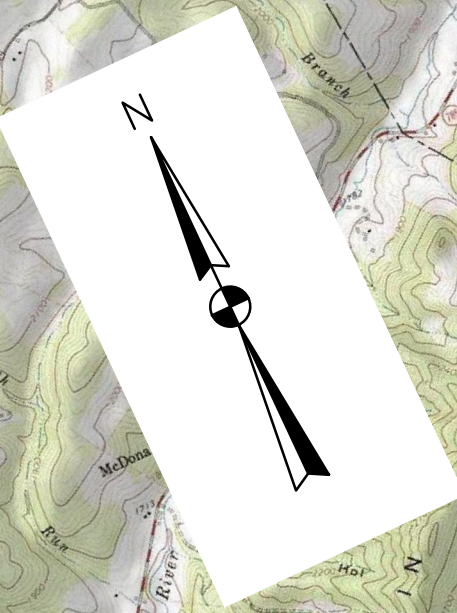
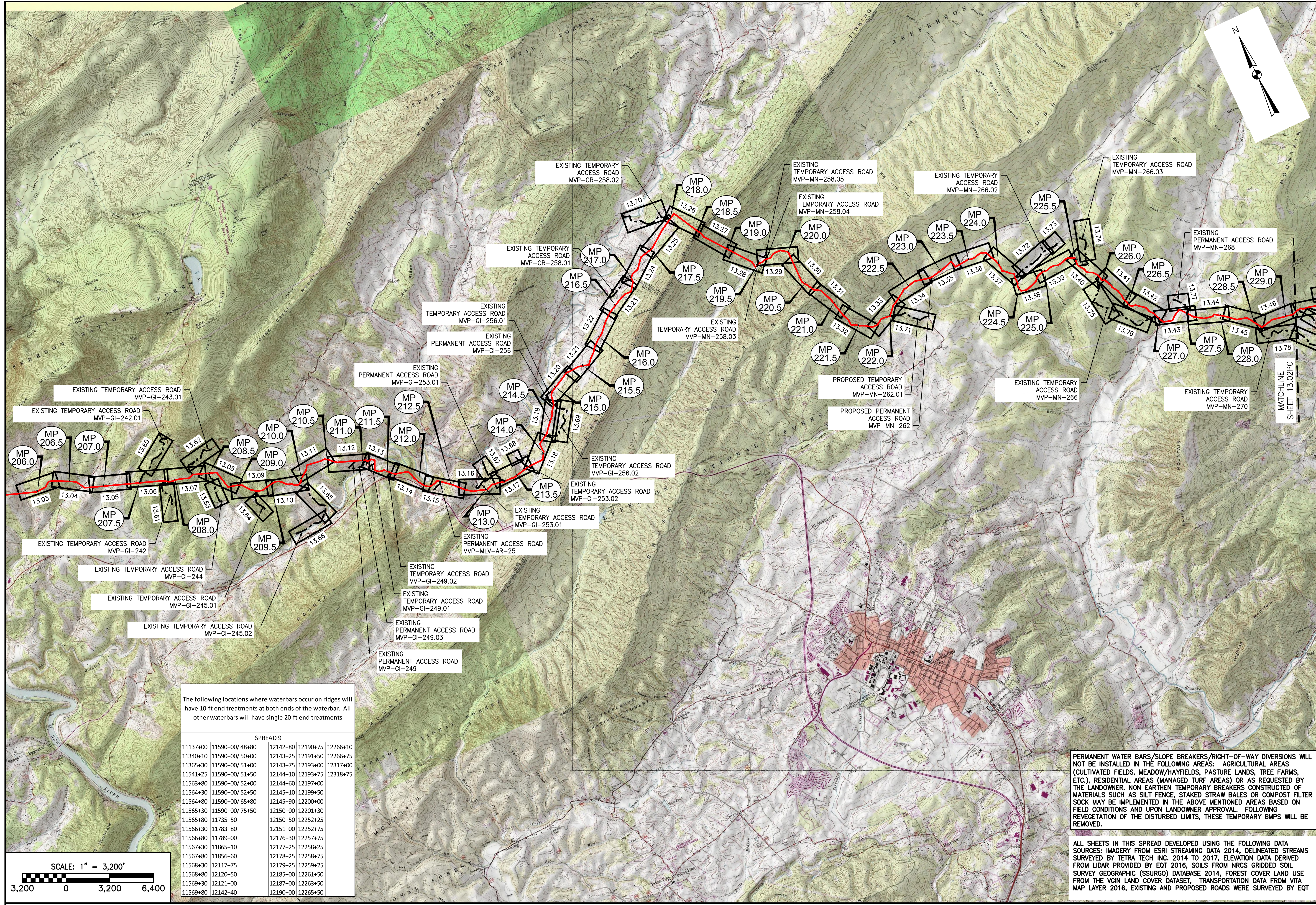


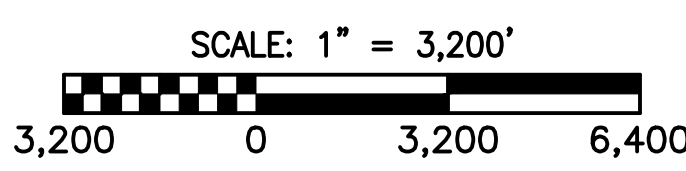
By virtue of this seal and signature, all supporting documents included in this package are accurate and support the design presented herein.





The following locations where waterbars occur on ridges will have 10-ft end treatments at both ends of the waterbar. All other waterbars will have single 20-ft end treatments

SPREAD 9				
11137+00	11590+00/48+80	12142+80	12190+75	12266+10
11340+10	11590+00/50+00	12143+25	12191+50	12266+75
11365+30	11590+00/51+00	12143+75	12193+00	12317+00
11541+25	11590+00/51+50	12144+10	12193+75	12318+75
11563+80	11590+00/52+00	12144+60	12197+00	
11564+30	11590+00/52+50	12145+10	12199+50	
11564+80	11590+00/55+80	12145+90	12200+30	
11565+30	11590+00/75+50	12150+00	12201+30	
11565+80	11735+50	12150+50	12252+25	
11566+30	11783+80	12151+00	12252+75	
11566+80	11789+00	12176+30	12257+75	
11567+30	11865+10	12177+25	12258+25	
11567+80	11856+60	12178+25	12258+75	
11568+30	12117+75	12179+25	12259+25	
11568+80	12120+50	12185+00	12261+50	
11569+30	12121+00	12187+00	12263+50	
11569+80	12142+40	12190+00	12265+50	



PERMANENT WATER BARS/SLOPE BREAKERS/RIGHT-OF-WAY DIVERSIONS WILL NOT BE INSTALLED IN THE FOLLOWING AREAS: AGRICULTURAL AREAS (CULTIVATED FIELDS, MEADOW/HAYFIELDS, PASTURE LANDS, TREE FARMS, ETC.), RESIDENTIAL AREAS (MANAGED TURF AREAS) OR AS REQUESTED BY THE LANDOWNER. NON EARTHEN TEMPORARY BREAKERS CONSTRUCTED OF MATERIALS SUCH AS SILT FENCE, STAKED STRAW BALES OR COMPOST FILTER SOCK MAY BE IMPLEMENTED IN THE ABOVE MENTIONED AREAS BASED ON FIELD CONDITIONS AND UPON LANDOWNER APPROVAL. FOLLOWING REVEGETATION OF THE DISTURBED LIMITS, THESE TEMPORARY BMPS WILL BE REMOVED.

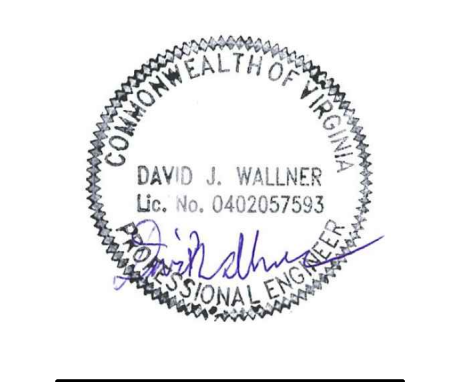
ALL SHEETS IN THIS SPREAD DEVELOPED USING THE FOLLOWING DATA SOURCES: IMAGERY FROM ESRI STREAMING DATA 2014, DELINEATED STREAMS SURVEYED BY TETRA TECH INC. 2014 TO 2017, ELEVATION DATA DERIVED FROM LIDAR PROVIDED BY EQT 2016, SOILS FROM NRCS GRIDDED SOIL SURVEY GEOGRAPHIC (SSURGO) DATABASE 2014, FOREST COVER LAND USE FROM THE VGIN LAND COVER DATASET, TRANSPORTATION DATA FROM VITA MAP LAYER 2016, EXISTING AND PROPOSED ROADS WERE SURVEYED BY EQT

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VADEO COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/9/18	KAL	JRE	ADDRESS VADEO COMMENTS

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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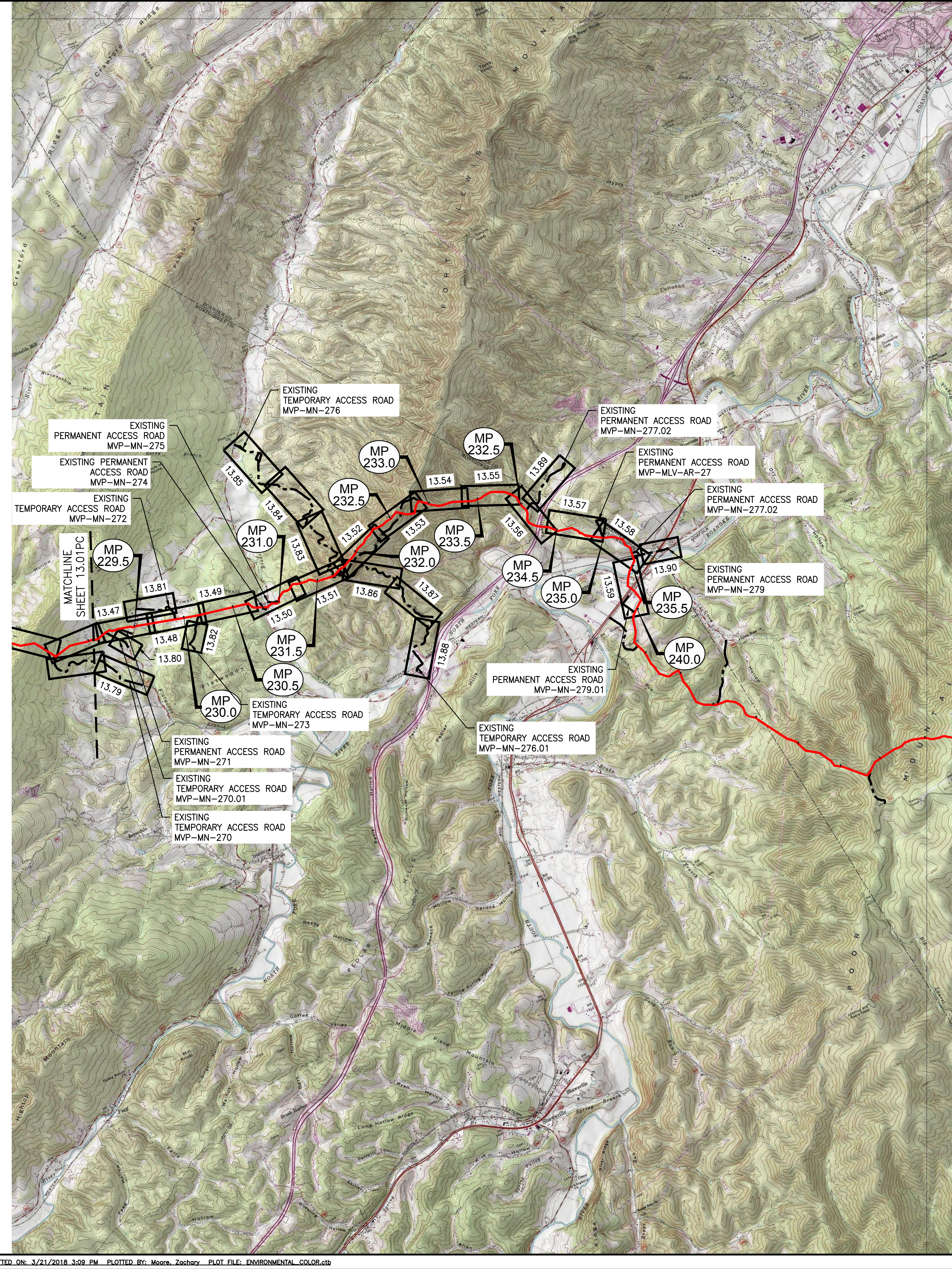
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.01PC OF 13.90PC	

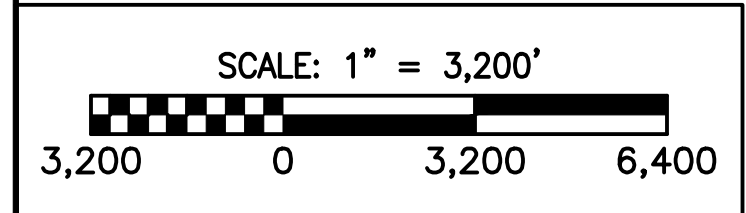
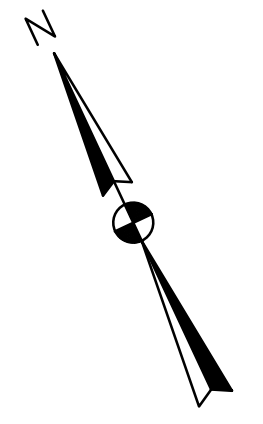
The following locations where waterbars occur on ridges will have 10-ft end treatments at both ends of the waterbar. All other waterbars will have single 20-ft end treatments

SPREAD 9				
11137+00	11590+00/48+80	12142+80	12190+75	12266+10
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11569+80	12142+40	12190+00	12265+50	



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ALL SHEETS IN THIS SPREAD DEVELOPED USING THE FOLLOWING DATA SOURCES: IMAGERY FROM ESRI STREAMING DATA 2014, DELINEATED STREAMS SURVEYED BY TETRA TECH INC. 2014 TO 2017, ELEVATION DATA DERIVED FROM LIDAR PROVIDED BY EQT 2016, SOILS FROM NRCS GRIDDED SOIL SURVEY GEOGRAPHIC (SSURGO) DATABASE 2014, FOREST COVER LAND USE FROM THE VGIN LAND COVER DATASET, TRANSPORTATION DATA FROM VITA MAP LAYER 2016, EXISTING AND PROPOSED ROADS WERE SURVEYED BY EQT

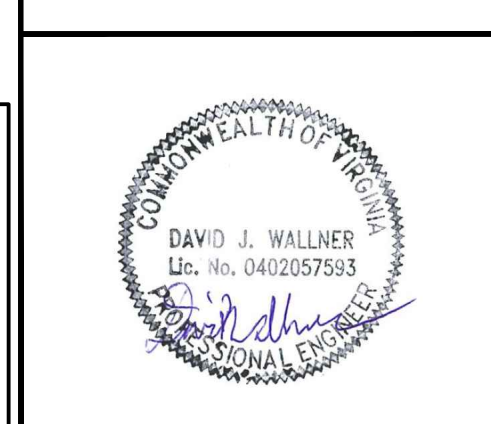


NO.	DATE	BY:	CHKD.:	APPD.:	DESCRIPTION
4	3/5/18	KAL	JRE	DJW	ADDRESS VADEO COMMENTS
3	2/16/18	KAL	JRE	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	JRE	DJW	ADDRESS VADEO COMMENTS
1	9/21/17	KAL	JRE	DJW	PLAN SUBMISSION

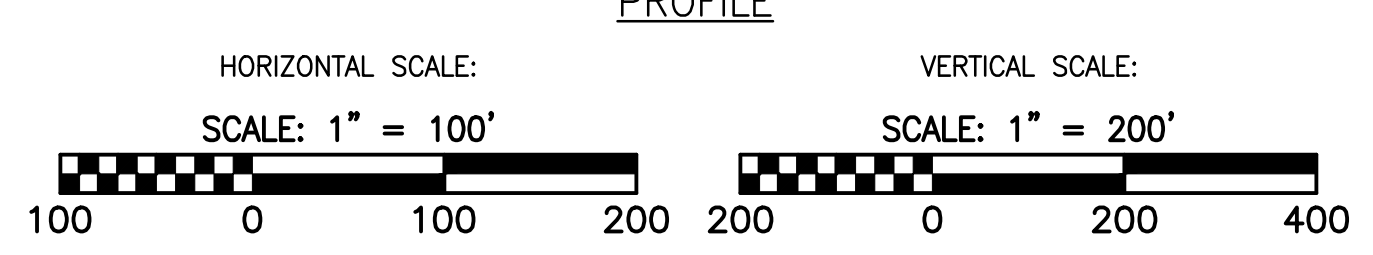
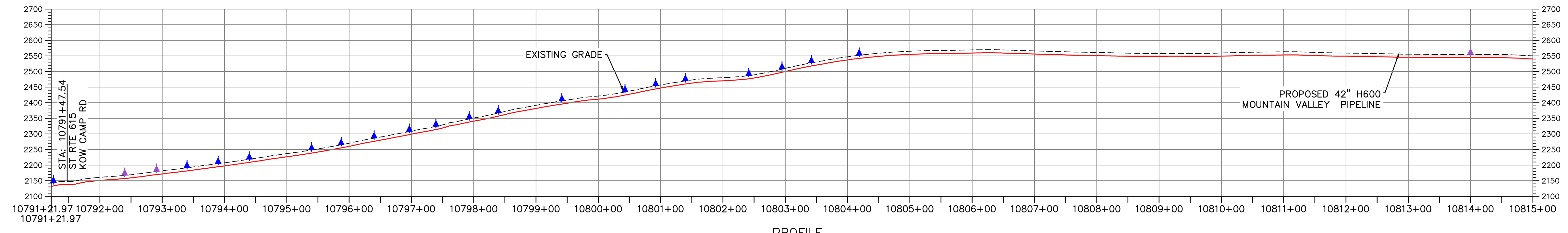
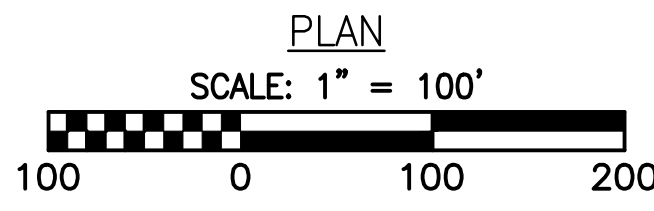
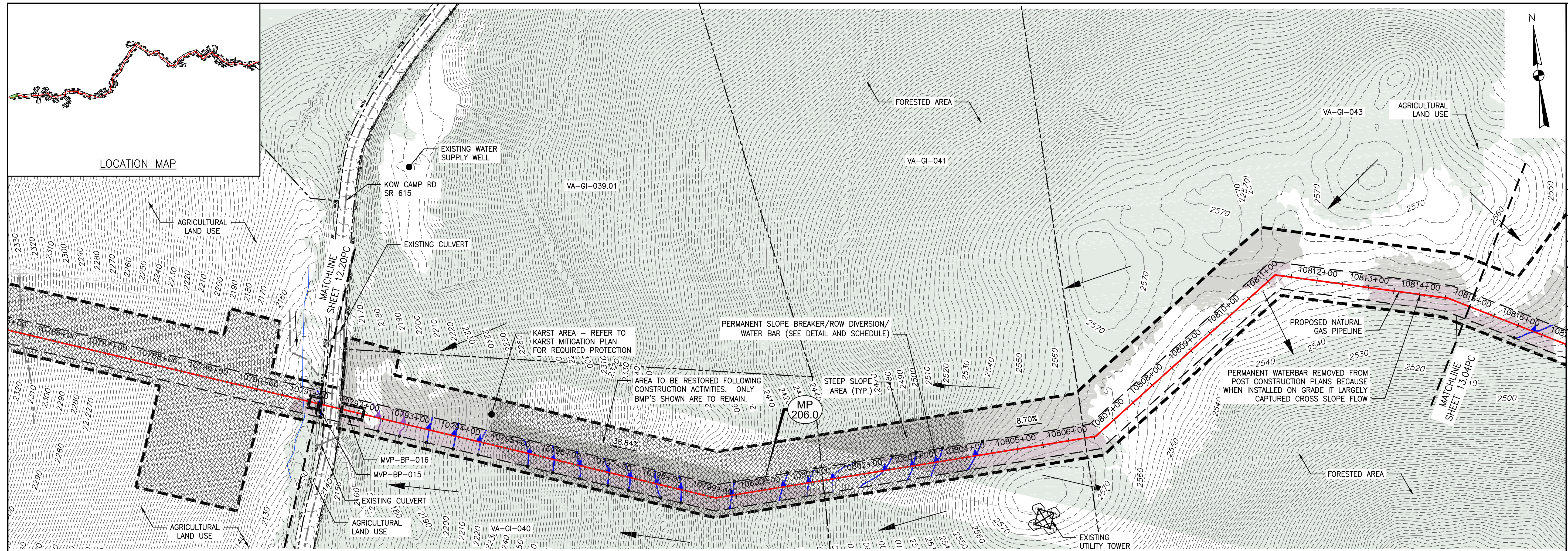
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.02PC OF 13.90PC	



LEGEND

— EXISTING CULVERT	++++ PROPOSED LEVEL SPREADER	→ STREAM FLOW DIRECTION	▨ STEEP SLOPE AREA
— STREAM	--- PROPOSED PERMANENT RIGHT OF WAY	▨ FEMA 100 YEAR FLOODPLAIN	▨ EXISTING FOREST
--- EXISTING PROPERTY LINE	--- PROPOSED ACCESS ROAD CENTERLINE	▲ PERMANENT WATER BAR 10' END TREATMENT	▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
--- EXISTING STATE LINE	--- PROPOSED PIPELINE	▲ PERMANENT WATER BAR 15' END TREATMENT	▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
--- EXISTING COUNTY LINE	→ SURFACE WATER FLOW DIRECTION	▲ PERMANENT WATER BAR 20' END TREATMENT	
--- EXISTING ROAD/TRAIL	▨ POND		
▨ USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨ WETLAND		
▨ APPALACHIAN NATIONAL SCENIC TRAIL	▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)		
▨ ACID FORMING MATERIAL	● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)		
▨ PROPOSED LEVEL SPREADER DIVERSION			
▨ GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)			
▨ PROPOSED LIMIT OF DISTURBANCE			

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

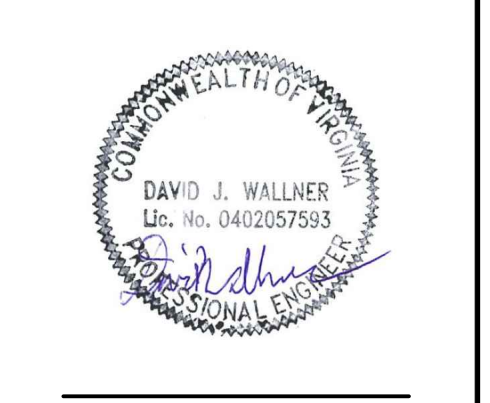
NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

REVISIONS:

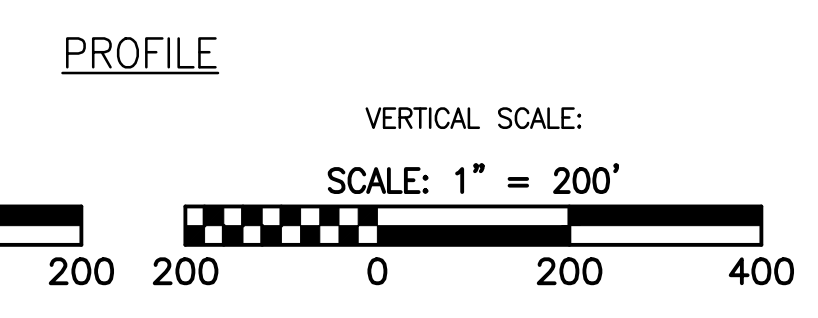
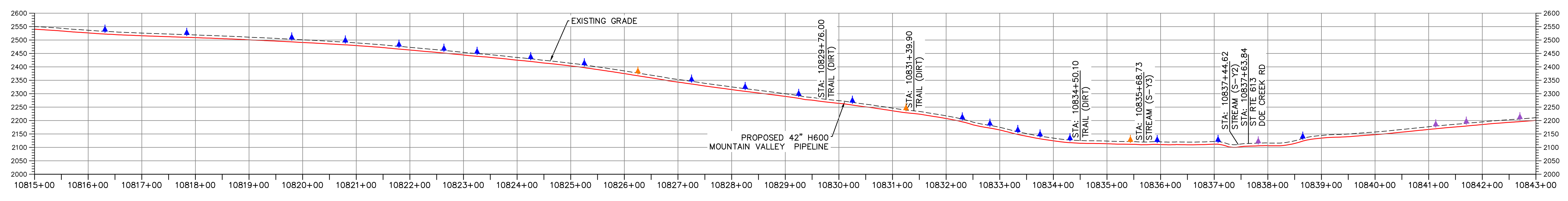
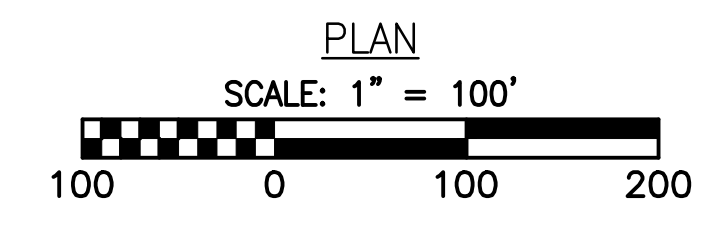
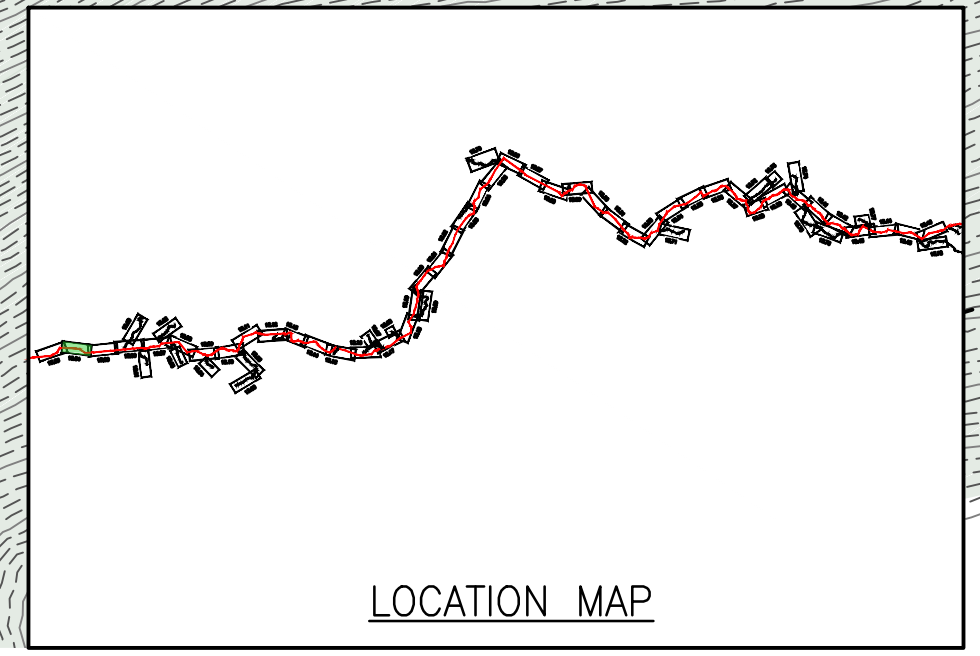
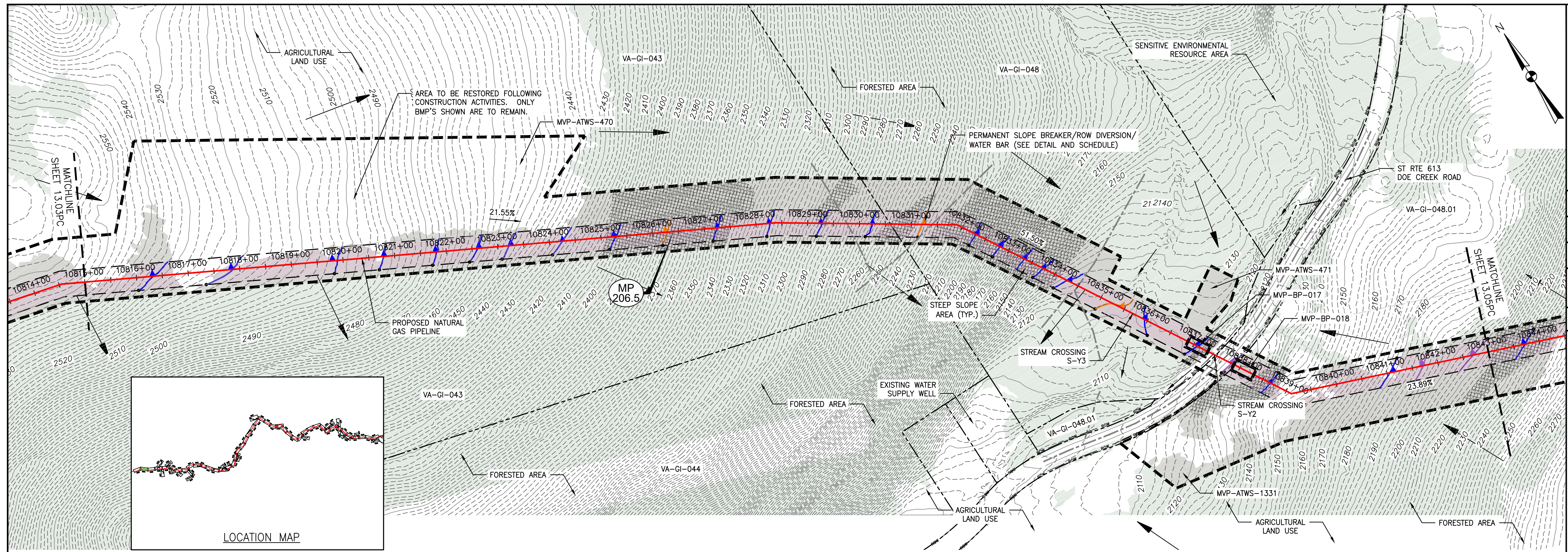
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.03PC OF 13.90PC



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	▲	PERMANENT WATER BAR 10' END TREATMENT
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 15' END TREATMENT
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 20' END TREATMENT
---	EXISTING COUNTY LINE	---	SURFACE WATER FLOW DIRECTION	■	STEEP SLOPE AREA
---	EXISTING ROAD/TRAIL	▲	POND	■	EXISTING FOREST
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	■	WETLAND	■	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
---	APPALACHIAN NATIONAL SCENIC TRAIL	▲	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)	■	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
---	ACID FORMING MATERIAL	▲	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)		
---	PROPOSED LEVEL SPREADER DIVERSION				
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)				
---	PROPOSED LIMIT OF DISTURBANCE				

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VAQED COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VAQED COMMENTS

REVISIONS:

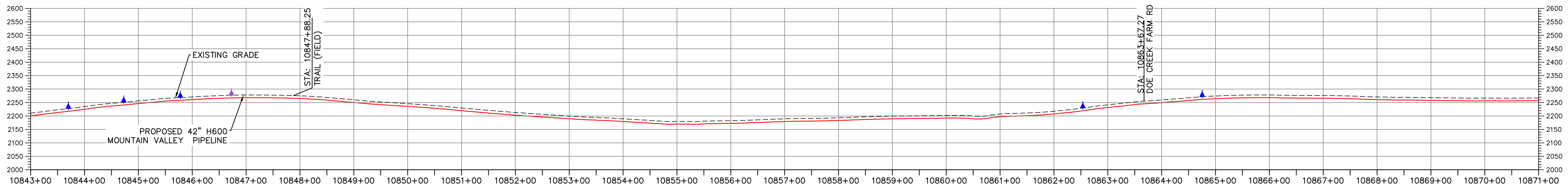
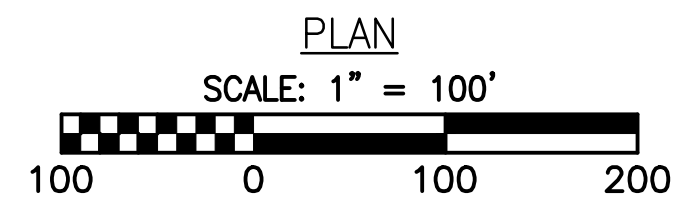
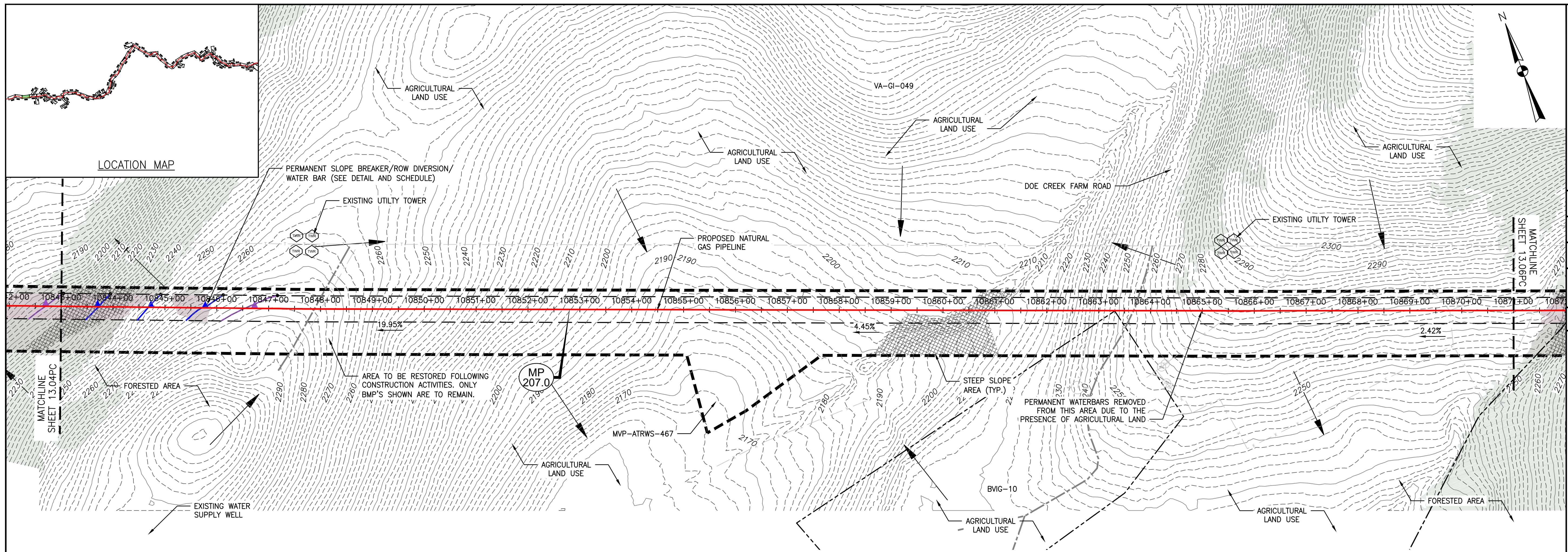
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
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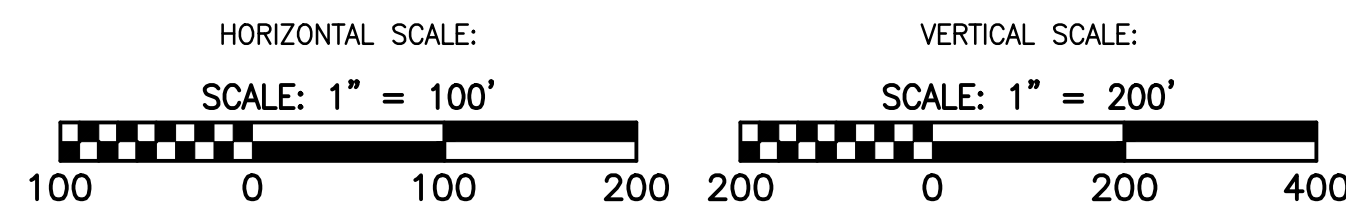
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

COMMONWEALTH OF PENNSYLVANIA
 DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY: KAL
 CHECKED BY: DJW
 APPROVED BY: DJW
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHEET NO. 13.04PC OF 13.90PC



PROFILE



LEGEND

- EXISTING CULVERT
- STREAM
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED LEVEL SPREADER
- PROPOSED PERMANENT RIGHT OF WAY
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

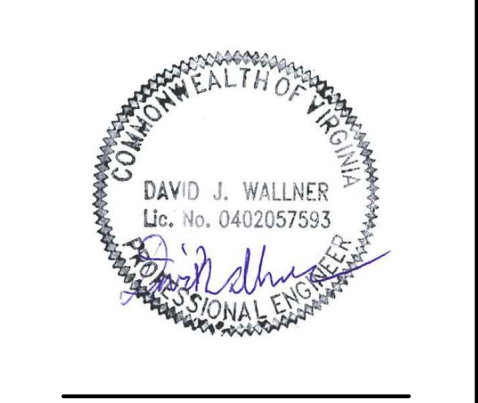
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

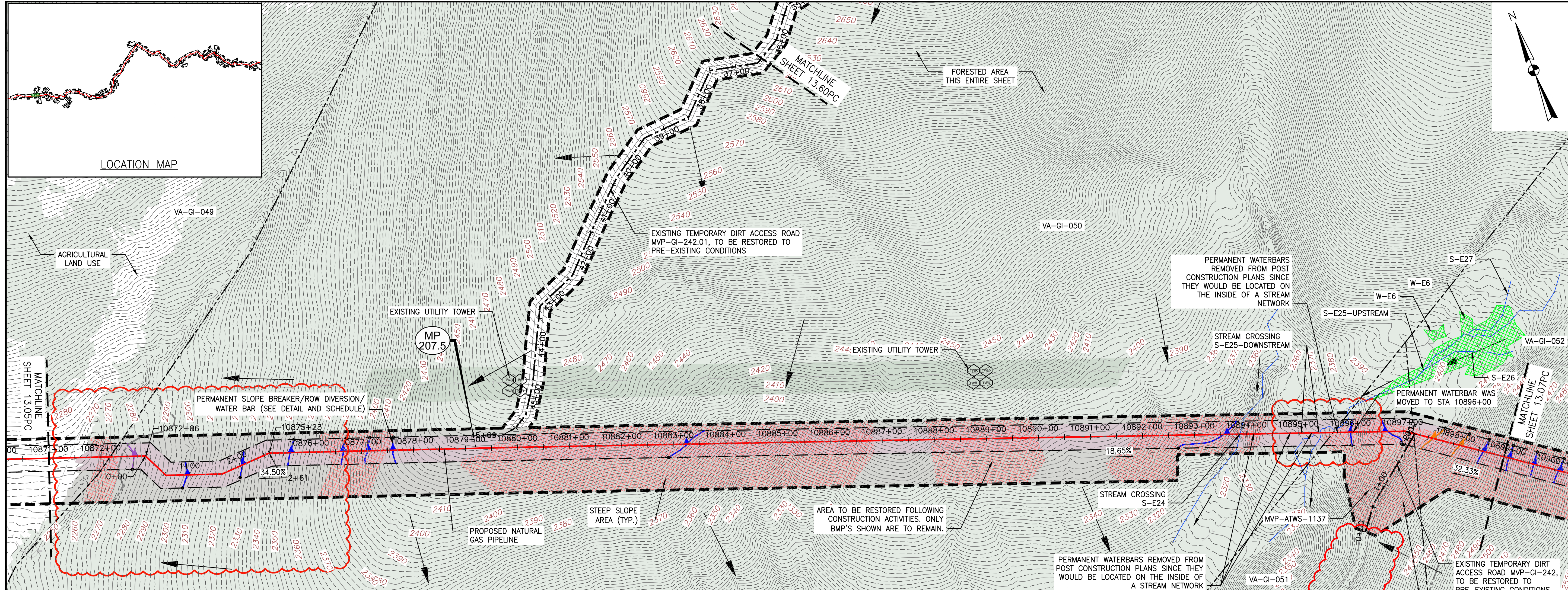
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
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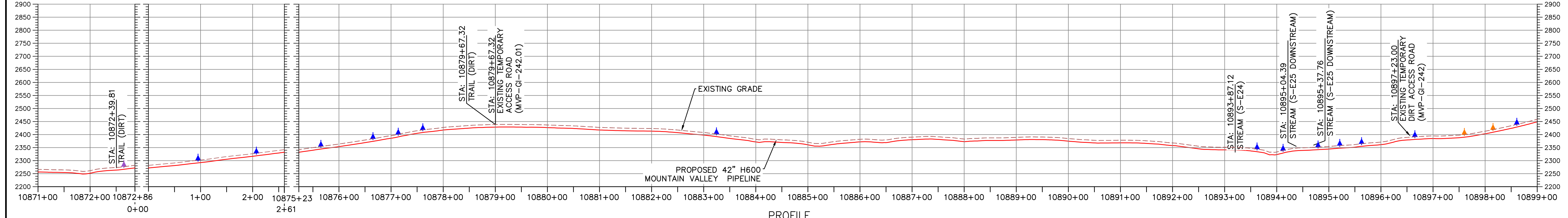
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.05PC OF 13.90PC



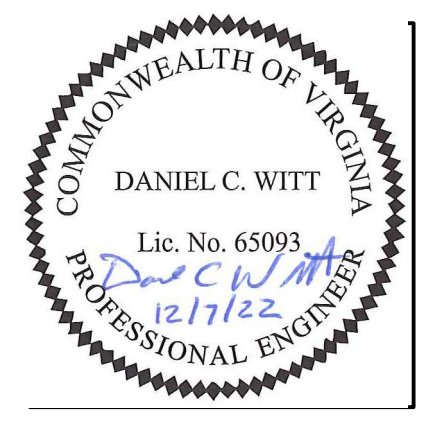
PLAN
SCALE: 1" = 100'



PROFILE

HORIZONTAL SCALE: SCALE: 1" = 100'
VERTICAL SCALE: SCALE: 1" = 200'

- LEGEND**
- EXISTING CULVERT
 - STREAM
 - EXISTING PROPERTY LINE
 - EXISTING STATE LINE
 - EXISTING COUNTY LINE
 - EXISTING ROAD/TRAIL
 - USDA FOREST SERVICE (NATIONAL FOREST) LANDS
 - APPALACHIAN NATIONAL SCenic TRAIL
 - ACID FORMING MATERIAL
 - PROPOSED LEVEL SPREADER DIVERSION
 - GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
 - PROPOSED LIMIT OF DISTURBANCE
 - PROPOSED LEVEL SPREADER
 - PROPOSED PERMANENT RIGHT OF WAY
 - PROPOSED ACCESS ROAD CENTERLINE
 - PROPOSED PIPELINE
 - SURFACE WATER FLOW DIRECTION
 - POND
 - WETLAND
 - PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
 - APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
 - STREAM FLOW DIRECTION
 - FEMA 100 YEAR FLOODPLAIN
 - PERMANENT WATER BAR 10' END TREATMENT
 - PERMANENT WATER BAR 15' END TREATMENT
 - PERMANENT WATER BAR 20' END TREATMENT
 - PROPOSED BAFFLE LOCATION (SEE DETAILS MVP-ES33.1/MVP-ES33.1A, AND MVP-ES33.2/MVP-ES33.2A)
 - STEEP SLOPE AREA
 - EXISTING FOREST
 - PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
 - TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION



THIS SEAL APPLIES ONLY TO REVISIONS DATED 12-07-22

- NOTES:**
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	12/07/22	JJZ	DCW	MODIFICATION FOR CL. SHFT NEAR MP207.5 AND ADD BORE PITS AT S-E25
2	02/02/22	JJZ	JRE	FIELD MODIFICATION
3	01/06/22	JJZ	TD	ATMS TO FOLLOW EXISTING ACCESS ROAD FIELD MODIFICATION
4	12/31/19	BH	JRE	ADD MP 208.3 (MVP-25 SITE AND ACCESS ROAD MP-MV-AE 25.02)
5	3/15/18	KAL	DJW	ADDRESS VADOC COMMENTS
6	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY

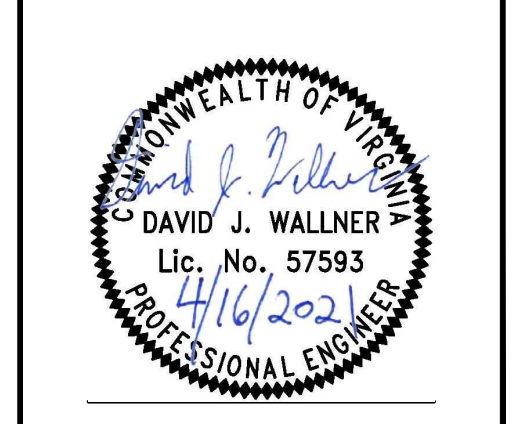
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

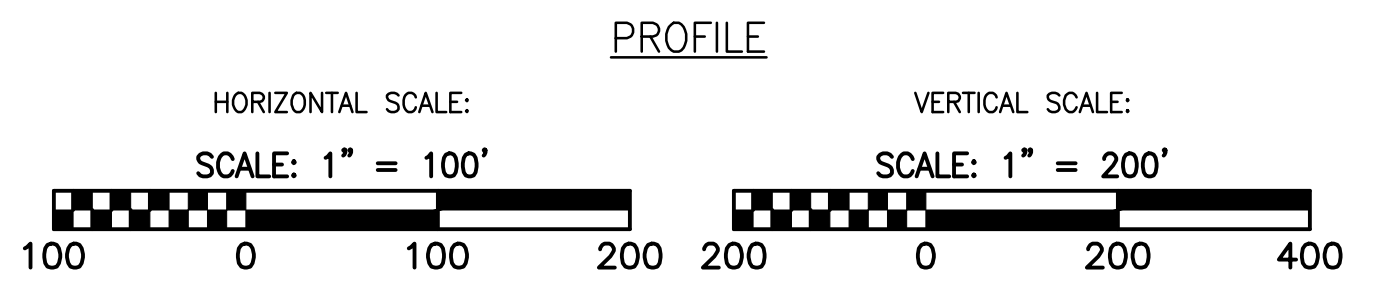
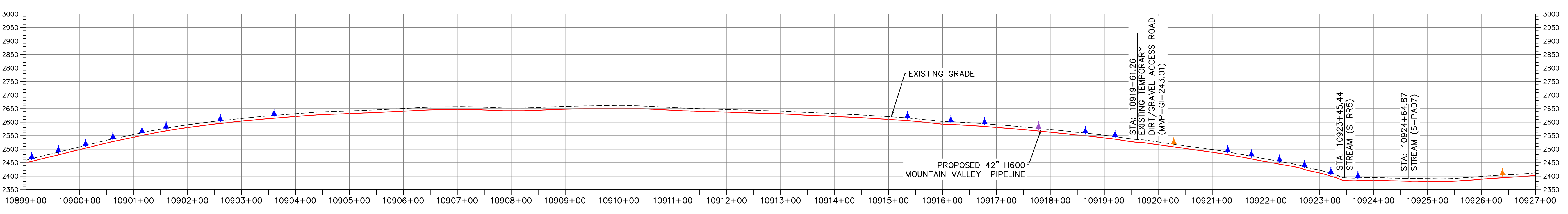
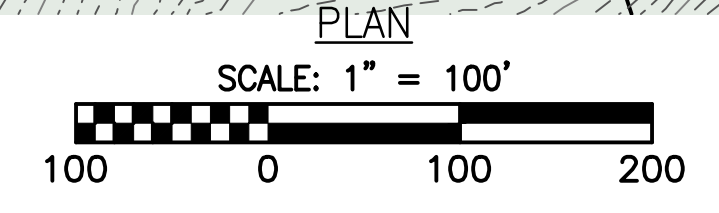
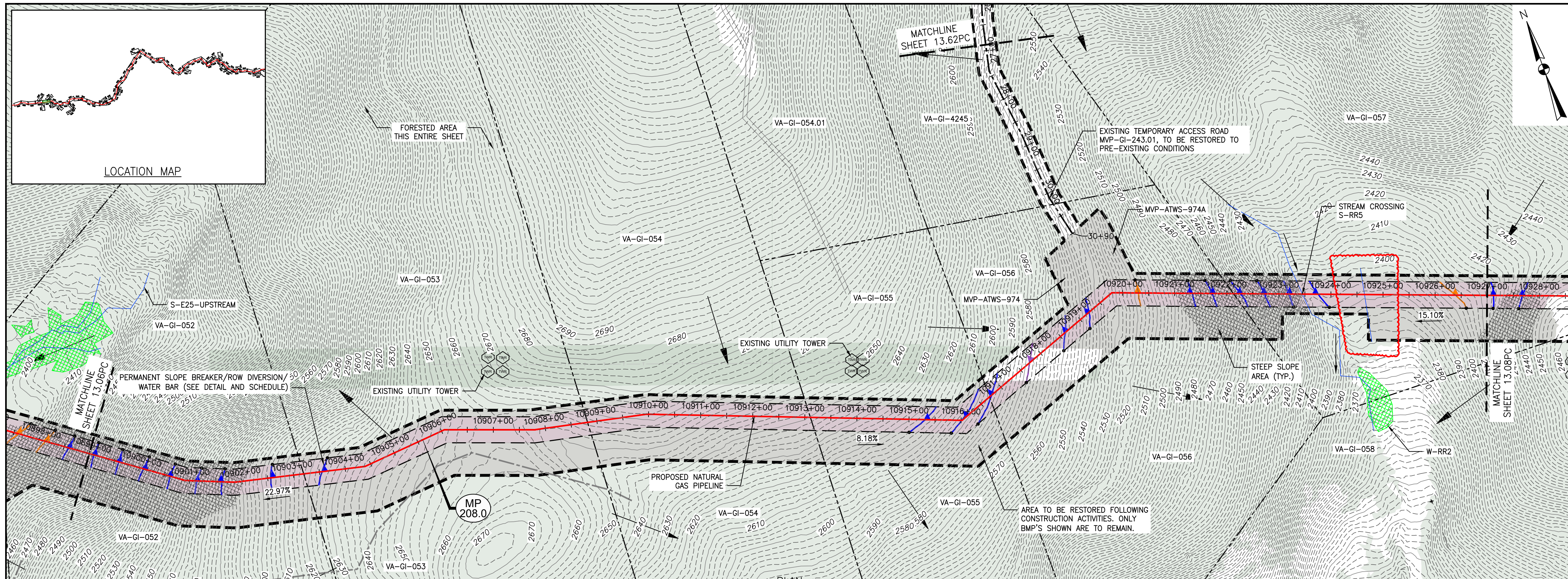
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661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	JJZ
CHECKED BY:	DCW
APPROVED BY:	TD
DATE:	12/07/2022
SCALE:	AS SHOWN
SHT. NO. 13.06PC OF 13.90PC	



- LEGEND**
- EXISTING CULVERT
 - STREAM
 - - - EXISTING PROPERTY LINE
 - - - EXISTING STATE LINE
 - - - EXISTING COUNTY LINE
 - - - EXISTING ROAD/TRAIL
 - USDA FOREST SERVICE (NATIONAL FOREST) LANDS
 - APPALACHIAN NATIONAL SCENIC TRAIL
 - ACID FORMING MATERIAL
 - PROPOSED LEVEL SPREADER DIVERSION
 - GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
 - PROPOSED LIMIT OF DISTURBANCE
 - ++++ PROPOSED LEVEL SPREADER
 - - - PROPOSED PERMANENT RIGHT OF WAY
 - - - PROPOSED ACCESS ROAD CENTERLINE
 - PROPOSED PIPELINE
 - SURFACE WATER FLOW DIRECTION
 - ▣ POND
 - ▣ WETLAND
 - PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
 - APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
 - STREAM FLOW DIRECTION
 - FEMA 100 YEAR FLOODPLAIN
 - PERMANENT WATER BAR 10' END TREATMENT
 - PERMANENT WATER BAR 15' END TREATMENT
 - PERMANENT WATER BAR 20' END TREATMENT
 - PROPOSED BAFFLE LOCATION (SEE DETAILS MVP-ES33.1/MVP-ES33.1A, AND MVP-ES33.2/MVP-ES33.2A)
 - ▣ STEEP SLOPE AREA
 - ▣ EXISTING FOREST
 - ▣ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
 - ▣ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

- NOTES:**
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
 - IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VADEQ COMMENTS
3	2/16/18	KAL	DJW	REVISION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADEQ COMMENTS
5	7/7/20	JRE	DJW	CHANGES TO AQUATIC RESOURCES DELINEATIONS

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

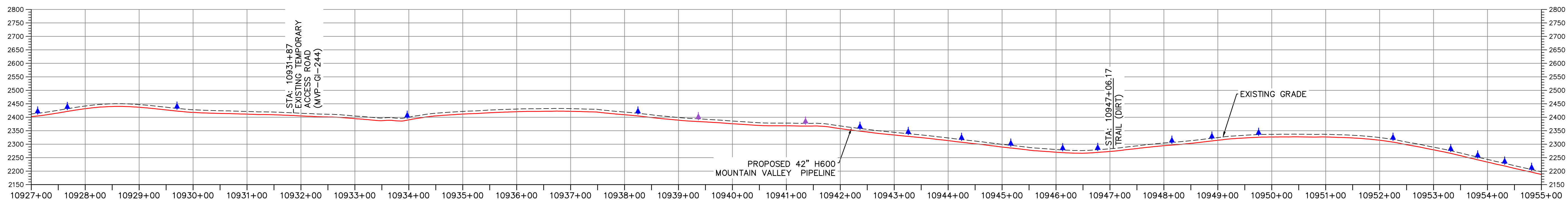
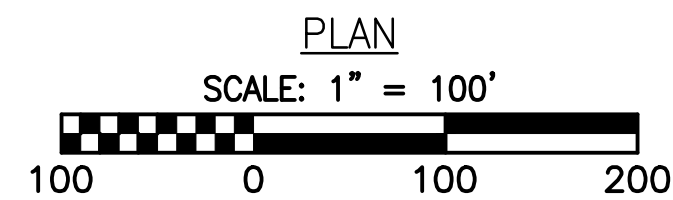
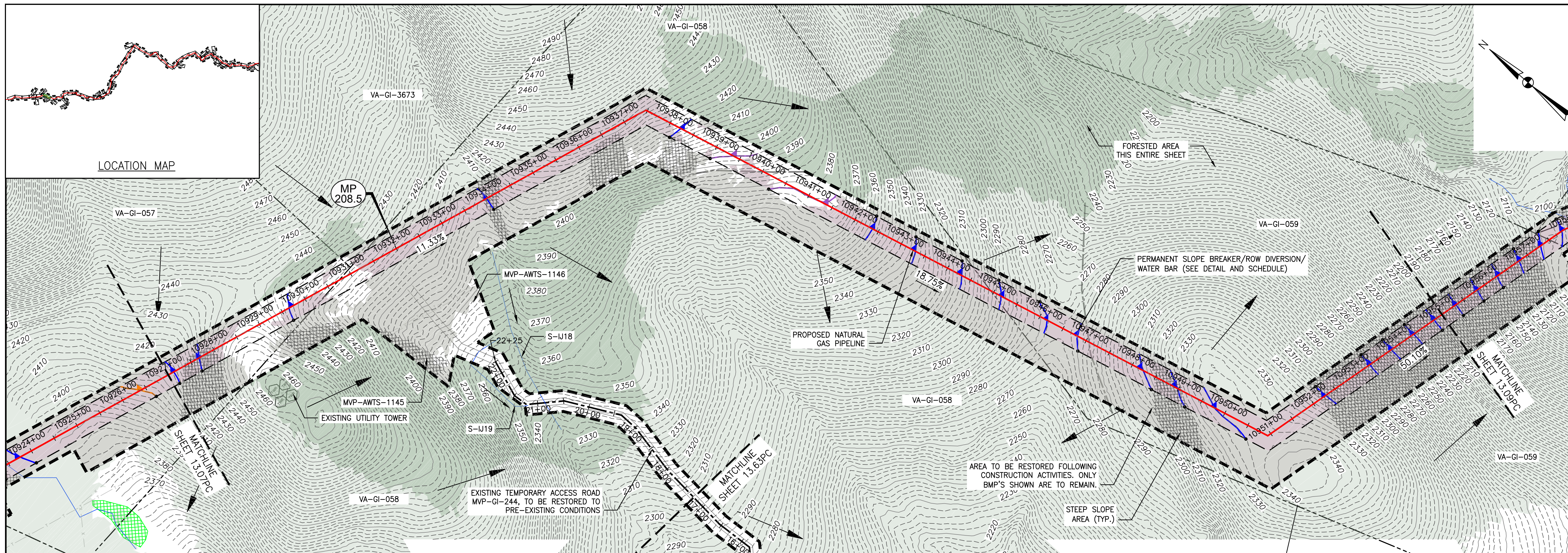
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661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

COMMONWEALTH OF PENNSYLVANIA
 DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DJW
 DATE: 07/07/2020
 SCALE: AS SHOWN
 SHEET NO. 13.07PC OF 13.90PC



LEGEND

- | | | | | | | | | | | |
|-------------------------|------------------------------|---|---|---|---|-------------------------------------|---|--|---|---------------------------------|
| — EXISTING CULVERT | ++++ PROPOSED LEVEL SPREADER | — PROPOSED PERMANENT RIGHT OF WAY | — PROPOSED ACCESS ROAD CENTERLINE | — PROPOSED PIPELINE | — SURFACE WATER FLOW DIRECTION | — POND | — WETLAND | — PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) | • APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS) | |
| — STREAM | — EXISTING PROPERTY LINE | — EXISTING STATE LINE | — EXISTING COUNTY LINE | — EXISTING ROAD/TRAIL | — USDA FOREST SERVICE (NATIONAL FOREST) LANDS | — APPALACHIAN NATIONAL SCENIC TRAIL | — ACID FORMING MATERIAL | — PROPOSED LEVEL SPREADER DIVERSION | — GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | — PROPOSED LIMIT OF DISTURBANCE |
| — STREAM FLOW DIRECTION | — FEMA 100 YEAR FLOODPLAIN | — PERMANENT WATER BAR 10' END TREATMENT | — PERMANENT WATER BAR 15' END TREATMENT | — PERMANENT WATER BAR 20' END TREATMENT | — STEEP SLOPE AREA | — EXISTING FOREST | — PERMANENT EASEMENT RESTORED TO MEADOW CONDITION | — TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION | | |

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS

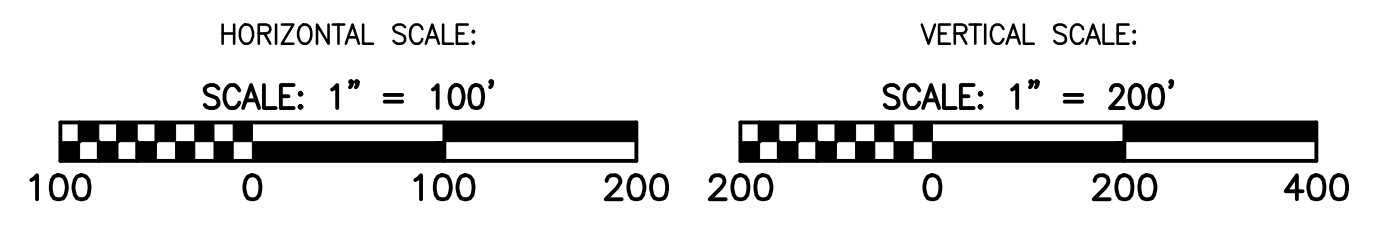
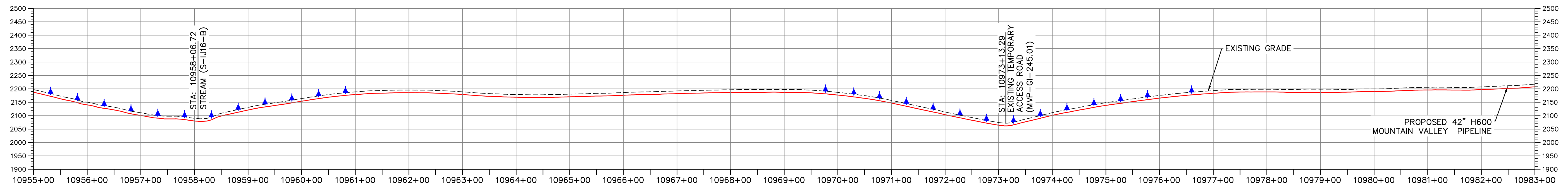
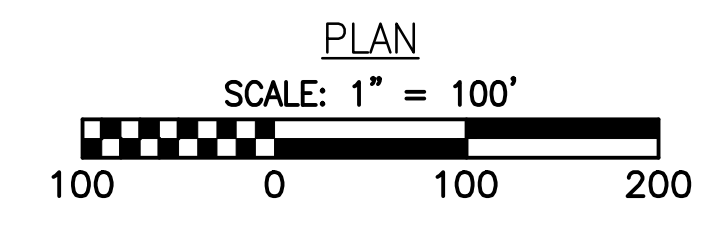
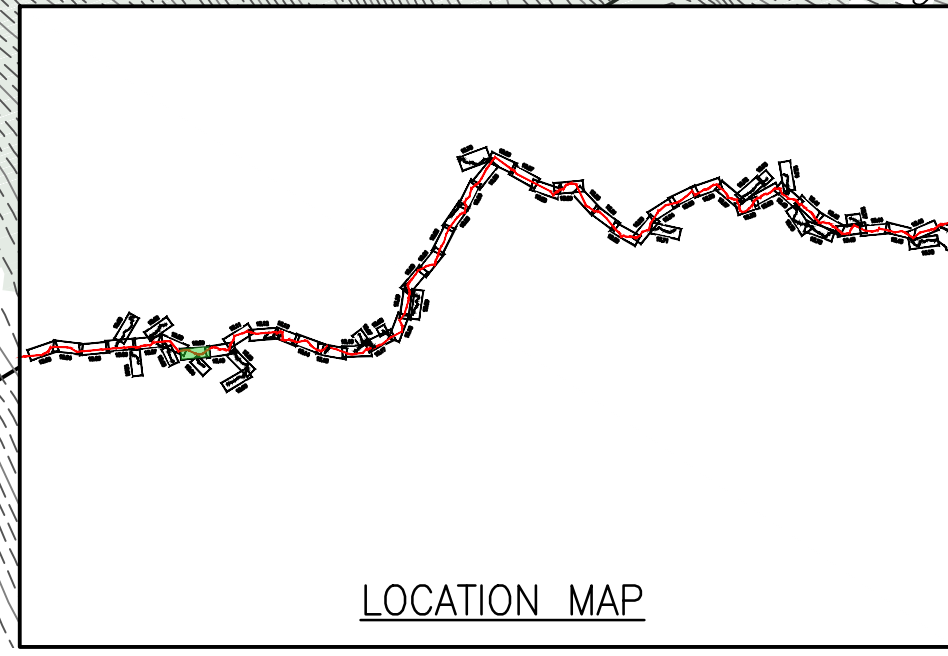
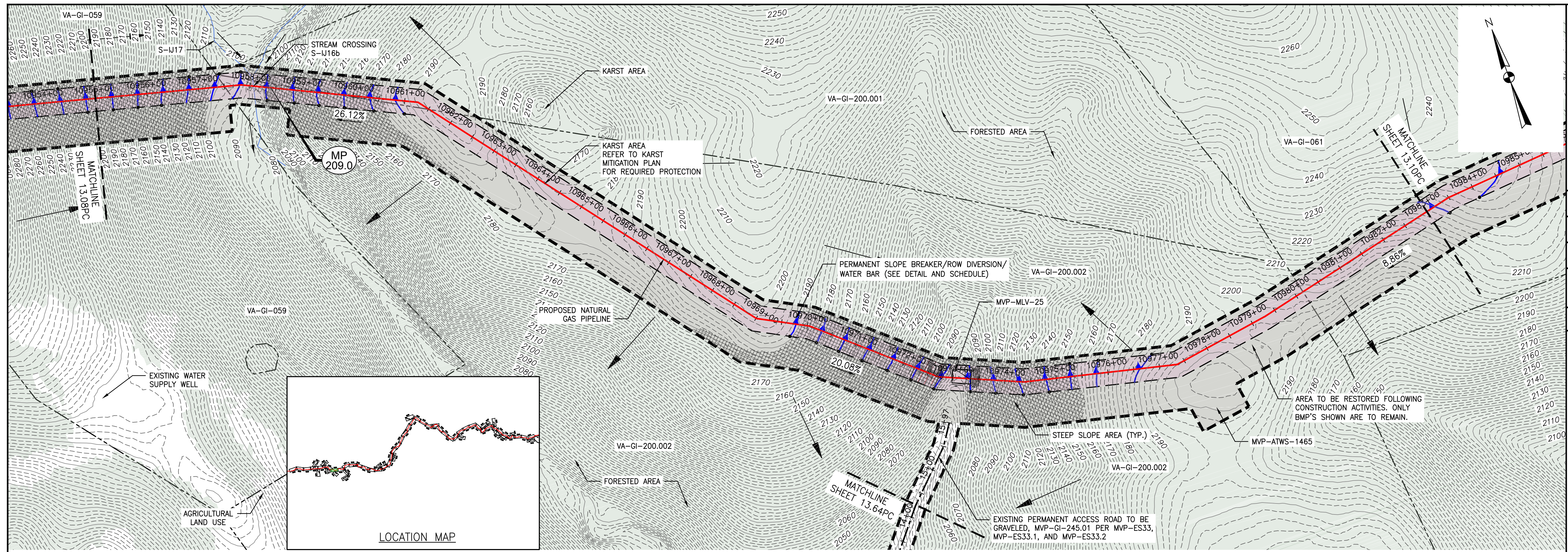
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

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FOSTER PLAZA 7
PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

DAVID J. WALLNER
Lic. No. 0402057593
Professional Engineer

DRAWN BY: KAL
CHECKED BY: JRE
APPROVED BY: DW
DATE: 11/21/2017
SCALE: AS SHOWN
SHT. NO. 13.09PC OF 13.90PC



- LEGEND**
- EXISTING CULVERT
 - STREAM
 - - - EXISTING PROPERTY LINE
 - - - EXISTING STATE LINE
 - - - EXISTING COUNTY LINE
 - - - EXISTING ROAD/TRAIL
 - USDA FOREST SERVICE (NATIONAL FOREST) LANDS
 - APPALACHIAN NATIONAL SCENIC TRAIL
 - ACID FORMING MATERIAL
 - PROPOSED LEVEL SPREADER DIVERSION
 - GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
 - PROPOSED LIMIT OF DISTURBANCE
 - ++++ PROPOSED LEVEL SPREADER
 - - - PROPOSED PERMANENT RIGHT OF WAY
 - - - PROPOSED ACCESS ROAD CENTERLINE
 - PROPOSED PIPELINE
 - SURFACE WATER FLOW DIRECTION
 - POND
 - WETLAND
 - PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
 - APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
 - STREAM FLOW DIRECTION
 - FEMA 100 YEAR FLOODPLAIN
 - PERMANENT WATER BAR 10' END TREATMENT
 - PERMANENT WATER BAR 15' END TREATMENT
 - PERMANENT WATER BAR 20' END TREATMENT
 - STEEP SLOPE AREA
 - EXISTING FOREST
 - PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
 - TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

- NOTES:**
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
 - IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS

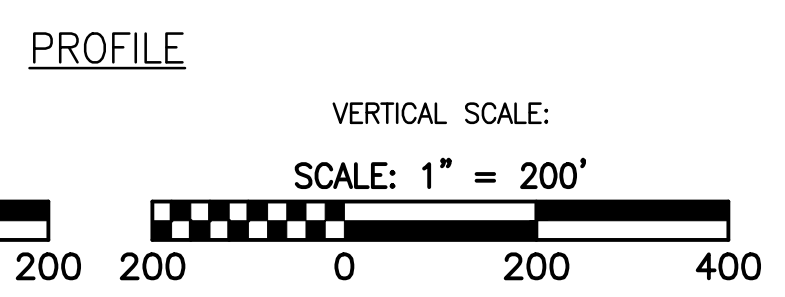
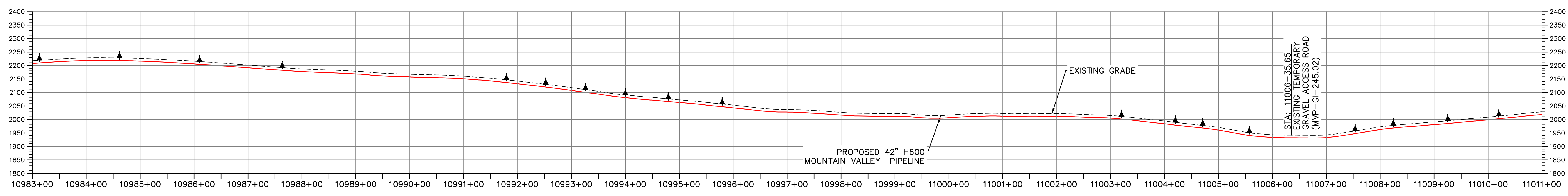
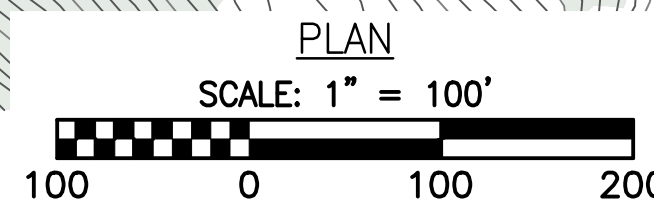
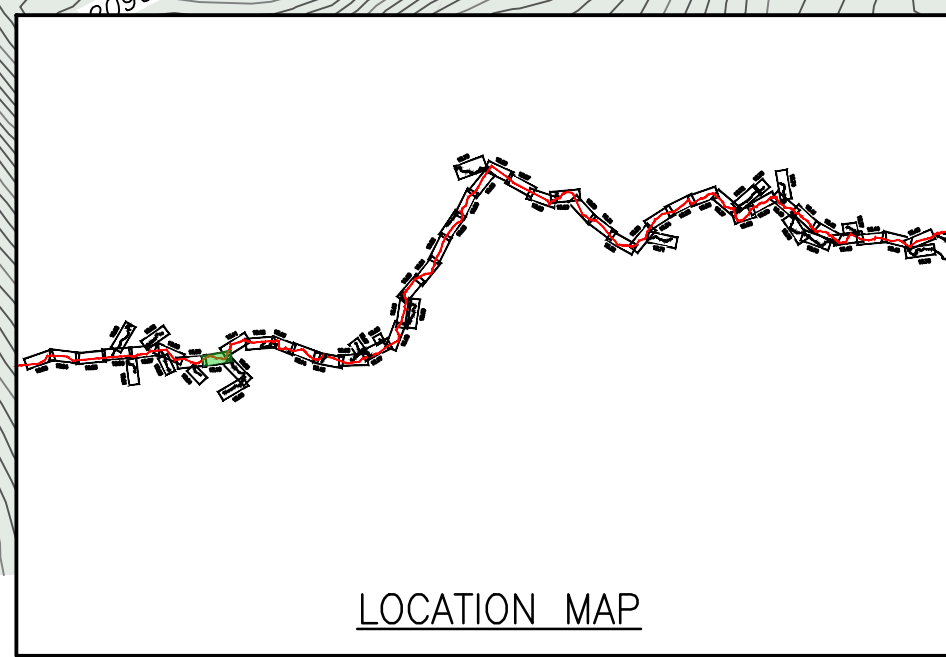
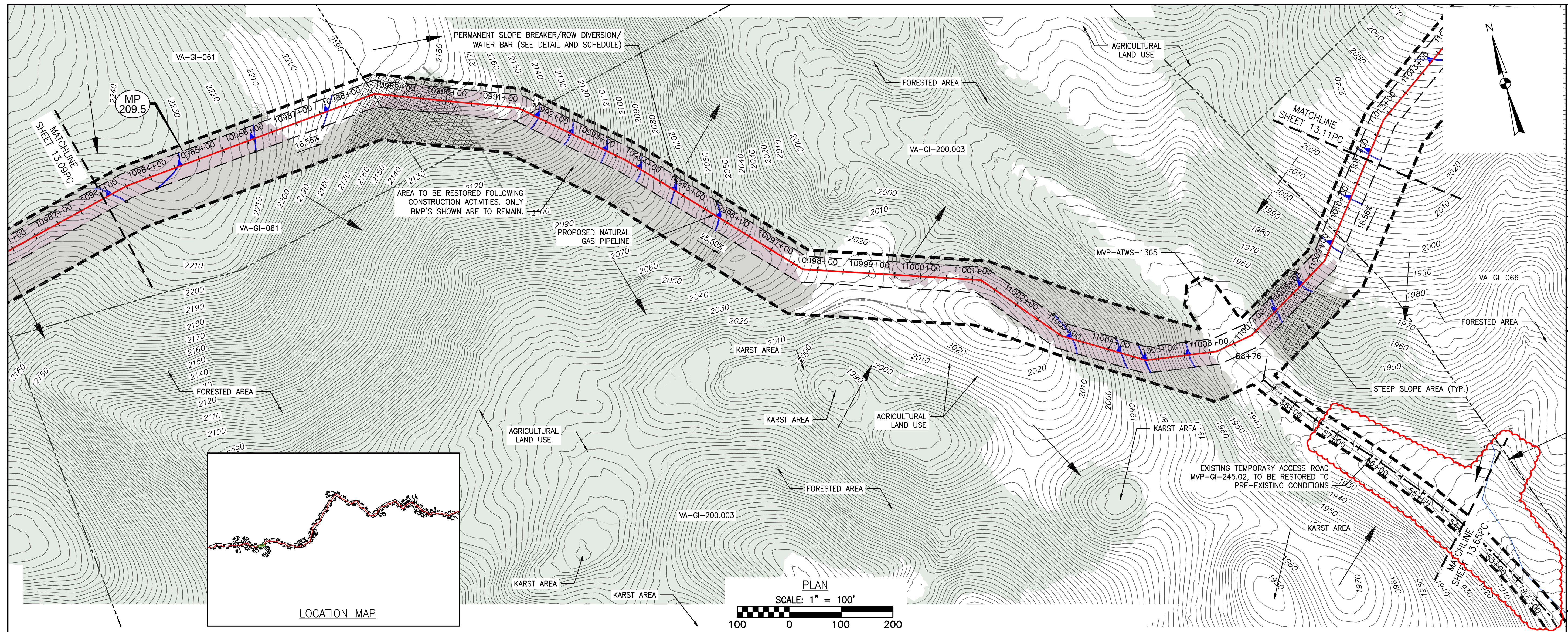
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DWJ
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHT. NO. 13.09PC OF 13.90PC



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION	▨	STEEP SLOPE AREA
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	—	FEMA 100 YEAR FLOODPLAIN	▨	EXISTING FOREST
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 10' END TREATMENT	▨	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 15' END TREATMENT	▨	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
---	EXISTING COUNTY LINE	→	SURFACE WATER FLOW DIRECTION	●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)		
---	EXISTING ROAD/TRAIL	▨	POND				
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨	WETLAND				
---	APPALACHIAN NATIONAL SCENIC TRAIL						
---	ACID FORMING MATERIAL						
---	PROPOSED LEVEL SPREADER DIVERSION						
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)						
---	PROPOSED LIMIT OF DISTURBANCE						

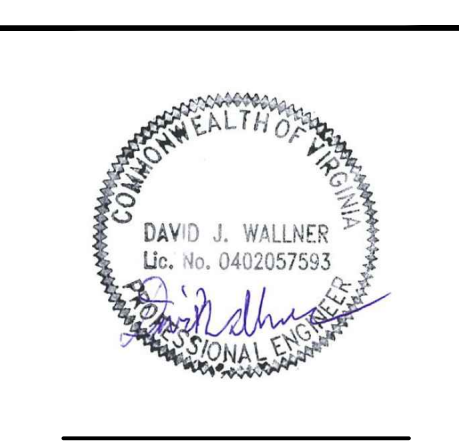
- NOTES:**
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
 - IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
5	10/23/18	BH		FIELD MODIFICATIONS
4	3/5/18	KAL		ADDRESS VABED COMMENTS
3	2/7/18	KAL		RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL		ADDRESS VABED COMMENTS
1	9/21/17	KAL		PLAN SUBMISSION

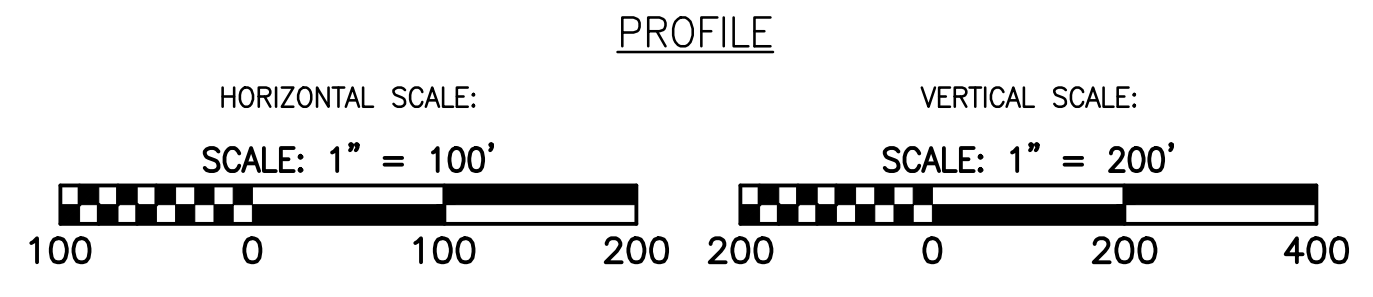
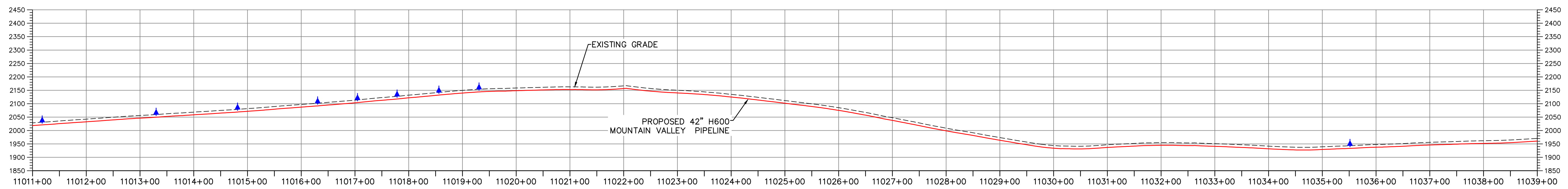
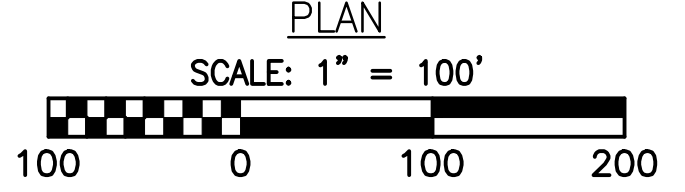
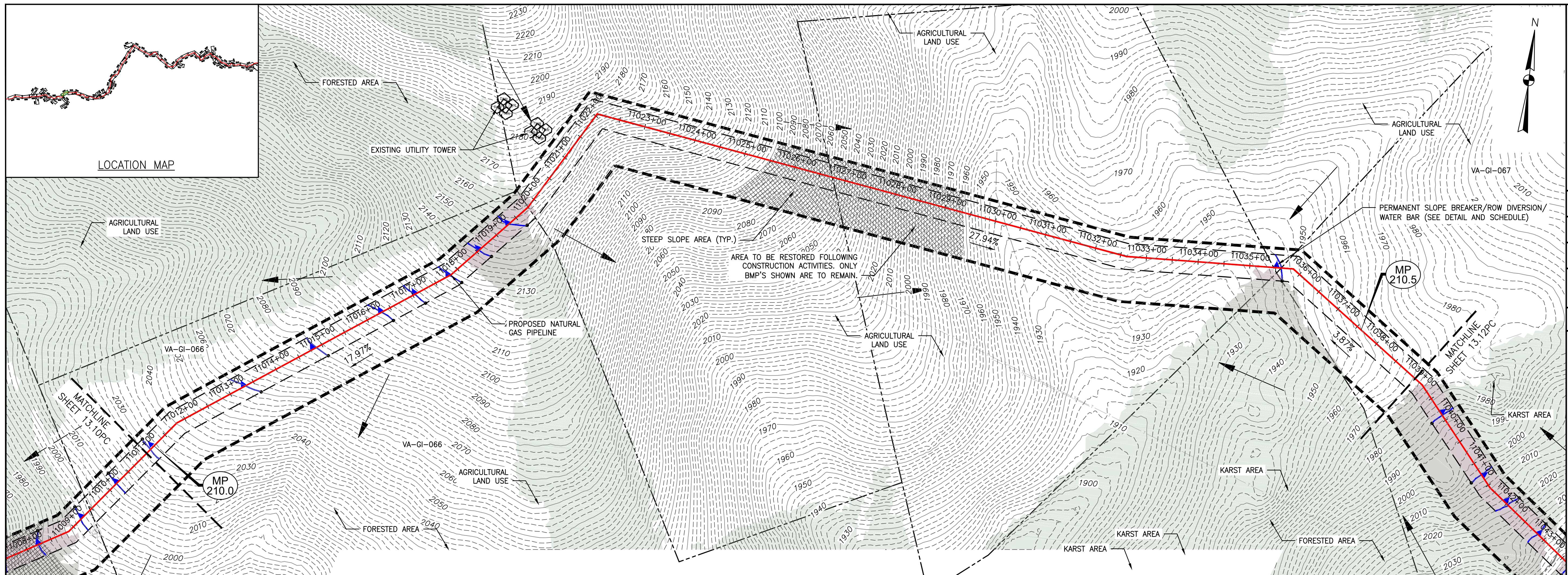
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	10/23/2018
SCALE:	AS SHOWN
SHT. NO.	13.10PC OF 13.90PC



LEGEND

— EXISTING CULVERT	+++++ PROPOSED LEVEL SPREADER	— PROPOSED PERMANENT RIGHT OF WAY
— STREAM	— PROPOSED ACCESS ROAD CENTERLINE	— PROPOSED PIPELINE
--- EXISTING PROPERTY LINE	— SURFACE WATER FLOW DIRECTION	— POND
- - - EXISTING STATE LINE	— WETLAND	— PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- - - EXISTING COUNTY LINE	— FEMA 100 YEAR FLOODPLAIN	— PERMANENT WATER BAR 10' END TREATMENT
--- EXISTING ROAD/TRAIL	— PERMANENT EASEMENT RESTORED TO MEADOW CONDITION	— PERMANENT WATER BAR 15' END TREATMENT
— USDA FOREST SERVICE (NATIONAL FOREST) LANDS	— TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION	— PERMANENT WATER BAR 20' END TREATMENT
— ANST — ANST — APPALACHIAN NATIONAL SCENIC TRAIL		
— AFM — AFM — ACID FORMING MATERIAL		
— GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)		
— PROPOSED LIMIT OF DISTURBANCE		

NOTES:

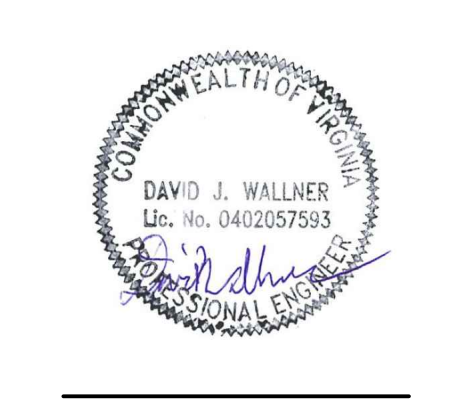
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	JRE	PLAN SUBMISSION
2	11/21/17	KAL	JRE	ADDRESS VAQED COMMENTS
3	2/16/18	KAL	JRE	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	JRE	ADDRESS VAQED COMMENTS

