

NO.	DATE	CHKD.	APPROV.	DESCRIPTION
1	7/17/17			

CONSTRUCTION ALIGNMENT STA 3740+00 TO 3794+00  
 ATLANTIC COAST PIPELINE, LLC  
 C/O DOMINION TRANSMISSION, INC.  
 925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330

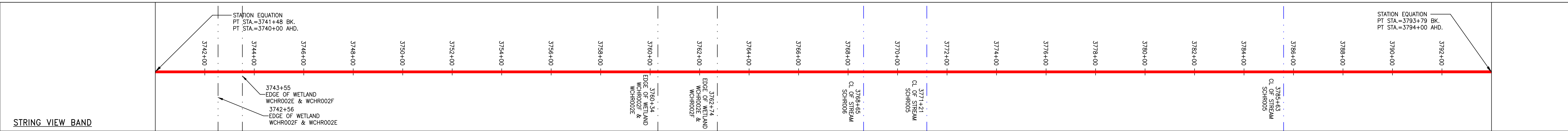
SCALE: AS SHOWN  
 DATE: 7/18/17  
 DRAWN: JMS  
 CHECKED: DLH  
 APPROVED: NET

**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.	005
SUB TASK NO.	00
GROUP ID	D
DRAWING NO.	E075
075 OF 84	

PIPE SPECIFICATION



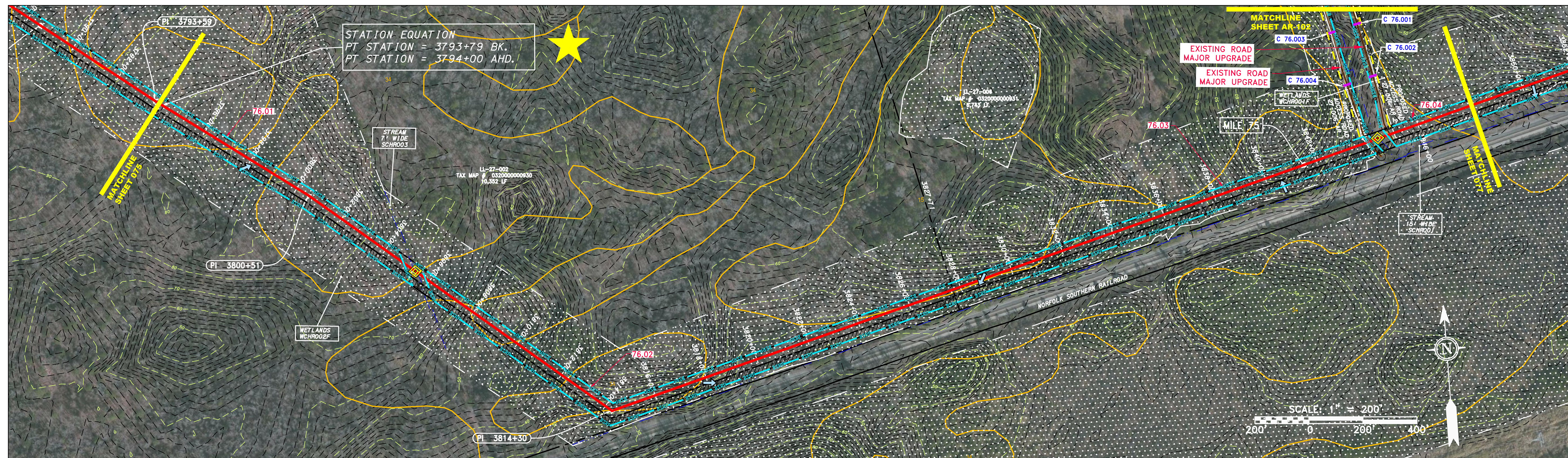
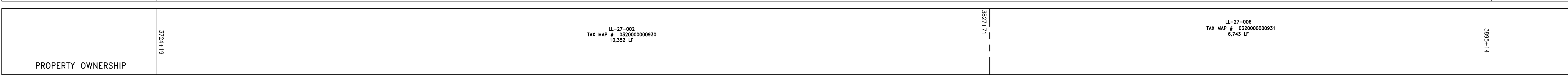
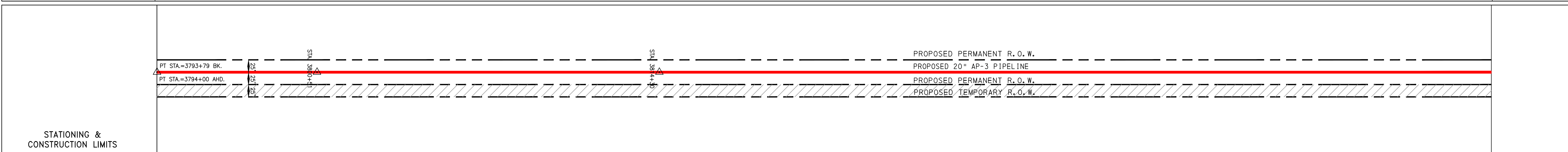
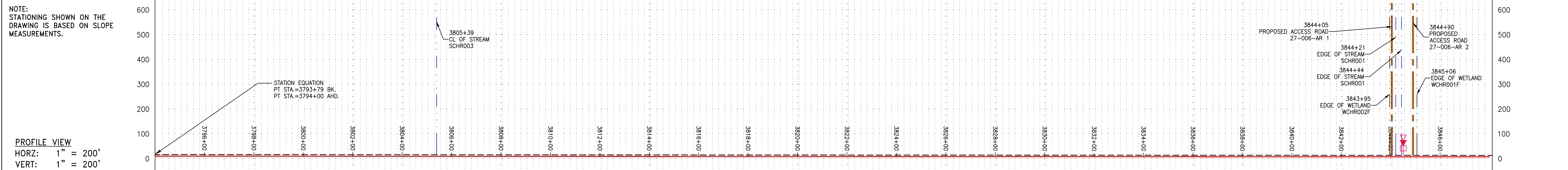
**LEGEND**

— X — X — FENCE	— W — WATER LINE	— SAN — SANITARY SEWER	— OH — OVERHEAD UTILITY LINES	— ACCESS ROAD	— PROPOSED PERMANENT EASEMENT	— PROPOSED PERMANENT R.O.W.	— 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	— 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 IDENTIFICATION	— CULVERT IDENTIFICATION	— ORANGE SAFETY FENCE	— ROADSIDE DITCH	— SOIL TYPE	— TYPICAL BIC SLOPE CATEGORY SLOPE INCLINATION
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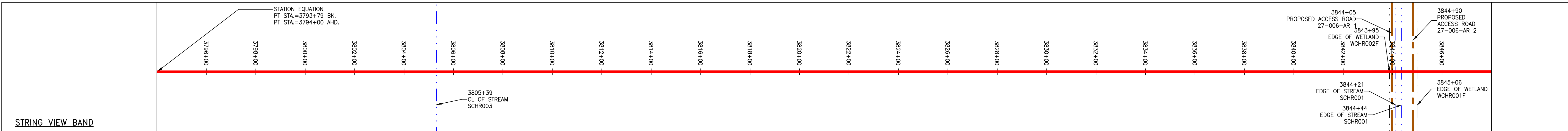
**NOTES:**

- COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, US SURVEY FOOT, CENTRAL MERIDIAN 81° W, 1107-2014.
- 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.
- 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.
- BEST IN CLASS (BIC) STEP 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 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 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, REVEGETATION, AND MAINTENANCE PLAN, SECTION V.4.5. 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. \\WBE\_27\GAI-ERM\2017-04-03 (E & S REV 12)\SPREAD 8\2665-7 PLAN SHEETS (75-77).DWG



PIPE SPECIFICATION



<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>--- PROPERTY LINE</li> <li>-X-X- FENCE</li> <li>-G-G- EXISTING GAS PIPELINE</li> <li>-OH- OVERHEAD UTILITY LINES</li> <li>- - - ACCESS ROAD</li> <li>- - - PROPOSED GAS PIPELINE</li> <li>- - - STORM SEWER</li> <li>-E- UNDERGROUND ELECTRIC</li> <li>-W- WATER LINE</li> <li>-G- SANITARY SEWER</li> <li>- - - EDGE OF GRAVEL</li> <li>- - - PROPOSED PERMANENT EASEMENT</li> <li>- - - PROPOSED GAS PIPELINE (NO GROUND SURVEY)</li> <li>EXTRA WORK SPACE</li> <li>AREA OF NO DISTURBANCE</li> <li>WETLAND</li> <li>TOPSOIL SEGREGATION AREA</li> <li>PROPOSED TEMPORARY R.O.W.</li> <li>UTILITY POLE</li> <li>PERMANENT WATERBAR/SLOPE BREAKER</li> <li>TEMPORARY WATERBAR/SLOPE BREAKER</li> <li>TRENCH BREAKER/PLUG</li> <li>STREAM CROSSING</li> <li>USPWS STREAM CROSSING WITH ENHANCED CONTROLS</li> <li>SEEP</li> <li>SLOPE DIRECTION</li> <li>CONSTRUCTION ENTRANCE WITH DITCH</li> <li>CULVERT AS NEEDED</li> <li>CULVERT/WATERBAR</li> <li>L00</li> <li>111.03</li> <li>C 111.001</li> <li>ORANGE SAFETY FENCE</li> <li>ROADSIDE DITCH</li> <li>SOIL TYPE</li> <li>30-58%</li> <li>LIMIT OF DISTURBANCE</li> <li>BELTED SILT RETENTION FENCE (BSRF)</li> <li>COMPOST FILTER SOCK</li> <li>SEDIMENT BARRIER IDENTIFICATION</li> <li>CULVERT IDENTIFICATION</li> <li>ORANGE SAFETY FENCE</li> <li>ROADSIDE DITCH</li> <li>SOIL TYPE</li> <li>TYPICAL BIC SLOPE CATEGORY SLOPE INCLINATION</li> </ul>	<p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, US SURVEY FOOT, CENTRAL MERIDIAN 81° W.</li> <li>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.</li> <li>IMAGERY TAKEN FROM GOOGLE EARTH.</li> <li>THE PROPERTY LINES SHOWN ARE BASED ON GIS &amp; 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.</li> <li>STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM.</li> <li>EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS.</li> <li>ALL STATIONING SHOWN IS SLOPE STATIONING.</li> <li>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.</li> <li>EROSION CONTROL MATTING SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS STEEP SLOPE BAND.</li> <li>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.</li> <li>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.</li> <li>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.4.5. 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.</li> </ol>
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REVISIONS

