RIGHT-OF-WAY & OWNERSHIP DATA

RIGHT-OF-WAY & OWNERSHIP DATA	11431+43	VA-MO-002 4358 LF 4530 SLOPE	11475+01	VA-MO-200.056 298 LF 300 SLOPE	11477+99 STATE ROUTE 621 49 LF - 51 SLOPE 11478+48	VA-MO-200.056 268 LF 280 SLOPE	11481+16

DESIGN						
PIPE / COATING	11431+43	1	11478+83	4	11487+63	1	11481+16
SLOPE DISTANCE		4815'		80'		266'	
CLASS LOCATION / HCA		1					

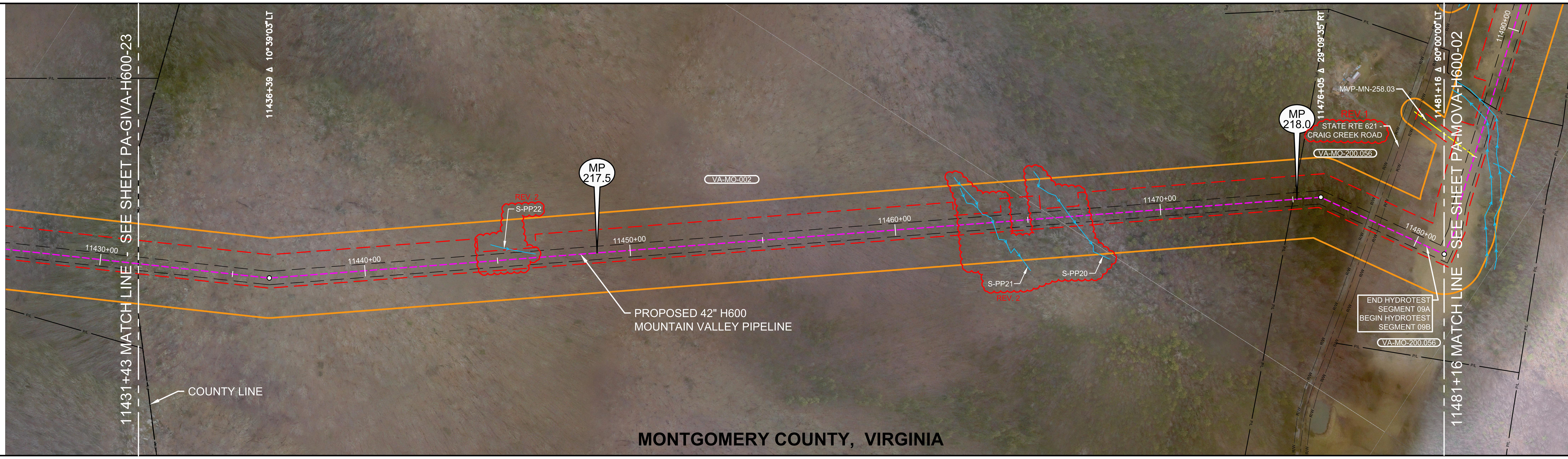
ENVIRONMENTAL		
CONSTRUCTION EXCLUSION		
WETLAND / STREAM	S-PP21 6 LF	S-PP20 4 LF
.		
.		

PLAN VIEW

0' 100' 200' 400'

LEGEND

- STUDY CORRIDOR
- PROPOSED 42"PIPELINE
- NON-SURVEYED C/L
- 500' TICK MARK
- EXISTING PIPELINE
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- PERMANENT ACCESS RD
- TEMPORARY ACCESS RD
- ANCILLARY SITE
- COUNTY LINE
- PROPERTY LINE
- ROAD RIGHT-OF-WAY
- FENCE LINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- C/L ROAD
- C/L RAILROAD
- DELINEATED STREAM
- DELINEATED WETLAND
- BARRACADE FENCE
- PI SYMBOL
- PROPOSED TEST STATION
- MAILBOX
- LINE MARKER - VENT PIPE
- POWER/TELE POLE
- SIGN
- TOWER LEG
- TREE
- GUY ANCHOR
- TANK
- GAS VALVE
- WELL - GAS/OIL/WATER/ MONITORING
- POST - GATE/FENCE
- ELEC/GAS/WTR METER
- PEDESTAL - UTILITY
- MH - SANITARY/WATER
- CATCH BASIN - CULVERT
- ADDITIONAL TEMPORARY WORK SPACE(ATWS)
- ABOVE GROUND FACILITY
- LIMITS OF DISTURBANCE



AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

REV 4.0.0 - ISSUED TO FERC

REFERENCE DRAWINGS

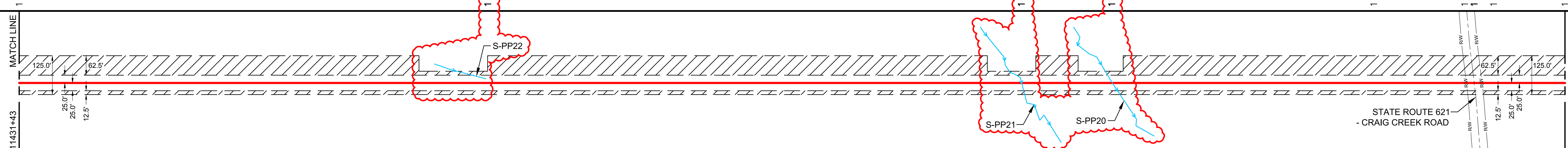
DRAWING NO.	DESCRIPTION

HORIZONTAL STATIONING

- 11431+43 MATCH LINE, END CRAIG COUNTY, BEGIN MONTGOMERY COUNTY, PROPERTY LINE
- REV. 2 11436+39 ℄ STREAM(S-PP22)11' LT
- REV. 2 11463+69 ℄ STREAM(S-PP21)
- 11466+60 ℄ STREAM(S-PP20)
- 11475+01 PROPERTY LINE
- 11477+98 RIGHT-OF-WAY
- 11478+23 ℄ STATE ROUTE 621 - CRAIG CREEK ROAD
- 11478+48 RIGHT-OF-WAY
- 11481+16 MATCH LINE

WORK SPACE

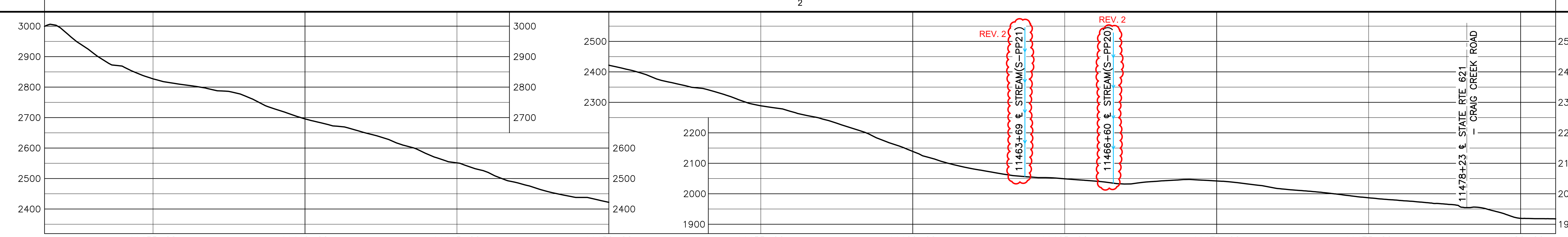
- PROPOSED PIPELINE
- EXISTING PIPELINE
- ACCESS ROAD TEMPORARY WORK SPACE
- PERMANENT EASEMENT
- TEMPORARY WORK SPACE(TWS)
- ADD. TEMPORARY WORK SPACE(ATWS)