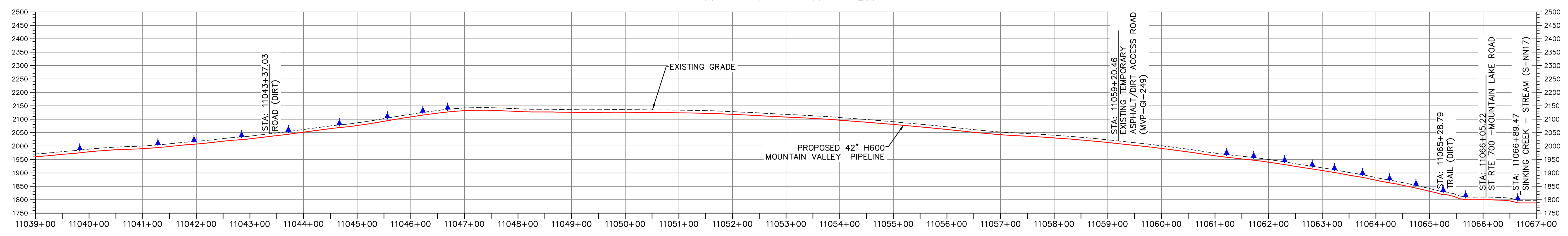
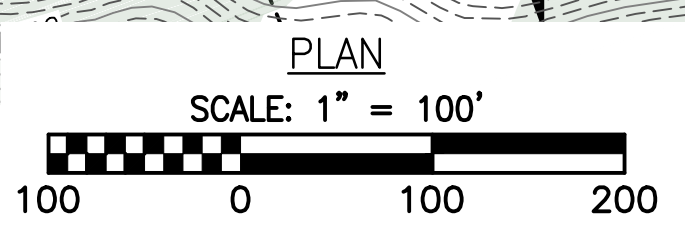
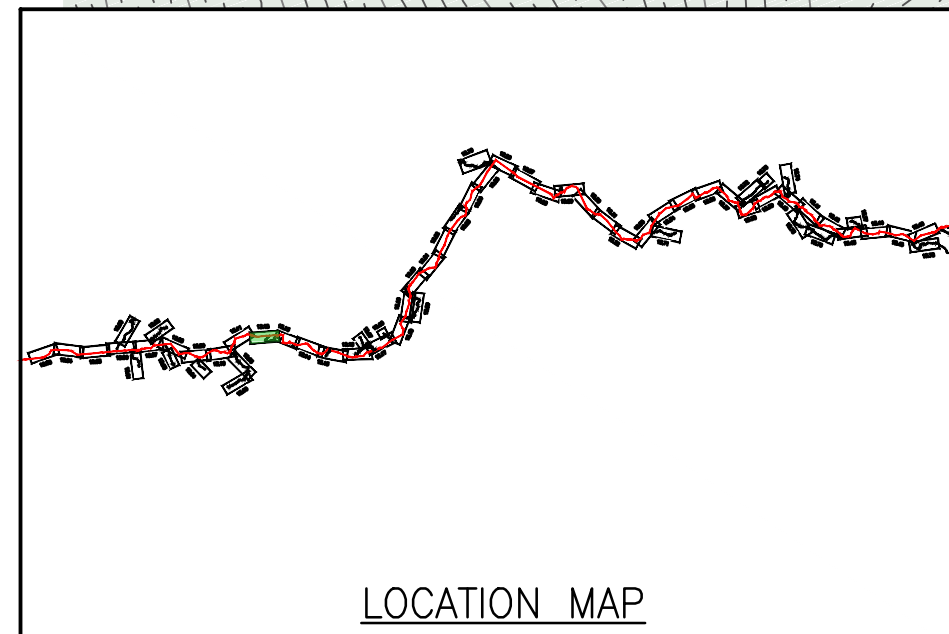
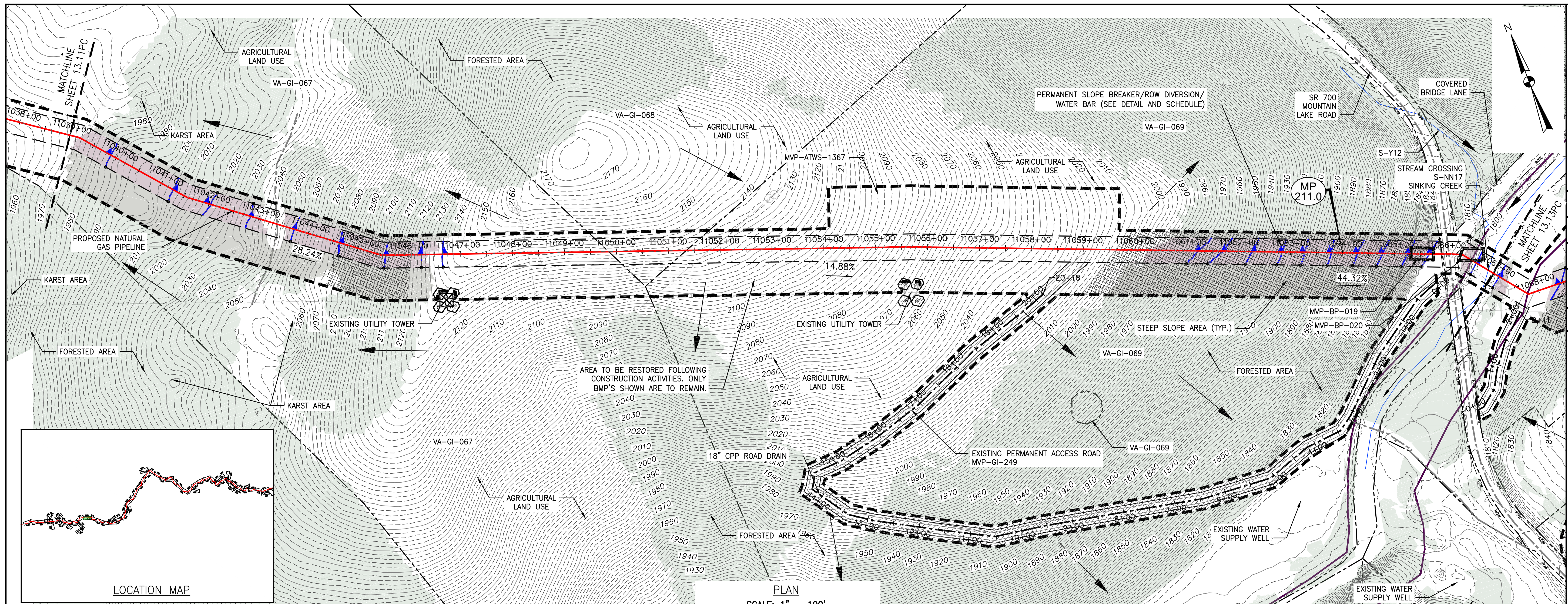
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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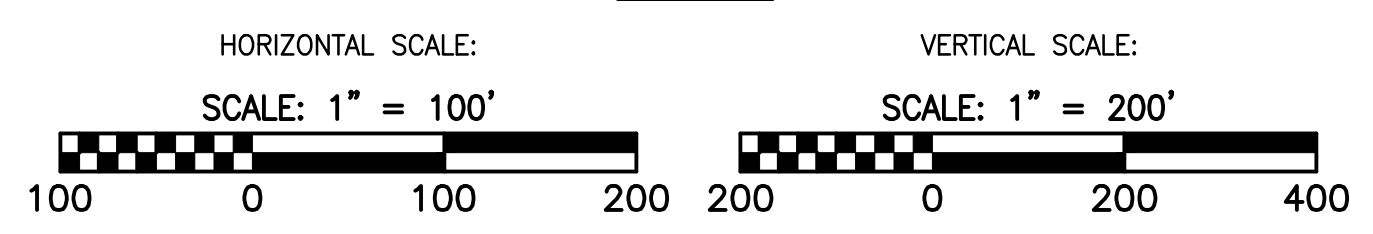
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.11PC OF 13.90PC	



PROFILE



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE
---	EXISTING STATE LINE	---	PROPOSED PIPELINE
---	EXISTING COUNTY LINE	---	SURFACE WATER FLOW DIRECTION
---	EXISTING ROAD/TRAIL	▲	POND
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▲	WETLAND
---	APPALACHIAN NATIONAL SCENIC TRAIL	▲	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
---	ACID FORMING MATERIAL	▲	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
---	PROPOSED LEVEL SPREADER DIVERSION	▲	STREAM FLOW DIRECTION
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)	▲	FEMA 100 YEAR FLOODPLAIN
---	PROPOSED LIMIT OF DISTURBANCE	▲	PERMANENT WATER BAR 10' END TREATMENT
		▲	PERMANENT WATER BAR 15' END TREATMENT
		▲	PERMANENT WATER BAR 20' END TREATMENT
		▲	STEEP SLOPE AREA
		▲	EXISTING FOREST
		▲	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
		▲	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

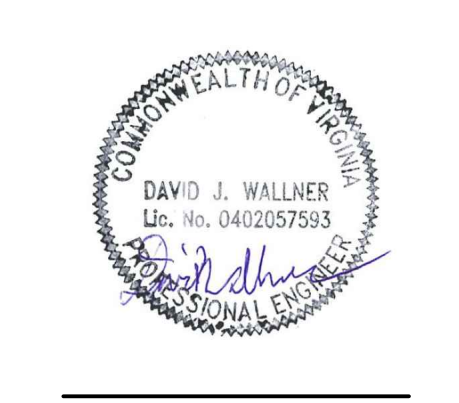
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	REVISION
3	2/16/18	KAL	DJW	REVISION
4	3/5/18	KAL	DJW	REVISION

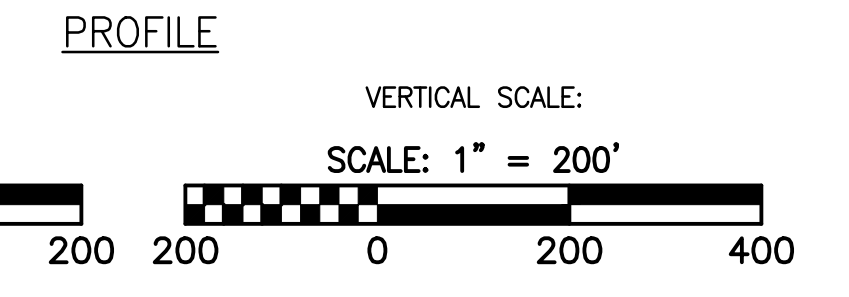
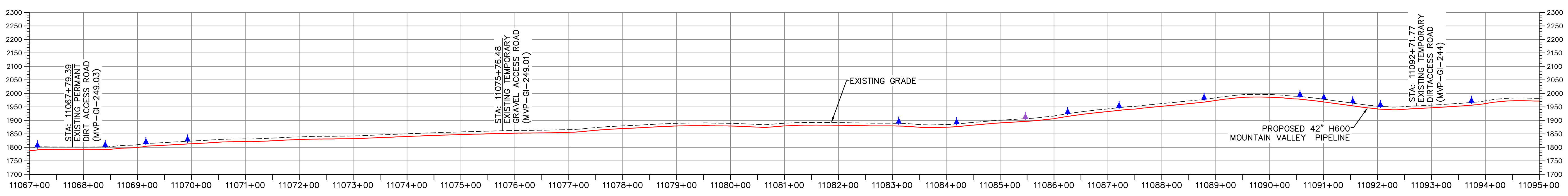
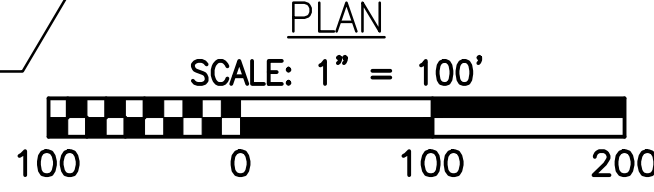
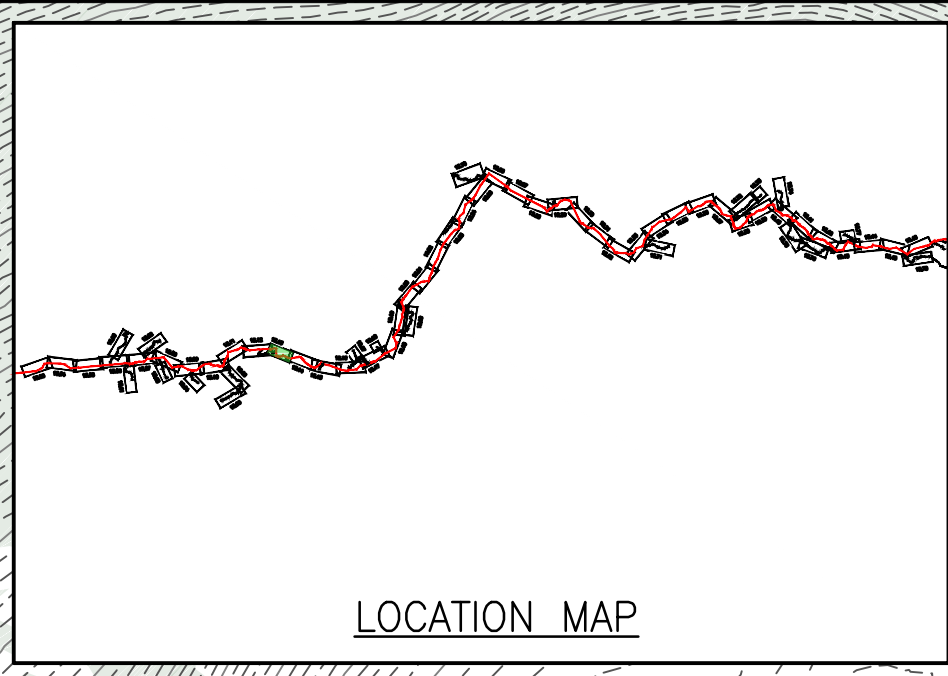
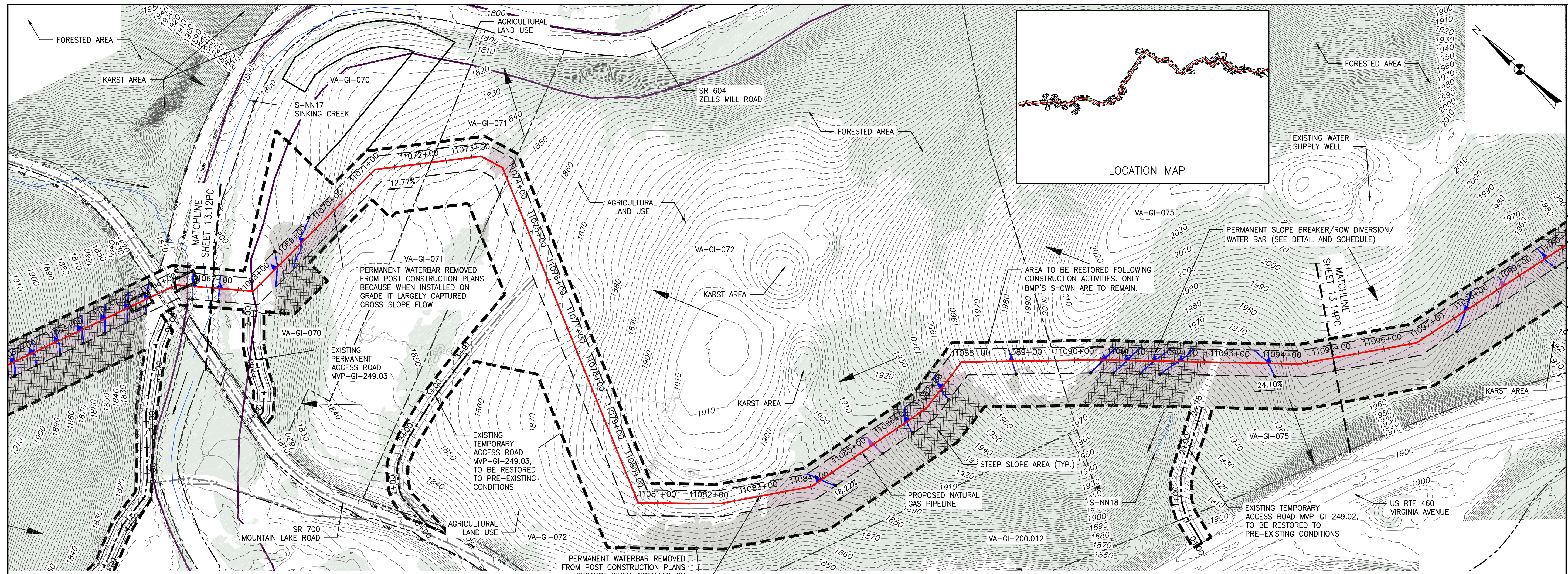
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	DJW
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.12PC OF 13.90PC	



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	▲	FEMA 100 YEAR FLOODPLAIN
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 10' END TREATMENT
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 15' END TREATMENT
---	EXISTING COUNTY LINE	---	SURFACE WATER FLOW DIRECTION	▲	PERMANENT WATER BAR 20' END TREATMENT
---	EXISTING ROAD/TRAIL	→	POND	■	STEEP SLOPE AREA
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	■	WETLAND	■	EXISTING FOREST
---	APPALACHIAN NATIONAL SCENIC TRAIL	▲	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)	■	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
---	ACID FORMING MATERIAL	●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)	■	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
---	PROPOSED LEVEL SPREADER DIVERSION				
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)				
---	PROPOSED LIMIT OF DISTURBANCE				

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADED COMMENTS

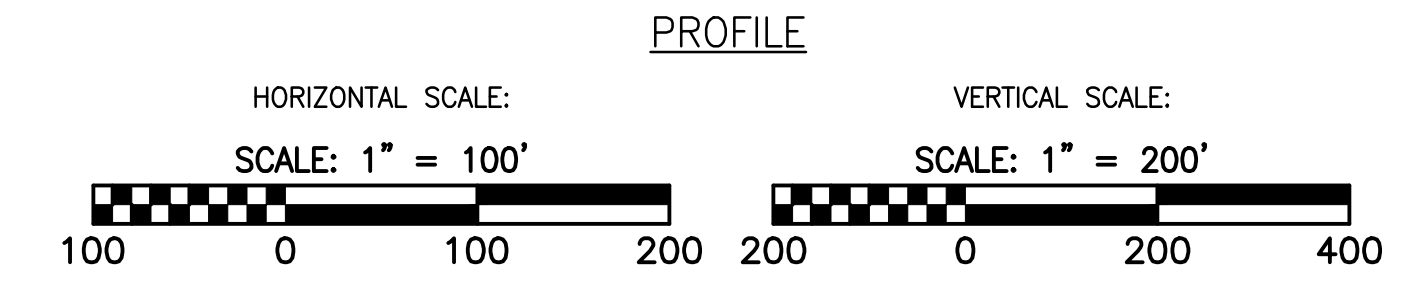
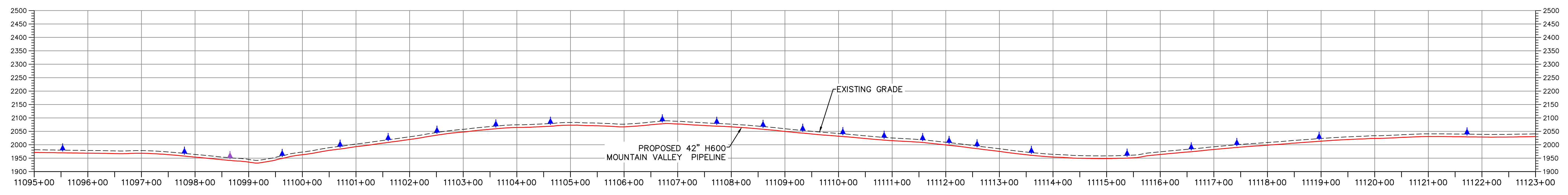
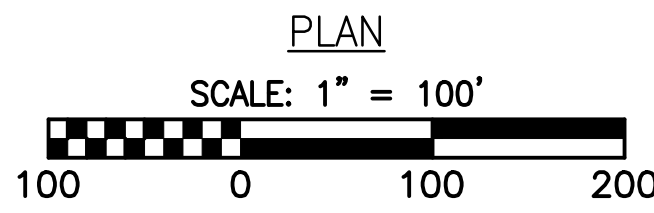
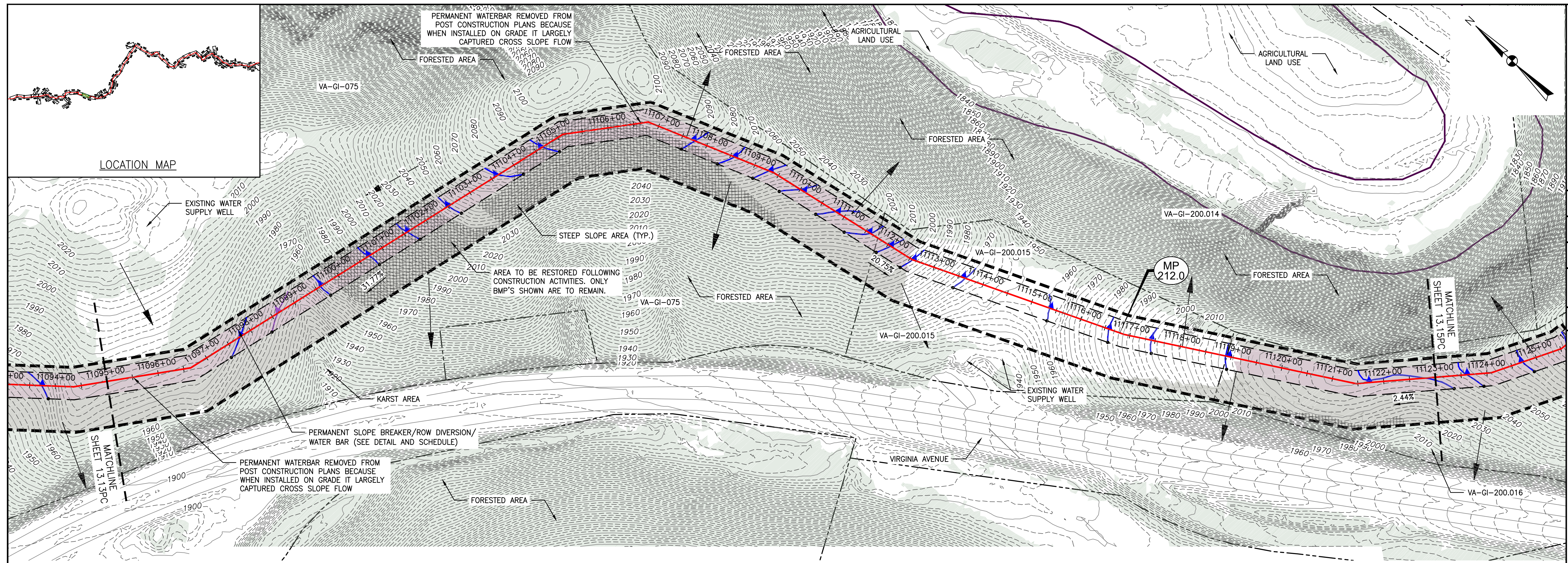
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

COMMONWEALTH OF PENNSYLVANIA
 DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DJW
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHT. NO. 13.13PC OF 13.90PC



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	—▲—	STREAM FLOW DIRECTION
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	▲	PERMANENT WATER BAR 10' END TREATMENT
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 15' END TREATMENT
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 20' END TREATMENT
---	EXISTING COUNTY LINE	---	SURFACE WATER FLOW DIRECTION		
---	EXISTING ROAD/TRAIL	▲	POND		
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▲	WETLAND		
---	ANST - ANST - APPALACHIAN NATIONAL SCENIC TRAIL	▲	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)		
---	AFM - AFM - ACID FORMING MATERIAL	▲	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)		
---	PROPOSED LEVEL SPREADER DIVERSION				
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)				
---	PROPOSED LIMIT OF DISTURBANCE				

NOTES:

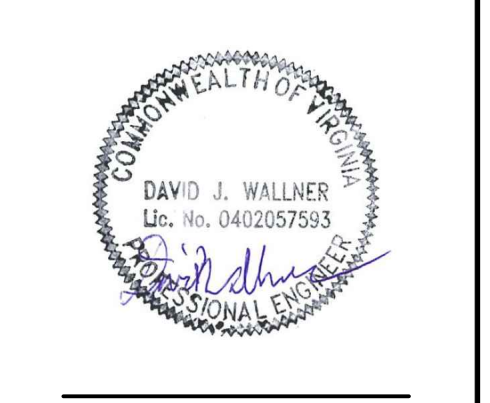
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

ADDRESS VAEQ COMMENTS		RESUBMISSION USING APPROVED STORMWATER METHODOLOGY		PLAN SUBMISSION		REVISIONS:	
NO.	DATE	CHKD.	APPD.	NO.	DATE	CHKD.	APPD.
4	3/5/18	KAL	DW	1	9/21/17	KAL	DW
3	2/16/18	KAL	DW	2	11/21/17	KAL	DW
2	11/21/17	KAL	DW	3	2/7/18	KAL	DW
1	9/21/17	KAL	DW	4	3/5/18	KAL	DW

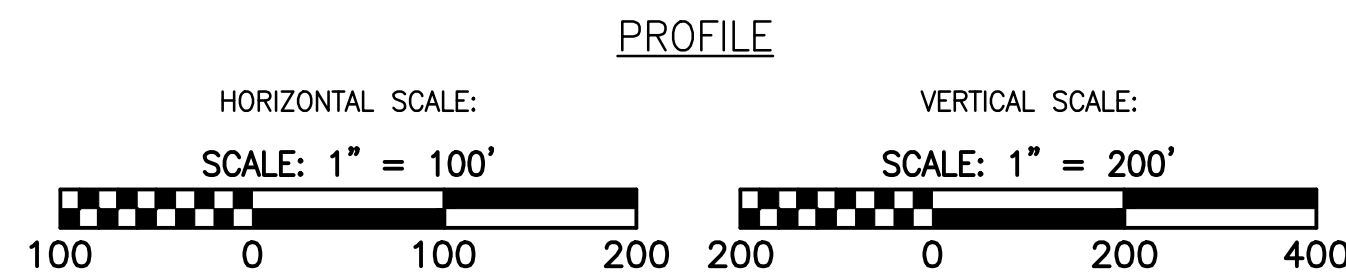
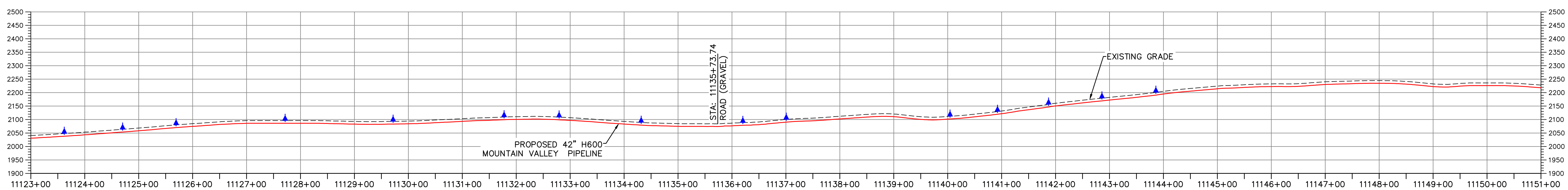
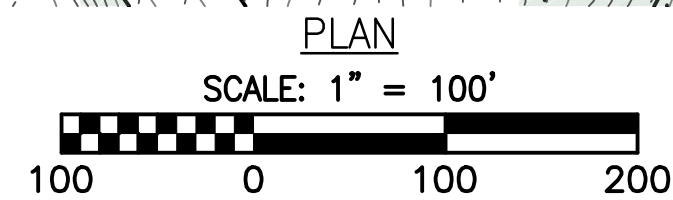
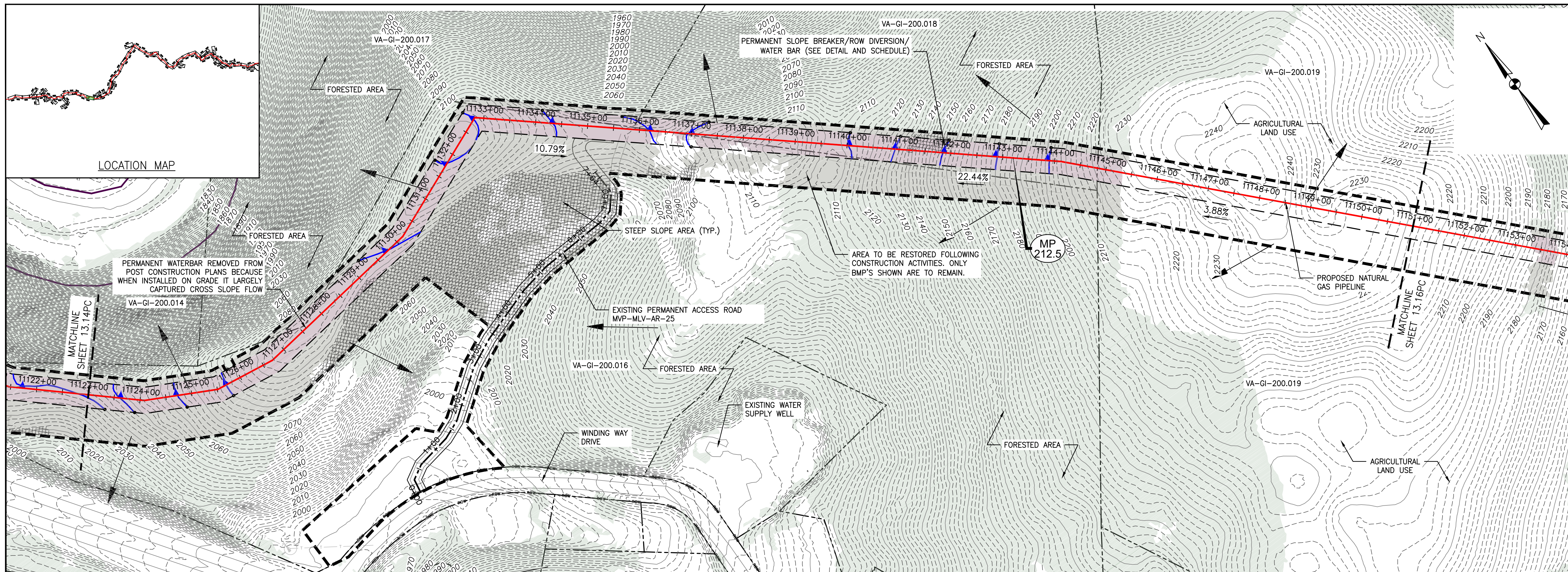
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.14PC OF	13.90PC



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

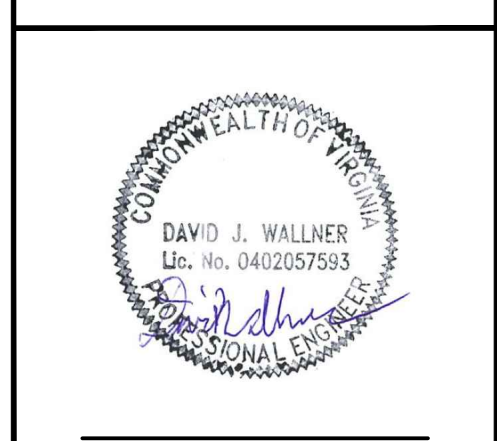
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
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2	11/21/17	KAL	DJW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADED COMMENTS

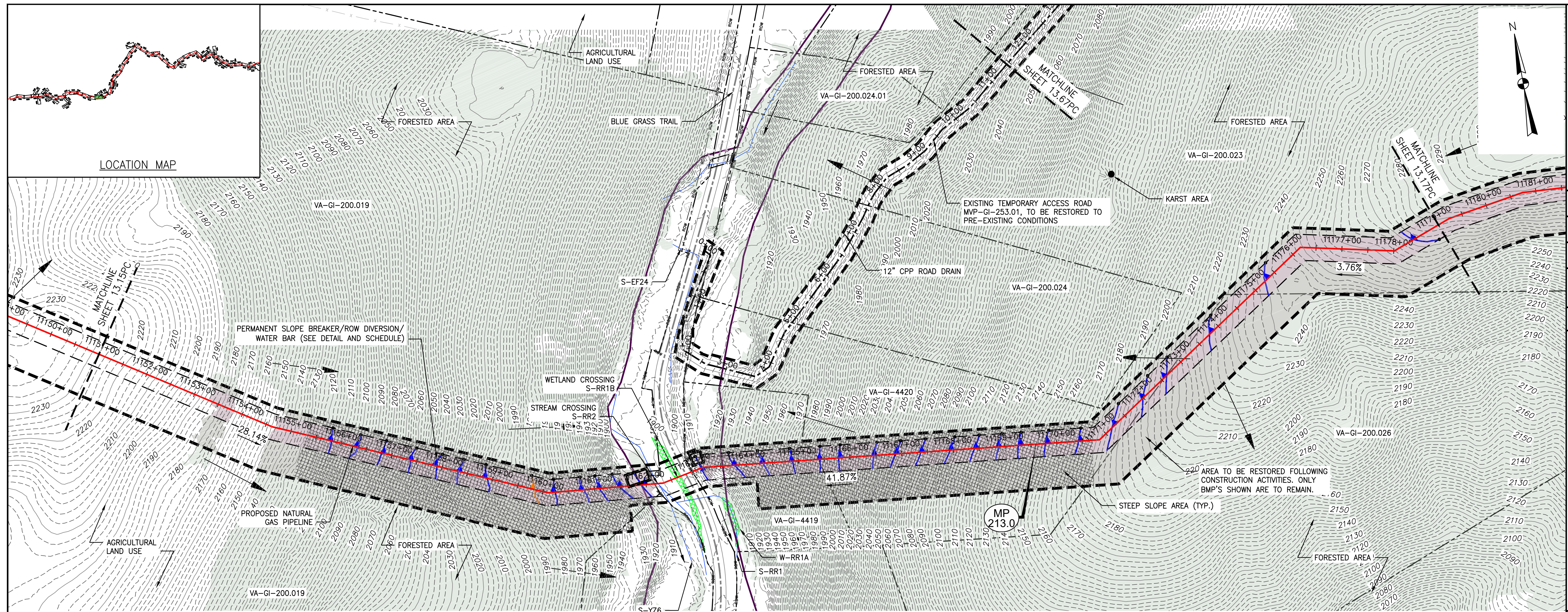
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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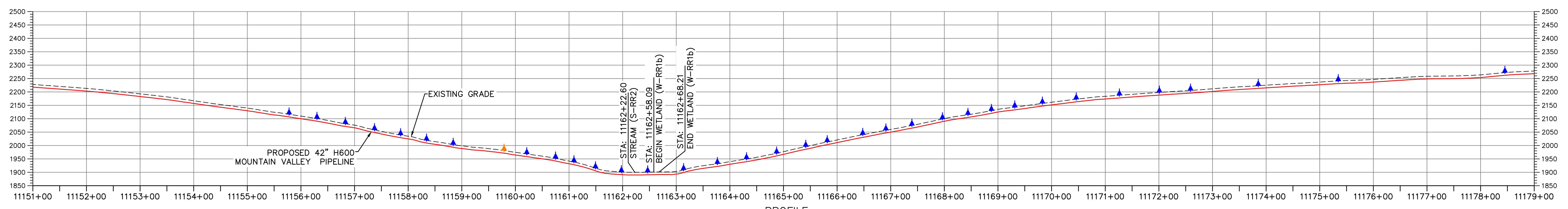
POST CONSTRUCTION
(STORMWATER &
RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.15PC OF 13.90PC



PLAN
SCALE: 1" = 100'



PROFILE
HORIZONTAL SCALE: SCALE: 1" = 100'
VERTICAL SCALE: SCALE: 1" = 200'

LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	
---	EXISTING COUNTY LINE	---	SURFACE WATER FLOW DIRECTION	
---	EXISTING ROAD/TRAIL	▲	POND	
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▲	WETLAND	
---	APPALACHIAN NATIONAL SCENIC TRAIL	▲	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)	
---	ACID FORMING MATERIAL	▲	STREAM FLOW DIRECTION	
---	PROPOSED LEVEL SPREADER DIVERSION	▲	FEMA 100 YEAR FLOODPLAIN	
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)	▲	PERMANENT WATER BAR 10' END TREATMENT	
---	PROPOSED LIMIT OF DISTURBANCE	▲	PERMANENT WATER BAR 15' END TREATMENT	
		▲	PERMANENT WATER BAR 20' END TREATMENT	
			▲	STEEP SLOPE AREA
				EXISTING FOREST
				PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
				TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADED COMMENTS

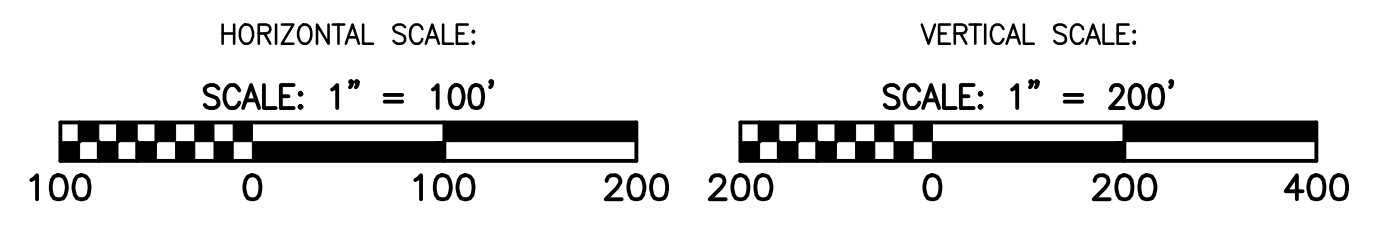
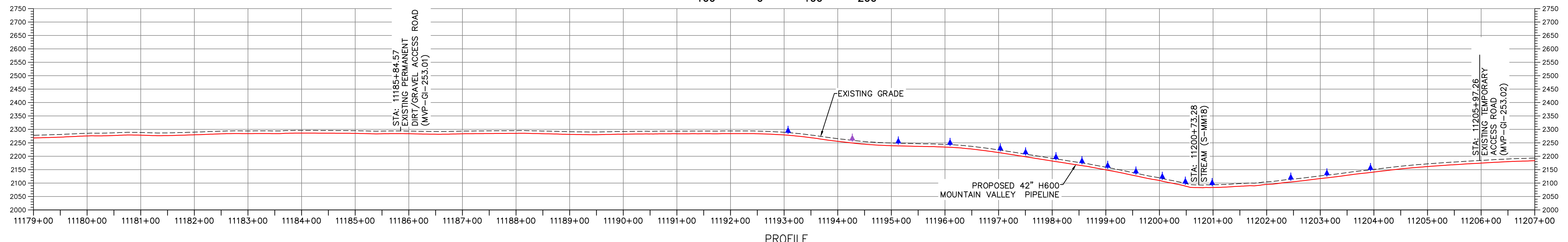
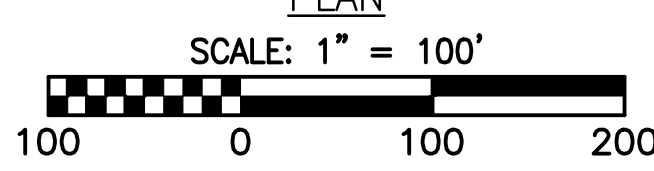
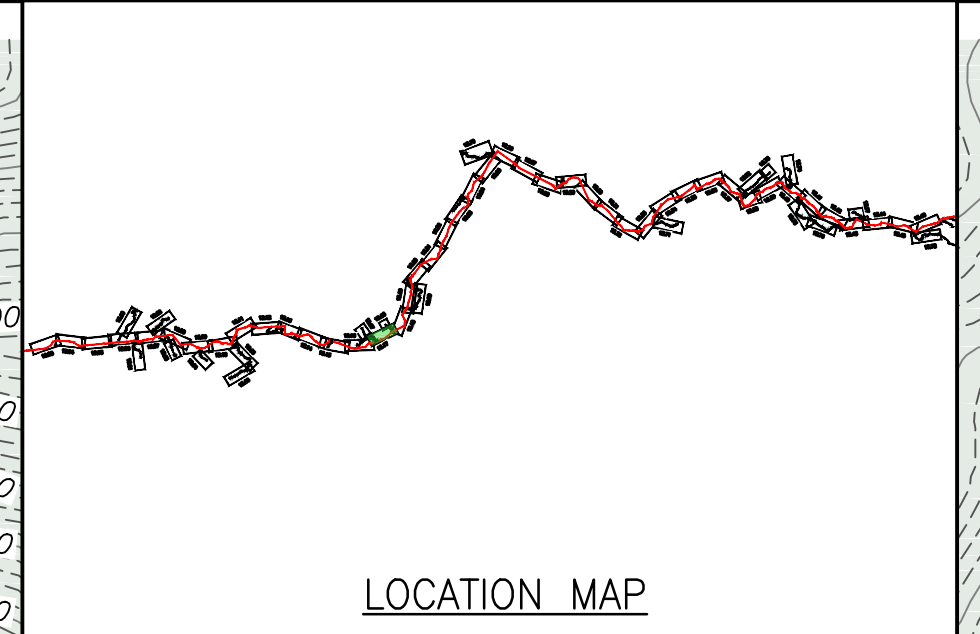
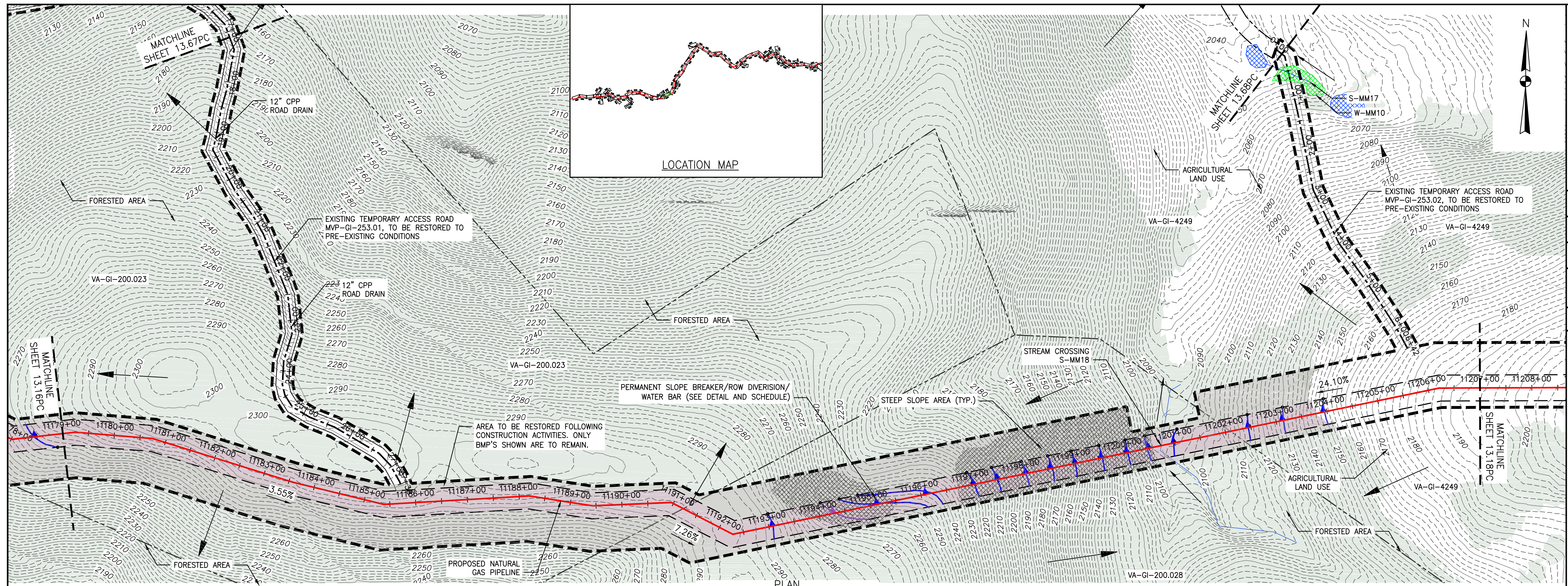
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
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 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.16PC OF 13.90PC	



- LEGEND**
- EXISTING CULVERT
 - STREAM
 - - - EXISTING PROPERTY LINE
 - - - EXISTING STATE LINE
 - - - EXISTING COUNTY LINE
 - - - EXISTING ROAD/TRAIL
 - USDA FOREST SERVICE (NATIONAL FOREST) LANDS
 - APPALACHIAN NATIONAL SCENIC TRAIL
 - ACID FORMING MATERIAL
 - PROPOSED LEVEL SPREADER DIVERSION
 - GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
 - - - PROPOSED LIMIT OF DISTURBANCE
 - ++++ PROPOSED LEVEL SPREADER
 - - - PROPOSED PERMANENT RIGHT OF WAY
 - - - PROPOSED ACCESS ROAD CENTERLINE
 - PROPOSED PIPELINE
 - SURFACE WATER FLOW DIRECTION
 - POND
 - WETLAND
 - PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
 - APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
 - STREAM FLOW DIRECTION
 - FEMA 100 YEAR FLOODPLAIN
 - PERMANENT WATER BAR 10' END TREATMENT
 - PERMANENT WATER BAR 15' END TREATMENT
 - PERMANENT WATER BAR 20' END TREATMENT
 - STEEP SLOPE AREA
 - EXISTING FOREST
 - PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
 - TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

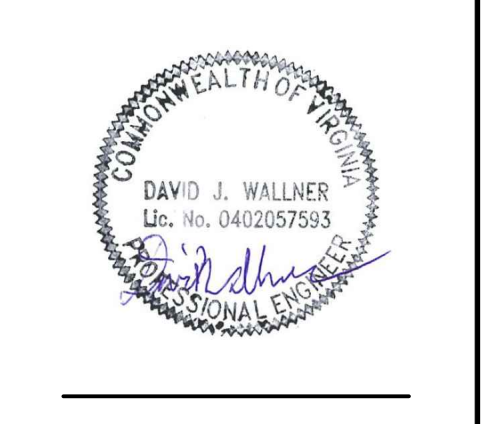
- NOTES:**
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VADEQ COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADEQ COMMENTS

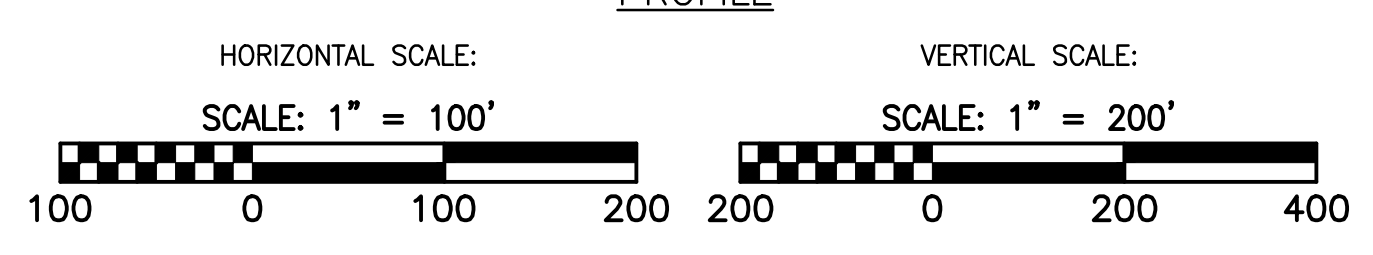
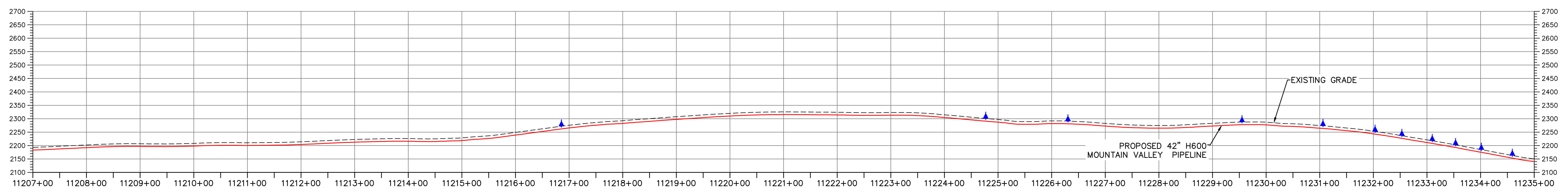
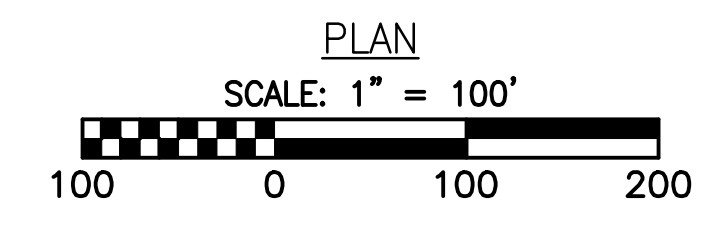
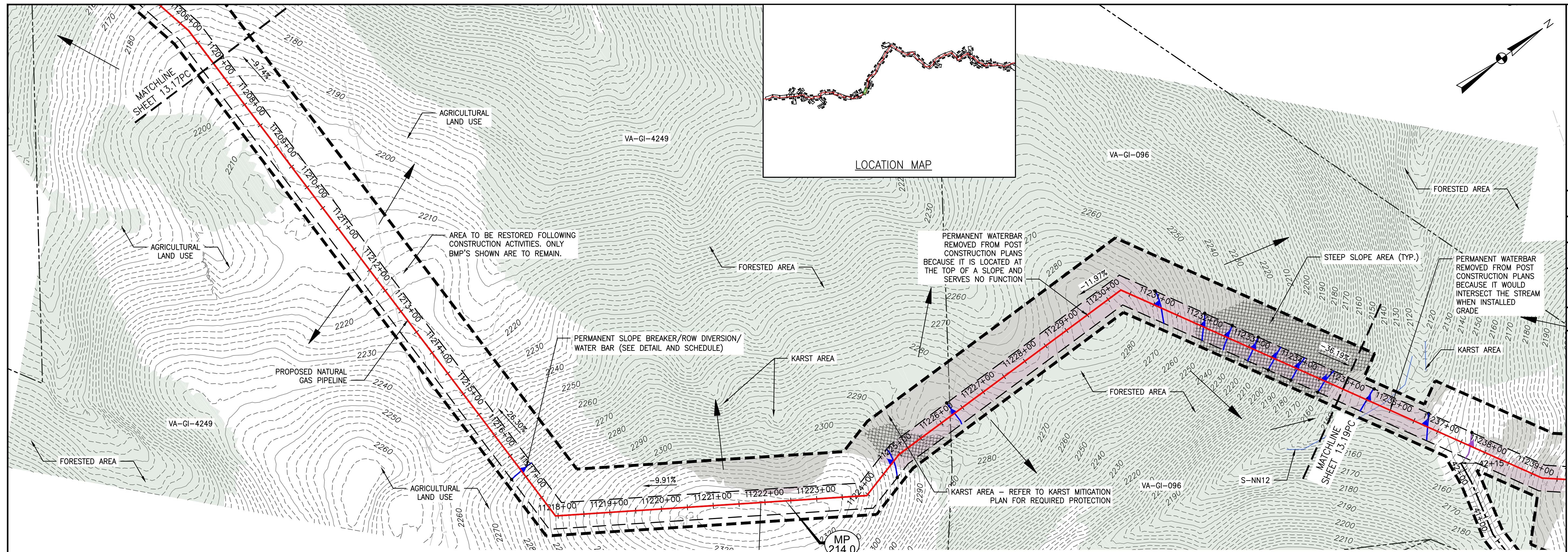
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
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 PITTSBURGH, PA 15220

POST CONSTRUCTION
(STORMWATER &
RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.17PC OF 13.90PC	REVISION



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION	▨	STEEP SLOPE AREA
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	—	FEMA 100 YEAR FLOODPLAIN	▨	EXISTING FOREST
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 10' END TREATMENT	▨	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 15' END TREATMENT	▨	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
---	EXISTING COUNTY LINE	→	SURFACE WATER FLOW DIRECTION	▲	PERMANENT WATER BAR 20' END TREATMENT		
---	EXISTING ROAD/TRAIL	▨	POND				
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨	WETLAND				
---	APPALACHIAN NATIONAL SCENIC TRAIL	▲	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)				
---	ACID FORMING MATERIAL	●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)				
---	PROPOSED LEVEL SPREADER DIVERSION						
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)						
---	PROPOSED LIMIT OF DISTURBANCE						

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VADEQ COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VADEQ COMMENTS

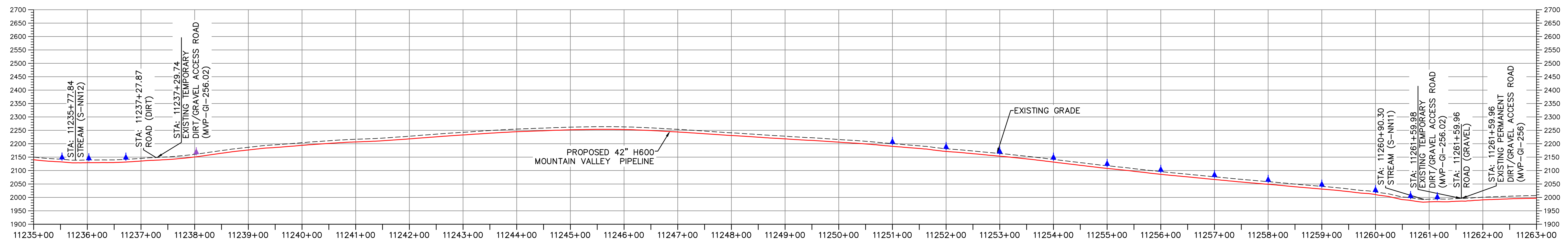
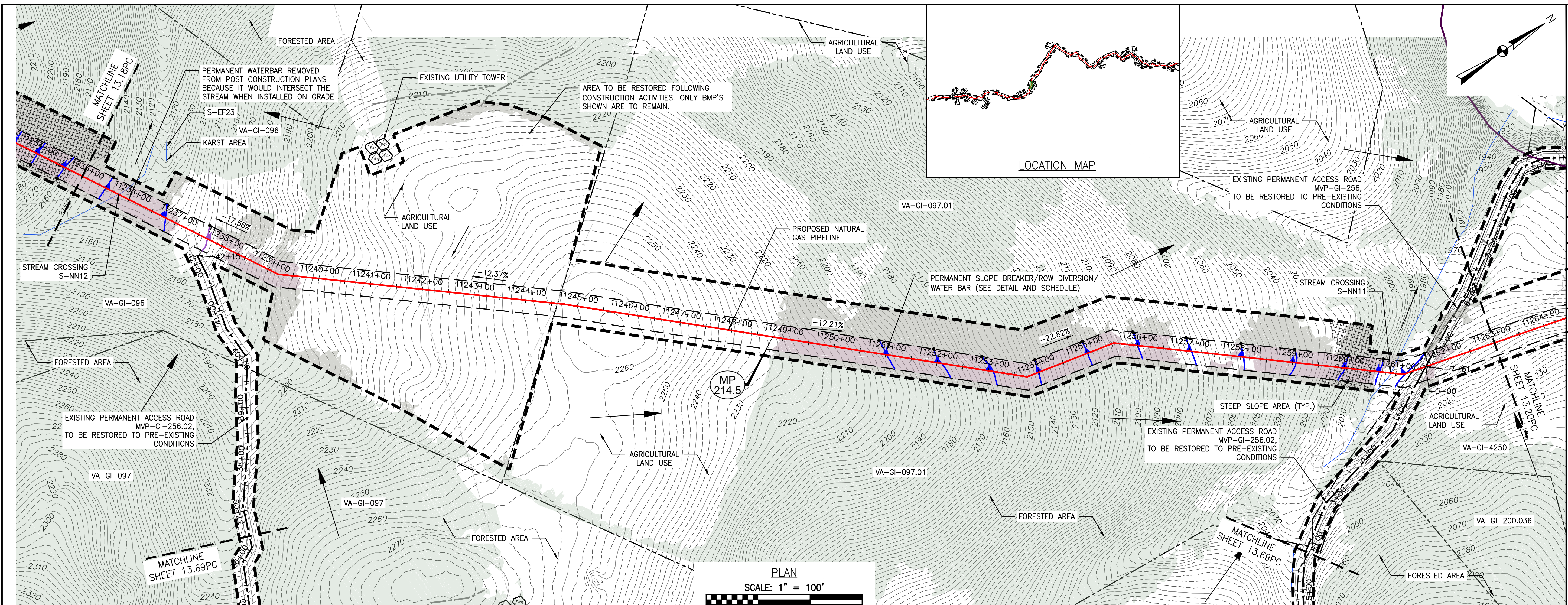
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

COMMONWEALTH OF PENNSYLVANIA
 DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DWJ
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHEET NO. 13.18PC OF 13.90PC



LEGEND

— EXISTING CULVERT	+++++ PROPOSED LEVEL SPREADER
— STREAM	--- PROPOSED PERMANENT RIGHT OF WAY
- - - EXISTING PROPERTY LINE	- - - PROPOSED ACCESS ROAD CENTERLINE
- - - EXISTING STATE LINE	—+— PROPOSED PIPELINE
- - - EXISTING COUNTY LINE	—+— SURFACE WATER FLOW DIRECTION
- - - EXISTING ROAD/TRAIL	▣ POND
— USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▣ WETLAND
— APPALACHIAN NATIONAL SCENIC TRAIL	—+— STREAM FLOW DIRECTION
— ACID FORMING MATERIAL	▣ FEMA 100 YEAR FLOODPLAIN
— PROPOSED LEVEL SPREADER DIVERSION	▣ PERMANENT WATER BAR 10' END TREATMENT
— GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)	▣ PERMANENT WATER BAR 15' END TREATMENT
— PROPOSED LIMIT OF DISTURBANCE	▣ PERMANENT WATER BAR 20' END TREATMENT
• APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)	▣ STEEP SLOPE AREA
	▣ EXISTING FOREST
	▣ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
	▣ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
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2	11/21/17	KAL	DJW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADED COMMENTS

REVISIONS:

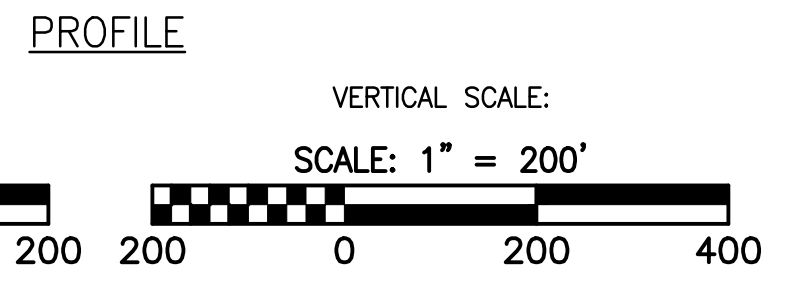
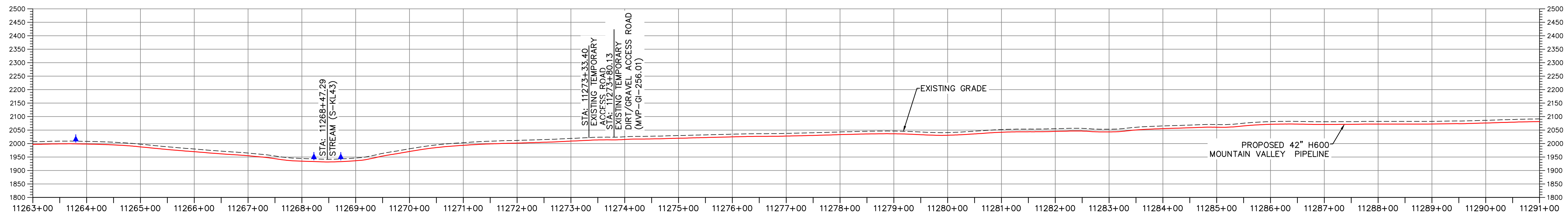
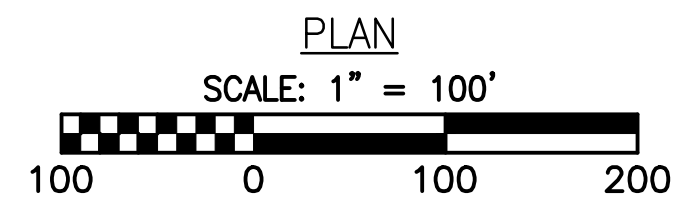
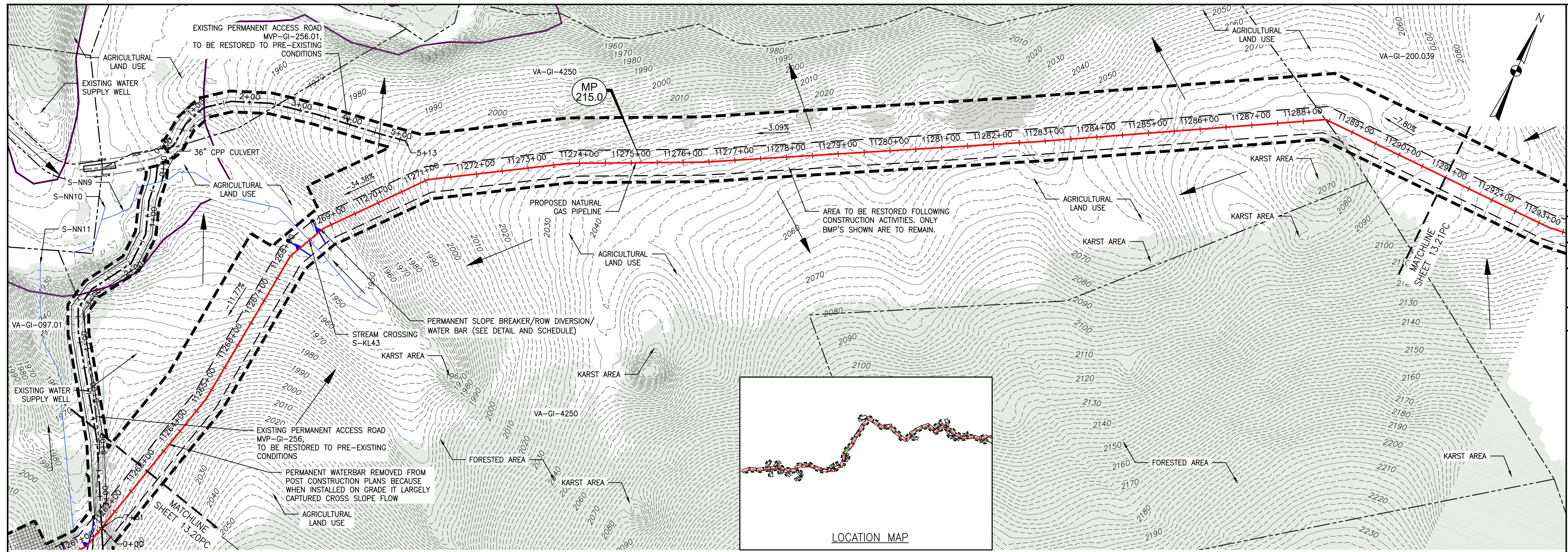
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.19PC OF 13.90PC	REVISION



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION	▨	STEEP SLOPE AREA
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	▲	PERMANENT WATER BAR 10' END TREATMENT	▨	EXISTING FOREST
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 15' END TREATMENT	▨	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 20' END TREATMENT	▨	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
---	EXISTING COUNTY LINE	→	SURFACE WATER FLOW DIRECTION				
---	EXISTING ROAD/TRAIL	▨	POND				
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨	WETLAND				
---	APPALACHIAN NATIONAL SCENIC TRAIL	→	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)				
---	ACID FORMING MATERIAL	→	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)				
---	PROPOSED LEVEL SPREADER DIVERSION						
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)						
---	PROPOSED LIMIT OF DISTURBANCE						

NOTES:

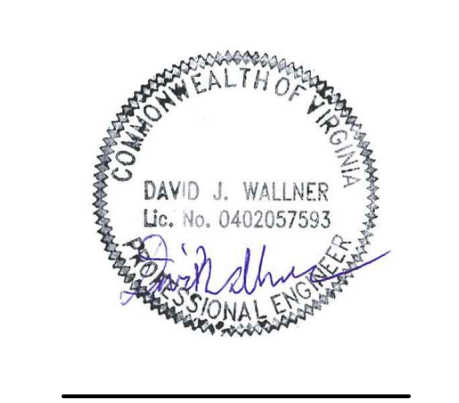
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- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VAEQ COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VAEQ COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

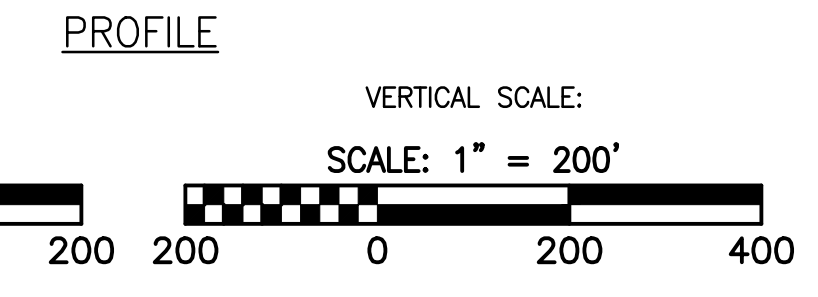
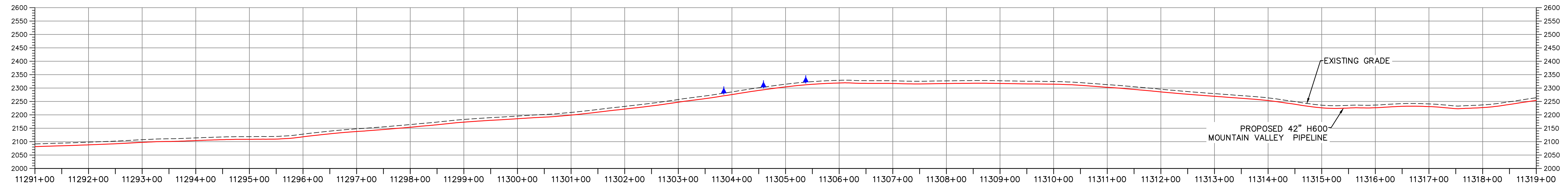
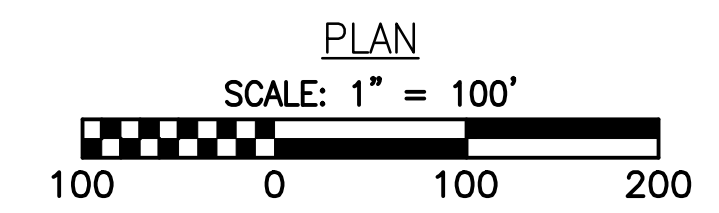
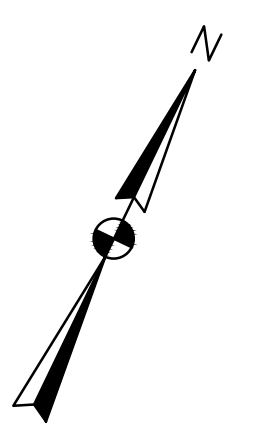
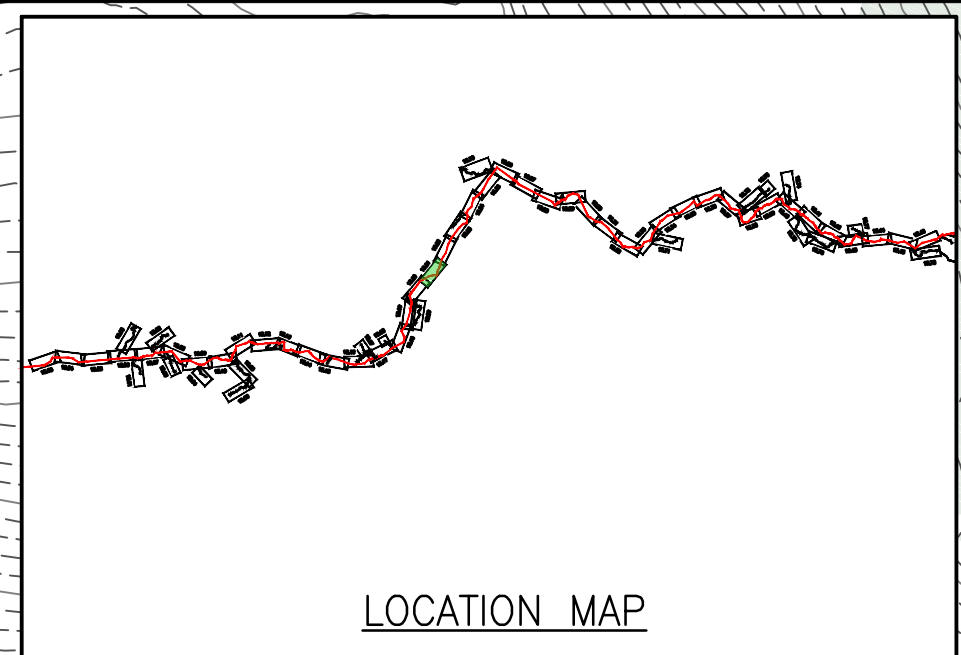
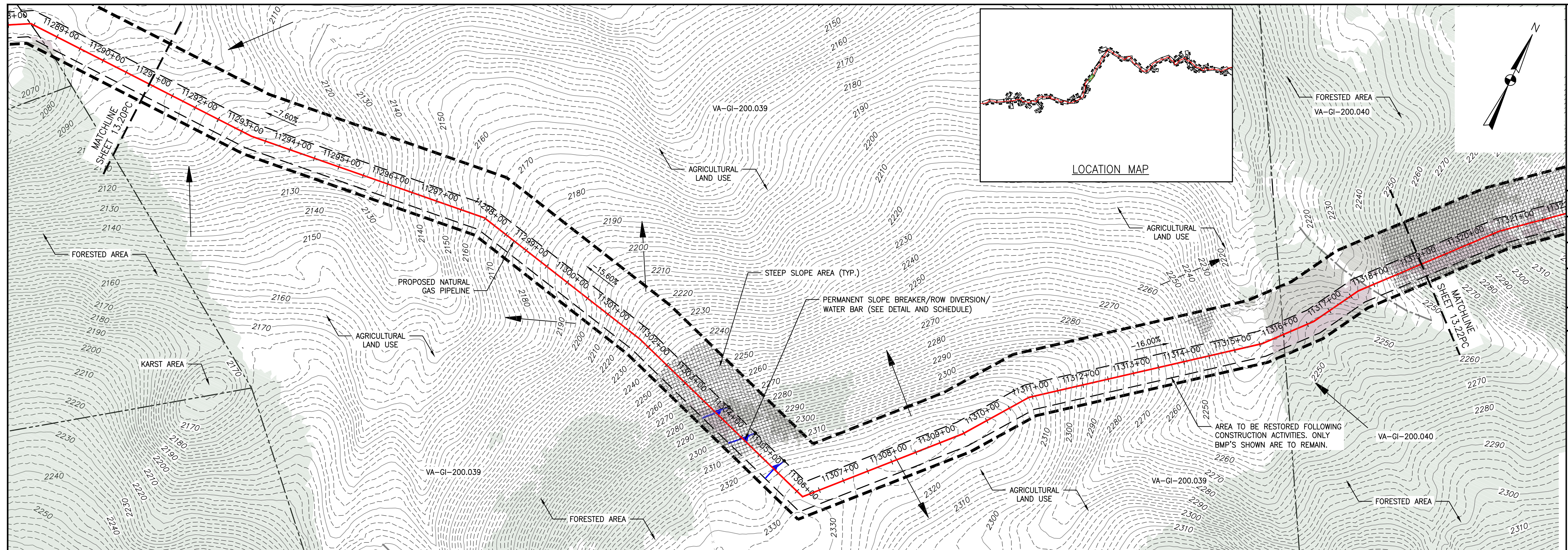
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.20PC	OF 13.90PC



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION	▨	STEEP SLOPE AREA
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	▲	FEMA 100 YEAR FLOODPLAIN	▨	EXISTING FOREST
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 10' END TREATMENT	▨	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 15' END TREATMENT	▨	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
---	EXISTING COUNTY LINE	→	SURFACE WATER FLOW DIRECTION	●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)		
---	EXISTING ROAD/TRAIL	▨	POND				
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨	WETLAND				
---	APPALACHIAN NATIONAL SCENIC TRAIL						
---	ACID FORMING MATERIAL						
---	PROPOSED LEVEL SPREADER DIVERSION						
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)						
---	PROPOSED LIMIT OF DISTURBANCE						

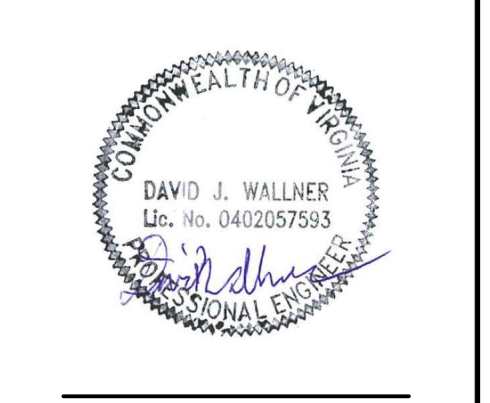
- NOTES:**
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
 - IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VAQD COMMENTS
3	2/7/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VAQD COMMENTS

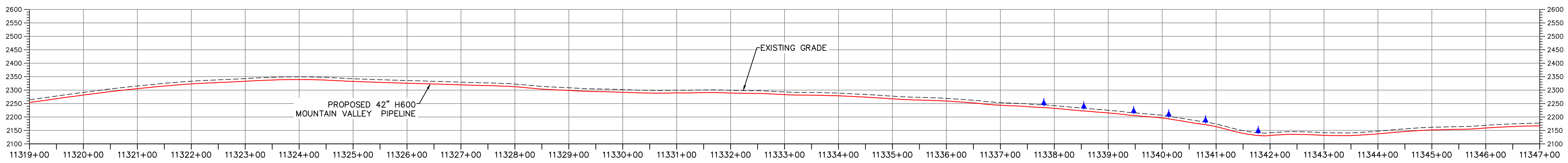
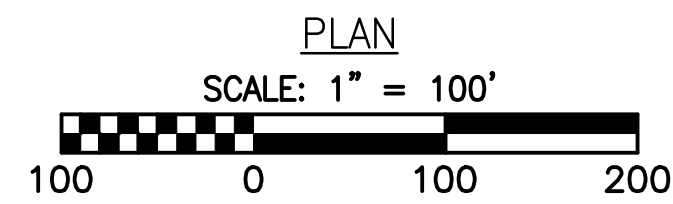
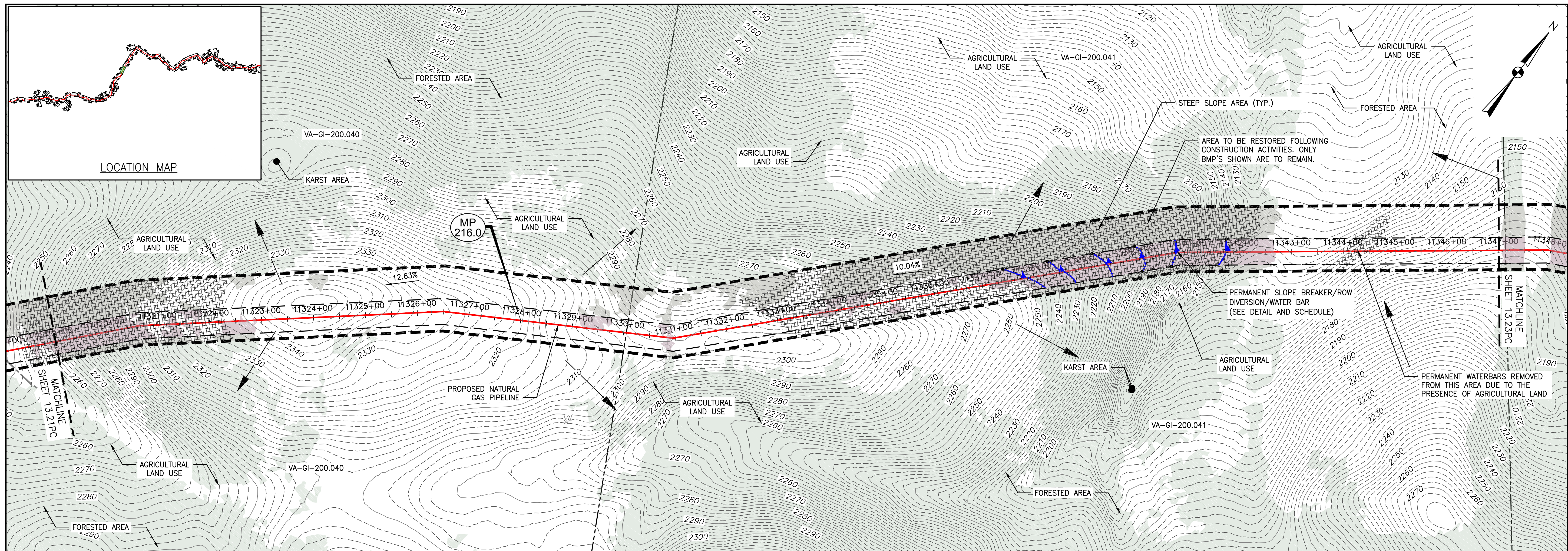
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
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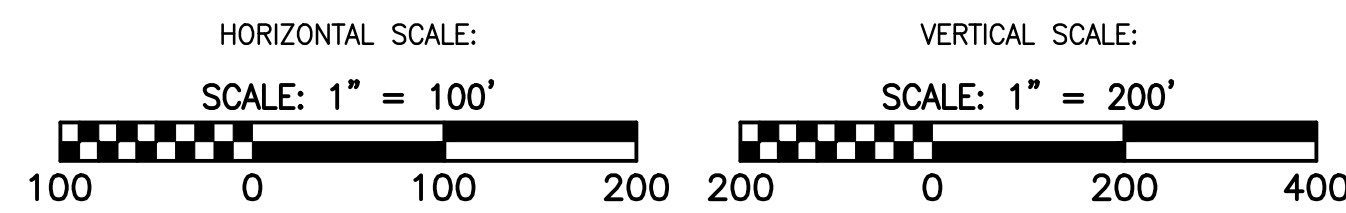
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.21PC OF 13.90PC	REVISION



PROFILE



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- +++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

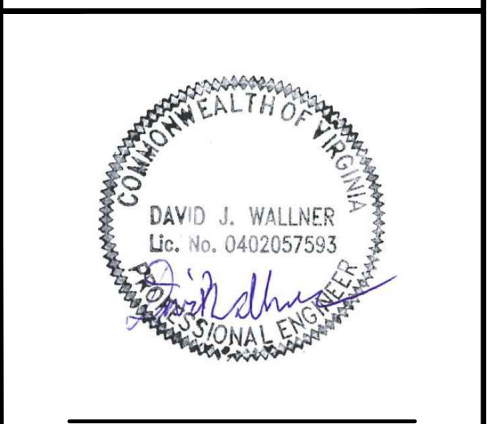
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	JRE	PLAN SUBMISSION
2	11/21/17	KAL	JRE	ADDRESS VADED COMMENTS
3	2/16/18	KAL	JRE	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	JRE	ADDRESS VADED COMMENTS

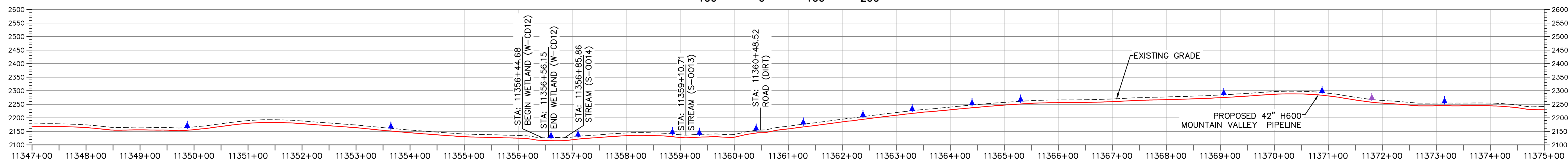
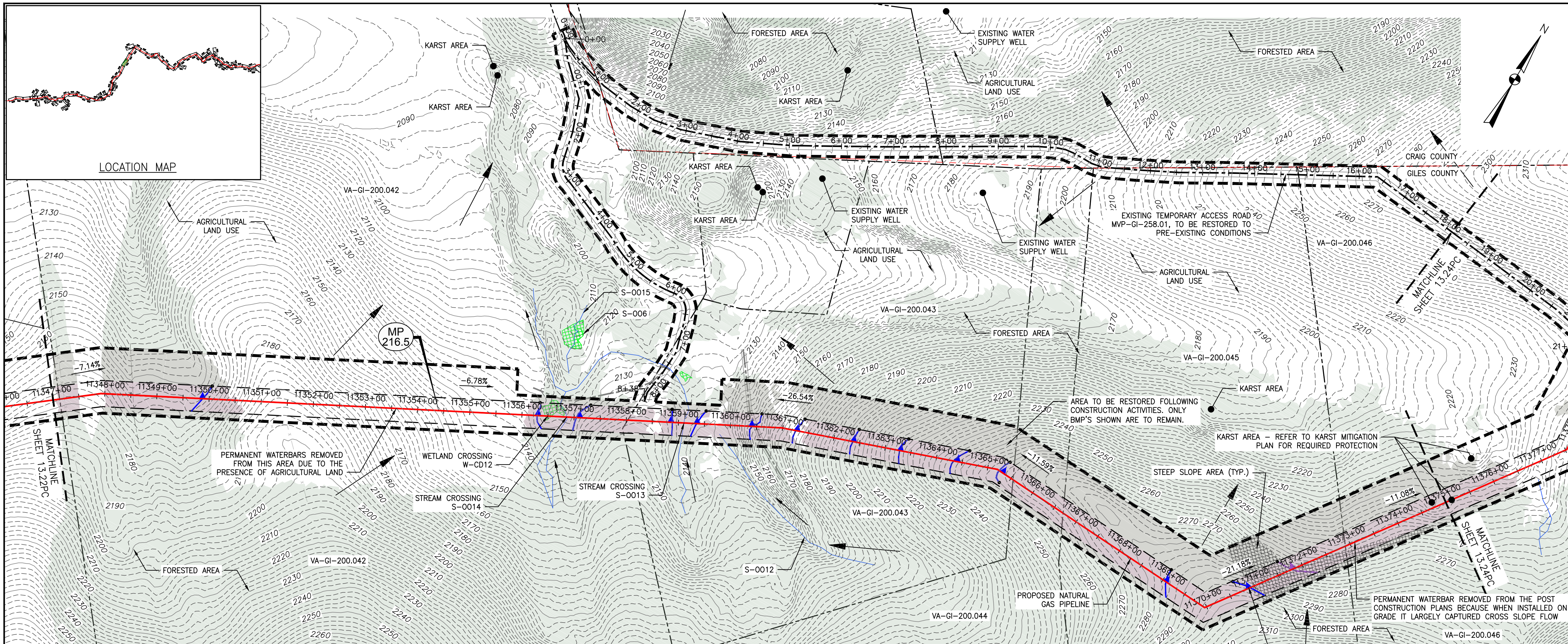
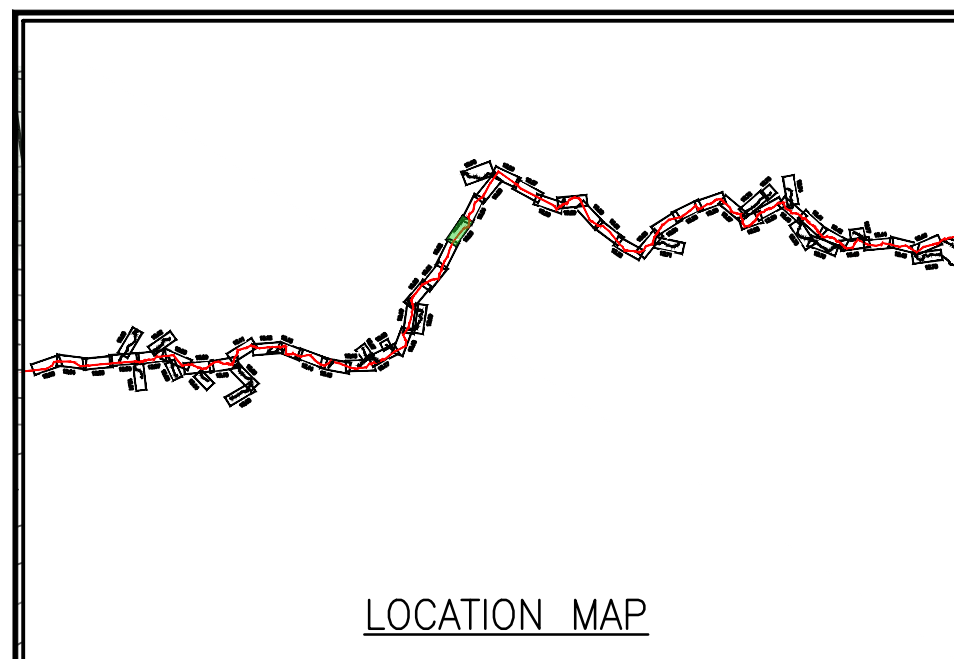
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.22PC OF 13.90PC	REVISION



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

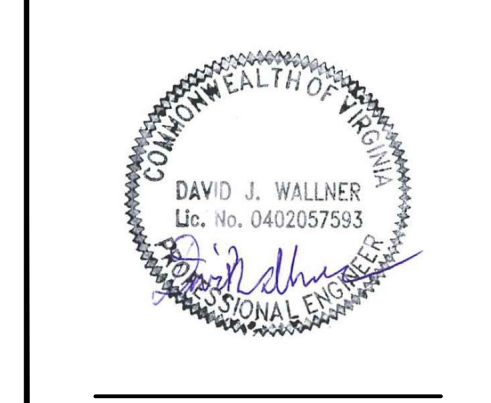
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS

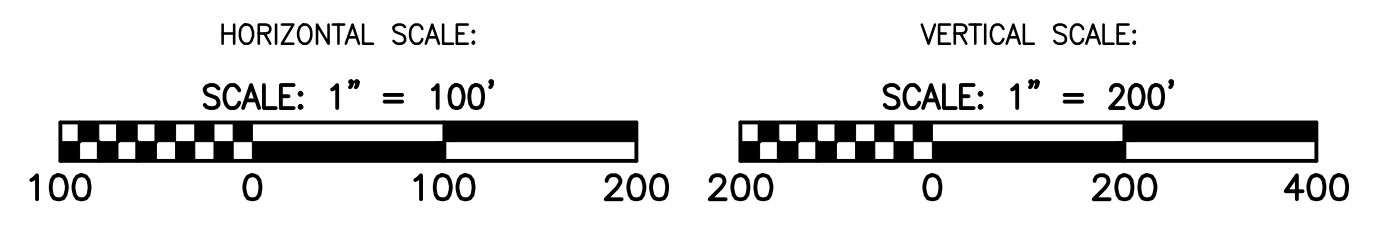
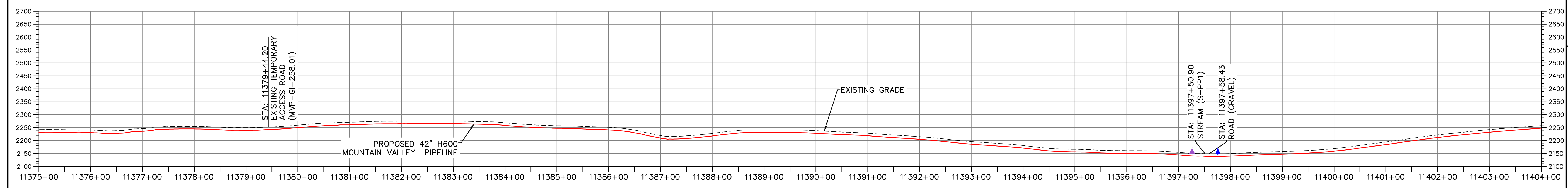
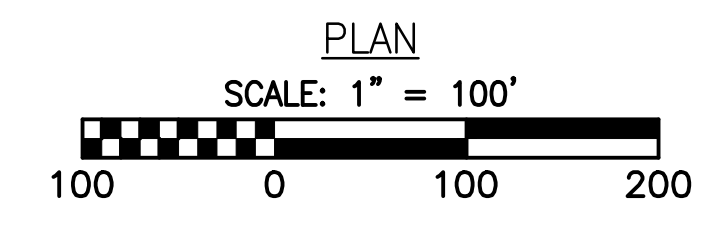
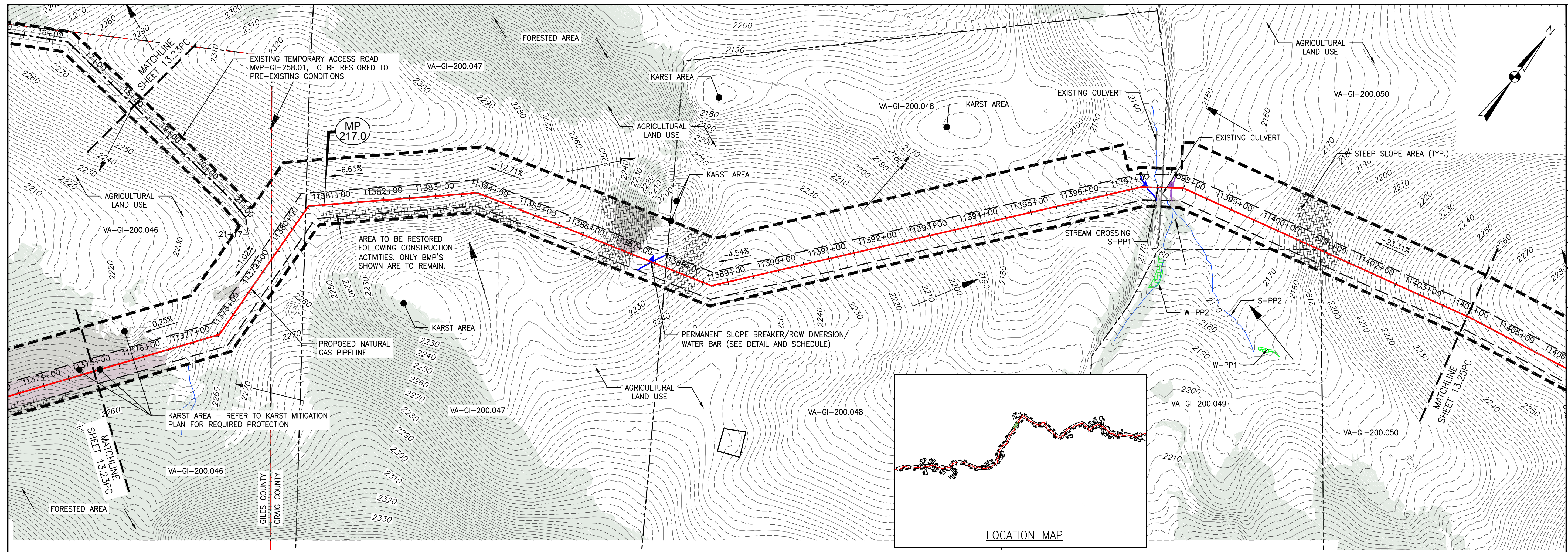
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.23PC OF 13.90PC	REVISION



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE
---	EXISTING STATE LINE	---	PROPOSED PIPELINE
---	EXISTING COUNTY LINE	---	SURFACE WATER FLOW DIRECTION
---	EXISTING ROAD/TRAIL	▲	POND
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	■	WETLAND
---	APPALACHIAN NATIONAL SCENIC TRAIL	→	STREAM FLOW DIRECTION
---	ACID FORMING MATERIAL	▲	FEMA 100 YEAR FLOODPLAIN
---	PROPOSED LEVEL SPREADER DIVERSION	▲	PERMANENT WATER BAR 10' END TREATMENT
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)	▲	PERMANENT WATER BAR 15' END TREATMENT
---	PROPOSED LIMIT OF DISTURBANCE	▲	PERMANENT WATER BAR 20' END TREATMENT
●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)	■	STEEP SLOPE AREA

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADED COMMENTS

REVISIONS:

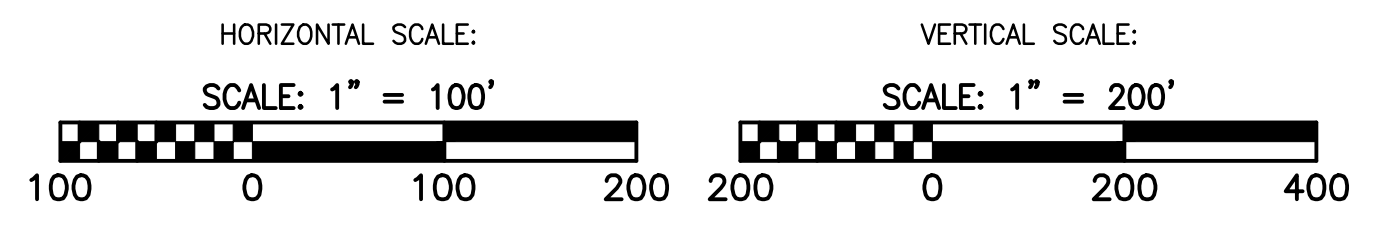
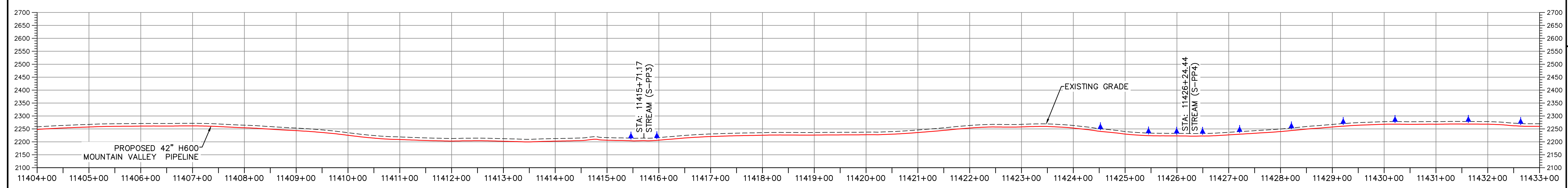
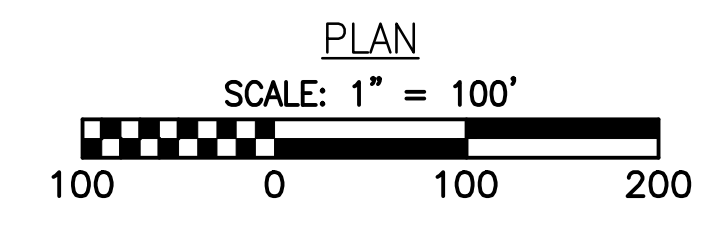
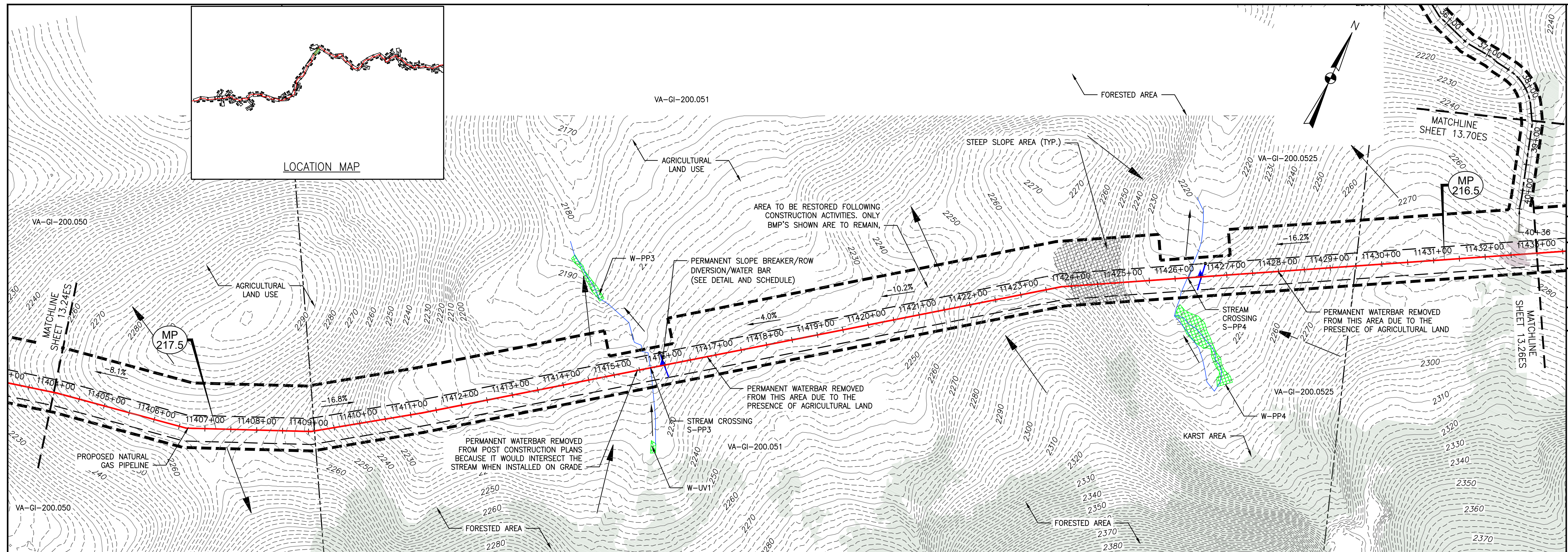
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
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 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DJW
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHT. NO. 13.24PC OF 13.90PC



LEGEND

— EXISTING CULVERT	+++++ PROPOSED LEVEL SPREADER	→ STREAM FLOW DIRECTION
— STREAM	--- PROPOSED PERMANENT RIGHT OF WAY	▬ FEMA 100 YEAR FLOODPLAIN
--- EXISTING PROPERTY LINE	--- PROPOSED ACCESS ROAD CENTERLINE	▬ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
--- EXISTING STATE LINE	--- PROPOSED PIPELINE	▬ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
--- EXISTING COUNTY LINE	→ SURFACE WATER FLOW DIRECTION	
--- EXISTING ROAD/TRAIL	▭ POND	
--- USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▭ WETLAND	
--- APPALACHIAN NATIONAL SCENIC TRAIL	▭ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)	
--- ACID FORMING MATERIAL	▭ APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)	
--- PROPOSED LEVEL SPREADER DIVERSION		
--- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)		
--- PROPOSED LIMIT OF DISTURBANCE		

NOTES:

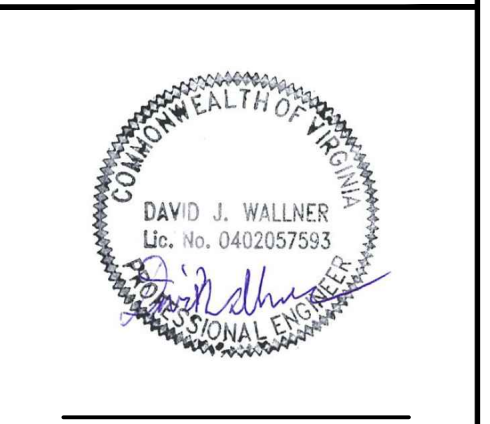
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
3	2/16/18	KAL	DW	ADDRESS VAEQ COMMENTS
4	3/5/18	KAL	DW	ADDRESS VAEQ COMMENTS

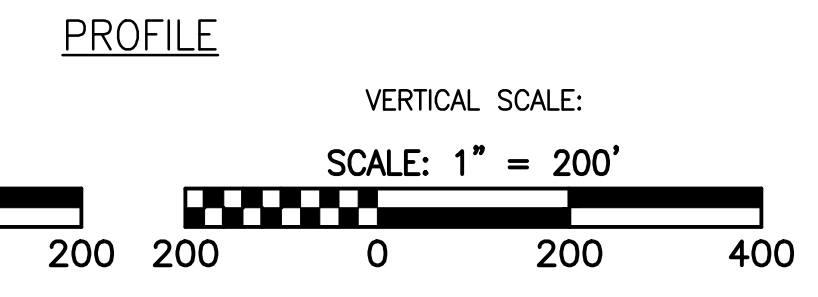
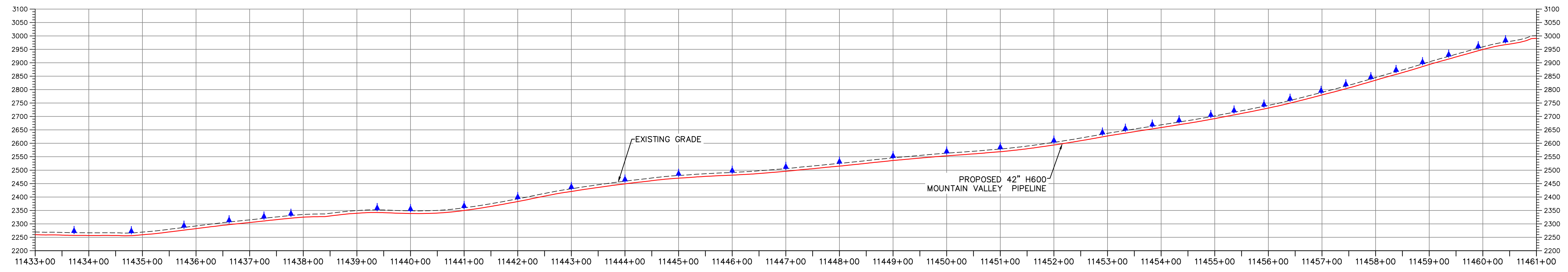
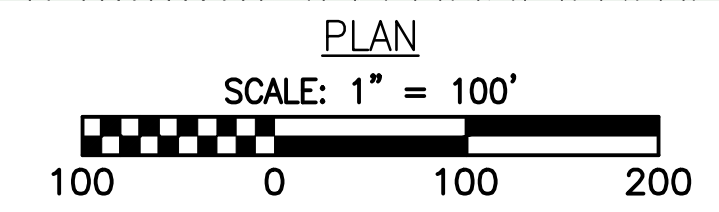
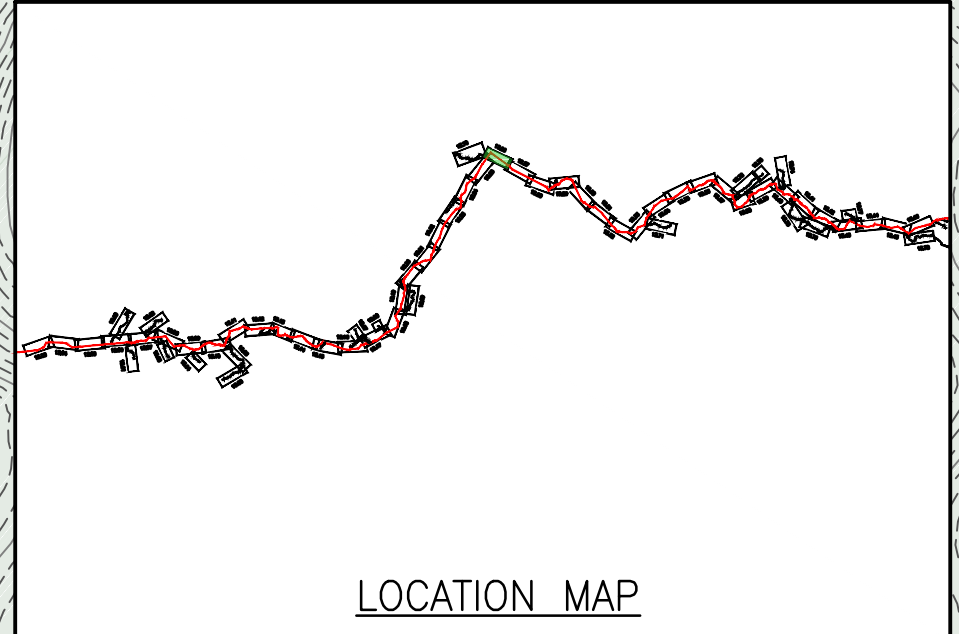
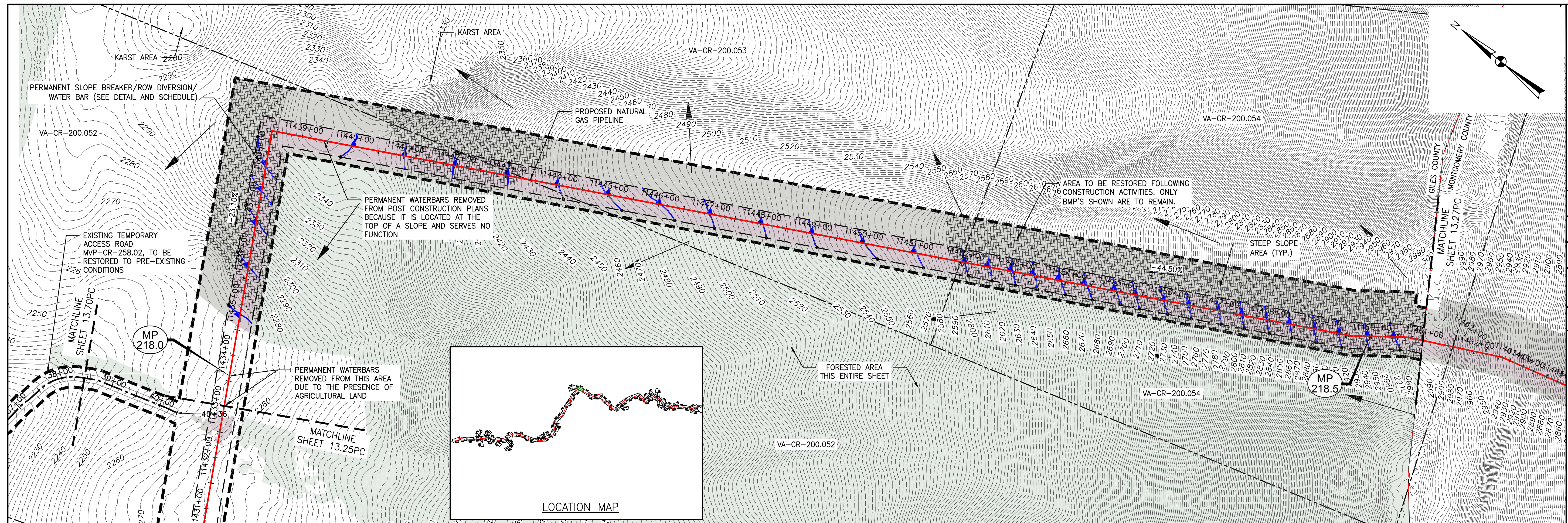
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 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.25PC OF 13.90PC	



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION	▨	STEEP SLOPE AREA
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	—	FEMA 100 YEAR FLOODPLAIN	▨	EXISTING FOREST
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 10' END TREATMENT	▨	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 15' END TREATMENT	▨	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
---	EXISTING COUNTY LINE	→	SURFACE WATER FLOW DIRECTION	▲	PERMANENT WATER BAR 20' END TREATMENT		
---	EXISTING ROAD/TRAIL	▨	POND				
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨	WETLAND				
---	APPALACHIAN NATIONAL SCENIC TRAIL	→	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)				
---	ACID FORMING MATERIAL	●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)				
---	PROPOSED LEVEL SPREADER DIVERSION						
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)						
---	PROPOSED LIMIT OF DISTURBANCE						

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADED COMMENTS

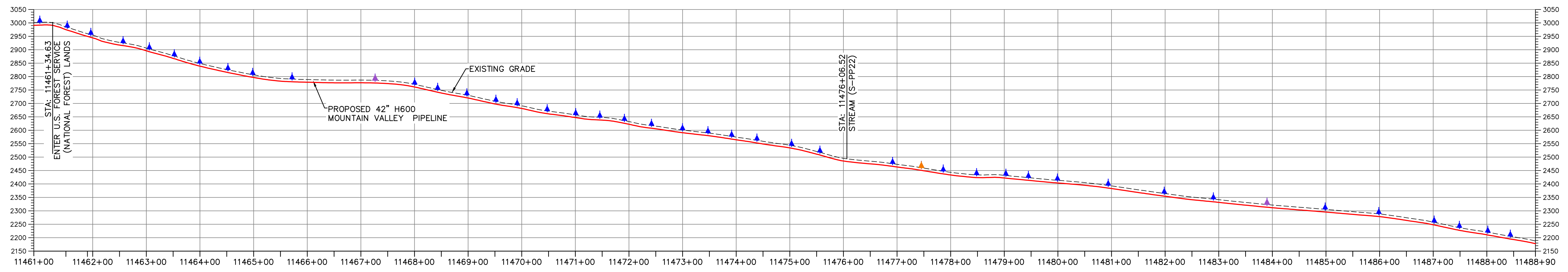
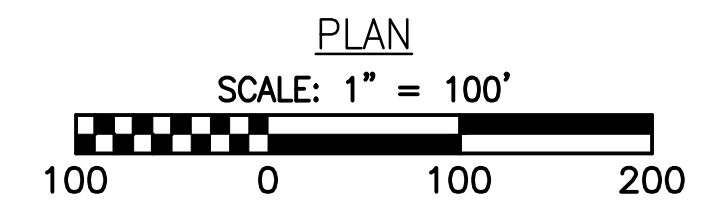
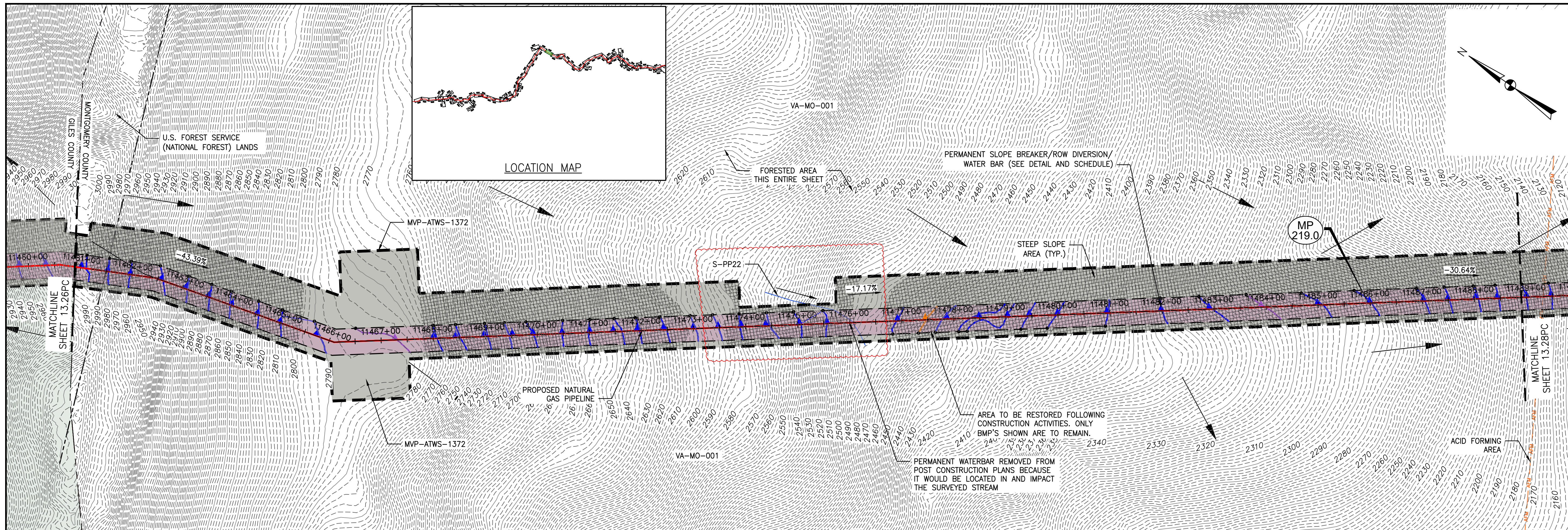
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DJW
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHT. NO. 13.26PC OF 13.90PC



- LEGEND**
- EXISTING CULVERT
 - STREAM
 - EXISTING PROPERTY LINE
 - EXISTING STATE LINE
 - EXISTING COUNTY LINE
 - EXISTING ROAD/TRAIL
 - USDA FOREST SERVICE (NATIONAL FOREST) LANDS
 - APPALACHIAN NATIONAL SCENIC TRAIL
 - ACID FORMING MATERIAL
 - PROPOSED LEVEL SPREADER DIVERSION
 - GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
 - PROPOSED LIMIT OF DISTURBANCE
 - PROPOSED LEVEL SPREADER
 - PROPOSED PERMANENT RIGHT OF WAY
 - PROPOSED ACCESS ROAD CENTERLINE
 - PROPOSED PIPELINE
 - SURFACE WATER FLOW DIRECTION
 - POND
 - WETLAND
 - PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
 - APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
 - STREAM FLOW DIRECTION
 - FEMA 100 YEAR FLOODPLAIN
 - PERMANENT WATER BAR 10' END TREATMENT
 - PERMANENT WATER BAR 15' END TREATMENT
 - PERMANENT WATER BAR 20' END TREATMENT
 - STEEP SLOPE AREA
 - EXISTING FOREST
 - PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
 - TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

- NOTES:**
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
 - IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VADEQ COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADEQ COMMENTS
7/2/20		JRE	DJW	CHANGES TO AQUATIC RESOURCES DELINEATIONS

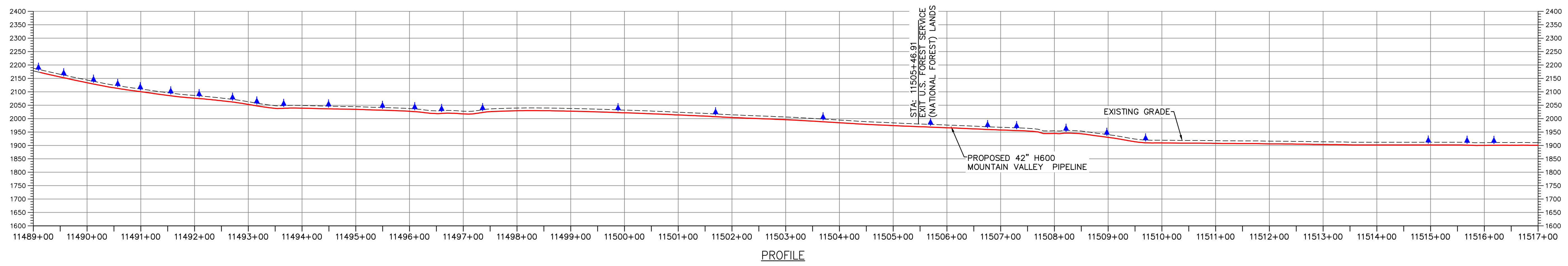
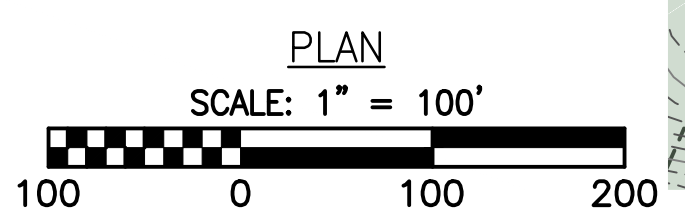
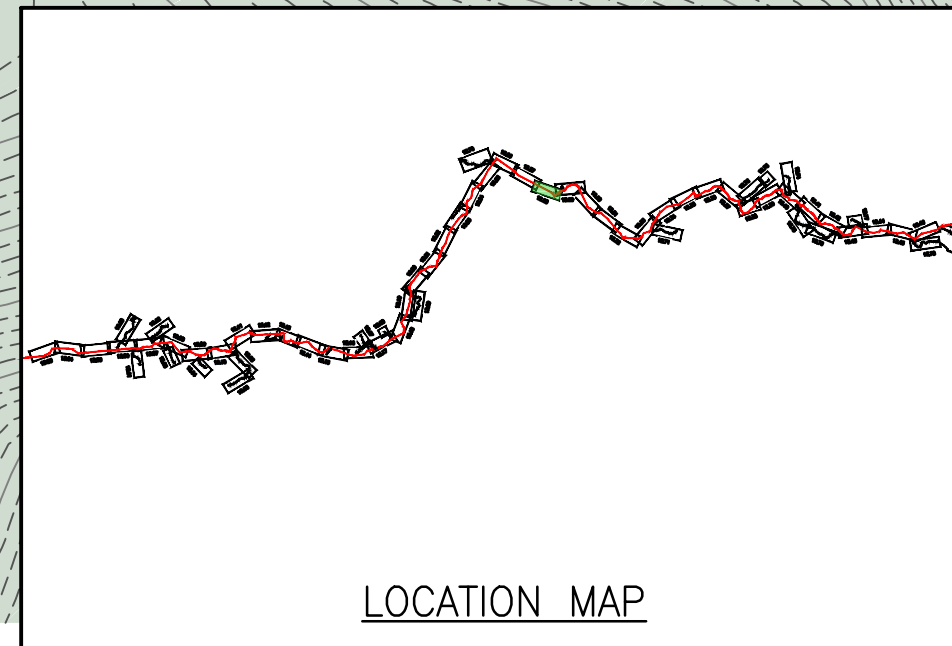
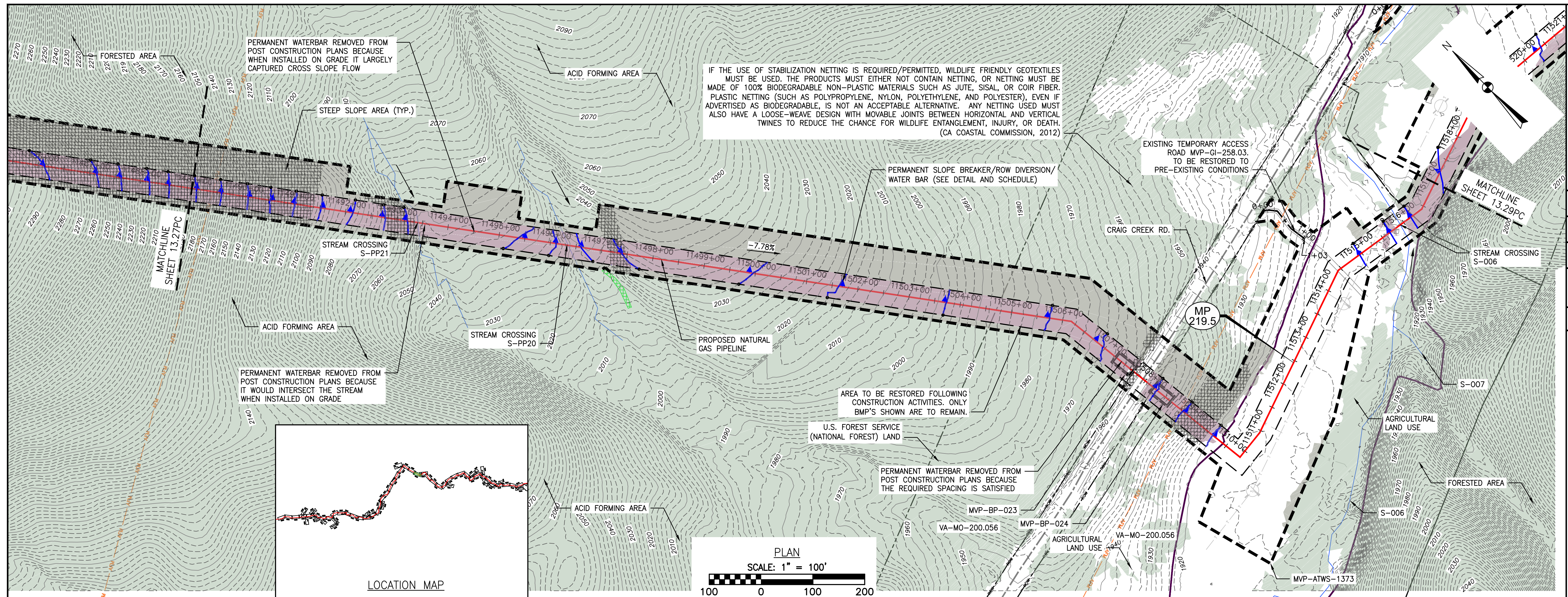
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

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FOSTER PLAZA 7
PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

DAVID J. WALLNER
Lic. No. 0402057593
Professional Engineer

DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	7/7/20
SCALE:	AS SHOWN
SHT. NO. 13.27PC OF 13.90PC	5 REVISION



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION



NOTES:

1. NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
2. IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VABED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VABED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

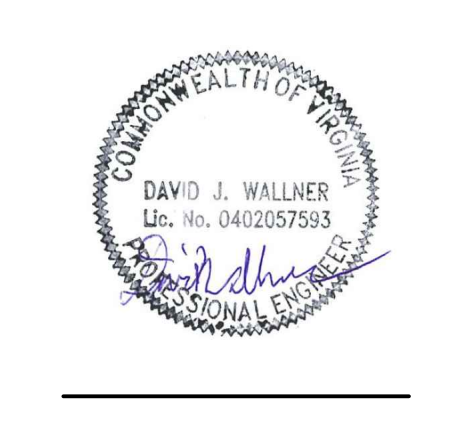
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

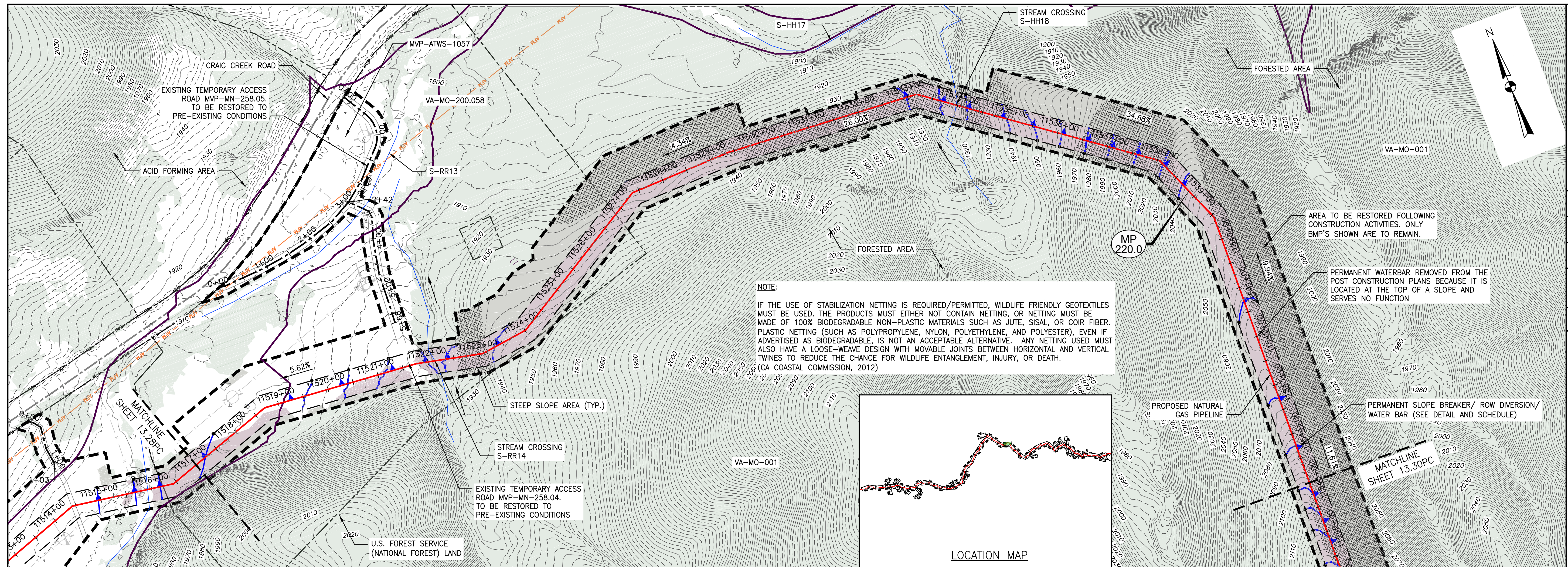
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 PITTSBURGH, PA 15220

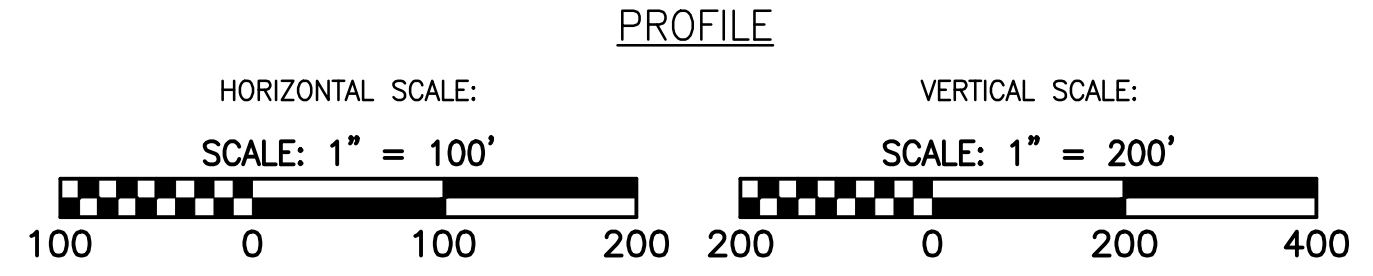
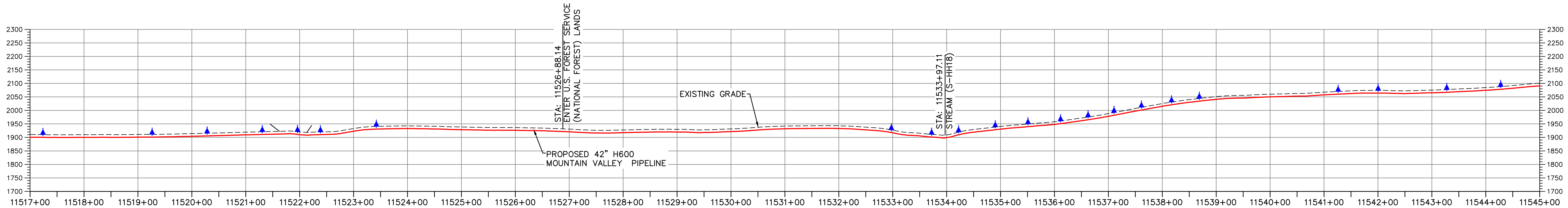
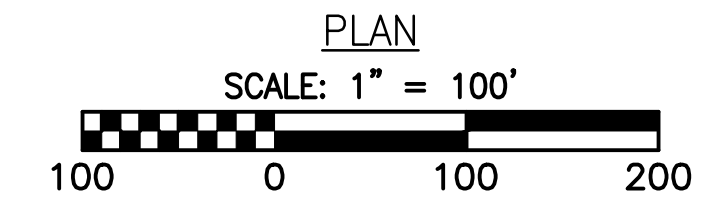
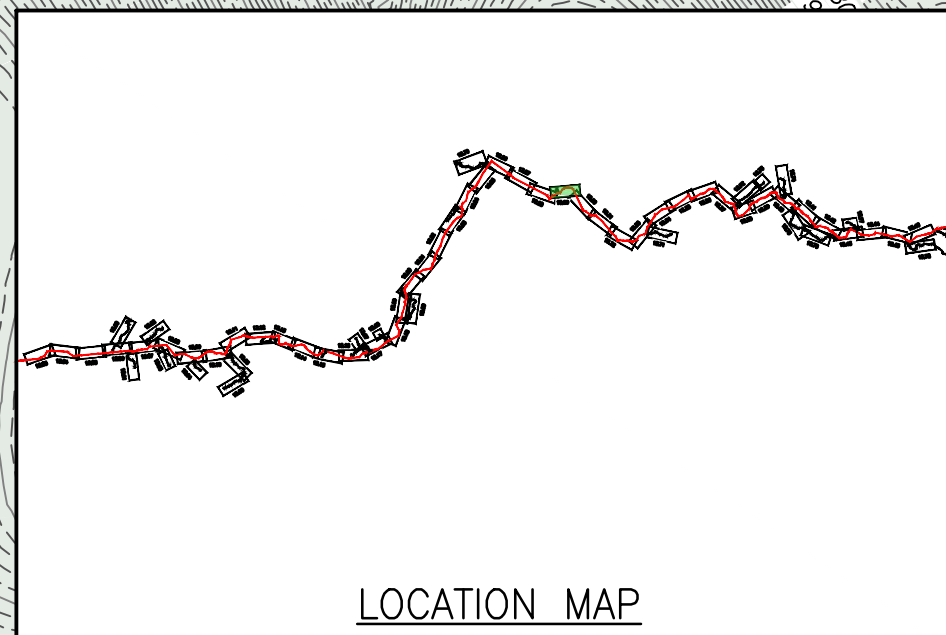
POST CONSTRUCTION
(STORMWATER &
RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.28PC OF 13.90PC



NOTE:
 IF THE USE OF STABILIZATION NETTING IS REQUIRED/PERMITTED, WILDLIFE FRIENDLY GEOTEXTILES MUST BE USED. THE PRODUCTS MUST EITHER NOT CONTAIN NETTING, OR NETTING MUST BE MADE OF 100% BIODEGRADABLE NON-PLASTIC MATERIALS SUCH AS JUTE, SISAL, OR COIR FIBER. PLASTIC NETTING (SUCH AS POLYPROPYLENE, NYLON, POLYETHYLENE, AND POLYESTER), EVEN IF ADVERTISED AS BIODEGRADABLE, IS NOT AN ACCEPTABLE ALTERNATIVE. ANY NETTING USED MUST ALSO HAVE A LOOSE-WEAVE DESIGN WITH MOVABLE JOINTS BETWEEN HORIZONTAL AND VERTICAL TWINES TO REDUCE THE CHANCE FOR WILDLIFE ENTANGLEMENT, INJURY, OR DEATH. (CA COASTAL COMMISSION, 2012)



LEGEND	
—	EXISTING CULVERT
—	STREAM
- - -	EXISTING PROPERTY LINE
- - -	EXISTING STATE LINE
- - -	EXISTING COUNTY LINE
- - -	EXISTING ROAD/TRAIL
—	USDA FOREST SERVICE (NATIONAL FOREST) LANDS
—	APPALACHIAN NATIONAL SCENIC TRAIL
—	ACID FORMING MATERIAL
—	PROPOSED LEVEL SPREADER DIVERSION
—	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
—	PROPOSED LIMIT OF DISTURBANCE
+++++	PROPOSED LEVEL SPREADER
- - -	PROPOSED PERMANENT RIGHT OF WAY
- - -	PROPOSED ACCESS ROAD CENTERLINE
—	PROPOSED PIPELINE
—	SURFACE WATER FLOW DIRECTION
—	POND
—	WETLAND
—	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
•	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
—	STREAM FLOW DIRECTION
—	FEMA 100 YEAR FLOODPLAIN
—	PERMANENT WATER BAR 10' END TREATMENT
—	PERMANENT WATER BAR 15' END TREATMENT
—	PERMANENT WATER BAR 20' END TREATMENT
—	STEEP SLOPE AREA
—	EXISTING FOREST
—	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
—	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:
 1. NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
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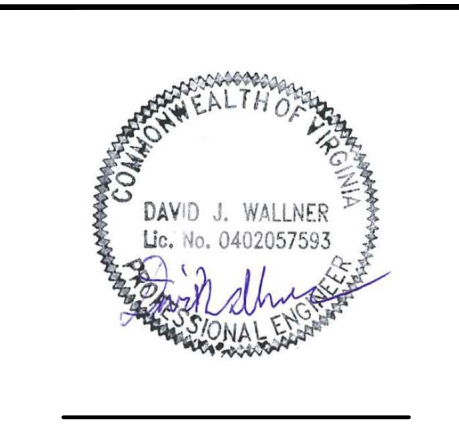
NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
3	2/7/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS

REVISIONS:

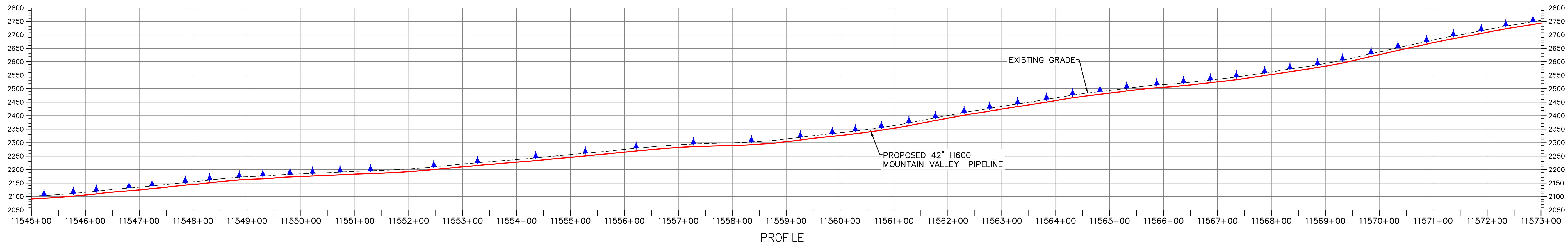
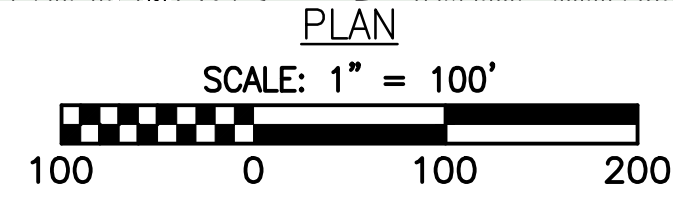
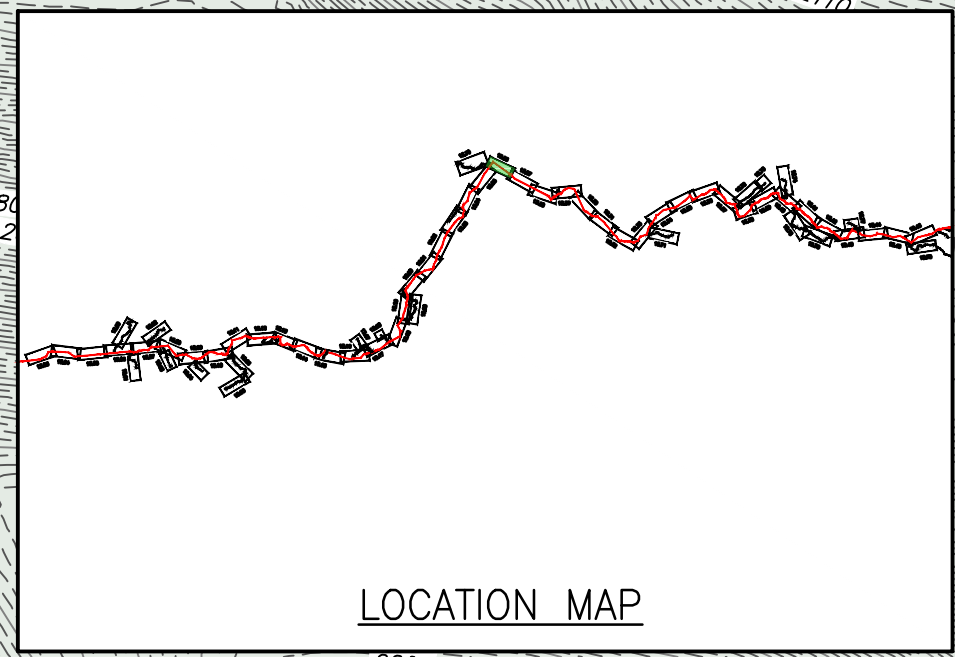
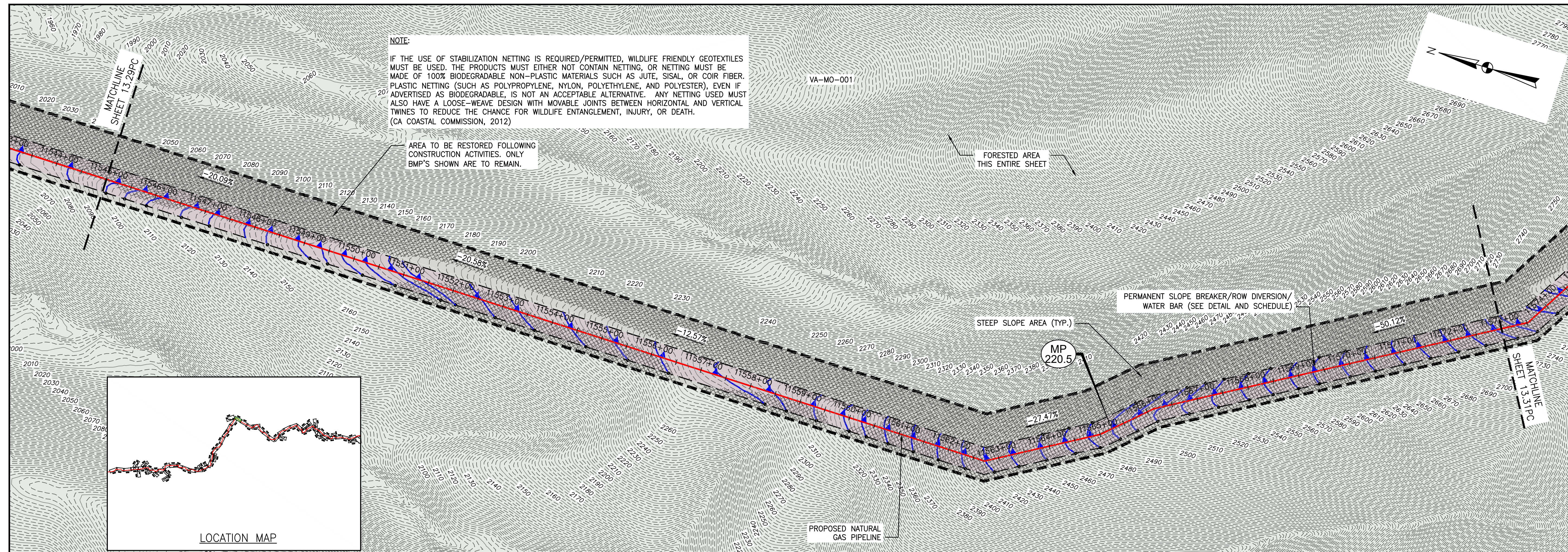
Mountain Valley Pipeline
 POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
 MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
 MOUNTAIN VALLEY PIPELINE, LLC
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 CANONSBURG, PA 15311

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 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DW
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHEET NO. 13.29PC OF 13.90PC



LEGEND

— EXISTING CULVERT	+++++ PROPOSED LEVEL SPREADER	— PROPOSED PERMANENT RIGHT OF WAY
— STREAM	— PROPOSED ACCESS ROAD CENTERLINE	— PROPOSED PIPELINE
--- EXISTING PROPERTY LINE	— SURFACE WATER FLOW DIRECTION	▲ POND
--- EXISTING STATE LINE	▲ WETLAND	▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
--- EXISTING COUNTY LINE	▲ FEMA 100 YEAR FLOODPLAIN	▲ PERMANENT WATER BAR 10' END TREATMENT
--- EXISTING ROAD/TRAIL	▲ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION	▲ PERMANENT WATER BAR 15' END TREATMENT
— USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▲ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION	▲ PERMANENT WATER BAR 20' END TREATMENT
— APPALACHIAN NATIONAL SCENIC TRAIL		
— ACID FORMING MATERIAL		
— PROPOSED LEVEL SPREADER DIVERSION		
— GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)		
— PROPOSED LIMIT OF DISTURBANCE		

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

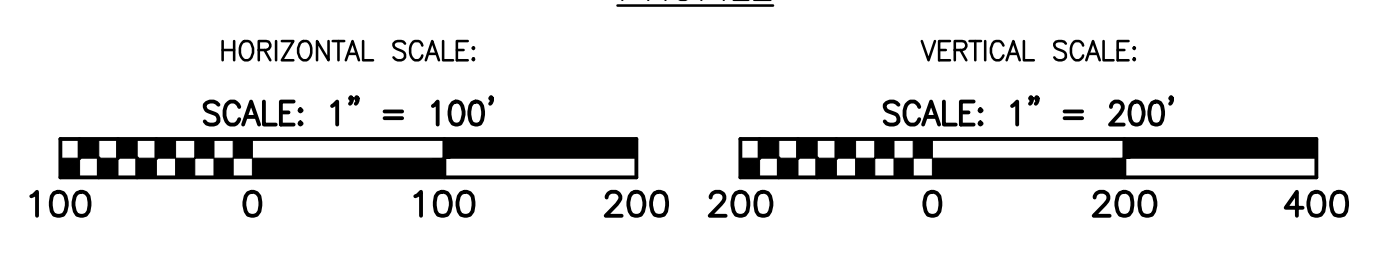
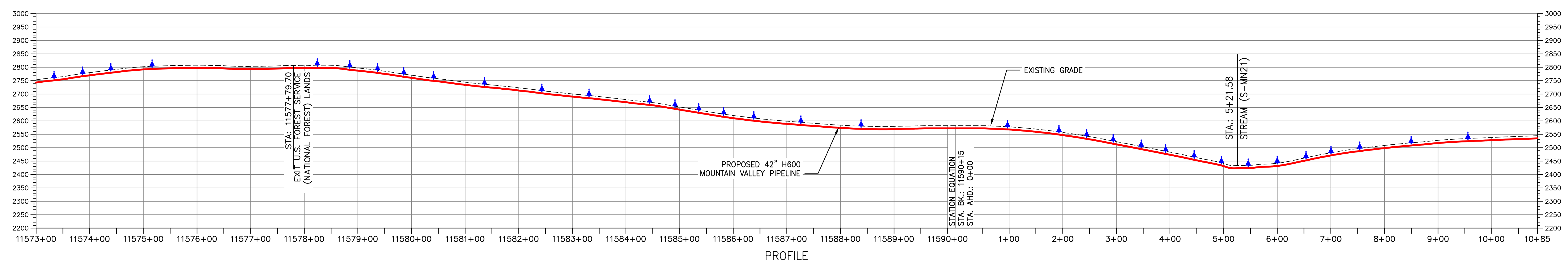
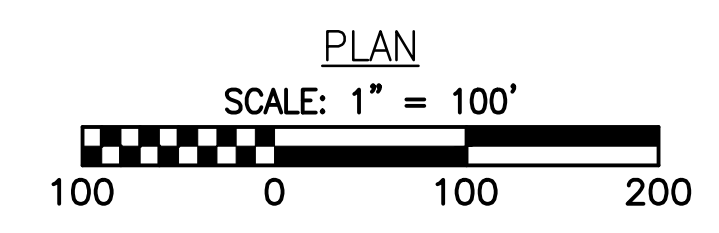
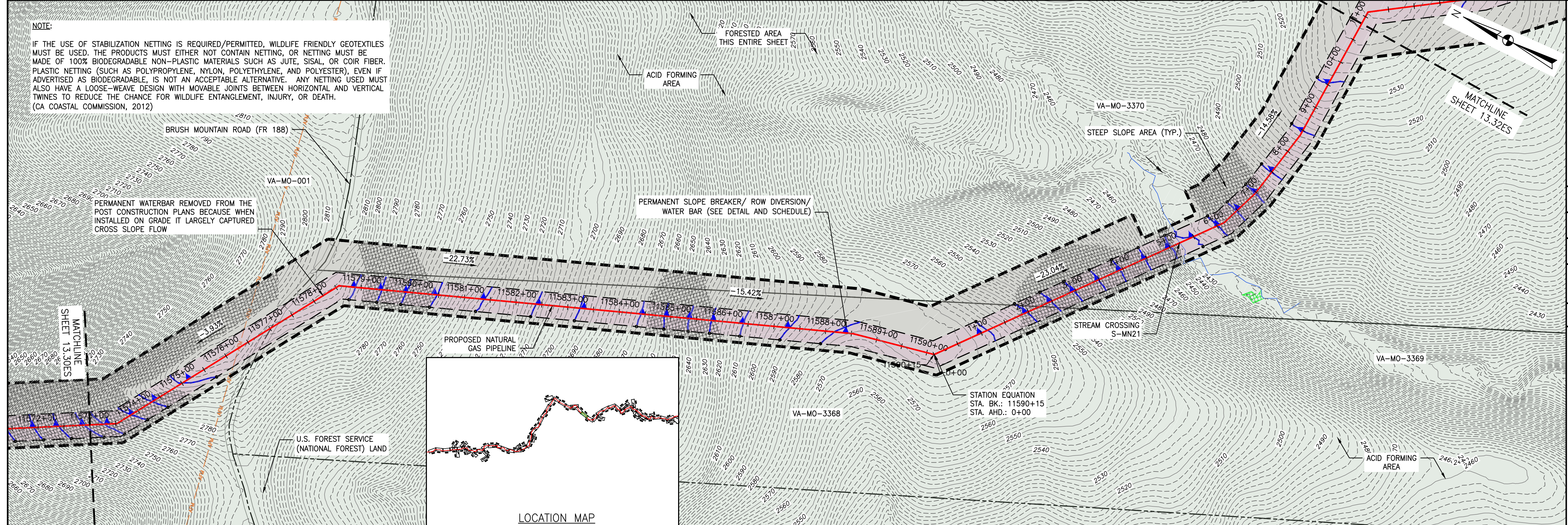
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 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DWJ
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHT. NO. 13.30PC OF 13.90PC



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE
---	EXISTING STATE LINE	---	PROPOSED PIPELINE
---	EXISTING COUNTY LINE	---	SURFACE WATER FLOW DIRECTION
---	EXISTING ROAD/TRAIL	▲	POND
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	■	WETLAND
---	APPALACHIAN NATIONAL SCENIC TRAIL	→	STREAM FLOW DIRECTION
---	ACID FORMING MATERIAL	▲	FEMA 100 YEAR FLOODPLAIN
---	PROPOSED LEVEL SPREADER DIVERSION	▲	PERMANENT WATER BAR 10' END TREATMENT
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)	▲	PERMANENT WATER BAR 15' END TREATMENT
---	PROPOSED LIMIT OF DISTURBANCE	▲	PERMANENT WATER BAR 20' END TREATMENT
●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)	■	STEEP SLOPE AREA
		■	EXISTING FOREST
		■	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
		■	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VABE COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VABE COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

REVISIONS:

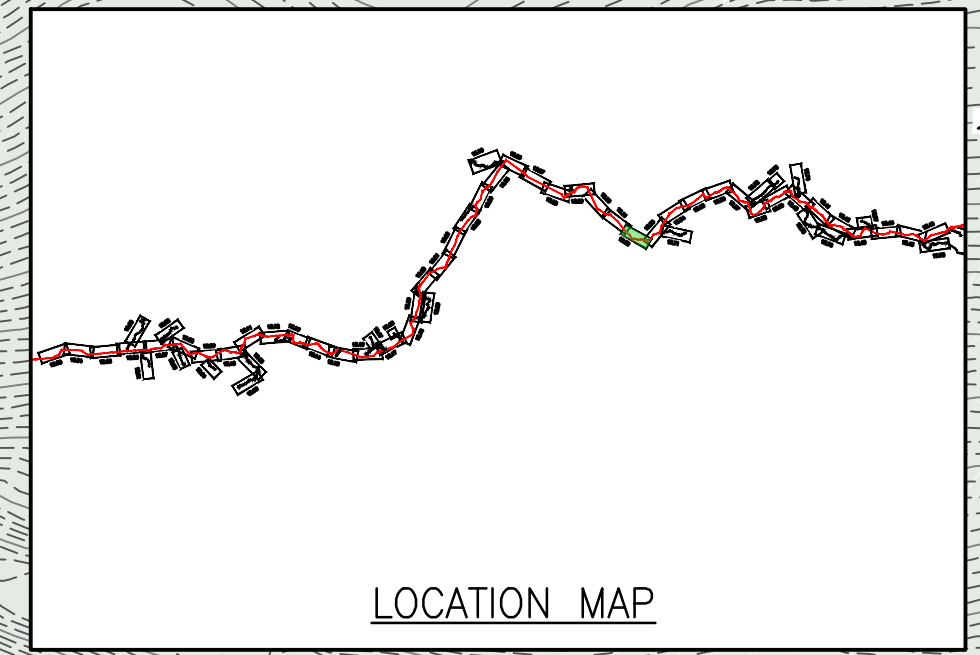
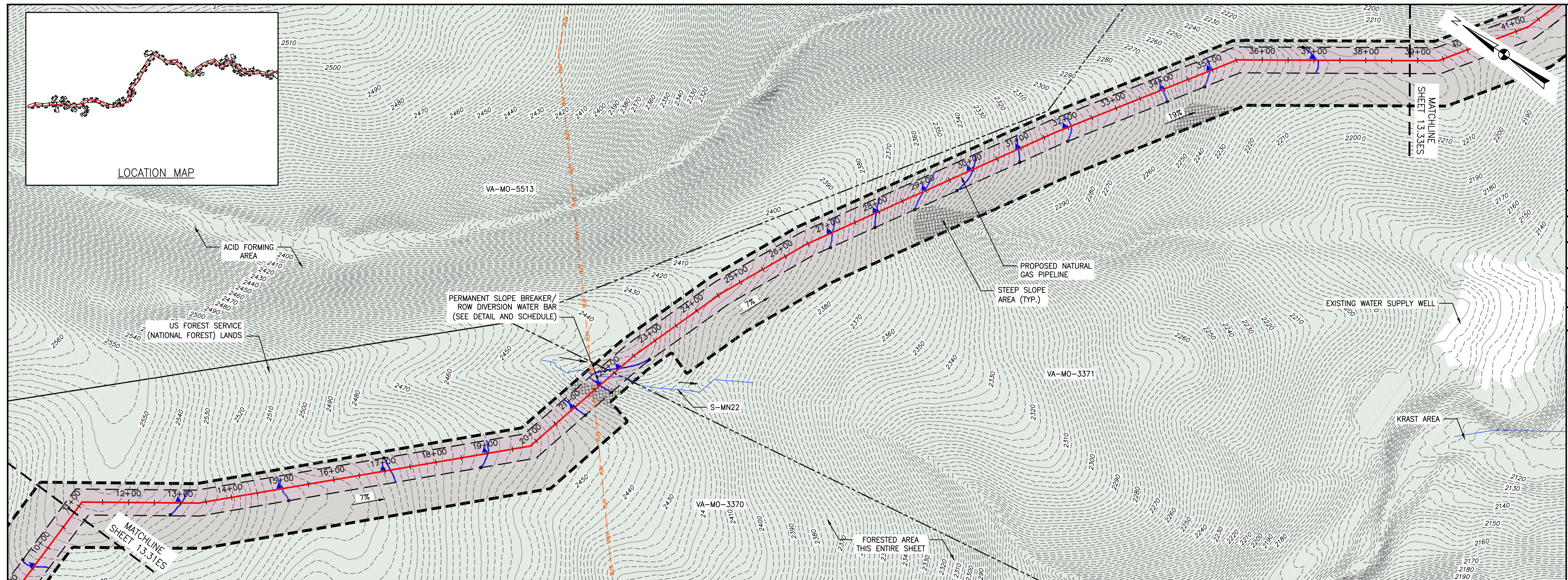
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

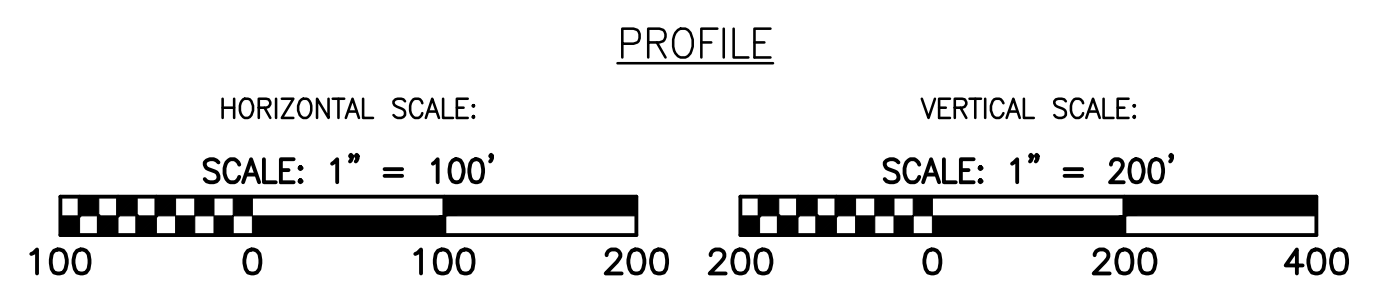
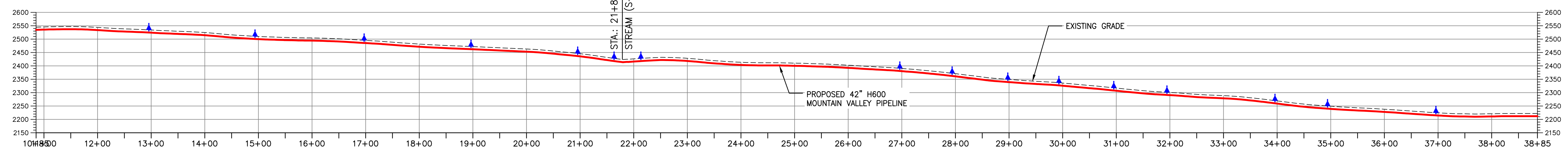
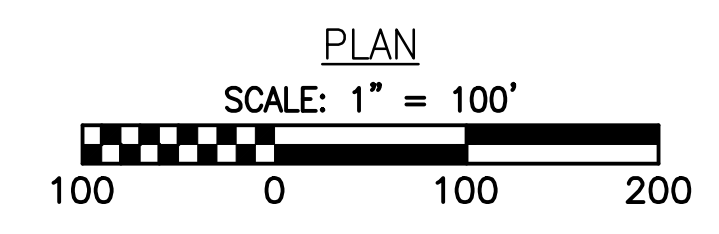
DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.31PC OF 13.90PC



NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADED COMMENTS

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

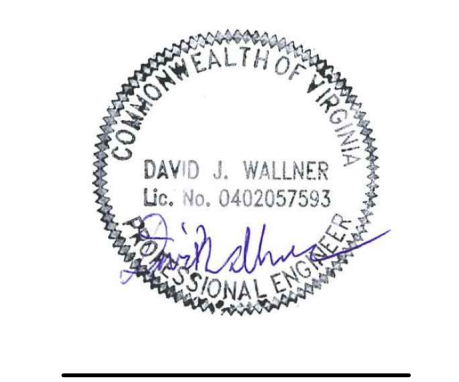


LEGEND	
	EXISTING CULVERT
	STREAM
	EXISTING PROPERTY LINE
	EXISTING STATE LINE
	EXISTING COUNTY LINE
	EXISTING ROAD/TRAIL
	USDA FOREST SERVICE (NATIONAL FOREST) LANDS
	APPALACHIAN NATIONAL SCENIC TRAIL
	ACID FORMING MATERIAL
	PROPOSED LEVEL SPREADER DIVERSION
	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED LEVEL SPREADER
	PROPOSED PERMANENT RIGHT OF WAY
	PROPOSED ACCESS ROAD CENTERLINE
	PROPOSED PIPELINE
	SURFACE WATER FLOW DIRECTION
	POND
	WETLAND
	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
	STREAM FLOW DIRECTION
	FEMA 100 YEAR FLOODPLAIN
	PERMANENT WATER BAR 10' END TREATMENT
	PERMANENT WATER BAR 15' END TREATMENT
	PERMANENT WATER BAR 20' END TREATMENT
	STEEP SLOPE AREA
	EXISTING FOREST
	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

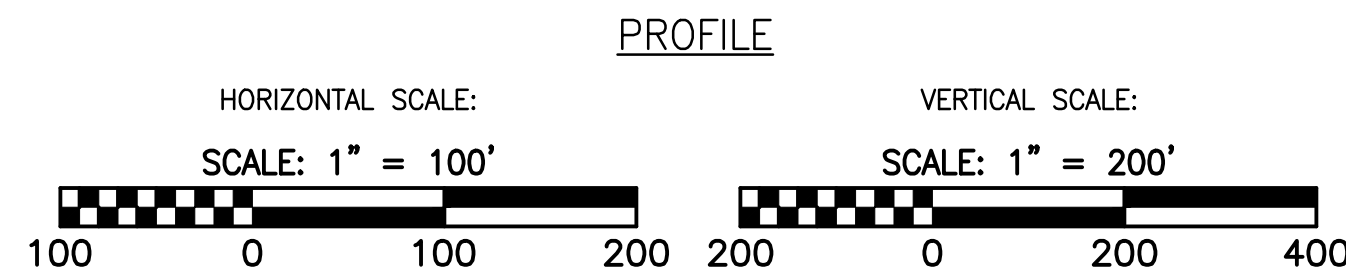
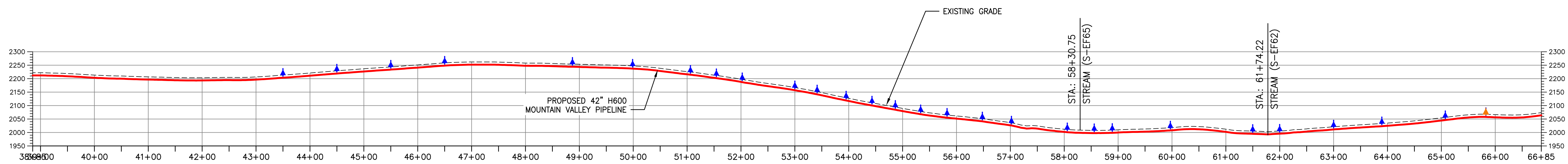
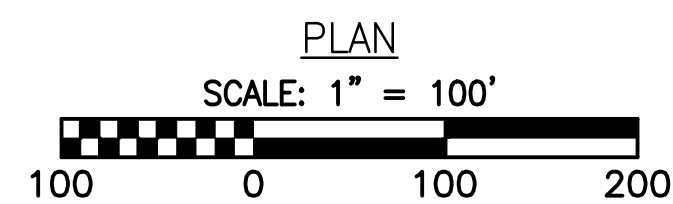
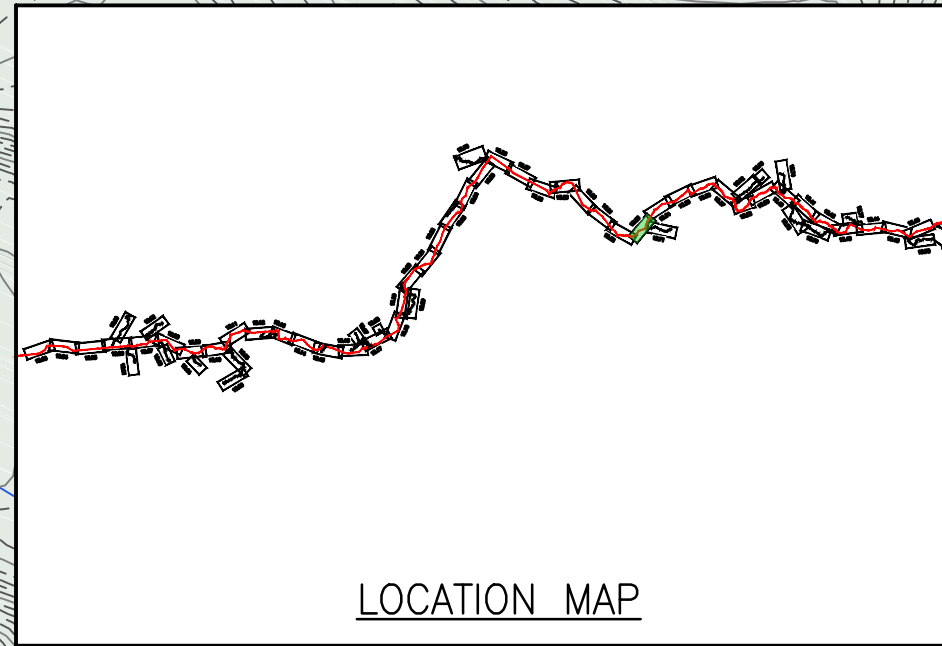
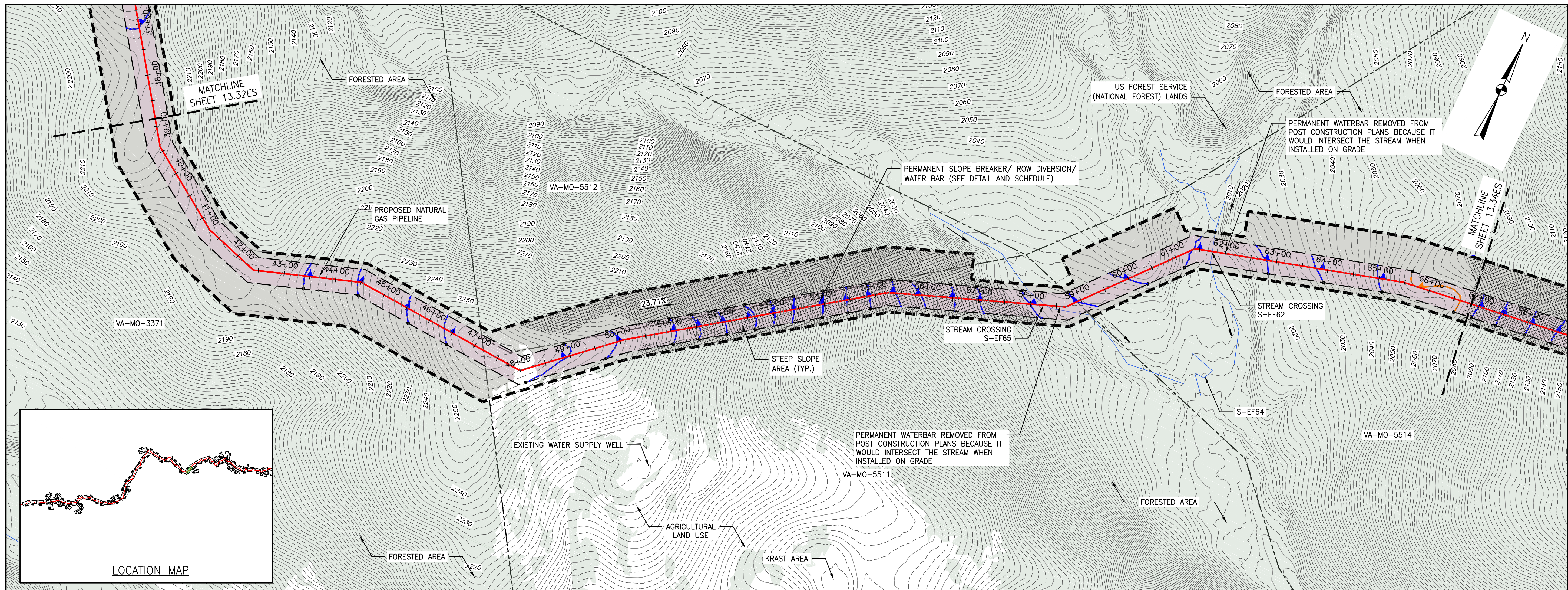
- NOTES:**
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
 - IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

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 661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION
 (STORMWATER &
 RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.32PC OF 13.90PC	REVISION



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DJW	ADDRESS VABED COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DJW	ADDRESS VABED COMMENTS
1	9/21/17	KAL	DJW	PLAN SUBMISSION

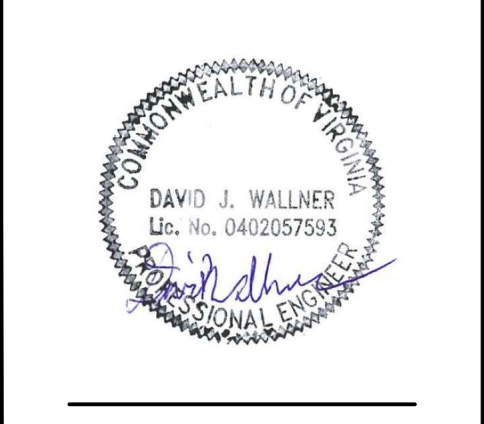
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

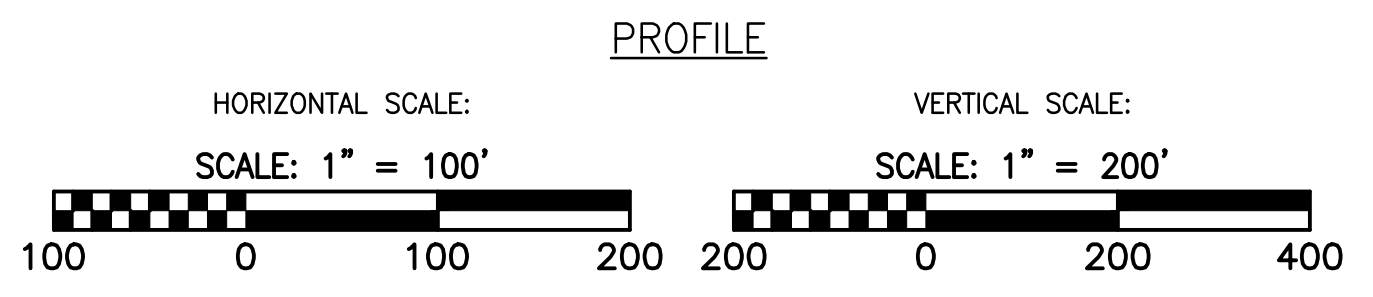
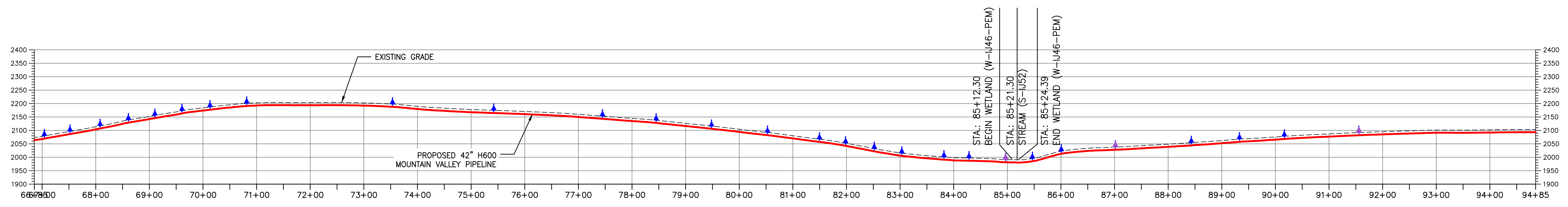
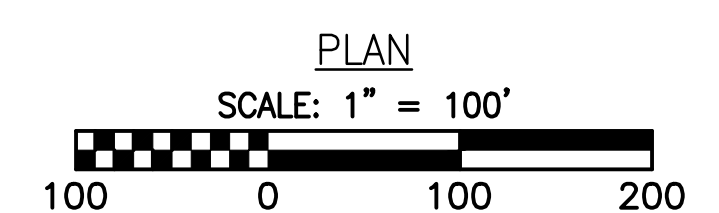
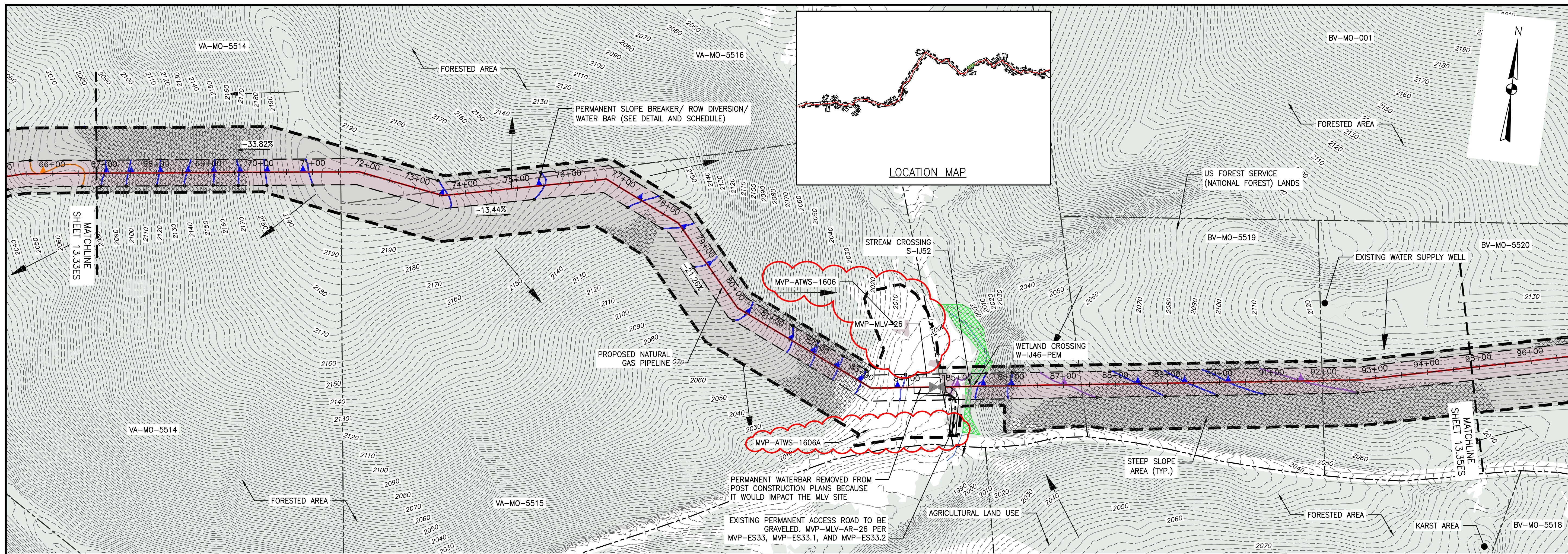
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.33PC OF 13.90PC



LEGEND

— EXISTING CULVERT	+++++ PROPOSED LEVEL SPREADER	→ STREAM FLOW DIRECTION	▨ STEEP SLOPE AREA
— STREAM	--- PROPOSED PERMANENT RIGHT OF WAY	— FEMA 100 YEAR FLOODPLAIN	▨ EXISTING FOREST
--- EXISTING PROPERTY LINE	--- PROPOSED ACCESS ROAD CENTERLINE	▲ PERMANENT WATER BAR 10' END TREATMENT	▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
--- EXISTING STATE LINE	--- PROPOSED PIPELINE	▲ PERMANENT WATER BAR 15' END TREATMENT	▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
--- EXISTING COUNTY LINE	→ SURFACE WATER FLOW DIRECTION	▲ PERMANENT WATER BAR 20' END TREATMENT	
--- EXISTING ROAD/TRAIL	▨ POND		
▨ USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨ WETLAND		
▨ APPALACHIAN NATIONAL SCENIC TRAIL	▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)		
▨ ACID FORMING MATERIAL	● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)		
▨ PROPOSED LEVEL SPREADER DIVERSION			
▨ GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)			
--- PROPOSED LIMIT OF DISTURBANCE			

