

PIPE SPECIFICATION

STRING VIEW BAND

LEGEND

--- PROPERTY LINE	--- STORM SEWER	--- UNDERGROUND ELECTRIC	--- SANITARY SEWER	--- EDGE OF GRAVEL	--- PROPOSED PERMANENT EASEMENT	--- PROPOSED GAS PIPELINE (NO GROUND SURVEY)	--- 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	--- LIMIT OF DISTURBANCE	--- BELTED SILT RETENTION FENCE (BSRF)	--- COMPOST FILTER SOCK	--- SEDIMENT BARRIER IDENTIFICATION	--- CULVERT IDENTIFICATION	--- ORANGE SAFETY FENCE	--- ROADSIDE DITCH	--- SOIL TYPE	--- TYPICAL BIC SLOPE CATEGORY	--- SLOPE INCLINATION
-X-X- FENCE	-E- STORM SEWER	-W- UNDERGROUND ELECTRIC	-G- SANITARY SEWER	-OH- EDGE OF GRAVEL	-OH- PROPOSED PERMANENT EASEMENT	-OH- PROPOSED GAS PIPELINE (NO GROUND SURVEY)	▲ 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	▲ LIMIT OF DISTURBANCE	▲ BELTED SILT RETENTION FENCE (BSRF)	▲ COMPOST FILTER SOCK	▲ SEDIMENT BARRIER IDENTIFICATION	▲ CULVERT IDENTIFICATION	▲ ORANGE SAFETY FENCE	▲ ROADSIDE DITCH	▲ SOIL TYPE	▲ TYPICAL BIC SLOPE CATEGORY	▲ SLOPE INCLINATION

NOTES:

- COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, US SURVEY FOOT, CENTRAL MERIDIAN 81° W.
- 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.
- IMAGERY TAKEN FROM GOOGLE EARTH.
- EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS.
- STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM.
- SILT FENCE AND FILTER SOCK SHALL BE INSTALLED PARALLEL TO CONTOUR TO EXTENT PRACTICABLE IN ACCORDANCE WITH STANDARD DETAIL.
- ALL STATIONING SHOWN IS SLOPE STATIONING.
- EROSION CONTROL MATINGS SHALL BE PLACED IN AREAS OF 30% SLOPE OR GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS SLOPE BAND PLAN.
- ACCESS ROADS HAVE BEEN GROUPED INTO FOUR CATEGORIES: 1) EXISTING ROADS NO IMPROVEMENTS, 2) 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.
- 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 THE PLAN SET.
- THE CONSTRUCTION RIGHT-OF-WAY (ROW) WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS IN ACCORDANCE WITH SECTION V.5 FEDERAL ENERGY REGULATORY COMMISSION (FERC) UPLAND EROSION CONTROL, VEGETATION, AND MAINTENANCE PLAN, SECTION V.5.5. 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.

REVISIONS		DESCRIPTION
NO.	DATE	CHKD. APPVD.

Daniel R. Goldstein
 Daniel R. Goldstein
 Lic. No. 047436
 PROFESSIONAL ENGINEER

ERM

CONSTRUCTION ALIGNMENT STA 1400+00 TO 1456+00
 SOUTHAMPTON COUNTY, VIRGINIA

ATLANTIC COAST PIPELINE, LLC
 C/O DOMINION TRANSMISSION, INC.
 925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330

SCALE: AS SHOWN
 DATE: 6/19/17
 DRAWN: JMS
 CHECKED: DLH
 APPROVED: NET

gai consultants

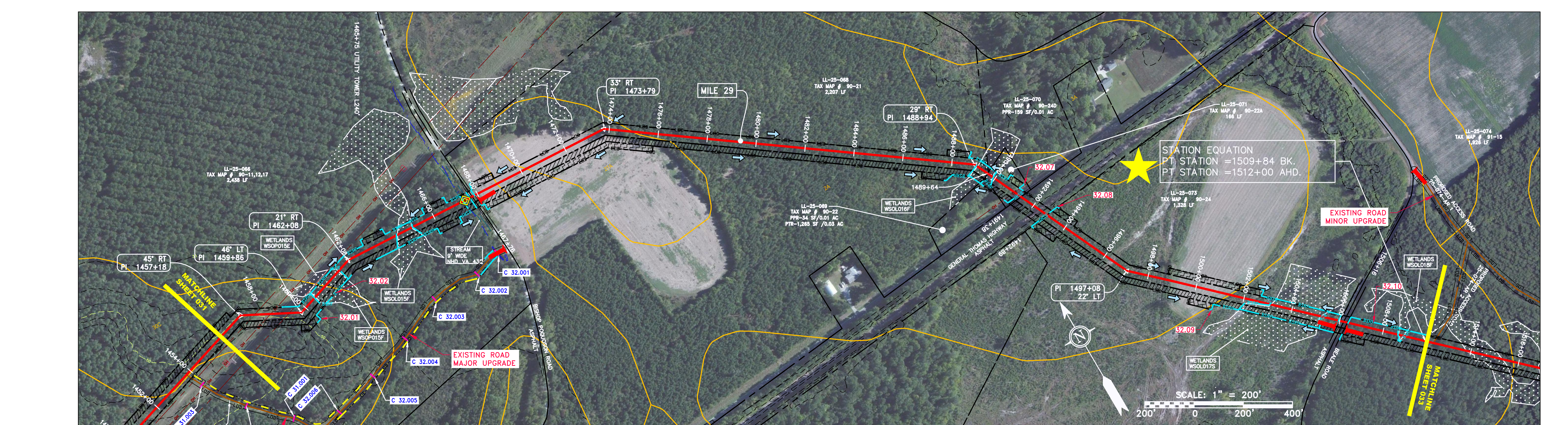
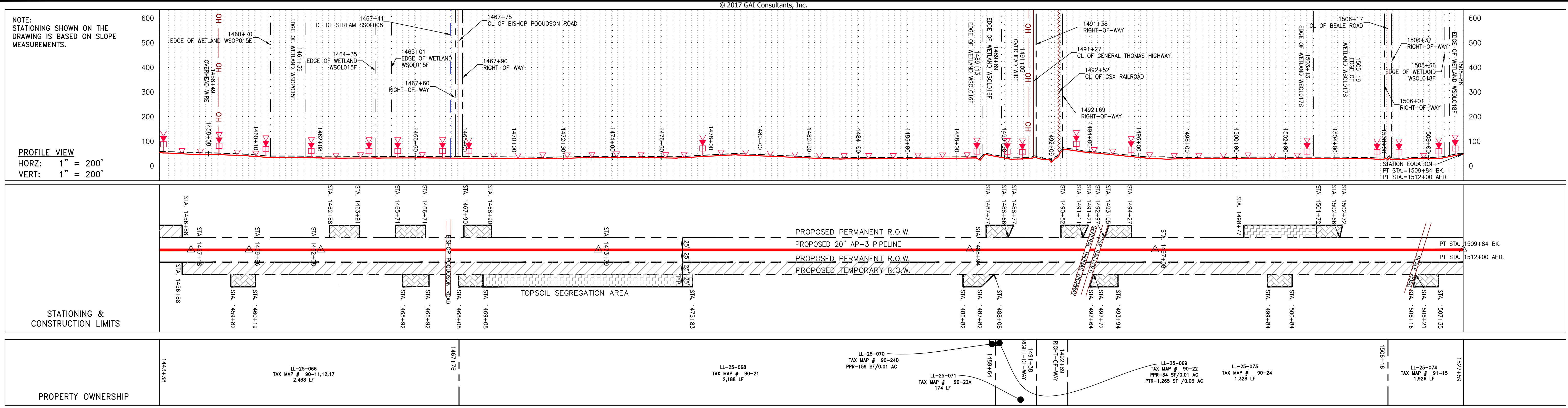
SOUTHPOINTE OFFICE
 6000 TOWN CENTER BLVD.
 CANONSBURG, PA 15317
 724-673-3545

mbe monaloh basin engineers

300 BUSINESS CENTER DRIVE
 PITTSBURGH, PA 15205
 412-788-2433

PROJECT NO./DASH NO. 140468
 TASK NO. SUB TASK NO. 005 00
 GROUP ID DRAWING NO. D E031
 031 OF 84

6/19/2017 11:21 AM



PIPE SPECIFICATION

STRING VIEW BAND

LEGEND

--- PROPERTY LINE	--- STORM SEWER	--- EXTRA WORK SPACE	--- PERMANENT WATERBAR/SLOPE BREAKER	--- LIMIT OF DISTURBANCE	--- COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, U.S. SURVEY FOOT, CENTRAL MERIDIAN 81° W.
-X-X- FENCE	--- UNDERGROUND ELECTRIC	--- TOPSOIL SEGREGATION AREA	--- TEMPORARY WATERBAR/SLOPE BREAKER	--- BELTED SILT RETENTION FENCE (BSRF)	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.
--- STREAM	--- WATER LINE	--- AREA OF NO DISTURBANCE	--- TRENCH BREAKER/PLUG	--- COMPOST FILTER SOCK	IMAGERY TAKEN FROM GOOGLE EARTH.
--- EXISTING GAS PIPELINE	--- SANITARY SEWER	--- PROPOSED TEMPORARY R.O.W.	--- STREAM CROSSING	--- SEDIMENT BARRIER IDENTIFICATION	THE STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM.
--- OVERHEAD UTILITY LINES	--- EDGE OF GRAVEL	--- UTILITY POLE	--- USFWS STREAM CROSSING WITH ENHANCED CONTROLS	--- CULVERT IDENTIFICATION	EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS.
--- ACCESS ROAD	--- PROPOSED PERMANENT EASEMENT	--- WETLAND (COLOR SHOWN TO PROVIDE CLARITY ONLY)	--- SEEP	--- ORANGE SAFETY FENCE	ALL STATIONING SHOWN IS SLOPE STATIONING.
--- PROPOSED GAS PIPELINE	--- PROPOSED GAS PIPELINE (NO GROUND SURVEY)		--- SLOPE DIRECTION	--- ROADSIDE DITCH	SILT FENCE AND FILTER SOCK SHALL BE INSTALLED PARALLEL TO CONTOUR TO EXTENT PRACTICABLE IN ACCORDANCE WITH STANDARD DETAIL.
			--- CONSTRUCTION ENTRANCE WITH DITCH	--- SOIL TYPE	BEST IN CLASS (BIC) STEEP SLOPE CATEGORY INFORMATION CAN BE FOUND IN THE APPENDIX OF THE STORMWATER POLLUTION PREVENTION PLAN.
			--- CULVERT/WATERBAR	--- TYPICAL BIC SLOPE CATEGORY SLOPE INCLINATION	EROSION CONTROL MATINGS SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS STEEP SLOPE BAND.

NOTES:

1. 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.
2. IMAGERY TAKEN FROM GOOGLE EARTH.
3. THE STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM.
4. EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS.
5. ALL STATIONING SHOWN IS SLOPE STATIONING.
6. SILT FENCE AND FILTER SOCK SHALL BE INSTALLED PARALLEL TO CONTOUR TO EXTENT PRACTICABLE IN ACCORDANCE WITH STANDARD DETAIL.
7. BEST IN CLASS (BIC) STEEP SLOPE CATEGORY INFORMATION CAN BE FOUND IN THE APPENDIX OF THE STORMWATER POLLUTION PREVENTION PLAN.
8. EROSION CONTROL MATINGS SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS STEEP SLOPE BAND.
9. ACCESS ROADS HAVE BEEN GROUPED INTO FOUR CATEGORIES - 1) EXISTING ROADS NO IMPROVEMENTS, 2) 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.
10. 'ERM IS SOLELY RESPONSIBLE FOR THE NATURE AND LOCATION OF THE DEPICTED BMPs AS OF THE DATE SIGNED AND SEALED BY THE SOURCE DATA PROVIDED AND AS DESCRIBED IN THE NOTES SECTION OF THE INDEX SHEET OF THIS PLAN SET.
11. THE CONSTRUCTION RIGHT-OF-WAY (ROW) WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS IN ACCORDANCE WITH SECTION V.5 FEDERAL ENERGY REGULATORY COMMISSION (FERC) UPLAND EROSION CONTROL, VEGETATION, AND MAINTENANCE PLAN, SECTION V.5.5. 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.

