

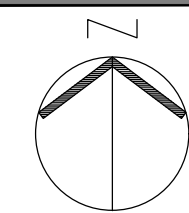
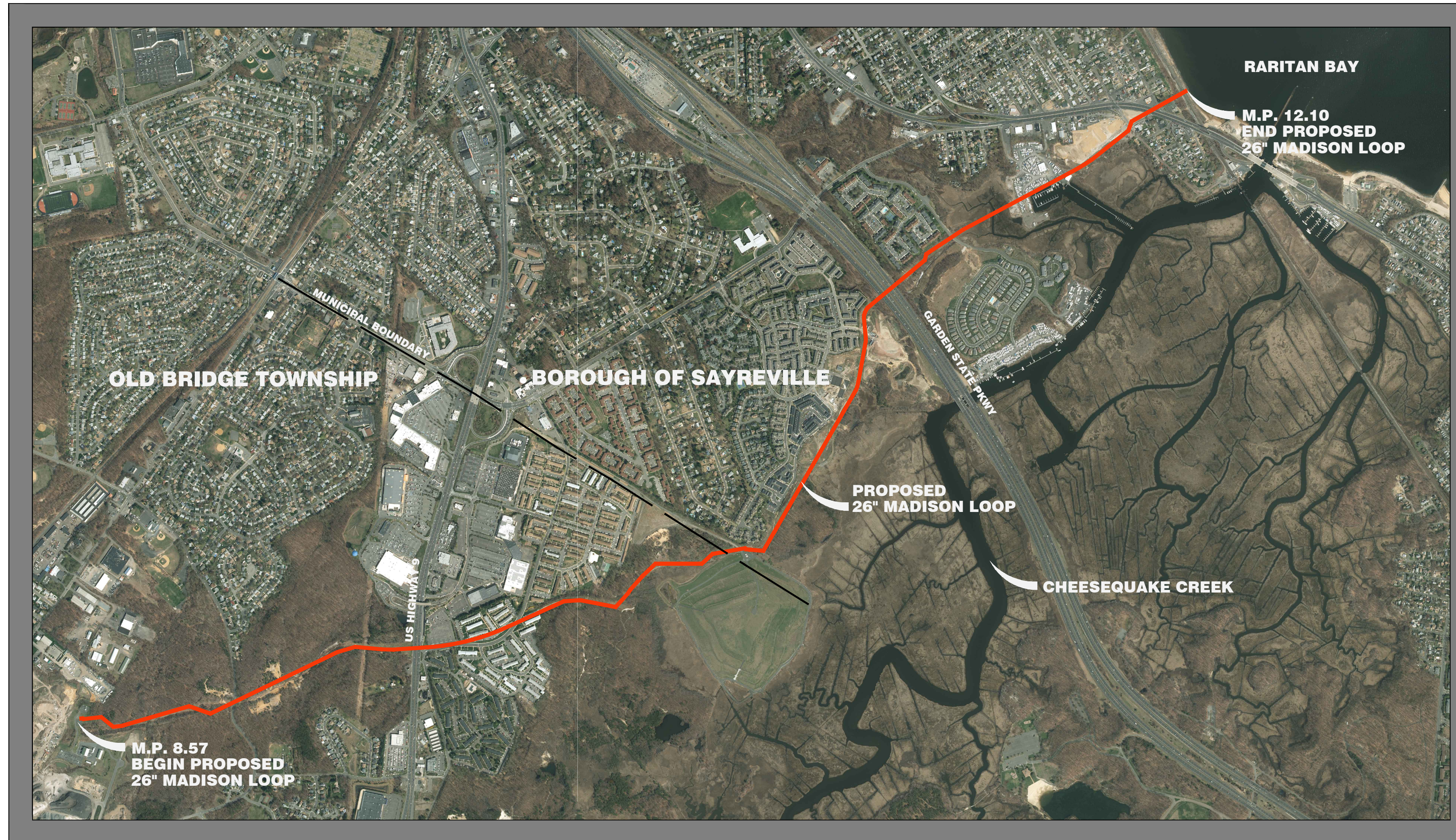
NJDEP LAND USE PERMIT PLANS

FOR THE

NORTHEAST SUPPLY ENHANCEMENT PROJECT

PROPOSED 26" MADISON LOOP

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC



AERIAL KEY MAP

SOURCE: WWW.NJGIN.STATE.NJ.US, AERIAL MAPS, 2015
SCALE: 1" = 1000'

| DRAWING LIST | | | | |
|--------------|---|----------|--------------|--|
| DWG. NO. | DWG. TITLE | ISSUED | LAST REVISED | |
| 1 | COVER SHEET | 06/08/18 | 04/22/19 | |
| 2 | GENERAL NOTES | 06/08/18 | 04/22/19 | |
| 3 | WETLAND PERMIT PLAN (MILE 8.57 TO 8.8) | 06/08/18 | 04/22/19 | |
| 4 | WETLAND PERMIT PLAN (MILE 8.8 TO 9.1) | 06/08/18 | 04/22/19 | |
| 5 | WETLAND PERMIT PLAN (MILE 9.1 TO 9.4) | 06/08/18 | 04/22/19 | |
| 6 | WETLAND PERMIT PLAN (MILE 9.4 TO 9.6) | 06/08/18 | 04/22/19 | |
| 7 | WETLAND PERMIT PLAN (MILE 9.6 TO 9.9) | 06/08/18 | 04/22/19 | |
| 8 | WETLAND PERMIT PLAN (MILE 9.9 TO 10.1) | 06/08/18 | 04/22/19 | |
| 9 | WETLAND PERMIT PLAN (MILE 10.1 TO 10.4) | 06/08/18 | 04/22/19 | |
| 10 | WETLAND PERMIT PLAN (MILE 10.4 TO 10.6) | 06/08/18 | 04/22/19 | |
| 11 | WETLAND PERMIT PLAN (MILE 10.6 TO 10.9) | 06/08/18 | 04/22/19 | |
| 12 | WETLAND PERMIT PLAN (MILE 10.9 TO 11.1) | 06/08/18 | 04/22/19 | |
| 13 | WETLAND PERMIT PLAN (MILE 11.1 TO 11.4) | 06/08/18 | 04/22/19 | |
| 14 | WETLAND PERMIT PLAN (MILE 11.4 TO 11.6) | 06/08/18 | 04/22/19 | |
| 15 | WETLAND PERMIT PLAN (MILE 11.6 TO 11.9) | 06/08/18 | 04/22/19 | |
| 16 | WETLAND PERMIT PLAN (MILE 11.9 TO 12.1) | 06/08/18 | 04/22/19 | |
| 17 | CONSTRUCTION DETAILS-1 | 06/08/18 | 04/22/19 | |
| 18 | CONSTRUCTION DETAILS-2 | 06/08/18 | 04/22/19 | |
| 19 | CONSTRUCTION DETAILS-3 | 06/08/18 | 04/22/19 | |
| 20 | CONSTRUCTION DETAILS-4 | 06/08/18 | 04/22/19 | |

| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

THOMAS J. MURPHY, PLS
DW SMITH ASSOCIATES, LLC
1450 STATE ROUTE 34, WALL, NJ 07753
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 37207 COA NO. 24GA28122400

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
PS&S, LLC
1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
PROFESSIONAL ENGINEER
N.J. LIC. NO. 41319 COA NO. 24GA28032700

W. Salmon 04/24/19
SIGNATURE DATE

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
1433 ROUTE 34
SUITE A4
WALL, NJ 07727
PHONE: (848) 206-2626

CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. DRAWINGS DO NOT SCALE. THE DRAWINGS TO DETERMINE DIMENSIONS.

THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT.

THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI AND SARTOR, LLC IS PROHIBITED.

UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DERIVED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

COPYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC. - ALL RIGHTS RESERVED.

PROJECT
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH
MIDDLESEX COUNTY, NEW JERSEY

SHEET TITLE
COVER SHEET

PROJECT NO.: 05731.0002 DRAWN BY: JPK
SCALE: AS NOTED CHECKED BY: WS
DATE: 06/08/18 SHEET 1 OF 20
SHEET NO.

NOTES ON USE OF PLANS:

- UNLESS THESE PERMIT DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE," THESE DRAWINGS SHALL NOT BE USED FOR PERMITTING ASSOCIATED WITH CONSTRUCTION OR THE IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN PERMITTING DOCUMENTS. THESE PLANS ARE FOR NJDEP PERMITTING ONLY. NO CONSTRUCTION IS TO BE BASED UPON THESE PLANS.
- ALL DIMENSIONS MUST BE VERIFIED IN THE FIELD DURING CONSTRUCTION BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION.
- ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS.
- THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT.
- THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY OTHER PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI, AND SARTOR, LLC IS EXPRESSLY PROHIBITED.
- INFORMATION FOR DESIGN LAYOUT IS CONTAINED SOLELY IN THE WRITTEN DIMENSIONS, BEARINGS, AND ANGLES CONTAINED ON THE DRAWINGS.
- THIS DIMENSIONAL INFORMATION IS NOT WARRANTED NOR SHOULD IT BE CONSIDERED AS COMPLETE FOR EVERY ASPECT OF THE LAYOUT. STANDARD PRACTICE REQUIRES THAT THE LAYOUT PERSON CHECK THE DIMENSIONAL DATA CONSISTENCY AND TO PERFORM SURVEY CALCULATIONS WHICH ARE CUSTOMARY FOR CONSTRUCTION LAYOUT. IN THE EVENT THAT A QUESTION OR INCONSISTENCY IS DISCOVERED, THE INSTALLER SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER, PAULUS, SOKOLOWSKI, AND SARTOR, LLC.
- THE GRAPHICAL INFORMATION CONTAINED IN ELECTRONIC FILES IS INTENDED AS DRAWING DATA ONLY. IT IS NOT INTENDED TO SERVE AS SURVEY LAYOUT DATA.
- ALL PROPOSED FITTING ANGLES ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY PRIOR TO CUTTING.

GENERAL NOTES:

- AS INDICATED IN THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES," SUFFICIENT CONSTRUCTION WARNING SIGNS ARE TO BE PROVIDED AND MAINTAINED BY CONTRACTORS PERFORMING CONSTRUCTION WORK. SAID SIGNS ARE TO BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETED AND APPROVED BY THE APPROPRIATE MUNICIPAL INSPECTION PERSONNEL.
- THE CONTRACTOR SHALL PROVIDE SUCH TEMPORARY DRAINAGE, SOIL EROSION, AND DUST CONTROL MEASURES AS MAY BE INDICATED ON THE PLANS AND/OR AS DIRECTED BY THE MUNICIPAL ENGINEER OR OTHER AGENCIES OR DEPARTMENTS TO SATISFY ENVIRONMENTAL CONCERNS.
- LOCATION OF EXISTING INLETS, CATCH BASINS AND MANHOLES MUST BE FIELD VERIFIED BEFORE WORK MAY COMMENCE. ANY CONFLICTING INFORMATION FROM THAT SHOWN SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE DESIGN ENGINEER, PAULUS, SOKOLOWSKI, AND SARTOR, LLC.
- ALL ROADWAYS ARE TO BE PASSABLE FOR FIRE, POLICE, & EMERGENCY VEHICLES DURING CONSTRUCTION. NOTICE SHALL BE GIVEN TO AGENCIES 72 HOURS IN ADVANCE IF WORK MAY IMPACT EMERGENCY RESPONSE.
- ALL NON-PIPELINE CONSTRUCTION SHOWN HEREIN SHALL CONFORM TO MUNICIPAL/COUNTY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS AND N.J. DEPT. OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2001, AS AMENDED, UNLESS SPECIFICALLY SHOWN OTHERWISE HEREIN. IN CASE OF CONFLICT, THE MORE RESTRICTIVE SHALL GOVERN. CONTRACTOR SHALL NOTIFY DESIGN ENGINEER, PAULUS, SOKOLOWSKI, AND SARTOR, LLC IN WRITING OF ANY QUESTIONS REGARDING CONFLICTS.
- UNLESS SPECIFICALLY SHOWN HEREIN, THE DESIGN ENGINEER, PAULUS, SOKOLOWSKI, AND SARTOR, LLC HAS NOT CONDUCTED AN INVESTIGATION OR PROVIDED DATA ON THE NATURE OF, OR STRUCTURAL SUITABILITY OF ANY SUBSURFACE MATERIALS. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER, PAULUS, SOKOLOWSKI, AND SARTOR, LLC IN WRITING OF ANY UNUSUAL SOIL OR ROCK CONDITIONS ENCOUNTERED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING WARNING SIGNS, BARRICADES, AND ANY AND ALL SAFETY MEASURES AS MAY BE REQUIRED BY LOCAL CODE, OSHA, STANDARD PRACTICE, AND/OR COMMON SENSE AND MAINTENANCE THEREOF. IN RESIDENTIAL AREAS, WHERE THE STREET ADDRESSES (HOUSE NUMBERS) ARE NOT VISIBLE FROM THE PROJECT AREA, CONTRACTOR MUST POST EACH PROPERTY'S ADDRESS AT THE EDGE OF THE WORK RIGHT-OF-WAY. SIGNAGE WILL BE PROVIDED BY THE CONTRACTOR AND SHALL INCLUDE PROPERTY ADDRESS, LANDOWNER NAME, LOT AND BLOCK. LETTERING SHALL BE A MINIMUM OF 2" HIGH AND SHALL BE OF A COLOR THAT CONTRASTS WITH THE SIGN.
- ALL SOIL EROSION AND SEDIMENT CONTROL STRUCTURES AND MEASURES SHALL BE IN PLACE PRIOR TO ANY SITE DISTURBANCE.
- CONTRACTOR TO RESTORE GROUND SURFACE OF GAS PIPELINE TRENCH, CONSTRUCTION STAGING AREAS, AND ALL OTHER DISTURBED AREAS TO THEIR ORIGINAL CONDITION OR BETTER, OR AS SPECIFIED IN THESE PLANS.
- NO CONSTRUCTION SHALL BE PERFORMED ON WEEKENDS OR DURING NIGHTS IN RESIDENTIAL AREAS WITHOUT PRIOR APPROVAL OF TRANSOCO AND TOWNSHIP.
- A TYPICAL TRAFFIC CONTROL PLAN IS PROVIDED WITH GAS ALIGNMENT SHEETS. CONTRACTOR IS RESPONSIBLE TO MODIFY, ADJUST AND AUGMENT THE PLAN BASED UPON THEIR SPECIFIC MEANS AND METHODS, THEN SUBMIT TO OWNER FOR APPROVAL PRIOR TO USE.
- ALL TREES REMOVED DURING CLEARING SHALL BE TRIMMED AND PLACED AT EDGE OF EASEMENT FOR LANDOWNER UNLESS OTHERWISE NOTED ON PLANS.
- THE CONTRACTOR SHALL PREPARE AS-BUILT DRAWINGS FOR ALL UNDERGROUND IMPROVEMENTS INSTALLED DURING CONSTRUCTION, ETC. AS-BUILT DRAWINGS MUST BE SIGNED AND SEALED BY A NJ PROFESSIONAL ENGINEER OR LAND SURVEYOR. THE AS-BUILT SURVEY DRAWINGS MUST COMPLY WITH UTILITY OWNER STANDARDS / REQUIREMENTS. COPIES SHALL BE SUBMITTED TO UTILITY COMPANY AND/OR OWNER.

OWNER / APPLICANT

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC
2800 POST OAK BLVD.
HOUSTON, TEXAS 77006

FRESHWATER WETLANDS, FLOOD HAZARD AREA AND COASTAL ZONE MANAGEMENT NOTES:

- THE PURPOSE OF THESE PLANS IS TO SECURE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION FRESHWATER WETLANDS PERMIT FOR THE PROPOSED CONSTRUCTION OF A 26-INCH GAS TRANSMISSION MAIN CO-LOCATED ADJACENT TO AN EXISTING 42-INCH GAS PIPELINE.
 - FRESHWATER WETLAND INDIVIDUAL PERMIT – N.J.A.C. 7:7A-7.2
- IT IS THE INTENT OF THE APPLICANT/OWNER TO CO-LOCATE THE PROPOSED GAS TRANSMISSION MAIN WITHIN THE EXISTING EASEMENT WHERE POSSIBLE.
- THE APPLICANT/OWNER SHALL SECURE ALL PROPOSED PERMANENT AND TEMPORARY EASEMENTS AND RIGHTS OF ACCESS SHOWN ON THE PLANS PRIOR TO CONSTRUCTION. THE OWNER/CONTRACTOR SHALL ALSO SECURE NECESSARY EASEMENTS OR RIGHTS OF ACCESS BEYOND THE LIMITS SHOWN, AS DEMED NECESSARY.
- THE CONTRACTOR IS ADVISED THAT STAGING, STORING AND STOCKPILING OF MATERIALS AND EQUIPMENT SHALL BE ACCOMPLISHED OUTSIDE NJDEP REGULATED FRESHWATER WETLANDS, WETLANDS BUFFERS OR FLOOD HAZARD AREA RIPARIAN ZONES TO THE MAXIMUM EXTENT PRACTICABLE AND IN ACCORDANCE WITH NJDEP LINEAR CONSTRUCTION GUIDELINES.
- THE CONTRACTOR SHALL EXCAVATE, STORE AND REPLACE TOPSOIL WITHIN TRENCH LIMITS. PROPOSED FINISHED GRADE SHALL MATCH EXISTING GRADE. ALL EXCESS MATERIAL SHALL BE DISPOSED OF LAWFULLY.
- ANY PROPOSED TRENCH IN A STREAM CHANNEL, OPEN WATER OR RIPARIAN ZONE IS TO BE A MAXIMUM OF 20 FEET WIDE, UNLESS CONSTRUCTION STANDARDS DICTATE ADDITIONAL WIDTH.
- MINIMUM DEPTH OF BURIAL (TOP OF PIPE) SHALL BE FOUR (4) FEET FOR STREAM CROSSINGS. MINIMUM COVER AT ALL OTHER LOCATIONS SHALL BE THREE (3) FEET.
- A MINIMUM COVER OF FOUR (4) FEET SHALL BE PROVIDED FROM THE CHANNEL INVERT. THE ELEVATION OF THE TRANSMISSION GAS MAIN SHALL REMAIN HORIZONTAL UNTIL TEN (10) FEET BEYOND THE TOP OF BANK, OR TWICE THE HEIGHT OF THE STREAM BANK, WHICHEVER IS GREATER. THE INCLINED OF THE MAIN SHALL BE NO GREATER THAT 1:2 ENTERING AND EXITING THE CHANNEL BANK AREA.
- ADDITIONAL TEMPORARY OFF-SITE STAGING & STORAGE IS PROVIDED AT APPROXIMATE MP8.57, MP9.00 AND MP10.35. NO REGULATED FEATURES EXIST WITHIN OFF-SITE AREAS.
- PROPOSED PROJECT IS SUBJECT TO FREEHOLD SOIL CONSERVATION DISTRICT PLAN CERTIFICATION APPROVAL.
- PRIOR TO ANY SITE DISTURBANCE, ALL WETLANDS AND OR WETLANDS TRANSITION AREA LIMITS SHALL BE CLEARLY IDENTIFIED IN THE FIELD WITH ORANGE "MIRAFI" PROTECTIVE FENCING OR APPROVED ALTERNATE. LOCATE SILT FENCE FIVE FEET UPSTREAM OF PROTECTIVE FENCING AND DOWNSTREAM OF CLEARING LIMITS AS SHOWN. THE CONTRACTOR SHALL VERIFY THAT ALL PERMITS AS MAY BE REQUIRED BY LOCAL, COUNTY, STATE, OR FEDERAL REGULATIONS ARE IN HAND, ON THE JOB AND VALID PRIOR TO COMMENCING WORK. PLS&S SHALL STAKE THESE BOUNDARIES PRIOR TO CONSTRUCTION.
- NON-PAVED AREAS IN FRESHWATER WETLANDS AND/OR RIPARIAN ZONES TO RECEIVE 18 INCHES OF TOPSOIL/INSITU MATERIAL.
- PER N.J.A.C. 7:13-4.1(h) "WHERE A COASTAL WETLAND REGULATED UNDER THE WETLANDS ACT OF 1970, N.J.S.A. 13:9A-1ET SEQ., LIES WITHIN A RIPARIAN ZONE, THE RIPARIAN ZONE STANDARDS OF THIS CHAPTER DO NOT APPLY WITHIN THE WETLAND."
- THE WETLAND PERMIT PLANS WITHIN THIS SET (SHEETS 3 THROUGH 16) DO NOT INCLUDE IMPACTS TO MAPPED COASTAL WETLANDS. SEE THE WATERFRONT DEVELOPMENT PLANS WITHIN THIS SET (SHEETS 31 THROUGH 37) FOR THESE IMPACTS.

REFERENCE NOTES

- EXISTING CONDITIONS SHOWN HEREON ARE BASED UPON SURVEY INFORMATION PREPARED BY D.W. SMITH ASSOCIATES, LLC AND WILLIAMS TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC.
- THE VERTICAL DATUM REFERS TO NAVD 88 TOPOGRAPHICAL DATA. (CONVERSION TO NVGD 1929; +1.04 FT.)
- THE HORIZONTAL DATUM REFERS TO NAD83 NEW JERSEY STATE PLANE COORDINATE SYSTEM.
- LOT LINES AND RIGHT-OF-WAY LINES SHOWN HEREON WERE TAKEN FROM ABOVE-REFERENCED SURVEY INFORMATION.
- TOPOGRAPHIC CONTOURS BASED UPON AERIALS PERFORMED BY MICHAEL BAKER INTERNATIONAL AUGUST 2016, PROVIDED BY TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC.
- THESE PLANS ARE BASED UPON GAS ALIGNMENT PLANS ENTITLED "TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC – FERC ALIGNMENT SHEET NORTHEAST SUPPLY ENHANCEMENT PROJECT – PROPOSED 26" MADISON LOOP M.P. 8.57 TO M.P. 12.00 MIDDLESEX COUNTY, NEW JERSEY", LAST REVISED MAY 9, 2018, PREPARED BY MUSTANG OF NEW JERSEY, INC.
- INFORMATION SHOWN FROM MILE POST 12.00 TO MEAN HIGH WATER LINE TAKEN FROM PLANS ENTITLED "TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC – FERC ALIGNMENT SHEET (1 OF 8) NORTHEAST SUPPLY ENHANCEMENT PROJECT – PROPOSED 26" RIPARIAN BAY LOOP LINE, M.P. 12.00 TO M.P. 12.22, NEW JERSEY", LAST REVISED MARCH 15, 2017, PREPARED BY INTECSEA, WORLEY PARSONS GROUP.
- TAX MAP INFORMATION TAKEN FROM TAX MAP FOR BOROUGH OF SAYREVILLE, MIDDLESEX COUNTY, NEW JERSEY, SHEETS 126, 126-01, 126-02, 127, 129, 136, AND 143, DATED AUGUST 1989, PREPARED BY RAYMOND E. BORUP JR., P.L.S. AND TAX MAP FOR TOWNSHIP OF OLD BRIDGE, MIDDLESEX COUNTY, NEW JERSEY, SHEETS 4, 4.21 AND 5, DATED JULY 2008, PREPARED BY MICHAEL J. MCGURL, P.L.S.
- NEW JERSEY WATERS OF THE UNITED STATES DELINEATION DATA WERE COLLECTED BY ECOSCIENCES AND ECOLOGY AND ENVIRONMENT, INC. IN 2016/2017. A MAPPING GRADE TRIMBLE GPS WAS USED TO COLLECT FRESHWATER WETLANDS IN THE FIELD. IN NEW JERSEY MAPPING GRADE LOCATIONS AND DATA WERE RECORDED BY CIVIL SURVEY OF WILLIAMS STRATEGIC SOURCING COMPANY, LLC TO MEET PLS CERTIFICATION REQUIREMENT REQUIRED FOR NJDEP LETTER OF INTERPRETATION.
- WITHIN THE SURVEY CORRIDOR ECOLOGY AND ENVIRONMENT, INC. AND AMY GREENE ENVIRONMENTAL ESTABLISHED THE RIPARIAN ZONES UTILIZING WATERS OF THE UNITED STATES FIELD DATA. OUTSIDE SURVEY CORRIDOR FEATURES ECOLOGY AND ENVIRONMENT, INC. USED REMOTE SENSING FOR FEATURES WHO'S TRADITIONAL AREAS ENROACH INTO THE SURVEY CORRIDOR FROM OUTSIDE.
- MEAN HIGH WATER LEVEL VALUES PROVIDED BY WILLIAMS TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC GENERATED FROM NOAA VERTICAL DATUM WEBSITE AND VERIFIED AGAINST THE NEW JERSEY TIDAL BENCHMARK DATA. NEGLIGIBLE DIFFERENCE BETWEEN SOURCES IS ASSUMED TO BE RELATED TO SEA LEVEL RISE AND FROM NEW JERSEY DATA BEING FROM 1970'S TIDAL EPOCH DATASET.
- SPRING HIGH WATER LEVEL ELEVATION VALUE AND DATA WERE BASED OFF OF FIELD OBSERVATIONS OF TIDAL WRACK LINES AND INCORPORATED ACROSS THE PROJECT DEM, PROVIDED BY WILLIAMS TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC.
- COASTAL WETLAND LIMITS TAKEN FROM NJDEP 1970 TIDAL WETLANDS BASEMAPS WEB MAP SERVICES, PREPARED BY NJDEP OFFICE OF INFORMATION RESOURCES MANAGEMENT BUREAU OF GEOGRAPHIC INFORMATION SYSTEMS, PUBLISHED FEBRUARY 2013.
- ADDITIONAL TEMPORARY OFF-SITE STAGING & STORAGE IS PROVIDED AT BLOCK 6302, LOT C0210 AS INDICATED ON PLAN ENTITLED "NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP – PERMIT PLAN BLOCK 6302, LOT C0210, OLD BRIDGE TOWNSHIP STAGING AREA," DATED JUNE 8, 2018, PREPARED BY PAULUS, SOKOLOWSKI AND SARTOR, LLC AND BLOCK 1051, LOT 4 AS INDICATED ON PLAN ENTITLED "NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP – PERMIT PLAN BLOCK 1051, LOT 4, OLD BRIDGE TOWNSHIP STAGING AREA," DATED JUNE 8, 2018, PREPARED BY PAULUS, SOKOLOWSKI AND SARTOR, LLC.

| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |
| | | |
| | | |

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

THOMAS J. MURPHY, PLS
DW SMITH ASSOCIATES, LLC
1450 STATE ROUTE 34, WALL, NJ 07753
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 37207 COA NO. 24GA28122400


SIGNATURE DATE

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
PS&S, LLC
1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
PROFESSIONAL ENGINEER
N.J. LIC. NO. 41319 COA NO. 24GA28032700

William Salmon 04/24/19
SIGNATURE DATE

PAULUS, SOKOLOWSKI AND SARTOR, LLC.



1433 ROUTE 34
SUITE A4
WALL, NJ 07727
PHONE: (848) 206-2626

CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. DRAWINGS DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS.

ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT.

THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI AND SARTOR, LLC IS PROHIBITED.

UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE," THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

COPYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC. – ALL RIGHTS RESERVED.

PROJECT

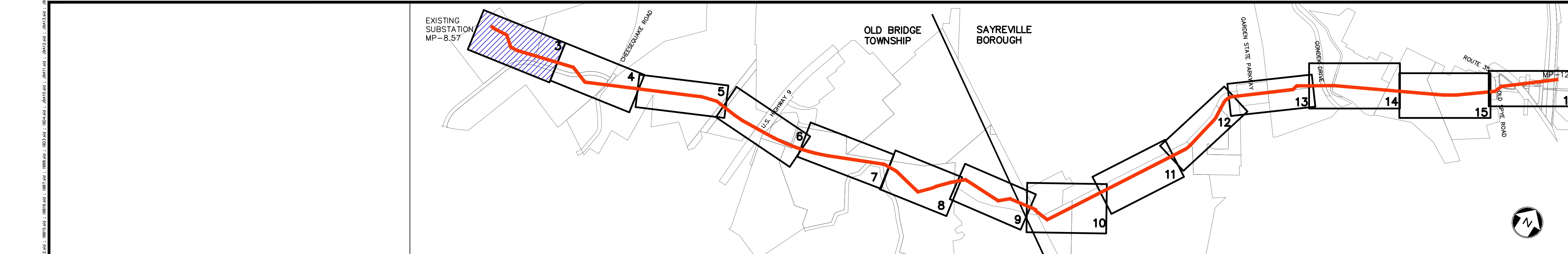
NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP

OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH
MIDDLESEX COUNTY, NEW JERSEY

SHEET TITLE

GENERAL NOTES

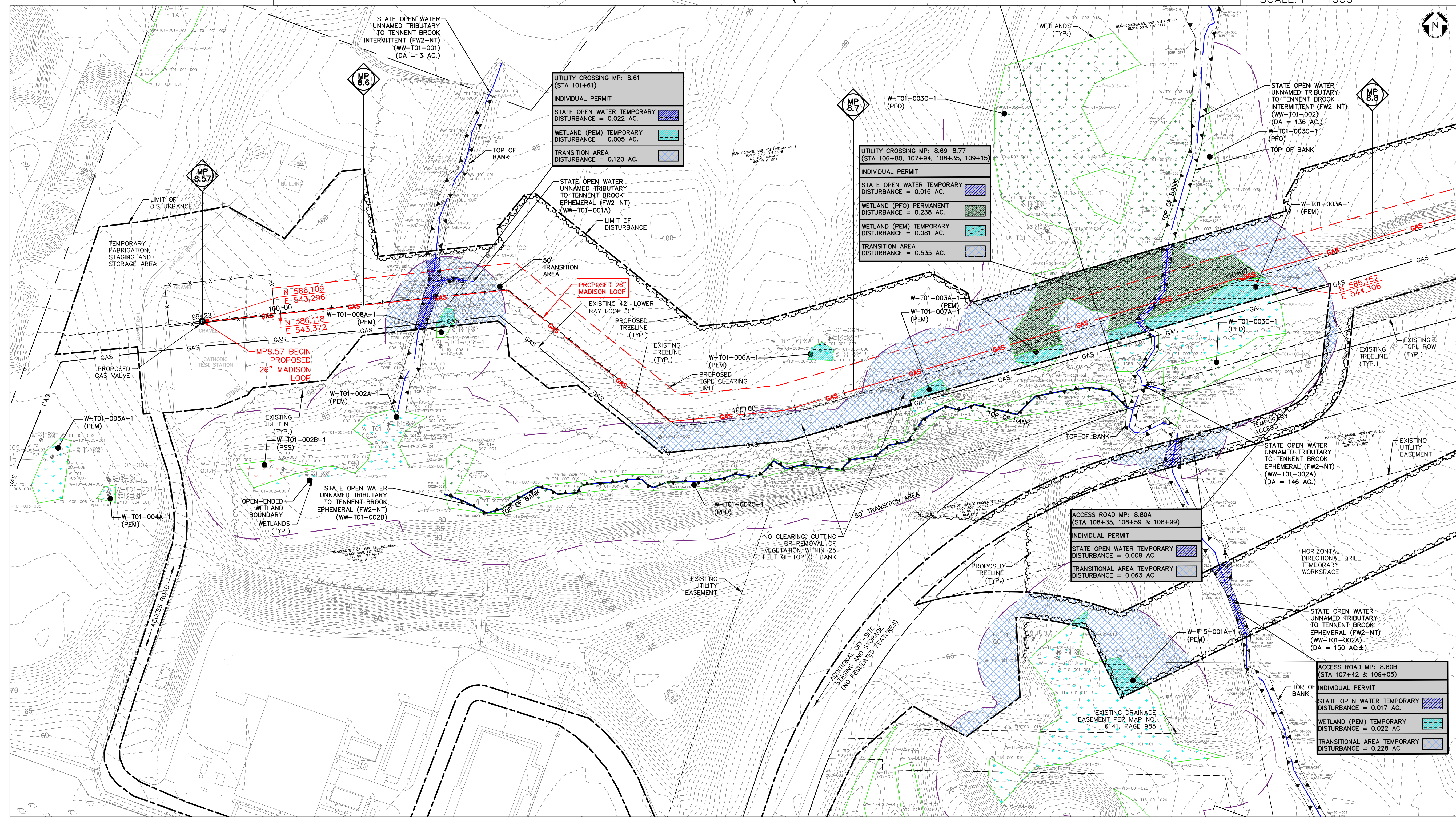
PROJECT NO.: 05731.0002 DRAWN BY: JPS
SCALE: AS NOTED CHECKED BY: WS
DATE: 06/08/18 SHEET 2 OF 24
SHEET NO.



KEY MAP
SCALE: 1" = 1000'

| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |

| LEGEND | |
|--------|---|
| | PROPERTY LINE |
| | EXISTING CONTOURS |
| | EXISTING SPOT ELEVATION |
| | EXISTING STORM SEWER |
| | EXISTING WATER MAIN |
| | EXISTING GAS MAIN |
| | PROPOSED GAS MAIN |
| | EXISTING SIGN |
| | EXISTING UTILITY POLE |
| | PROPOSED GAS VALVE |
| | EXISTING TREE |
| | EXISTING TREE/CANOPY |
| | EXISTING FENCE |
| | EXISTING RETAINING WALL |
| | EXISTING PERMANENT EASEMENT/TGPL R.O.W. |
| | PROPOSED PERMANENT EASEMENT |
| | PROPOSED LIMIT OF DISTURBANCE |
| | PROPOSED HDD LIMIT OF DISTURBANCE |
| | STREAM LINE |
| | WETLANDS BOUNDARY |
| | COASTAL WETLANDS BOUNDARY |
| | TOP OF BANK |
| | 50' WETLAND TRANSITION AREA |
| | RIPIARIAN BUFFER |
| | MEAN HIGH WATER LINE |
| | SPRING HIGH WATER LINE |
| | MEAN HIGH WATER LINE 500' BUFFER |
| | TIDELANDS |
| | PHOTO LOCATION (SEE REPORT) |
| | WETLAND FLAGS |
| | STATE OPEN WATERS/FLATS |
| | FRESHWATER WETLAND/STATE OPEN WATER DATA POINTS |



MATCH LINE SEE SHEET 4

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

THOMAS J. MURPHY, PLS
DW SMITH ASSOCIATES, LLC
1450 STATE ROUTE 34, WALL, NJ 07753
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 37207 COA NO. 24GA28122400

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
PS&S, LLC
1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
PROFESSIONAL ENGINEER
N.J. LIC. NO. 41319 COA NO. 24GA28032700

04/24/19

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
1433 ROUTE 34
SUITE A4
WALL, NJ 07727
PHONE: (848) 206-2626
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS. THESE CONTRACT DRAWINGS CONTAIN DATA ATTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT. THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI AND SARTOR, LLC IS PROHIBITED. UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

COPYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC - ALL RIGHTS RESERVED.

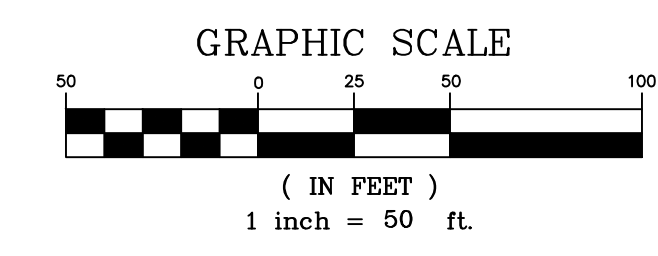
PROJECT
NORTHEAST SUPPLY
ENHANCEMENT PROJECT
PROPOSED
26" MADISON LOOP
OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH
MIDDLESEX COUNTY, NEW JERSEY

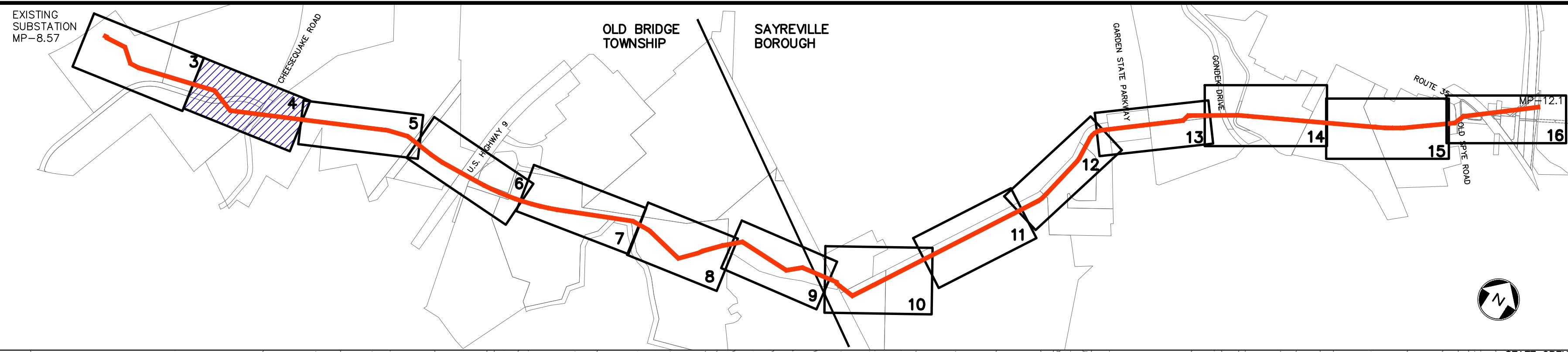
SHEET TITLE
WETLAND
PERMIT PLAN
MP 8.57 - MP 8.8