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	3/25/20	ZM	JRE	FIELD MODIFICATION MP 222.7 (ATWS-1606 and ATWS-1606A)
2	4/30/18	ZM	JRE	FIELD MODIFICATION
3	3/5/18	KAL	DJW	ADDRESS VADEO COMMENTS
4	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
5	11/21/17	KAL	DJW	ADDRESS VADEO COMMENTS
6	9/21/17	KAL	DJW	PLAN SUBMISSION

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

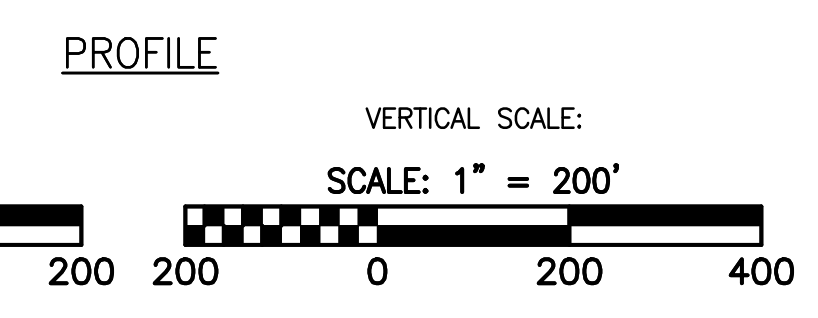
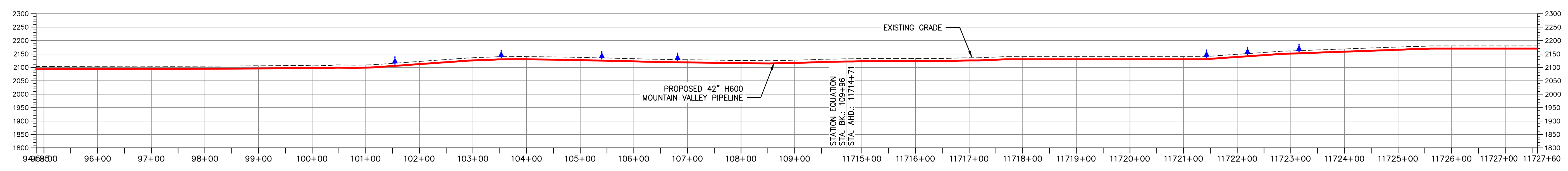
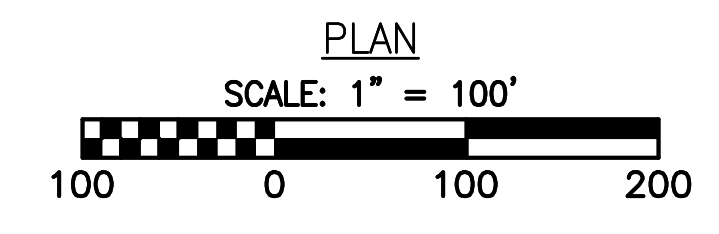
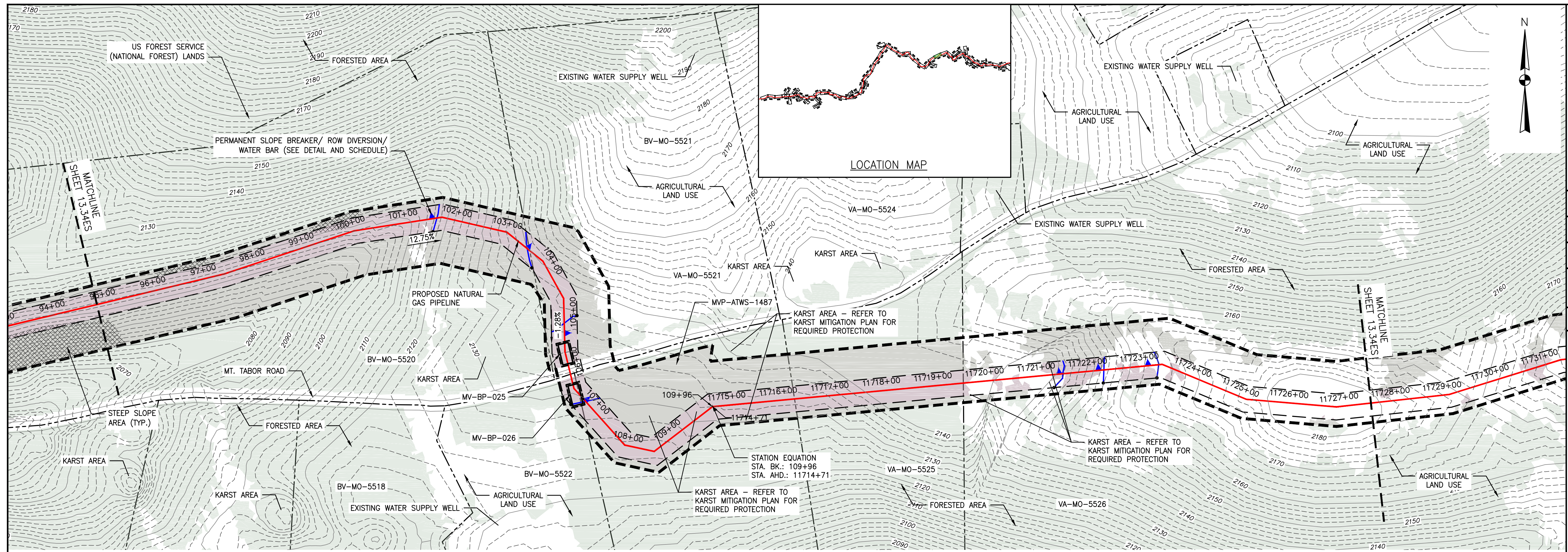
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 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DJW
 DATE: 3/25/20
 SCALE: AS SHOWN
 SHEET NO. 13.34PC OF 13.90PC



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION	▨	STEEP SLOPE AREA
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	—	FEMA 100 YEAR FLOODPLAIN	▨	EXISTING FOREST
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 10' END TREATMENT	▨	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 15' END TREATMENT	▨	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
---	EXISTING COUNTY LINE	→	SURFACE WATER FLOW DIRECTION	▲	PERMANENT WATER BAR 20' END TREATMENT		
---	EXISTING ROAD/TRAIL	▨	POND				
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨	WETLAND				
---	APPALACHIAN NATIONAL SCENIC TRAIL	▲	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)				
---	ACID FORMING MATERIAL	●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)				
---	PROPOSED LEVEL SPREADER DIVERSION						
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)						
---	PROPOSED LIMIT OF DISTURBANCE						

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VADEQ COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VADEQ COMMENTS

REVISIONS:

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

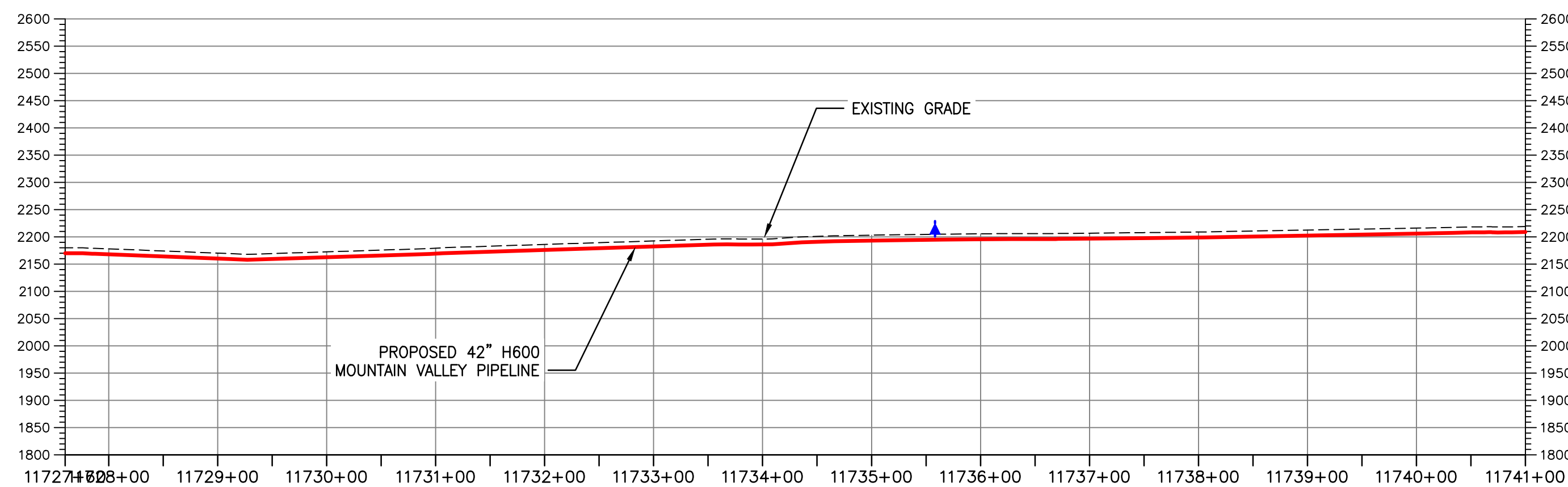
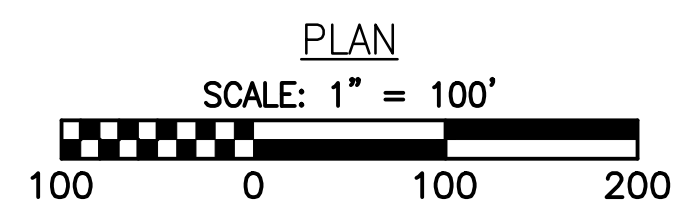
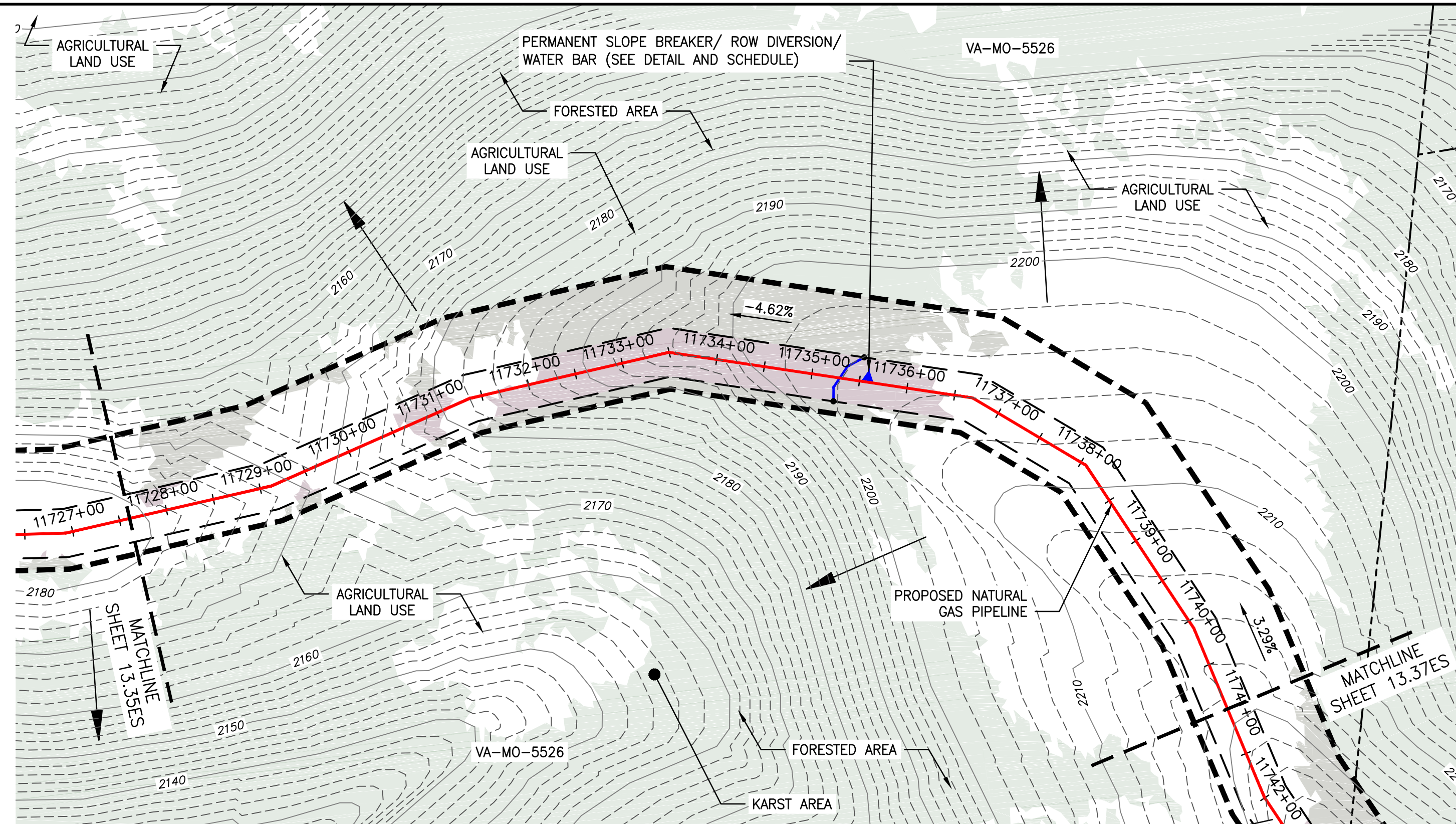
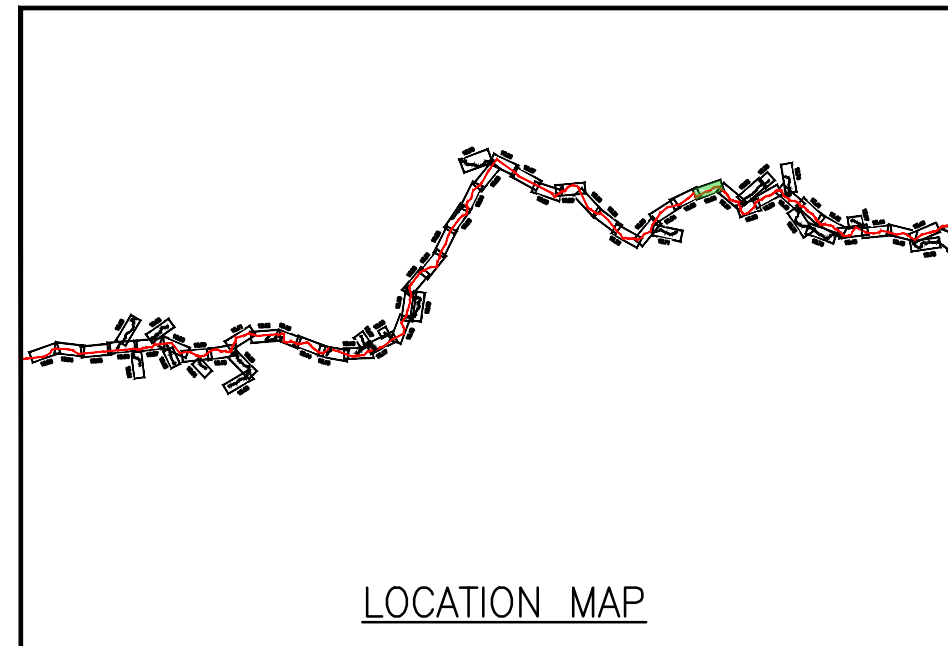
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PITTSBURGH, PA 15220

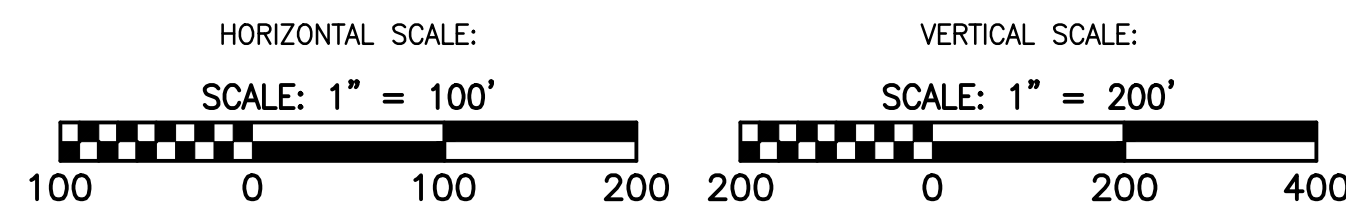
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY: KAL
CHECKED BY: JRE
APPROVED BY: DWJ
DATE: 11/21/2017
SCALE: AS SHOWN
SHT. NO. 13.35FC OF 13.90PC



PROFILE



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- - - PROPOSED LIMIT OF DISTURBANCE
- +++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

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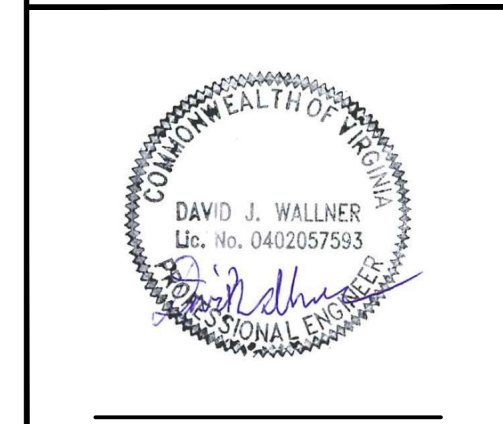


ADDRESS VADOC COMMENTS	DW
RESUBMISSION USING APPROVED STORMWATER METHODOLOGY	JRE
ADDRESS VADOC COMMENTS	KAL
PLAN SUBMISSION	DW
DESCRIPTION:	DW
NO:	CHKD.: APPD.:
DATE:	DWN.:
NO:	CHKD.: APPD.:

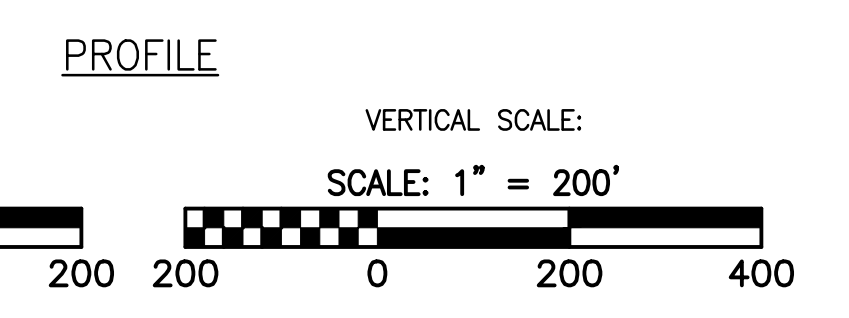
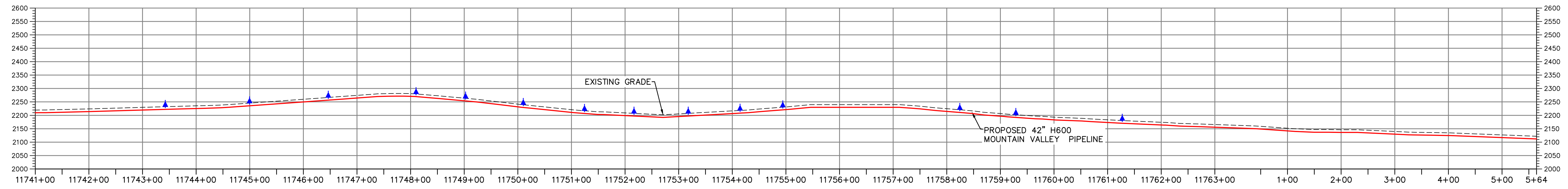
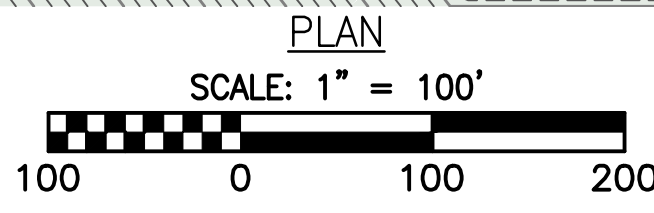
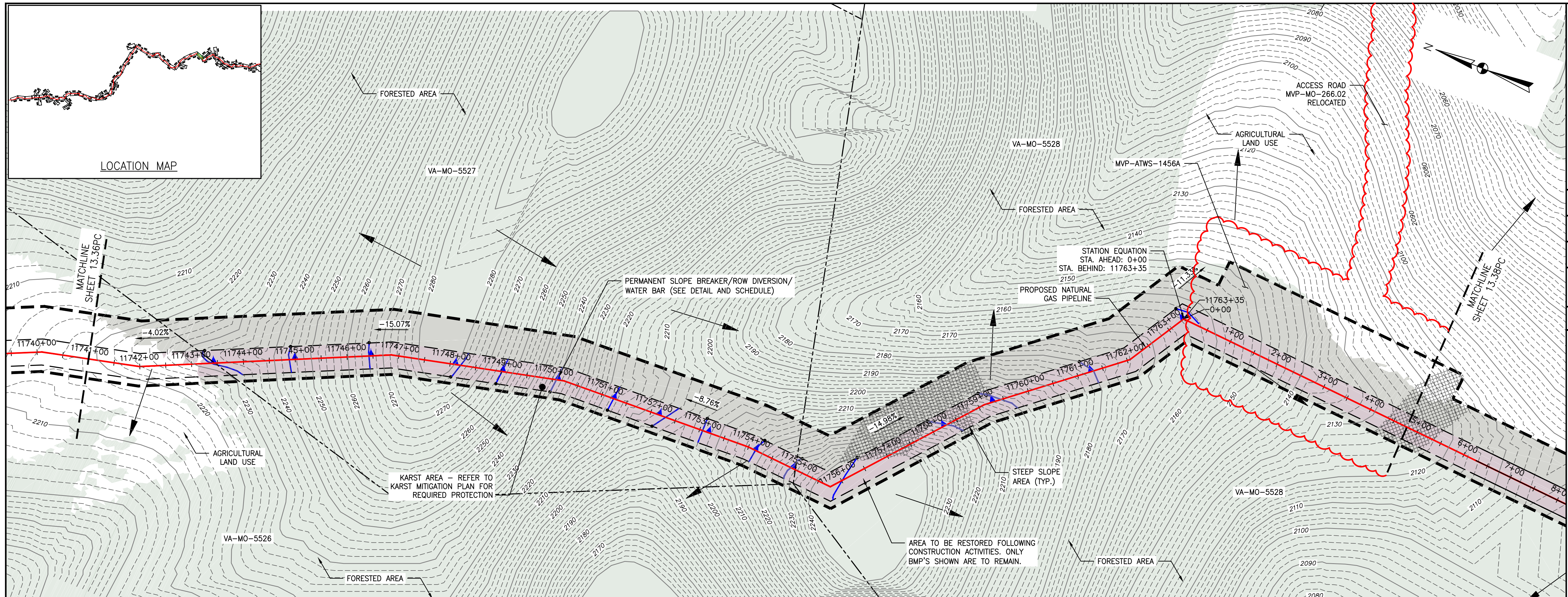
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.36PC OF 13.90PC	REVISION



LEGEND

— EXISTING CULVERT	+++++ PROPOSED LEVEL SPREADER	— PROPOSED PERMANENT RIGHT OF WAY
— STREAM	— PROPOSED ACCESS ROAD CENTERLINE	— PROPOSED PIPELINE
--- EXISTING PROPERTY LINE	— SURFACE WATER FLOW DIRECTION	— POND
--- EXISTING STATE LINE	— POND	— WETLAND
--- EXISTING COUNTY LINE	— PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)	— FEMA 100 YEAR FLOODPLAIN
--- EXISTING ROAD/TRAIL	• APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)	▲ PERMANENT WATER BAR 10' END TREATMENT
— USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▲ PERMANENT WATER BAR 15' END TREATMENT	▲ PERMANENT WATER BAR 20' END TREATMENT
— ANST — ANST — APPALACHIAN NATIONAL SCENIC TRAIL	▲ PERMANENT WATER BAR 10' END TREATMENT	▲ PERMANENT WATER BAR 15' END TREATMENT
— AFM — AFM — ACID FORMING MATERIAL	▲ PERMANENT WATER BAR 20' END TREATMENT	▲ PERMANENT WATER BAR 15' END TREATMENT
— PROPOSED LEVEL SPREADER DIVERSION	▲ PERMANENT WATER BAR 20' END TREATMENT	▲ PERMANENT WATER BAR 15' END TREATMENT
— GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)	▲ PERMANENT WATER BAR 20' END TREATMENT	▲ PERMANENT WATER BAR 15' END TREATMENT
— PROPOSED LIMIT OF DISTURBANCE	▲ PERMANENT WATER BAR 20' END TREATMENT	▲ PERMANENT WATER BAR 15' END TREATMENT

— STREAM FLOW DIRECTION	■ STEEP SLOPE AREA
— PERMANENT EASEMENT RESTORED TO MEADOW CONDITION	■ EXISTING FOREST
— TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION	

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
5	4/30/18	KAL	JRE	FIELD MODIFICATION
4	3/5/18	KAL	JRE	ADDRESS VABED COMMENTS
3	2/16/18	KAL	JRE	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	JRE	ADDRESS VABED COMMENTS
1	9/21/17	KAL	JRE	PLAN SUBMISSION

REVISIONS:

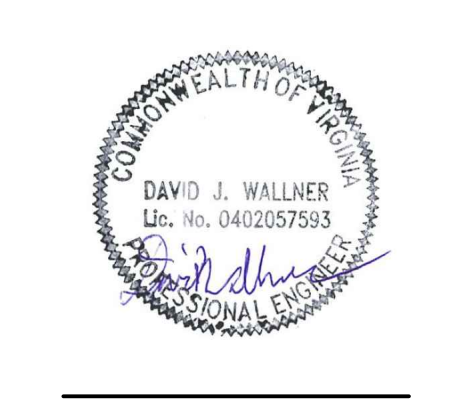
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

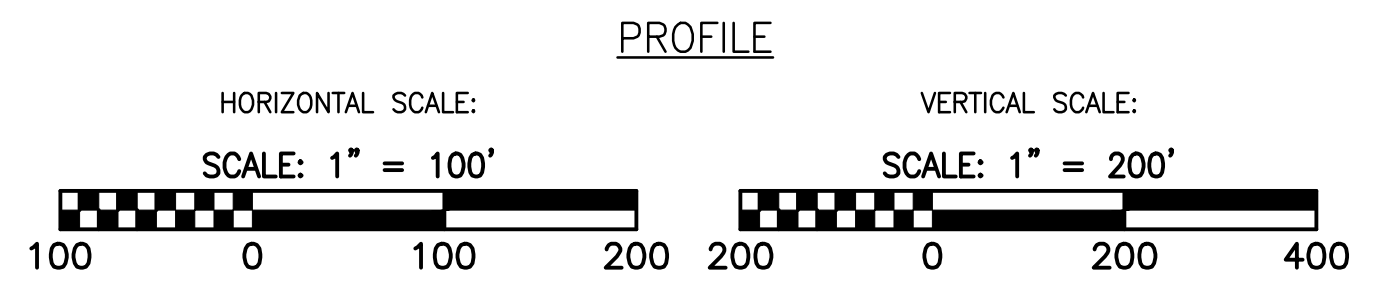
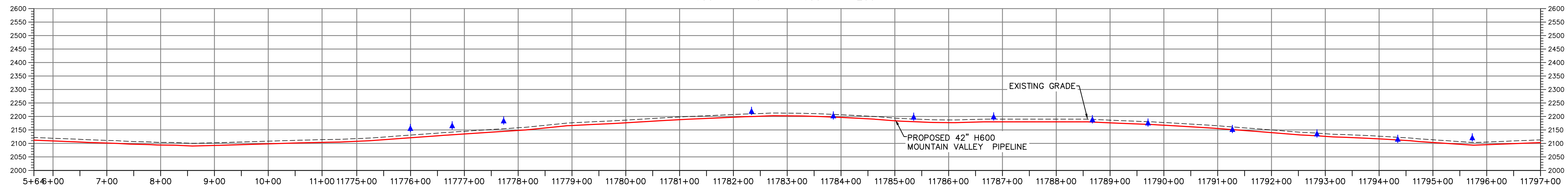
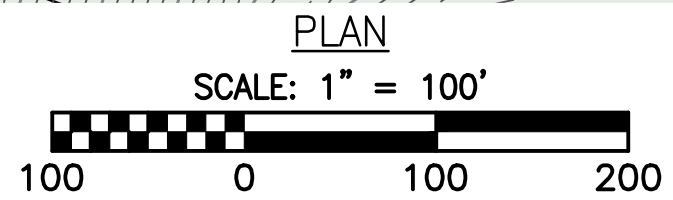
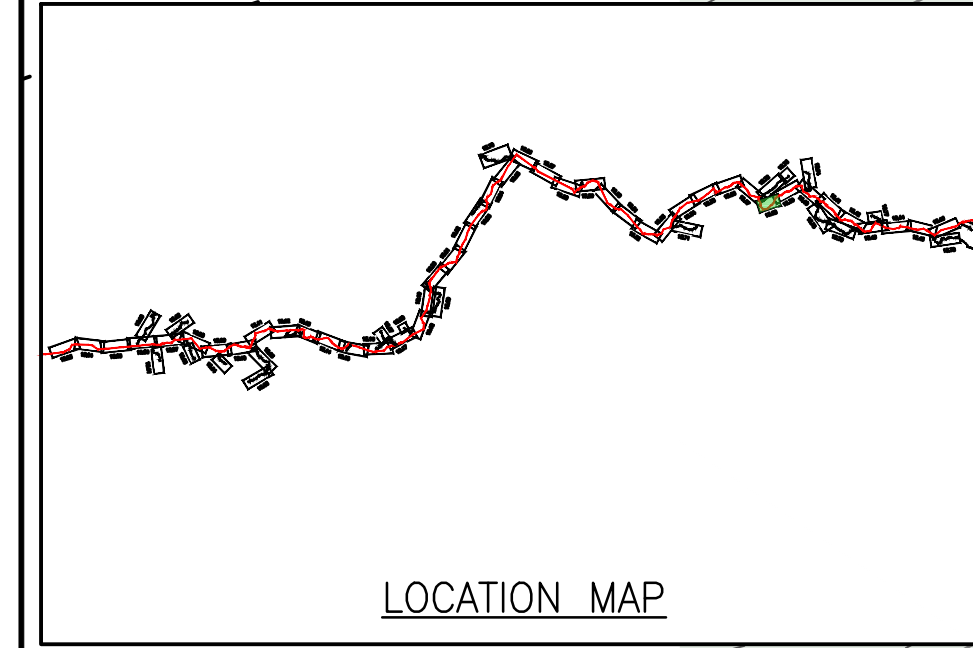
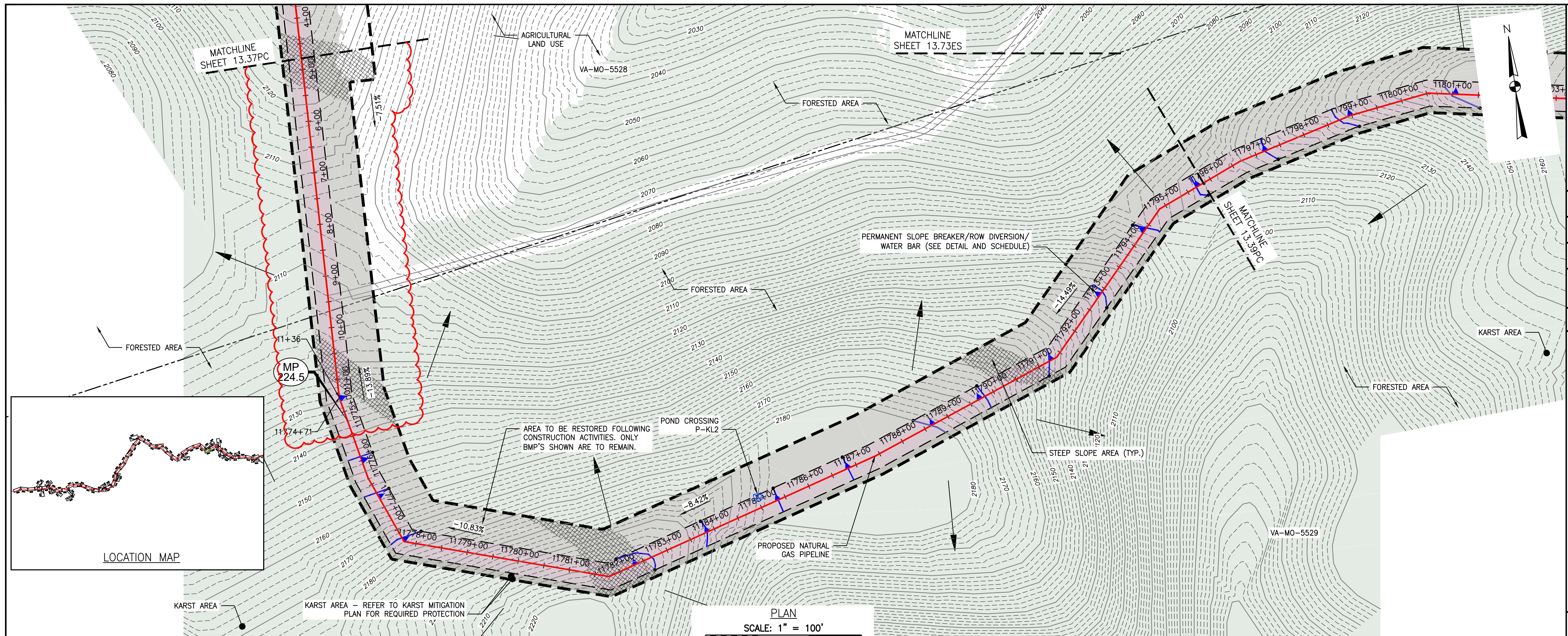
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661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.37PC OF 13.90PC	

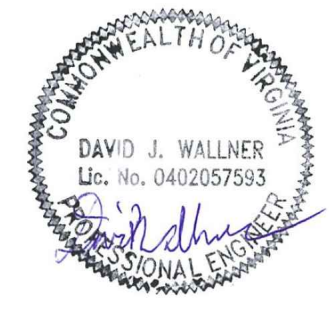


NO.	DATE	CHKD.	APPD.	DESCRIPTION
5	4/30/18	KAL	DW	FIELD MODIFICATION
4	3/5/18	KAL	DW	ADDRESS VABED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VABED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

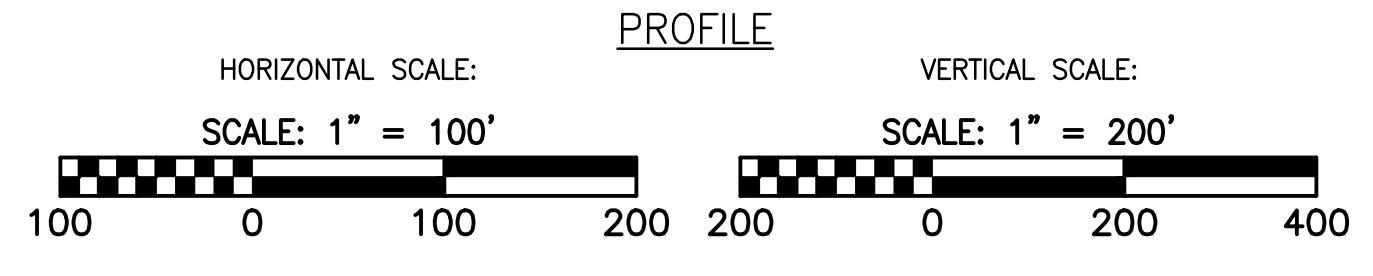
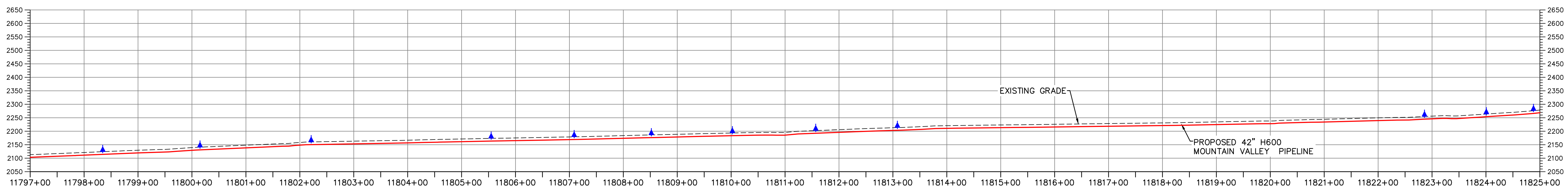
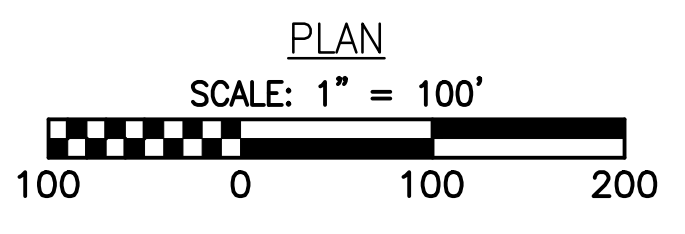
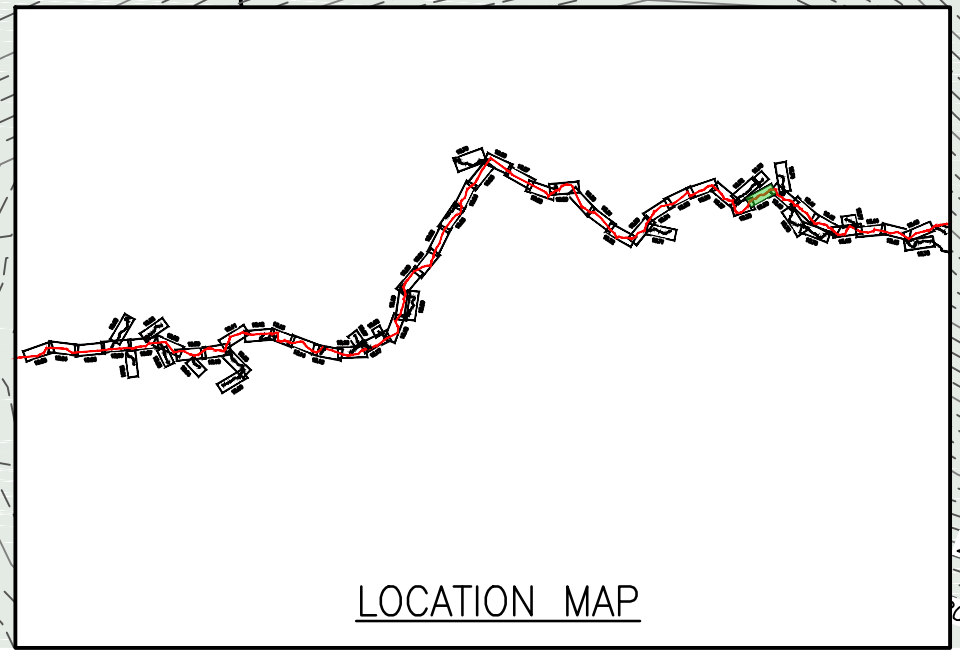
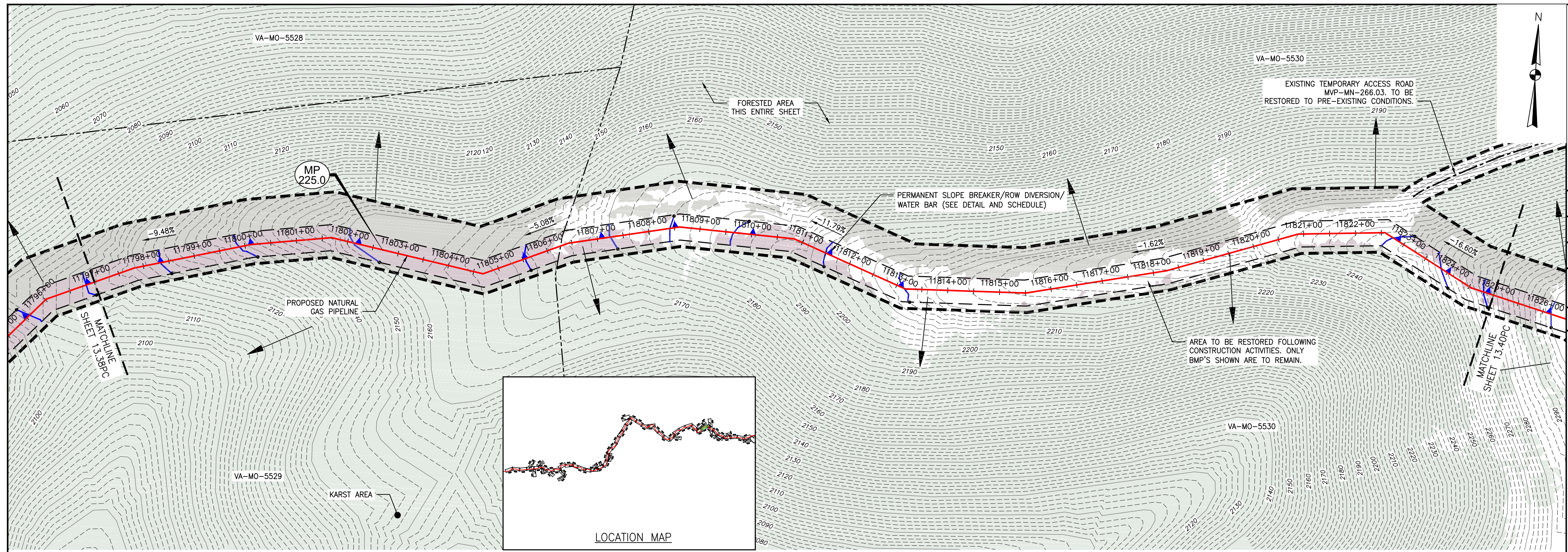
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
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POST CONSTRUCTION
 (STORMWATER &
 RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.38PC OF 13.90PC	



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	—	FEMA 100 YEAR FLOODPLAIN
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 10' END TREATMENT
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 15' END TREATMENT
---	EXISTING COUNTY LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 20' END TREATMENT
---	EXISTING ROAD/TRAIL	→	SURFACE WATER FLOW DIRECTION	■	STEEP SLOPE AREA
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▲	POND	■	EXISTING FOREST
---	APPALACHIAN NATIONAL SCENIC TRAIL	■	WETLAND	■	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
---	ACID FORMING MATERIAL	▲	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)	■	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
---	PROPOSED LEVEL SPREADER DIVERSION	●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)		
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)				
---	PROPOSED LIMIT OF DISTURBANCE				

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

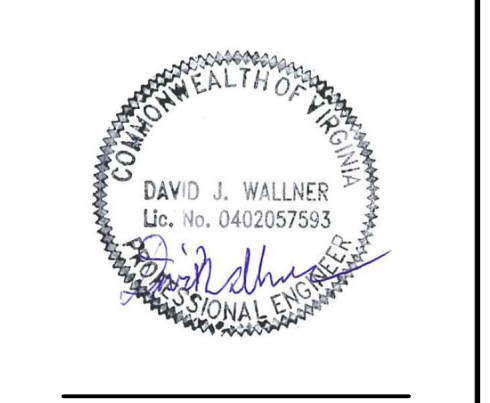
NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	JRE	ADDRESS VABED COMMENTS
3	2/16/18	KAL	JRE	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	JRE	ADDRESS VABED COMMENTS
1	9/21/17	KAL	JRE	PLAN SUBMISSION

REVISIONS:

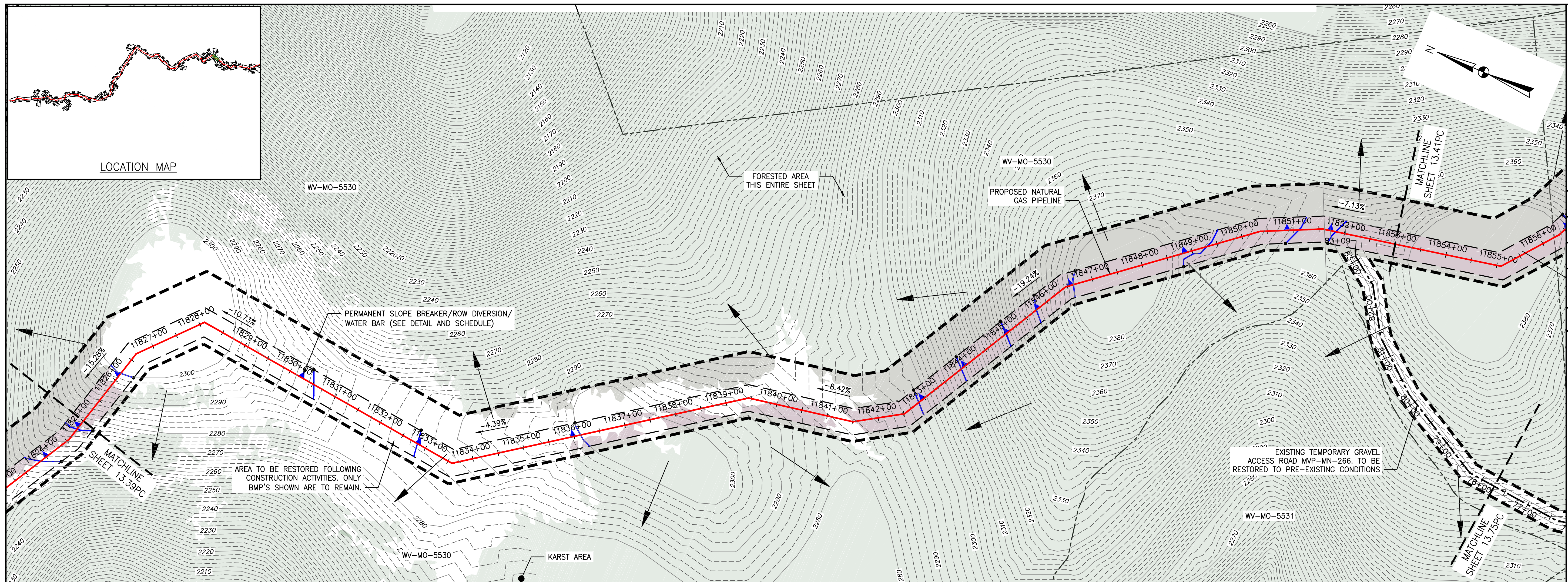
Mountain Valley Pipeline
 POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
 MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
 MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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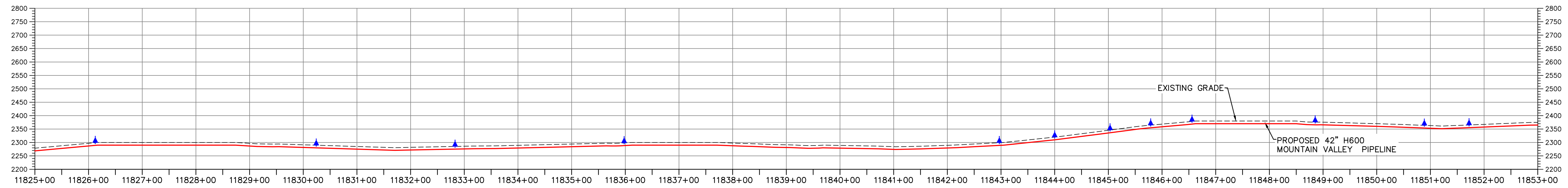
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.39PC OF 13.90PC	



PLAN
SCALE: 1" = 100'



LEGEND

— EXISTING CULVERT	+++++ PROPOSED LEVEL SPREADER	→ STREAM FLOW DIRECTION	▨ STEEP SLOPE AREA
— STREAM	--- PROPOSED PERMANENT RIGHT OF WAY	▬ FEMA 100 YEAR FLOODPLAIN	▨ EXISTING FOREST
--- EXISTING PROPERTY LINE	--- PROPOSED ACCESS ROAD CENTERLINE	▲ PERMANENT WATER BAR 10' END TREATMENT	▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
--- EXISTING STATE LINE	--- PROPOSED PIPELINE	▲ PERMANENT WATER BAR 15' END TREATMENT	▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
--- EXISTING COUNTY LINE	→ SURFACE WATER FLOW DIRECTION	▲ PERMANENT WATER BAR 20' END TREATMENT	
--- EXISTING ROAD/TRAIL	▨ POND		
--- USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨ WETLAND		
--- ANST --- APPALACHIAN NATIONAL SCENIC TRAIL	▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)		
--- AFM --- ACID FORMING MATERIAL	● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)		
--- PROPOSED LEVEL SPREADER DIVERSION			
--- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)			
--- PROPOSED LIMIT OF DISTURBANCE			

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS

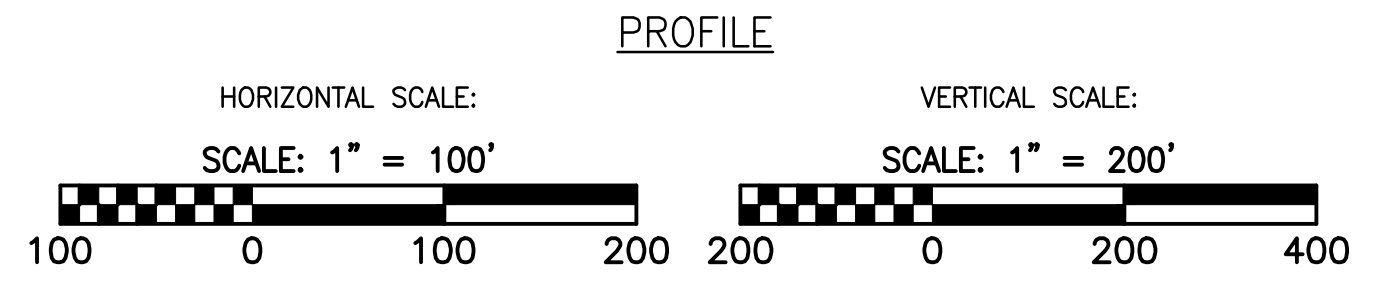
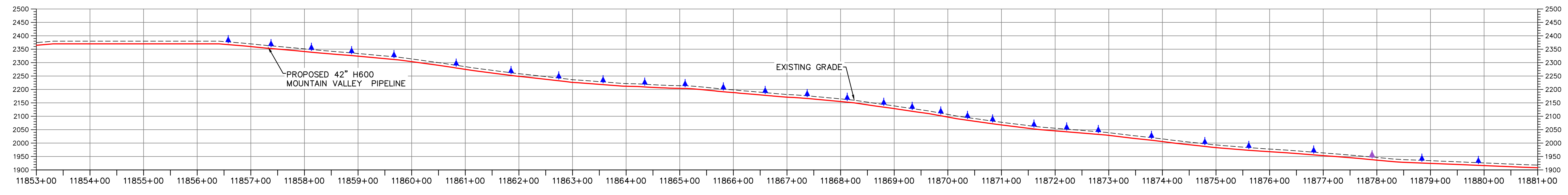
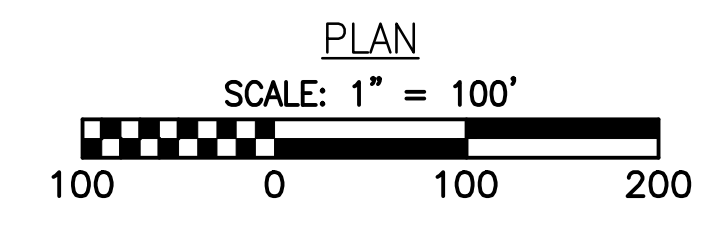
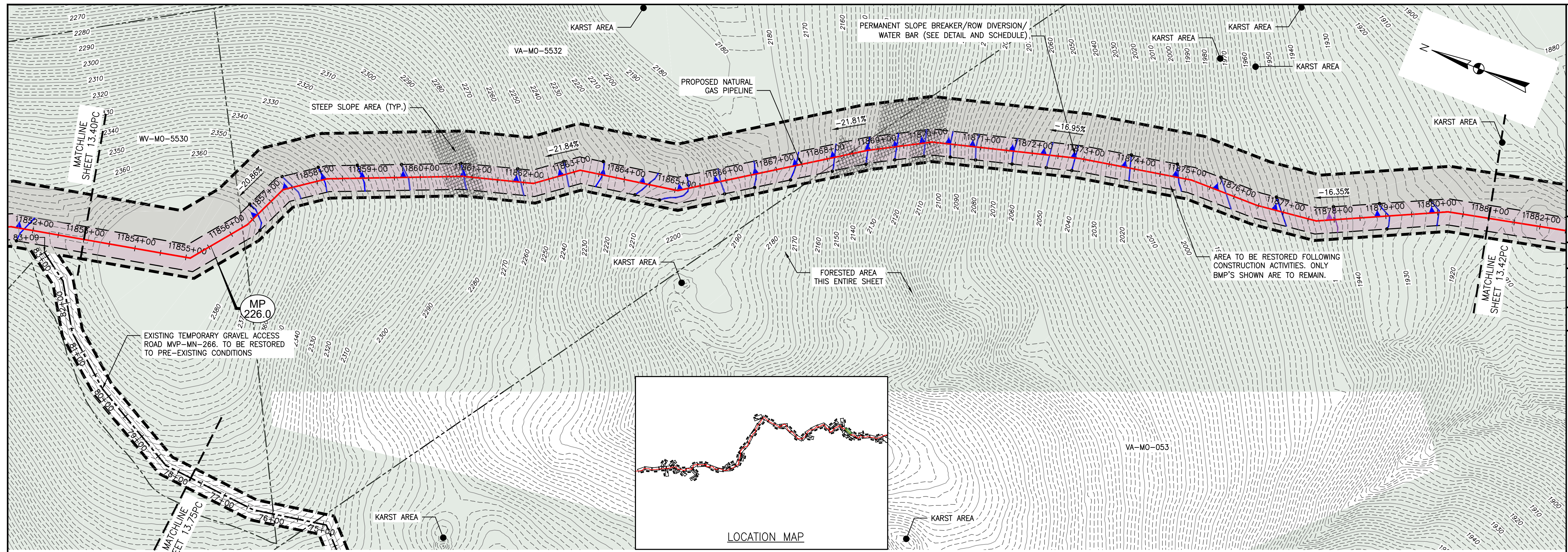
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.40PC	OF 13.90PC



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS

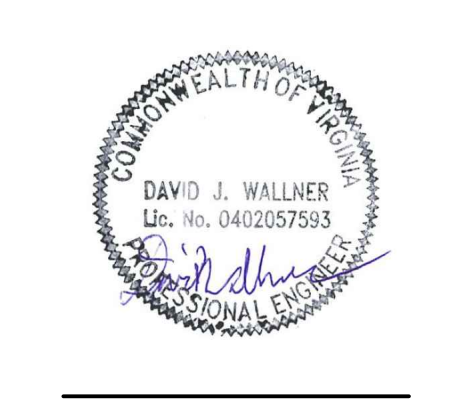
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

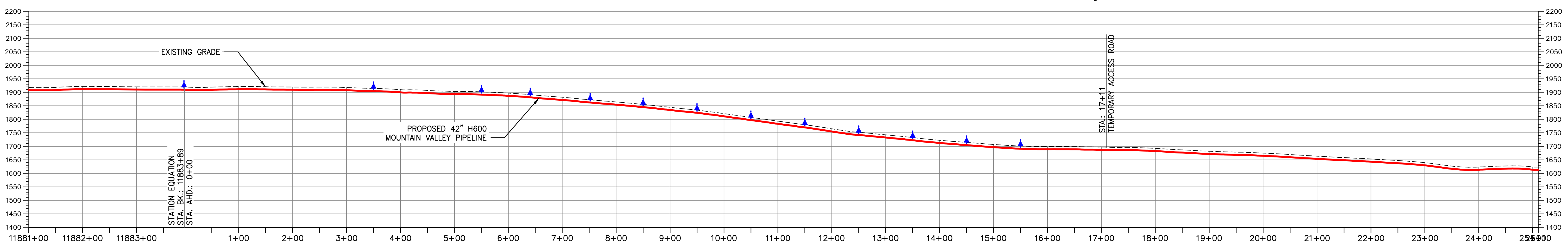
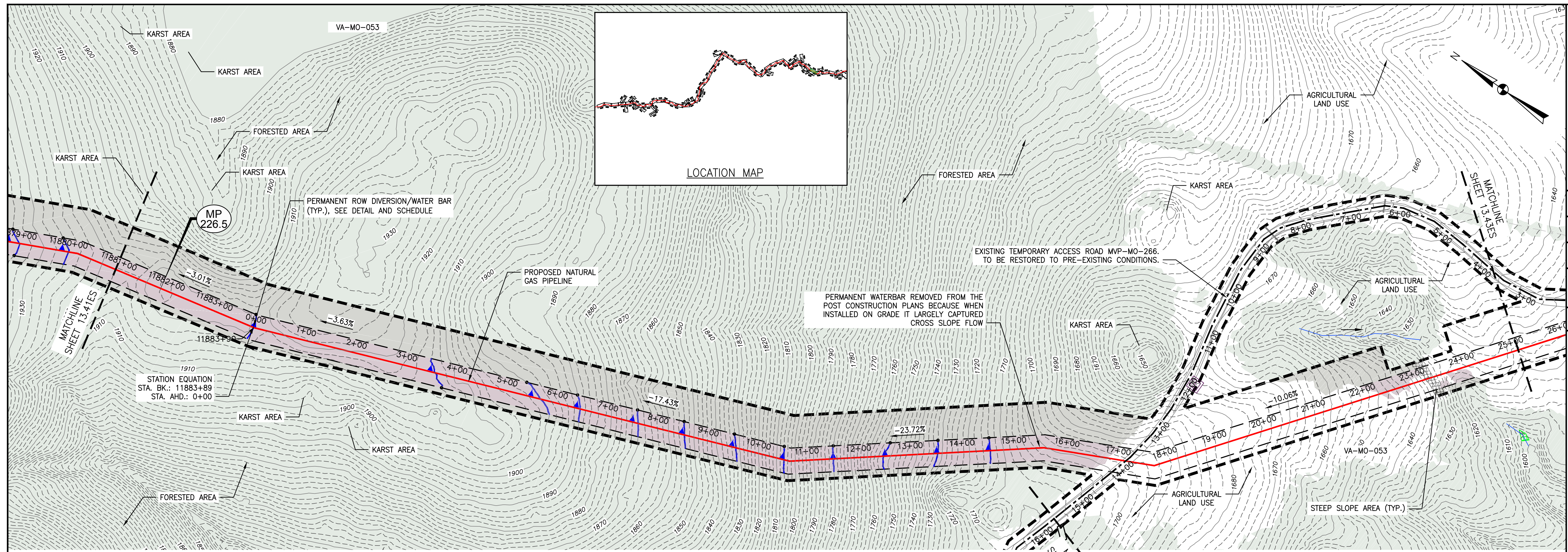
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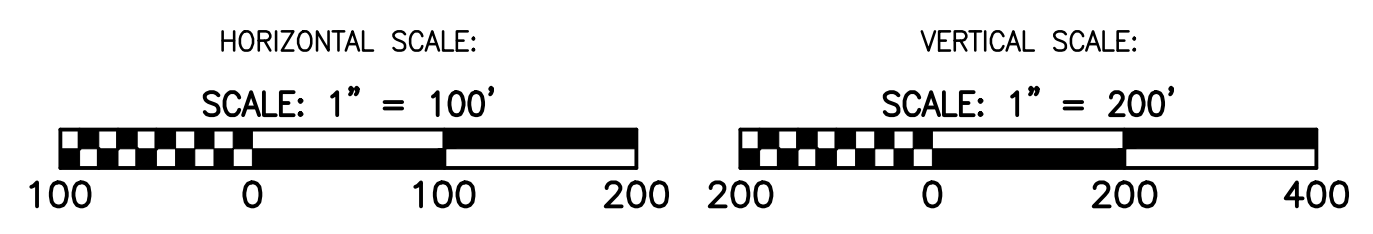
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.41PC OF 13.90PC



- LEGEND**
- EXISTING CULVERT
 - STREAM
 - - - EXISTING PROPERTY LINE
 - - - EXISTING STATE LINE
 - - - EXISTING COUNTY LINE
 - - - EXISTING ROAD/TRAIL
 - USDA FOREST SERVICE (NATIONAL FOREST) LANDS
 - APPALACHIAN NATIONAL SCENIC TRAIL
 - ACID FORMING MATERIAL
 - PROPOSED LEVEL SPREADER DIVERSION
 - GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
 - PROPOSED LIMIT OF DISTURBANCE
 - ++++ PROPOSED LEVEL SPREADER
 - - - PROPOSED PERMANENT RIGHT OF WAY
 - - - PROPOSED ACCESS ROAD CENTERLINE
 - PROPOSED PIPELINE
 - SURFACE WATER FLOW DIRECTION
 - POND
 - WETLAND
 - PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
 - APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
 - STREAM FLOW DIRECTION
 - FEMA 100 YEAR FLOODPLAIN
 - PERMANENT WATER BAR 10' END TREATMENT
 - PERMANENT WATER BAR 15' END TREATMENT
 - PERMANENT WATER BAR 20' END TREATMENT
 - STEEP SLOPE AREA
 - EXISTING FOREST
 - PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
 - TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION



- NOTES:**
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
 - IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADED COMMENTS

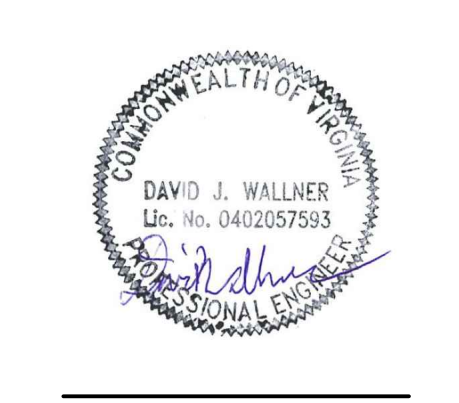
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

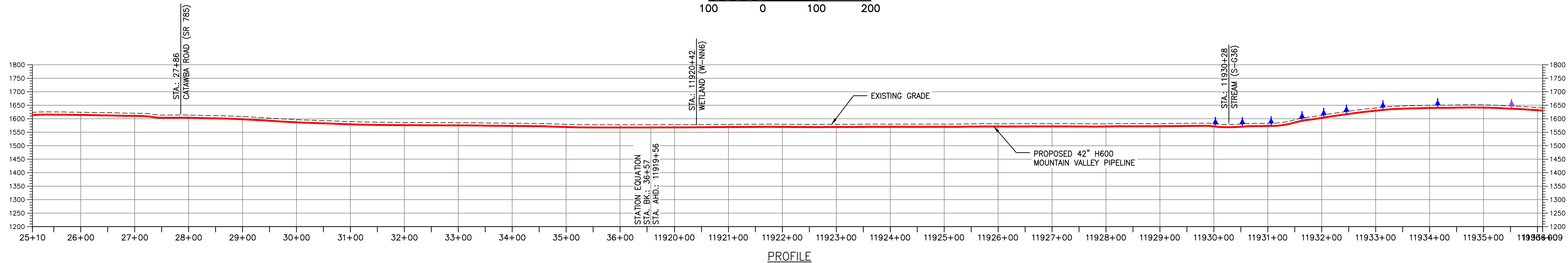
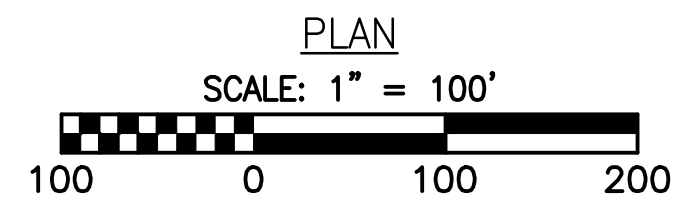
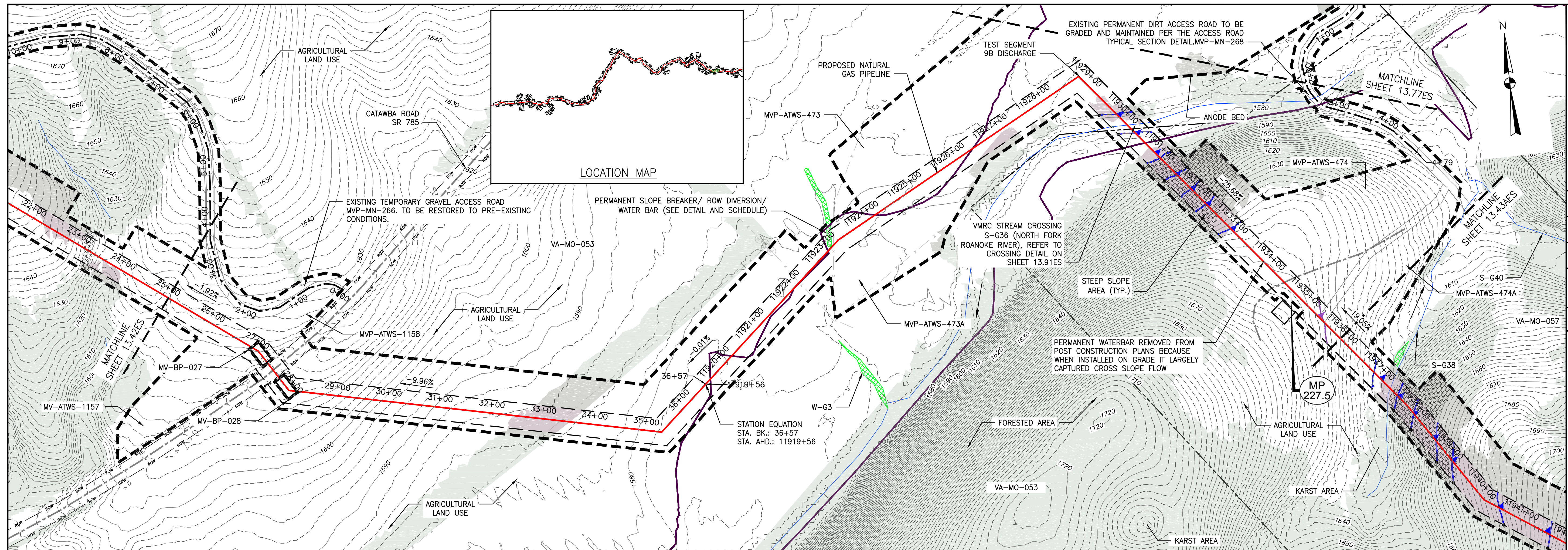
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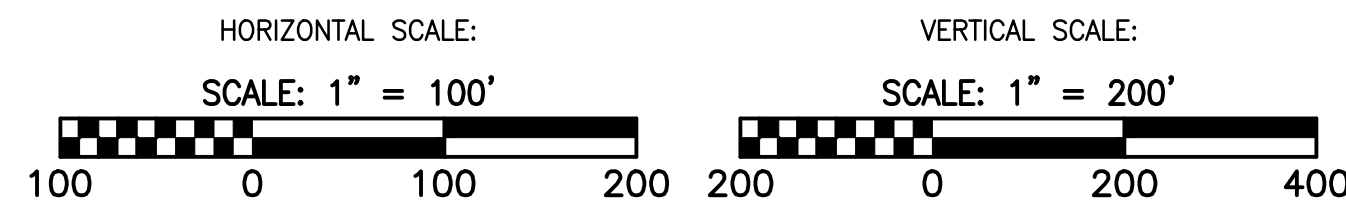
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.42PC OF 13.90PC	REVISION



PROFILE



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- +++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

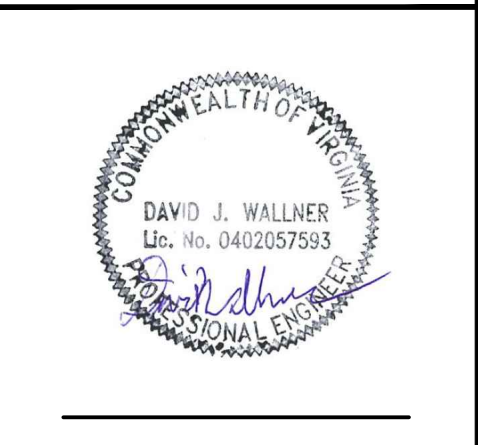
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS

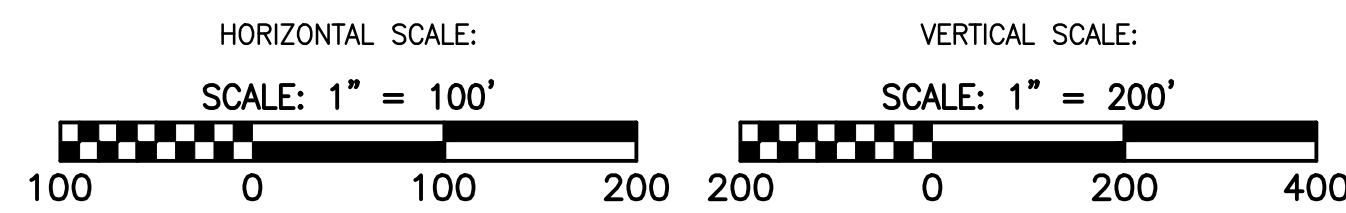
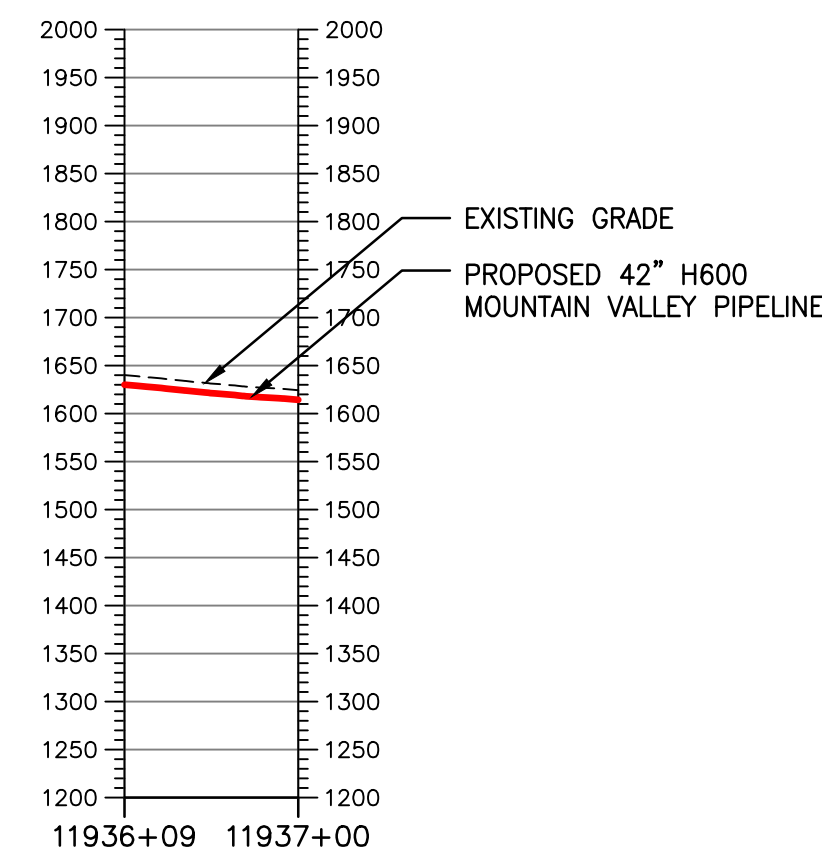
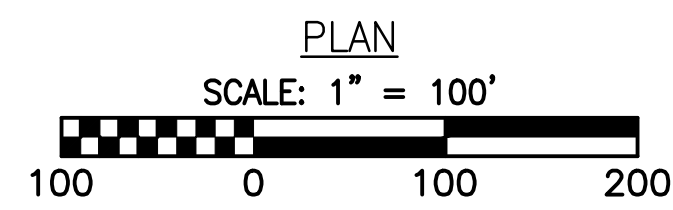
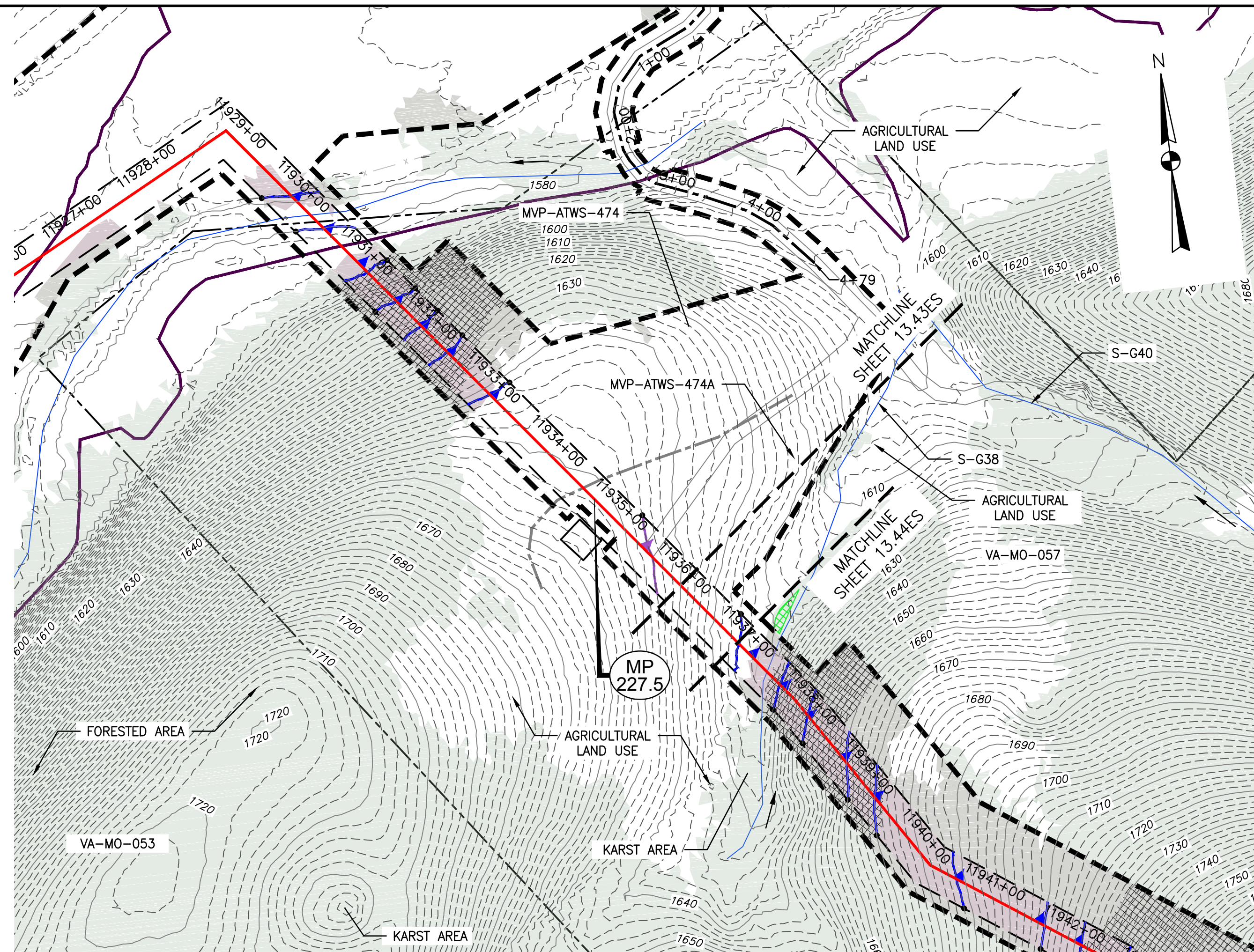
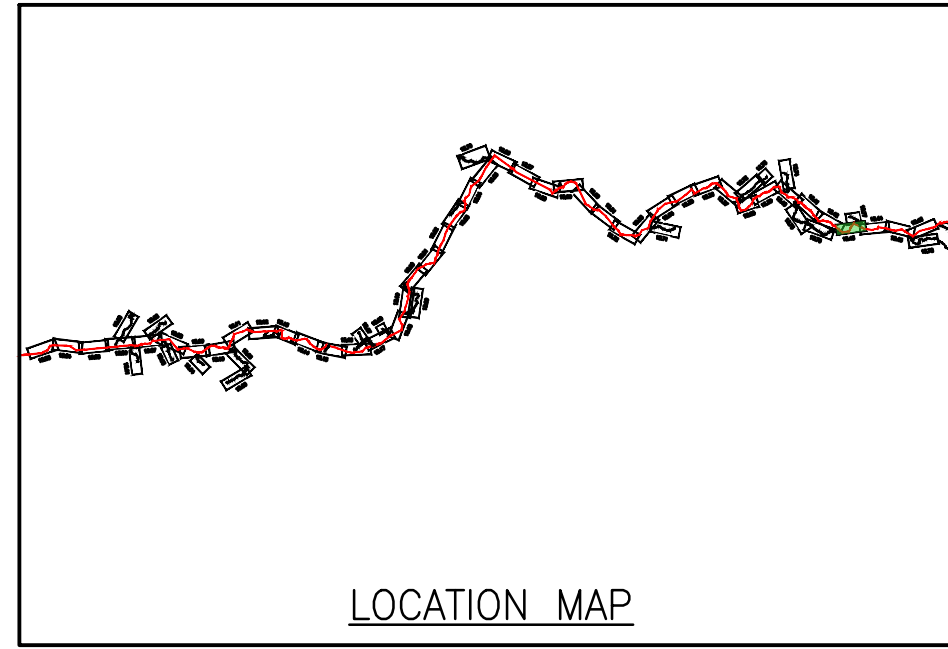
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.43PC OF 13.90PC	REVISION



LEGEND

- | | | | |
|---|---|---|---|
| — EXISTING CULVERT | +++++ PROPOSED LEVEL SPREADER | → STREAM FLOW DIRECTION | ▨ STEEP SLOPE AREA |
| — STREAM | — PROPOSED PERMANENT RIGHT OF WAY | — FEMA 100 YEAR FLOODPLAIN | ▨ EXISTING FOREST |
| - - - EXISTING PROPERTY LINE | — PROPOSED ACCESS ROAD CENTERLINE | ▲ PERMANENT WATER BAR 10' END TREATMENT | ▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION |
| - - - EXISTING STATE LINE | — PROPOSED PIPELINE | ▲ PERMANENT WATER BAR 15' END TREATMENT | ▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION |
| - - - EXISTING COUNTY LINE | → SURFACE WATER FLOW DIRECTION | ▲ PERMANENT WATER BAR 20' END TREATMENT | |
| - - - EXISTING ROAD/TRAIL | ▨ POND | | |
| — USDA FOREST SERVICE (NATIONAL FOREST) LANDS | ▨ WETLAND | | |
| — APPALACHIAN NATIONAL SCENIC TRAIL | — PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) | | |
| — ACID FORMING MATERIAL | • APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS) | | |
| — PROPOSED LEVEL SPREADER DIVERSION | | | |
| — GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | | | |
| — PROPOSED LIMIT OF DISTURBANCE | | | |

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

Mountain Valley Pipeline

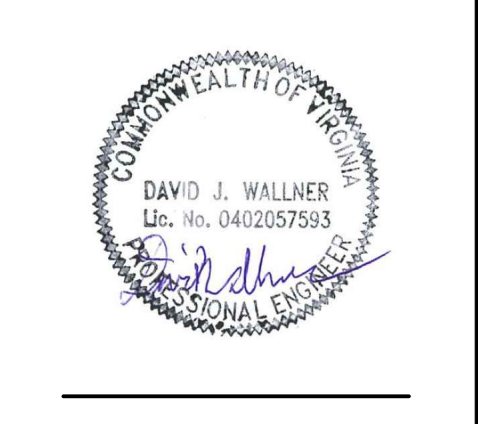
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

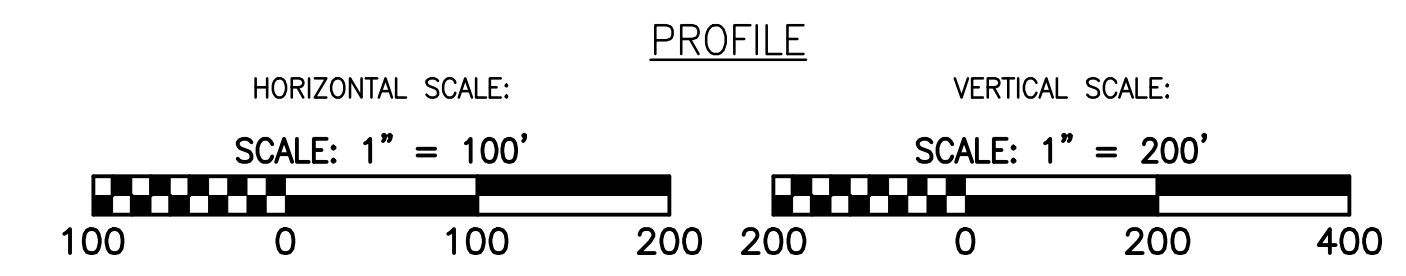
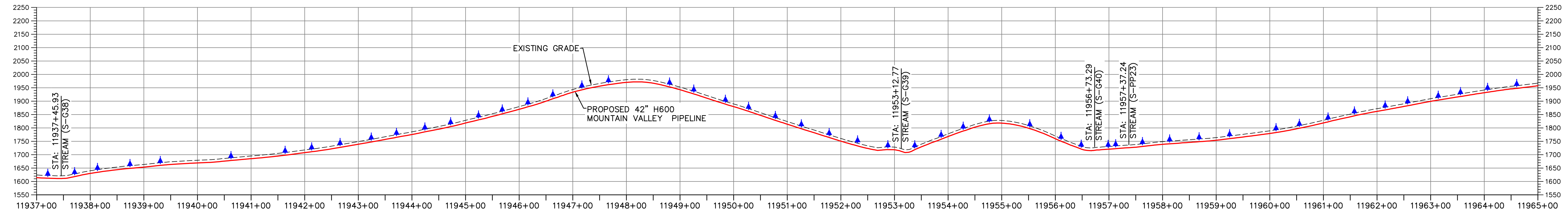
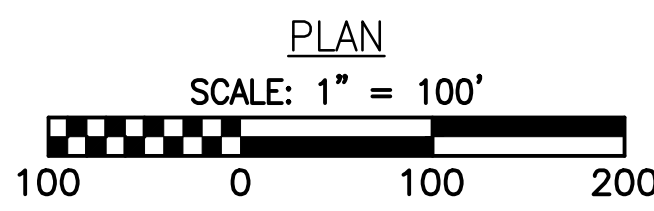
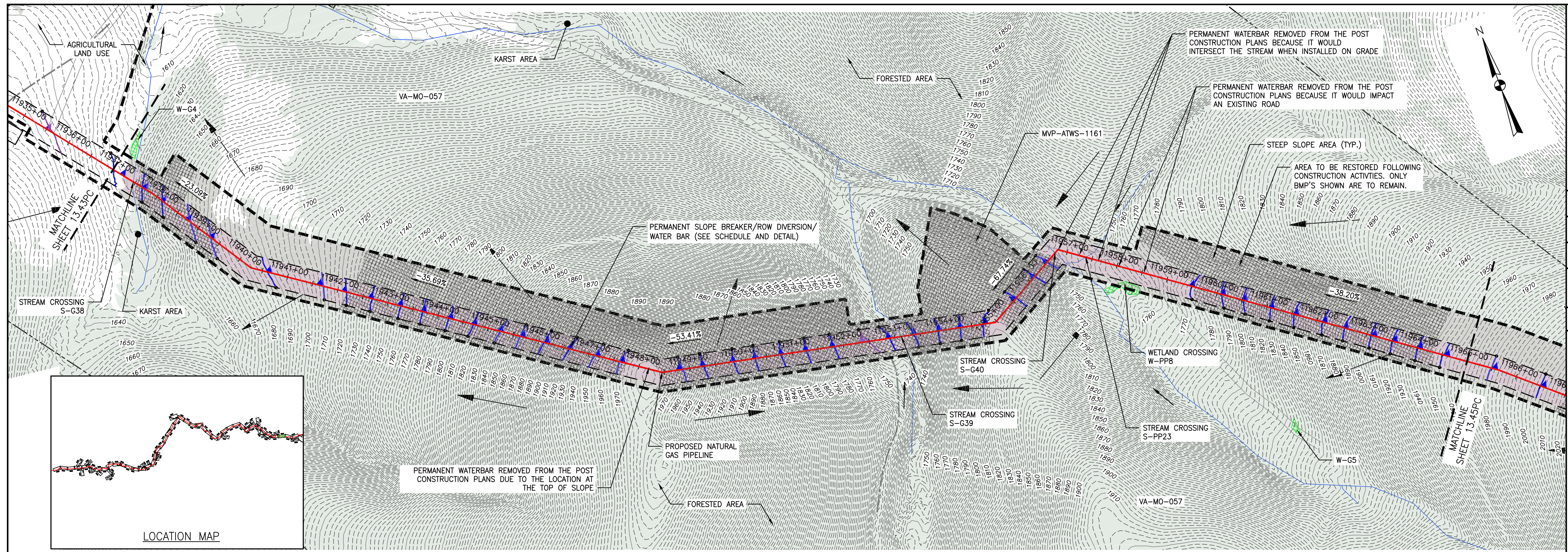
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FOSTER PLAZA 7
PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.43AES OF 13.90PC