CONSTRUCTION METHOD: 2

CONSTRUCTION METHOD KEY
1 - TYPICAL R/W CONFIGURATION
2 - TYPICAL R/W CONFIGURATION
3 - TYPICAL "SKINNEY" FOR WATER BODY
4 -
5 -
6 -
7 -
8 -
9 -
10 -
11 -
12 -
13 -
14 -
15 -
16 -

PROFILE



HOLLAND ENGINEERING
220 Hoover Boulevard, Suite 2
Holland, Michigan 49423-3766
T 616-392-5938 F 616-392-2116
26555 Evergreen Rd. Suite. 430
Southfield, Michigan 48076
T 248-827-7322 F 248-827-7549
www.hollandengineering.com

REVISIONS

REV.	BY	DATE	DESCRIPTION
0	HEI	10-15-15	REV. 4.0.0 ISSUED TO FERC
1	HEI	01-12-16	FERC DATA REQUEST 21 - ADDED ROAD NAME AND FERC DATA REQUEST 21 - ADDED NHD WATERBODY
2	HEI	04-13-16	FERC DATA REQUEST NO.2

MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
1	5081	42"O.D. X 0.617"W.T., X-70, FUSION BONDED EPOXY
4	80	42"O.D. X 0.740"W.T., X-70, FBE & ARO
		TYPE 1 TEST STATION - PIPELINE
		TYPE 4 TEST STATION - FOREIGN CROSSING

APPROVED FOR CONSTRUCTION		
REV.	BY	DATE
.	.	.

APPROVED FOR BIDDING		
REV.	BY	DATE
.	.	.

APPROVED FOR FERC		
REV.	BY	DATE
0	RRR	10-15-15

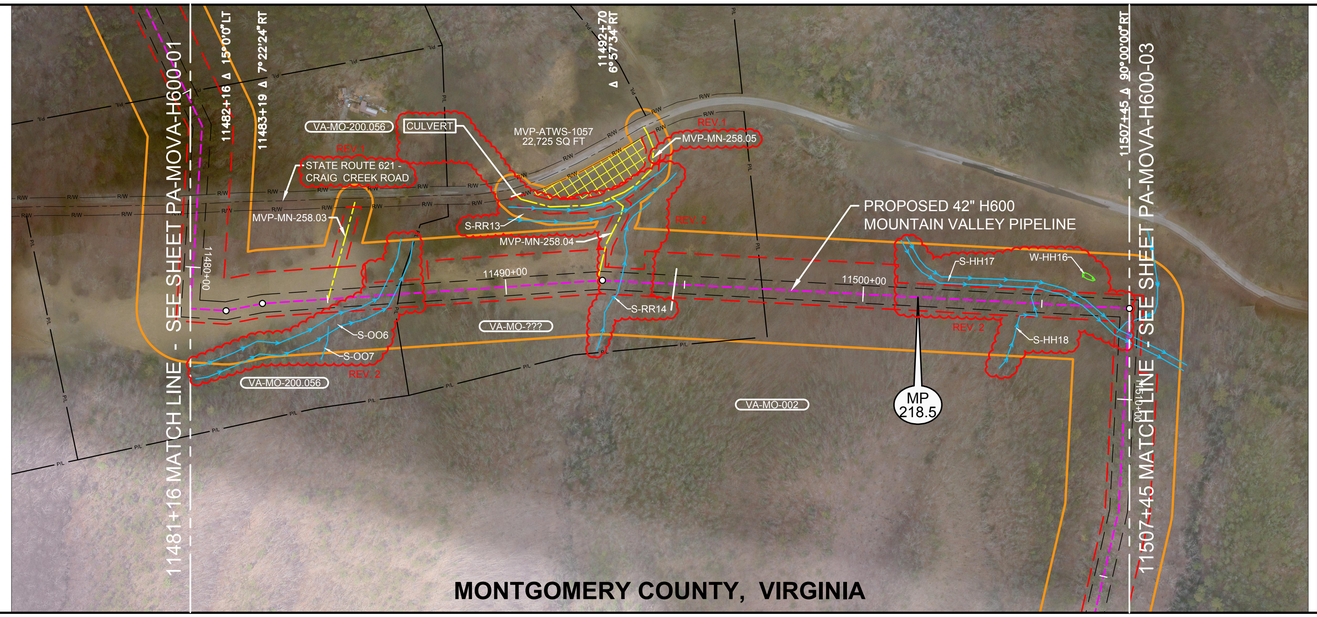
Mountain Valley PIPELINE

PIPELINE ALIGNMENT
MOUNTAIN VALLEY PROJECT - H600 LINE
A-1 PRECINCT.,MONTGOMERY CO.,VA.
STA. 11431+43 TO STA. 11481+16

HORZ. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	02/11/15
DRAFTING CK:	.
ENGINEERING CK:	.
CONSTRUCTION CK:	.
ENVIRONMENTAL CK:.	.
AFE/P.O.NO.:	
HEI PROJECT NO.: 14-10-052	
DRAWING NO.: PA-MOVA-H600 -01	
SHEET 239 OF 326	REV. 2
DATE OF PLOT: 04/20/16 12:02 PM	

RIGHT-OF-WAY & OWNERSHIP DATA

		11481+16										11507+45
			VA-MO-200.056	VA-MO-???	VA-MO-???	VA-MO-???	VA-MO-???	VA-MO-???	VA-MO-???	VA-MO-002		
			576 LF 576 SLOPE	11486+92 36 LF 36 SLOPE	11487+28 713 LF 715 SLOPE	11494+41 69 LF 70 SLOPE	11495+10 208 LF 208 SLOPE	11497+18 1027 LF 1034 SLOPE				
DESIGN	PIPE / COATING	11481+16	1									11507+45
	SLOPE DISTANCE	2632'										
	CLASS LOCATION / HCA	1										
ENVIRONMENTAL	CONSTRUCTION EXCLUSION											
	WETLAND / STREAM		REV. 2 S-006 40 LF			REV. 2 S-RR14 7 LF				REV. 2 S-HH18 | S-HH17 6 LF | 18 LF		
	.											
	.											



0' 100' 200' 400'

PLAN VIEW

LEGEND

- STUDY CORRIDOR
- PROPOSED 42"PIPELINE
- NON-SURVEYED C/L
- 500' TICK MARK
- EXISTING PIPELINE
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- PERMANENT ACCESS RD
- TEMPORARY ACCESS RD
- ANCILLARY SITE
- COUNTY LINE
- PROPERTY LINE
- ROAD RIGHT-OF-WAY
- FENCE LINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- C/L ROAD
- C/L RAILROAD
- DELINEATED STREAM
- DELINEATED WETLAND
- BARRACADE FENCE
- PI SYMBOL
- PROPOSED TEST STATION
- MAILBOX
- LINE MARKER - VENT PIPE
- POWER/TELE POLE
- SIGN
- TOWER LEG
- TREE
- GUY ANCHOR
- TANK
- GAS VALVE
- WELL - GAS/OIL/WATER/ MONITORING
- POST - GATE/FENCE
- ELEC/GAS/WTR METER
- PEDESTAL - UTILITY
- MH - SANITARY/WATER
- CATCH BASIN - CULVERT
- ADDITIONAL TEMPORARY WORK SPACE(ATWS)
- ABOVE GROUND FACILITY
- LIMITS OF DISTURBANCE

REFERENCE DRAWINGS

DRAWING NO.	DESCRIPTION

HORIZONTAL STATIONING

WORK SPACE

- PROPOSED PIPELINE
- EXISTING PIPELINE
- ACCESS ROAD TEMPORARY WORK SPACE
- PERMANENT EASEMENT
- TEMPORARY WORK SPACE(TWS)
- ADD. TEMPORARY WORK SPACE(ATWS)

