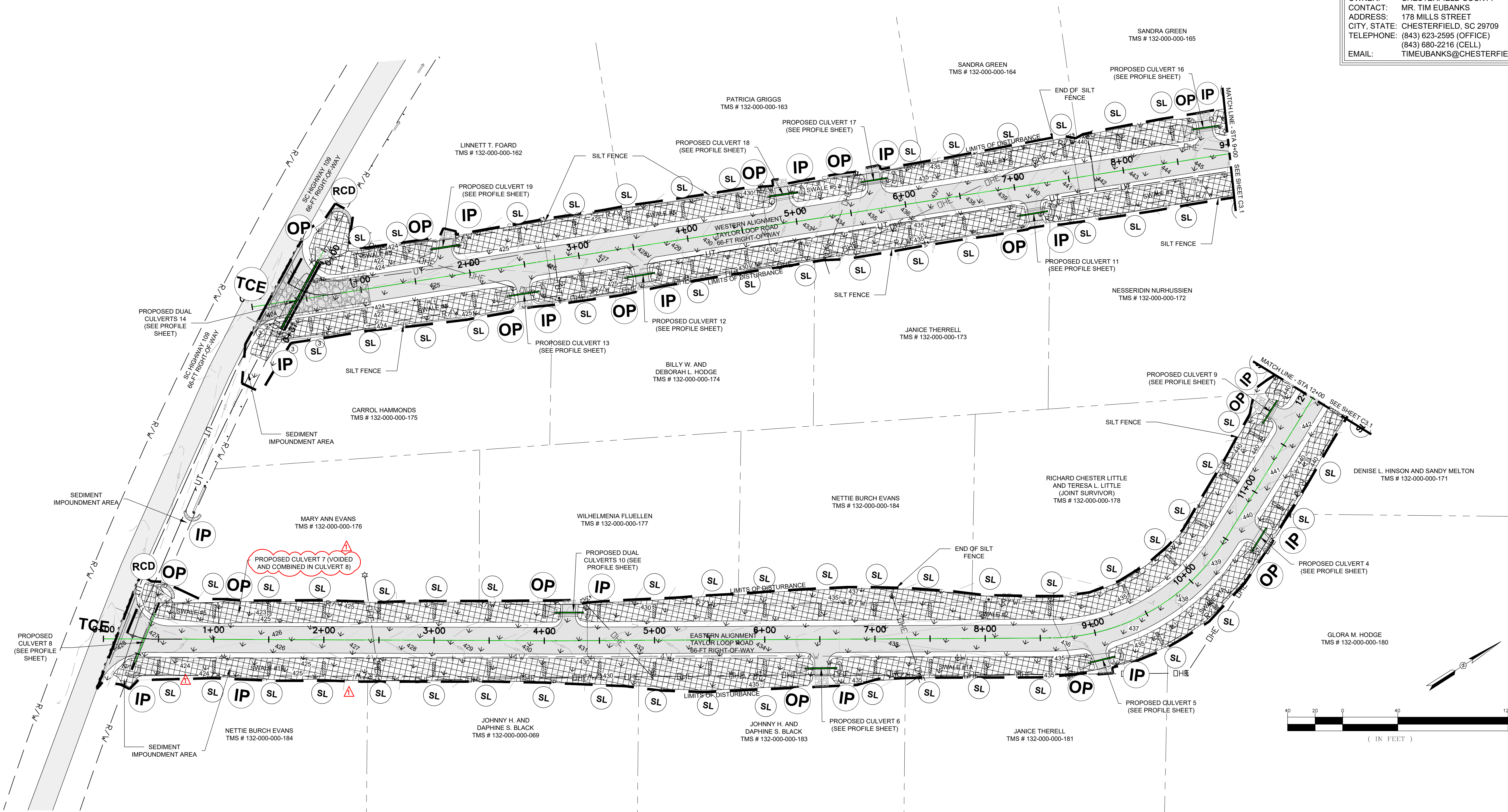
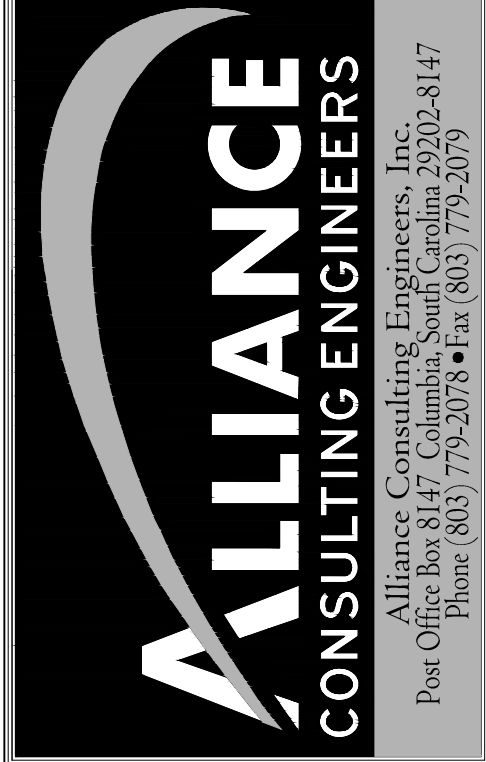
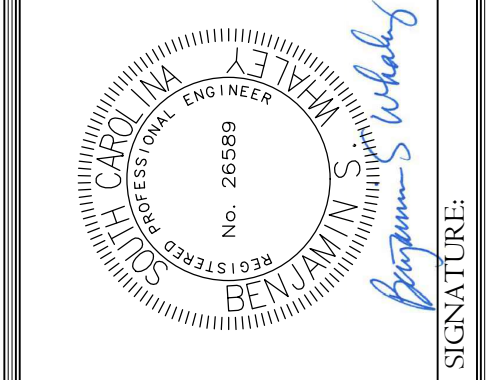
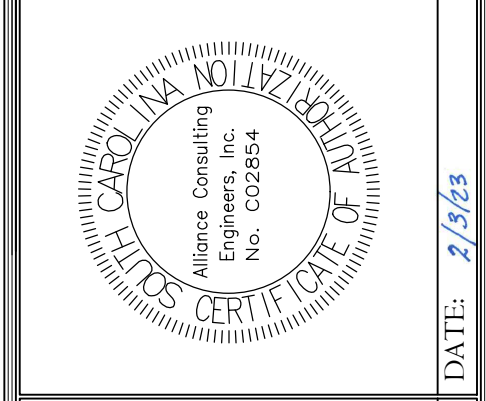
NOTE: CAD FILES WILL BE PROVIDED TO CONTRACTOR FOR USE WITH SITE STAKING.

REFERENCES:

- REFERENCE IS MADE TO TOPOGRAPHIC AND UTILITY SURVEY OF THE PROPOSED ROADWAY IMPROVEMENTS SURVEY BY HAYES SURVEYING DATED OCTOBER 14, 2022.
- REFERENCE IS MADE TO LIDAR DATA PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) NATURAL RESOURCES CONSERVATION SERVICE (NRCS) GEOSPATIAL DATA GATEWAY FOR THE MAJORITY OF THE PROPERTY.
- REFERENCE IS MADE TO CHESTERFIELD COUNTY GIS RECORDS FOR THE LOCATION OF RIGHT-OF-WAY AND PROPERTY LINES AND NOTE THAT THE PROPERTY LINES ARE APPROXIMATE - NOT FIELD SURVEYED.

OWNER INFORMATION
 OWNER: CHESTERFIELD COUNTY
 CONTACT: MR. TIM EUBANKS
 ADDRESS: 178 MILLS STREET
 CITY, STATE: CHESTERFIELD, SC 29709
 TELEPHONE: (843) 623-2595 (OFFICE)
 (843) 680-2216 (CELL)
 EMAIL: TIMEUBANKS@CHESTERFIELDCOUNTY SC.COM

REVISION DATE	
▲	SCDOT COMMENT - BSW 2.20.23



PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE #3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

SHEET: EROSION AND SEDIMENT CONTROL PLAN FOR TAYLOR LOOP ROAD (SHEET 1 OF 2)

DATE: DECEMBER 2022 SCALE: 1" = 50'

FILE NAME: C3.0.dwg
 REFERENCE FILE: 22210-0013 BASE.dwg
 PROJECT NO: 22210-0013

SHEET C3.0

DWG NO. 01.1588-D27

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February 20, 2023 - 10:22:24 AM S:\Projects\22210-0013 C-Fund Ruby Improv Taylor Loop Highway Improv\Taylor Loop Highway Improv\Construction Plans\C3.0 Erosion Control & Sed - Ph 1.dwg

LEGEND			
---	EXISTING CONTOUR MINOR	---	EXISTING UNDERGROUND ELECTRIC
---	EXISTING CONTOUR MAJOR	---	EXISTING TELECOMMUNICATIONS
---	EXISTING PROPERTY LINE	---	EXISTING STORM DRAINAGE
---	EXISTING RIGHT-OF-WAY	---	EXISTING FENCE
---	EXISTING FENCE	---	EXISTING PAVEMENT
---	EXISTING WATER MAIN	---	LIMITS OF DISTURBANCE
---	EXISTING WASTEWATER GRAVITY LINE	---	PROPOSED CONTOUR MAJOR
---	EXISTING WASTEWATER FORCE MAIN	---	PROPOSED CONTOUR MINOR
---	EXISTING NATURAL GAS MAIN	---	PROPOSED STORM DRAINAGE
---	EXISTING OVERHEAD ELECTRIC	---	PROPOSED PAVEMENT

LEGEND			
---	PROPOSED SILT FENCE	OP	OUTLET PROTECTION
---	TEMPORARY CONSTRUCTION ENTRANCE	---	PROPOSED GRASSING
---	PROPOSED RIP RAP	---	EROSION CONTROL MATTING (NORTH AMERICAN GREEN S150)
---	PROPOSED SILT LOG	RCD	ROCK CHECK DAM
---	INLET PROTECTION		

CONSTRUCTION SEQUENCE

1. RECEIVE LAND DISTURBANCE PERMIT FROM SCDHEC.
2. NOTIFY SCDHEC REGIONAL OFFICE AND CHESTERFIELD COUNTY ROAD MAINTENANCE 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITIES.
3. PRE-CONSTRUCTION MEETING WILL BE HELD ON SITE WITH THE SCDHEC REPRESENTATIVE, OWNER AND CONTRACTOR TO DISCUSS THE MEASURES AND HOW TO FOLLOW THE OS-SWPPP STANDARDS BEFORE WORK BEGINS.
4. CLEARING AND GRUBBING ONLY AS NECESSARY ALONG THE LIMITS OF DISTURBANCE FOR INSTALLATION OF PERIMETER CONTROLS, TEMPORARY SEDIMENT CONTROL MEASURES, AND BEST MANAGEMENT PRACTICES (BMPs) (e.g., CONSTRUCTION ENTRANCE, SILT FENCE, INLET AND OUTLET PROTECTION WITH RIP-RAP).
5. INSTALL PERIMETER EROSION AND SEDIMENT CONTROL DEVICES.
6. VERIFY LOCATION OF EXISTING UNDERGROUND UTILITIES WITHIN THE RIGHT-OF-WAY AND HAVE RELOCATED. EXISTING UTILITIES WITHIN THE WORK ZONE WILL NEED TO BE COORDINATED WITH THE SUPPLIERS PHYSICALLY LOCATED AND VERIFIED BEFORE ANY CONSTRUCTION PROCESS BEGINS.
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11. INSTALL PERMANENT SEEDING AND REMAINING RIP-RAP OUTLET PROTECTION.
12. MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES FOR THE EXTENT OF THE PROJECT.
13. ONCE THE SITE HAS REACHED 70% STABILIZATION PER SCDHEC REQUIREMENTS, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER ENTIRE ROADWAY IS FINALLY STABILIZED (SCDHEC/CHESTERFIELD COUNTY INSPECTION RECOMMENDS THAT THE PROJECT OWNER/OPERATOR HAVE THE SWPPP PREPARER (IF APPLICABLE) OR REGISTRATION EQUIVALENT APPROVE THE REMOVAL OF THE TEMPORARY STRUCTURES).

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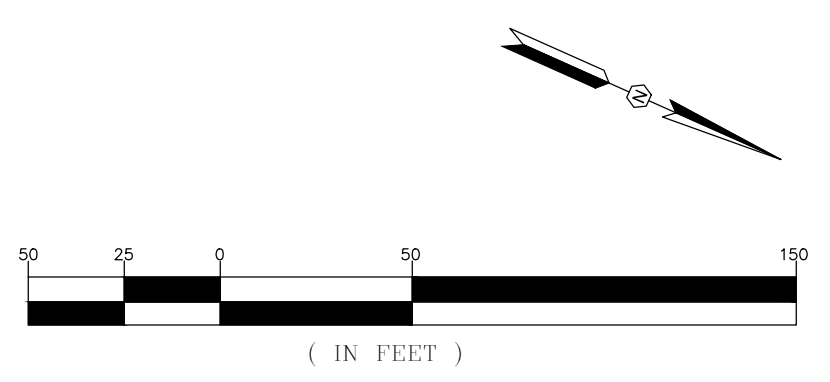
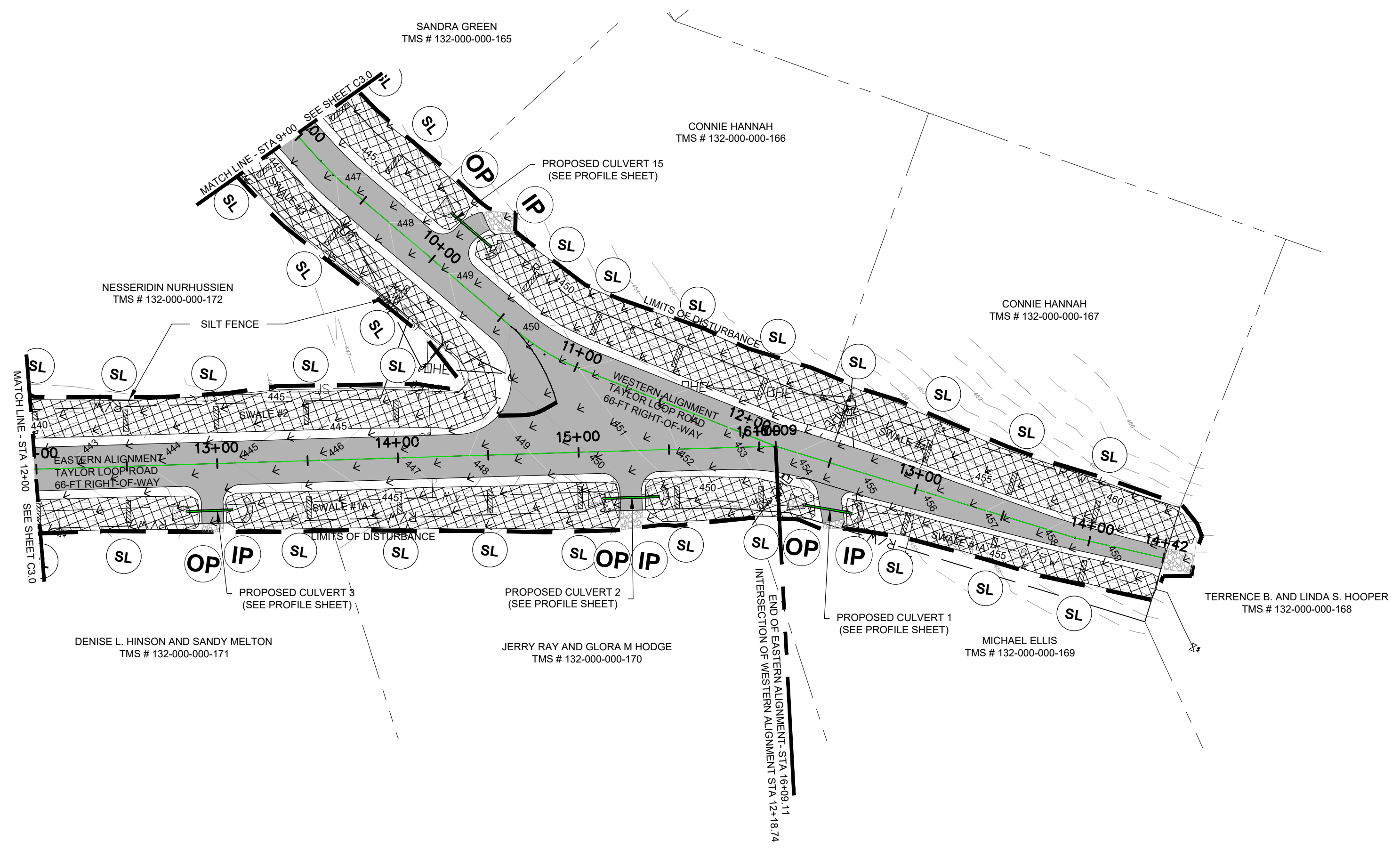
NOTE: CAD FILES WILL BE PROVIDED TO CONTRACTOR FOR USE WITH SITE STAKING.

REFERENCES:

1. REFERENCE IS MADE TO TOPOGRAPHIC AND UTILITY SURVEY OF THE PROPOSED ROADWAY IMPROVEMENTS SURVEY BY HAYES SURVEYING DATED OCTOBER 14, 2022.
2. REFERENCE IS MADE TO LIDAR DATA PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) NATURAL RESOURCES CONSERVATION SERVICE (NRCS) GEOSPATIAL DATA GATEWAY FOR THE MAJORITY OF THE PROPERTY.
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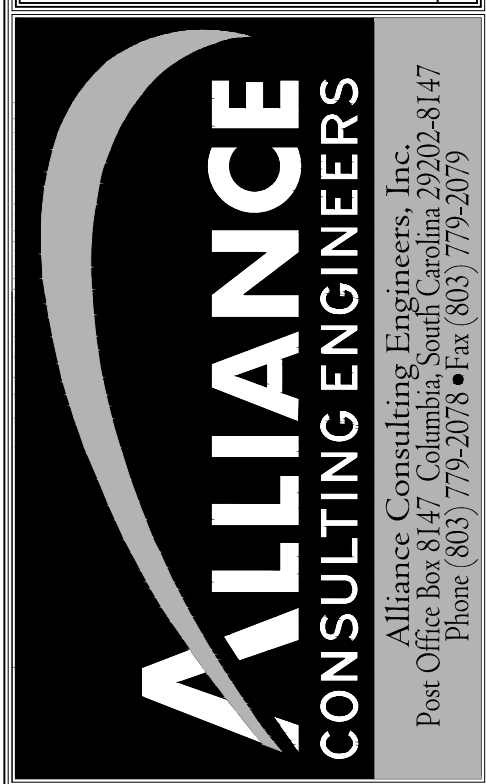
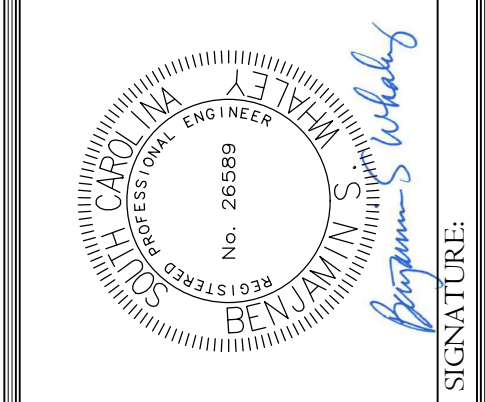
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REVISION DATE	
▲	SCDOT COMMENT - BSW
▲	2.20.23

APPROVALS	
ENGINEER	BSW
DESIGNER	JAM
CHECKER	JAM
INTEGRATOR	JAM
APPROVED BY	BSW



PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE #3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

SHEET: EROSION AND SEDIMENT CONTROL PLAN FOR TAYLOR LOOP ROAD (SHEET 2 OF 2)

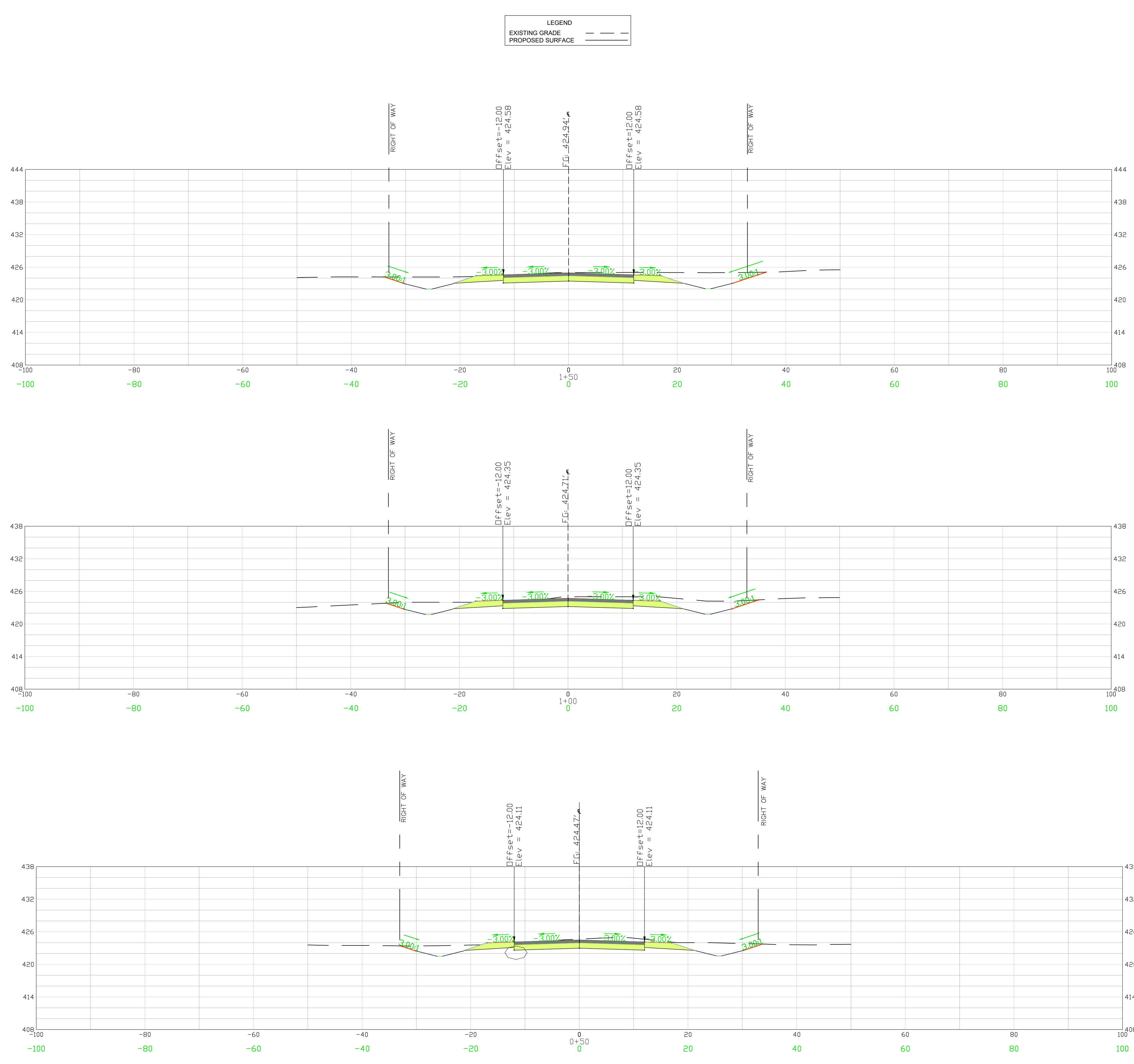
DATE: DECEMBER 2022
 SCALE: 1" = 50'

FILE NAME:	C3.0.dwg
REFERENCE FILE:	22210-0013
BASE.dwg	
PROJECT NO.:	22210-0013

DWG NO. 01.1588-D27

February 20, 2023 - 10:34:56 AM S:\Projects\22210-0013 C-Fund Ruby Improv Taylor Loop Comm of Ruby\Chersterfield\Colony\Construction Plans\C4.0 West Cross Section (1 of 10).dwg

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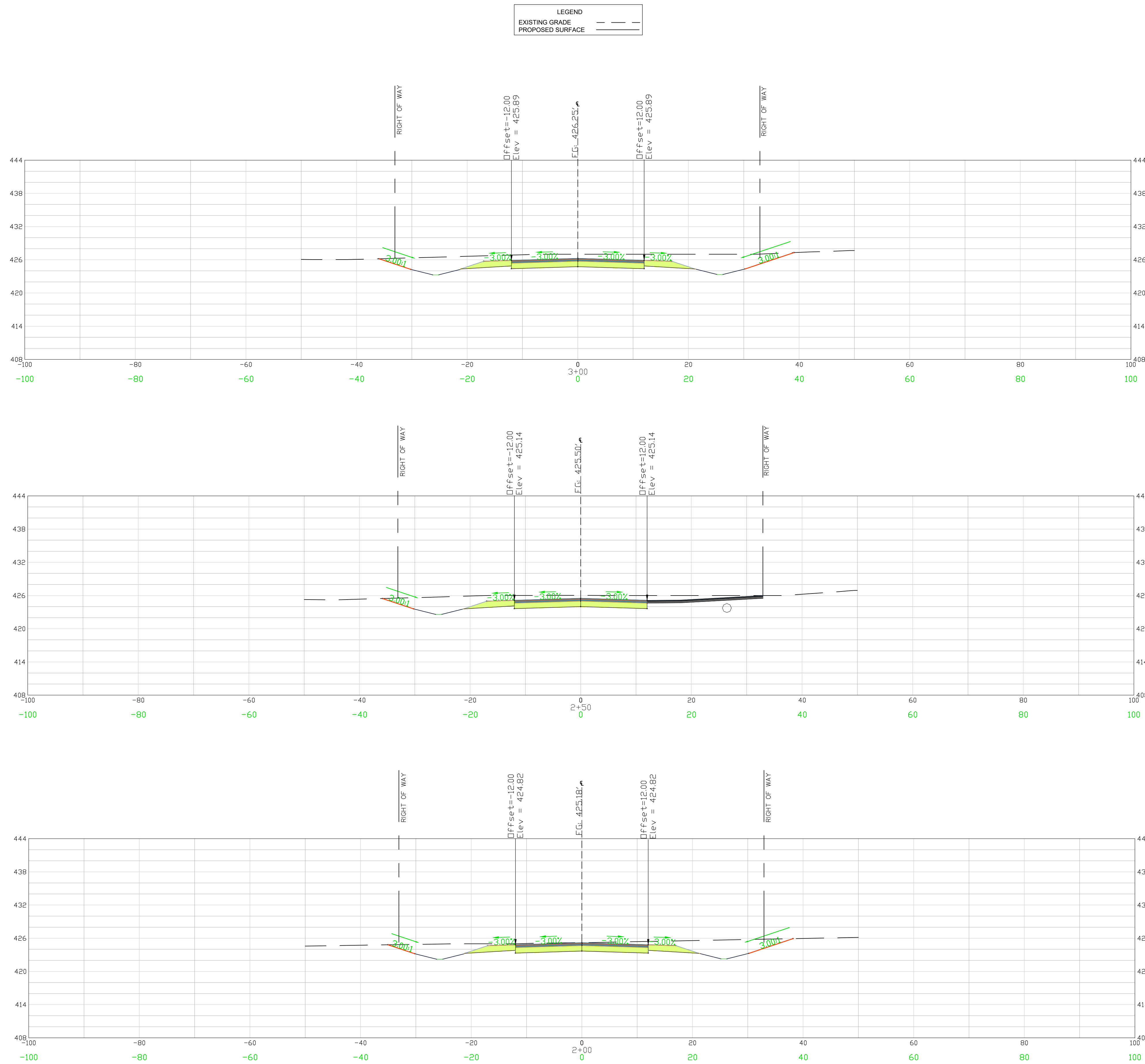