LEGEND

— EXISTING CULVERT	+++++ PROPOSED LEVEL SPREADER	→ STREAM FLOW DIRECTION	▨ STEEP SLOPE AREA
— STREAM	--- PROPOSED PERMANENT RIGHT OF WAY	▲ FEMA 100 YEAR FLOODPLAIN	▨ EXISTING FOREST
--- EXISTING PROPERTY LINE	--- PROPOSED ACCESS ROAD CENTERLINE	▲ PERMANENT WATER BAR 10' END TREATMENT	▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
--- EXISTING STATE LINE	--- PROPOSED PIPELINE	▲ PERMANENT WATER BAR 15' END TREATMENT	▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
--- EXISTING COUNTY LINE	→ SURFACE WATER FLOW DIRECTION	▲ PERMANENT WATER BAR 20' END TREATMENT	
--- EXISTING ROAD/TRAIL	▨ POND		
--- USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨ WETLAND		
--- ANST --- APPALACHIAN NATIONAL SCENIC TRAIL	▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)		
--- AFM --- ACID FORMING MATERIAL	● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)		
--- PROPOSED LEVEL SPREADER DIVERSION			
--- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)			
--- PROPOSED LIMIT OF DISTURBANCE			

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VAEQ COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VAEQ COMMENTS

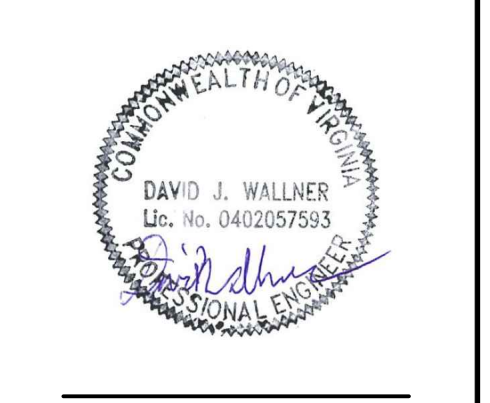
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

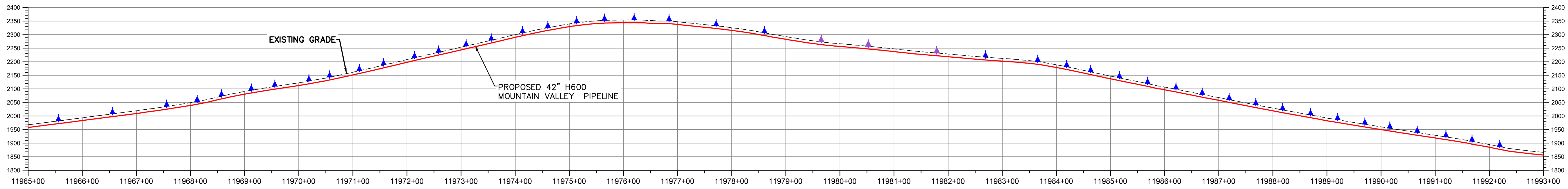
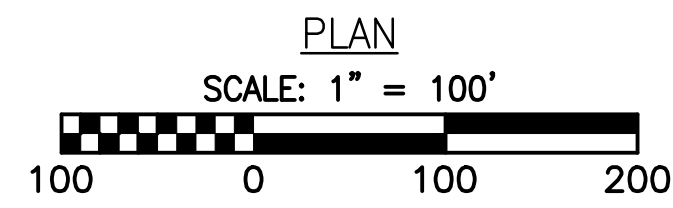
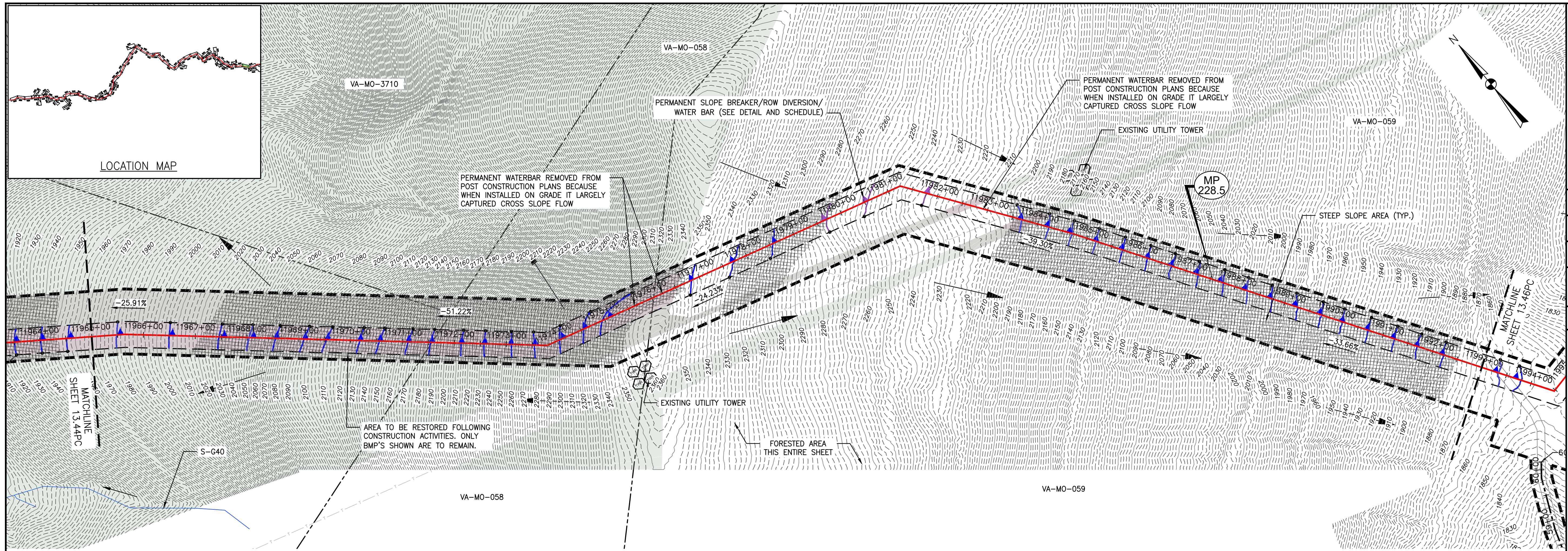
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FOSTER PLAZA 7
PITTSBURGH, PA 15220

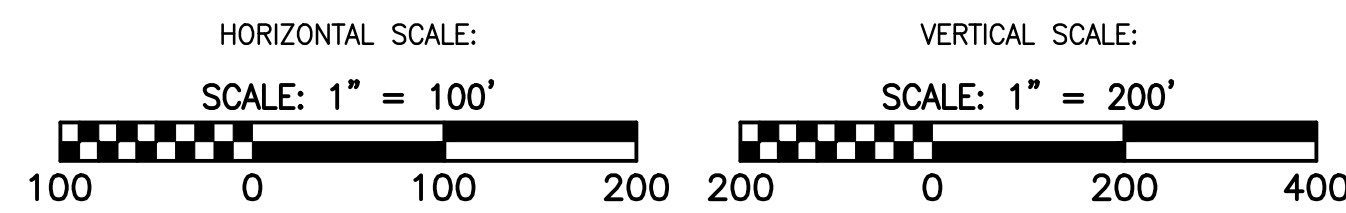
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.44PC OF 13.90PC	REVISION



PROFILE



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- - - PROPOSED LIMIT OF DISTURBANCE
- +++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DJW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DJW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DJW	PLAN SUBMISSION

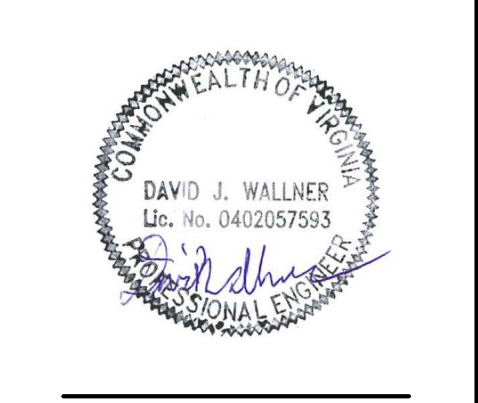
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

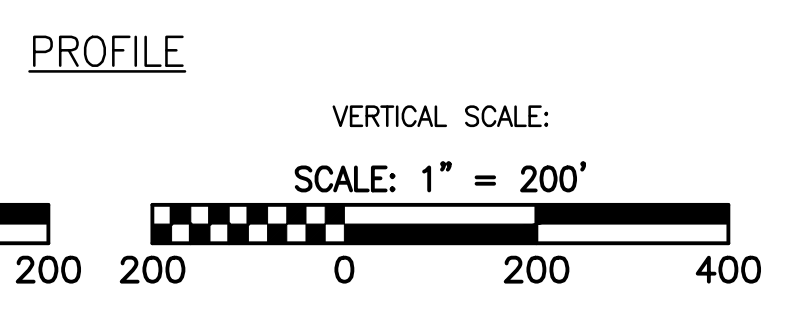
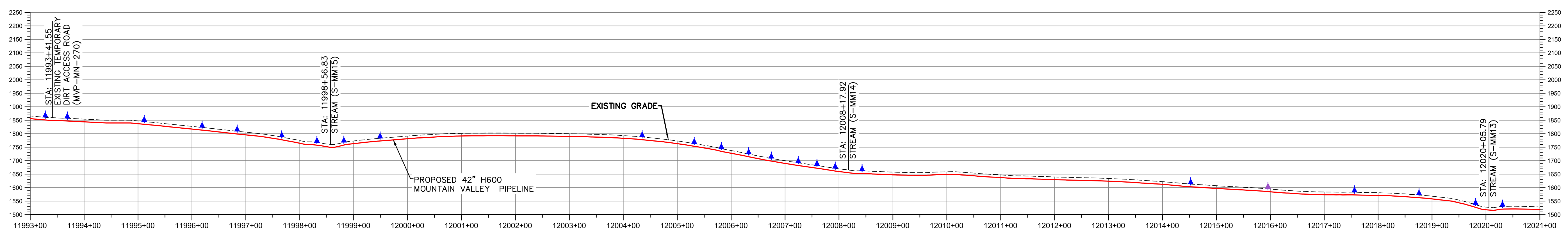
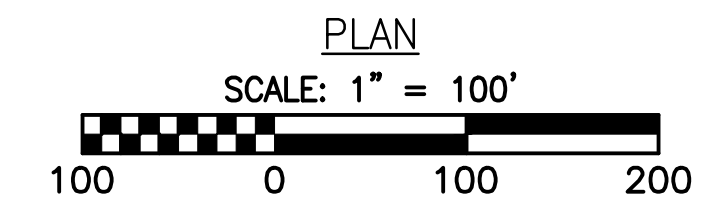
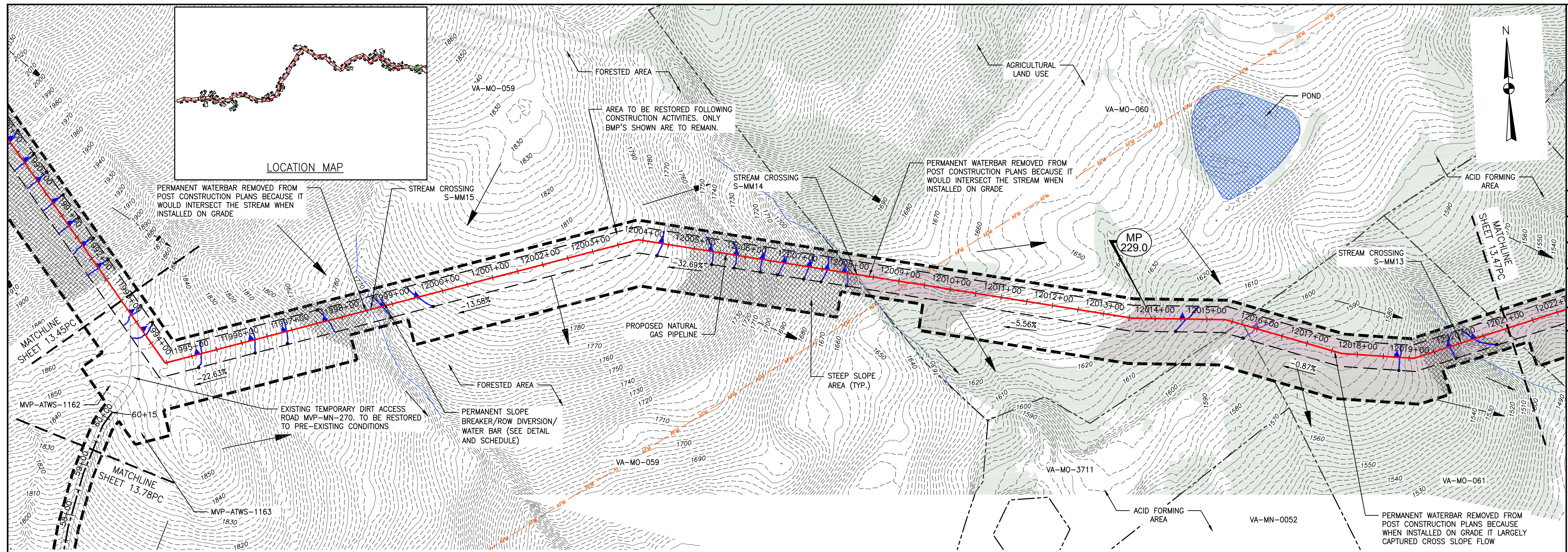
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FOSTER PLAZA 7
PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.45PC OF 13.90PC	



LEGEND

— EXISTING CULVERT	+++++ PROPOSED LEVEL SPREADER	→ STREAM FLOW DIRECTION	▨ STEEP SLOPE AREA
— STREAM	--- PROPOSED PERMANENT RIGHT OF WAY	▲ FEMA 100 YEAR FLOODPLAIN	▨ EXISTING FOREST
--- EXISTING PROPERTY LINE	--- PROPOSED ACCESS ROAD CENTERLINE	▲ PERMANENT WATER BAR 10' END TREATMENT	▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
--- EXISTING STATE LINE	--- PROPOSED PIPELINE	▲ PERMANENT WATER BAR 15' END TREATMENT	▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
--- EXISTING COUNTY LINE	→ SURFACE WATER FLOW DIRECTION	▲ PERMANENT WATER BAR 20' END TREATMENT	
--- EXISTING ROAD/TRAIL	▨ POND		
--- USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨ WETLAND		
--- APPALACHIAN NATIONAL SCENIC TRAIL	▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)		
--- ACID FORMING MATERIAL	● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)		
--- PROPOSED LEVEL SPREADER DIVERSION			
--- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)			
--- PROPOSED LIMIT OF DISTURBANCE			

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VABED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VABED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

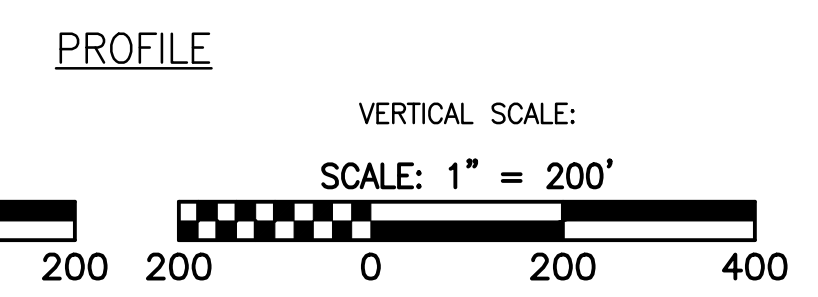
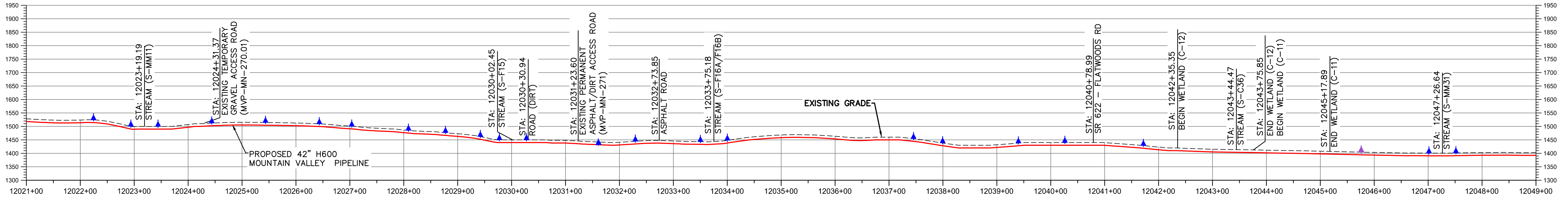
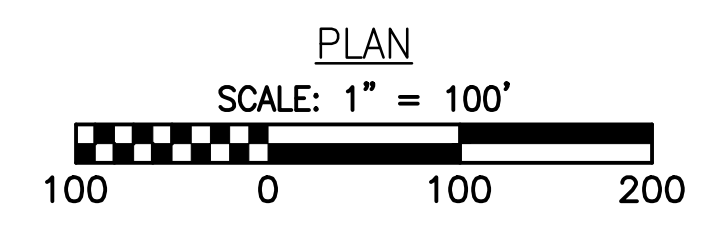
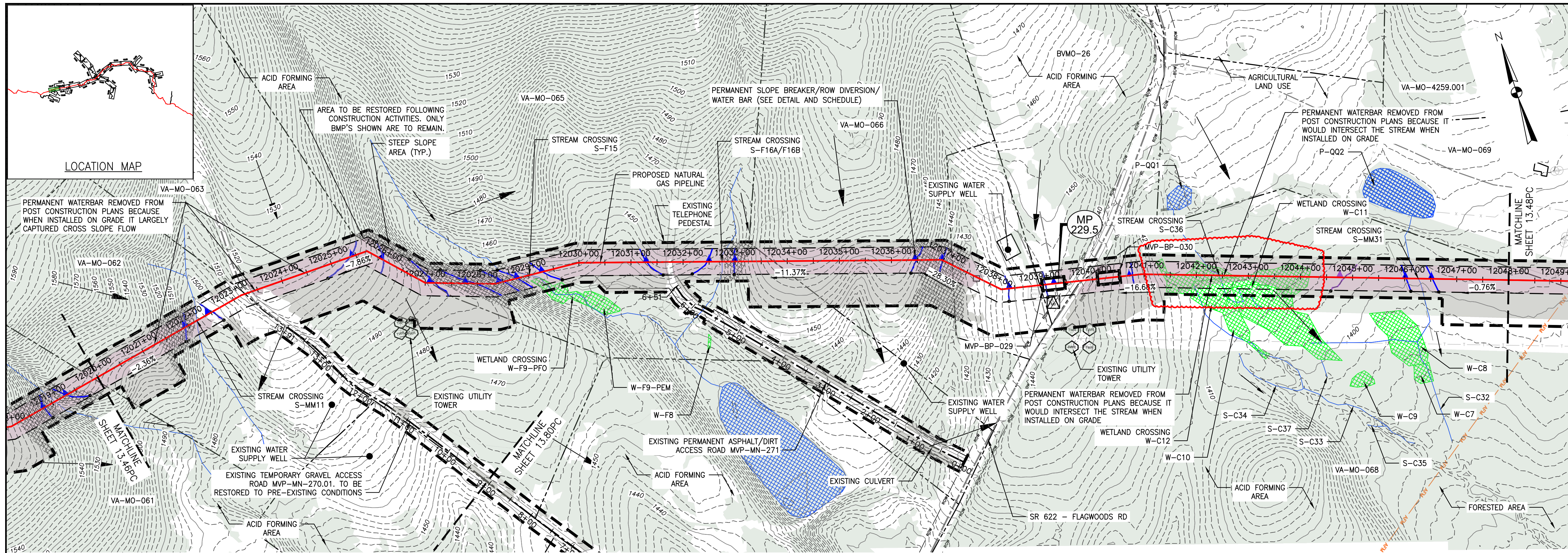
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DWJ
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHT. NO. 13.46PC OF 13.90PC



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION	▨	STEEP SLOPE AREA
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	—	FEMA 100 YEAR FLOODPLAIN	▨	EXISTING FOREST
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 10' END TREATMENT	▨	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 15' END TREATMENT	▨	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
---	EXISTING COUNTY LINE	→	SURFACE WATER FLOW DIRECTION	▲	PERMANENT WATER BAR 20' END TREATMENT		
---	EXISTING ROAD/TRAIL	▨	POND				
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨	WETLAND				
---	APPALACHIAN NATIONAL SCENIC TRAIL	▲	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)				
---	ACID FORMING MATERIAL	●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)				
---	PROPOSED LEVEL SPREADER DIVERSION						
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)						
---	PROPOSED LIMIT OF DISTURBANCE						

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VADEQ COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADEQ COMMENTS
7/2/20		BH	DJW	CHANGES TO AQUATIC RESOURCES DELINEATION

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

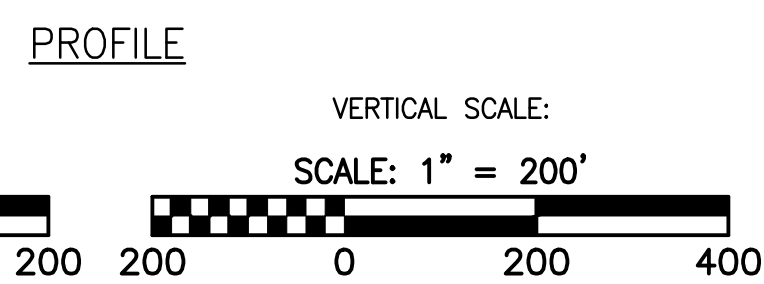
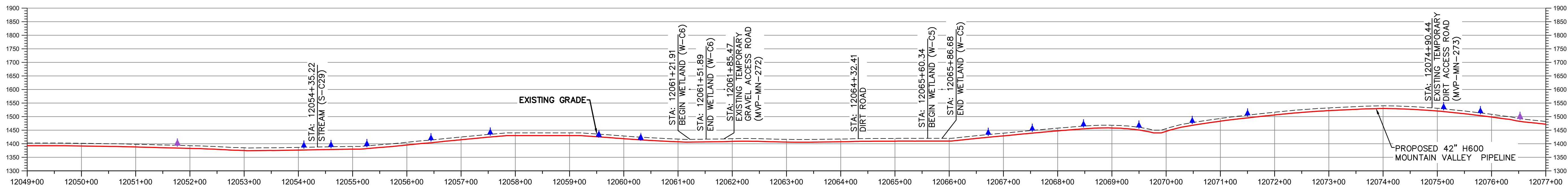
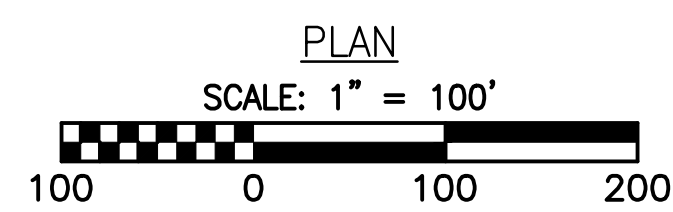
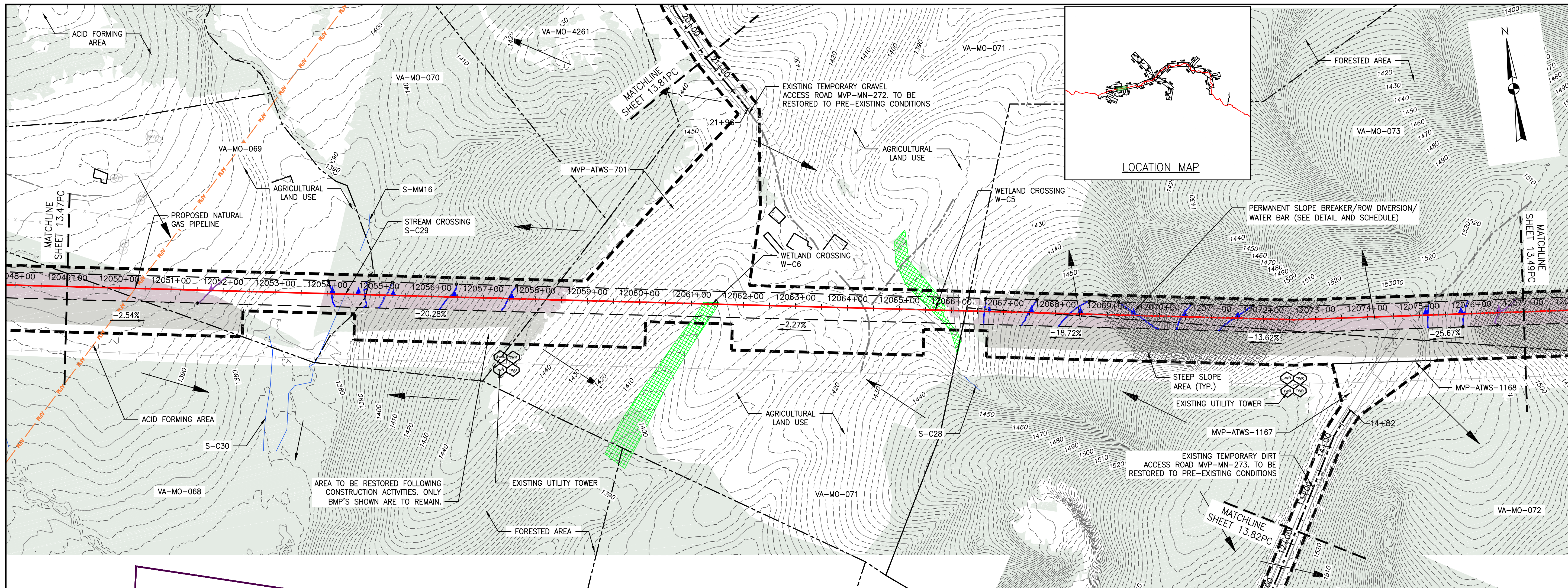
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

COMMONWEALTH OF PENNSYLVANIA
DAVID J. WALLNER
Lic. No. 0402057593

DRAWN BY: KAL
CHECKED BY: JRE
APPROVED BY: DJW
DATE: 7/7/20
SCALE: AS SHOWN
SHT. NO. 13.47PC OF 13.90PC



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- - - PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

1. NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
2. IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

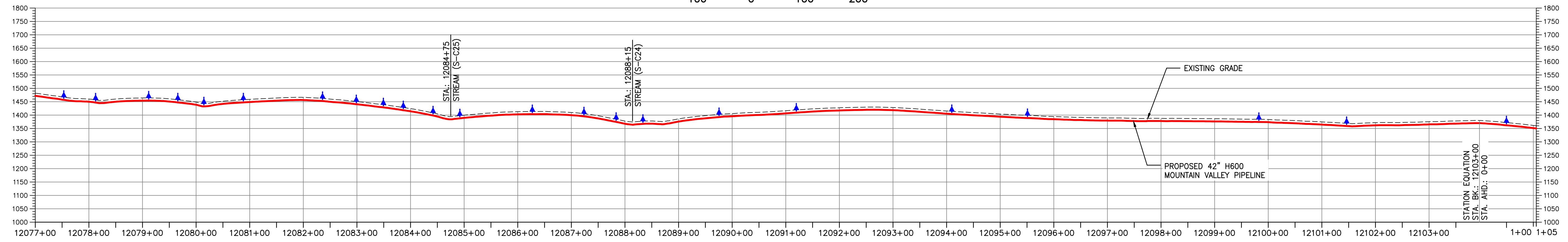
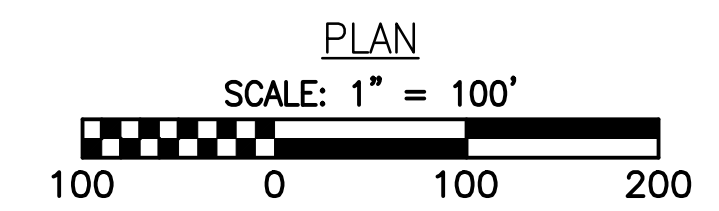
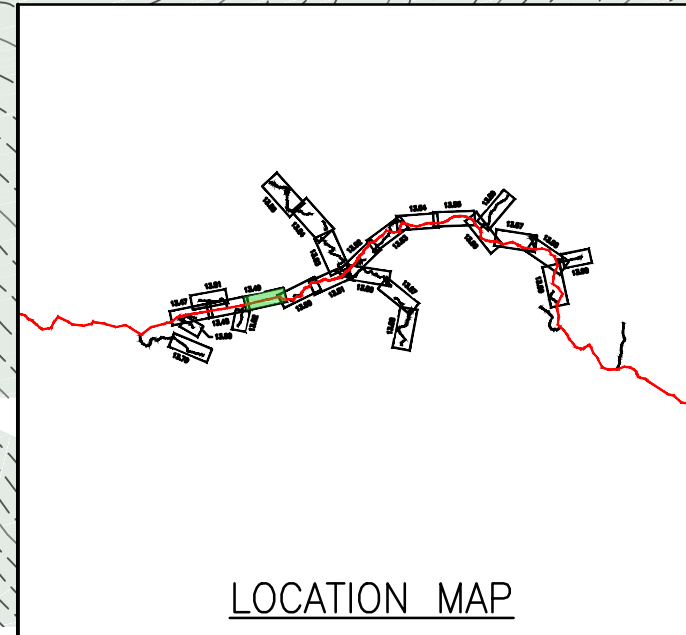
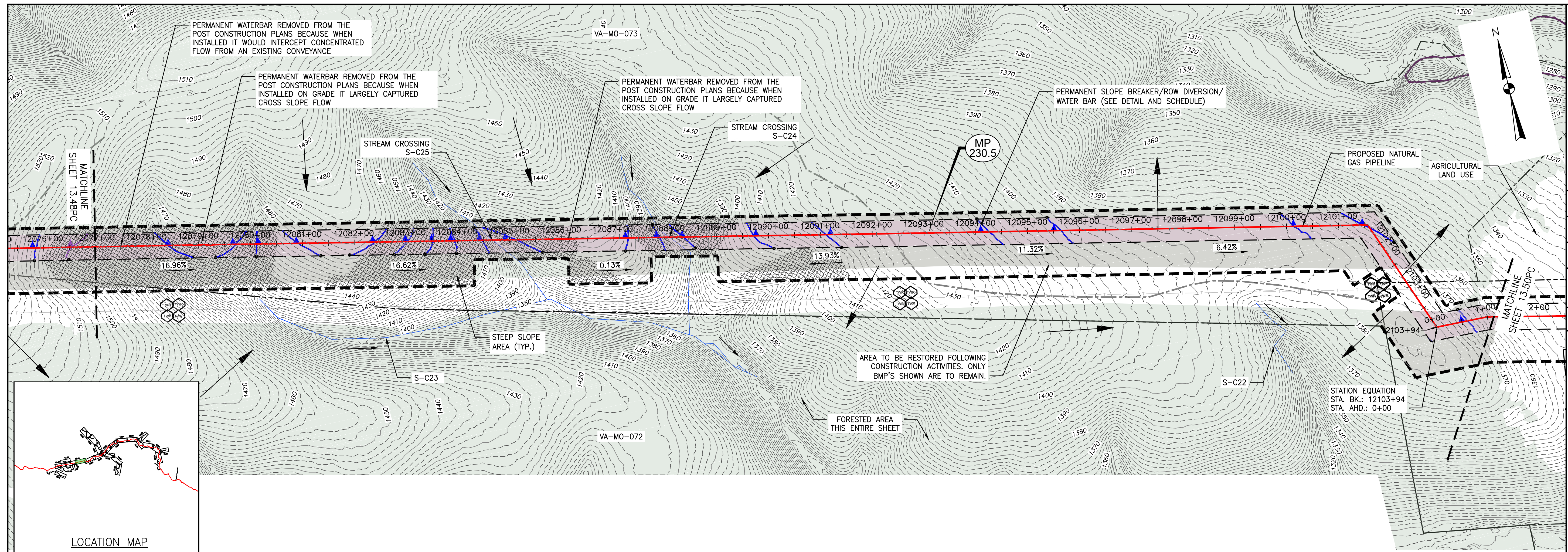
MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

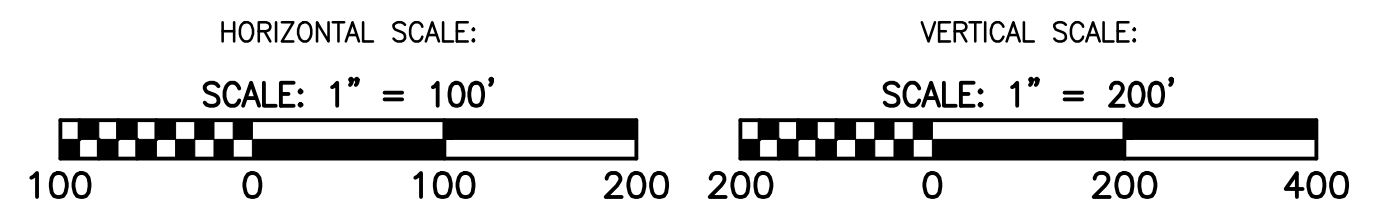
DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.48PC OF 13.90PC	



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE
---	EXISTING STATE LINE	---	PROPOSED PIPELINE
---	EXISTING COUNTY LINE	---	SURFACE WATER FLOW DIRECTION
---	EXISTING ROAD/TRAIL	■	POND
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	■	WETLAND
---	APPALACHIAN NATIONAL SCENIC TRAIL	→	STREAM FLOW DIRECTION
---	ACID FORMING MATERIAL	■	FEMA 100 YEAR FLOODPLAIN
---	PROPOSED LEVEL SPREADER DIVERSION	▲	PERMANENT WATER BAR 10' END TREATMENT
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)	▲	PERMANENT WATER BAR 15' END TREATMENT
---	PROPOSED LIMIT OF DISTURBANCE	▲	PERMANENT WATER BAR 20' END TREATMENT
●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)	■	STEEP SLOPE AREA
		■	EXISTING FOREST
		■	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
		■	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION



NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

REVISIONS:

Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

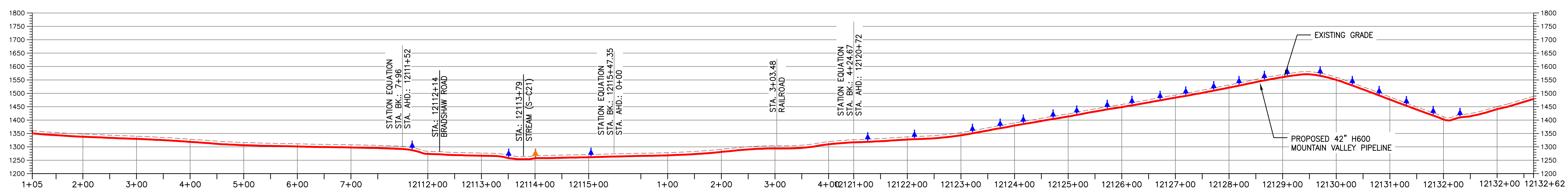
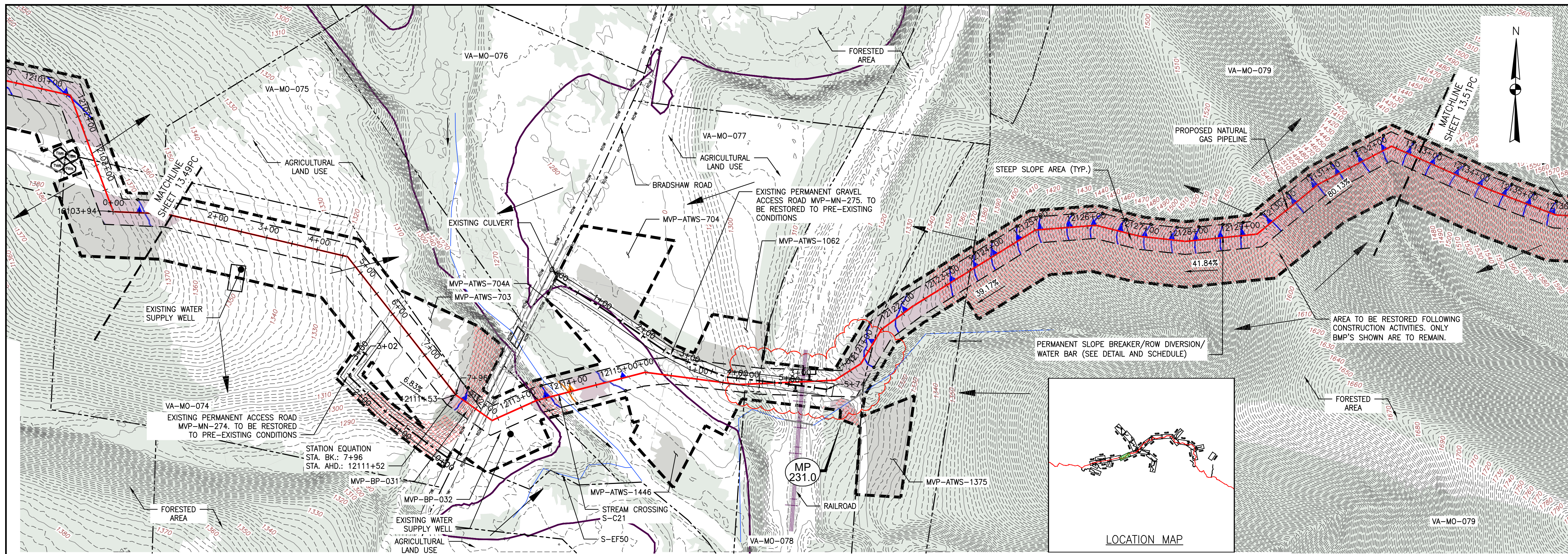
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 PITTSBURGH, PA 15220

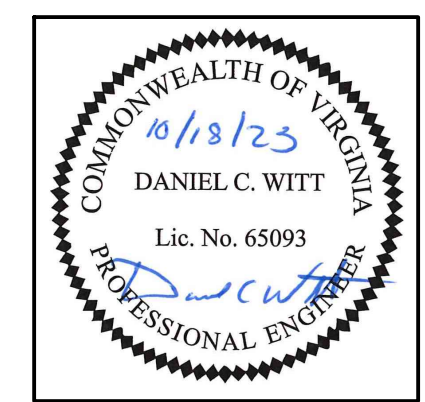
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

COMMONWEALTH OF PENNSYLVANIA
 DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DWJ
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHT. NO. 13.49PC OF 13.90PC



- LEGEND**
- EXISTING CULVERT
 - STREAM
 - EXISTING PROPERTY LINE
 - EXISTING STATE LINE
 - EXISTING COUNTY LINE
 - EXISTING ROAD/TRAIL
 - USDA FOREST SERVICE (NATIONAL FOREST) LANDS
 - APPALACHIAN NATIONAL SCENIC TRAIL
 - ACID FORMING MATERIAL
 - PROPOSED LEVEL SPREADER DIVERSION
 - GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
 - PROPOSED LIMIT OF DISTURBANCE
 - PROPOSED LEVEL SPREADER
 - PROPOSED PERMANENT RIGHT OF WAY
 - PROPOSED ACCESS ROAD CENTERLINE
 - PROPOSED PIPELINE
 - SURFACE WATER FLOW DIRECTION
 - POND
 - WETLAND
 - PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
 - APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
 - STREAM FLOW DIRECTION
 - FEMA 100 YEAR FLOODPLAIN
 - PERMANENT WATER BAR 10' END TREATMENT
 - PERMANENT WATER BAR 15' END TREATMENT
 - PERMANENT WATER BAR 20' END TREATMENT
 - STEEP SLOPE AREA
 - EXISTING FOREST
 - PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
 - TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION



THIS SEAL APPLIES ONLY TO REVISIONS DATED 10-16-23

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	10/16/23	JUZ	IHH	ADJUST PIPELINE CENTERLINE
2	8/11/22	JUZ	DCW	REMOVE LOD
3	1/11/21	ZM	DJW	ADDRESS VABEO COMMENTS
4	7/7/20	BH	DJW	FIELD MODIFICATION - MP 230.8 (PIPELINE RE-ROUTE)
5	3/15/18	KAL	DJW	ADDRESS VABEO COMMENTS
6	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY

Mountain Valley Pipeline

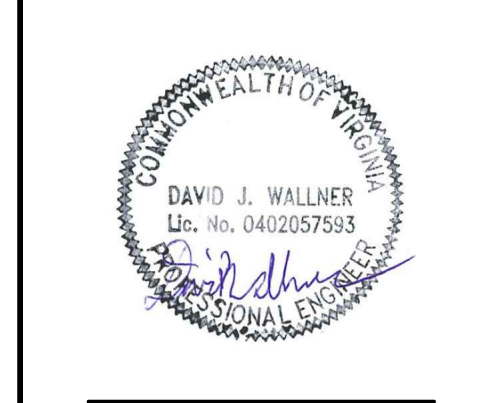
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

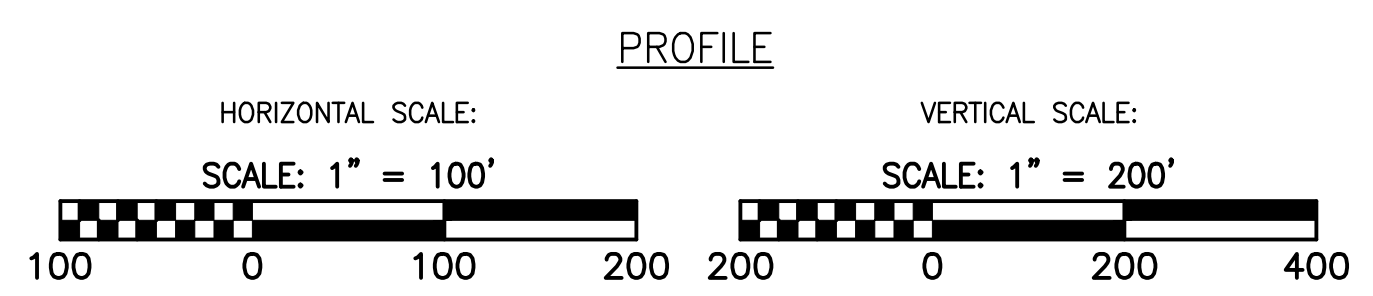
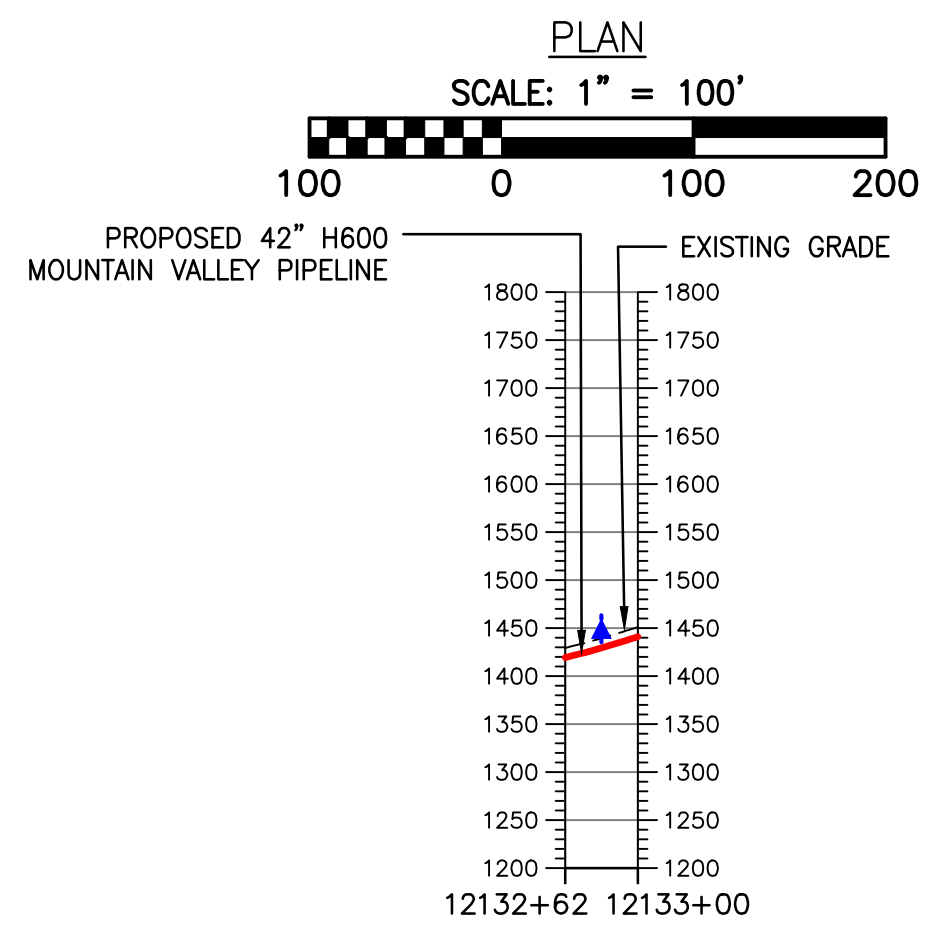
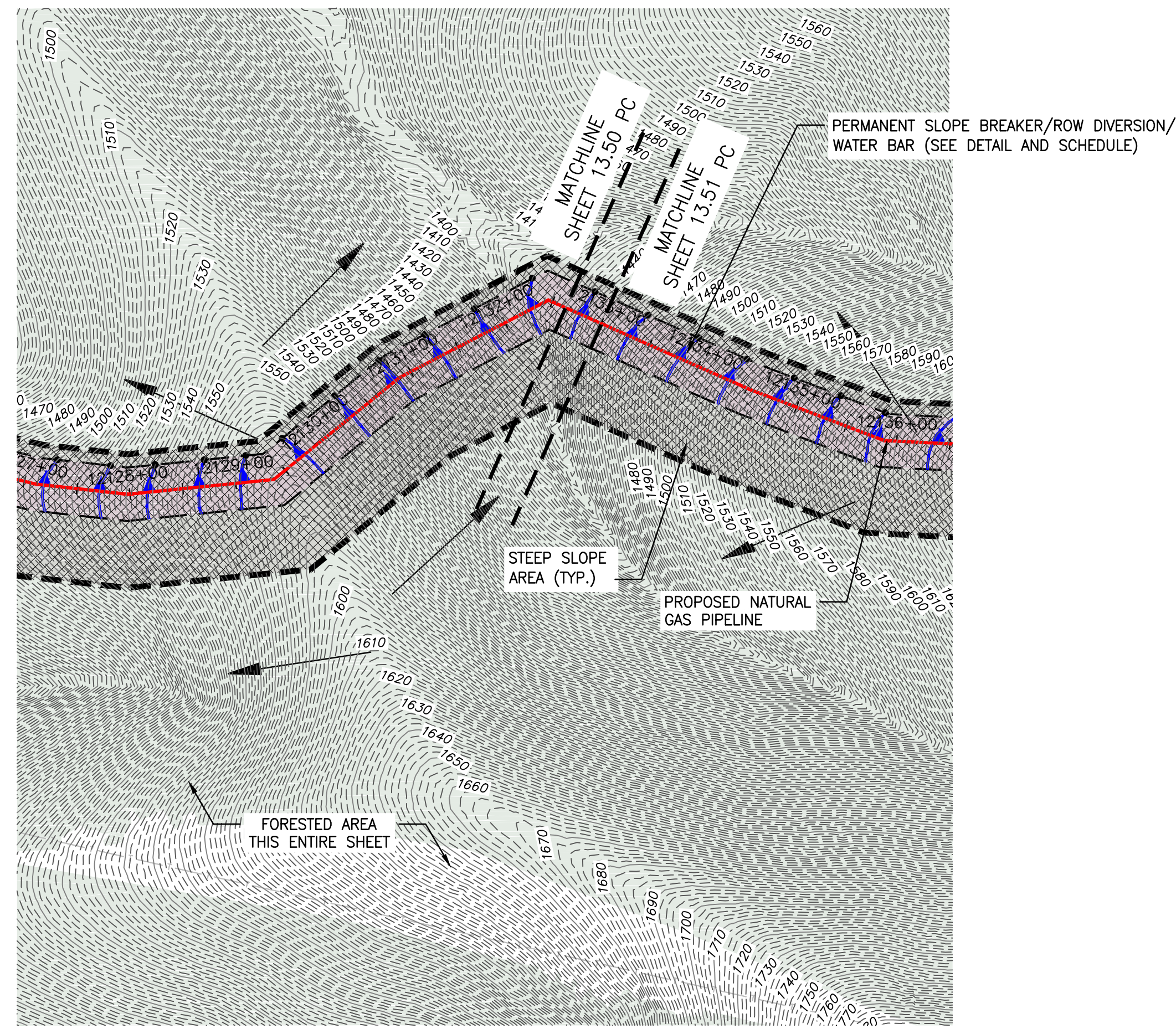
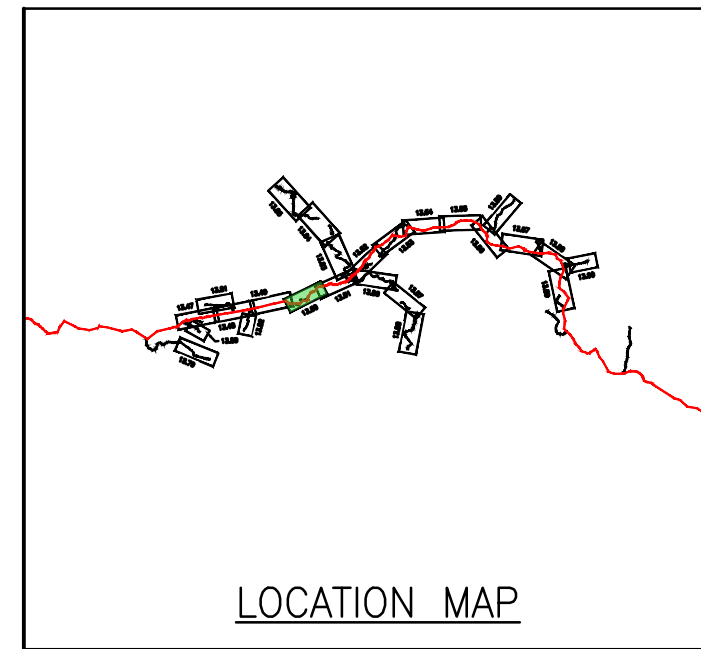
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	JUZ
CHECKED BY:	IHH
APPROVED BY:	DCW
DATE:	10/16/23
SCALE:	AS SHOWN
SHT. NO. 13.50PC OF 13.90PC	

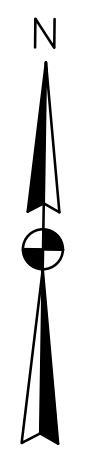


LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

1. NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
2. IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.



NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

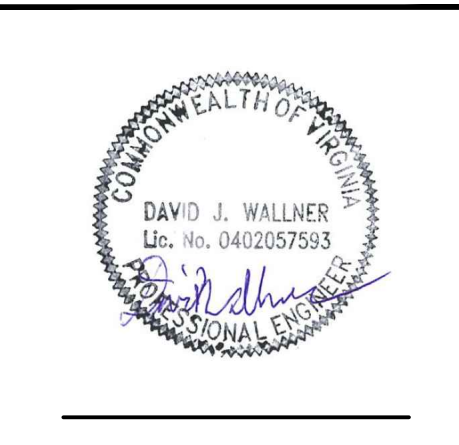
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

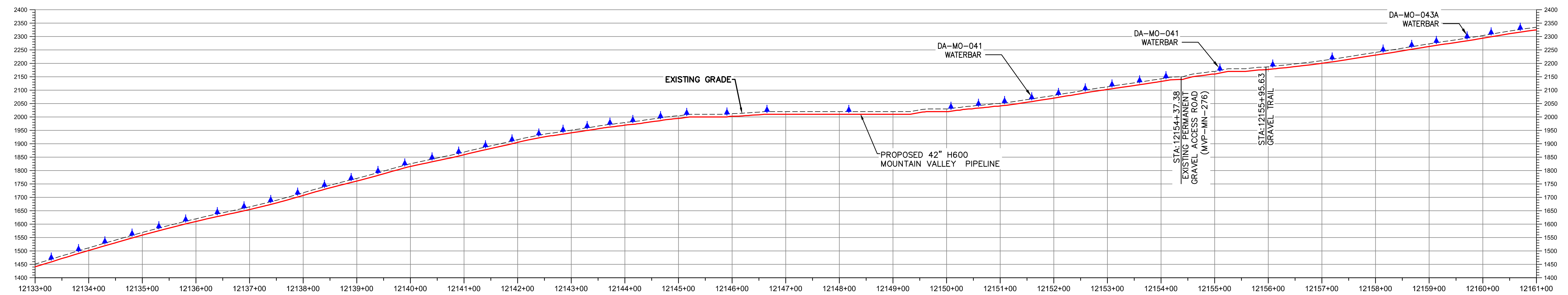
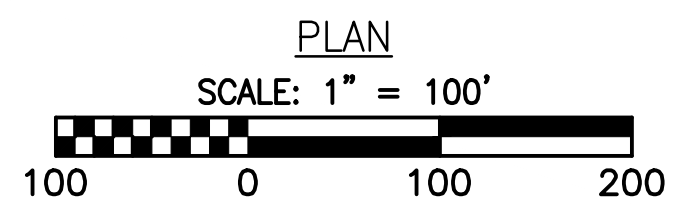
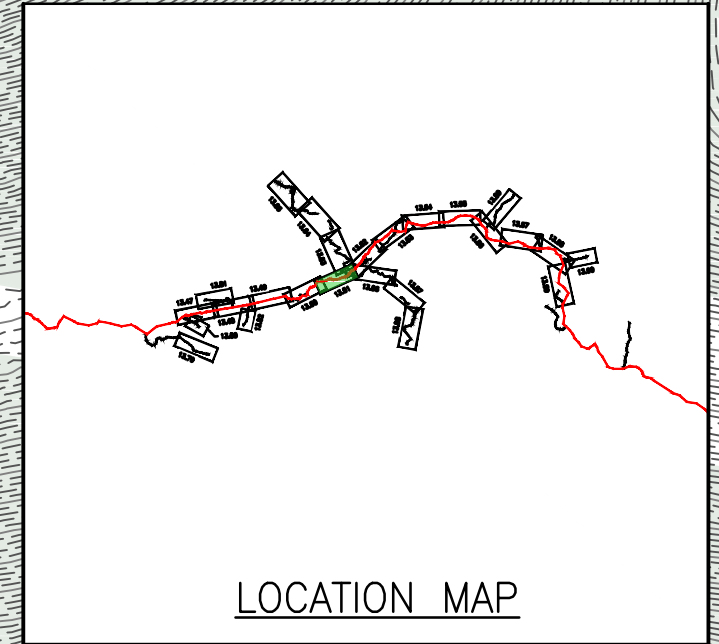
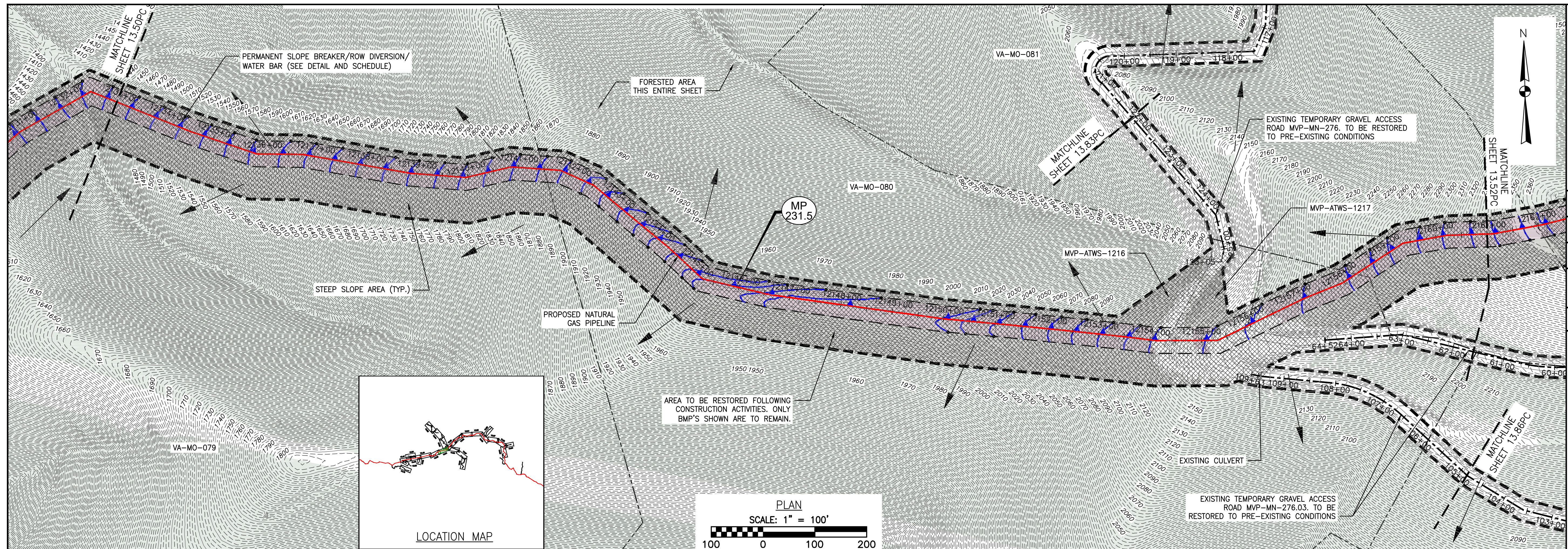
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661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

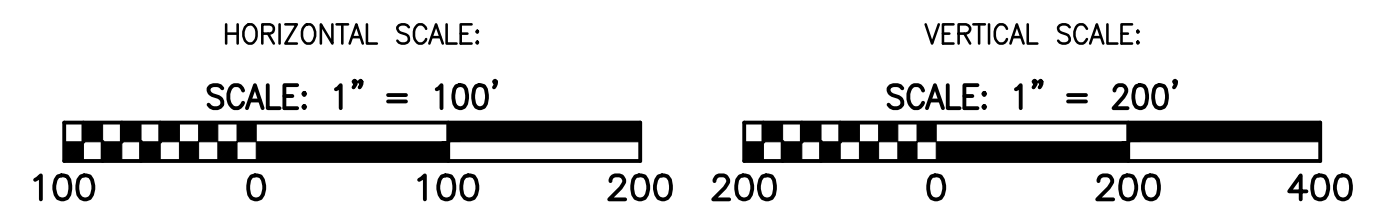
POST CONSTRUCTION
 (STORMWATER &
 RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.50APC OF 13.90PC



PROFILE



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	▲	FEMA 100 YEAR FLOODPLAIN
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 10' END TREATMENT
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 15' END TREATMENT
---	EXISTING COUNTY LINE	---	SURFACE WATER FLOW DIRECTION	▲	PERMANENT WATER BAR 20' END TREATMENT
---	EXISTING ROAD/TRAIL	▲	POND	■	STEEP SLOPE AREA
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	■	WETLAND	■	EXISTING FOREST
---	APPALACHIAN NATIONAL SCENIC TRAIL	▲	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)	■	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
---	ACID FORMING MATERIAL	●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)	■	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
---	PROPOSED LEVEL SPREADER DIVERSION				
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)				
---	PROPOSED LIMIT OF DISTURBANCE				

NOTES:

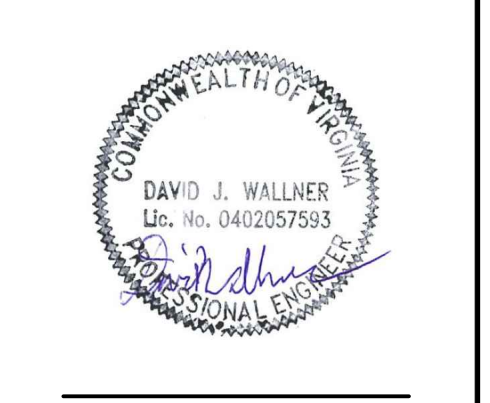
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VADEQ COMMENTS
3	2/7/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VADEQ COMMENTS

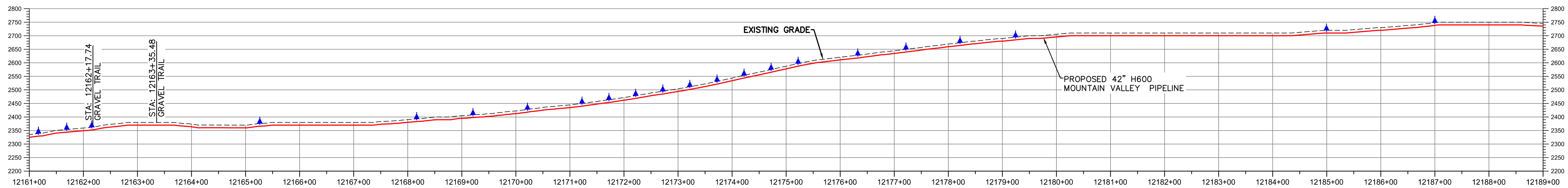
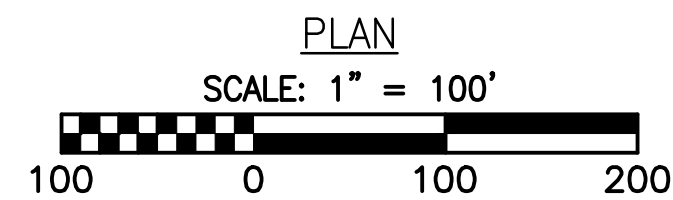
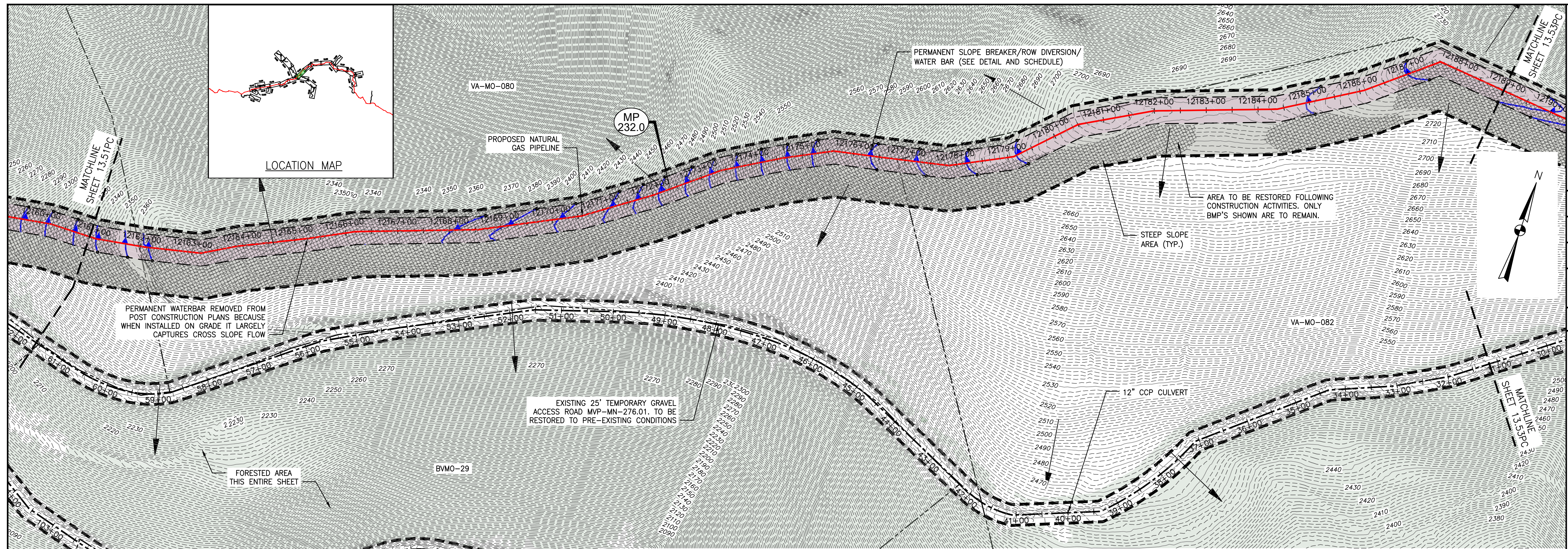
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.51PC OF 13.90PC



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- ANST — APPALACHIAN NATIONAL SCENIC TRAIL
- AFM — ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- +++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

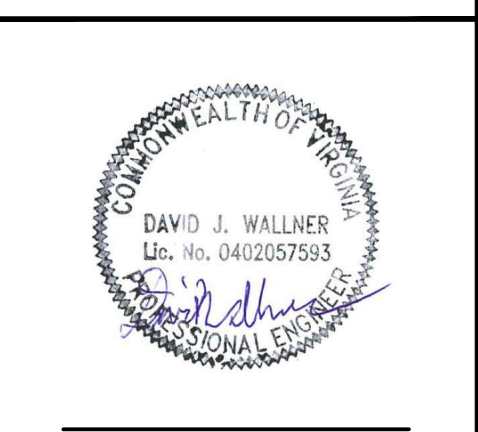
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
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2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

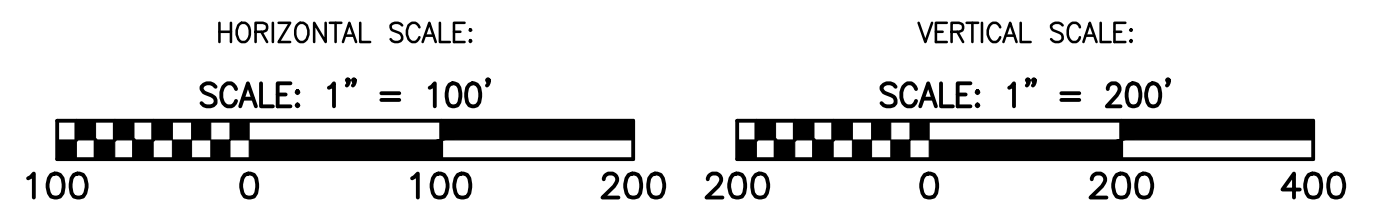
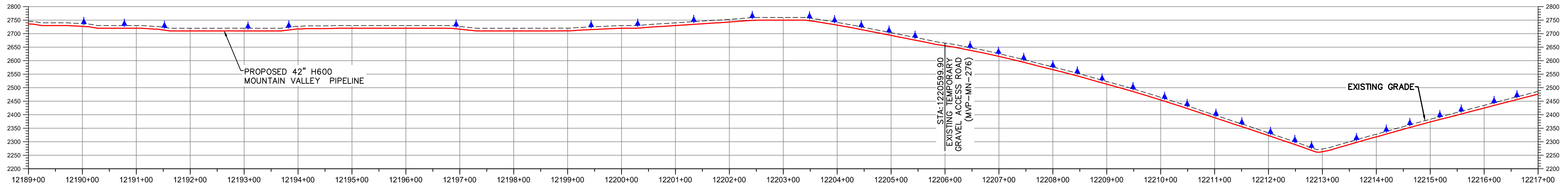
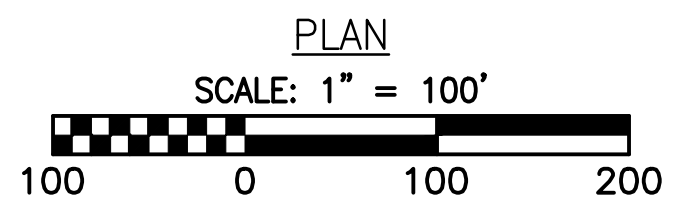
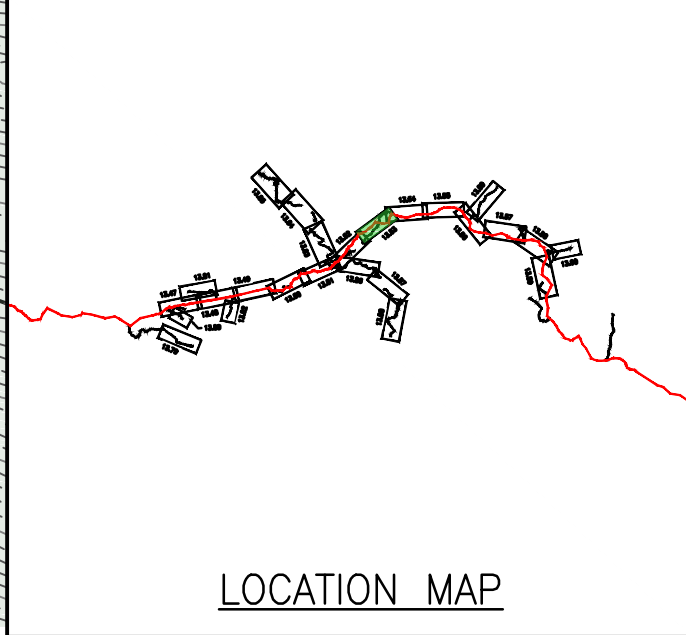
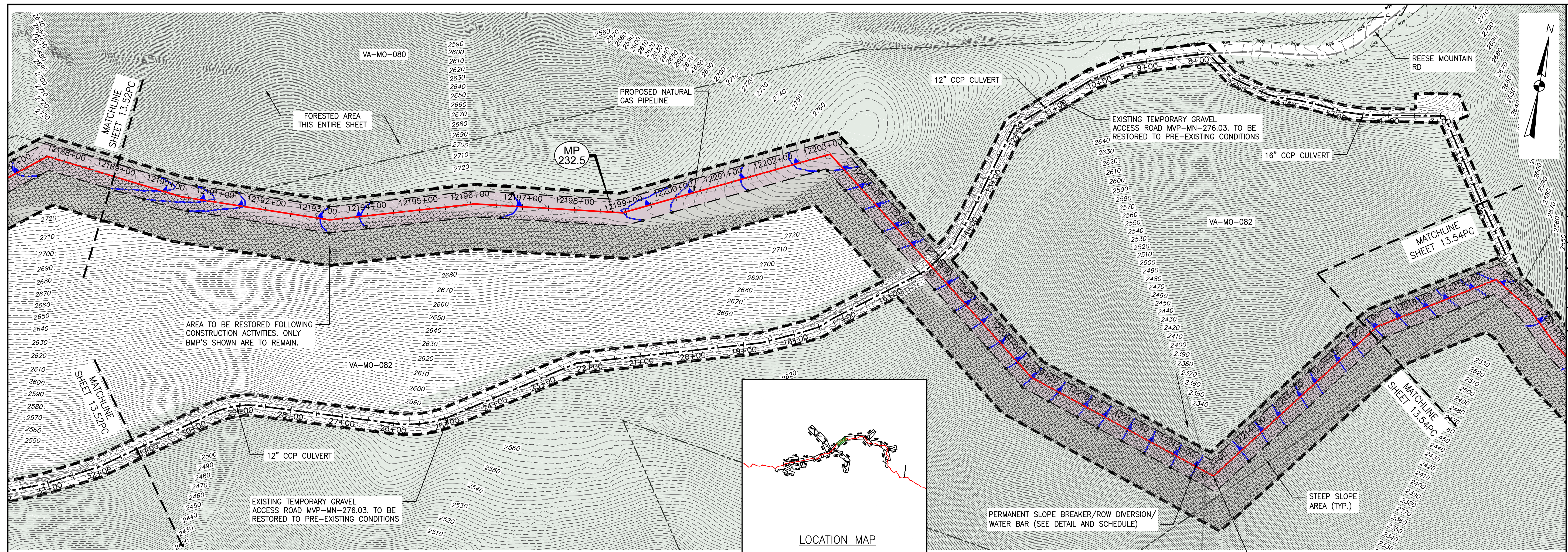
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.52PC OF 13.90PC	REVISION



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION	▨	STEEP SLOPE AREA
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	▲	FEMA 100 YEAR FLOODPLAIN	▨	EXISTING FOREST
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 10' END TREATMENT	▨	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 15' END TREATMENT	▨	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
---	EXISTING COUNTY LINE	→	SURFACE WATER FLOW DIRECTION	▲	PERMANENT WATER BAR 20' END TREATMENT		
---	EXISTING ROAD/TRAIL	▨	POND				
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨	WETLAND				
---	APPALACHIAN NATIONAL SCENIC TRAIL	→	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)				
---	ACID FORMING MATERIAL	●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)				
---	PROPOSED LEVEL SPREADER DIVERSION						
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)						
---	PROPOSED LIMIT OF DISTURBANCE						

NOTES:

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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	JRE	PLAN SUBMISSION
2	11/21/17	KAL	JRE	ADDRESS VADED COMMENTS
3	2/16/18	KAL	JRE	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	JRE	ADDRESS VADED COMMENTS

REVISIONS:

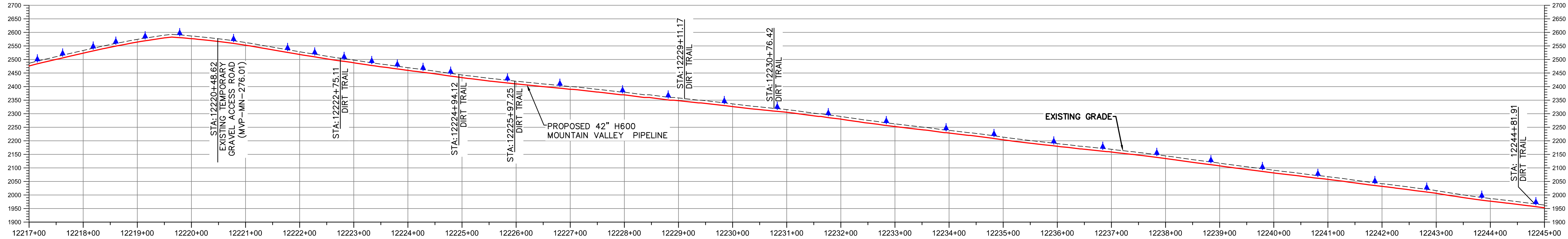
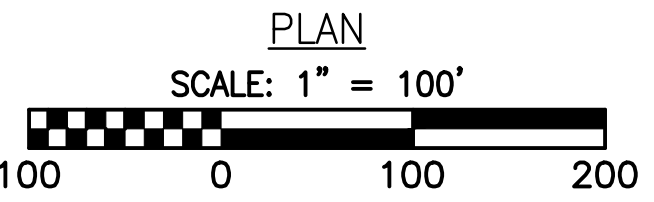
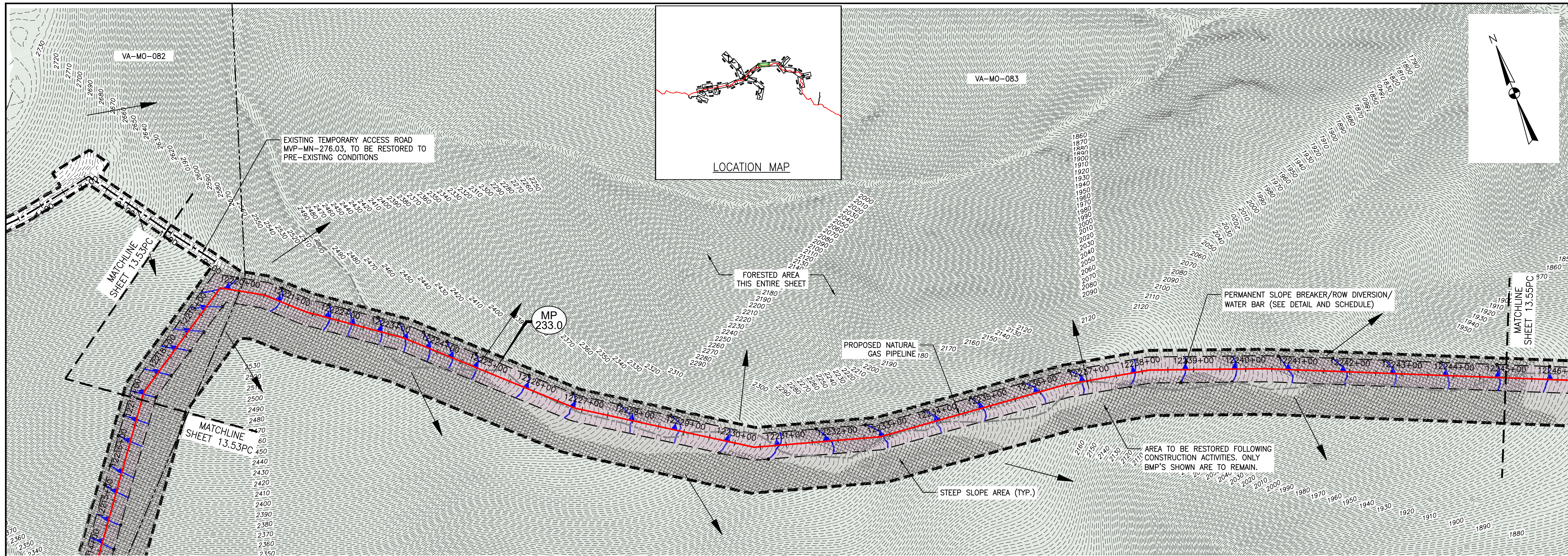
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DJW
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHT. NO. 13.53PC OF 13.90PC



LEGEND	
	EXISTING CULVERT
	STREAM
	EXISTING PROPERTY LINE
	EXISTING STATE LINE
	EXISTING COUNTY LINE
	EXISTING ROAD/TRAIL
	USDA FOREST SERVICE (NATIONAL FOREST) LANDS
	APPALACHIAN NATIONAL SCENIC TRAIL
	ACID FORMING MATERIAL
	PROPOSED LEVEL SPREADER DIVERSION
	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED LEVEL SPREADER
	PROPOSED PERMANENT RIGHT OF WAY
	PROPOSED ACCESS ROAD CENTERLINE
	PROPOSED PIPELINE
	SURFACE WATER FLOW DIRECTION
	POND
	WETLAND
	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
	STREAM FLOW DIRECTION
	FEMA 100 YEAR FLOODPLAIN
	PERMANENT WATER BAR 10' END TREATMENT
	PERMANENT WATER BAR 15' END TREATMENT
	PERMANENT WATER BAR 20' END TREATMENT
	STEEP SLOPE AREA
	EXISTING FOREST
	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

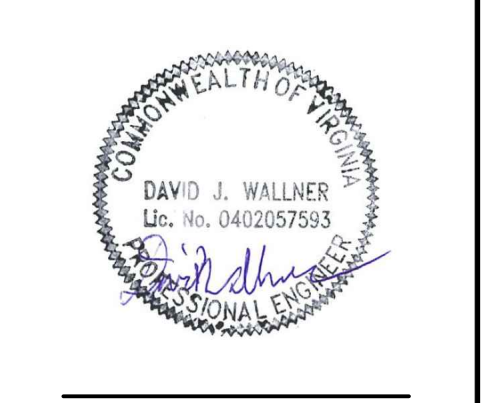
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REVISIONS:				
NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VADEQ COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADEQ COMMENTS

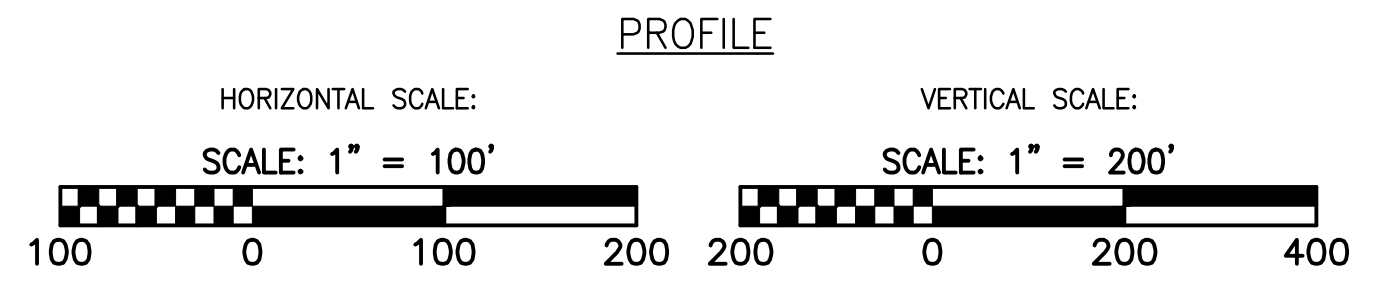
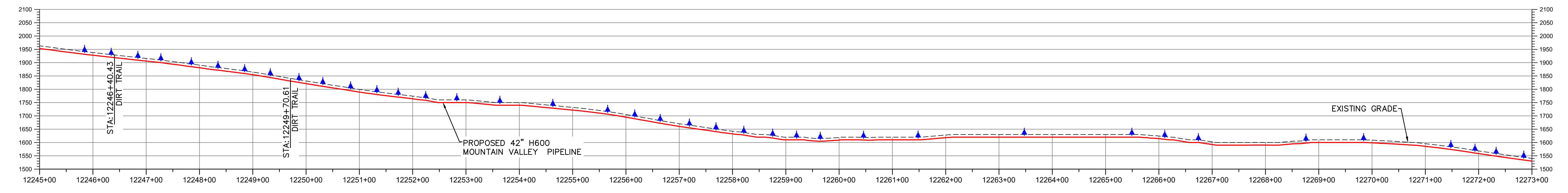
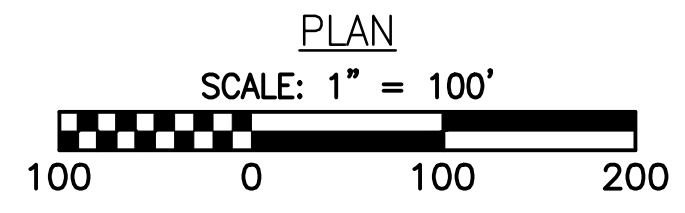
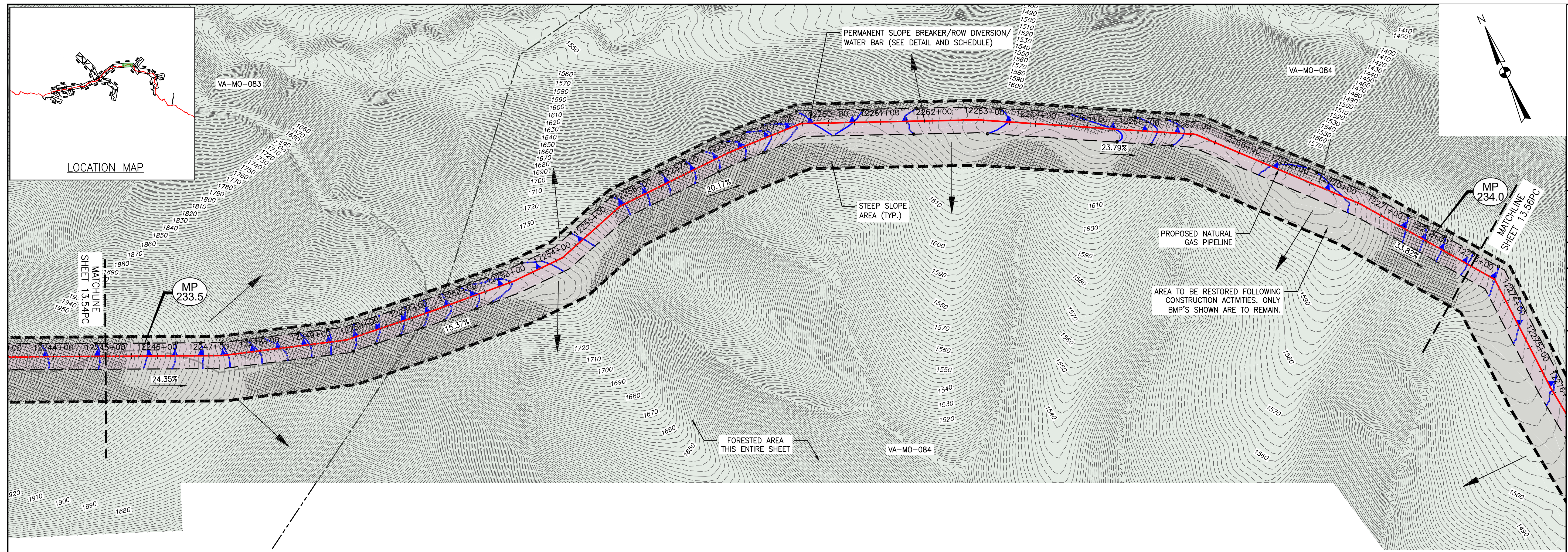
Mountain Valley Pipeline
 POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
 MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
 MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.54PC OF 13.90PC



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE
---	EXISTING STATE LINE	---	PROPOSED PIPELINE
---	EXISTING COUNTY LINE	---	SURFACE WATER FLOW DIRECTION
---	EXISTING ROAD/TRAIL	■	POND
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	■	WETLAND
---	APPALACHIAN NATIONAL SCENIC TRAIL	→	STREAM FLOW DIRECTION
---	ACID FORMING MATERIAL	—	FEMA 100 YEAR FLOODPLAIN
---	PROPOSED LEVEL SPREADER DIVERSION	▲	PERMANENT WATER BAR 10' END TREATMENT
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)	▲	PERMANENT WATER BAR 15' END TREATMENT
---	PROPOSED LIMIT OF DISTURBANCE	▲	PERMANENT WATER BAR 20' END TREATMENT
●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)	■	STEEP SLOPE AREA
		■	EXISTING FOREST
		■	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
		■	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

