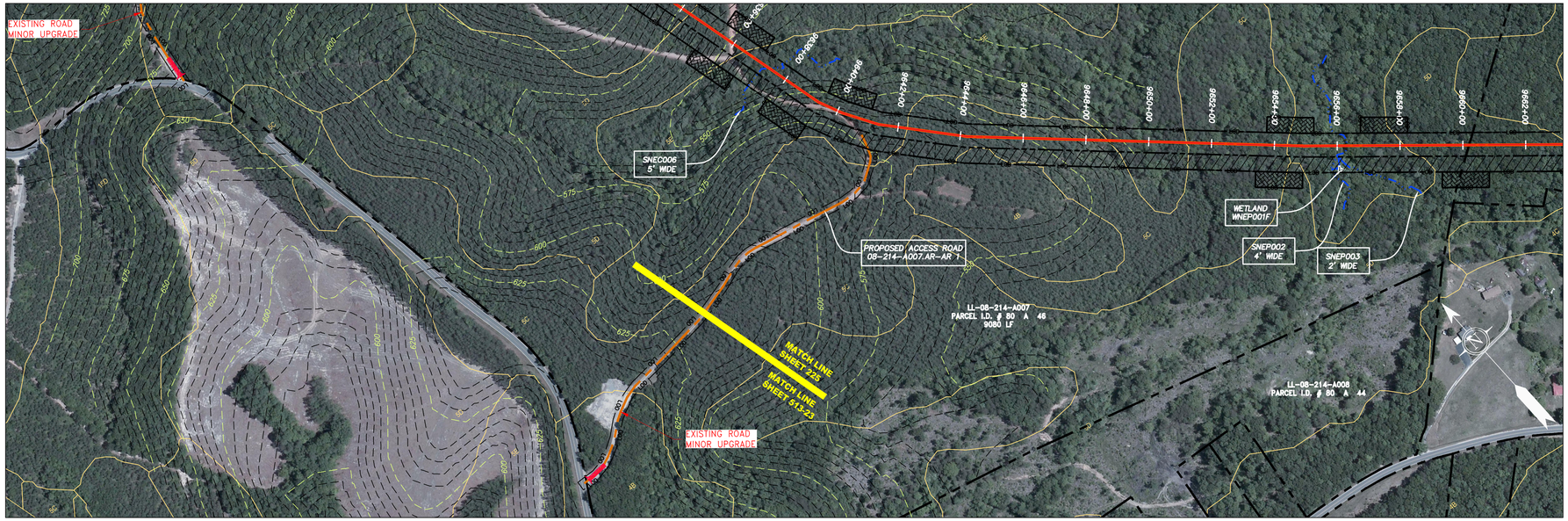
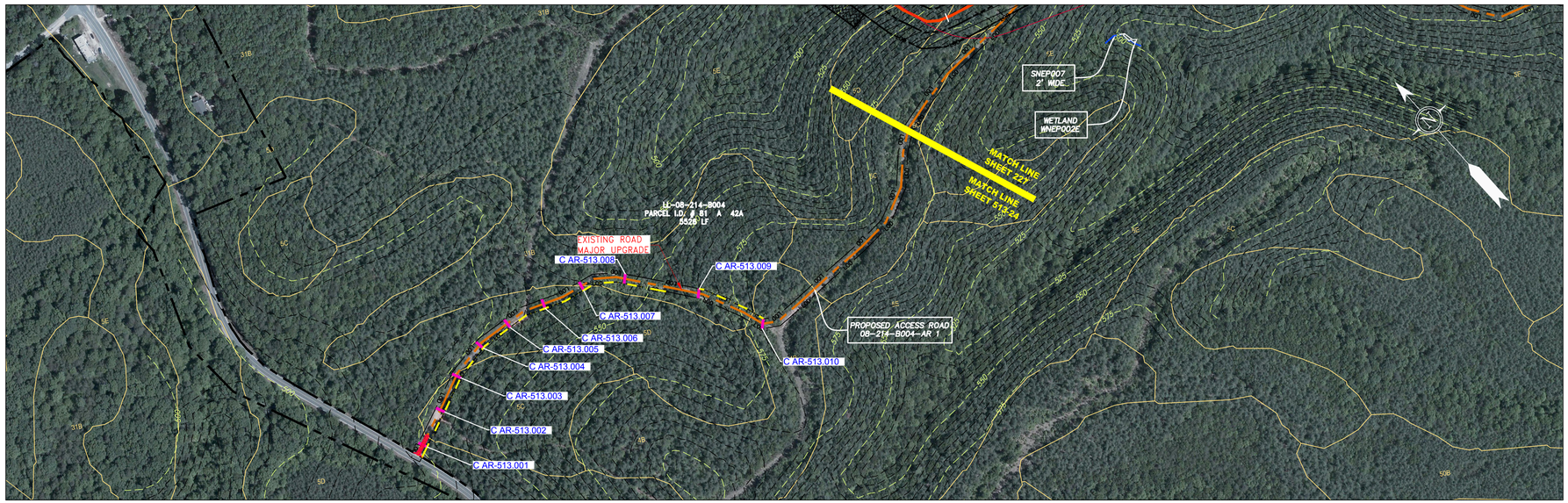