PROJECT NO.: 05731.0002 DRAWN BY: JPS
SCALE: 1" = 50' CHECKED BY: WS
DATE: 06/08/18 SHEET 3 OF 20
SHEET NO.

| WETLAND LEGEND | | | |
|----------------|--------------------------------------|--|---|
| | PALUSTRINE EMERGENT (PEM) | | EMERGENT/INTERTIDAL/ESTUARINE DISTURBED |
| | PALUSTRINE EMERGENT DISTURBED | | STATE OPEN WATER |
| | PALUSTRINE FORESTED (PFO) | | TRANSITION AREA DISTURBANCE |
| | PALUSTRINE FORESTED DISTURBED | | TEMPORARY DISTURBANCE |
| | PALUSTRINE SCRUB-SHRUB (PSS) | | PERMANENT DISTURBANCE |
| | PALUSTRINE SCRUB-SHRUB DISTURBED | | COASTAL WETLAND |
| | EMERGENT/INTERTIDAL/ESTUARINE (E2EM) | | |

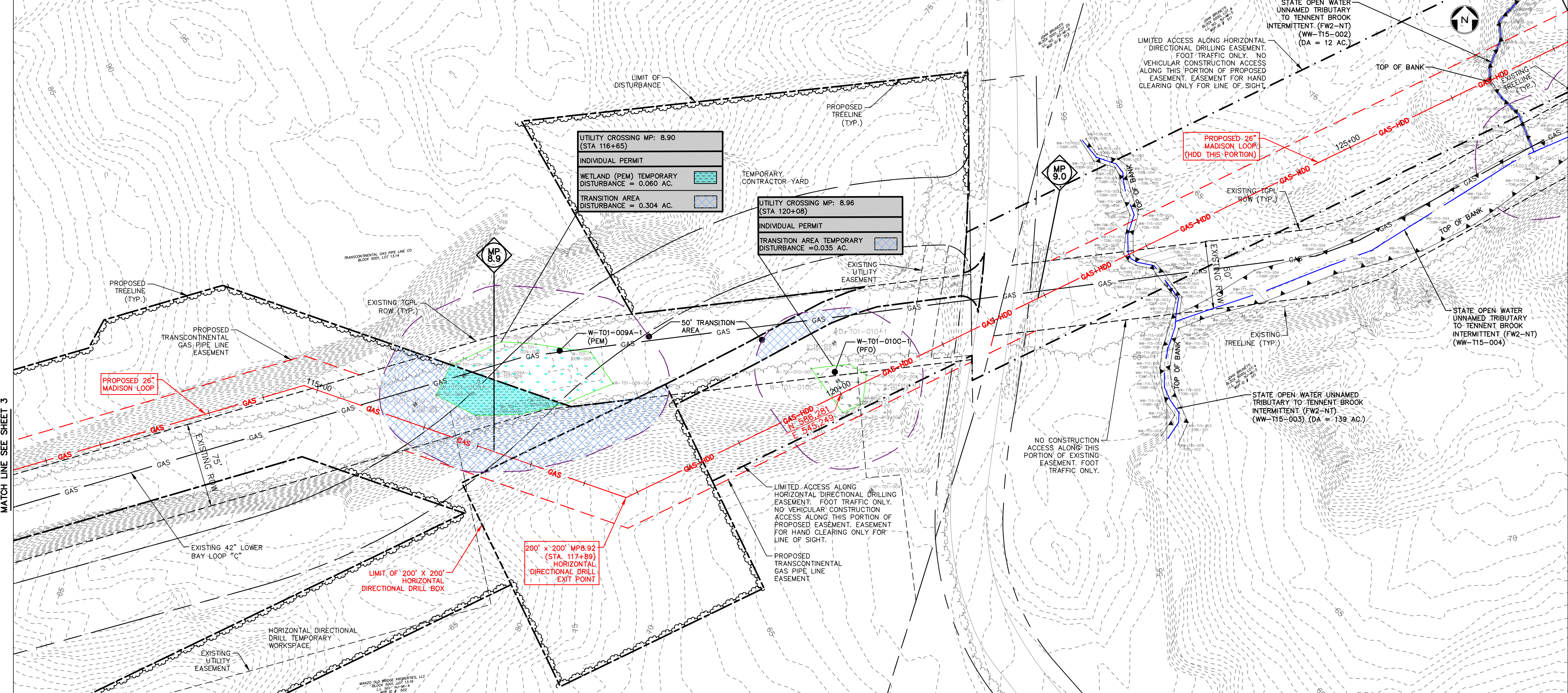
- NOTES:**
- SEE DETAIL SHEETS 17-19 FOR METHODS OF STREAM CROSSING AND STREAM DIVERSION.
 - SEE SHEET 4 FOR WETLAND UTILITY CROSSING TABULATION.





| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |

| LEGEND | |
|--------|---|
| --- | PROPERTY LINE |
| --- | EXISTING CONTOURS |
| --- | EXISTING SPOT ELEVATION |
| --- | EXISTING STORM SEWER |
| --- | EXISTING WATER MAIN |
| --- | EXISTING GAS MAIN |
| --- | PROPOSED GAS MAIN |
| --- | EXISTING SIGN |
| --- | EXISTING UTILITY POLE |
| --- | PROPOSED GAS VALVE |
| --- | EXISTING TREELINE/CANOPY |
| --- | EXISTING TREE |
| --- | PROPOSED TREELINE |
| --- | EXISTING FENCE |
| --- | EXISTING RETAINING WALL |
| --- | EXISTING PERMANENT EASEMENT/TGPL R.O.W. |
| --- | PROPOSED PERMANENT EASEMENT |
| --- | PROPOSED LIMIT OF DISTURBANCE |
| --- | PROPOSED HDD LIMIT OF DISTURBANCE |
| --- | STREAM LINE |
| --- | WETLANDS BOUNDARY |
| --- | COASTAL WETLANDS BOUNDARY |
| --- | TOP OF BANK |
| --- | MEAN HIGH WATER LINE |
| --- | SPRING HIGH WATER LINE |
| --- | MEAN HIGH WATER LINE 500' BUFFER |
| --- | TIDELANDS |
| --- | W-T01-005A-1 PHOTO LOCATION (SEE REPORT) |
| --- | WETLAND FLAGS |
| --- | STATE OPEN WATERS/FLATS |
| --- | FRESHWATER WETLAND/STATE OPEN WATER DATA POINTS |



I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

THOMAS J. MURPHY, PLS
 DW SMITH ASSOCIATES, LLC
 1450 STATE ROUTE 34, WALL, NJ 07753
 PROFESSIONAL LAND SURVEYOR
 N.J. LIC. NO. 37207 COA NO. 24GA28122400

SIGNATURE _____ DATE _____

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
 PS&S, LLC
 1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
 PROFESSIONAL ENGINEER
 N.J. LIC. NO. 41319 COA NO. 24GA28032700

SIGNATURE _____ DATE 04/24/19

PAULUS, SOKOLOWSKI AND SARTOR, L.L.C.
 1433 ROUTE 34 SUITE A4 WALL, NJ 07727 PHONE: (848) 206-2626

CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

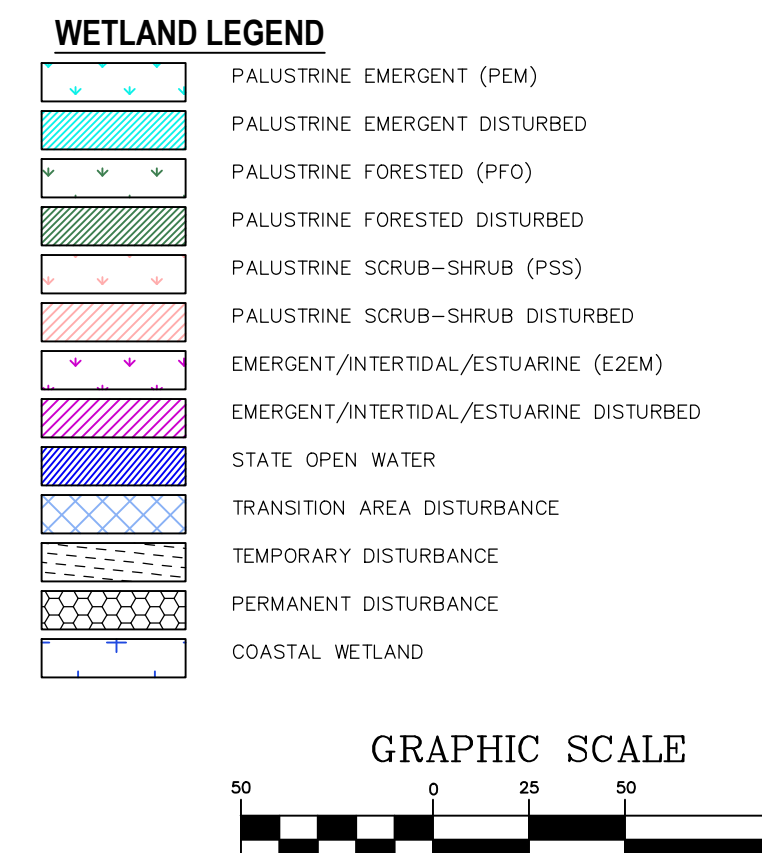
ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, L.L.C. OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. DRAWINGS DO NOT SCALE. THE DRAWINGS TO DETERMINE DIMENSIONS. ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT.

THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI AND SARTOR, L.L.C. IS PROHIBITED.

UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

COPYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, L.L.C. - ALL RIGHTS RESERVED.

| WETLAND ID | MILE POST | STATION | WETLAND UTILITY CROSSING TABULATION | | | | | | | | | | | | | | | | |
|------------------|---------------|---------|-------------------------------------|------------------|----------------------------------|-----------------------------------|------------------|----------------------------------|--------------------------------------|------------------|----------------------------------|---|------------------|----------------------------------|------------------|------------------|----------------------------------|-------|-------|
| | | | PALUSTRINE EMERGENT (PEM) (ACRES) | | | PALUSTRINE FORESTED (PFO) (ACRES) | | | PALUSTRINE SCRUB-SHRUB (PSS) (ACRES) | | | EMERGENT/INTERTIDAL/ESTUARINE (E2EM) WETLANDS | | | TRANSITION AREA | | STATE OPEN WATER | | |
| | | | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | | |
| W-T01-008A-1 | 8.61 | 101+61 | 0.005 | | | | | | | | | | | | | | | 0.022 | |
| STATE OPEN WATER | | 101+61 | | | | | | | | | | | | | | | | | |
| W-T01-006A-1 | | 105+89 | 0.007 | | | | | | | | | | | | | | | | |
| W-T01-007A-1 | | 106+80 | | | | | | | | | | | | | | | | | |
| W-T01-007A-1 | | 106+80 | | | | | | | | | | | | | | | | | |
| W-T01-008A-1 | 8.69 - 8.77 | 107+94 | 0.074 | | | | | | | | | | | | 0.231 | 0.304 | | | |
| W-T01-008C-1 | | 108+35 | | | | | | | | | | | | | | | | 0.016 | |
| STATE OPEN WATER | | 108+35 | | | | | | | | | | | | | | | | | |
| W-T01-007C-1 | | 108+59 | | | | | | | | | | | | | | | | | |
| W-T01-009C-1 | 8.80A | 108+35 | | | | | | | | | | | | | | | | | |
| STATE OPEN WATER | | 108+35 | | | | | | | | | | | | | | | | 0.009 | |
| W-T15-001A-1 | 8.80B | 107+42 | 0.022 | | | | | | | | | | | | | | 0.228 | 0.017 | |
| STATE OPEN WATER | | 109+05 | | | | | | | | | | | | | | | | | |
| W-T01-009A-1 | 8.90 | 116+65 | 0.060 | | | | | | | | | | | | 0.119 | 0.179 | 0.005 | | |
| W-T01-010C-1 | 8.96 | 120+08 | | | | | | | | | | | | | | 0.035 | | | |
| W-T15-002A-1 | | 138+68 | 0.012 | | | | | | | | | | | | | | | | |
| W-T15-003A-1 | | 132+54 | 0.072 | | | | | | | | | | | | | | | | |
| W-T15-005C-1 | 9.20 - 9.32 | 134+02 | | | | | | | | | | | | | 0.141 | 0.183 | 0.142 | | |
| STATE OPEN WATER | | 134+29 | | | | | | | | | | | | | | | | 0.035 | |
| W-T15-004C-1 | | 178+17 | | | | | | | | | | | | | | | | | |
| W-T01-014A-1 | | 178+96 | 0.494 | | | | | | | | | | | | | | | | |
| W-T01-014C | 10.05 - 10.19 | 181+88 | | | | | | | | | | | | | 1.093 | 0.136 | 0.549 | | |
| W-T01-014B-1 | | 184+08 | | | | | | | | | | | | | | | | | |
| STATE OPEN WATER | | 177+44 | | | | | | | | | | | | | | | | 0.058 | |
| W-T01-016D-1 | 10.45 | 198+70 | | | | | | | | | | | | | | 0.021 | 0.040 | | |
| W-T01-011A-1 | | 213+85 | 0.544 | | | | | | | | | | | | | | | | |
| W-T01-012D-1 | 10.69 - 10.74 | 210+39 | | | | | | | | | | | | | 0.263 | 0.002 | 0.015 | | |
| W-T07-002A-1 | | 224+34 | 0.001 | | | | | | | | | | | | | | | | |
| W-T07-001D-1 | 10.87 - 10.94 | 223+23 | | | | | | | | | | | | | | 0.079 | 0.013 | 0.168 | |
| W-T07-001C-1 | | 220+70 | | | | | | | | | | | | | | | | | |
| W-T07-003A-1 | | 244+98 | 0.681 | | | | | | | | | | | | | | | | |
| W-T07-003B-1 | 11.36 - 11.42 | 249+08 | | | | | | | | | | | | | | | | | |
| W-T07-004D-1 | 11.43 - 11.50 | 250+31 | | | | | | | | | | | | | 0.004 | | | | |
| W-T01-017A-1 | | 268+16 | 0.004 | | | | | | | | | | | | | | | | |
| W-T01-017D-1 | 11.77 - 11.94 | 270+67 | | | | | | | | | | | | | 0.021 | 0.101 | 0.228 | 0.157 | |
| TOTAL | | | 1.976 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | 2.447 | 1.143 | 1.592 | 0.157 |