CROSS SECTIONS 0+50 - 1+50
 SCALE 1" = 10'

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<p>APPROVALS</p> <table border="1"> <tr><td>ENGINEER</td><td>BSW</td></tr> <tr><td>DESIGNER</td><td>JAM</td></tr> <tr><td>TITLE ENGINEER</td><td>JAM</td></tr> <tr><td>CHECKED BY</td><td>BSW</td></tr> <tr><td>APPROVED</td><td>BSW</td></tr> </table>	ENGINEER	BSW	DESIGNER	JAM	TITLE ENGINEER	JAM	CHECKED BY	BSW	APPROVED	BSW	<p>DATE: 2/15/23</p>
ENGINEER	BSW										
DESIGNER	JAM										
TITLE ENGINEER	JAM										
CHECKED BY	BSW										
APPROVED	BSW										
	<p>SIGNATURE: Benjamin S. Wilby</p>										
<p>ALLIANCE CONSULTING ENGINEERS Alliance Consulting Engineers, Inc. Post Office Box 8147, Columbia, South Carolina 29202-8147 Phone (803) 779-2078 • Fax (803) 779-2079</p>											
<p>CROSS SECTIONS WESTERN ALIGNMENT STA 0+50 TO 1+50 (SHEET 1 OF 10)</p>											
<p>PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA</p>											
<p>FILE NAME: C4.0.dwg</p>	<p>SHEET C4.0</p>										
<p>REFERENCE FILE: 22210-0013 BASE.dwg</p>	<p>PROJECT NO. 22210-0013</p>										
<p>DWG NO. 01.1588-D27</p>											

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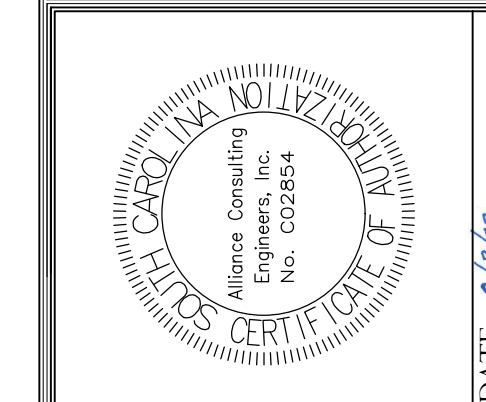
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CROSS SECTIONS 2+00 - 3+00
SCALE 1" = 10'

REVISION DATE	

APPROVALS	DATE
ENGINEER BSW	
DESIGNER JAM	
CHECKED BY JAT	
APPROVED BSW	



SIGNATURE:
Benjamin J. Williams

DATE: 2/15/23



CROSS SECTIONS
WESTERN ALIGNMENT
STA 2+00 TO 3+00
(SHEET 2 OF 10)

SHEET: DATE: JANUARY 2023 SCALE: 1" = 10'

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN, INCORPORATED IN CHESTERFIELD COUNTY, SOUTH CAROLINA

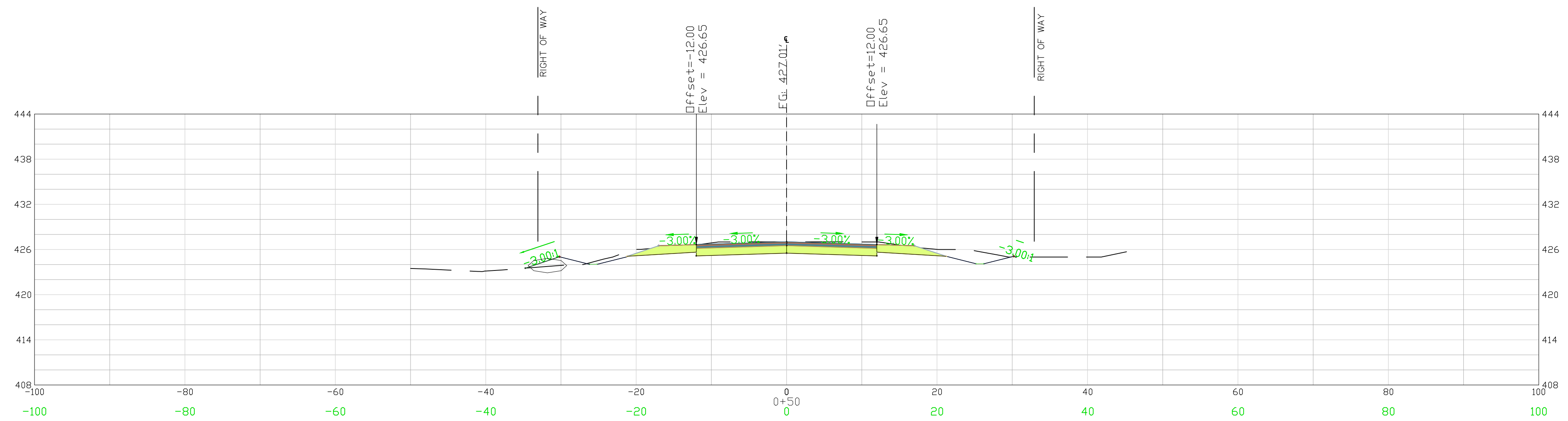
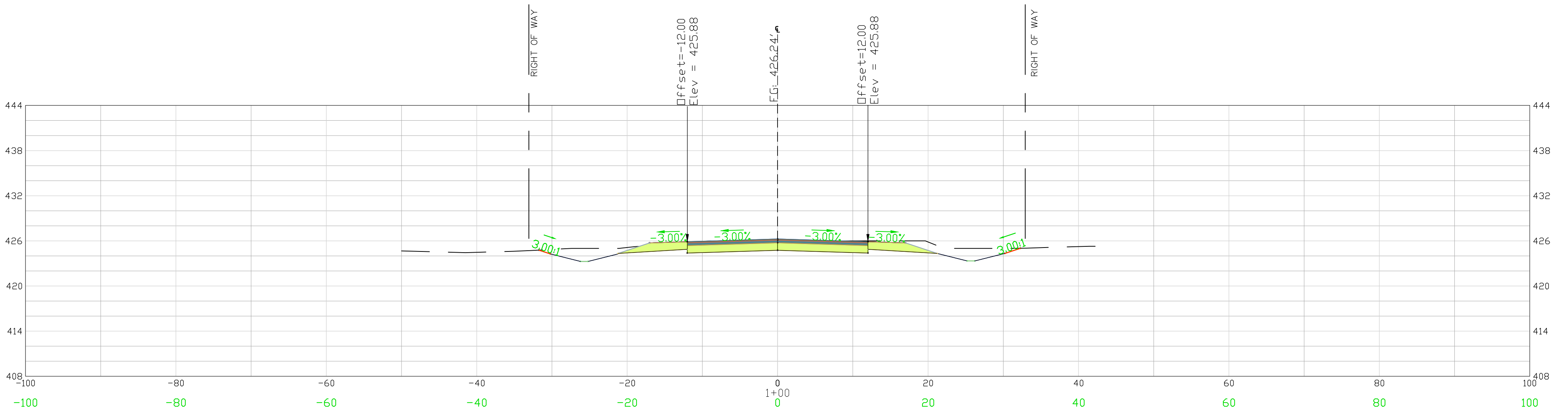
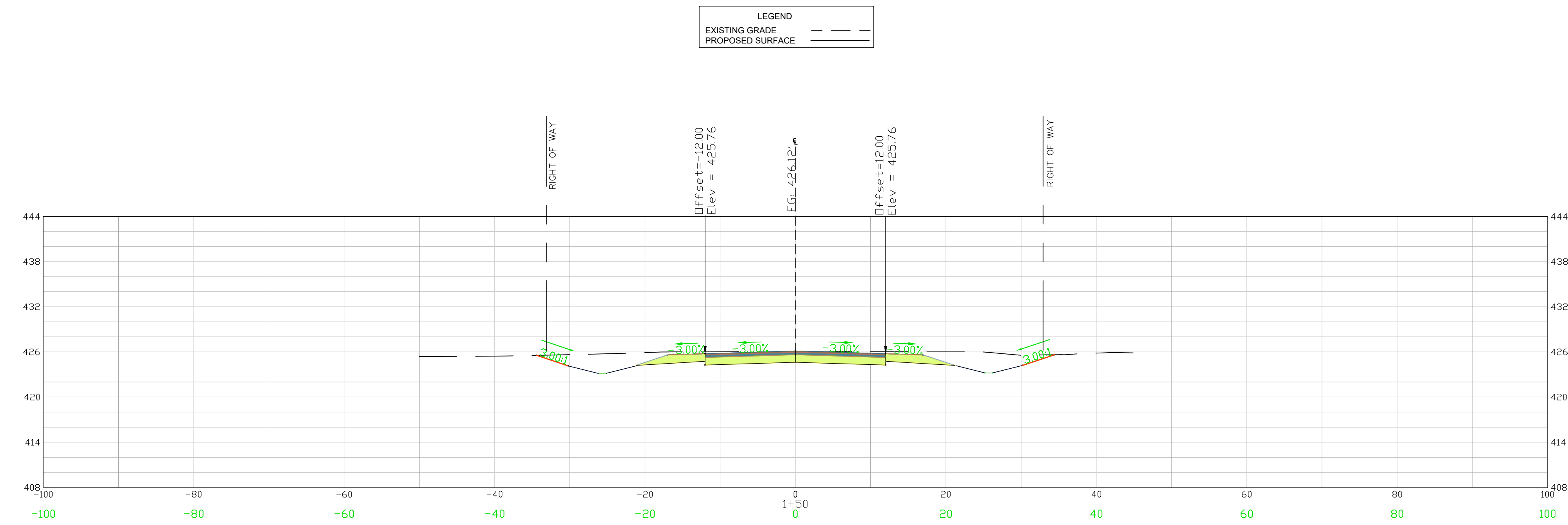
CHESTERFIELD COUNTY SOUTH CAROLINA

FILE NAME: C4.1.dwg	SHEET C4.1
REFERENCE FILE: 22210-0013 BASE.dwg	
PROJECT NO. 22210-0013	

DWG NO. 01.1588-D27

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February 20, 2023 - 10:48:01 AM S:\Projects\22210-0013 C-Fund Ruby Improv\ Taylor Loop Comm of Ruby\ Chesterfield County\Construction Plans\ C4.10 East Cross Section (1 of 1).dwg



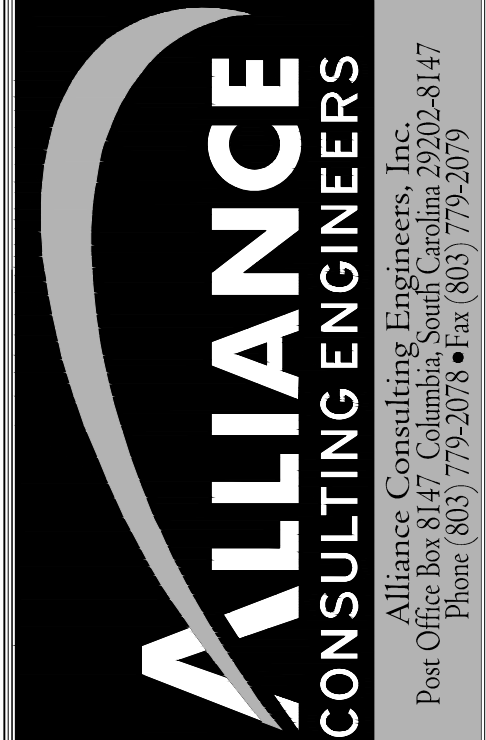
CROSS SECTIONS 0+50 - 1+50
SCALE 1" = 10'

REVISION DATE	

APPROVALS	ENGINEER	DESIGNER	CHECKER	APPROVED
	BSW	JAM	JAM	BSW



SIGNATURE: *Benjamin J. Williams*
DATE: 2/15/23



CROSS SECTIONS
EASTERN ALIGNMENT
STA 0+50 TO 1+50
(SHEET 1 OF 11)
SCALE: 1" = 10'
DATE: JANUARY 2023

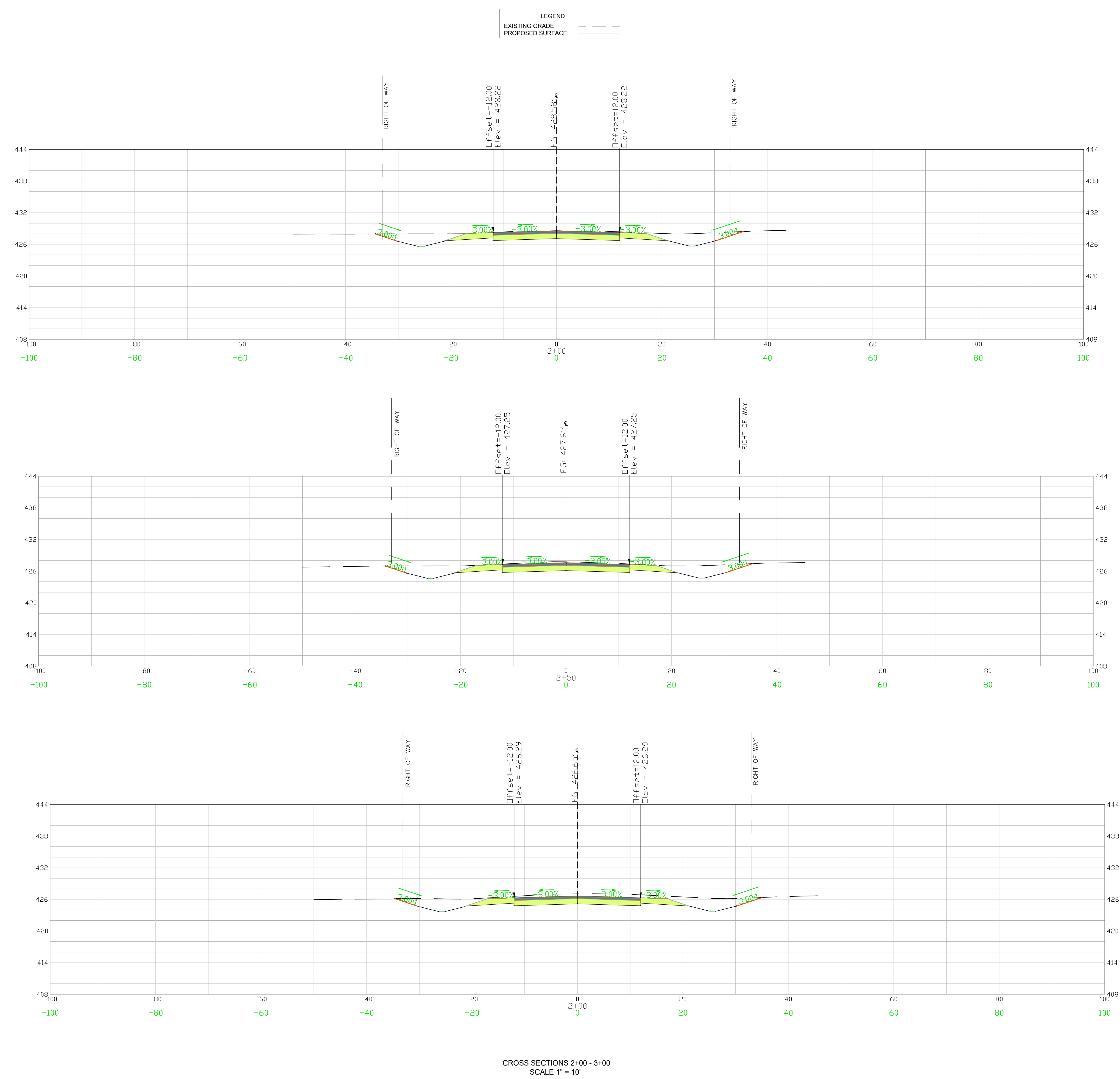
PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA
SOUTH CAROLINA

FILE NAME: C4.10.dwg	SHEET C4.10
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PROJECT NO. 22210-0013	

DWG NO. 01.1588-D27

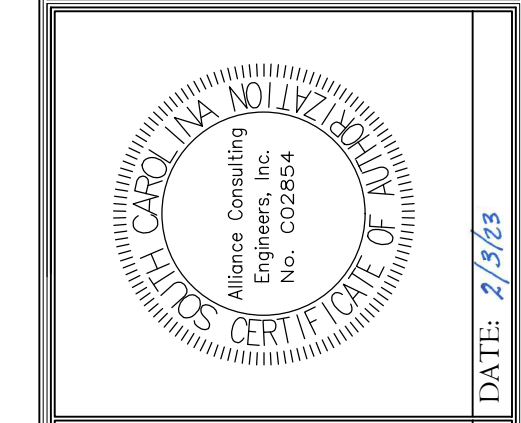
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February 20, 2023 - 10:49:06 AM S:\Projects\22210-0013 C-Fund Ruben Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\C4.11 East Cross Section (2 of 11).dwg

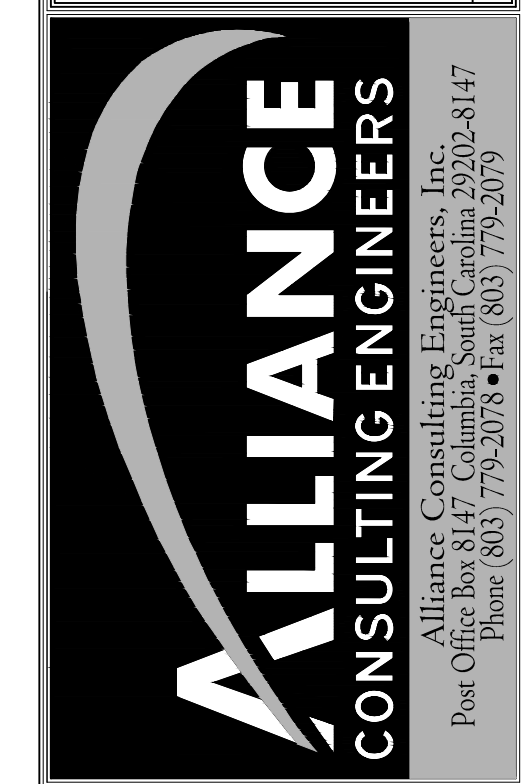


REVISION DATE	

APPROVALS	DATE
ENGINEER BSW	
DESIGNER JAM	
CHECKER JAM	
APPROVED BY BSW	
APPROVED BSW	



SIGNATURE: *Benjamin Williams*
 DATE: 2/15/23



CROSS SECTIONS EASTERN ALIGNMENT STA 2+00 TO 3+00 (SHEET 2 OF 11)
 SHEET: | DATE: JANUARY 2023 | SCALE: 1" = 10'

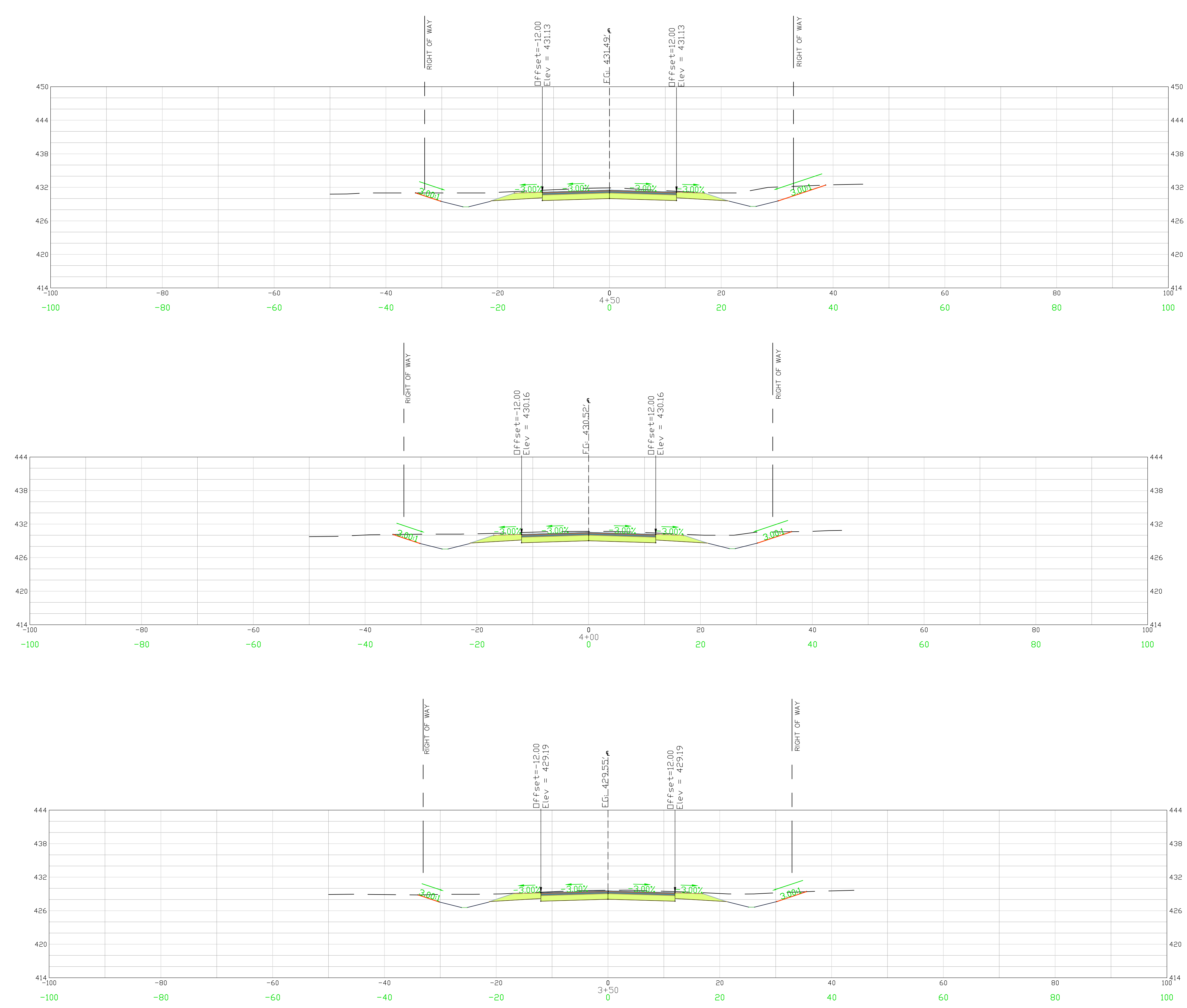
PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA
 CHESTERFIELD COUNTY | SOUTH CAROLINA

FILE NAME: C4.11.dwg	SHEET C4.11
REFERENCE FILE: 22210-0013 BASE.dwg	
PROJECT NO. 22210-0013	

DWG NO. 01.1588-D27

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February 20, 2023 - 10:50:05 AM S:\Projects\22210-0013 C-Fund Ruben Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\ C4.12 East Cross Section (3 of 11).dwg

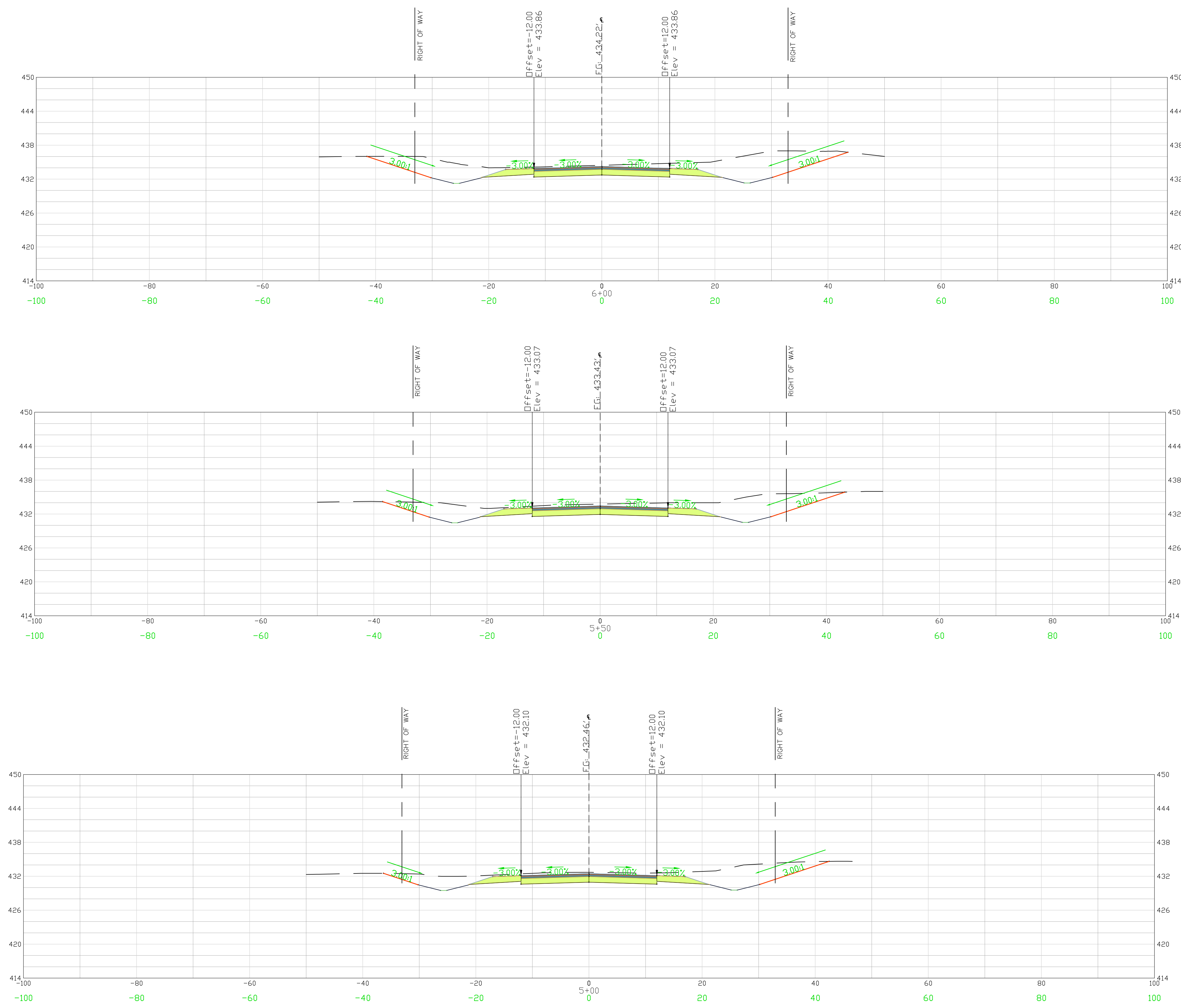


CROSS SECTIONS 3+50 - 4+50
SCALE 1" = 10'