ACCESS ROAD
DETAIL 23



ACCESS ROAD
DETAIL 24

SCALE: 1" = 200'
200' 0 200' 400'

LEGEND

- PROPERTY LINE
- FENCE
- STREAM
- EXISTING GAS PIPELINE
- OVERHEAD UTILITY LINES
- ACCESS ROAD
- PROPOSED GAS PIPELINE
- STORM SEWER
- UNDERGROUND ELECTRIC
- WATER LINE
- SANITARY SEWER
- EDGE OF GRAVEL
- PROPOSED PERMANENT EASEMENT
- PROPOSED GAS PIPELINE (NO GROUND SURVEY)
- EXTRA WORK SPACE
- AREA OF NO DISTURBANCE
- WETLAND (COLOR SHOWN TO PROVIDE CLARITY ONLY)
- TOPSOIL SEGREGATION AREA
- PROPOSED TEMPORARY R.O.W.
- UTILITY POLE

NOTE: THE PE SEAL AND SIGNATURE APPLIES ONLY TO THE E&S CONTROL DESIGN COMPLETED BY ERM (SEE NOTE 12).

- PERMANENT WATERBAR/SLOPE BREAKER
- TEMPORARY WATERBAR/SLOPE BREAKER
- TRENCH BREAKER/PLUG
- STREAM CROSSING
- USFWS STREAM CROSSING WITH ENHANCED CONTROLS
- SEEP
- SLOPE DIRECTION
- CONSTRUCTION ENTRANCE WITH DITCH CULVERT AS NEEDED
- CULVERT/ WATERBAR
- LOD — LIMIT OF DISTURBANCE
- BSRF — BELTED SILT RETENTION FENCE (BSRF)
- COMPOST FILTER SOCK
- 111.03 / C 111.001 — SEDIMENT BARRIER IDENTIFICATION / CULVERT IDENTIFICATION
- X — ORANGE SAFETY FENCE
- ROADSIDE DITCH
- CuB — SOIL TYPE
- A1 (E) 30-58% — TYPICAL BIC SLOPE CATEGORY / SLOPE INCLINATION

NOTES:

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3. IMAGERY TAKEN FROM GOOGLE EARTH.
4. THE PROPERTY LINES SHOWN ARE BASED ON GIS & TAX ASSESSMENT RECORDS (PROVIDED BY OTHERS). GAI CONSULTANTS MAKE NO GUARANTEE EITHER EXPRESSED OR IMPLIED AS TO THE ACCURACY OF THE RECORDS AS SHOWN ON THESE DRAWINGS.
5. STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM.
6. EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS.
7. ALL STATIONING SHOWN IS SLOPE STATIONING.
8. SILT FENCE AND FILTER SOCK SHALL BE INSTALLED PARALLEL TO CONTOUR TO EXTENT PRACTICABLE IN ACCORDANCE WITH STANDARD DETAIL
9. BEST IN CLASS (BIC) STEEP SLOPE CATEGORY INFORMATION CAN BE FOUND IN THE APPENDIX OF THE STORMWATER POLLUTION PREVENTION PLAN.
10. EROSION CONTROL MATTING SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS STEEP SLOPES BAND.
11. ACCESS ROADS HAVE BEEN GROUPED INTO FOUR CATEGORIES - 1) EXISTING ROADS NO IMPROVEMENTS, 2) EXISTING ROADS MINOR IMPROVEMENTS, 3) EXISTING ROADS MAJOR IMPROVEMENTS AND 4) NEW ROADS. APPROPRIATE EROSION AND SEDIMENT CONTROLS WILL BE PROVIDED FOR ROADS IN CATEGORIES 2, 3 AND 4. ROADS IN CATEGORIES 1 AND 2 HAVE ADEQUATE EXISTING DRAINAGE; DRAINAGE FEATURES WILL BE PROVIDED FOR ROADS IN CATEGORIES 3 AND 4.
12. "ERM IS SOLELY RESPONSIBLE FOR THE NATURE AND LOCATION OF THE DEPICTED BMPS AS OF THE DATE SIGNED AND SEALED BASED ON THE SOURCE DATA PROVIDED AND AS DESCRIBED IN THE NOTES SECTION OF THE INDEX SHEET OF THIS PLAN SET.
13. THE CONSTRUCTION RIGHT-OF-WAY (ROW) WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS IN ACCORDANCE WITH SECTION V.A.5 FEDERAL ENERGY REGULATORY COMMISSION (FERC) UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN, SECTION V.A.5. IN ADDITION, WETLAND AND WATERBODY CROSSINGS WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS IN ACCORDANCE WITH NATIONWIDE PERMIT 12 (NWP) ISSUED BY THE U.S. CORPS OF ENGINEERS.

THIS DRAWING WAS PRODUCED WITH COMPUTER AIDED DRAFTING TECHNOLOGY AND IS SUPPORTED BY ELECTRONIC DRAWING FILES. DO NOT REVISE THIS DRAWING VIA MANUAL DRAFTING METHODS.