REVISIONS

NO.	DATE	CHKD.	APPD.	DESCRIPTION

PROFESSIONAL ENGINEER
 DANIEL R. GOLDSTEIN
 Lic. No. 047436

ERM

ATLANTIC COAST PIPELINE, LLC
 C/O DOMINION TRANSMISSION, INC.
 925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330

CONSTRUCTION ALIGNMENT STA 1456+00 TO 1512+00
 SOUTHAMPTON COUNTY, VIRGINIA

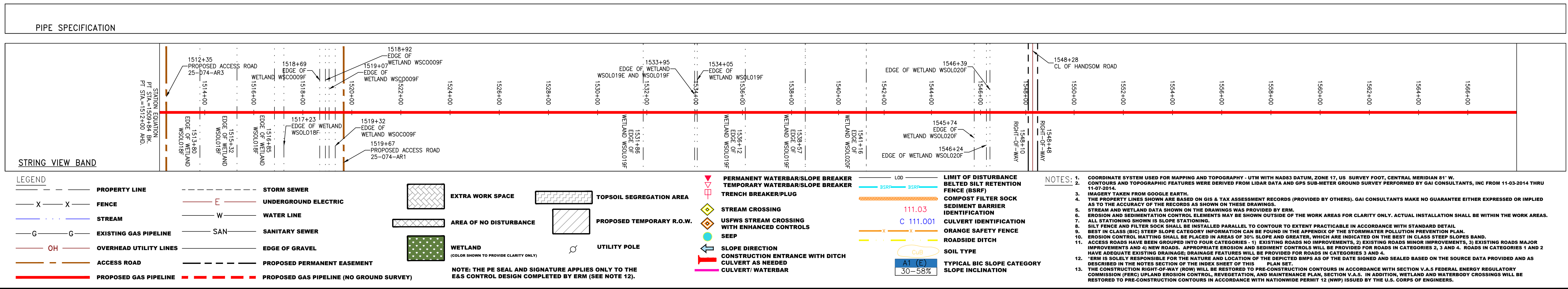
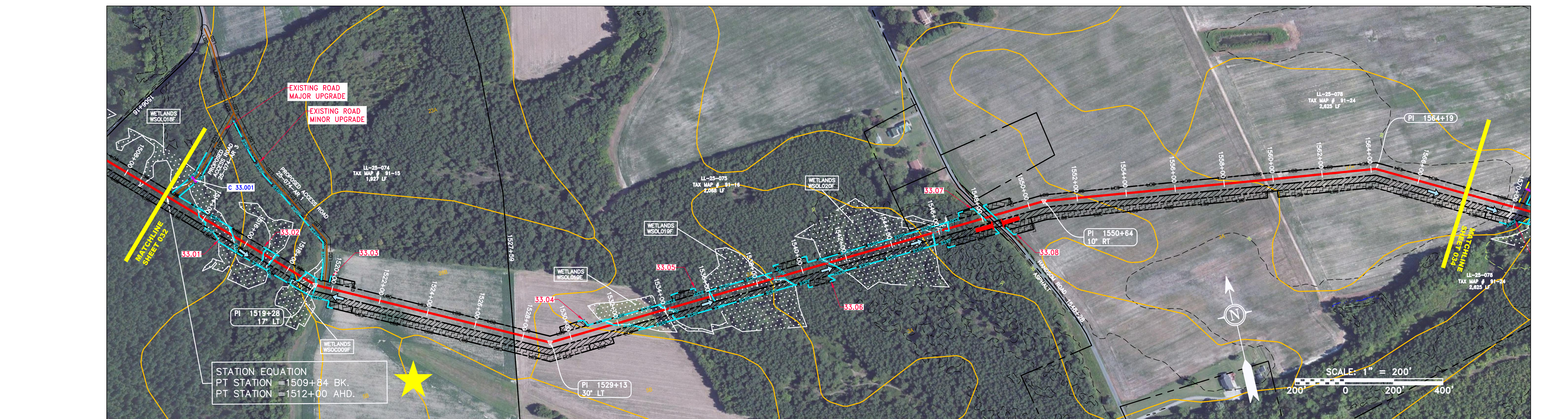
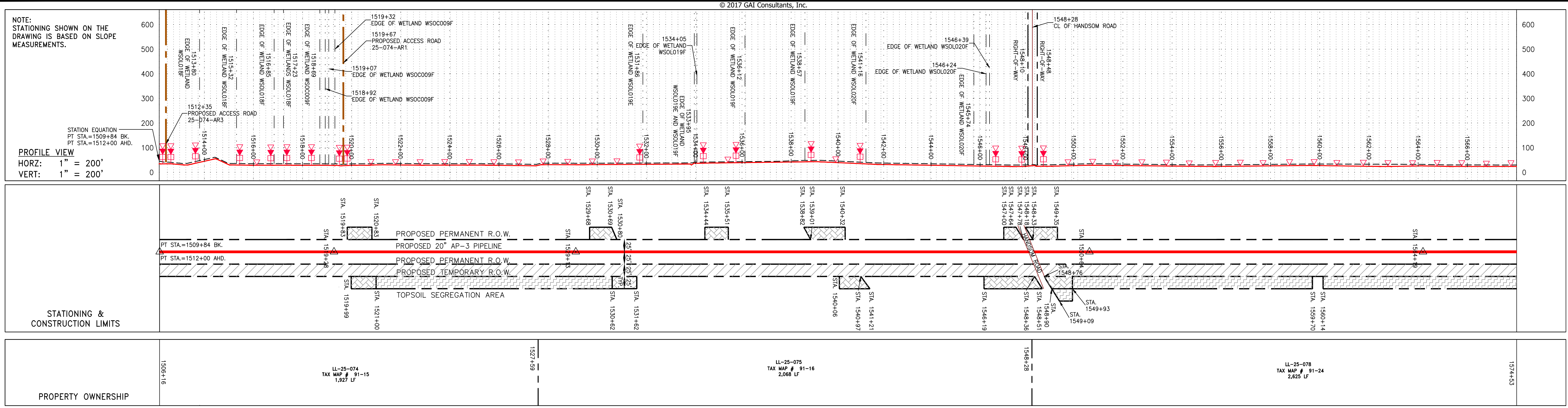
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 DRAWN: JMS
 CHECKED: DLH
 APPROVED: NET

gai consultants
 SOUTHPOINT OFFICE
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 724-673-3545

mbe monaloh basin engineers
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PROJECT NO./DASH NO. 140468
 TASK NO. 005 SUB TASK NO. 00
 GROUP ID D DRAWING NO. E032
 032 OF 84

6/19/2017 11:25 AM



REVISIONS		DESCRIPTION
NO.	DATE	CHKD. APPD.

DANIEL R. GOLDSTEIN
 Lic. No. 047436

ATLANTIC COAST PIPELINE, LLC
 C/O DOMINION TRANSMISSION, INC.
 925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330

CONSTRUCTION ALIGNMENT STA 1512+00 TO 1568+00
 SOUTHAMPTON COUNTY, VIRGINIA

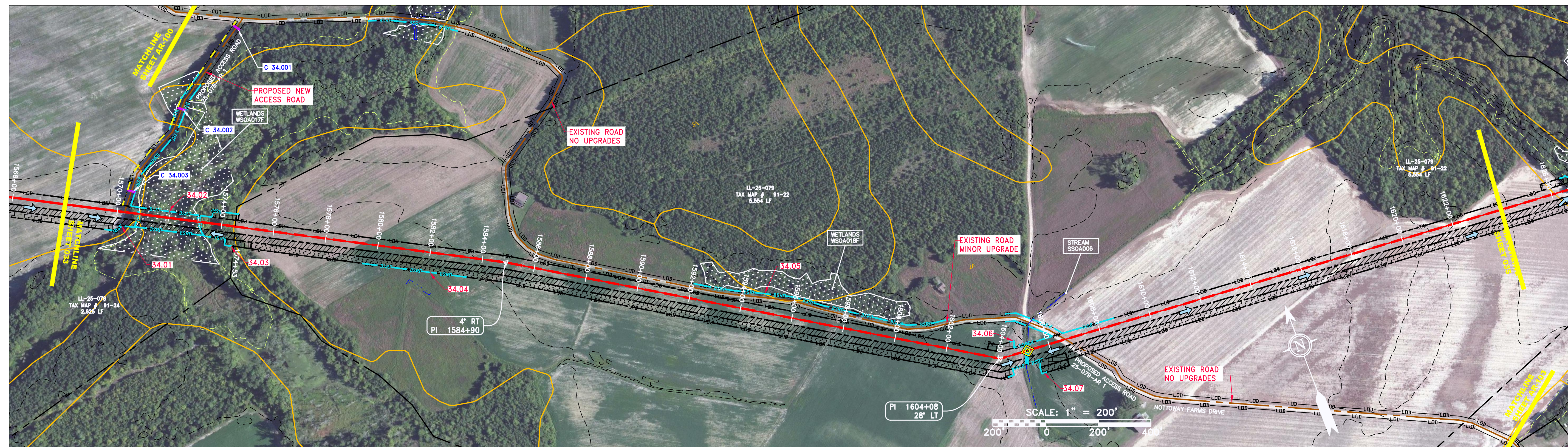
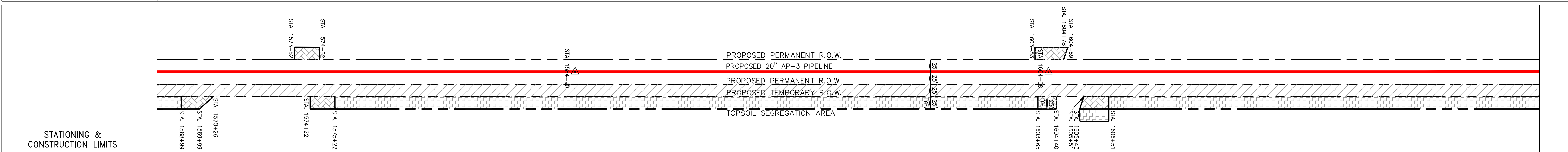
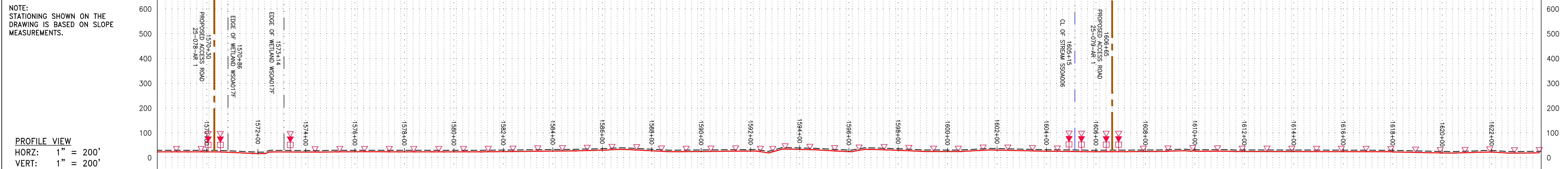
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 DRAWN: GOS
 CHECKED: DLH
 APPROVED: NET

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

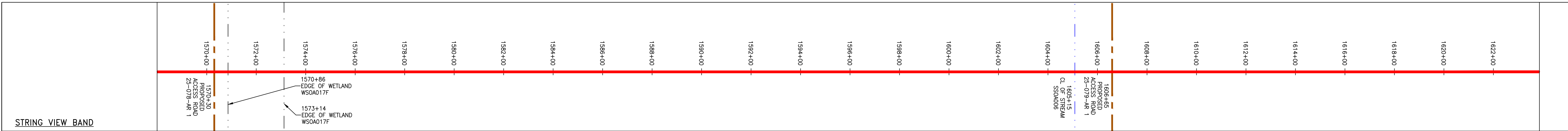
 300 BUSINESS CENTER DRIVE
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PROJECT NO./DASH NO.	140468	
TASK NO.	SUB TASK NO.	005 00
GROUP ID	DRAWING NO.	D E033
033	OF	84