<p>PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN, INCORPORATED IN CHESTERFIELD COUNTY, SOUTH CAROLINA</p> <p>FILE NAME: C4.12.dwg REFERENCE FILE: 22210-0013 BASE.dwg PROJECT NO.: 22210-0013</p>	<p>SHEET: CROSS SECTIONS EASTERN ALIGNMENT STA 3+50 TO 4+50 (SHEET 3 OF 11)</p> <p>DATE: JANUARY 2023 SCALE: 1" = 10'</p> <p>SOUTH CAROLINA CHESTERFIELD COUNTY</p> <p>SHEET: C4.12</p>								
<p>ALLIANCE CONSULTING ENGINEERS Alliance Consulting Engineers, Inc. Post Office Box 8147, Columbia, South Carolina 29202-8147 Phone (803) 792-0778 • Fax (803) 792-2079</p>									
<p>APPROVALS:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">ENGINEER BSW</td> <td style="width: 25%;">DESIGNER JAM</td> <td style="width: 25%;">CHECKED BY JAM</td> <td style="width: 25%;">APPROVED BY BSW</td> </tr> </table>		ENGINEER BSW	DESIGNER JAM	CHECKED BY JAM	APPROVED BY BSW				
ENGINEER BSW	DESIGNER JAM	CHECKED BY JAM	APPROVED BY BSW						
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<p>SIGNATURE: <i>Program S. Wilby</i></p> <p>DATE: 2/15/23</p>									

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February 20, 2023 - 10:50:48 AM S:\Projects\22210-0013 C-Fund Ruben Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\C4.13 East Cross Section (4 of 11).dwg

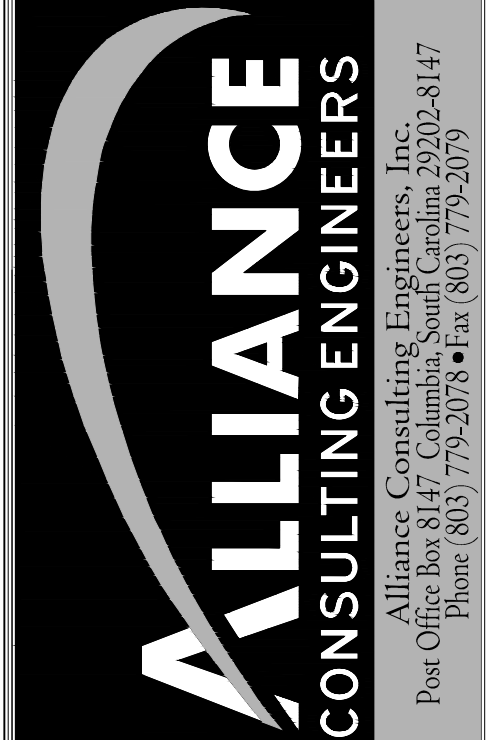


CROSS SECTIONS 5+00 - 6+00
 SCALE 1" = 10'

APPROVALS	REVISION	DATE
ENGINEER BSW		
DESIGNER JAM		
CHECKED BY JAM		
APPROVED BSW		



SIGNATURE: *Benjamin J. Williams*
 DATE: 2/15/23



CROSS SECTIONS EASTERN ALIGNMENT STA 5+00 TO 6+00 (SHEET 4 OF 11)
 SHEET: CROSS SECTIONS EASTERN ALIGNMENT STA 5+00 TO 6+00 (SHEET 4 OF 11)
 DATE: JANUARY 2023
 SCALE: 1" = 10'

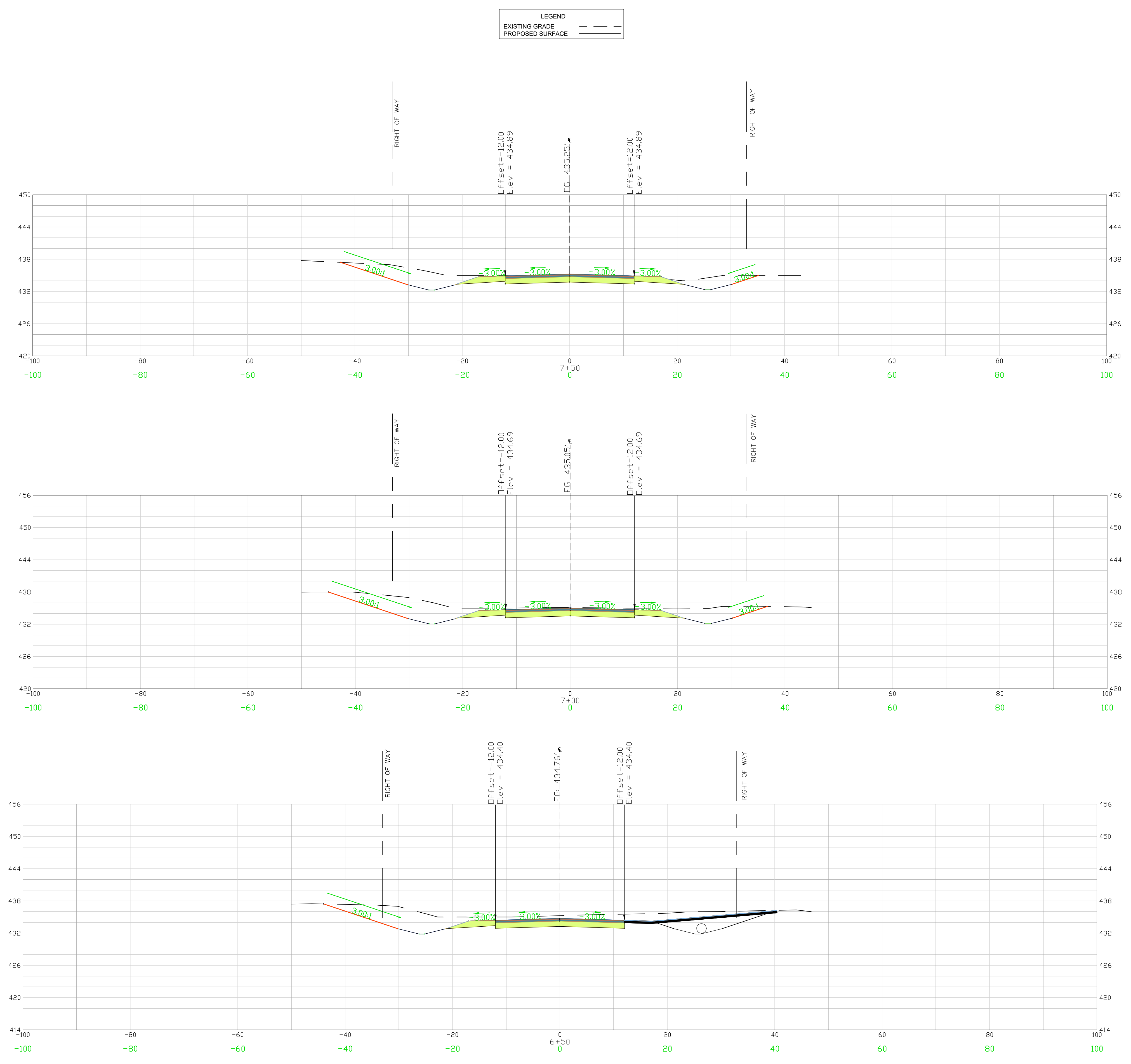
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 PROJECT NO.: 22210-0013
 SHEET: C4.13

FILE NAME: C4.13.dwg
 REFERENCE FILE: 22210-0013 BASE.dwg
 PROJECT NO.: 22210-0013
 SHEET: C4.13

DWG NO. 01.1588-D27

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February 20, 2023 - 10:51:27 AM S:\Projects\22210-0013 C-Fund Ruben Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\ C4.14 East Cross Section (6 of 11).dwg



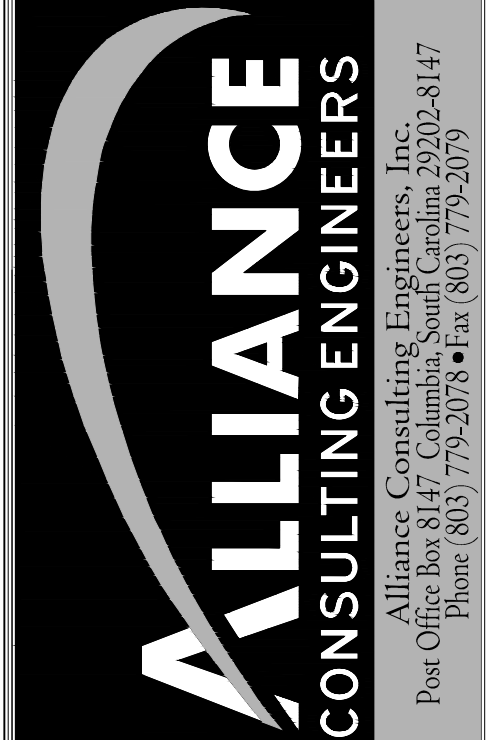
CROSS SECTIONS 6+50 - 7+50
SCALE 1" = 10'

REVISION DATE	

APPROVALS	DATE
ENGINEER BSW	
DESIGNER JAM	
TITLE ENGINEER JAH	
CHECKED BY BSW	
APPROVED BY BSW	



SIGNATURE: *Benjamin J. Williams*
 DATE: 2/15/23



SHEET: CROSS SECTIONS EASTERN ALIGNMENT STA 6+50 TO 7+50 (SHEET 5 OF 11)
 DATE: JANUARY 2023
 SCALE: 1" = 10'

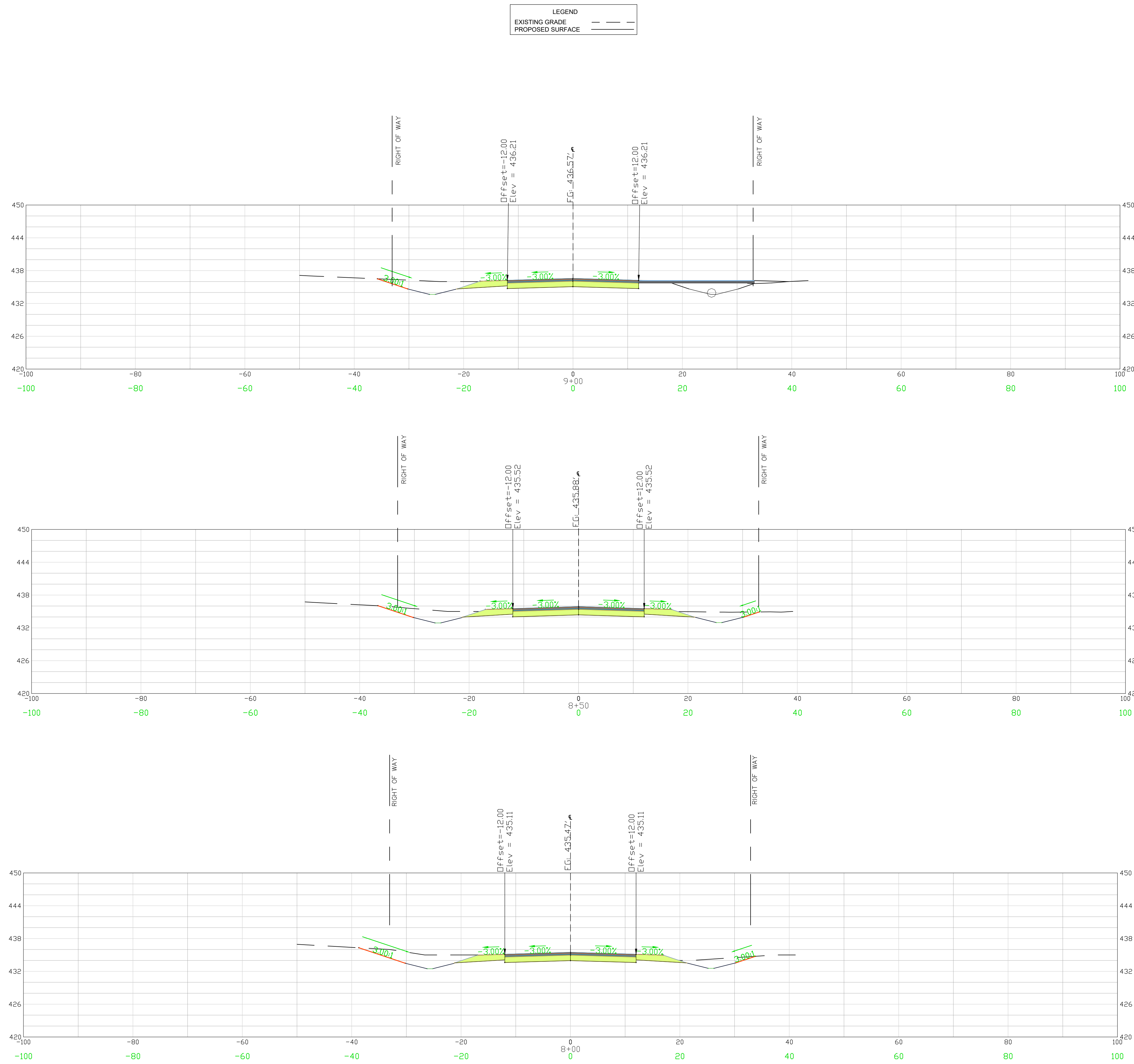
PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN, INCORPORATED IN CHESTERFIELD COUNTY, SOUTH CAROLINA
 CHESTERFIELD COUNTY SOUTH CAROLINA

FILE NAME: C4.14.dwg	SHEET C4.14
REFERENCE FILE: 22210-0013 BASE.dwg	
PROJECT NO. 22210-0013	

DWG NO. 01.1588-D27

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February 20, 2023 - 10:52:41 AM S:\Projects\22210-0013 C-Fund Ruben Loop Comm of Ruben Chesterfield County\Construction Plans\ C4.15 East Cross Section (6 of 11).dwg



CROSS SECTIONS 8+00 - 9+00
SCALE 1" = 10'

REVISION	
NO.	DATE

APPROVALS:

ENGINEER	DESIGNER	CHECKED BY	APPROVED BY
BSW	JAM	JAM	BSW

DATE: 2/15/23

SIGNATURE:

Benjamin J. Williams

No. 26589

ALLIANCE CONSULTING ENGINEERS

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 Post Office Box 8147, Columbia, South Carolina 29202-8147
 Phone (803) 779-2078 • Fax (803) 779-2079

CROSS SECTIONS
 EASTERN ALIGNMENT
 STA 8+00 TO 9+00
 (SHEET 6 OF 11)

DATE: JANUARY 2023
 SCALE: 1" = 10'

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

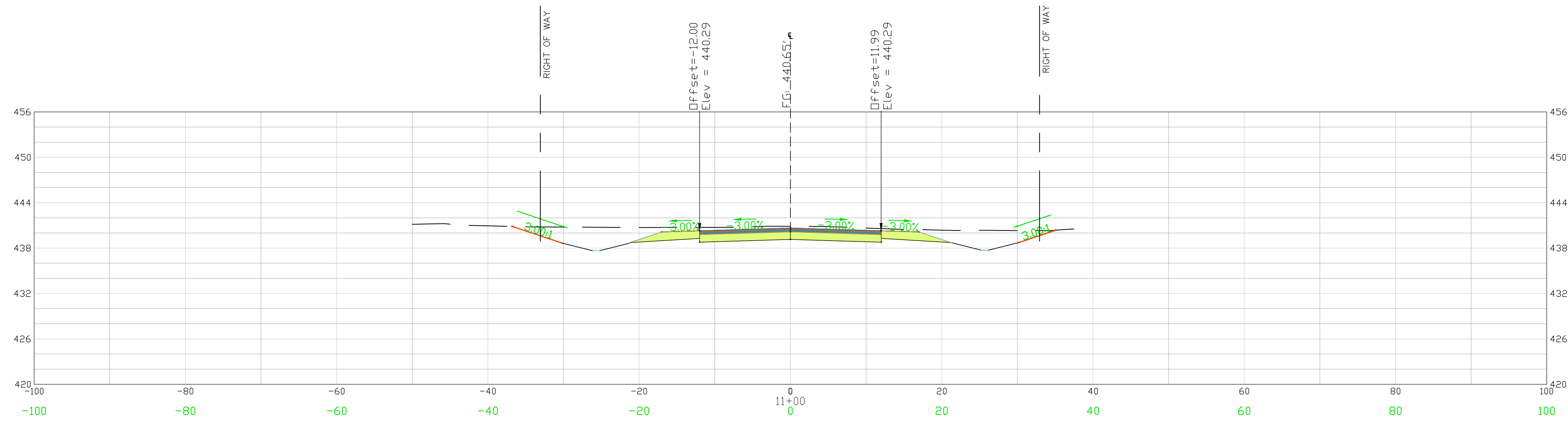
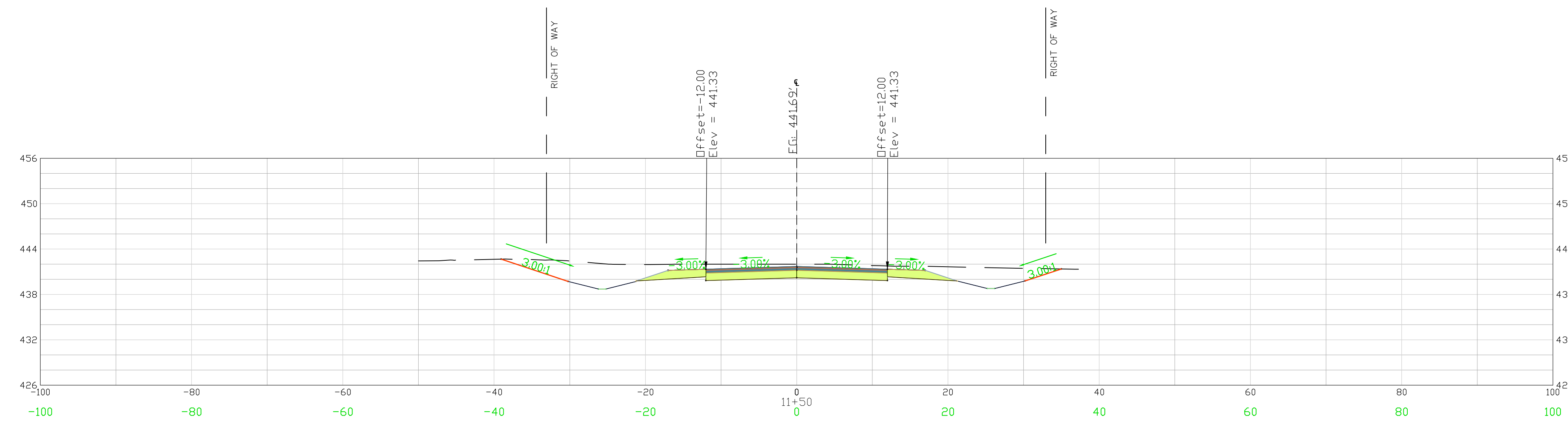
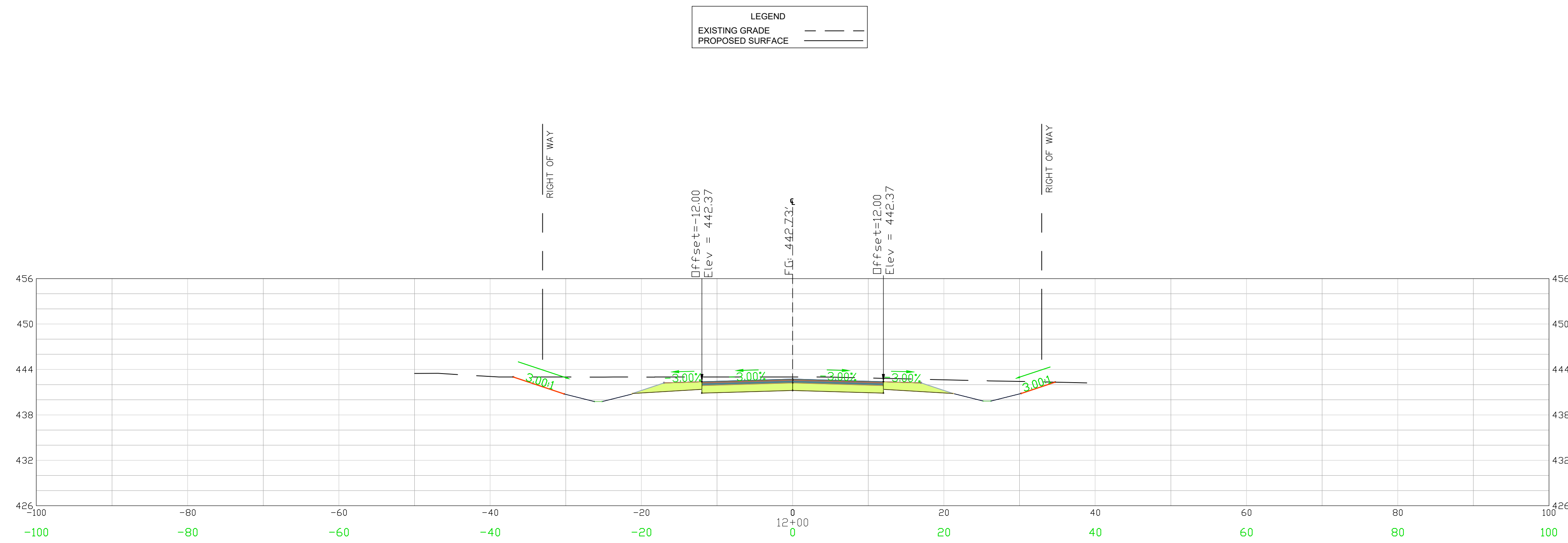
CHESTERFIELD COUNTY SOUTH CAROLINA

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DWG NO. 01.1588-D27

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February 20, 2023 - 10:54:04 AM S:\Projects\22210-0013 C-Fund Ruby Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\ C4.17 East Cross Section (8 of 11).dwg



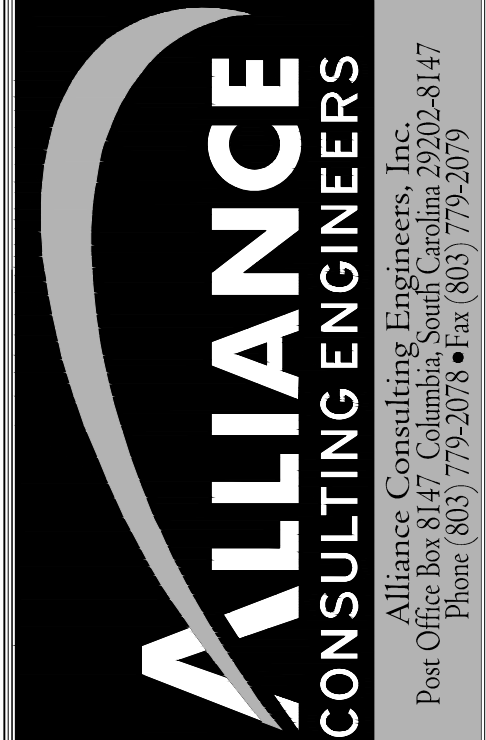
CROSS SECTIONS 11+00 - 12+00
SCALE 1" = 10'

REVISION	
NO.	DATE

APPROVALS	
ENGINEER	BSW
DESIGNER	JAM
CHECKED BY	JAM
APPROVED	BSW



SIGNATURE: *Benjamin J. Williams*
DATE: 2/15/23



CROSS SECTIONS
EASTERN ALIGNMENT
STA 11+00 TO 12+00
(SHEET 8 OF 11)

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

DATE: JANUARY 2023
SCALE: 1" = 10'