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2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

REVISIONS:

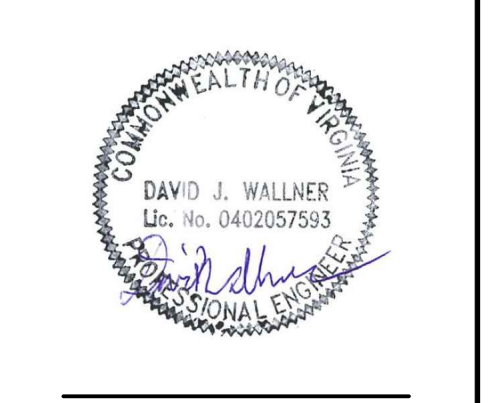
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

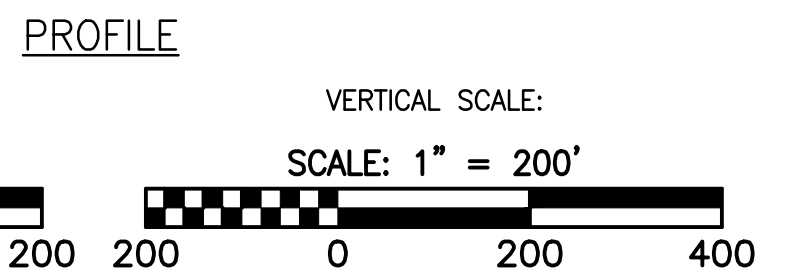
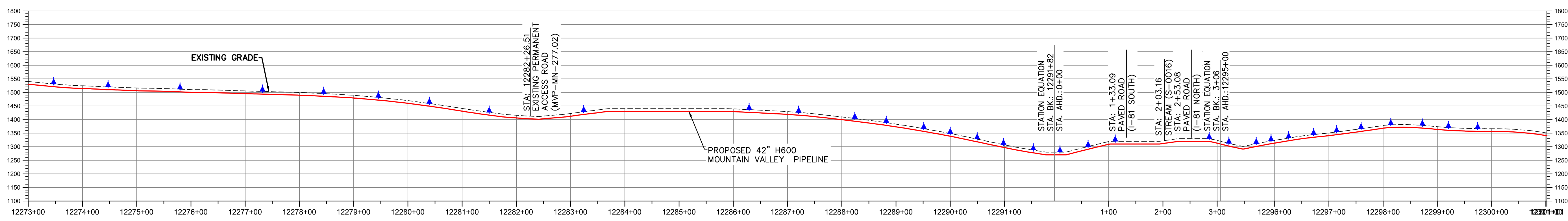
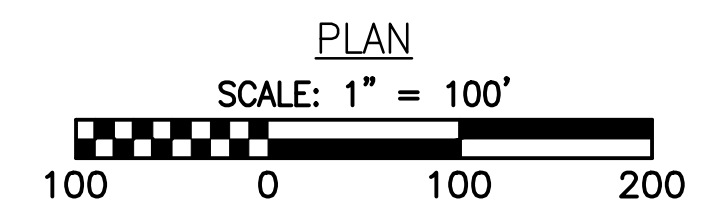
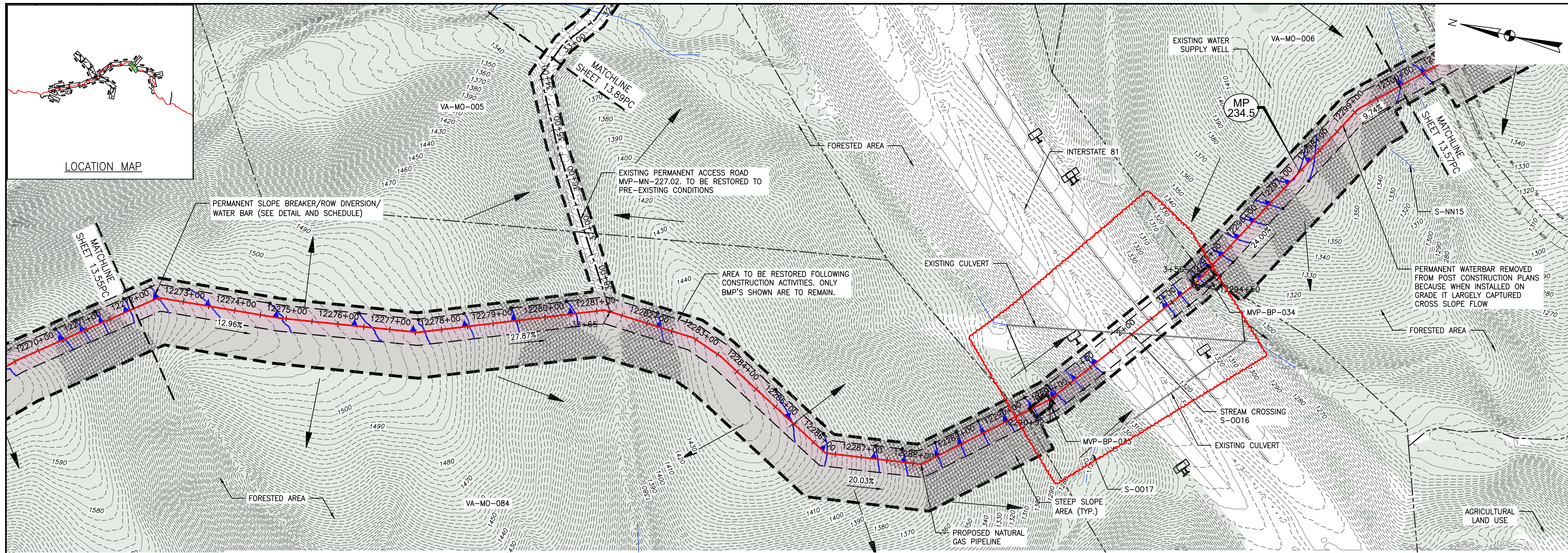
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.55PC OF 13.90PC	



- LEGEND**
- EXISTING CULVERT
 - STREAM
 - - - EXISTING PROPERTY LINE
 - - - EXISTING STATE LINE
 - - - EXISTING COUNTY LINE
 - - - EXISTING ROAD/TRAIL
 - USDA FOREST SERVICE (NATIONAL FOREST) LANDS
 - APPALACHIAN NATIONAL SCENIC TRAIL
 - ACID FORMING MATERIAL
 - PROPOSED LEVEL SPREADER DIVERSION
 - GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
 - - - PROPOSED LIMIT OF DISTURBANCE
 - +++++ PROPOSED LEVEL SPREADER
 - - - PROPOSED PERMANENT RIGHT OF WAY
 - - - PROPOSED ACCESS ROAD CENTERLINE
 - PROPOSED PIPELINE
 - SURFACE WATER FLOW DIRECTION
 - ▣ POND
 - ▣ WETLAND
 - PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
 - APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
 - STREAM FLOW DIRECTION
 - FEMA 100 YEAR FLOODPLAIN
 - PERMANENT WATER BAR 10' END TREATMENT
 - PERMANENT WATER BAR 15' END TREATMENT
 - PERMANENT WATER BAR 20' END TREATMENT
 - ▨ STEEP SLOPE AREA
 - ▨ EXISTING FOREST
 - ▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
 - ▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

- NOTES:**
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
 - IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DJW	PLAN SUBMISSION
2	11/21/17	KAL	DJW	ADDRESS VADEO COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DJW	ADDRESS VADEO COMMENTS
5	4/30/18	KAL	DJW	FIELD MODIFICATION
6	7/2/20	ZM	JRE	CHANGES TO AQUATIC RESOURCES DELINEATION

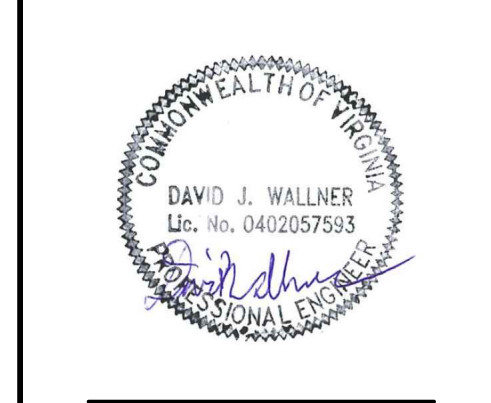
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

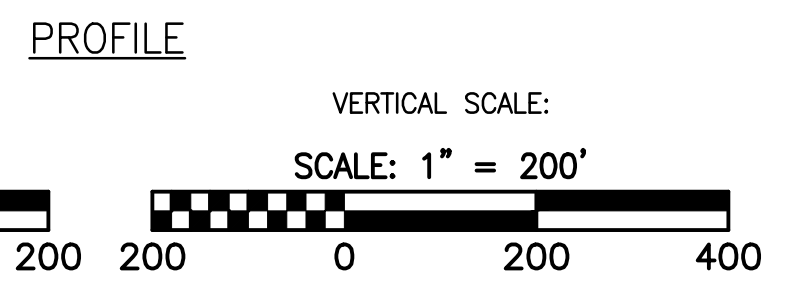
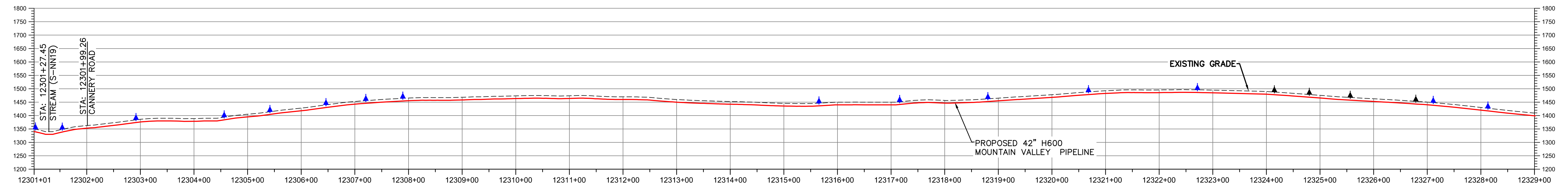
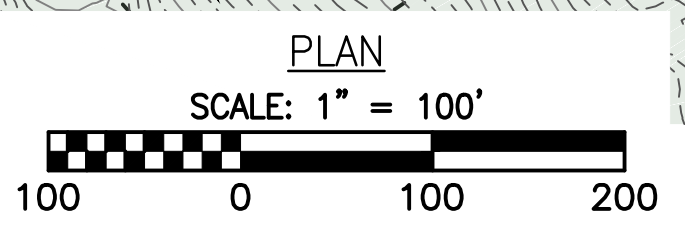
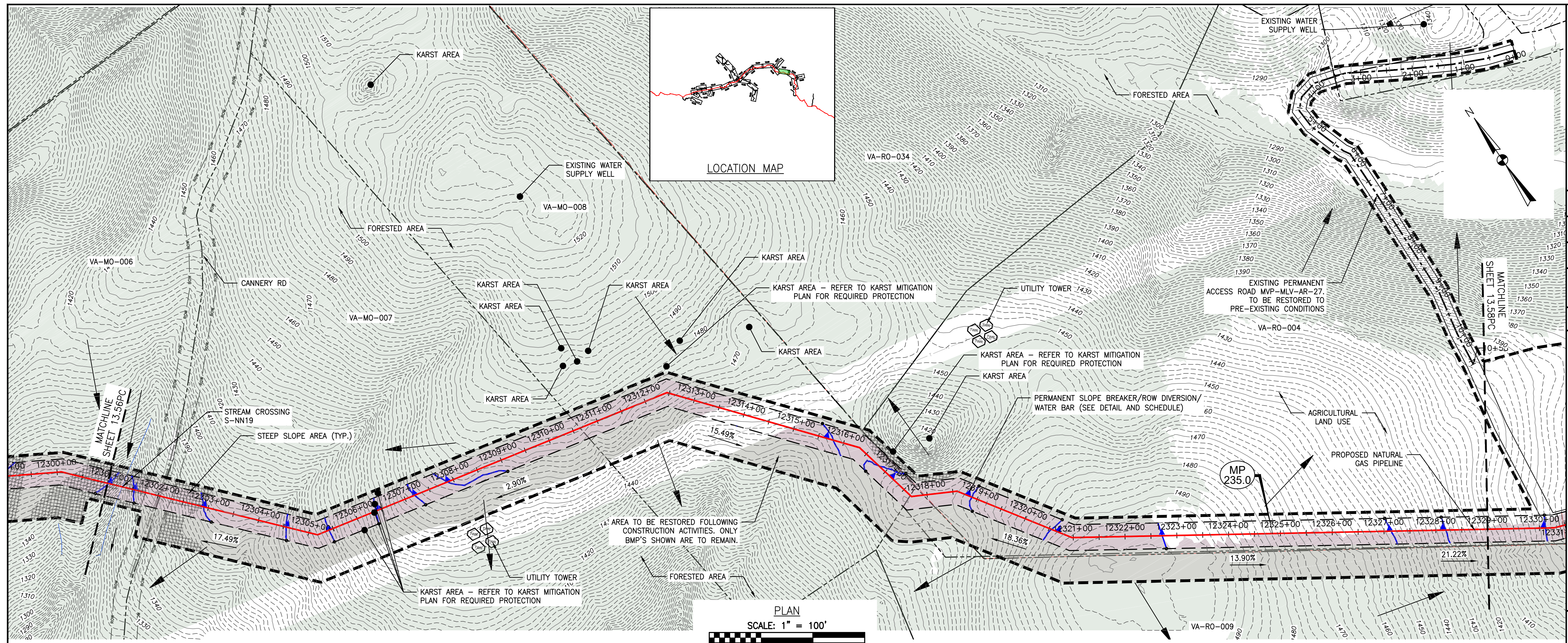
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	7/7/20
SCALE:	AS SHOWN
SHT. NO. 13.56PC OF 13.90PC	



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	—	FEMA 100 YEAR FLOODPLAIN
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 10' END TREATMENT
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 15' END TREATMENT
---	EXISTING COUNTY LINE	---	SURFACE WATER FLOW DIRECTION	▲	PERMANENT WATER BAR 20' END TREATMENT
---	EXISTING ROAD/TRAIL	▲	POND	■	STEEP SLOPE AREA
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	■	WETLAND	■	EXISTING FOREST
---	APPALACHIAN NATIONAL SCENIC TRAIL	▲	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)	■	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
---	ACID FORMING MATERIAL	▲	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)	■	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
---	PROPOSED LEVEL SPREADER DIVERSION				
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)				
---	PROPOSED LIMIT OF DISTURBANCE				

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.:	APPD.:	DESCRIPTION:
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VAQED COMMENTS
3	2/7/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VAQED COMMENTS

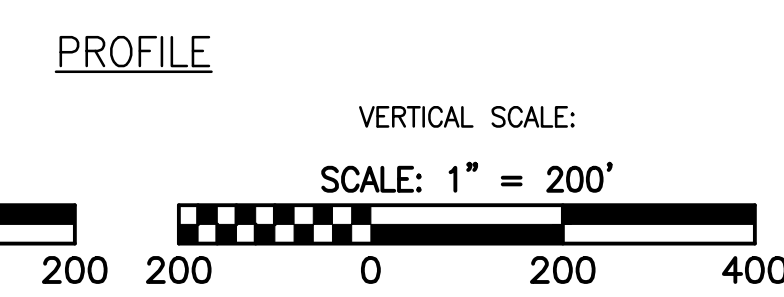
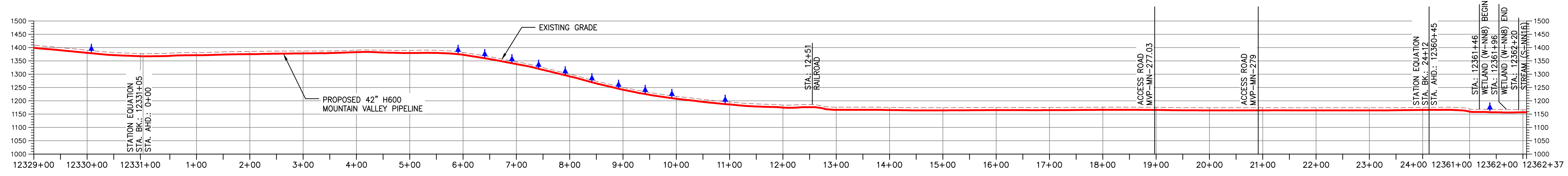
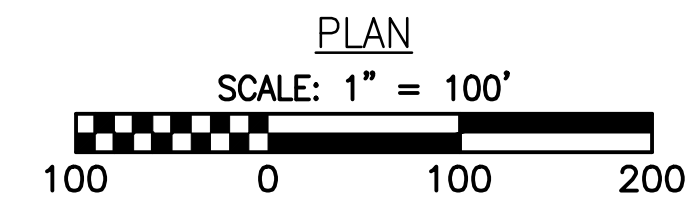
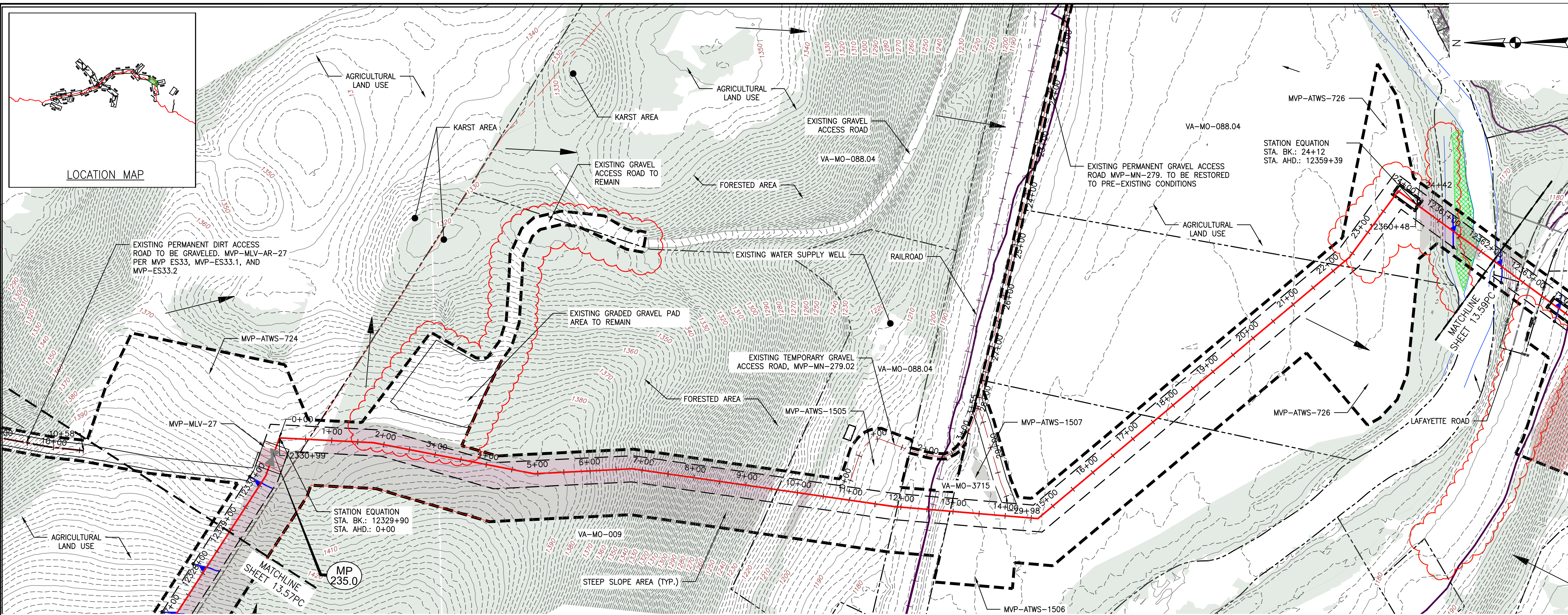
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

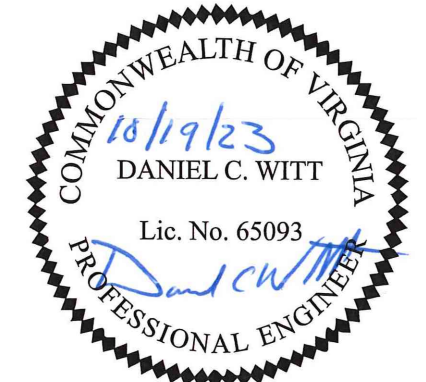
DAVID J. WALLNER
 Lic. No. 0402057593
 PROFESSIONAL ENGINEER

DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.57PC OF 13.90PC	



- LEGEND**
- EXISTING CULVERT
 - STREAM
 - - - EXISTING PROPERTY LINE
 - - - EXISTING STATE LINE
 - - - EXISTING COUNTY LINE
 - - - EXISTING ROAD/TRAIL
 - USDA FOREST SERVICE (NATIONAL FOREST) LANDS
 - APPALACHIAN NATIONAL SCENIC TRAIL
 - ACID FORMING MATERIAL
 - PROPOSED LEVEL SPREADER DIVERSION
 - GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
 - PROPOSED LIMIT OF DISTURBANCE
 - +++++ PROPOSED LEVEL SPREADER
 - - - PROPOSED PERMANENT RIGHT OF WAY
 - - - PROPOSED ACCESS ROAD CENTERLINE
 - - - PROPOSED PIPELINE
 - SURFACE WATER FLOW DIRECTION
 - ▣ POND
 - ▣ WETLAND
 - ▣ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
 - APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
 - STREAM FLOW DIRECTION
 - ▣ FEMA 100 YEAR FLOODPLAIN
 - ▣ PERMANENT WATER BAR 10' END TREATMENT
 - ▣ PERMANENT WATER BAR 15' END TREATMENT
 - ▣ PERMANENT WATER BAR 20' END TREATMENT
 - ▣ STEEP SLOPE AREA
 - ▣ EXISTING FOREST
 - ▣ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
 - ▣ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

- NOTES:**
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
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THIS SEAL ONLY APPLIES TO REVISIONS DATED 10-19-23

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	10-19-23	JUZ	IHH	ADJUST PIPELINE CENTERLINE/ REMOVE LOD C98B-24
2	09/10/22	JUZ	DCW	MODIFICATION TO ADD EXISTING ROANOKE GAS PAD TO LOD
3	3/15/18	KAL	JRE	FIELD MODIFICATION - MP 227.7 (PIPELINE RE-ROUTE) ADDRESS VABEC COMMENTS
4	3/15/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
5	7/7/20	BH	DW	FIELD MODIFICATION - MP 227.7 (PIPELINE RE-ROUTE)
6	-	MAP	DW	FIELD MODIFICATION

Mountain Valley Pipeline

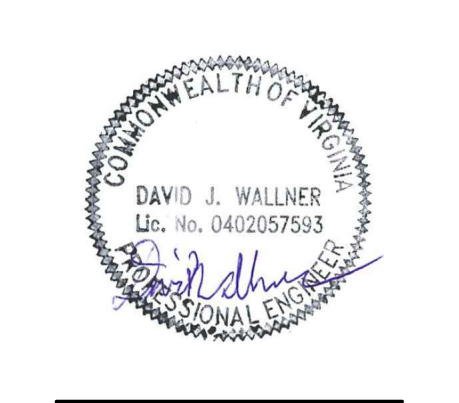
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

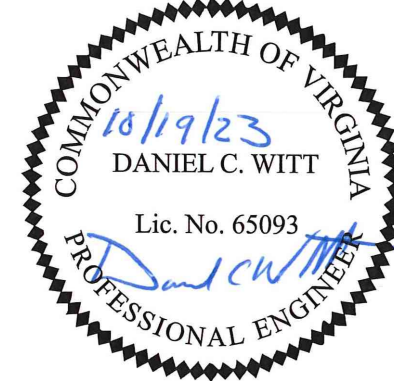
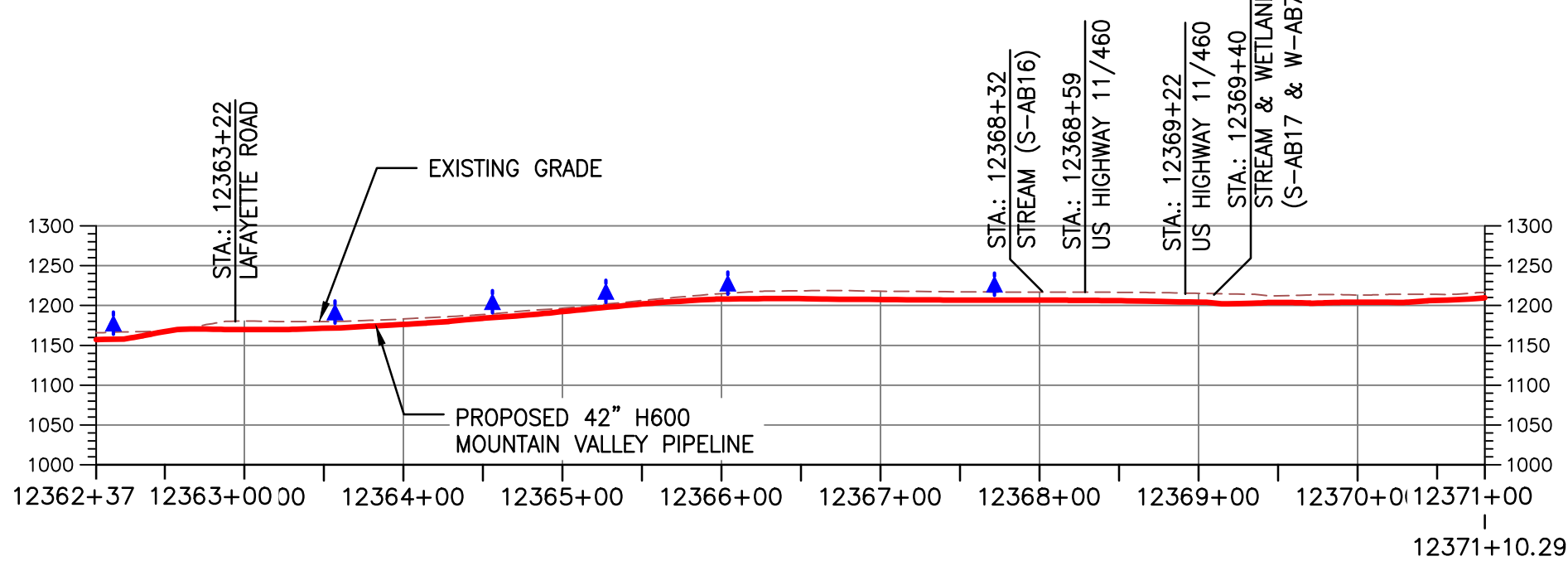
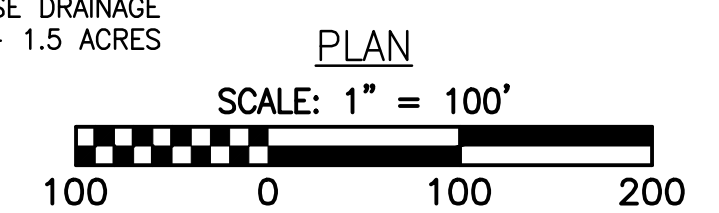
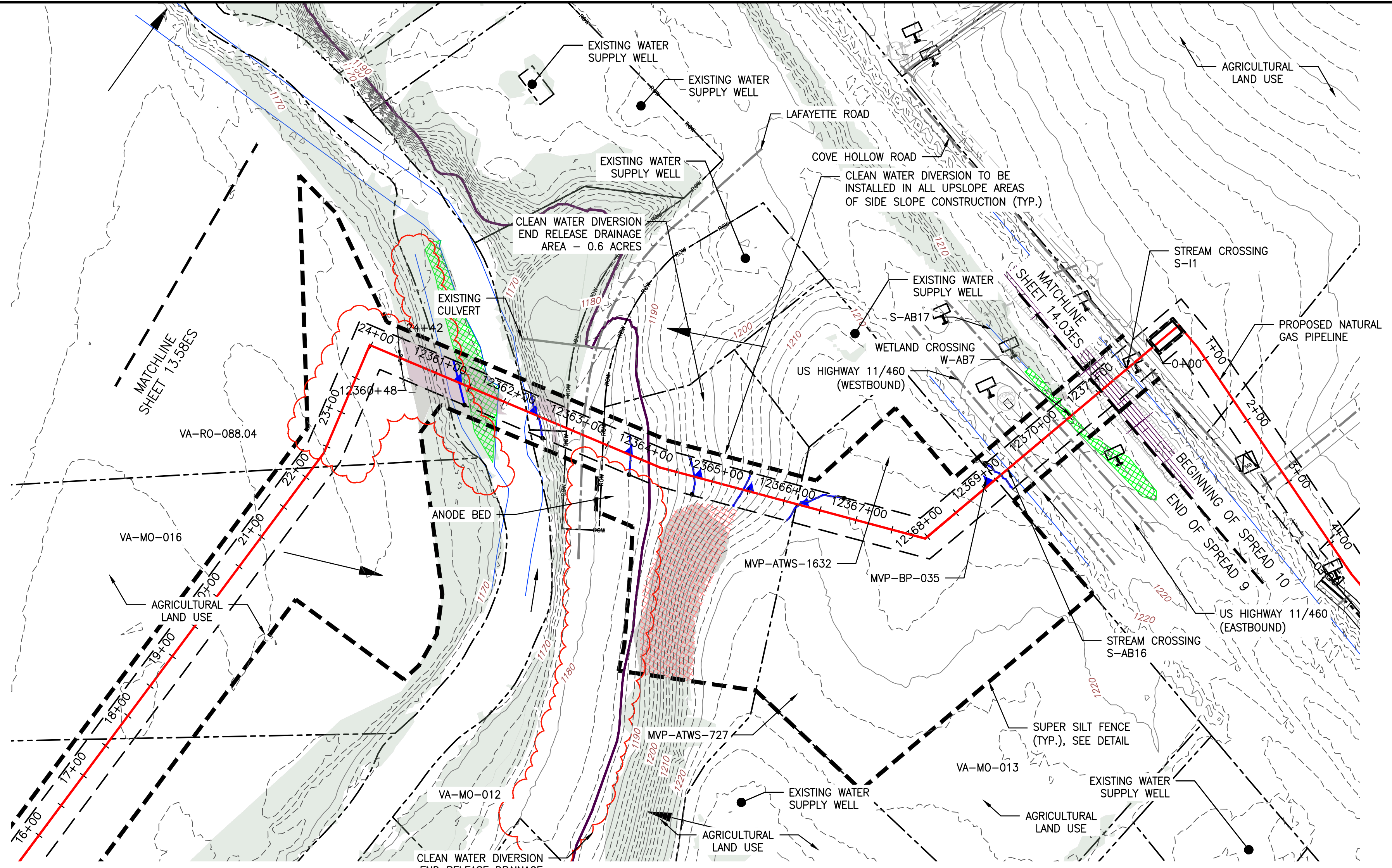
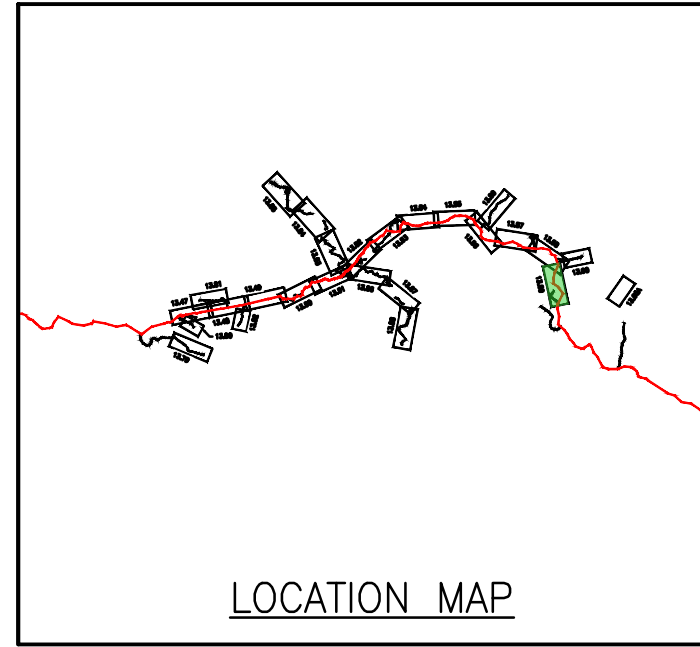
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	JUZ
CHECKED BY:	IHH
APPROVED BY:	DCW
DATE:	10/19/23
SCALE:	AS SHOWN
SHT. NO.	13.58PC OF 13.90PC



THIS SEAL APPLIES ONLY TO REVISIONS DATED 10-19-23

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- STREAM
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- EXISTING ROAD/TRAIL
- EXISTING PROPERTY LINE
- EXISTING STATE LINE
- EXISTING COUNTY LINE
- POND
- WETLAND
- ACID FORMING MATERIAL
- SURFACE WATER FLOW DIRECTION
- PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- PROPOSED SILT FENCE (SEE NOTE 5)
- PROPOSED SUPER SILT FENCE (SEE DETAIL MVP-ES9.2)
- PROPOSED REINFORCED FILTRATION DEVICE (SEE DETAILS MVP-ES9, 9.1, 9.2, 9.3)
- ORANGE CONSTRUCTION SAFETY FENCE
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- PROPOSED COMPOST FILTER SOCK (SEE DETAILS MVP-ES3, 3.1, 3.2)
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- CLEAN WATER DIVERSION PIPE
- CLEAN WATER DIVERSION DIKE (SEE DETAIL MVP-ES50 AND MVP-ES51)
- EXISTING FOREST
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- DRAINAGE AREA BOUNDARY
- TIMBER MAT (SEE DETAIL MVP-ES37)
- STEEP SLOPE EROSION CONTROL (SEE NOTE 2)
- STEEP SLOPE AREAS (SEE NOTE 4)
- PROPOSED ROCK CONSTRUCTION ENTRANCE
- PROPOSED TRENCH BREAKER (SEE DETAIL MVP-20)
- TEMPORARY ROW DIVERSION/WATER BAR (VADEQ STD & SPEC 3.11)
- PERMANENT SLOPE BREAKER/ROW DIVERSION/WATER BAR (SEE DETAILS MVP-17, ES38, AND SCHEDULE)

NOTES:

1. TOPSOIL SEGREGATION WILL BE PERFORMED IN ALL IMMEDIATE CONSTRUCTION AREAS OF THE PROJECT IN ACCORDANCE WITH DETAIL MVP-ES46.1 THROUGH MVP-ES46.3.
2. FLEXTERRA, EARTHGUARD OR EQUIVALENT MAY BE USED AS A SUBSTITUTE TO EROSION CONTROL BLANKET AS DIRECTED BY MVP.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY ALL UTILITIES. THE UTILITY LINES SHOWN ON THE PLAN ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT REPRESENT SURVEYED LINE INFORMATION.
4. SLOPES OF 30° OR GREATER EXIST. CONSTRUCTION FOR STEEP SLOPES TO BE PERFORMED USING STEEP SLOPE TECHNIQUES IDENTIFIED IN THE DETAIL SHEETS. ALSO REFER TO THE SITE-SPECIFIC DESIGN OF STABILIZATION MEASURES IN SELECTED HIGH-HAZARD PORTIONS OF THE ROUTE OF THE PROPOSED MOUNTAIN VALLEY PIPELINE PROJECT.
5. WHERE CONSTRUCTION CONDITIONS PRECLUDE THE USE OF DIVERSION DITCHES DUE TO SITE CONDITIONS THE CONTRACTOR WILL INSTALL SILT FENCE AT THE DIRECTION OF MVP.
6. DRAINAGE FEATURE CROSSINGS TO BE PERFORMED PER DETAIL MVP-ES49.
7. TEMPORARY ACCESS ROAD CROSSING OF STREAMS AND WETLANDS WILL UTILIZE TIMBER MATS. ANY PERMANENT ROAD CROSSINGS WILL BE CONDUCTED VIA CULVERTS. NO UNPERMITTED IMPACT TO STREAMS WILL OCCUR AS A RESULT OF ROAD OR PIPELINE CROSSINGS AND ALL ESC BMP'S WILL BE INSTALLED TO CONTINUE THE STREAM FLOW.
8. ALL NON VMRC STREAM CROSSINGS WILL BE PERFORMED AS DESCRIBED IN THE STREAM CROSSING TABLE INCLUDED IN THIS PACKAGE.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
10/19/23	JZ	IHH	DCW	PERMANENT LOD REDUCTION FOR CP08-24
10/16/23	JZ	IHH	DCW	ADJUST PIPELINE CENTERLINE
11/25/19	BH	JRE	DCW	ADDRESS VADEQ COMMENTS TO FIELD MODIFICATION SUBMITTAL
4/3/19	BH	JRE	DCW	FIELD MODIFICATION-MP 235.5 (ADDED MVP-ATWS-1632)
4/30/18	KAL	JRE	DCW	FIELD MODIFICATION
4/30/18	KAL	JRE	DCW	FIELD MODIFICATION

Mountain Valley Pipeline

EROSION AND SEDIMENT CONTROL PLANS

MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE

SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC

2200 ENERGY DRIVE
CANONSBURG, PA 15317

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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

EROSION AND SEDIMENT CONTROL PLANS

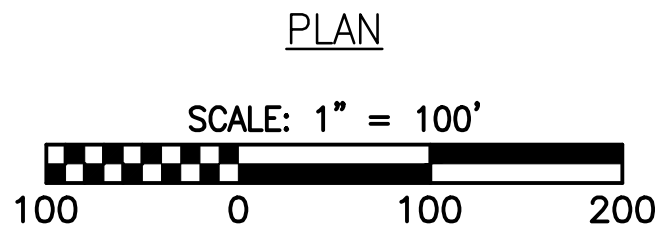
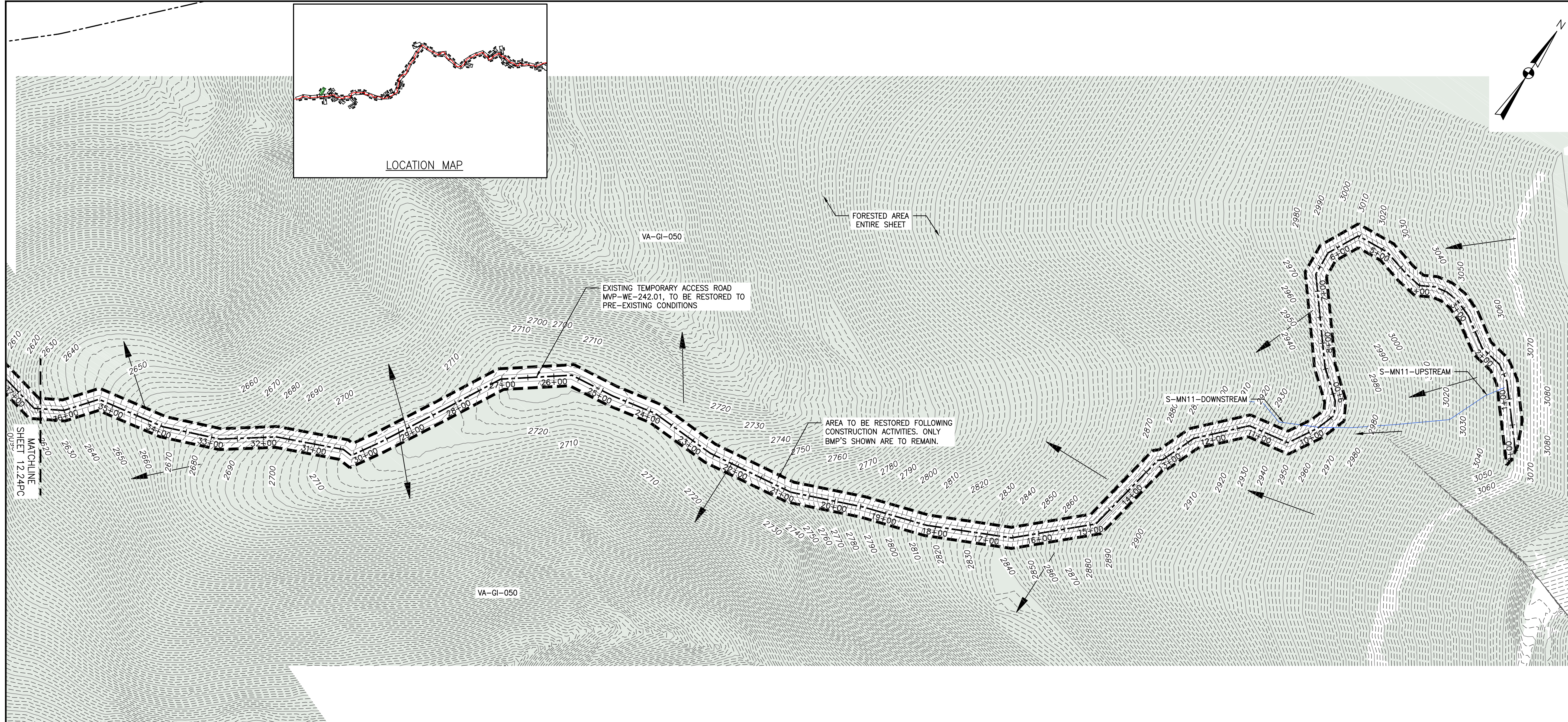
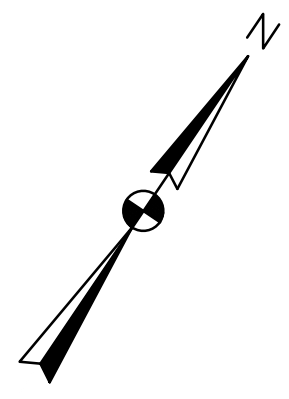
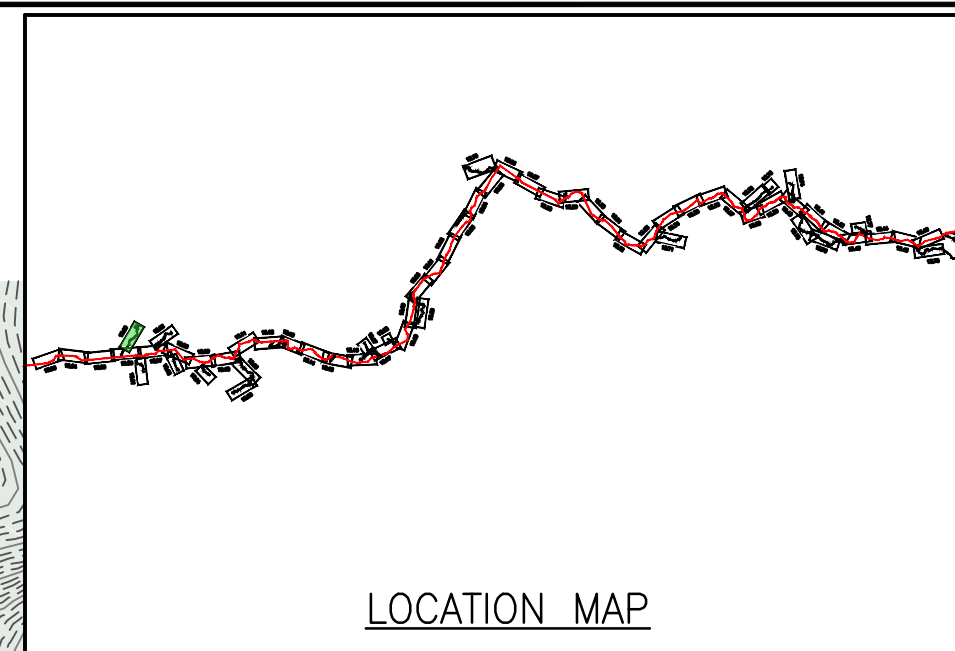
COMMONWEALTH OF VIRGINIA

DAVID J. WALLNER
Lic. No. 0402057593
PROFESSIONAL ENGINEER

DRAWN BY: JZ
CHECKED BY: IHH
APPROVED BY: DCW

DATE: 10/19/23
SCALE: AS SHOWN

SHT. NO. 13.59PC OF 13.90PC



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

1. NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
2. IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

Mountain Valley Pipeline

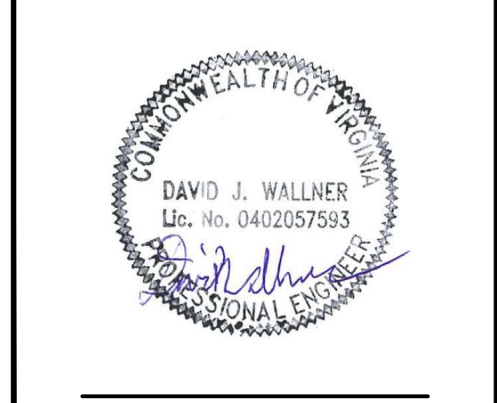
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
SPREAD 9 - GILES COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
2200 ENERGY DRIVE
CANONSBURG, PA 15311

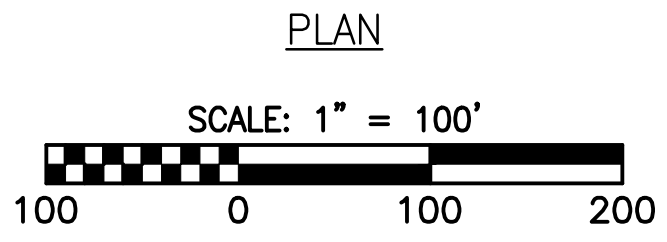
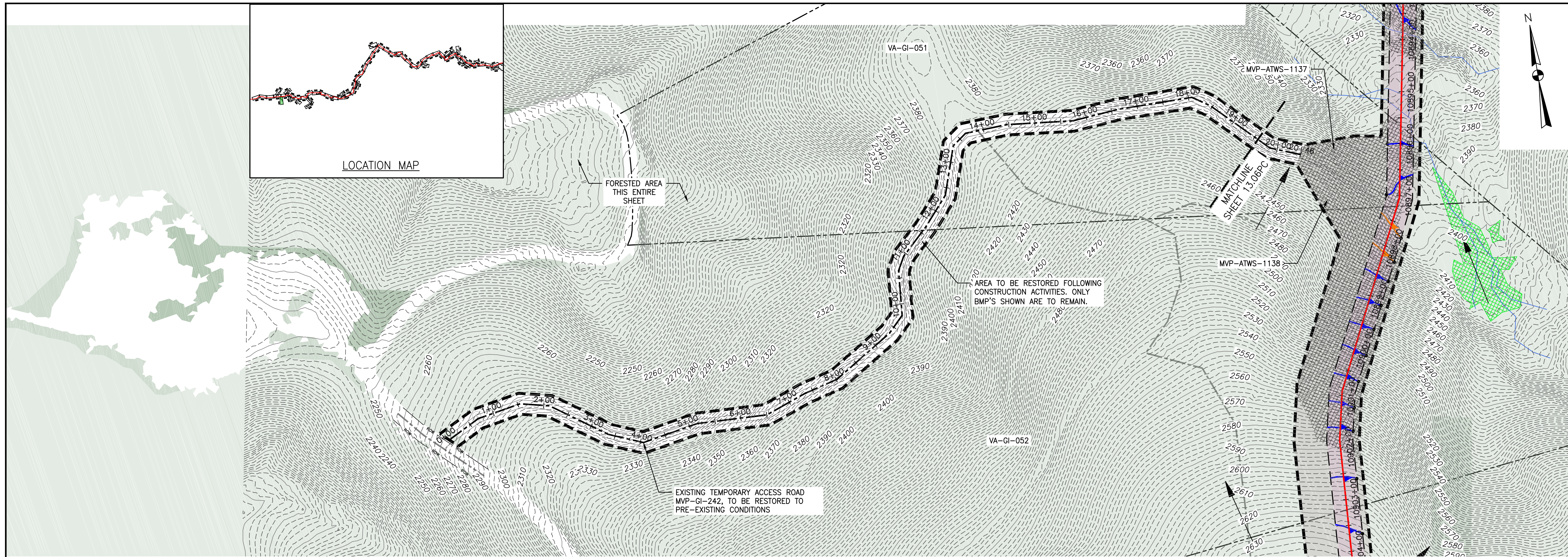
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.60PC OF 13.90PC



LEGEND

- | | | | |
|---|---|---|---|
| — EXISTING CULVERT | +++++ PROPOSED LEVEL SPREADER | → STREAM FLOW DIRECTION | ▨ STEEP SLOPE AREA |
| — STREAM | --- PROPOSED PERMANENT RIGHT OF WAY | ▬ FEMA 100 YEAR FLOODPLAIN | ▨ EXISTING FOREST |
| --- EXISTING PROPERTY LINE | --- PROPOSED ACCESS ROAD CENTERLINE | ▲ PERMANENT WATER BAR 10' END TREATMENT | ▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION |
| --- EXISTING STATE LINE | --- PROPOSED PIPELINE | ▲ PERMANENT WATER BAR 15' END TREATMENT | ▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION |
| --- EXISTING COUNTY LINE | → SURFACE WATER FLOW DIRECTION | ▲ PERMANENT WATER BAR 20' END TREATMENT | |
| --- EXISTING ROAD/TRAIL | ▨ POND | | |
| ▨ USDA FOREST SERVICE (NATIONAL FOREST) LANDS | ▨ WETLAND | | |
| ▨ APPALACHIAN NATIONAL SCENIC TRAIL | ▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) | | |
| ▨ ACID FORMING MATERIAL | ● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS) | | |
| ▨ PROPOSED LEVEL SPREADER DIVERSION | | | |
| ▨ GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | | | |
| ▨ PROPOSED LIMIT OF DISTURBANCE | | | |

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VABED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VABED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

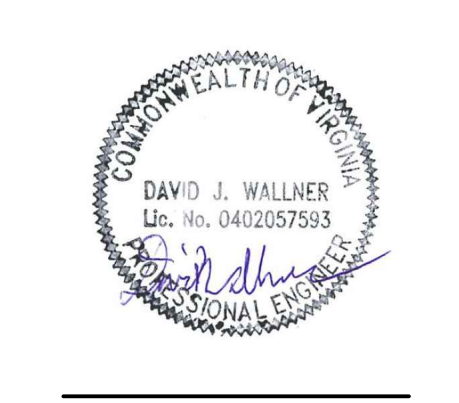
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

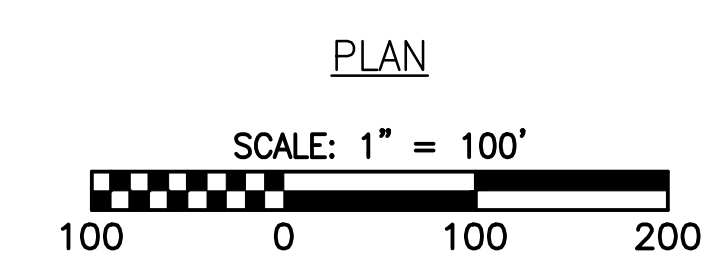
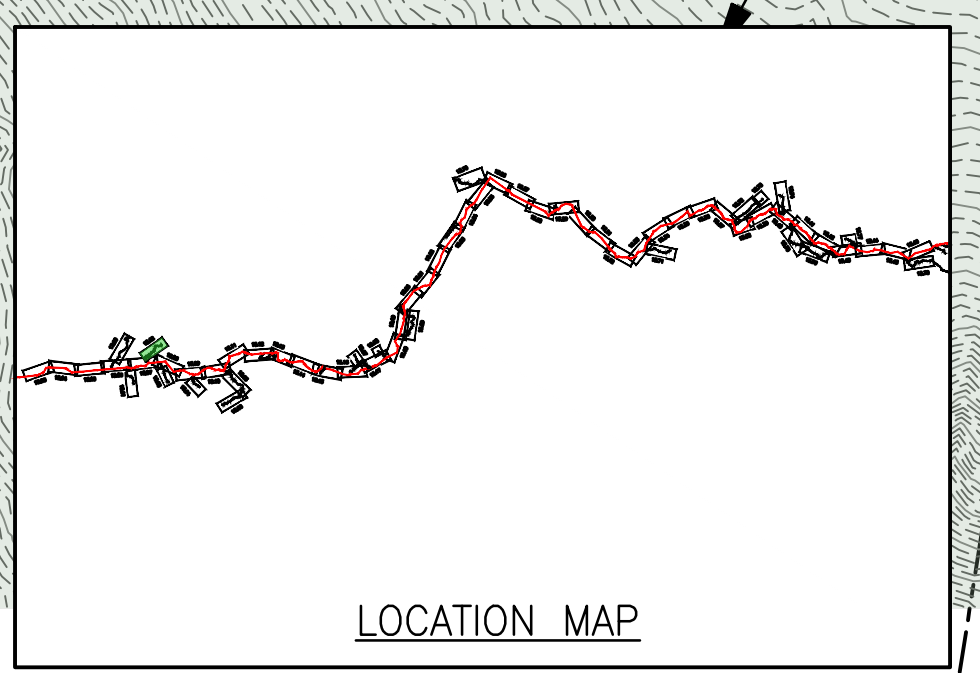
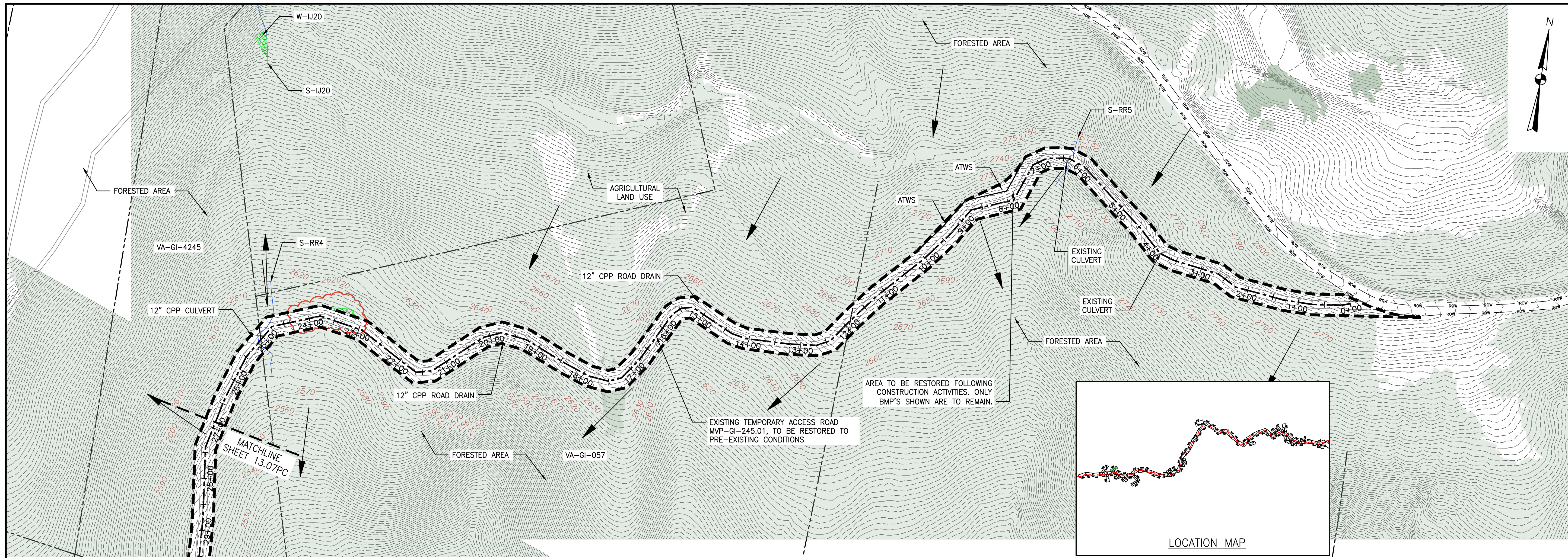
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661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.61PC OF 13.90PC

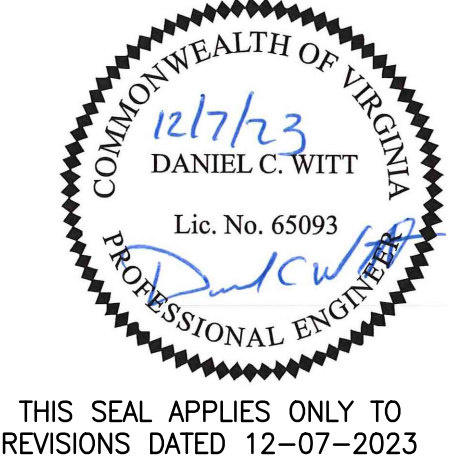


LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	→	FEMA 100 YEAR FLOODPLAIN
---	EXISTING PROPERTY LINE	---	PROPOSED ACCESS ROAD CENTERLINE	▲	PERMANENT WATER BAR 10' END TREATMENT
---	EXISTING STATE LINE	---	PROPOSED PIPELINE	▲	PERMANENT WATER BAR 15' END TREATMENT
---	EXISTING COUNTY LINE	→	SURFACE WATER FLOW DIRECTION	▲	PERMANENT WATER BAR 20' END TREATMENT
---	EXISTING ROAD/TRAIL	→	POND	●	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
---	USDA FOREST SERVICE (NATIONAL FOREST) LANDS	→	WETLAND		
---	APPALACHIAN NATIONAL SCENIC TRAIL				
---	ACID FORMING MATERIAL				
---	PROPOSED LEVEL SPREADER DIVERSION				
---	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)				
---	PROPOSED LIMIT OF DISTURBANCE				

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

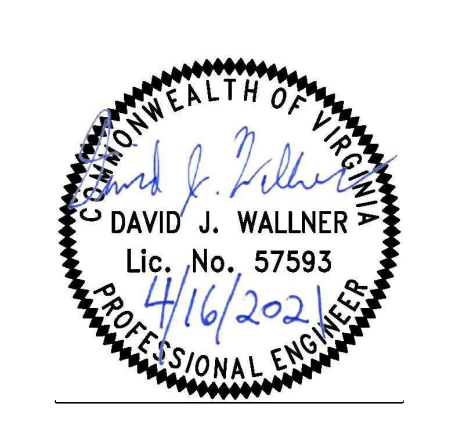


NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	12/07/23	JZ	IHH	CHANGES TO AQUATIC RESOURCES DELINEATIONS
2	11/21/17	KAL	JRE	ADDRESS VADO COMMENTS
3	11/21/17	KAL	JRE	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	JRE	ADDRESS VADO COMMENTS
5	2/16/18	KAL	JRE	ADDRESS VADO COMMENTS
6	11/21/17	KAL	JRE	PLAN SUBMISSION

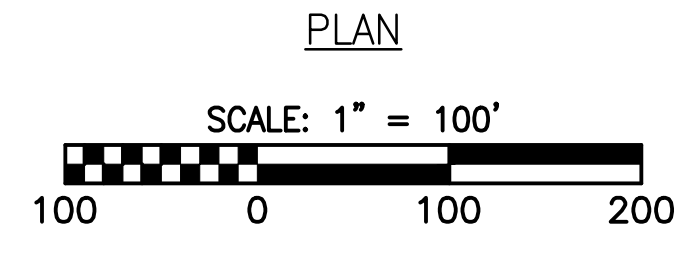
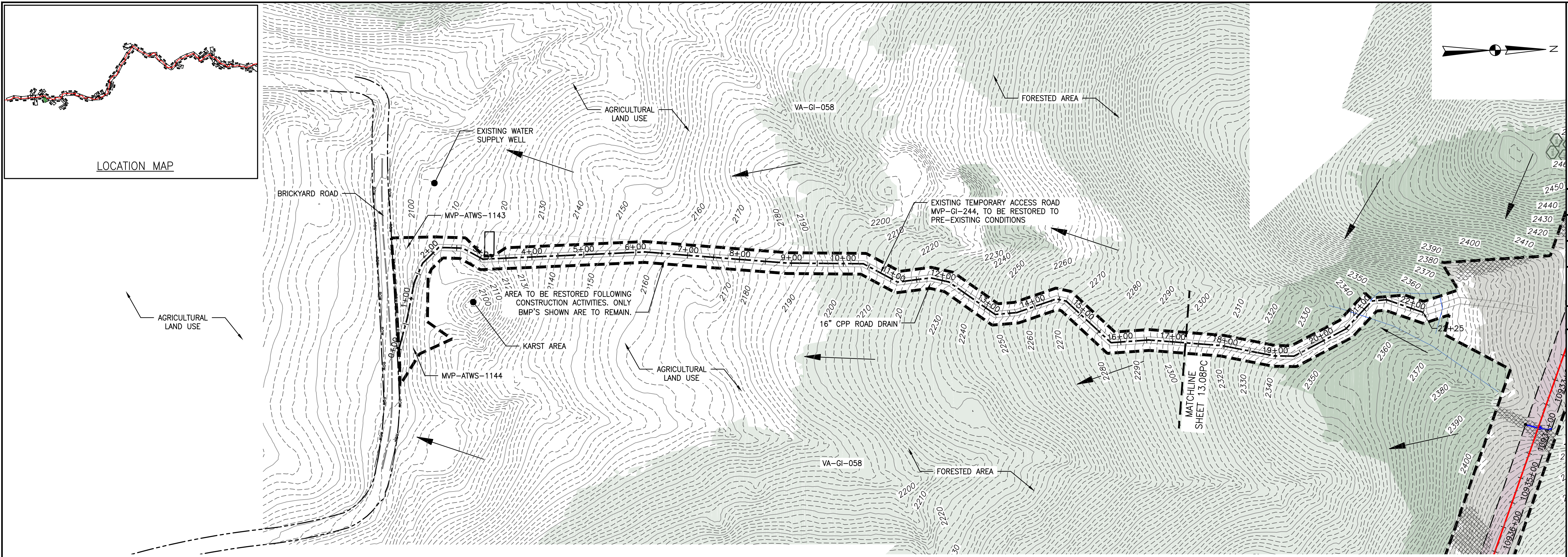
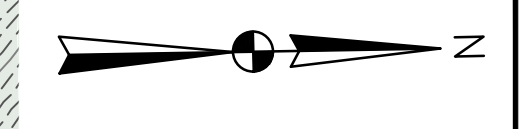
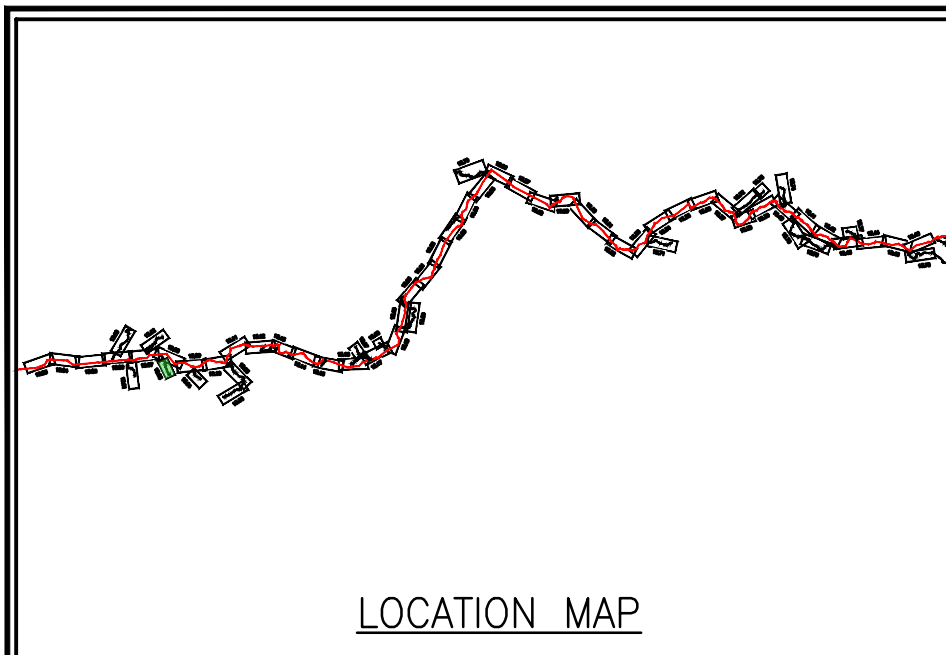
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
 MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
 MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	JZ
CHECKED BY:	IHH
APPROVED BY:	DCW
DATE:	12/07/2023
SCALE:	AS SHOWN
SHT. NO. 13.62PC OF 13.90PC	



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

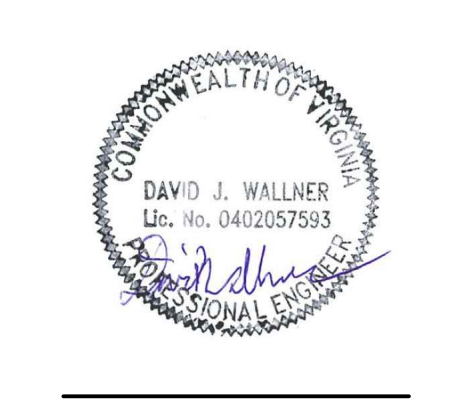
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2. IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

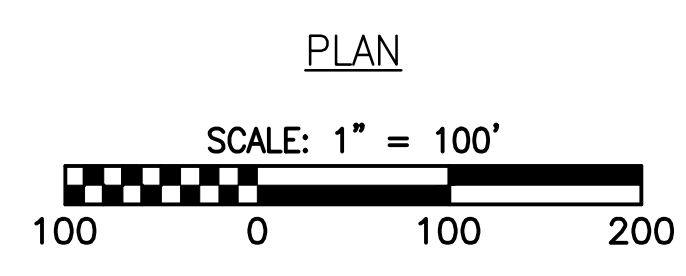
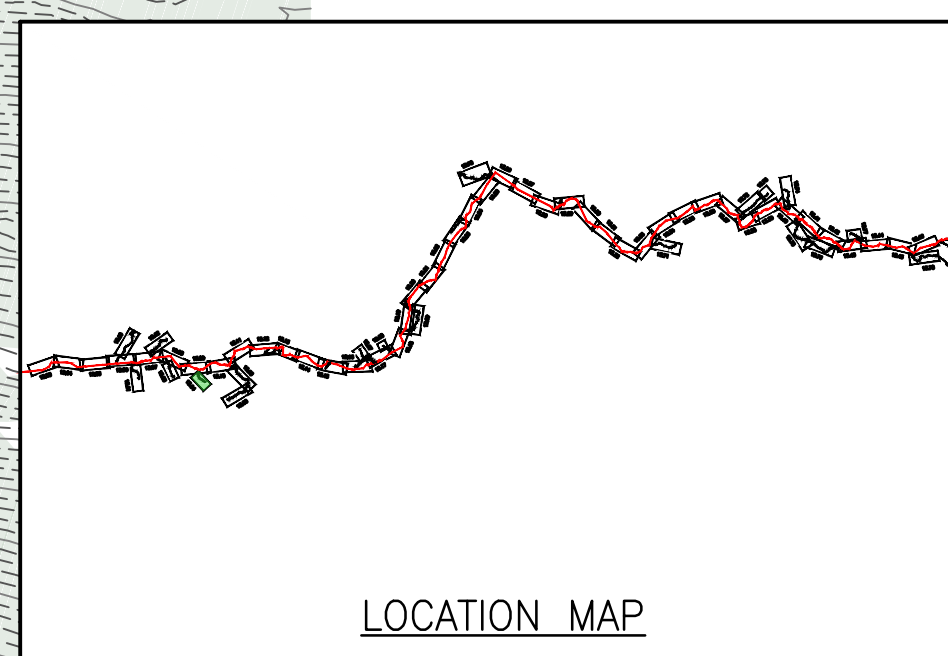
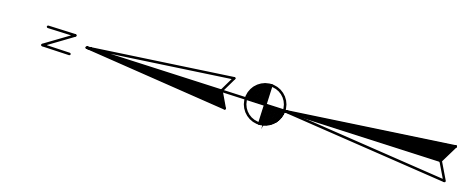
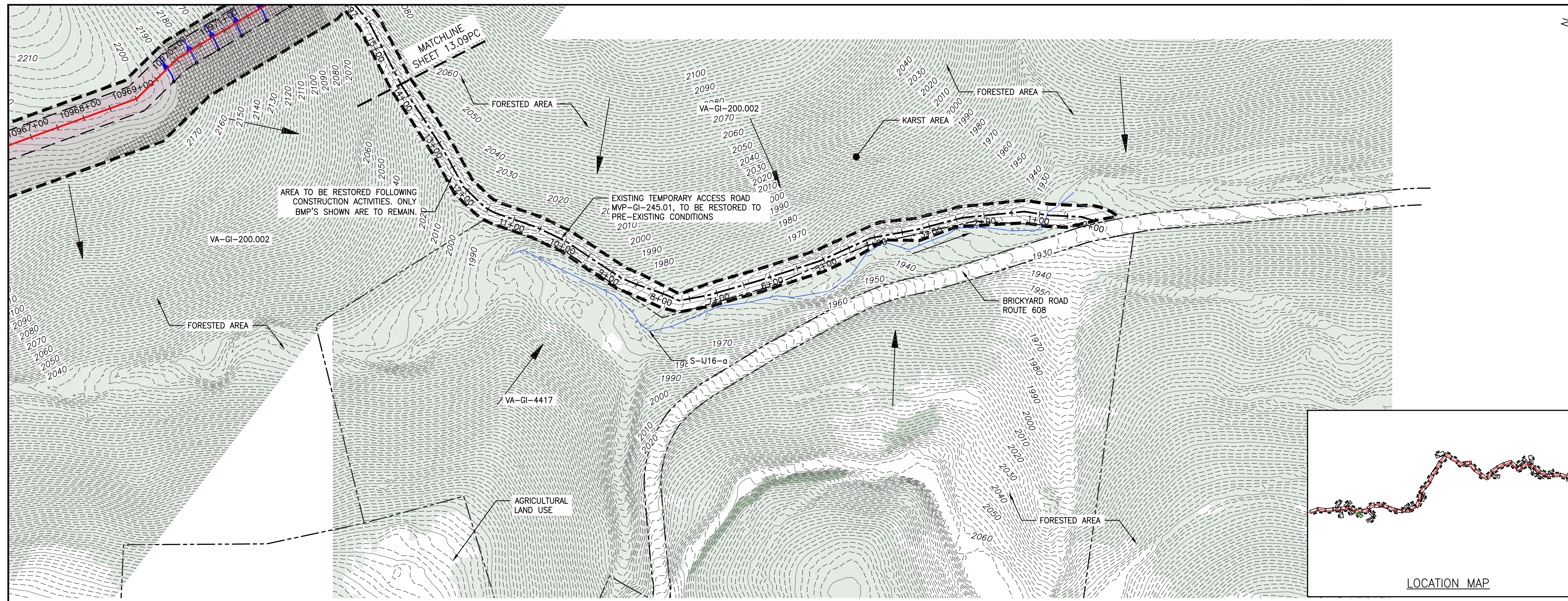
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.63PC OF 13.90PC



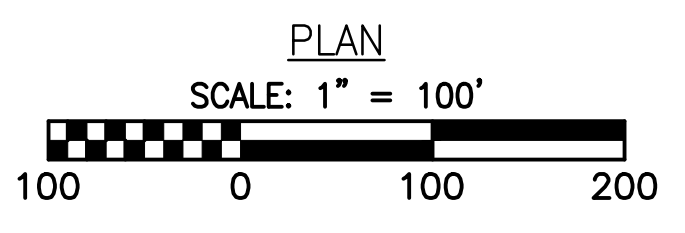
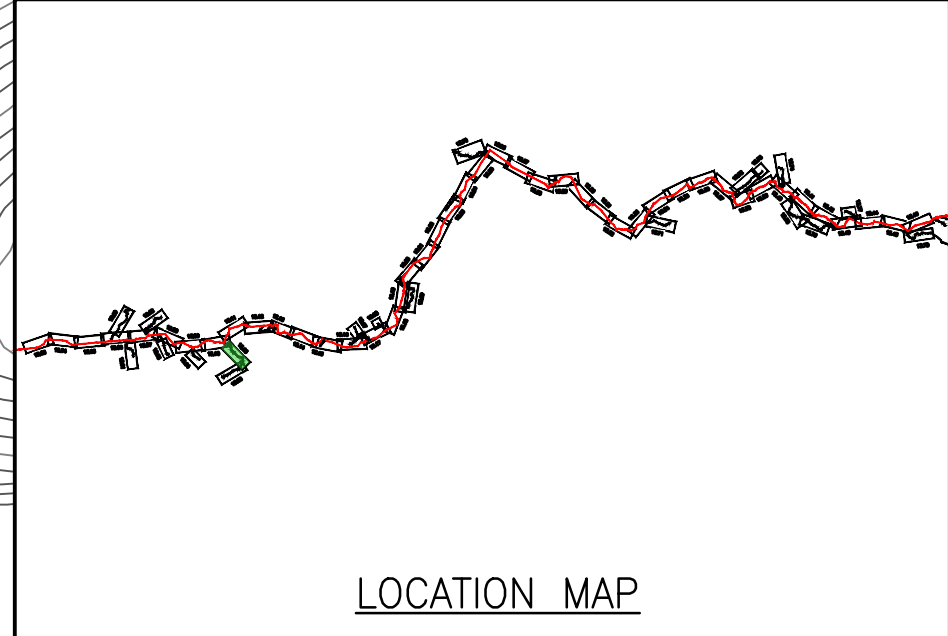
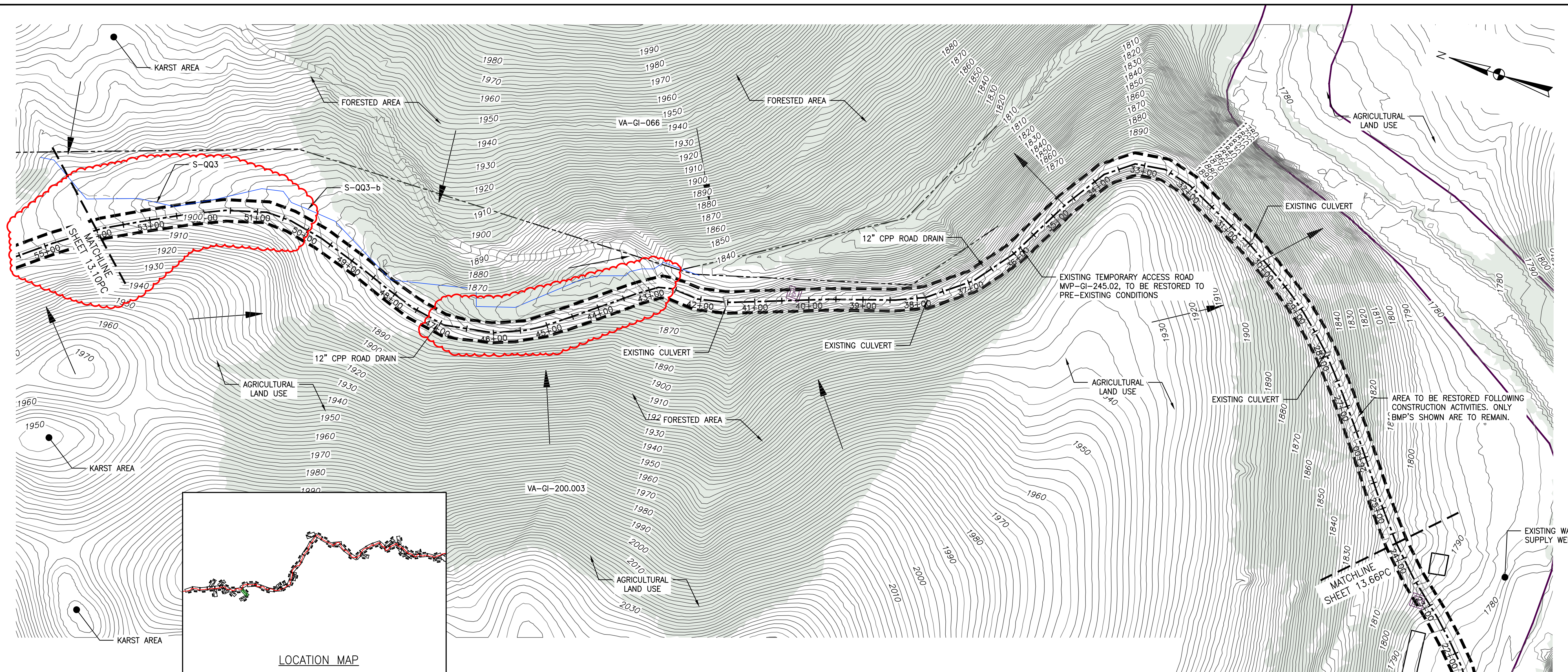
LEGEND

- | | | | |
|--|---|---|---|
| — EXISTING CULVERT | +++++ PROPOSED LEVEL SPREADER | → STREAM FLOW DIRECTION | ▨ STEEP SLOPE AREA |
| — STREAM | --- PROPOSED PERMANENT RIGHT OF WAY | ▬ FEMA 100 YEAR FLOODPLAIN | ▨ EXISTING FOREST |
| --- EXISTING PROPERTY LINE | --- PROPOSED ACCESS ROAD CENTERLINE | ▲ PERMANENT WATER BAR 10' END TREATMENT | ▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION |
| --- EXISTING STATE LINE | --- PROPOSED PIPELINE | ▲ PERMANENT WATER BAR 15' END TREATMENT | ▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION |
| --- EXISTING COUNTY LINE | → SURFACE WATER FLOW DIRECTION | ▲ PERMANENT WATER BAR 20' END TREATMENT | |
| --- EXISTING ROAD/TRAIL | ▨ POND | | |
| --- USDA FOREST SERVICE (NATIONAL FOREST) LANDS | ▨ WETLAND | | |
| --- ANST --- ANST --- APPALACHIAN NATIONAL SCENIC TRAIL | ▬ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) | | |
| --- AFM --- AFM --- ACID FORMING MATERIAL | • APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS) | | |
| --- PROPOSED LEVEL SPREADER DIVERSION (SEE DETAILS MVP-ES39) | | | |
| --- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | | | |
| --- PROPOSED LIMIT OF DISTURBANCE | | | |

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

ADDRESS VABED COMMENTS		ADDRESS VABED COMMENTS	
RESUBMISSION USING APPROVED STORMWATER METHODOLOGY		RESUBMISSION USING APPROVED STORMWATER METHODOLOGY	
ADDRESS VABED COMMENTS		ADDRESS VABED COMMENTS	
PLAN SUBMISSION		PLAN SUBMISSION	
DESCRIPTION:		DESCRIPTION:	
NO.	DATE	CHKD.:	APPD.:
4	3/5/18	KAL	DW
3	2/16/18	KAL	DW
2	11/21/17	KAL	DW
1	9/21/17	KAL	DW
REVISIONS:			
<p>POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS</p> <p>MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE</p> <p>SPREAD 9 - GILES COUNTY, VIRGINIA</p> <p>MOUNTAIN VALLEY PIPELINE, LLC</p> <p>2200 ENERGY DRIVE CANONSBURG, PA 15311</p>			
<p>TETRA TECH</p> <p>complex world CLEAR SOLUTIONS™</p> <p>661 ANDERSEN DRIVE FOSTER PLAZA 7 PITTSBURGH, PA 15220</p>			
<p>POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS</p>			
DRAWN BY: KAL		CHECKED BY: JRE	
APPROVED BY: DW		DATE: 11/21/2017	
SCALE: AS SHOWN		REVISION	
SHT. NO. 13.64PC OF 13.90PC			



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

1. NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
2. IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
5	10/23/18	BH		
4	3/5/18	KAL		
3	2/16/18	KAL		
2	11/21/17	KAL		
1	9/21/17	KAL		

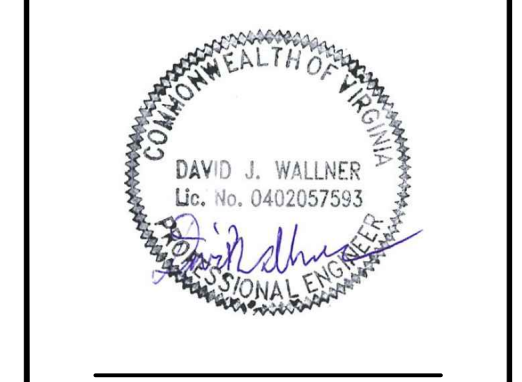
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

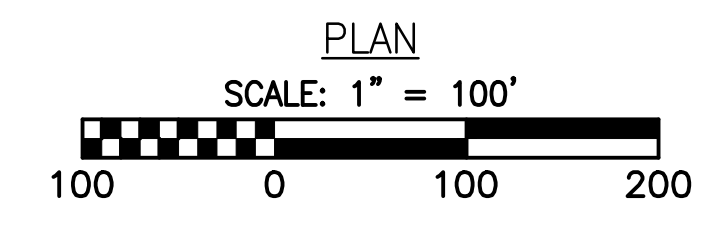
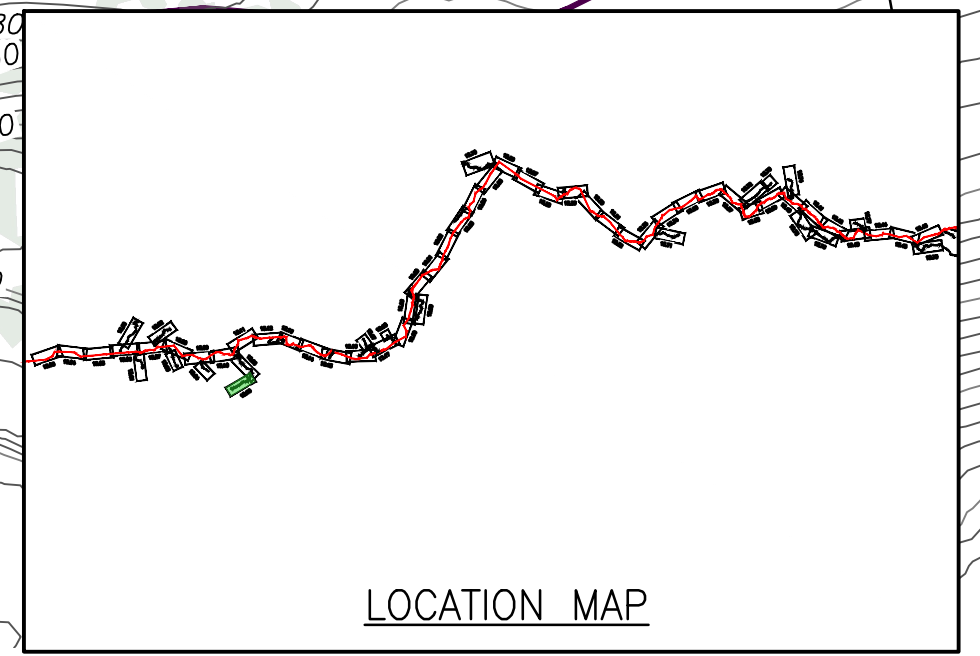
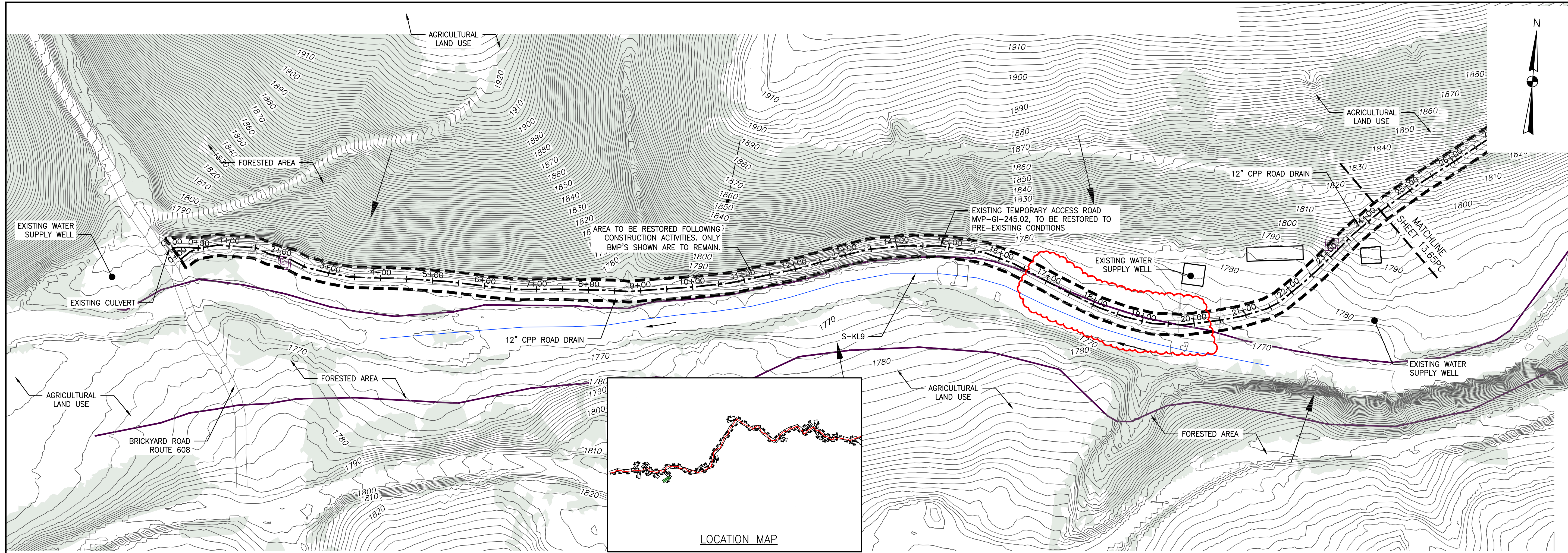
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661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	10/23/2018
SCALE:	AS SHOWN
SHT. NO. 13.65PC	OF 13.90PC