6/19/2017 11:42 AM



PIPE SPECIFICATION



LEGEND

—	PROPERTY LINE	—	STORM SEWER	□	EXTRA WORK SPACE	□	TOPSOIL SEGREGATION AREA	▲	PERMANENT WATERBAR/SLOPE BREAKER	—	LIMIT OF DISTURBANCE
-X-X-	FENCE	-E-	UNDERGROUND ELECTRIC	□	AREA OF NO DISTURBANCE	□	PROPOSED TEMPORARY R.O.W.	◆	TEMPORARY WATERBAR/SLOPE BREAKER	—	BELTED SILT RETENTION FENCE (BSRF)
—G—G—	EXISTING GAS PIPELINE	-W-	WATER LINE	□	WETLAND (COLOR SHOWN TO PROVIDE CLARITY ONLY)	□	UTILITY POLE	◆	TRENCH BREAKER/PLUG	—	COMPOST FILTER SOCK
-OH-	OVERHEAD UTILITY LINES	-SAN-	SANITARY SEWER	□	NOTE: THE PE SEAL AND SIGNATURE APPLIES ONLY TO THE E&S CONTROL DESIGN COMPLETED BY ERM (SEE NOTE 12).	□		◆	STREAM CROSSING	—	SEDIMENT BARRIER IDENTIFICATION
—	ACCESS ROAD	-	EDGE OF GRAVEL	□		□		◆	WITH ENHANCED CONTROLS	—	CULVERT IDENTIFICATION
—	PROPOSED GAS PIPELINE	-	PROPOSED PERMANENT EASEMENT	□		□		◆	SEEP	—	ORANGE SAFETY FENCE
- - -	PROPOSED GAS PIPELINE (NO GROUND SURVEY)	-		□		□		◆	SLOPE DIRECTION	—	ROADSIDE DITCH
		-		□		□		◆	CONSTRUCTION ENTRANCE WITH DITCH	—	SOIL TYPE
		-		□		□		◆	CULVERT AS NEEDED	—	AT (E) 30-58%
		-		□		□		◆	CULVERT/WATERBAR	—	TYPICAL BIC SLOPE CATEGORY SLOPE INCLINATION

NOTES:

- COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, US SURVEY FOOT, CENTRAL MERIDIAN 81° W.
- 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.
- IMAGERY TAKEN FROM GOOGLE EARTH.
- 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.
- STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM.
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- ALL STATIONING SHOWN IS SLOPE STATIONING.
- SILT FENCE AND FILTER SOCK SHALL BE INSTALLED PARALLEL TO CONTOUR TO EXTENT PRACTICABLE IN ACCORDANCE WITH STANDARD DETAIL.
- BEST IN CLASS (BIC) STEP SLOPE CATEGORY INFORMATION CAN BE FOUND IN THE APPENDIX OF THE STORMWATER POLLUTION PREVENTION PLAN.
- EROSION CONTROL MATTING SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS STEP SLOPE BAND.
- 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.
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- THE CONSTRUCTION RIGHT-OF-WAY (ROW) WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS IN ACCORDANCE WITH SECTION V.5 FEDERAL ENERGY REGULATORY COMMISSION (FERC) UPLAND EROSION CONTROL, VEGETATION, 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.

GAI CAD FILE NO. 2665 - GAI WORK ORDER 06 - SOUTHEAST PIPELINE (SECTION 7) 3 - CAD DRAWINGS ALIGNMENT SHEETS 2665-6 PLAN SHEETS (33-35).DWG

REVISIONS

NO.	DATE	CHKD.	APPD.	DESCRIPTION

Daniel R. Goldstein
 Daniel R. Goldstein
 Lic. No. 047436
 PROFESSIONAL ENGINEER

ERM

20" AP-3 PIPELINE
 CONSTRUCTION ALIGNMENT STA 1568+00 TO 1624+00
 SOUTHAMPTON COUNTY, VIRGINIA

ATLANTIC COAST PIPELINE, LLC
 C/O DOMINION TRANSMISSION, INC.
 925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330

SCALE: AS SHOWN
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gai consultants

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 PITTSBURGH, PA 15205
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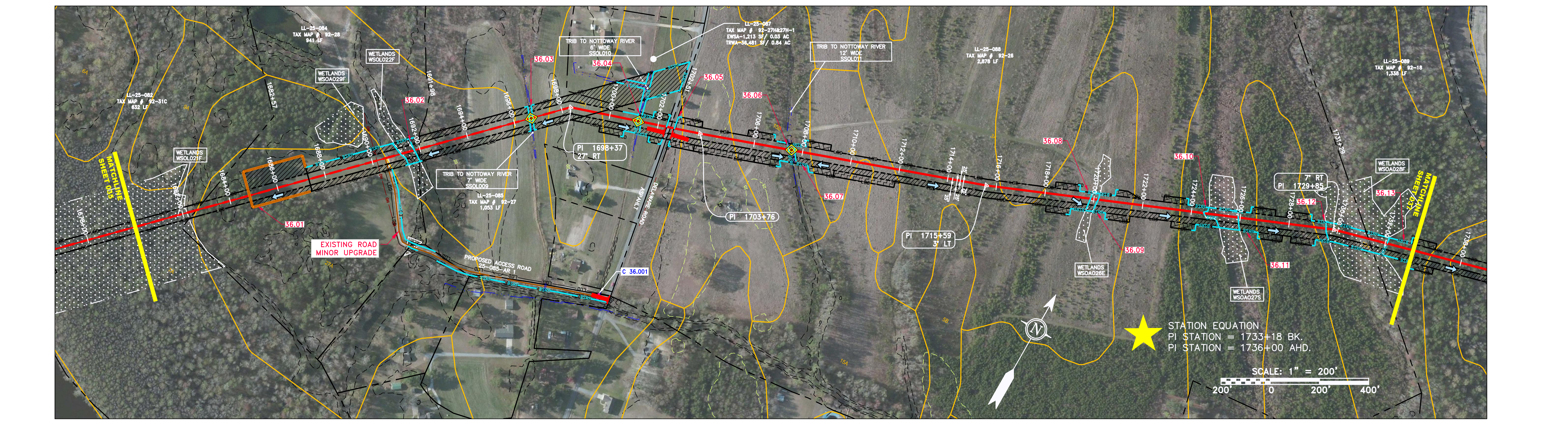
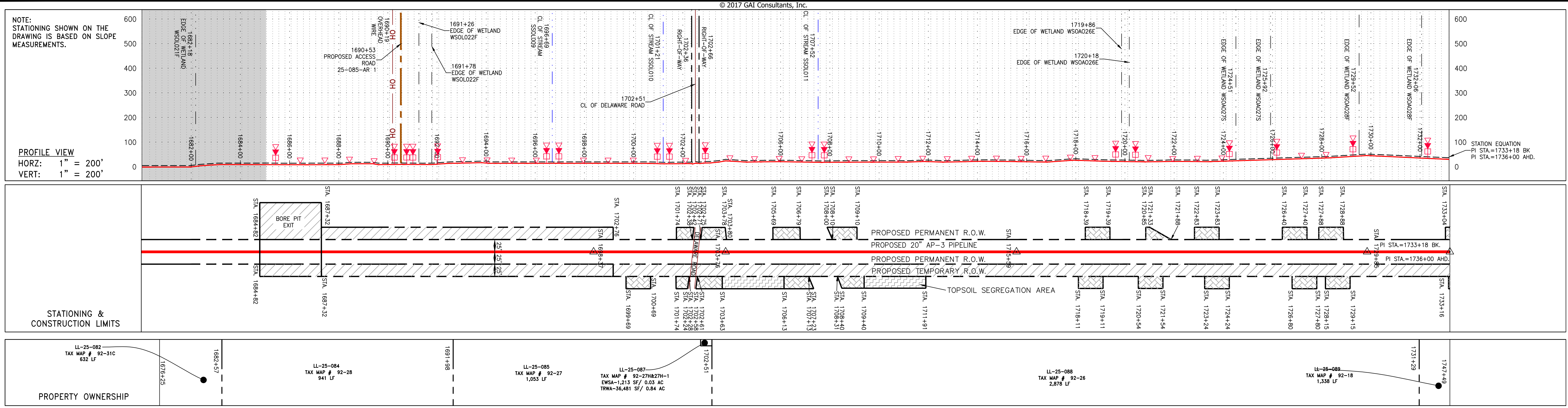
PROJECT NO./DASH NO.
 140468

TASK NO. SUB TASK NO.
 005 00

GROUP ID DRAWING NO.
 D E034

034 OF 84

6/19/2017 11:46 AM



PIPE SPECIFICATION

STRING VIEW BAND

LEGEND

---	PROPERTY LINE	---	STORM SEWER	---	EXTRA WORK SPACE	---	TOPSOIL SEGREGATION AREA
-X-X-	FENCE	---	UNDERGROUND ELECTRIC	---	---	---	---
---	STREAM	---	WATER LINE	---	---	---	---
-G-G-	EXISTING GAS PIPELINE	---	SANITARY SEWER	---	---	---	---
-OH-	OVERHEAD UTILITY LINES	---	EDGE OF GRAVEL	---	---	---	---
---	ACCESS ROAD	---	PROPOSED PERMANENT EASEMENT	---	---	---	---
---	PROPOSED GAS PIPELINE	---	PROPOSED GAS PIPELINE (NO GROUND SURVEY)	---	---	---	---

NOTES:

- COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, U.S. SURVEY FOOT, CENTRAL MERIDIAN 81° W.
- 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.
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REVISIONS

NO.	DATE	CHKD.	APPD.	DESCRIPTION

Daniel R. Goldstein
 DANIEL R. GOLDSTEIN
 Lic. No. 047436

ERM

ATLANTIC COAST PIPELINE, LLC
 C/O DOMINION TRANSMISSION, INC.
 925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330

20" AP-3 PIPELINE
 CONSTRUCTION ALIGNMENT STA 1680+00 TO 1736+00
 SOUTHAMPTON COUNTY, VIRGINIA

SCALE: AS SHOWN
 DATE: 6/19/17
 DRAWN: JMS
 CHECKED: DLH
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gai consultants