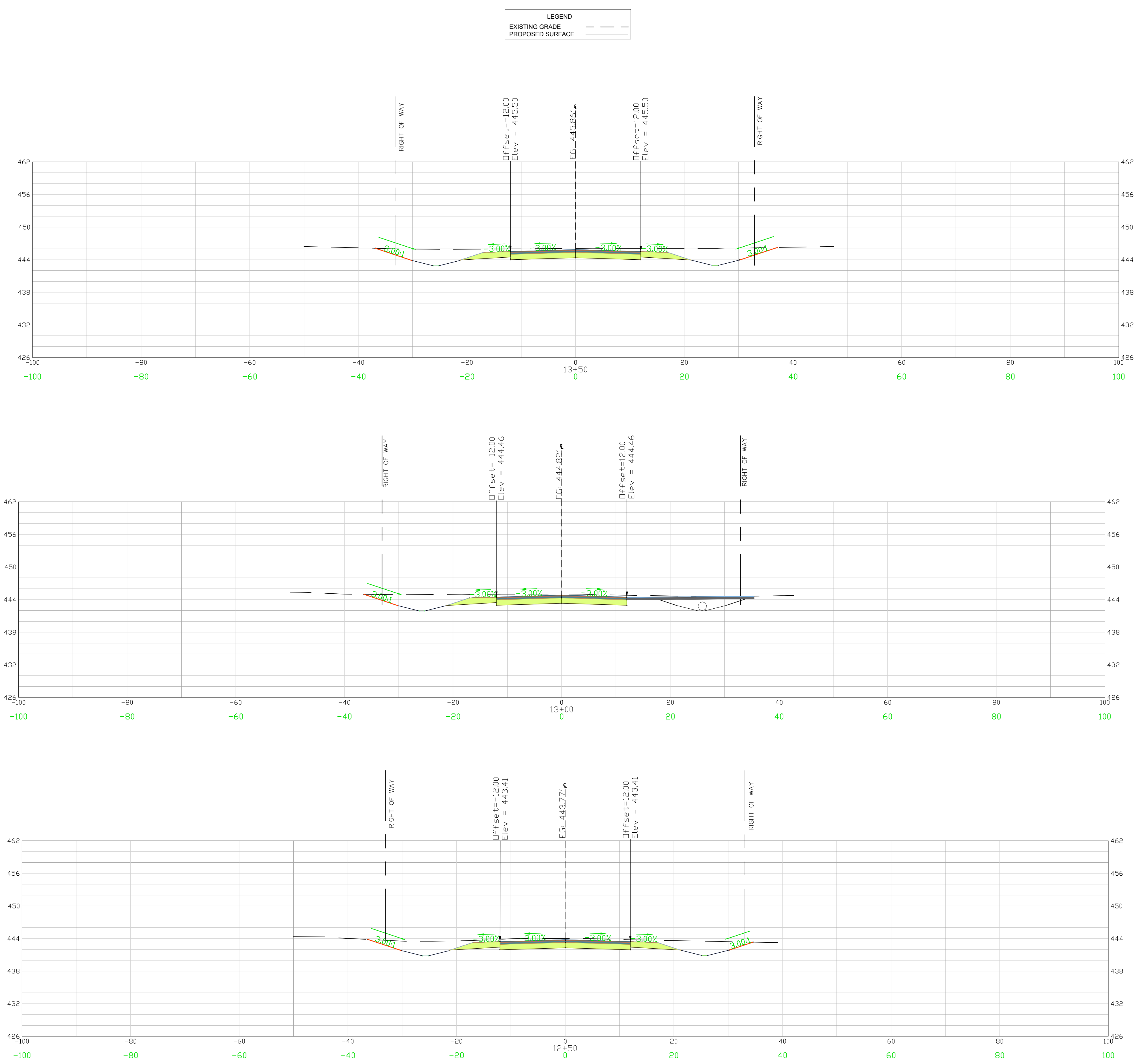
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SHEET C4.17

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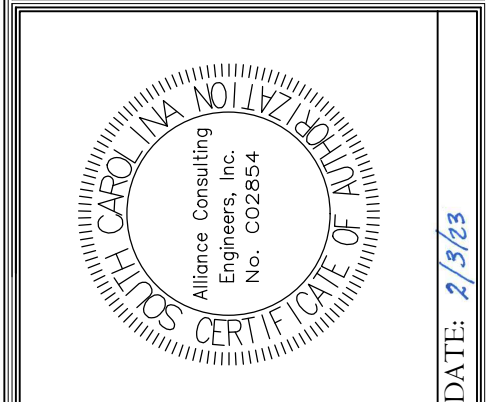
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February 20, 2023 - 10:54:43 AM S:\Projects\22210-0013 C-Fund Ruben Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\ C4.18 East Cross Section (0 of 11).dwg

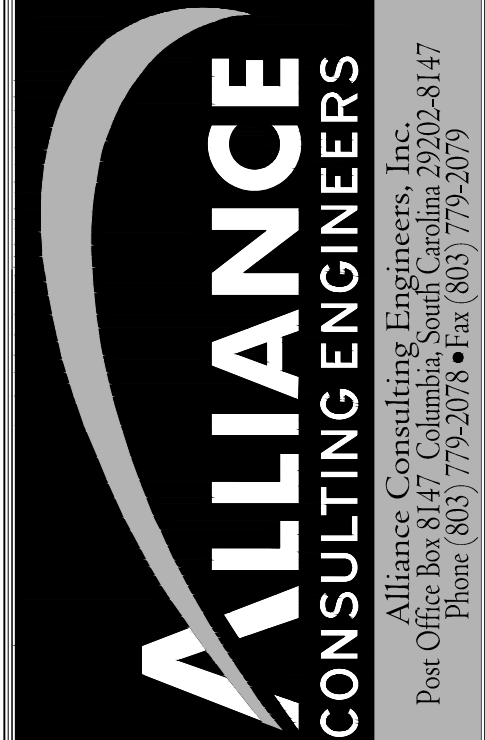


REVISION DATE	

APPROVALS	
ENGINEER BSW	
DESIGNER JAM	
CHECKED BY JAH	
APPROVED BY BSW	



SIGNATURE: *Benjamin J. Williams*
 DATE: 2/15/23



CROSS SECTIONS
EASTERN ALIGNMENT
STA 12+50 TO 13+50
(SHEET 9 OF 11)

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

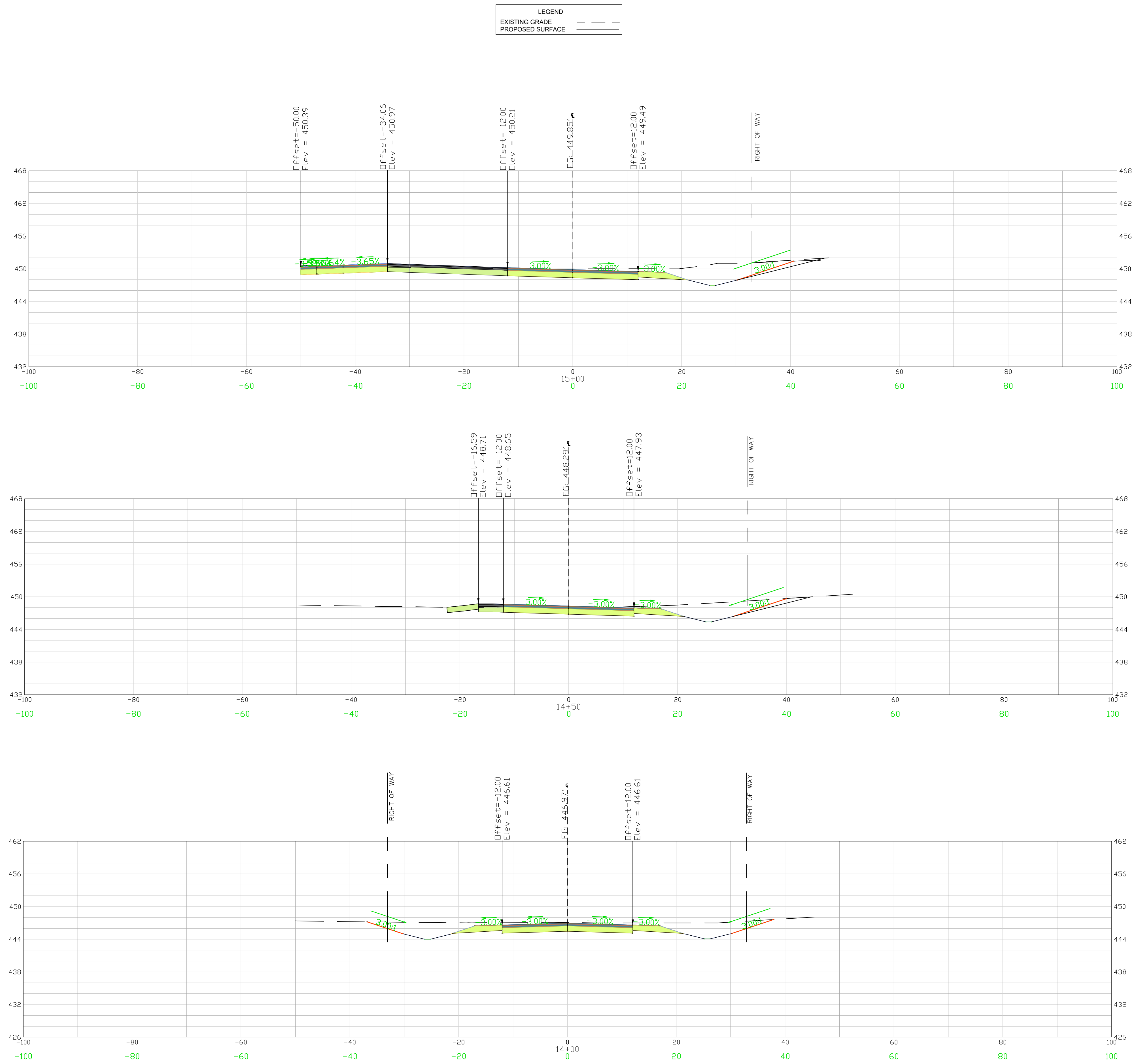
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PROJECT NO. 22210-0013	

DWG NO. 01.1588-D27

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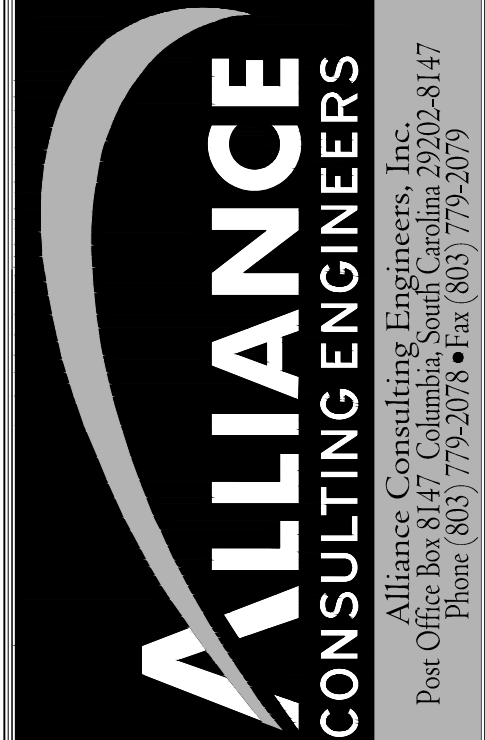
February 20, 2023 - 10:55:52 AM S:\Projects\22210-0013 C-Fund Ruben Improm Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\ C4.19 East Cross Section (10 of 11).dwg



APPROVALS	ENGINEER	DESIGNER	CHECKER	APPROVED
	BSW	JAM	JAM	BSW



SIGNATURE: *Benjamin J. Williams*
 DATE: 2/15/23



PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN, INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

SHEET: CROSS SECTIONS EASTERN ALIGNMENT STA 14+00 TO 15+00 (SHEET 10 OF 11)

DATE: JANUARY 2023
 SCALE: 1" = 10'

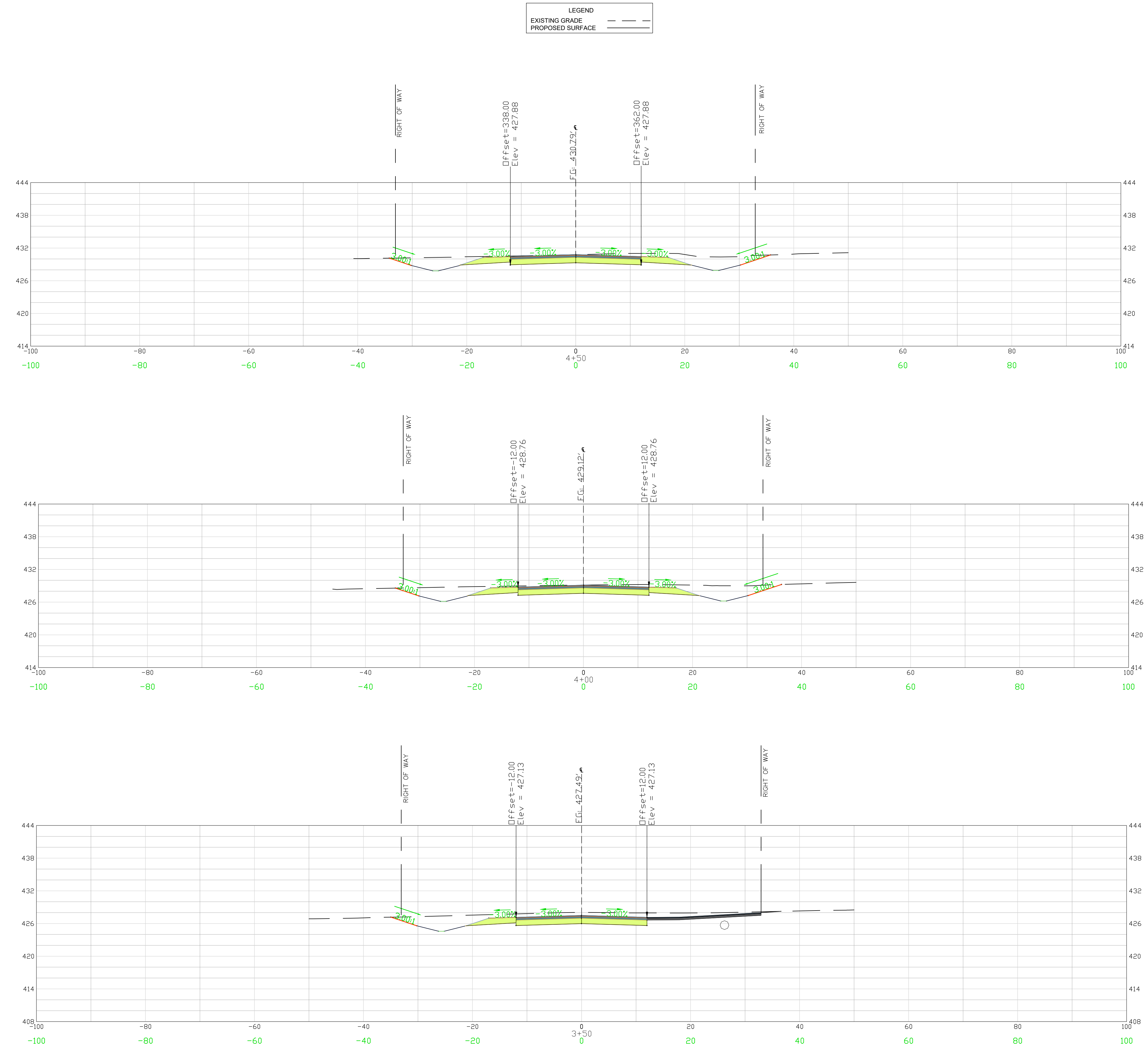
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 REFERENCE FILE: 22210-0013 BASE.dwg
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SHEET: C4.19

DWG NO. 01.1588-D27

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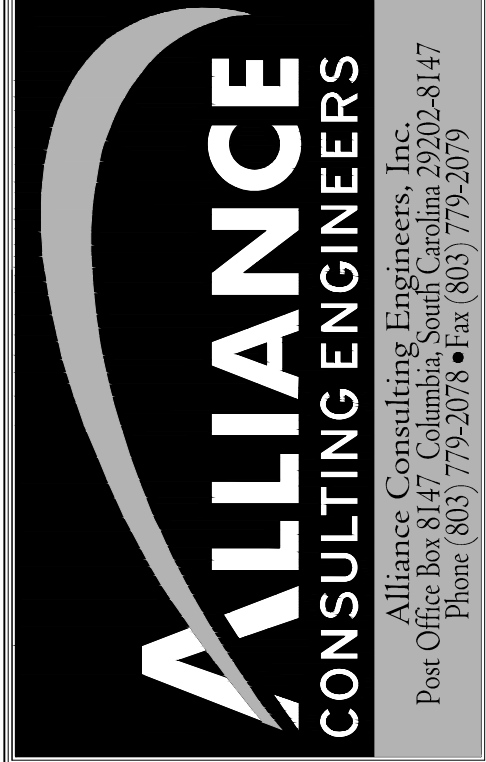
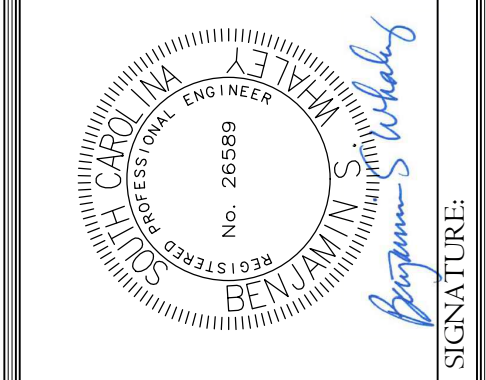
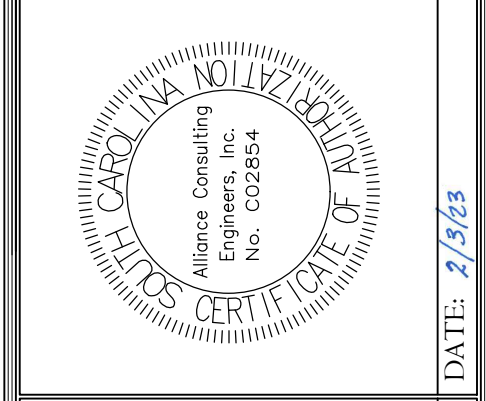
February 20, 2023 - 10:38:44 AM S:\Projects\22210-0013 C-Fund Ruben Improv Taylor Loop Comm of Ruby Chesterfield Colony\Construction Plans\ C4.2 West Cross Section (3 of 10).dwg



CROSS SECTIONS 3+50 - 4+50
SCALE 1" = 10'

REVISION DATE	

APPROVALS	DATE
ENGINEER BSW	
DESIGNER JAM	
CHECKED BY JAT	
APPROVED BSW	



CROSS SECTIONS
 WESTERN ALIGNMENT
 STA 3+50 TO 4+50
 (SHEET 3 OF 10)

DATE: JANUARY 2023
 SCALE: 1" = 10'

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

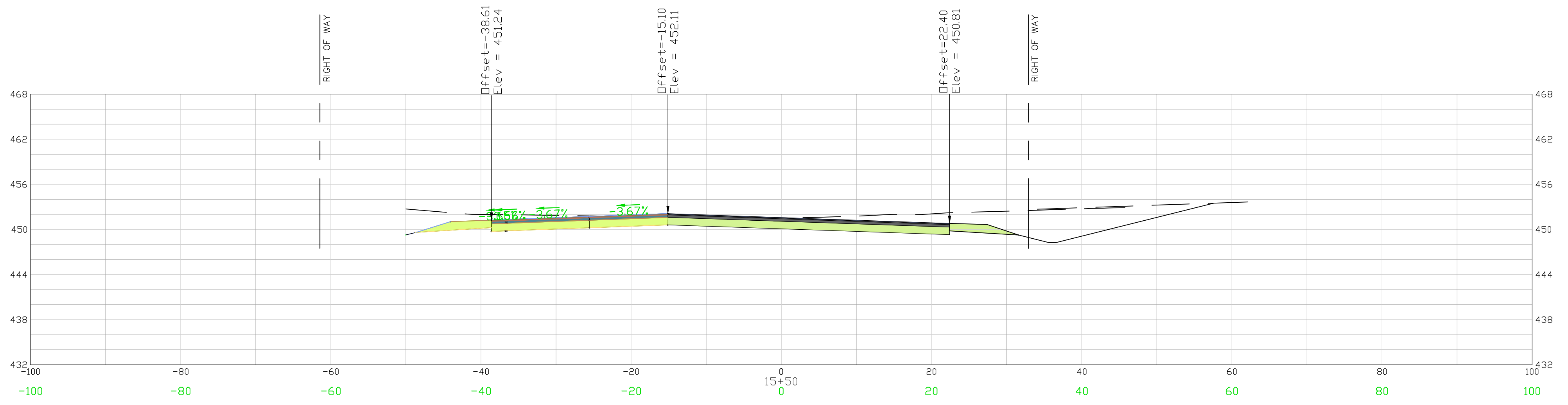
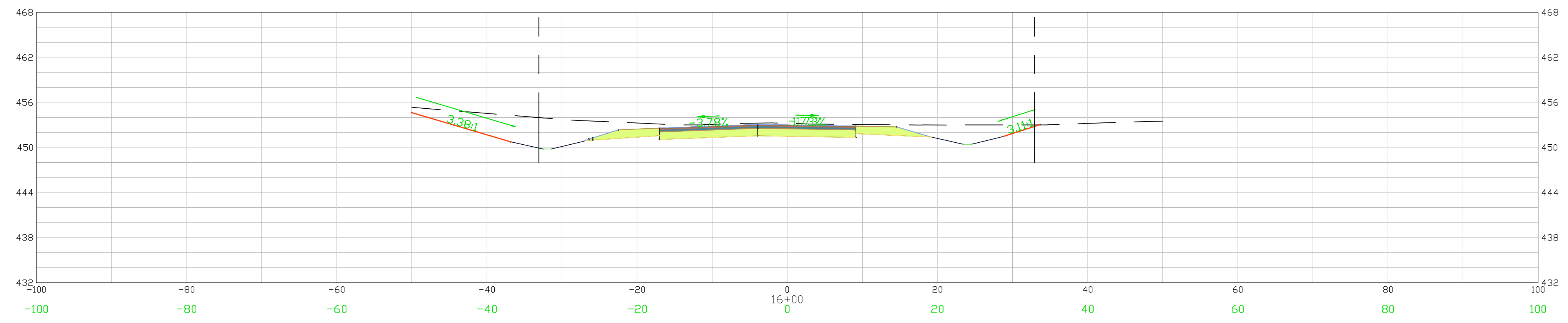
CHESTERFIELD COUNTY SOUTH CAROLINA

FILE NAME: C4.2.dwg	SHEET C4.2
REFERENCE FILE: 22210-0013 BASE.dwg	
PROJECT NO. 22210-0013	

DWG NO. 01.1588-D27

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February 20, 2023 - 10:56:28 AM S:\Projects\22210-0013 C-Fund Ruben Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\C4.20 East Cross Section (11 of 11).dwg

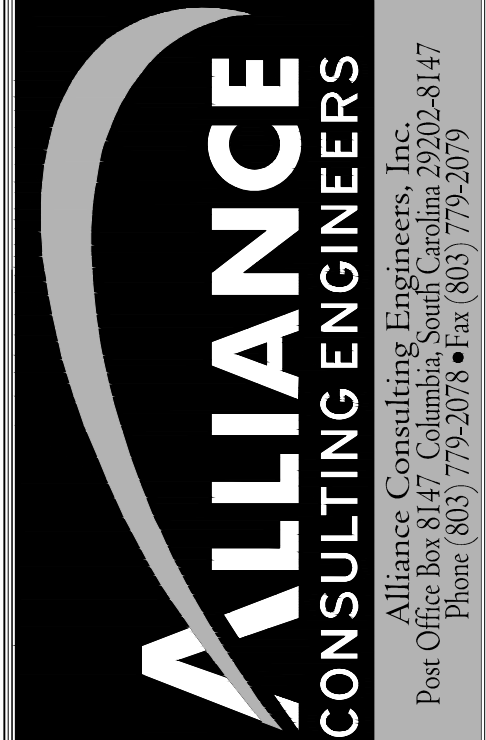
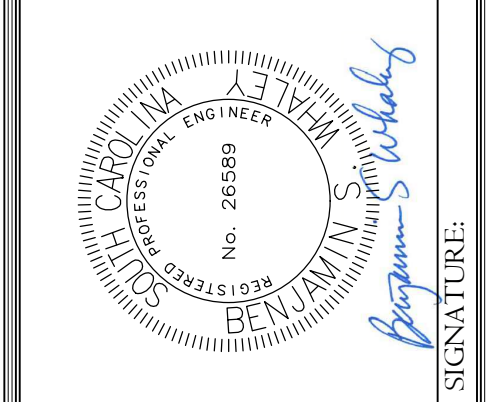


CROSS SECTIONS 15+50 - 16+00
SCALE 1" = 10'

LEGEND
EXISTING GRADE ———
PROPOSED SURFACE - - - -

REVISION DATE	

APPROVALS	
ENGINEER BSW	DESIGNER JAM
CHECKER JAM	APPROVED BY BSW



CROSS SECTIONS
EASTERN ALIGNMENT
STA 15+50 TO 16+00
(SHEET 11 OF 11)

DATE: JANUARY 2023
SCALE: 1" = 10'

PROJECT
2022 C-FUND ROADWAY
IMPROVEMENTS FOR THE ±
3,000-LF TAYLOR LOOP OFF SC
HIGHWAY 109 NEAR THE TOWN
OF RUBEN, INCORPORATED
CHESTERFIELD COUNTY,
SOUTH CAROLINA