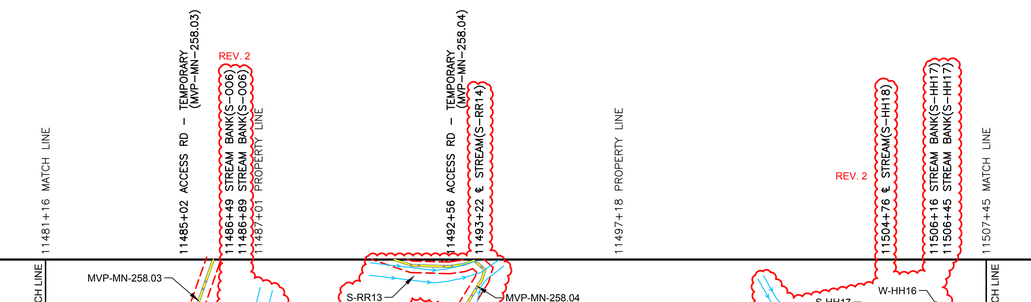
CONSTRUCTION METHOD

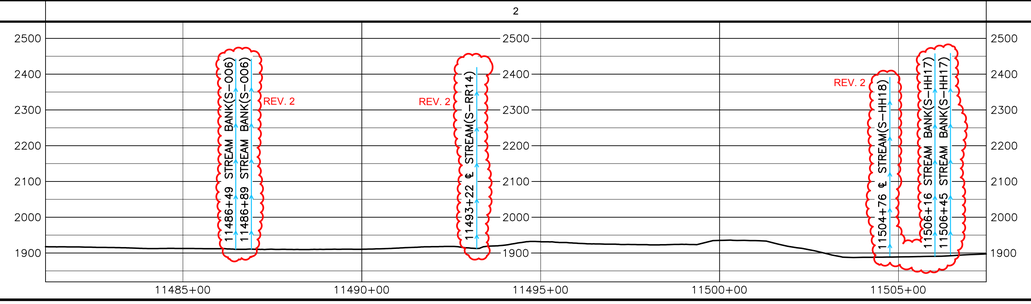
CONSTRUCTION METHOD KEY

1 - TYPICAL R/W CONFIGURATION
2 - TYPICAL R/W CONFIGURATION
3 - TYPICAL "SKINNEY" FOR WATER BODY
4 -
5 -
6 -
7 -
8 -
9 -
10 -
11 -
12 -
13 -
14 -
15 -
16 -

PROFILE

REV 4.0.0 - ISSUED TO FERC





HOLLAND ENGINEERING

220 Hoover Boulevard, Suite 2 | 26595 Evergreen Rd. Suite 430
Holland, Michigan 49423-3786 | Southfield, Michigan 48076
T 616.396.0808 F 616.392.5727 | T 248.827.7222 F 248.827.7049
www.hollandengineering.com

REVISIONS

REV.	BY	DATE	DESCRIPTION
0	HEI	10-1-15	REV. 4.0.0 ISSUED TO FERC
1	HEI	01-12-16	FERC DATA REQUEST 21 - MVP-MN-258.05 ADDED ROAD NAME AND FERC DATA REQUEST 21 - ADDED NHD WATERBODY
2	HEI	04-13-16	FERC DATA REQUEST REV 2

AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
1	2632	42"O.D. X 0.617"W.T. X70 FBE BONDED EPOXY
		TYPE 1 TEST STATION - PIPELINE
		TYPE 4 TEST STATION - FOREIGN CROSSING

APPROVED FOR CONSTRUCTION		
REV.	BY	DATE
-	-	-

APPROVED FOR BIDDING		
REV.	BY	DATE
-	-	-

APPROVED FOR FERC		
REV.	BY	DATE
0	HRR	10-15-15

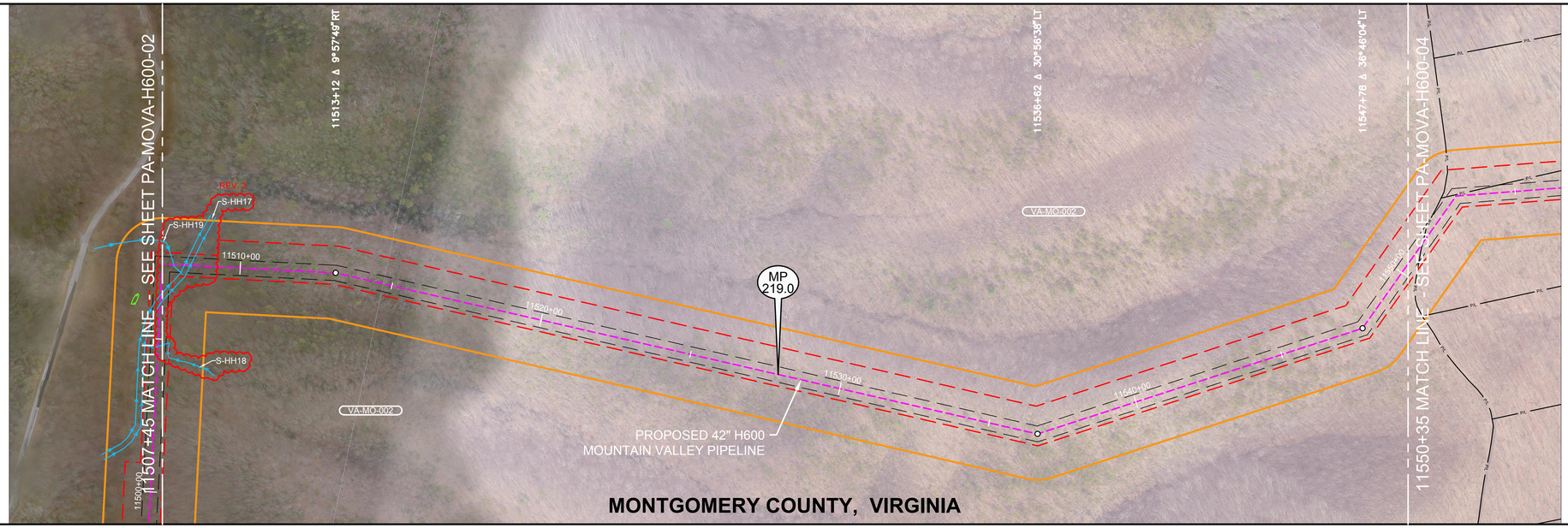
Mountain Valley PIPELINE

PIPELINE ALIGNMENT

MOUNTAIN VALLEY PROJECT - H600 LINE
A-1 PRECINCT.,MONTGOMERY CO.,VA.
STA. 11481+16 TO STA. 11507+45

HORZ. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	02/11/15
DRAFTING CK:	.
ENGINEERING CK:	.
CONSTRUCTION CK:	.
ENVIRONMENTAL CK:	.
AFE/P.O.NO.:	
HEI PROJECT NO.: 14-10-052	
DRAWING NO.:	
PA-MOVA-H600 -02	
SHEET 240 OF 326	REV. 2
DATE OF PLOT: 04/20/16 1:59 PM	

RIGHT-OF-WAY & OWNERSHIP DATA		11507+45	VA-MO-002 4290 LF 4422 SLOPE	11550+35
DESIGN	PIPE / COATING	11507+45	1	11550+35
	SLOPE DISTANCE		4422'	
	CLASS LOCATION / HCA		1	
ENVIRONMENTAL	CONSTRUCTION EXCLUSION			
	WETLAND / STREAM	REV. 2: S-HH19 4 LF; S-HH17 19 LF		
	.			
	.			