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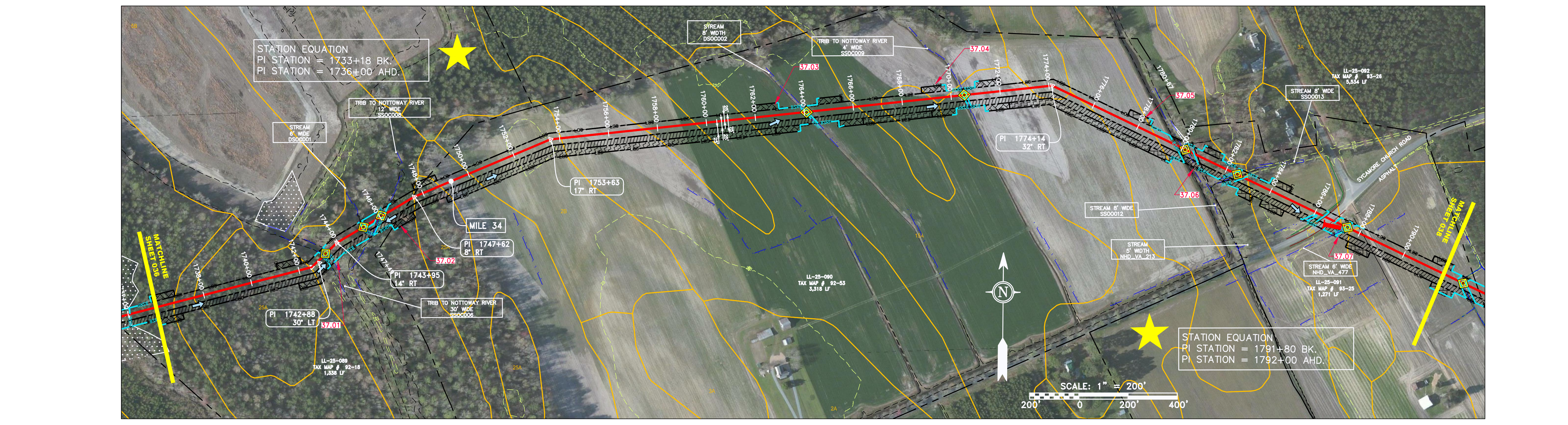
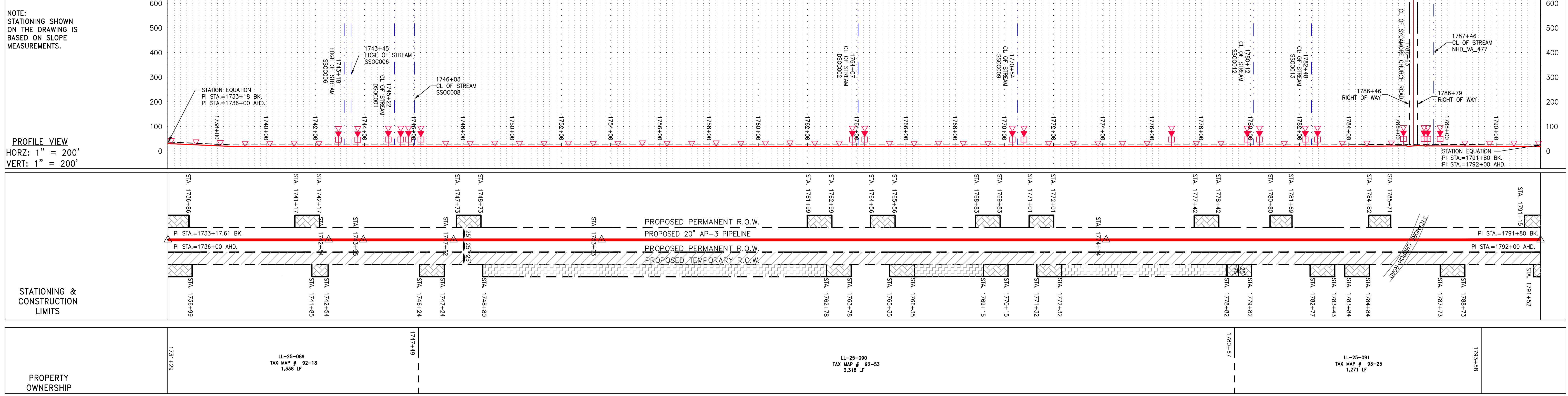
PROJECT NO./DASH NO.
 140468

TASK NO. SUB TASK NO.
 005 00

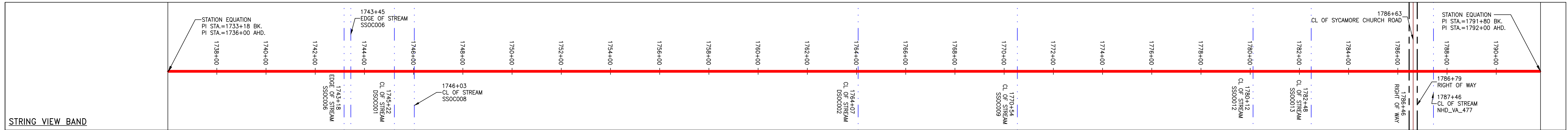
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036 OF 84

6/19/2017 11:57 AM



PIPE SPECIFICATION



<p>LEGEND</p> <ul style="list-style-type: none"> --- PROPERTY LINE -X-X- FENCE -G-G- EXISTING GAS PIPELINE -OH- OVERHEAD UTILITY LINES - - - ACCESS ROAD - - - PROPOSED PERMANENT EASEMENT - - - PROPOSED PERMANENT R.O.W. - - - PROPOSED TEMPORARY R.O.W. - - - PROPOSED GAS PIPELINE (NO GROUND SURVEY) - - - STORM SEWER - - - UNDERGROUND ELECTRIC - - - WATER LINE - - - SANITARY SEWER - - - EDGE OF GRAVEL - - - WETLAND (COLOR SHOWN TO PROVIDE CLARITY ONLY) - - - EXTRA WORK SPACE - - - AREA OF NO DISTURBANCE - - - TOPSOIL SEGREGATION AREA - - - PROPOSED TEMPORARY R.O.W. - - - UTILITY POLE - - - 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 - - - LIMIT OF DISTURBANCE - - - BELTED SILT RETENTION FENCE (BSRF) - - - COMPOST FILTER SOCK - - - SEDIMENT BARRIER IDENTIFICATION - - - CULVERT IDENTIFICATION - - - ORANGE SAFETY FENCE - - - ROADSIDE DITCH - - - SOIL TYPE - - - TYPICAL BIC SLOPE CATEGORY - - - SLOPE INCLINATION 	<p>NOTES:</p> <ol style="list-style-type: none"> 1. COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, U.S. SURVEY FOOT, CENTRAL MERIDIAN 81° W, 1107-2014. 2. 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. 3. STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM. 4. EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS. 5. ALL STATIONING SHOWN IS SLOPE STATIONING. 6. SILT FENCE AND FILTER SOCK SHALL BE INSTALLED PARALLEL TO CONTOUR TO EXTENT PRACTICABLE IN ACCORDANCE WITH STANDARD DETAIL. 7. BEST IN CLASS (BIC) SLOPE CATEGORY INFORMATION CAN BE FOUND IN THE APPENDIX OF THE STORMWATER POLLUTION PREVENTION PLAN. 8. EROSION CONTROL MATTING SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS SLOPE BAND. 9. 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. 10. 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. 11. THE CONSTRUCTION RIGHT-OF-WAY (ROW) WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS IN ACCORDANCE WITH SECTION V.5 FEDERAL ENERGY REGULATORY COMMISSION (FERC) UPLAND EROSION CONTROL, VEGETATION, AND MAINTENANCE PLAN, SECTION V.5.5. 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.
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REVISIONS

NO.	DATE	CHKD.	APPROD.	DESCRIPTION

Daniel R. Goldstein
 Daniel R. Goldstein
 Lic. No. 047436
 PROFESSIONAL ENGINEER

ERM

20" AP-3 PIPELINE
 CONSTRUCTION ALIGNMENT STA 1736+00 TO 1792+00
 SOUTHAMPTON COUNTY, VIRGINIA

ATLANTIC COAST PIPELINE, LLC
 C/O DOMINION TRANSMISSION, INC.
 925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330

SCALE: AS SHOWN
 DATE: 6/19/17
 DRAWN: JMS
 CHECKED: DLH
 APPROVED: NET

gai consultants

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

mbe
 monaloh basin
 engineers

300 BUSINESS CENTER DRIVE
 PITTSBURGH, PA 15205
 412-788-2433

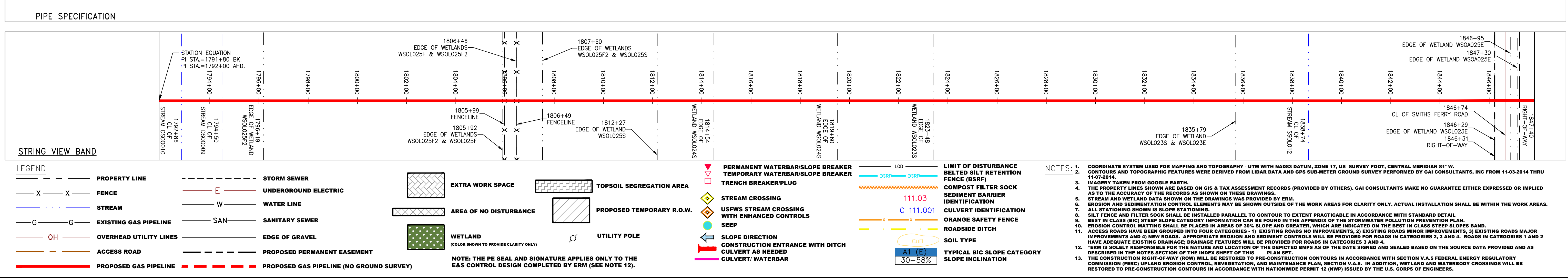
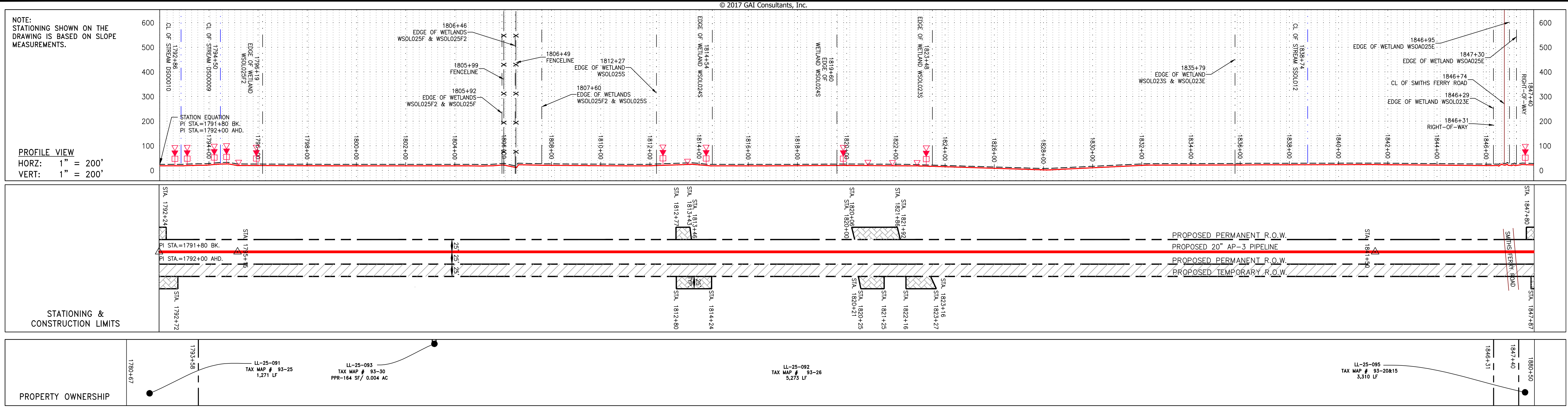
PROJECT NO./DASH NO.
 140468

TASK NO.	SUB TASK NO.
005	00

GROUP ID: D DRAWING NO.: E037

037 OF 84

6/19/2017 12:00 PM



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NOTE: STATIONING SHOWN ON THE DRAWING IS BASED ON SLOPE MEASUREMENTS.

PROFILE VIEW
 HORZ: 1" = 200'
 VERT: 1" = 200'

STATIONING & CONSTRUCTION LIMITS

PROPERTY OWNERSHIP

SCALE: AS SHOWN
 DATE: 6/21/17
 DRAWN: JMS
 CHECKED: DLH
 APPROVED: NET

LEGEND

NOTES:

1. COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, U.S. 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 BEST IN CLASS (BIC) STEP SLOPE CATEGORY INFORMATION CAN BE FOUND IN THE APPENDIX OF THE STORMWATER POLLUTION PREVENTION PLAN.
 9. EROSION CONTROL MATINGS SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS STEP SLOPE BAND.
 10. ACCESS ROADS HAVE BEEN GROUPED INTO FOUR CATEGORIES - 1) EXISTING ROADS MINOR IMPROVEMENTS, 2) 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.
 11. 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.
 12. THE CONSTRUCTION RIGHT-OF-WAY (ROW) WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS IN ACCORDANCE WITH SECTION V.5 FEDERAL ENERGY REGULATORY COMMISSION (FERC) UPLAND EROSION CONTROL, VEGETATION, 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.