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	7/17/17			

Daniel R. Goldstein  
Lic. No. 047436  
Professional Engineer

ERM

20" AP-3 PIPELINE  
CONSTRUCTION ALIGNMENT STA 3794+00 TO 3848+00  
CITY OF CHESAPEAKE, VIRGINIA

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

SCALE: AS SHOWN  
DATE: 7/18/17  
DRAWN: MPC  
CHECKED: DLH  
APPROVED: NET

gai consultants

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

mbe  
monah 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.: E076

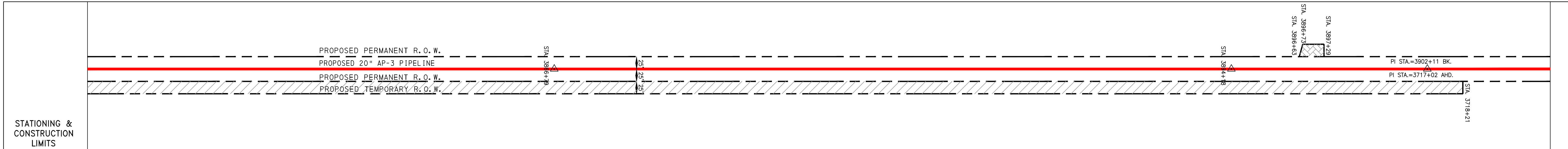
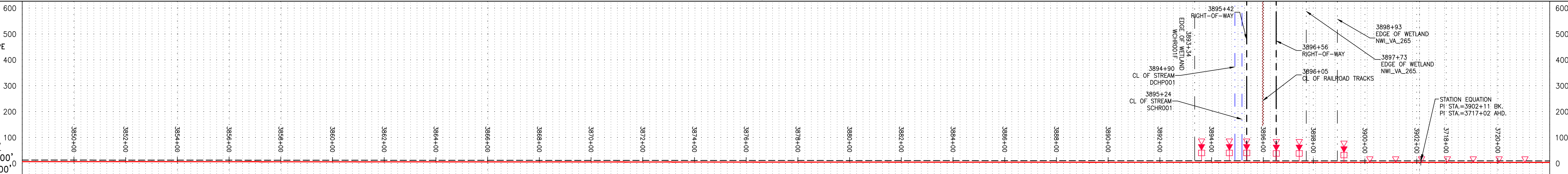
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7/18/2017 3:27 PM

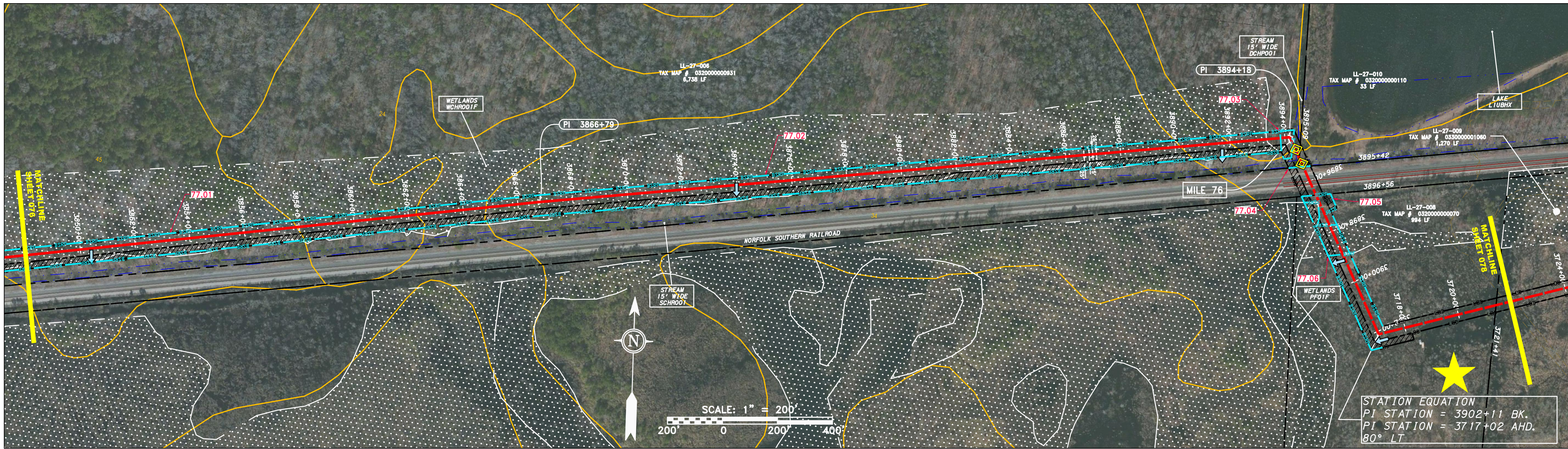
GAI CAD FILE NO. \\MBE\_27\GAI-ERM\2017-04-03 (E & S REV 12)\SPREAD 8\2665-7 PLAN SHEETS (75-77).DWG

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

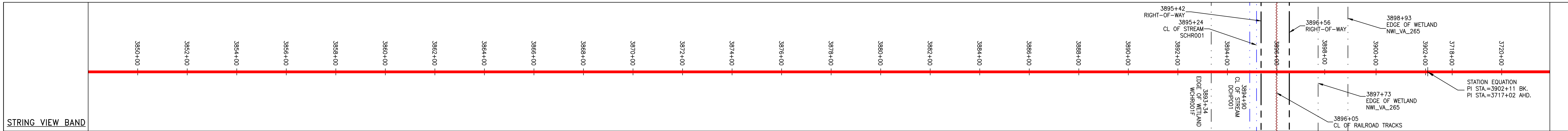
PROFILE VIEW  
HORZ: 1" = 200'  
VERT: 1" = 200'



PROPERTY OWNERSHIP table with columns for Station, Tax Map #, and Area (LF).



PIPE SPECIFICATION



LEGEND and NOTES section containing symbols for Property Line, Storm Sewer, Wetland, Stream, etc., and a list of 13 notes regarding survey methods, property lines, and construction standards.

Professional Engineer seal for Daniel R. Goldstein, Lic. No. 047436, and the ERM logo.

CONSTRUCTION ALIGNMENT STA 3848+00 TO 3722+00  
ATLANTIC COAST PIPELINE, LLC  
C/O DOMINION TRANSMISSION, INC.  
925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330

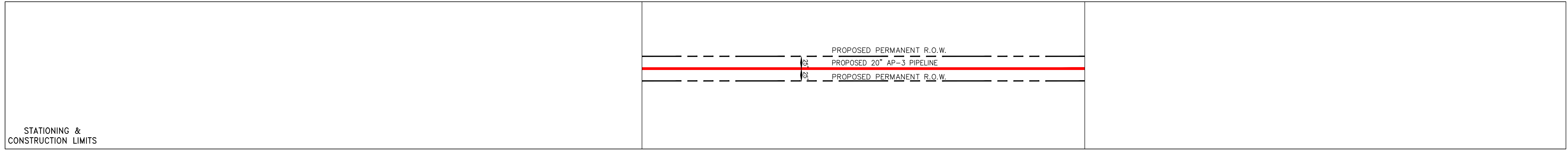
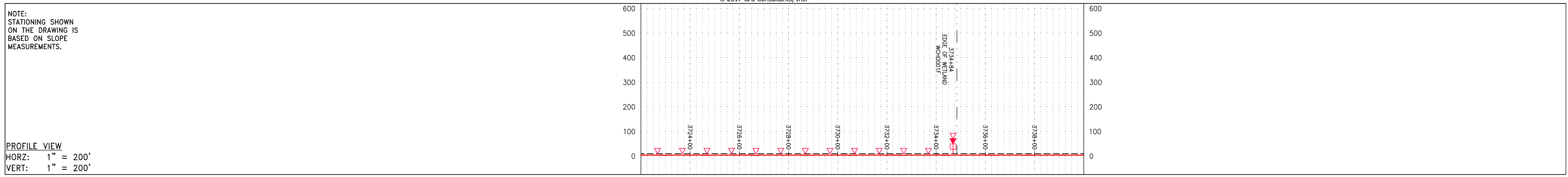
SCALE: AS SHOWN  
DATE: 7/18/17  
DRAWN: JMS  
CHECKED: DLH  
APPROVED: NET

gai consultants  
SOUTHPOINT 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