NO.	DATE	DWN.	CHKD.	APPVD.	DESCRIPTION
					REVISIONS

COMMONWEALTH OF VIRGINIA
DANIEL R. GOLDSTEIN
Lic. No. 047436
PROFESSIONAL ENGINEER

ERM

42" AP-1 PIPELINE
ACCESS ROAD DETAIL
BUCKINGHAM COUNTY, VIRGINIA

ATLANTIC COAST PIPELINE, LLC
c/o DOMINION TRANSMISSION, INC.
925 WHITE OAKS BLVD., BRIDGEPORT, WV 26330

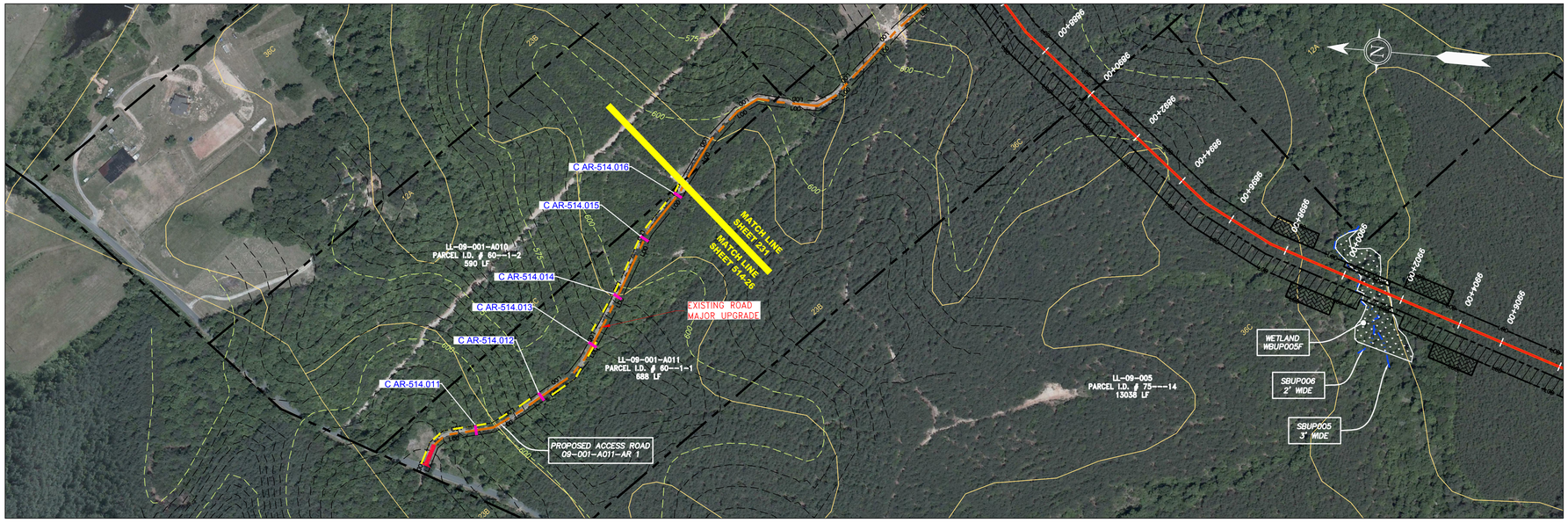
SCALE:	AS SHOWN
DATE:	3/24/17
DRAWN:	GPT
CHECKED:	DLH
APPROVED:	NET

gai consultants
SOUTHPOINTE OFFICE
6000 TOWN CENTER BLVD.
CANONSBURG, PA 15317
724-873-3545

PROJECT NO./DASH NO.	
140468	
TASK NO.	SUB TASK NO.
005	00
GROUP ID	DRAWING NO.
D	E513
AR-513	

GAI CAD FILE NO.R:\050-5159 — GAI, INC. — GAI — THRASHER — SERP — MAPPING\SURVEY\DRAWING\SEC 4\SEC 4 ACCESS ROAD DETAILS\SEC 4 — ACCESS ROAD DETAILS.DWG

ACCESS ROAD
DETAIL 25



ACCESS ROAD
DETAIL 26

SCALE: 1" = 200'
200' 0 200' 400'

LEGEND

- PROPERTY LINE
- FENCE
- STREAM
- EXISTING GAS PIPELINE
- OVERHEAD UTILITY LINES
- ACCESS ROAD
- PROPOSED GAS PIPELINE
- STORM SEWER
- UNDERGROUND ELECTRIC
- WATER LINE
- SANITARY SEWER
- EDGE OF GRAVEL
- PROPOSED PERMANENT EASEMENT
- PROPOSED GAS PIPELINE (NO GROUND SURVEY)
- EXTRA WORK SPACE
- AREA OF NO DISTURBANCE
- WETLAND (COLOR SHOWN TO PROVIDE CLARITY ONLY)
- TOPSOIL SEGREGATION AREA
- PROPOSED TEMPORARY R.O.W.
- UTILITY POLE
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- TEMPORARY WATERBAR/SLOPE BREAKER
- TRENCH BREAKER/PLUG
- STREAM CROSSING
- USFWS STREAM CROSSING WITH ENHANCED CONTROLS
- SEEP
- SLOPE DIRECTION
- CONSTRUCTION ENTRANCE WITH DITCH
- CULVERT AS NEEDED
- CULVERT/ WATERBAR
- LOD — LIMIT OF DISTURBANCE
- BSRF — BELTED SILT RETENTION FENCE (BSRF)
- COMPOST FILTER SOCK
- 111.03 / C 111.001 — SEDIMENT BARRIER IDENTIFICATION / CULVERT IDENTIFICATION
- ORANGE SAFETY FENCE
- ROADSIDE DITCH
- SOIL TYPE
- A1 (E) 30–58% — TYPICAL BIC SLOPE CATEGORY / SLOPE INCLINATION