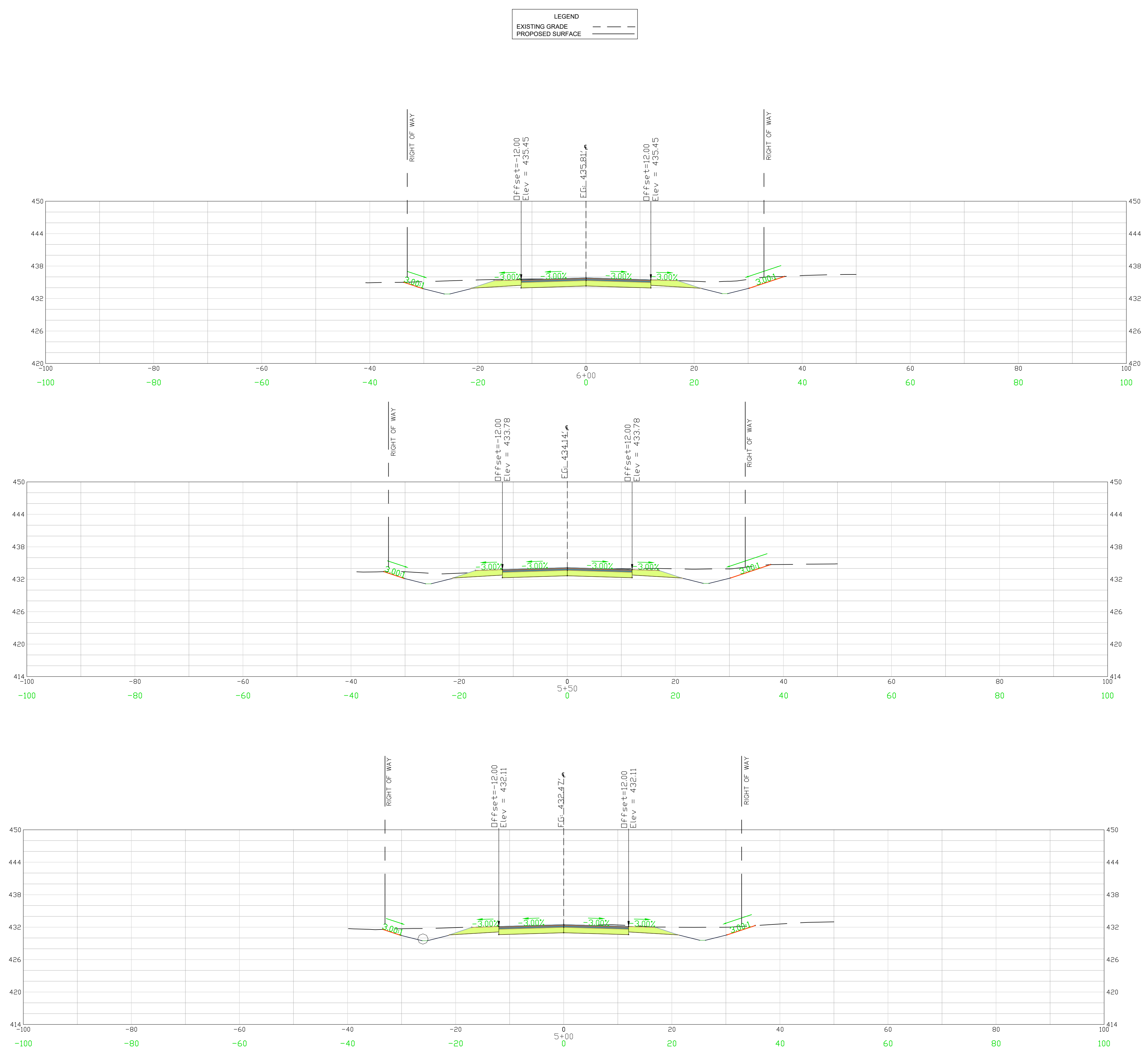
CHESTERFIELD COUNTY SOUTH CAROLINA

FILE NAME: C4.20.dwg	SHEET C4.20
REFERENCE FILE: 22210-0013 BASE.dwg	
PROJECT NO. 22210-0013	

DWG NO. 01.1588-D27

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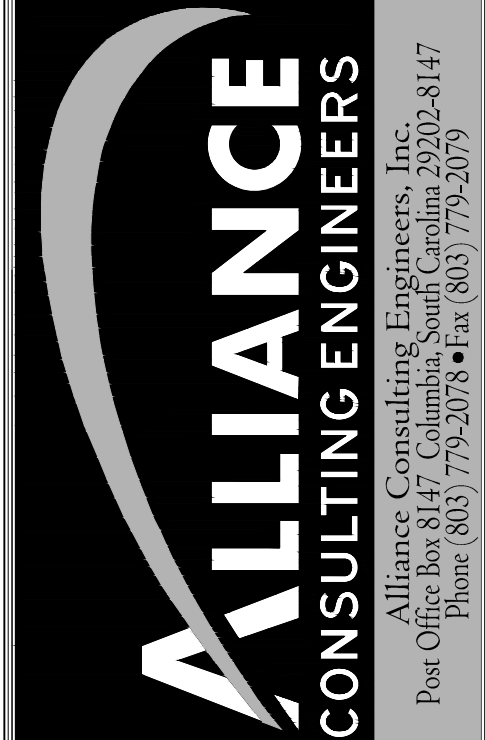
February 20, 2023 - 10:37:30 AM S:\Projects\22210-0013 C-Fund Ruben Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\C4.3 West Cross Section (4 of 10).dwg



APPROVALS	ENGINEER	DESIGNER	CHECKER	APPROVED
	BSW	JAM	JAM	BSW
				BSW



SIGNATURE: *Benjamin J. Williams*
 DATE: 2/15/23



CROSS SECTIONS
WESTERN ALIGNMENT
 STA 5+00 TO 6+00
 (SHEET 4 OF 10)

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

DATE: JANUARY 2023
 SCALE: 1" = 10'

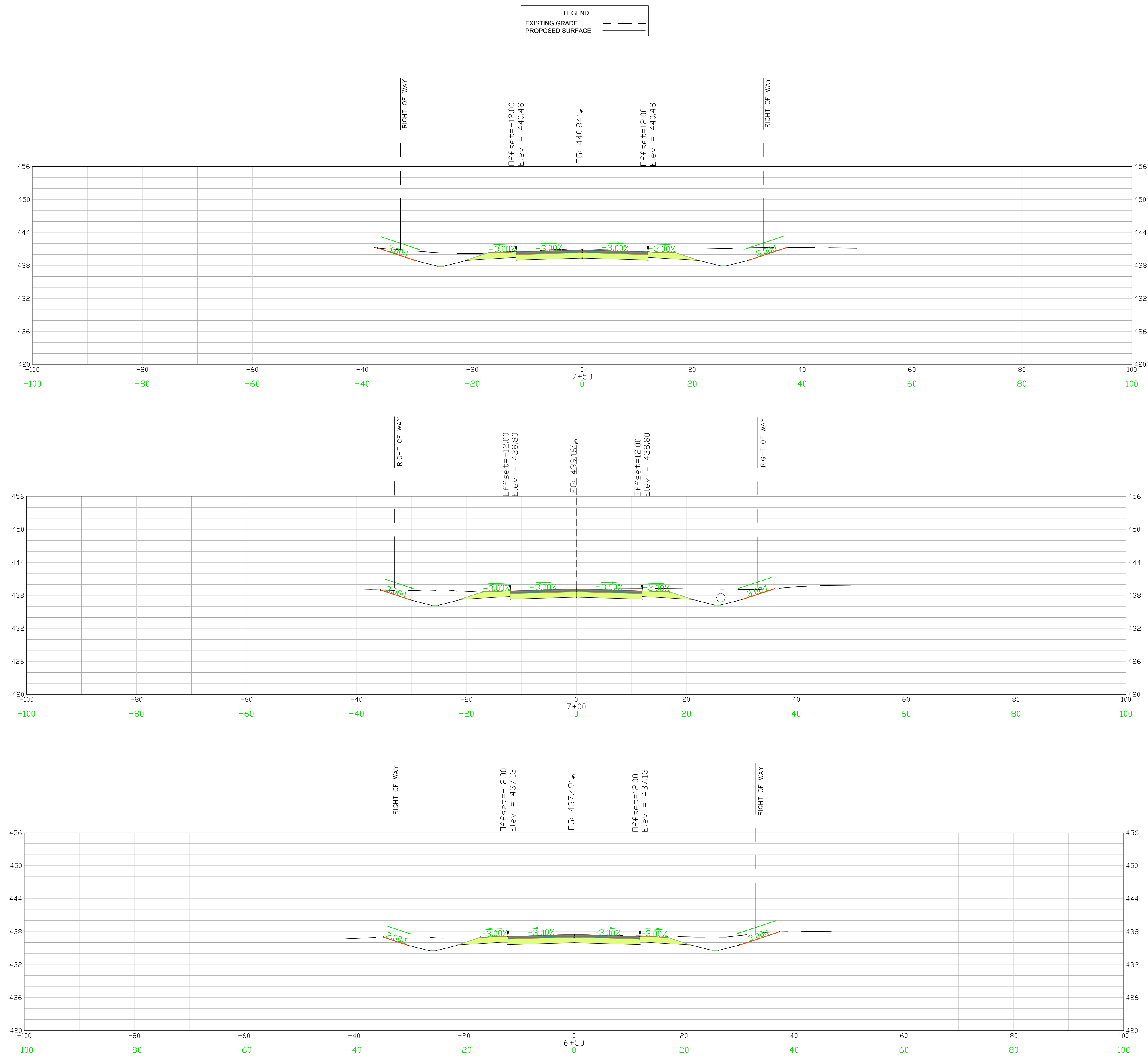
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 REFERENCE FILE: 22210-0013 BASE.dwg
 PROJECT NO.: 22210-0013

SHEET C4.3

DWG NO. 01.1588-D27

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February 20, 2023 - 10:38:14 AM S:\Projects\22210-0013 C-Fund Ruby Improv\ Taylor Loop Comm of Ruby\ Chesterfield\ Cology\ Construction\ Plans\ C4.4 West Cross Section (8 of 10).dwg

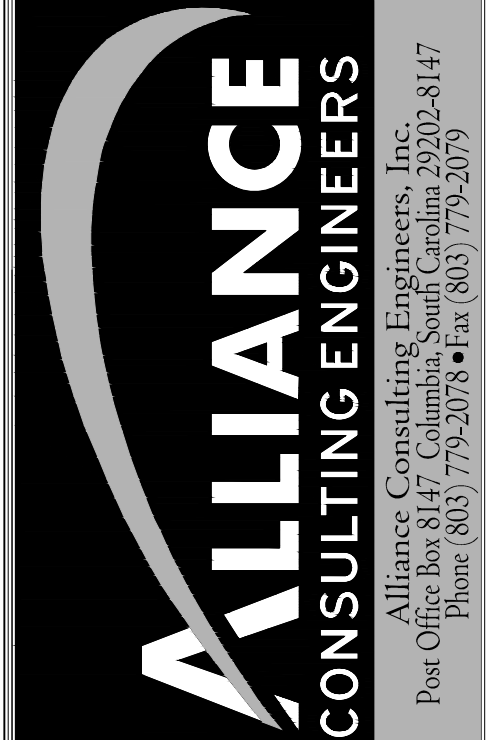


CROSS SECTIONS 6+50 - 7+50
SCALE 1" = 10'

APPROVALS	ENGINEER	DESIGNER	CHECKER	APPROVED
BSW	JAM	JAM	JAM	BSW
BSW	JAM	JAM	JAM	BSW



SIGNATURE: *Benjamin J. Williams*
 DATE: 2/15/23



CROSS SECTIONS
 WESTERN ALIGNMENT
 STA 6+50 TO 7+50
 (SHEET 5 OF 10)
 SCALE: 1" = 10'
 DATE: JANUARY 2023

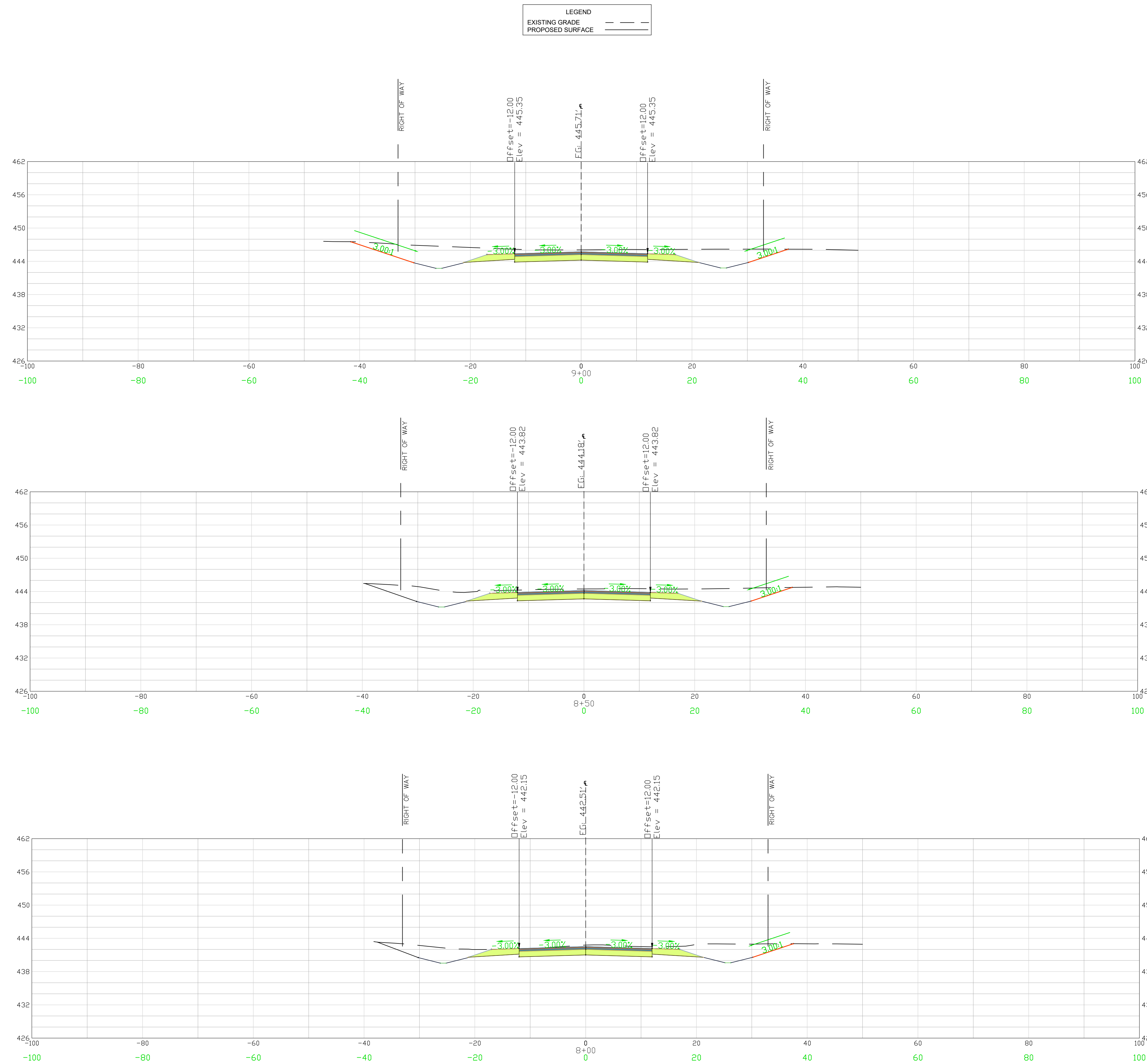
PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBY, IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA
 CHESTERFIELD COUNTY SOUTH CAROLINA

FILE NAME: C4.4.dwg	SHEET C4.4
REFERENCE FILE: 22210-0013 BASE.dwg	
PROJECT NO. 22210-0013	

DWG NO. 01.1588-D27

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February 20, 2023 - 10:38:07 AM S:\Projects\22210-0013 C-Fund Ruben Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\C4.5 West Cross Section (8 of 10).dwg



REVISION	
NO.	DATE

ENGINEER BSW	DESIGNER JAM	TITLE/ANALYST JAT	CHECKED BY BSW	APPROVED BY BSW
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DATE: 2/15/23

SIGNATURE:
Gregory S. Wilby

ALLIANCE CONSULTING ENGINEERS

Alliance Consulting Engineers, Inc.
 Post Office Box 8147, Columbia, South Carolina 29202-8147
 Phone (803) 779-2078 • Fax (803) 779-2079

CROSS SECTIONS
 WESTERN ALIGNMENT
 STA 8+00 TO 9+00
 (SHEET 6 OF 10)

SCALE: 1" = 10'

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN, INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

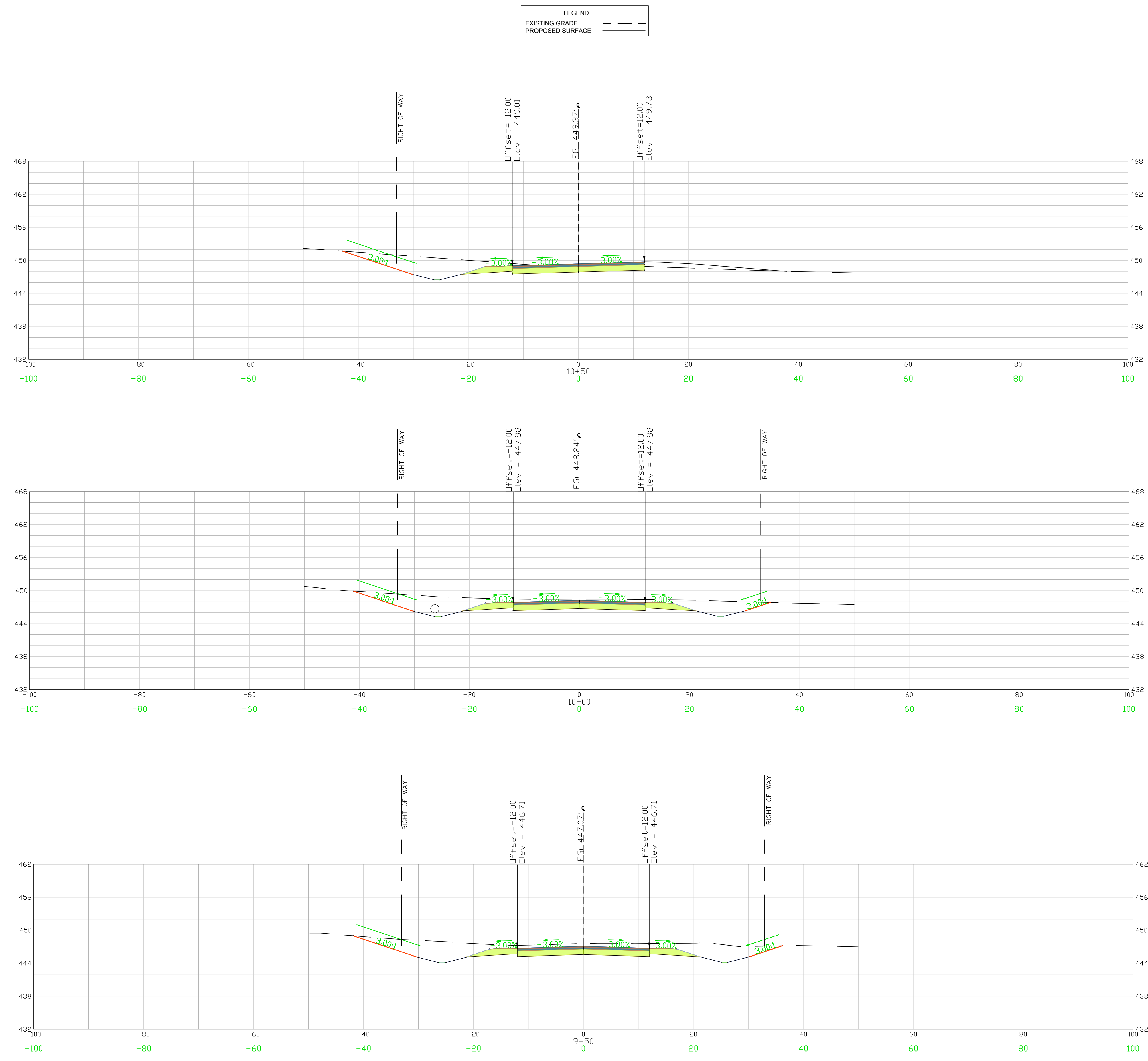
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REFERENCE FILE: 22210-0013 BASE.dwg	
PROJECT NO. 22210-0013	

DWG NO. 01.1588-D27

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February 20, 2023 - 10:39:54 AM S:\Projects\22210-0013 C-Fund Ruben Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\ C4.6 West Cross Section (7 of 10).dwg



REVISION	
NO.	DATE

APPROVALS:

ENGINEER BSW	DESIGNER JAM	CHECKED BY JAT	APPROVED BY BSW
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DATE: 2/15/23

SIGNATURE: *Program S. Wilby*

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 Alliance Consulting Engineers, Inc.
 Post Office Box 8147, Columbia, South Carolina 29202-8147
 Phone (803) 779-2078 • Fax (803) 779-2079

CROSS SECTIONS
 WESTERN ALIGNMENT
 STA 9+50 TO 10+50
 (SHEET 7 OF 10)

DATE: JANUARY 2023
 SCALE: 1" = 10'

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

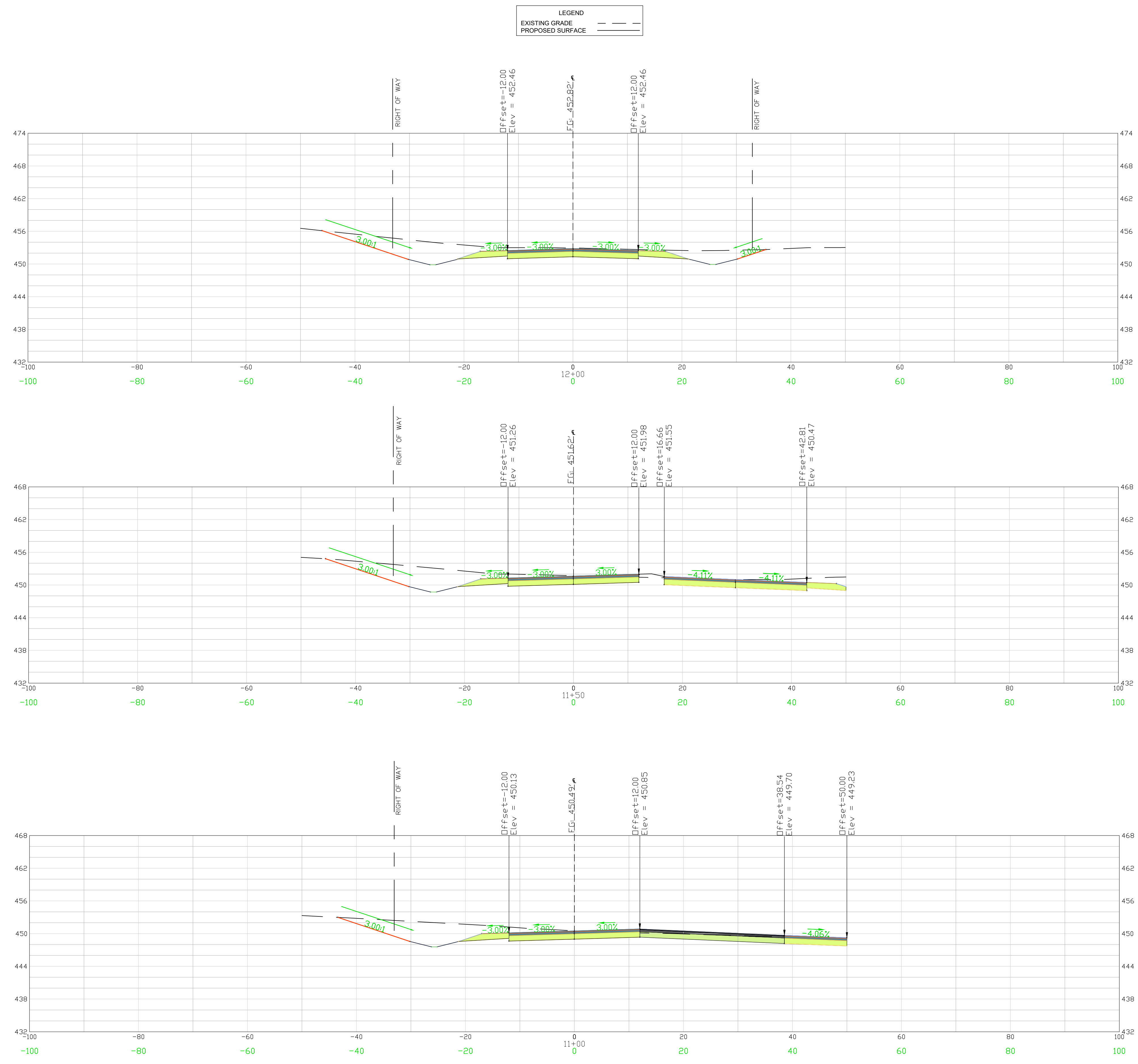
CHESTERFIELD COUNTY SOUTH CAROLINA

FILE NAME: C4.6.dwg	SHEET C4.6
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PROJECT NO. 22210-0013	

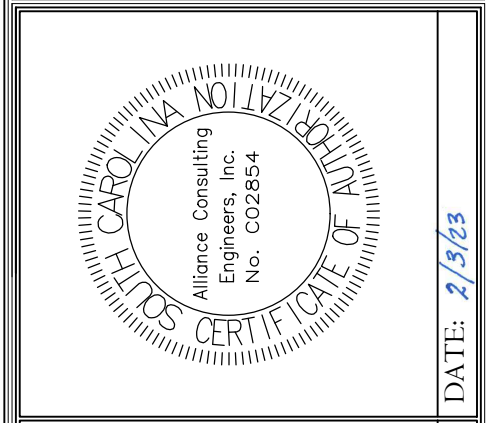
DWG NO. 01.1588-D27

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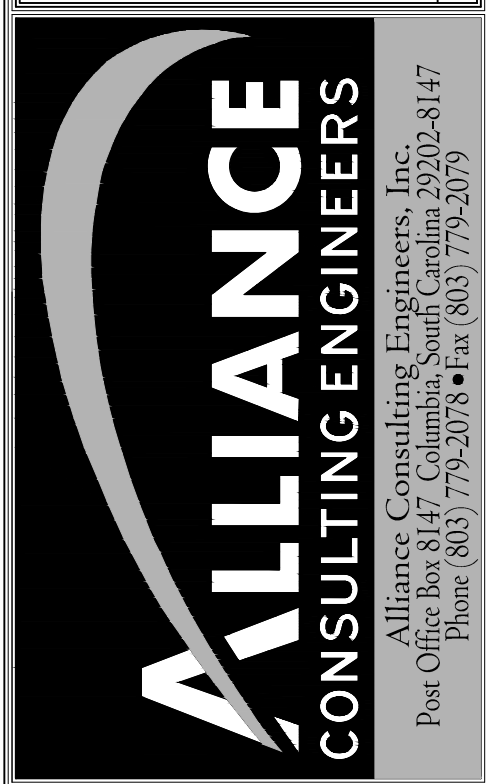
February 20, 2023 - 10:40:51 AM S:\Projects\22210-0013 C-Fund Ruben Loop Improv Taylor Loop Comm of Ruby Chesterfield County\Construction Plans\C4.7 West Cross Section (8 of 10).dwg