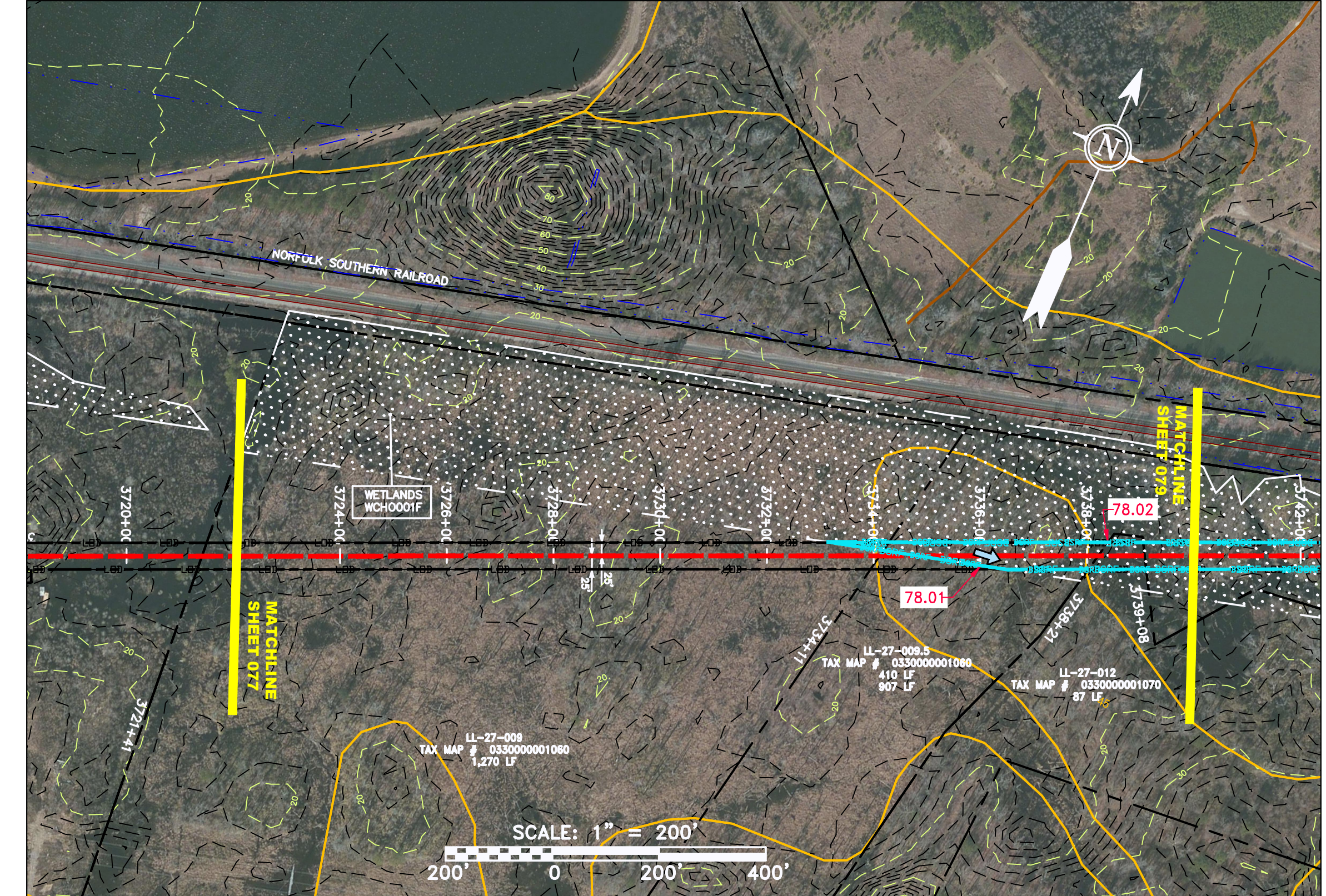
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TASK NO. 005 SUB TASK NO. 00  
GROUP ID D DRAWING NO. E077  
077 OF 84

GAI CAD FILE NO. \\MBE\_27\GAI-ERMA\2017-04-03 (E & S REV 12)\SPREAD 8\2665-7 PLAN SHEETS (75-77).DWG



PROPERTY OWNERSHIP

3721+41	LL-27-009 TAX MAP # 0330000001060 1,270 LF	3734+11	LL-27-009.5 TAX MAP # 0330000001060 410 LF	3738+21	LL-27-012 TAX MAP # 0330000001070 87 LF	3739+08	LL-27-009.5 TAX MAP # 0330000001060 410 LF	3741+80	LL-27-012 TAX MAP # 0330000001070 87 LF
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PIPE SPECIFICATION

3724+00	3728+00	3732+00	3736+00	3738+00
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STRING VIEW BAND

<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>PROPERTY LINE</li> <li>FENCE</li> <li>STREAM</li> <li>EXISTING GAS PIPELINE</li> <li>OVERHEAD UTILITY LINES</li> <li>ACCESS ROAD</li> <li>PROPOSED GAS PIPELINE</li> <li>STORM SEWER</li> <li>UNDERGROUND ELECTRIC</li> <li>WATER LINE</li> <li>SANITARY SEWER</li> <li>EDGE OF GRAVEL</li> <li>PROPOSED PERMANENT EASEMENT</li> <li>PROPOSED GAS PIPELINE (NO GROUND SURVEY)</li> </ul>	<ul style="list-style-type: none"> <li>EXTRA WORK SPACE</li> <li>AREA OF NO DISTURBANCE</li> <li>WETLAND</li> <li>TOPSOIL SEGREGATION AREA</li> <li>PROPOSED TEMPORARY R.O.W.</li> <li>UTILITY POLE</li> </ul>	<ul style="list-style-type: none"> <li>PERMANENT WATERBAR/SLOPE BREAKER</li> <li>TEMPORARY WATERBAR/SLOPE BREAKER</li> <li>TRENCH BREAKER/PLUG</li> <li>STREAM CROSSING</li> <li>USPWS STREAM CROSSING WITH ENHANCED CONTROLS</li> <li>SEEP</li> <li>SLOPE DIRECTION</li> <li>CONSTRUCTION ENTRANCE WITH DITCH</li> <li>CULVERT AS NEEDED</li> <li>CULVERT/WATERBAR</li> <li>L00</li> <li>BSE1</li> <li>BSE2</li> <li>COMPOST FILTER SOCK IDENTIFICATION</li> <li>SEDIMENT BARRIER IDENTIFICATION</li> <li>CULVERT IDENTIFICATION</li> <li>ORANGE SAFETY FENCE</li> <li>ROADSIDE DITCH</li> <li>SOIL TYPE</li> <li>TYPICAL BIC SLOPE CATEGORY</li> <li>SLOPE INCLINATION</li> </ul>	<p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, US SURVEY FOOT, CENTRAL MERIDIAN 81° W.</li> <li>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.</li> <li>IMAGERY TAKEN FROM GOOGLE EARTH.</li> <li>THE PROPERTY LINES SHOWN ARE BASED ON GIS &amp; 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.</li> <li>STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM.</li> <li>EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS.</li> <li>ALL STATIONING SHOWN IS SLOPE STATIONING.</li> <li>SILT FENCE AND FILTER SOCK SHALL BE INSTALLED PARALLEL TO CONTOUR TO EXTENT PRACTICABLE IN ACCORDANCE WITH STANDARD DETAIL.</li> <li>BEST IN CLASS (BIC) STEEP SLOPE CATEGORY INFORMATION CAN BE FOUND IN THE APPENDIX OF THE STORMWATER POLLUTION PREVENTION PLAN.</li> <li>EROSION CONTROL MATTING SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS STEEP SLOPES BAND.</li> <li>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.</li> <li>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.</li> <li>THE CONSTRUCTION RIGHT-OF-WAY (ROW) WILL BE RESTORED TO PRE-CONSTRUCTION CONTOURS IN ACCORDANCE WITH SECTION V.4.5 FEDERAL ENERGY REGULATORY COMMISSION (FERC) UPLAND EROSION CONTROL, VEGETATION, AND MAINTENANCE PLAN, SECTION V.4.5. 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.</li> </ol>
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NOTE: THE PE SEAL AND SIGNATURE APPLIES ONLY TO THE E&S CONTROL DESIGN COMPLETED BY ERM (SEE NOTE 12).

REVISIONS

NO.	DATE	BY	CHKD.	APPD.	DESCRIPTION

20" AP-3 PIPELINE  
CONSTRUCTION ALIGNMENT STA 3722+00 TO 3740+00  
CITY OF CHESAPEAKE, 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: MPC  
CHECKED: DLH  
APPROVED: NET

gai consultants

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

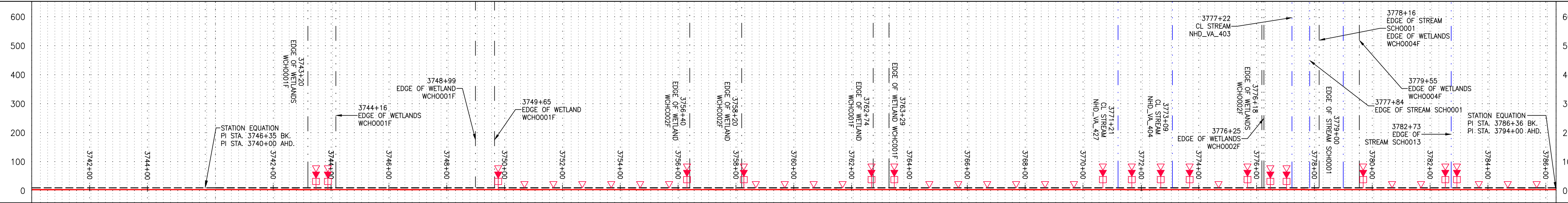
mbe monaloh basin engineers

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

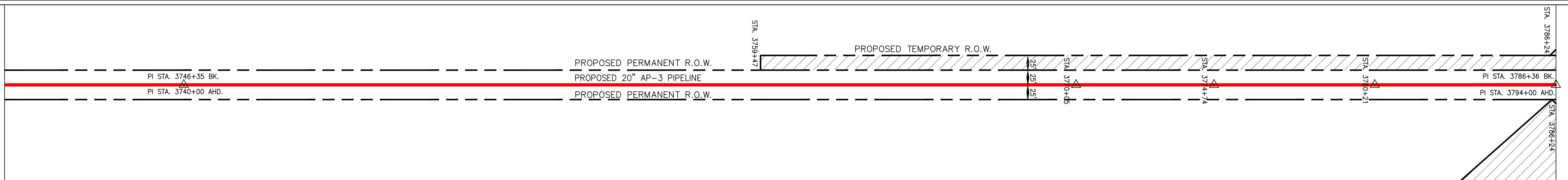
PROJECT NO./DASH NO.	140468
TASK NO.	005
SUB TASK NO.	00
GROUP ID	D
DRAWING NO.	E078
078	OF 84