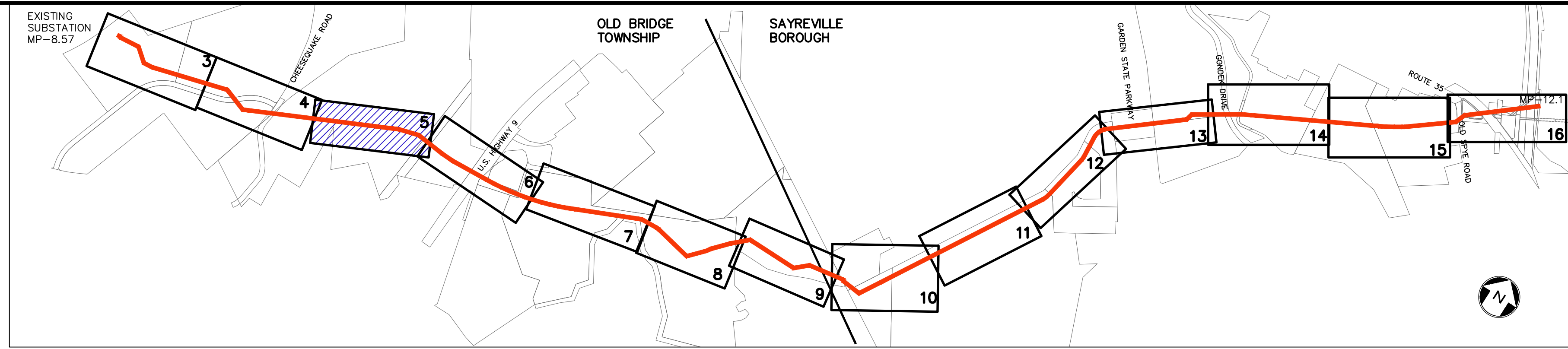
NOTES:

- SEE DETAIL SHEETS 17-19 FOR METHODS OF STREAM CROSSING AND STREAM DIVERSION.
- FRESHWATER WETLANDS TRANSITION AREA TEMPORARY DISTURBANCE WITH RESTORATION SHALL BE PROVIDED FOR ALL DISTURBANCE BEYOND PERMANENT EASEMENTS.

PROJECT
NORTHEAST SUPPLY ENHANCEMENT PROJECT
 PROPOSED
26" MADISON LOOP
 OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH
 MIDDLESEX COUNTY, NEW JERSEY

SHEET TITLE
WETLAND PERMIT PLAN
MP 8.8 - MP 9.1

PROJECT NO.: 05731.0002 DRAWN BY: JPS
 SCALE: 1" = 50' CHECKED BY: WS
 DATE: 06/08/18 SHEET 4 OF 20
 SHEET NO. **4**

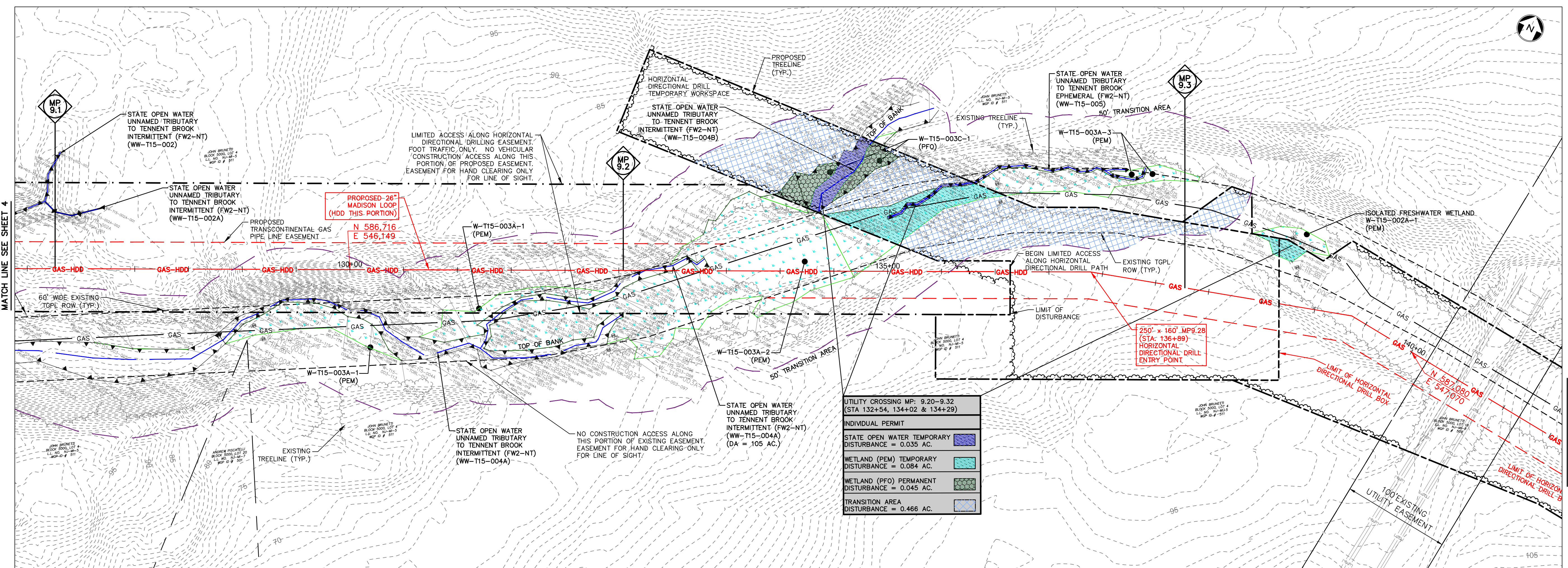


KEY MAP
SCALE: 1" = 1000'

| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |

LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- EXISTING SPOT ELEVATION
- EXISTING STORM SEWER
- EXISTING WATER MAIN
- EXISTING GAS MAIN
- PROPOSED GAS MAIN
- EXISTING SIGN
- EXISTING UTILITY POLE
- PROPOSED GAS VALVE
- EXISTING TREE
- EXISTING TREE/CANOPY
- EXISTING TREE
- PROPOSED TREELINE
- EXISTING FENCE
- EXISTING RETAINING WALL
- EXISTING PERMANENT EASEMENT/TGPL R.O.W.
- EASEMENT
- PROPOSED PERMANENT EASEMENT
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED HDD LIMIT OF DISTURBANCE
- STREAM LINE
- WETLANDS BOUNDARY
- COASTAL WETLANDS BOUNDARY
- TOP OF BANK
- 50' WETLAND TRANSITION AREA
- RIPARIAN BUFFER
- MEAN HIGH WATER LINE
- SPRING HIGH WATER LINE
- MEAN HIGH WATER LINE 500' BUFFER
- TIDELANDS
- PHOTO LOCATION (SEE REPORT)
- WETLAND FLAGS
- STATE OPEN WATERS FLAGS
- FRESHWATER WETLAND/STATE OPEN WATER DATA POINTS

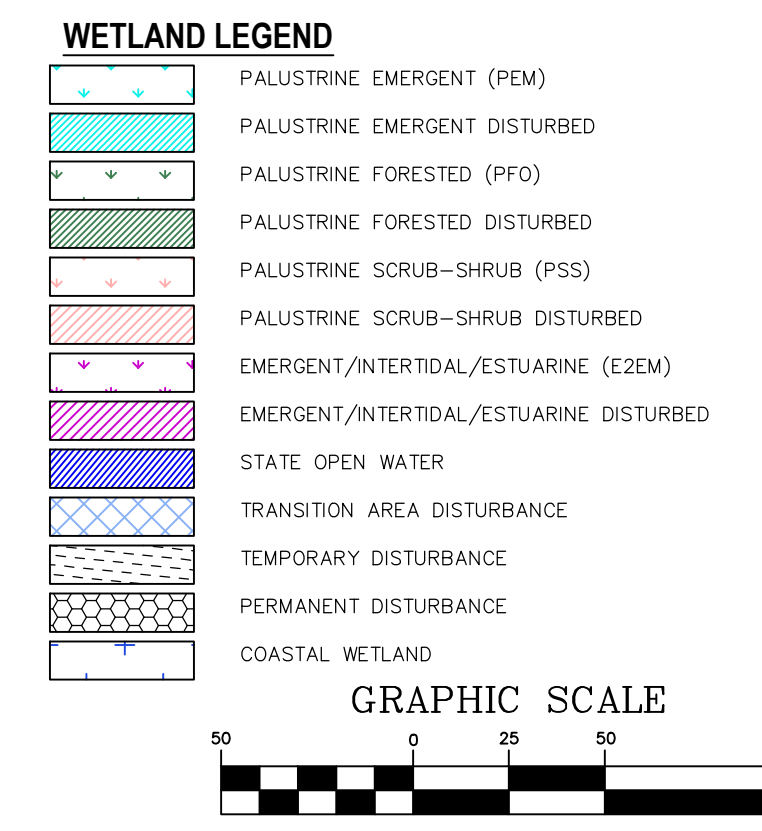


UTILITY CROSSING MP: 9.20-9.32
(STA 132+54, 134+02 & 134+29)

INDIVIDUAL PERMIT

- STATE OPEN WATER TEMPORARY DISTURBANCE = 0.035 AC.
- WETLAND (PEM) TEMPORARY DISTURBANCE = 0.084 AC.
- WETLAND (PFO) PERMANENT DISTURBANCE = 0.045 AC.
- TRANSITION AREA DISTURBANCE = 0.466 AC.