APPROVALS	ENGINEER	DESIGNER	TRACER/ANALYST	CHECKED BY	APPROVED BY
	BSW	JAM	JAM	BSW	BSW



SIGNATURE: *Benjamin J. Williams*
 DATE: 2/15/23



CROSS SECTIONS
 WESTERN ALIGNMENT
 STA 11+00 TO 12+00
 (SHEET 8 OF 10)

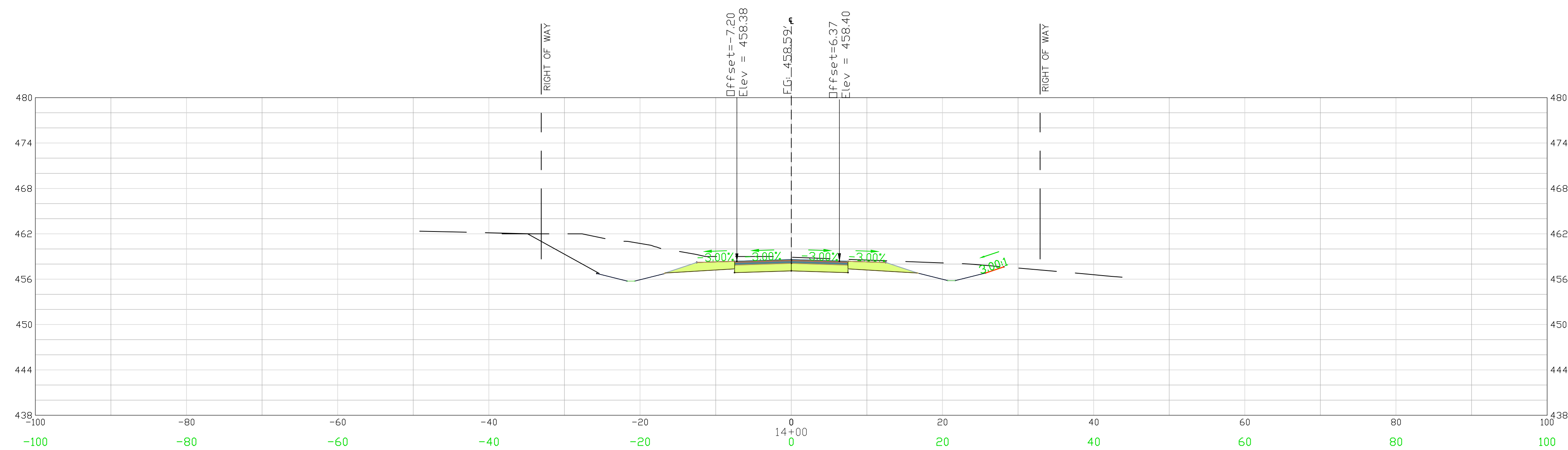
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DATE: JANUARY 2023
 SCALE: 1" = 10'

FILE NAME: C4.7.dwg
 REFERENCE FILE: 22210-0013 BASE.dwg
 PROJECT NO.: 22210-0013

SHEET C4.7

DWG NO. 01.1588-D27



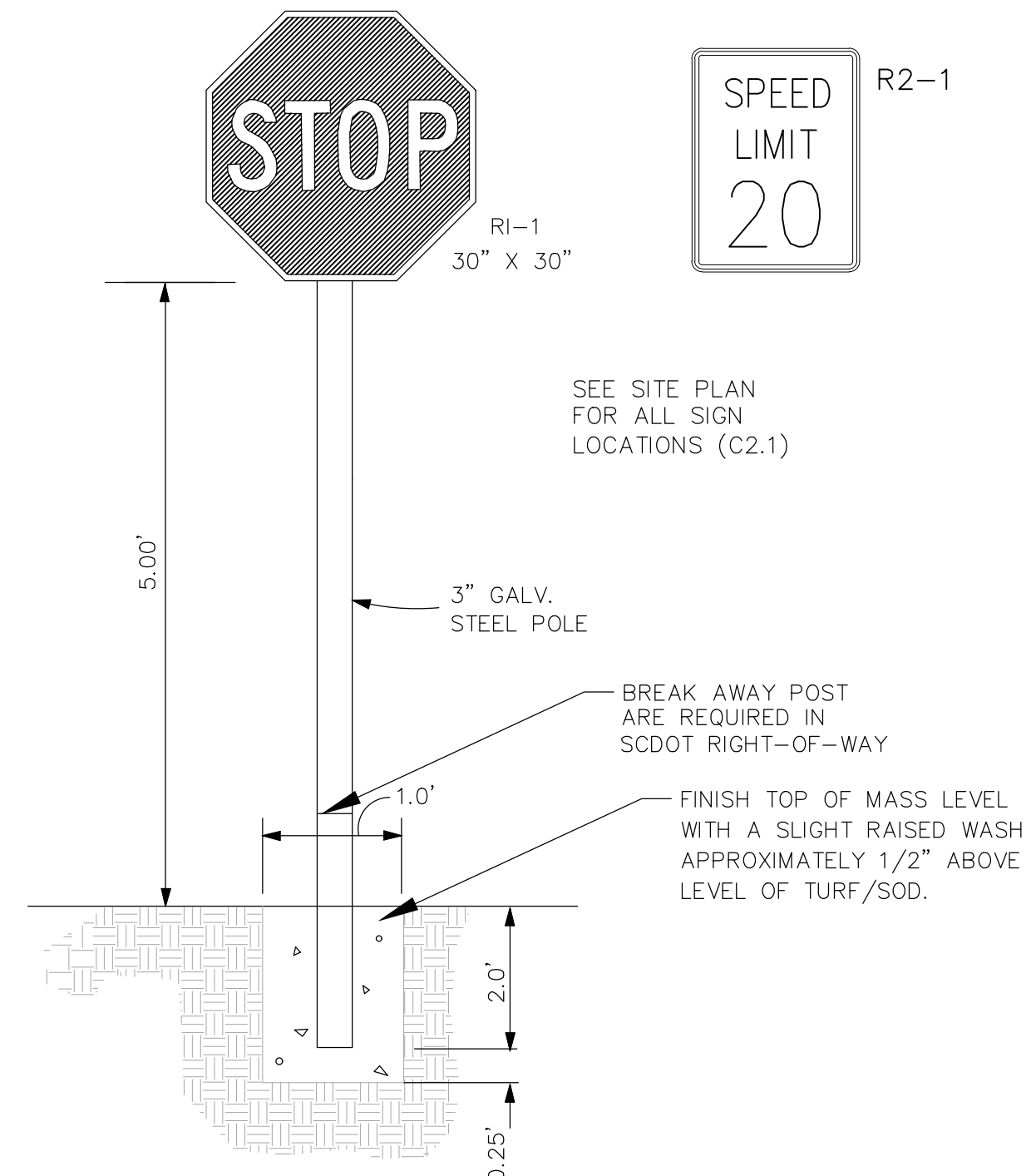
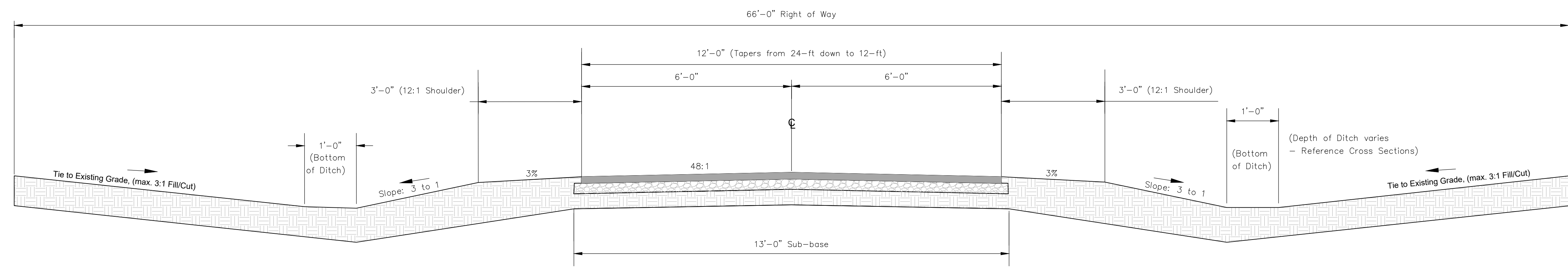
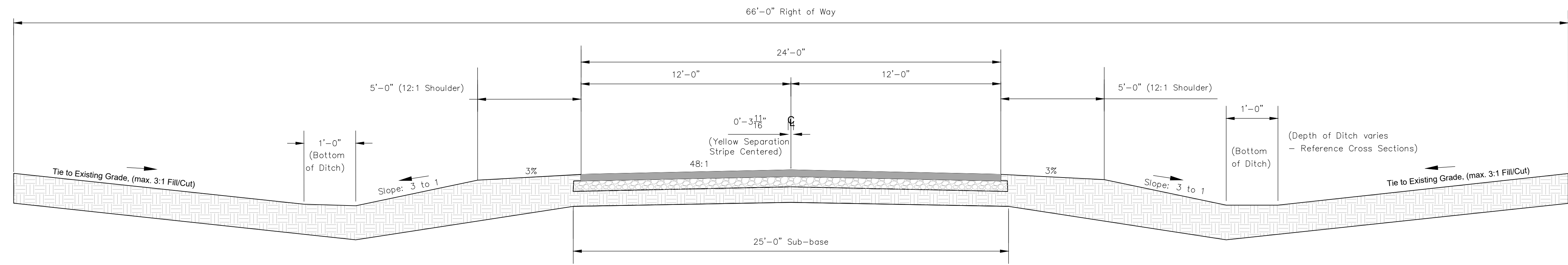
LEGEND	
EXISTING GRADE	---
PROPOSED SURFACE	---

CROSS SECTION 14+00
SCALE 1" = 10'

REVISION DATE																	
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">ENGINEER</td> <td style="width: 25%;">DESIGNER</td> <td style="width: 25%;">CHECKED BY</td> <td style="width: 25%;">APPROVED BY</td> </tr> <tr> <td>BSW</td> <td>JAM</td> <td>JAM</td> <td>BSW</td> </tr> <tr> <td colspan="2">THESE ENGINEERS ARE REGISTERED PROFESSIONAL ENGINEERS IN THE STATE OF SOUTH CAROLINA</td> <td colspan="2">APPROVED BY</td> </tr> <tr> <td colspan="2">No. 002854</td> <td colspan="2">BSW</td> </tr> </table>	ENGINEER	DESIGNER	CHECKED BY	APPROVED BY	BSW	JAM	JAM	BSW	THESE ENGINEERS ARE REGISTERED PROFESSIONAL ENGINEERS IN THE STATE OF SOUTH CAROLINA		APPROVED BY		No. 002854		BSW		DATE: 2/15/23
ENGINEER	DESIGNER	CHECKED BY	APPROVED BY														
BSW	JAM	JAM	BSW														
THESE ENGINEERS ARE REGISTERED PROFESSIONAL ENGINEERS IN THE STATE OF SOUTH CAROLINA		APPROVED BY															
No. 002854		BSW															
	SIGNATURE: <i>Benjamin S. Wilby</i>																
<p>ALLIANCE CONSULTING ENGINEERS Alliance Consulting Engineers, Inc. Post Office Box 8147, Columbia, South Carolina 29202-8147 Phone (803) 779-2078 • Fax (803) 779-2079</p>																	
<p>CROSS SECTIONS WESTERN ALIGNMENT STA 14+00 (SHEET 10 OF 10)</p>																	
<p>PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN, INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA</p>	<p>DATE: JANUARY 2023 SCALE: 1" = 10'</p>																
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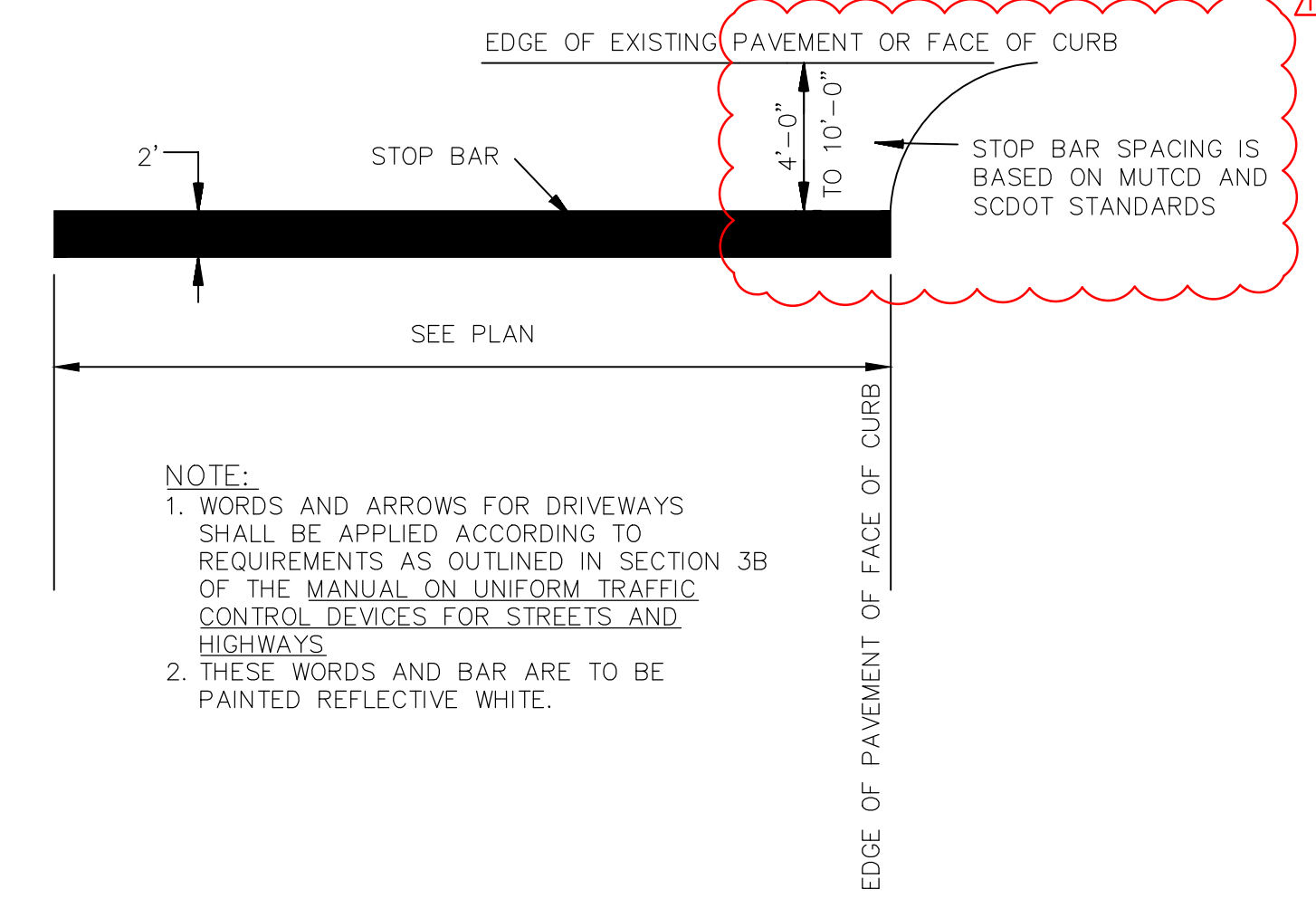
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February 20, 2023 - 10:58:14 AM S:\Projects\22210-0013 C-Fund Relay Improv Taylor Loop Comm of Rubby, Chesterfield Colding\Construction Plans\C-5.0 Site Details.dwg



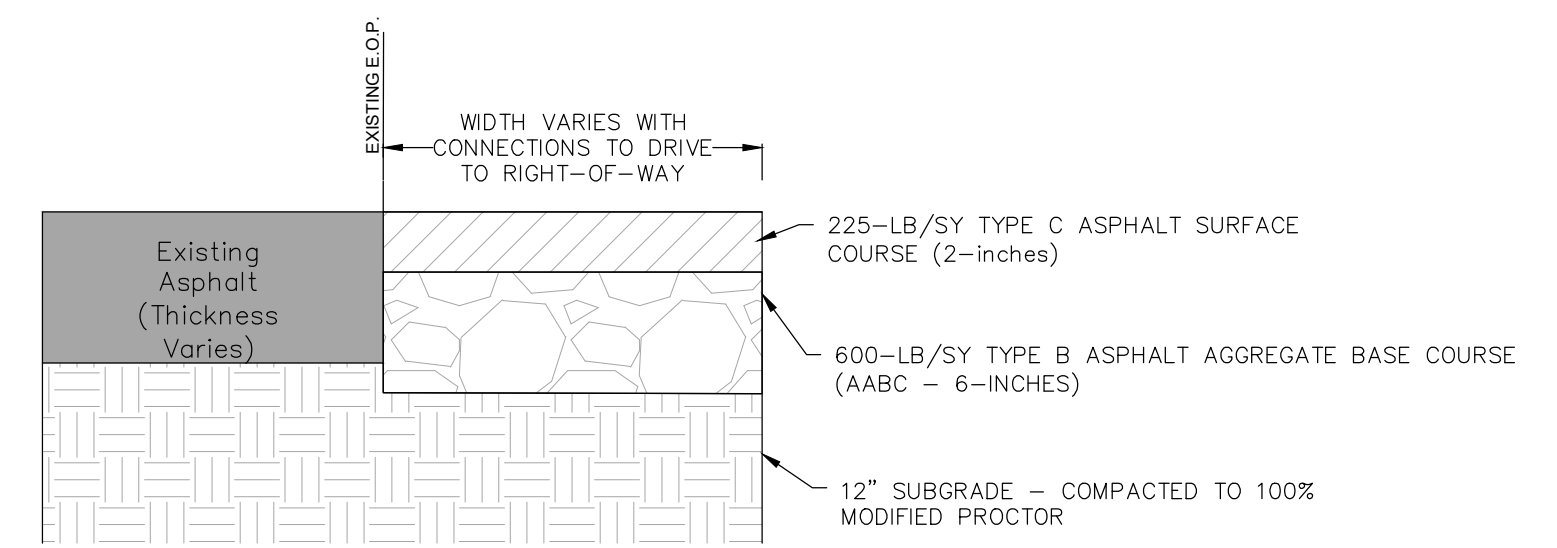
NOTES:

- ALL SIGNS SHALL CONFORM WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR COLOR, SIZE, REFLECTIVITY, AND HEIGHT.
- SIGNS TO PLACED AS SHOWN ON PLAN.



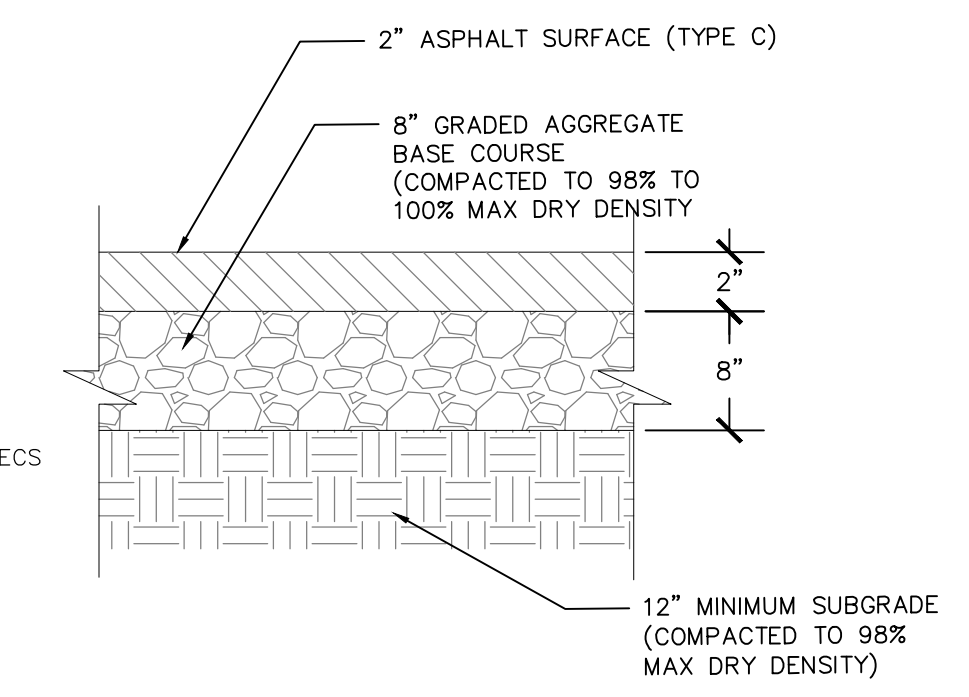
NOTE:

- WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
- THESE WORDS AND BAR ARE TO BE PAINTED REFLECTIVE WHITE.



NOTE:

- FULL DEPTH ASPHALT SECTION TO BE USED FOR SCDOT DRIVE CONNECTION SECTION WITHIN THE SCDOT RIGHT-OF-WAY.
- FOR WIDENING OF 0' TO 6' WIDE - USE 5-INCHES OF HMA TYPE BASE IN LIEU OF 700-LB/SY OF AABC.
- DEPTH BASED ON GUIDELINES FOR ASPHALT PAVEMENT DESIGN FOR DRIVEWAYS AND TURNING LANES FOR PERMITTING APPLICATIONS SCDOT STANDARDS.



NOTE:

- THE ROADWAY PAVEMENT SECTION IS BASED ON THE LIMITED SUBSURFACE EXPLORATION TAYLOR LOOP ROADWAY IMPROVEMENTS REPORT PROVIDED BY ECS SOUTHEAST, LLP - REPORT NUMBER: 08:15329 DATED NOVEMBER 3, 2022

REVISION DATE	
▲	SCDOT COMMENT - BSW 2.20.23
▲	
▲	
▲	

APPROVALS

ENGINEER	DESIGNER	TECHNICIAN	CHECKED BY	APPROVED
BSW	JAM	JAH	BSW	BSW

ALLIANCE CONSULTING ENGINEERS, INC.
No. 26899
No. 002604

DATE: 2/2/23

SCDOT LICENSE

ALLIANCE CONSULTING ENGINEERS, INC.
No. 26899
No. 002604

DATE: 2/2/23

ALLIANCE CONSULTING ENGINEERS, INC.

Post Office Box 1000, South Carolina
Phone: (803) 779-2079 • Fax: (803) 779-2079

SITE DETAILS

SCALE: AS SHOWN

DATE: JANUARY 2023

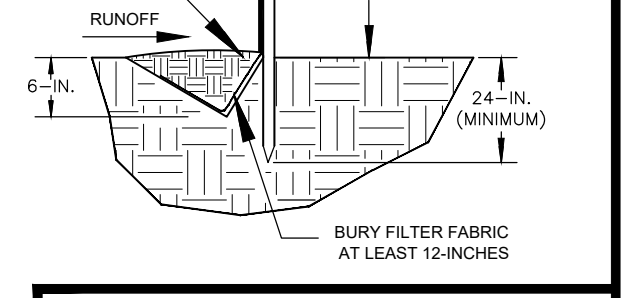
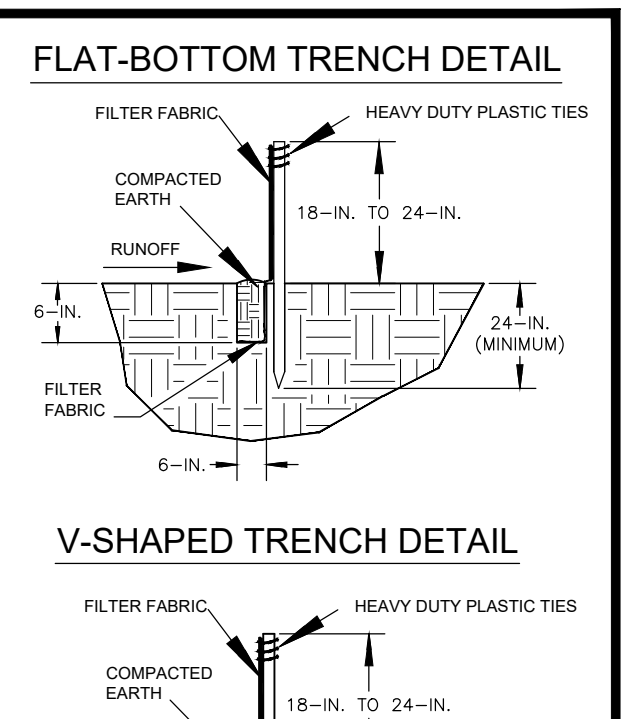
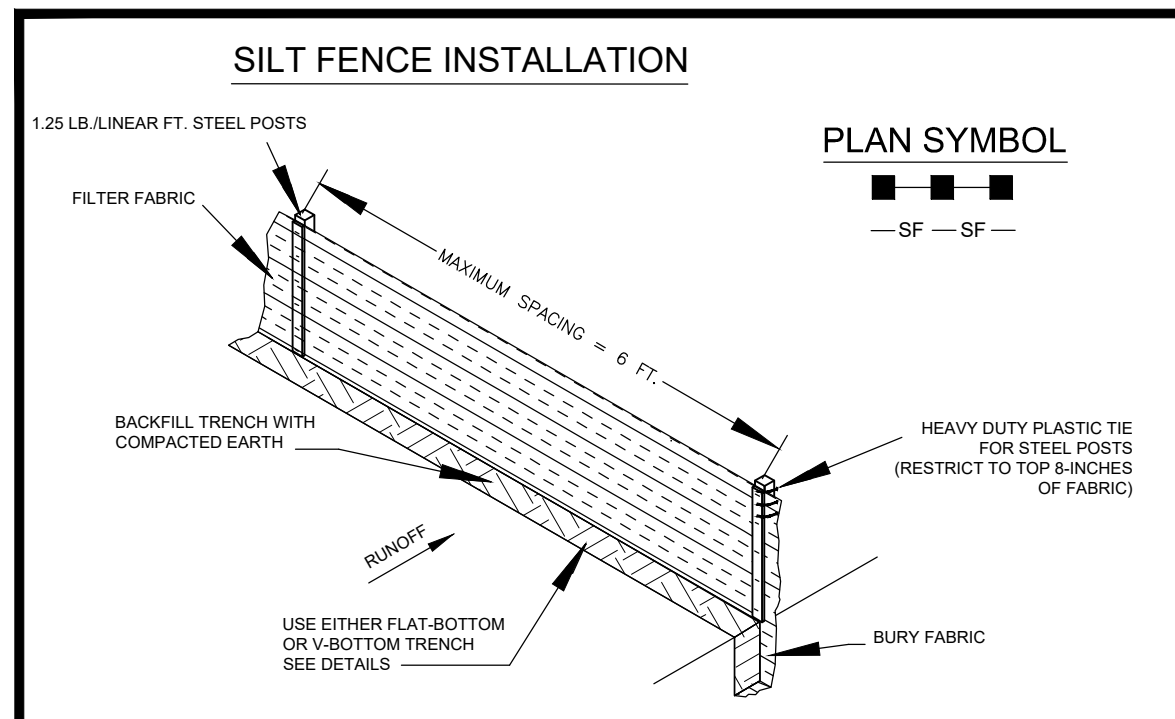
PROJECT

2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUB IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

FILE NAME: C5.0.DWG	SHEET C5.0
REFERENCE FILE: 22210-0013 BASE.dwg	
PROJECT NO. 22210-0013	

DWG NO. 01,1588-D27

February 20, 2023 - 11:08:44 AM S:\Projects\22210-0013_C-Fund Entry Improv Taylor Loop Comm of Ruby Charleston College\Construction Plans\C-7.0 ESC Detail Sheets.dwg
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 February 20, 2023 - 11:08:44 AM S:\Projects\22210-0013_C-Fund Entry Improv Taylor Loop Comm of Ruby Charleston College\Construction Plans\C-7.0 ESC Detail Sheets.dwg



- SILT FENCE - GENERAL NOTES**
- Do not place silt fence across channels or in other areas subject to concentrated flows. Silt fence should not be used as a velocity control BMP. Concentrated flows are any flows greater than 0.5 cfs.
 - Maximum sheet or overland flow path length to the silt fence shall be 100-feet.
 - Maximum slope steepness (normal [perpendicular] to the fence line) shall be 2:1.
 - Silt fence joints, when necessary, shall be completed by one of the following options:
 - Wrap each fabric together at a support post with both ends fastened to the post, with a 1-foot minimum overlap.
 - Overlap silt fence by installing 3-feet passed the support post to which the new silt fence roll is attached. Attach old roll to new roll with heavy-duty plastic ties, or,
 - Overlap entire width of each silt fence roll from one support post to the next support post.
 - Attach filter fabric to the steel posts using heavy-duty plastic ties that are evenly spaced within the top 8-inches of the fabric.
 - Install the silt fence perpendicular to the direction of the stormwater flow and place the silt fence the proper distance from the top of steep slopes to provide sediment storage and access for maintenance and cleanup.
 - Install Silt Fence Checks (Tie-Backs) every 50-100 feet, dependent on slope, along silt fence that is installed with slope and where concentrated flows are expected or are documented along the proposed/installed silt fence.