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

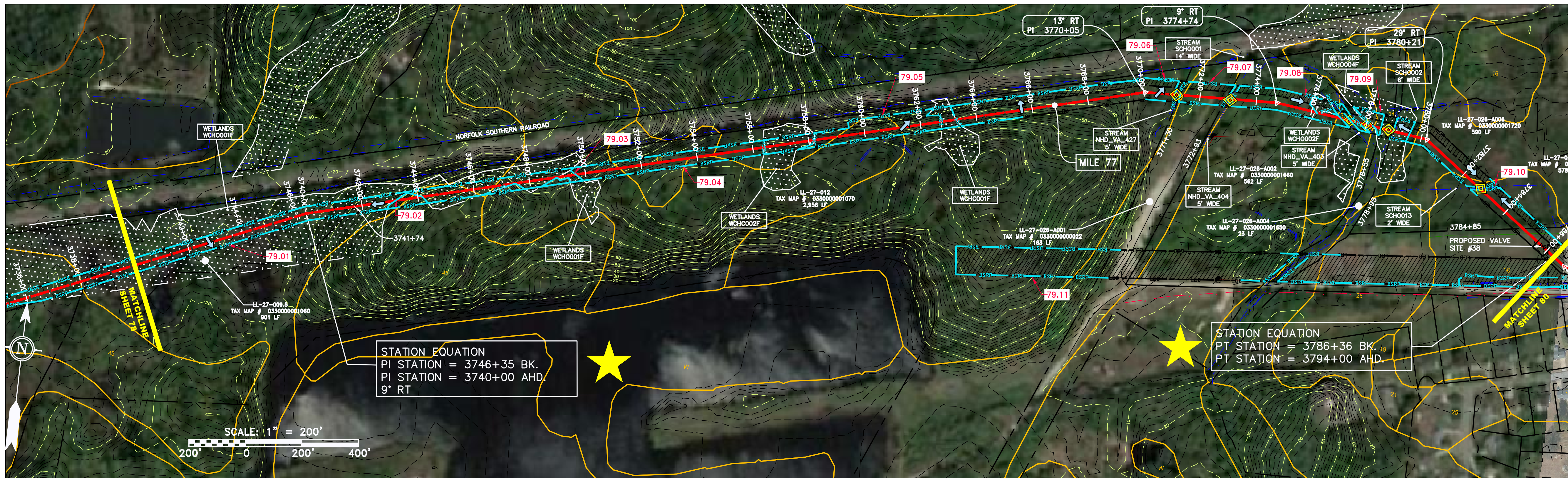
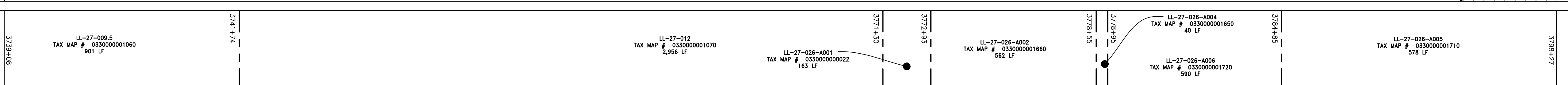
PROFILE VIEW  
HORZ: 1" = 200'  
VERT: 1" = 200'



STATIONING &  
CONSTRUCTION LIMITS

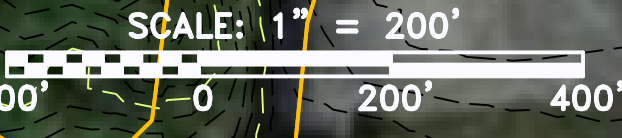


PROPERTY OWNERSHIP

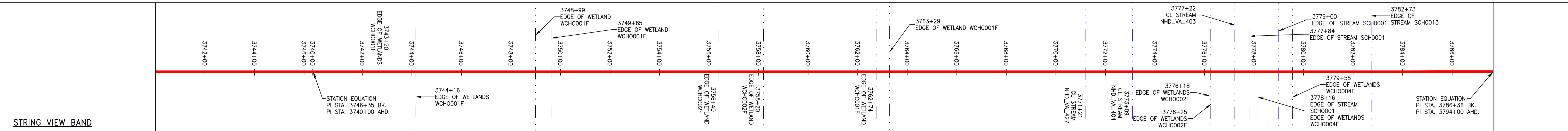


STATION EQUATION  
PT STATION = 3746+35 BK.  
PI STATION = 3740+00 AHD.  
9" RT

STATION EQUATION  
PT STATION = 3786+36 BK.  
PI STATION = 3794+00 AHD.



PIPE SPECIFICATION



LEGEND

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| <ul style="list-style-type: none"> <li>--- PROPERTY LINE</li> <li>-X-X- FENCE</li> <li>-G-G- EXISTING GAS PIPELINE</li> <li>-OH- OVERHEAD UTILITY LINES</li> <li>- - - ACCESS ROAD</li> <li>- - - PROPOSED GAS PIPELINE</li> </ul> | <ul style="list-style-type: none"> <li>-E- STORM SEWER</li> <li>-W- UNDERGROUND ELECTRIC</li> <li>- - - WATER LINE</li> <li>- - - SANITARY SEWER</li> <li>- - - EDGE OF GRAVEL</li> <li>- - - PROPOSED PERMANENT EASEMENT</li> <li>- - - PROPOSED GAS PIPELINE (NO GROUND SURVEY)</li> </ul> | <ul style="list-style-type: none"> <li>[Hatched Box] EXTRA WORK SPACE</li> <li>[Dotted Box] AREA OF NO DISTURBANCE</li> <li>[Green Box] WETLAND (COLOR SHOWN TO PROVIDE CLARITY ONLY)</li> <li>[Hatched Box] TOPSOIL SEGREGATION AREA</li> <li>[Hatched Box] PROPOSED TEMPORARY R.O.W.</li> <li>[Circle with X] UTILITY POLE</li> </ul> | <ul style="list-style-type: none"> <li>[Triangle with X] PERMANENT WATERBAR/SLOPE BREAKER</li> <li>[Triangle with X] TEMPORARY WATERBAR/SLOPE BREAKER</li> <li>[Triangle with X] TRENCH BREAKER/PLUG</li> <li>[Diamond] STREAM CROSSING</li> <li>[Diamond] USFWS STREAM CROSSING WITH ENHANCED CONTROLS</li> <li>[Circle] SEEP</li> <li>[Arrow] SLOPE DIRECTION</li> <li>[Arrow] CONSTRUCTION ENTRANCE WITH DITCH</li> <li>[Arrow] CULVERT AS NEEDED</li> <li>[Arrow] CULVERT/WATERBAR</li> </ul> | <ul style="list-style-type: none"> <li>[Line] LIMIT OF DISTURBANCE</li> <li>[Line] BELTED SILT RETENTION FENCE (BSRF)</li> <li>[Line] COMPOST FILTER SOCK</li> <li>[Line] SEDIMENT BARRIER IDENTIFICATION</li> <li>[Line] CULVERT IDENTIFICATION</li> <li>[Line] ORANGE SAFETY FENCE</li> <li>[Line] ROADSIDE DITCH</li> <li>[Line] SOIL TYPE</li> <li>[Line] TYPICAL BIC SLOPE CATEGORY</li> <li>[Line] SLOPE INCLINATION</li> </ul> | <p>NOTES:</p> <ol style="list-style-type: none"> <li>1. COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, U.S. SURVEY FOOT, CENTRAL MERIDIAN 81° 11' 07" WEST.</li> <li>2. THE PROPERTY LINES SHOWN ARE BASED ON GIS &amp; 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.</li> <li>3. IMAGERY TAKEN FROM GOOGLE EARTH.</li> <li>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.</li> <li>5. STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM.</li> <li>6. ALL STATIONING SHOWN IS SLOPE STATIONING.</li> <li>7. 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.</li> <li>8. EROSION CONTROL MATTING SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED ON THE BEST IN CLASS STEEP SLOPE BAND.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ol> |
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REVISIONS

NO.	DATE	BY	CHKD.	APPROV.	DESCRIPTION

Daniel R. Goldstein  
Lic. No. 047436  
Professional Engineer

ERM

CONSTRUCTION ALIGNMENT STA 3740+00 TO 3794+00  
CITY OF CHESAPEAKE, 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: NSD  
CHECKED: DLH  
APPROVED: NET