| WETLAND ID | MILE POST | STATION | WETLAND UTILITY CROSSING TABULATION | | | | | | | | | | | | | | |
|------------------|-------------|---------|-------------------------------------|------------------|----------------------------------|-----------------------------------|------------------|----------------------------------|--------------------------------------|------------------|----------------------------------|--|------------------|----------------------------------|------------------|------------------|------------------|
| | | | PALUSTRINE EMERGENT (PEM) (ACRES) | | | PALUSTRINE FORESTED (PFO) (ACRES) | | | PALUSTRINE SCRUB-SHRUB (PSS) (ACRES) | | | EMERGENT/INTERTIDAL/ESTUARINE (E2EM) (ACRES) | | | TRANSITION AREA | | STATE OPEN WATER |
| | | | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | |
| W-T01-008A-1 | 8.61 | 101+61 | 0.005 | | | | | | | | | | | 0.052 | 0.068 | 0.022 | |
| STATE OPEN WATER | | 101+61 | | | | | | | | | | | | | | | |
| W-T01-008A-1 | | 105+89 | 0.007 | | | | | | | | | | | | | | |
| W-T01-007A-1 | | 106+80 | | | | | | | | | | | | | | | |
| W-T01-003A-1 | 8.69-8.77 | 107+94 | 0.074 | | | | | | | | | | | 0.231 | 0.304 | | |
| W-T01-003C-1 | | 108+35 | | | | | 0.238 | | | | | | | | | | |
| STATE OPEN WATER | | 108+35 | | | | | | | | | | | | | | 0.016 | |
| W-T01-002C-1 | | 108+59 | | | | | | | | | | | | | | | |
| W-T01-003C-1 | 8.80A | 108+35 | | | | | | | | | | | | 0.063 | | | |
| STATE OPEN WATER | | 108+99 | | | | | | | | | | | | | | 0.009 | |
| W-T15-001A-1 | 8.80B | 107+42 | 0.022 | | | | | | | | | | | | 0.228 | 0.017 | |
| STATE OPEN WATER | | 109+65 | | | | | | | | | | | | 0.119 | 0.179 | 0.006 | |
| W-T01-008A-1 | 8.90 | 116+55 | 0.060 | | | | | | | | | | | | 0.035 | | |
| W-T01-010C-1 | 8.96 | 120+08 | | | | | | | | | | | | | | | |
| W-T15-002A-1 | | 138+68 | 0.012 | | | | | | | | | | | | | | |
| W-T15-003A-1 | | 132+54 | 0.072 | | | | | | | | | | | 0.141 | 0.183 | 0.142 | |
| W-T15-002C-1 | 9.20-9.32 | 134+02 | | | | | 0.045 | | | | | | | | | | |
| STATE OPEN WATER | | 134+29 | | | | | | | | | | | | | | 0.035 | |
| W-T15-004C-1 | | 178+17 | | | | | 0.010 | | | | | | | | | | |
| W-T01-014A-1 | | 178+96 | 0.494 | | | | | | | | | | | 1.093 | 0.136 | 0.549 | |
| W-T01-014C | | 181+88 | | | | | 0.034 | | | | | | | | | | |
| W-T01-014B-1 | 10.05-10.19 | 184+08 | | | | | | 0.007 | | | | | | | | | |
| STATE OPEN WATER | | 177+44 | | | | | | | | | | | | | | 0.058 | |
| W-T01-016D-1 | 10.45 | 198+70 | | | | | | | | | | | | 0.021 | 0.040 | | |
| W-T01-011A-1 | | 213+85 | 0.544 | | | | | | | | | | | | | | |
| W-T01-012D-1 | 10.69-10.74 | 210+39 | | | | | | | | | | | | 0.263 | 0.002 | 0.016 | |
| W-T07-002A-1 | | 224+34 | 0.003 | | | | | | | | | | | | | | |
| W-T07-001D-1 | 10.87-10.94 | 223+23 | | | | | | | | | | | | 0.079 | 0.013 | 0.168 | |
| W-T07-001C-1 | | 220+70 | | | | | | | | | | | | | | | |
| W-T07-003A-1 | | 244+98 | 0.681 | | | | | | | | | | | 0.448 | 0.036 | 0.177 | |
| W-T07-003B-1 | 11.36-11.42 | 249+08 | | | | | | | | | | | | | | | |
| W-T07-004D-1 | 11.43-11.60 | 250+31 | | | | | | | | | | | | 0.004 | 0.002 | 0.038 | |
| W-T01-017A-1 | | 268+16 | 0.004 | | | | | | | | | | | | | | |
| W-T01-017D-1 | 11.77-11.94 | 270+67 | | | | | | | | | | | | 0.021 | 0.101 | 0.228 | |
| TOTAL | | | 1.976 | 0.000 | 0.000 | 0.000 | 0.327 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.000 | 2.447 | 1.143 | 1.992 | |



NOTES:
1. SEE DETAIL SHEET 17-19 FOR METHODS OF STREAM CROSSING AND STREAM DIVERSION
2. FRESHWATER WETLANDS TRANSITION AREA TEMPORARY DISTURBANCE WITH RESTORATION SHALL BE PROVIDED FOR ALL DISTURBANCE BEYOND PERMANENT EASEMENTS.

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

THOMAS J. MURPHY, PLS
DW SMITH ASSOCIATES, LLC
1450 STATE ROUTE 34, WALL, NJ 07753
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 37207 COA NO. 24GA28124400

SIGNATURE _____ DATE _____

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
PS&S, LLC
1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
PROFESSIONAL ENGINEER
N.J. LIC. NO. 41319 COA NO. 24GA28032700

SIGNATURE *W. Salmon* DATE 04/24/19

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
1433 ROUTE 34 SUITE A4 WALL, NJ 07727 PHONE: (848) 206-2626
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

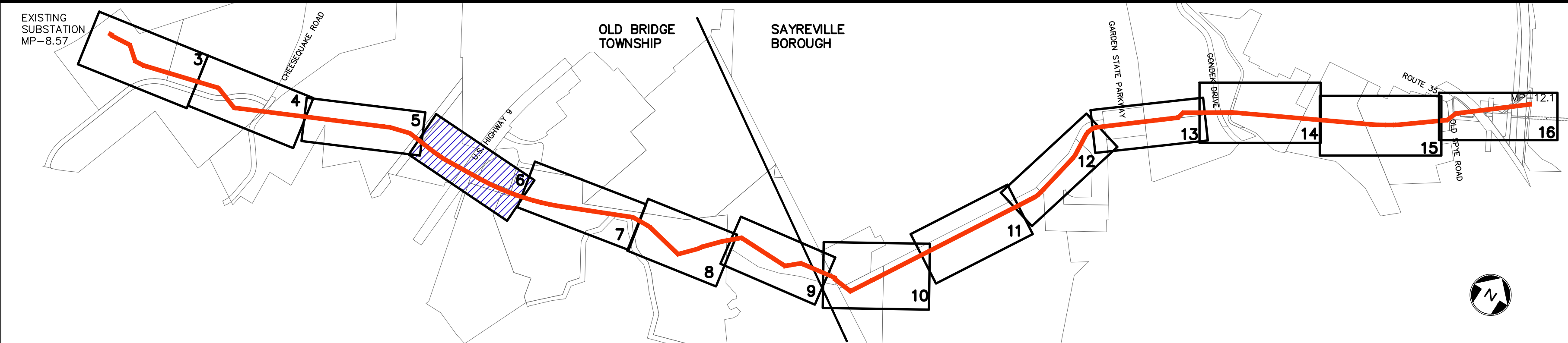
ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT; THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT.

UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

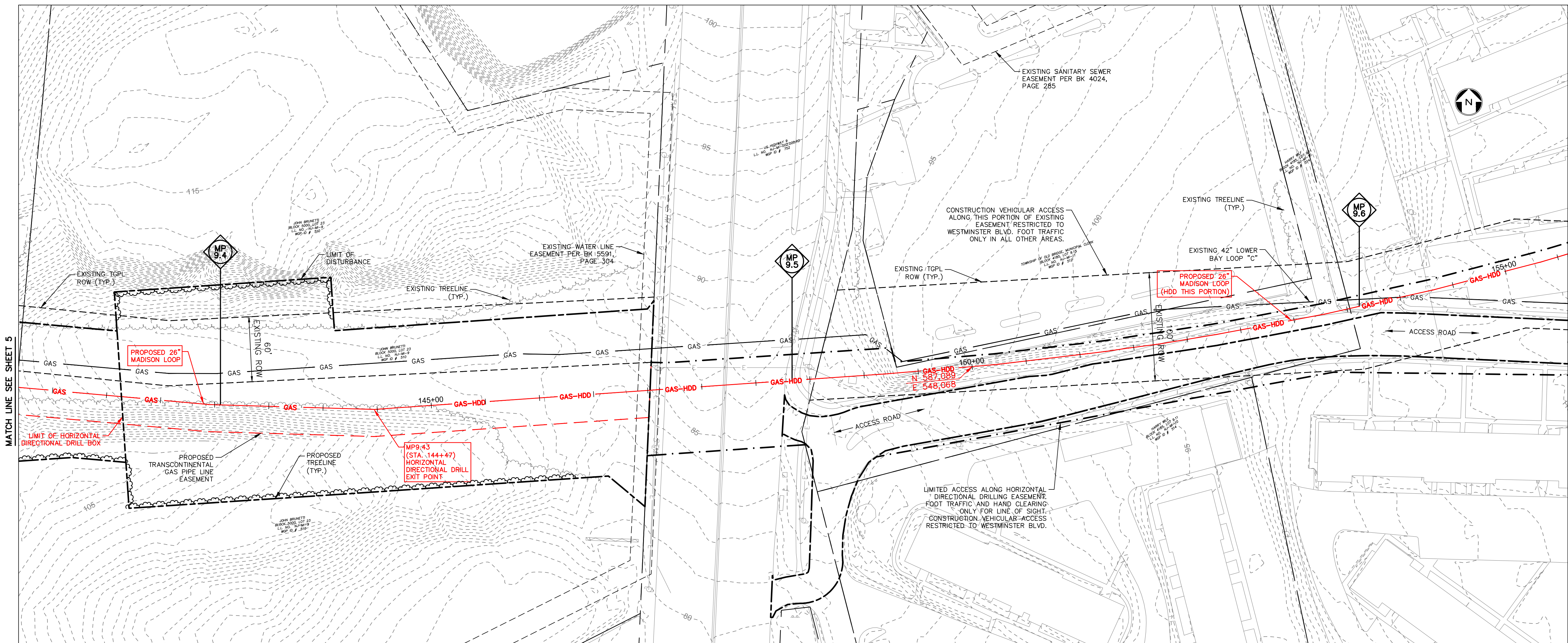
PROJECT
NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP
OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH MIDDLESEX COUNTY, NEW JERSEY

SHEET TITLE
WETLAND PERMIT PLAN MP 9.1 - MP 9.4

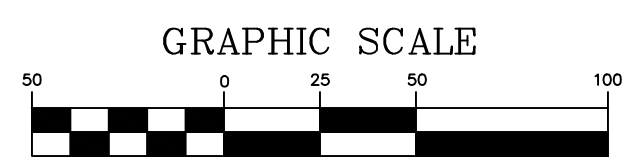
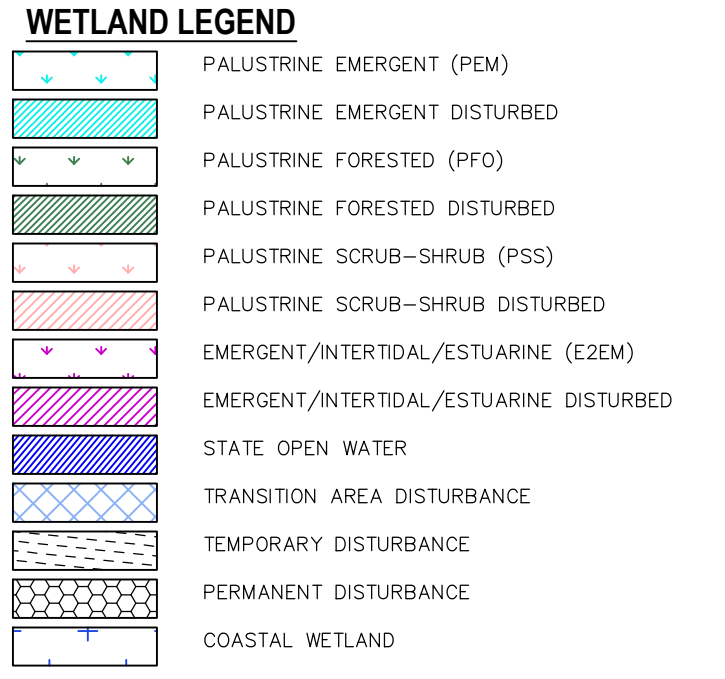
PROJECT NO.: 05731.0002 DRAWN BY: JPS
SCALE: 1" = 50' CHECKED BY: WS
DATE: 06/08/18 SHEET 5 OF 20
SHEET NO. **5**