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REVISIONS

NO.	DATE	DWN.	CHKD.	APP'VD.	DESCRIPTION

COMMONWEALTH OF VIRGINIA
DANIEL R. GOLDSTEIN
Lic. No. 047436
PROFESSIONAL ENGINEER

ERM

42" AP-1 PIPELINE
ACCESS ROAD DETAIL
BUCKINGHAM COUNTY, VIRGINIA

ATLANTIC COAST PIPELINE, LLC
c/o DOMINION TRANSMISSION, INC.
925 WHITE OAKS BLVD., BRIDGEPORT, WV 26330

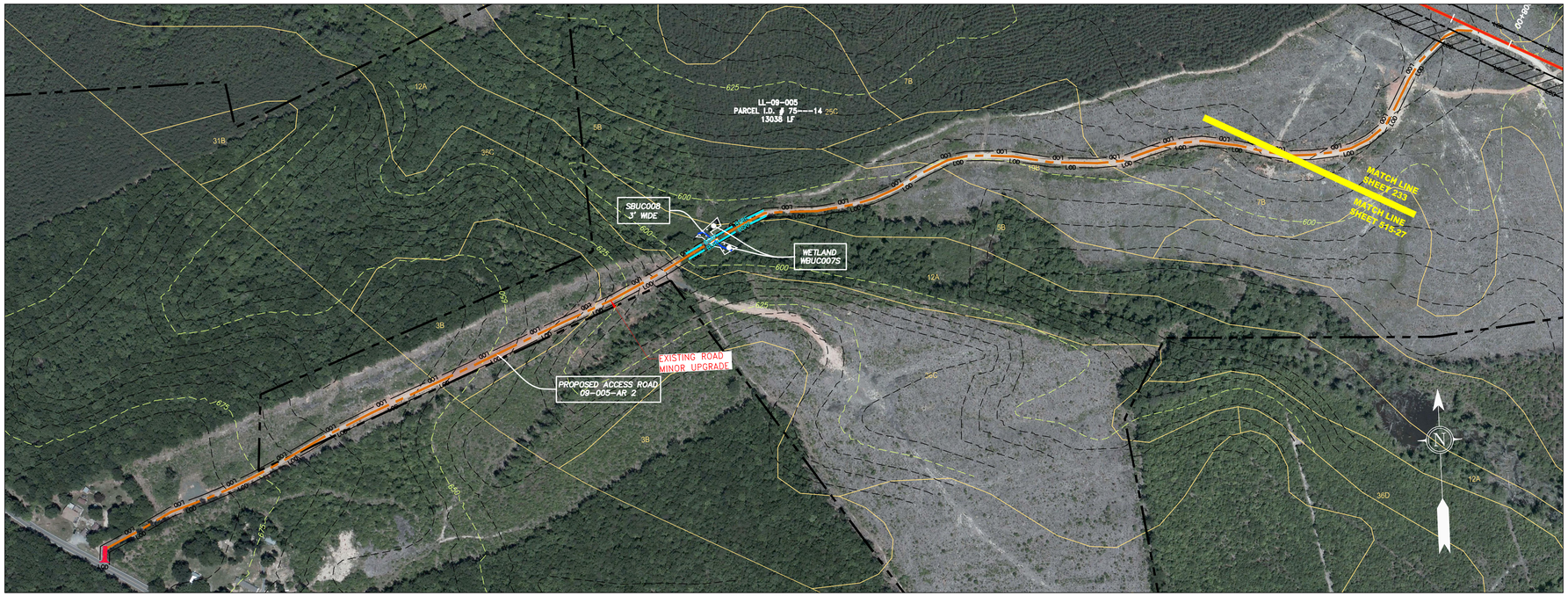
SCALE:	AS SHOWN
DATE:	3/24/17
DRAWN:	GPT
CHECKED:	DLH
APPROVED:	NET

gai consultants
SOUTHPOINTE OFFICE
6000 TOWN CENTER BLVD.
CANONSBURG, PA 15317
724-873-3545

