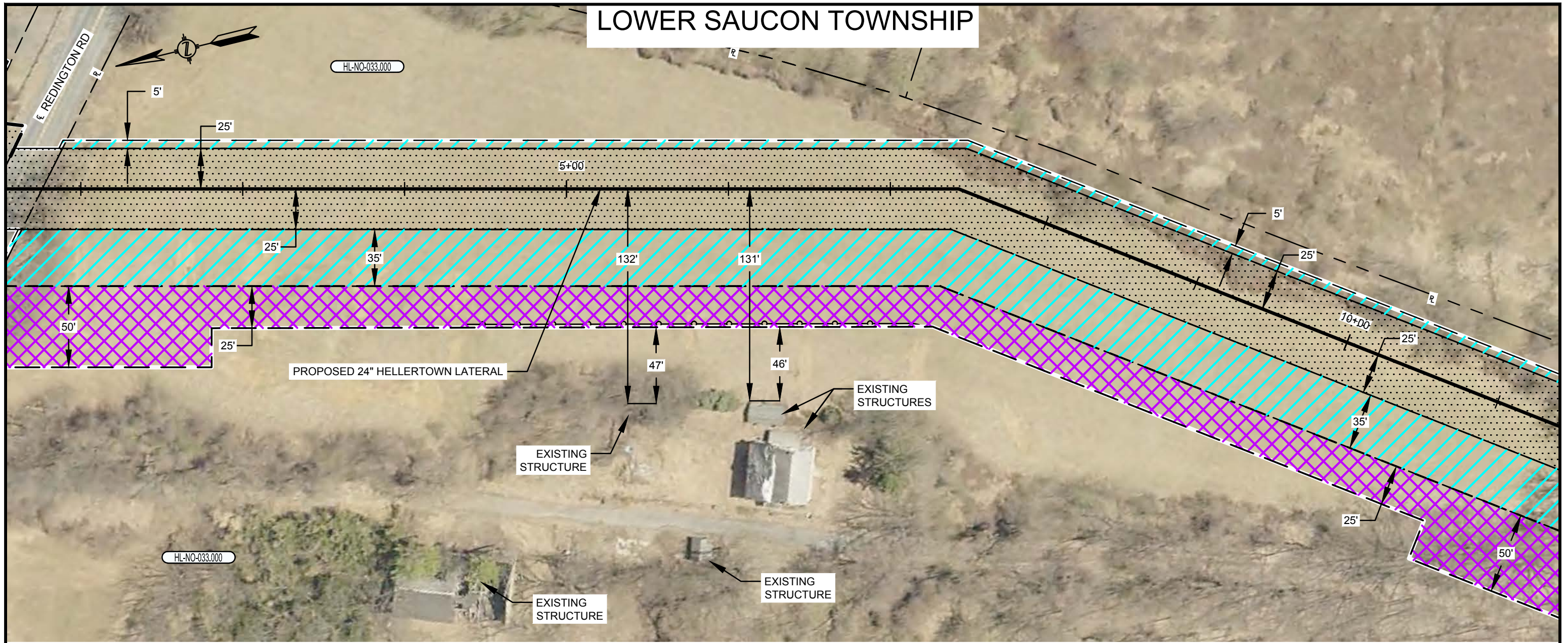


Appendix I

Residential Mitigation Plans

This page intentionally left blank.

LOWER SAUCON TOWNSHIP

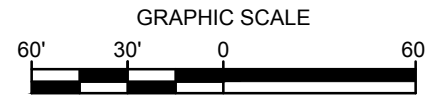


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:		TOWNSHIP: LOWER SAUCON RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-103.DWG	

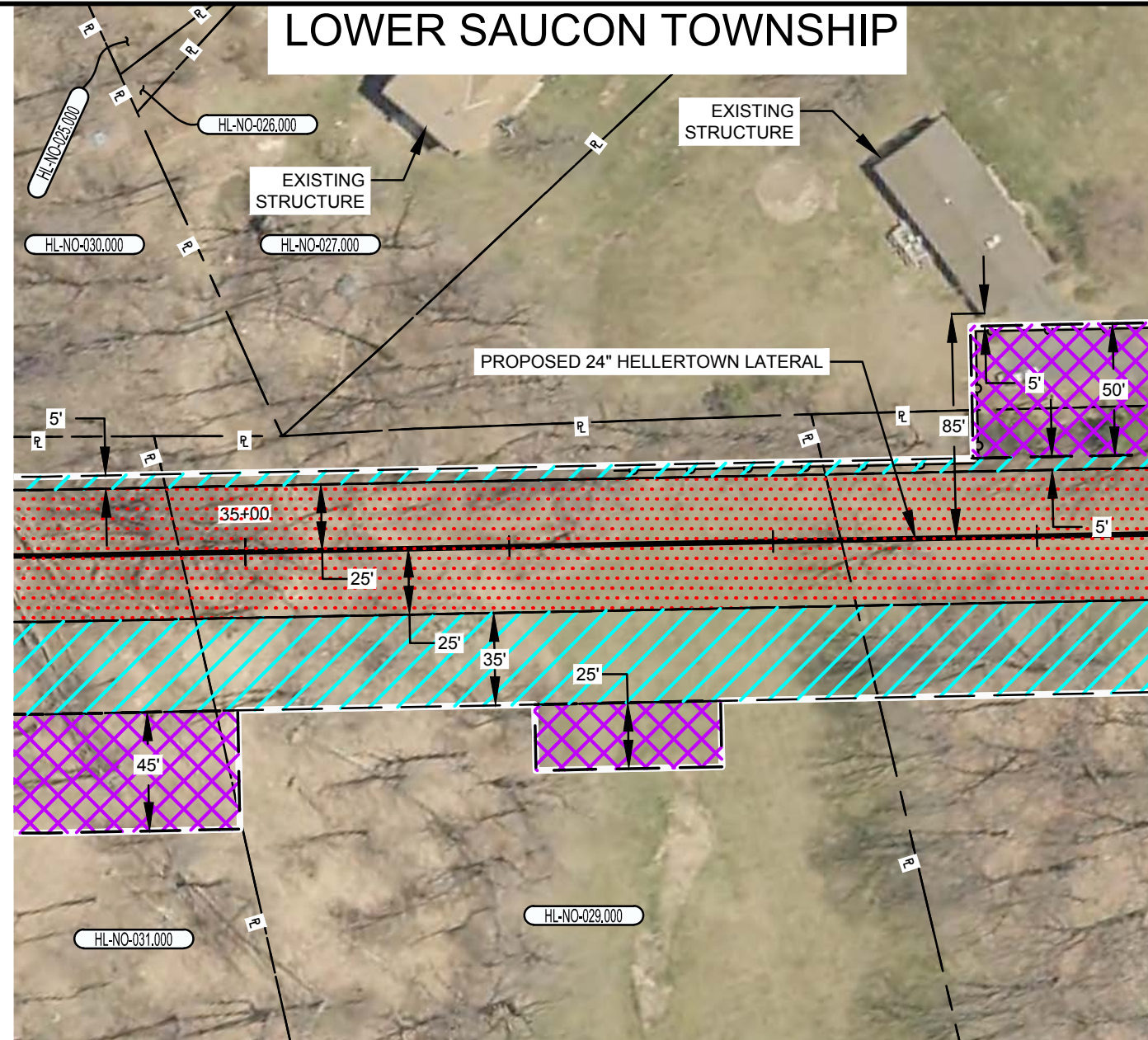
PENNEAST PIPELINE PROJECT
 PROPOSED 24" HELLERTOWN LATERAL
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA



000-03-02-103

SHEET: 01 OF 01	F
TYPE: ACAD	

LOWER SAUCON TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: LOWER SAUCON	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-104.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 24" HELLERTOWN LATERAL
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

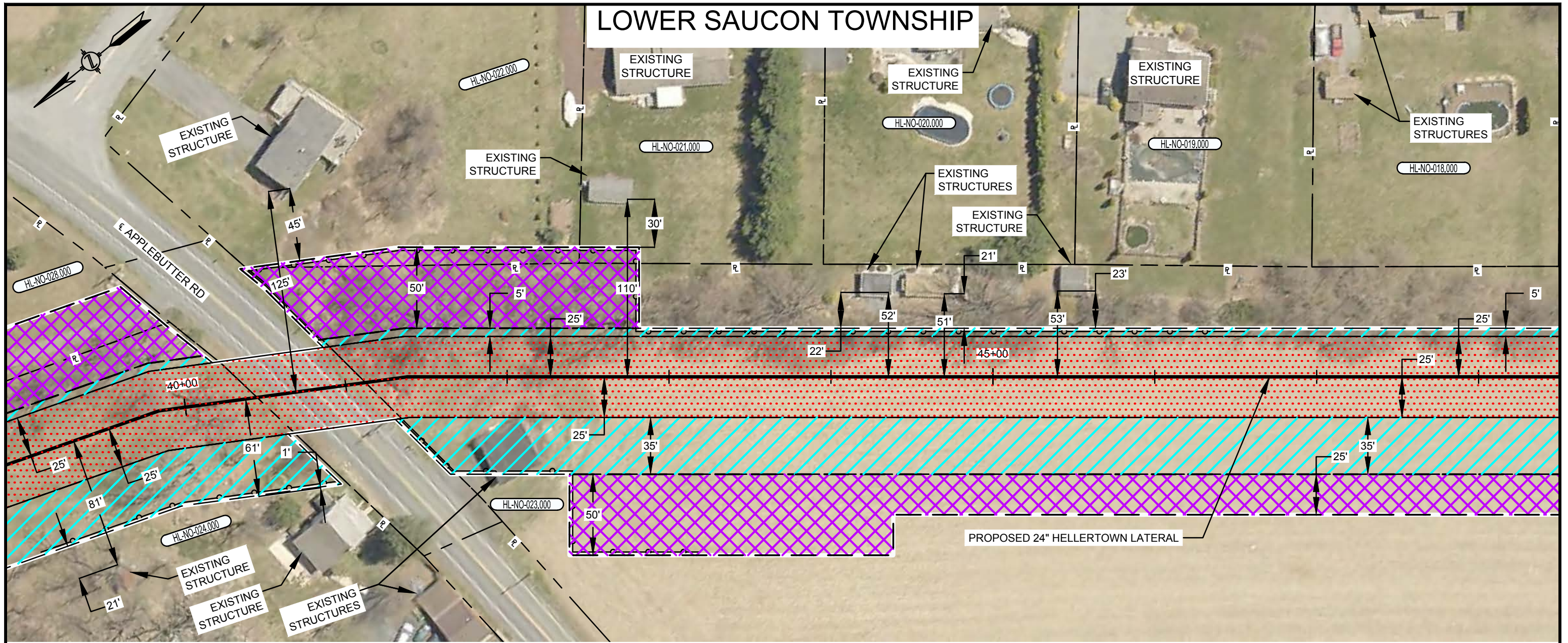


000-03-02-104

SHEET: 01 OF 01
 TYPE: ACAD

F

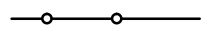


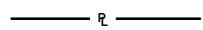
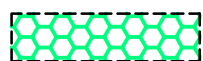
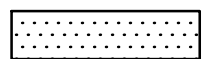


LOWER SAUCON TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: LOWER SAUCON	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-105.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 24" HELLERTOWN LATERAL
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

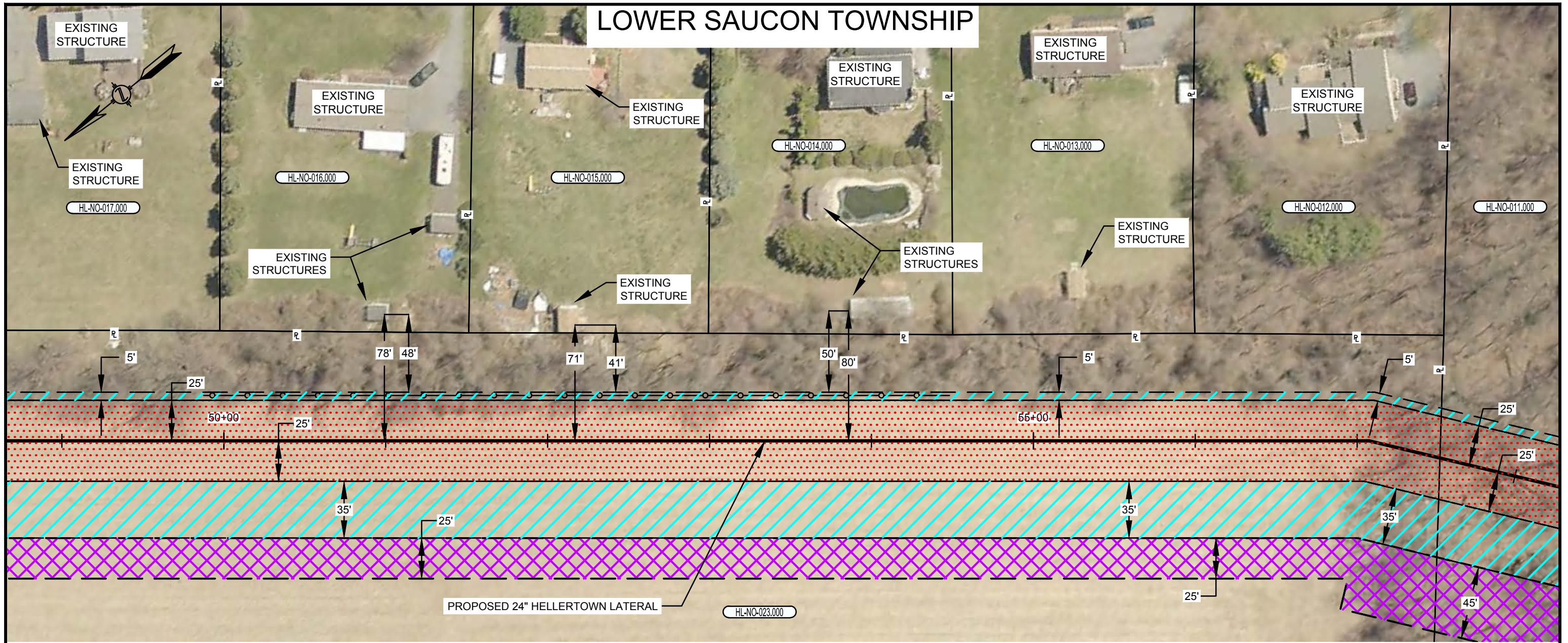


000-03-02-105

SHEET: 01 OF 01
 TYPE: ACAD

F

LOWER SAUCON TOWNSHIP



LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



PLAN VIEW

SCALE: 1" = 60'

NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: LOWER SAUCON	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-106.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 24" HELLERTOWN LATERAL
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

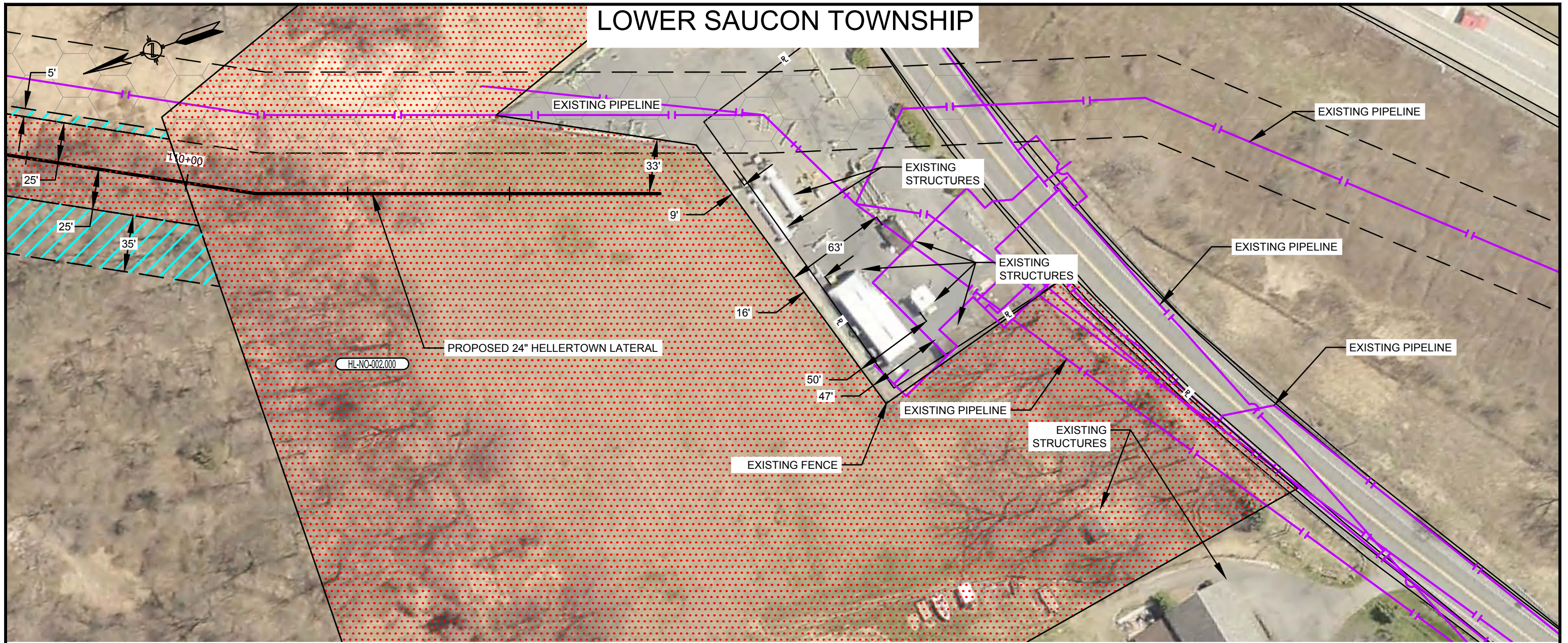


000-03-02-106

SHEET: 01 OF 01
 TYPE: ACAD

F

LOWER SAUCON TOWNSHIP

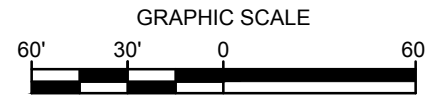


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: LOWER SAUCON	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-107.DWG	

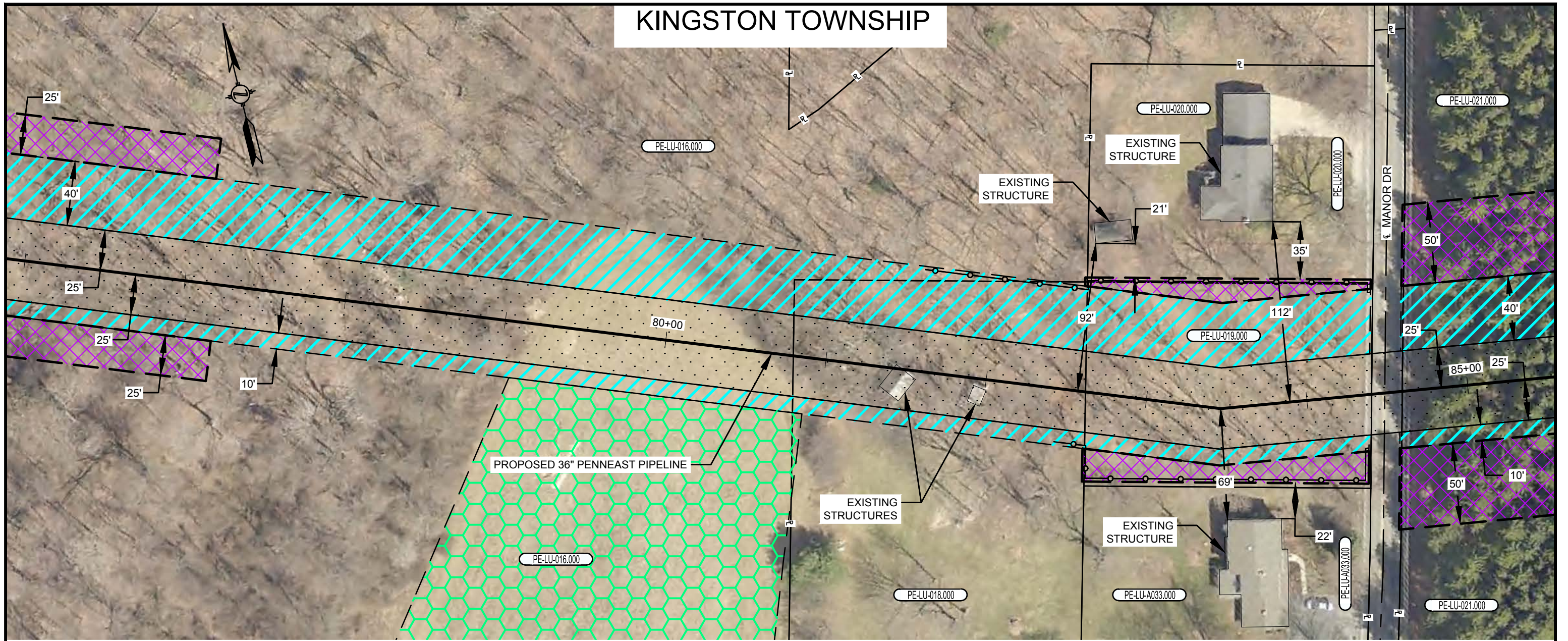
PENNEAST PIPELINE PROJECT
 PROPOSED 24" HELLERTOWN LATERAL
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA



000-03-02-107

SHEET: 01 OF 01	F
TYPE: ACAD	

KINGSTON TOWNSHIP

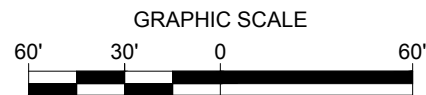


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: KINGSTON	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR: ---	DATE: ---	000-03-02-001.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

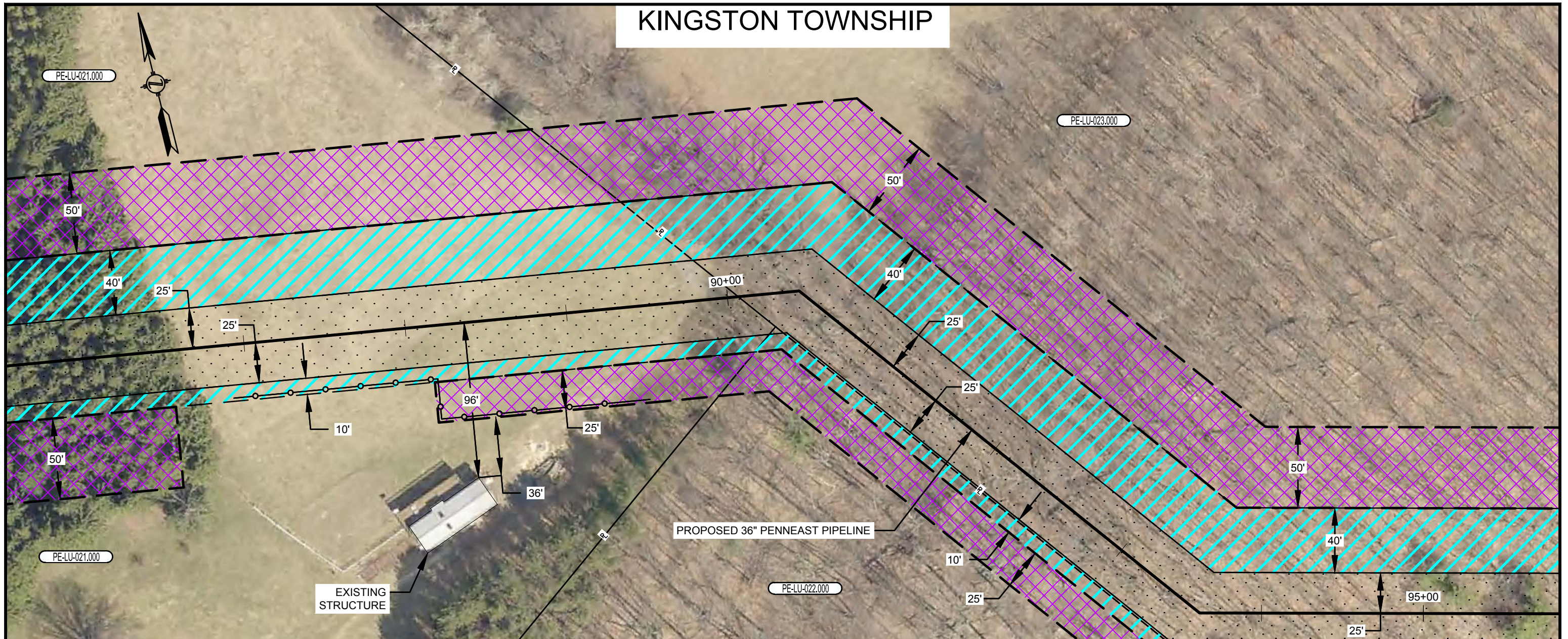


000-03-02-001

SHEET: 01 OF 01
 TYPE: ACAD

F

KINGSTON TOWNSHIP

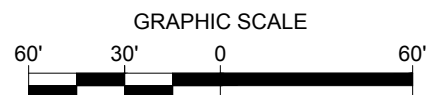


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: KINGSTON	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-002.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

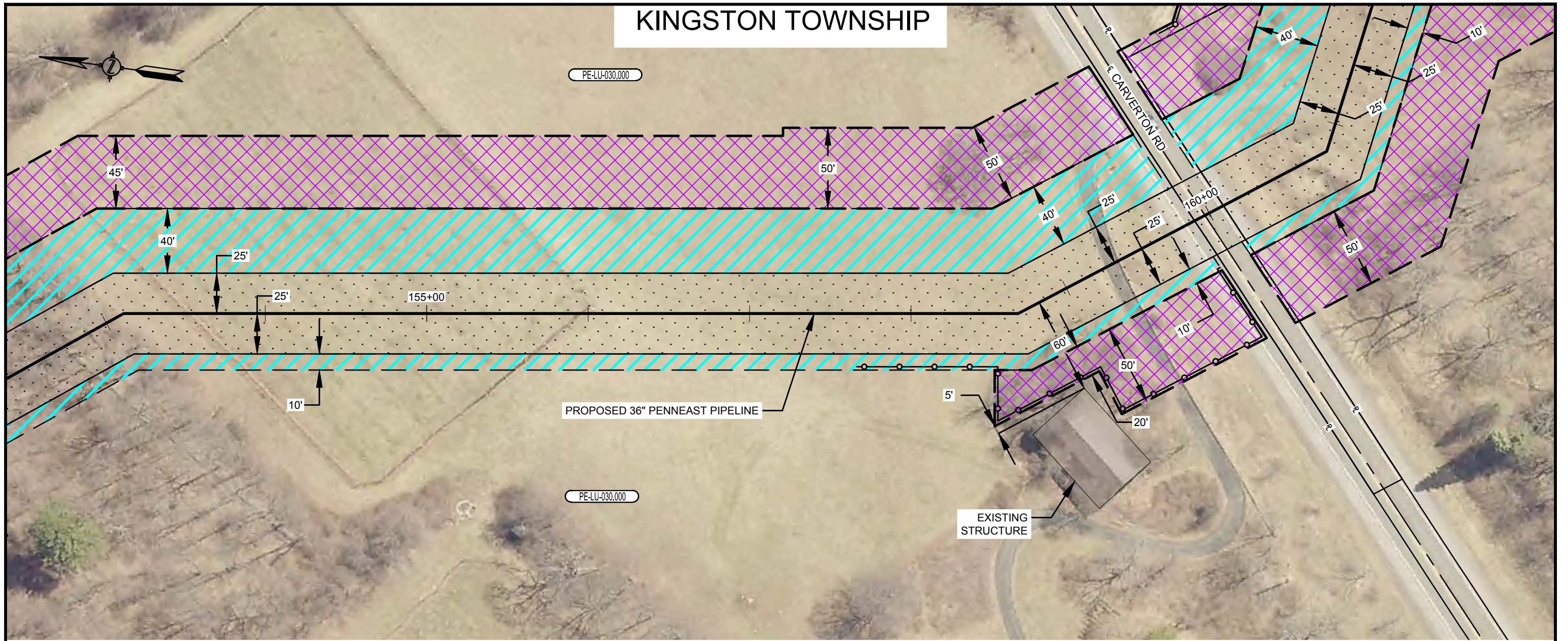


000-03-02-002

SHEET: 01 OF 01
 TYPE: ACAD

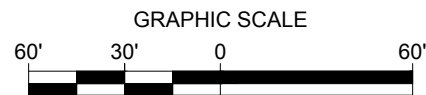
F

KINGSTON TOWNSHIP



LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



PLAN VIEW

SCALE: 1" = 60'

NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: KINGSTON	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-003.DWG	

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
LUZERNE COUNTY, PENNSYLVANIA

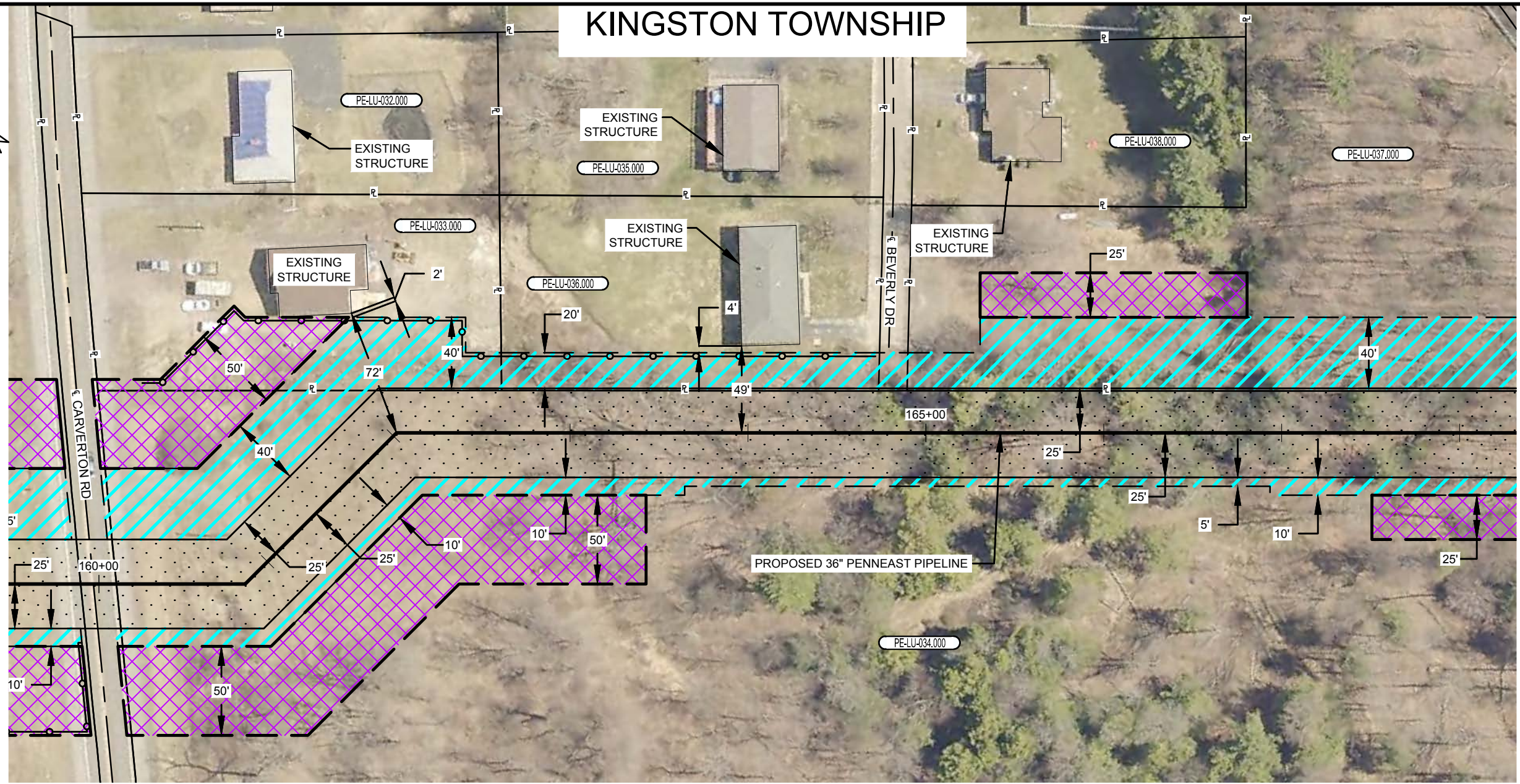


000-03-02-003

SHEET: 01 OF 01
TYPE: ACAD

F

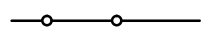


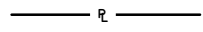
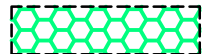
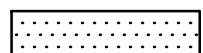


KINGSTON TOWNSHIP

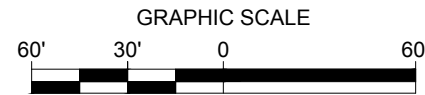


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY


CONSTRUCTION TECHNIQUES


1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: KINGSTON	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-004.DWG	

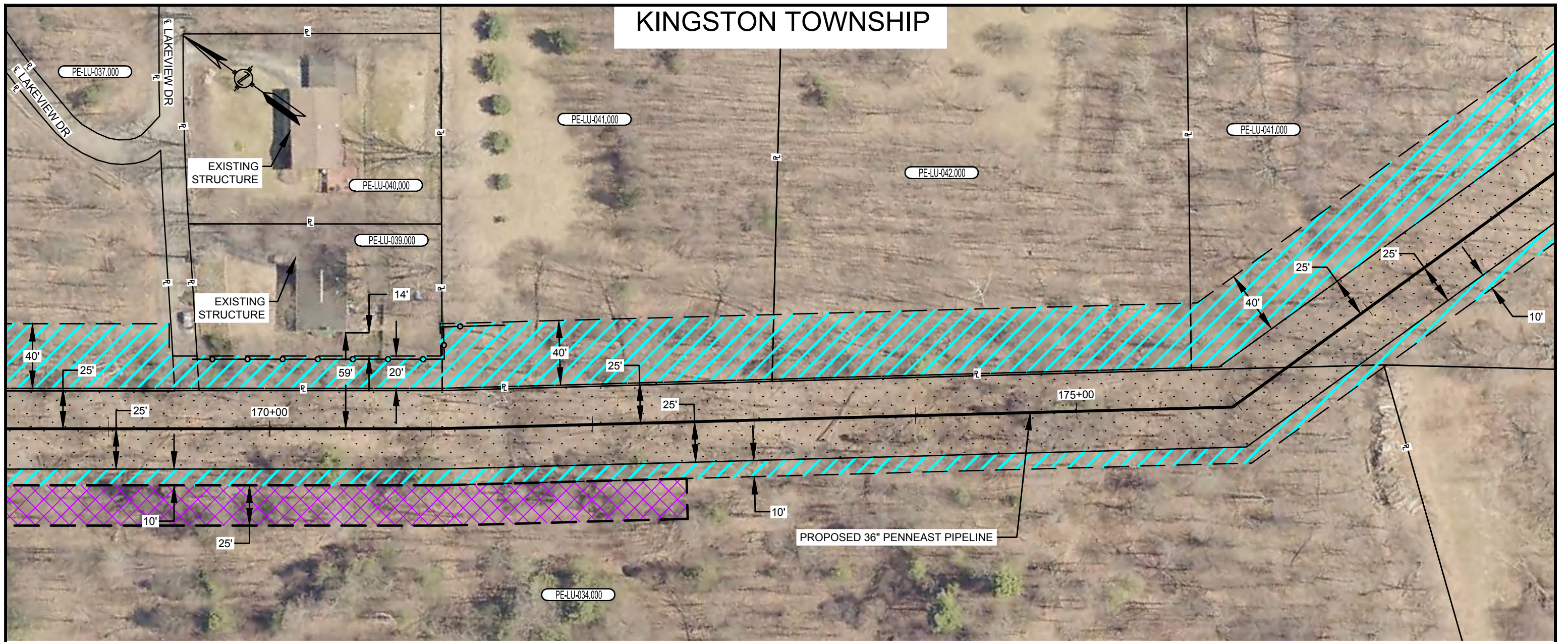
PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA



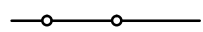


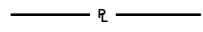
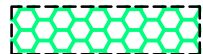
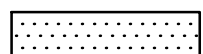




000-03-02-004	SHEET: 01 OF 01	F
	TYPE: ACAD	

KINGSTON TOWNSHIP



LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)

PLAN VIEW

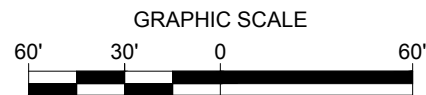
SCALE: 1" = 60'

NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.



NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: KINGSTON	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-005.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

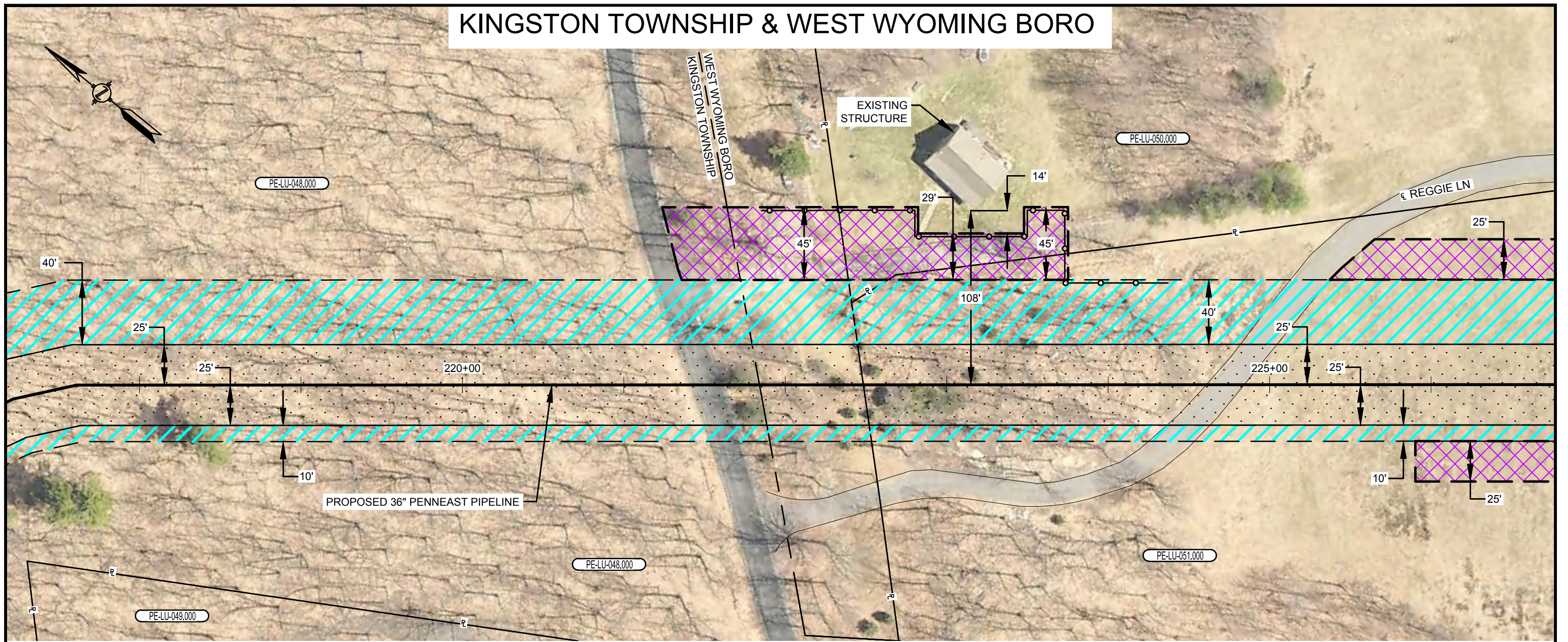


000-03-02-005

SHEET: 01 OF 01
 TYPE: ACAD

F

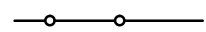


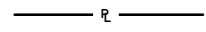
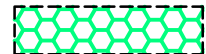
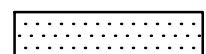


KINGSTON TOWNSHIP & WEST WYOMING BORO

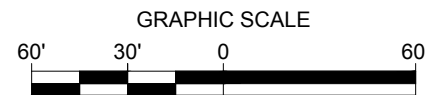


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:		TOWNSHIP: SEE TITLE RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-006.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

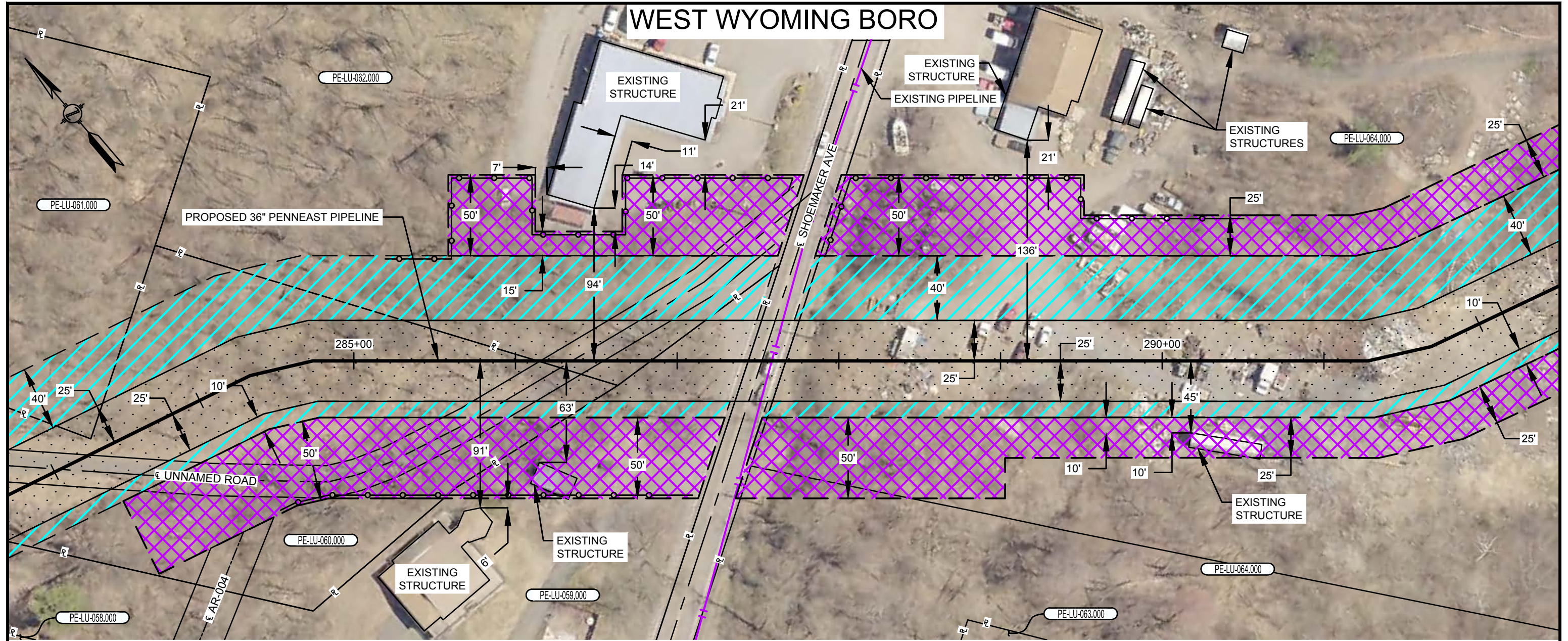


000-03-02-006

SHEET: 01 OF 01
 TYPE: ACAD

F

WEST WYOMING BORO

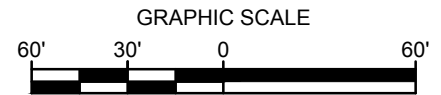


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	LUZERNE
SECTION:		TOWNSHIP:SEE TITLE	RANGE:
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-007.DWG	

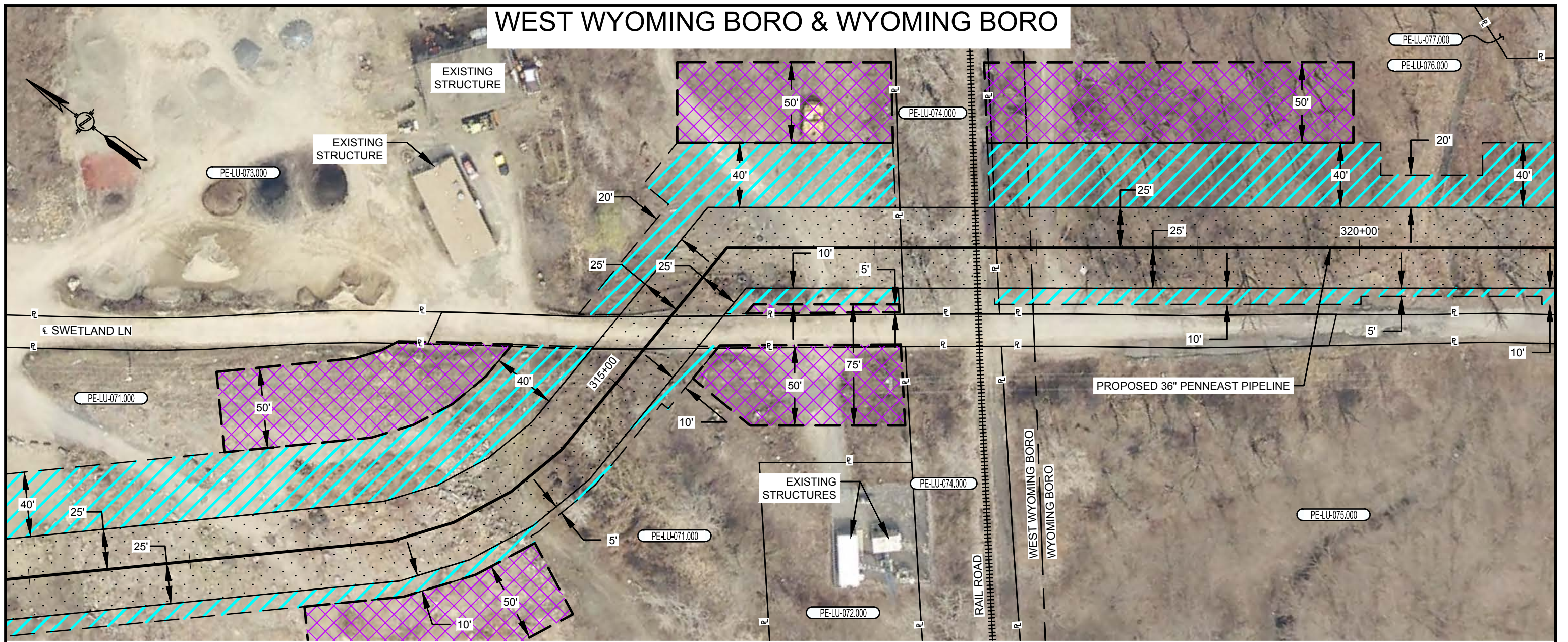
PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

000-03-02-007

SHEET: 01 OF 01
 TYPE: ACAD

F

WEST WYOMING BORO & WYOMING BORO

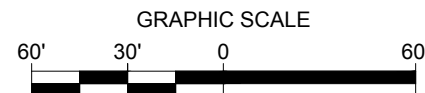


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:		TOWNSHIP: SEE TITLE RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-008.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

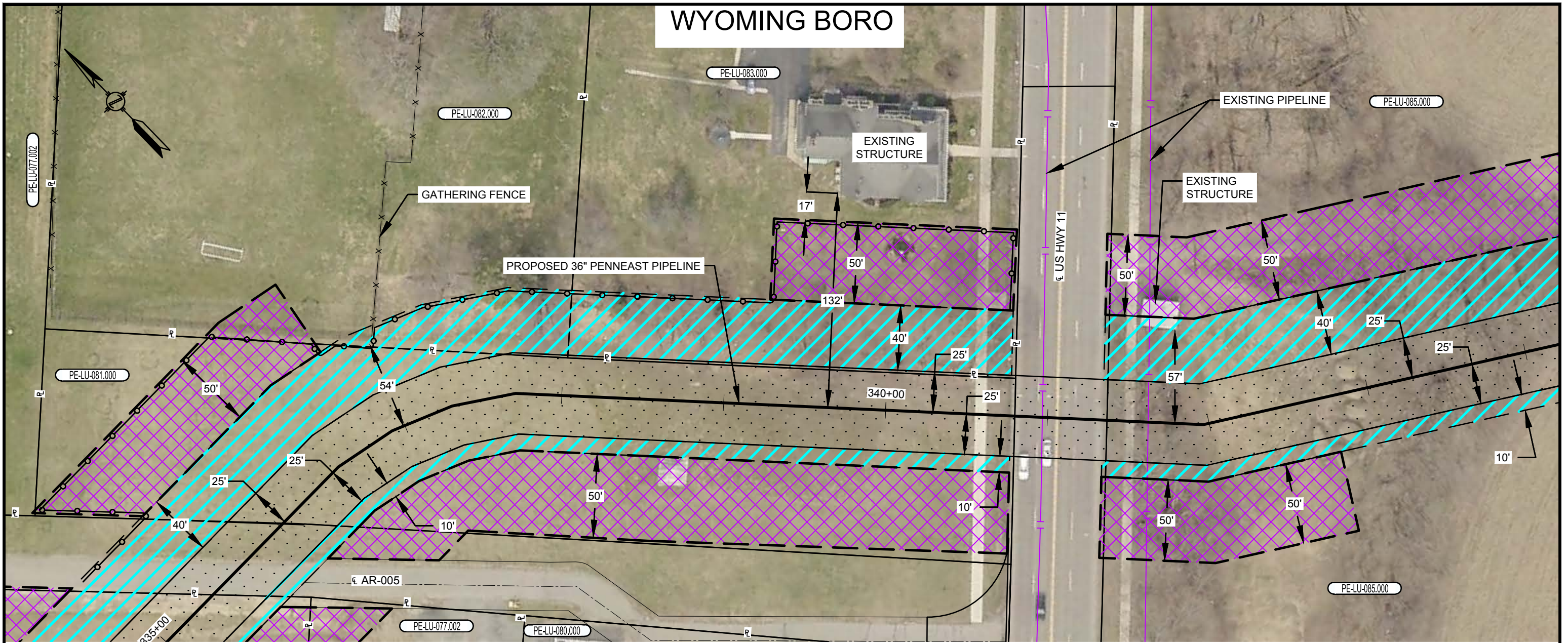


000-03-02-008

SHEET: 01 OF 01
 TYPE: ACAD

F

WYOMING BORO

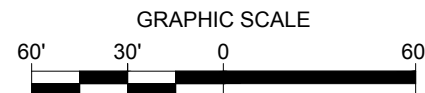


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:		TOWNSHIP: WYOMING BORO	
RANGE:		SCALE: 1"=60'	
DFT: HMM	DATE: 02/18/2016	FILENAME: 000-03-02-009.DWG	
CHK: HMM	DATE: 02/18/2016		
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA



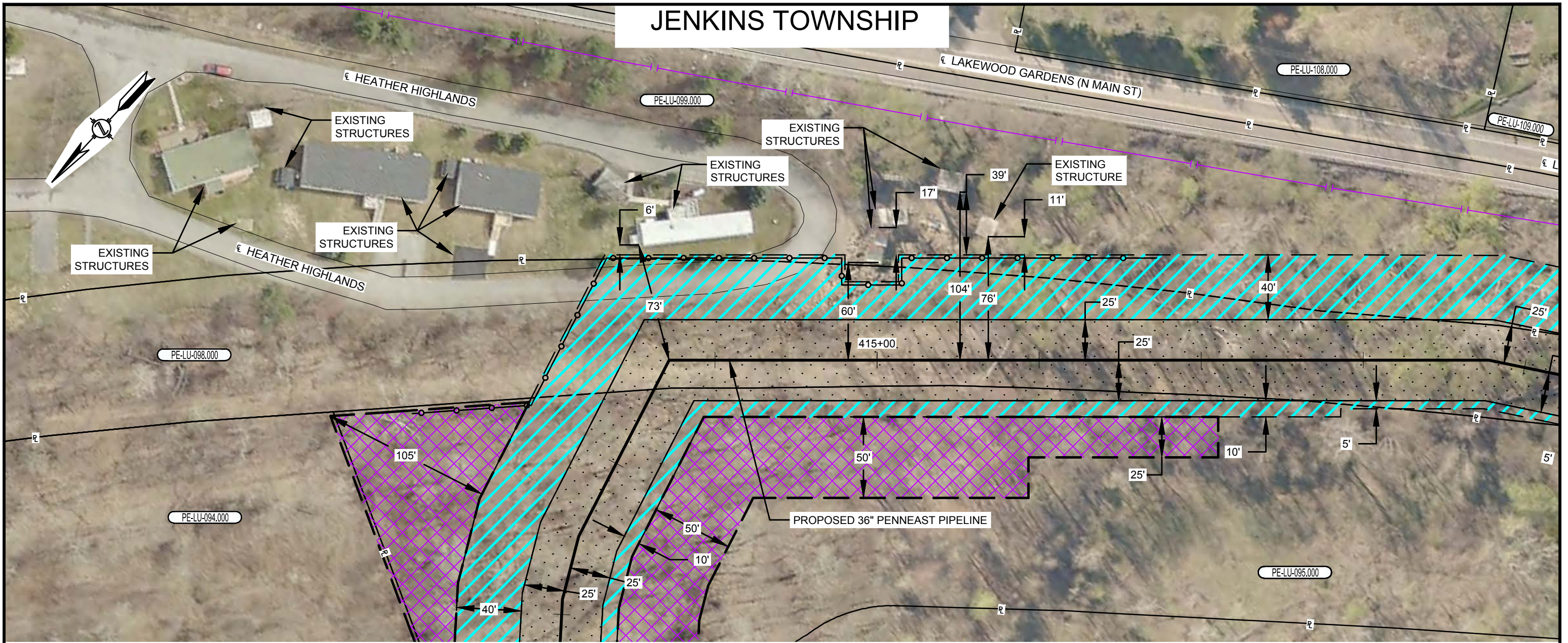
000-03-02-009

SHEET: 01 OF 01

TYPE: ACAD

F

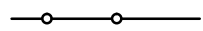


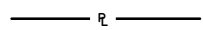
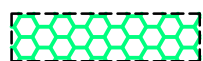
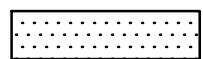


JENKINS TOWNSHIP

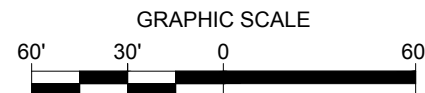


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: JENKINS	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-010.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