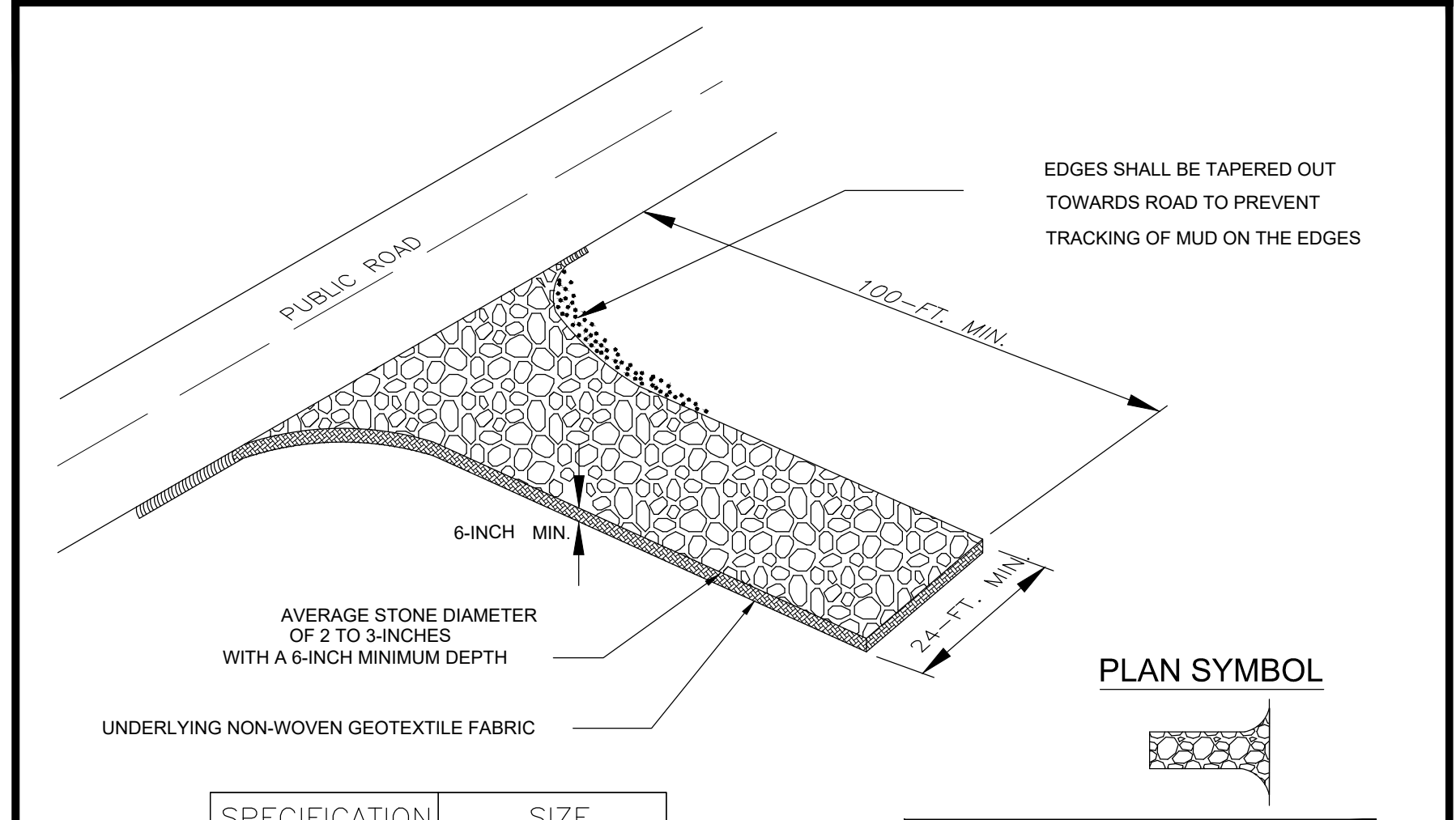
South Carolina Department of Health and Environmental Control
SILT FENCE
 STANDARD DRAWING NO. SC-03 Page 1 of 2
 NOT TO SCALE FEBRUARY 2014 DATE

- SILT FENCE - POST REQUIREMENTS**
- Silt fence posts must be 48-inch long steel posts that meet, at a minimum, the following physical characteristics:
 - Composed of a high strength steel with a minimum yield strength of 50,000 psi.
 - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48-inches.
 - Weight 1.25 pounds per foot (± 8%)
 - Posts shall be equipped with projections to aid in fastening of filter fabric.
 - Steel posts may need to have a metal soil stabilization plate welded near the bottom when installed along steep slopes or installed in loose soils. The plate should have a minimum cross section of 17-square inches and be composed of 1/2 gauge steel, at a minimum. The metal soil stabilization plate should be completely buried.
 - Install posts to a minimum of 24-inches. A minimum height of 1- to 2- inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
 - Post spacing shall be at a maximum of 6-feet on center.

- SILT FENCE - INSPECTION & MAINTENANCE**
- The key to functional silt fence is weekly inspections, routine maintenance, and regular sediment removal.
 - Regular inspections of silt fence shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
 - Attention to sediment accumulations along the silt fence is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
 - Remove accumulated sediment when it reaches 1/3 the height of the silt fence.
 - Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
 - Check for areas where stormwater runoff has eroded a channel beneath the silt fence, or where the fence has sagged or collapsed due to runoff overtopping the silt fence. Install checks/tie-backs and/or reinstall silt fence, as necessary.
 - Check for tears within the silt fence, areas where silt fence has begun to decompose, and for any other circumstance that may render the silt fence ineffective. Removed damaged silt fence and reinstall new silt fence immediately.
 - Silt fence should be removed within 30 days after final stabilization is achieved and once it is removed, the resulting disturbed area shall be permanently stabilized.

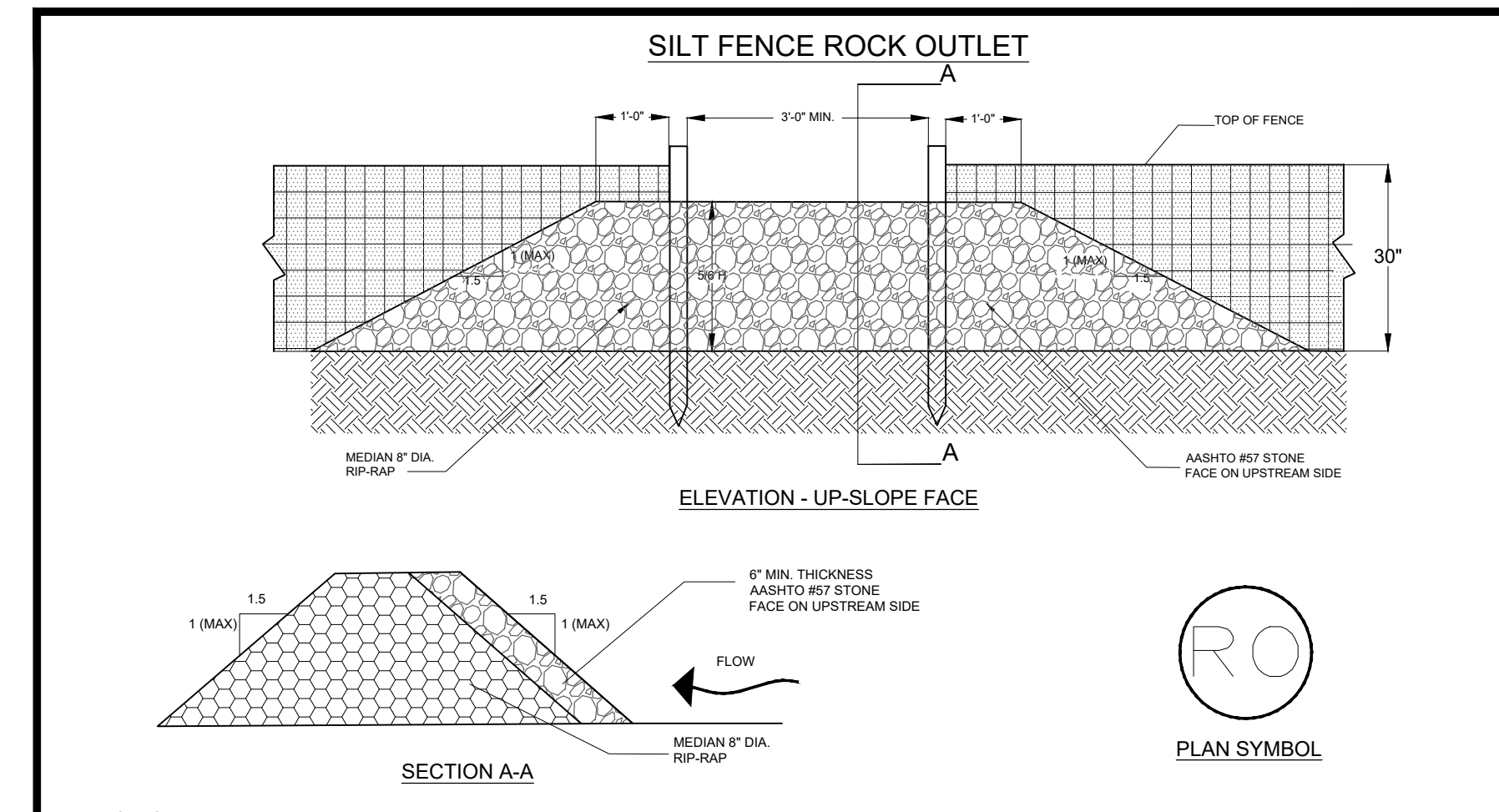
- SILT FENCE - FABRIC REQUIREMENTS**
- Silt fence must be composed of woven geotextile filter fabric that consists of the following requirements:
 - Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polyolefins, polyesters, or polyamides that are formed into a network such that the filaments or yarns retain dimensional stability relative to each other;
 - Free of any treatment or coating which might adversely affect its physical properties after installation;
 - Free of any defects or flaws that significantly affect its physical and/or filtering properties; and,
 - Have a minimum width of 36-inches.
 - Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
 - 12-inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled.
 - Filter Fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
 - Filter Fabric shall be installed at a minimum of 24-inches above the ground.

South Carolina Department of Health and Environmental Control
SILT FENCE
 STANDARD DRAWING NO. SC-03 PAGE 2 of 2
 GENERAL NOTES FEBRUARY 2014 DATE



SPECIFICATION	SIZE
ROCK PAD THICKNESS	6 INCHES
ROCK PAD WIDTH	24 FEET
ROCK PAD LENGTH	100 FEET
ROCK PAD STONE SIZE	D = 2-3 INCHES

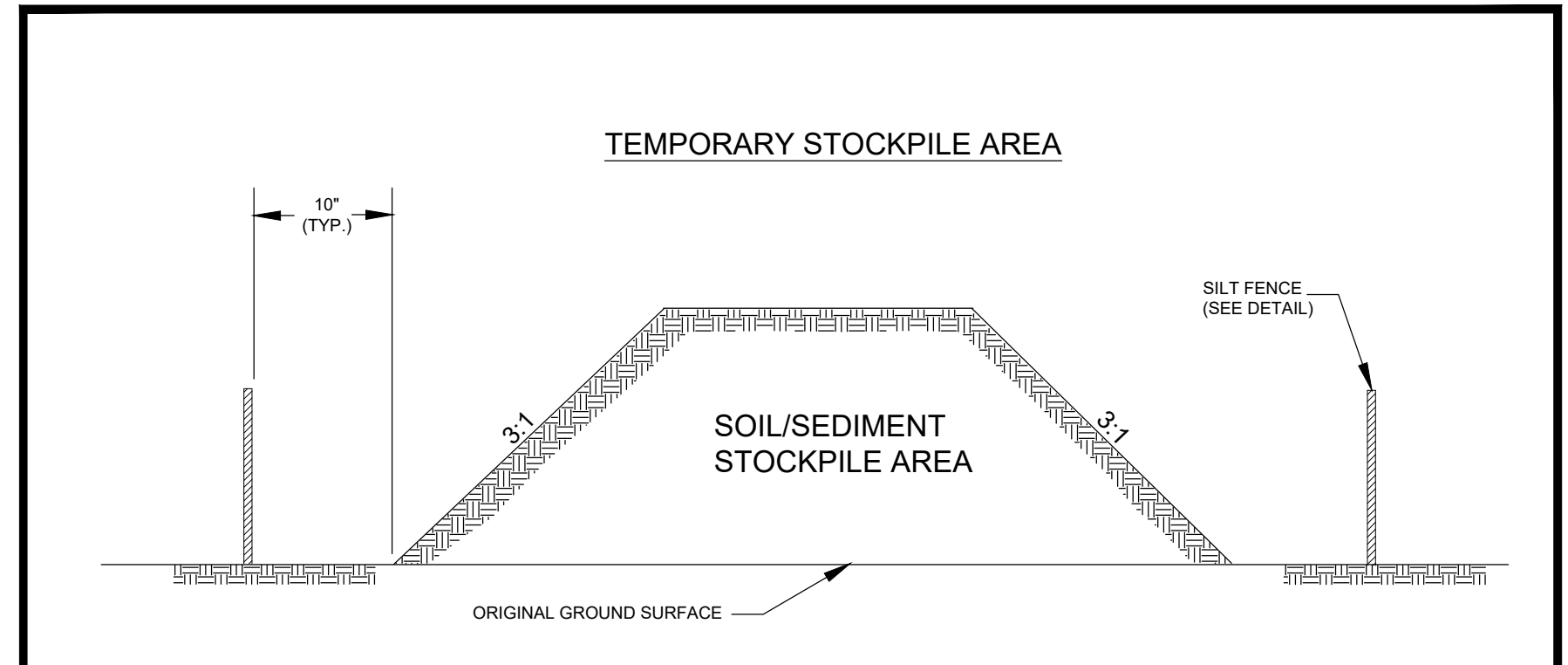
South Carolina Department of Health and Environmental Control
CONSTRUCTION ENTRANCE
 STANDARD DRAWING NO. SC-06 PAGE 1 of 2
 NOT TO SCALE FEBRUARY 2014 DATE



- NOTES:**
- WASHED STONE (#57) TO BE REMOVED AND REPLACED ONCE IT BECOMES CLOGGED WITH SEDIMENT.
 - SEDIMENT TO BE REMOVED WHEN ACCUMULATIONS REACH 1/3 HEIGHT OF SILT FENCE
 - THE KEY TO FUNCTIONAL ROCK OUTLETS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.

South Carolina Department of Health and Environmental Control
SILT FENCE ROCK OUTLET
 STANDARD DRAWING NO. SC-14 PAGE 1 of 1
 NOT TO SCALE FEBRUARY 2014 DATE

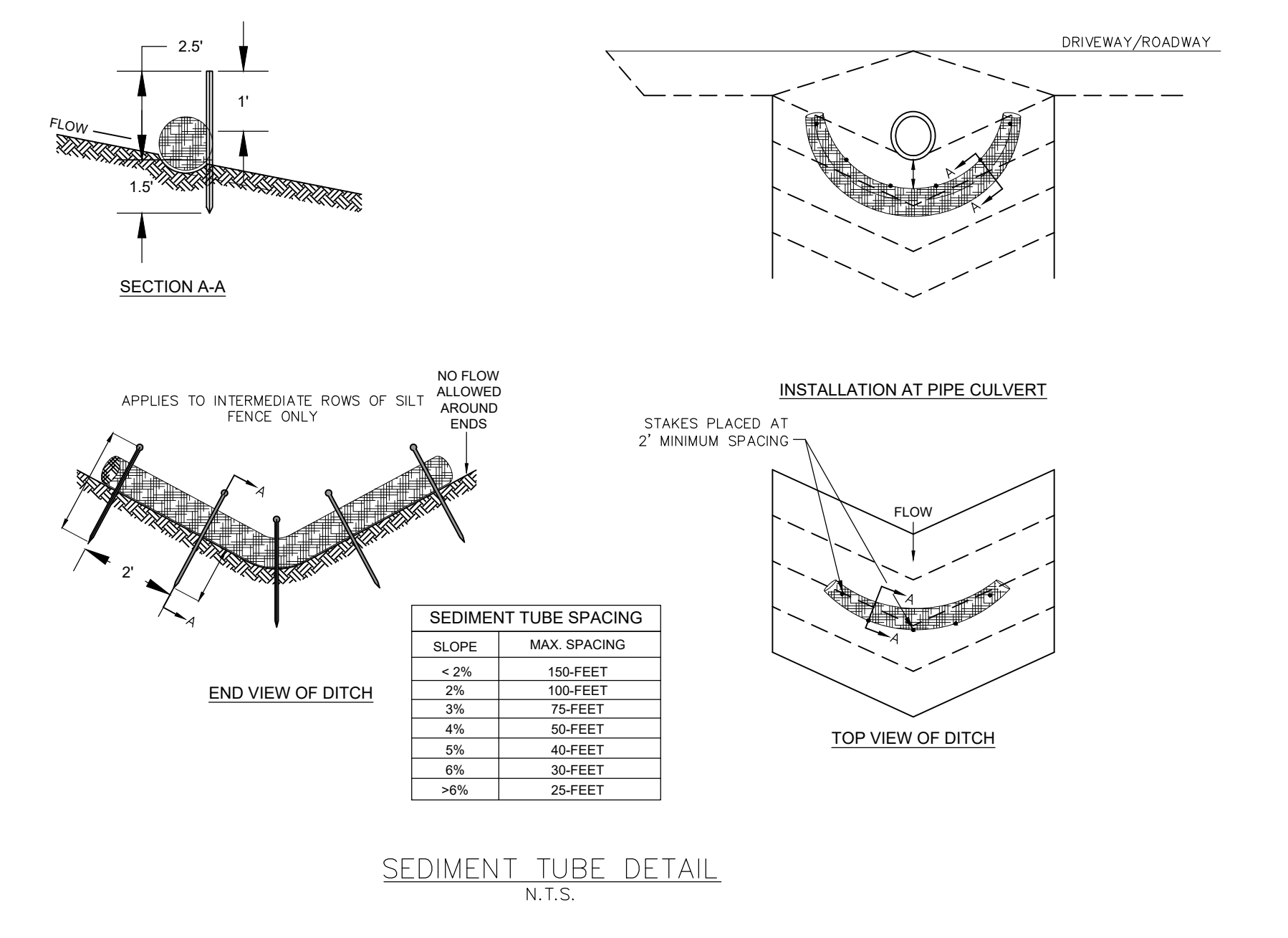
- NOTES:**
- J-HOOK OR TIE-BACK SILT FENCE WILL BE ADDED ALONG SECTIONS OF SILT FENCE RUNNING PERPENDICULAR TO CONTOURS AND SPACES NO GREATER THAN 100- FEET APART - SEE PLAN VIEW ON SHEETS C5.0 - PHASE I EROSION AND SEDIMENT CONTROL PLAN SHEET.
 - IN AREAS OF PROTECTION TO THE EXISTING WETLANDS, A DOUBLE ROW OF SILT FENCE WILL BE INSTALLED AT THE EDGE OF THE WETLAND BUFFER AND THE ROWS OF SILT FENCE WILL BE A MINIMUM OF 3- FEET WHERE GRADING IS TIGHT OR 5- FEET IN AREAS WHERE SPACING ALLOWS.



- NOTES:**
- SILT FENCE TO EXTEND AROUND ENTIRE PERIMETER OF STOCKPILE, OR IF STOCKPILE AREA IS LOCATED ON NEAR A SLOPE THE SILT FENCE IS TO EXTEND ALONG CONTOURS OF THE DOWN-GRADIENT AREA.
 - IF STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, TEMPORARY STABILIZATION MEASURES MUST BE IMPLEMENTED.
 - SILT FENCE SHALL BE MAINTAINED UNTIL STOCKPILE AREA HAS EITHER BEEN REMOVED OR PERMANENTLY STABILIZED.
 - THE KEY TO FUNCTIONAL TEMPORARY STOCKPILE AREAS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.

South Carolina Department of Health and Environmental Control
TEMPORARY STOCKPILE
 STANDARD DRAWING NO. SC-15 PAGE 1 of 1
 NOT TO SCALE FEBRUARY 2014 DATE

- CONSTRUCTION ENTRANCE - GENERAL NOTES**
- Stabilized construction entrances should be used at all points where traffic will egress/ingress a construction site onto a public road or any impervious surfaces, such as parking lots.
 - Install a non-woven geotextile fabric prior to placing any stone.
 - Install a culvert pipe across the entrance when needed to provide positive drainage.
 - The entrance shall consist of 2-inch to 3-inch D50 stone placed at a minimum depth of 6-inches.
 - Minimum dimensions of the entrance shall be 24-feet wide by 100-feet long, and may be modified as necessary to accommodate site constraints.
 - The edges of the entrance shall be tapered out towards the road to prevent tracking at the edge of the entrance.
 - Divert all surface runoff and drainage from the stone pad to a sediment trap or basin or other sediment trapping structure.
 - Limestone may not be used for the stone pad.



SEDIMENT TUBE DETAIL
N.T.S.

SLOPE	MAX. SPACING
< 2%	150- FEET
2%	100- FEET
3%	75- FEET
4%	50- FEET
5%	40- FEET
6%	30- FEET
> 6%	25- FEET

South Carolina Department of Health and Environmental Control
CONSTRUCTION ENTRANCE
 STANDARD DRAWING NO. SC-06 PAGE 2 of 2
 GENERAL NOTES FEBRUARY 2014 DATE

REVISION DATE

SCDHEC Comments - BSW 4/20/21

APPROVALS
 ENGINEER: BSW
 DESIGNER: JAM
 TECHNICIAN: JAH
 CHECKED BY: BSW
 APPROVED: BSW
 DATE: 2/15/23

South Carolina Department of Health and Environmental Control
TEMPORARY STOCKPILE
 STANDARD DRAWING NO. SC-15 PAGE 1 of 1
 NOT TO SCALE FEBRUARY 2014 DATE

ALLIANCE CONSULTING ENGINEERS
 Alliance Consulting Engineers, Inc.
 3000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA
 Post Office Box 8147 Columbia, South Carolina 29202-8147
 Phone: (803) 779-2078 Fax: (803) 779-2079
 SCALE: AS SHOWN
 DATE: JANUARY 2023

EROSION AND SEDIMENT CONTROL DETAILS (SHEET 1 OF 2)
 SHEET

PROJECT
 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE ± 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUBEN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA
 SOUTH CAROLINA
 CHESTERFIELD COUNTY

FILE NAME: C7.0.DWG
REFERENCE FILE: 22210-0013 BASE.dwg
PROJECT NO.: 22210-0013
SHEET: C7.0

DWG NO. 01.1588-D27

Sediment and Erosion Control Notes

Standard Notes:

- If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.
- Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.
 - When stabilization by the 14th day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable.
 - Where construction activity on a portion of the Site is temporarily ceased, and earth-disturbing activities will be resumed within fourteen (14) days, temporary stabilization measures do not have to be initiated on that portion of the Site.
- All sediment and erosion control devices shall be inspected every seven (7) days. If site inspections identify BMPs that are damaged or are not operating effectively, maintenance must be performed as soon as practical or as reasonably possible and before the next storm event whenever practicable.
- Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove any sediments before being pumped back into any waters of the State.
- All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.
- The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.
- Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with S.C. Reg. 72-300 et seq. and SCR10000.
- Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.
- All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WoS. A 10-foot buffer should be maintained between the last row of silt fence and all WoS.
- Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.