0' 100' 200' 400'

PLAN VIEW

LEGEND

- STUDY CORRIDOR
- PROPOSED 42"PIPELINE
- NON-SURVEYED C/L
- 500' TICK MARK
- EXISTING PIPELINE
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- PERMANENT ACCESS RD
- TEMPORARY ACCESS RD
- ANCILLARY SITE
- COUNTY LINE
- PROPERTY LINE
- ROAD RIGHT-OF-WAY
- FENCE LINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- C/L ROAD
- C/L RAILROAD
- DELINEATED STREAM
- DELINEATED WETLAND
- BARRACADE FENCE
- PI SYMBOL
- PROPOSED TEST STATION
- MAILBOX
- LINE MARKER - VENT PIPE
- POWER/TELE POLE
- SIGN
- TOWER LEG
- TREE
- GUY ANCHOR
- TANK
- GAS VALVE
- WELL - GAS/OIL/WATER/ MONITORING
- POST - GATE/FENCE
- ELEC/GAS/WTR METER
- PEDESTAL - UTILITY
- MH - SANITARY/WATER
- CATCH BASIN - CULVERT
- ADDITIONAL TEMPORARY WORK SPACE(ATWS)
- ABOVE GROUND FACILITY
- LIMITS OF DISTURBANCE

REFERENCE DRAWINGS

DRAWING NO.	DESCRIPTION

HORIZONTAL STATIONING

WORK SPACE

- PROPOSED PIPELINE
- EXISTING PIPELINE
- ACCESS ROAD TEMPORARY WORK SPACE
- PERMANENT EASEMENT
- TEMPORARY WORK SPACE(TWS)
- ADD. TEMPORARY WORK SPACE(ATWS)

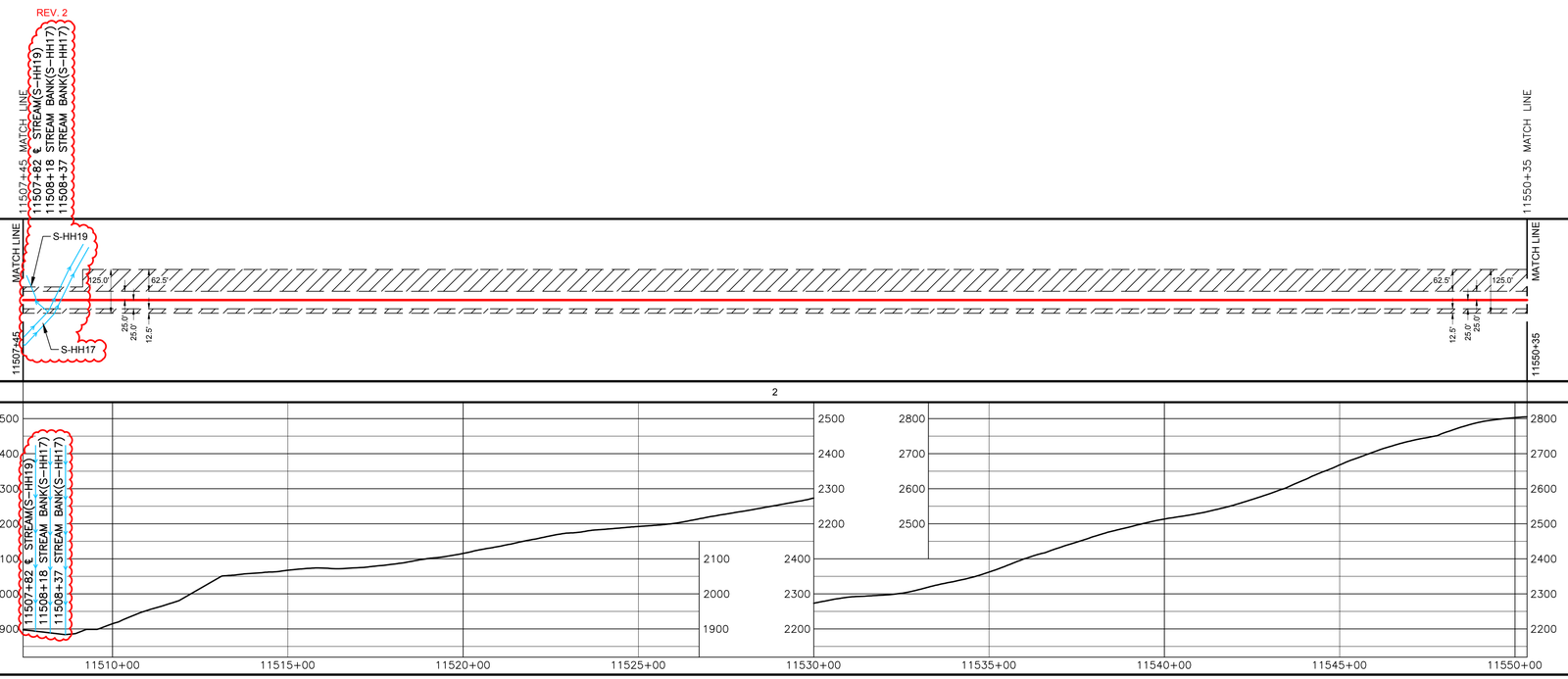
CONSTRUCTION METHOD

CONSTRUCTION METHOD KEY

1 - TYPICAL R/W CONFIGURATION
2 - TYPICAL R/W CONFIGURATION
3 - TYPICAL "SKINNEY" FOR WATER BODY
4 -
5 -
6 -
7 -
8 -
9 -
10 -
11 -
12 -
13 -
14 -
15 -
16 -

PROFILE

REV 4.0.0 - ISSUED TO FERC



HOLLAND ENGINEERING

220 Hoover Boulevard, Suite 2 | 26555 Evergreen Rd, Suite 430
Holland, Michigan 49423-3786 | Southfield, Michigan 48076
T 616.396.0500 F 616.392.5727 | T 248.827.7222 F 248.827.7049
www.hollandengineering.com

REVISIONS

REV.	BY	DATE	DESCRIPTION
4.0.0	HEI	10-15-15	REV. 4.0.0 ISSUED TO FERC
1	HEI	01-12-16	FERC DATA REQUEST 21 - ADDED NHD WATERBODY
2	HEI	04-13-16	FERC DATA REQUEST No.2

AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
	4422'	42"O.D. X 0.617"W.T. API 5L X70 FBE BONDED EPOXY
1		TYPE 1 TEST STATION - PIPELINE
4		TYPE 4 TEST STATION - FOREIGN CROSSING

APPROVED FOR CONSTRUCTION			APPROVED FOR BIDDING			APPROVED FOR FERC			
REV.	BY	DATE	REV.	BY	DATE	REV.	BY	DATE	
-	-	-	-	-	-	0	HRR	10-15-15	

Mountain Valley PIPELINE

PIPELINE ALIGNMENT

MOUNTAIN VALLEY PROJECT - H600 LINE
A-1 PRECINCT., MONTGOMERY CO., VA.
STA. 11507+45 TO STA. 11550+35

HORZ. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	02/11/15
DRAFTING CK:	.
ENGINEERING CK:	.
CONSTRUCTION CK:	.
ENVIRONMENTAL CK:	.
AFE/P.O.NO.:	
HEI PROJECT NO.: 14-10-052	
DRAWING NO.: PA-MOVA-H600 -03	
SHEET 241 OF 326	REV. 0
DATE OF PLOT: 04/20/16 12:16 PM	

RIGHT-OF-WAY & OWNERSHIP DATA

Station range	Parcel(s)	Length
11550+35 – 11552+73	VA-MO-002 / VA-MO-3369	238 LF 239 SLOPE
11552+73 – 11553+55	VA-MO-002 / VA-MO-3370 / VA-MO-3369	82 LF 84 SLOPE
11553+55 – 11558+66	VA-MO-3370 / VA-MO-3369	511 LF 526 SLOPE
11558+66 – 11577+01	VA-MO-3369	1835 LF 1857 SLOPE
11577+01 – 11582+87	VA-MO-3369 / VA-MO-3368	586 LF 610 SLOPE
11582+87 – 11589+39	VA-MO-3368	652 LF 688 SLOPE
11589+39 – 11590+75	VA-MO-3368 / VA-MO-3367	136 LF 137 SLOPE
11590+75 – 11595+19	VA-MO-3367	444 LF 446 SLOPE
11595+19 – 11596+58	VA-MO-3367 / VA-MO-3366	139 LF 140 SLOPE
11596+58 – 11600+21	VA-MO-3366	363 LF 372 SLOPE