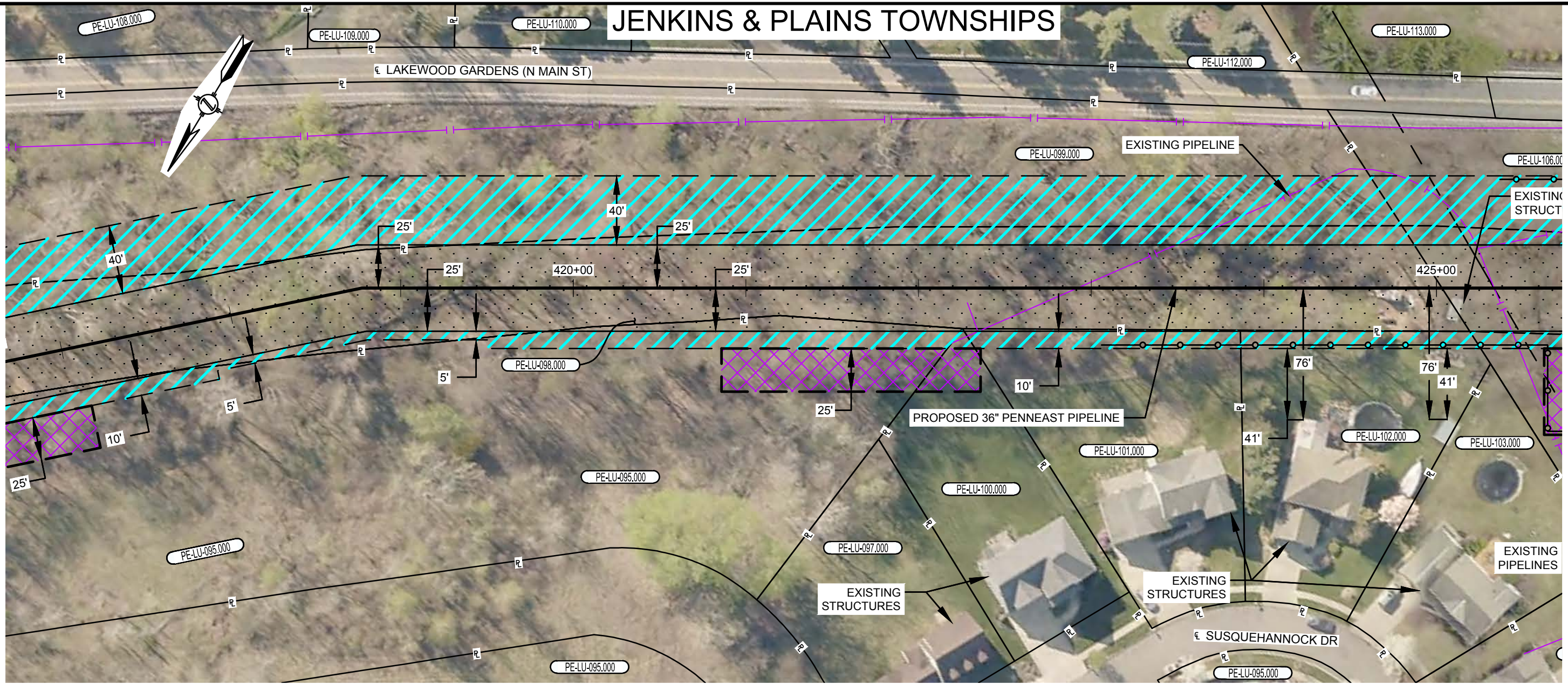


000-03-02-010

SHEET: 01 OF 01
 TYPE: ACAD

F

JENKINS & PLAINS TOWNSHIPS

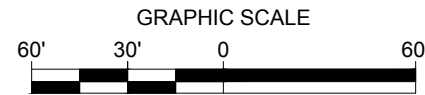


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY



CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: JENKINS & PLAINS	RANGE: SEE TITLE	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-011.DWG	

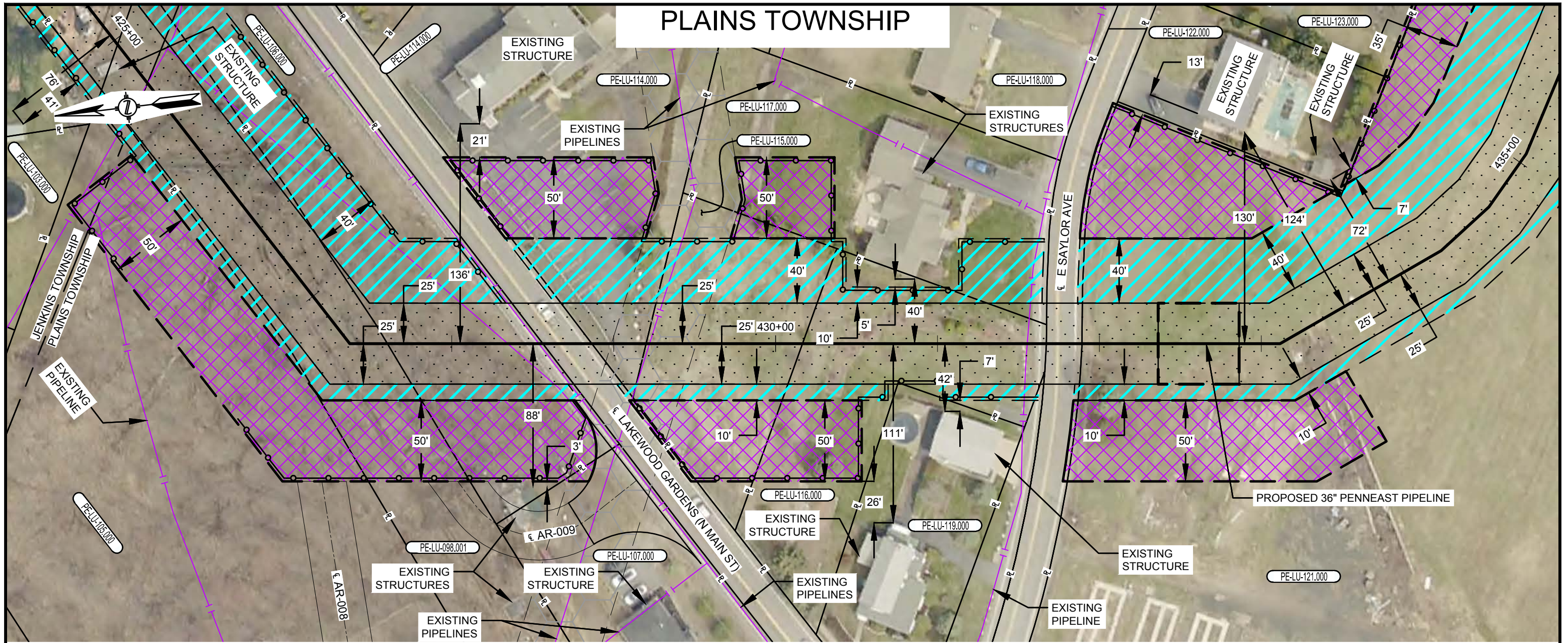
PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

000-03-02-011

SHEET: 01 OF 01	F
TYPE: ACAD	

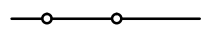


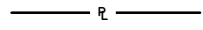
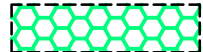
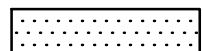


PLAINS TOWNSHIP

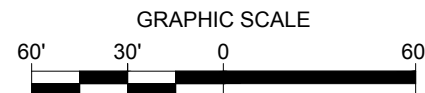


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	LUZERNE
SECTION:	TOWNSHIP: PLAINS	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-012.DWG
APPR:	DATE:		

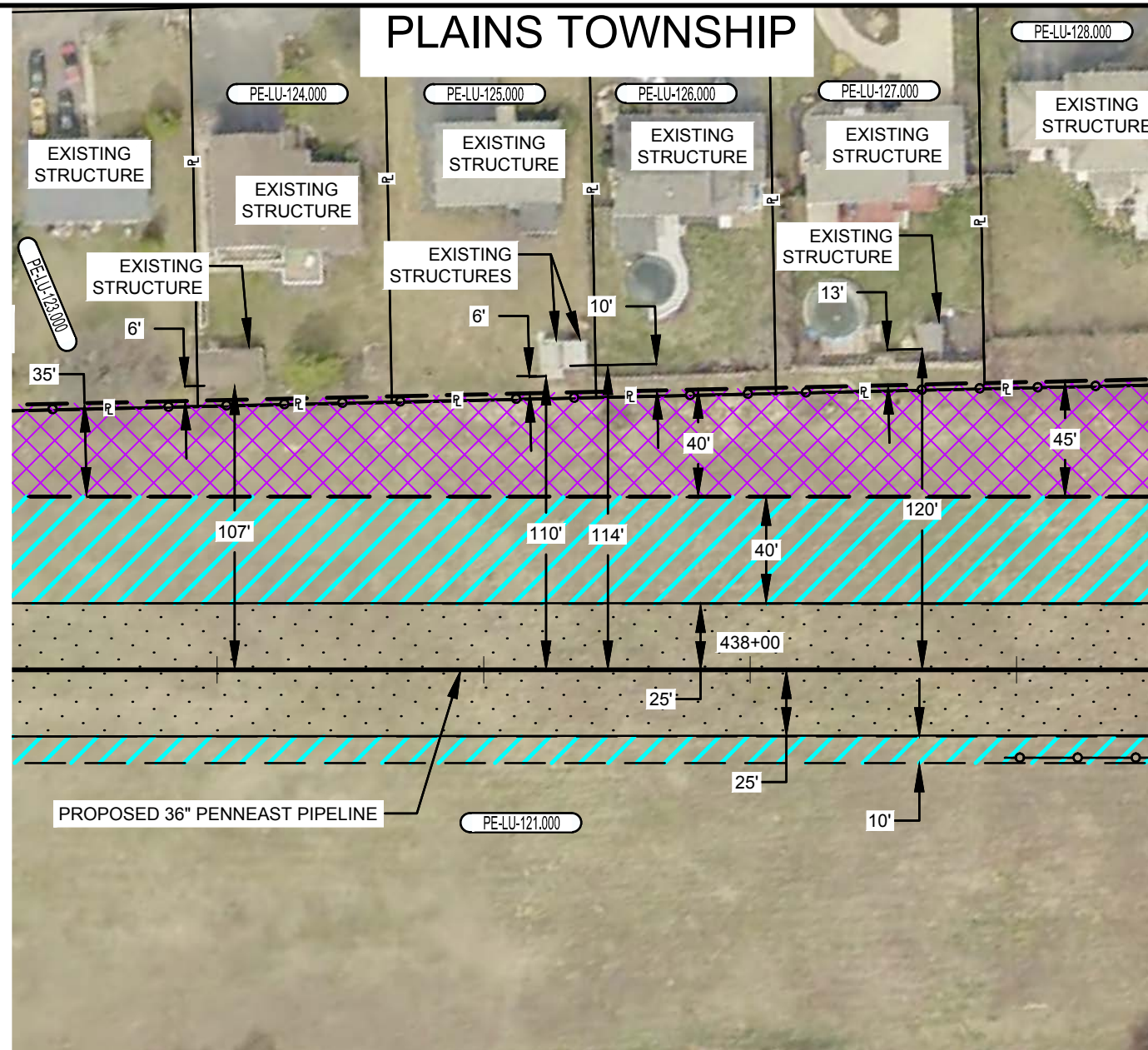
PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA



000-03-02-012

SHEET: 01 OF 01
 TYPE: ACAD

F

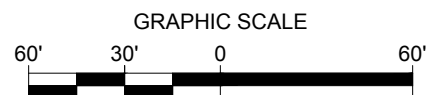


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: PLAINS	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-013.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

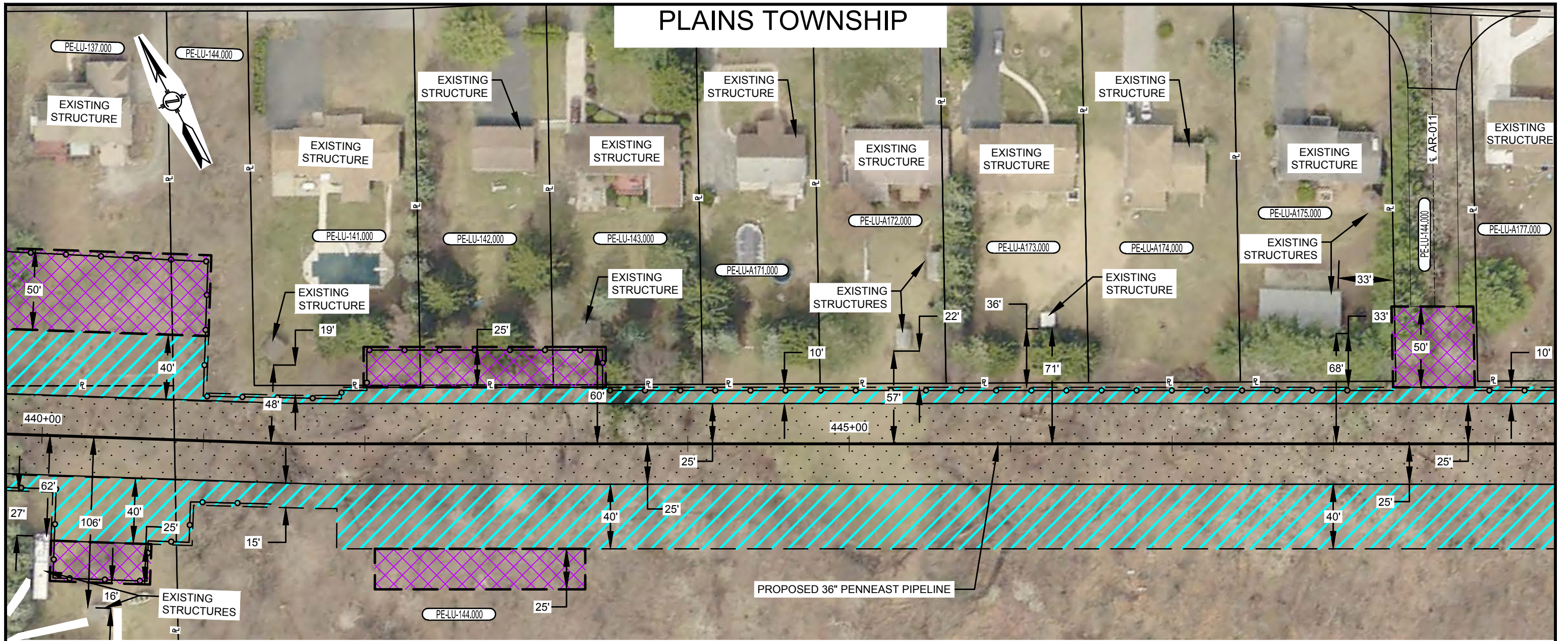


000-03-02-013

SHEET: 01 OF 01
 TYPE: ACAD

F

PLAINS TOWNSHIP

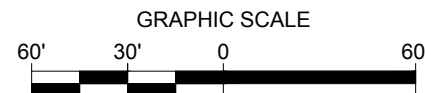


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

- SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
- STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
- STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
- PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

- THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
- THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: PLAINS	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-014.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

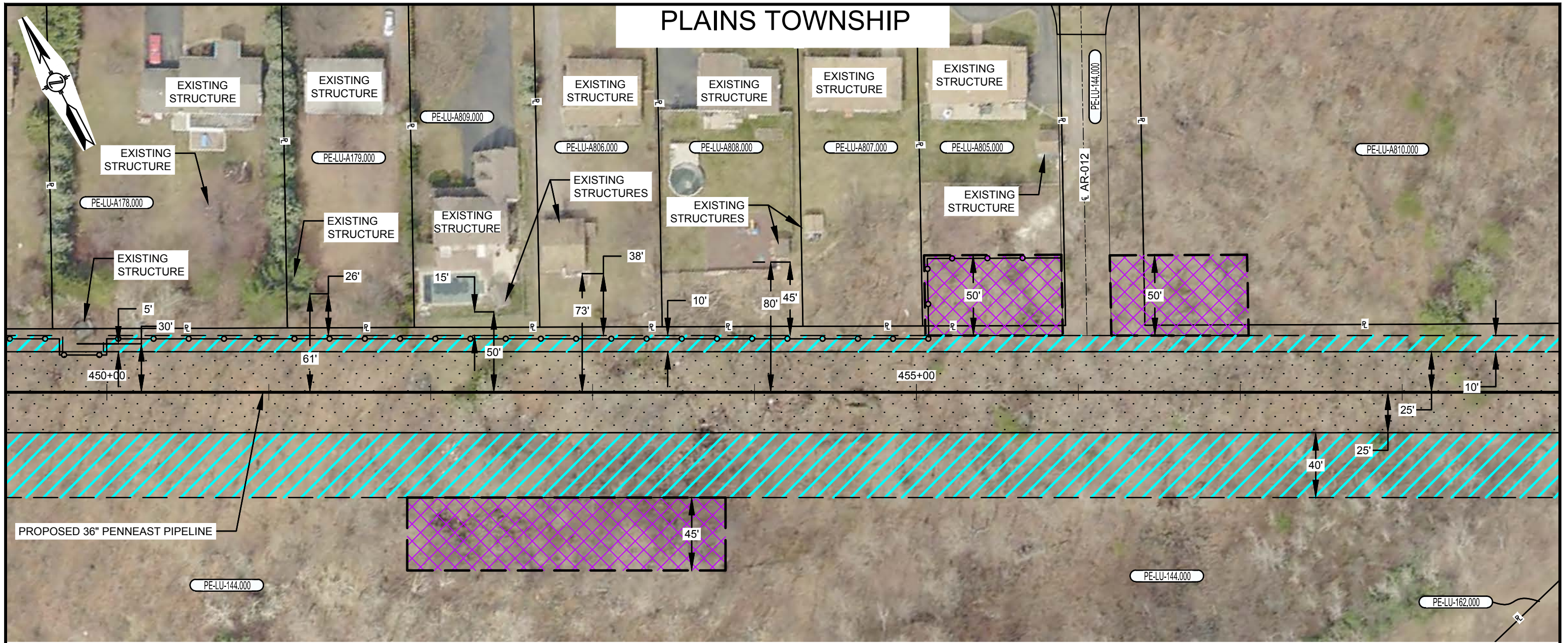


000-03-02-014

SHEET: 01 OF 01
 TYPE: ACAD

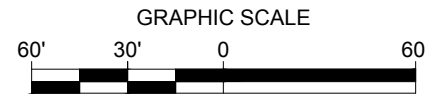
F

PLAINS TOWNSHIP



LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



PLAN VIEW

SCALE: 1" = 60'

NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

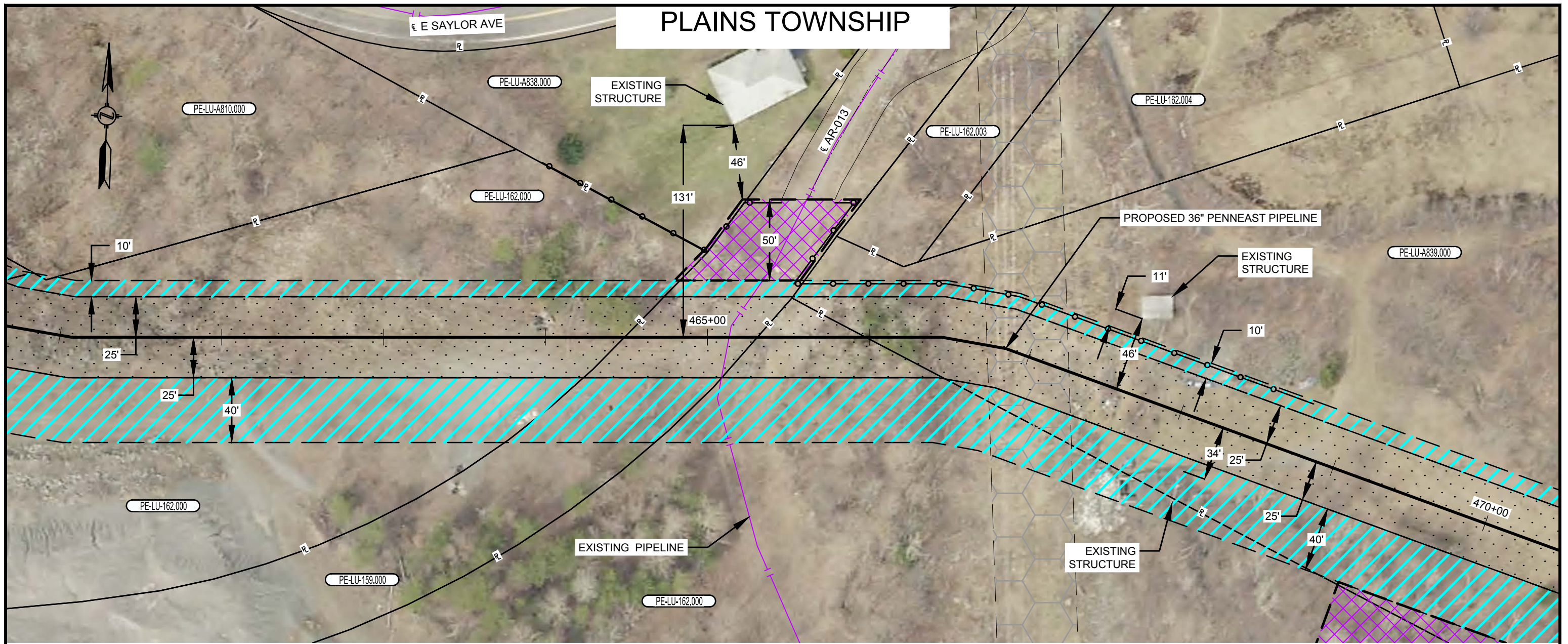
NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: PLAINS	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-015.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

000-03-02-015	SHEET: 01 OF 01	F
	TYPE: ACAD	

PLAINS TOWNSHIP

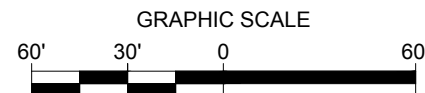


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: PLAINS	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-016.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

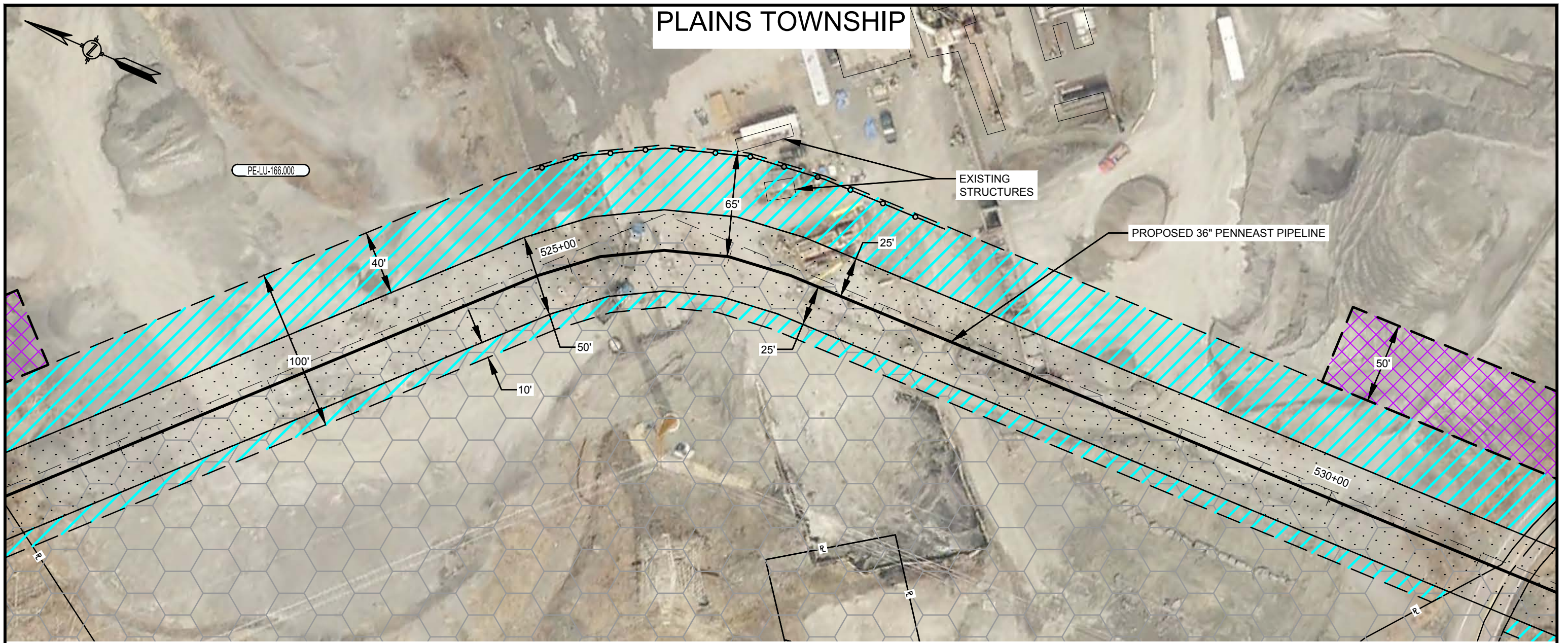


000-03-02-016

SHEET: 01 OF 01
 TYPE: ACAD

F

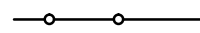

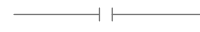
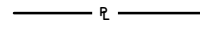
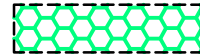
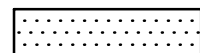


PLAINS TOWNSHIP

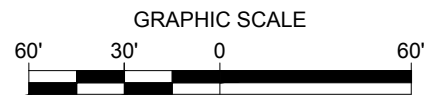


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA: ----	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:		TOWNSHIP: PLAINS TWP RANGE: ----	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-018.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

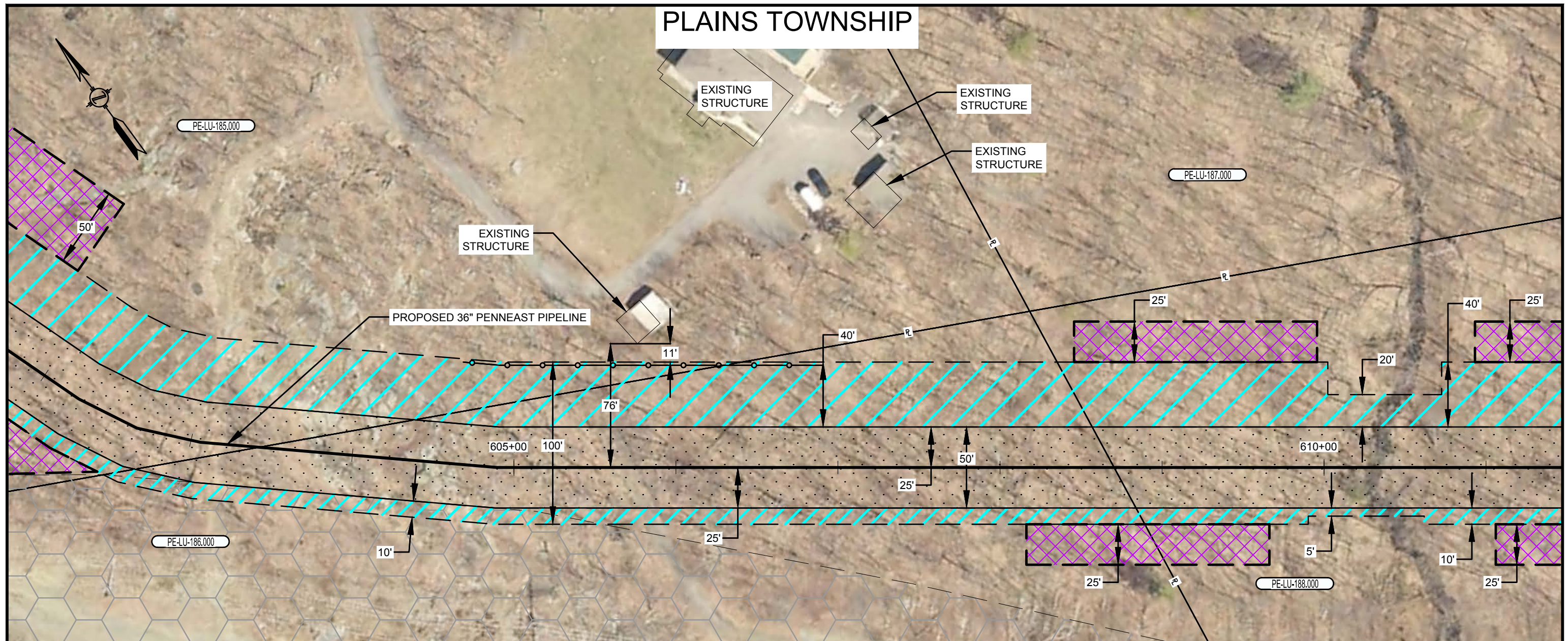


000-03-02-018

SHEET: 01 OF 01
 TYPE: ACAD

F

PLAINS TOWNSHIP

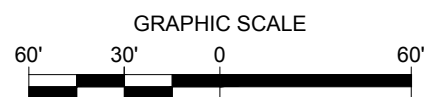


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUBMITTAL FOR PERMITTING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:		TOWNSHIP: PLAINS	
DFT: HMM		DATE: 02/18/2016	
CHK: HMM		DATE: 02/18/2016	
APPR:		DATE:	
SCALE: 1"=60'		FILENAME: 000-03-02-019.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

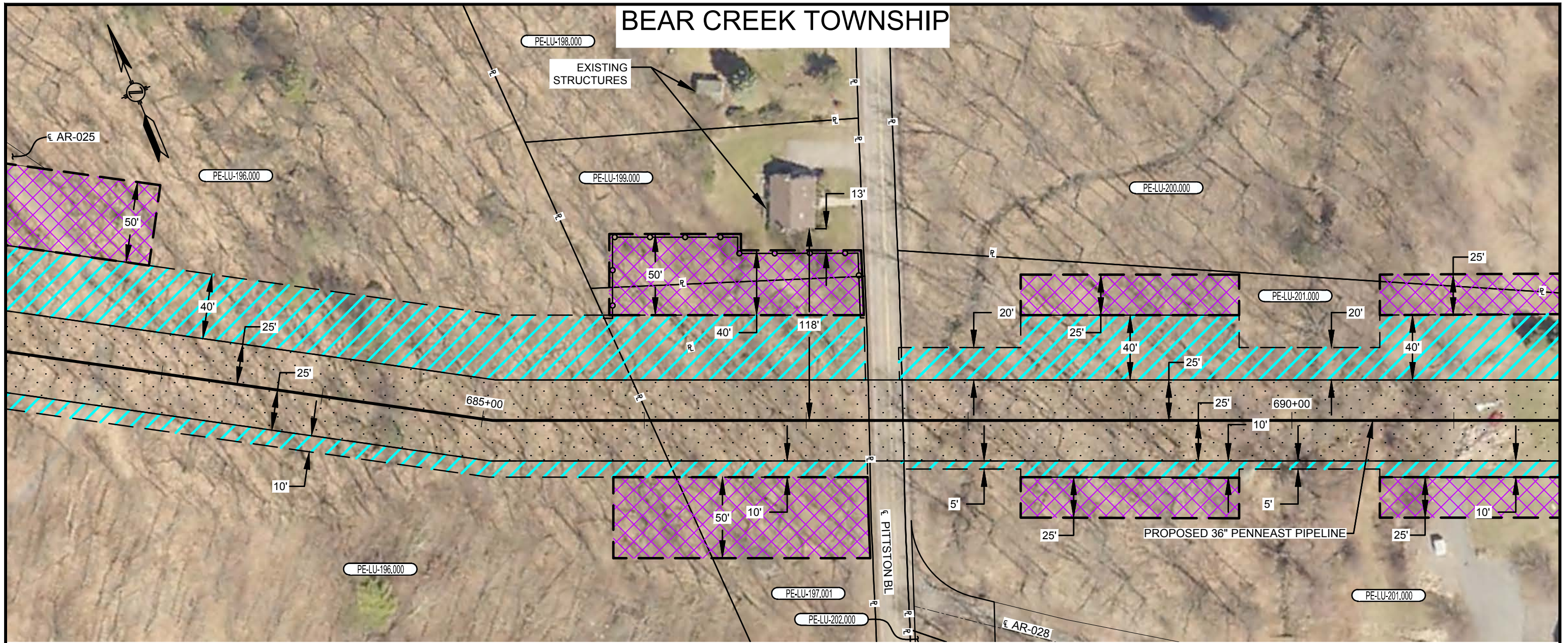


000-03-02-019

SHEET: 01 OF 01
 TYPE: ACAD

F

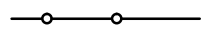


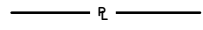
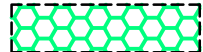
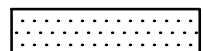


BEAR CREEK TOWNSHIP

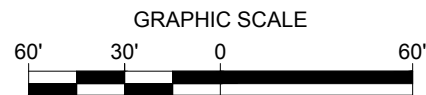


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: BEAR CREEK	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-020.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 LUZERNE COUNTY, PENNSYLVANIA

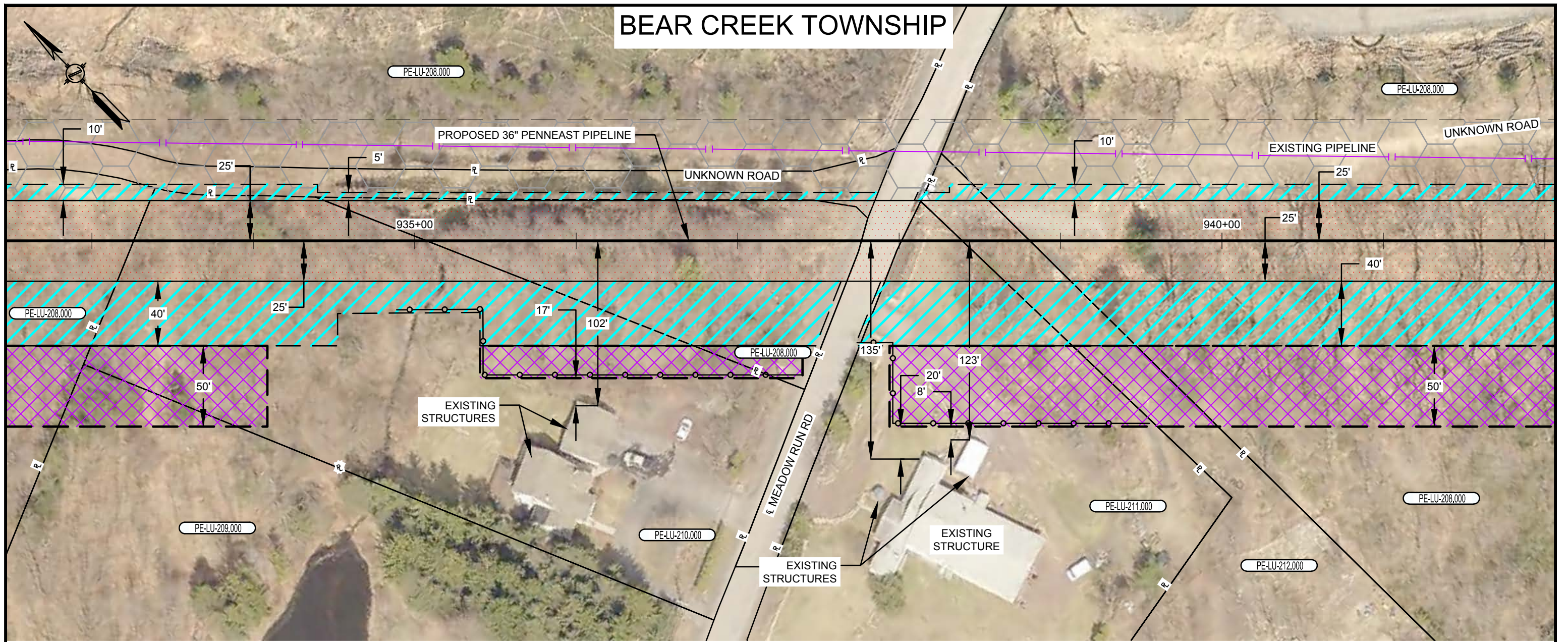


000-03-02-020

SHEET: 01 OF 01
 TYPE: ACAD

F

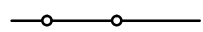


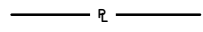
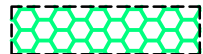
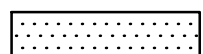


BEAR CREEK TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: BEAR CREEK	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-021.DWG	

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE

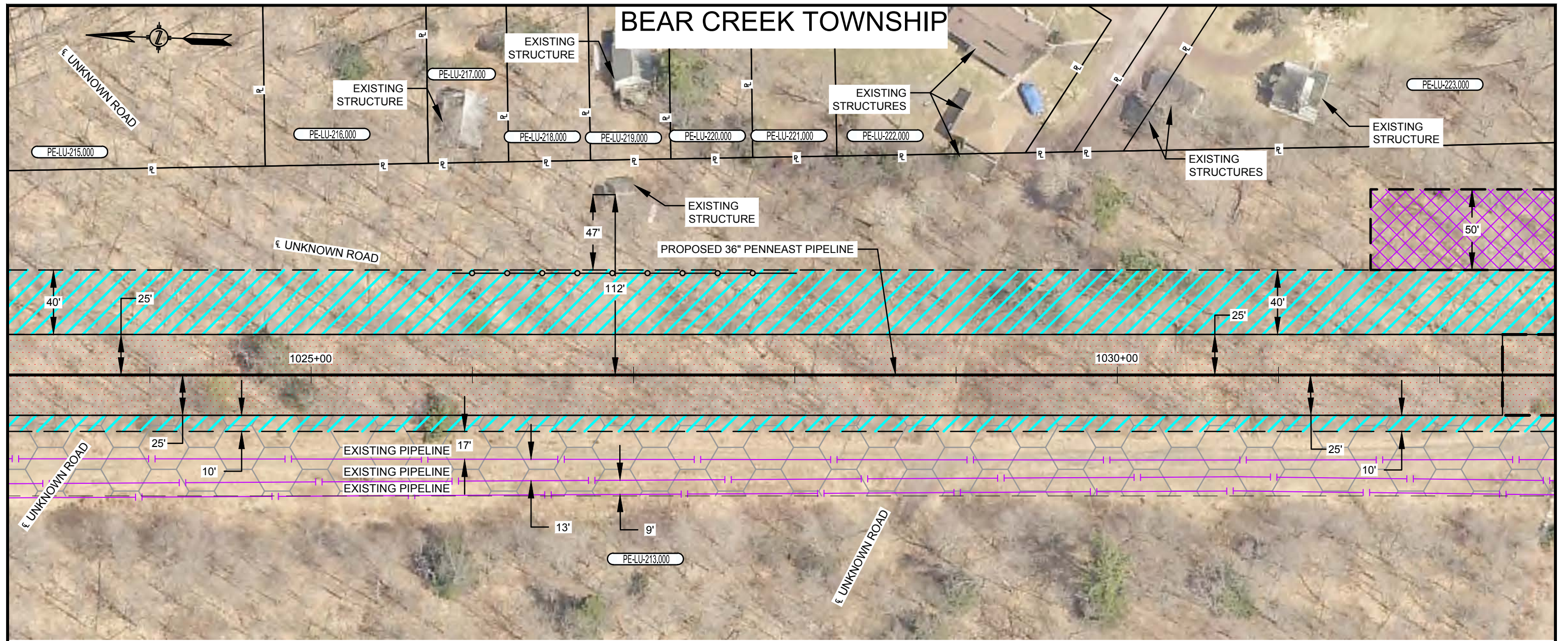
RESIDENTIAL SITE SPECIFIC
LUZERNE COUNTY, PENNSYLVANIA



000-03-02-021

SHEET: 01 OF 01
TYPE: ACAD

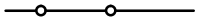


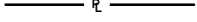

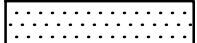


F

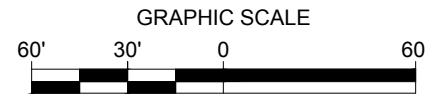


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY


CONSTRUCTION TECHNIQUES


1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: LUZERNE	
SECTION:	TOWNSHIP: BEAR CREEK	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-022.DWG	

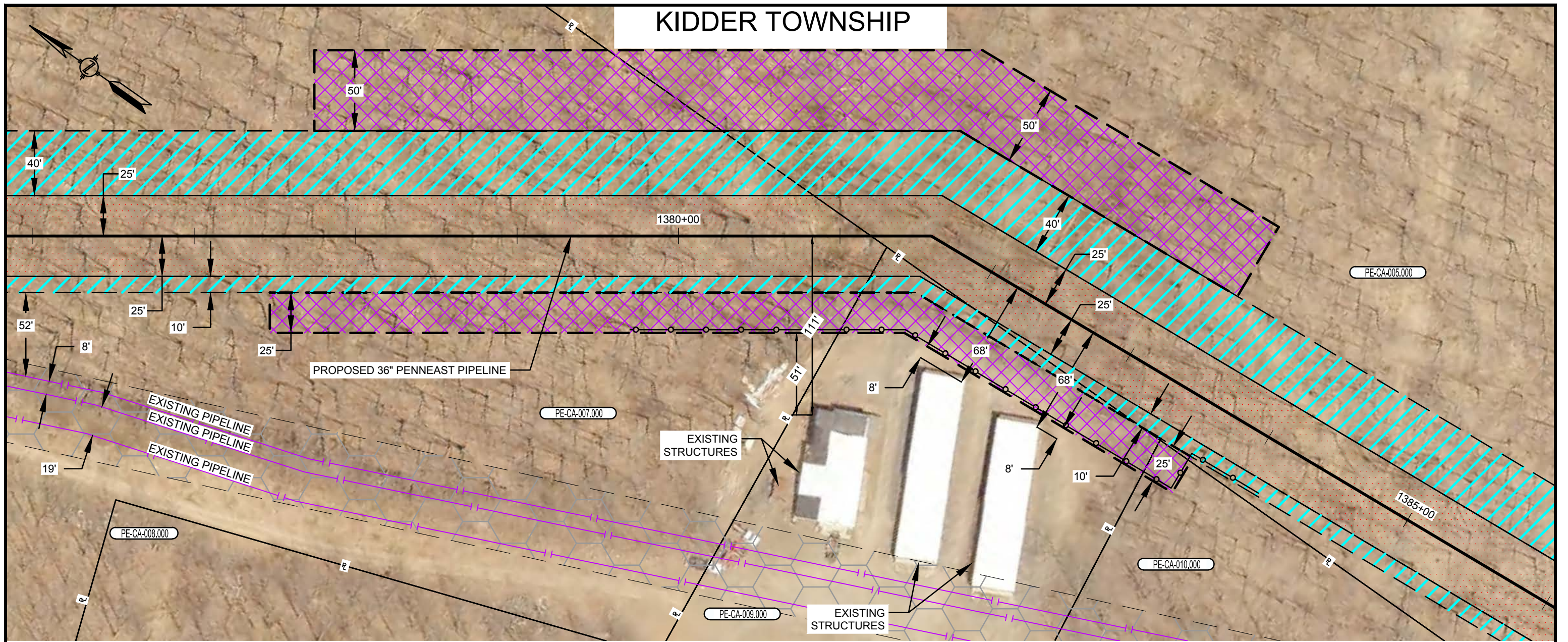
PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
SEGMENT B
RESIDENTIAL SITE SPECIFIC
LUZERNE COUNTY, PENNSYLVANIA





000-03-02-022	SHEET: 01 OF 01	F
	TYPE: ACAD	

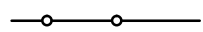


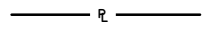
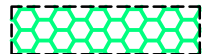
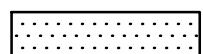


KIDDER TOWNSHIP

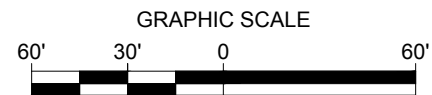


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	CARBON
SECTION:	TOWNSHIP: KIDDER	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:		000-03-02-023.DWG

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
SEGMENT B
RESIDENTIAL SITE SPECIFIC
CARBON COUNTY, PENNSYLVANIA

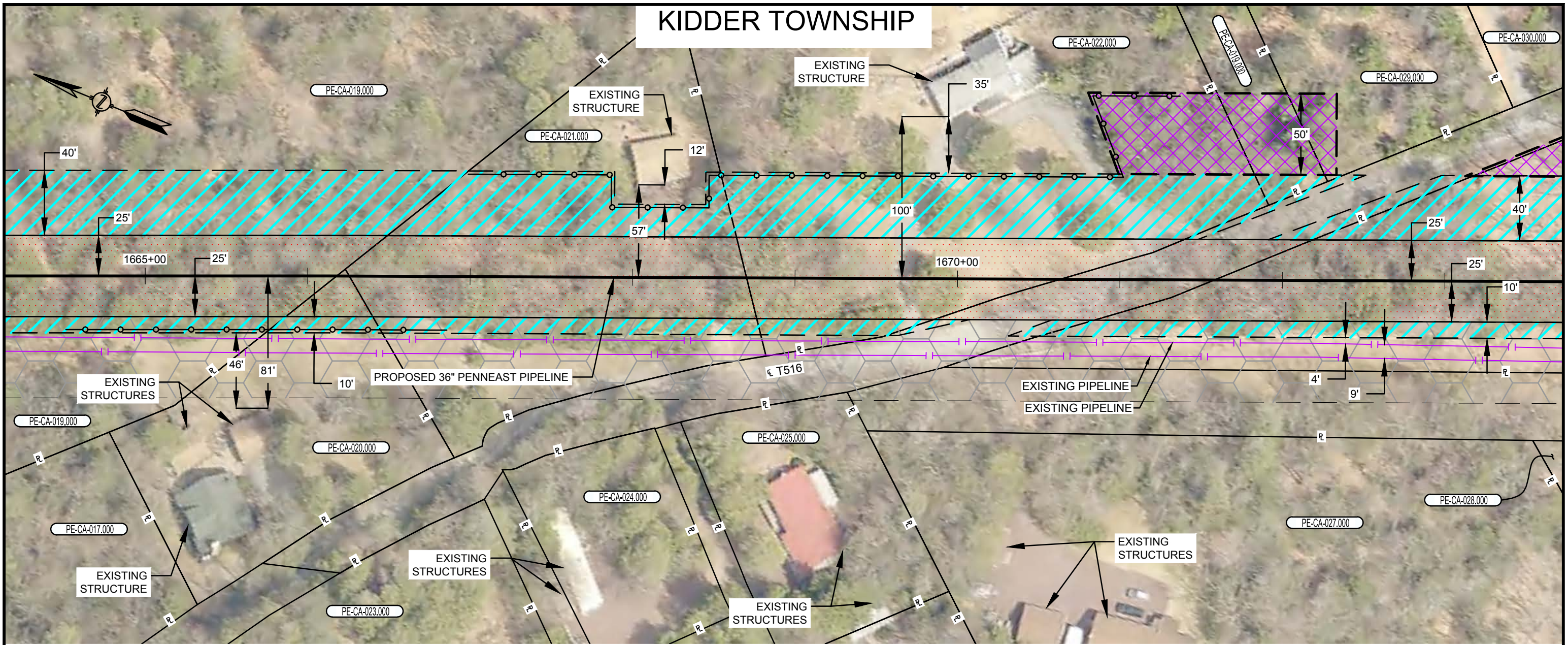


000-03-02-023

SHEET: 01 OF 01
TYPE: ACAD

F

KIDDER TOWNSHIP

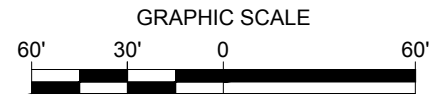


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

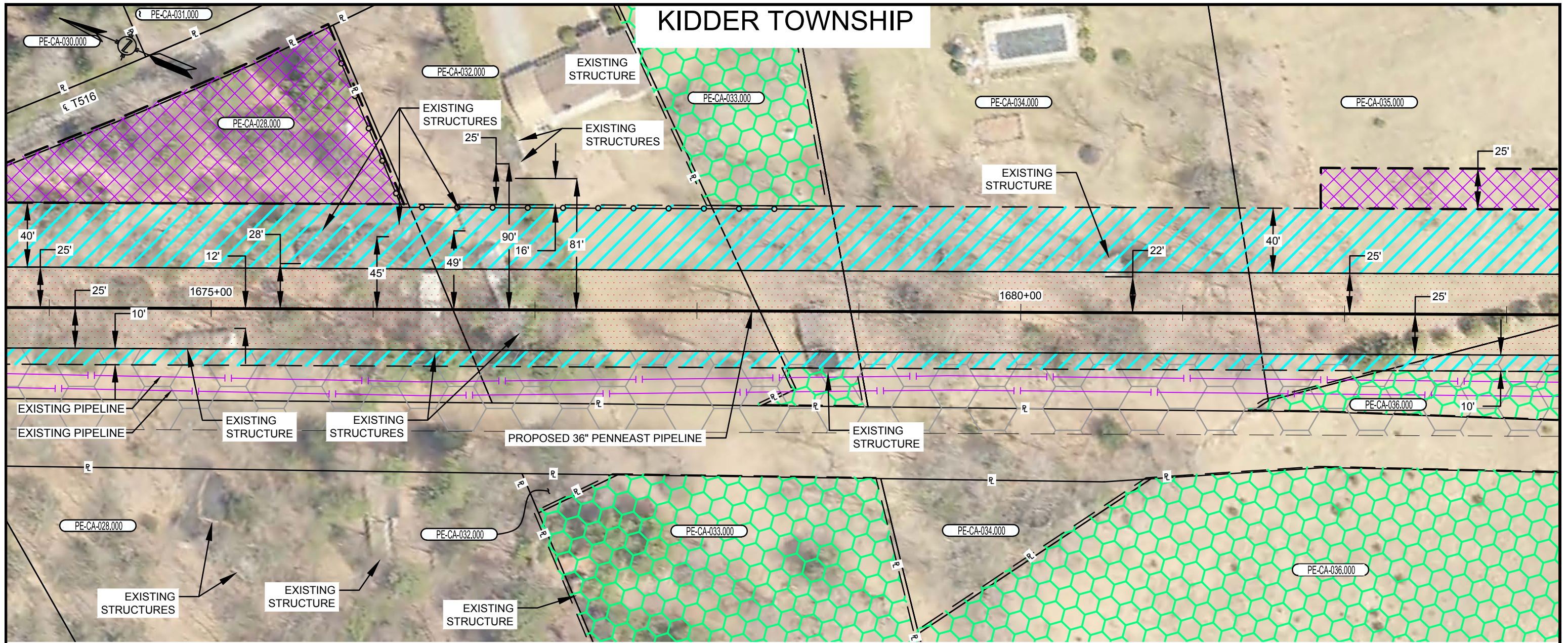
NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	CARBON
SECTION:	TOWNSHIP: KIDDER	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:		000-03-02-024.DWG

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
SEGMENT B
RESIDENTIAL SITE SPECIFIC
CARBON COUNTY, PENNSYLVANIA

000-03-02-024	SHEET: 01 OF 01	F
	TYPE: ACAD	

KIDDER TOWNSHIP

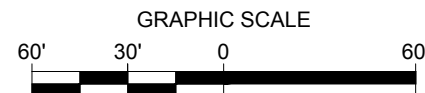


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: CARBON	
SECTION:	TOWNSHIP: KIDDER	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-025.DWG	

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
SEGMENT B
RESIDENTIAL SITE SPECIFIC
CARBON COUNTY, PENNSYLVANIA

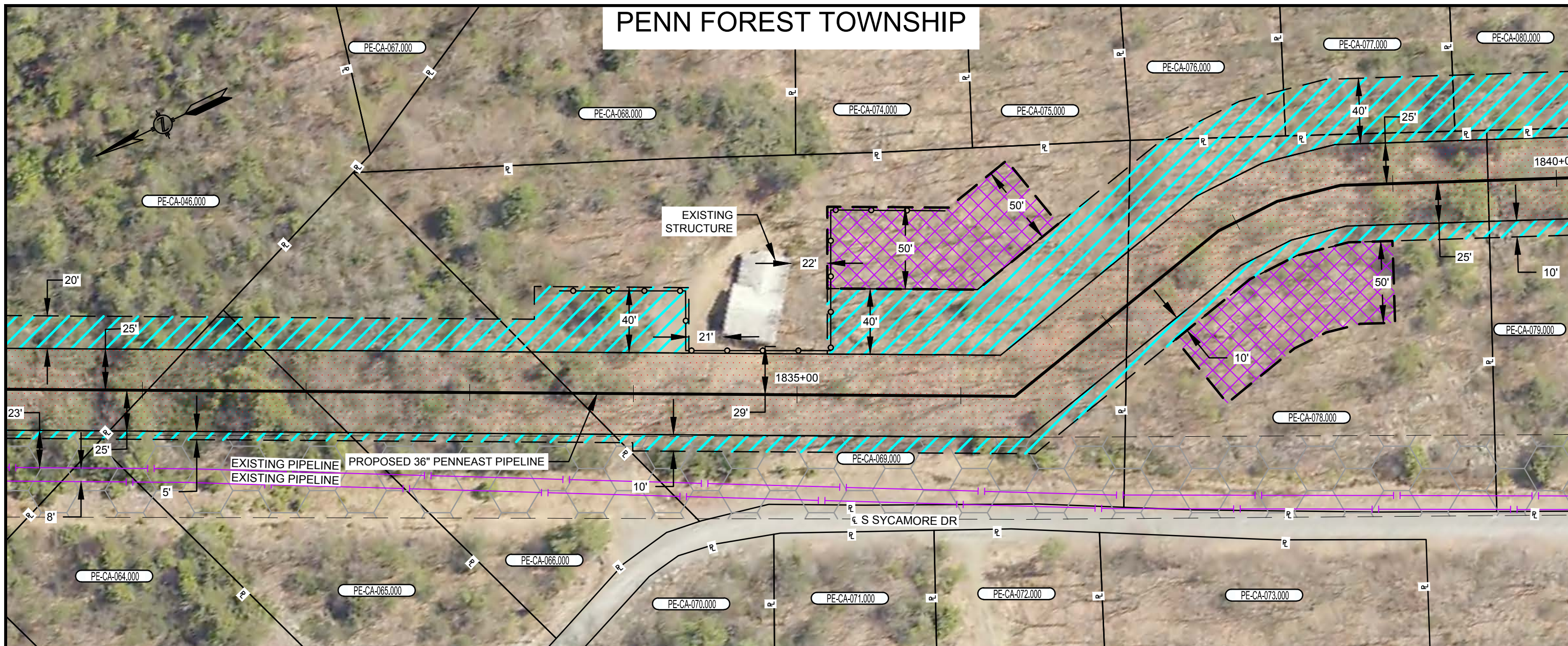


000-03-02-025

SHEET: 01 OF 01
TYPE: ACAD

F




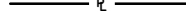

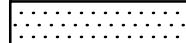


PENN FOREST TOWNSHIP

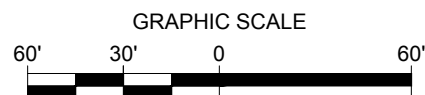


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

- SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
- STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
- STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
- PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

- THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
- THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	CARBON
SECTION:	TOWNSHIP: PENN FOREST	RANGE:	
DFT:	HMM	DATE:	02/18/2016
CHK:	HMM	DATE:	02/18/2016
APP:		SCALE:	1"=60'
FILENAME:		000-03-02-026.DWG	