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

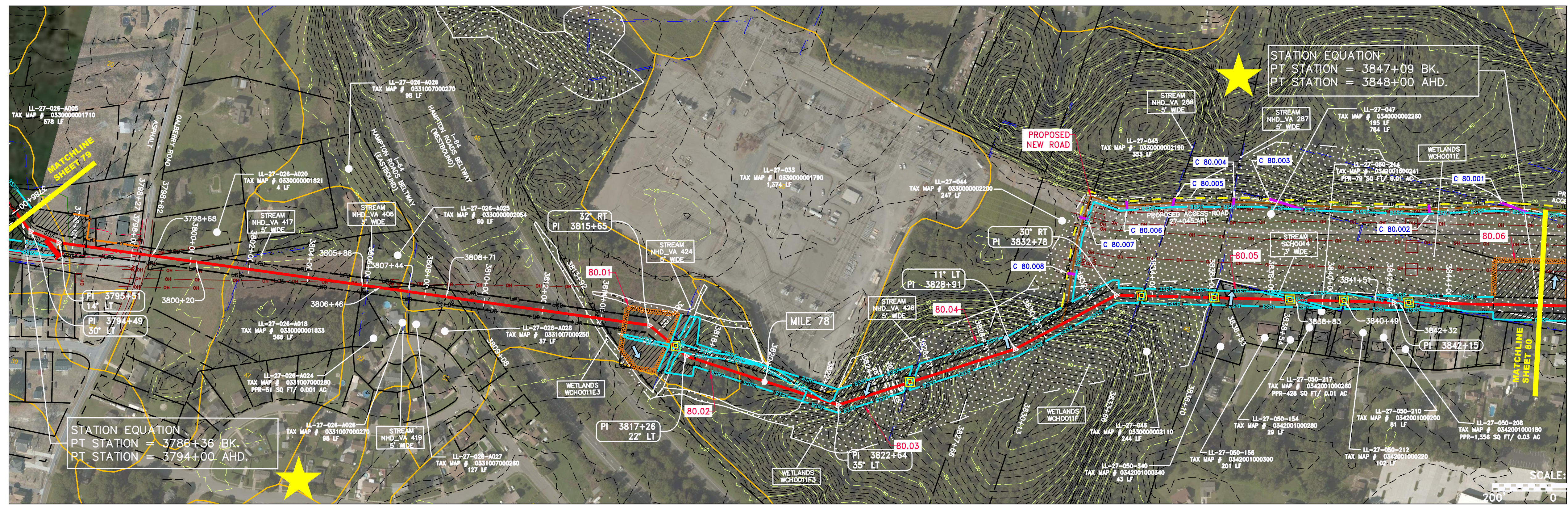
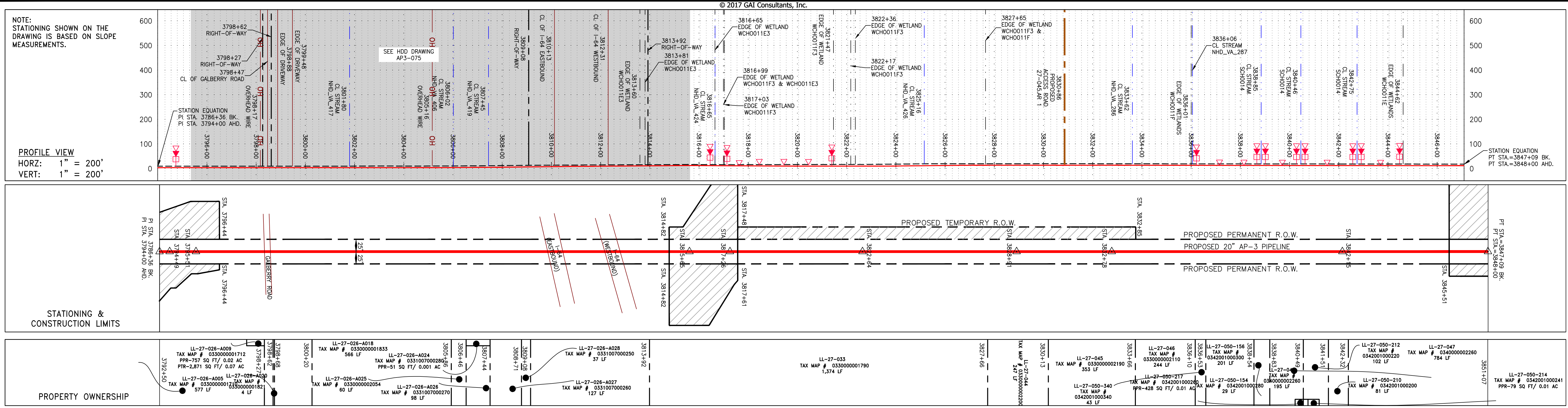
mbe monaloh basin engineers  
300 BUSINESS CENTER DRIVE  
PITTSBURGH, PA 15205  
412-788-2433

PROJECT NO./DASH NO.  
140468

TASK NO. SUB TASK NO.  
005 00

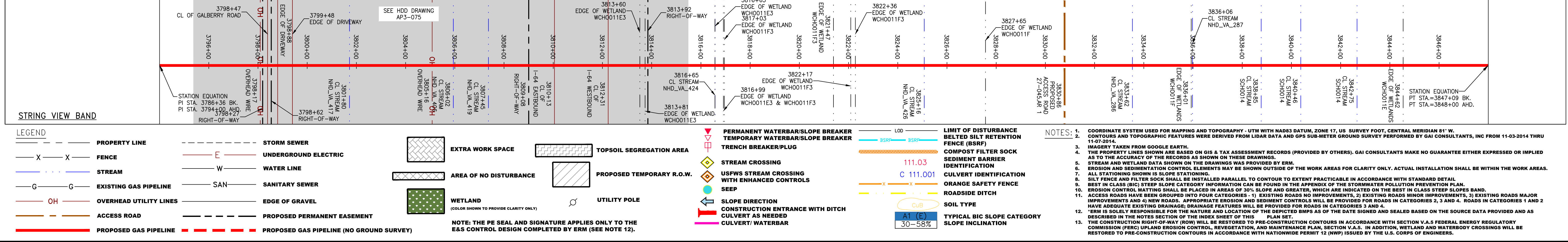
GROUP ID DRAWING NO.  
D E079

079 OF 84



PIPE SPECIFICATION

PROPERTY LINE	STORM SEWER	EXTRA WORK SPACE	TOPSOIL SEGREGATION AREA	PERMANENT WATERBAR/SLOPE BREAKER	LIMIT OF DISTURBANCE
FENCE	UNDERGROUND ELECTRIC	AREA OF NO DISTURBANCE	PROPOSED TEMPORARY R.O.W.	TEMPORARY WATERBAR/SLOPE BREAKER	BELTED SILT RETENTION FENCE (BSRF)
STREAM	WATER LINE	UTILITY POLE	UTILITY POLE	TRENCH BREAKER/PLUG	COMPOST FILTER SOCK
EXISTING GAS PIPELINE	SANITARY SEWER	WETLAND	WETLAND	STREAM CROSSING	SEDIMENT BARRIER IDENTIFICATION
OVERHEAD UTILITY LINES	EDGE OF GRAVEL	WETLAND (COLOR SHOWN TO PROVIDE CLARITY ONLY)	WETLAND	USFWS STREAM CROSSING WITH ENHANCED CONTROLS	CULVERT IDENTIFICATION
ACCESS ROAD	PROPOSED PERMANENT EASEMENT	WETLAND	WETLAND	CULVERT AS NEEDED	ORANGE SAFETY FENCE
PROPOSED GAS PIPELINE	PROPOSED GAS PIPELINE (NO GROUND SURVEY)	WETLAND	WETLAND	CULVERT/WATERBAR	ROADSIDE DITCH



REVISIONS

NO.	DATE	CHKD.	APPD.	DESCRIPTION

CONSTRUCTION ALIGNMENT STA 3794+00 TO 3848+00

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

SCALE: AS SHOWN  
DATE: 6/19/17  
DRAWN: CLM  
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

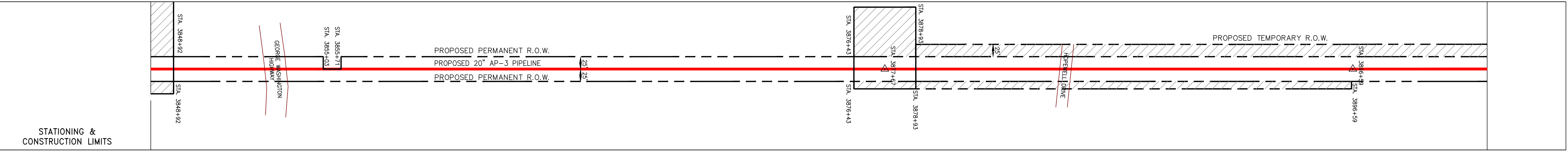
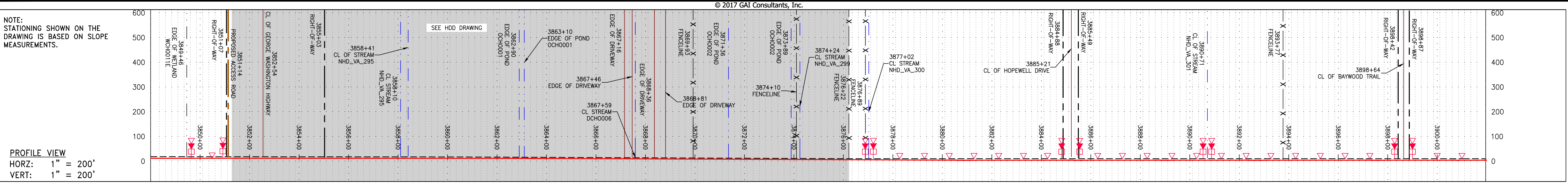
PROJECT NO./DASH NO.  
140468