REVISIONS

DANIEL R. GOLDSTEIN
 Lic. No. 047436
 PROFESSIONAL ENGINEER

ERM

ATLANTIC COAST PIPELINE, LLC
 C/O DOMINION TRANSMISSION, INC.
 925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330

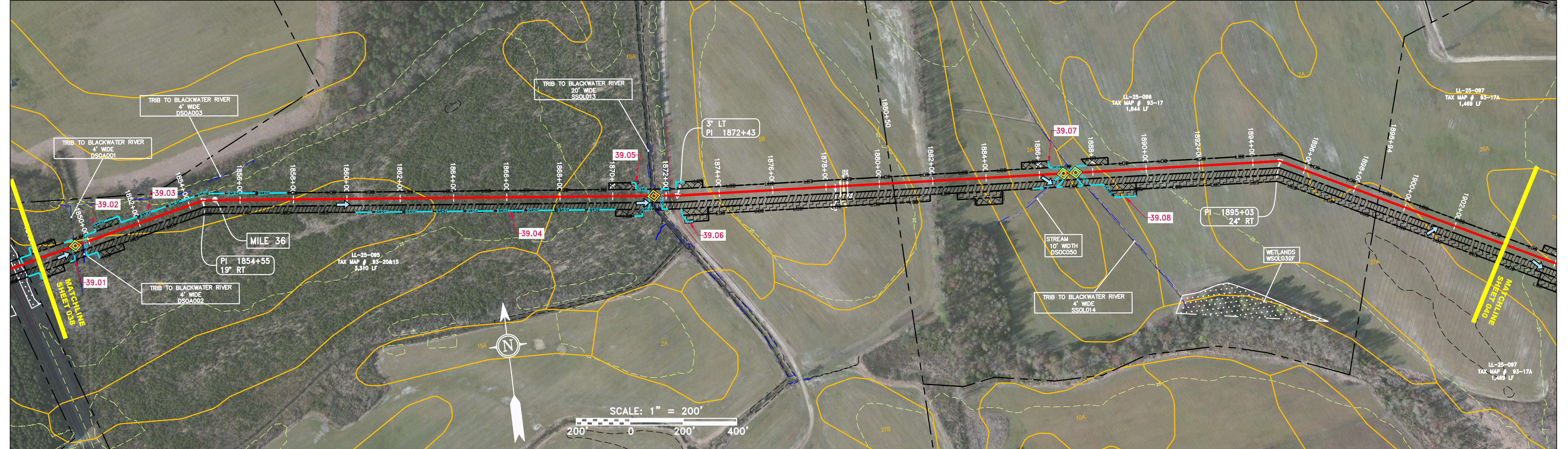
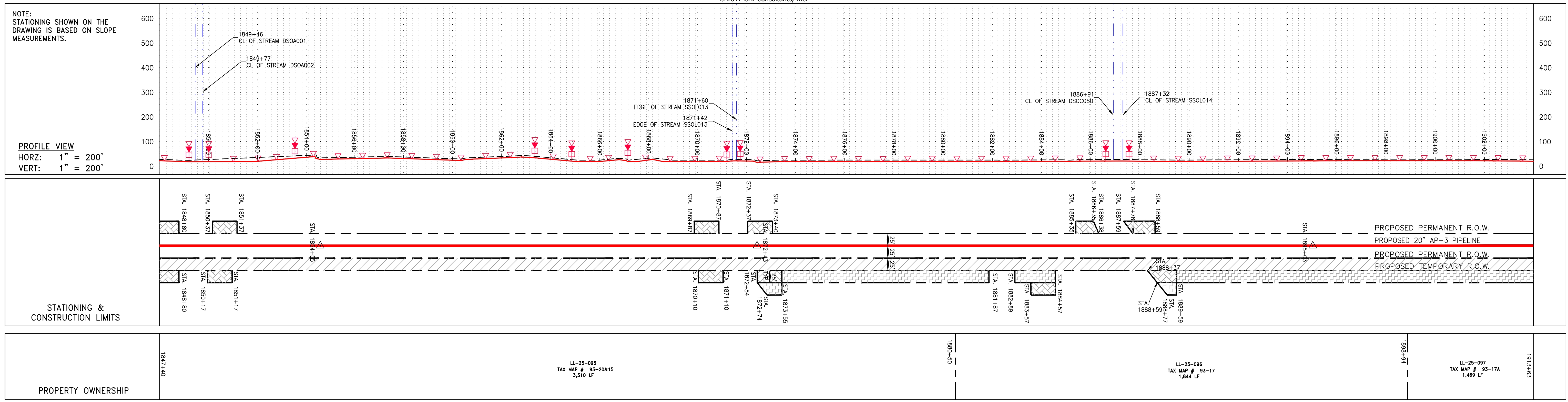
CONSTRUCTION ALIGNMENT STA 1792+00 TO 1848+00
 SOUTHAMPTON COUNTY, VIRGINIA

PROJECT NO./DASH NO. 140468
 TASK NO. SUB TASK NO. 005 00
 GROUP ID DRAWING NO. D E038
 038 OF 84

9/21/2017 10:25 AM

GAI CAD FILE NO. 2665 - GAI WORK ORDER 06 - SOUTHEAST PIPELINE (SECTION 7) 3 - CAD DRAWINGS\ALIGNMENT SHEETS\2665-6 PLAN SHEETS (39-41).DWG

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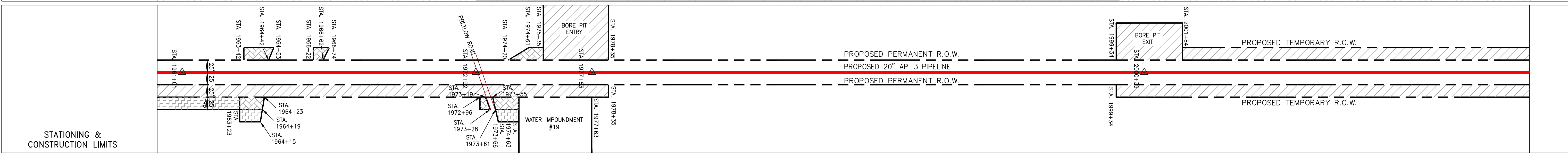
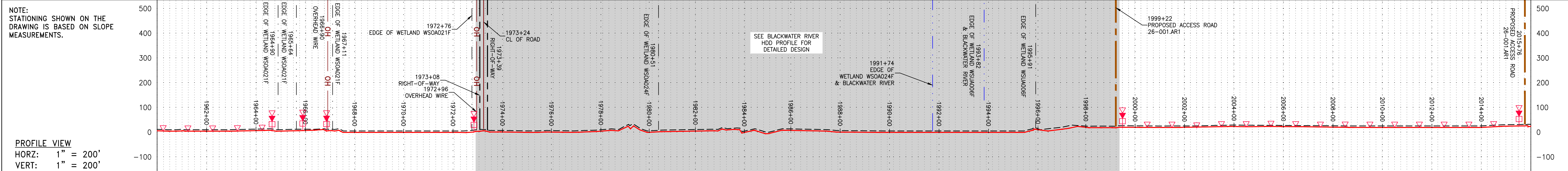


PIPE SPECIFICATION

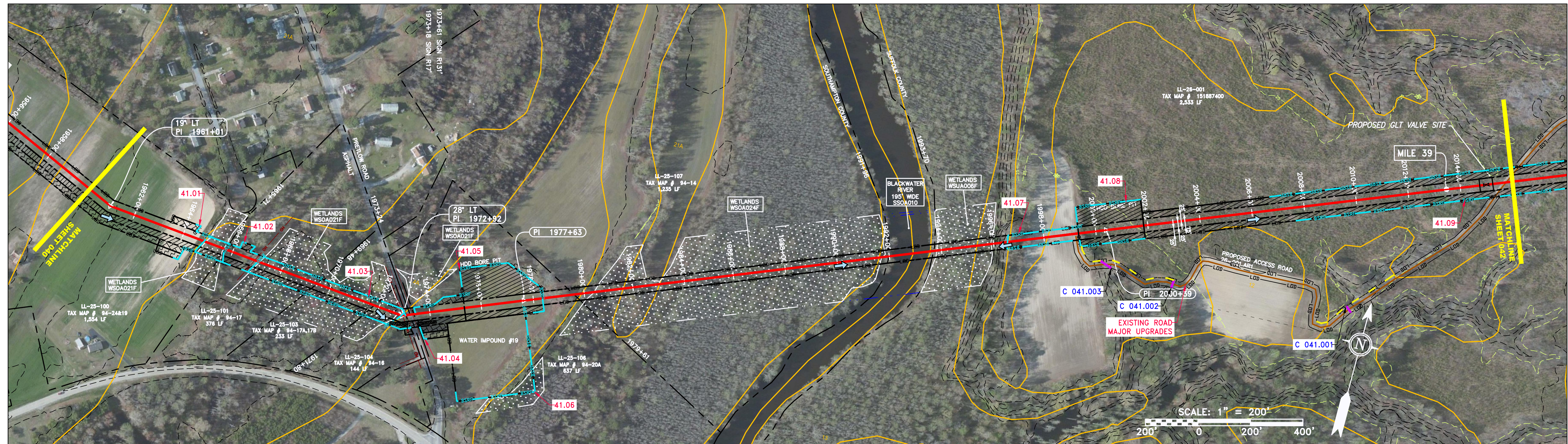
STRING VIEW BAND

<p>LEGEND</p> <ul style="list-style-type: none"> --- PROPERTY LINE -X-X- FENCE -G-G- EXISTING GAS PIPELINE -OH- OVERHEAD UTILITY LINES -A- ACCESS ROAD -E- STORM SEWER -W- UNDERGROUND ELECTRIC -SAN- WATER LINE -SAN- SANITARY SEWER -W- EDGE OF GRAVEL -W- PROPOSED PERMANENT EASEMENT -W- PROPOSED GAS PIPELINE (NO GROUND SURVEY) 	<ul style="list-style-type: none"> [Hatched Box] EXTRA WORK SPACE [Dotted Box] AREA OF NO DISTURBANCE [Green Box] WETLAND (COLOR SHOWN TO PROVIDE CLARITY ONLY) [Hatched Box] TOPSOIL SEGREGATION AREA [Hatched Box] PROPOSED TEMPORARY R.O.W. [Circle with X] UTILITY POLE 	<ul style="list-style-type: none"> [Triangle with X] PERMANENT WATERBAR/SLOPE BREAKER [Triangle with X] TEMPORARY WATERBAR/SLOPE BREAKER [Triangle with X] TRENCH BREAKER/PLUG [Circle with X] STREAM CROSSING [Circle with X] USFWS STREAM CROSSING WITH ENHANCED CONTROLS [Circle with X] SEEP [Circle with X] SLOPE DIRECTION [Circle with X] CONSTRUCTION ENTRANCE WITH DITCH [Circle with X] CULVERT AS NEEDED [Circle with X] CULVERT/WATERBAR 	<ul style="list-style-type: none"> [Line with X] LIMIT OF DISTURBANCE [Line with X] BELTED SILT RETENTION FENCE (BSRF) [Line with X] COMPOST FILTER SOCK [Line with X] SEDIMENT BARRIER IDENTIFICATION [Line with X] CULVERT IDENTIFICATION [Line with X] ORANGE SAFETY FENCE [Line with X] ROADSIDE DITCH [Line with X] SOIL TYPE [Line with X] TYPICAL BIC SLOPE CATEGORY [Line with X] SLOPE INCLINATION 	<p>NOTES:</p> <ol style="list-style-type: none"> 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 MATINGS SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS STEEP SLOPE 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.5 FEDERAL ENERGY REGULATORY COMMISSION (FERC) UPLAND EROSION CONTROL, VEGETATION, AND MAINTENANCE PLAN, SECTION V.5.5. 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.
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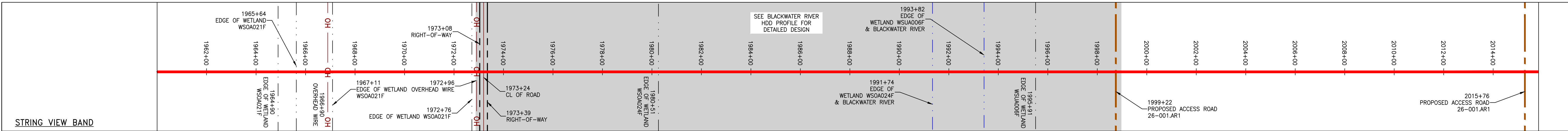
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NO.	DATE	CHKD.	APPD.	DESCRIPTION							
<p>ATLANTIC COAST PIPELINE, LLC C/O DOMINION TRANSMISSION, INC. 925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330</p>											
<p>20" AP-3 PIPELINE CONSTRUCTION ALIGNMENT STA 1848+00 TO 1904+00 SOUTHAMPTON COUNTY, VIRGINIA</p>											
<p>SCALE: AS SHOWN DATE: 6/19/17 DRAWN: JMS CHECKED: DLH APPROVED: NET</p>											
<p>gai consultants</p>											
<p>SOUTHPOINT OFFICE 6000 TOWN CENTER BLVD. CANONSBURG, PA 15317 724-673-3545</p>											
<p>mbe monaloh basin engineers</p>											
<p>300 BUSINESS CENTER DRIVE PITTSBURGH, PA 15205 412-788-2433</p>											
<p>PROJECT NO./DASH NO. 140468</p>											
<p>TASK NO. SUB TASK NO. 005 00</p>		<p>GROUP ID DRAWING NO. D E039</p>									
<p>039 OF 84</p>											