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
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- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

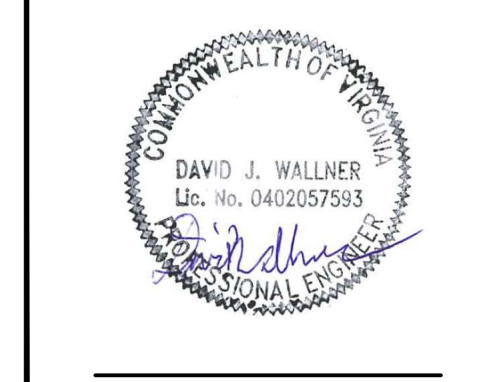
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2. IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
5	10/23/18	BH	JRE	FIELD MODIFICATIONS
4	3/5/18	KAL	JRE	ADDRESS VABED COMMENTS
3	2/16/18	KAL	JRE	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	JRE	ADDRESS VABED COMMENTS
1	9/21/17	KAL	JRE	PLAN SUBMISSION

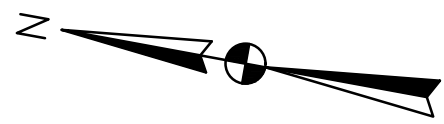
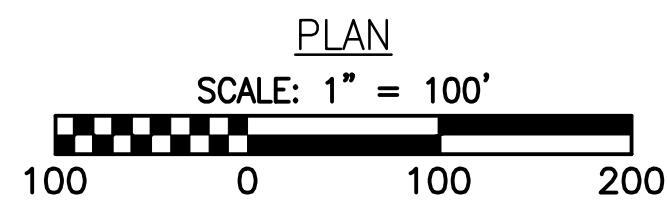
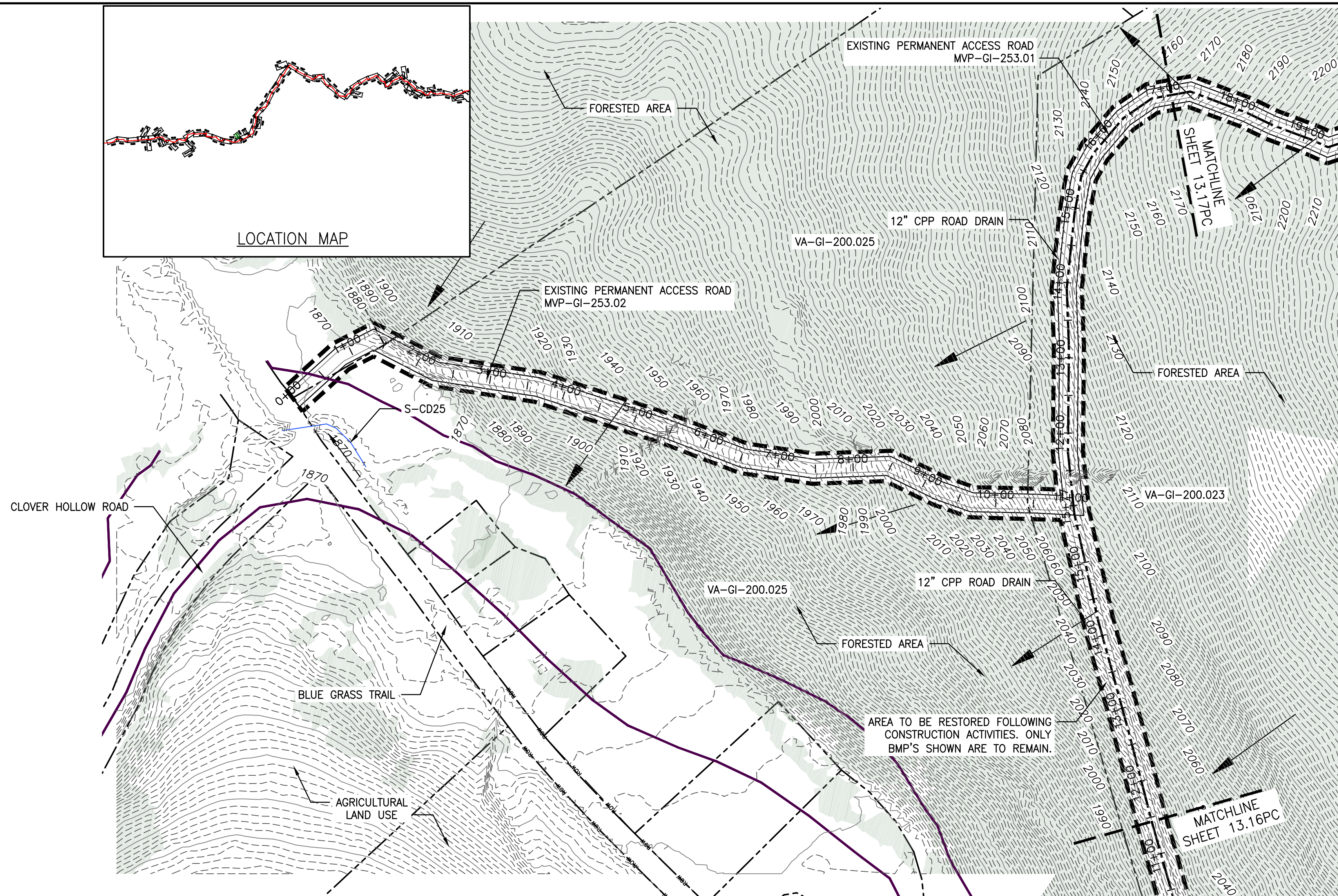
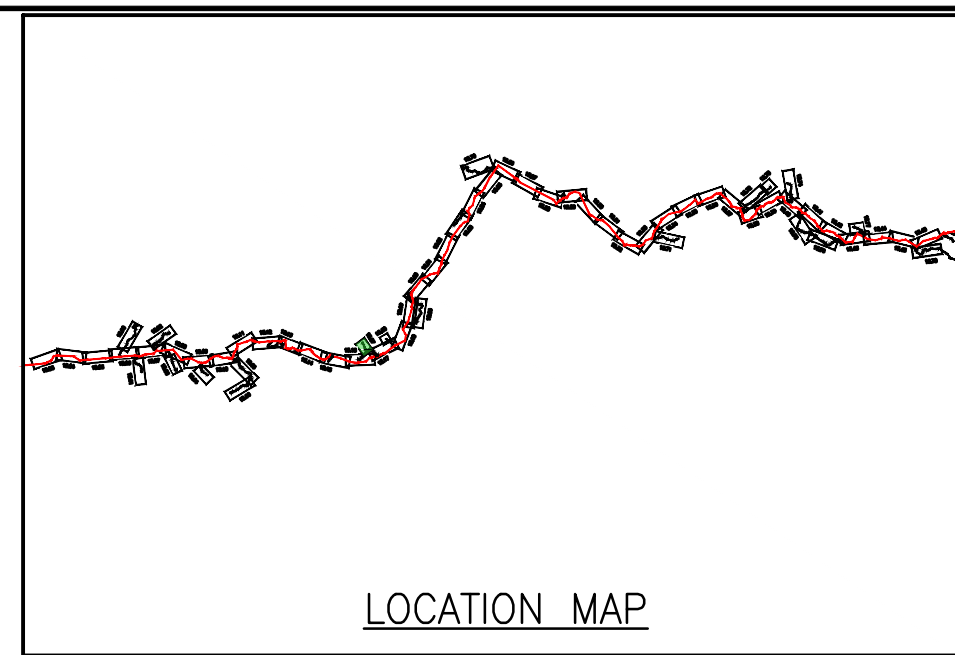
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 PITTSBURGH, PA 15220

POST CONSTRUCTION
(STORMWATER &
RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	10/23/2018
SCALE:	AS SHOWN
SHT. NO.	13.66PC OF 13.90PC



LEGEND

- | | | | |
|---|---|---|---|
| — EXISTING CULVERT | +++++ PROPOSED LEVEL SPREADER | → STREAM FLOW DIRECTION | ▨ STEEP SLOPE AREA |
| — STREAM | --- PROPOSED PERMANENT RIGHT OF WAY | ▬ FEMA 100 YEAR FLOODPLAIN | ▨ EXISTING FOREST |
| --- EXISTING PROPERTY LINE | --- PROPOSED ACCESS ROAD CENTERLINE | ▲ PERMANENT WATER BAR 10' END TREATMENT | ▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION |
| --- EXISTING STATE LINE | --- PROPOSED PIPELINE | ▲ PERMANENT WATER BAR 15' END TREATMENT | ▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION |
| --- EXISTING COUNTY LINE | → SURFACE WATER FLOW DIRECTION | ▲ PERMANENT WATER BAR 20' END TREATMENT | |
| --- EXISTING ROAD/TRAIL | ▨ POND | | |
| ▨ USDA FOREST SERVICE (NATIONAL FOREST) LANDS | ▨ WETLAND | | |
| ▨ APPALACHIAN NATIONAL SCENIC TRAIL | ▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) | | |
| ▨ ACID FORMING MATERIAL | ● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS) | | |
| ▨ PROPOSED LEVEL SPREADER DIVERSION | | | |
| ▨ GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | | | |
| ▨ PROPOSED LIMIT OF DISTURBANCE | | | |

NOTES:

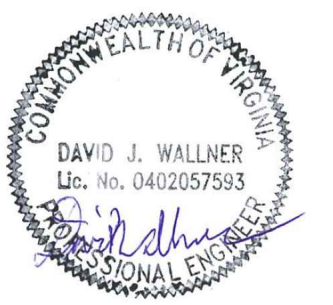
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VAQED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VAQED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

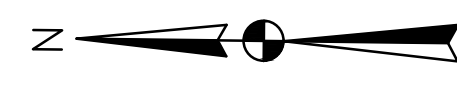
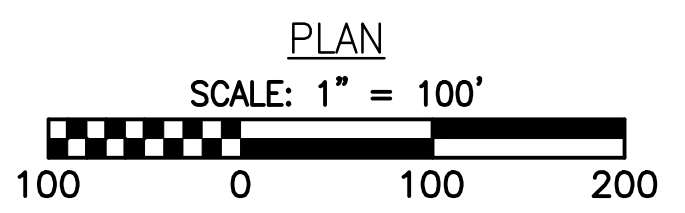
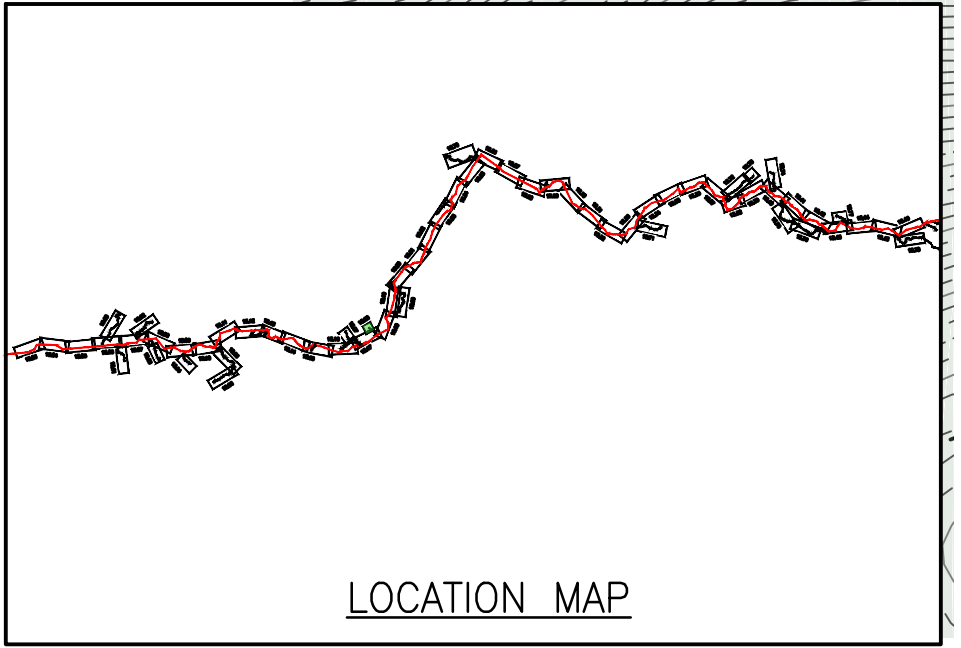
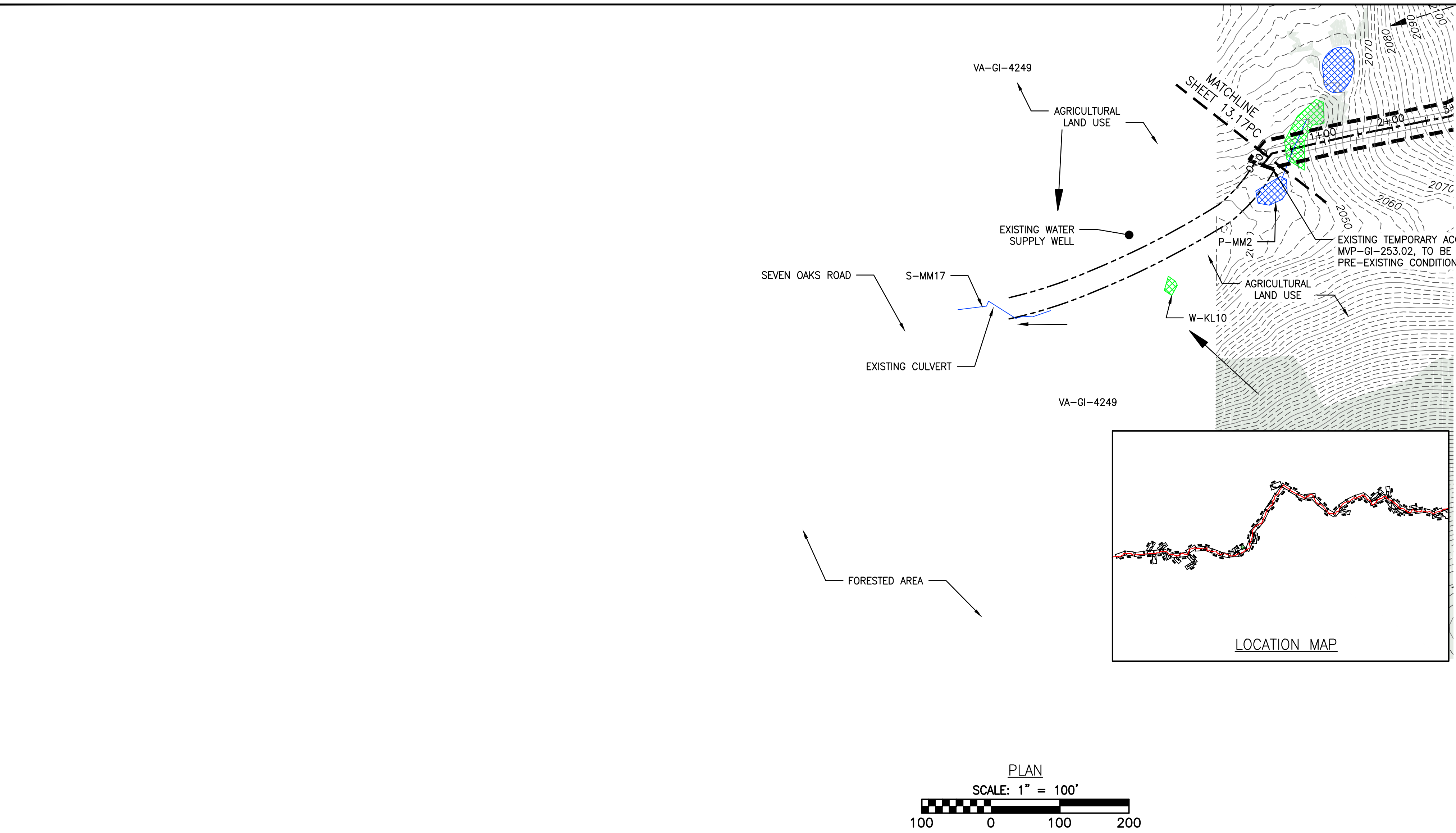
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
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POST CONSTRUCTION
(STORMWATER &
RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.67PC OF 13.90PC	REVISION



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

1. NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
2. IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	JRE	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	JRE	ADDRESS VADED COMMENTS
1	9/21/17	KAL	JRE	PLAN SUBMISSION

Mountain Valley PIPELINE

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS

MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE

SPREAD 9 - GILES COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC

2200 ENERGY DRIVE

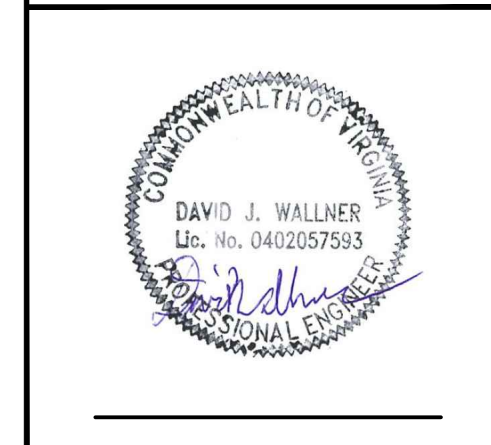
CANONSBURG, PA 15311

TETRA TECH

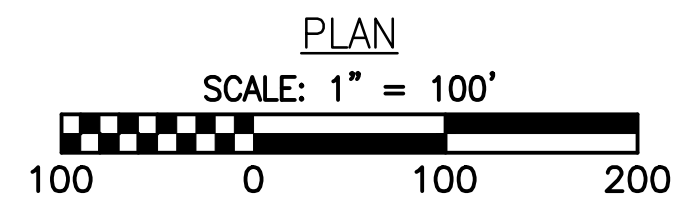
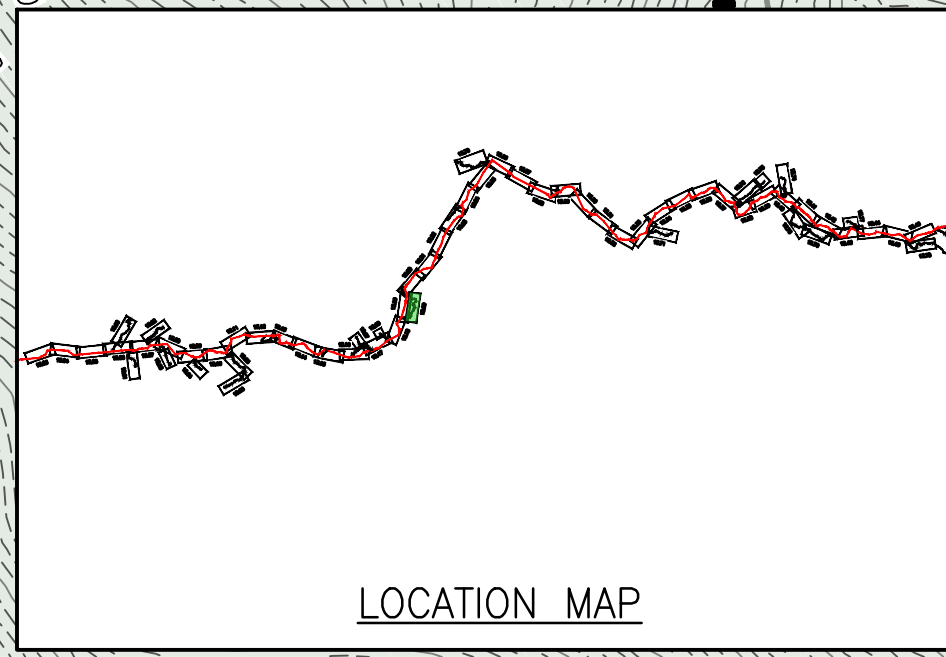
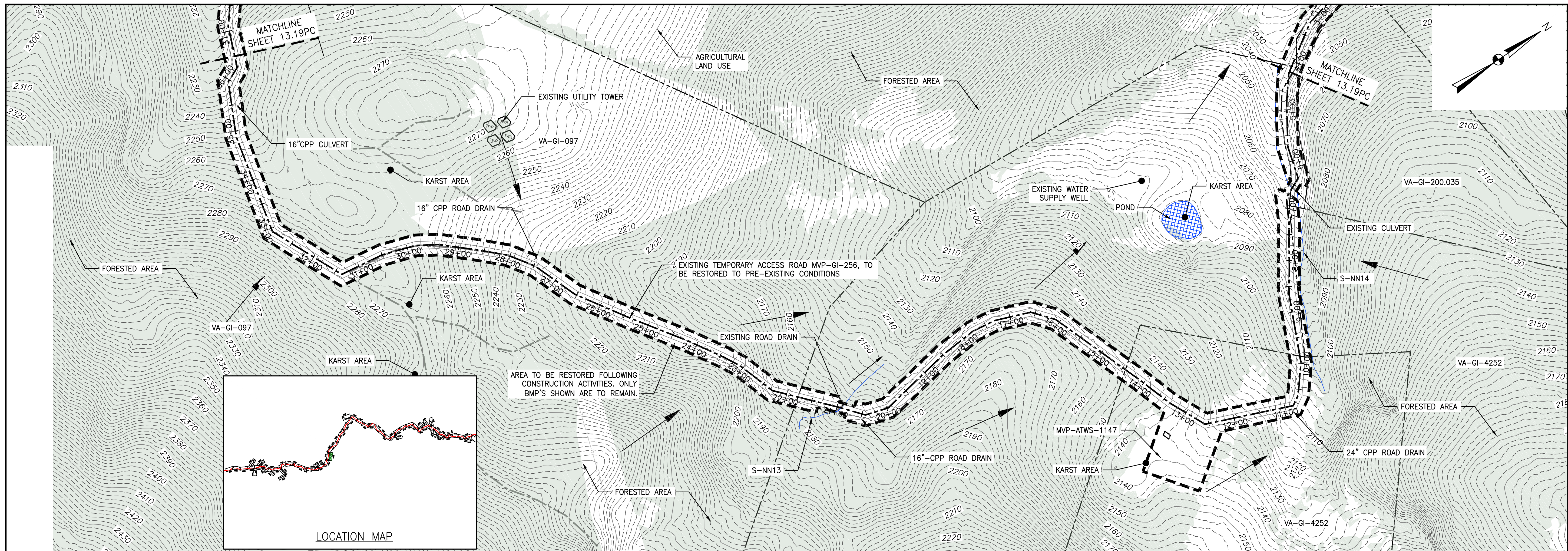
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661 ANDERSEN DRIVE
FOSTER PLAZA 7
PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.68PC OF 13.90PC	REVISION



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- +++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

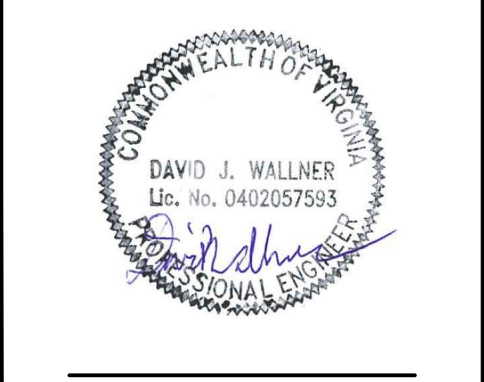
1. NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
2. IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

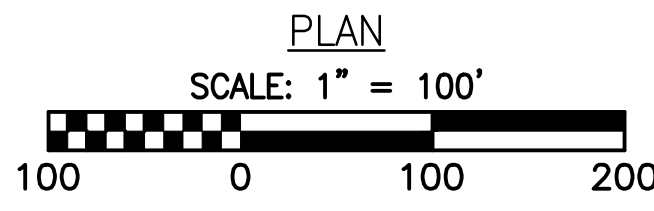
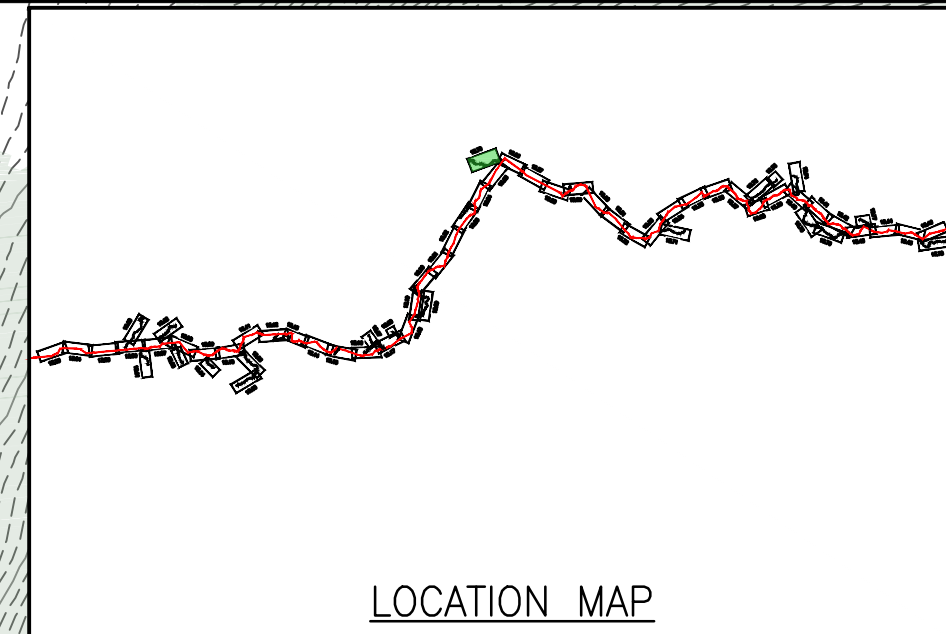
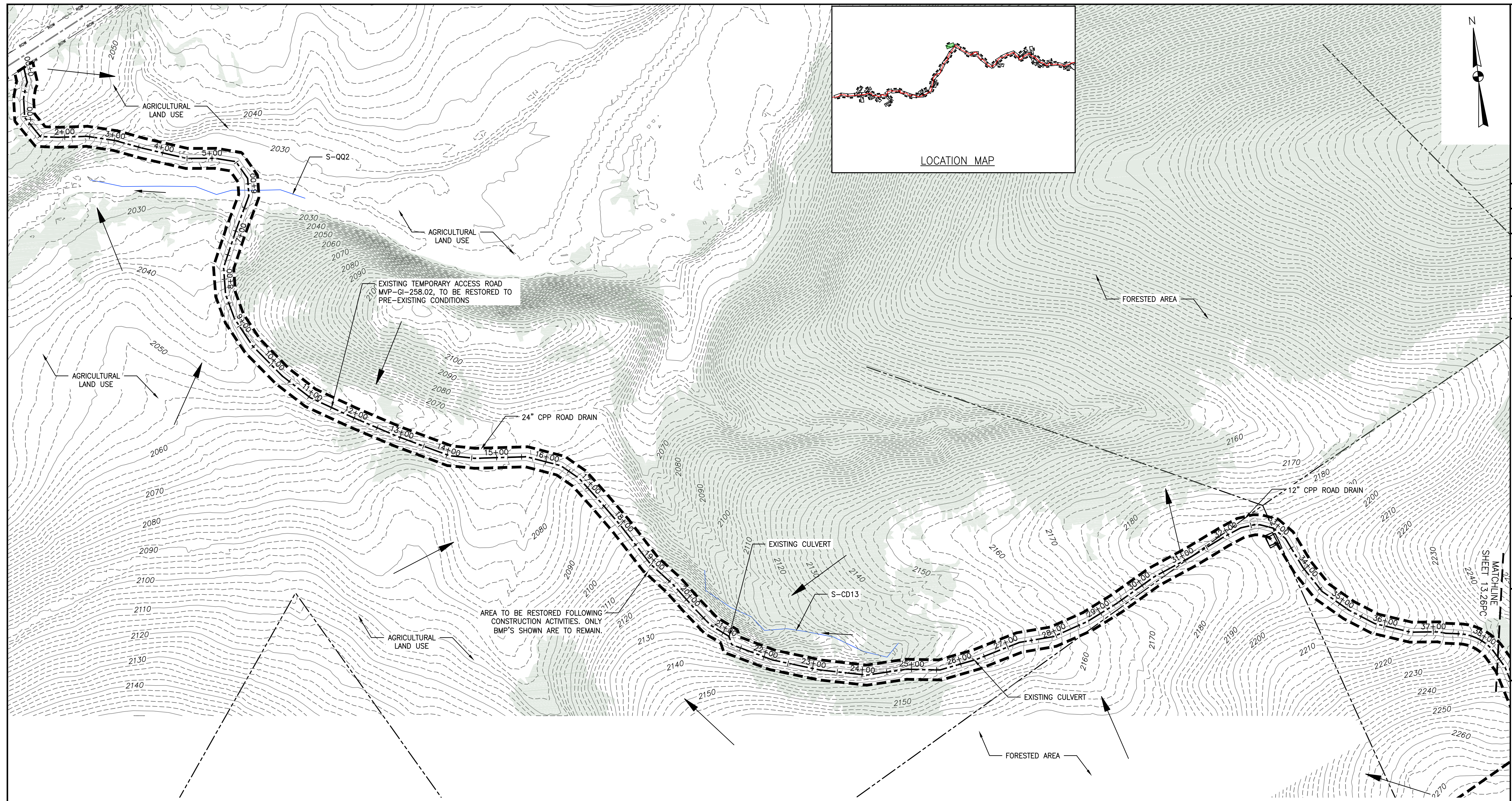
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

TETRA TECH
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 661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.69PC OF 13.90PC	



LEGEND	
—	EXISTING CULVERT
—	STREAM
- - -	EXISTING PROPERTY LINE
- - -	EXISTING STATE LINE
- - -	EXISTING COUNTY LINE
- - -	EXISTING ROAD/TRAIL
—	USDA FOREST SERVICE (NATIONAL FOREST) LANDS
—	APPALACHIAN NATIONAL SCENIC TRAIL
—	ACID FORMING MATERIAL
—	PROPOSED LEVEL SPREADER DIVERSION
—	GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
—	PROPOSED LIMIT OF DISTURBANCE
+++++	PROPOSED LEVEL SPREADER
- - -	PROPOSED PERMANENT RIGHT OF WAY
- - -	PROPOSED ACCESS ROAD CENTERLINE
—	PROPOSED PIPELINE
—	SURFACE WATER FLOW DIRECTION
—	POND
—	WETLAND
—	PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
—	APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
—	STREAM FLOW DIRECTION
—	FEMA 100 YEAR FLOODPLAIN
—	PERMANENT WATER BAR 10' END TREATMENT
—	PERMANENT WATER BAR 15' END TREATMENT
—	PERMANENT WATER BAR 20' END TREATMENT
—	STEEP SLOPE AREA
—	EXISTING FOREST
—	PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
—	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

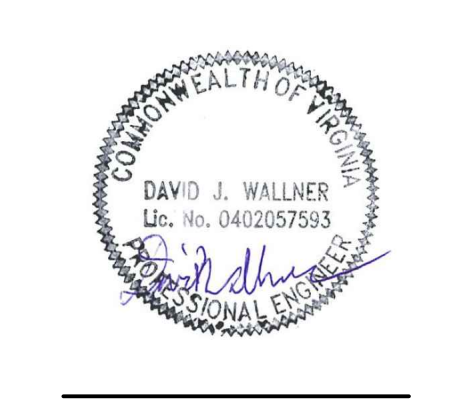
- NOTES:**
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	DW		ADDRESS VALED COMMENTS
3	2/16/18	JRE		RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL		ADDRESS VALED COMMENTS
1	9/21/17	KAL		PLAN SUBMISSION

Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - GILES COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO.	13.70PC OF 13.90PC

ACCESS ROAD MVP-MN-262.01
REMOVED FROM PROJECT

LEGEND

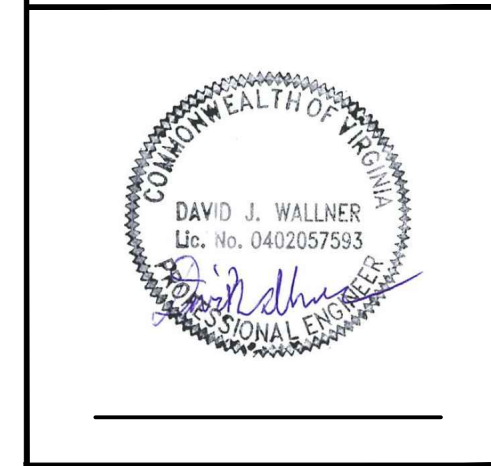
- | | | | | | | | |
|-----|---|-------|---|---|---------------------------------------|---|---|
| — | EXISTING CULVERT | +++++ | PROPOSED LEVEL SPREADER | → | STREAM FLOW DIRECTION | ▨ | STEEP SLOPE AREA |
| — | STREAM | --- | PROPOSED PERMANENT RIGHT OF WAY | → | FEMA 100 YEAR FLOODPLAIN | ▨ | EXISTING FOREST |
| --- | EXISTING PROPERTY LINE | --- | PROPOSED ACCESS ROAD CENTERLINE | ▲ | PERMANENT WATER BAR 10' END TREATMENT | ▨ | PERMANENT EASEMENT RESTORED TO MEADOW CONDITION |
| --- | EXISTING STATE LINE | + | PROPOSED PIPELINE | ▲ | PERMANENT WATER BAR 15' END TREATMENT | ▨ | TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION |
| --- | EXISTING COUNTY LINE | → | SURFACE WATER FLOW DIRECTION | ● | PERMANENT WATER BAR 20' END TREATMENT | | |
| --- | EXISTING ROAD/TRAIL | ▨ | POND | | | | |
| --- | USDA FOREST SERVICE (NATIONAL FOREST) LANDS | ▨ | WETLAND | | | | |
| --- | APPALACHIAN NATIONAL SCENIC TRAIL | → | PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) | | | | |
| --- | ACID FORMING MATERIAL | | APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS) | | | | |
| --- | PROPOSED LEVEL SPREADER DIVERSION | | | | | | |
| --- | GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | | | | | | |
| --- | PROPOSED LIMIT OF DISTURBANCE | | | | | | |

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

Mountain Valley PIPELINE
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 PITTSBURGH, PA 15220

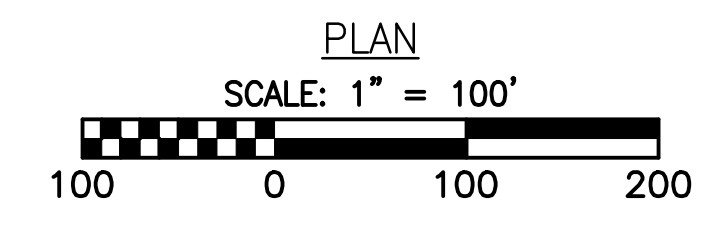
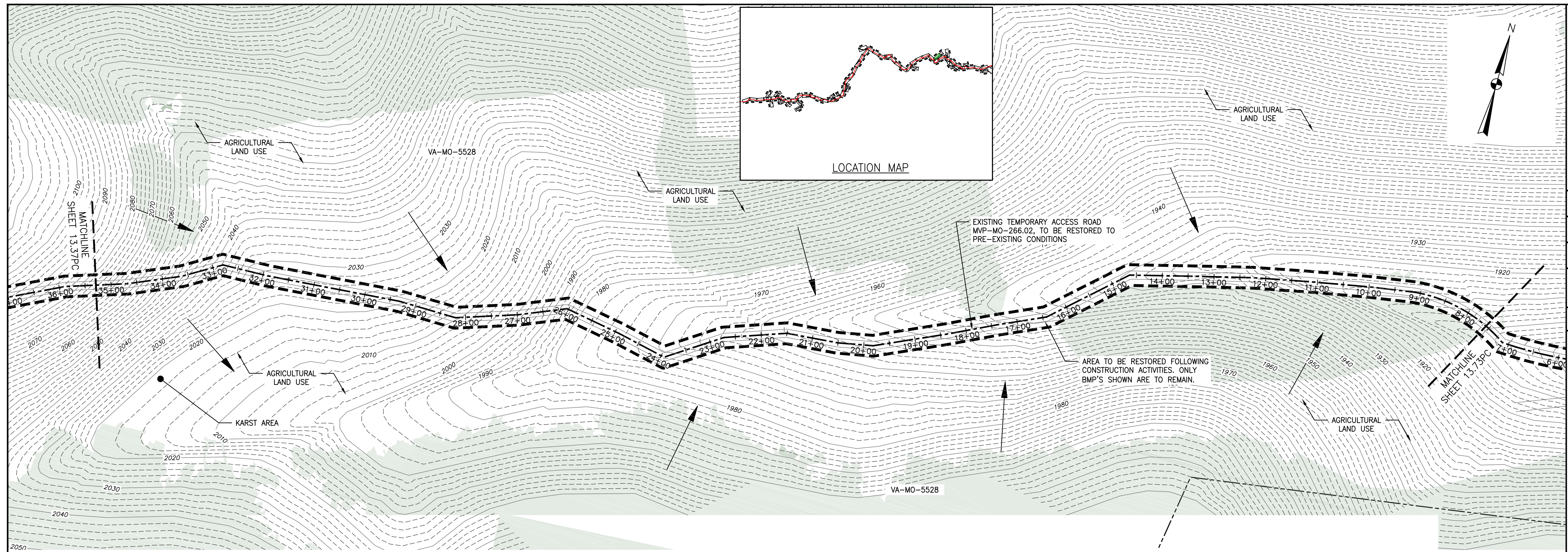
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.71PC OF 13.90PC	

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- ANST — APPALACHIAN NATIONAL SCENIC TRAIL
- AFM — ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
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- POND
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- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

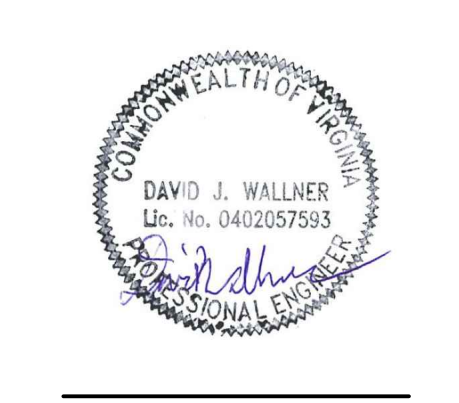
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	JRE	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

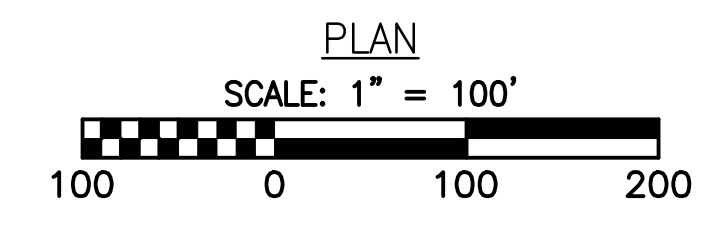
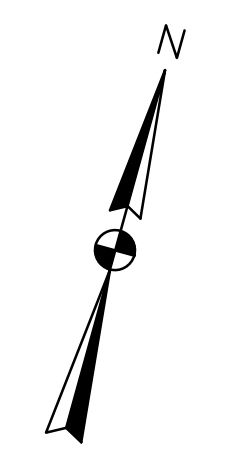
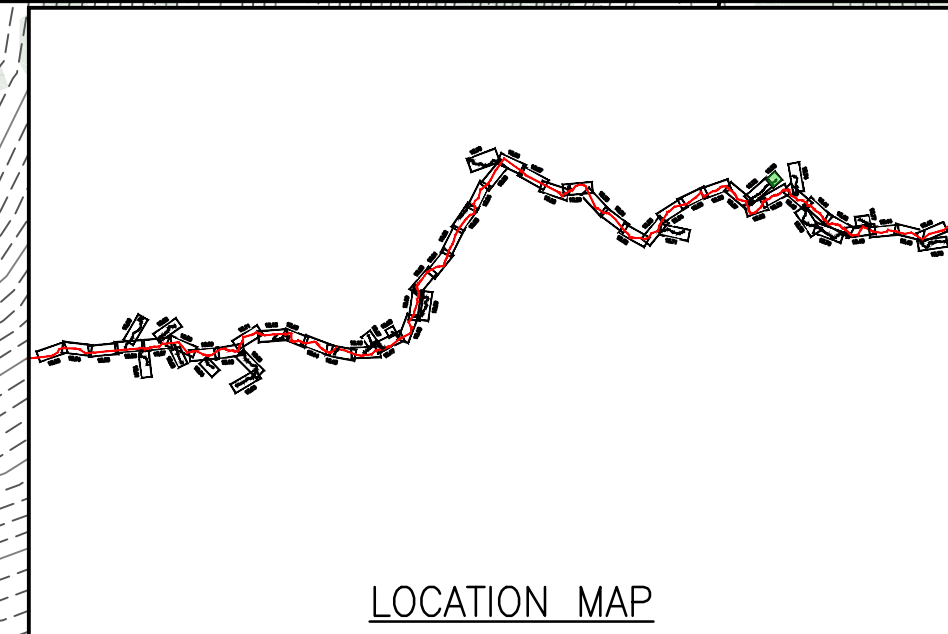
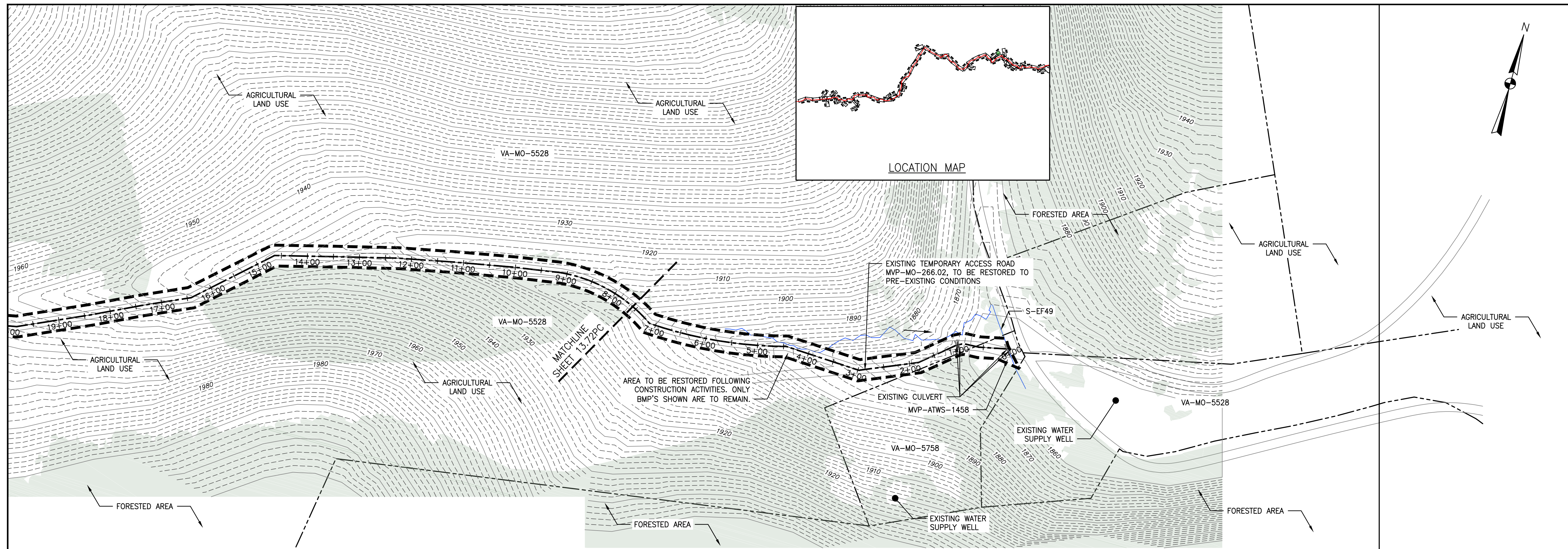
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION
(STORMWATER &
RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.72PC OF 13.90PC	



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
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- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
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- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
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NOTES:

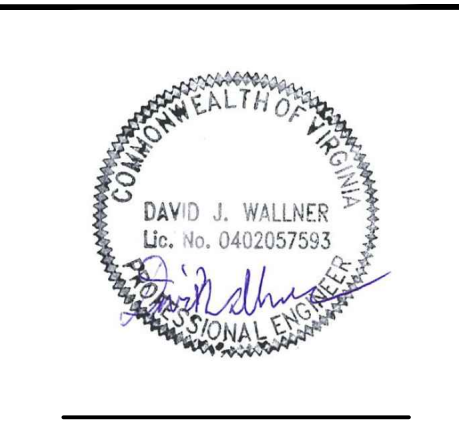
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VAQD COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VAQD COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

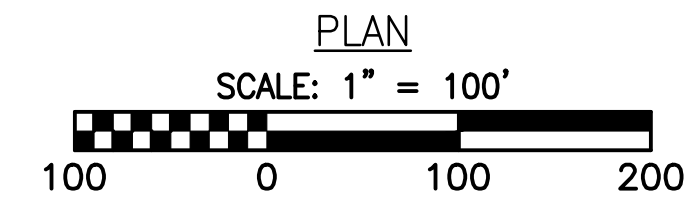
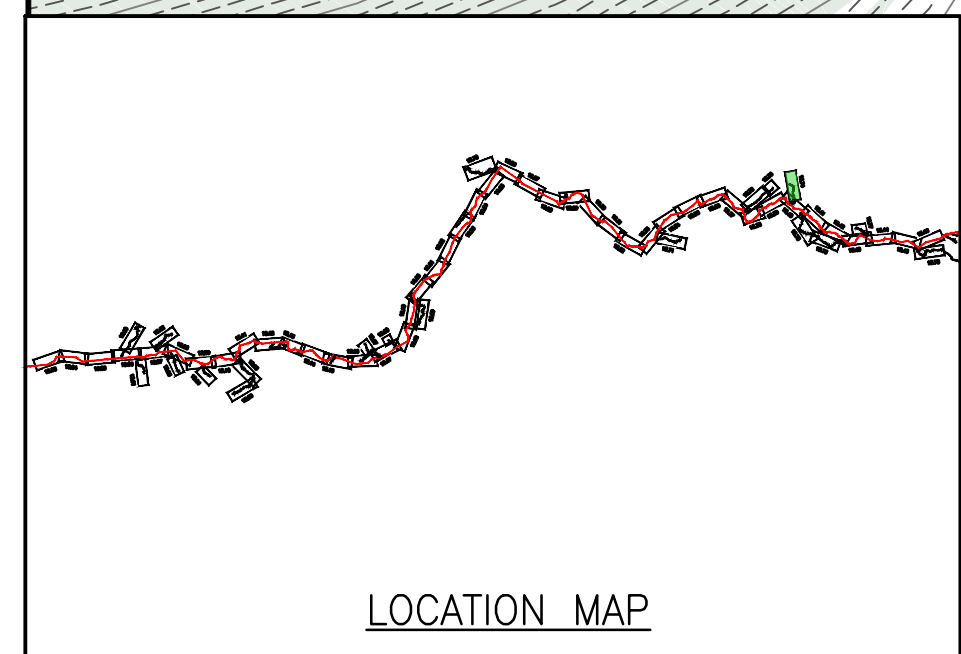
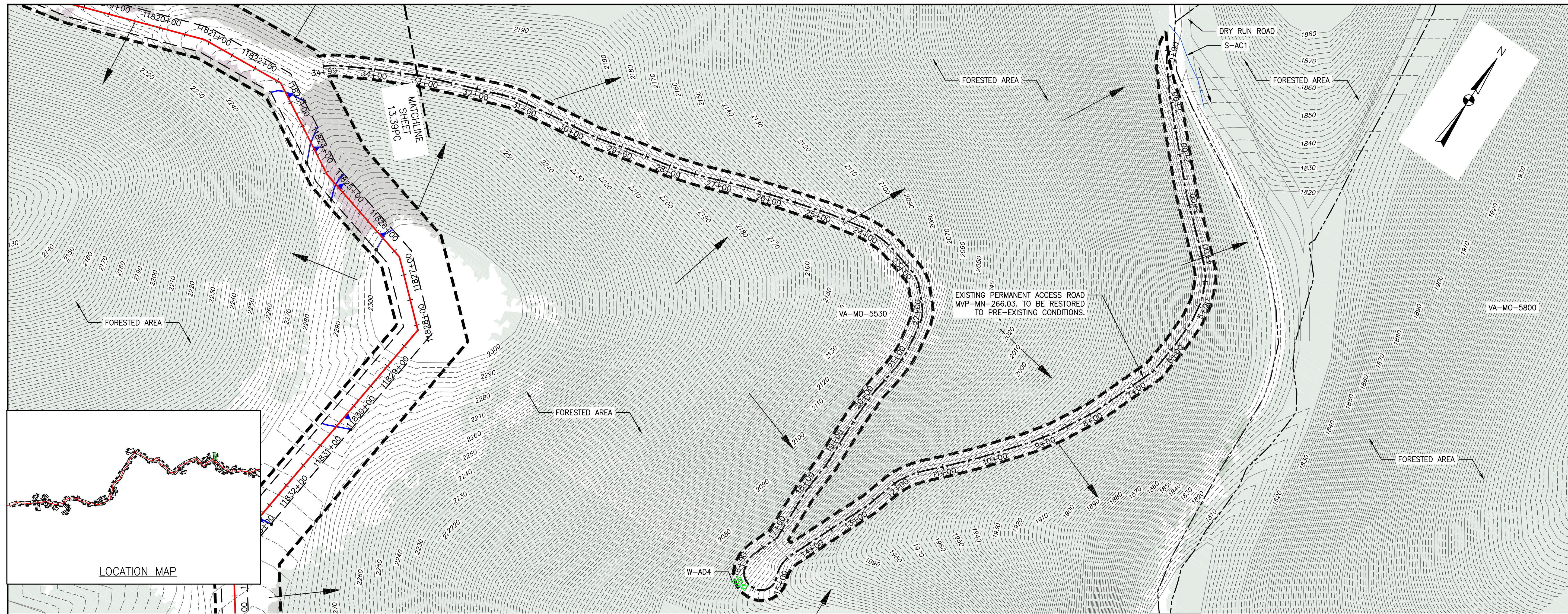
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

TETRA TECH
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 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION
 (STORMWATER &
 RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.73PC OF 13.90PC	



LEGEND

- | | | | |
|---|---|---|---|
| — EXISTING CULVERT | +++++ PROPOSED LEVEL SPREADER | → STREAM FLOW DIRECTION | ▨ STEEP SLOPE AREA |
| — STREAM | --- PROPOSED PERMANENT RIGHT OF WAY | ▨ FEMA 100 YEAR FLOODPLAIN | ▨ EXISTING FOREST |
| --- EXISTING PROPERTY LINE | --- PROPOSED ACCESS ROAD CENTERLINE | ▲ PERMANENT WATER BAR 10' END TREATMENT | ▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION |
| --- EXISTING STATE LINE | --- PROPOSED PIPELINE | ▲ PERMANENT WATER BAR 15' END TREATMENT | ▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION |
| --- EXISTING COUNTY LINE | → SURFACE WATER FLOW DIRECTION | ▲ PERMANENT WATER BAR 20' END TREATMENT | |
| --- EXISTING ROAD/TRAIL | ▨ POND | | |
| --- USDA FOREST SERVICE (NATIONAL FOREST) LANDS | ▨ WETLAND | | |
| --- ANST --- APPALACHIAN NATIONAL SCENIC TRAIL | ▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) | | |
| --- AFM --- ACID FORMING MATERIAL | ● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS) | | |
| --- PROPOSED LEVEL SPREADER DIVERSION | | | |
| --- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | | | |
| --- PROPOSED LIMIT OF DISTURBANCE | | | |

NOTES:

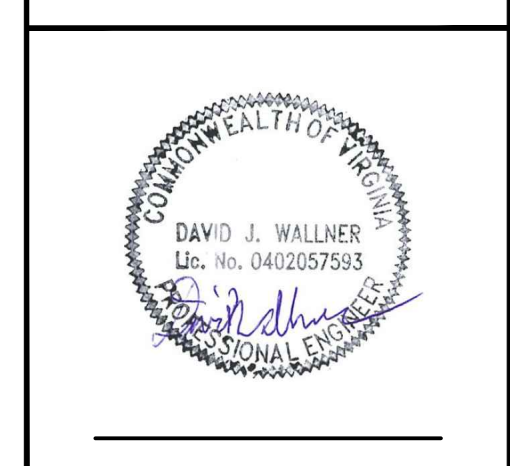
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VABED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VABED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

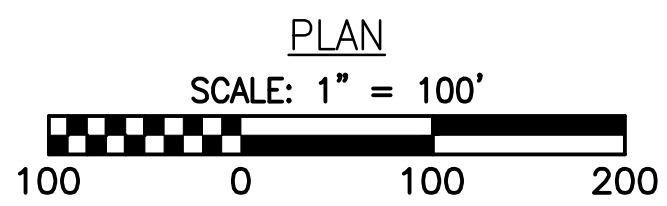
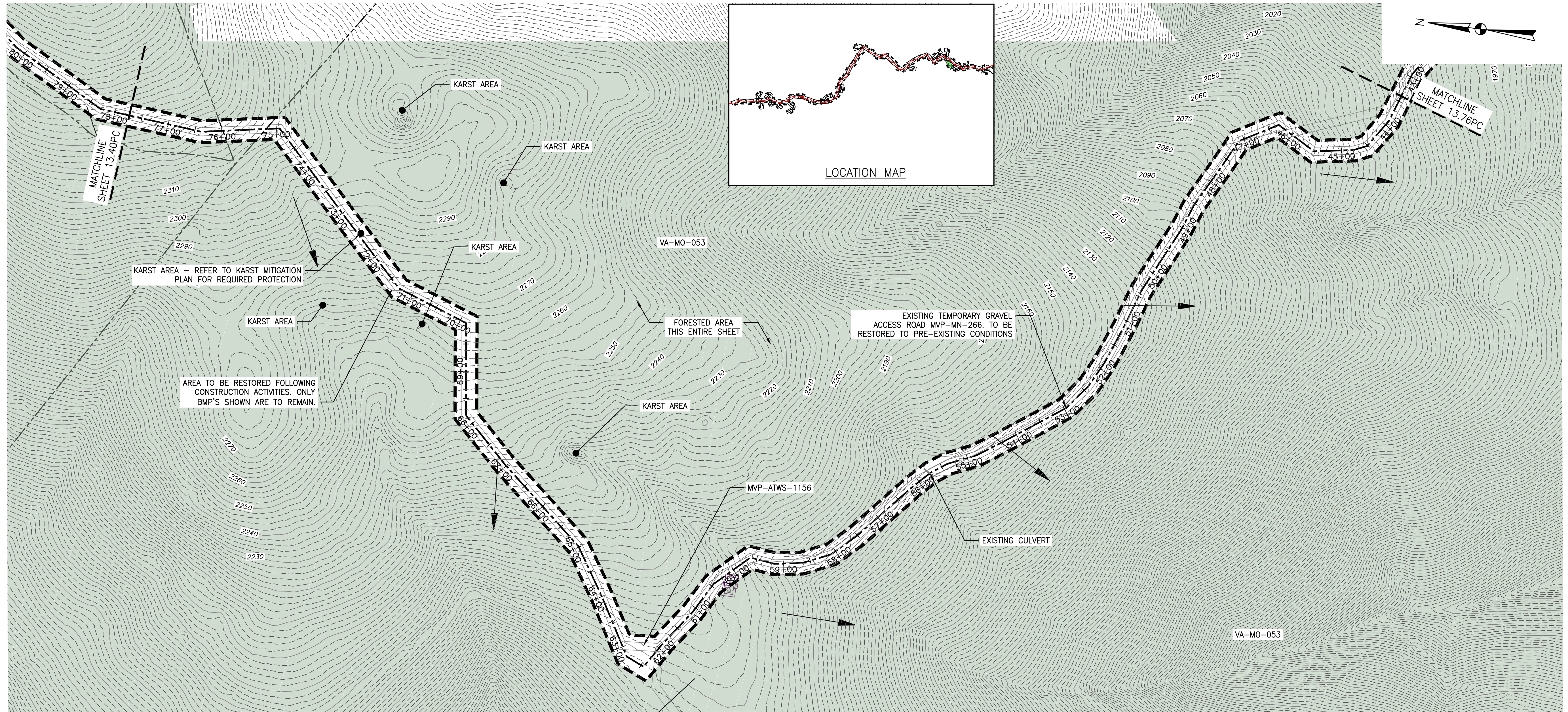
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.74PC OF 13.90PC	REVISION



LEGEND

- | | | | |
|---|---|---|---|
| — EXISTING CULVERT | +++++ PROPOSED LEVEL SPREADER | → STREAM FLOW DIRECTION | ▨ STEEP SLOPE AREA |
| — STREAM | --- PROPOSED PERMANENT RIGHT OF WAY | ▬ FEMA 100 YEAR FLOODPLAIN | ▨ EXISTING FOREST |
| --- EXISTING PROPERTY LINE | --- PROPOSED ACCESS ROAD CENTERLINE | ▲ PERMANENT WATER BAR 10' END TREATMENT | ▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION |
| --- EXISTING STATE LINE | --- PROPOSED PIPELINE | ▲ PERMANENT WATER BAR 15' END TREATMENT | ▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION |
| --- EXISTING COUNTY LINE | → SURFACE WATER FLOW DIRECTION | ▲ PERMANENT WATER BAR 20' END TREATMENT | |
| --- EXISTING ROAD/TRAIL | ▨ POND | | |
| --- USDA FOREST SERVICE (NATIONAL FOREST) LANDS | ▨ WETLAND | | |
| --- ANST --- ANST --- APPALACHIAN NATIONAL SCENIC TRAIL | ▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) | | |
| --- AFM --- AFM --- ACID FORMING MATERIAL | ● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS) | | |
| --- PROPOSED LEVEL SPREADER DIVERSION | | | |
| --- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | | | |
| --- PROPOSED LIMIT OF DISTURBANCE | | | |

NOTES:

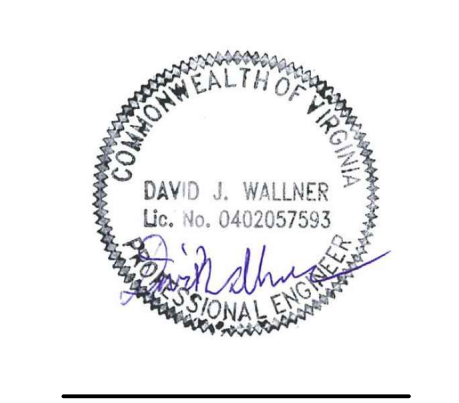
- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

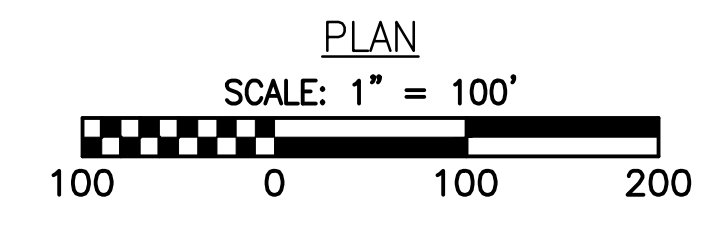
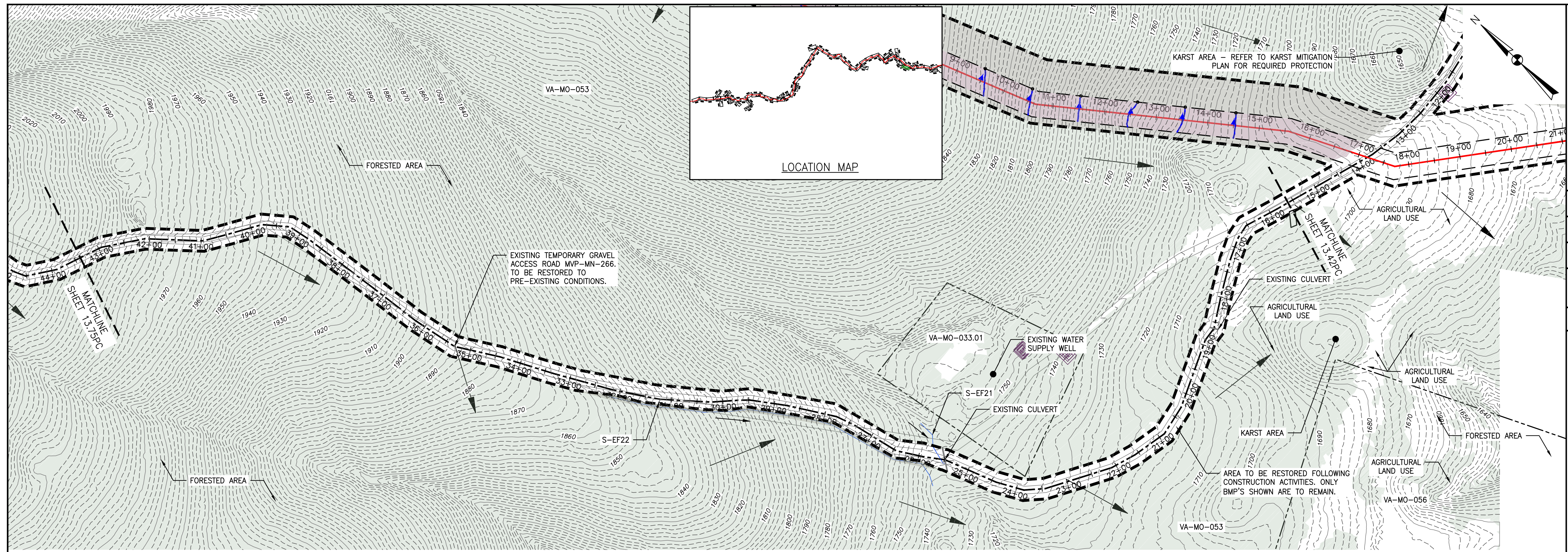
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 661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

**POST CONSTRUCTION
(STORMWATER &
RESTORATION) PLANS**



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.75PC OF 13.90PC	

REVISIONS:



LEGEND

- | | | | |
|---|---|---|---|
| — EXISTING CULVERT | +++++ PROPOSED LEVEL SPREADER | → STREAM FLOW DIRECTION | ▨ STEEP SLOPE AREA |
| — STREAM | --- PROPOSED PERMANENT RIGHT OF WAY | ▬ FEMA 100 YEAR FLOODPLAIN | ▨ EXISTING FOREST |
| --- EXISTING PROPERTY LINE | --- PROPOSED ACCESS ROAD CENTERLINE | ▲ PERMANENT WATER BAR 10' END TREATMENT | ▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION |
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| --- USDA FOREST SERVICE (NATIONAL FOREST) LANDS | ▨ WETLAND | | |
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| --- ACID FORMING MATERIAL | ● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS) | | |
| --- PROPOSED LEVEL SPREADER DIVERSION | | | |
| --- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | | | |
| --- PROPOSED LIMIT OF DISTURBANCE | | | |

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1	9/21/17	KAL	DW	PLAN SUBMISSION

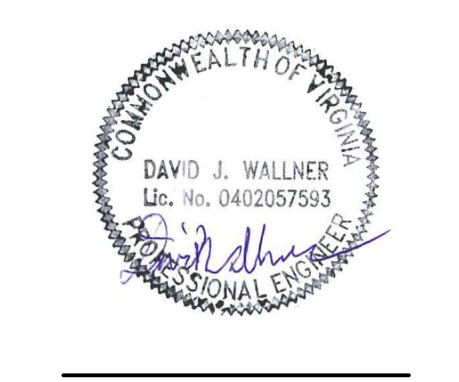
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MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

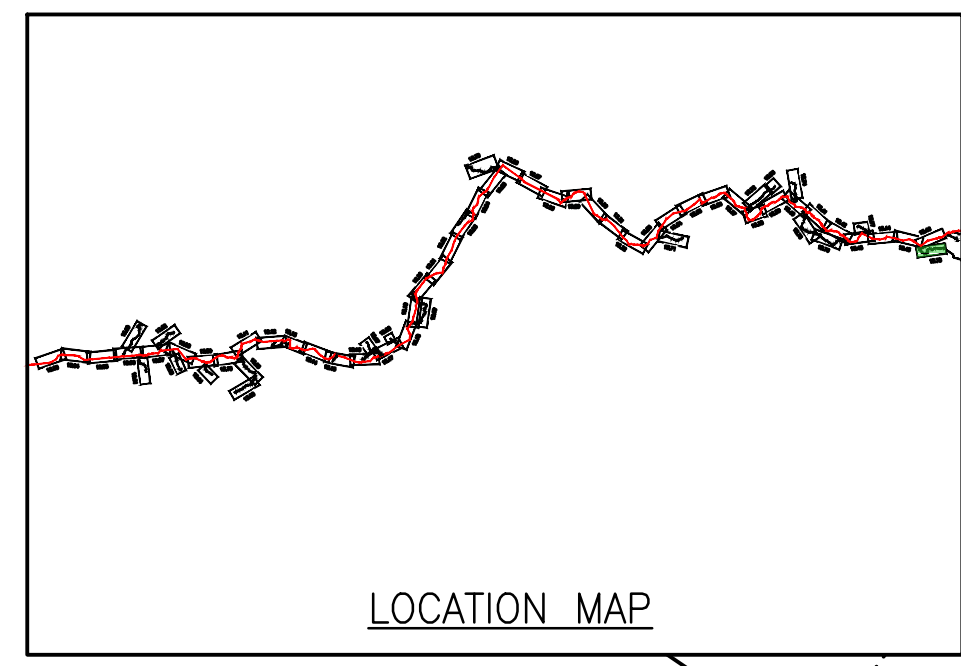
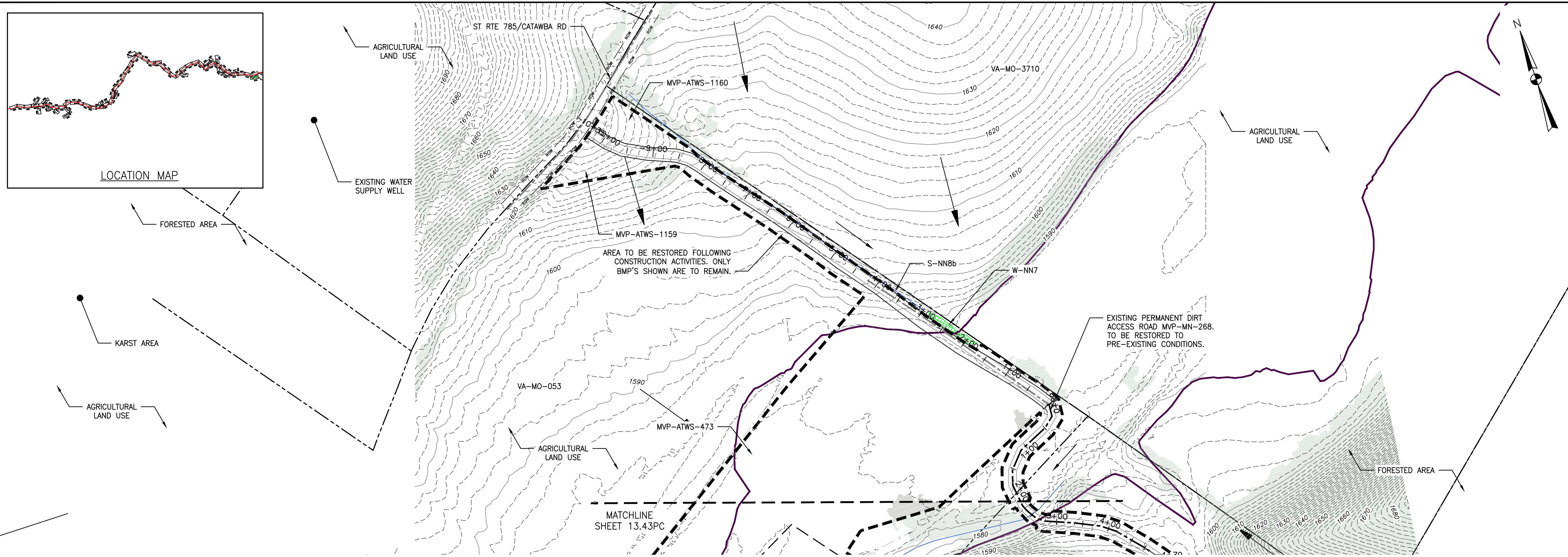
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661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.76PC OF 13.90PC	



EXISTING WATER SUPPLY WELL

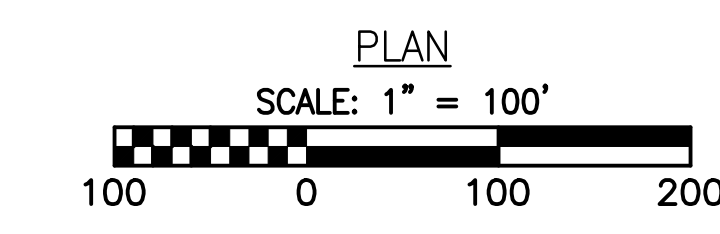
FORESTED AREA

KARST AREA

AGRICULTURAL LAND USE

AREA TO BE RESTORED FOLLOWING CONSTRUCTION ACTIVITIES. ONLY BMP'S SHOWN ARE TO REMAIN.

EXISTING PERMANENT DIRT ACCESS ROAD MVP-MN-268. TO BE RESTORED TO PRE-EXISTING CONDITIONS.



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

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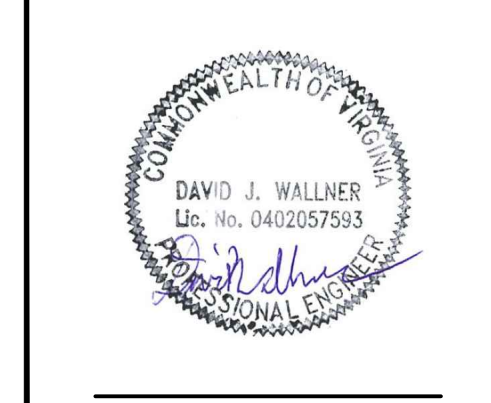
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

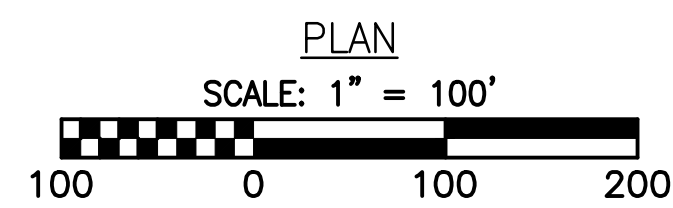
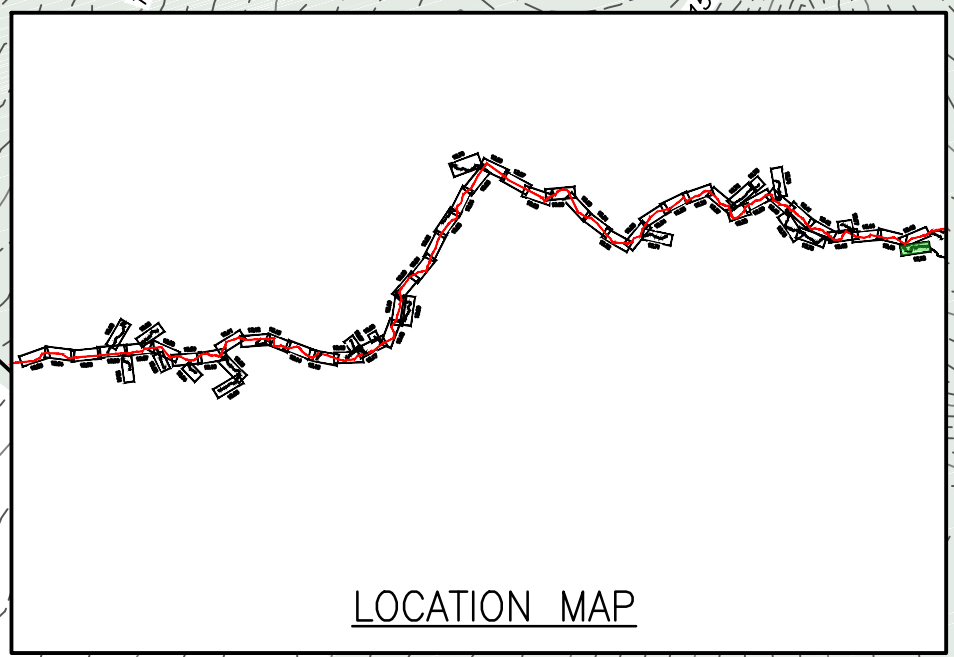
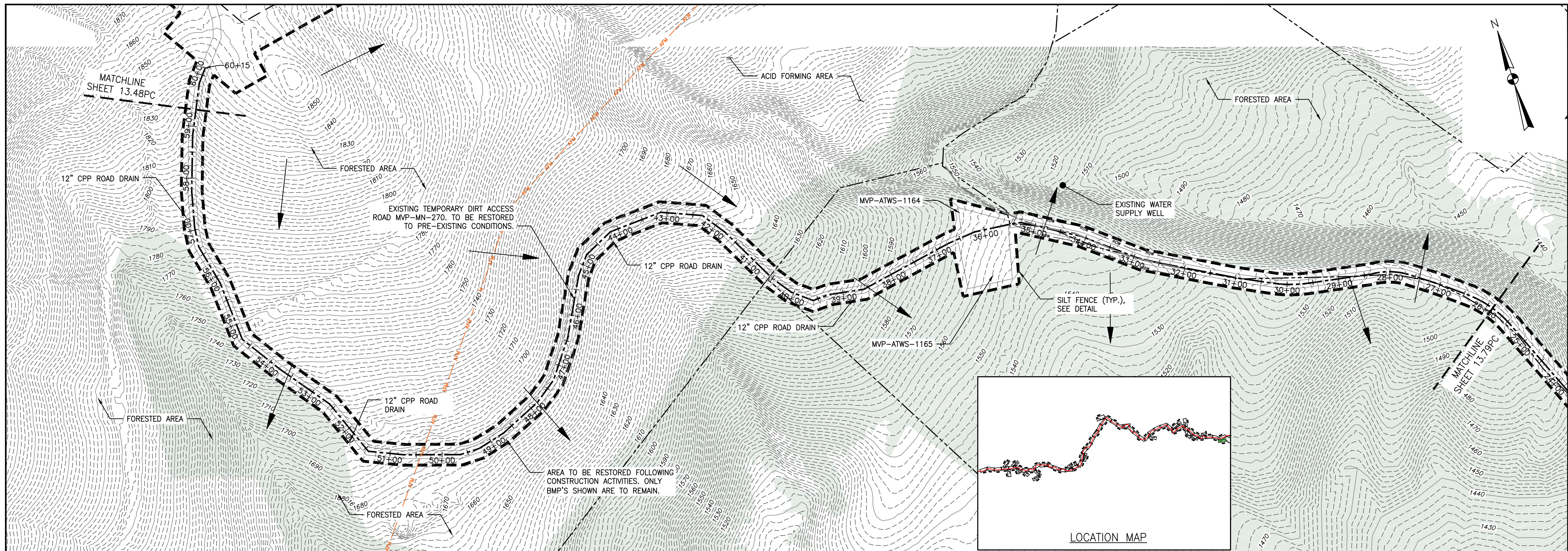
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661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.77PC OF 13.90PC	REVISION



LEGEND

- | | | | |
|---|---|---|---|
| — EXISTING CULVERT | ++++ PROPOSED LEVEL SPREADER | → STREAM FLOW DIRECTION | ▨ STEEP SLOPE AREA |
| — STREAM | --- PROPOSED PERMANENT RIGHT OF WAY | ▬ FEMA 100 YEAR FLOODPLAIN | ▨ EXISTING FOREST |
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| --- PROPOSED LEVEL SPREADER DIVERSION | | | |
| --- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | | | |
| --- PROPOSED LIMIT OF DISTURBANCE | | | |

NOTES:

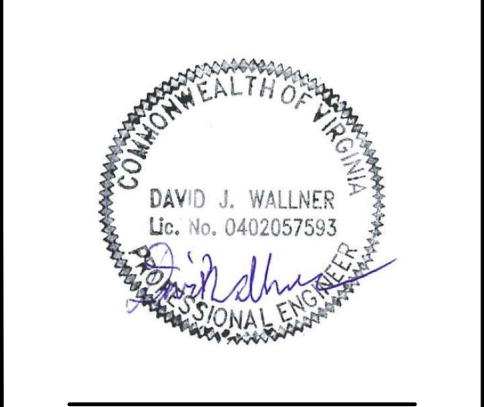
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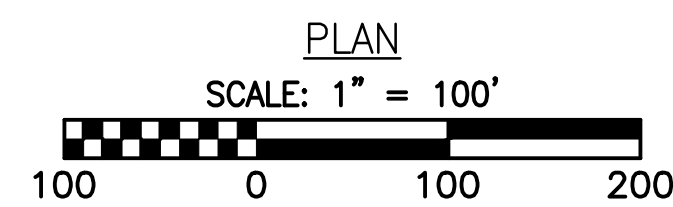
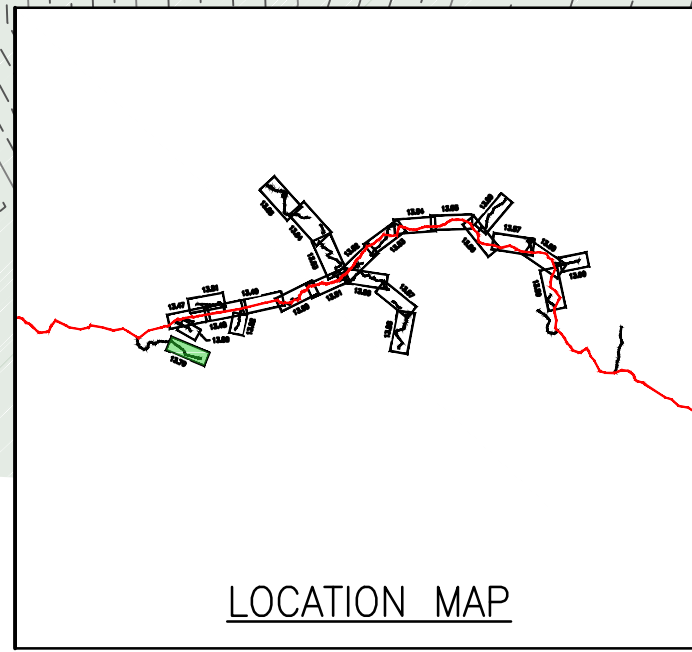
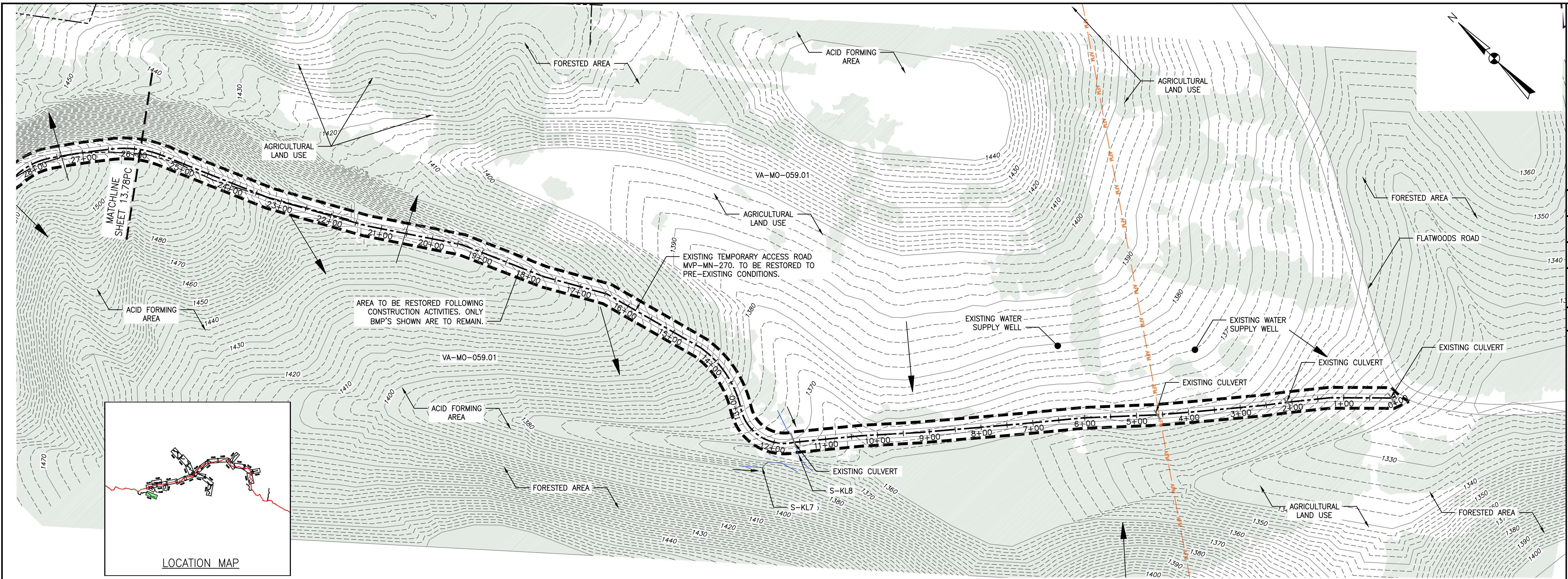
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DWJ
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.78PC OF 13.90PC	



LEGEND

- | | | | |
|---|---|---|---|
| — EXISTING CULVERT | +++++ PROPOSED LEVEL SPREADER | → STREAM FLOW DIRECTION | ▨ STEEP SLOPE AREA |
| — STREAM | --- PROPOSED PERMANENT RIGHT OF WAY | ▬ FEMA 100 YEAR FLOODPLAIN | ▨ EXISTING FOREST |
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NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VADEQ COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VADEQ COMMENTS

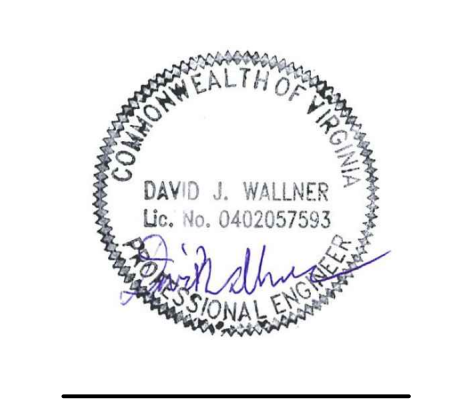
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