TASK NO.	SUB TASK NO.
005	00

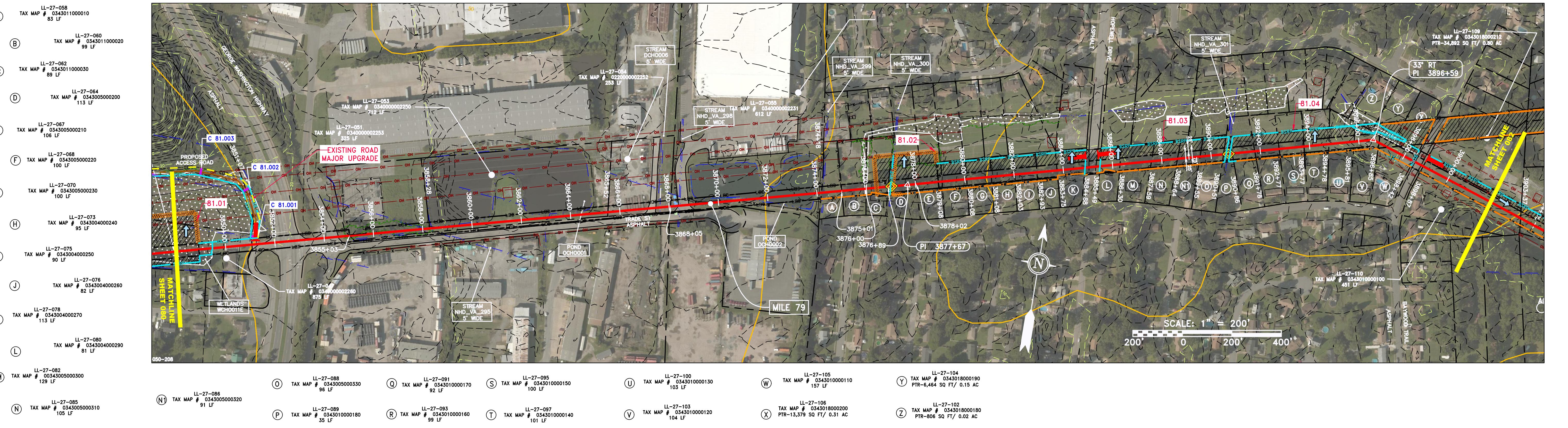
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80 OF 84

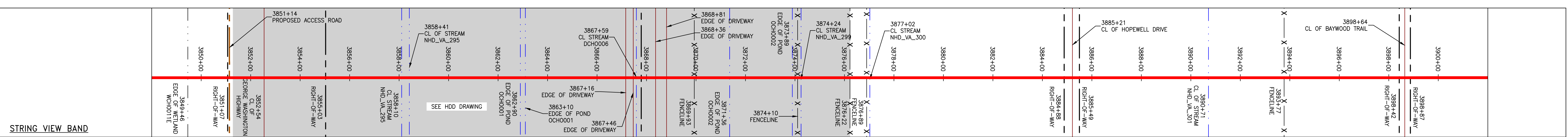
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PROPERTY OWNERSHIP	TAX MAP #	ACRES
A	LL-27-088	83 LF
B	LL-27-080	99 LF
C	LL-27-082	89 LF
D	LL-27-084	113 LF
E	LL-27-067	106 LF
F	LL-27-068	100 LF
G	LL-27-070	100 LF
H	LL-27-073	95 LF
I	LL-27-075	90 LF
J	LL-27-076	82 LF
K	LL-27-078	113 LF
L	LL-27-080	81 LF
M	LL-27-082	129 LF
N	LL-27-085	105 LF
O	LL-27-088	96 LF
P	LL-27-089	35 LF
Q	LL-27-091	92 LF
R	LL-27-093	99 LF
S	LL-27-095	100 LF
T	LL-27-097	101 LF
U	LL-27-100	103 LF
V	LL-27-103	104 LF
W	LL-27-105	157 LF
X	LL-27-106	PTIR-13,379 SQ FT / 0.31 AC
Y	LL-27-104	TAX MAP # 0343018000180 PTR-6,484 SQ FT / 0.15 AC
Z	LL-27-102	TAX MAP # 0343018000180 PTR-806 SQ FT / 0.02 AC
AA	LL-27-053	TAX MAP # 0340000002250 712 LF
AB	LL-27-051	TAX MAP # 0340000002253 525 LF
AC	LL-27-054	TAX MAP # 0220000002252 253 LF
AD	LL-27-055	TAX MAP # 0340000002231 612 LF
AE	LL-27-056	TAX MAP # 0340000002232 253 LF
AF	LL-27-057	TAX MAP # 0340000002280 875 LF
AG	LL-27-058	TAX MAP # 0343010000010 83 LF
AH	LL-27-060	TAX MAP # 0343010000020 99 LF
AI	LL-27-062	TAX MAP # 0343010000030 89 LF
AJ	LL-27-064	TAX MAP # 0343050000200 113 LF
AK	LL-27-067	TAX MAP # 0343005000210 106 LF
AL	LL-27-068	TAX MAP # 0343005000220 100 LF
AM	LL-27-070	TAX MAP # 0343005000230 100 LF
AN	LL-27-073	TAX MAP # 0343004000240 95 LF
AO	LL-27-075	TAX MAP # 0343004000250 90 LF
AP	LL-27-076	TAX MAP # 0343004000260 82 LF
AQ	LL-27-078	TAX MAP # 0343004000270 113 LF
AR	LL-27-080	TAX MAP # 0343004000280 81 LF
AS	LL-27-082	TAX MAP # 0343005000300 129 LF
AT	LL-27-085	TAX MAP # 0343005000310 105 LF
AV	LL-27-088	TAX MAP # 0343005000330 96 LF
AW	LL-27-089	TAX MAP # 0343010000180 35 LF
AX	LL-27-091	TAX MAP # 0343010000170 92 LF
AY	LL-27-093	TAX MAP # 0343010000160 99 LF
AZ	LL-27-095	TAX MAP # 0343010000150 100 LF
BA	LL-27-097	TAX MAP # 0343010000140 101 LF
BB	LL-27-100	TAX MAP # 0343010000130 103 LF
BC	LL-27-103	TAX MAP # 0343010000120 104 LF
BD	LL-27-105	TAX MAP # 0343010000110 157 LF
BE	LL-27-106	TAX MAP # 0343018000020 PTR-13,379 SQ FT / 0.31 AC
BF	LL-27-104	TAX MAP # 0343018000180 PTR-6,484 SQ FT / 0.15 AC
BG	LL-27-102	TAX MAP # 0343018000180 PTR-806 SQ FT / 0.02 AC



PIPE SPECIFICATION



<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>PROPERTY LINE</li> <li>FENCE</li> <li>EXISTING GAS PIPELINE</li> <li>OVERHEAD UTILITY LINES</li> <li>ACCESS ROAD</li> <li>PROPOSED GAS PIPELINE</li> <li>STORM SEWER</li> <li>UNDERGROUND ELECTRIC</li> <li>WATER LINE</li> <li>SANITARY SEWER</li> <li>EDGE OF GRAVEL</li> <li>PROPOSED PERMANENT EASEMENT</li> <li>PROPOSED GAS PIPELINE (NO GROUND SURVEY)</li> <li>EXTRA WORK SPACE</li> <li>AREA OF NO DISTURBANCE</li> <li>TOPSOIL SEGREGATION AREA</li> <li>PROPOSED TEMPORARY R.O.W.</li> <li>UTILITY POLE</li> <li>PERMANENT WATERBAR/SLOPE BREAKER</li> <li>TEMPORARY WATERBAR/SLOPE BREAKER</li> <li>TRENCH BREAKER/PLUG</li> <li>STREAM CROSSING</li> <li>CULVERT AS NEEDED</li> <li>USPWS STREAM CROSSING WITH ENHANCED CONTROLS</li> <li>SEEP</li> <li>SLOPE DIRECTION</li> <li>CONSTRUCTION ENTRANCE WITH DITCH</li> <li>CULVERT/WATERBAR</li> <li>LIMIT OF DISTURBANCE</li> <li>BELTED SILT RETENTION FENCE (BSRF)</li> <li>COMPOST FILTER SOCK</li> <li>SEDIMENT BARRIER IDENTIFICATION</li> <li>CULVERT IDENTIFICATION</li> <li>ORANGE SAFETY FENCE</li> <li>ROADSIDE DITCH</li> <li>SOIL TYPE</li> <li>TYPICAL BIG SLOPE CATEGORY SLOPE INCLINATION</li> </ul>	<p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, US SURVEY FOOT, CENTRAL MERIDIAN 81° W.</li> <li>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.</li> <li>IMAGERY TAKEN FROM GOOGLE EARTH.</li> <li>THE PROPERTY LINES SHOWN ARE BASED ON GIS &amp; 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.</li> <li>STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM.</li> <li>EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS.</li> <li>ALL STATIONING SHOWN IS SLOPE STATIONING.</li> <li>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.</li> <li>EROSION CONTROL MATTING SHALL BE PLACED IN AREAS OF 30% SLOPE AND GREATER, WHICH ARE INDICATED BY THE BEST IN CLASS STEEP SLOPE BAND.</li> <li>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.</li> <li>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.</li> <li>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. CORP OF ENGINEERS.</li> </ol>
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**REVISIONS**

NO.	DATE	CHKD.	APPD.	DESCRIPTION

**Daniel R. Goldstein**  
 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 3848+00 TO 3902+00**

SCALE: AS SHOWN  
 DATE: 6/19/17  
 DRAWN: NSD  
 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