PROPERTY OWNERSHIP	2013-03
LL-25-100 TAX MAP # 94-24819 1,554 LF	LL-26-001 TAX MAP # 151887400 2,533 LF
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LL-25-103 TAX MAP # 94-17A,17B 233 LF	
LL-25-104 TAX MAP # 94-16 144 LF	
LL-25-106 TAX MAP # 94-20A 637 LF	
LL-25-107 TAX MAP # 94-14 1,235 LF	



PIPE SPECIFICATION



<p>LEGEND</p> <ul style="list-style-type: none"> --- PROPERTY LINE -X-X- FENCE -G-G- EXISTING GAS PIPELINE -OH- OVERHEAD UTILITY LINES - - - ACCESS ROAD - - - PROPOSED GAS PIPELINE - - - STORM SEWER - - - UNDERGROUND ELECTRIC - - - WATER LINE - - - SAN - - - SANITARY SEWER - - - EDGE OF GRAVEL - - - PROPOSED PERMANENT EASEMENT - - - PROPOSED GAS PIPELINE (NO GROUND SURVEY) [Hatched Box] EXTRA WORK SPACE [Dotted Box] AREA OF NO DISTURBANCE [Green Box] WETLAND (COLOR SHOWN TO PROVIDE CLARITY ONLY) [Hatched Box] TOPSOIL SEGREGATION AREA [Hatched Box] PROPOSED TEMPORARY R.O.W. [Circle with X] UTILITY POLE [Triangle with X] PERMANENT WATERBAR/SLOPE BREAKER [Triangle with X] TEMPORARY WATERBAR/SLOPE BREAKER [Triangle with X] TRENCH BREAKER/PLUG [Circle with X] STREAM CROSSING [Circle with X] USFWS STREAM CROSSING WITH ENHANCED CONTROLS [Circle with X] SEEP [Arrow] SLOPE DIRECTION [Circle with X] CONSTRUCTION ENTRANCE WITH DITCH [Circle with X] CULVERT AS NEEDED [Circle with X] CULVERT/WATERBAR [Line with X] LIMIT OF DISTURBANCE [Line with X] BELTED SILT RETENTION FENCE (BSRF) [Line with X] COMPOST FILTER SOCK [Line with X] SEDIMENT BARRIER IDENTIFICATION [Line with X] CULVERT IDENTIFICATION [Line with X] ORANGE SAFETY FENCE [Line with X] ROADSIDE DITCH [Line with X] SOIL TYPE [Line with X] TYPICAL BIC SLOPE CATEGORY SLOPE INCLINATION 	<p>NOTES:</p> <ol style="list-style-type: none"> COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, US SURVEY FOOT, CENTRAL MERIDIAN 81° W. 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. IMAGERY TAKEN FROM GOOGLE EARTH. 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. STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM. EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS. ALL STATIONING SHOWN IS SLOPE STATIONING. SILT FENCE AND FILTER SOCK SHALL BE INSTALLED PARALLEL TO CONTOUR TO EXTENT PRACTICABLE IN ACCORDANCE WITH STANDARD DETAIL. BEST IN CLASS (BIC) STEEP SLOPE CATEGORY INFORMATION CAN BE FOUND IN THE APPENDIX OF THE STORMWATER POLLUTION PREVENTION PLAN. EROSION CONTROL MATTING SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS STEEP SLOPE BAND. 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. 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. THE CONSTRUCTION RIGHT-OF-WAY (ROW) WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS IN ACCORDANCE WITH SECTION V.5 FEDERAL ENERGY REGULATORY COMMISSION (FERC) UPLAND EROSION CONTROL, VEGETATION, 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.
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REVISIONS		DESCRIPTION
NO.	DATE	CHKD. APPVD.

20" AP-3 PIPELINE
CONSTRUCTION ALIGNMENT STA 1960+00 TO 2016+00
SOUTHAMPTON & SUFFOLK COUNTIES, VIRGINIA

ATLANTIC COAST PIPELINE, LLC
C/O DOMINION TRANSMISSION, INC.
925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330

ERM

SCALE:	AS SHOWN
DATE:	6/19/17
DRAWN:	GOS
CHECKED:	DLH
APPROVED:	NET

gai consultants

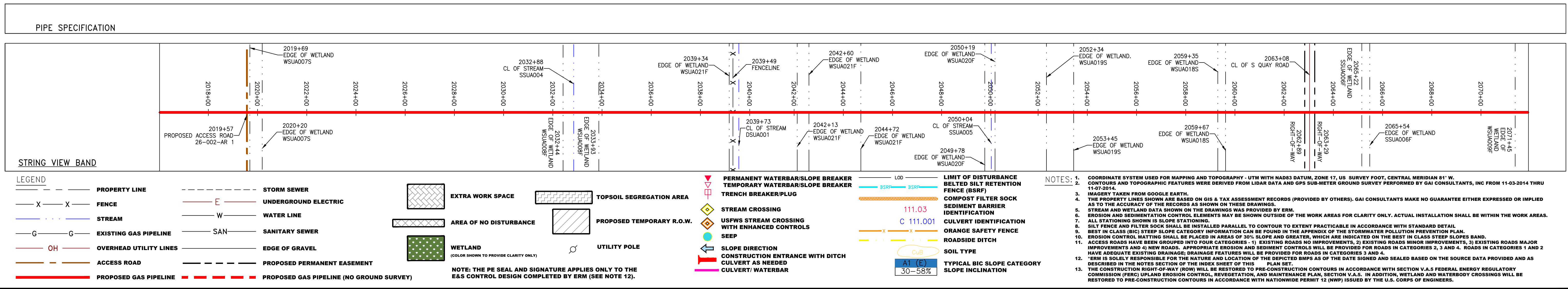
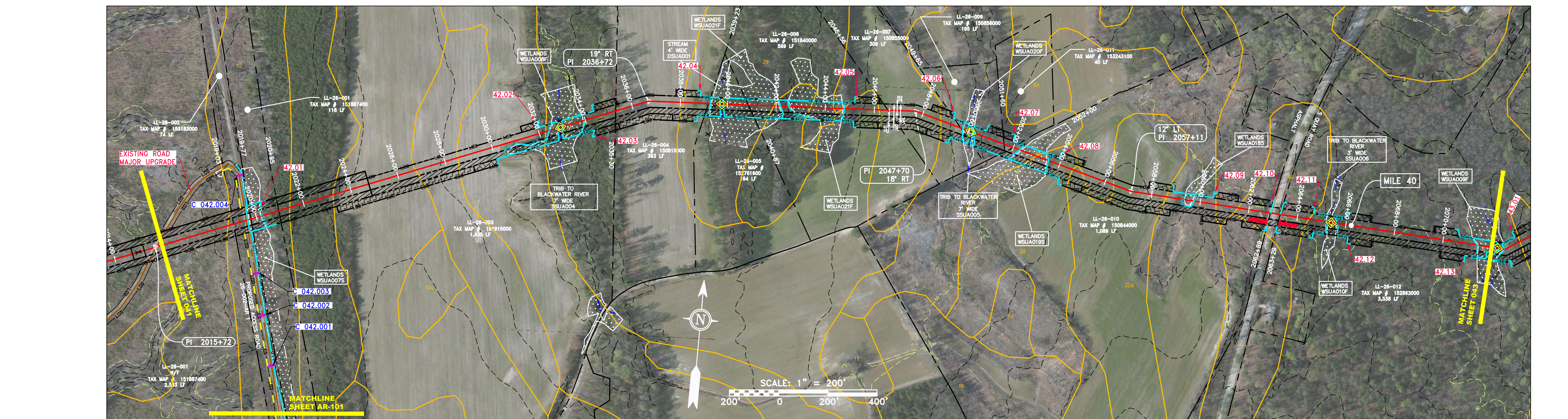
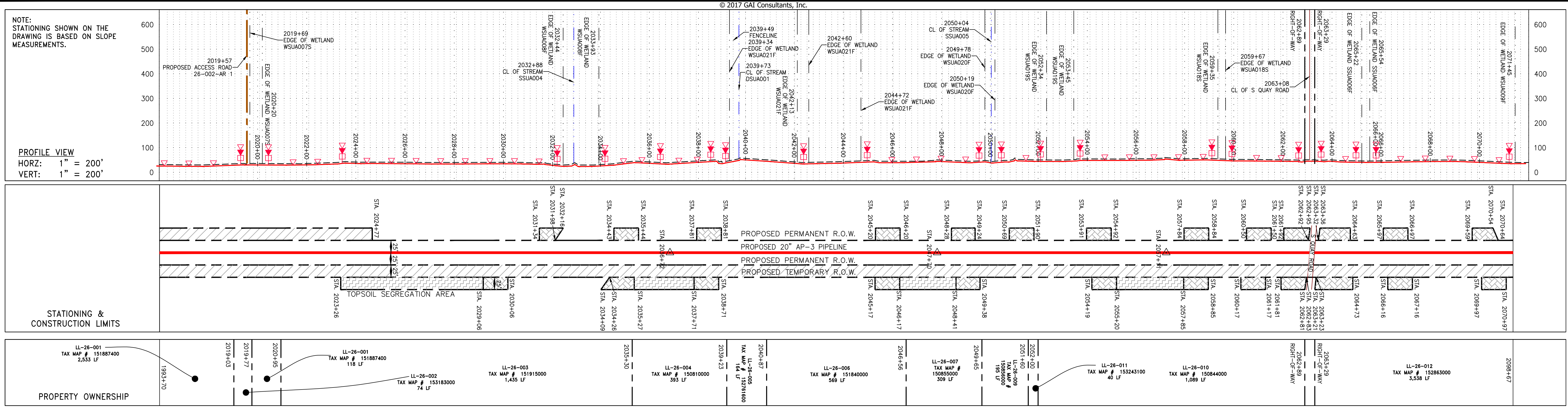
SOUTHPOINTE OFFICE
6000 TOWN CENTER BLVD.
CANONSBURG, PA 15317
724-873-3545

mbe monaloh basin engineers

300 BUSINESS CENTER DRIVE
PITTSBURGH, PA 15205
412-788-2433

PROJECT NO./DASH NO.	140468	
TASK NO.	005	SUB TASK NO. 00
GROUP ID	D	DRAWING NO. E041
041	OF	84

GAI CAD FILE NO. 2665 - GAI WORK ORDER 06 - SOUTHEAST PIPELINE (SECTION 7) 3 - CAD DRAWINGS ALIGNMENT SHEETS 2665-6 PLAN SHEETS (39-41).DWG