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
SEGMENT B
RESIDENTIAL SITE SPECIFIC
CARBON COUNTY, PENNSYLVANIA

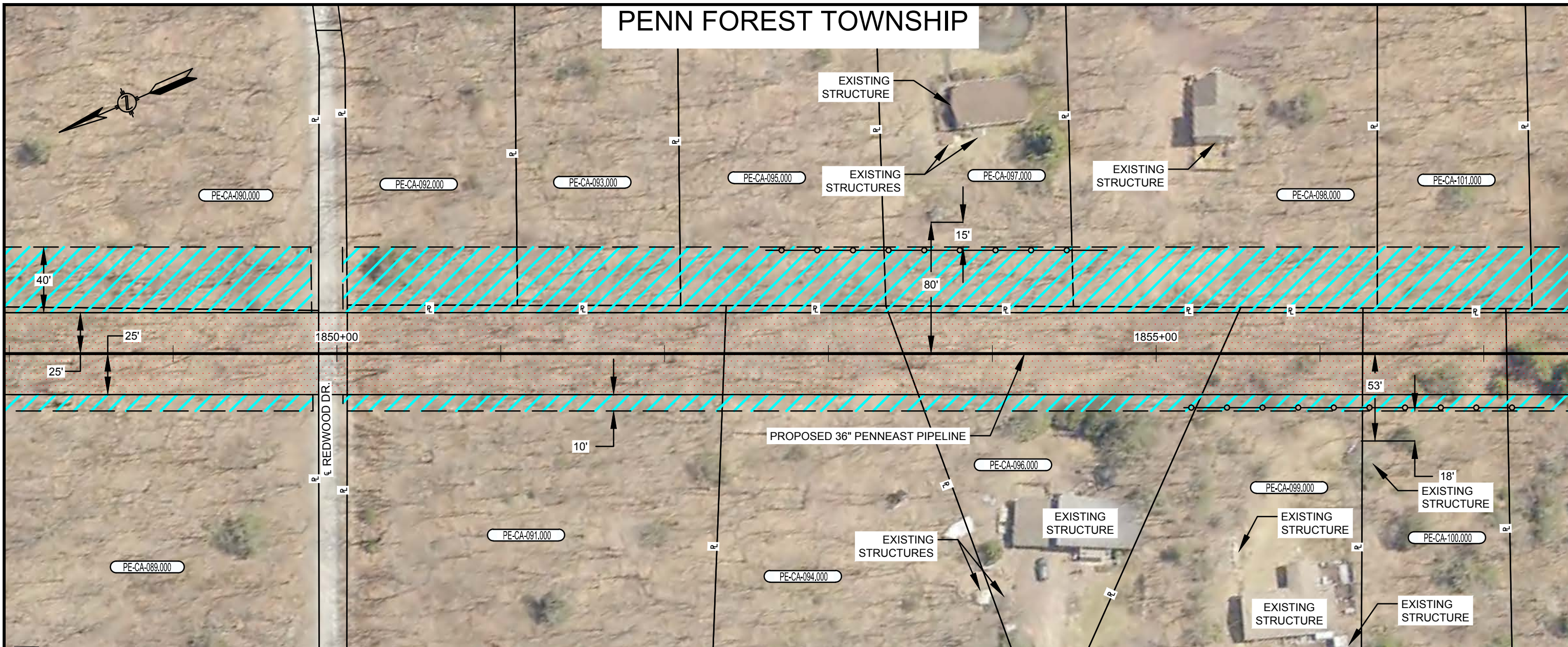


000-03-02-026

SHEET: 01 OF 01
TYPE: ACAD

F

PENN FOREST TOWNSHIP

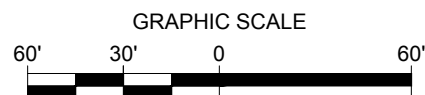


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	CARBON
SECTION:	TOWNSHIP: PENN FOREST	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:		000-03-02-027.DWG

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
SEGMENT B
RESIDENTIAL SITE SPECIFIC
CARBON COUNTY, PENNSYLVANIA

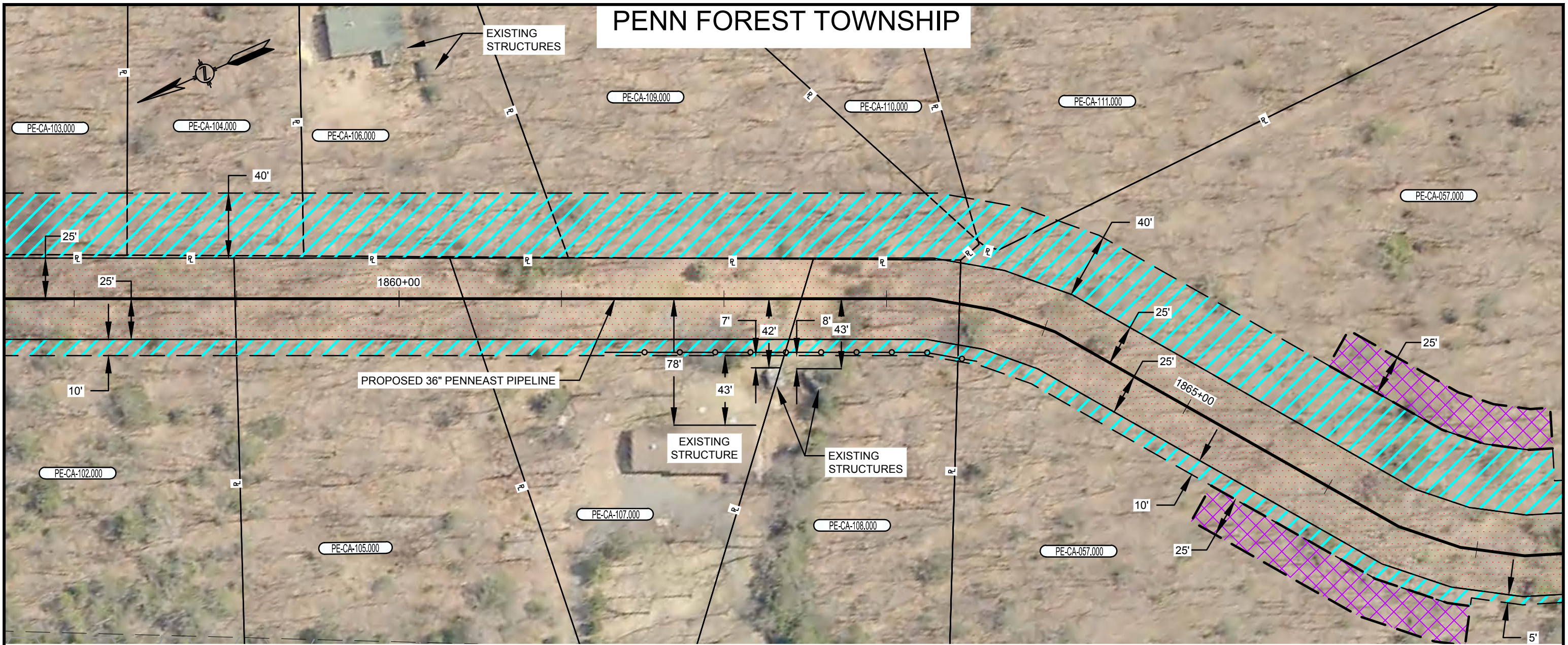


000-03-02-027

SHEET: 01 OF 01
TYPE: ACAD

F

PENN FOREST TOWNSHIP

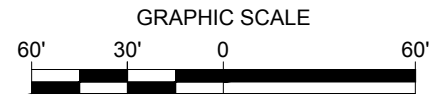


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

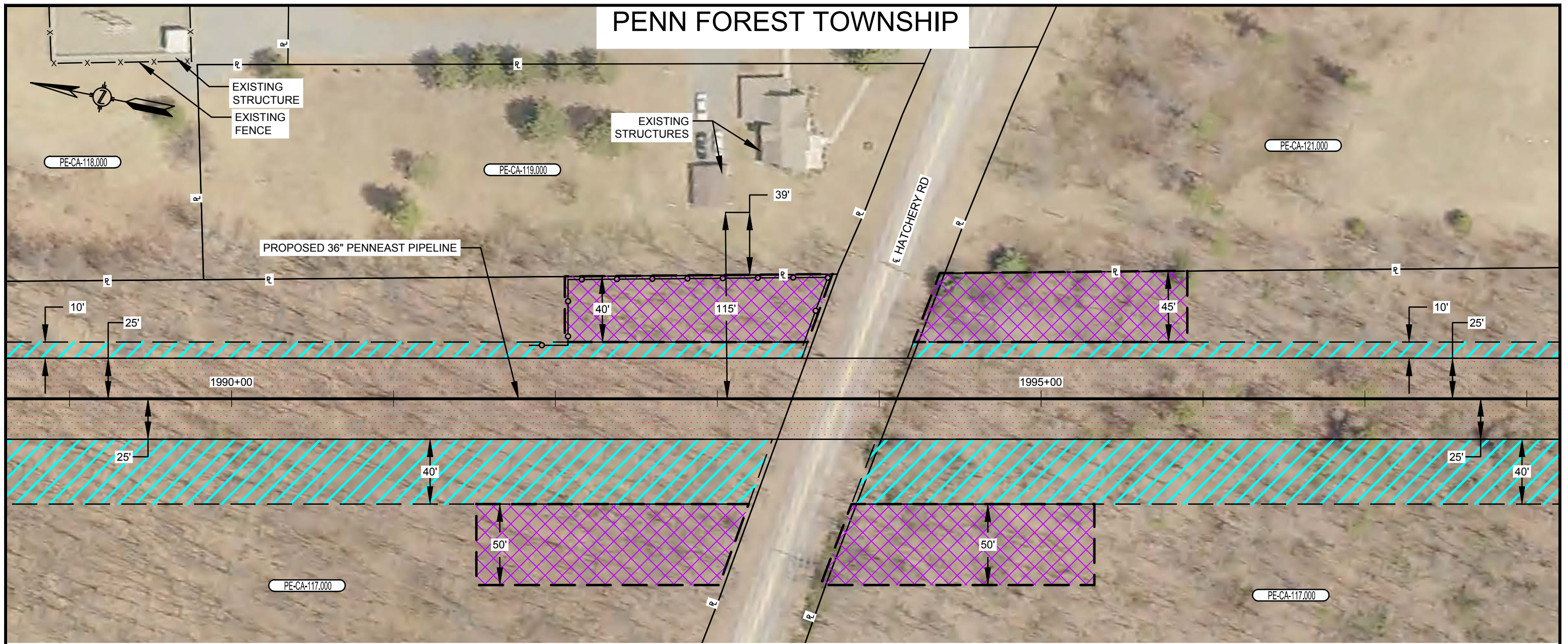
NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	CARBON
SECTION:	TOWNSHIP: PENN FOREST	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:		000-03-02-028.DWG

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
SEGMENT B
RESIDENTIAL SITE SPECIFIC
CARBON COUNTY, PENNSYLVANIA

000-03-02-028	SHEET: 01 OF 01	F
	TYPE: ACAD	

PENN FOREST TOWNSHIP

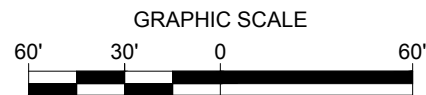


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	CARBON
SECTION:	TOWNSHIP: PENN FOREST	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-029.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 SEGMENT B
 RESIDENTIAL SITE SPECIFIC
 CARBON COUNTY, PENNSYLVANIA

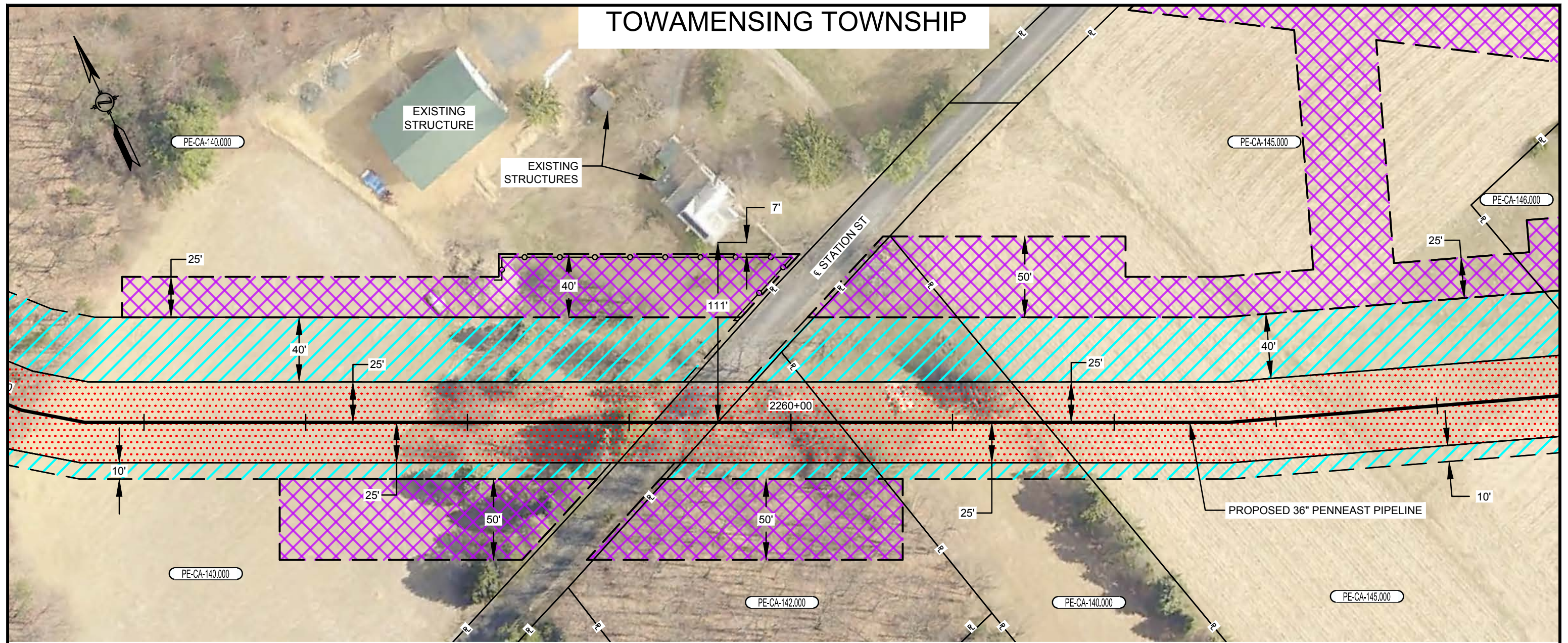


000-03-02-029

SHEET: 01 OF 01
 TYPE: ACAD

F

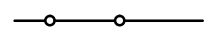


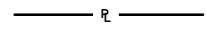
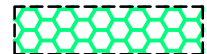
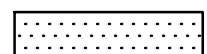


TOWAMENSING TOWNSHIP

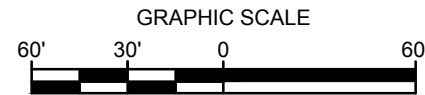


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: CARBON	
SECTION:	TOWNSHIP: TOWAMENSING	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-030.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 CARBON COUNTY, PENNSYLVANIA

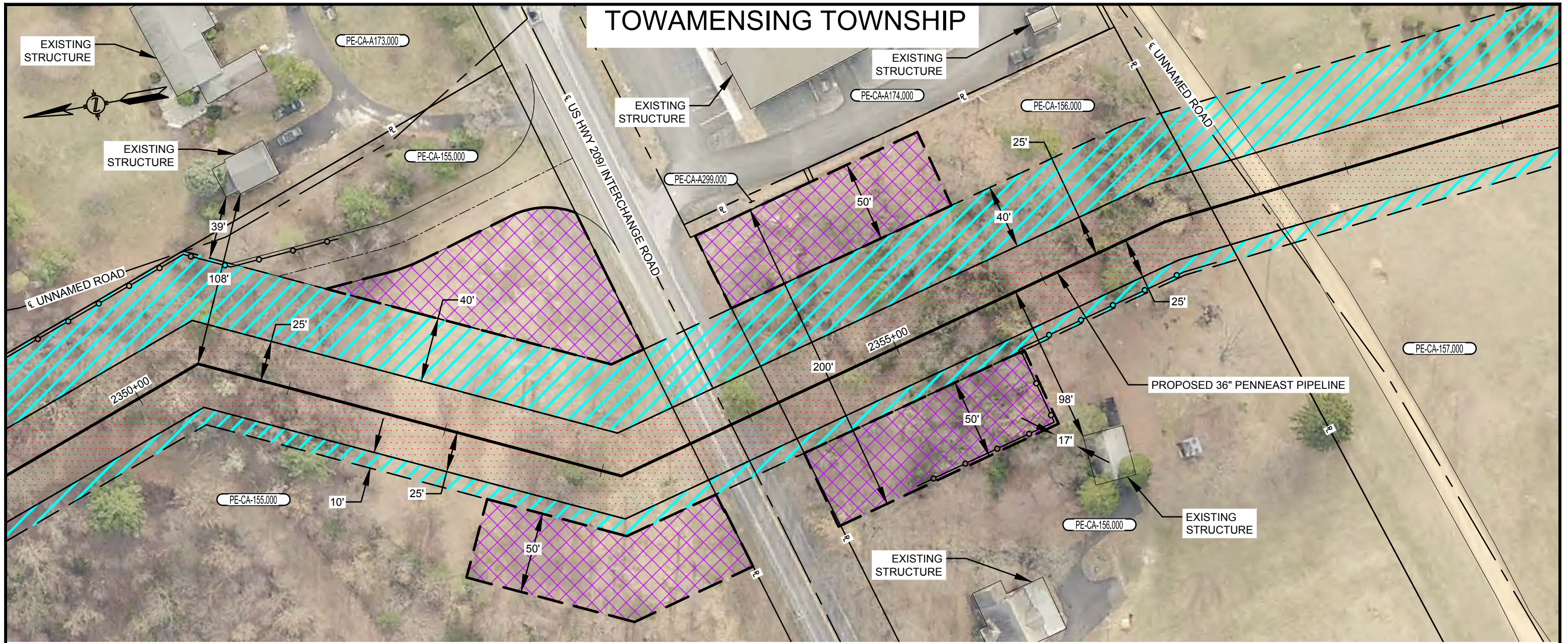


000-03-02-030

SHEET: 01 OF 01
 TYPE: ACAD

F

TOWAMENSING TOWNSHIP

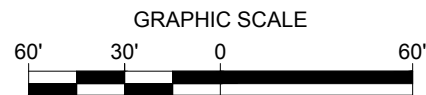


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION: ---		OP. AREA: ---	
STATE: ---		CO./PAR.: CARBON	
SECTION: ---	TOWNSHIP: TOWAMENSING	RANGE: ---	
DFT: HMM	DATE: 02/18/2016	SCALE: ---	
CHK: HMM	DATE: 02/18/2016	FILENAME: ---	
APPR: ---	DATE: ---	000-03-02-030A.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 CARBON COUNTY, PENNSYLVANIA

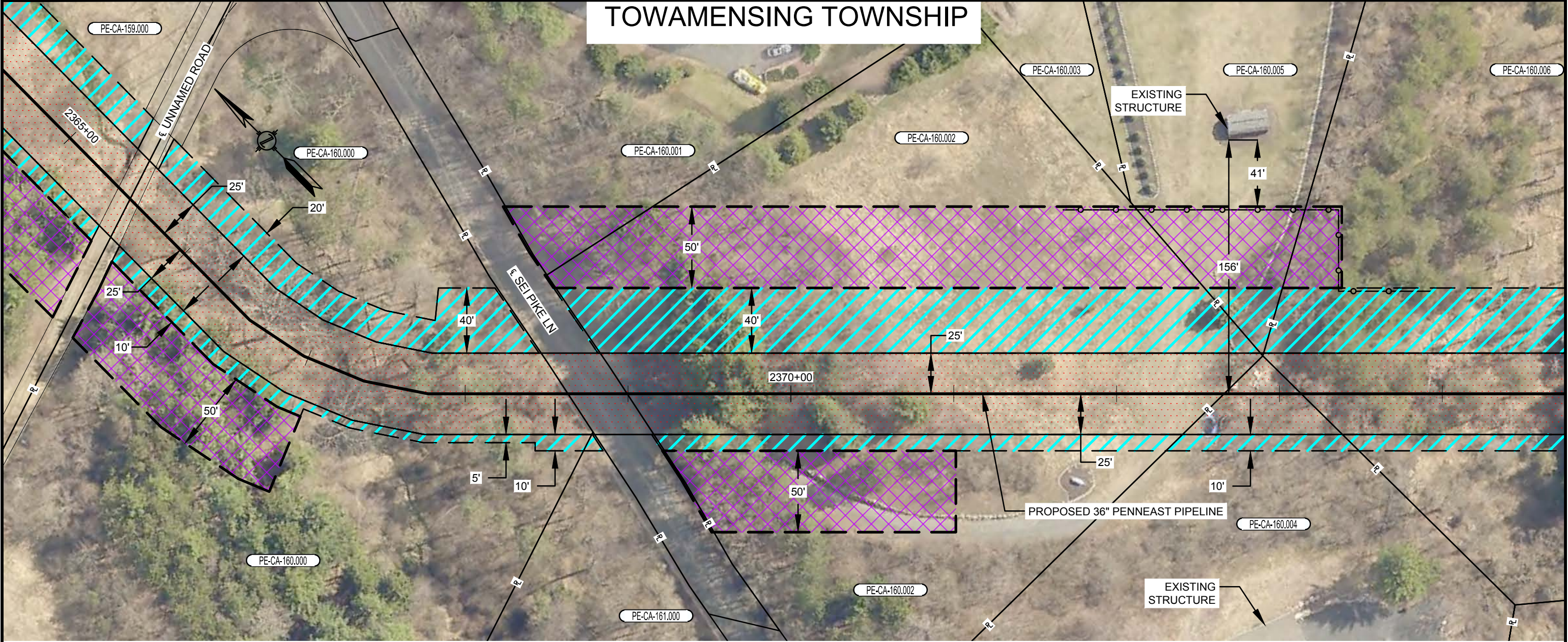


000-03-02-030A

SHEET: 01 OF 01
 TYPE: ACAD

F

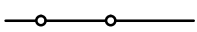


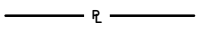
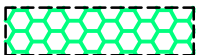
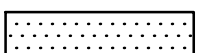


TOWAMENSING TOWNSHIP

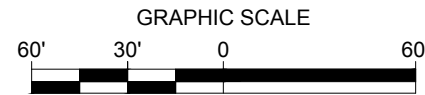


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: CARBON	
SECTION:	TOWNSHIP: TOWAMENSING	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-031.DWG	

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
CARBON COUNTY, PENNSYLVANIA

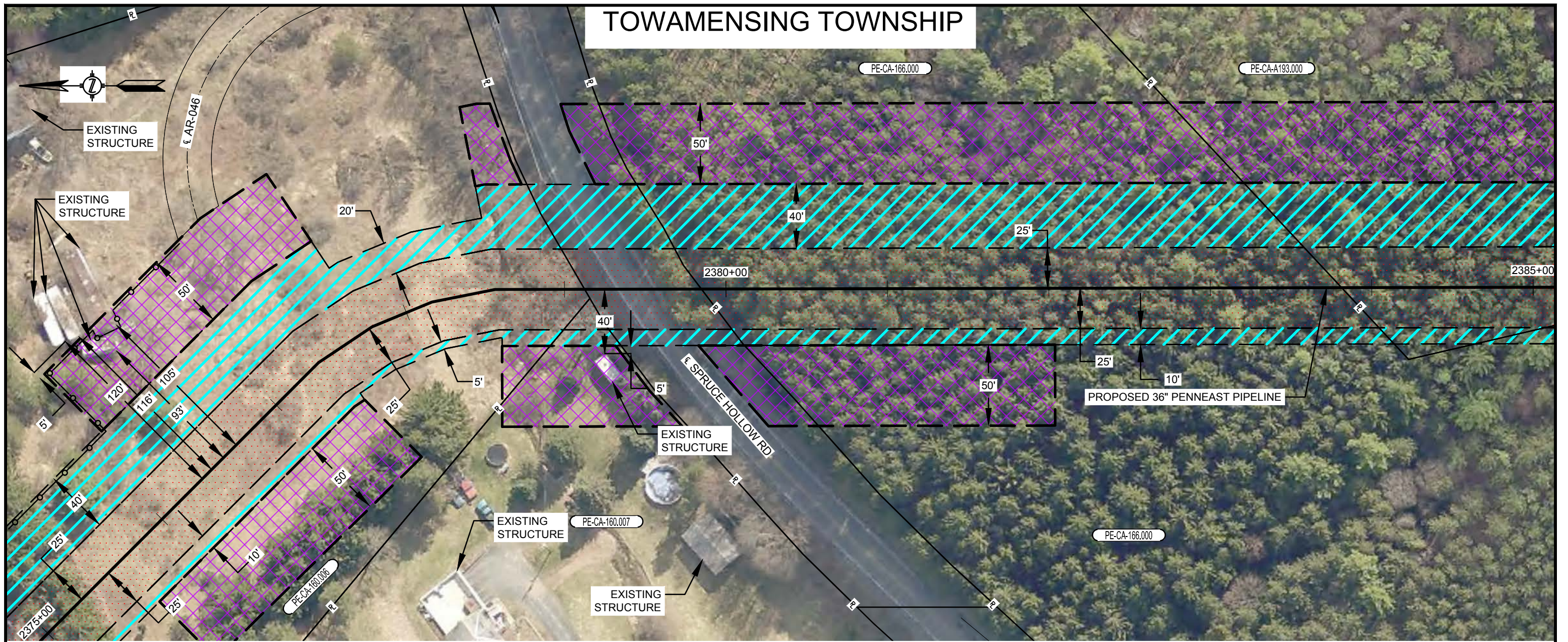


000-03-02-031

SHEET: 01 OF 01
TYPE: ACAD

F

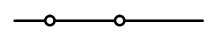


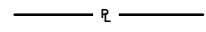
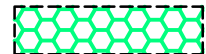
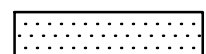


TOWAMENSING TOWNSHIP

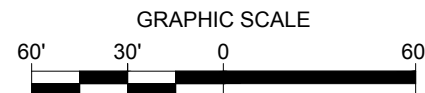


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: CARBON	
SECTION:	TOWNSHIP: TOWAMENSING	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-032.DWG	

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
CARBON COUNTY, PENNSYLVANIA

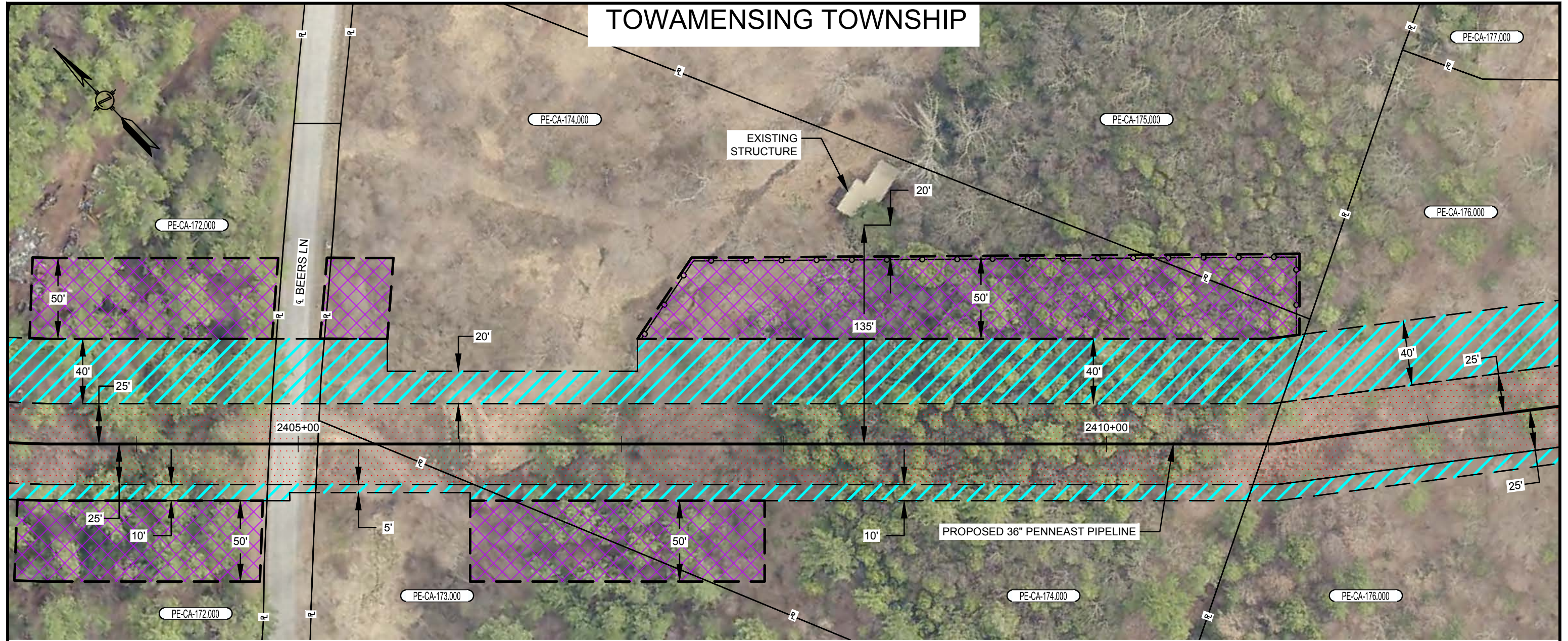


000-03-02-032

SHEET: 01 OF 01
TYPE: ACAD

F

TOWAMENSING TOWNSHIP

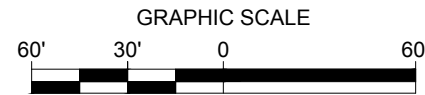


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: CARBON	
SECTION:		TOWNSHIP:TOWAMENSING RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-033.DWG	

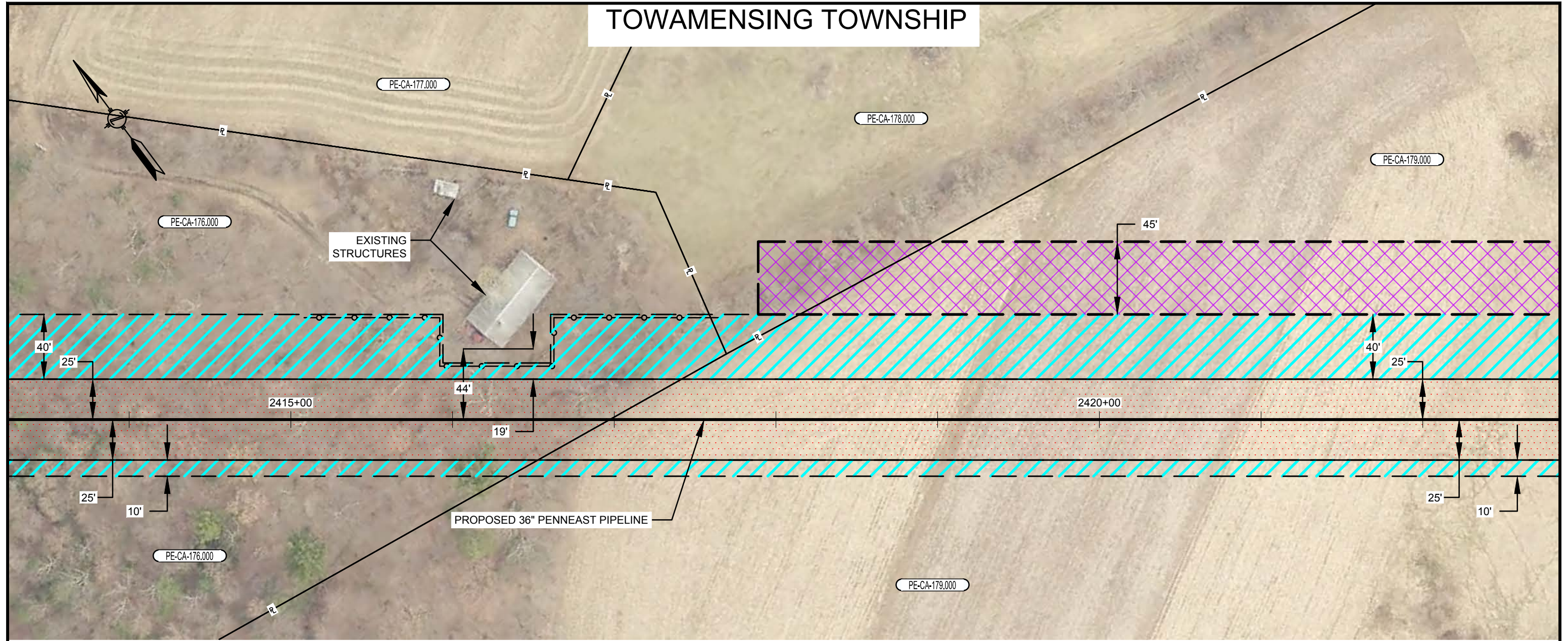
PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 CARBON COUNTY, PENNSYLVANIA



000-03-02-033

SHEET: 01 OF 01	F
TYPE: ACAD	

TOWAMENSING TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

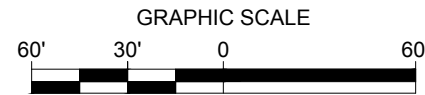
- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)

NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.



PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: CARBON	
SECTION:	TOWNSHIP: TOWAMENSING	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-034.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 CARBON COUNTY, PENNSYLVANIA

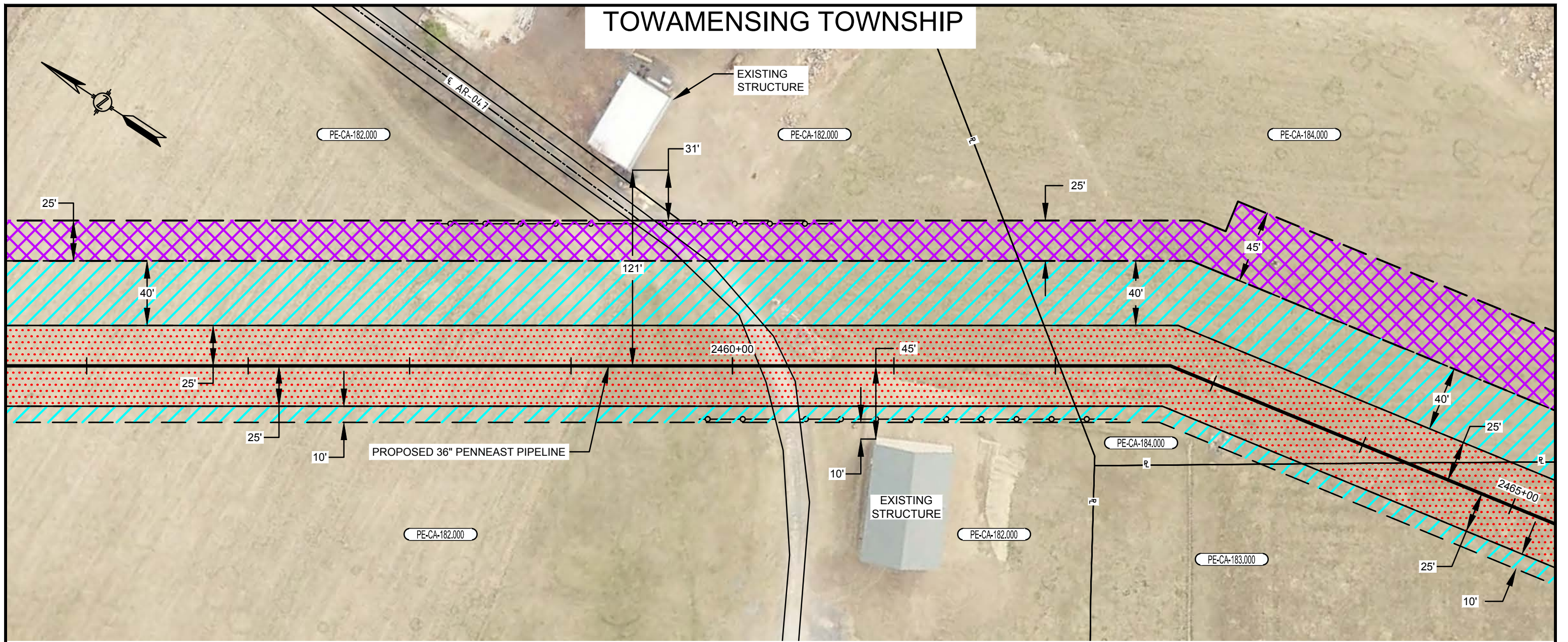


000-03-02-034

SHEET: 01 OF 01
 TYPE: ACAD

F

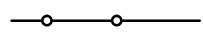


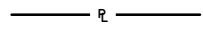
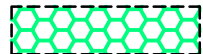
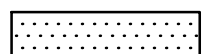


TOWAMENSING TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: CARBON	
SECTION:		TOWNSHIP:TOWAMENSING RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-035.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 CARBON COUNTY, PENNSYLVANIA

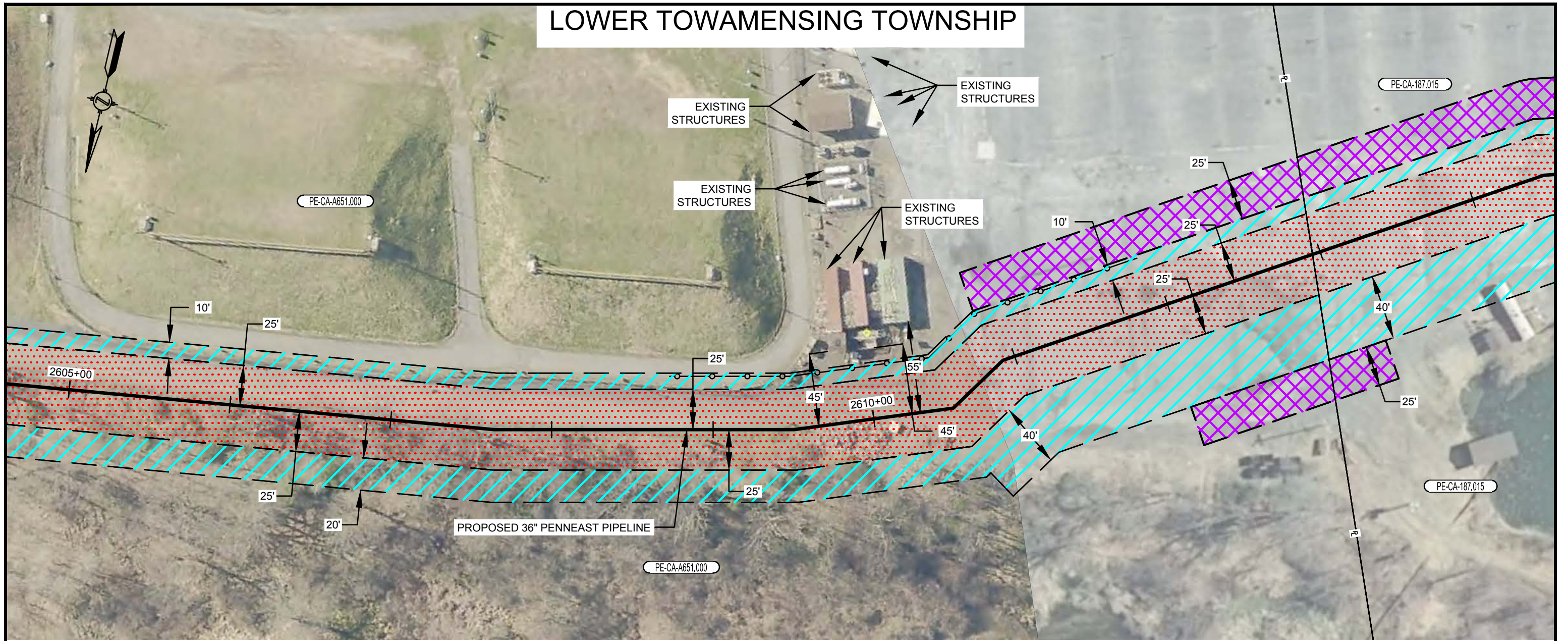


000-03-02-035

SHEET: 01 OF 01
 TYPE: ACAD

F

LOWER TOWAMENSING TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: CARBON	
SECTION:	TOWNSHIP: LOWER TOWAMENSING	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-036.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 CARBON COUNTY, PENNSYLVANIA

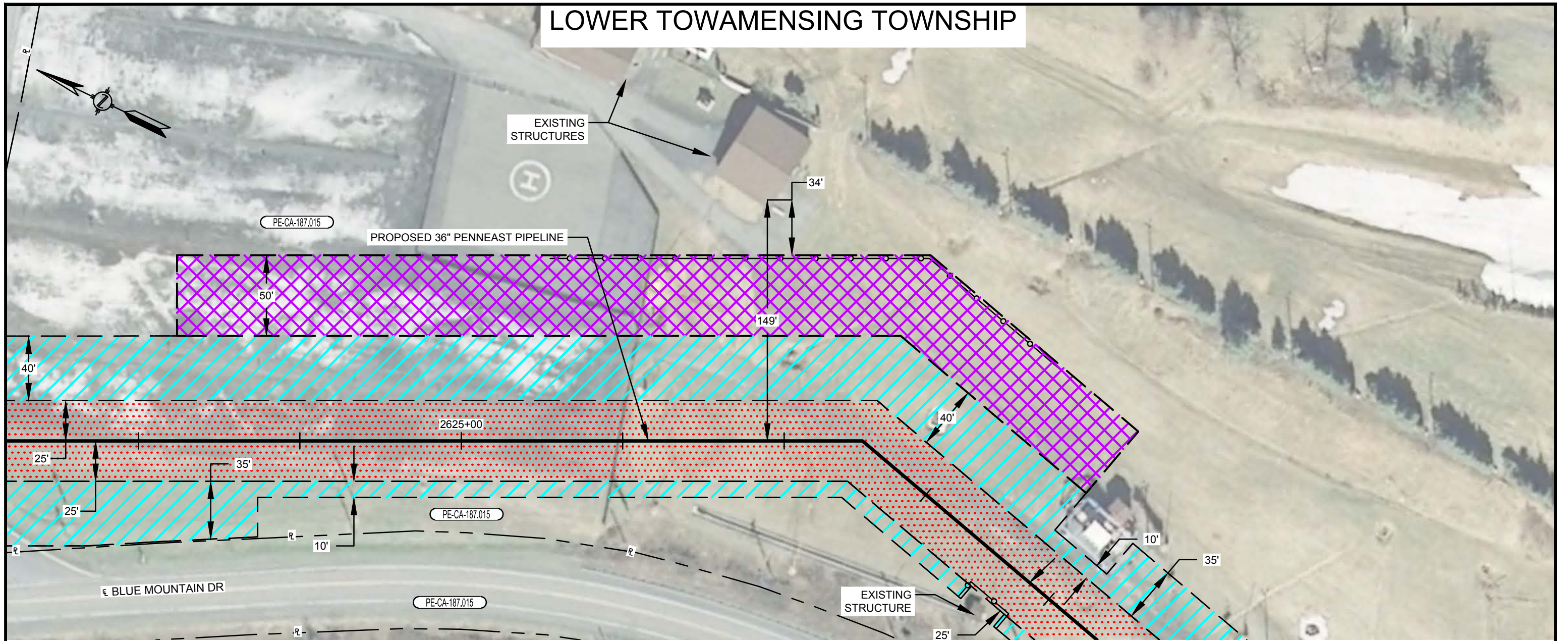


000-03-02-036

SHEET: 01 OF 01
 TYPE: ACAD

F

LOWER TOWAMENSING TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	CARBON
SECTION:	TOWNSHIP:SEE TITLE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME: 000-03-02-037.DWG	
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 CARBON COUNTY, PENNSYLVANIA

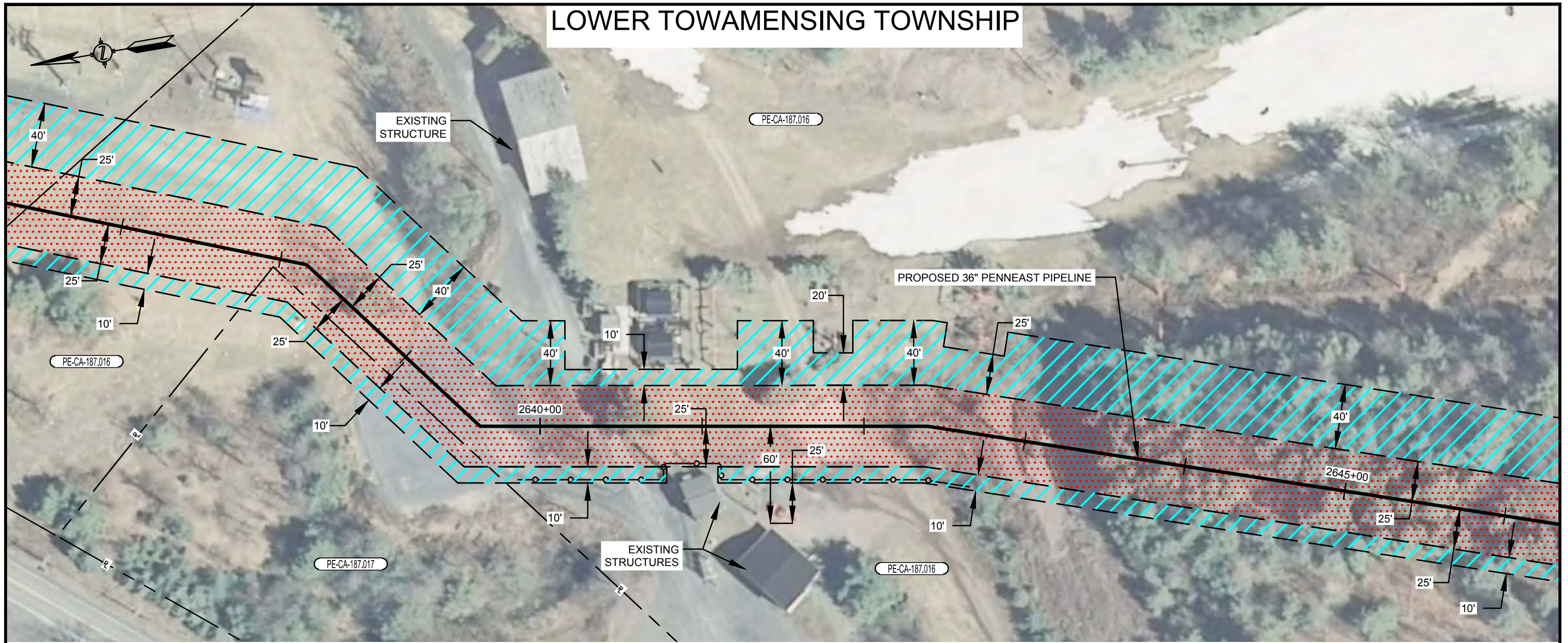


000-03-02-037

SHEET: 01 OF 01
 TYPE: ACAD

F

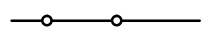


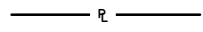
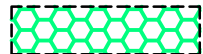
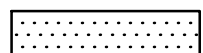


LOWER TOWAMENSING TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.:	
SECTION:	TOWNSHIP: SEE TITLE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME: 000-03-02-038.DWG	
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 CARBON COUNTY, PENNSYLVANIA

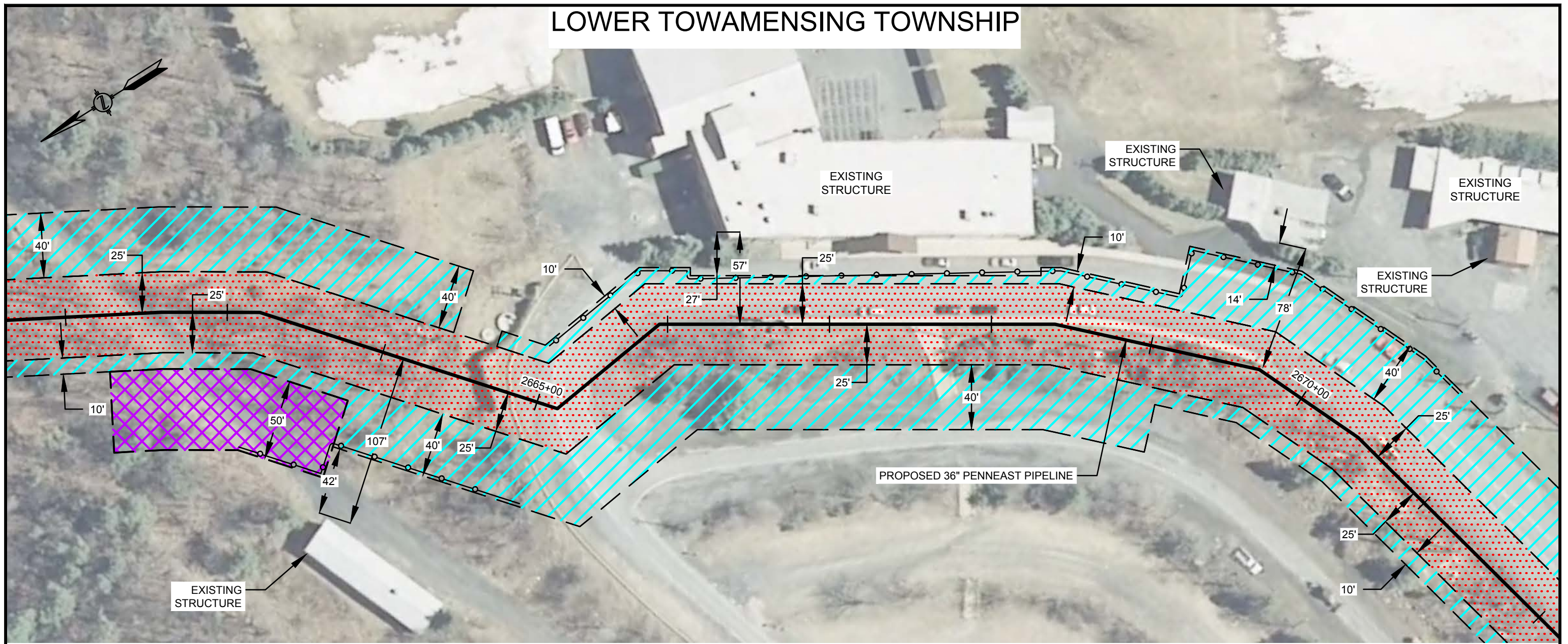


000-03-02-038

SHEET: 01 OF 01
 TYPE: ACAD

F

LOWER TOWAMENSING TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	CARBON
SECTION:	TOWNSHIP:SEE TITLE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-039.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 CARBON COUNTY, PENNSYLVANIA



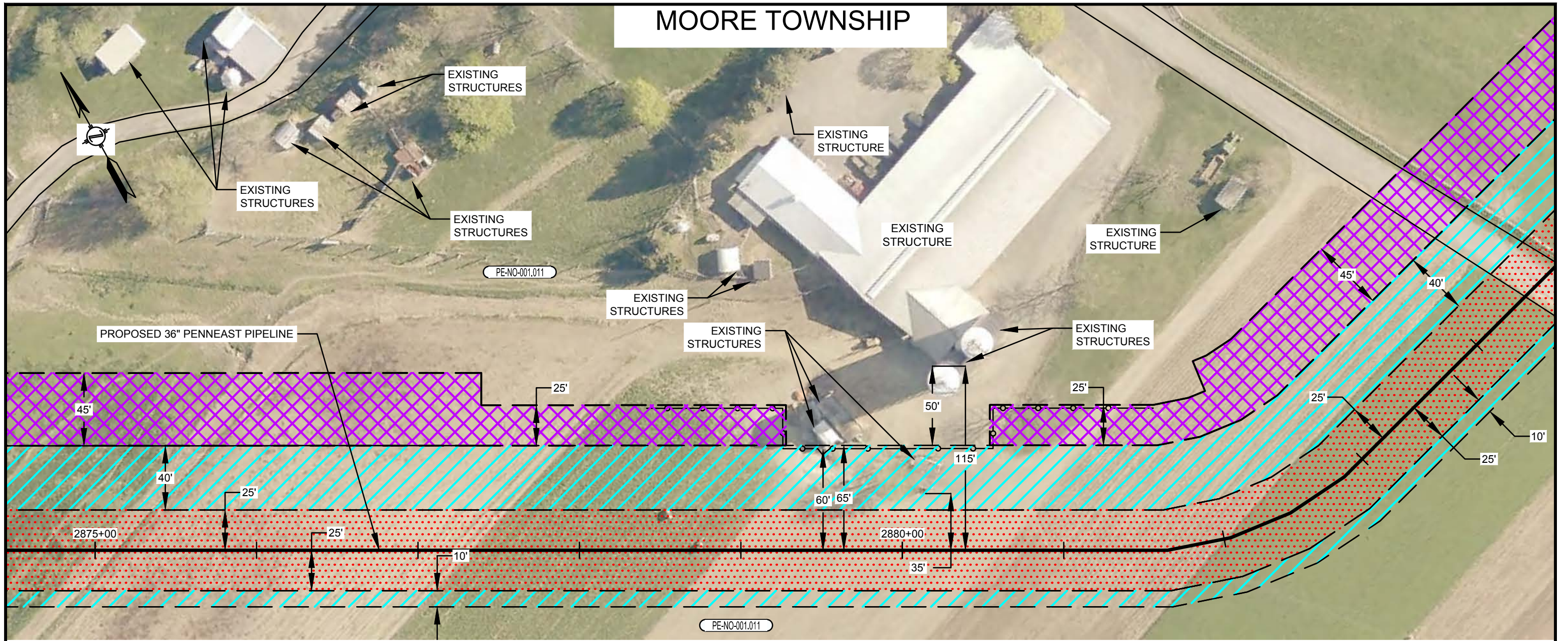
000-03-02-039

SHEET: 01 OF 01

TYPE: ACAD

F

MOORE TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

- SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
- STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
- STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
- PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

- THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
- THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	NORTHAMPTON
SECTION:		TOWNSHIP:	MOORE
		RANGE:	
DFT:	HMM	DATE:	02/18/2016
CHK:	HMM	DATE:	02/18/2016
APPR:		DATE:	
SCALE:		1"=60'	
FILENAME:		000-03-02-040.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