DESIGN

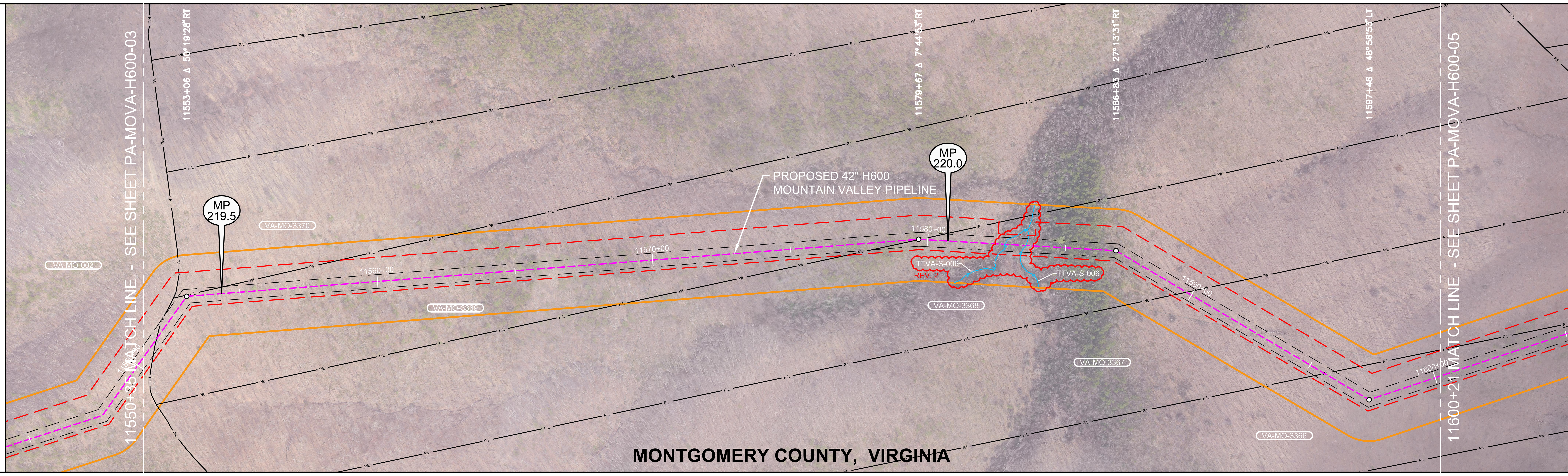
	11550+35 – 11600+21
PIPE / COATING	1
SLOPE DISTANCE	5099'
CLASS LOCATION / HCA	1

ENVIRONMENTAL

CONSTRUCTION EXCLUSION	
WETLAND / STREAM	REV. 2 — TTVA-S-006: 7 LF; TTVA-S-006: 7 LF
.	
.	

0' 100' 200' 400'

PLAN VIEW



LEGEND

- STUDY CORRIDOR
- PROPOSED 42"PIPELINE
- NON-SURVEYED C/L
- 500' TICK MARK
- EXISTING PIPELINE
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- PERMANENT ACCESS RD
- TEMPORARY ACCESS RD
- ANCILLARY SITE
- COUNTY LINE
- PROPERTY LINE
- ROAD RIGHT-OF-WAY
- FENCE LINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- C/L ROAD
- C/L RAILROAD
- DELINEATED STREAM
- DELINEATED WETLAND
- BARRACADE FENCE
- PI SYMBOL
- PROPOSED TEST STATION
- MAILBOX
- LINE MARKER - VENT PIPE
- POWER/TELE POLE
- SIGN
- TOWER LEG
- TREE
- GUY ANCHOR
- TANK
- GAS VALVE
- WELL - GAS/OIL/WATER/ MONITORING
- POST - GATE/FENCE
- ELEC/GAS/WTR METER
- PEDESTAL - UTILITY
- MH - SANITARY/WATER
- CATCH BASIN - CULVERT
- ADDITIONAL TEMPORARY WORK SPACE(ATWS)
- ABOVE GROUND FACILITY
- LIMITS OF DISTURBANCE

AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

REV 4.0.0 - ISSUED TO FERC

REFERENCE DRAWINGS

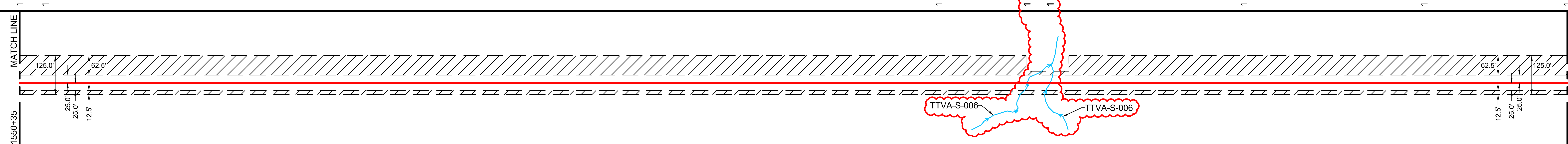
DRAWING NO.	DESCRIPTION

HORIZONTAL STATIONING

- 11550+35 MATCH LINE
- 11551+18 PROPERTY LINE
- 11579+72 PROPERTY LINE
- 11582+81 ℄ STREAM(TTVA-S-006) (REV. 2)
- 11583+55 ℄ STREAM(TTVA-S-006) (REV. 2)
- 11589+80 PROPERTY LINE
- 11595+61 PROPERTY LINE
- 11600+21 MATCH LINE

WORK SPACE

- PROPOSED PIPELINE
- EXISTING PIPELINE
- ACCESS ROAD TEMPORARY WORK SPACE
- PERMANENT EASEMENT
- TEMPORARY WORK SPACE(TWS)
- ADD. TEMPORARY WORK SPACE(ATWS)

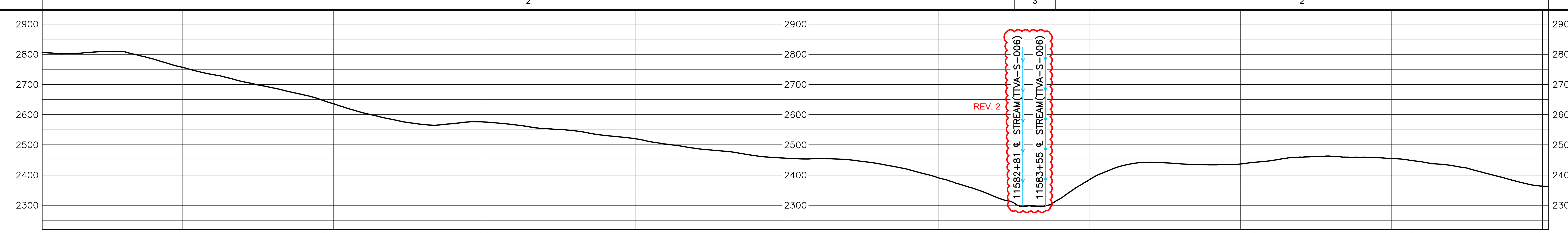


CONSTRUCTION METHOD

11550+35 – 11582+81	11582+81 – 11583+55	11583+55 – 11600+21
2	3	2

CONSTRUCTION METHOD KEY
1 - TYPICAL R/W CONFIGURATION
2 - TYPICAL R/W CONFIGURATION
3 - TYPICAL "SKINNEY" FOR WATER BODY
4 -
5 -
6 -
7 -
8 -
9 -
10 -
11 -
12 -
13 -
14 -
15 -
16 -

PROFILE



MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
1	5099	42"O.D. X 0.617"W.T., X-70, FUSION BONDED EPOXY
		TYPE 1 TEST STATION - PIPELINE
		TYPE 4 TEST STATION - FOREIGN CROSSING

REVISIONS

REV.	BY	DATE	DESCRIPTION
0	HEI	10-15-15	REV. 4.0.0 ISSUED TO FERC
1	HEI	01-12-16	FERC DATA REQUEST 21 - ADDED NHD WATERBODY
2	HEI	04-13-16	FERC DATA REQUEST No.2

APPROVED FOR CONSTRUCTION

REV.	BY	DATE
.	.	.