NO.	DATE	CHKD.	APPD.	DESCRIPTION

DANIEL L. GOLDSTEIN
 Lic. No. 04736

20" AP-3 PIPELINE
 CONSTRUCTION ALIGNMENT STA 2016+00 TO 2072+00
 CITY OF SUFFOLK, VIRGINIA

ATLANTIC COAST PIPELINE, LLC
 C/O DOMINION TRANSMISSION, INC.
 925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330

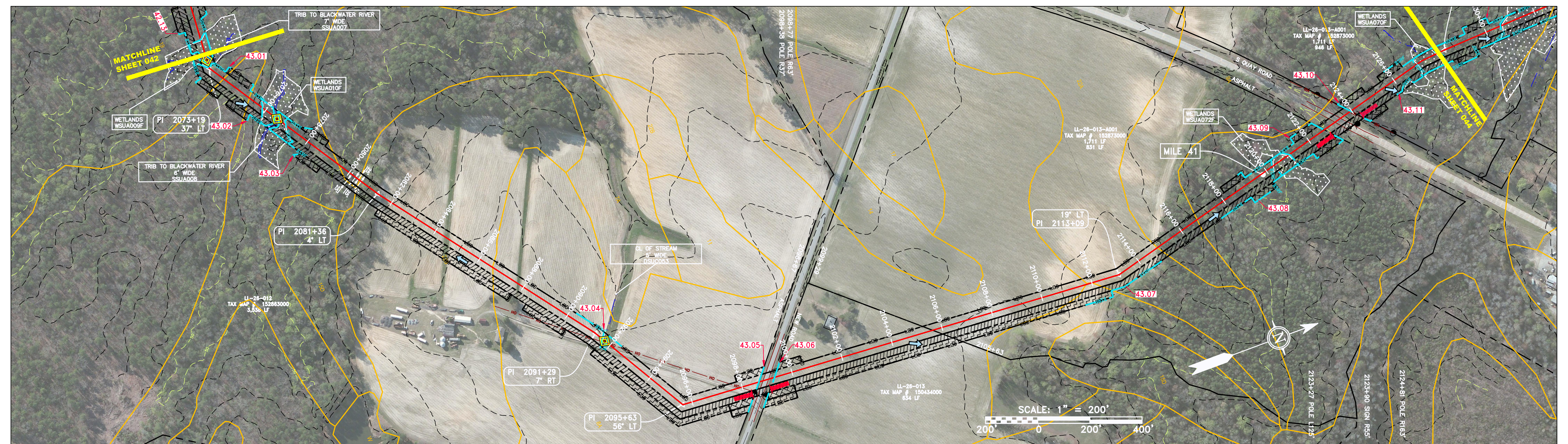
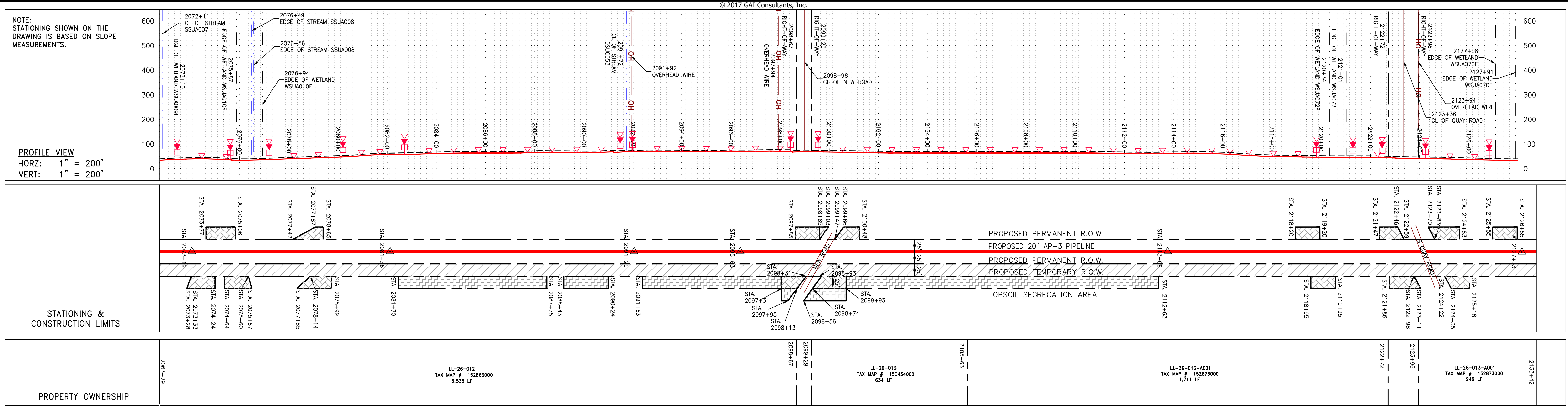
SCALE:	AS SHOWN
DATE:	6/19/17
DRAWN:	RDC
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SOUTHPOINTE OFFICE
 6000 TOWN CENTER BLVD.
 CANONSBURG, PA 15317
 724-673-3545

300 BUSINESS CENTER DRIVE
 PITTSBURGH, PA 15205
 412-788-2433

PROJECT NO./DASH NO.	140468	
TASK NO.	SUB TASK NO.	005 / 00
GROUP ID	DRAWING NO.	D / E042
042	OF	84

6/19/2017 11:31 AM



PIPE SPECIFICATION

STRING VIEW BAND

LEGEND

---	PROPERTY LINE	---	STORM SEWER	---	EXTRA WORK SPACE	---	TOPSOIL SEGREGATION AREA
-X-X-	FENCE	---	UNDERGROUND ELECTRIC	---	---	---	---
---	STREAM	---	WATER LINE	---	---	---	---
-G-G-	EXISTING GAS PIPELINE	---	SANITARY SEWER	---	---	---	---
OH	OVERHEAD UTILITY LINES	---	EDGE OF GRAVEL	---	---	---	---
---	ACCESS ROAD	---	PROPOSED PERMANENT EASEMENT	---	---	---	---
---	PROPOSED GAS PIPELINE	---	PROPOSED GAS PIPELINE (NO GROUND SURVEY)	---	---	---	---

NOTES:

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- IMAGERY TAKEN FROM GOOGLE EARTH.
- STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM.
- EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS.
- BEST IN CLASS (BIC) STEEP SLOPE CATEGORY INFORMATION CAN BE FOUND IN THE APPENDIX OF THE STORMWATER POLLUTION PREVENTION PLAN.
- EROSION CONTROL MATINGS SHALL BE PLACED IN AREAS OF 30% SLOPE OR GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS STEEP SLOPE BAND.
- 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.
- 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.
- THE CONSTRUCTION RIGHT-OF-WAY (ROW) WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS IN ACCORDANCE WITH SECTION V.5 FEDERAL ENERGY REGULATORY COMMISSION (FERC) UPLAND EROSION CONTROL, VEGETATION, 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.

REVISIONS

NO.	DATE	BY	DESCRIPTION

Daniel L. Goldstein
 DANIEL L. GOLDSTEIN
 Lic. No. 04736

PROFESSIONAL ENGINEER

ERM

SCALE: AS SHOWN
 DATE: 6/19/17
 DRAWN: JMS
 CHECKED: DLH
 APPROVED: NET

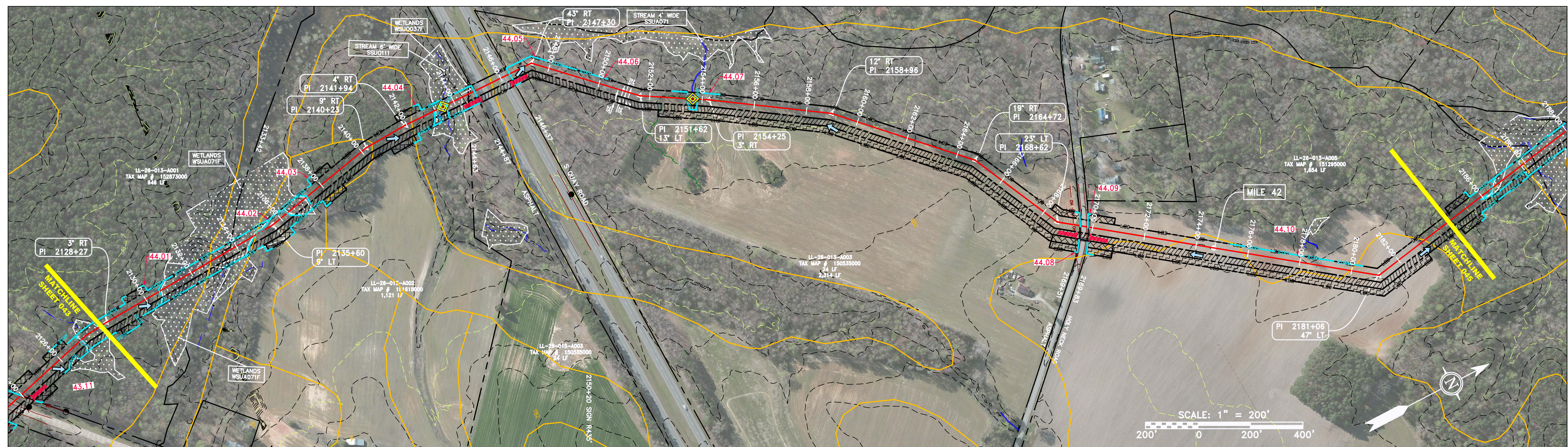
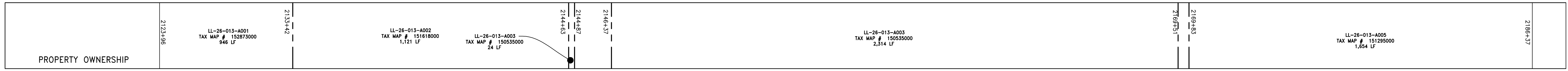
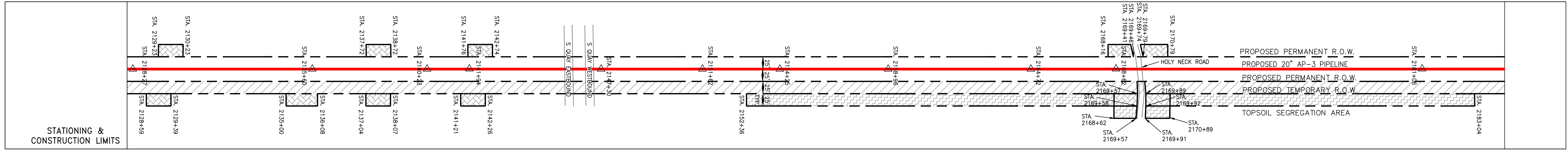
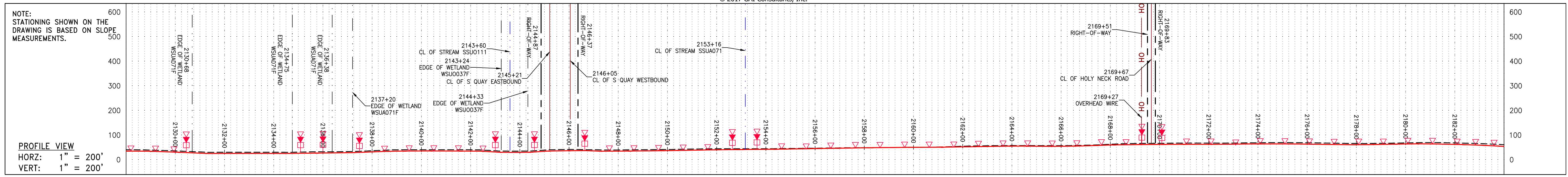
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 GROUP ID DRAWING NO. D E043
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300 BUSINESS CENTER DRIVE
 PITTSBURGH, PA 15205
 412-788-2433