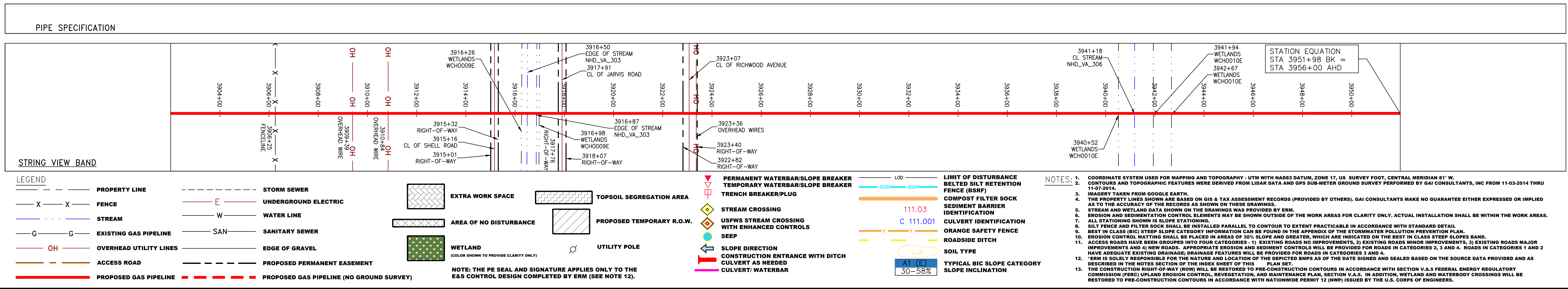
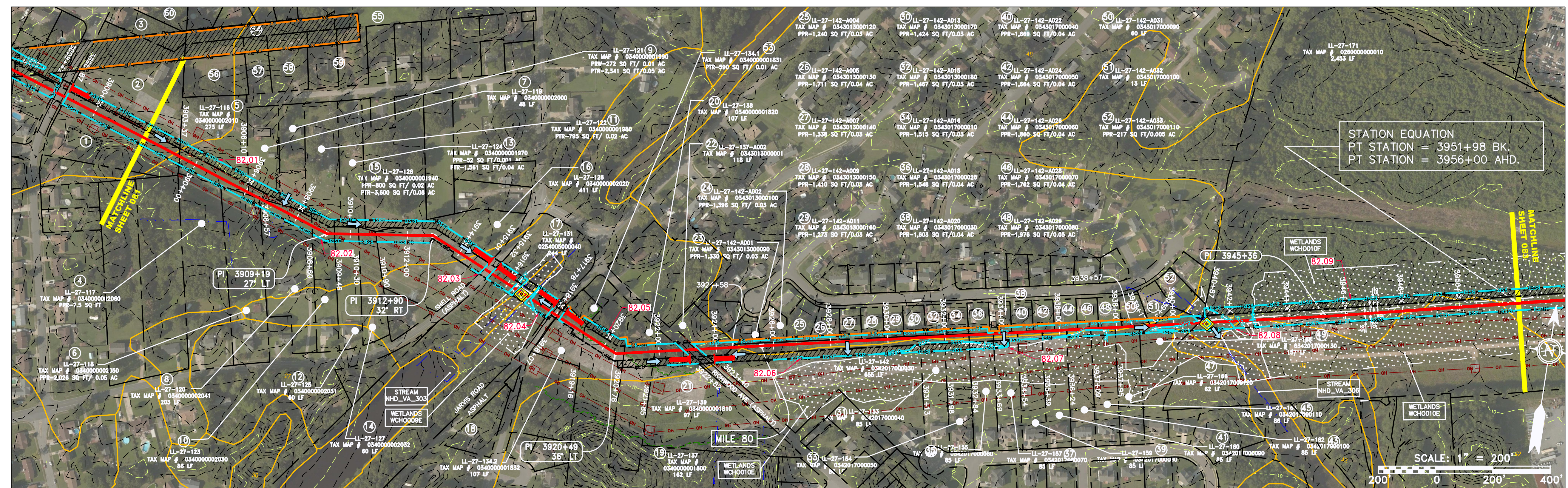
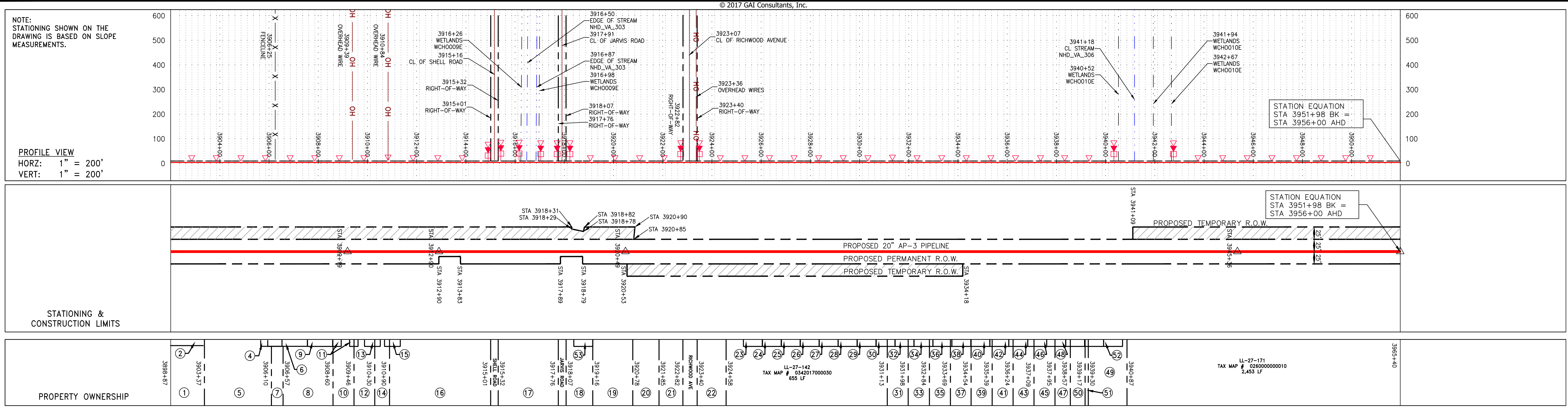
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 140468

TASK NO. SUB TASK NO.  
 005 00

GROUP ID DRAWING NO.  
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081 OF 84

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REVISIONS

NO.	DATE	CHKD.	APPROV.	DESCRIPTION

**DANIEL L. GOLDSTEIN**  
Lic. No. 047436

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

**20" AP-3 PIPELINE**  
CONSTRUCTION ALIGNMENT STA 3902+00 TO 3956+00  
CITY OF CHESAPEAKE, VIRGINIA

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

gai consultants

SOUTHPOINTE OFFICE  
6000 TOWN CENTER BLVD.  
CANONSBURG, PA 15317  
724-273-3545

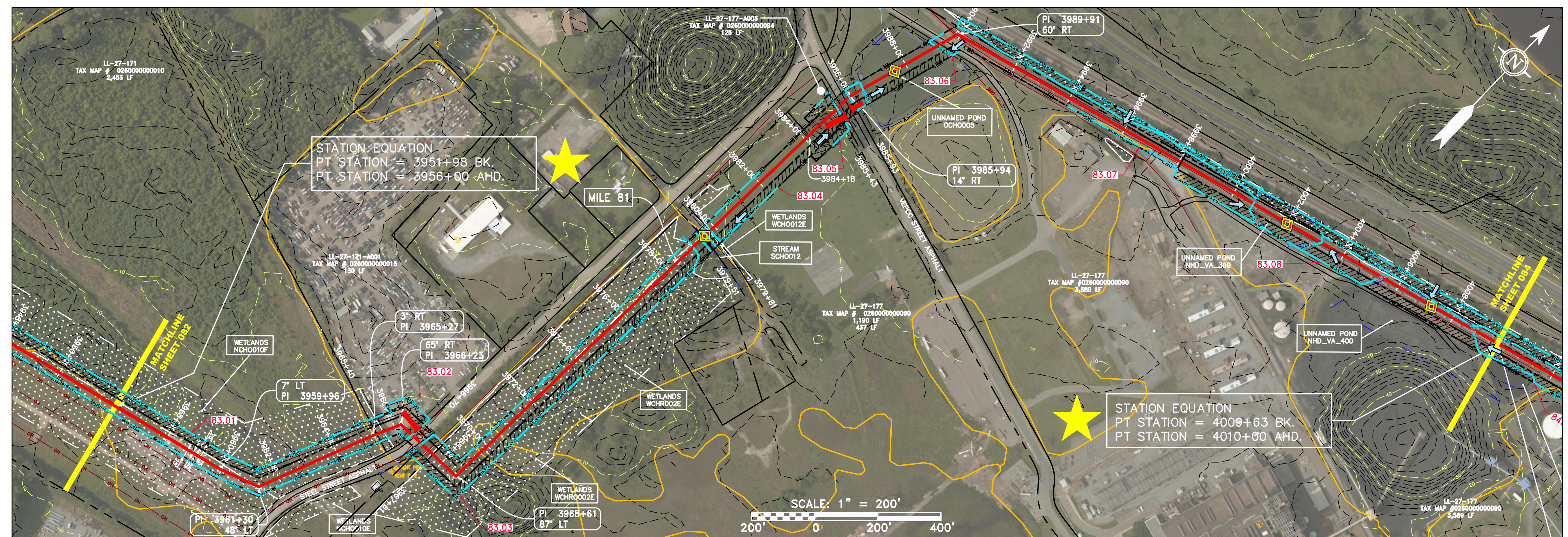
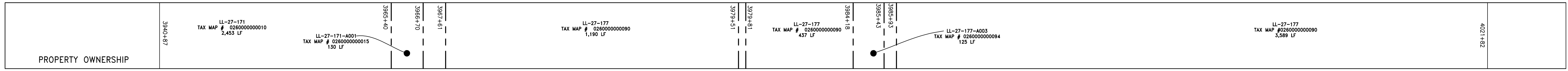
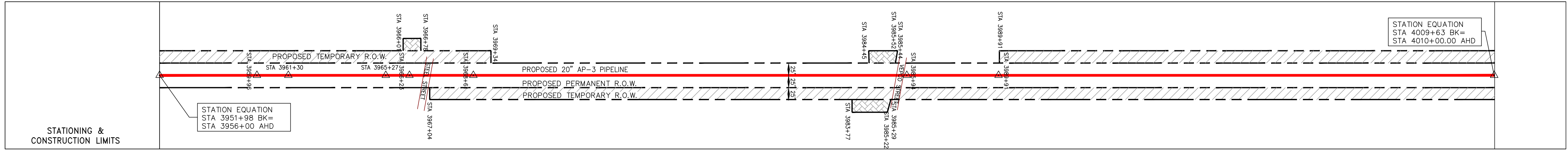
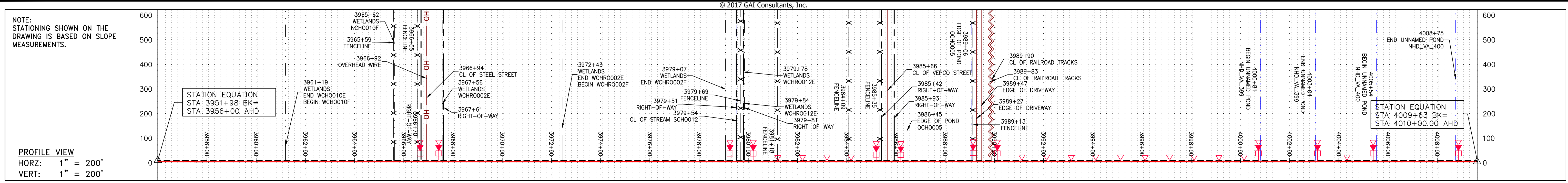
mbe  
monaloh basin  
engineers