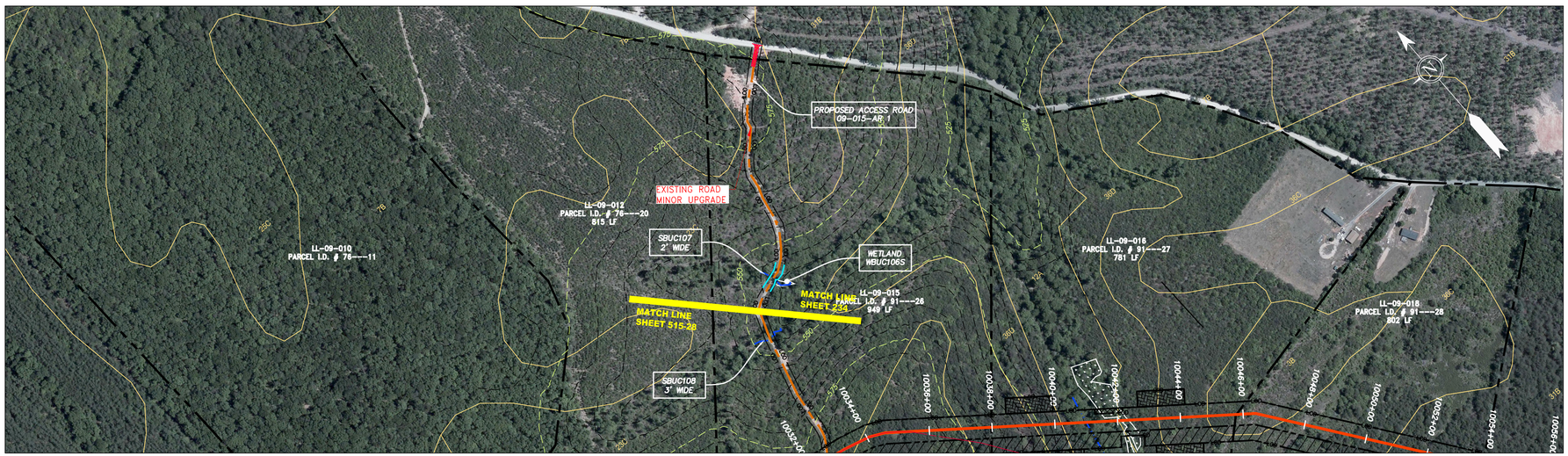
PROJECT NO./DASH NO.	
140468	
TASK NO.	SUB TASK NO.
005	00
GROUP ID	DRAWING NO.
D	E514

AR-514

GAI CAD FILE NO.R:\050-5159 - GIA, INC. - GAI - THRASHER - SERP - MAPPING\SURVEY\DRAWING\SEC 4\SEC 4 ACCESS ROAD DETAILS\SEC 4 - ACCESS ROAD DETAILS.DWG



ACCESS ROAD
DETAIL 27



ACCESS ROAD
DETAIL 28

SCALE: 1" = 200'
200' 0 200' 400'

LEGEND

- PROPERTY LINE
- FENCE
- STREAM
- EXISTING GAS PIPELINE
- OVERHEAD UTILITY LINES
- ACCESS ROAD
- PROPOSED GAS PIPELINE
- STORM SEWER
- UNDERGROUND ELECTRIC
- WATER LINE
- SANITARY SEWER
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- PROPOSED PERMANENT EASEMENT
- PROPOSED GAS PIPELINE (NO GROUND SURVEY)
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- TOPSOIL SEGREGATION AREA
- PROPOSED TEMPORARY R.O.W.
- UTILITY POLE

NOTE: THE PE SEAL AND SIGNATURE APPLIES ONLY TO THE E&S CONTROL DESIGN COMPLETED BY ERM (SEE NOTE 12).

- PERMANENT WATERBAR/SLOPE BREAKER
- TEMPORARY WATERBAR/SLOPE BREAKER
- TRENCH BREAKER/PLUG
- STREAM CROSSING
- USFWS STREAM CROSSING WITH ENHANCED CONTROLS
- SEEP
- SLOPE DIRECTION
- CONSTRUCTION ENTRANCE WITH DITCH
- CULVERT AS NEEDED
- CULVERT/ WATERBAR

- LOD — LIMIT OF DISTURBANCE
- BSRF — BELTED SILT RETENTION FENCE (BSRF)
- COMPOST FILTER SOCK
- 111.03 C 111.001 — SEDIMENT BARRIER IDENTIFICATION
- CULVERT IDENTIFICATION
- ORANGE SAFETY FENCE
- ROADSIDE DITCH
- SOIL TYPE
- A1 (C) 30-58% — TYPICAL BIC SLOPE CATEGORY SLOPE INCLINATION

NOTES:
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NO.	DATE	DWN.	CHKD.	APP'VD.	DESCRIPTION
					REVISIONS

COMMONWEALTH OF VIRGINIA
DANIEL R. GOLDSTEIN
Lic. No. 047436
PROFESSIONAL ENGINEER

ERM

42" AP-1 PIPELINE
ACCESS ROAD DETAIL
BUCKINGHAM COUNTY, VIRGINIA

ATLANTIC COAST PIPELINE, LLC
c/o DOMINION TRANSMISSION, INC.
925 WHITE OAKS BLVD., BRIDGEPORT, WV 26330

SCALE:	AS SHOWN
DATE:	3/24/17
DRAWN:	GPT
CHECKED:	DLH
APPROVED:	NET

gai consultants
SOUTHPOINTE OFFICE
6000 TOWN CENTER BLVD.
CANONSBURG, PA 15317
724-873-3545

PROJECT NO./DASH NO.	140468
TASK NO.	SUB TASK NO. 00
005	
GROUP ID	DRAWING NO.
D	E515

AR-515

GAI CAD FILE NO. R:\D50-5159 - GIA, INC. - GAI - THRASHER - SERP - MAPPING\SURVEY\DRAWING\SEC 4\SEC 4 ACCESS ROAD DETAILS\SEC 4 - ACCESS ROAD DETAILS.DWG

ACCESS ROAD
DETAIL 29

SCALE: 1" = 200'
200' 0 200' 400'