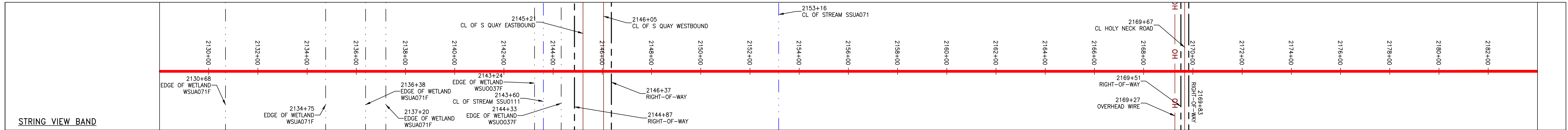
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PIPE SPECIFICATION



<p>LEGEND</p> <ul style="list-style-type: none"> --- PROPERTY LINE -X-X- FENCE -G-G- EXISTING GAS PIPELINE -OH- OVERHEAD UTILITY LINES -A- ACCESS ROAD -E- STORM SEWER -W- UNDERGROUND ELECTRIC -S- WATER LINE -SAN- SANITARY SEWER -W- EDGE OF GRAVEL -E- PROPOSED PERMANENT EASEMENT -G- PROPOSED GAS PIPELINE (NO GROUND SURVEY) [Hatched Box] EXTRA WORK SPACE [Dotted Box] AREA OF NO DISTURBANCE [Green Box] WETLAND (COLOR SHOWN TO PROVIDE CLARITY ONLY) [Hatched Box] TOPSOIL SEGREGATION AREA [Hatched Box] PROPOSED TEMPORARY R.O.W. [Circle with X] UTILITY POLE [Triangle with X] PERMANENT WATERBAR/SLOPE BREAKER [Triangle with X] TEMPORARY WATERBAR/SLOPE BREAKER [Triangle with X] TRENCH BREAKER/PLUG [Circle with X] STREAM CROSSING [Circle with X] USFWS STREAM CROSSING WITH ENHANCED CONTROLS [Circle with X] SEEP [Circle with X] SLOPE DIRECTION [Circle with X] CONSTRUCTION ENTRANCE WITH DITCH [Circle with X] CULVERT AS NEEDED [Circle with X] CULVERT/WATERBAR [Line with X] LIMIT OF DISTURBANCE [Line with X] BELTED SILT RETENTION FENCE (BSRF) [Line with X] COMPOST FILTER SOCK IDENTIFICATION [Line with X] SEDIMENT BARRIER IDENTIFICATION [Line with X] CULVERT IDENTIFICATION [Line with X] ORANGE SAFETY FENCE [Line with X] ROADSIDE DITCH [Line with X] SOIL TYPE [Line with X] TYPICAL BIG SLOPE CATEGORY SLOPE INCLINATION 	<p>NOTES:</p> <ol style="list-style-type: none"> COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, U.S. SURVEY FOOT, CENTRAL MERIDIAN 81° W. 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. 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. IMAGERY TAKEN FROM GOOGLE EARTH. STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM. EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS. ALL STATIONING SHOWN IS SLOPE STATIONING. SILT FENCE AND FILTER SOCK SHALL BE INSTALLED PARALLEL TO CONTOUR TO EXTENT PRACTICABLE IN ACCORDANCE WITH STANDARD DETAIL. BEST IN CLASS (BIC) STEEP SLOPE CATEGORY INFORMATION CAN BE FOUND IN THE APPENDIX OF THE STORMWATER POLLUTION PREVENTION PLAN. EROSION CONTROL MATTING SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS STEEP SLOPE BAND. 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 OR DRAINAGE FEATURES WILL BE PROVIDED FOR ROADS IN CATEGORIES 3 AND 4. 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. THE CONSTRUCTION RIGHT-OF-WAY (ROW) WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS IN ACCORDANCE WITH SECTION V.5 FEDERAL ENERGY REGULATORY COMMISSION (FERC) UPLAND EROSION CONTROL, VEGETATION, 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.
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NOTE: THE PE SEAL AND SIGNATURE APPLIES ONLY TO THE E&S CONTROL DESIGN COMPLETED BY ERM (SEE NOTE 12).

NO.	DATE	CHKD.	APPD.	DESCRIPTION

REVISIONS

20" AP-3 PIPELINE
 CONSTRUCTION ALIGNMENT STA 2128+00 TO 2184+00
 CITY OF SUFFOLK, VIRGINIA

ATLANTIC COAST PIPELINE, LLC
 C/O DOMINION TRANSMISSION, INC.
 925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330

SCALE: AS SHOWN
 DATE: 6/19/17
 DRAWN: JMS
 CHECKED: DLH
 APPROVED: NET

gai consultants

SOUTHPOINTE OFFICE
 6000 TOWN CENTER BLVD.
 CANONSBURG, PA 15317
 724-673-3545

mbe
 monaloh basin
 engineers

300 BUSINESS CENTER DRIVE
 PITTSBURGH, PA 15205
 412-788-2433

PROJECT NO./DASH NO.
 140468

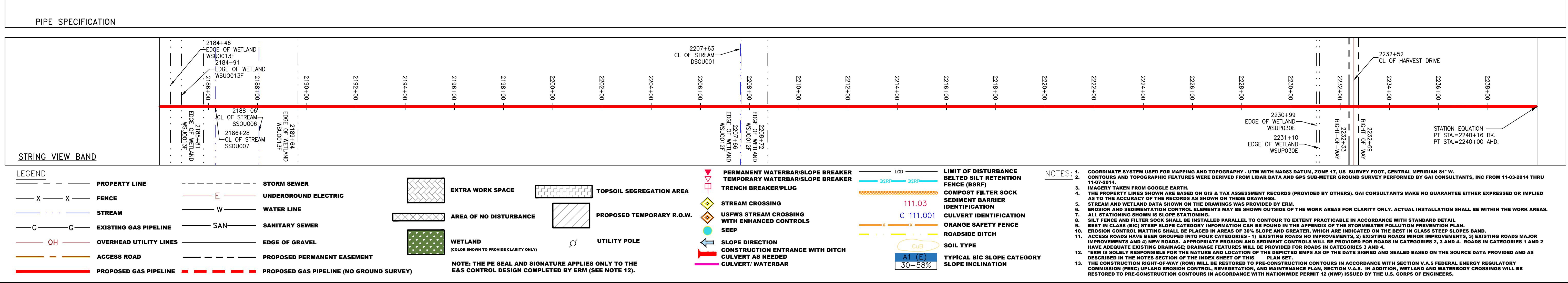
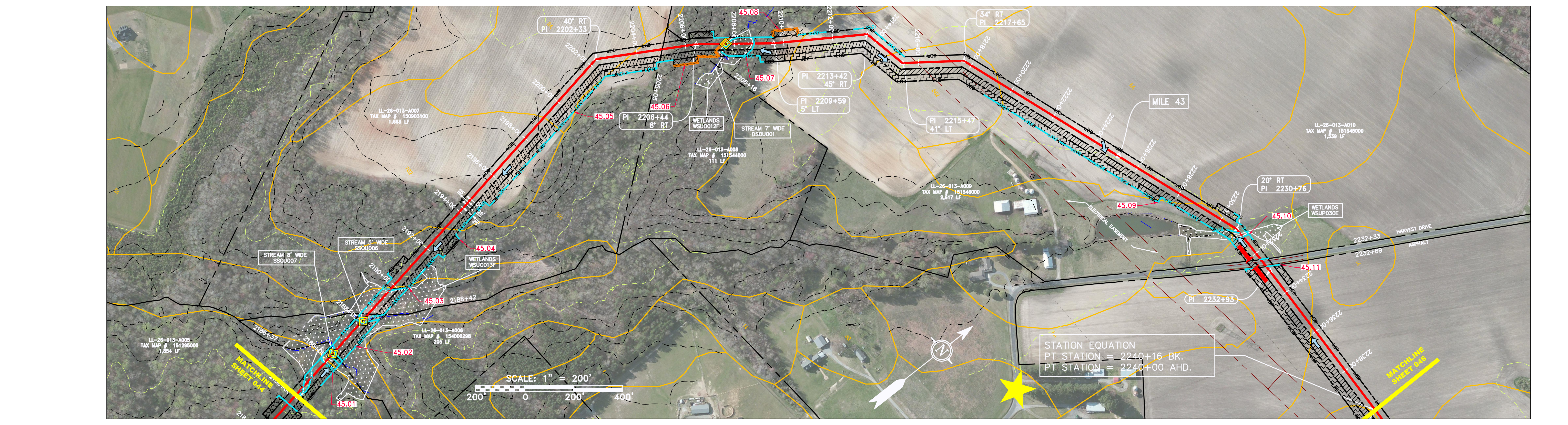
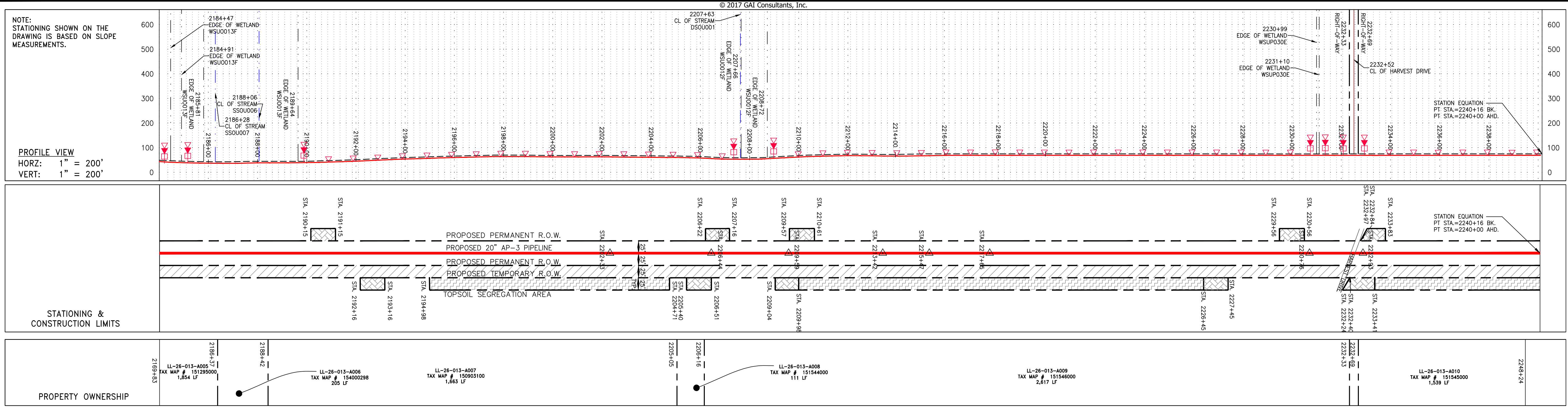
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REVISIONS
 NO. DATE CHKD. APPD. DESCRIPTION
 01 06/19/17 JMS DLH 20" AP-3 PIPELINE CONSTRUCTION ALIGNMENT STA 2184+00 TO 2240+00

SCALE: AS SHOWN
 DATE: 6/19/17
 DRAWN: JMS
 CHECKED: DLH
 APPROVED: NET

PROJECT NO./DASH NO. 140468
 TASK NO. SUB TASK NO. 005 00
 GROUP ID DRAWING NO. D E045
 045 OF 84

Daniel L. Goldstein
 DANIEL L. GOLDSTEIN
 Lic. No. 047436
 PROFESSIONAL ENGINEER
 ERM

ATLANTIC COAST PIPELINE, LLC
 C/O DOMINION TRANSMISSION, INC.
 925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330

20" AP-3 PIPELINE
 CONSTRUCTION ALIGNMENT STA 2184+00 TO 2240+00
 CITY OF SUFFOLK, VIRGINIA

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