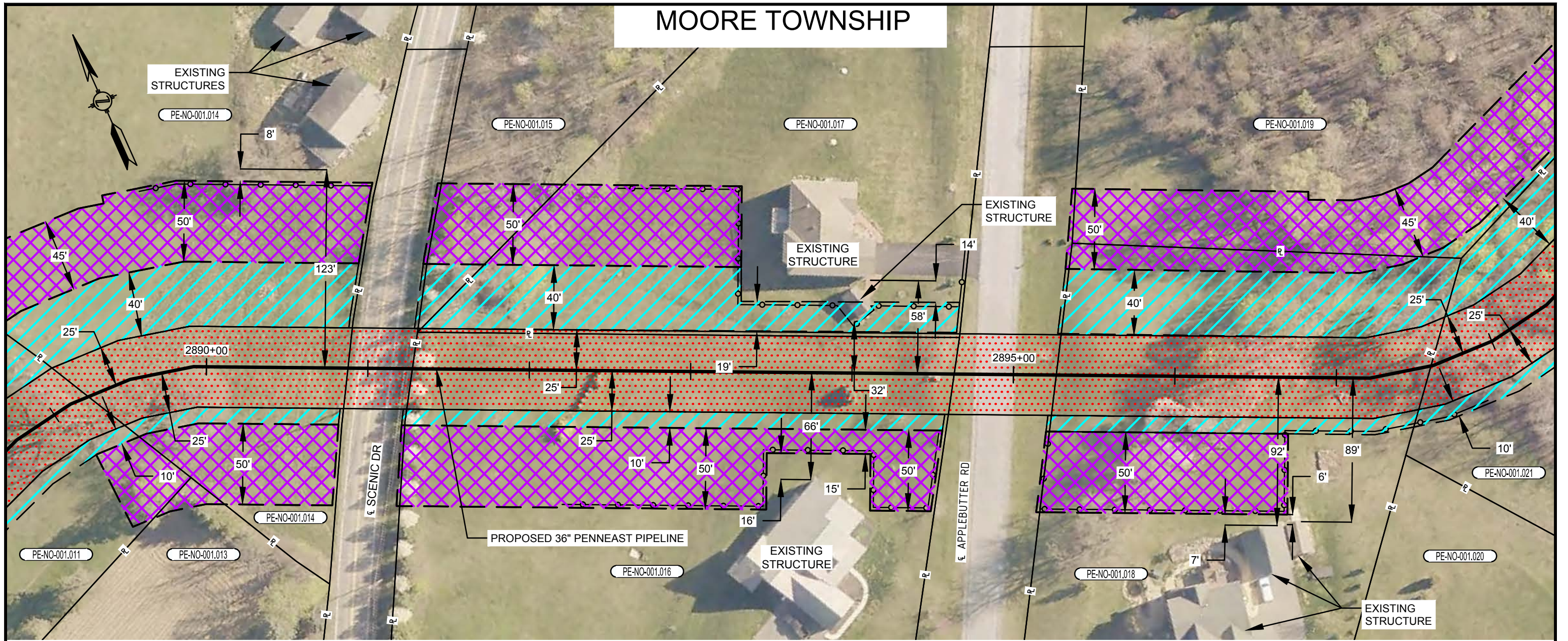


000-03-02-040

SHEET: 01 OF 01
 TYPE: ACAD

F

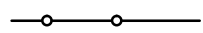


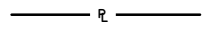
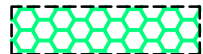
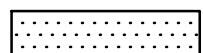


MOORE TOWNSHIP

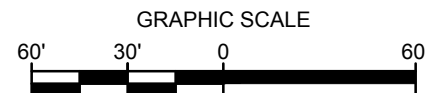


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREHOUSE
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: MOORE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-041.DWG	

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
NORTHAMPTON COUNTY, PENNSYLVANIA

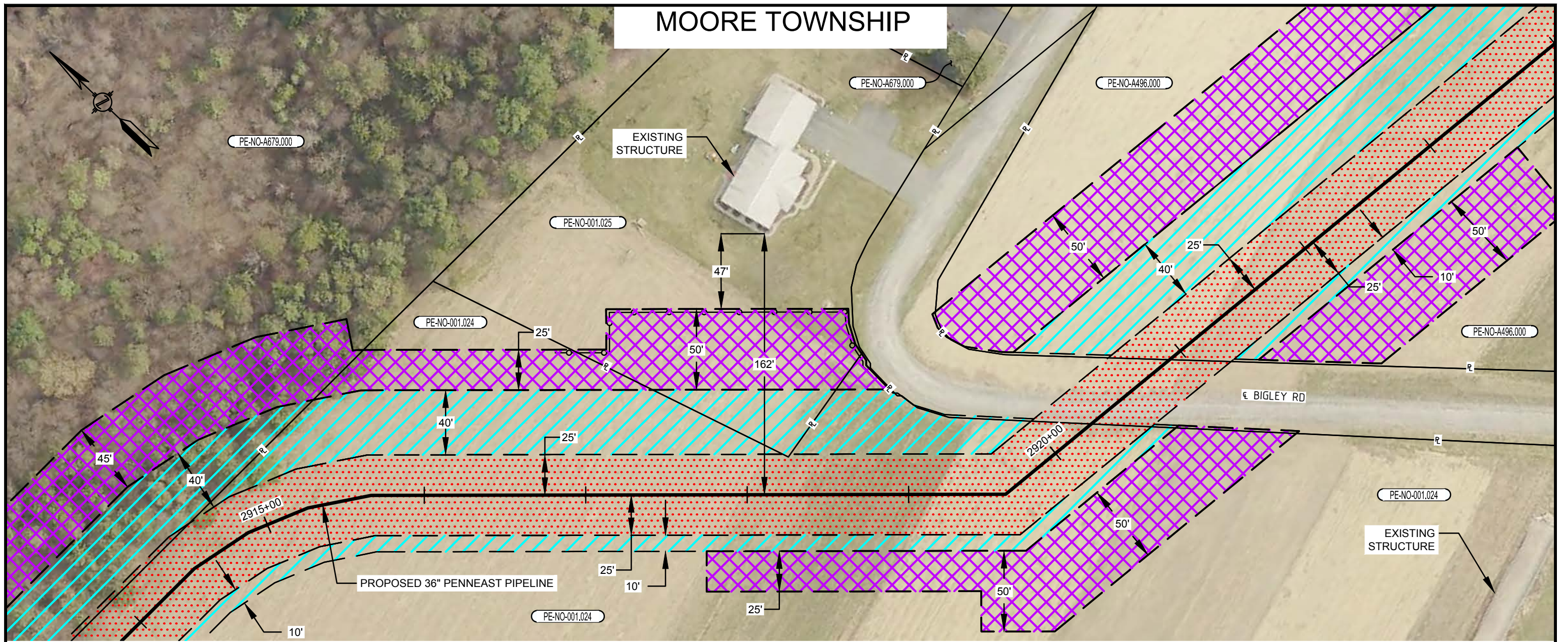


000-03-02-041

SHEET: 01 OF 01
TYPE: ACAD

F

MOORE TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: MOORE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-042.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

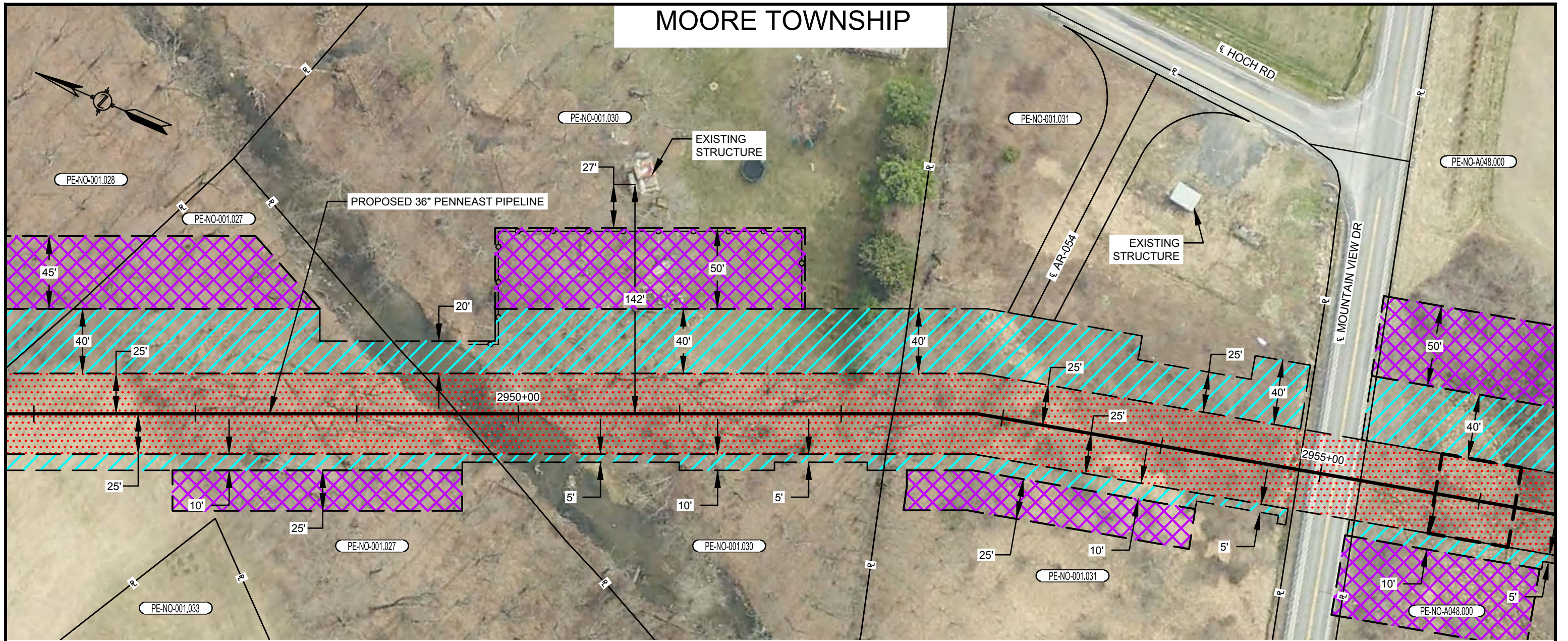


000-03-02-042

SHEET: 01 OF 01
 TYPE: ACAD

F

MOORE TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: MOORE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-043.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

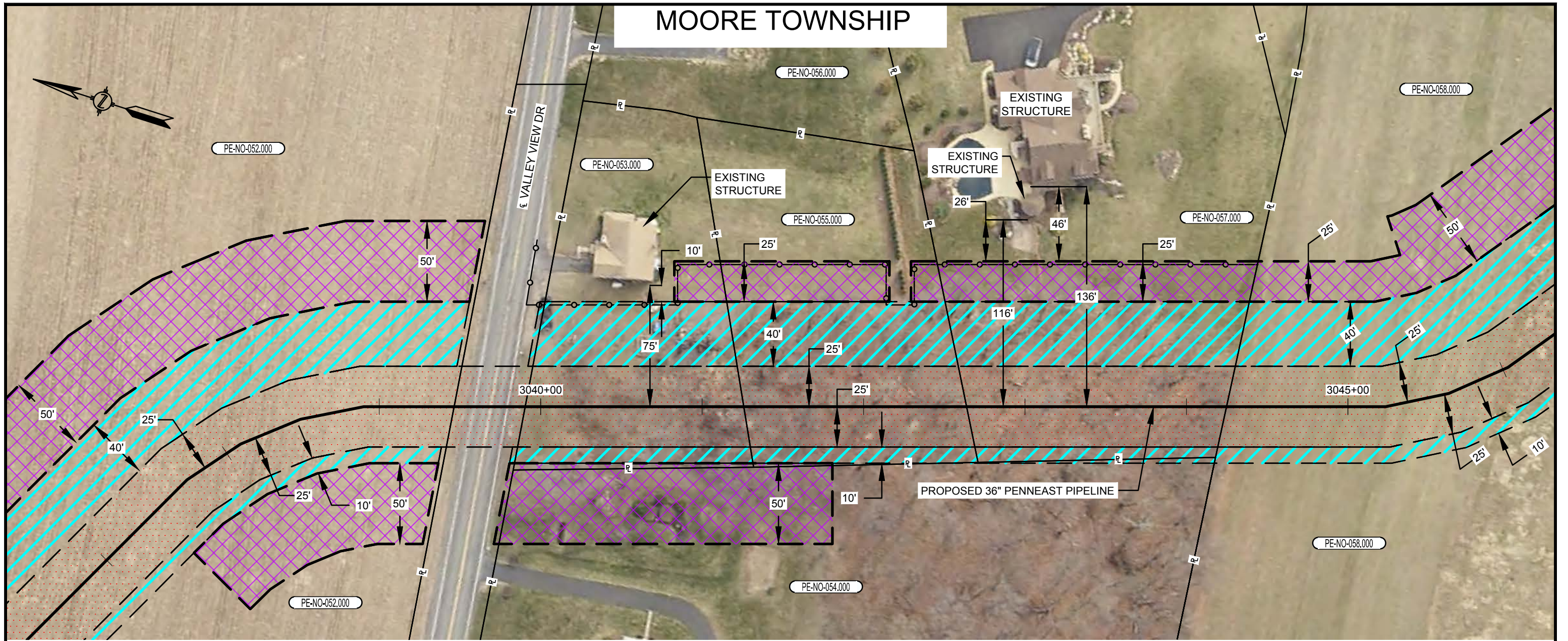


000-03-02-043

SHEET: 01 OF 01
 TYPE: ACAD

F

MOORE TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: MOORE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-044.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

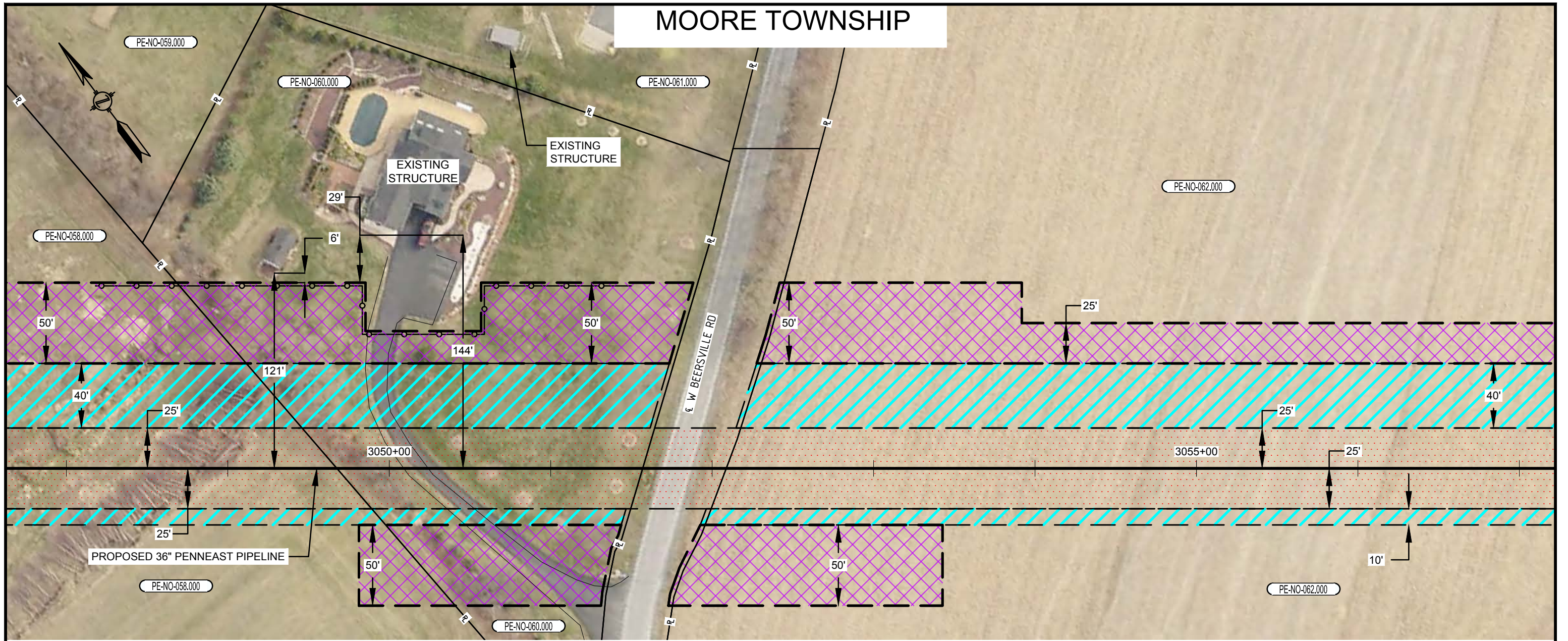


000-03-02-044

SHEET: 01 OF 01
 TYPE: ACAD

F

MOORE TOWNSHIP

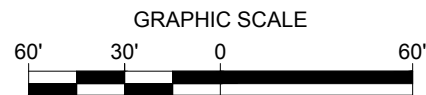


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

- SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
- STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
- STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
- PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

- THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
- THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:		TOWNSHIP: MOORE RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-045.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

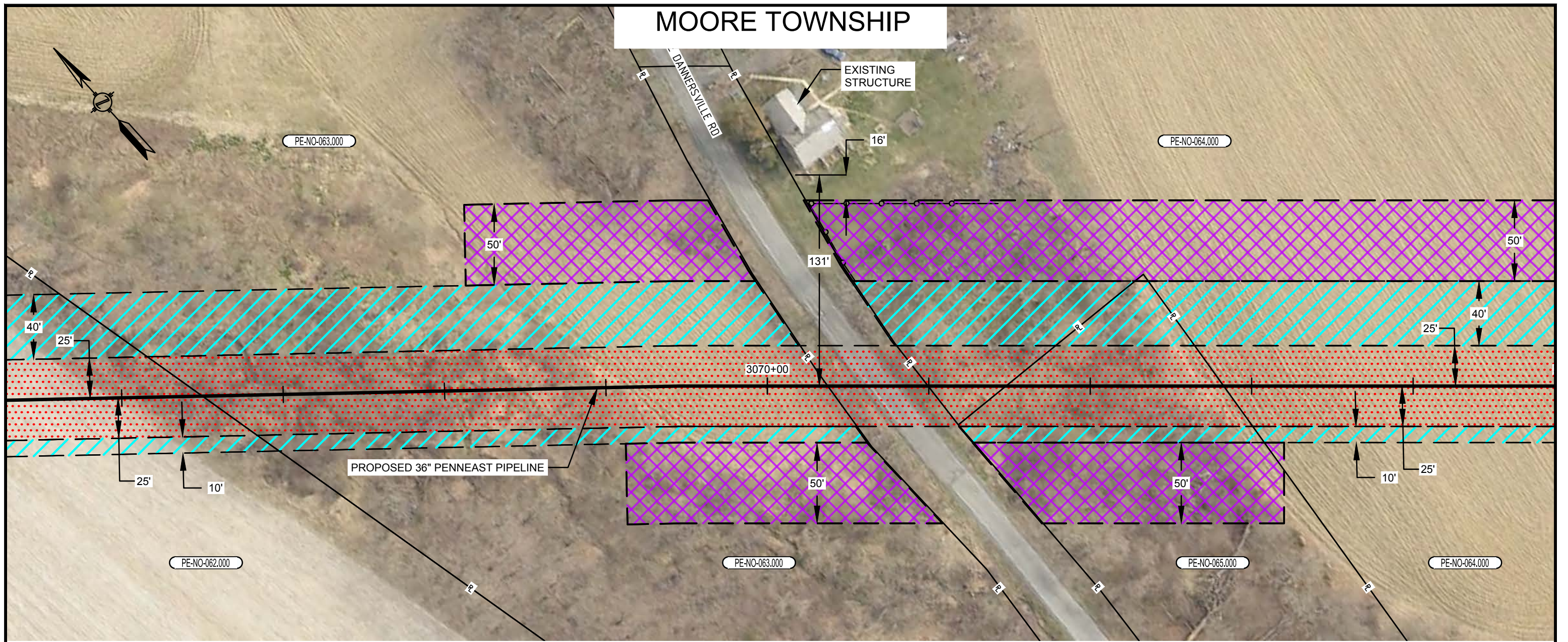


000-03-02-045

SHEET: 01 OF 01
 TYPE: ACAD

F

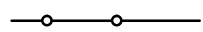


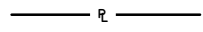
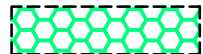
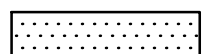


MOORE TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:		TOWNSHIP: MOORE	
RANGE:		SCALE: 1"=60'	
DFT: HMM	DATE: 02/18/2016	FILENAME:	
CHK: HMM	DATE: 02/18/2016	000-03-02-046.DWG	
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

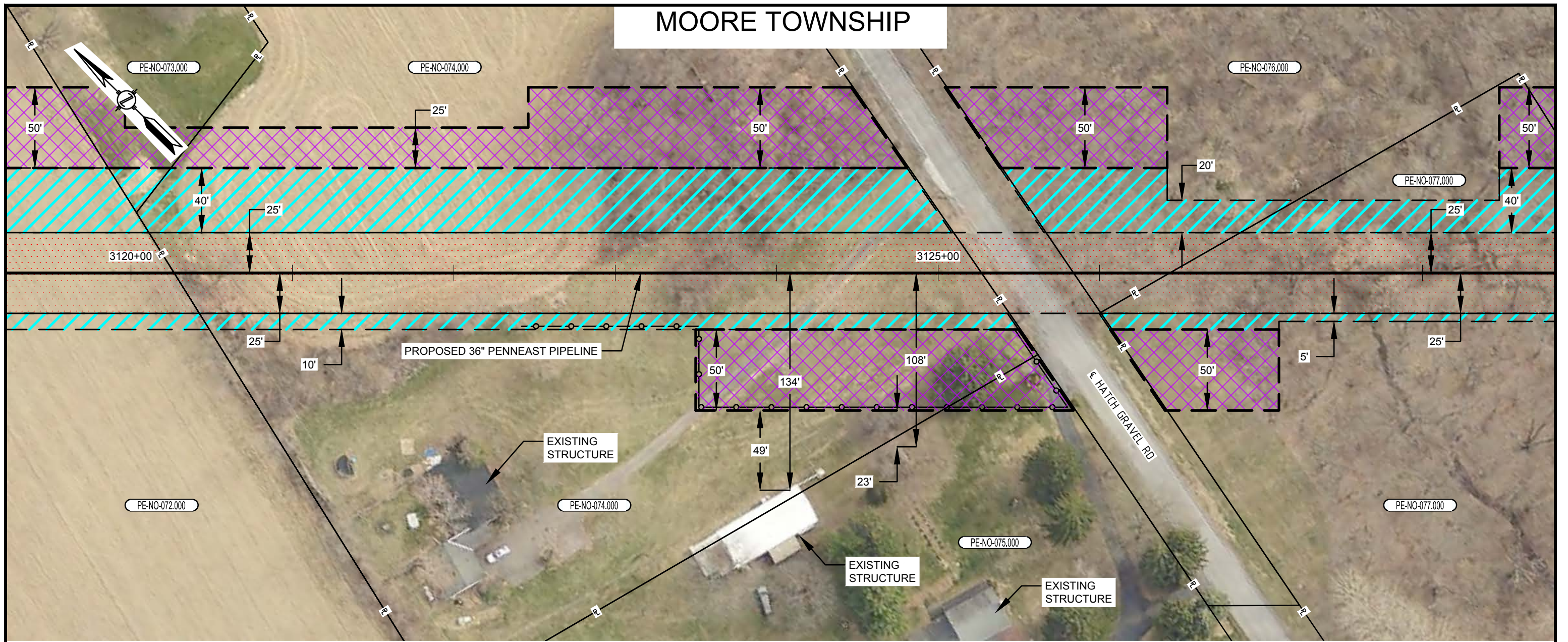


000-03-02-046

SHEET: 01 OF 01
 TYPE: ACAD

F

MOORE TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: MOORE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-047.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

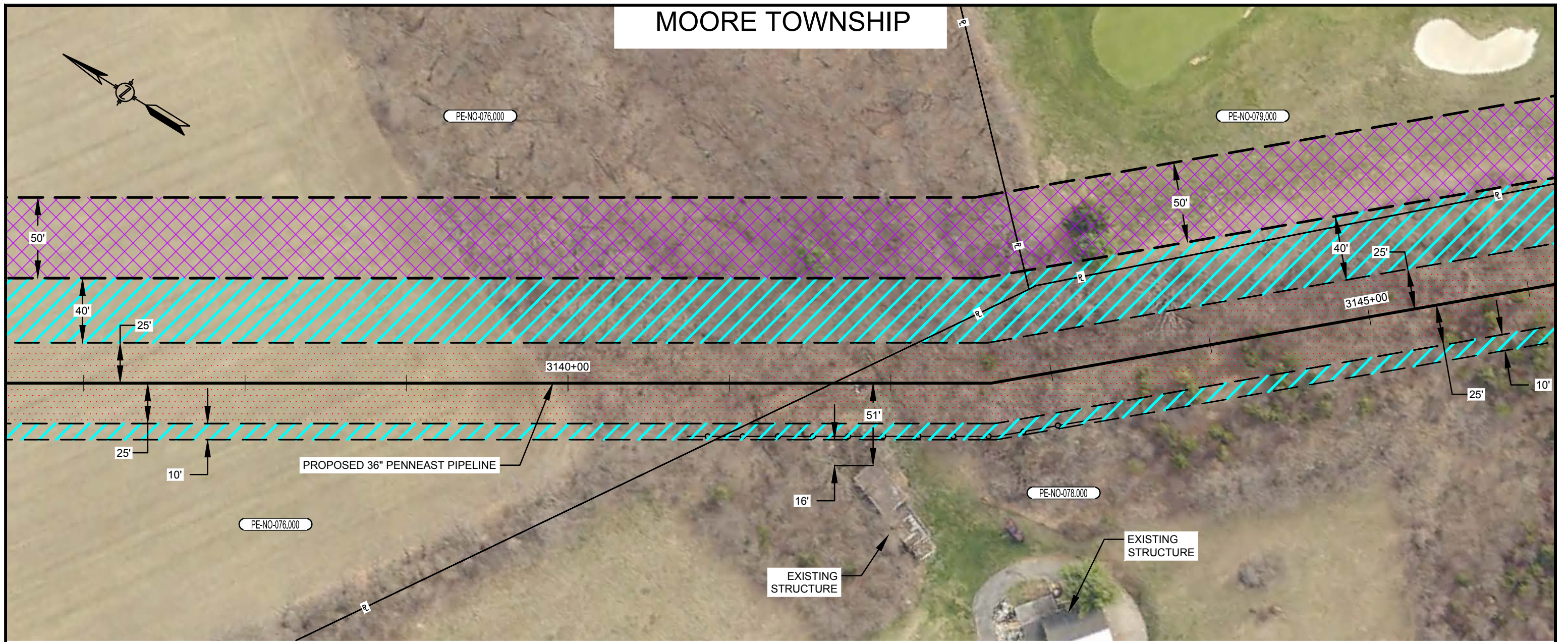


000-03-02-047

SHEET: 01 OF 01
 TYPE: ACAD

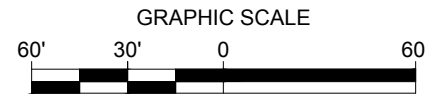
F

MOORE TOWNSHIP



LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



PLAN VIEW

SCALE: 1" = 60'

NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:		TOWNSHIP: MOORE RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-048.DWG	

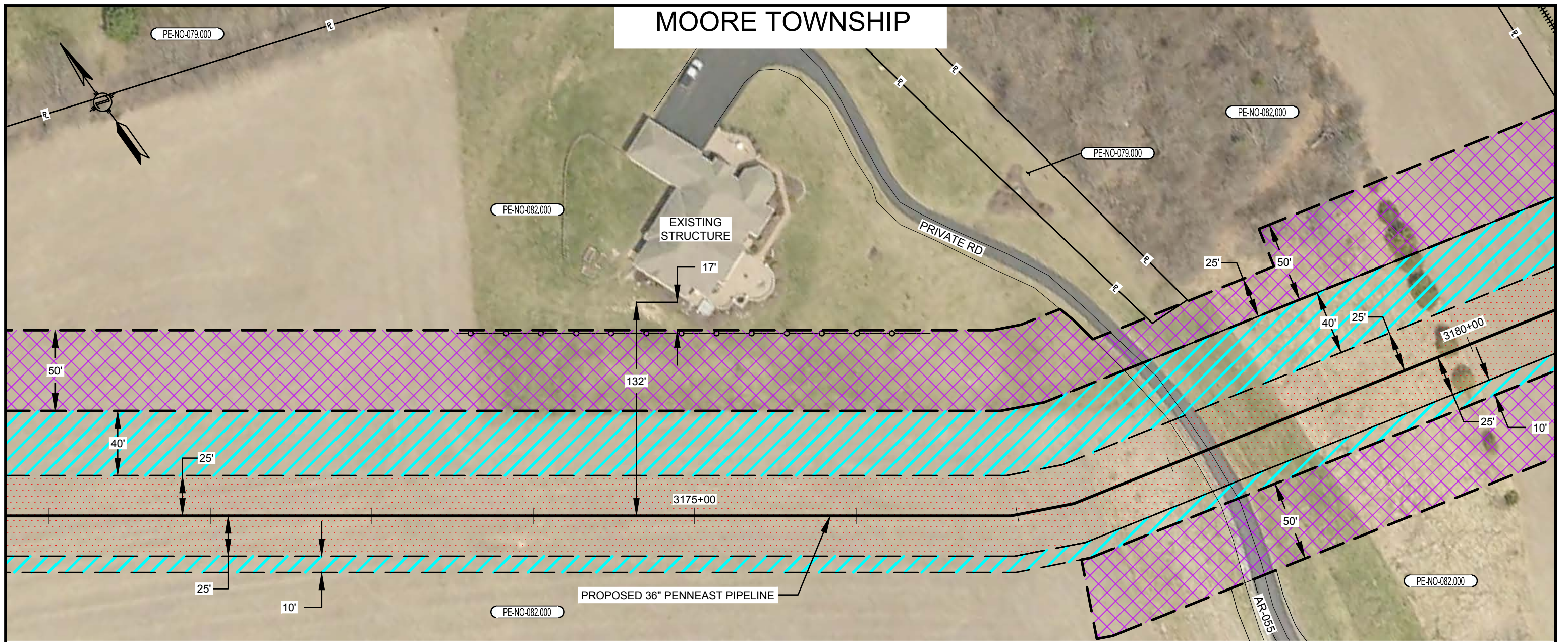
PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
NORTHAMPTON COUNTY, PENNSYLVANIA



000-03-02-048

SHEET: 01 OF 01	F
TYPE: ACAD	

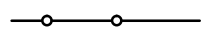


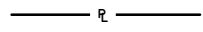
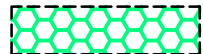
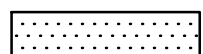


MOORE TOWNSHIP

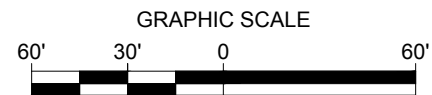


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: MOORE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-049.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

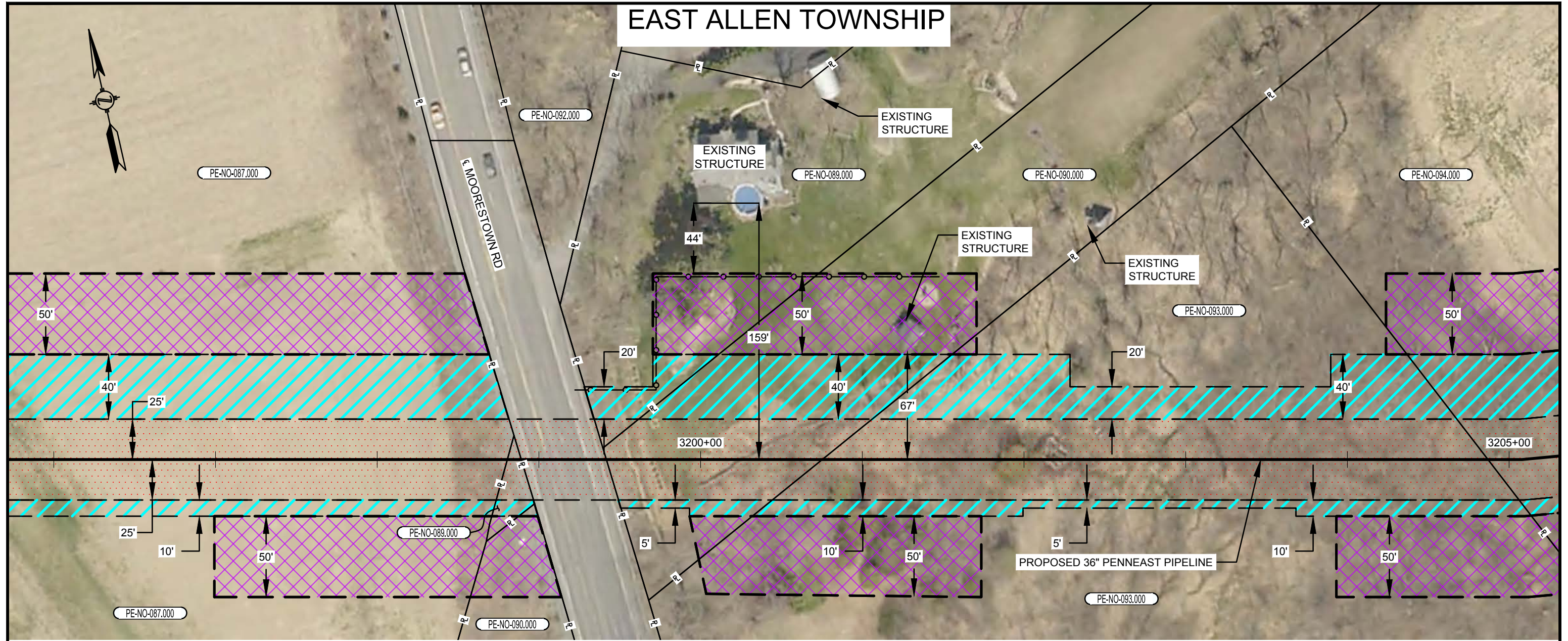


000-03-02-049

SHEET: 01 OF 01
 TYPE: ACAD

F

EAST ALLEN TOWNSHIP

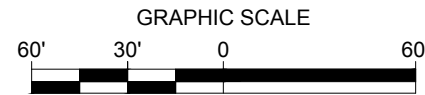


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: EAST ALLEN	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-050.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

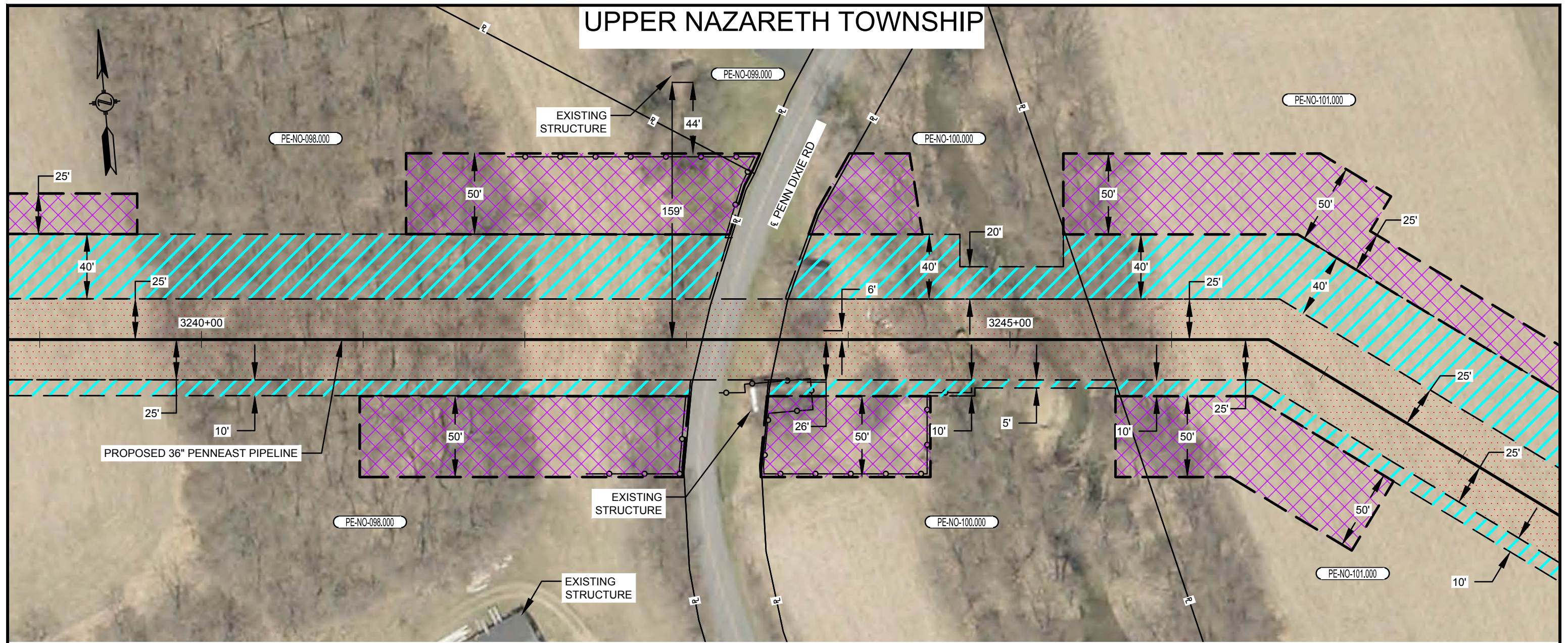


000-03-02-050

SHEET: 01 OF 01
 TYPE: ACAD

F

UPPER NAZARETH TOWNSHIP

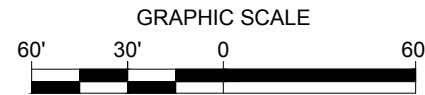


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

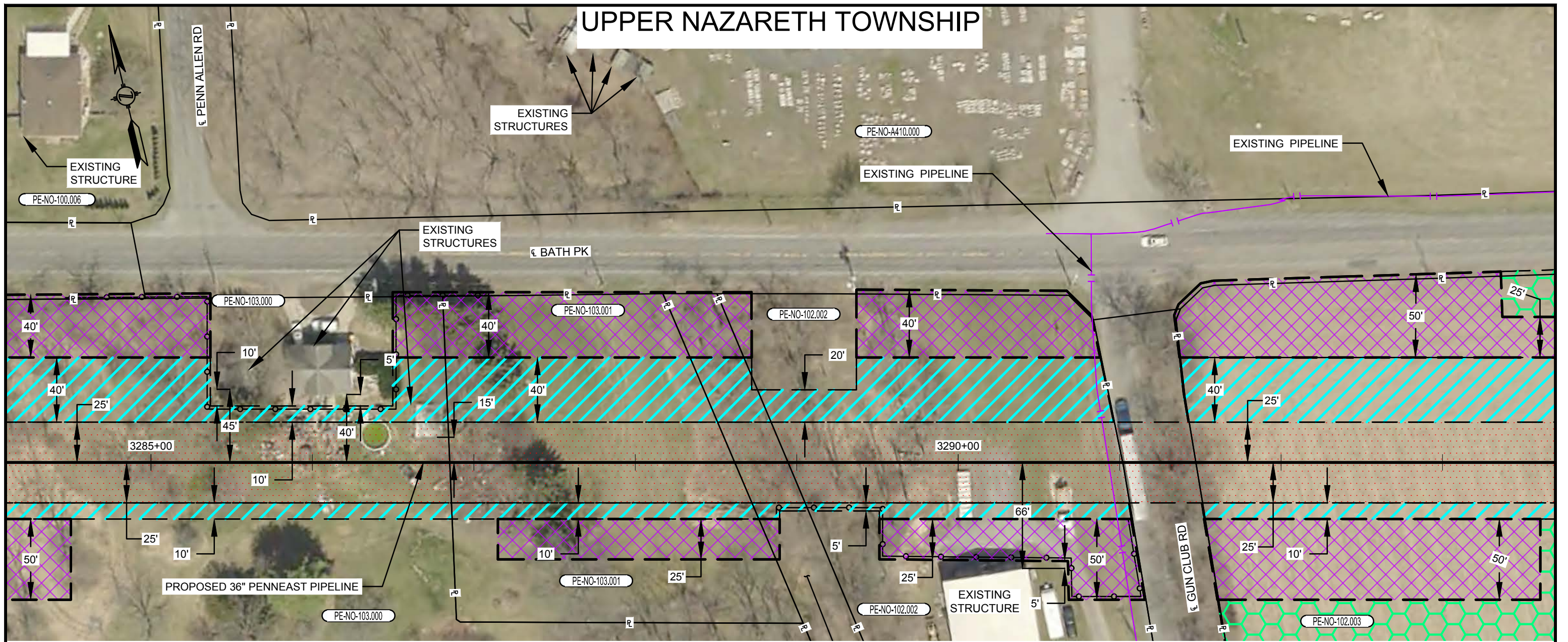
NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:		TOWNSHIP: UPPER NAZARETH RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-051.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

000-03-02-051	SHEET: 01 OF 01	F
	TYPE: ACAD	

UPPER NAZARETH TOWNSHIP

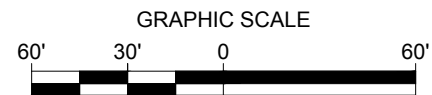


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: UPPER NAZARETH	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-052.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

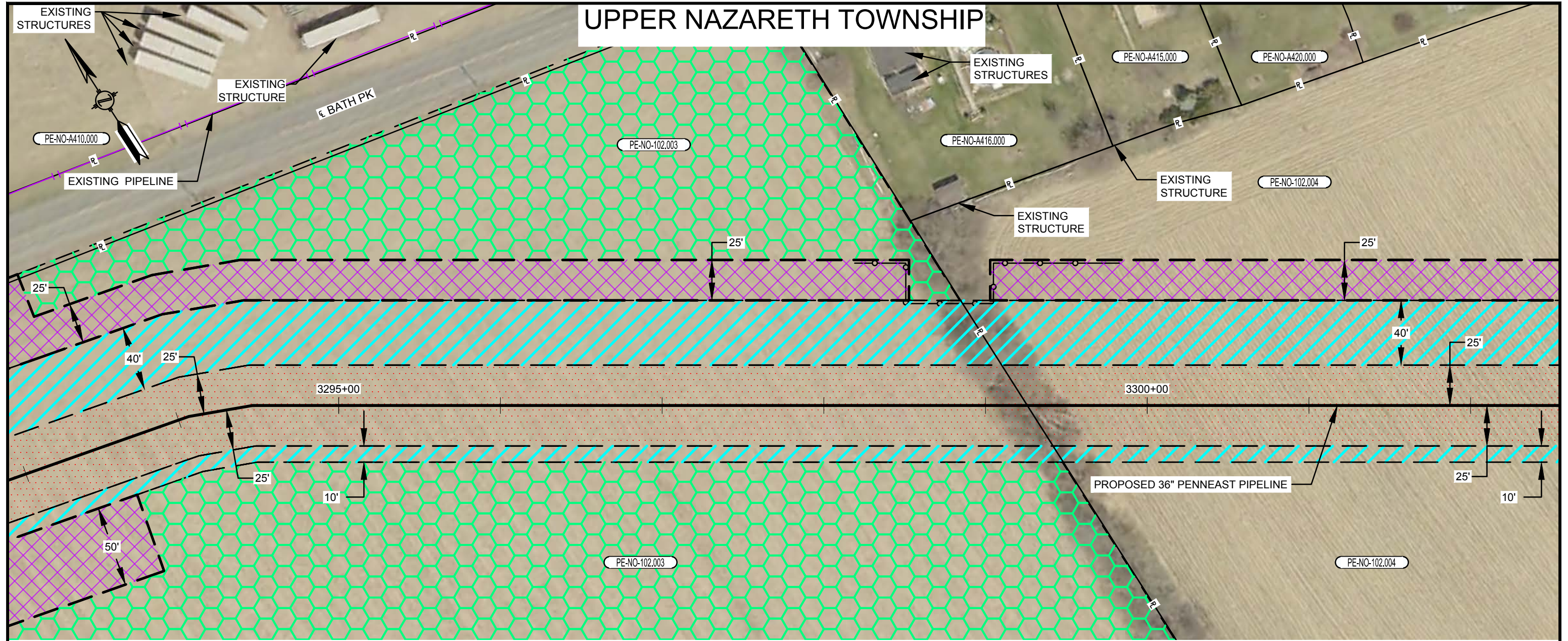


000-03-02-052

SHEET: 01 OF 01
 TYPE: ACAD

F

UPPER NAZARETH TOWNSHIP

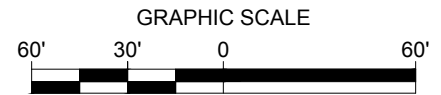


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

- SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
- STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
- STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
- PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

- THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
- THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: UPPER NAZARETH	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-053.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

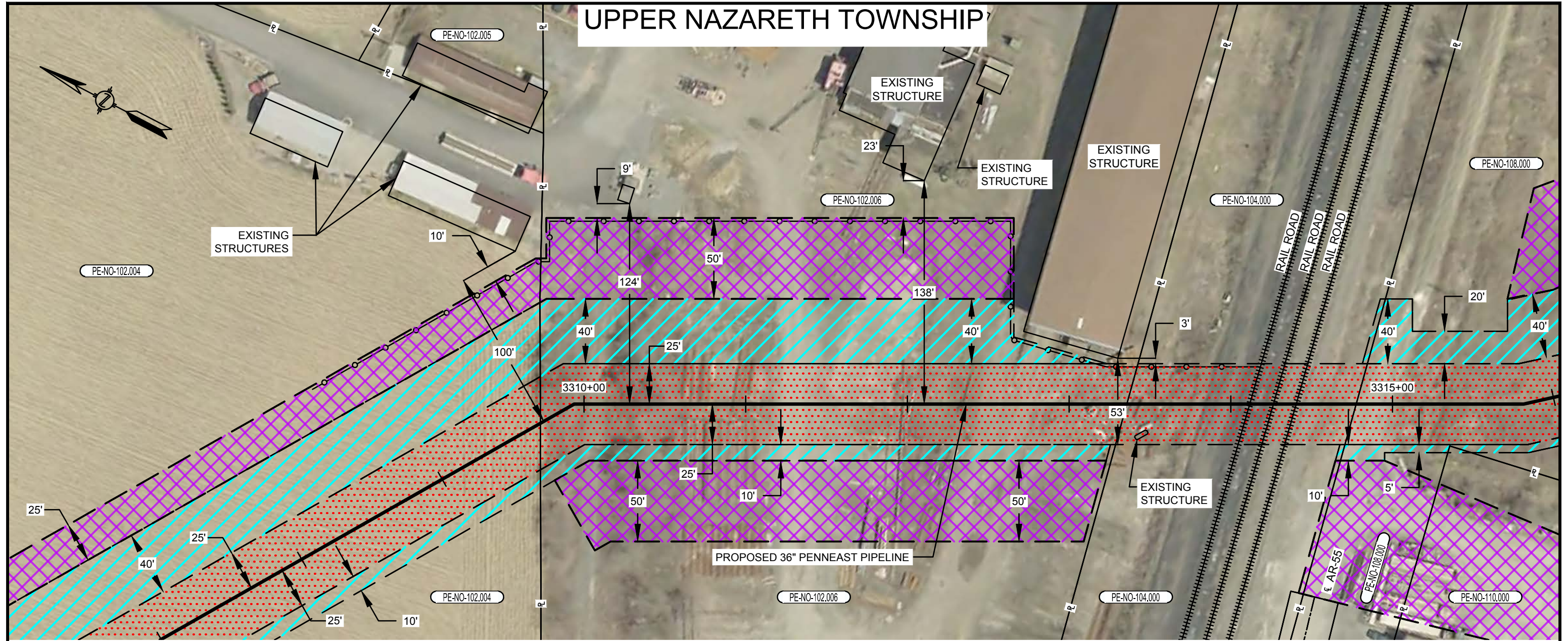


000-03-02-053

SHEET: 01 OF 01
 TYPE: ACAD

F

UPPER NAZARETH TOWNSHIP

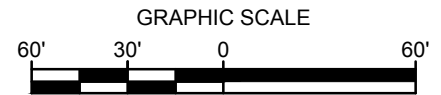


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

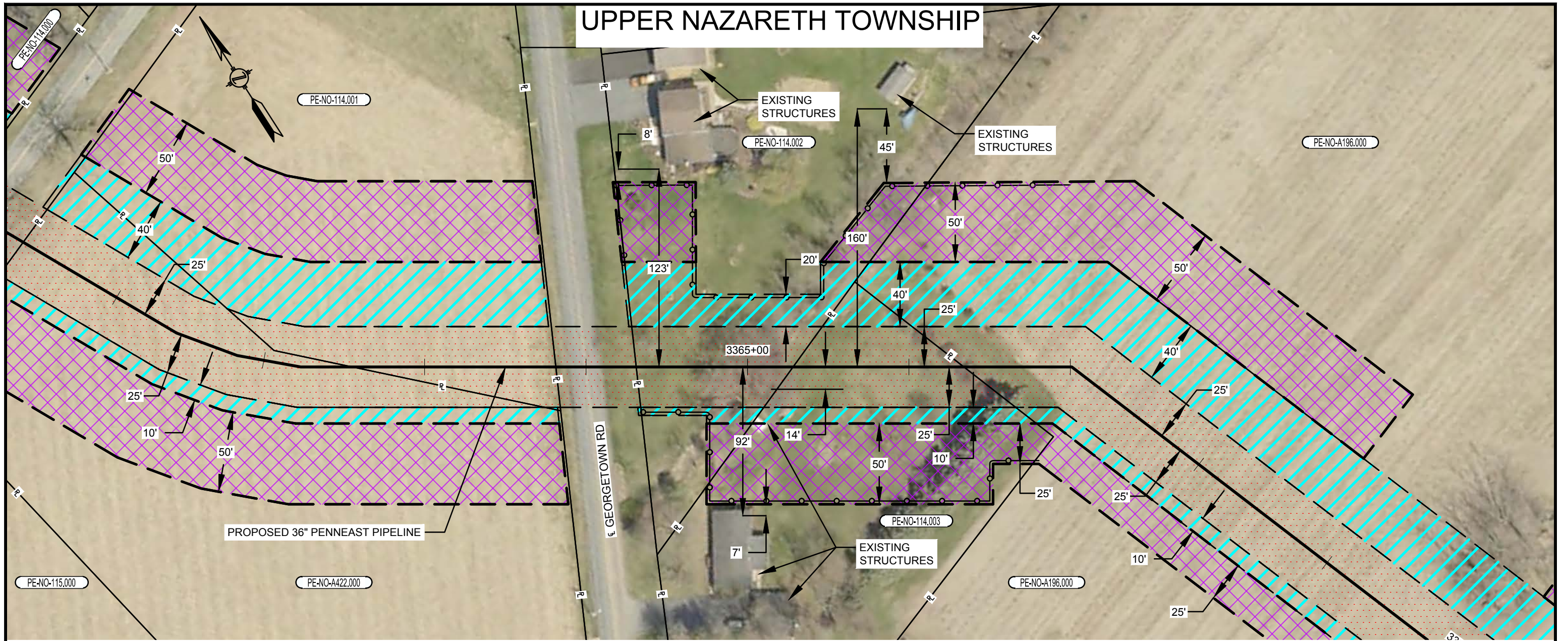
NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: UPPER NAZARETH	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-054.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

000-03-02-054	SHEET: 01 OF 01	F
	TYPE: ACAD	

UPPER NAZARETH TOWNSHIP

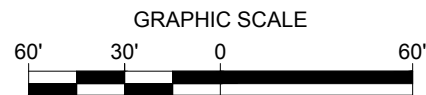


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: UPPER NAZARETH	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-055.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

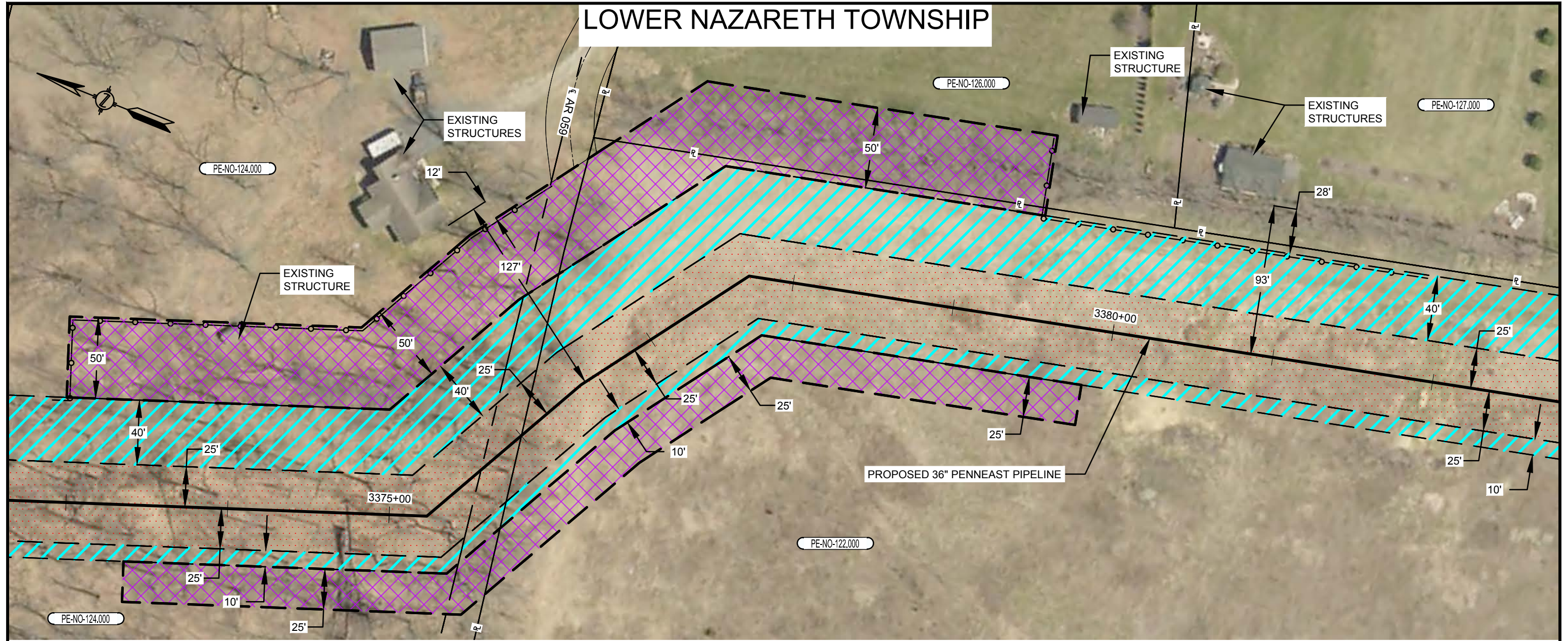


000-03-02-055

SHEET: 01 OF 01
 TYPE: ACAD

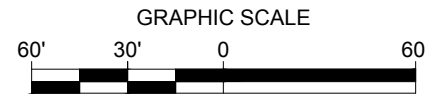
F

LOWER NAZARETH TOWNSHIP



LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



PLAN VIEW

SCALE: 1" = 60'

NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: LOWER NAZARETH	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-056.DWG	

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
NORTHAMPTON COUNTY, PENNSYLVANIA