LEGEND

- PROPERTY LINE
- FENCE
- STREAM
- EXISTING GAS PIPELINE
- OVERHEAD UTILITY LINES
- ACCESS ROAD
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- CULVERT IDENTIFICATION
- X — ORANGE SAFETY FENCE
- ROADSIDE DITCH
- CuB — SOIL TYPE
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GROUP ID	DRAWING NO.
D	E516

AR-516

GAI CAD FILE NO.R:\050-5159 - GIA, INC. - GAI - THRASHER - SERP - MAPPING\SURVEY\DRAWING\SEC 4\SEC 4 ACCESS ROAD DETAILS.DWG
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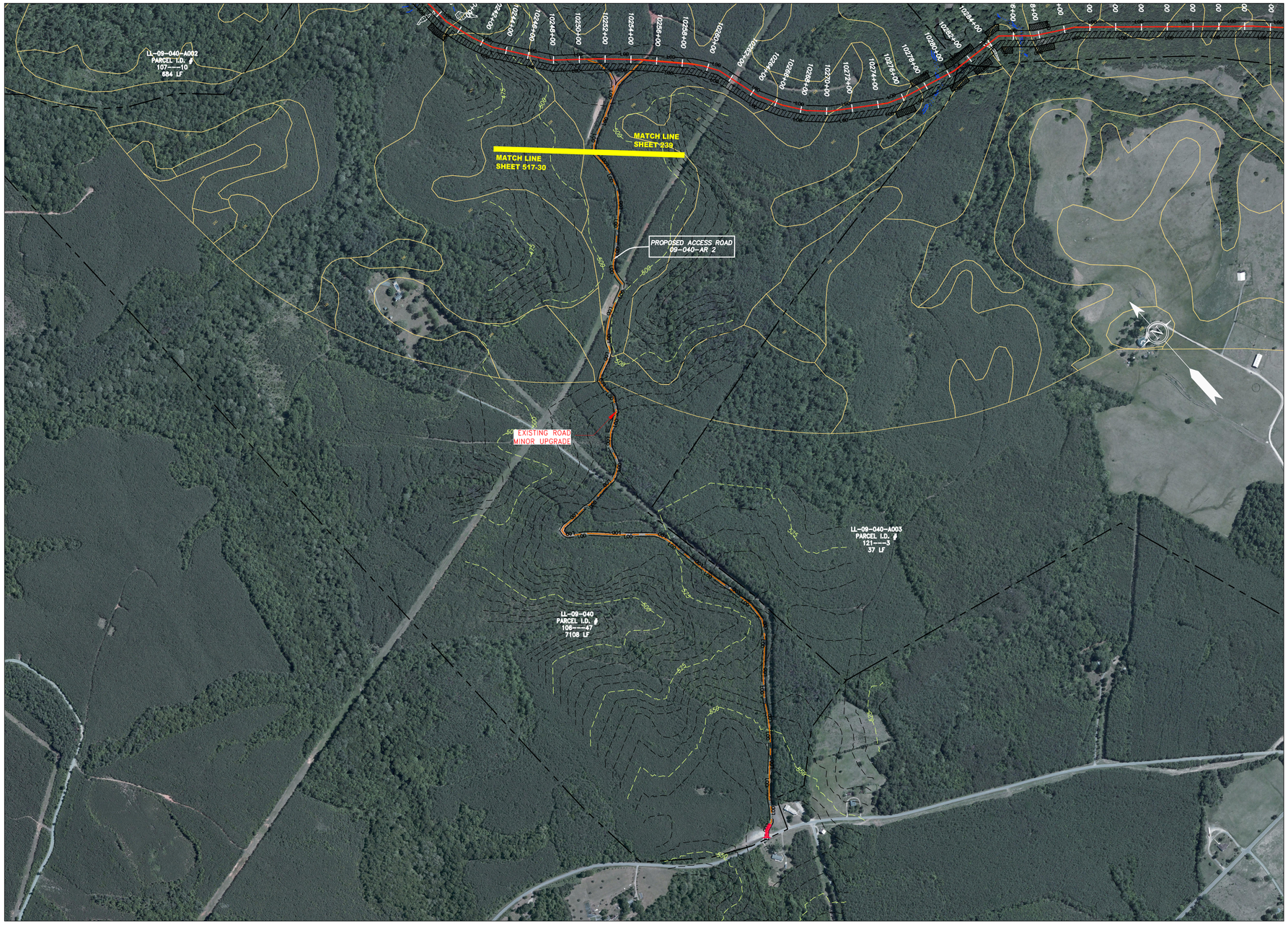

ACCESS ROAD
DETAIL 30

SCALE: 1" = 400'
400' 0 400' 800'

LEGEND

- PROPERTY LINE
- FENCE
- STREAM
- EXISTING GAS PIPELINE
- OVERHEAD UTILITY LINES
- ACCESS ROAD
- PROPOSED GAS PIPELINE
- STORM SEWER
- UNDERGROUND ELECTRIC
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- SANITARY SEWER
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- CONSTRUCTION ENTRANCE WITH DITCH
- CULVERT AS NEEDED
- CULVERT/ WATERBAR
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- BSRF — BELTED SILT RETENTION FENCE (BSRF)
- COMPOST FILTER SOCK
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- CULVERT IDENTIFICATION
- ORANGE SAFETY FENCE
- ROADSIDE DITCH
- CuB — SOIL TYPE
- A1 (E) 30-58% — TYPICAL BIC SLOPE CATEGORY SLOPE INCLINATION