KEY MAP
SCALE: 1" = 1000'



| WETLAND UTILITY CROSSING TABULATION | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---------------|---------|------------------|------------------|----------------------------------|------------------|-----------------------------------|----------------------------------|------------------|--------------------------------------|----------------------------------|------------------|--|----------------------------------|------------------|------------------|----------------------------------|------------------|-------|
| WETLAND ID | MILE POST | STATION | WETLANDS | | | | PALUSTRINE FORESTED (PFO) (ACRES) | | | PALUSTRINE SCRUB-SHRUB (PSS) (ACRES) | | | EMERGENT/INTERTIDAL/ESTUARINE WETLANDS | | | TRANSITION AREA | | STATE OPEN WATER | |
| | | | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | |
| W-101-000A-1 | 8.61 | 101+61 | 0.005 | | | | | | | | | | | | | 0.052 | 0.068 | | 0.022 |
| STATE OPEN WATER | | 101+61 | | | | | | | | | | | | | | | | | |
| W-101-000A-1 | | 105+89 | 0.007 | | | | | | | | | | | | | | | | |
| W-101-002A-1 | 8.69 - 8.77 | 105+80 | | | | | | | | | | | | | | | | | |
| W-101-003A-1 | | 107+94 | 0.074 | | | | | | | | | | | | | 0.231 | 0.304 | | |
| W-101-003C-1 | | 108+35 | | | | | 0.238 | | | | | | | | | | | | |
| STATE OPEN WATER | | 109+15 | | | | | | | | | | | | | | | | | 0.016 |
| W-101-001C-1 | | 108+59 | | | | | | | | | | | | | | | | | |
| W-101-003C-1 | 8.80A | 108+35 | | | | | | | | | | | | | | | 0.063 | | 0.009 |
| STATE OPEN WATER | | 108+59 | | | | | | | | | | | | | | | | | |
| W-115-001A-1 | 8.80B | 107+42 | 0.022 | | | | | | | | | | | | | | | | 0.028 |
| STATE OPEN WATER | | 109+05 | | | | | | | | | | | | | | | | | 0.012 |
| W-101-009A-1 | 8.90 | 116+65 | 0.050 | | | | | | | | | | | | | 0.119 | 0.179 | 0.006 | |
| STATE OPEN WATER | | 120+08 | | | | | | | | | | | | | | | | 0.035 | |
| W-115-002A-1 | | 138+68 | 0.012 | | | | | | | | | | | | | | | | |
| W-115-003A-1 | | 132+64 | 0.073 | | | | | | | | | | | | | | | | |
| W-115-003C-1 | 9.20 - 9.32 | 134+02 | | | | 0.045 | | | | | | | | | | 0.141 | 0.183 | 0.142 | |
| STATE OPEN WATER | | 134+29 | | | | | | | | | | | | | | | | | 0.035 |
| W-115-004C-1 | | 178+17 | 0.010 | | | | | | | | | | | | | | | | |
| STATE OPEN WATER | | 178+44 | | | | | | | | | | | | | | | | | |
| W-101-014C-1 | 10.05 - 10.10 | 181+88 | 0.694 | | | 0.034 | | | | | | | | | | 1.093 | 0.136 | 0.549 | |
| STATE OPEN WATER | | 184+08 | | | | | | | | 0.007 | | | | | | | | | 0.058 |
| W-101-010C-1 | 10.45 | 172+44 | | | | | | | | | | | | | | | | | |
| STATE OPEN WATER | | 199+70 | | | | | | | | | | | | | | | | | |
| W-101-011A-1 | 10.69 - 10.74 | 213+85 | 0.544 | | | | | | | | | | | | | 0.263 | 0.002 | 0.016 | |
| STATE OPEN WATER | | 210+39 | | | | | | | | | | | | | | | | | |
| W-107-002A-1 | | 224+34 | 0.001 | | | | | | | | | | | | | | | | |
| STATE OPEN WATER | | 223+23 | | | | | | | | | | | | | | | | | |
| W-101-001C-1 | 10.87-10.94 | 220+70 | | | | | | | | | | | | | | 0.079 | 0.013 | 0.168 | |
| STATE OPEN WATER | | 220+70 | | | | | | | | | | | | | | | | | |
| W-107-003A-1 | 11.36 - 11.42 | 244+08 | 0.681 | | | | | | | | | | | | | 0.448 | 0.036 | 0.177 | |
| STATE OPEN WATER | | 248+08 | | | | | | | | | | | | | | | | | |
| W-101-004B-1 | 11.43 - 11.60 | 250+81 | | | | | | | 0.004 | | | | | | | | | | 0.038 |
| STATE OPEN WATER | | 268+16 | | | | | | | | | | | | | | | | | |
| W-101-017A-1 | 11.77 - 11.94 | 270+67 | | | | | | | | | | | | | | 0.021 | 0.101 | 0.228 | |
| STATE OPEN WATER | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | 1.976 | 0.000 | 0.000 | 0.000 | 0.327 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | | 2.447 | 1.143 | 1.592 | 0.157 |



- NOTES:
- NO NJDEP FRESHWATER WETLANDS REGULATED FEATURES ON THIS SHEET.
 - FRESHWATER WETLANDS TRANSITION AREA TEMPORARY DISTURBANCE WITH RESTORATION SHALL BE PROVIDED FOR ALL DISTURBANCE BEYOND PERMANENT EASEMENTS.

| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |

LEGEND

PROPERTY LINE
EXISTING CONTOURS
EXISTING SPOT ELEVATION
EXISTING STORM SEWER
EXISTING WATER MAIN
EXISTING GAS MAIN
PROPOSED GAS MAIN
EXISTING SIGN
EXISTING UTILITY POLE
PROPOSED GAS VALVE
EXISTING TREE/CANOPY
EXISTING TREE
PROPOSED TREE LINE
EXISTING FENCE
EXISTING RETAINING WALL
EXISTING PERMANENT EASEMENT/TGPL R.O.W.
PROPOSED PERMANENT EASEMENT
PROPOSED LIMIT OF DISTURBANCE
PROPOSED HDD LIMIT OF DISTURBANCE
STREAM LINE
WETLANDS BOUNDARY
COASTAL WETLANDS BOUNDARY
TOP OF BANK
50' WETLAND TRANSITION AREA
RIPARIAN BUFFER
MEAN HIGH WATER LINE
SPRING HIGH WATER LINE
MEAN HIGH WATER LINE 500' BUFFER
TIDELANDS
⊕ W-T01-005A-1 PHOTO LOCATION (SEE REPORT)
△ 1620 WETLAND FLAGS
△ 1432 STATE OPEN WATERS FLAGS
◆ 1609 FRESHWATER WETLAND/STATE OPEN WATER DATA POINTS

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND PREPARED UNDER MY DIRECT SUPERVISION.

THOMAS J. MURPHY, PLS
DW SMITH ASSOCIATES, LLC
1450 STATE ROUTE 34, WALL, NJ 07753
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 37207 COA NO. 24GA28124400

SIGNATURE _____ DATE _____

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
PS&S, LLC
1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
PROFESSIONAL ENGINEER
N.J. LIC. NO. 4131B COA NO. 24GA28032700

SIGNATURE _____ DATE 04/24/19

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
1433 ROUTE 34 SUITE A4 WALL, NJ 07727 PHONE: (848) 206-2626
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE. THE DIMENSIONS TO BE SHOWN IN DIMENSIONS.
ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE. THE DIMENSIONS TO BE SHOWN IN DIMENSIONS.
THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT.
UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

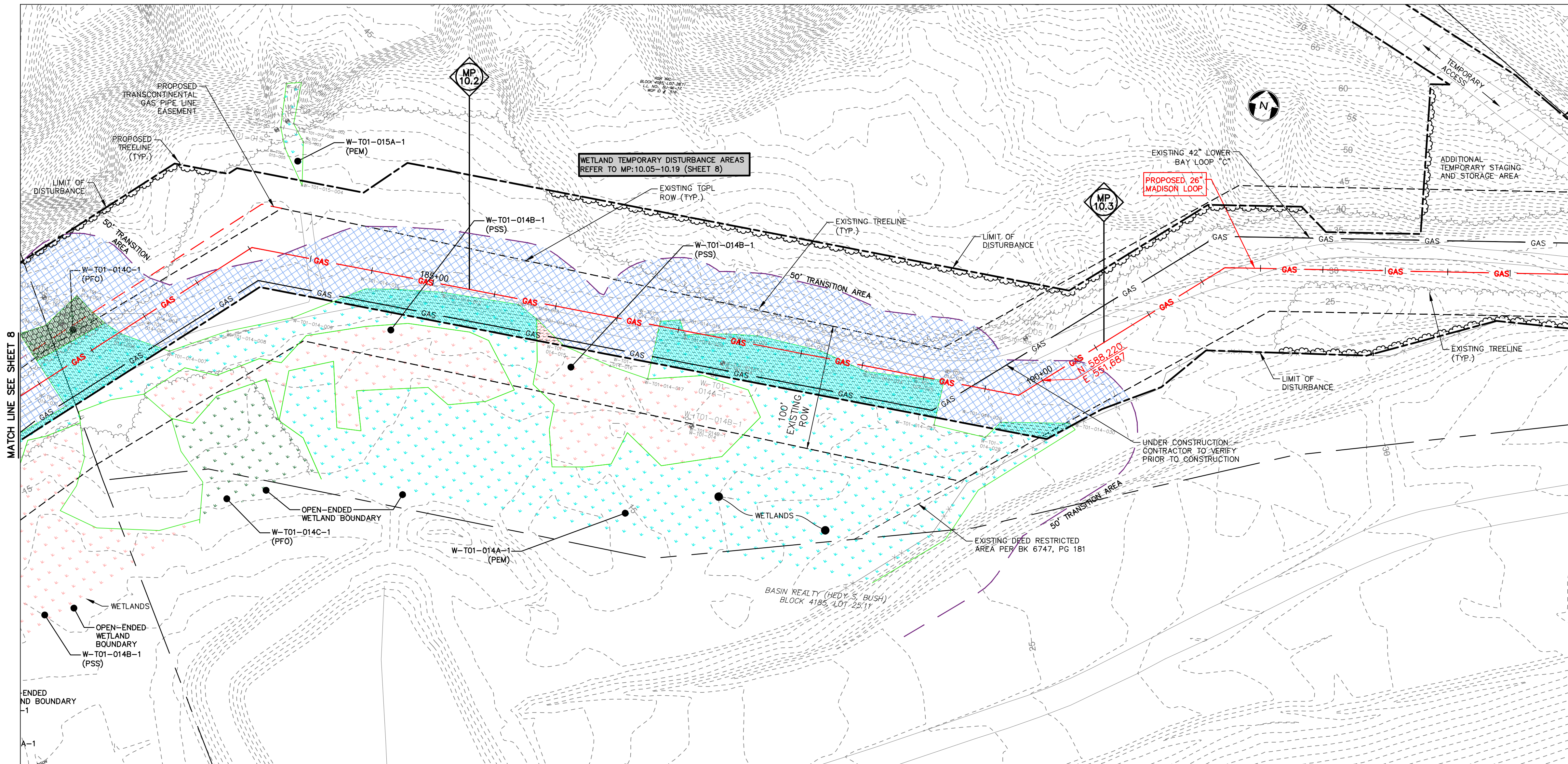
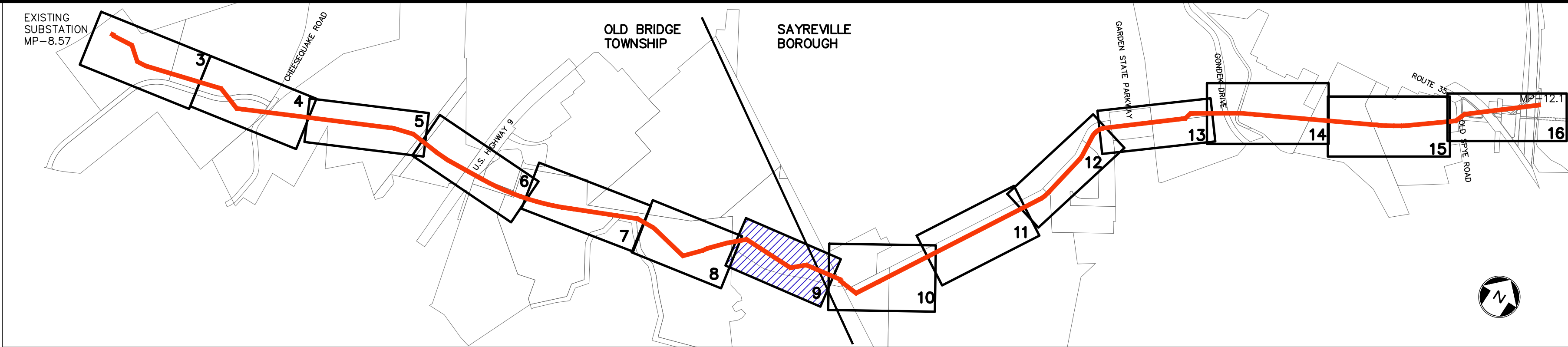
PROJECT: NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH MIDDLESEX COUNTY, NEW JERSEY