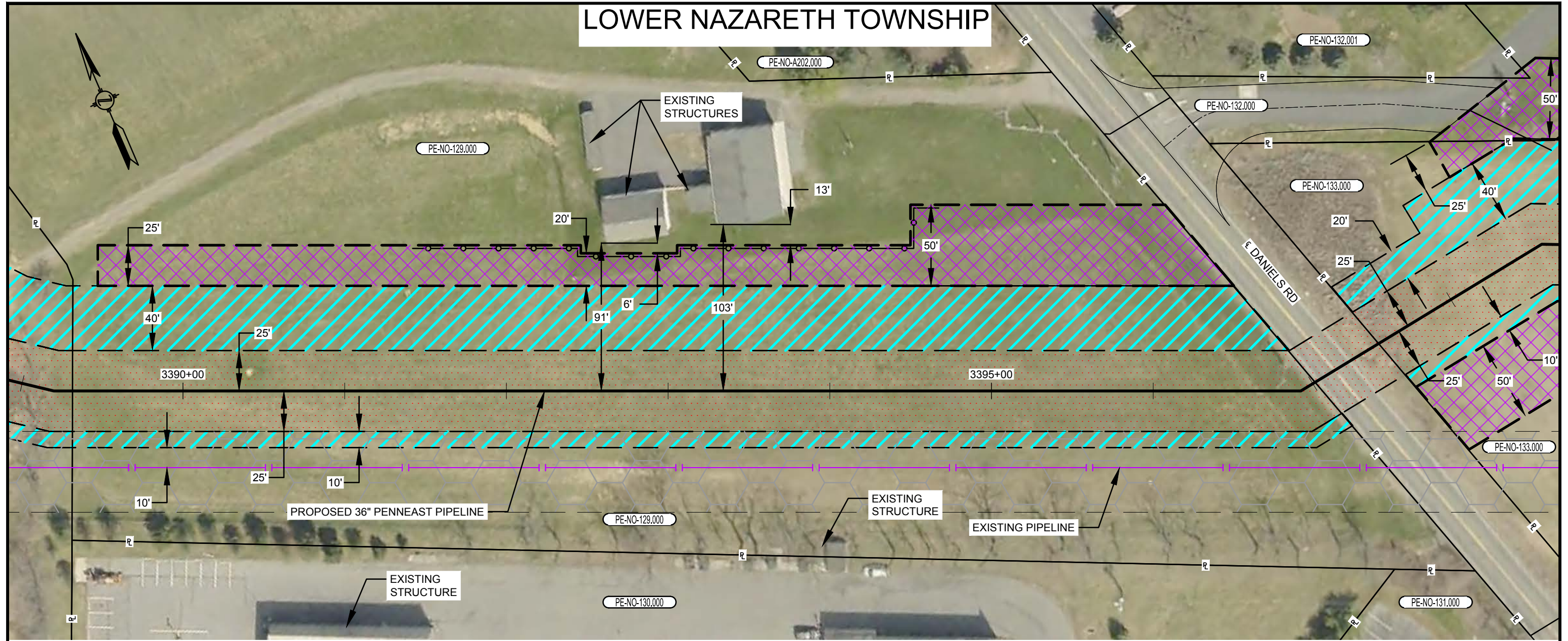


000-03-02-056

SHEET: 01 OF 01
TYPE: ACAD

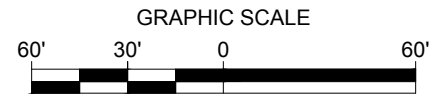
F

LOWER NAZARETH TOWNSHIP



LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



PLAN VIEW

SCALE: 1" = 60'

NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	NORTHAMPTON
SECTION:	TOWNSHIP: LOWER NAZARETH	RANGE:	
DFT:	HMM	DATE:	02/18/2016
CHK:	HMM	DATE:	02/18/2016
APPR:		DATE:	
SCALE:		1"=60'	
FILENAME:		000-03-02-057.DWG	

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
NORTHAMPTON COUNTY, PENNSYLVANIA

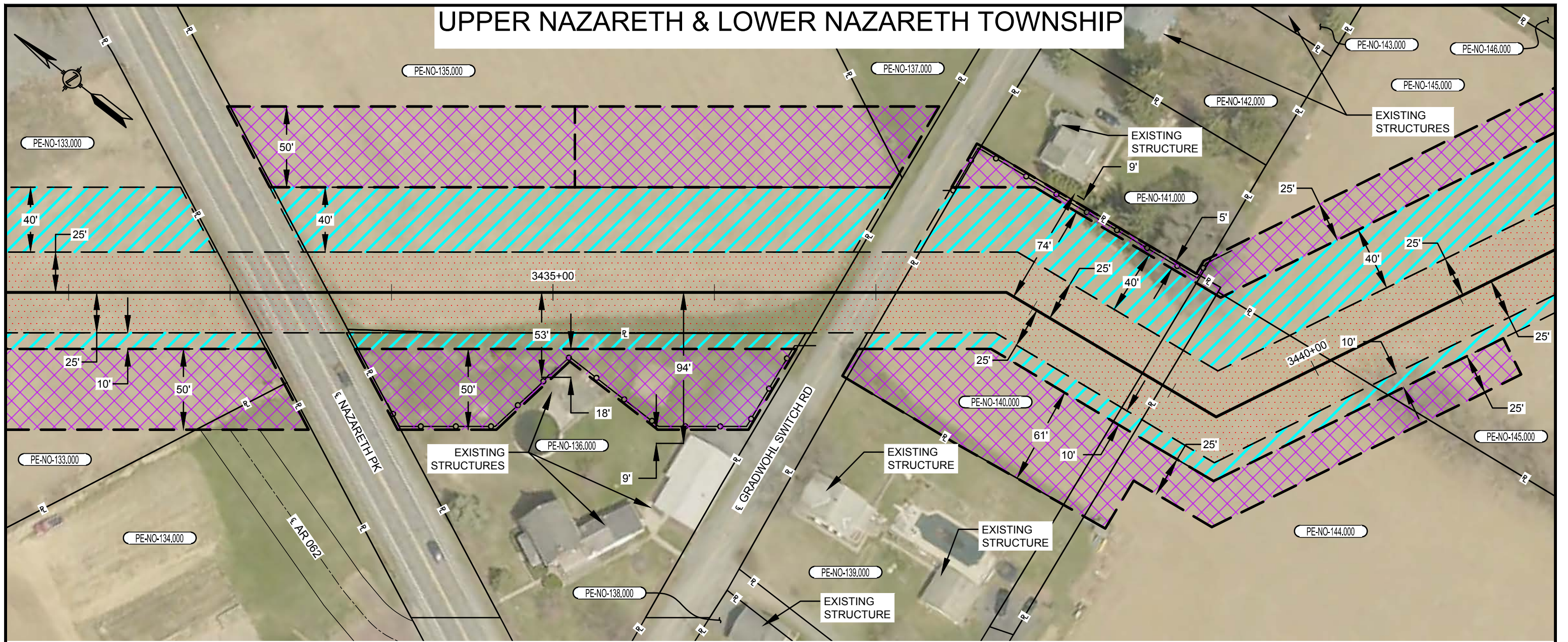


000-03-02-057

SHEET: 01 OF 01
TYPE: ACAD

F

UPPER NAZARETH & LOWER NAZARETH TOWNSHIP

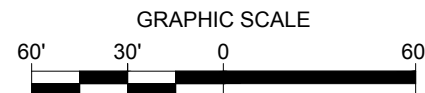


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:		TOWNSHIP: SEE TITLE RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-058.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

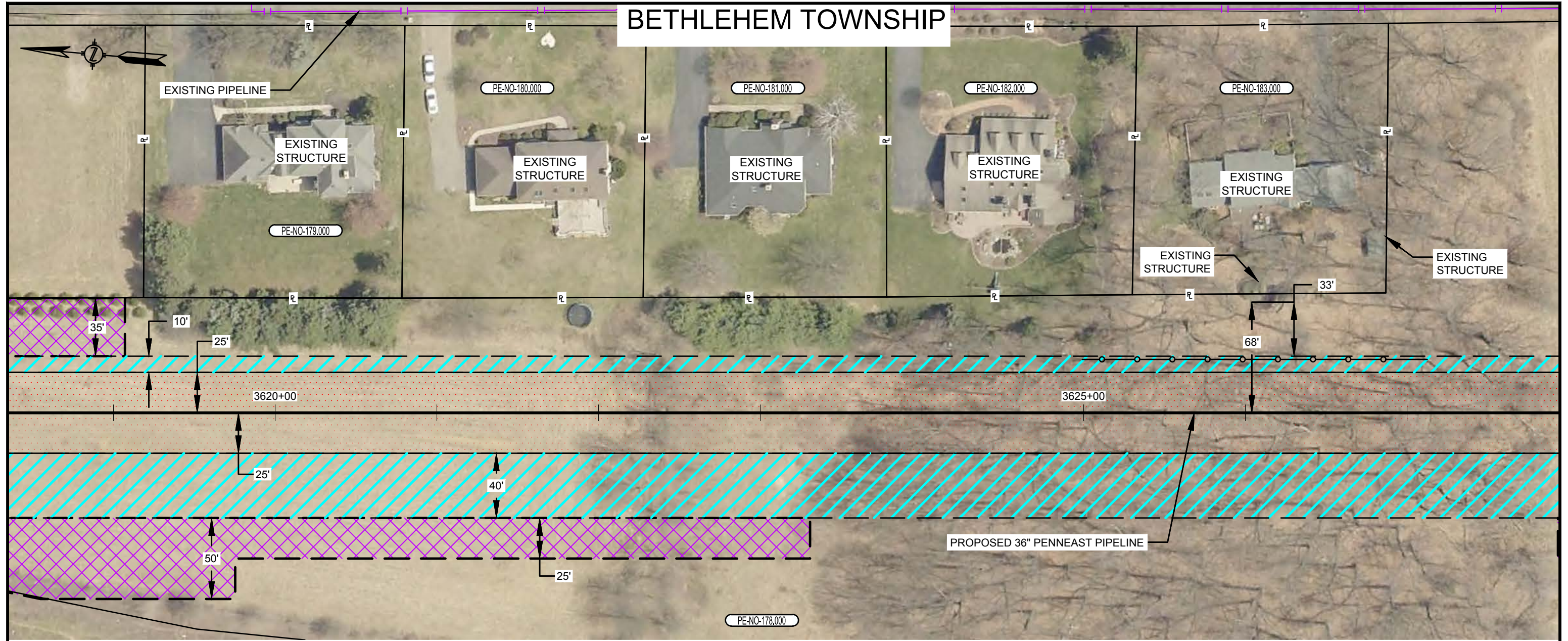


000-03-02-058

SHEET: 01 OF 01
 TYPE: ACAD

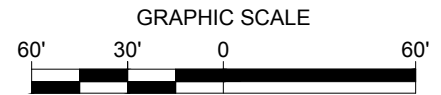
F

BETHLEHEM TOWNSHIP



LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



PLAN VIEW

SCALE: 1" = 60'

NOTES:

- SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
- STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
- STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
- PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

- THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
- THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:		TOWNSHIP: BETHLEHEM RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-059.DWG	

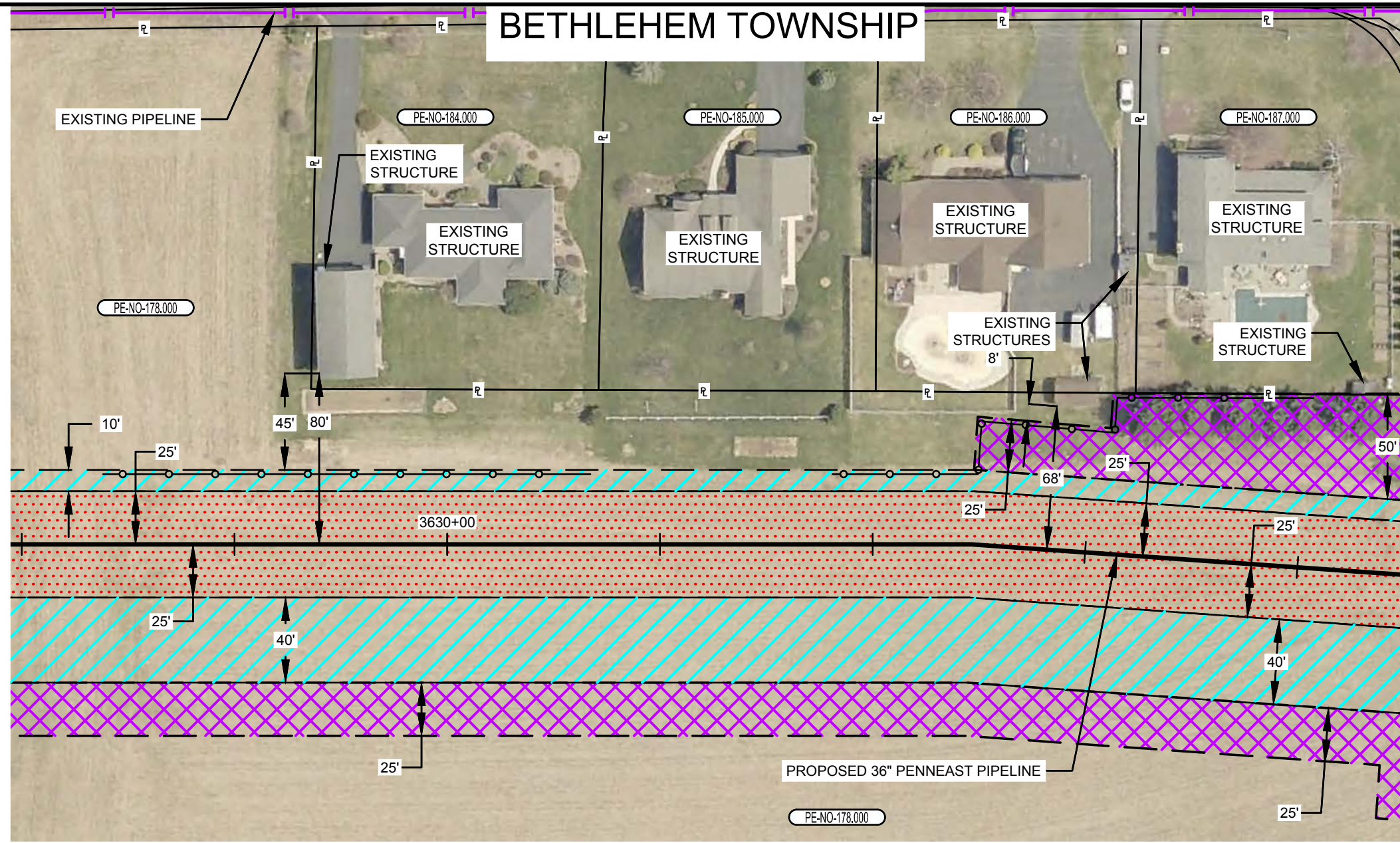
PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA



000-03-02-059

SHEET: 01 OF 01	F
TYPE: ACAD	

BETHLEHEM TOWNSHIP

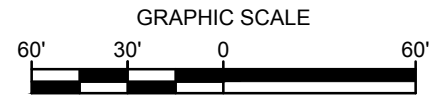


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:		TOWNSHIP: BETHLEHEM RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-060.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

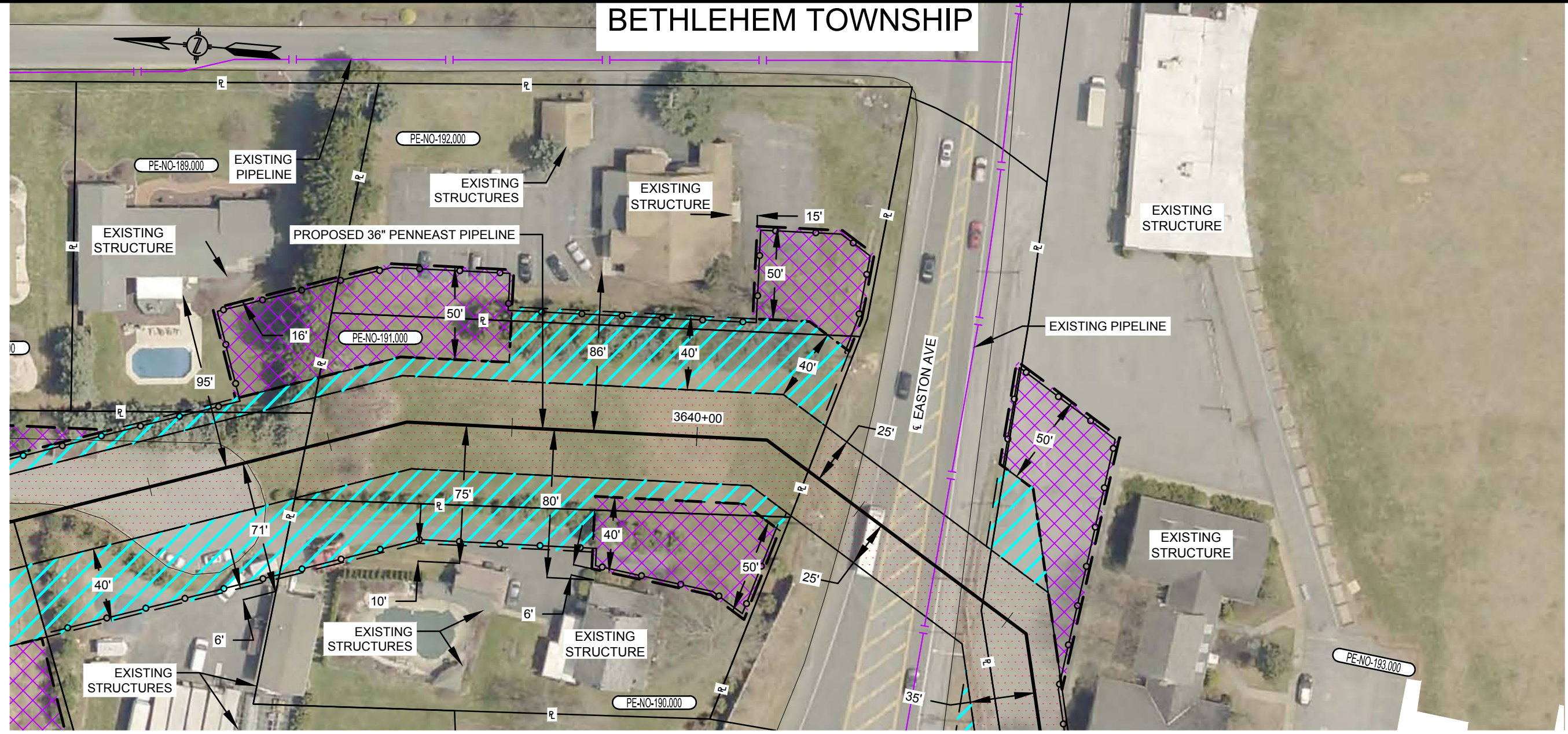


000-03-02-060

SHEET: 01 OF 01
 TYPE: ACAD

F

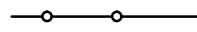


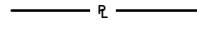
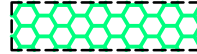
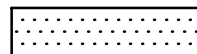


BETHLEHEM TOWNSHIP

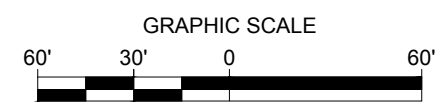


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA.:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:		TOWNSHIP: BETHLEHEM RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-061.DWG	

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
NORTHAMPTON COUNTY, PENNSYLVANIA

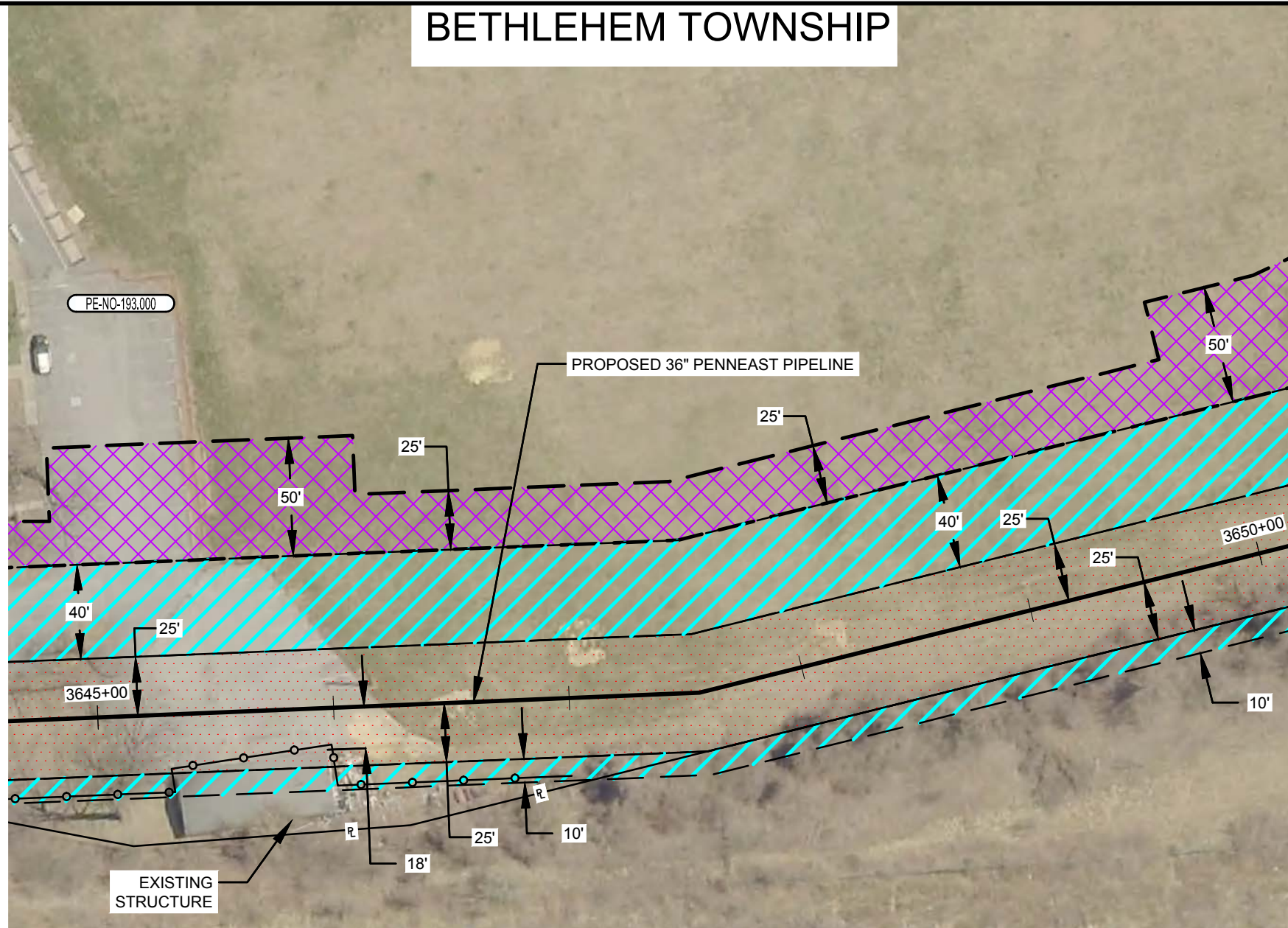


000-03-02-061

SHEET: 01 OF 01
TYPE: ACAD

F

BETHLEHEM TOWNSHIP

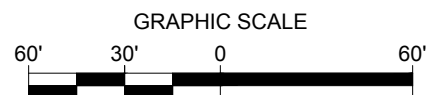


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:		TOWNSHIP: BETHLEHEM RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-062.DWG	

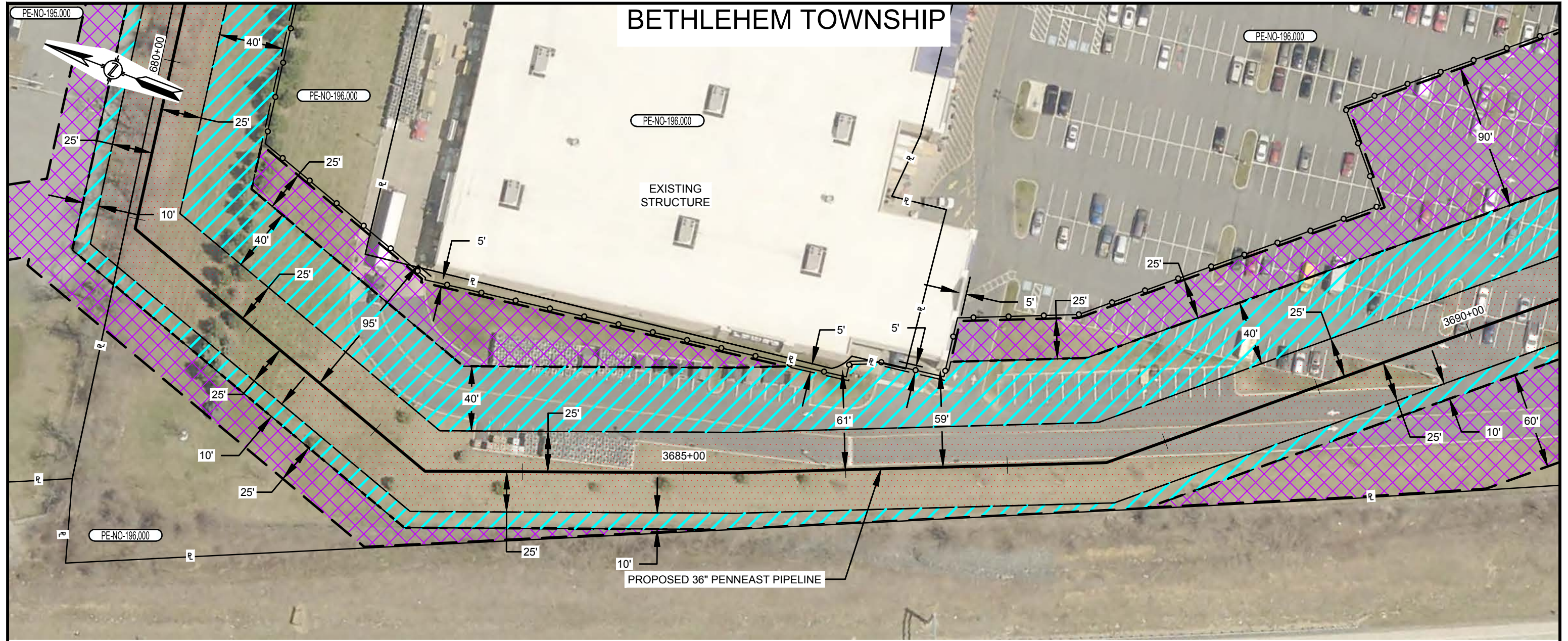
PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA



000-03-02-062

SHEET: 01 OF 01
 TYPE: ACAD

F



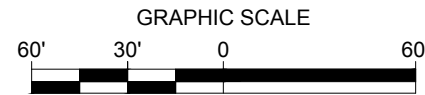
BETHLEHEM TOWNSHIP

PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

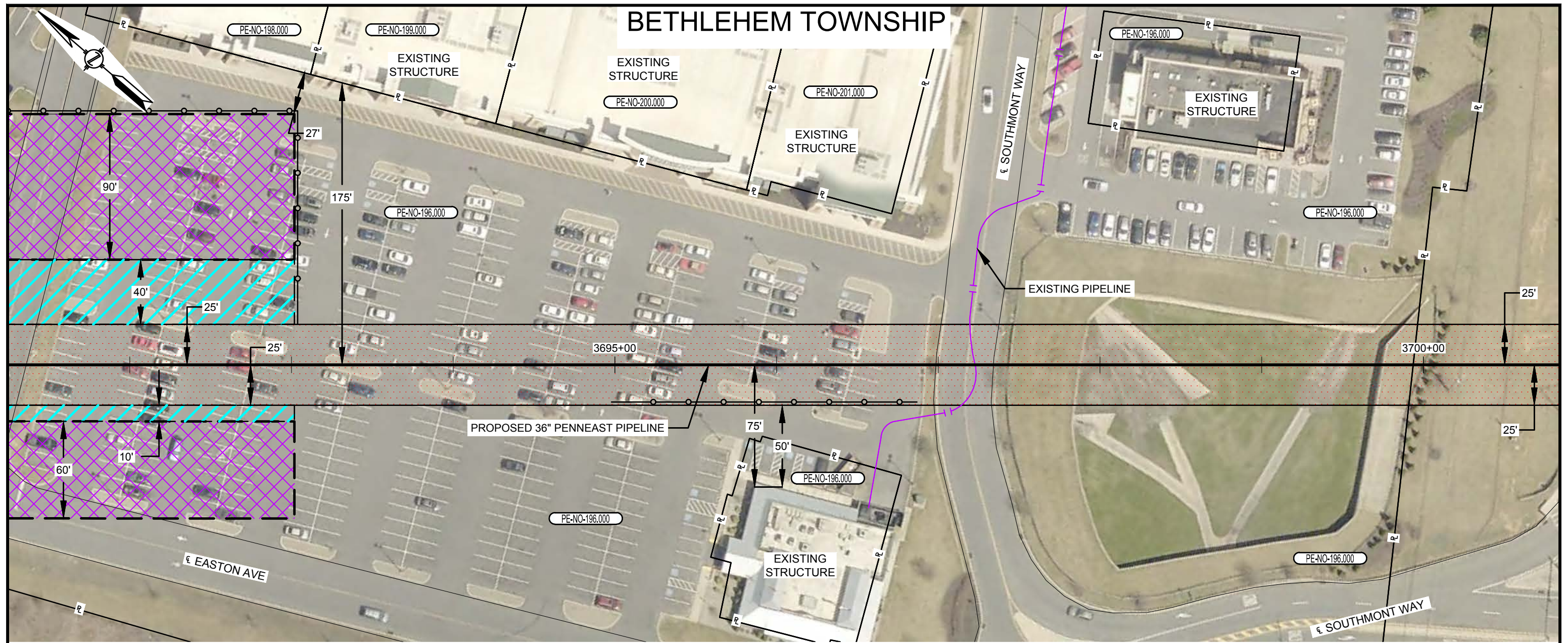
1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	NORTHAMPTON
SECTION:		TOWNSHIP:	BETHLEHEM
		RANGE:	
DFT:	HMM	DATE:	02/18/2016
CHK:	HMM	DATE:	02/18/2016
APPR:		DATE:	
SCALE:		1"=60'	
FILENAME:		000-03-02-063.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

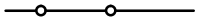


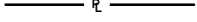

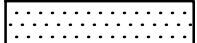


000-03-02-063	SHEET: 01 OF 01	F
	TYPE: ACAD	

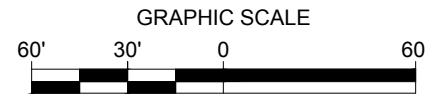


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY


CONSTRUCTION TECHNIQUES


1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:		TOWNSHIP: BETHLEHEM RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-064.DWG	

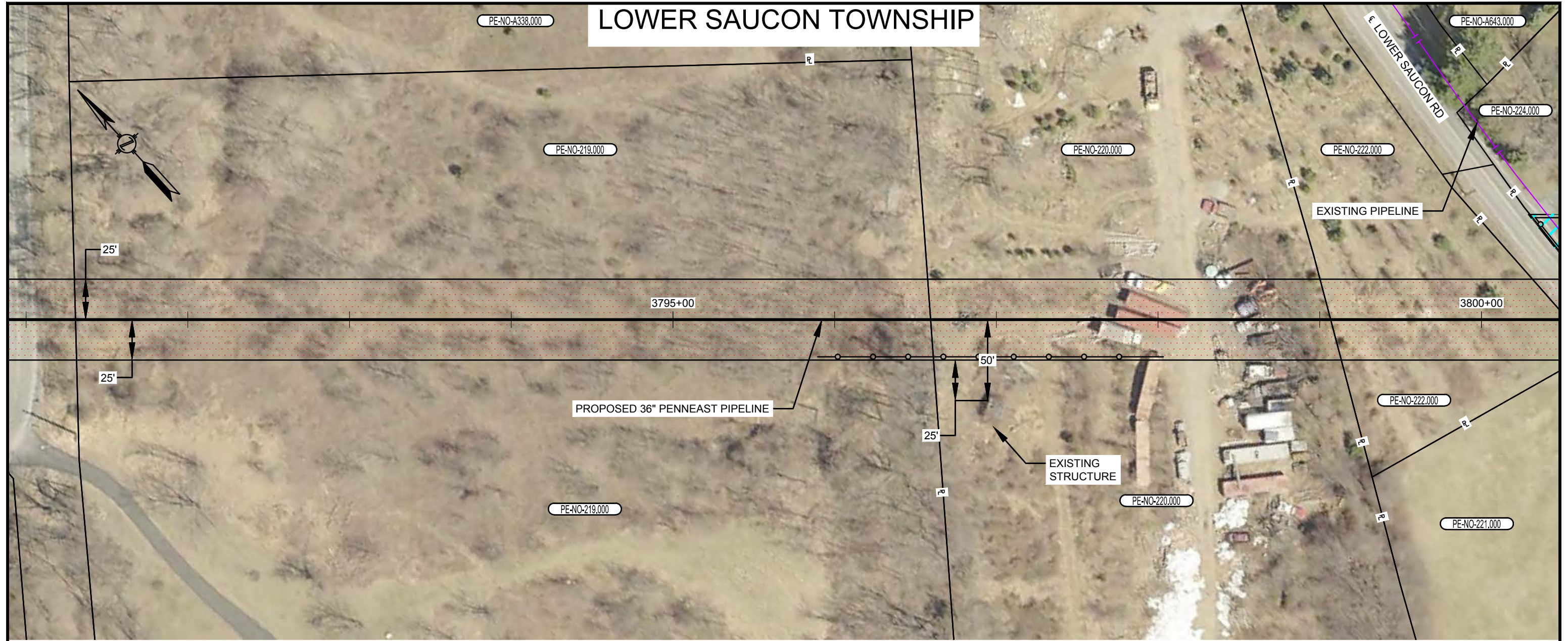
PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA





000-03-02-064	SHEET: 01 OF 01	F
	TYPE: ACAD	

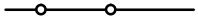


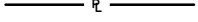




LOWER SAUCON TOWNSHIP

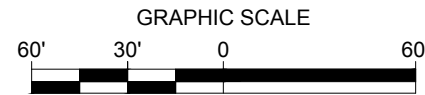


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY


CONSTRUCTION TECHNIQUES


1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: LOWER SAUCON	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-065.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

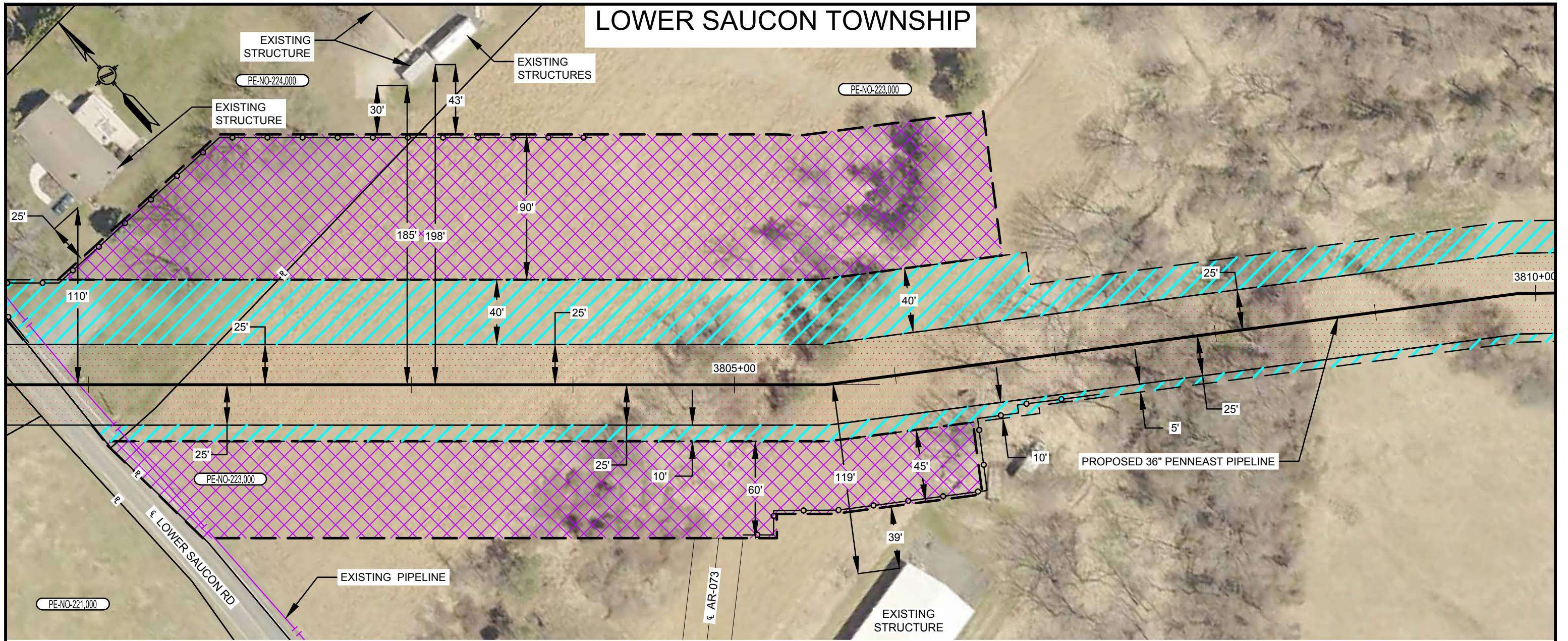




000-03-02-065

SHEET: 01 OF 01	F
TYPE: ACAD	

LOWER SAUCON TOWNSHIP

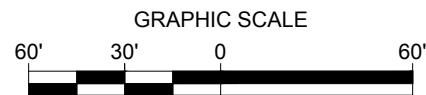


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

- SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
- STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
- STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
- PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

- THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
- THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: LOWER SAUCON	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-066.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

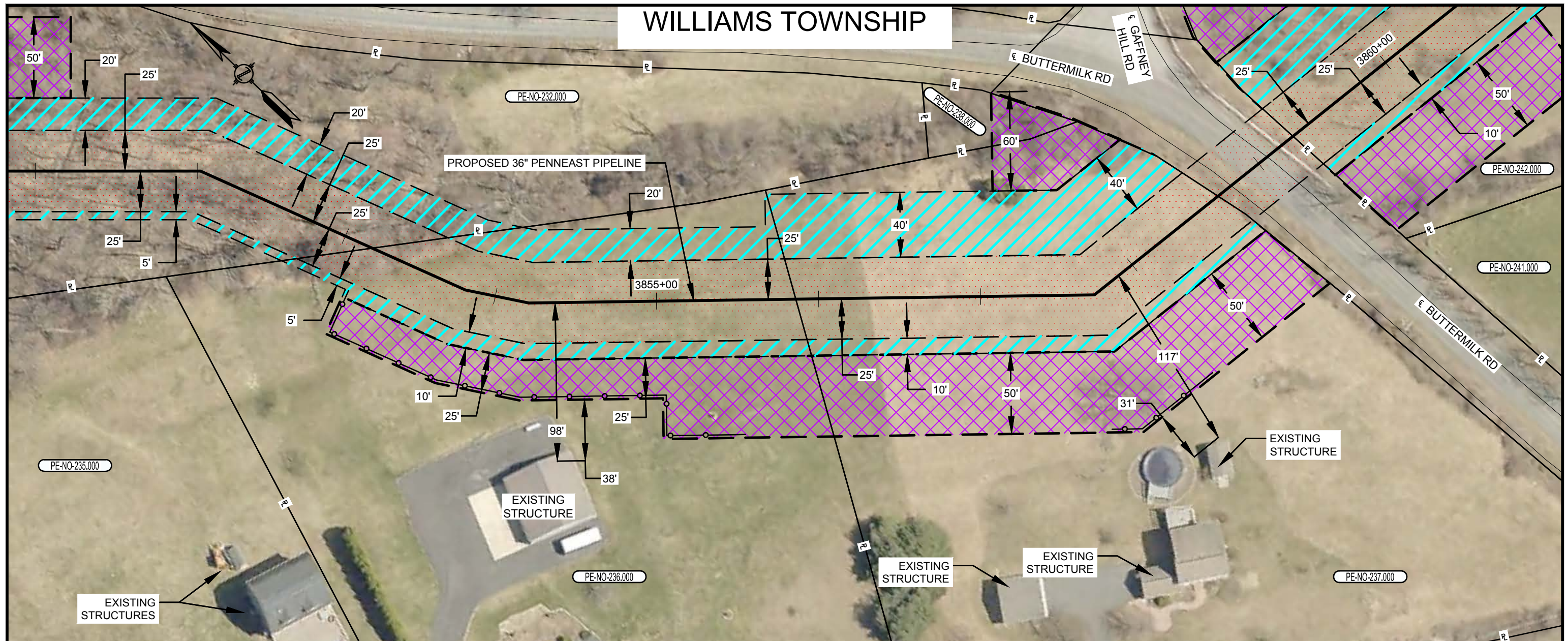


000-03-02-066

SHEET: 01 OF 01
 TYPE: ACAD

F

WILLIAMS TOWNSHIP

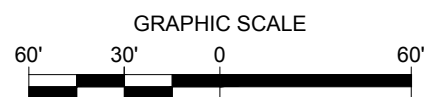


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:		TOWNSHIP: WILLIAMS RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-067.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

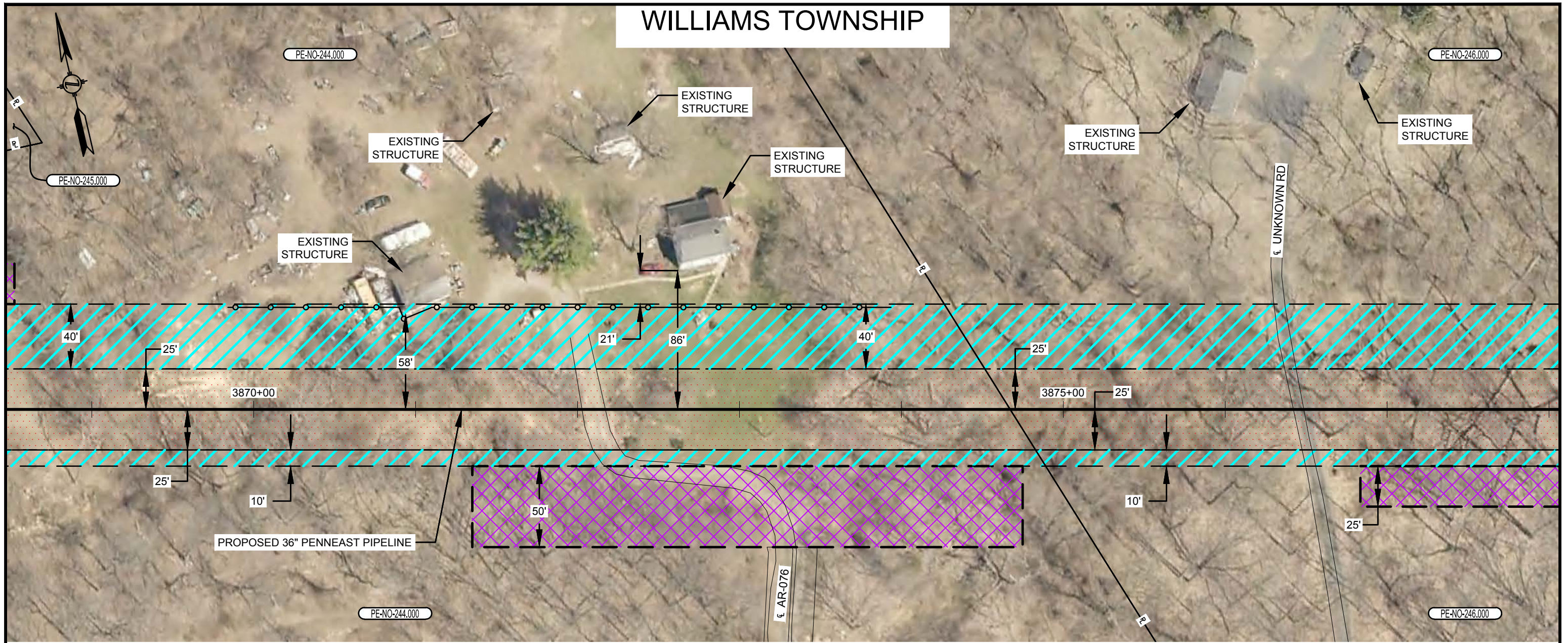


000-03-02-067

SHEET: 01 OF 01
 TYPE: ACAD

F

WILLIAMS TOWNSHIP

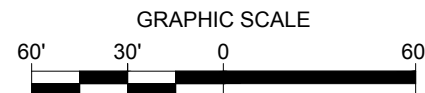


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:	TOWNSHIP: WILLIAMS	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-068.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

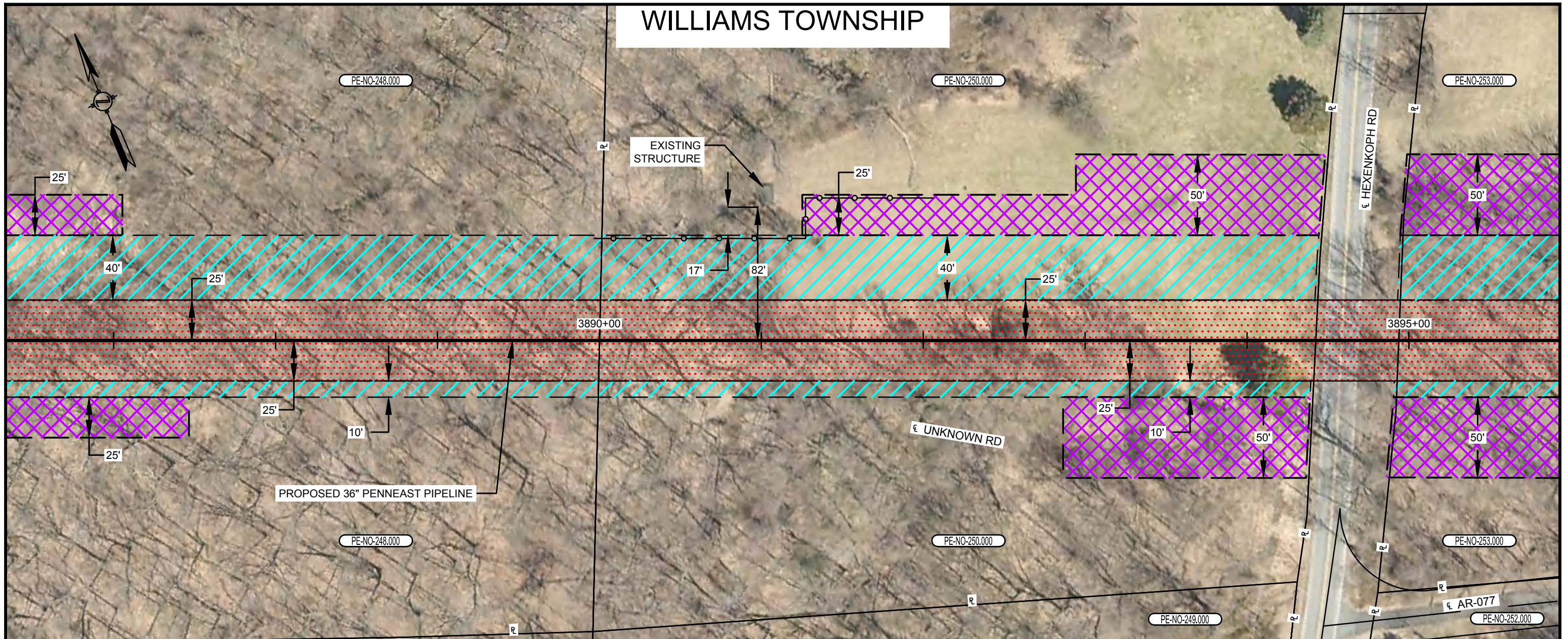


000-03-02-068

SHEET: 01 OF 01
 TYPE: ACAD

F

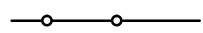


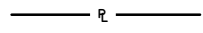
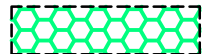
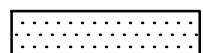


WILLIAMS TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: PENNSYLVANIA		CO./PAR.: NORTHAMPTON	
SECTION:		TOWNSHIP: WILLIAMS RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-069.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 NORTHAMPTON COUNTY, PENNSYLVANIA

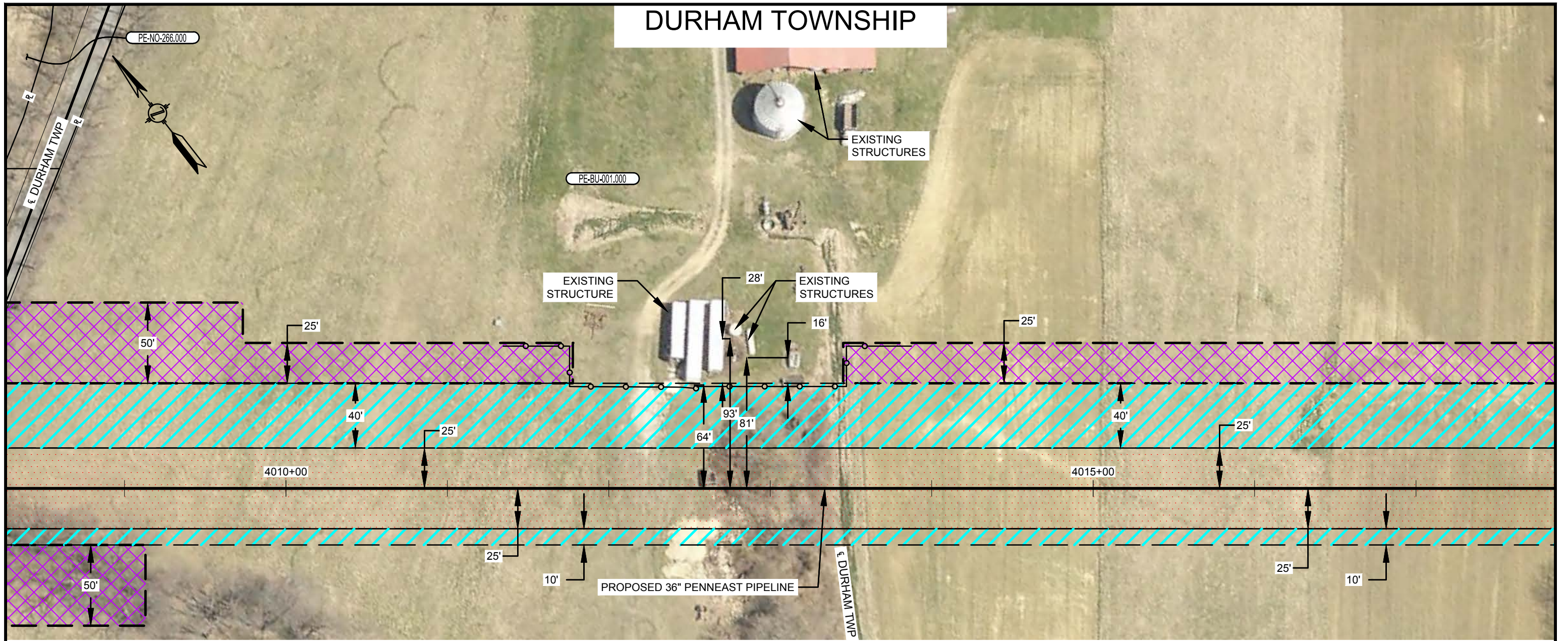


000-03-02-069

SHEET: 01 OF 01
 TYPE: ACAD

F

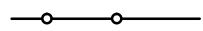


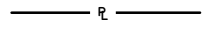
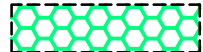
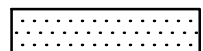


DURHAM TOWNSHIP

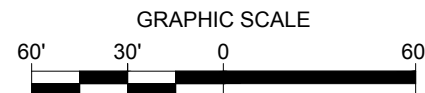


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	PENNSYLVANIA	CO./PAR.:	BUCKS
SECTION:	TOWNSHIP: DURHAM	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-070.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 BUCKS COUNTY, PENNSYLVANIA

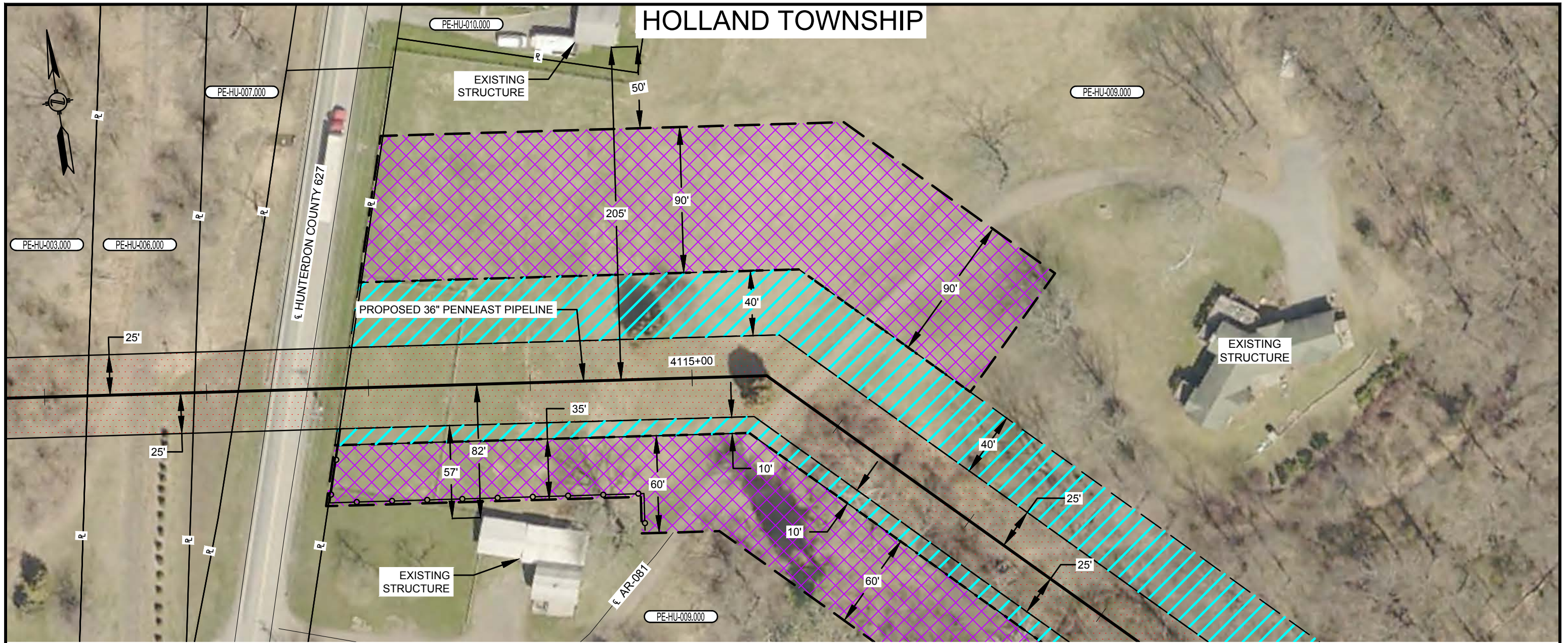


000-03-02-070

SHEET: 01 OF 01
 TYPE: ACAD

F

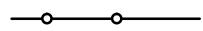


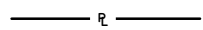
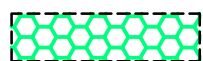
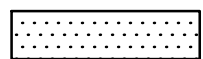


HOLLAND TOWNSHIP

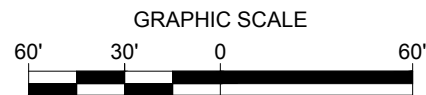


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:		TOWNSHIP:	HOLLAND
		RANGE:	
DFT:	HMM	DATE:	02/18/2016
CHK:	HMM	DATE:	02/18/2016
APPR:		DATE:	
SCALE:		1"=60'	
FILENAME:		000-03-02-071.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