Additional Notes:

- Install permanent vegetative cover and the long-term erosion protection measures or structures as soon as practical in the development process.
- Provide for handling the increased runoff caused by changed soil and surface conditions. Use effective means to conserve existing on-site soil including the use of diversion ditches, graded waterways and storm sewers.
- Place silt fence barriers at locations shown on plan. Silt barriers shall be maintained in place and in good condition until ground cover is established.
- All disturbed areas not paved shall be grassed. Use temporary plant cover, mulching, and/or structures to control runoff and protect areas subject to erosion during construction.
- Sediment ponds are to be excavated to original grades upon the accumulation of 1.5' on sediment stake placed at outlet.
- Provide a temporary stone splash pad at all fire hydrants or other points if discharge during testing of the water distribution system.
- Should Permanent Grassing requirements conflict with Landscape Plans, Landscape Plans supercede Permanent Grassing requirements.

Grassing Specifications:

- All seed mixtures for the various seeding schedules shall be weighed and mixed to the proper proportions in the presence of the owner or the owner's representative.

PERMANENT SEEDING		
Maintained Turf (High Profile Lawn/Landscaped Areas)		
Planting Dates	Variety	Application Rate
April 1 - September 15	Bermuda Triangle Blend by Pennington Seed, Inc.	125 LBS/ACRE
Slopes 4H:1V or Greater		
Planting Dates	Variety	Application Rate
April 1 - September 15	Slopermaster Spring/Summer Mix by Pennington Seeding, Inc.	75 LBS/ACRE
	Slopermaster Spring/Summer Mix Composition:	
	30% Hulled Sahara Bermudagrass (Cynodon dactylon)	
	15% Durana White Clover (Trifolium repens)	
	10% Brown Top Millet (Urochloa ramosa)	
	15% Weeping Lovegrass (Eragrostis curvula (Schrad.) Nees)	
September 15 - March 31	Slopermaster Fall/Winter Mix by Pennington Seed, Inc.	100 LBS/ACRE
	Slopermaster Fall/Winter Mix Composition:	
	25% Unhulled Sericea Lespedeza (Lespedeza cuneata)	
	20% Unhulled Sahara Bermudagrass (Cynodon dactylon)	
	20% Greystone Tall Fescue (Schedonorus arundinaceus)	
	10% Durana White Clover (Trifolium repens)	
	10% Rye Grain (Lolium multiflorum)	
	5% Weeping Lovegrass (Eragrostis curvula (Schrad.) Nees)	
Slopes 4H:1V or Less		
Planting Dates	Variety	Application Rate
April 1 - September 15	Hulled Sahara Bermudagrass	75 LBS/ACRE
September 15 - March 31	Unhulled Sahara Bermudagrass	100 LBS/ACRE

- Double seed all grassed swales, water ways, and embankments from top of bank to bottom of bank on all bank slopes less than 3:1.

MAINTENANCE SCHEDULE					
CONTROL ITEM	INSPECTION FREQUENCY	MAINTENANCE ACTIVITY	CONTROL ITEM	INSPECTION FREQUENCY	MAINTENANCE ACTIVITY
SILT FENCE	-AFTER EACH STORM EVENT -WHEN A FENCE SECTION IS TOPPED OR UNDERMINED -WEEKLY	-REPAIR FENCE TO ORIGINAL SPECIFICATIONS -ANY FENCE TOPPED OR UNDERMINED MUST BE REPLACED WITH A ROCK FILTER OUTLET -ADHERE TO MANUFACTURER'S RECOMMENDATIONS FOR REPLACING FENCE -REMOVE DEPOSITS WHEN ACCUMULATION REACHES 1/2 ABOVE GROUND HEIGHT OF FENCE	STORM DRAIN INLET PROTECTION	-AFTER EACH STORM EVENT -WEEKLY	-REPAIR TRAP TO ORIGINAL DIMENSIONS -REMOVE ALL SEDIMENT FROM TRAP
CONSTRUCTION EXIT	-AFTER EACH STORM EVENT -DAILY	-REPAIR TO ORIGINAL SPECIFICATIONS -ADD ASPHALT #1 ROCK AS NECESSARY -ENSURE NO SEDIMENT IS DEPOSITED ON PUBLIC ROADWAYS. IF SO, REMOVE AND PLACE SEDIMENT IN DESIGNATED DISPOSAL AREA -MAINTAIN STOCKPILE OF ADDITIONAL ROCK FOR REPLACEMENT. STOCKPILE HEIGHT MUST NOT EXCEED 35' NOR A 2:1 SLOPE	ROCK CHECK DAMS	-AFTER EACH STORM EVENT -WEEKLY	-REPAIR TRAP TO ORIGINAL DIMENSIONS -REMOVE ALL SEDIMENT FROM FILTER ROCK
			TEMPORARY/PERMANENT GRASSING	-AFTER EACH STORM EVENT -WEEKLY	-ENSURE A MIN. UNIFORM RATE OF COVERAGE OF 70% IS PRESENT -REGRADE AND RE-SEED ALL EROSION GULLIES -REMOVE ACCUMULATED SEDIMENT DEPOSITS AND RE-SEED -REPLACE/ADD MULCH WHERE NECESSARY

POST-CONSTRUCTION MAINTENANCE PLAN

- GRASS AROUND AND IN DETENTION BASIN WILL BE MOWED BI-WEEKLY.
- TREES WILL BE REMOVED FROM WITHIN THE DETENTION BASIN BI-MONTHLY.
- TRASH WILL BE REMOVED FROM WITHIN AND AROUND THE DETENTION BASIN MONTHLY.
- OUTLET STRUCTURES AND/OR PIPES WILL BE CLEANED AND REPAIRED BI-WEEKLY.
- SEDIMENT ACCUMULATION TO BE REMOVED FROM DETENTION BASIN AFTER 4-INCHES OF BUILDUP OR ONCE A YEAR, WHICHEVER COMES FIRST.
- DETENTION BASIN BOTTOM TO BE REGRADED TOWARDS OUTLET STRUCTURES AFTER SEDIMENTATION REMOVAL OR WHEN NECESSARY UPON MONTHLY INSPECTIONS.
- DISCHARGE POINT TO BE CLEANED, CLEARED AND REPAIRED AS NECESSARY UPON MONTHLY INSPECTIONS.
- EMERGENCY SPILLWAY TO BE CLEANED AND REPAIRED WHEN NECESSARY UPON MONTHLY INSPECTION.
- EROSION ON SIDE SLOPES OF DETENTION BASIN AND/OR EMERGENCY SPILLWAYS TO BE REGRADED AS NECESSARY UPON MONTHLY INSPECTION.

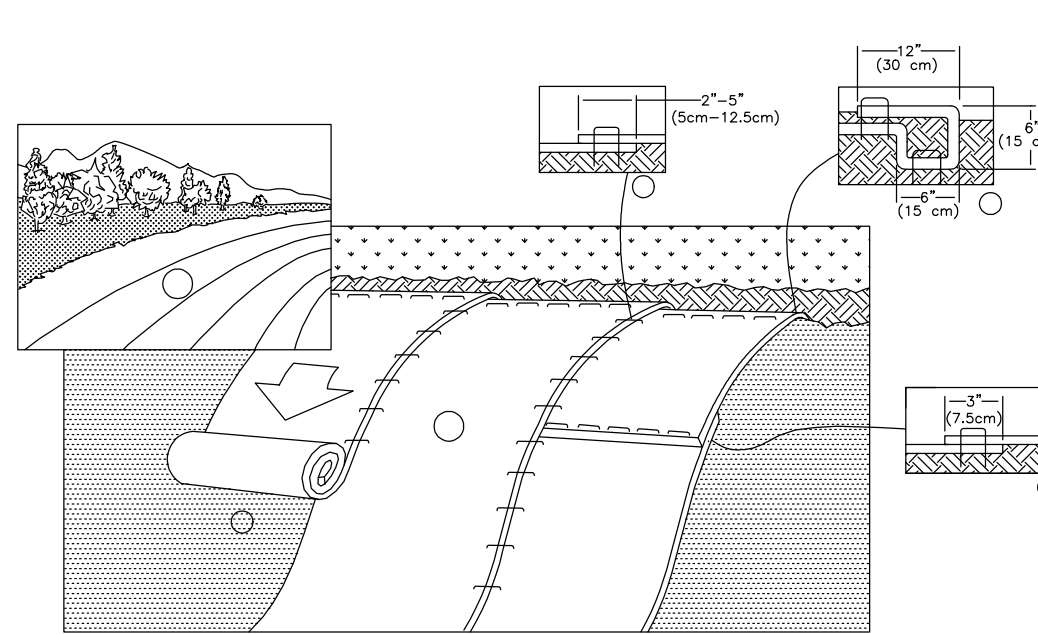
DESCRIPTION:
SEDIMENT TUBES ARE ELONGATED TUBES OF COMPACTED GEOTEXTILES, CURLED EXCELSIOR WOOD, NATURAL COCONUT FIBER, OR HARDWOOD MULCH, STRAW, PINE NEEDLES, AND LEAF MULCH-FILLED SEDIMENT TUBES ARE NOT PERMITTED UNDER THIS SPECIFICATION.

WHEN AND WHERE TO USE IT:
INSTALL SEDIMENT TUBES ALONG CONTOURS, IN DRAINAGE CONVEYANCE SWALES, AND AROUND INLETS TO HELP REDUCE THE EFFECTS OF SOIL EROSION BY ENERGY DISSIPATION.

MATERIALS:
SEDIMENT TUBES FOR DITCH CHECKS AND TYPE A INLET STRUCTURE FILTERS EXHIBIT THE FOLLOWING PROPERTIES:
1. PRODUCED BY A MANUFACTURER EXPERIENCED IN SEDIMENT TUBE MANUFACTURING
2. COMPOSED OF COMPACTED GEOTEXTILES, CURLED EXCELSIOR WOOD, NATURAL COCONUT FIBERS, HARDWOOD MULCH, OR A MIX OF THESE MATERIALS ENCLOSED BY A FLEXIBLE NETTING MATERIAL
3. UTILIZES ULTRAVIOLET NETTING THAT CONSISTS OF SEAMLESS, HIGH-DENSITY POLYETHYLENE. PHOTODEGRADABLE MATERIALS TREATED WITH ULTRAVIOLET STABILIZERS OR SEAMLESS, HIGH-DENSITY POLYETHYLENE. NON-DEGRADABLE MATERIALS
4. DIAMETER RANGING FROM 18-INCHES TO 24-INCHES
5. CURLED EXCELSIOR WOOD OR NATURAL COCONUT ROLLED EROSION CONTROL PRODUCTS (RECPs) THAT ARE ROLLED UP TO CREATE A SEDIMENT TUBE ARE NOT ALLOWED UNDER THIS SPECIFICATION.
6. STRAW, STRAW FIBER, STRAW BALES, PINE NEEDLES, AND LEAF MULCH ARE NOT ALLOWED UNDER THIS SPECIFICATION.

INSTALLATION:
1. INSTALL OVER BARE SOIL, MULCHED AREAS, OR EROSION CONTROL BLANKETS.
2. THE MINIMUM DIAMETER SHALL BE 18 INCHES.
3. SEDIMENT TUBES SHOULD BE STAKED USING WOODEN STAKES (2-INCH x 2-INCH) OR STEEL POSTS (STANDARD "1" OR "1" SECTIONS WITH A MINIMUM WEIGHT OF 1.25 POUNDS PER FOOT), A MINIMUM OF 48-INCHES IN LENGTH, PLACED ON 2-FOOT CENTERS.
4. STAKES SHOULD BE INTERTWINED WITH THE OUTER MESH ON THE DOWNSTREAM SIDE AND DRIVEN IN THE GROUND TO A MINIMUM DEPTH OF 1.5 FEET, LEAVING LESS THAN 1 FOOT OF STAKE EXPOSED ABOVE THE SEDIMENT TUBE. ALWAYS REFER TO THE MANUFACTURER'S RECOMMENDATIONS FOR THE STAKING DETAIL.
5. INSTALL ALL SEDIMENT TUBES INSURING THAT NO GAPS EXIST BETWEEN THE SOIL AND THE BOTTOM OF THE SEDIMENT TUBE. THE ENDS OF ADJACENT SEDIMENT TUBES SHOULD BE OVERLAPPED 6-INCH TO PREVENT FLOW AND SEDIMENT FROM PASSING THROUGH THE FIELD JOINT. IN NO SITUATIONS SHOULD SEDIMENT TUBES BE STACKED ON TOP OF ONE ANOTHER.
6. CONSTRUCT A TRENCH THAT IS A MINIMUM 20% OF THE TUBE DIAMETER TO INSTALL THE TUBE IN. THIS IS TO ENSURE NO GAPS AT THE BOTTOM.
7. AVOID DAMAGE TO SEDIMENT TUBES WHILE INSTALLING THEM. IF THE SEDIMENT TUBE BECOMES DAMAGED DURING INSTALLATION, A STAKE SHOULD BE PLACED ON BOTH SIDES OF THE DAMAGED AREA TERMINATING THE TUBE SEGMENT AND A NEW TUBE SEGMENT SHOULD BE INSTALLED.
8. SEDIMENT TUBES SHOULD BE INSTALLED IN SWALES OR DRAINAGE DITCHES PERPENDICULAR TO THE FLOW OF WATER
9. SEDIMENT TUBES SHOULD CONTINUE UP THE SIDE SLOPES A MINIMUM OF 1-FOOT ABOVE THE DESIGN FLOW DEPTH. SEDIMENT TUBE SHALL BE INSTALLED TO ALLOW FLOW OF WATER OVER THE MIDDLE SECTION PRIOR TO GOING AROUND THE ENDS.
10. SEDIMENT TUBES SHOULD BE SPACED ACCORDING TO THE ABOVE LISTED SEDIMENT TUBE SPACING TABLE.
11. SEDIMENT TUBE LENGTH SELECTED SHOULD MINIMIZE THE NUMBER OF SEDIMENT TUBES NEEDED TO SPAN THE WIDTH OF THE DRAINAGE CONVEYANCE. IF THE DITCH CHECK LENGTH (PERPENDICULAR TO THE WATER FLOW) IS 15 FEET, THEN ONE 15-FOOT SEDIMENT TUBE IS PREFERRED COMPARED TO TWO OVERLAPPING 10-FOOT SEDIMENT TUBES.
12. SEDIMENT TUBES FOR DITCH CHECKS SHOULD REMAIN IN PLACE UNTIL FULLY ESTABLISHED VEGETATION AND ROOT SYSTEMS HAVE COMPLETELY DEVELOPED AND CAN SURVIVE ON THEIR OWN.

INSPECTION AND MAINTENANCE:
1. CHECK DAMS SHOULD BE INSPECTED EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH STORM THAT PRODUCES 1/2-INCHES OR MORE OF RAIN TO ENSURE CONTINUED EFFECTIVENESS.
2. LARGE DEBRIS, TRASH, AND LEAVES SHOULD BE REMOVED.
3. IF EROSION CAUSES THE EDGES TO FALL TO A HEIGHT EQUAL TO OR BELOW THE HEIGHT OF THE CENTER, REPAIRS SHOULD BE MADE IMMEDIATELY.
4. REMOVE ACCUMULATED SEDIMENT FROM THE UPSTREAM SIDE OF THE SEDIMENT TUBE WHEN THE SEDIMENT HAS REACHED A HEIGHT OF APPROXIMATELY ONE-THIRD OF THE EXPOSED HEIGHT OF THE TUBE (MEASURED AT THE CENTER).
5. ACCUMULATED SEDIMENT SHOULD BE REMOVED PRIOR TO REMOVING SEDIMENT TUBES.
6. SEDIMENT TUBE REMOVAL SHOULD BE COMPLETED ONLY AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN COMPLETELY STABILIZED. PERMANENT VEGETATION SHOULD REPLACE AREAS FROM WHICH GRAVEL, STONE, SEDIMENT TUBES, OR OTHER MATERIALS HAVE BEEN REMOVED.

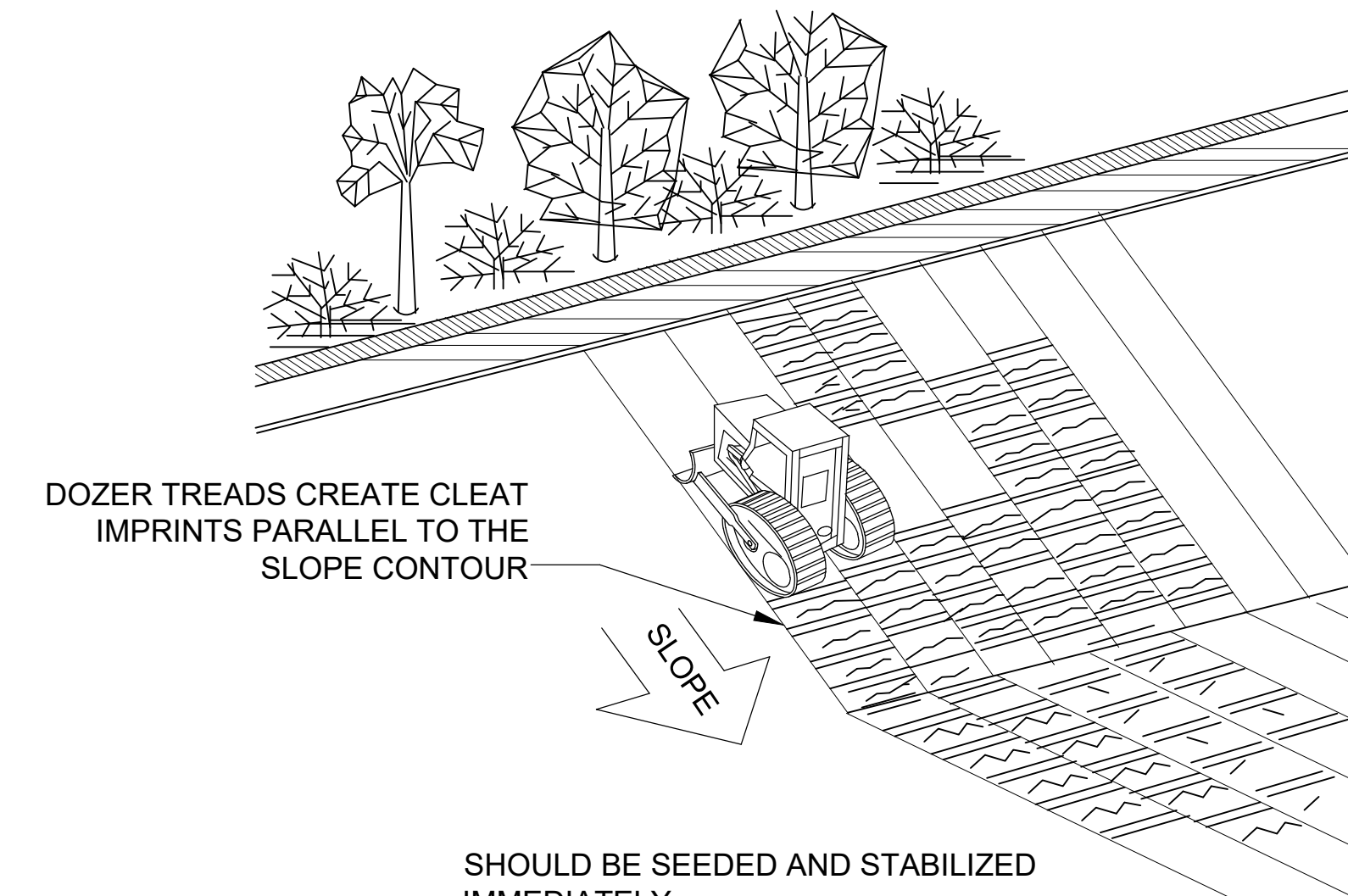


- PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30CM) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP'S.
- ROLL THE RECP'S (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE ANCHORS. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON RECP'S TYPE.
- CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP'S WIDTH.
NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

EROSION CONTROL BLANKET INSPECTION AND MAINTENANCE

Inspect areas protected by ECBs for dislocation or failure every 7 calendar days.
Conduct regular inspections until grasses are firmly established.
Adhere to the pinning or stapling pattern as shown on the Manufacturer's installation sheet. If there is evidence that the ECB is not securely fastened to the soil, require extra pins or staples to inhibit the ECB from becoming dislodged.
If washout or breakage occurs, repair all damaged areas immediately by restoring the soil on slopes or channels to its finished grade, re-apply fertilizer and seed, and replacing the appropriate ECB material as needed.

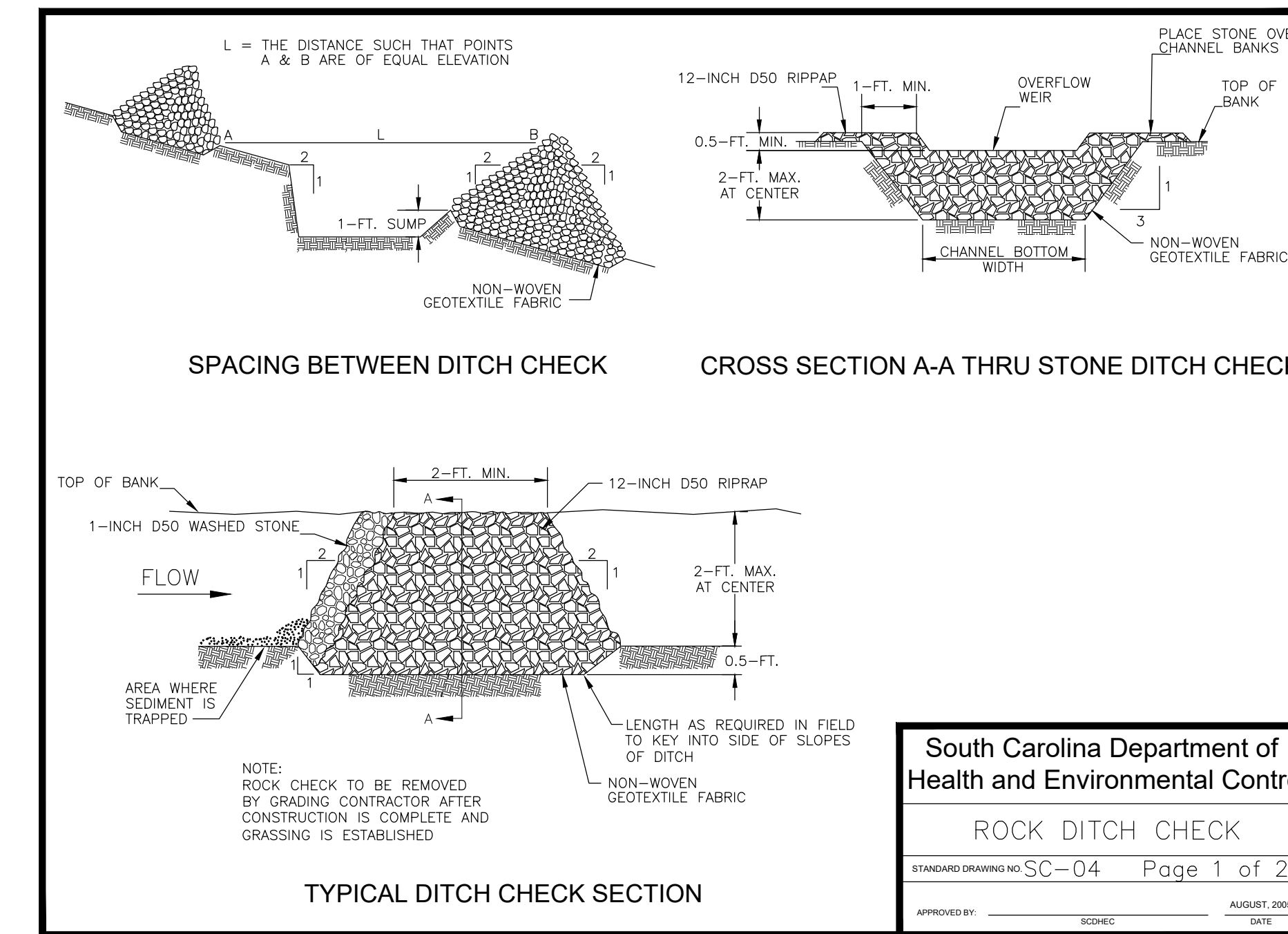
SLOPE INSTALLATION NOT TO SCALE



DOZER TRENDS CREATE CLEAT IMPRINTS PARALLEL TO THE SLOPE CONTOUR

SHOULD BE SEEDED AND STABILIZED IMMEDIATELY.

TRACKING (SCDHEC DETAIL EC-01) NOT TO SCALE



SPACING BETWEEN DITCH CHECK

CROSS SECTION A-A THRU STONE DITCH CHECK

TYPICAL DITCH CHECK SECTION

South Carolina Department of Health and Environmental Control
ROCK DITCH CHECK
STANDARD DRAWING NO. SC-04 Page 1 of 2
APPROVED BY: _____ DATE: _____
REVISION: _____

REVISION	DATE

APPROVALS:

ENGINEER RSW	DESIGNER JAM	DEFINITION JAH	CHECKED BY RSW	APPROVED RSW
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ALLIANCE CONSULTING ENGINEERS, INC.
No. C02854

REGISTERED PROFESSIONAL ENGINEER
No. 26589
SOUTH CAROLINA

Signature: *Regina S. White*

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Phone: (803) 779-2078 • Fax: (803) 779-2079

EROSION AND SEDIMENT CONTROL DETAILS
(SHEET 2 OF 2)

PROJECT: 2022 C-FUND ROADWAY IMPROVEMENTS FOR THE 3,000-LF TAYLOR LOOP OFF SC HIGHWAY 109 NEAR THE TOWN OF RUB IN INCORPORATED CHESTERFIELD COUNTY, SOUTH CAROLINA

FILE NAME: C7.0 DWG
REFERENCE FILE: 22210-0013 BASE.dwg
PROJECT NO.: 22210-0013

SHEET: C7.1

DWG NO. 01.1588-D27

February 20, 2023 - 11:04:19 AM S:\Projects\22210-0013_C-Fund Roadway Improv Taylor Loop Comm of Rubby Chesterfield County\Construction Plans\C7.0.ESC Detail Sheets.dwg