APPROVED FOR BIDDING

REV.	BY	DATE
.	.	.

APPROVED FOR FERC

REV.	BY	DATE
0	RRR	10-15-15

HOLLAND ENGINEERING
220 Hoover Boulevard, Suite 2, Holland, Michigan 49423-3766, T 616-392-5938 F 616-392-2116
26555 Evergreen Rd. Suite. 430, Southfield, Michigan 48076, T 248-827-7322 F 248-827-7549
www.hollandengineering.com

Mountain Valley PIPELINE

PIPELINE ALIGNMENT

MOUNTAIN VALLEY PROJECT - H600 LINE A-1 & C-3 PCT.,MONTGOMERY CO.,VA. STA. 11550+35 TO STA. 11600+21

HORZ. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	02/11/15
DRAFTING CK:	.
ENGINEERING CK:	.
CONSTRUCTION CK:	.
ENVIRONMENTAL CK:.	.
AFE/P.O.NO.:	
HEI PROJECT NO.: 14-10-052	
DRAWING NO.: PA-MOVA-H600 -04	
SHEET 242 OF 326	REV. 1
DATE OF PLOT: 04/19/16 1:36 PM	

RIGHT-OF-WAY & OWNERSHIP DATA

Station	Ownership	Length
11600+21 – 11600+69	VA-MO-3366	48 LF / 48 SLOPE
11600+69 – 11607+61	VA-MO-3367 / VA-MO-3366	692 LF / 696 SLOPE
11607+61 – 11611+80	VA-MO-3367	419 LF / 428 SLOPE
11611+80 – 11612+16	VA-MO-3372 / VA-MO-3365 / VA-MO-3367	36 LF / 37 SLOPE
11612+16 – 11615+30	VA-MO-3372 / VA-MO-3365	314 LF / 318 SLOPE
11615+30 – 11638+51	VA-MO-3365	2321 LF / 2353 SLOPE
11638+51 – 11640+07	VA-MO-3365 / VA-MO-030	156 LF / 157 SLOPE
11640+07 – 11644+57	VA-MO-030	450 LF / 451 SLOPE
11644+57 – 11645+84	VA-MO-200.073 / VA-MO-032	127 LF / 127 SLOPE
11645+84 – 11653+60	VA-MO-032	776 LF / 778 SLOPE

DESIGN

	11600+21 – 11621+56	11621+56 – 11644+37	11644+37 – 11644+77	11644+77 – 11653+60
PIPE / COATING	1	2	5	2
SLOPE DISTANCE	2163'	2305'	40'	885'
CLASS LOCATION / HCA	1	2		

ENVIRONMENTAL

CONSTRUCTION EXCLUSION

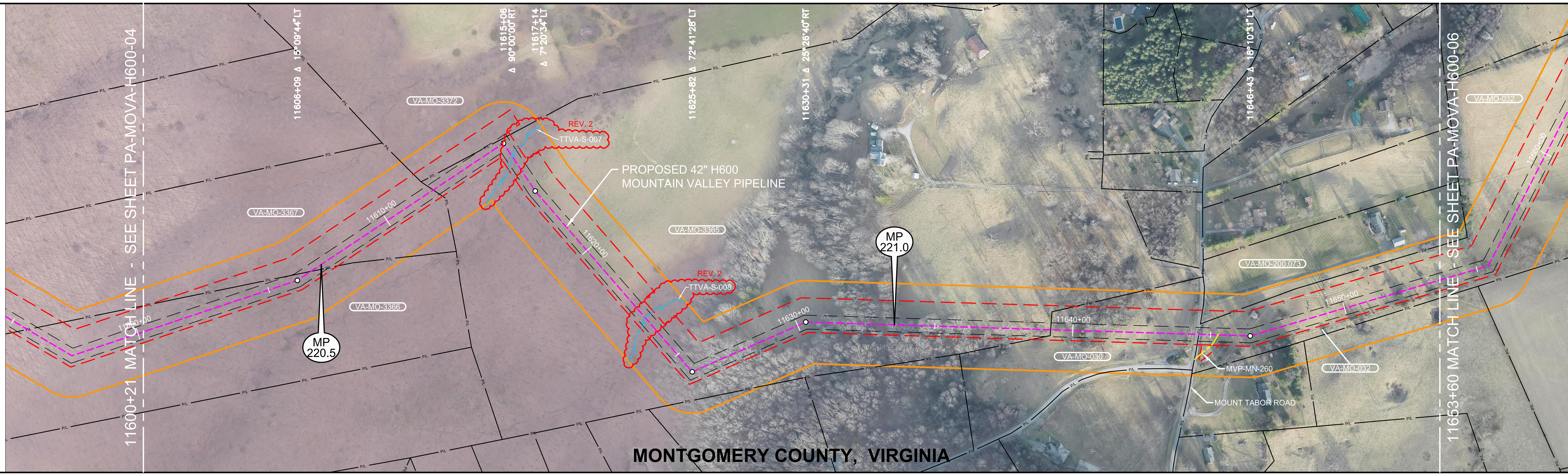
WETLAND / STREAM: REV. 2 TTVA-S-007 2 LF; REV. 2 TTVA-S-008 3 LF

.

.

PLAN VIEW

0' 100' 200' 400'



LEGEND

- STUDY CORRIDOR
- PROPOSED 42"PIPELINE
- NON-SURVEYED C/L
- 500' TICK MARK
- EXISTING PIPELINE
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- PERMANENT ACCESS RD
- TEMPORARY ACCESS RD
- ANCILLARY SITE
- COUNTY LINE
- PROPERTY LINE
- ROAD RIGHT-OF-WAY
- FENCE LINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- C/L ROAD
- C/L RAILROAD
- DELINEATED STREAM
- DELINEATED WETLAND
- BARRACADE FENCE
- PI SYMBOL
- PROPOSED TEST STATION
- MAILBOX
- LINE MARKER - VENT PIPE
- POWER/TELE POLE
- SIGN
- TOWER LEG
- TREE
- GUY ANCHOR
- TANK
- GAS VALVE
- WELL - GAS/OIL/WATER/ MONITORING
- POST - GATE/FENCE
- ELEC/GAS/WTR METER
- PEDESTAL - UTILITY
- MH - SANITARY/WATER
- CATCH BASIN - CULVERT
- ADDITIONAL TEMPORARY WORK SPACE(ATWS)
- ABOVE GROUND FACILITY
- LIMITS OF DISTURBANCE

REV 4.0.0 - ISSUED TO FERC

REFERENCE DRAWINGS

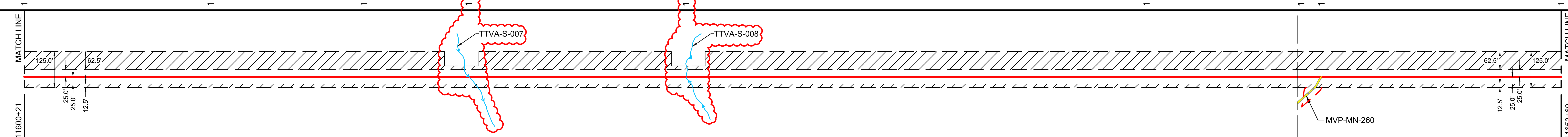
DRAWING NO.	DESCRIPTION

HORIZONTAL STATIONING

- 11600+21 MATCH LINE
- 11606+68 PROPERTY LINE
- 11612+01 PROPERTY LINE
- REV. 2 11615+66 ℄ STREAM(TTVA-S-007)
- REV. 2 11623+20 ℄ STREAM(TTVA-S-008)
- 11639+20 PROPERTY LINE
- 11644+57 ℄ MOUNT TABOR ROAD, PROPERTY LINE
- 11645+27 ACCESS RD -TEMPORARY (MVP-MN-260)
- 11653+60 MATCH LINE