NOTES:
1. COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, US SURVEY FOOT, CENTRAL MERIDIAN 81° W.
2. CONTOURS AND TOPOGRAPHIC FEATURES WERE DERIVED FROM LIDAR DATA AND GPS SUB-METER GROUND SURVEY PERFORMED BY GAI CONSULTANTS, INC FROM 11-03-2014 THRU 11-07-2014.
3. IMAGERY TAKEN FROM GOOGLE EARTH.
4. THE PROPERTY LINES SHOWN ARE BASED ON GIS & TAX ASSESSMENT RECORDS (PROVIDED BY OTHERS). GAI CONSULTANTS MAKE NO GUARANTEE EITHER EXPRESSED OR IMPLIED AS TO THE ACCURACY OF THE RECORDS AS SHOWN ON THESE DRAWINGS.
5. STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM.
6. EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS.
7. ALL STATIONING SHOWN IS SLOPE STATIONING.
8. SILT FENCE AND FILTER SOCK SHALL BE INSTALLED PARALLEL TO CONTOUR TO EXTENT PRACTICABLE IN ACCORDANCE WITH STANDARD DETAIL
9. BEST IN CLASS (BIC) STEEP SLOPE CATEGORY INFORMATION CAN BE FOUND IN THE APPENDIX OF THE STORMWATER POLLUTION PREVENTION PLAN.
10. EROSION CONTROL MATTING SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS STEEP SLOPES BAND.
11. ACCESS ROADS HAVE BEEN GROUPED INTO FOUR CATEGORIES - 1) EXISTING ROADS NO IMPROVEMENTS, 2) EXISTING ROADS MINOR IMPROVEMENTS, 3) EXISTING ROADS MAJOR IMPROVEMENTS AND 4) NEW ROADS. APPROPRIATE EROSION AND SEDIMENT CONTROLS WILL BE PROVIDED FOR ROADS IN CATEGORIES 2, 3 AND 4. ROADS IN CATEGORIES 1 AND 2 HAVE ADEQUATE EXISTING DRAINAGE; DRAINAGE FEATURES WILL BE PROVIDED FOR ROADS IN CATEGORIES 3 AND 4.
12. "ERM IS SOLELY RESPONSIBLE FOR THE NATURE AND LOCATION OF THE DEPICTED BMPS AS OF THE DATE SIGNED AND SEALED BASED ON THE SOURCE DATA PROVIDED AND AS DESCRIBED IN THE NOTES SECTION OF THE INDEX SHEET OF THIS PLAN SET.
13. THE CONSTRUCTION RIGHT-OF-WAY (ROW) WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS IN ACCORDANCE WITH SECTION V.A.5 FEDERAL ENERGY REGULATORY COMMISSION (FERC) UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN, SECTION V.A.5. IN ADDITION, WETLAND AND WATERBODY CROSSINGS WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS IN ACCORDANCE WITH NATIONWIDE PERMIT 12 (NWP) ISSUED BY THE U.S. CORPS OF ENGINEERS.