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

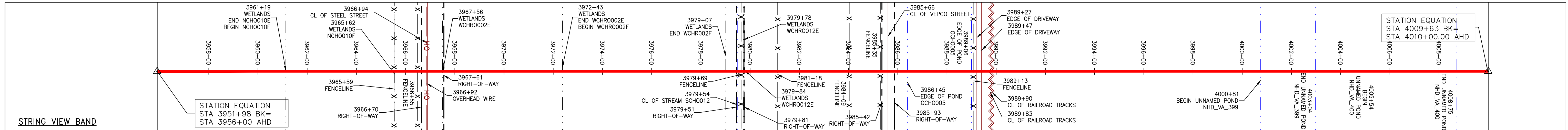
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TASK NO.	SUB TASK NO.	005 00
GROUP ID	DRAWING NO.	D E082
082	OF	84

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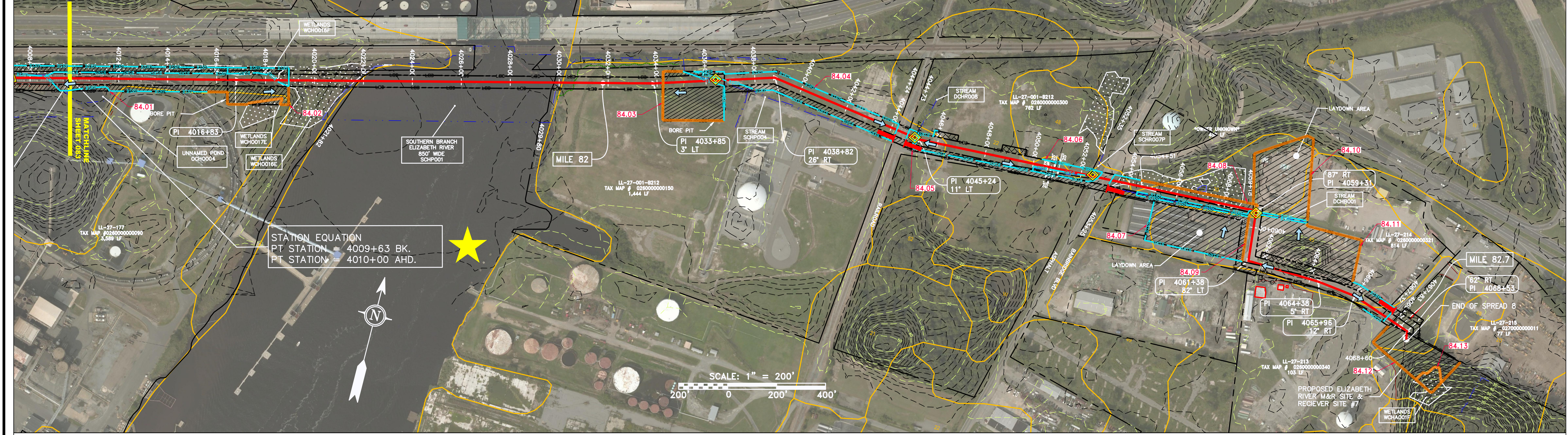
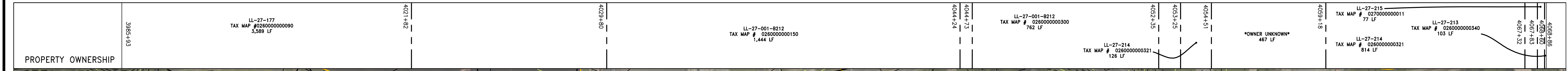
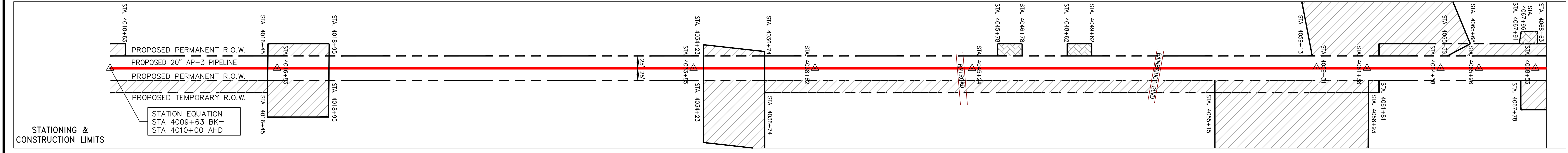
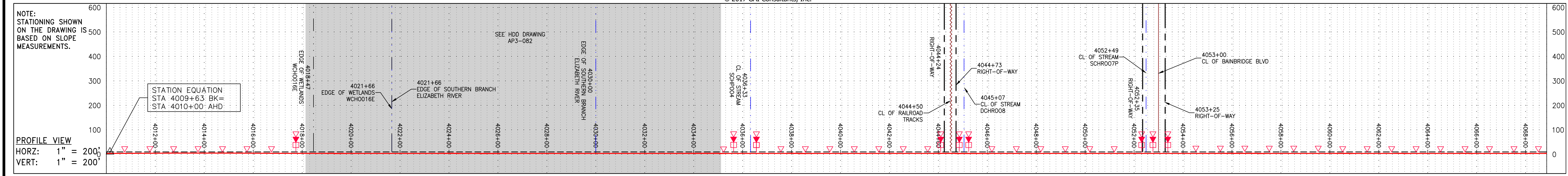
PIPE SPECIFICATION



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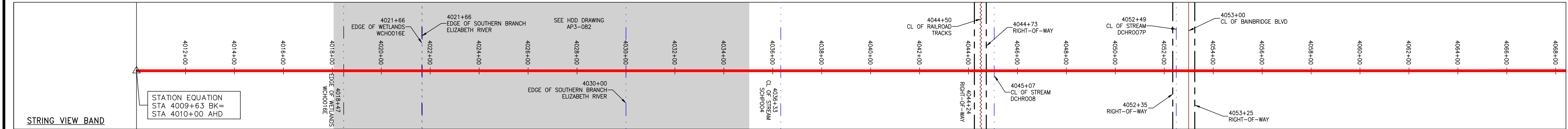
NOTE: THE PE SEAL AND SIGNATURE APPLIES ONLY TO THE E&S CONTROL DESIGN COMPLETED BY ERM (SEE NOTE 12).

<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>CHKD.</th> <th>APPROV.</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>		NO.	DATE	CHKD.	APPROV.	DESCRIPTION					
NO.	DATE	CHKD.	APPROV.	DESCRIPTION							
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<p>                 CONSTRUCTION ALIGNMENT STA 3956+00 TO 4010+00                  CITY OF CHESAPEAKE, VIRGINIA                  ATLANTIC COAST PIPELINE, LLC                  C/O DOMINION TRANSMISSION, INC.                  925 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330             </p>											
<p>                 SCALE: AS SHOWN                  DATE: 6/19/17                  DRAWN: JMS                  CHECKED: DLH                  APPROVED: NET             </p>											
<p> </p>											
<p>                 SOUTHPOINTE OFFICE                  6000 TOWN CENTER BLVD.                  PITTSBURGH, PA 15317                  724-273-3545             </p>											
<p> </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 E083             </p>											
<p>                 083 OF 84             </p>											



PIPE SPECIFICATION

20" AP-3 PIPELINE	20" AP-3 PIPELINE
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**LEGEND**

PROPERTY LINE	STORM SEWER	EXTRA WORK SPACE	PERMANENT WATERBAR/SLOPE BREAKER
FENCE	UNDERGROUND ELECTRIC	TOPSOIL SEGREGATION AREA	STREAM CROSSING
STREAM	WATER LINE	AREA OF NO DISTURBANCE	USFWS STREAM CROSSING WITH ENHANCED CONTROLS
EXISTING GAS PIPELINE	SANITARY SEWER	PROPOSED TEMPORARY R.O.W.	SLOPE
OVERHEAD UTILITY LINES	EDGE OF GRAVEL	WETLAND	CONSTRUCTION ENTRANCE WITH DITCH
ACCESS ROAD	PROPOSED PERMANENT EASEMENT	UTILITY POLE	CULVERT AS NEEDED
PROPOSED GAS PIPELINE	PROPOSED GAS PIPELINE (NO GROUND SURVEY)		CULVERT/WATERBAR

**NOTES:**

- COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, U.S. SURVEY FOOT, CENTRAL MERIDIAN 81° 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 DRAINAGE FEATURES WILL BE PROVIDED FOR ROADS IN CATEGORIES 3 AND 4.
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**REVISIONS**

NO.	DATE	CHKD.	APPROV.	DESCRIPTION

**PROFESSIONAL ENGINEER**  
  
 DANIEL L. GOLDSTEIN  
 Lic. No. 047436

**ERM**

20" AP-3 PIPELINE  
 CONSTRUCTION ALIGNMENT STA 4010+00 TO 4068+64.03  
 CITY OF CHESAPEAKE, 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 DRAWING NO. D E084  
 084 OF 84

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