WORK SPACE

- PROPOSED PIPELINE
- EXISTING PIPELINE
- ACCESS ROAD TEMPORARY WORK SPACE
- PERMANENT EASEMENT
- TEMPORARY WORK SPACE(TWS)
- ADD. TEMPORARY WORK SPACE(ATWS)



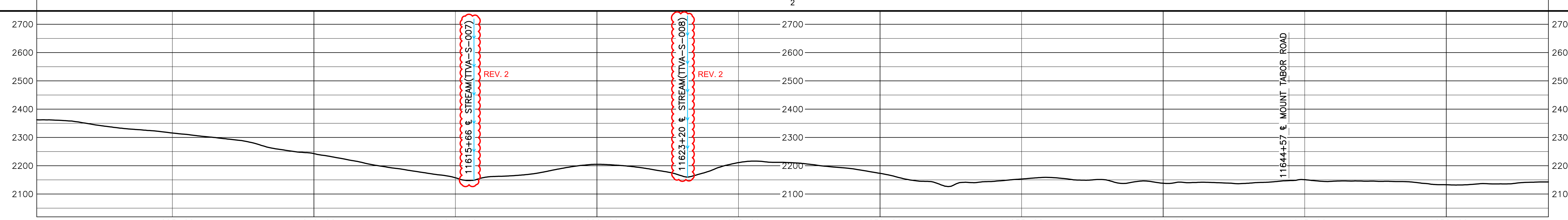
CONSTRUCTION METHOD

2

CONSTRUCTION METHOD KEY

1 - TYPICAL R/W CONFIGURATION
2 - TYPICAL R/W CONFIGURATION
3 - TYPICAL "SKINNEY" FOR WATER BODY
4 -
5 -
6 -
7 -
8 -
9 -
10 -
11 -
12 -
13 -
14 -
15 -
16 -

PROFILE



AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

HOLLAND ENGINEERING
220 Hoover Boulevard, Suite 2, Holland, Michigan 49423-3766, T 616-392-5938 F 616-392-2116
26555 Evergreen Rd. Suite. 430, Southfield, Michigan 48076, T 248-827-7322 F 248-827-7549
www.hollandengineering.com

REVISIONS

REV.	BY	DATE	DESCRIPTION
0	HEI	10-15-15	REV. 4.0.0 ISSUED TO FERC
1	HEI	01-12-16	FERC DATA REQUEST 21 - ADDED NEW WETLAND

MATERIAL SUMMARY

MK. NO.	QTY.	DESCRIPTION
1	2163	42"O.D. X 0.617"W.T., X-70, FUSION BONDED EPOXY
2	3190	42"O.D. X 0.740"W.T., X-70, FUSION BONDED EPOXY
5	40	42"O.D. X 0.888"W.T., X-70, FBE & ARO
		TYPE 1 TEST STATION - PIPELINE
		TYPE 4 TEST STATION - FOREIGN CROSSING

APPROVED FOR CONSTRUCTION

REV.	BY	DATE
.	.	.

APPROVED FOR BIDDING

REV.	BY	DATE
.	.	.

APPROVED FOR FERC

REV.	BY	DATE
0	RRR	10-15-15

Mountain Valley PIPELINE

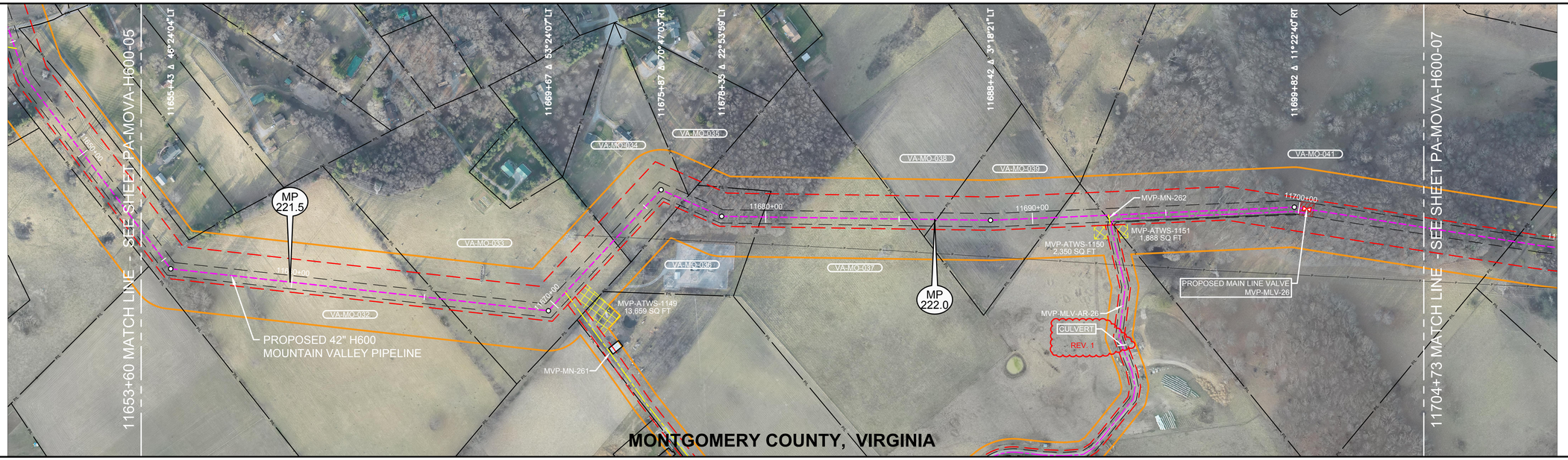
PIPELINE ALIGNMENT

MOUNTAIN VALLEY PROJECT - H600 LINE C-3 PRECINCT.,MONTGOMERY CO.,VA. STA. 11600+21 TO STA. 11653+60

HORZ. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	02/11/15
DRAFTING CK:	.
ENGINEERING CK:	.
CONSTRUCTION CK:	.
ENVIRONMENTAL CK:.	.
AFE/P.O.NO.:	
HEI PROJECT NO.: 14-10-052	
DRAWING NO.: PA-MOVA-H600 -05	
SHEET 243 OF 326	REV. 1
DATE OF PLOT: 04/20/16 12:23 PM	

RIGHT-OF-WAY & OWNERSHIP DATA

		11653+60	VA-MO-032 1105 LF 1109 SLOPE	11664+65	VA-MO-033 / VA-MO-032 139 LF 139 SLOPE	11666+04	VA-MO-033 723 LF 724 SLOPE	11673+27	VA-MO-034 293 LF 295 SLOPE	11676+20	VA-MO-035 / VA-MO-034 52 LF 52 SLOPE	11676+72	VA-MO-035 / VA-MO-034 / VA-MO-036 18 LF 18 SLOPE	11676+90	VA-MO-035 / VA-MO-036 15 LF 15 SLOPE	11677+05	VA-MO-035 / VA-MO-036 / VA-MO-037 5 LF 5 SLOPE	11677+10	VA-MO-037 / VA-MO-036 44 LF 45 SLOPE	11677+54	VA-MO-036 232 LF 232 SLOPE	11679+86	VA-MO-037 491 LF 493 SLOPE	11684+77	VA-MO-037 96 LF 97 SLOPE	11685+73	VA-MO-038 41 LF 41 SLOPE	11686+14	VA-MO-038 / VA-MO-039 89 LF 89 SLOPE	11687+03	VA-MO-039 352 LF 355 SLOPE	11690+55	VA-MO-039 100 LF 101 SLOPE	11691+55	VA-MO-037 54 LF 54 SLOPE	11692+09	VA-MO-041 / VA-MO-037 92 LF 93 SLOPE	11693+01	VA-MO-041 1172 LF 1178 SLOPE	11704+73
DESIGN	PIPE / COATING	11653+60	2											11680+29	1																					11704+73
	SLOPE DISTANCE	2680'												2455'																								
	CLASS LOCATION / HCA	2												1																								
ENVIRONMENTAL	CONSTRUCTION EXCLUSION																																				
	WETLAND / STREAM																																				
	.																																				
	.																																				