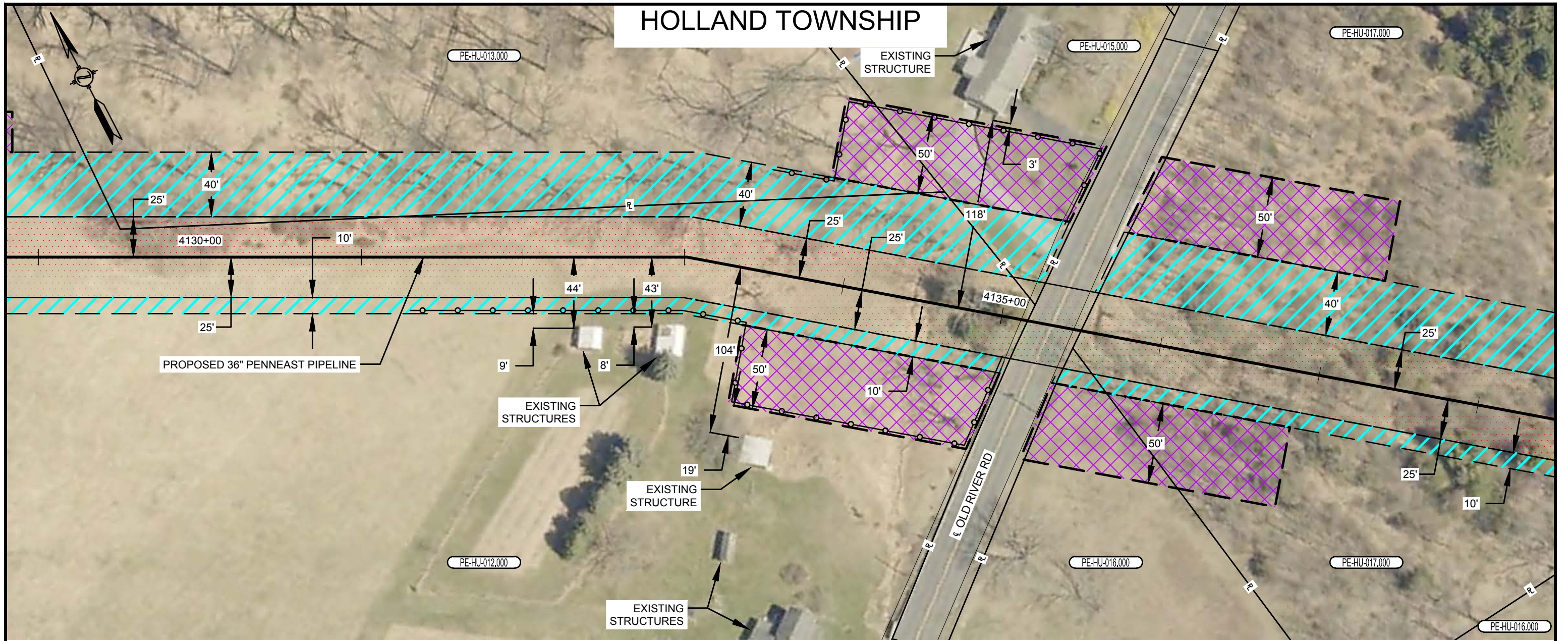


000-03-02-071

SHEET: 01 OF 01
 TYPE: ACAD

F

HOLLAND TOWNSHIP

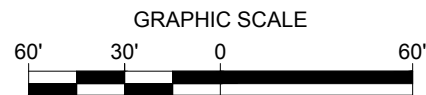


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:		TOWNSHIP:	HOLLAND
		RANGE:	
DFT:	HMM	DATE:	02/18/2016
CHK:	HMM	DATE:	02/18/2016
APPR:		DATE:	
SCALE:		1"=60'	
FILENAME:		000-03-02-072.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

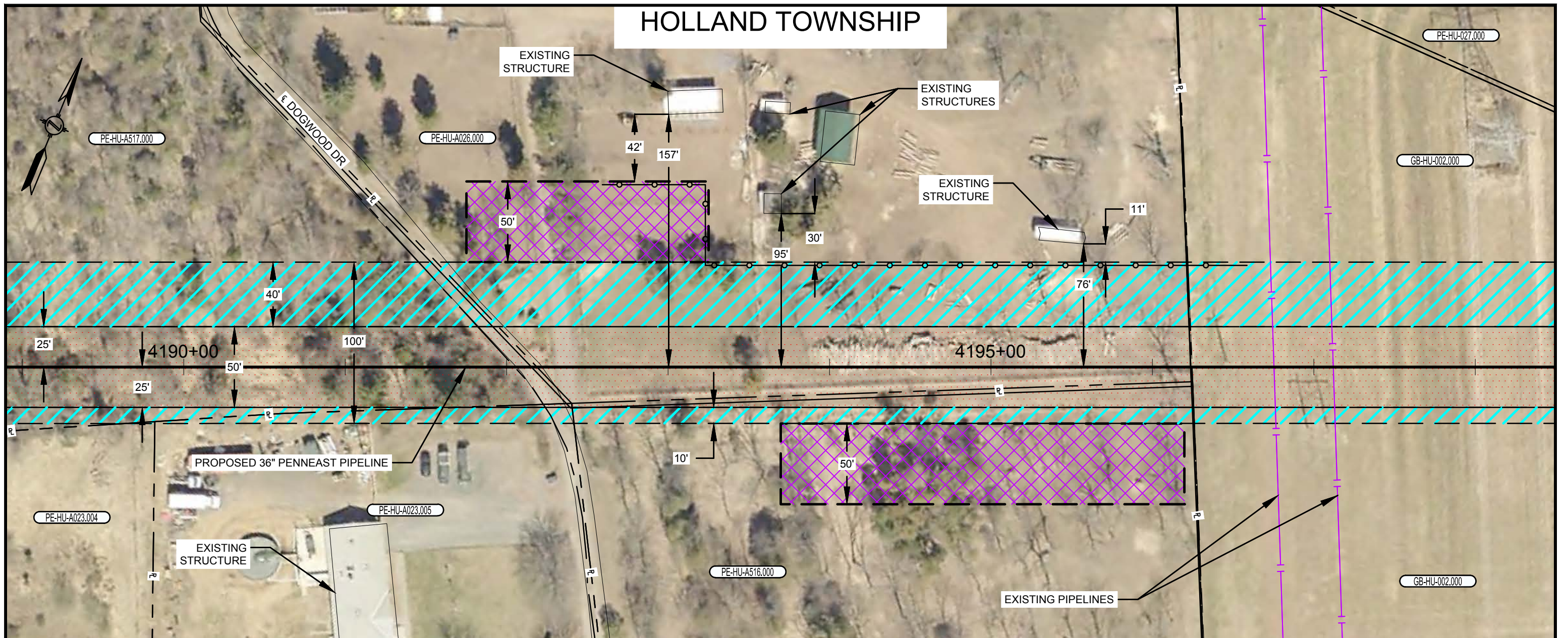


000-03-02-072

SHEET: 01 OF 01
 TYPE: ACAD

F

HOLLAND TOWNSHIP

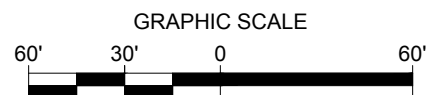


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:		TOWNSHIP:	HOLLAND
		RANGE:	
DFT:	HMM	DATE:	02/18/2016
CHK:	HMM	DATE:	02/18/2016
APPR:		DATE:	
SCALE:		1"=60'	
FILENAME:		000-03-02-073.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

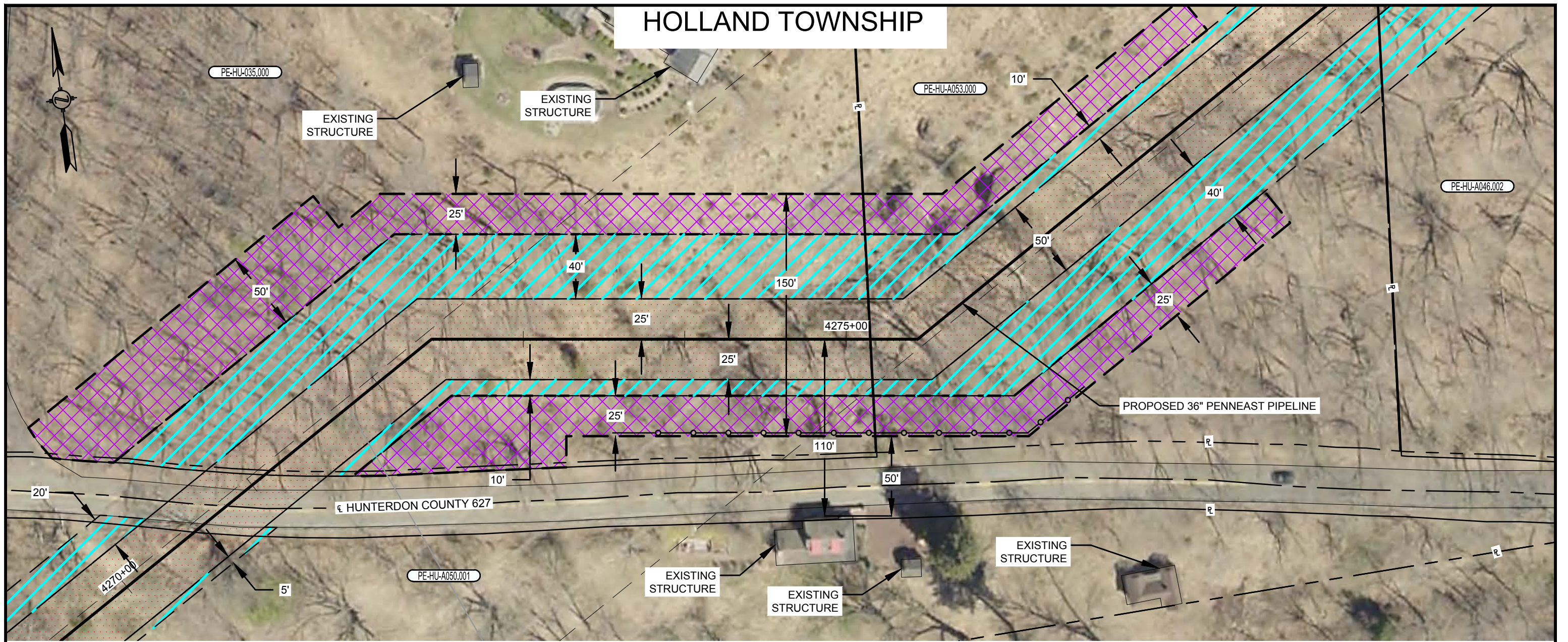


000-03-02-073

SHEET: 01 OF 01
 TYPE: ACAD

F

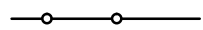


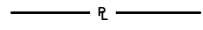
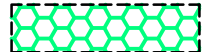



HOLLAND TOWNSHIP

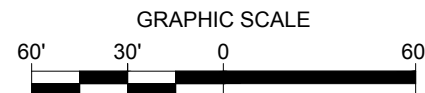


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:		TOWNSHIP:	HOLLAND
		RANGE:	
DFT:	HMM	DATE:	02/18/2016
CHK:	HMM	DATE:	02/18/2016
APPR:		DATE:	
SCALE:		1"=60'	
FILENAME:		000-03-02-074.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

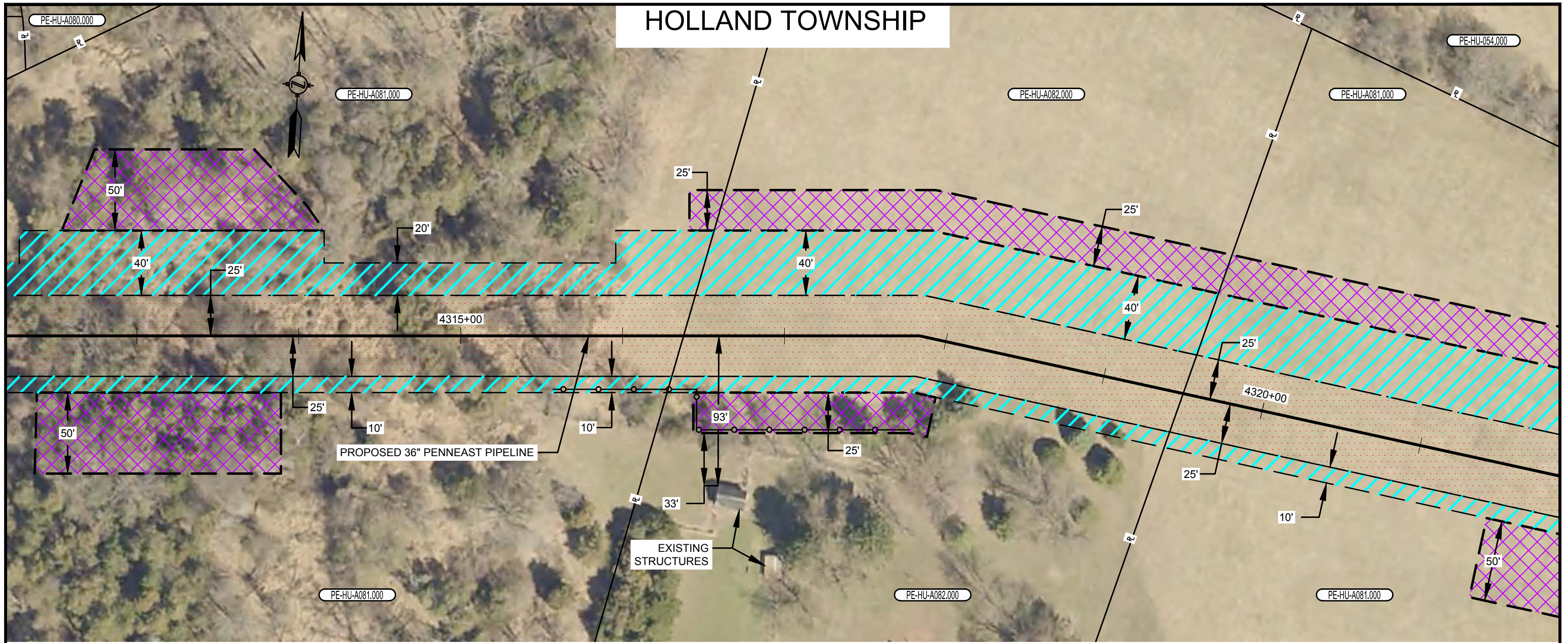


000-03-02-074

SHEET: 01 OF 01
 TYPE: ACAD

F

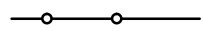


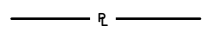
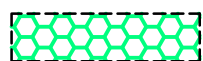
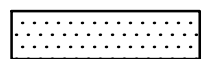


HOLLAND TOWNSHIP

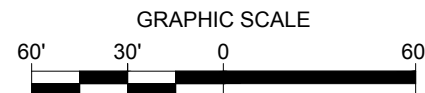


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:		TOWNSHIP:	HOLLAND
		RANGE:	
DFT:	HMM	DATE:	02/18/2016
CHK:	HMM	DATE:	02/18/2016
APPR:		DATE:	
SCALE:		1"=60'	
FILENAME:		000-03-02-075.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

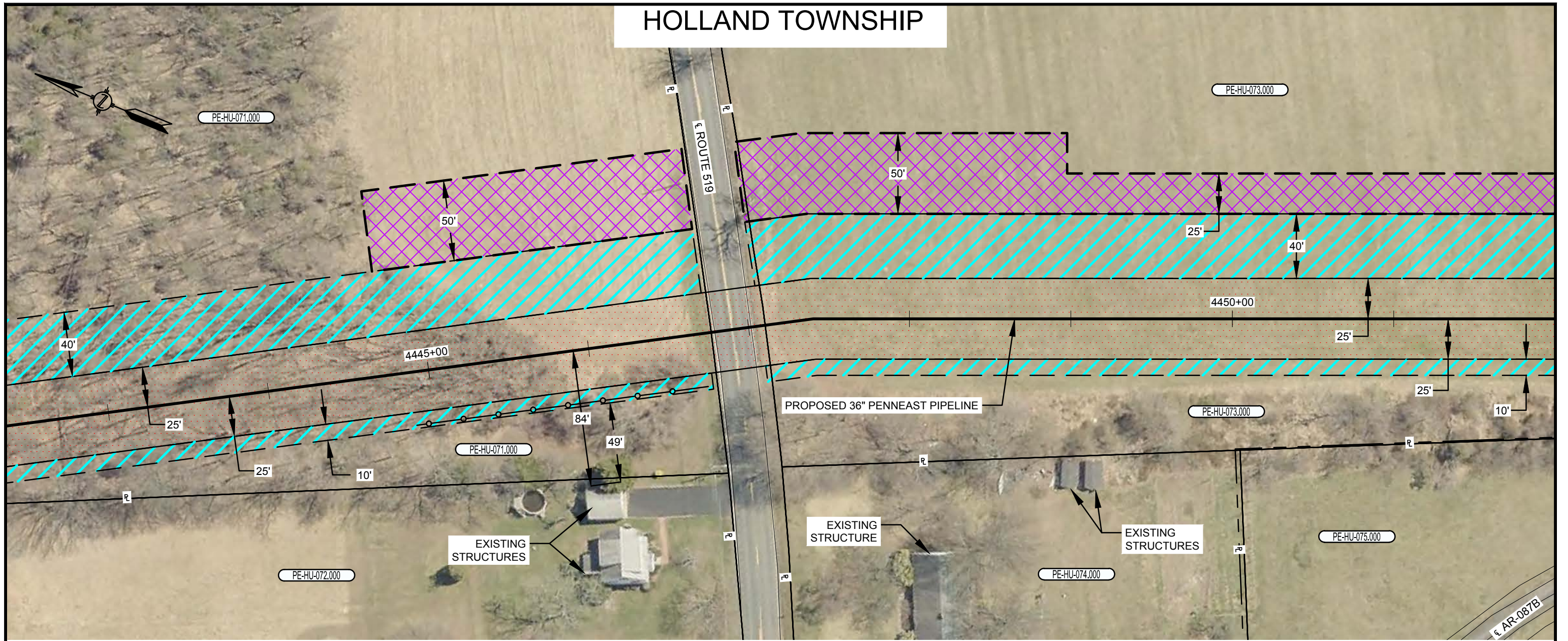


000-03-02-075

SHEET: 01 OF 01
 TYPE: ACAD

F

HOLLAND TOWNSHIP

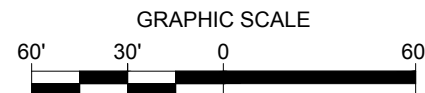


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:		TOWNSHIP:	HOLLAND
		RANGE:	
DFT:	HMM	DATE:	02/18/2016
CHK:	HMM	DATE:	02/18/2016
APPR:		DATE:	
SCALE:		1"=60'	
FILENAME:		000-03-02-076.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

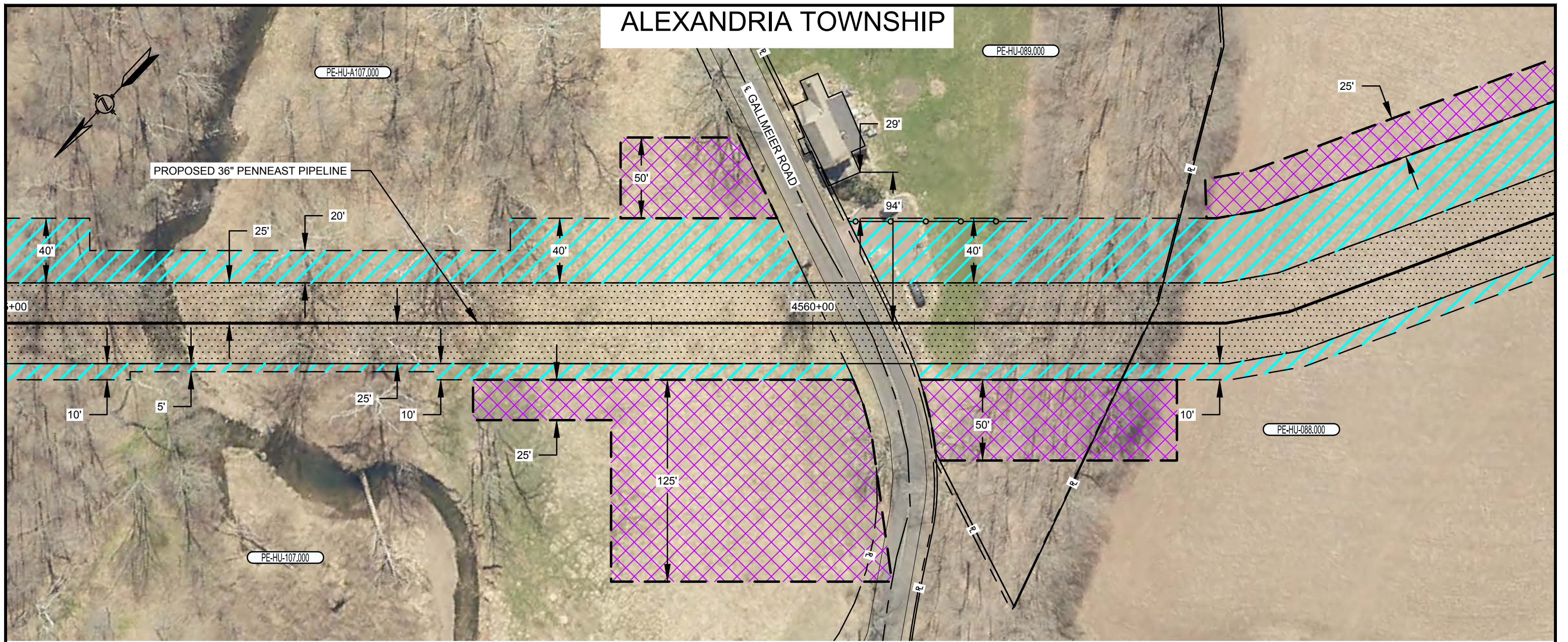


000-03-02-076

SHEET: 01 OF 01
 TYPE: ACAD

F

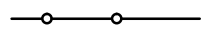


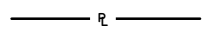
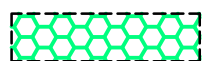
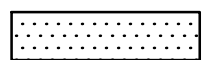


ALEXANDRIA TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION: ----		OP. AREA:	
STATE: NEW JERSEY		CO./PAR.: HUNTERDON	
SECTION:		TOWNSHIP: ALEXANDRIA RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-077.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

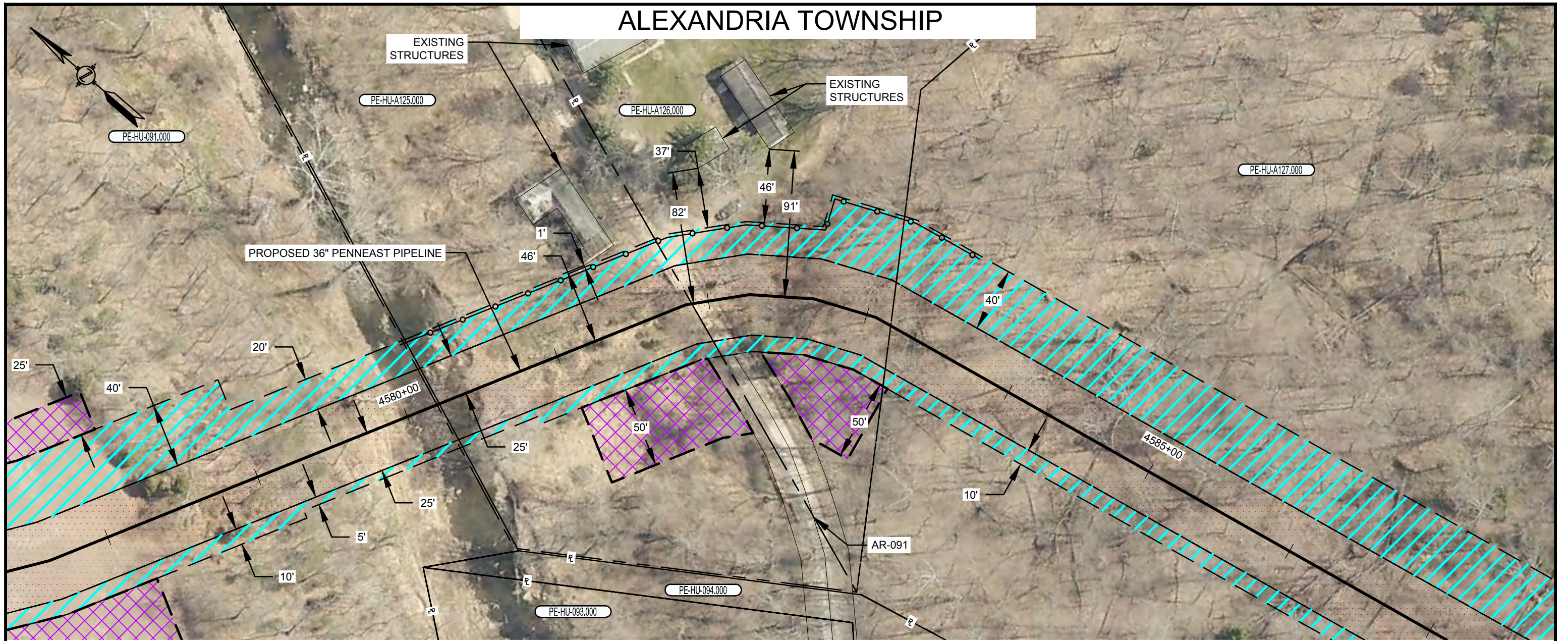


000-03-02-077

SHEET: 01 OF 01
 TYPE: ACAD

F

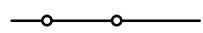


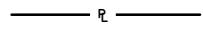
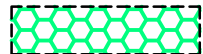
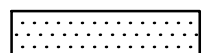


ALEXANDRIA TOWNSHIP

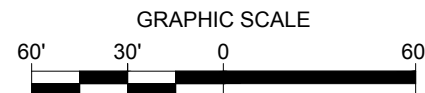


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:		TOWNSHIP:	ALEXANDRIA
		RANGE:	
DFT:	HMM	DATE:	02/18/2016
CHK:	HMM	DATE:	02/18/2016
APPR:		DATE:	
SCALE:		1"=60'	
FILENAME:		000-03-02-078.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

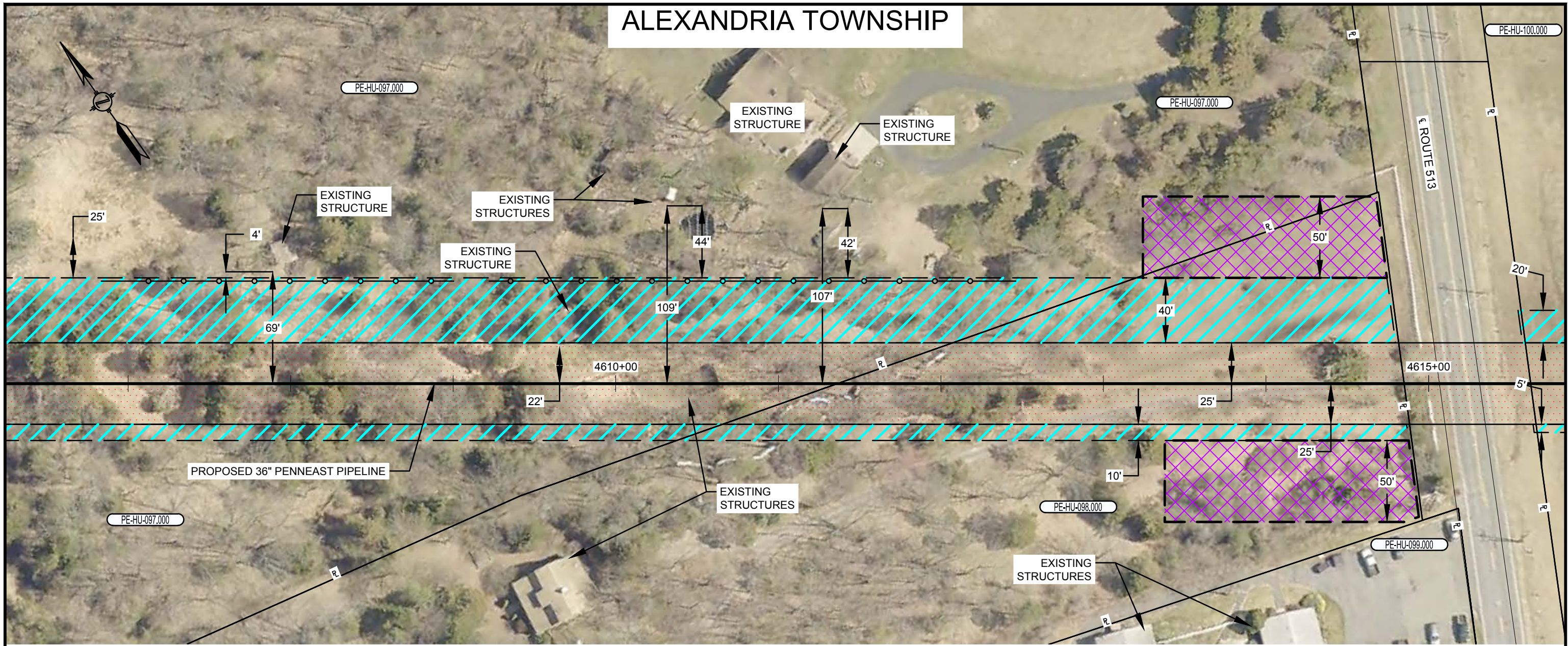


000-03-02-078

SHEET: 01 OF 01
 TYPE: ACAD

F

ALEXANDRIA TOWNSHIP

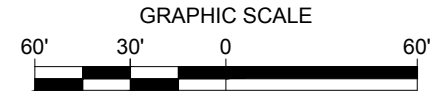


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: NEW JERSEY		CO./PAR.: HUNTERDON	
SECTION:		TOWNSHIP: ALEXANDRIA RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-079.DWG	

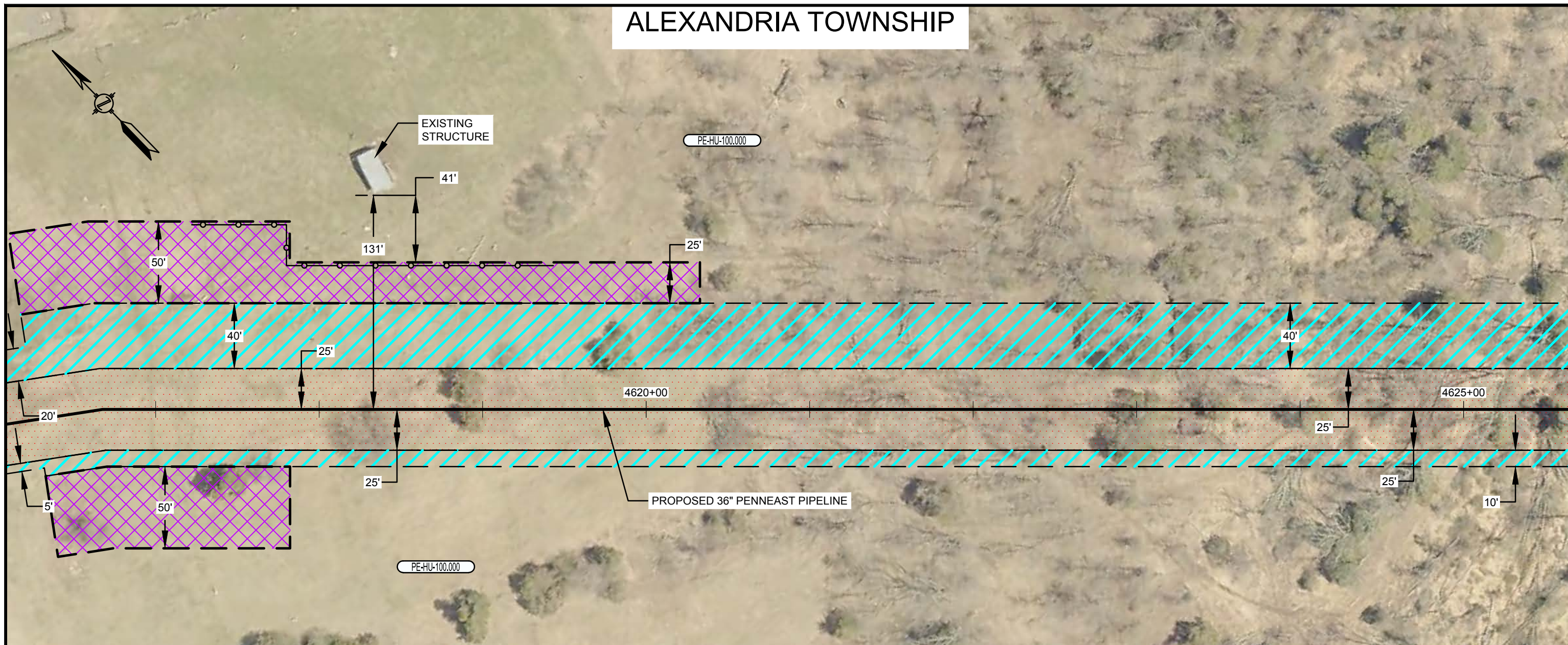
PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY



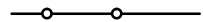

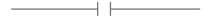
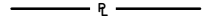

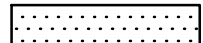


000-03-02-079

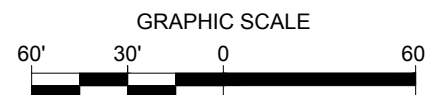
SHEET: 01 OF 01	F
TYPE: ACAD	

ALEXANDRIA TOWNSHIP



LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



PLAN VIEW

SCALE: 1" = 60'

NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:		TOWNSHIP:	ALEXANDRIA
		RANGE:	
DFT:	HMM	DATE:	02/18/2016
CHK:	HMM	DATE:	02/18/2016
APPR:		DATE:	
		SCALE:	1"=60'
		FILENAME:	000-03-02-080.DWG

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
HUNTERDON COUNTY, NEW JERSEY

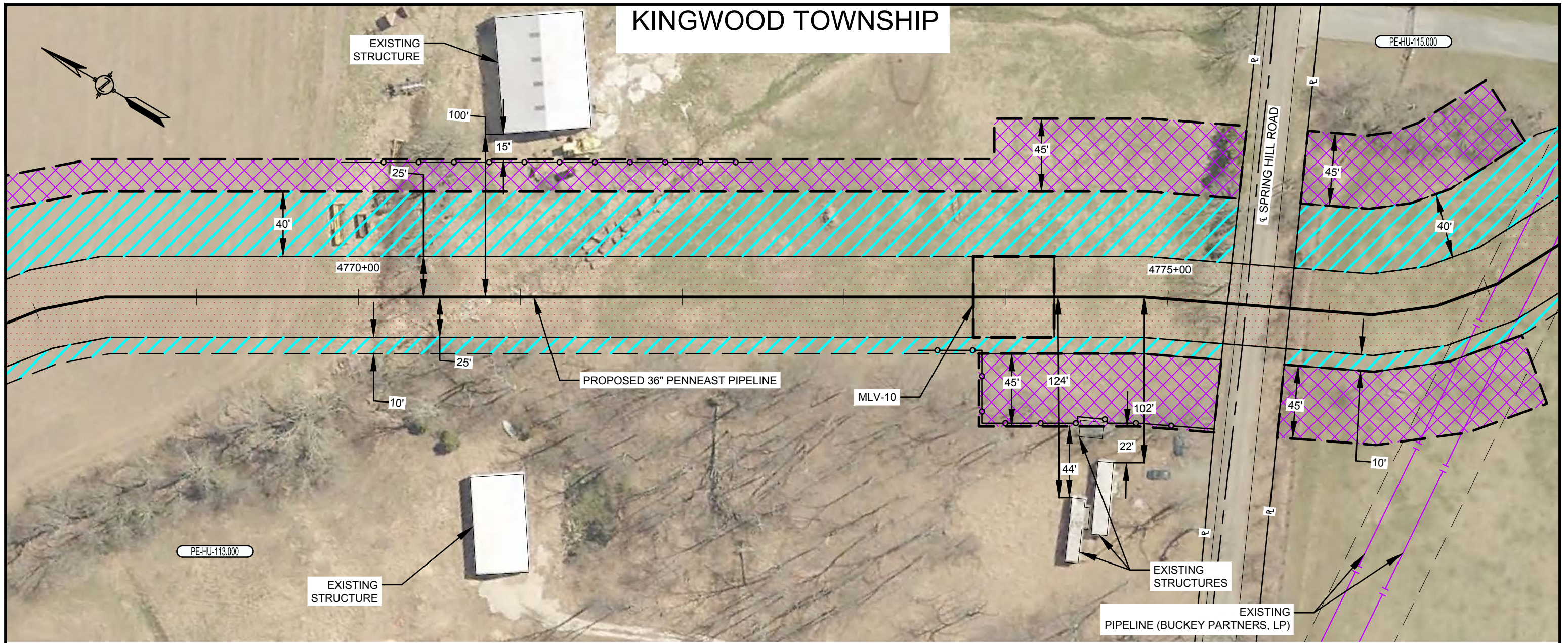


000-03-02-080

SHEET: 01 OF 01
TYPE: ACAD

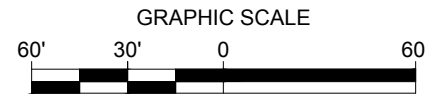
F

KINGWOOD TOWNSHIP



LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



PLAN VIEW

SCALE: 1" = 60'

NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

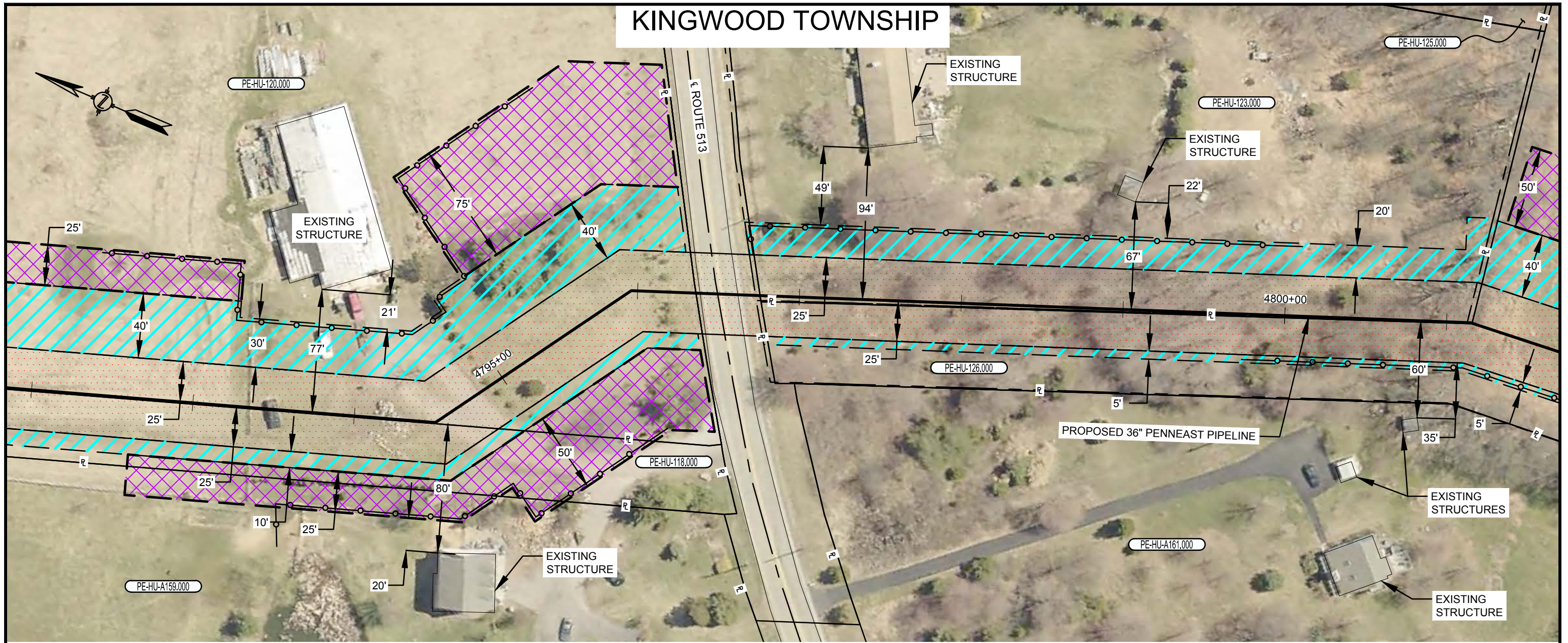
NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:	TOWNSHIP: KINGWOOD	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-081.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

000-03-02-081	SHEET: 01 OF 01	F
	TYPE: ACAD	

KINGWOOD TOWNSHIP

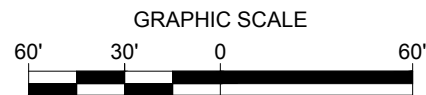


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:	TOWNSHIP: KINGWOOD	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-082.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

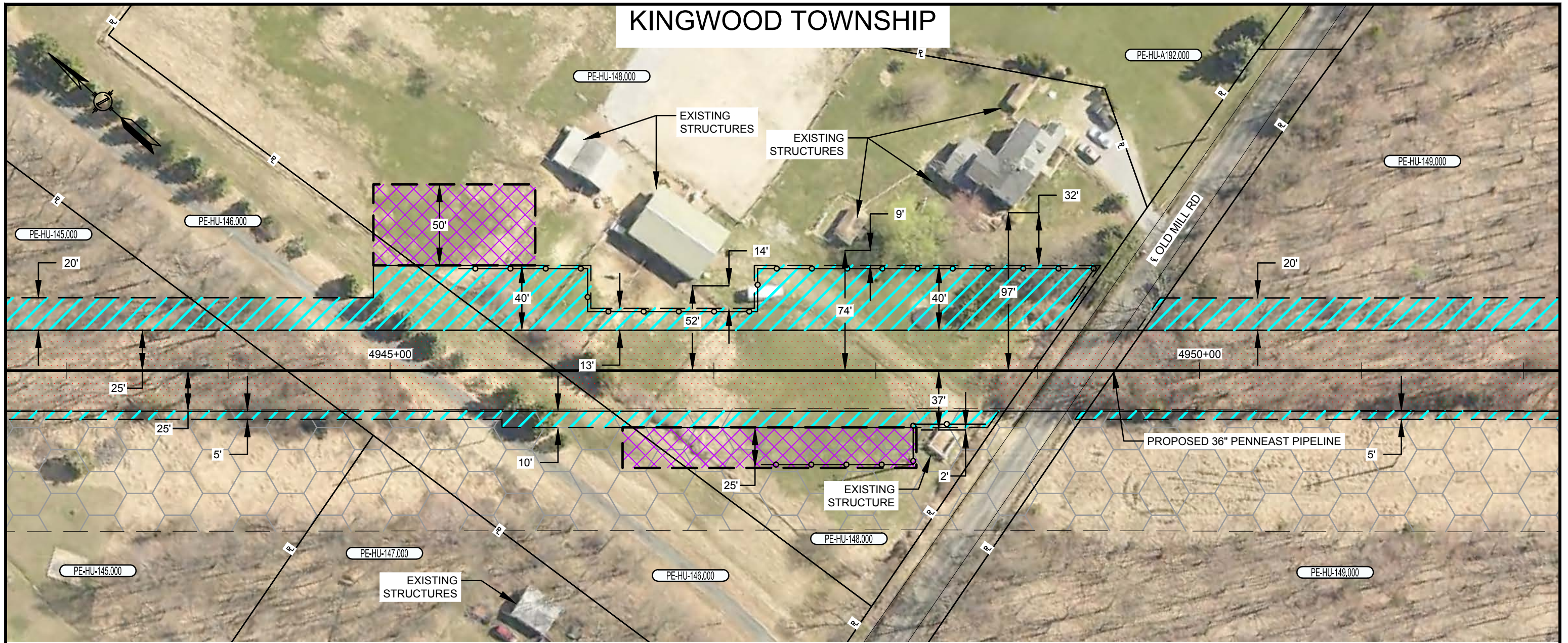


000-03-02-082

SHEET: 01 OF 01
 TYPE: ACAD

F

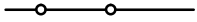


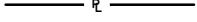

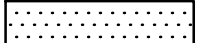


KINGWOOD TOWNSHIP

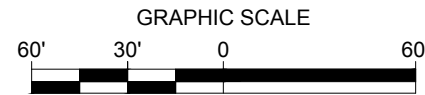


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:	TOWNSHIP: KINGWOOD	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-083.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

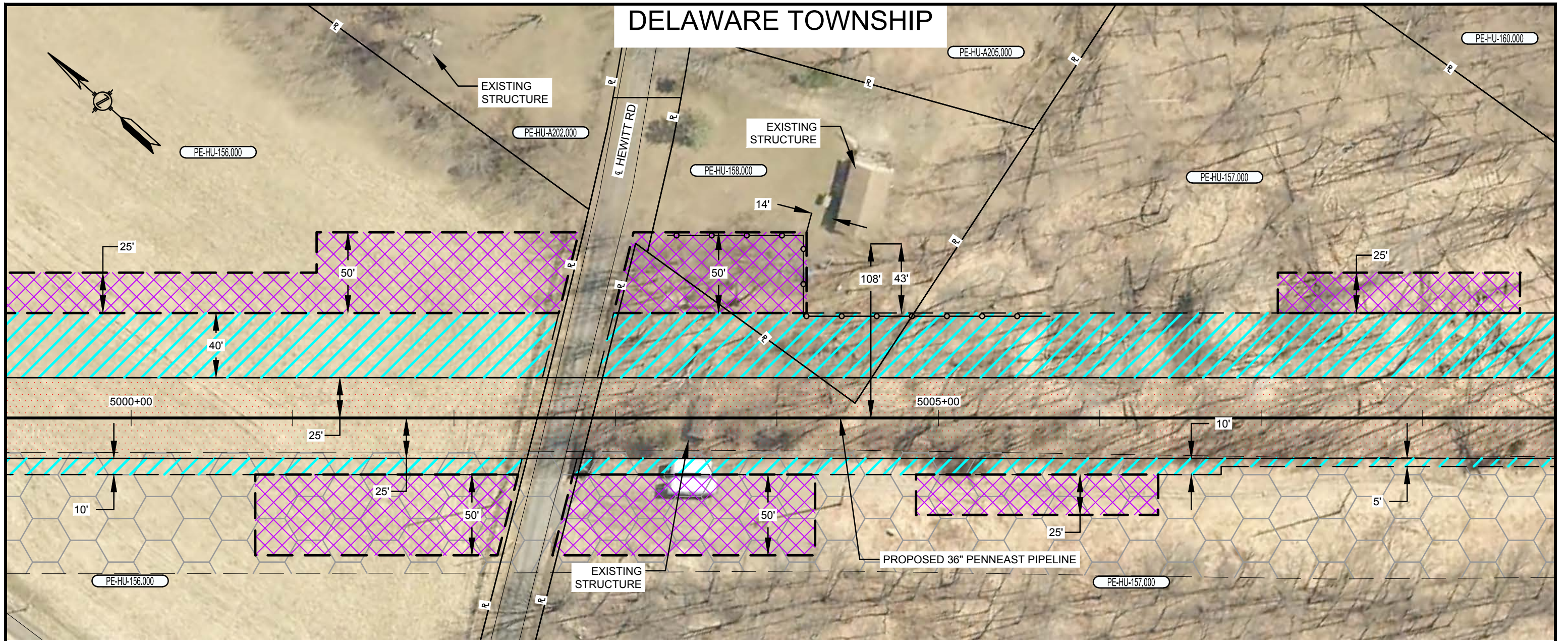


000-03-02-083

SHEET: 01 OF 01
 TYPE: ACAD

F

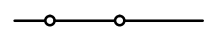


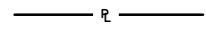
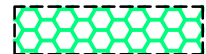
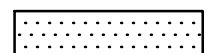


DELAWARE TOWNSHIP

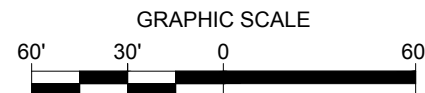


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:	TOWNSHIP: DELAWARE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-084.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

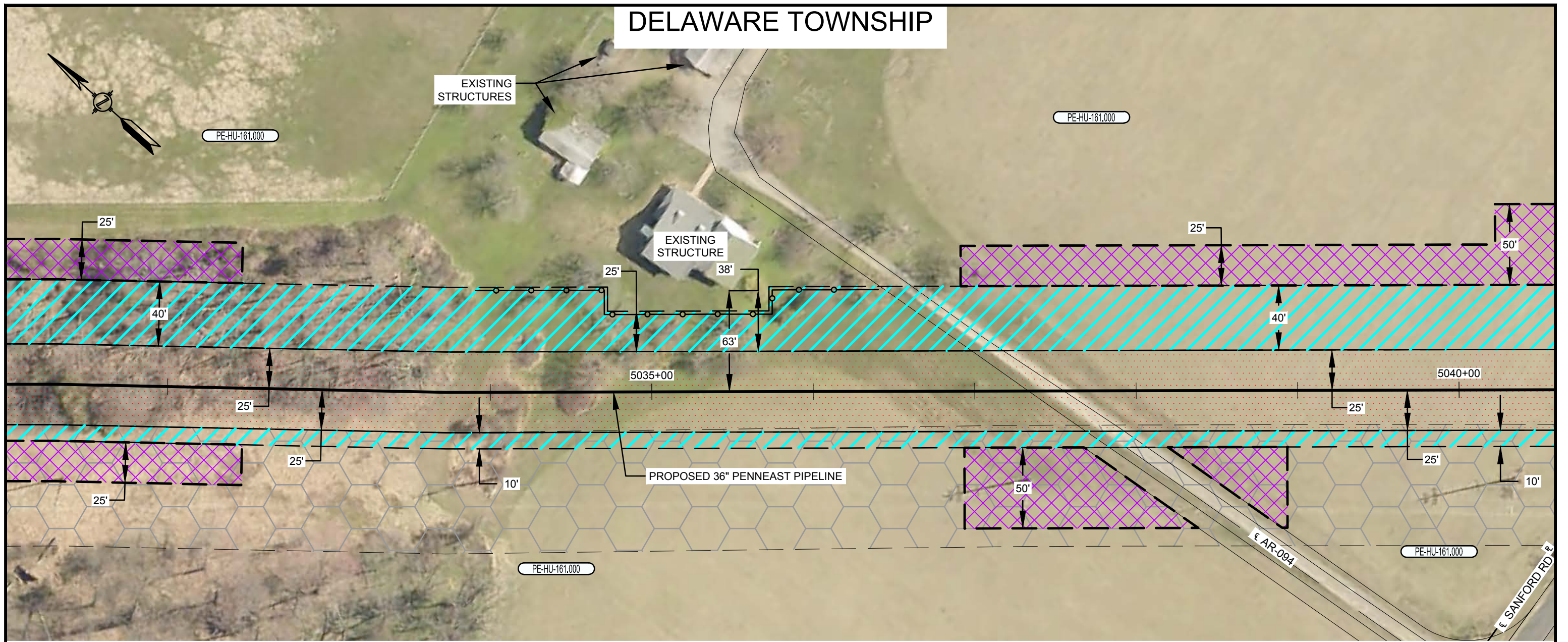


000-03-02-084

SHEET: 01 OF 01
 TYPE: ACAD

F

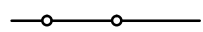


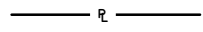
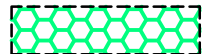
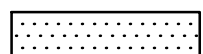


DELAWARE TOWNSHIP

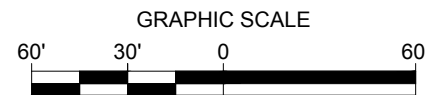


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:	TOWNSHIP: DELAWARE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-085.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

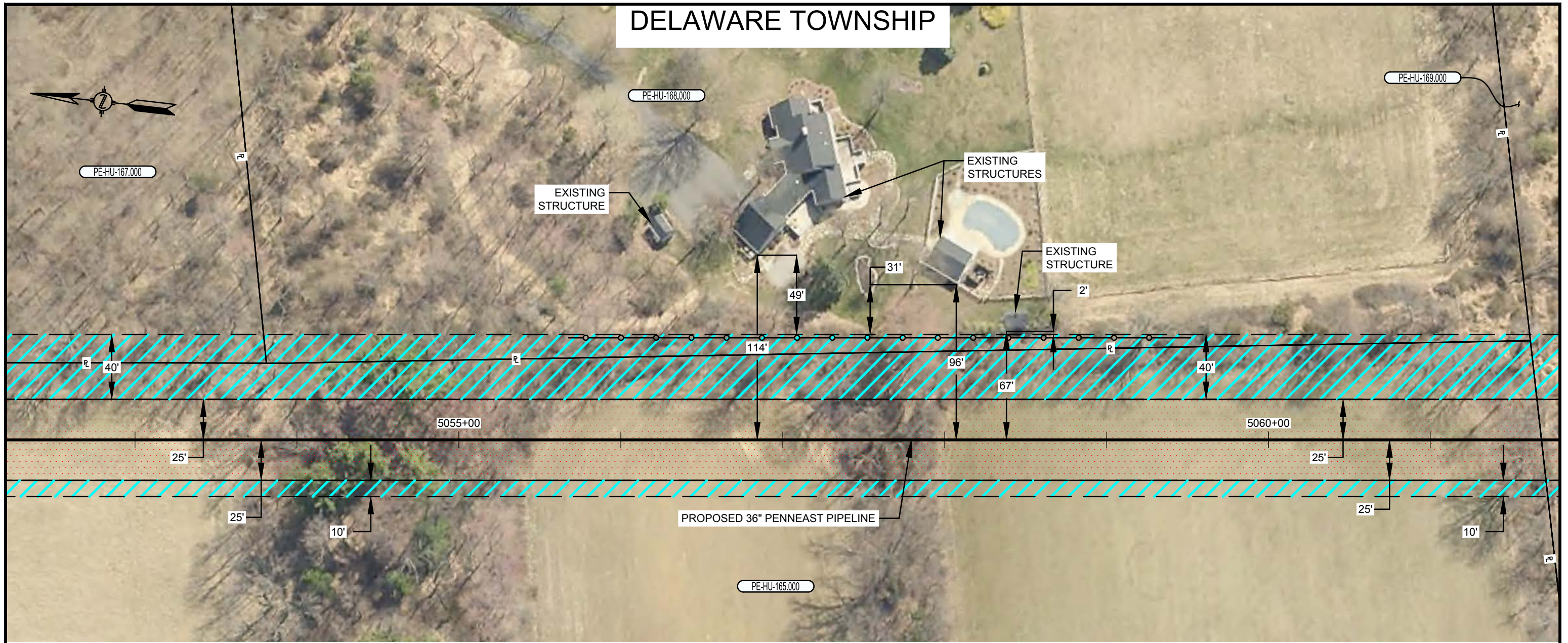


000-03-02-085

SHEET: 01 OF 01
 TYPE: ACAD

F

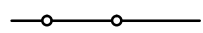


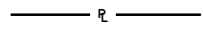
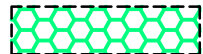
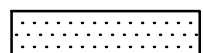