NO.	DATE	DWN.	CHKD.	APPVD.	DESCRIPTION
					REVISIONS

COMMONWEALTH OF VIRGINIA
DANIEL R. GOLDSTEIN
Lic. No. 047436
PROFESSIONAL ENGINEER

ERM

42" AP-1 PIPELINE
ACCESS ROAD DETAIL
BUCKINGHAM COUNTY, VIRGINIA

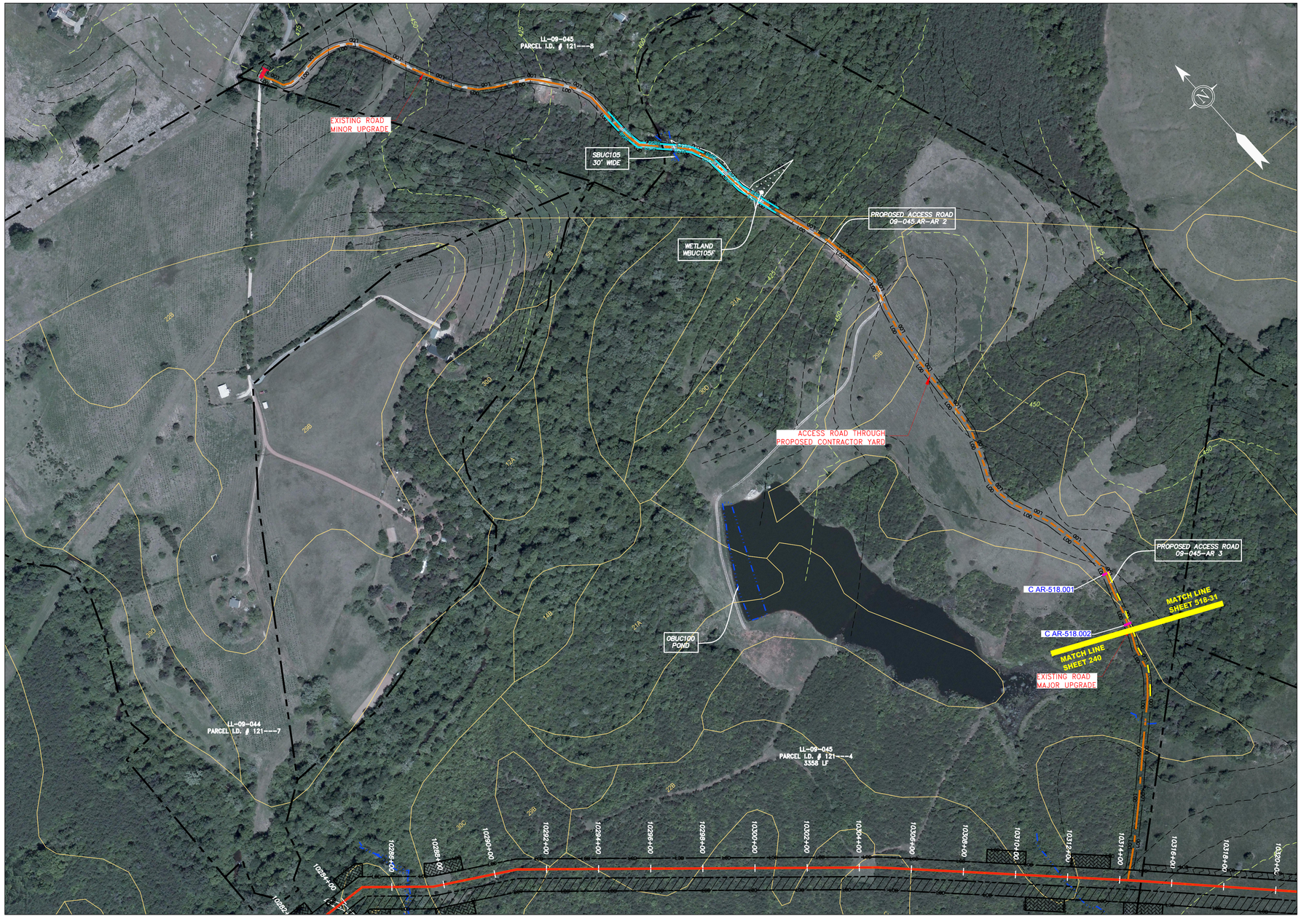
ATLANTIC COAST PIPELINE, LLC
c/o DOMINION TRANSMISSION, INC.
925 WHITE OAKS BLVD., BRIDGEPORT, WV 26330

SCALE:	AS SHOWN
DATE:	3/24/17
DRAWN:	GPT
CHECKED:	DLH
APPROVED:	NET

gai consultants
SOUTHPOINTE OFFICE
6000 TOWN CENTER BLVD.
CANONSBURG, PA 15317
724-873-3545

PROJECT NO./DASH NO.	
140468	
TASK NO.	SUB TASK NO.
005	00
GROUP ID	DRAWING NO.
D	E517
AR-517	

GAI CAD FILE NO. \\TTG-FS1\THRASHER\050-5159 - GAI - THRASHER - SERP - MAPPING\SURVEY\DRAWING\SEC 4\SEC 4 ACCESS ROAD DETAILS.DWG



ACCESS ROAD
DETAIL 31

SCALE: 1" = 200'
200' 0 200' 400'

LEGEND

- PROPERTY LINE
- FENCE
- STREAM
- EXISTING GAS PIPELINE
- OVERHEAD UTILITY LINES
- ACCESS ROAD
- PROPOSED GAS PIPELINE
- STORM SEWER
- UNDERGROUND ELECTRIC
- WATER LINE
- SANITARY SEWER
- EDGE OF GRAVEL
- PROPOSED PERMANENT EASEMENT
- PROPOSED GAS PIPELINE (NO GROUND SURVEY)
- EXTRA WORK SPACE
- AREA OF NO DISTURBANCE
- WETLAND (COLOR SHOWN TO PROVIDE CLARITY ONLY)
- TOPSOIL SEGREGATION AREA
- PROPOSED TEMPORARY R.O.W.
- UTILITY POLE

NOTE: THE PE SEAL AND SIGNATURE APPLIES ONLY TO THE E&S CONTROL DESIGN COMPLETED BY ERM (SEE NOTE 12).

- PERMANENT WATERBAR/SLOPE BREAKER
- TEMPORARY WATERBAR/SLOPE BREAKER
- TRENCH BREAKER/PLUG
- STREAM CROSSING
- USFWS STREAM CROSSING WITH ENHANCED CONTROLS
- SEEP
- SLOPE DIRECTION
- CONSTRUCTION ENTRANCE WITH DITCH
- CULVERT AS NEEDED
- CULVERT/ WATERBAR
- LOD — LIMIT OF DISTURBANCE
- BSRF — BELTED SILT RETENTION FENCE (BSRF)
- COMPOST FILTER SOCK
- 111.03 — SEDIMENT BARRIER IDENTIFICATION
- C 111.001 — CULVERT IDENTIFICATION
- ORANGE SAFETY FENCE
- ROADSIDE DITCH
- CuB — SOIL TYPE
- A1 (E) 30-58% — TYPICAL BIC SLOPE CATEGORY SLOPE INCLINATION

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