0' 100' 200' 400'

PLAN VIEW

LEGEND

- STUDY CORRIDOR
- PROPOSED 42"PIPELINE
- NON-SURVEYED C/L
- 500' TICK MARK
- EXISTING PIPELINE
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- PERMANENT ACCESS RD
- TEMPORARY ACCESS RD
- ANCILLARY SITE
- COUNTY LINE
- PROPERTY LINE
- ROAD RIGHT-OF-WAY
- FENCE LINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- C/L ROAD
- C/L RAILROAD
- DELINEATED STREAM
- DELINEATED WETLAND
- BARRACADE FENCE
- PI SYMBOL
- PROPOSED TEST STATION
- MAILBOX
- LINE MARKER - VENT PIPE
- POWER/TELE POLE
- SIGN
- TOWER LEG
- TREE
- GUY ANCHOR
- TANK
- GAS VALVE
- WELL - GAS/OIL/WATER/ MONITORING
- POST - GATE/FENCE
- ELEC/GAS/WTR METER
- PEDESTAL - UTILITY
- MH - SANITARY/WATER
- CATCH BASIN - CULVERT
- ADDITIONAL TEMPORARY WORK SPACE(ATWS)
- ABOVE GROUND FACILITY
- LIMITS OF DISTURBANCE

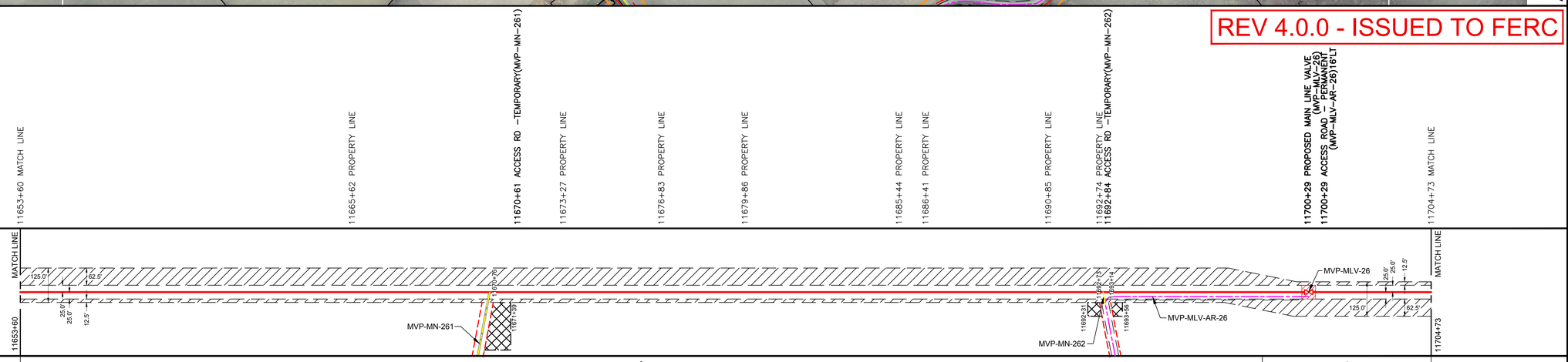
REFERENCE DRAWINGS

DRAWING NO.	DESCRIPTION

HORIZONTAL STATIONING

WORK SPACE

- PROPOSED PIPELINE
- EXISTING PIPELINE
- ACCESS ROAD TEMPORARY WORK SPACE
- PERMANENT EASEMENT
- TEMPORARY WORK SPACE(TWS)
- ADD. TEMPORARY WORK SPACE(ATWS)



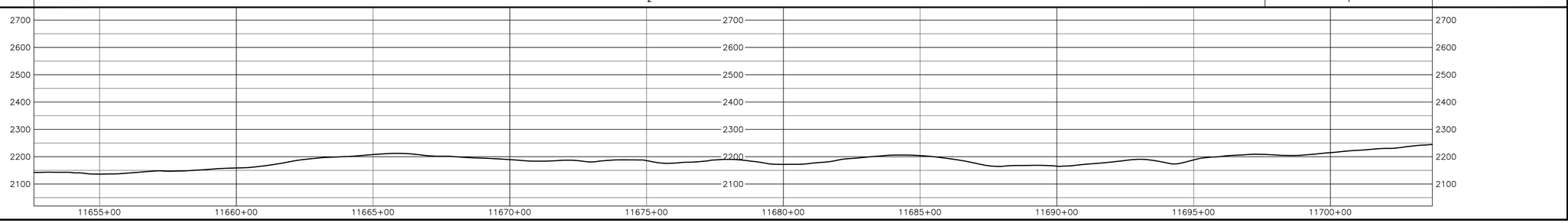
CONSTRUCTION METHOD

2	1

CONSTRUCTION METHOD KEY

1 - TYPICAL R/W CONFIGURATION
2 - TYPICAL R/W CONFIGURATION
3 - TYPICAL "SKINNEY" FOR WATER BODY
4 -
5 -
6 -
7 -
8 -
9 -
10 -
11 -
12 -
13 -
14 -
15 -
16 -

PROFILE



REV 4.0.0 - ISSUED TO FERC

AERIAL PHOTOGRAPHY DATE: APRIL 2015 & JANUARY 2016

MATERIAL SUMMARY

MK. NO.:	QTY.	DESCRIPTION
1	2455	42"O.D. X 0.617"W.T. X 70 PLSION BONDED EPOXY
2	2680	42"O.D. X 0.740"W.T. X 70 PLSION BONDED EPOXY
	1	TYPE 1 TEST STATION - PIPELINE
	1	TYPE 4 TEST STATION - FOREIGN CROSSING

REVISIONS

REV.:	BY:	DATE:	DESCRIPTION
0	HEI	10-15-15	REV. 4.0.0 ISSUED TO FERC
1	HEI	04-13-16	FERC DATA REQUEST No.2

APPROVED FOR FERC

REV.	BY	DATE
0	HRR	10-15-15

APPROVED FOR BIDDING

REV.	BY	DATE
-	-	-

APPROVED FOR CONSTRUCTION

REV.	BY	DATE
-	-	-

HOLLAND ENGINEERING

220 Hoover Boulevard, Suite 2 | 26555 Evergreen Rd. Suite 430
Holland, Michigan 49423-3786 | Southfield, Michigan 48076
T 616.355.0080 F 616.355.0081 | T 248.281.7220 F 248.281.7949
www.hollandengineering.com

Mountain Valley PIPELINE

PIPELINE ALIGNMENT

MOUNTAIN VALLEY PROJECT - H600 LINE
C-3 PRECINCT.,MONTGOMERY CO.,VA.
STA. 11653+60 TO STA. 11704+73

HORZ. SCALE: 1" = 200'	
DRAWN BY: HEI(DRF)	02/11/15
DRAFTING CK:	.
ENGINEERING CK:	.
CONSTRUCTION CK:	.
ENVIRONMENTAL CK:	.
AFE/P.O.NO.:	
HEI PROJECT NO.: 14-10-052	
DRAWING NO.:	
PA-MOVA-H600 -06	
SHEET 244 OF 326	REV. 0
DATE OF PLOT: 04/19/16 1:37 PM	