DELAWARE TOWNSHIP

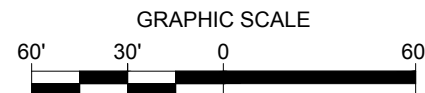


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

- SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
- STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
- STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
- PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

- THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
- THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:	TOWNSHIP: DELAWARE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-086.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

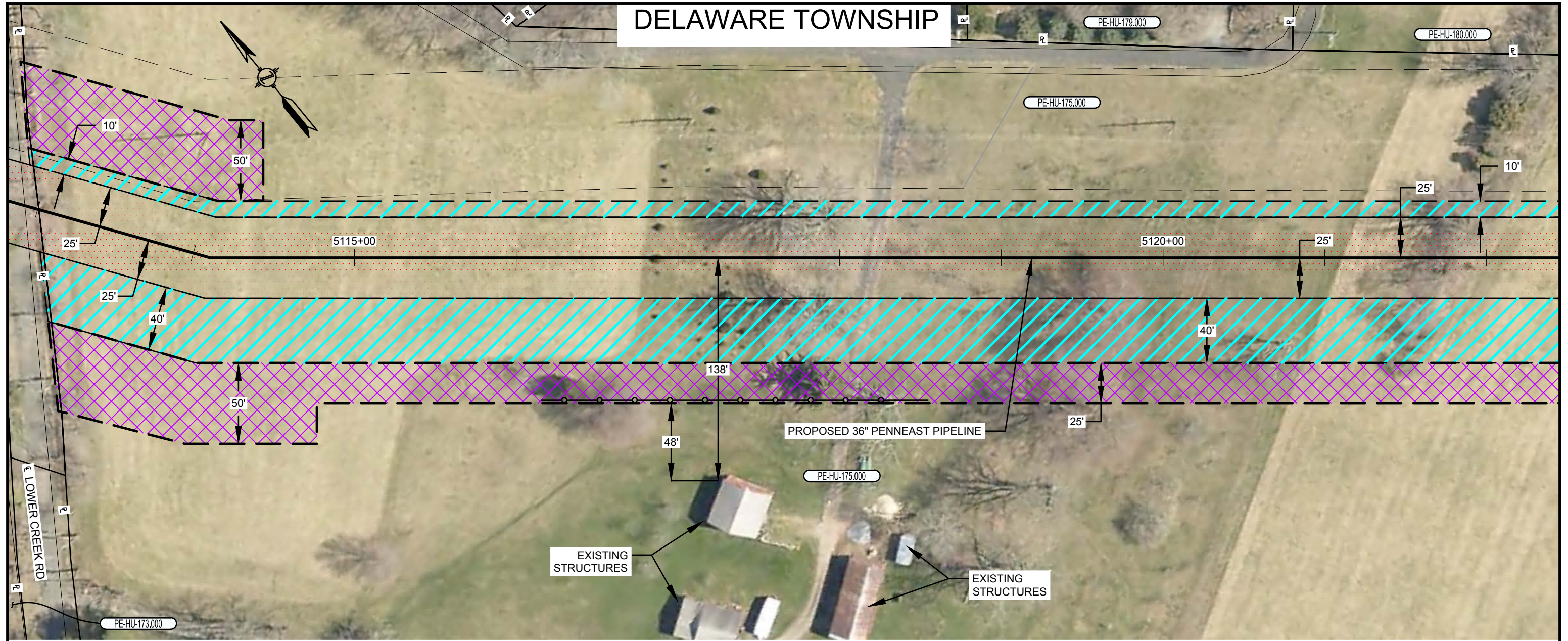


000-03-02-086

SHEET: 01 OF 01
 TYPE: ACAD

F

DELAWARE TOWNSHIP

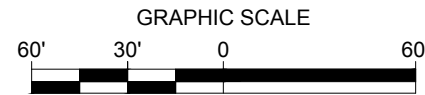


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:	TOWNSHIP: DELAWARE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-087.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

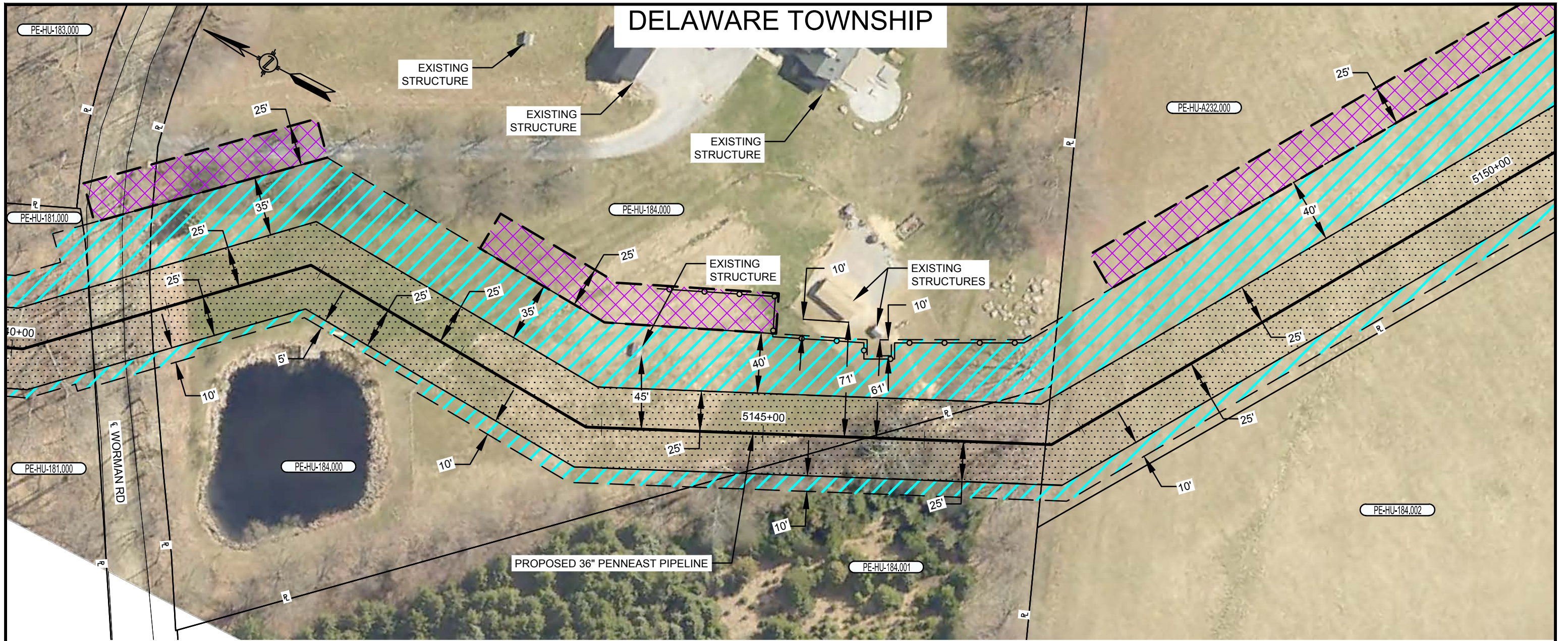


000-03-02-087

SHEET: 01 OF 01
 TYPE: ACAD

F

DELAWARE TOWNSHIP

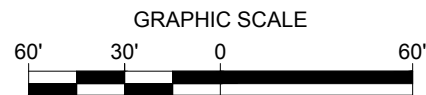


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:	TOWNSHIP: DELAWARE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:		000-03-02-088.DWG

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

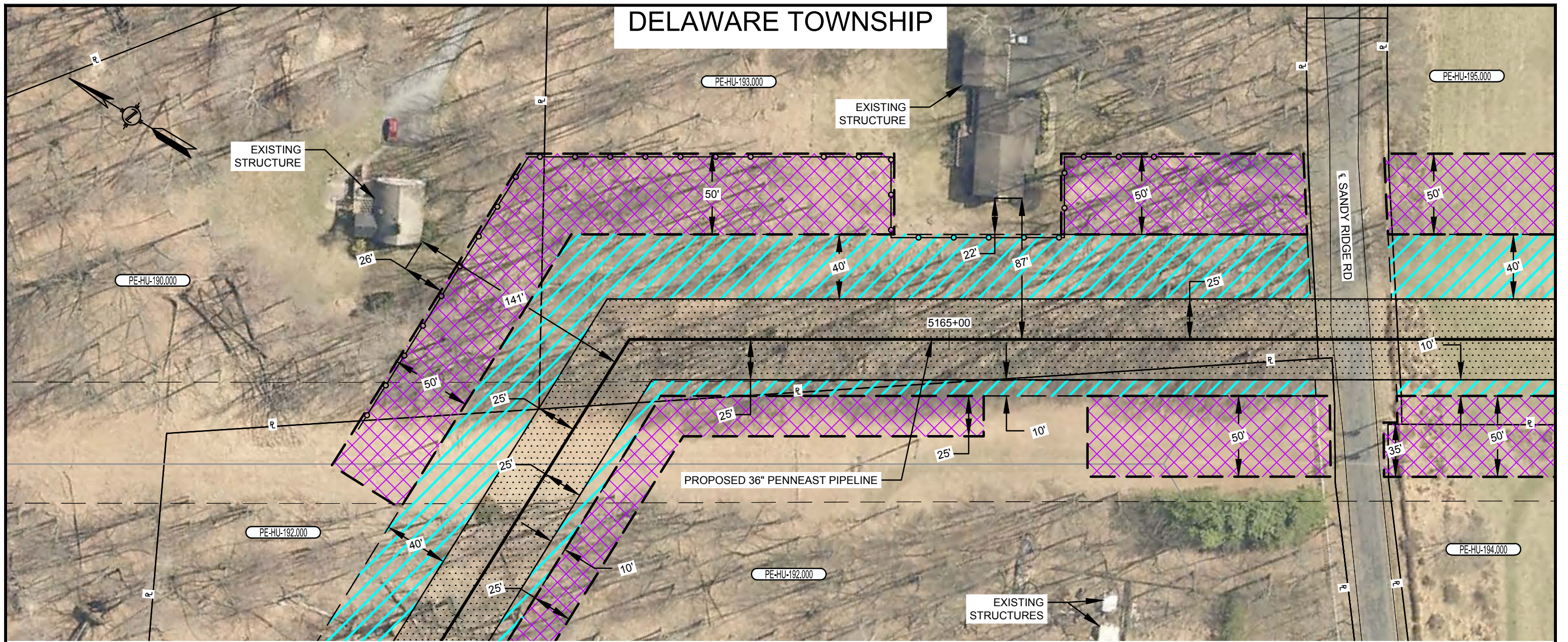


000-03-02-088

SHEET: 01 OF 01
 TYPE: ACAD

F

DELAWARE TOWNSHIP

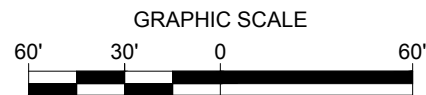


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:	TOWNSHIP: DELAWARE	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-089.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

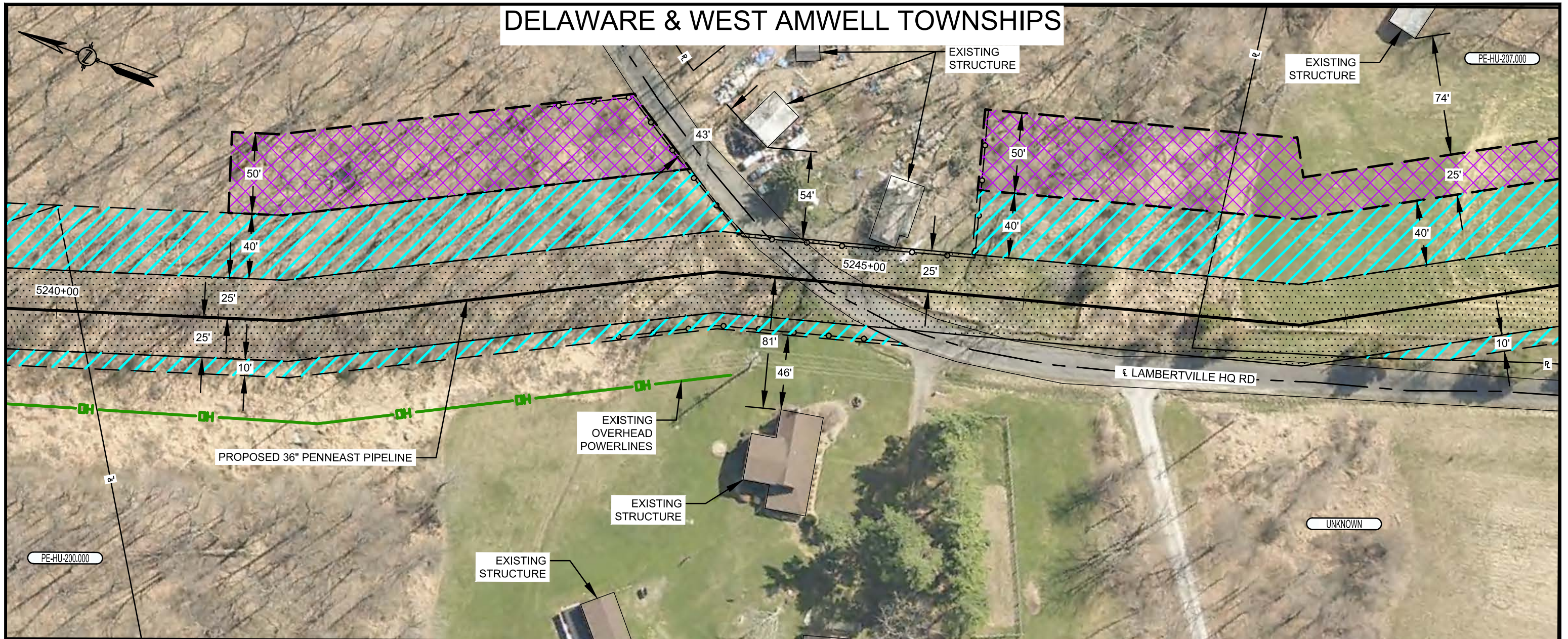


000-03-02-089

SHEET: 01 OF 01
 TYPE: ACAD

F

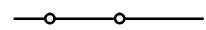


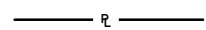
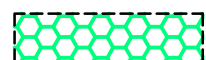
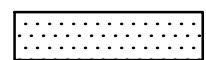


DELAWARE & WEST AMWELL TOWNSHIPS

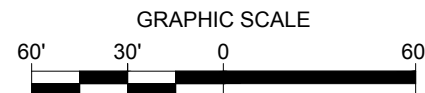


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:		TOWNSHIP: SEE TITLE	RANGE:
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-090.DWG	

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
HUNTERDON COUNTY, NEW JERSEY

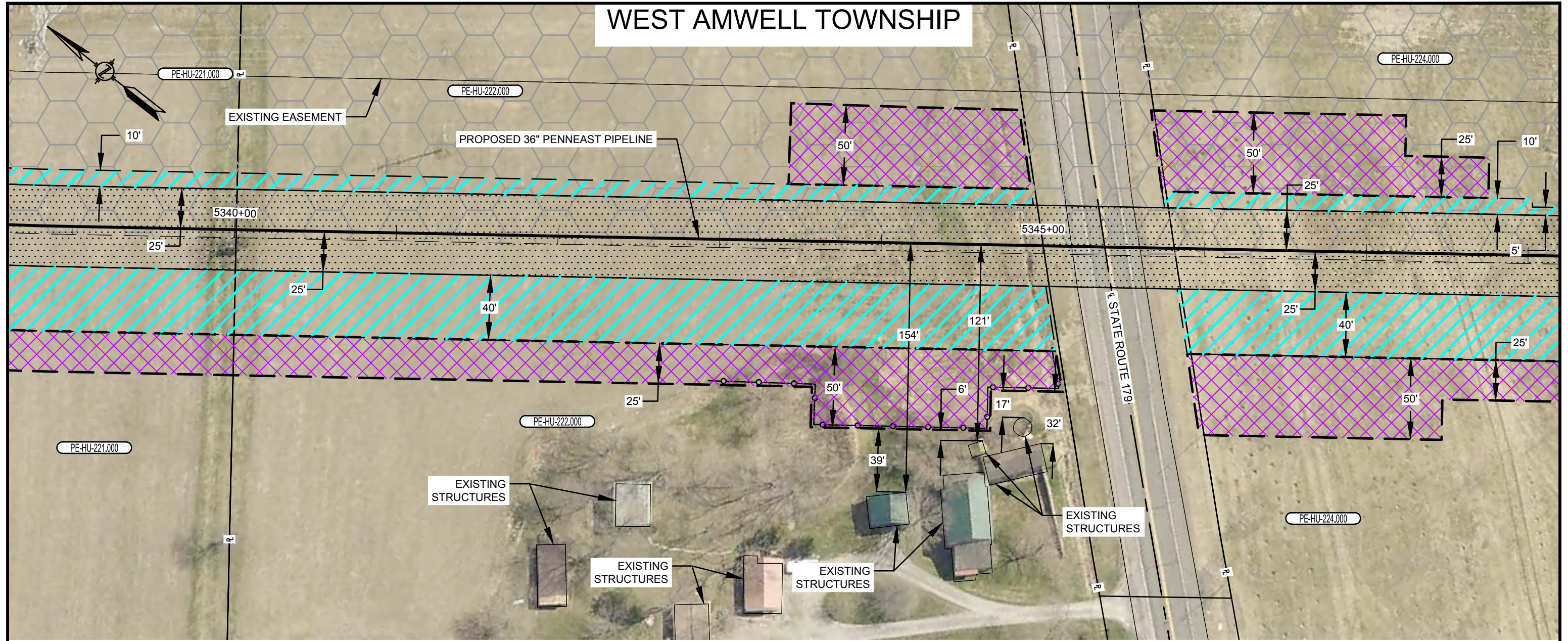


000-03-02-090

SHEET: 01 OF 01
TYPE: ACAD

F

WEST AMWELL TOWNSHIP

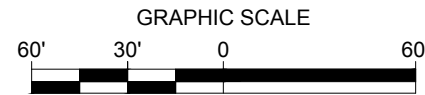


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	HUNTERDON
SECTION:	TOWNSHIP: WEST AMWELL	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-091.DWG
APPR:	DATE:		

**PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
HUNTERDON COUNTY, NEW JERSEY**

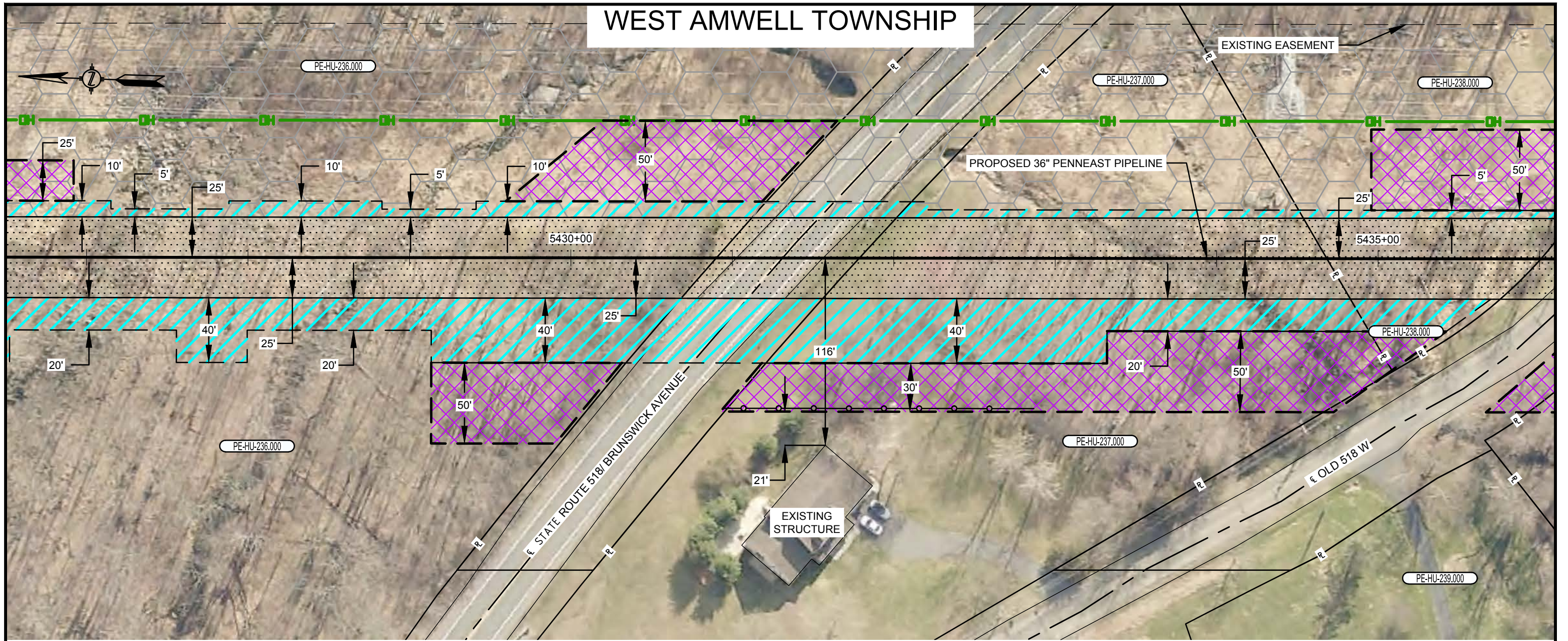


000-03-02-091

SHEET: 01 OF 01
TYPE: ACAD

F

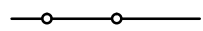


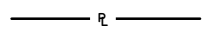
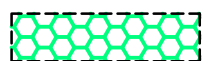
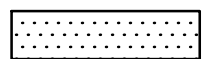


WEST AMWELL TOWNSHIP

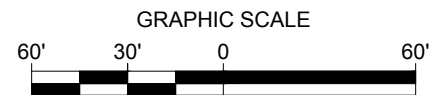


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: NEW JERSEY		CO./PAR.: HUNTERDON	
SECTION:	TOWNSHIP: WEST AMWELL	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-092.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

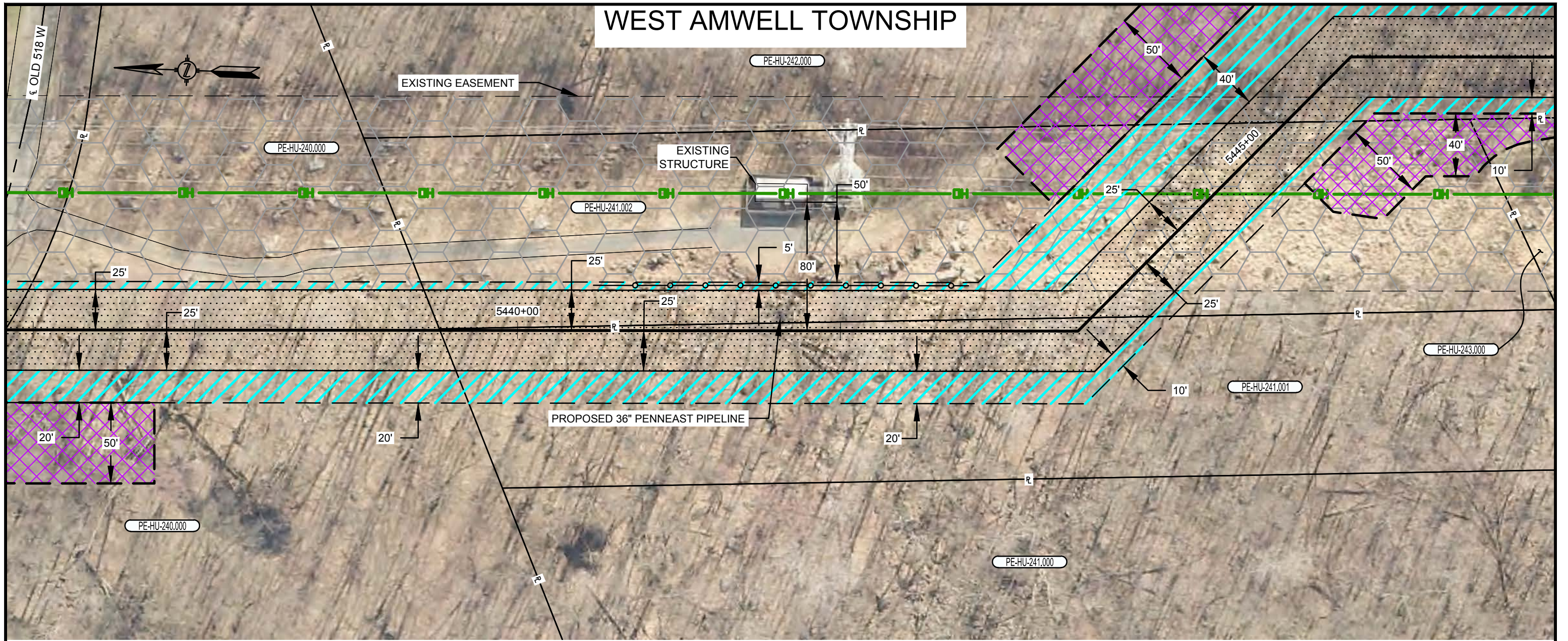


000-03-02-092

SHEET: 01 OF 01
 TYPE: ACAD

F

WEST AMWELL TOWNSHIP

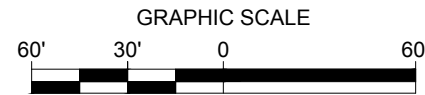


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

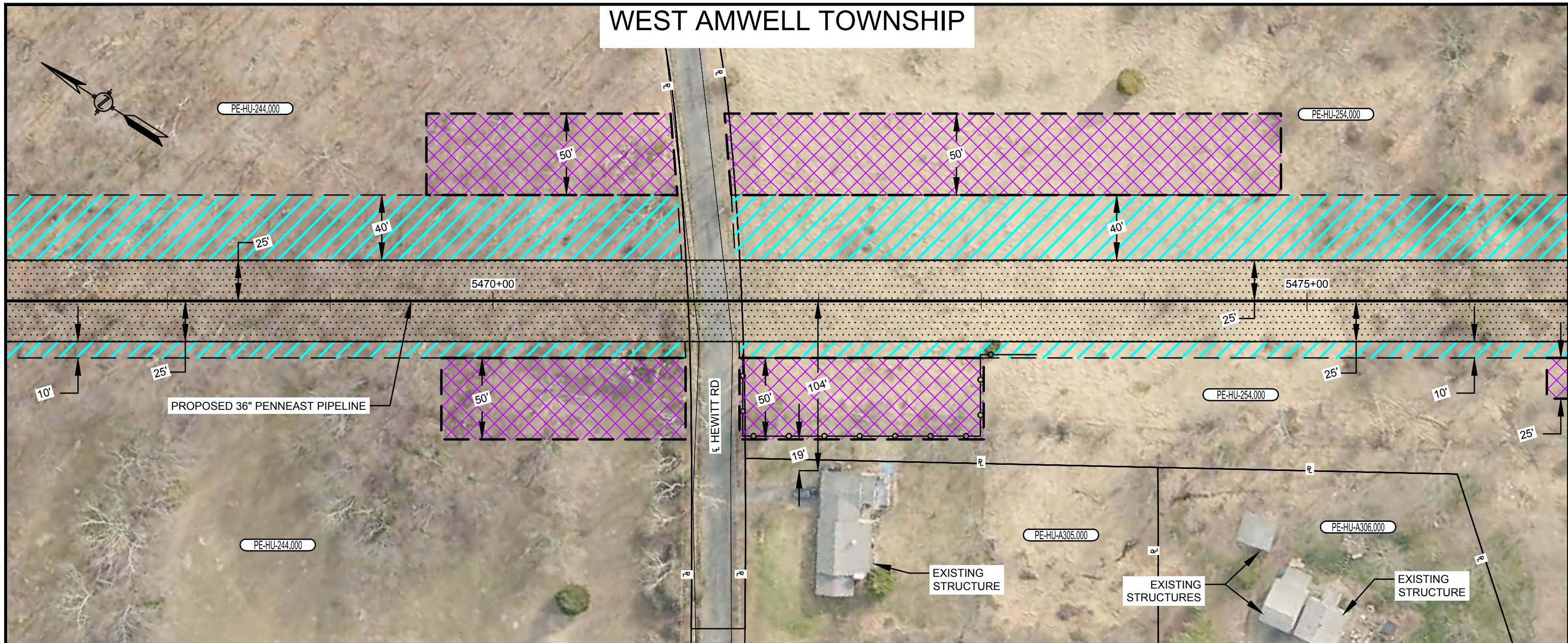
DIVISION:		OP. AREA:	
STATE: NEW JERSEY		CO./PAR.: HUNTERDON	
SECTION:	TOWNSHIP: WEST AMWELL	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-093.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 HUNTERDON COUNTY, NEW JERSEY

000-03-02-093

SHEET: 01 OF 01	F
TYPE: ACAD	

WEST AMWELL TOWNSHIP

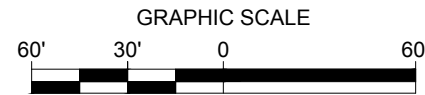


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

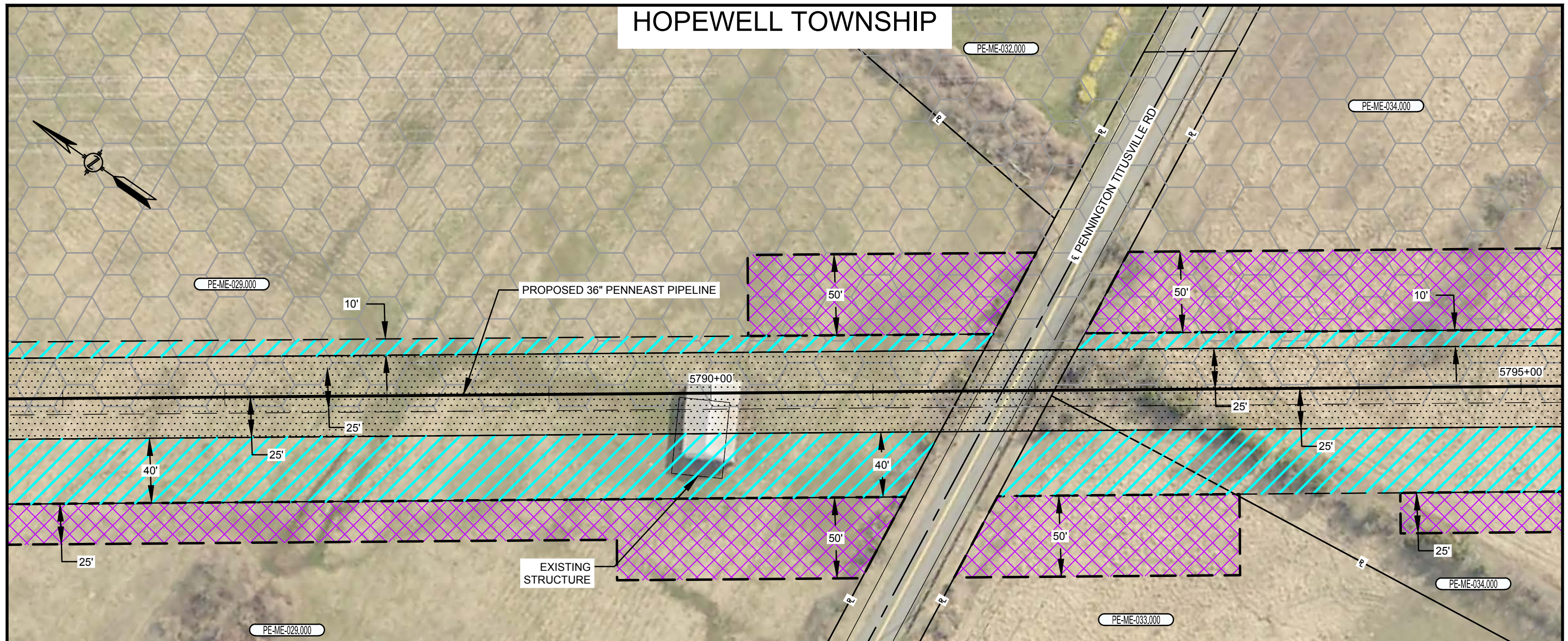
NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE: NEW JERSEY		CO./PAR.: HUNTERDON	
SECTION:	TOWNSHIP: WEST AMWELL	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-094.DWG	

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
HUNTERDON COUNTY, NEW JERSEY

000-03-02-094	SHEET: 01 OF 01	F
	TYPE: ACAD	




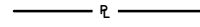

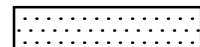


HOPEWELL TOWNSHIP

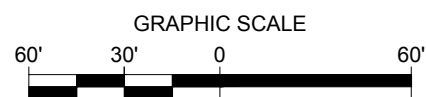


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA.:	
STATE: NEW JERSEY		CO./PAR.: MERCER	
SECTION:		TOWNSHIP: HOPEWELL RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE: 1"=60'	
CHK: HMM	DATE: 02/18/2016	FILENAME:	
APPR:	DATE:	000-03-02-095.DWG	

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 MERCER COUNTY, NEW JERSEY

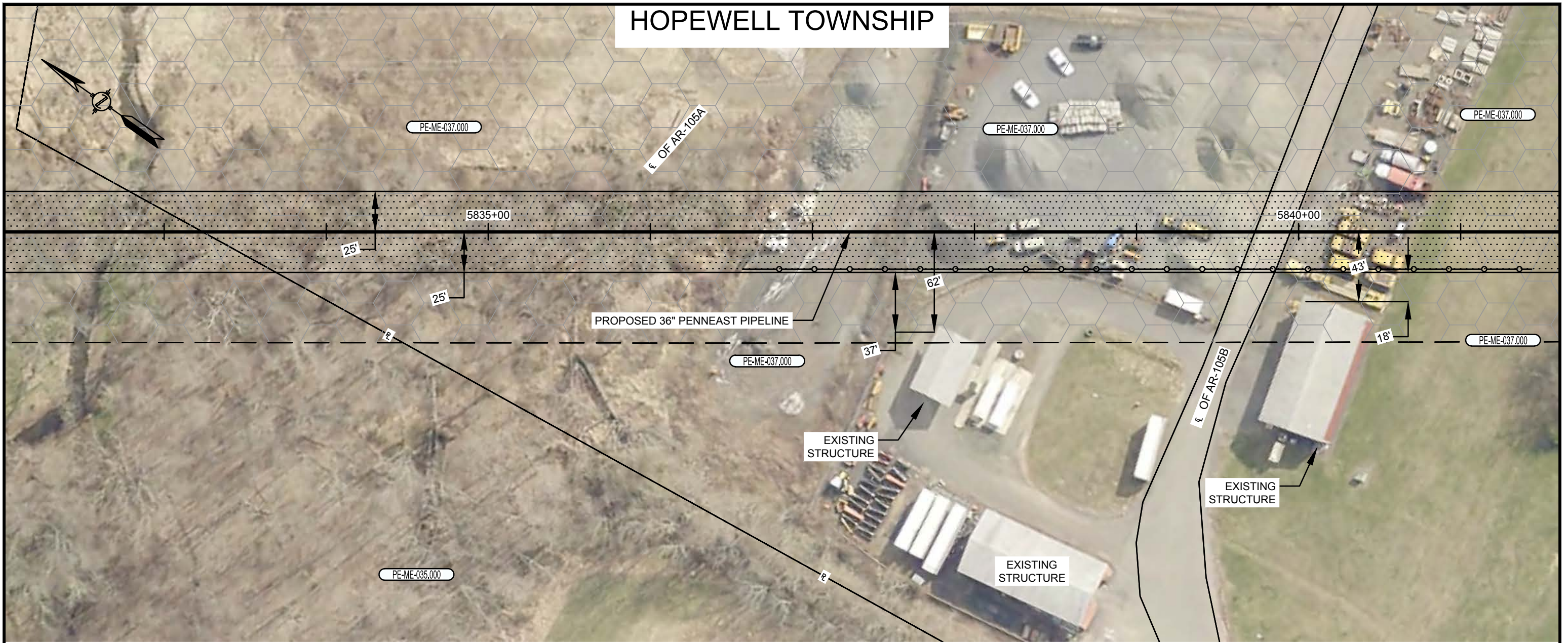


000-03-02-095

SHEET: 01 OF 01
 TYPE: ACAD

F

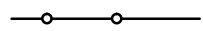


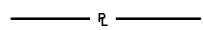
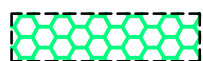
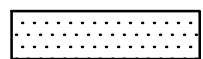


HOPEWELL TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	MERCER
SECTION:	TOWNSHIP: HOPEWELL	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-096.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
MERCER COUNTY, NEW JERSEY

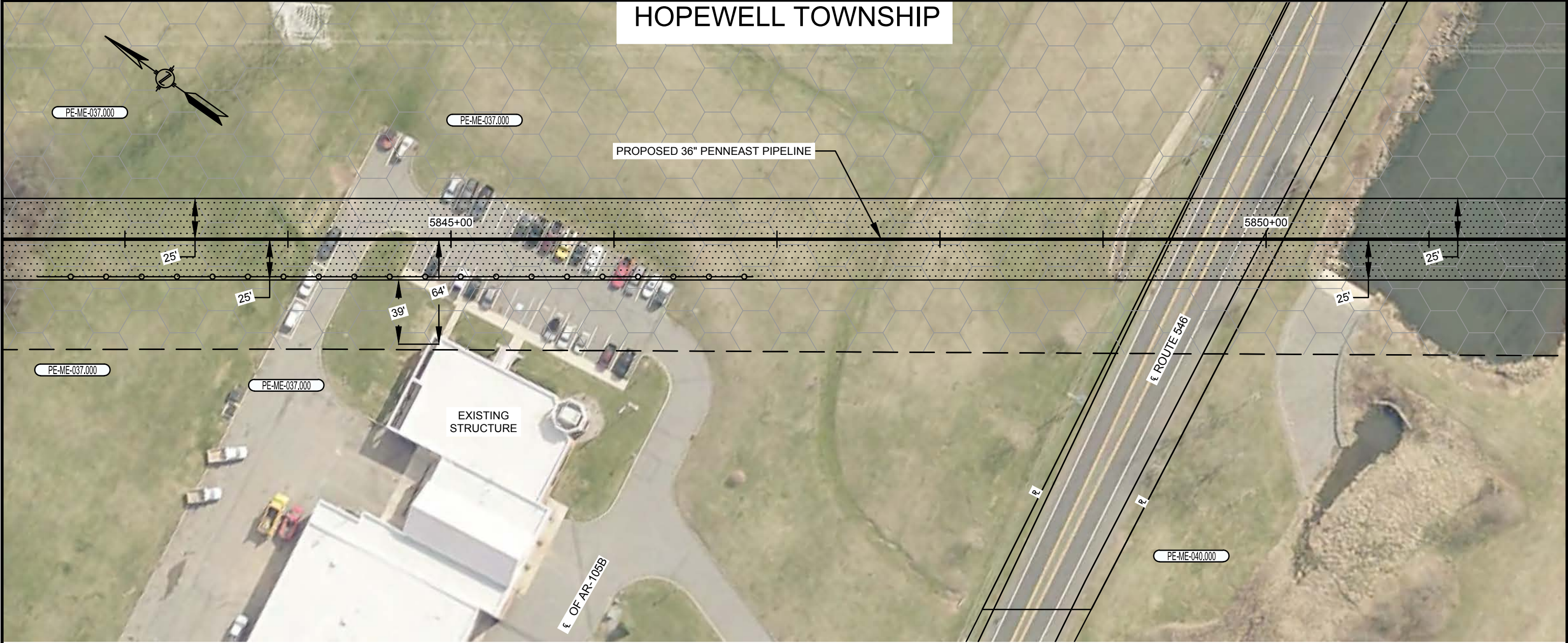


000-03-02-096

SHEET: 01 OF 01
TYPE: ACAD

F

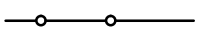


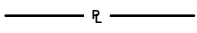
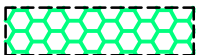
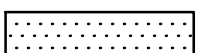


HOPEWELL TOWNSHIP

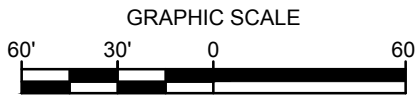


PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES


1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.


PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	MERCER
SECTION:	TOWNSHIP: HOPEWELL	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-097.DWG
APPR:	DATE:		

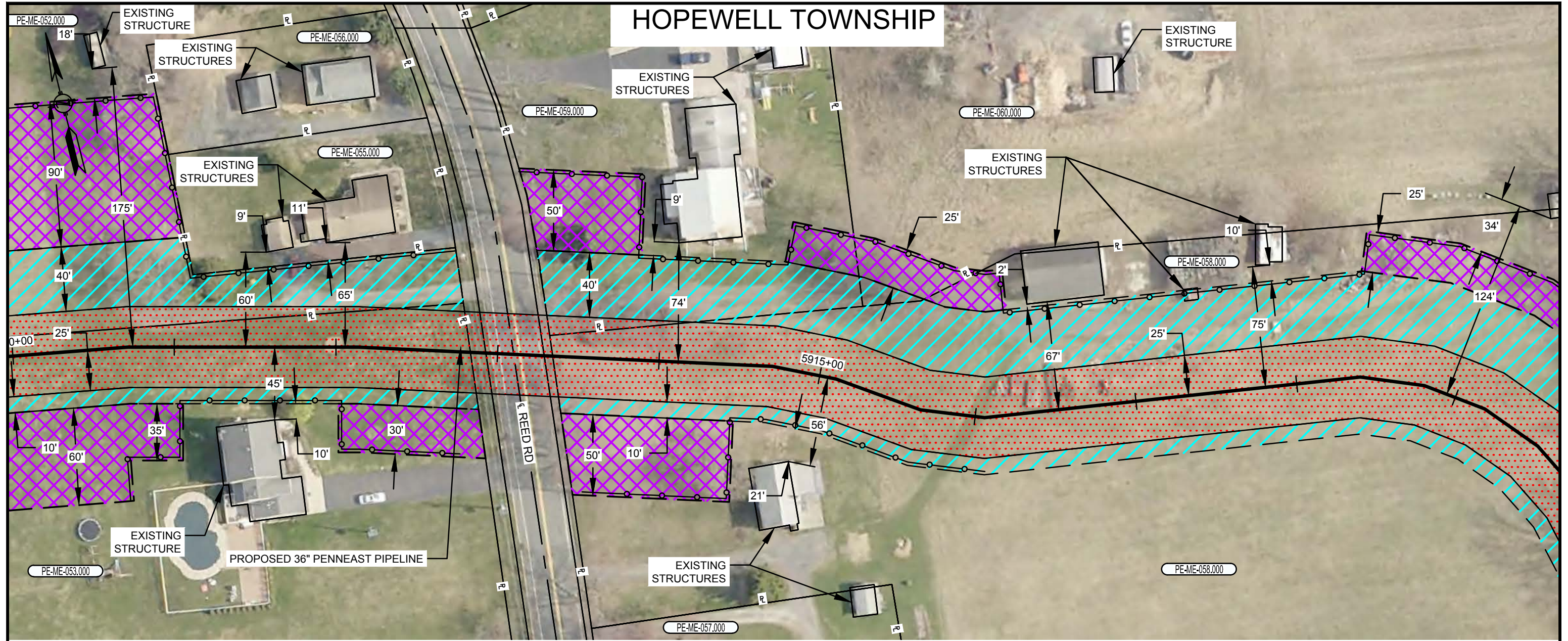
PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 MERCER COUNTY, NEW JERSEY





000-03-02-097	SHEET: 01 OF 01	F
	TYPE: ACAD	

HOPEWELL TOWNSHIP

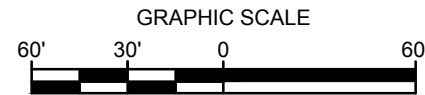


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

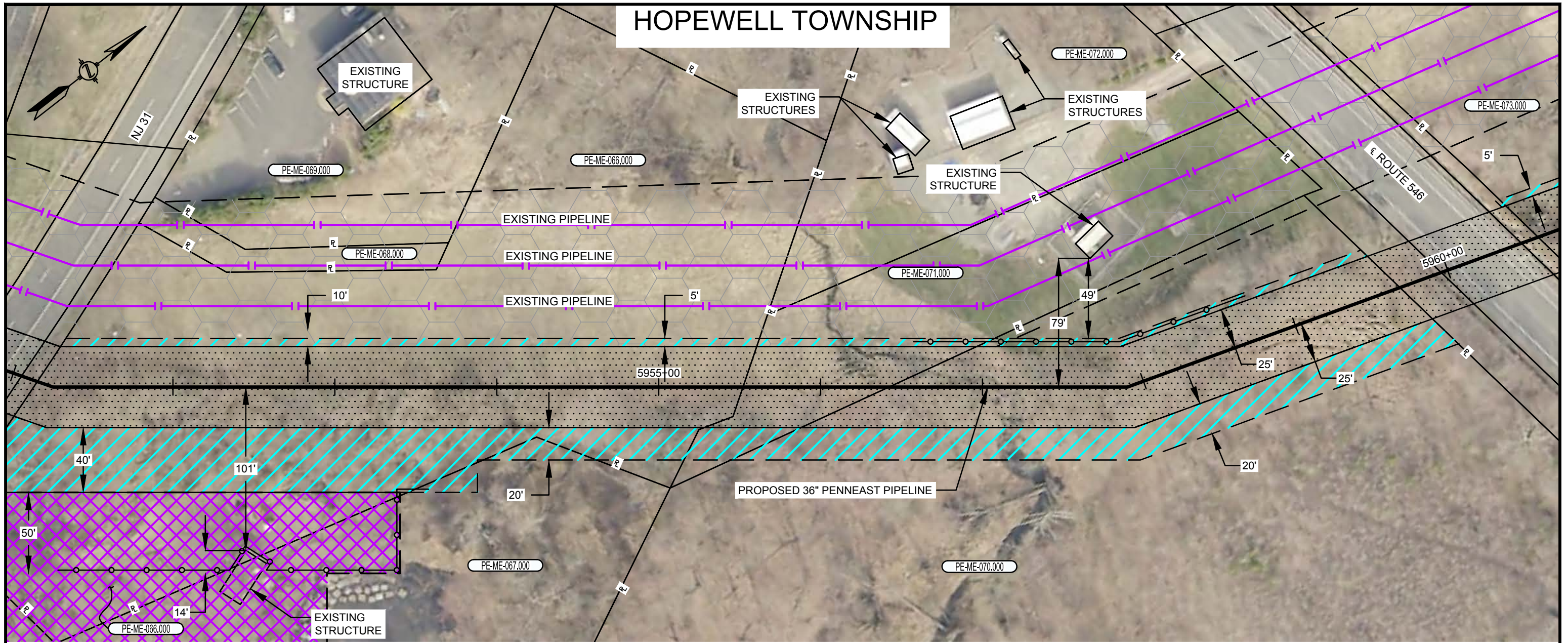
NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	MERCER
SECTION:	TOWNSHIP:HOPEWELL	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-098.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 MERCER COUNTY, NEW JERSEY

000-03-02-098	SHEET: 01 OF 01	F
	TYPE: ACAD	

HOPEWELL TOWNSHIP

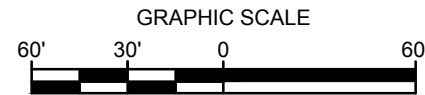


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	MERCER
SECTION:	TOWNSHIP: HOPEWELL	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-099.DWG
APPR:	DATE:		

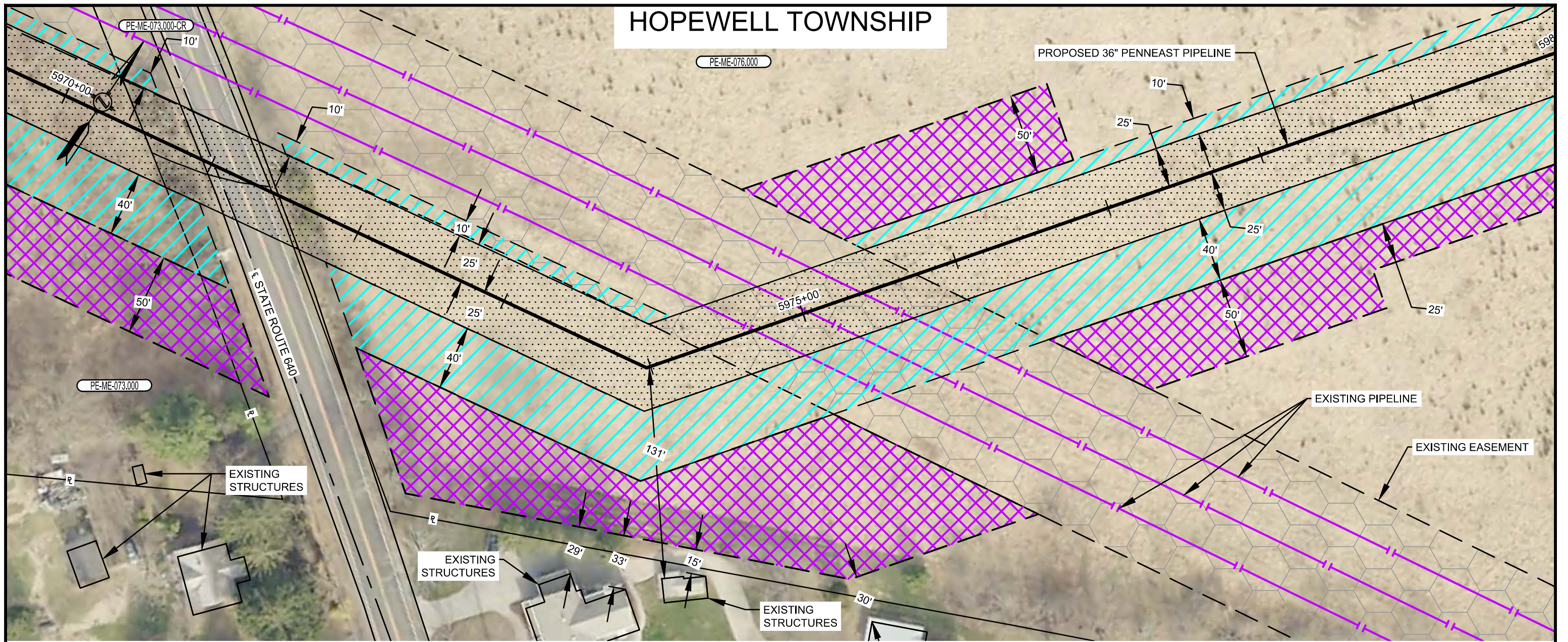
PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 MERCER COUNTY, NEW JERSEY



000-03-02-099

SHEET:	01 OF 01	F
TYPE:	ACAD	

HOPEWELL TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)

NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.



PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	MERCER
SECTION:	TOWNSHIP: HOPEWELL	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-100.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
 PROPOSED 36" PENNEAST PIPELINE
 RESIDENTIAL SITE SPECIFIC
 MERCER COUNTY, NEW JERSEY

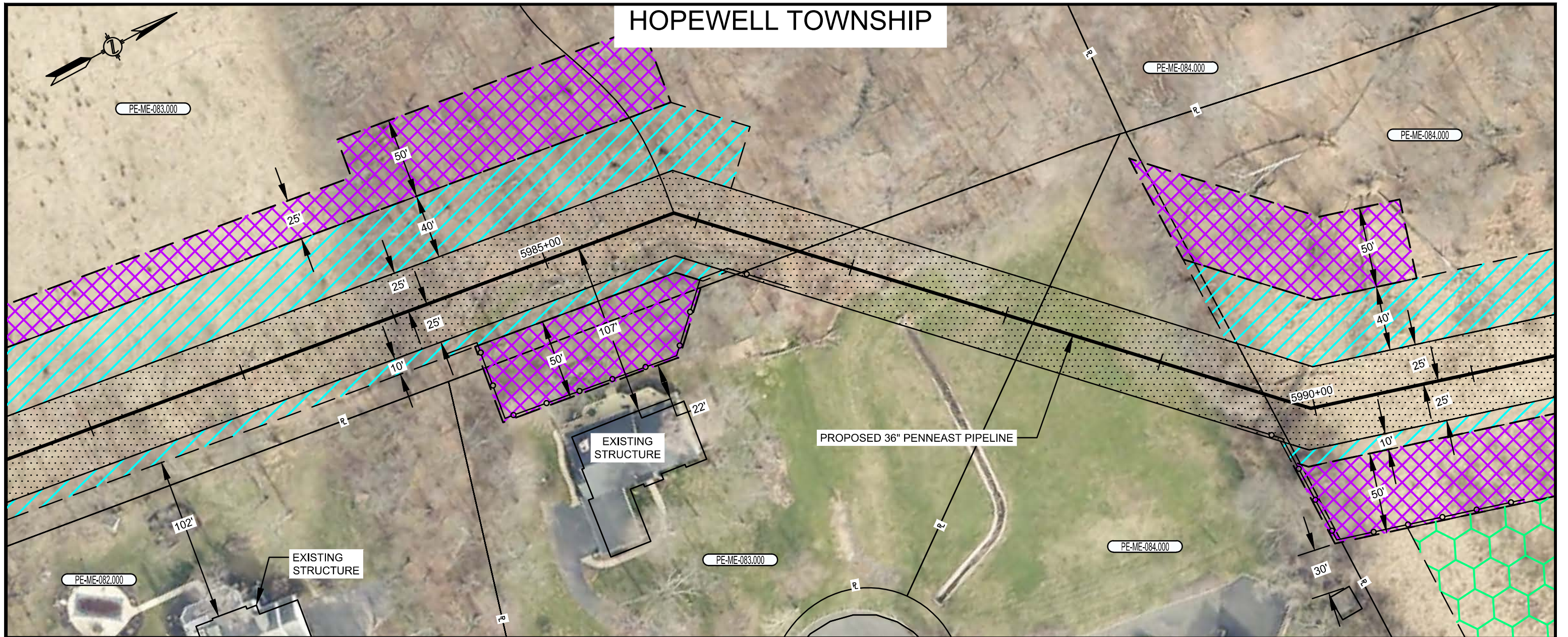


000-03-02-100

SHEET: 01 OF 01
 TYPE: ACAD

F

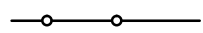


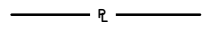
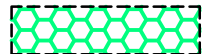
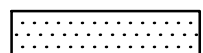


HOPEWELL TOWNSHIP



PLAN VIEW

SCALE: 1" = 60'

LEGEND

-  SAFETY FENCE
-  PROPOSED PIPELINE
-  EXISTING PIPELINE
-  PROPERTY LINE
-  PROPOSED STAGING AREA / WAREYARD
-  PROPOSED PERMANENT EASEMENT
-  TEMPORARY WORKSPACE
-  ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	MERCER
SECTION:	TOWNSHIP: HOPEWELL	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-101.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
MERCER COUNTY, NEW JERSEY



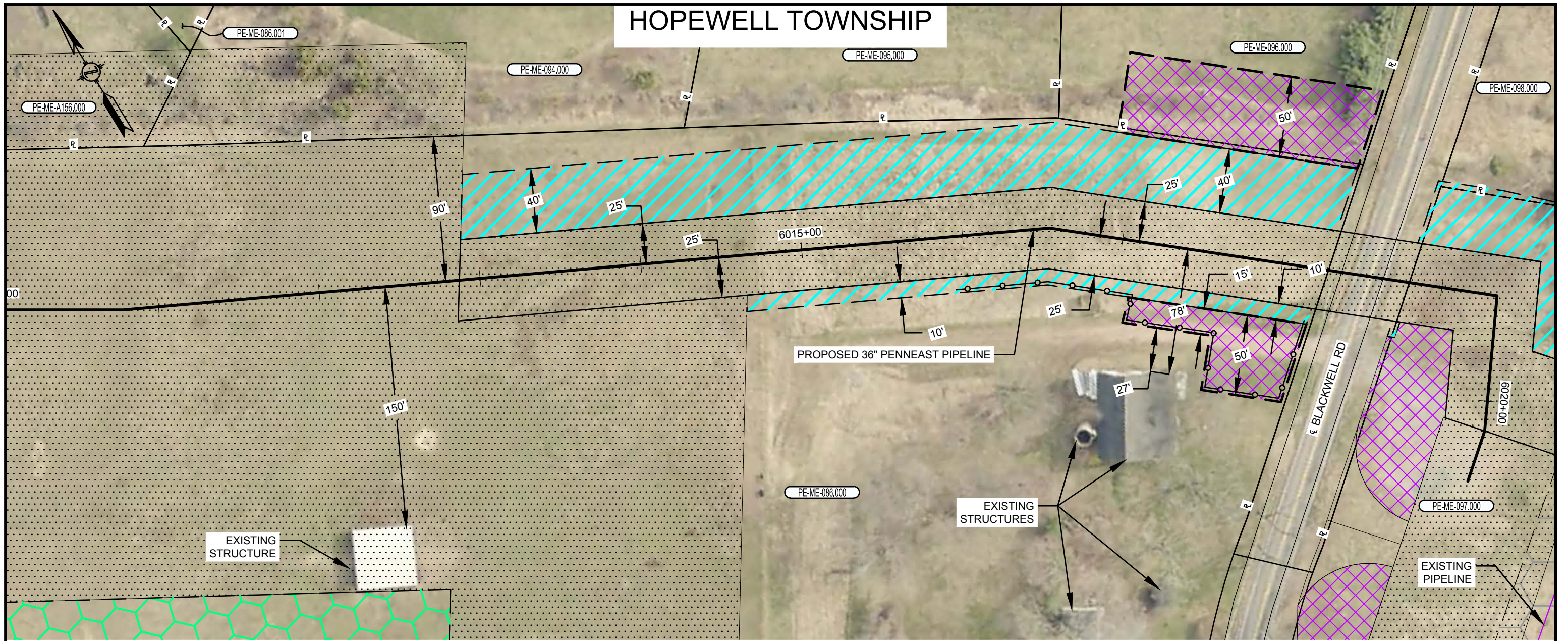
000-03-02-101

SHEET: 01 OF 01

TYPE: ACAD

F

HOPEWELL TOWNSHIP

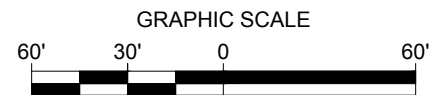


PLAN VIEW

SCALE: 1" = 60'

LEGEND

- SAFETY FENCE
- PROPOSED PIPELINE
- EXISTING PIPELINE
- PROPERTY LINE
- PROPOSED STAGING AREA / WAREYARD
- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- ADDITIONAL TEMPORARY WORKSPACE (ATWS)



NOTES:

1. SAFETY FENCE WILL BE INSTALLED AT THE EDGE OF THE LIMIT OF DISTURBANCE (L.O.D.) FOR A DISTANCE OF 100 FEET ON EITHER SIDE OF THE RESIDENCE OR BUSINESS ESTABLISHMENT.
2. STRUCTURES WITHIN L.O.D. WILL BE REMOVED, RELOCATED OR PROTECTED PER LAND OWNER AGREEMENT.
3. STRUCTURES WERE PROVIDED BY PICTOMETRY®, 2015.
4. PROPERTY LINES DEPICTED ON THIS PLAN ARE BASED OFF GIS TAX MAP DATA AND ARE NOT THE RESULT OF A BOUNDARY SURVEY

CONSTRUCTION TECHNIQUES

1. THE SEWER LINE TECHNIQUE IS A LESS EFFICIENT ALTERNATIVE TO THE MAINLINE METHOD OF CONSTRUCTION. IT IS TYPICALLY USED WHEN THE PIPELINE IS TO BE INSTALLED IN VERY CLOSE PROXIMITY TO AN EXISTING STRUCTURE OR WHEN AN OPEN DITCH WOULD ADVERSELY IMPACT A COMMERCIAL/RESIDENTIAL ESTABLISHMENT. THE TECHNIQUE INVOLVES INSTALLING PIPE ONE JOINT AT A TIME WHEREBY THE WELDING, X-RAY AND COATING ACTIVITIES ARE ALL PERFORMED IN THE OPEN TRENCH. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED OR THE OPEN TRENCH IS COVERED WITH STEEL PLATES OR TIMBER MATS.
2. THE DRAG SECTION CONSTRUCTION TECHNIQUE, WHILE LESS EFFICIENT THAN MAINLINE METHODS, IS NORMALLY PREFERRED OVER THE SEWER LINE ALTERNATIVE. THIS TECHNIQUE INVOLVES THE TRENCHING, INSTALLATION AND BACKFILL OF A PREFABRICATED LENGTH OF PIPE CONTAINING SEVERAL SEGMENTS ALL IN ONE DAY. AT THE END OF EACH DAY THE NEWLY INSTALLED PIPE IS BACKFILLED AND/OR COVERED WITH STEEL PLATES OR TIMBER MATS.

PLOTDATE FILEPATH

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
F	02/18/2016	HMM	SUPPLEMENTAL FERC FILING		
E	10/23/2015	HMM	ISSUED FOR BID		
D	09/18/2015	HMM	FERC FINAL FILING		
REVISIONS					

DIVISION:		OP. AREA:	
STATE:	NEW JERSEY	CO./PAR.:	MERCER
SECTION:	TOWNSHIP: HOPEWELL	RANGE:	
DFT: HMM	DATE: 02/18/2016	SCALE:	1"=60'
CHK: HMM	DATE: 02/18/2016	FILENAME:	000-03-02-102.DWG
APPR:	DATE:		

PENNEAST PIPELINE PROJECT
PROPOSED 36" PENNEAST PIPELINE
RESIDENTIAL SITE SPECIFIC
MERCER COUNTY, NEW JERSEY



000-03-02-102

SHEET: 01 OF 01
TYPE: ACAD

F

This page intentionally left blank.

Appendix J

List of Preparers

This page intentionally left blank.

**APPENDIX J
LIST OF PREPARERS**

Federal Energy Regulatory Commission

Kochhar, Medha – Project Manager, Introduction, Proposed Action, Alternatives, Water Resources, Wetlands, Vegetation and Wildlife, Threatened, Endangered Species and Special Status Species, Land Use, Recreation, and Visual Resources, Cumulative Impacts

Ph.D., Plant Ecology, 1974, North Carolina State University

M.S., Botany, 1968, B.I.T.S., Pilani, India

B.S., Biology and Chemistry, 1966, University of Delhi

Barakat, Kandilarya – Air Quality, Noise, Reliability and Safety

M.E. Environmental Engineering/Project Management, 2006, University of Maryland, College Park

B.S. Chemical Engineering, 2003, University of Maryland, College Park

Crosley, Shannon – Alternatives and Cumulative Impacts

B.S., Natural Resources Management, 1998, University of Maryland

Howard, Eric – Cultural Resources

M.A., Anthropology, 1998, University of Tennessee

B.A., Anthropology, 1992, University of Tennessee

Kopka, Robert – Soils and Socioeconomics

M.S., Soil Science, 1990, Cornell University

B.S., Agronomy, 1987, Delaware Valley College of Science and Agriculture

Rana, Tony – Geology and Groundwater Resources

M.S., International Development, 2012, Tulane University Law School – Payson Center for International Development

Graduate Studies, Hydrogeology and Geochemistry, 1985–1988, Oklahoma State University

B.S., Geology, 1984, New Jersey City University

Yuan, Julia – Vegetation and Wildlife and Threatened, Endangered Species and Special Status Species

M.P.S., Natural Resources Management, 2003, State University of New York, College of Environmental Science and Forestry

B.S., Environmental Biology/Forestry, 1999, State University of New York, College of Environmental Science and Forestry

Tetra Tech, Inc.**Sparks, Sean – Project Manager, Introduction, Proposed Action**

B.A., Environmental Studies, 2005, Lake Forest College

Atmer, Thomas – Cumulative Impacts

B.A., Environmental Studies; Chemical Physics, 2014, Tufts University

Crookston, John – Vegetation and Wildlife and Threatened, Endangered Species and Special Status Species, Reliability and Safety

M.S., Ecology, 2007, San Diego State University

B.A., Biology, 2002, University of California, San Diego

Dadswell, Matt – Socioeconomics

Post-Masters Study (ABD), Economic Geography, 1997, University of Washington

M.A., Economic Geography, 1990, University of Cincinnati

B.A., (Joint Honours) Economics and Geography, 1988, Portsmouth Polytechnic, England

Dillon, Peter – Geology, Soils, Groundwater Resources

M.S., Geology (Geochemistry), 1994, Boston College

B.S., Geology, 1983, Boston College

Marshall, Sydne – Cultural Resources

Ph.D., Anthropology, 1981, Columbia University

M.Phil. (Master of Philosophy), 1975, Anthropology, Columbia University

M.A., Anthropology, 1974, Columbia University

B.A., Anthropology, 1972, The American University

Pellerin, Tricia – Noise

M.E.Sc, Chemical and Biochemical Engineering, 2005, University of Western Ontario

B.E.Sc, Chemical and Biochemical Engineering, 2002, University of Western Ontario

Schils, Nathalie – Water Resources, Wetlands, Land Use, Recreation, and Visual Resources, Conclusions and Recommendations

B.A., Environmental Studies; International Relations, 2012, Tufts University

Scott, John G. – Alternatives

M.S., Wildlife and Fisheries Science, 1995, Pennsylvania State University

B.S., Natural Resources Management, 1983, Cornell University

Williams, Chris – Air Quality

B.S., Chemical Engineering, 1998, Massachusetts Institute of Technology

Appendix K

References

This page intentionally left blank.

References

- Allen, Williford & Seale Inc. 2001. Natural Gas Pipeline Impact Study, Prepared for the INGAA Foundation.
- American Wind Energy Association. 2015. U.S. Wind Energy State Facts. <http://www.awea.org/resources/statefactsheets>. Accessed December 10, 2015.
- Anspaugh, L.R. 2012. Scientific Issues Concerning Radon in Natural Gas. Texas Eastern Transmission, LP and Algonquin Gas Transmission, LLC New Jersey–New York Expansion Project. FERC Docket No. CP11-56.
- ASGECI (Amy S. Green Environmental Consultants, Inc.). 2015. NJ Habitat Assessment Memo and List of Wildlife Species Observed. Prepared for and Submitted to AECOM. August 6, 2015.
- Bailey, R.G. 1998. Ecoregions Map of North America. Explanatory Note. Misc. Publ. 1548. USDA Forest Service, Washington D.C. 10 pp.
- Bennett, A.F. 1991. Roads, Roadsides, and Wildlife Conservation: A Review. Pages 99-117 in D.A. Saunders and R.J. Hobbs (editors). *Nature Conservation 2: The Role of Corridors*.
- Bies & Hansen. 1996. *Engineering Noise Control*, Fourth Edition.
- Black, B.B., M.W. Collopy, H.F. Percival, A.A. Tiller, and P.G. Bohall. 1984. Effects of Low-level Military Training Flights on Wading Bird Colonies in Florida. U.S. Air Force Technical Report Number 7. Florida Cooperative Fisheries and Wildlife Resources Unit, Gainesville, Florida.
- Bowles, A.E. 1995. Responses of Wildlife to Noise. *Wildlife and Recreationists: Coexistence through Management and Research*. R.L. Knight and K.J. Gutzwiller, eds. Island Press, Covelo, California. pp. 109–156.
- Burge and Kitech. 2009. “Methods for predicting and evaluating noise from horizontal directional drilling (HDD) equipment.” *Proceedings of InterNoise 2009*.
- Butchkowski, Eileen and Turner, G. 2010. Pennsylvania Game Commission species fact sheet- Northern Flying Squirrel (*Glaucomys sabrinus macrotis*). Accessible at: www.portal.state.pa.us/portal/server.pt/.../northern_flying_squirrel_pdf.
- Butchkowski, Eileen. 2014. Pennsylvania Game Commission species fact sheet- Eastern small footed bat (*Myotis leibii*). Available at URL: www.portal.state.pa.us/portal/server.pt/document/.../small-footed_bat_pdf.
- CEQ (Council on Environmental Quality). 1997. Environmental Justice Guidance under the National Environmental Policy Act. Executive Office of the President. Washington, D.C. December 10. Available online at: <http://www.epa.gov/compliance/resources/policies/ej/index.html>
- Collins, H.H. Jr. 1981. *The Complete Field Guide to North American Wildlife*. Eastern Edition. Harper & Row Publishers, NY.

- Congressional Research Service. 2007. Energy Independence and Security Act of 2007: A Summary of Major Provisions. CRS Report for Congress, Order Code RL34294, Fred Sissine, Coordinator.
- Cornell Lab of Ornithology. 2015. American Bittern. All About Birds. Website. Accessed on 4/2016. Accessible at: https://www.allaboutbirds.org/guide/American_Bittern/lifehistory.
- Cowardin, L.M., Charter, V., Golet, F.C., LaRoe, E.T. 1979. Classification of Wetlands and Deepwater Habitats of the United States, Report No. FWS/OBL-97/31, U. S. Department of the Interior, Fish and Wildlife Service, Washington District of Columbia.
- Crisswell, R. 2012. Plight of the Eastern Redbelly Turtle. Pennsylvania Angler and Boater. January/February 2012. Pennsylvania Fish and Boat Commission.
- CWFNJ (Conserve Wildlife Foundation of New Jersey). 2012. New Jersey's Endangered and Threatened Wildlife. Last updated on April 2, 2012. Accessible at: <http://www.njfishandwildlife.com/tandespp.htm>. Accessed on January 31, 2015.
- Daeschler, T. 2015. Associate Curator of Vertebrate Zoology at the Academy of Natural Sciences in Philadelphia as well as Professor in the Biodiversity Department of Drexel University. Pennsylvania. (personnel communication).
- DCNR (Pennsylvania Department of Conservation and Natural Resources). 2015. Pre-Survey Meeting at Weiser State Forest Office, March 18, 2015. Minutes in Project Technical File.
- Diskin, B., Friedman, J., Peppas, S., and Peppas, S. 2011. The Effect of Natural Gas Pipelines on Residential Value. Right of Way. January/February.
- DOT (U.S. Department of Transportation). 2012. Leak Detection Study – DTPH56-11-D-000001. U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration. Final Report No. 12-173. December 10, 2012.
- DOT PHMSA (U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration). 2015a. Significant Pipeline Incidents by Cause; National Gas Transmission: Significant Incident Details: 1995-2014. Accessed July 2015.
- DOT PHMSA. 2015b. Consequences to the Public and the Pipeline Industry; National Gas Transmission: Consequences Summary Statistics: 2010-2014. Accessed July 2015.
- DOT PHMSA. 2015c. Significant Pipeline Incidents by Cause; National Gas Distribution: Significant Incidents Summary Statistics: 1995-2014, 20-year average. Accessed July 2015.
- DOT PHMSA. 2015d. Significant Pipeline Incidents by Cause; National Gas Transmission: Significant Incidents Summary Statistics: 1995-2014, 20-year average. Accessed July 2015.
- Eastern Research Group, Inc. 1999. Estimating Particulate Matter Emissions from Construction Operations. EPA Contract 68-D7-0068. September 30, 1999.
- Ebert, Janet. 2015. PennEast Rare Plant Survey Report- Rare Plant Search of 7 Polygons for PNDI #022407. Prepared for and Submitted to AECOM.

Econsult (Econsult Solutions and Drexel University). 2015. Economic Impact Report and Analysis: PennEast Pipeline Project Economic Impact Analysis. Available at: <http://penneastpipeline.com/economic-impact-analysis/>

EDR (Environmental Data Resources, Inc.). 2015. EDR DataMap Environmental Atlas Project Reports. February 12, 2015.

EIA (U.S. Energy Information Administration). 2010. State Nuclear Profiles. <http://www.eia.gov/nuclear/state/2008>. Accessed January 2016.

EIA. 2014a. Electricity, State Electricity Profiles, Pennsylvania Electricity Profile 2014. Released March 24, 2016. Next scheduled release February 2017. <https://www.eia.gov/electricity/state/pennsylvania>.

EIA. 2014b. Electricity, State Electricity Profiles, New Jersey Electricity Profile 2014. Released March 24, 2016. Next scheduled release February 2017. <https://www.eia.gov/electricity/state/newjersey/index.cfm>.

EIA. 2015a. Annual Energy Outlook, 2015. https://www.eia.gov/forecasts/aeo/section_elecgeneration.cfm. Accessed December 2015.

EIA. 2015b. State Profile and Energy Estimates. <http://www.eia.gov/state>. Accessed January 2016.

EPA (U.S. Environmental Protection Agency). 1995a. Compilation of Air Pollutant Emission Factors. Volume I: Stationary Point and Area Sources. Fifth Edition, AP-42. Available online at <http://www.epa.gov/ttnchie1/ap42/>.

EPA. 1995b. Protocol for Equipment Leak Emission Estimates. Office of Air Quality Planning and Standards (OAQPS). EPA-453/R-95-017. November 1995.

EPA. 1998. Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses. April. Available online at: <http://www.epa.gov/compliance/resources/policies/ej/index.html>.

EPA. 2010. Waterbody quality assessment report for Jacobs Creek. Available at https://ofmpub.epa.gov/tmdl_waters10/attains_waterbody.control?p_list_id=NJ02040105210060-01&p_state=NJ&p_cycle=2010 . Accessed on March 16, 2016.

EPA. 2011. Additional Clarification Regarding Applicability of Appendix W Modeling Guidance for the 1-hour NO₂ NAAQS. Tyler Fox memorandum, dated March 1, 2011. U.S. Environmental Protection Agency, Research Triangle Park, NC.

EPA. 2014. Oil and Natural Gas Sector Leaks. Report for Oil and Natural Gas Sector Leaks Review Panel. U.S. EPA Office of Air Quality Planning and Standards (OAQPS). April 2014.

EPA. 2015. Source Water Protection Sole Source Aquifer Program. Available at: <http://water.epa.gov/infrastructure/drinkingwater/sourcewater/protection/solesourceaquifer.cfm>. Accessed on July 1, 2015. EPA. 2015. Federal Register Notice: New Jersey Coastal Plain Aquifer. Available at: http://www.epa.gov/region02/water/aquifer/coast/fr_coast.htm. Accessed on July 1, 2015.

- FEMA (Federal Emergency Management Agency). 1992. Earthquake Resistant Construction of Gas and Liquid Fuel Pipeline Systems Serving, or Regulated by, the Federal Government, Earthquake Hazard Reduction Series 67, US Department of Commerce
- FERC (Federal Energy Regulatory Commission). 2002. Office of Energy Projects. Guidance Manual for Environmental Report Preparation. August 2002. <http://www.ferc.gov/industries/gas/enviro/erpman.pdf>. Accessed February 2, 2015.
- FERC. 2008. Mid Continent Express Final Environmental Impact Statement. (Docket No. CP08-6.). Washington, DC.
- FERC. 2013. Wetland and Waterbody Construction and Mitigation Procedures. Office of Energy Projects. Washington, D.C. May 2013.
- FERC. 2014. Constitution Pipeline and Wright Interconnect Projects. Final Environmental Impact Statement – Volume 1. FERC EIS 0249F. October. Available online at: <http://www.ferc.gov/industries/gas/enviro/eis/2014/02-12-14-eis.asp>
- FERC. 2015. Corpus Christi Liquefaction, LLC, 151 FERC ¶ 61,098 (2015) (May 6 Order).
- FERC. 2016. Draft Environmental Impact Statement for the Atlantic Sunrise Project. May 2016.
- FHWA (Federal Highway Administration). 2006. FHWA Roadway Construction Noise Model User's Guide, FHWA-HEP-05-054, January.
- Forman R.T., and L.E. Alexander. 1998. Roads and Their Major Ecological Effects. Annual Review of Ecology and Systematics 29:207-231.
- Fruits, E. 2008. The Impact of the Presence of a Natural Gas Pipeline on Residential Property Values. Portland State University. November.
- FWS (U.S. Fish and Wildlife Service). 1993. Northeastern Bulrush (*Scirpus ancistrochaetus*). Recovery Plan. Prepared by Carole K. Copeyon. Pennsylvania Field Office, USFWS for Northeast Region USFWS. Accessible at: http://ecos.fws.gov/docs/recovery_plan/930825.pdf
- FWS. 2001. Bog Turtle (*Clemmys muhlenbergii*) Northern Population Recovery Plan. Hadley, Massachusetts. 83pp + appendices.
- FWS. 2006. Northeastern Bulrush (*Scirpus ancistrochaetus*). Fact sheet. Accessible at: <https://www.fws.gov/northeast/pdf/bulrush.pdf>
- FWS. 2007. Indiana Bat (*Myotis sodalis*) Draft Recovery Plan: First Revision. USFWS, Fort Snelling, MN.
- FWS. 2009. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Accessed at <http://www.fws.gov/wetlands/>.
- FWS. 2014a. Trust Resource List for PennEast Pipeline located in Hunterdon and Mercer counties, NJ, and Bucks, Carbon, Luzerne, and Northampton counties, PA. August 26, 2014.

- FWS. 2014b. New Jersey Field Office website, Last Updated September 2014. Bog Turtle. Accessible at: <http://www.fws.gov/northeast/njfieldoffice/endangered/bogturtle.html>. Accessed February 6, 2015.
- FWS. 2015a. Range Wide Indiana Bat Summer Survey Guidelines. April 2015. Accessible at: <http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>.
- FWS. 2015b. Fact Sheet: Northern Long-Eared Bat – *Myotis septentrionalis*. USFWS. Midwest Region. Accessible at: <https://www.fws.gov/Midwest/Endangered/mammals/nleb/nlebFactSheet.html>
- Gallagher, W.D. 2015. Paleontology Professor, Rider University. New Jersey. (personal communication)
- Gishlick, A. 2015. Paleontology Professor at Bloomsburg University. Pennsylvania. (personnel communication)
- Haffner, C. and D. Gross. 2014. American Bittern, *Botaurus lentiginosus*. Connecting you with wildlife! Pennsylvania Game Commission. Accessible at: https://www.portal.state.pa.us/portal/server.pt/.../american_bittern_pdf.
- Hay, K.G. 1994. Greenways: Wildlife and Natural Gas Pipeline Corridors. The Conservation Fund, Arlington, Virginia.
- Helms, J. 1998. The Dictionary of Forestry. The Society of American Foresters. Copyright 1998.
- ICF International. 2012. Assessment of New York City Natural Gas Market Fundamentals and Life Cycle Fuel Emissions. Available on line at http://www.nyc.gov/html/om/pdf/2012/icf_natural_gas_study.pdf.
- ISO (International Organization for Standardization). 1996. “9613-2: Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation.” ISO 9613-2:1996(E).
- Jacobson, M., B. Lord, M. McDill, A. Kleit, T. Engelder, and A. Broucek. 2010. An Examination of Current and Future Costs and Revenues from Forest Products and Oil, Gas, and Mineral Extraction on Pennsylvania Game Commission Lands. Pennsylvania State University. Submitted to the Pennsylvania Legislative Budget and Finance Committee. January 14, 2010. Available URL: <http://lbfc.legis.state.pa.us/Resources/Documents/Reports/304.pdf>. Accessed Feb. 2, 2015.
- Jacobson, Mark Z. and Mark A. Delucchi. 2011a. Providing all global energy with wind, water, and solar power, Part I: Technologies, energy resources, quantities and areas of infrastructure, and materials. *Journal of Energy Policy* 39 (2011) 1154–1169. <https://web.stanford.edu/group/efmh/jacobson/Articles/I/JDEnPolicyPt1.pdf>. Accessed January 2016.
- Jacobson, Mark Z. and Mark A. Delucchi. 2011b. Providing all global energy with wind, water, and solar power, Part II: Reliability, system and transmission costs, and policies. *Journal of*

- Energy Policy 39 (2011) 1170–1190. <https://web.stanford.edu/group/efmh/jacobson/Articles/I/DJEnPolicyPt2.pdf>. Accessed January 2016.
- Jones, D.J., G.S. Kramer, D.N. Gideon, and R.J. Eiber. 1986. “An Analysis of Reportable Incidents for Natural Gas Transportation and Gathering Lines 1970 through June 1984.” American Gas Association. NG-18 Report No. 158, Pipeline Research Committee of the American Gas Association.
- Khorsand, S., 2001, Groundwater Resources of the New Jersey Highlands. Available at <http://www.crssa.rutgers.edu/advgeo/Sanaz%20SSA.htm>. Accessed on March 16, 2016
- Kinsley, B. 2014. *Cicindela marginipennis*. The IUCN Red List of Threatened Species 2014: e.T4851A21424216. <http://dx.doi.org/10.2305/IUCN.UK.2014-1.RLTS.T4851A21424216.en>. Downloaded on 18 May 2016.
- Knight, R.L. and S.A. Temple. 1995. Origin of Wildlife Responses to Recreationists. Wildlife and Recreationists Coexistence through Management and Research. R.L. Knight and K.J. Gutzwiller, eds. Island Press, Inc., Washington, DC. pp. 81–91.
- Knight, R.L., D.E. Andersen, M.J. Bechard, and N.V. Marr. 1987. Geographic Variation in Nest-defense Behavior in Red-tailed Hawk (*Buteo jamaicensis*). *Ibis* 131:22-26.
- Lazzari, M.A., C.C. O’Herron, and R.W. Hastings. 1986. Occurrence of Juvenile Atlantic Sturgeon, *Acipenser oxyrinchus*, in the Upper Tidal Delaware River. *Estuaries*. 9(4) Part B. pp. 356-361. (Abstract). Accessible at: http://www.jstor.org/stable/1351415?seq=1#page_scan_tab_contents.
- Leedy, D.L. 1975. Highway-Wildlife Relationships. Volume 1: A State-of-the-Art Report.
- Mellon Biological. 2015. Northeast Bulrush Survey Report- PennEast Pipeline Project. Prepared for AECOM.
- National Education Association Research. 2014. Rankings & Estimates. Rankings of the States 2013 and Estimates of School Statistics 2014. NEA Research. March. Available online at: <http://nces.ed.gov/ccd/districtsearch/>
- National Hydropower Association. 2015. Northeastern U.S. Hydro Generation Profile, 2013. Accessed December 14, 2015. <http://www.hydro.org/why-hydro/available/hydro-in-the-states/northeast>. Accessed December 10, 2015.
- Natural Resources Defense Council. 2015. Renewable Energy for America. <http://www.nrdc.org/energy/renewables/penn.asp>. Accessed December 10, 2015.
- New Jersey Audubon Society. 2014a. New Jersey’s Wildlife. <http://www.njaudubon.org/SectionNatureNotes/NewJerseysWildlife.aspx>.
- New Jersey Audubon Society. 2014b. Important Bird and Birding Areas (IBBA) Site Guide. <http://www.njaudubon.org/SectionIBBA/IBBASiteGuide.aspx?sk=2938>.

- New Jersey Board of Public Utilities. 2015. New Jersey Clean Energy Program. <http://www.njcleanenergy.com>. Accessed December 8, 2015.
- New Jersey Division of Taxation. 2014. Sales and Use Tax. Available online at: <http://www.state.nj.us/treasury/taxation/>
- NHD (National Hydrography Dataset). 2015. U.S. Geological Survey, Washington D.C. Accessed at <http://nhd.usgs.gov/data.html>.
- NJAC (New Jersey Administrative Code). 2009. NJAC 7:9B. Surface Water Quality Standards. Available at: <http://www.state.nj.us/dep/wms/bwqsa/December%202009%20SWQS.pdf>. Accessed on January 21, 2015.
- NJDEP (New Jersey Department of Environmental Protection). 1985. Sole Source Aquifer Petition. Northwest New Jersey 15 Basin Aquifer. Accessed at: <http://www.epa.gov/region02/water/aquifer/basin/15basin.htm> on August 1, 2015.
- NJDEP. 1997. NJDEP Public-Community Water-Supply Wells of New Jersey. Available at: <http://www.state.nj.us/dep/njgs/geodata/dgs97-1.htm>. Accessed on February 1, 2015.
- NJDEP. 1998. Surficial Aquifers of New Jersey, Series DGS98-5, Edition 20050810 (Geol_surficial_aquifer). Available at: https://njgin.state.nj.us/NJ_NJGINExplorer/ShowMetadata.jsp?docId=06511F28-222F-11DF-A53E-0003BA2C919E. Accessed on February 1, 2015.
- NJDEP. 2002. Well Head Protection Areas for Public Community Water Supply Wells in New Jersey. Available at: <http://www.state.nj.us/dep/njgs/geodata/dgs02-2.htm>. Accessed on July 22015.
- NJDEP. 2003. Physiographic Provinces of New Jersey. Available at: <http://www.nj.gov/dep/njgs/enviroed/infocirc/provinces.pdf>. In: PennEast, 2015. PennEast Pipeline Project Resource Report 2: *Water Use and Quality* FERC Docket No. CP15-__-000. Final FERC Section 7c Application. September 2015.
- NJDEP. 2004. An Overview of Non-indigenous Plant Species in New Jersey. <http://www.state.nj.us/dep/parksandforests/natural/heritage/InvasiveReport.pdf>.
- NJDEP. 2005. Available at: <http://www.state.nj.us/dep/fgw/pdf/fishbrochurenorth.pdf>. <http://www.state.nj.us/dep/fgw/chkfish.htm>
- NJDEP. 2010. Contributions to the Geology and Hydrogeology of the Newark Basin, Bulletin 77
- NJDEP. 2014a. Currently Known of Groundwater Contamination (CKE) for New Jersey. <http://www.nj.gov/dep/gis/stateshp.html#GWCKE>. Accessed April 1, 2015.
- NJDEP. 2014b. State Forestry Services. No Net Loss. http://www.state.nj.us/dep/parksandforests/forest/community/No_Net_Loss.htm. Last Updated December 2014; Accessed June 14, 2015.
- NJDEP. 2015a. New Jersey Division of Water Supply and Geoscience. Survey Programs. Available at: <http://www.state.nj.us/dep/njgs/functions/>. Accessed on August 2, 2015

NJDEP. 2015b. GeoWeb Database on Surficial and Bedrock Aquifers <http://www.state.nj.us/dep/gis/stateshp.html>.

NJDEP. 2015c. New Jersey Integrated Report, Appendix A: 2012 Final Integrated List of Waters (Assessment Unit Summary List). July 2014. http://www.state.nj.us/dep/wms/bwqsa/2012_final_integrated_list.pdf. Accessed July 2, 2015.

NJDEP-DFW (New Jersey Department of Environmental Protection-Division of Fish and Wildlife). 2002a. American Kestrel (*Falco sparverius*). Accessible at: <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/kestrel.pdf>. Accessed on February 5, 2015.

NJDEP-DFW. 2002a. Bobcat, (*Lynx rufus*). Accessed at: <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/bobcat.pdf>. Accessed on: February 6, 2015.

NJDEP-DFW. 2002b. Bobolink (*Dolichonyx oryzivorus*). Accessed at: <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/bobolink.pdf>. Accessed on February 5, 2015.

NJDEP-DFW. 2002b. Wood Turtle, (*Glyptemys insculpta*). Accessed at: <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/woodtrtl.pdf>. Accessed on: February 6, 2015.

NJDEP-DFW. 2002c. Long-tailed Salamander, (*Eurycea longicauda longicauda*). Accessed at: <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/lngtlsalamander.pdf>. Accessed on: February 6, 2015.

NJDEP-DFW. 2002c. Savannah Sparrow, (*Passerculus sandwichensis*). Accessed at: <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/savsparrow.pdf>. Accessed on: February 5, 2015.

NJDEP-DFW. 2002d. Bobcat, (*Lynx rufus*). Accessed at: <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/bobcat.pdf>. Accessed on: February 6, 2015.

NJDEP-DFW. 2002d. Southern Gray Treefrog, (*Hyla chrysoscelis*). <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/sograytreefrog.pdf>. Accessed on: May 17, 2016.

NJDEP-DFW. 2002f. Barred Owl (*Strix varia*). Accessed at: <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/bobolink.pdf>. Accessed on February 5, 2015.

NJDEP-DFW. 2002g. Bobolink (*Dolichonyx oryzivorus*). Accessed at: <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/bobolink.pdf>. Accessed on February 5, 2015.

NJDEP-DFW. 2002h. Grasshopper Sparrow, (*Ammodramus savannarum*). Accessed at: <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/grasshoppersparrow.pdf>. Accessed on: February 5, 2015.

NJDEP-DFW. 2002i. Red-shouldered Hawk, (*Buteo lineatus*). Accessed at: <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/redshldhwk.pdf>. Accessed on: February 5, 2015.

NJDEP-DFW. 2002j. Savannah Sparrow, (*Passerculus sandwichensis*). Accessed at: <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/savsparrow.pdf>. Accessed on: February 5, 2015.

NJDEP-DFW. 2010. New Jersey's Vernal Pool Project. <http://www.njfishandwildlife.com/ensp/vrnpoolupdate.htm> Last updated in September 2010.

NJDEP-DFW2002e. American Kestrel (*Falco sparverius*). Accessible at: <http://www.njfishandwildlife.com/ensp/pdf/end-thrtened/kestrel.pdf>. Accessed on February 5, 2015.

NJDEP-ENSP (Endangered and Nongame Species Program). 2015. NJ ENSP's Review of PennEast Pipeline Proposed Natural Gas Pipeline within New Jersey. Reviewed by ENSP Staff (K. Schantz). March 12, 2015.

NJDOT (New Jersey Department of Transportation). 2016. Commuter Information, Construction Updates. December 7, 2015. Accessed online at <http://www.state.nj.us/transportation/commuter/roads/>

NMFS (National Marine Fisheries Service). 1998. Final Recovery Plan for the Shortnose Sturgeon. *Acipenser brevirostrum*. U.S. Department of Commerce. National Oceanic and Atmospheric Administration. Available at: http://www.nmfs.noaa.gov/pr/pdfs/recovery/sturgeon_shortnose.pdf.

NMFS. 2014. Letter dated September 18, 2014 from Karen Greene, Reviewing Biologist, NOAA NMFS Northeast Fisheries Science Center, to Bernard Holcomb, URS Corporation.

NMFS. 2016. National Marine Fisheries Service Endangered Species Act Section 7 Biological Opinion -Permit No. 19255; Atlantic and shortnose sturgeon. Accessed April 14, 2016 at: http://www.nmfs.noaa.gov/pr/consultation/opinions/19255_final_biop_02.05.16.pdf

NOAA (National Oceanic and Atmospheric Administration). 2008. Shortnose Sturgeon (*Acipenser brevirostrum*). Office of Protective Resources. Species information webpage. Accessed 4/2016 at: <http://pbadupws.nrc.gov/docs/ML0833/ML083380572.pdf>.

NOAA. 2014. Estimated Range of Atlantic Sturgeon Distinct Population Segments (DPSs). Available at: <http://www.greateratlantic.fisheries.noaa.gov/protected/section7/guidance/maps/atlanticsturgeon.pdf>.

NOAA. 2015a. Koppen-Geiger Climate Classification - 2007. <http://sos.noaa.gov/Datasets/dataset.php?id=418>. Accessed March 2016.

NOAA. 2015b. 2013 Flash Flood/River Fatalities; Lightning Fatalities; and Tornado Fatalities. Accessed July 2015.

NOAA: Essential Fish Habitat Mapper v3.0. National Marine Fisheries Service: Habitat Conservation. Available at: <http://www.habitat.noaa.gov/protection/efh/efhmapper/index.html>

NPS (National Park Service). 2015. Nationwide Rivers Inventory. Pennsylvania Segments. <http://www.nps.gov/nrcr/programs/rtca/nri/states/pa.html>. Accessed February 3, 2015.

- NRC (U.S. Nuclear Regulatory Commission). 2015. Environmental Impact Statement for an Early Site Permit (ESP) at the PSEG Site. NUREG-2168. November 2015.
- NRC. 2016a. Combined License Applications for New Reactors. <http://www.nrc.gov/reactors/new-reactors/col/bell-bend.html>.
- NRC. 2016b. Final EIS for the Bell Bend Nuclear Power Plant. NUREG-2179. April 2016.
- NRCC (Northeast Regional Climate Center). 2015. US Comparative Climatic Data. <http://www.nrcc.cornell.edu/wxstation/comparative/comparative.html#>. Accessed March 2016.
- NRCS (Natural Resource Conservation Service). 2016. Working Lands for Wildlife - Bog Turtle. Available online at: <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/initiatives/?cid=stelprdb1047032>
- Ontario Ministry of Natural Resources. 2000. Conserving the forest interior: A threatened wildlife habitat. Ohio Extension Notes, Land Owner Resource Centre, Manotick, Ontario.
- PADCNR (Pennsylvania Department of Conservation and Natural Resources). 2000. Physiographic Provinces of Pennsylvania. Available at: http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_016202.pdf. Accessed on February 1, 2015.
- PADCNR. 2009. Guidelines for Right-of-Way Development on Pennsylvania State Forest and State Park Lands. June 17, 2009. Accessed on April 4, 2016 online at: http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_003513.pdf.
- PADCNR. 2012. Hickory Run State Park. Accessed online at <http://www.dcnr.state.pa.us/stateparks/findapark/hickoryrun/>
- PADCNR. 2013. Guidelines for Administering O&G Activity on State Forest Lands.
- PADCNR. 2015a. PAGEODE (Pennsylvania Geologic Data Exploration). Interactive on-line map of geological resources. Available at: <http://www.gis.dcnr.state.pa.us/geology/index.html>. Accessed on August 2, 2015.
- PADCNR. 2015b. Mineral Industries. Available at: http://dcnr.state.pa.us/topogeo/econresource/mineral_industries/index.htm. Accessed on August 2, 2015.
- PADCNR. 2015c. Pennsylvania Groundwater Information System (PaGWIS). <http://www.dcnr.state.pa.us/topogeo/groundwater/pagwis/index.htm>. Accessed February 6, 2015.
- PADEP (Pennsylvania Department of Environmental Protection). 2015. Land Recycling Cleanup Locations. http://www.pasda.psu.edu/uci/FullMetadataDisplay.aspx?file=LandRecyclingCleanupLocations2015_01.xml. Accessed April 1, 2015.
- Palmer, D. 2008. Updated Market Analysis: The Impact of Natural Gas Pipelines on Property Values. PGP Valuation. Prepared for Palomar Gas Transmission LLC. February.

- Pearce, D. and Moran, D. 1994. The economic value of biodiversity. Earthscan Publications, London.
- PennDOT (Pennsylvania Department of Transportation). 2016. 2013-2016 Transportation Improvement Plan. Accessed online at http://www.dot.state.pa.us/typ/index_files/TIP.htm
- Pennsylvania Code. 1994. Safe Drinking Water, Title 25, Chapter 109. Wellhead Protection Program. Available at: <http://www.pacode.com/secure/data/025/chapter109/s109.713.html>. Accessed on September 16, 2015.
- Pennsylvania Code. 2015. Water Quality Standards. Title 25, Chapter 93. Updated July 5, 2014. <http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>. Accessed January 22, 2015.
- Pennsylvania Department of Revenue. 2015a. Sales, Use, and Hotel Occupancy Tax. Available online at: <http://www.revenue.pa.gov/Pages/default.aspx#.VoxWQnlIh9M>
- Pennsylvania Department of Revenue. 2015b. Public Utility Realty Tax. Available online at: <http://www.revenue.pa.gov/Pages/default.aspx#.VoxWQnlIh9M>
- Pennsylvania Public Utility Commission. 2015. Energy Efficiency and Conservation Program. http://www.puc.pa.gov/filing_resources/issues_laws_regulations/act_129_information/energy_efficiency_and_conservation_ee_c_program.aspx. Accessed December 8, 2015.
- PFBC (Pennsylvania Fish and Boat Commission). 2010. Guidelines for Timber Rattlesnake Habitat Creation. 7 Pages. Bellefonte, PA.
- PFBC. 2011a. Species Action Plan, Bog Turtle. Natural Diversity Section.
- PFBC. 2011b. Species Action Plan, Timber Rattlesnake. Natural Diversity Section.
- PFBC. 2014. Letter dated September 8, 2014 from Heather A. Smiles, Chief, Natural Gas Section, to Bernard Holcomb, URS Corporation.
- PFBC. 2015a Wild Trout Waters, Natural Reproduction, January 2015. http://fishandboat.com/trout_repro.htm. Accessed January 2015.
- PFBC. 2015b. Wild Trout Waters. <http://fishandboat.com/wild98.htm>. Accessed January 2015.
- PFBC. 2015c. Class A Waters, December 2013. <http://fishandboat.com/classa.pdf>. Accessed January 2015.
- PFBC. 2015d. Approved Trout Streams, January 2015. <http://www.fish.state.pa.us/troutstreams.htm>, http://www.pasda.psu.edu/uci/MetadataDisplay.aspx?entry=PASDA&file=Approved_Trout_Waters201501.xml&dataset=963. Accessed January 2015.
- PFBC. 2015e. Trout Stocked Streams. <http://fishandboat.com/stocked.htm>. Accessed January 2015.

- PFBC. 2015f. Warmwater/Coolwater Fisheries. <http://fishandboat.com/images/pages/qa/fishing/wcwhtm>. Accessed January 2015.
- PFBC. 2015g. Pennsylvania Fishes. <http://www.fish.state.pa.us/fishes.htm>. Accessed on January 27, 2015.
- PFBC. 2016. Bog Turtles Slipping Away. Nongame and Endangered Species Unit. Prepared for the PFBC by Andrew L. Shiels.
- PGC (Pennsylvania Game Commission). 2008. Allegheny Woodrat (*Neotoma magister*). The Environmental Review Process in Pennsylvania. Provided with Project consultation from PGC (Taucher 2014).
- PGC. 2013. Wildlife in Pennsylvania. Available at: <http://www.portal.state.pa.us/portal/server.pt/community/wildlife/9109>. Accessed on August 19, 2015.
- PGC. 2015. Pennsylvania Game Commission Mapping Center. Available at: <http://www.portal.state.pa.us/portal/server.pt?open=514&objID=1528109&mode=2>. Accessed on March 1, 2016.
- Piatt, J.F. K.J. Kuletz, A.E. Burger, S.A. Hatch, V.L. Friesen, T.P. Birt, M.L. Arimitsu, G.S. Drew, A.M.A. Harding, and K.S. Bixler. 2006. Status Review of the Marbled Murrelet (*Brachyramphus Marmoratus*) in Alaska and British Columbia, Open-File Report 2006-1387.
- Poole, A. (Editor). 2015. The Birds of North America Online. Cornell Laboratory of Ornithology, Ithaca, NY. Available at: <http://bna.birds.cornell.edu/BNA/>. Accessed on February 4, 2015.
- Reid S. M. and P. G. Anderson. 1999. Effects of sediment released during open-cut pipeline water crossings. *Can. Water Resources. J.* 24:23–39.
- Riegelsville Borough Water Company. 2007. The Source Water Protection Plan for the Riegelsville Borough Water Company PWS# 1090058. Bucks County, PA. Available directly from Township.
- Robbins, C.S. 1988. Forest fragmentation and its effects on birds. In Johnson, J.E. (ed.) 1988. *Managing North Central forests for non-timber values*. Publication 88-4, Society of American Foresters, Bethesda, MD.
- Roberts, T. H, and Arner, D. H. 1984. Food Habits of Beaver in East Central Mississippi. *Journal of Wildlife Management* 48:14141419.
- Rodewald, A.D. 2001. *Managing for forest songbirds*. Ohio State University Extension, Columbus, Ohio. Fact Sheet W-6-2001.
- Rosenberg, K.V., R.W. Rohrbaugh, Jr., S.E. Barker, R.S. James, J.D. Lowe, and A.A. Dhondt. 1999. A land manager's guide to improving habitat for scarlet tanagers and other forest interior birds. The Cornell Lab of Ornithology, Ithaca, NY.

- Serfes, M.E. 2016. Final Report of U.S. EPA Method 1627 Kinetic and HDD Leach Test Results and Implications for Arsenic Mobilization Related to the Proposed PennEast Pipeline. Prepared for: Hatch Mott MacDonald, Inc. for PennEast Pipeline
- Sevon, WD. 2000. Physiographic Regions of Pennsylvania. Map 13. Fourth Edition. Pennsylvania Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey. PA. 2 pp.
- Solar Energy Industries Association. 2015. State Solar Policy. <http://www.seia.org/state-solar-policy>. Accessed January 2016.
- Sourcewatch.org. 2015. New Jersey and Fracking. Available at http://www.sourcewatch.org/index.php/New_Jersey_and_fracking. Accessed on August 18, 2015.
- STR. 2015. Trend Report: Luzerne, Northampton, Bucks, Mercer and Hunterdon County. Produced for PennEast on September 17, 2015.
- Susquehanna River Basin Commission (SRBC). 2015. Subbasin Information. <http://www.srbc.net/subbasin/subbasin.htm>. Accessed February 2, 2015.
- Tarlowe, P. 2002. American Bittern, *Botaurus lentiginosus*. New Jersey Department of Fish and Wildlife. Information sheet. Accessed 4/2016 at: <http://www.state.nj.us/dep/fgw/ensp/pdf/end-thrtened/ambittern.pdf>.
- The WHM Group. 2015. Compensatory Wetland Mitigation Plan. Prepared for PennEast Pipeline Company, LLC. Filed with the FERC on February 22, 2016 as part of responses to FERC staff information requests.
- Tourism Economics. 2015a. The Economic Impact of Travel and Tourism in Pennsylvania: Tourism Satellite Account Calendar Year 2013. Available at: <http://www.visitpa.com/sites/default/master/files/pdfs/PAVisitorEconomicImpact2013FINAL.pdf>.
- Tourism Economics. 2015b. The Economic Impact of Travel and Tourism in New Jersey: Tourism Satellite Account Calendar Year 2013. Available at: <http://www.visitnj.org/sites/default/master/files/2013-nj-economic-impact.pdf>.
- TransCanada. 2005. Available at: http://www.transcanada.com/docs/Our_Responsibility/Blowdown_Notification_Factsheet.pdf
- Transco (Transcontinental Gas Pipe line). 2015. Atlantic Sunrise Project FAQ. <http://atlanticsunriseexpansion.com/get-the-facts/get-the-facts>. Accessed March 2016.
- Trapp, H. and M.A. Horn. 1997. Groundwater Atlas of the United States, Delaware, Maryland, New Jersey, North Carolina, Pennsylvania, Virginia, and West Virginia. United States Geological Survey, Reston, VA. Available at: <http://pub.usgs.gov/ha/7301/report.pdf>. Accessed on February 1, 2015.
- Trombulak, S.C., and C.A. Frissell. 2000. Review of Ecological Effects of Roads on Terrestrial and Aquatic Communities. Middlebury College, Middlebury, VT.

- Turner, Greg. 2015. Pennsylvania Game Commission. Email communications with Deborah Poppel of AECOM, August 13 and August 18, 2015.
- U.S. Bureau of Economic Analysis. 2015a. CA25N Total full-time and part-time employment by industry, 2014. Available online at: <http://www.bea.gov>
- U.S. Bureau of Economic Analysis. 2015b. CA04 Personal income summary, 2014. Available online at: <http://www.bea.gov>
- U.S. Bureau of Economic Analysis. 2015c. CA25N Total full-time and part-time employment by industry, 2013. Available online at: <http://www.bea.gov>
- U.S. Bureau of Labor Statistics. 2015a. Labor Force Data by County, 2014 Annual Averages. Available online at: <http://www.bls.gov/home.htm>
- U.S. Bureau of Labor Statistics. 2015b. Regional and State Unemployment – 2014 Annual Averages. News Release. March 4.
- U.S. Bureau of Labor Statistics. 2015c. Available online at: <http://www.bls.gov/>
- U.S. Census Bureau. 2000. P001: Total Population [1] - Universe: Total population. Census 2000 Summary File 1 (SF 1) 100-Percent Data. Available online at: <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>
- U.S. Census Bureau. 2010. USA Counties Data File Downloads. Land Area. Available online at: <http://www.census.gov/support/USACdataDownloads.html#LND>
- U.S. Census Bureau. 2015a. Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2014. Population Division. March. Available online at: <http://factfinder.census.gov/>
- U.S. Census Bureau. 2015b. DP04: Selected Housing. 2010-2014 American Community Survey 5-Year Estimates. Available online at: <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>
- U.S. Census Bureau. 2015c. B25004: Vacancy Status. Universe: Vacant Housing Units. 2010-2014 American Community Survey 5-Year Estimates. Available online at: <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>
- U.S. Census Bureau. 2015d. Poverty Definitions. Available online at: <http://www.census.gov/hhes/www/poverty/methods/definitions.html>
- U.S. Census Bureau. 2015e. B03002: Hispanic or Latino Origin by Race. 2010-2014 American Community Survey 5-Year Estimates. Available online at: <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>
- U.S. Census Bureau. 2015f. B19013: Median Household Income. 2010-2014 American Community Survey 5-Year Estimates. Available online at: <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

- U.S. Census Bureau. 2015g. B17017: Poverty Status in the Past 12 Months by Household Type by Age of Householder. 2010-2014 American Community Survey 5-Year Estimates. Available online at: <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>
- U.S. Congress. 2005. Energy Policy Act of 2005. Available online at <http://www.gpo.gov/fdsys/pkg/PLAW-109publ58/pdf/PLAW-109publ58.pdf>. Accessed January 2016.
- U.S. Congress. 2007. Energy Independence and Security Act of 2007. Available online at <http://www.gpo.gov/fdsys/pkg/BILLS-110hr6enr/pdf/BILLS-110hr6enr.pdf>. Accessed January 2016.
- U.S. Congress. 2008. Energy Improvement and Extension Act of 2008. Available online at <http://www.gpo.gov/fdsys/pkg/BILLS-110hr1424eas/pdf/BILLS-110hr1424eas.pdf>. Accessed January 2016.
- U.S. Congress. 2009. The American Recovery and Reinvestment Act of 2009. Available online at <http://www.gpo.gov/fdsys/pkg/PLAW-111publ5/pdf/PLAW-111publ5.pdf>. Accessed January 2016.
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. 2015. National Center of Health Statistics, National Vital Statistics System, Table 10: Number of deaths from 113 selected causes.
- USACE (U.S. Army Corps of Engineers). 1987. Corps of Engineers Wetlands Delineation Manual. By Environmental Laboratory. January 1987 – Final Report. Online at: <http://www.cpe.rutgers.edu/Wetlands/1987-Army-Corps-Wetlands-Delineation-Manual.pdf>.
- USDA (U.S. Department of Agriculture). 2010. Natural Resources Conservation Service. Web Soil Survey, <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed March 26, 27, and 28, 2015.
- USDA. 2014. National Agricultural Statistics Service 2012 Census of Agriculture. State and County Profiles. Available online at: http://www.agcensus.usda.gov/Publications/2012/Full_Report/Census_by_State/
- USGCRP (U.S. Global Change Research Program). 2014. National Climate Assessment. Web. 20 May 2016.
- USGS (United States Geological Survey). 2003. Principal Aquifers of the 45 Conterminous United States, Hawaii, Puerto Rico, and the U.S. Virgin Islands. Available at: http://water.usgs.gov/GIS/metadata/usgswrd/XML/aquifers_us.xml. Accessed on April 11, 2016.
- USGS. 2005. Mineral Resources Data System. Last Revised January 2012. Available at: <http://mrdata.usgs.gov/mrds/>.
- USGS. 2009. Earthquake Probability Map. <https://geohazards.usgs.gov/eqprob/2009/>. Accessed March 30, 2015.
- USGS. 2014. USGS New Jersey: Surficial Aquifer Studies - Rancocas, New Jersey. Accessed at http://nj.usgs.gov/programs/Surficial/info/info_rancocas.html. Accessed on March 16, 2016.

- USGS. 2015. Digital Compilation Of Landslide Overview Map Of The Conterminous United States By Dorothy H. Radbruch-Hall, Roger B. Colton, William E. Davies, Ivo Lucchitta, Betty A. Skipp, and David J. Varnes. 1982.
- Virginia Department of Game and Inland Fisheries. 2016. Northern red-bellied cooter (*Pseudemys rubriventris*). Species information. Accessed on May 16, 2016 at: <http://www.dgif.virginia.gov/wildlife/information/?s=030057>
- Wildlife Specialists. 2015. Indiana and Northern Long-eared bat Mist Net Survey Report. PennEast Pipeline Project. Prepared for URS Corporation. July 2015.
- Wyatt, Andrew, Kristopher Montgomery, James Burton, and Joseph Kwiatek. 2016. *Phase I Archaeological Survey Report, PennEast Pipeline Project, Luzerne, Carbon, Northampton, and Bucks Counties, Pennsylvania, Addendum I*. Prepared for PennEast Pipeline Company, LLC by URS Corporation, Burlington, New Jersey.
- Wyatt, Andrew, Kristopher Montgomery, James Burton, Eileen Hood, Matthew Harris, and Joseph Kwiatek. 2015. *Phase I Archaeological Survey Report, PennEast Pipeline Project, Luzerne, Carbon, Northampton, and Bucks Counties, Pennsylvania*. Prepared for PennEast Pipeline Company, LLC by URS Corporation, Burlington, New Jersey.
- Zeoli, Vanessa and Eileen Hood. 2015a. *Reconnaissance-Level Historic Architectural Survey Report, PennEast Pipeline Project, Luzerne, Carbon, Northampton, and Bucks Counties, Pennsylvania*. Prepared for PennEast Pipeline Company, LLC by URS Corporation, Burlington, New Jersey.
- Zeoli, Vanessa and Eileen Hood. 2015b. *Reconnaissance-Level Historic Architectural Survey Report, PennEast Pipeline Project, Hunterdon and Mercer Counties, New Jersey*. Prepared for PennEast Pipeline Company, LLC by URS Corporation, Burlington, New Jersey.
- Ziesing, Grace, Joseph Kwiatek, Eileen Hood, Robert Kingsley, and Brian Albright. 2015a. *Phase I Archaeological Survey Report, PennEast Pipeline Project, Hunterdon and Mercer Counties, New Jersey*. Prepared for PennEast Pipeline Company, LLC by URS Corporation, Burlington, New Jersey.
- Ziesing, Grace, Joseph Kwiatek, Eileen Hood, Robert Kingsley, and Brian Albright. 2015b. *Phase I Archaeological Survey Report, PennEast Pipeline Project, Hunterdon and Mercer Counties, New Jersey. Revised December 2015*. Prepared for PennEast Pipeline Company, LLC by URS Corporation, Burlington, New Jersey.

FEDERAL ENERGY REGULATORY COMMISSION

Routing Code: PJ-11.2

Washington, DC 20426

Official Business

Penalty for Private Use