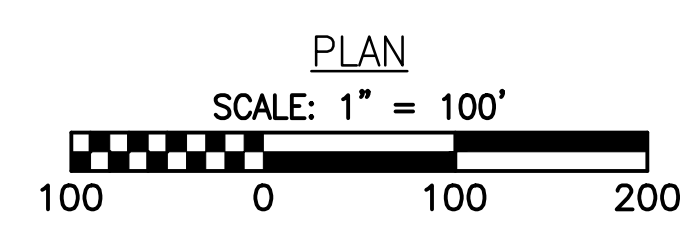
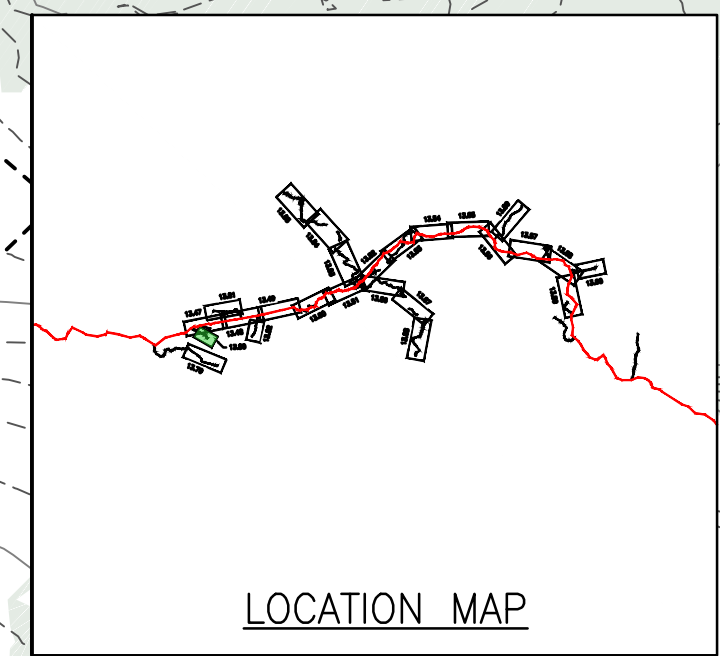
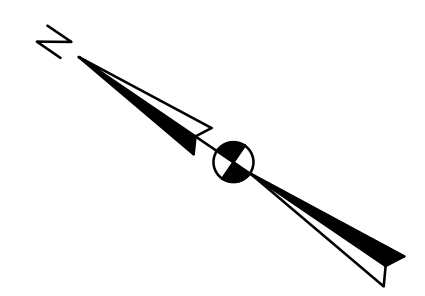
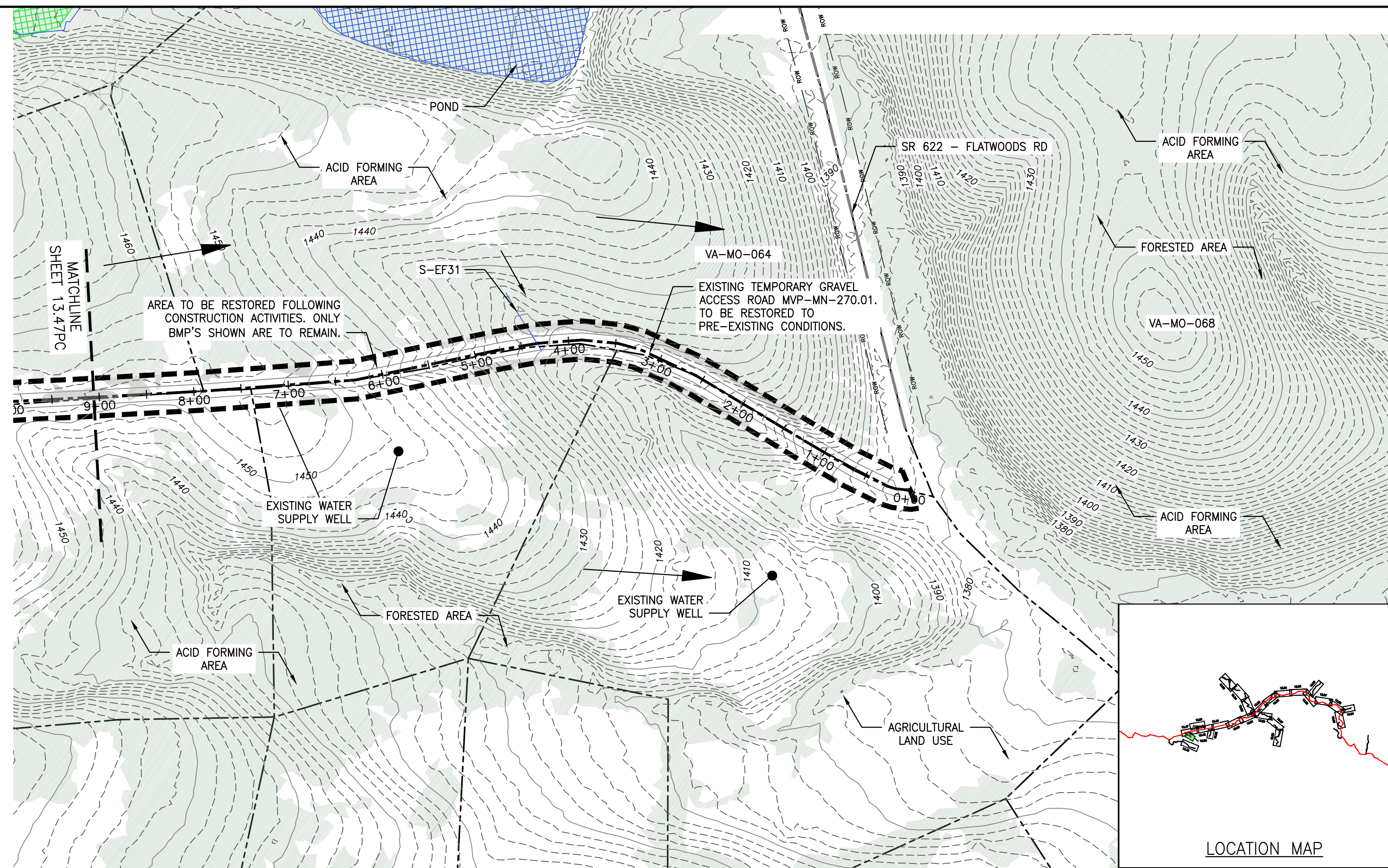
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661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.79PC OF 13.90PC	



LEGEND

- | | | | | | | | |
|------|---|-------|---------------------------------|---|---|---|---|
| — | EXISTING CULVERT | +++++ | PROPOSED LEVEL SPREADER | → | STREAM FLOW DIRECTION | ▨ | STEEP SLOPE AREA |
| — | STREAM | ---- | PROPOSED PERMANENT RIGHT OF WAY | → | FEMA 100 YEAR FLOODPLAIN | ▨ | EXISTING FOREST |
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| ---- | EXISTING COUNTY LINE | → | SURFACE WATER FLOW DIRECTION | ● | APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS) | | |
| ---- | EXISTING ROAD/TRAIL | ▨ | POND | | | | |
| ---- | USDA FOREST SERVICE (NATIONAL FOREST) LANDS | ▨ | WETLAND | | | | |
| ---- | APPALACHIAN NATIONAL SCENIC TRAIL | | | | | | |
| ---- | ACID FORMING MATERIAL | | | | | | |
| ---- | PROPOSED LEVEL SPREADER DIVERSION | | | | | | |
| ---- | GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | | | | | | |
| ---- | PROPOSED LIMIT OF DISTURBANCE | | | | | | |

NOTES:

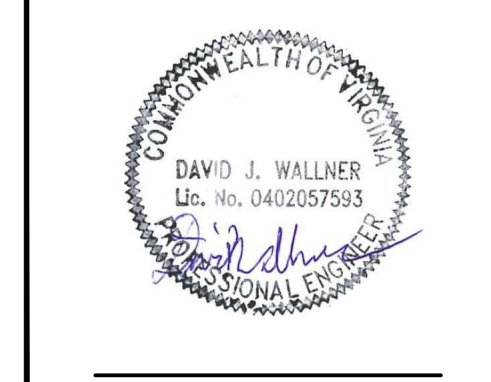
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ADDRESS VABED COMMENTS	DW
RESUBMISSION USING APPROVED STORMWATER METHODOLOGY	DW
ADDRESS VABED COMMENTS	DW
PLAN SUBMISSION	DW
DESCRIPTION:	
NO.:	CHKD.: APPD.:
DATE:	DWN.:

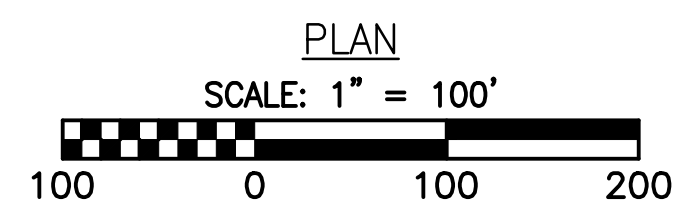
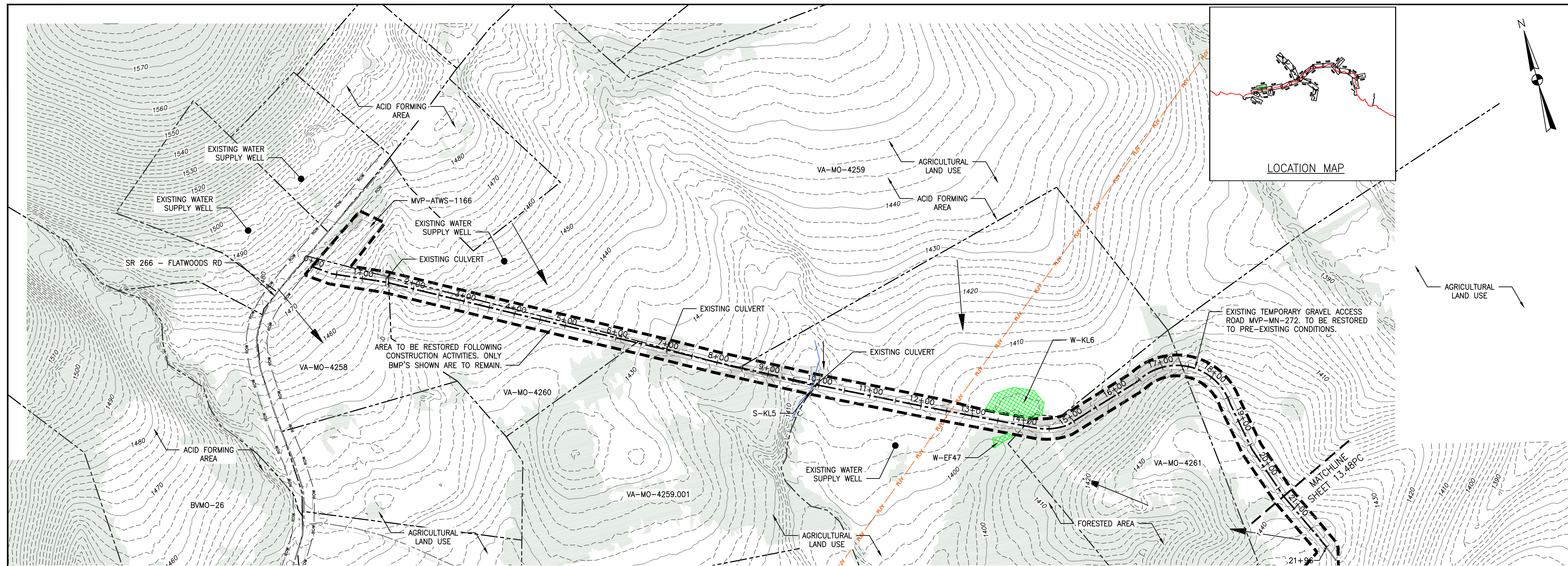
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.80PC	OF 13.90PC



LEGEND

—	EXISTING CULVERT	+++++	PROPOSED LEVEL SPREADER	→	STREAM FLOW DIRECTION	▨	STEEP SLOPE AREA
—	STREAM	---	PROPOSED PERMANENT RIGHT OF WAY	—	FEMA 100 YEAR FLOODPLAIN	▨	EXISTING FOREST
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1	9/21/17	KAL	DW	PLAN SUBMISSION

REVISIONS:

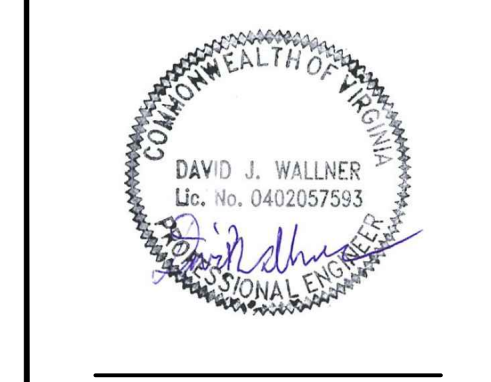
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

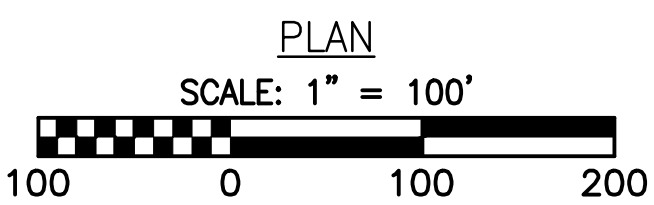
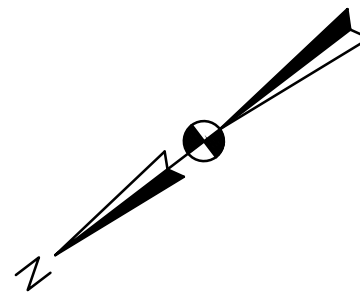
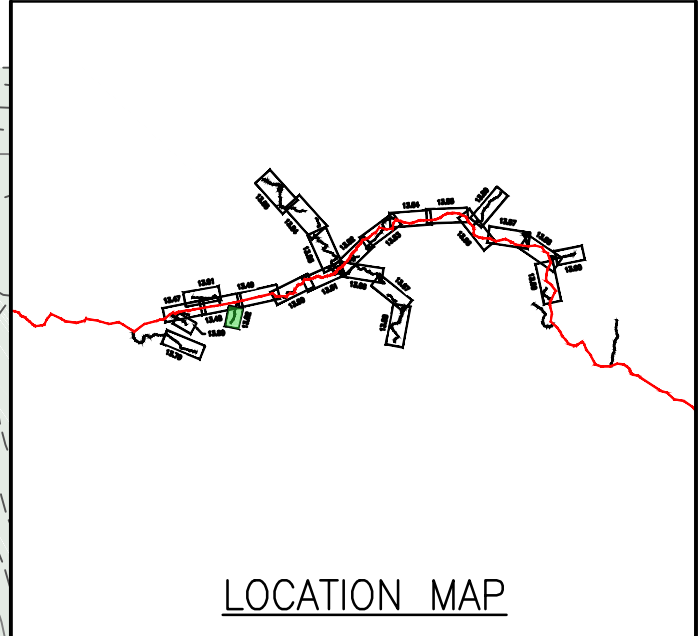
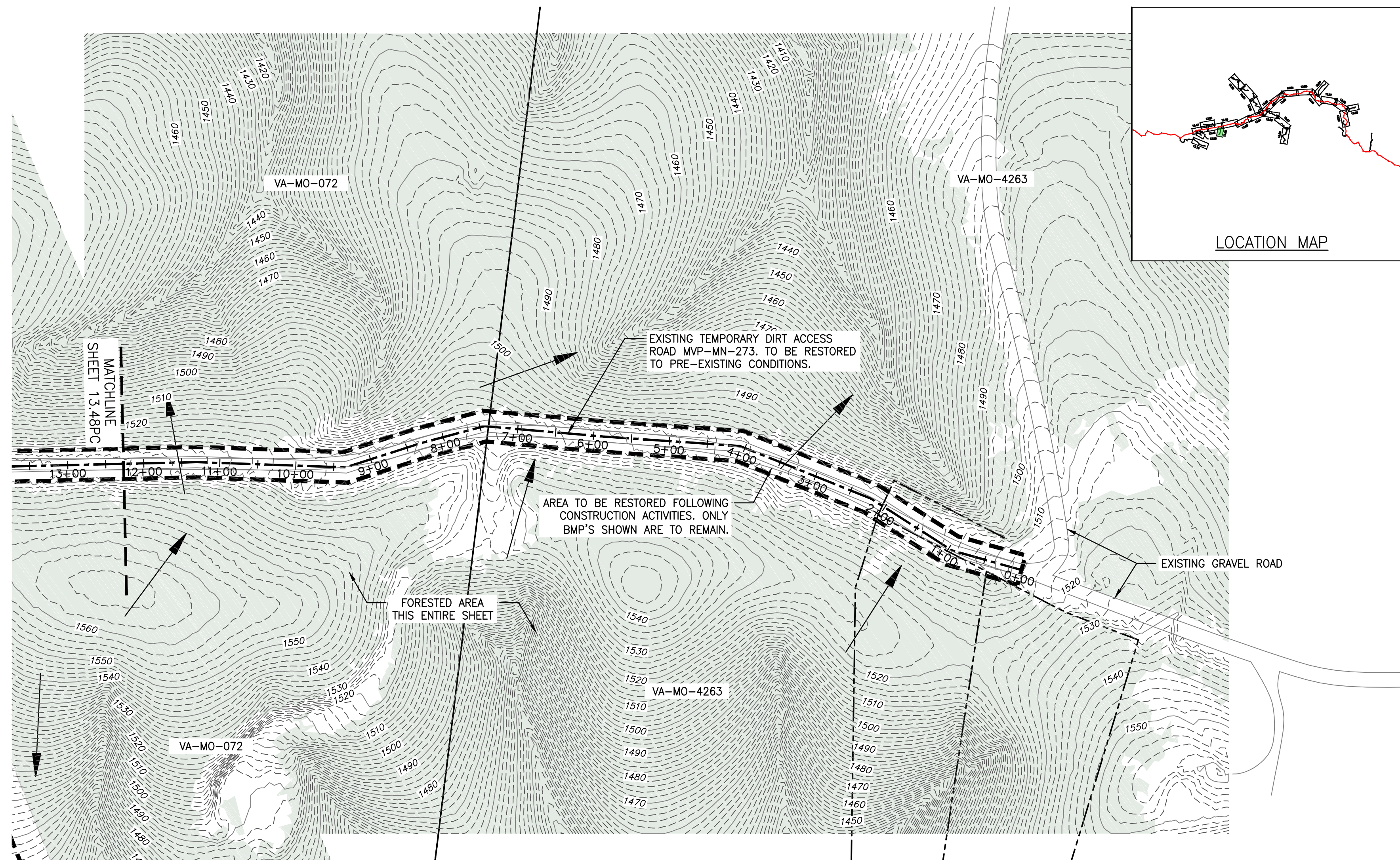
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661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DWJ
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHEET NO. 13.81PC OF 13.90PC



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

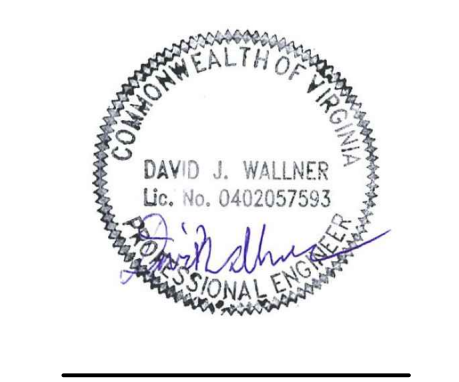
1. NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
2. IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	JRE	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	JRE	ADDRESS VADED COMMENTS
1	9/21/17	KAL	JRE	PLAN SUBMISSION

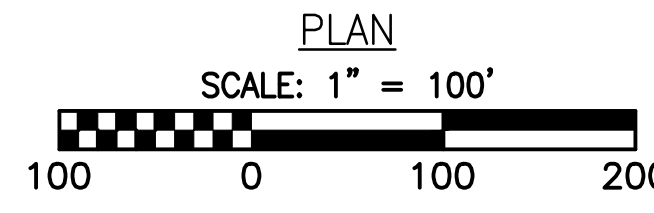
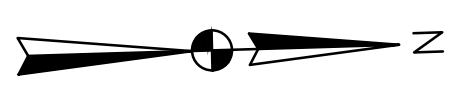
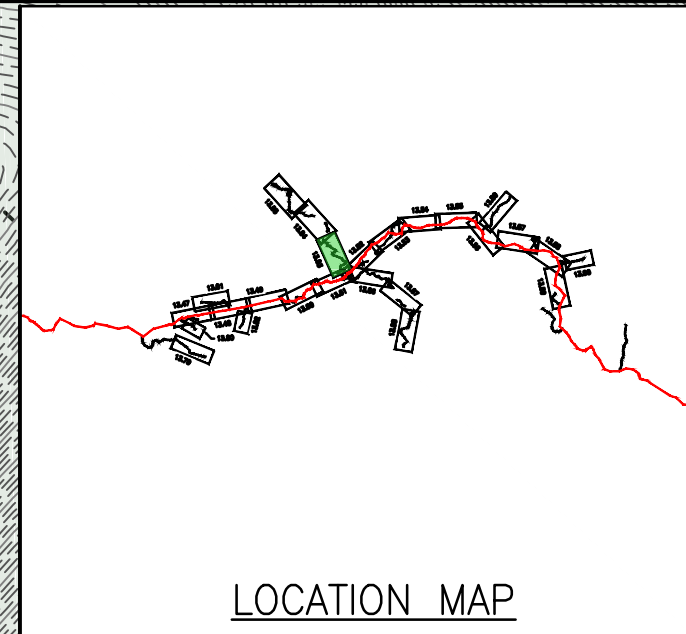
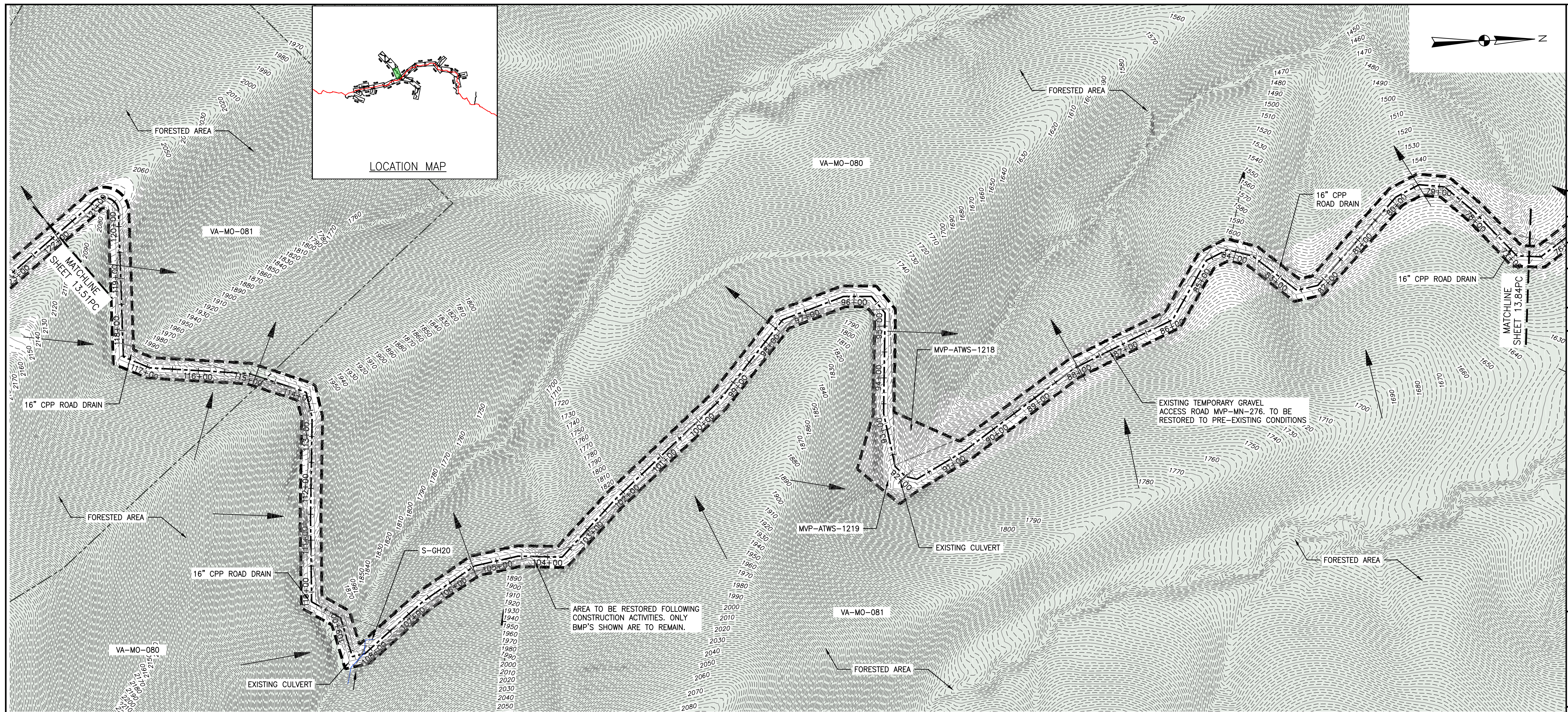
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION
 (STORMWATER &
 RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.82PC OF 13.90PC	



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- +++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

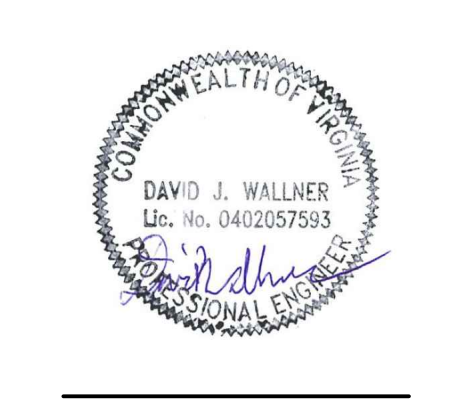
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2. IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DJW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DJW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DJW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DJW	PLAN SUBMISSION

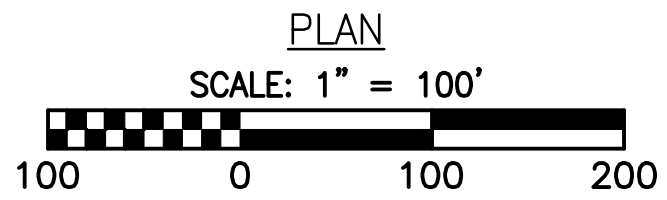
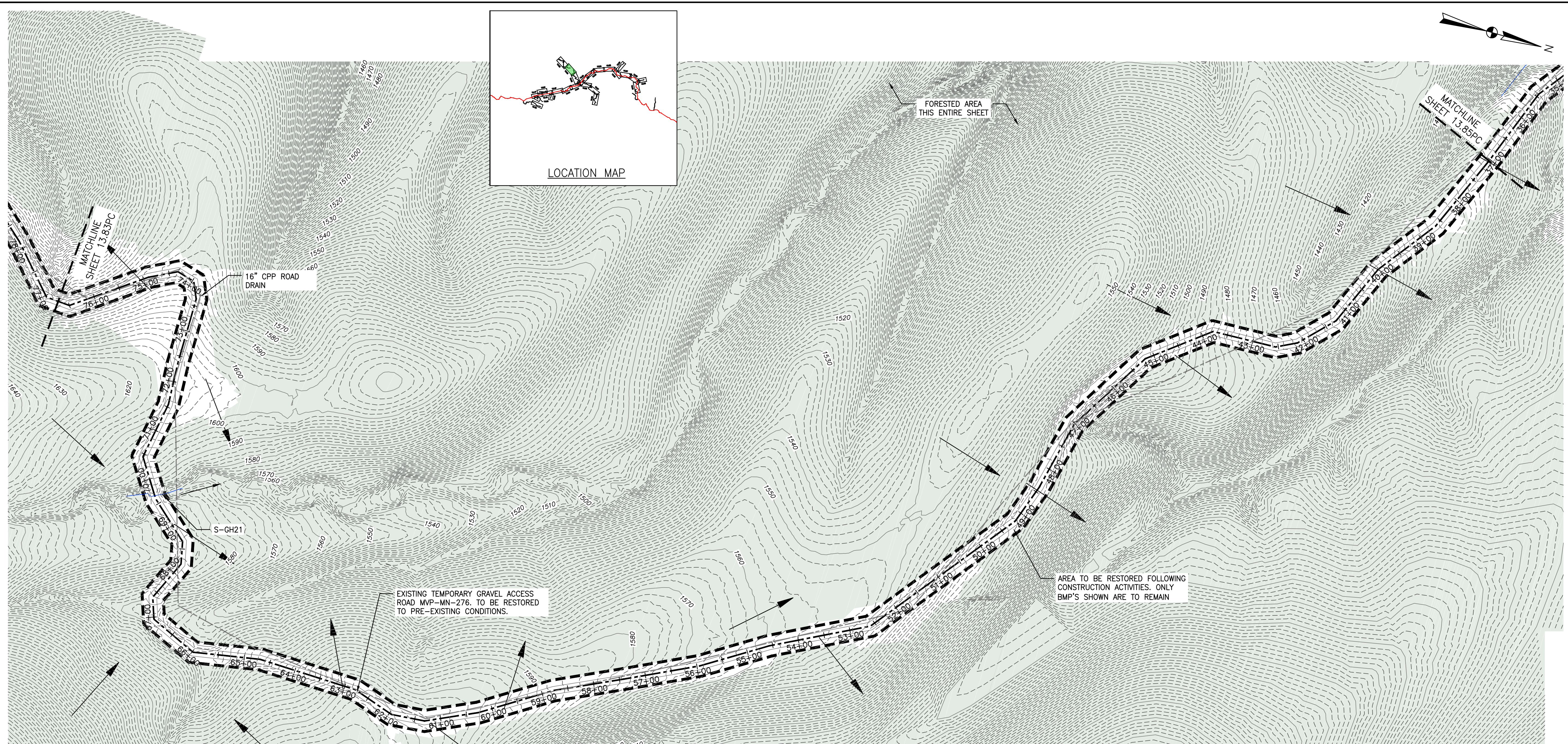
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
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 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION
(STORMWATER &
RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DJW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.83PC	OF 13.90PC



LEGEND

- | | | | |
|---|---|---|---|
| — EXISTING CULVERT | +++++ PROPOSED LEVEL SPREADER | → STREAM FLOW DIRECTION | ▨ STEEP SLOPE AREA |
| — STREAM | --- PROPOSED PERMANENT RIGHT OF WAY | ▬ FEMA 100 YEAR FLOODPLAIN | ▨ EXISTING FOREST |
| --- EXISTING PROPERTY LINE | --- PROPOSED ACCESS ROAD CENTERLINE | ▲ PERMANENT WATER BAR 10' END TREATMENT | ▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION |
| --- EXISTING STATE LINE | --- PROPOSED PIPELINE | ▲ PERMANENT WATER BAR 15' END TREATMENT | ▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION |
| --- EXISTING COUNTY LINE | → SURFACE WATER FLOW DIRECTION | ▲ PERMANENT WATER BAR 20' END TREATMENT | |
| --- EXISTING ROAD/TRAIL | ▨ POND | | |
| --- USDA FOREST SERVICE (NATIONAL FOREST) LANDS | ▨ WETLAND | | |
| --- APPALACHIAN NATIONAL SCENIC TRAIL | ▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) | | |
| --- ACID FORMING MATERIAL | ● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS) | | |
| --- PROPOSED LEVEL SPREADER DIVERSION | | | |
| --- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | | | |
| --- PROPOSED LIMIT OF DISTURBANCE | | | |

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

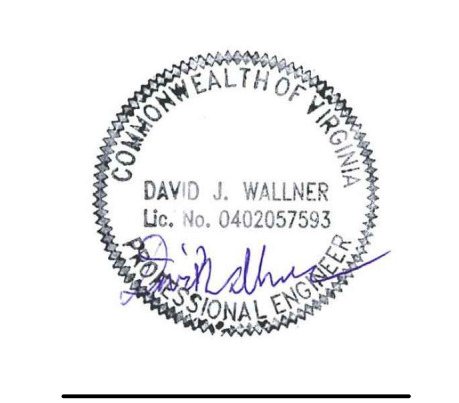
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

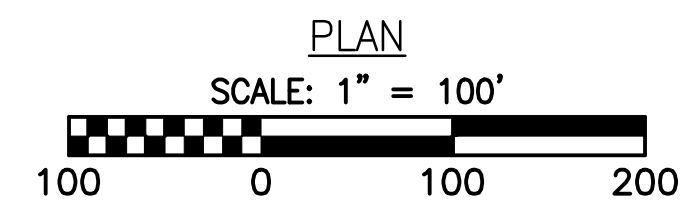
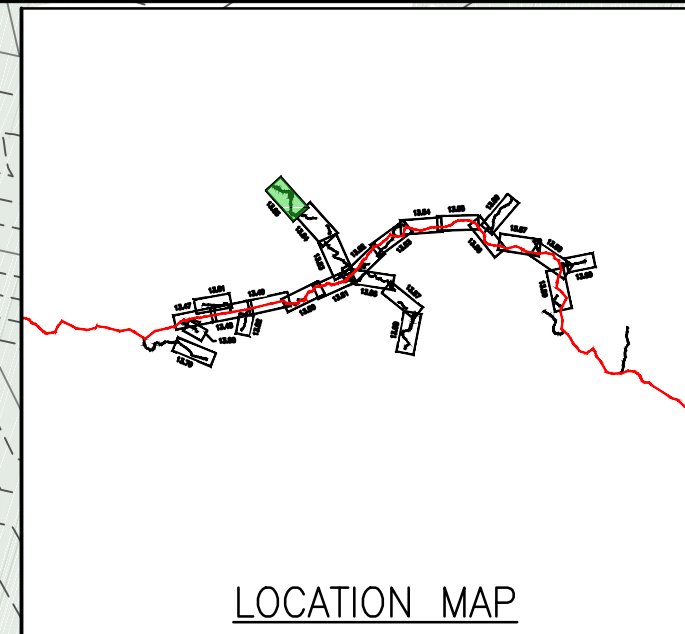
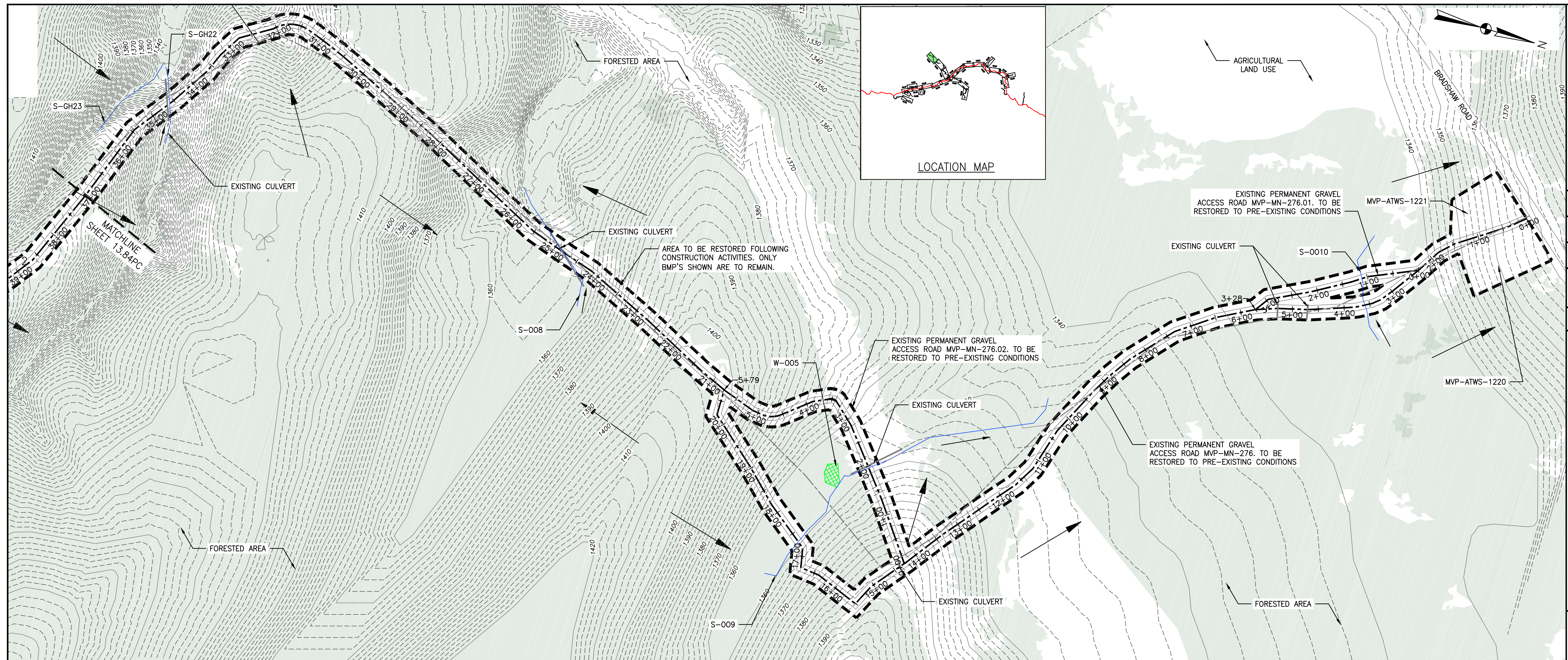
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661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.84PC OF 13.90PC	



LEGEND

— EXISTING CULVERT	+++++ PROPOSED LEVEL SPREADER	→ STREAM FLOW DIRECTION	▨ STEEP SLOPE AREA
— STREAM	--- PROPOSED PERMANENT RIGHT OF WAY	▬ FEMA 100 YEAR FLOODPLAIN	▨ EXISTING FOREST
--- EXISTING PROPERTY LINE	--- PROPOSED ACCESS ROAD CENTERLINE	▲ PERMANENT WATER BAR 10' END TREATMENT	▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
--- EXISTING STATE LINE	--- PROPOSED PIPELINE	▲ PERMANENT WATER BAR 15' END TREATMENT	▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
--- EXISTING COUNTY LINE	→ SURFACE WATER FLOW DIRECTION	▲ PERMANENT WATER BAR 20' END TREATMENT	
--- EXISTING ROAD/TRAIL	▨ POND		
--- USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨ WETLAND		
--- ANST --- ANST --- APPALACHIAN NATIONAL SCENIC TRAIL	▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)		
--- AFM --- AFM --- ACID FORMING MATERIAL	• APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)		
--- PROPOSED LEVEL SPREADER DIVERSION			
--- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)			
--- PROPOSED LIMIT OF DISTURBANCE			

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

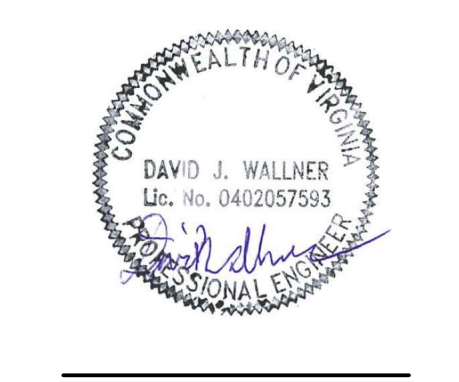
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

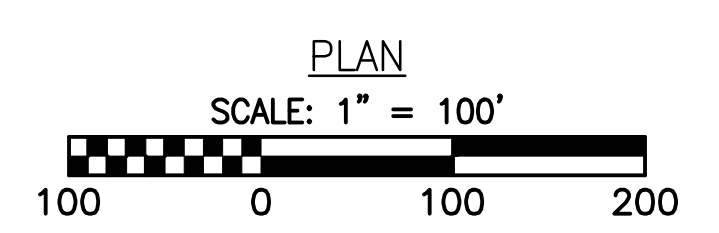
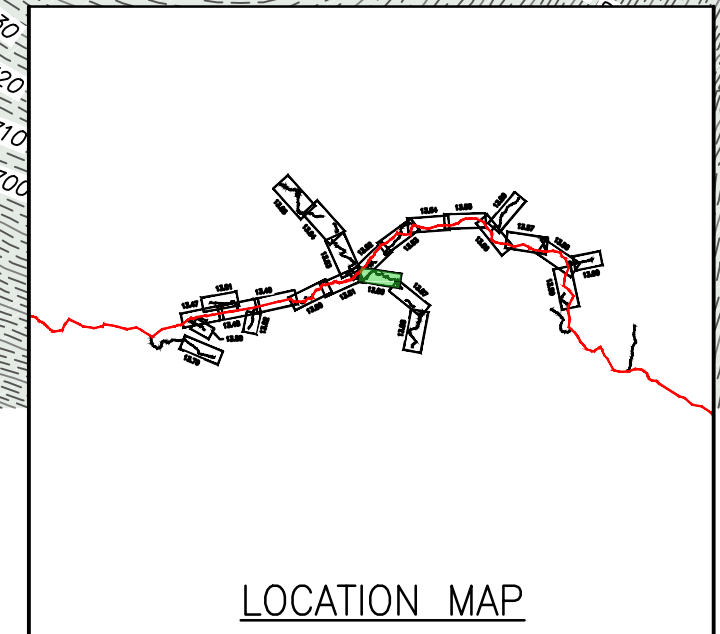
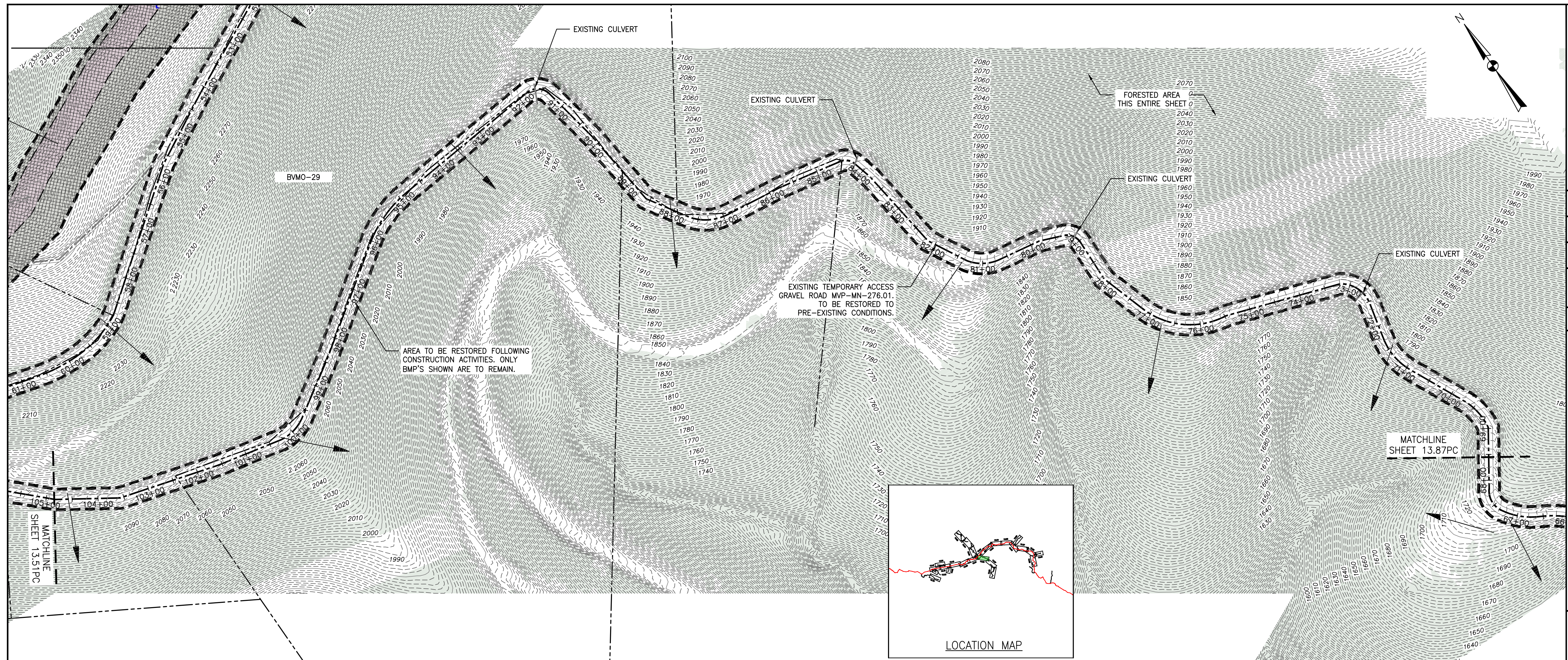
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661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION
(STORMWATER &
RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.85PC OF 13.90PC	



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

1. NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AS NOTED IN NOTE 2 BELOW.
2. IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
4	3/5/18	JRE	DW	ADDRESS VAEQ COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
2	11/21/17	KAL	DW	ADDRESS VAEQ COMMENTS
1	9/21/17	KAL	DW	PLAN SUBMISSION

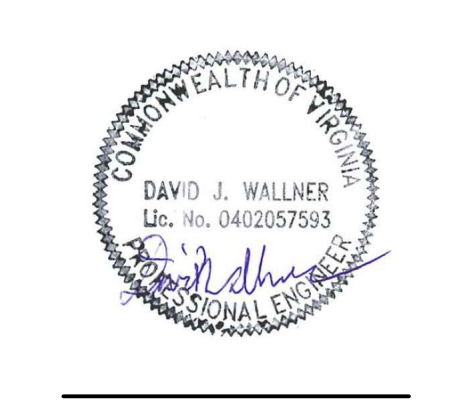
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA

MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

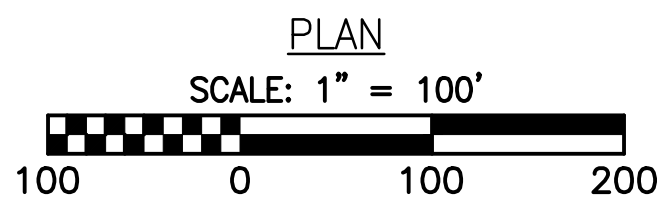
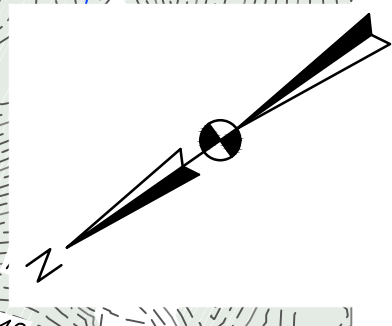
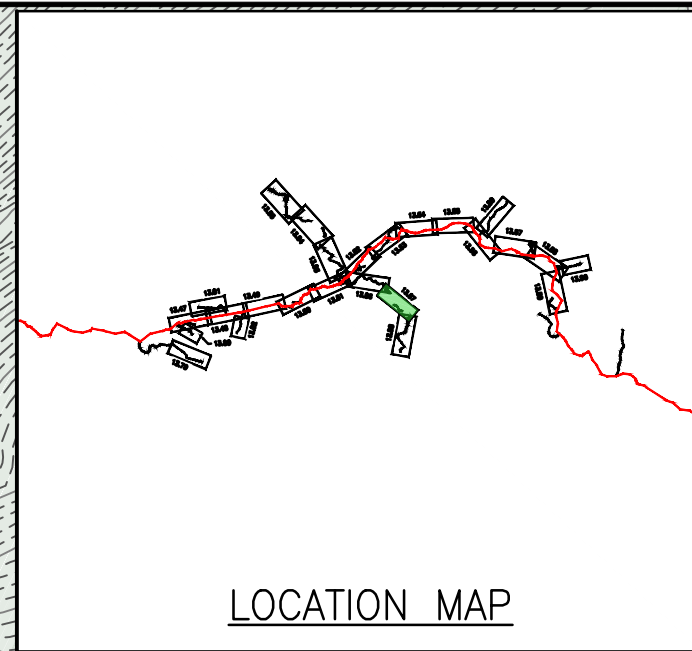
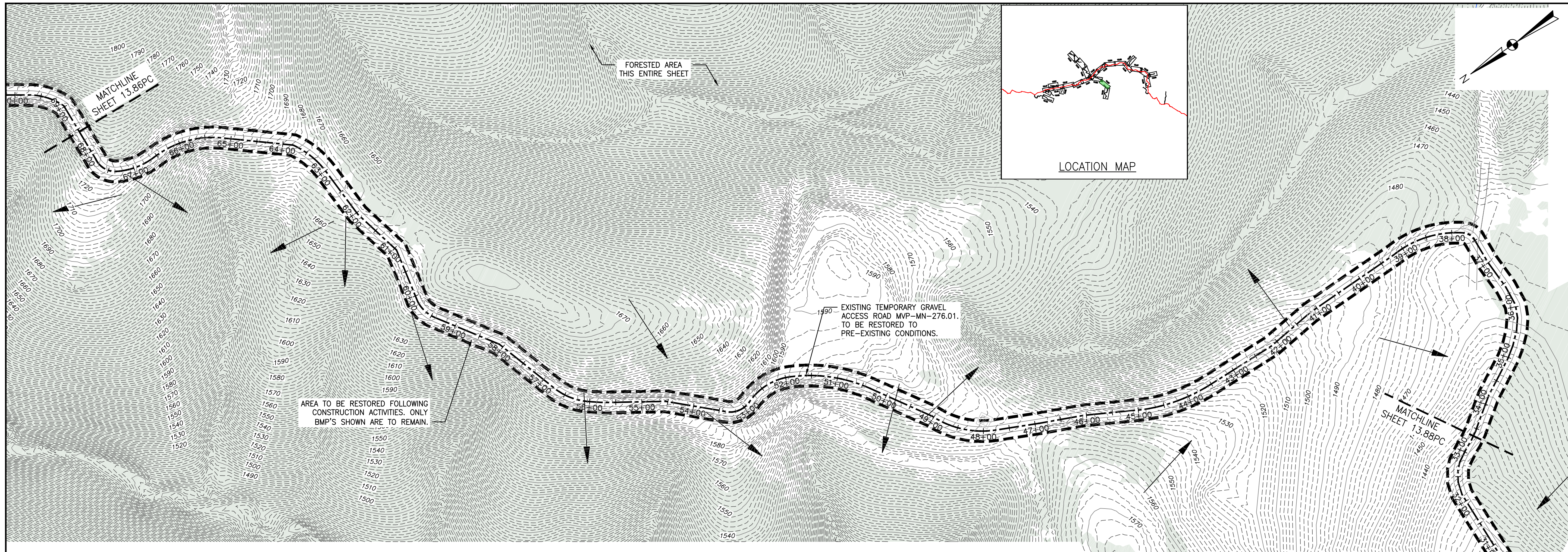
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661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.86PC	OF 13.90PC



LEGEND

- | | | | |
|---|--|---|---|
| — EXISTING CULVERT | ++++ PROPOSED LEVEL SPREADER | → STREAM FLOW DIRECTION | ▨ STEEP SLOPE AREA |
| — STREAM | --- PROPOSED PERMANENT RIGHT OF WAY | ▨ FEMA 100 YEAR FLOODPLAIN | ▨ EXISTING FOREST |
| --- EXISTING PROPERTY LINE | --- PROPOSED ACCESS ROAD CENTERLINE | ▲ PERMANENT WATER BAR 10' END TREATMENT | ▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION |
| --- EXISTING STATE LINE | --- PROPOSED PIPELINE | ▲ PERMANENT WATER BAR 15' END TREATMENT | ▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION |
| --- EXISTING COUNTY LINE | → SURFACE WATER FLOW DIRECTION | ● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS) | |
| --- EXISTING ROAD/TRAIL | ▨ POND | | |
| --- USDA FOREST SERVICE (NATIONAL FOREST) LANDS | ▨ WETLAND | | |
| --- ANST --- APPALACHIAN NATIONAL SCENIC TRAIL | ▨ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1) | | |
| --- AFM --- ACID FORMING MATERIAL | → GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39) | | |
| --- PROPOSED LEVEL SPREADER DIVERSION | ▨ PROPOSED LIMIT OF DISTURBANCE | | |

NOTES:

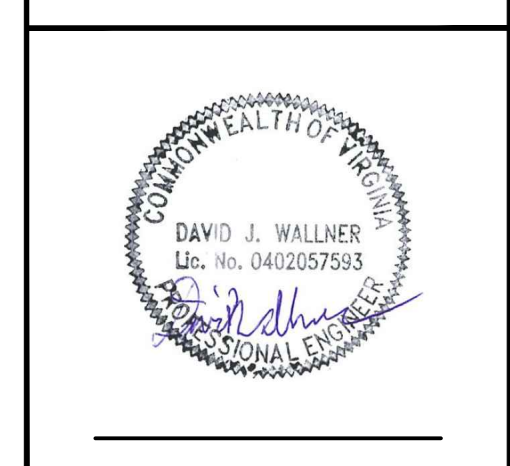
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- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VAQED COMMENTS
3	2/16/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VAQED COMMENTS

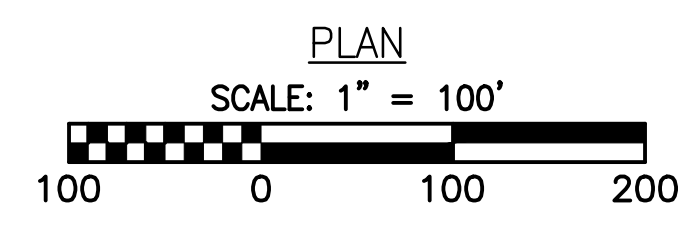
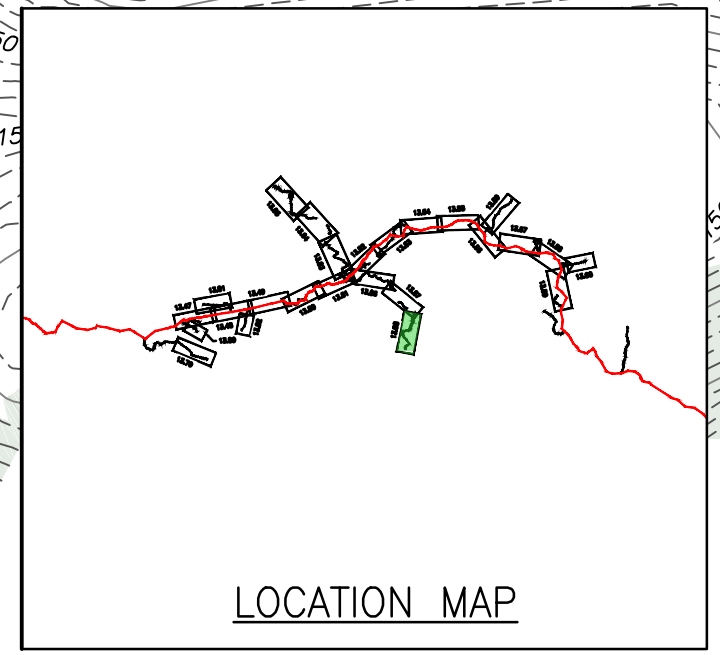
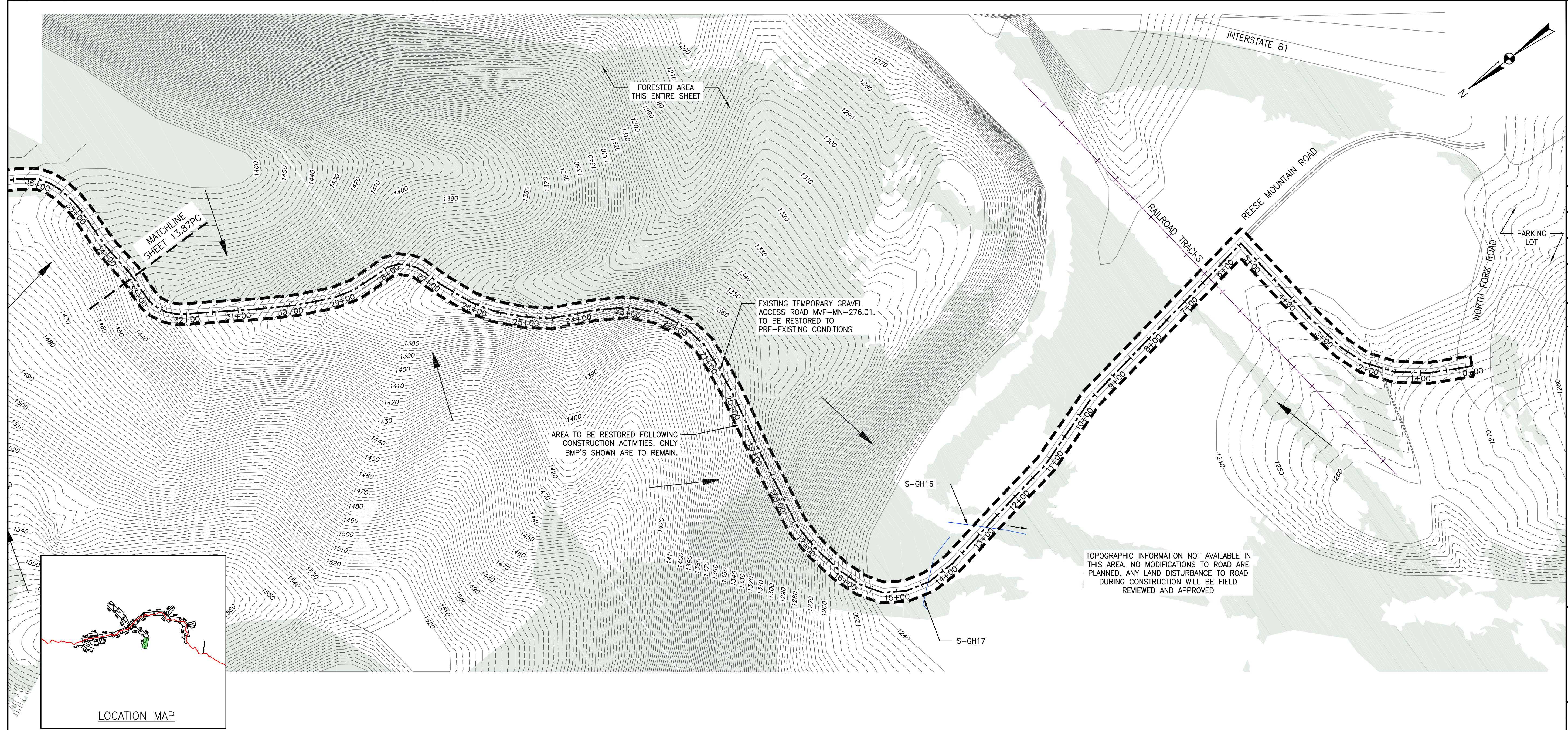
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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 661 ANDERSEN DRIVE
 FOSTER PLAZA 7
 PITTSBURGH, PA 15220

POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.87PC OF 13.90PC	



LEGEND

— EXISTING CULVERT	+++++ PROPOSED LEVEL SPREADER	→ STREAM FLOW DIRECTION	▨ STEEP SLOPE AREA
— STREAM	--- PROPOSED PERMANENT RIGHT OF WAY	▬ FEMA 100 YEAR FLOODPLAIN	▨ EXISTING FOREST
--- EXISTING PROPERTY LINE	--- PROPOSED ACCESS ROAD CENTERLINE	▲ PERMANENT WATER BAR 10' END TREATMENT	▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
--- EXISTING STATE LINE	--- PROPOSED PIPELINE	▲ PERMANENT WATER BAR 15' END TREATMENT	▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
--- EXISTING COUNTY LINE	→ SURFACE WATER FLOW DIRECTION	▲ PERMANENT WATER BAR 20' END TREATMENT	
--- EXISTING ROAD/TRAIL	▨ POND		
--- USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨ WETLAND		
--- APPALACHIAN NATIONAL SCENIC TRAIL	▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)		
--- ACID FORMING MATERIAL	● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)		
--- PROPOSED LEVEL SPREADER DIVERSION			
--- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)			
--- PROPOSED LIMIT OF DISTURBANCE			

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

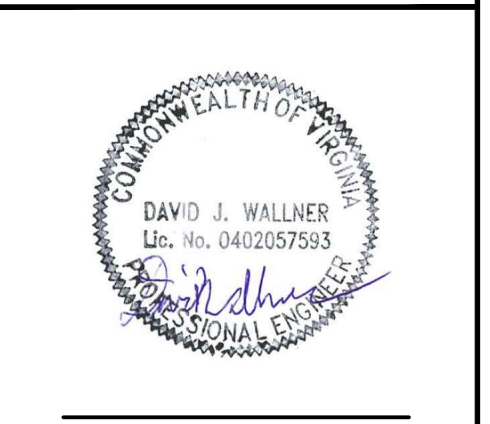
NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	JRE	PLAN SUBMISSION
2	11/21/17	KAL	JRE	ADDRESS VADED COMMENTS
3	2/16/18	KAL	JRE	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	JRE	ADDRESS VADED COMMENTS

REVISIONS:

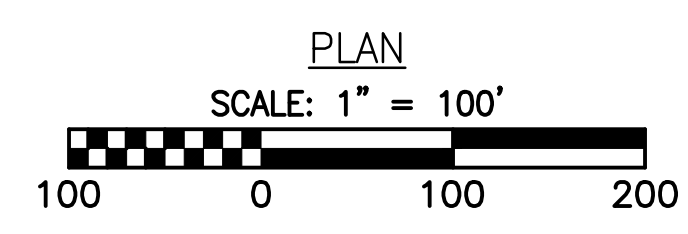
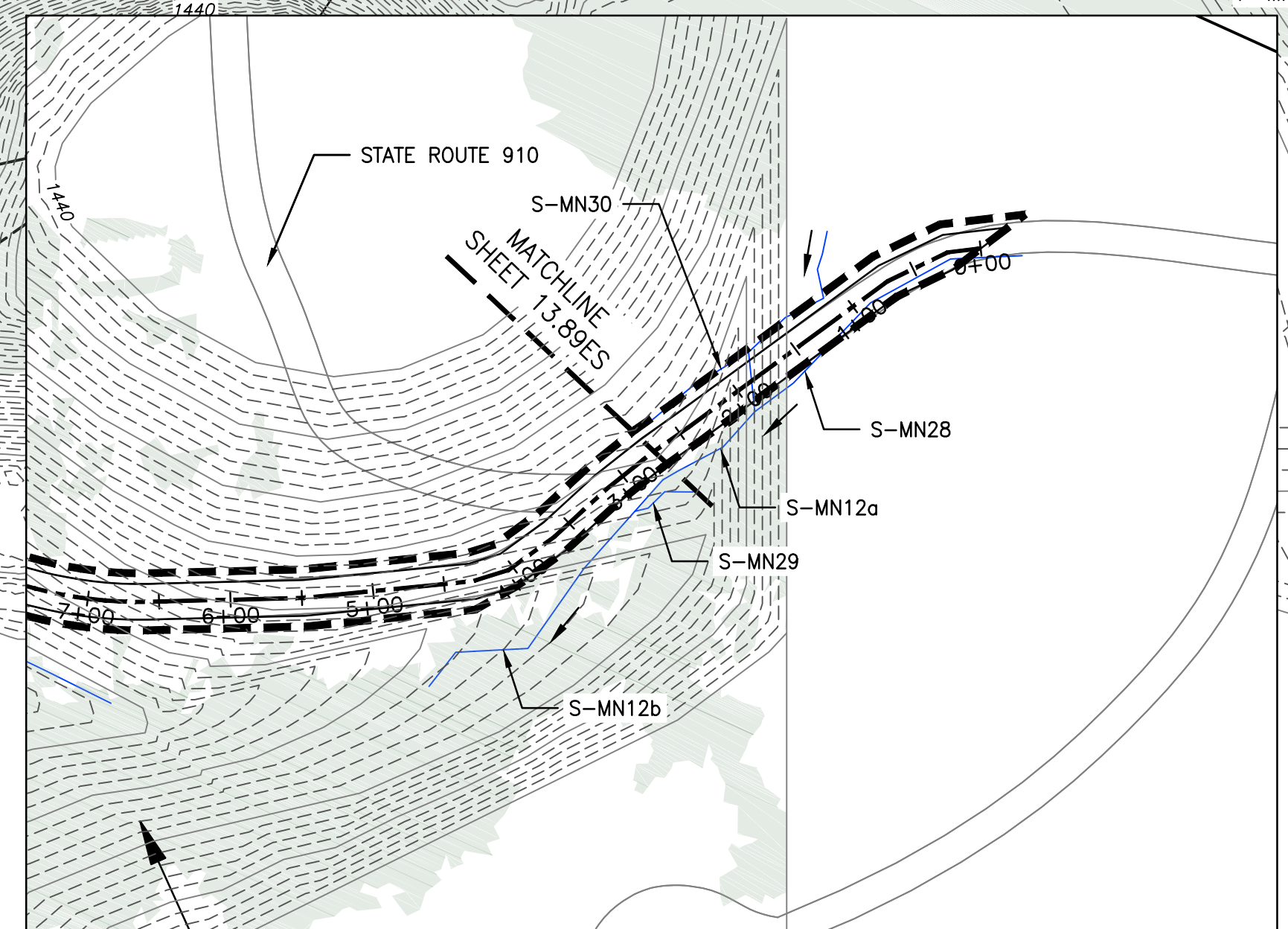
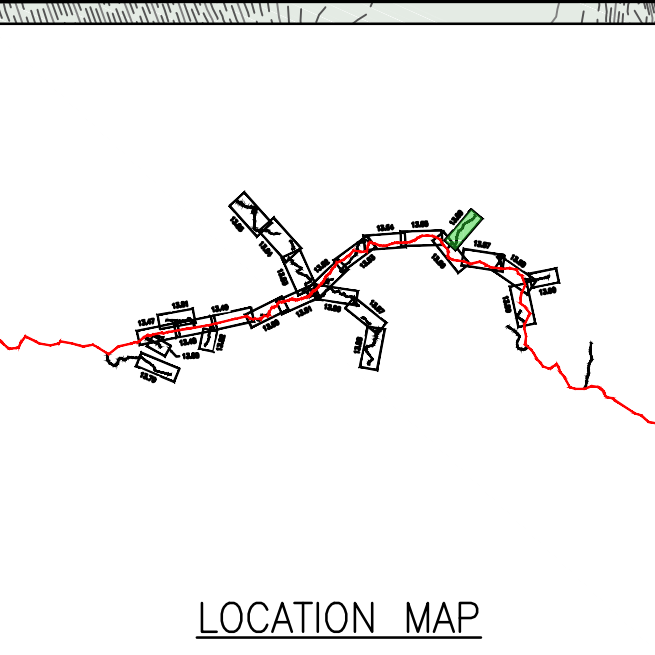
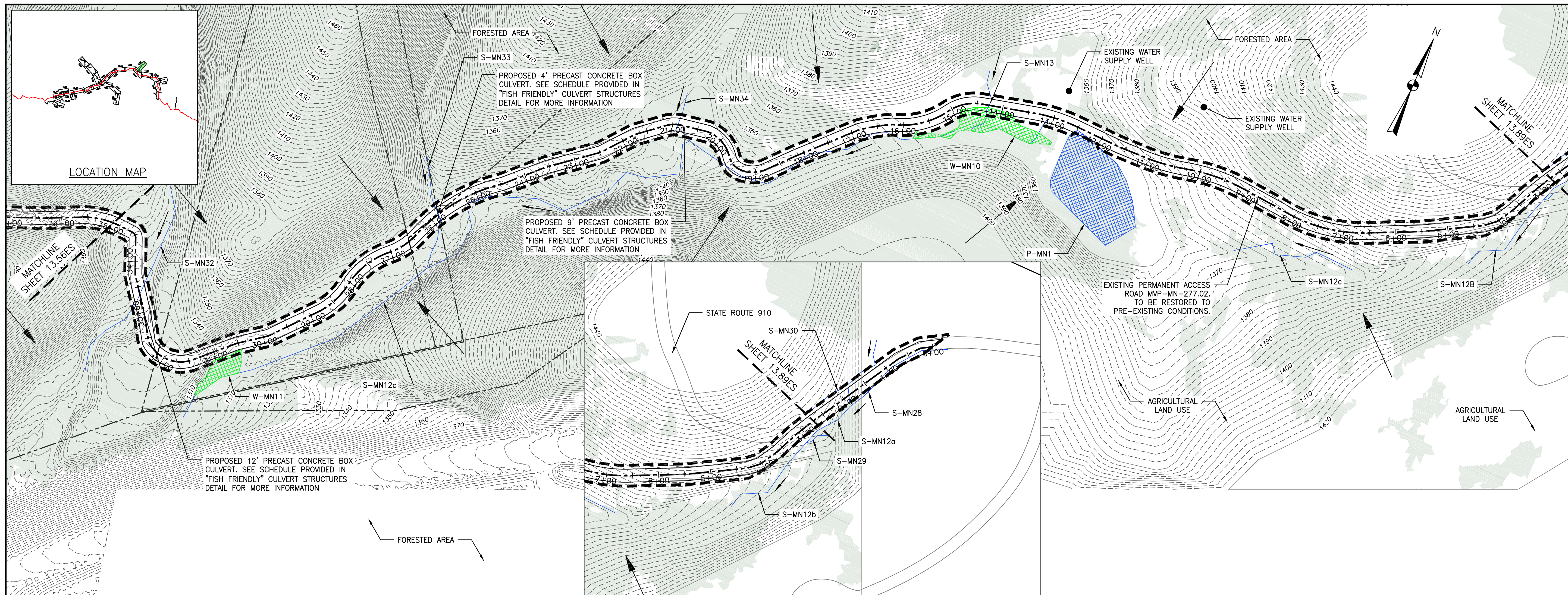
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
 2200 ENERGY DRIVE
 CANONSBURG, PA 15311

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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DJW
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHEET NO. 13.8BPC OF 13.90PC



LEGEND

— EXISTING CULVERT	+++++ PROPOSED LEVEL SPREADER	→ STREAM FLOW DIRECTION	▨ STEEP SLOPE AREA
— STREAM	--- PROPOSED PERMANENT RIGHT OF WAY	▬ FEMA 100 YEAR FLOODPLAIN	▨ EXISTING FOREST
--- EXISTING PROPERTY LINE	--- PROPOSED ACCESS ROAD CENTERLINE	▲ PERMANENT WATER BAR 10' END TREATMENT	▨ PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
--- EXISTING STATE LINE	--- PROPOSED PIPELINE	▲ PERMANENT WATER BAR 15' END TREATMENT	▨ TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION
--- EXISTING COUNTY LINE	→ SURFACE WATER FLOW DIRECTION	▲ PERMANENT WATER BAR 20' END TREATMENT	
--- EXISTING ROAD/TRAIL	▨ POND		
--- USDA FOREST SERVICE (NATIONAL FOREST) LANDS	▨ WETLAND		
--- APPALACHIAN NATIONAL SCENIC TRAIL	▲ PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)		
--- ACID FORMING MATERIAL	● APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)		
--- PROPOSED LEVEL SPREADER DIVERSION			
--- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)			
--- PROPOSED LIMIT OF DISTURBANCE			

NOTES:

- NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
- IN AREAS OF RIDGETOP AS NOTED IN THE TABLE ON THE LAST SHEET OF THIS PLAN SET, WATERBARS WITH END TREATMENT LENGTHS OF 10-FT WILL BE PLACED ON EITHER END.

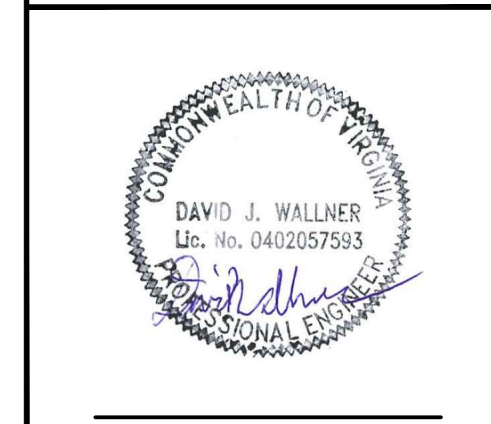
NO.	DATE	CHKD.	APPD.	DESCRIPTION
1	9/21/17	KAL	DW	PLAN SUBMISSION
2	11/21/17	KAL	DW	ADDRESS VADED COMMENTS
3	2/7/18	KAL	DW	RESUBMISSION USING APPROVED STORMWATER METHODOLOGY
4	3/5/18	KAL	DW	ADDRESS VADED COMMENTS

REVISIONS:

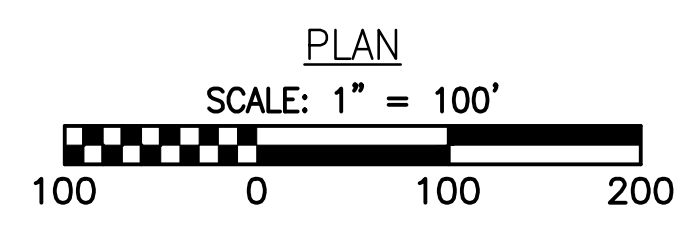
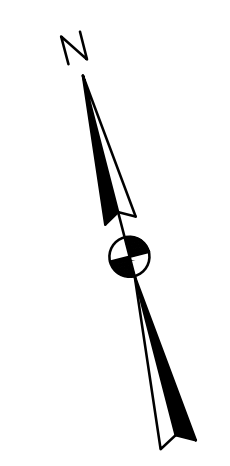
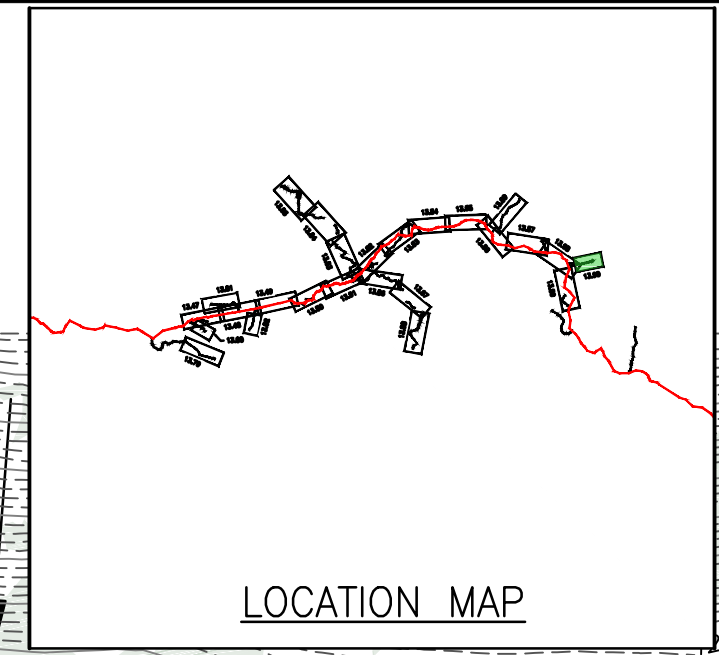
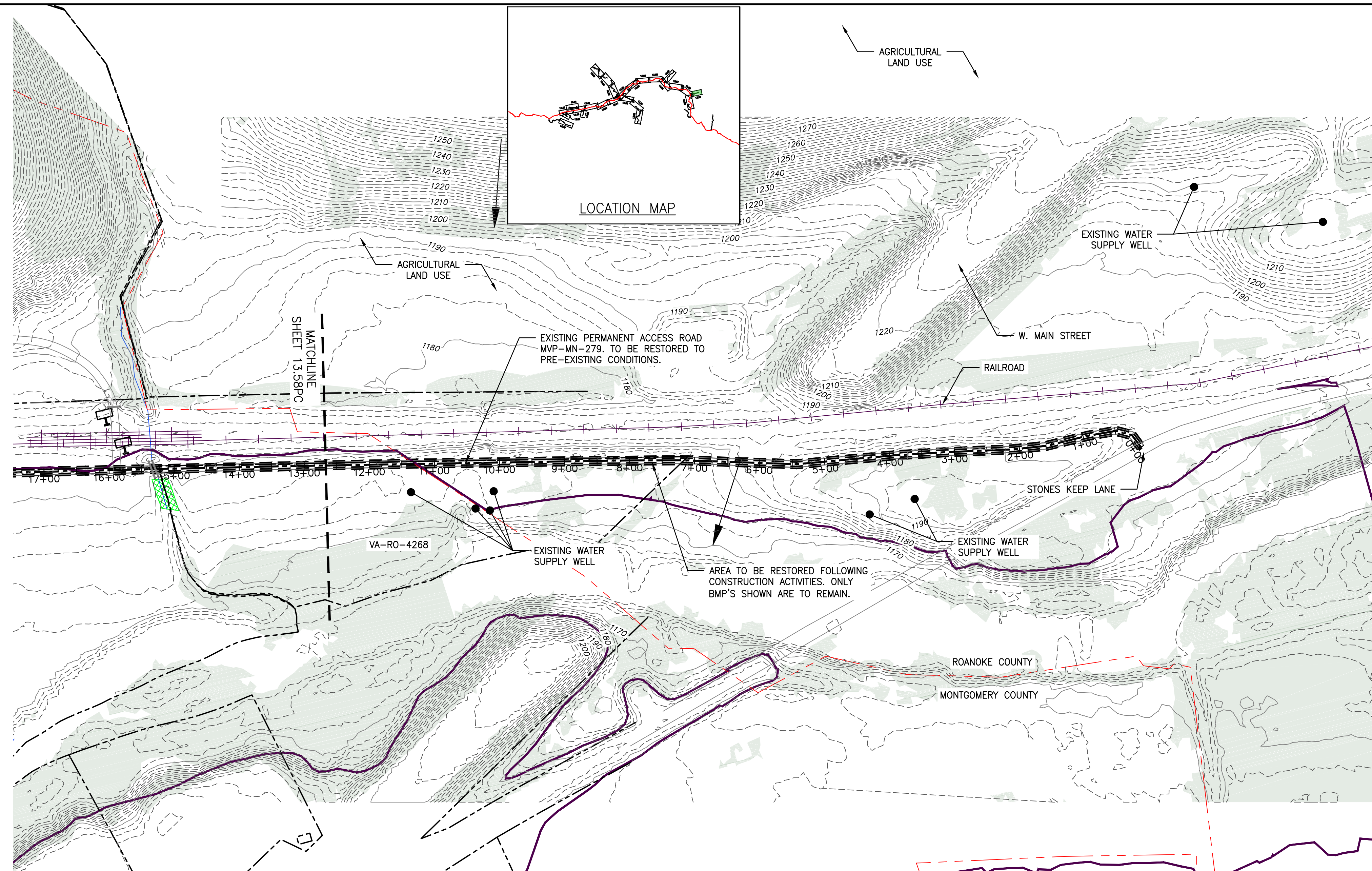
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
 SPREAD 9 - MONTGOMERY COUNTY, VIRGINIA
MOUNTAIN VALLEY PIPELINE, LLC
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POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS



DRAWN BY: KAL
 CHECKED BY: JRE
 APPROVED BY: DWJ
 DATE: 11/21/2017
 SCALE: AS SHOWN
 SHT. NO. 13.89PC OF 13.90PC



LEGEND

- EXISTING CULVERT
- STREAM
- - - EXISTING PROPERTY LINE
- - - EXISTING STATE LINE
- - - EXISTING COUNTY LINE
- - - EXISTING ROAD/TRAIL
- USDA FOREST SERVICE (NATIONAL FOREST) LANDS
- APPALACHIAN NATIONAL SCENIC TRAIL
- ACID FORMING MATERIAL
- PROPOSED LEVEL SPREADER DIVERSION
- GRASS-LINED CHANNEL (SEE DETAIL MVP-ES39)
- PROPOSED LIMIT OF DISTURBANCE
- ++++ PROPOSED LEVEL SPREADER
- - - PROPOSED PERMANENT RIGHT OF WAY
- - - PROPOSED ACCESS ROAD CENTERLINE
- PROPOSED PIPELINE
- SURFACE WATER FLOW DIRECTION
- POND
- WETLAND
- PROPOSED CULVERT WITH OUTLET PROTECTION (SEE DETAILS MVP-ES7, 7.1)
- APPROXIMATE LOCATION OF WATER BAR END TREATMENTS (PENDING FIELD CONDITIONS)
- STREAM FLOW DIRECTION
- FEMA 100 YEAR FLOODPLAIN
- PERMANENT WATER BAR 10' END TREATMENT
- PERMANENT WATER BAR 15' END TREATMENT
- PERMANENT WATER BAR 20' END TREATMENT
- STEEP SLOPE AREA
- EXISTING FOREST
- PERMANENT EASEMENT RESTORED TO MEADOW CONDITION
- TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION

NOTES:

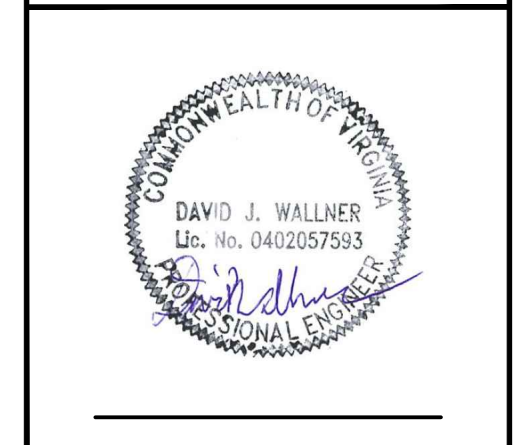
1. NOTE THAT ALL WATERBARS REGARDLESS OF SPECIFIED CALCULATION LENGTH TO BE INSTALLED AT 20-FT END TREATMENT LENGTH, EXCEPT AT NOTED IN NOTE 2 BELOW.
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ADDRESS VADED COMMENTS	DW	
RESUBMISSION USING APPROVED STORMWATER METHODOLOGY	JRE	
ADDRESS VADED COMMENTS	KAL	
PLAN SUBMISSION	JRE	
DESCRIPTION:	CHKD:	APPD:
NO.:	DATE:	NO.:

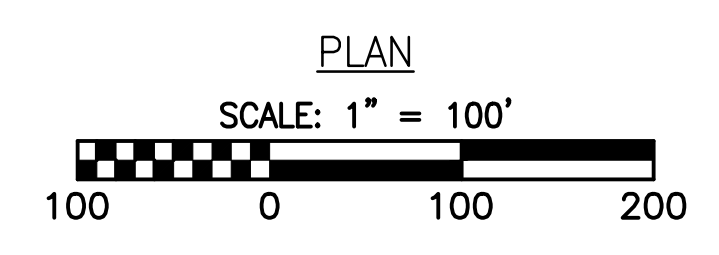
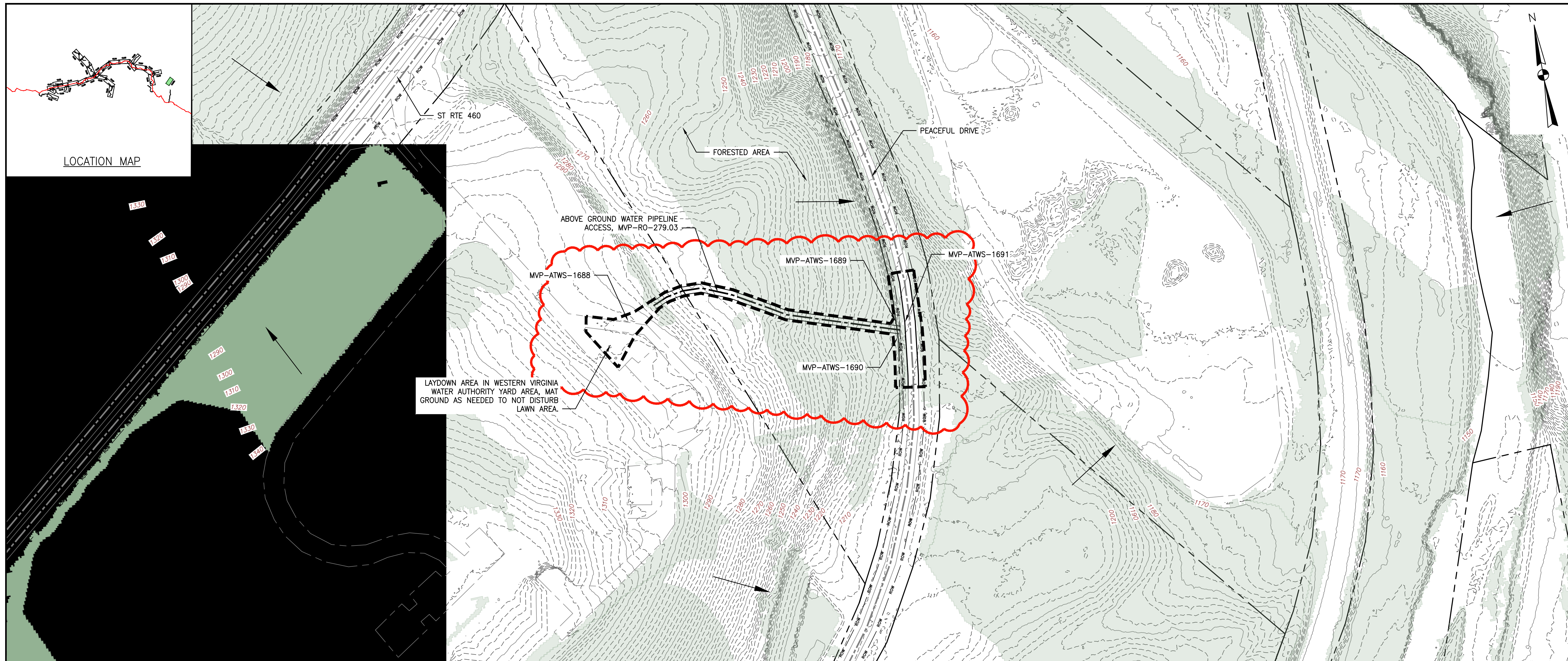
Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
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POST CONSTRUCTION
 (STORMWATER &
 RESTORATION) PLANS



DRAWN BY:	KAL
CHECKED BY:	JRE
APPROVED BY:	DW
DATE:	11/21/2017
SCALE:	AS SHOWN
SHT. NO. 13.90PC	OF 13.90PC



LEGEND

---	EXISTING PROPERTY LINE	—	STREAM
—1160—	EXISTING CONTOUR (MAJOR)	—	FEMA 100 YEAR FLOODPLAIN
- - -	EXISTING CONTOUR (MINOR)		
—	EXISTING ROAD CENTERLINE		
—	EXISTING EDGE OF ROAD (SURVEYED)		
- - -	PROPOSED LIMIT OF DISTURBANCE		
→	FLOW DIRECTION		
■	EXISTING FOREST		
■	TEMPORARY EASEMENT RESTORED TO BRUSH CONDITION		

NO.	DATE	BY	CHKD.	APPD.	DESCRIPTION
0	08-10-22	JUZ	DCW	TD	ADDITION OF MVP-ATWS 1681 AND 1680

Mountain Valley Pipeline
POST CONSTRUCTION (STORMWATER & RESTORATION) PLANS
MOUNTAIN VALLEY PIPELINE PROJECT - H600 LINE
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POST CONSTRUCTION
 (STORMWATER &
 RESTORATION) PLANS



DRAWN BY:	JUZ
CHECKED BY:	DW
APPROVED BY:	TD
DATE:	01/27/2022
SCALE:	AS SHOWN
SHT. NO. 13.90APC OF 13.91PC	REVISION