SHEET TITLE: WETLAND PERMIT PLAN MP 9.4 - MP 9.6

PROJECT NO.: 05731.0002 DRAWN BY: JPS
SCALE: 1" = 50' CHECKED BY: WS
DATE: 06/08/18 SHEET 6 OF 20
SHEET NO. **6**

WETLAND LEGEND

| | |
|----------|---|
| [Symbol] | PALUSTRINE EMERGENT (PEM) |
| [Symbol] | PALUSTRINE EMERGENT DISTURBED |
| [Symbol] | PALUSTRINE FORESTED (PFO) |
| [Symbol] | PALUSTRINE FORESTED DISTURBED |
| [Symbol] | PALUSTRINE SCRUB-SHRUB (PSS) |
| [Symbol] | PALUSTRINE SCRUB-SHRUB DISTURBED |
| [Symbol] | EMERGENT/INTERTIDAL/ESTUARINE (E2EM) |
| [Symbol] | EMERGENT/INTERTIDAL/ESTUARINE DISTURBED |
| [Symbol] | STATE OPEN WATER |
| [Symbol] | TRANSITION AREA DISTURBANCE |
| [Symbol] | TEMPORARY DISTURBANCE |
| [Symbol] | PERMANENT DISTURBANCE |
| [Symbol] | COASTAL WETLAND |



| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |

LEGEND

| | |
|----------|---|
| [Symbol] | PROPERTY LINE |
| [Symbol] | EXISTING CONTOURS |
| [Symbol] | EXISTING SPOT ELEVATION |
| [Symbol] | EXISTING STORM SEWER |
| [Symbol] | EXISTING WATER MAIN |
| [Symbol] | EXISTING GAS MAIN |
| [Symbol] | PROPOSED GAS MAIN |
| [Symbol] | EXISTING SIGN |
| [Symbol] | EXISTING UTILITY POLE |
| [Symbol] | PROPOSED GAS VALVE |
| [Symbol] | EXISTING TREELINE/CANOPY |
| [Symbol] | EXISTING TREE |
| [Symbol] | PROPOSED TREELINE |
| [Symbol] | EXISTING FENCE |
| [Symbol] | EXISTING RETAINING WALL |
| [Symbol] | EXISTING PERMANENT EASEMENT/TGPL R.O.W. |
| [Symbol] | PROPOSED PERMANENT EASEMENT |
| [Symbol] | PROPOSED LIMIT OF DISTURBANCE |
| [Symbol] | PROPOSED HDD LIMIT OF DISTURBANCE |
| [Symbol] | STREAM LINE |
| [Symbol] | WETLANDS BOUNDARY |
| [Symbol] | COASTAL WETLANDS BOUNDARY |
| [Symbol] | TOP OF BANK |
| [Symbol] | 50' WETLAND TRANSITION AREA |
| [Symbol] | RIPARIAN BUFFER |
| [Symbol] | MEAN HIGH WATER LINE |
| [Symbol] | SPRING HIGH WATER LINE |
| [Symbol] | MEAN HIGH WATER LINE 500' BUFFER |
| [Symbol] | TIDELANDS |
| [Symbol] | W-T01-005A-1 PHOTO LOCATION (SEE REPORT) |
| [Symbol] | WETLAND FLAGS |
| [Symbol] | STATE OPEN WATERS FLAGS |
| [Symbol] | FRESHWATER WETLAND/STATE OPEN WATER DATA POINTS |

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

THOMAS J. MURPHY, PLS
 DW SMITH ASSOCIATES, LLC
 1450 STATE ROUTE 34, WALL, NJ 07753
 PROFESSIONAL LAND SURVEYOR
 N.J. LIC. NO. 37207 COA NO. 24GA28122400

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
 PS&S, LLC
 1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
 PROFESSIONAL ENGINEER
 N.J. LIC. NO. 41319 COA NO. 24GA28032700

04/24/19

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
 PS&S
 1433 ROUTE 34 SUITE A4 WALL, NJ 07727 PHONE: (848) 206-2626
 CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS. THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT.

UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ONLY", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DERIVED THEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI AND SARTOR, LLC IS PROHIBITED.

COPYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC. - ALL RIGHTS RESERVED.

PROJECT
 NORTHEAST SUPPLY
 ENHANCEMENT PROJECT
 PROPOSED
 26" MADISON LOOP
 OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH
 MIDDLESEX COUNTY, NEW JERSEY

SHEET TITLE
 WETLAND
 PERMIT PLAN
 MP 10.1 - MP 10.4

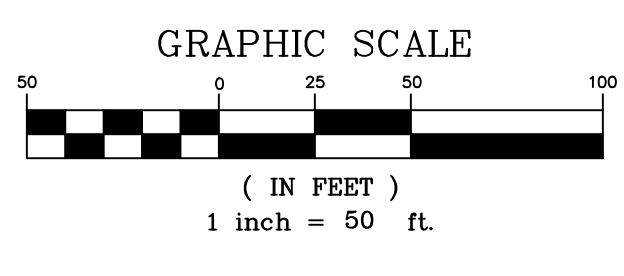
PROJECT NO.: 05731.0002 DRAWN BY: JPS
 SCALE: 1" = 50' CHECKED BY: WS
 DATE: 06/08/18 SHEET 9 OF 20
 SHEET NO. **9**

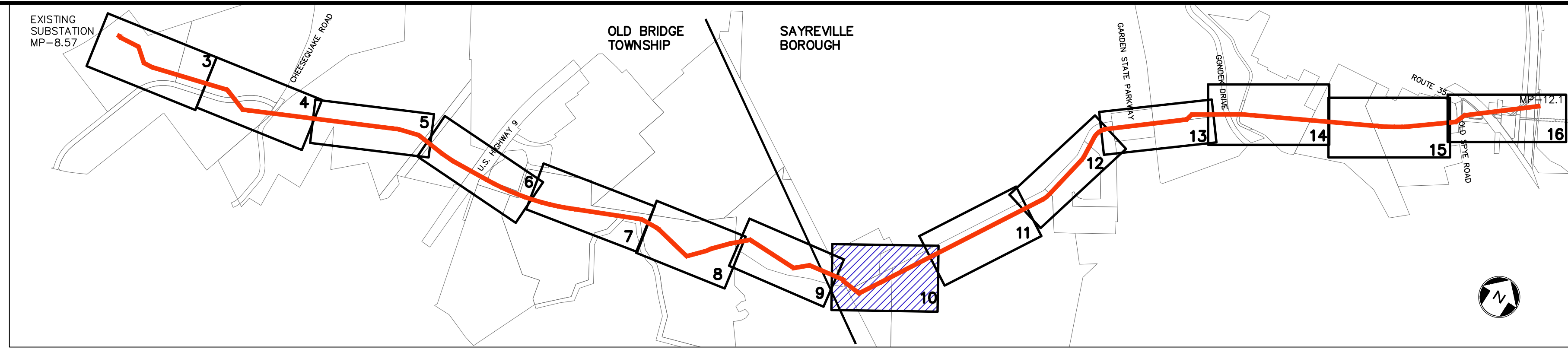
WETLAND UTILITY CROSSING TABULATION

| WETLAND ID | MILE POST | STATION | PALUSTRINE EMERGENT (PEM) (ACRES) | | | PALUSTRINE FORESTED (PFO) (ACRES) | | | PALUSTRINE SCRUB-SHRUB (PSS) (ACRES) | | | EMERGENT/INTERTIDAL/ESTUARINE | | | TRANSITION AREA | | | STATE OPEN WATER |
|------------------|---------------|---------|-----------------------------------|------------------|----------------------------------|-----------------------------------|------------------|----------------------------------|--------------------------------------|------------------|----------------------------------|-------------------------------|------------------|----------------------------------|------------------|------------------|----------------------------------|------------------|
| | | | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT |
| W-T01-006A-1 | 8.61 | 101+61 | 0.005 | | | | | | | | | | | | 0.052 | 0.068 | | 0.022 |
| STATE OPEN WATER | | 101+61 | | | | | | | | | | | | | | | | |
| W-T01-006A-1 | | 105+89 | 0.007 | | | | | | | | | | | | | | | |
| W-T01-007A-1 | | 105+80 | | | | | | | | | | | | | | | | |
| W-T01-003A-1 | 8.69 - 8.77 | 107+94 | 0.074 | | | | | | | | | | | | 0.231 | 0.304 | | |
| W-T01-003C-1 | | 109+35 | | | | 0.238 | | | | | | | | | | | | |
| STATE OPEN WATER | | 109+15 | | | | | | | | | | | | | | | | 0.016 |
| W-T01-007C-1 | | 108+59 | | | | | | | | | | | | | | | | |
| W-T01-003C-1 | 8.80A | 108+35 | | | | | | | | | | | | | 0.063 | | | 0.009 |
| STATE OPEN WATER | | 109+99 | | | | | | | | | | | | | | | | |
| W-T15-001A-1 | 8.80B | 107+42 | 0.022 | | | | | | | | | | | | | | 0.228 | |
| STATE OPEN WATER | | 109+05 | | | | | | | | | | | | | 0.119 | 0.179 | 0.006 | 0.017 |
| W-T01-009A-1 | 8.90 | 115+65 | 0.060 | | | | | | | | | | | | | | | |
| W-T01-010C-1 | 8.96 | 120+48 | | | | | | | | | | | | | | | | |
| W-T15-002A-1 | | 130+69 | 0.012 | | | | | | | | | | | | | | | |
| W-T15-003A-1 | 9.20 - 9.32 | 132+54 | 0.072 | | | | | | | | | | | | 0.141 | 0.183 | 0.142 | |
| W-T15-003C-1 | | 134+02 | | | | 0.045 | | | | | | | | | | | | |
| STATE OPEN WATER | | 134+29 | | | | | | | | | | | | | | | | 0.035 |
| W-T15-004C-1 | | 170+17 | | | | | | | | | | | | | | | | |
| W-T01-014B-1 | | 178+96 | 0.494 | | | | | | | | | | | | 1.093 | 0.136 | 0.549 | |
| W-T01-014C-1 | 10.05 - 10.19 | 181+88 | | | | 0.034 | | | | | | | | | | | | |
| W-T01-014B-1 | | 184+08 | | | | | | | 0.007 | | | | | | | | | |
| STATE OPEN WATER | | 177+44 | | | | | | | | | | | | | | | | 0.058 |
| W-T01-015D-1 | 10.45 | 190+70 | | | | 0.544 | | | | | | | | | 0.263 | 0.002 | 0.016 | |
| W-T01-011A-1 | | 213+85 | | | | | | | | | | | | | | | | |
| W-T01-012D-1 | 10.69 - 10.74 | 210+30 | | | | | | | | | | | | | 0.079 | 0.013 | 0.168 | |
| W-T07-002A-1 | | 224+34 | 0.001 | | | | | | | | | | | | | | | |
| W-T07-001D-1 | 10.87 - 10.94 | 223+23 | | | | | | | | | | | | | | | | |
| W-T07-002C-1 | | 220+70 | | | | | | | | | | | | | | | | |
| W-T07-003A-1 | | 244+98 | 0.681 | | | | | | | | | | | | 0.448 | 0.036 | 0.177 | |
| W-T07-003B-1 | 11.35 - 11.42 | 248+08 | | | | | | | | | | | | | | | | |
| W-T07-004D-1 | 11.43 - 11.60 | 250+31 | | | | | | | | | | | | | 0.002 | 0.038 | | |
| W-T01-017A-1 | 11.77 - 11.94 | 288+16 | 0.004 | | | | | | | | | | | | 0.021 | 0.101 | 0.238 | |
| W-T01-017D-1 | | 270+67 | | | | | | | | | | | | | 2.447 | 1.143 | 1.592 | 0.157 |
| TOTAL | | | 1.976 | 0.000 | 0.000 | 0.000 | 0.327 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | | | | |

NOTES:

- SEE DETAIL SHEETS 17-19 FOR METHODS OF STREAM CROSSING AND STREAM DIVERSION.
- FRESHWATER WETLANDS TRANSITION AREA TEMPORARY DISTURBANCE WITH RESTORATION SHALL BE PROVIDED FOR ALL DISTURBANCE BEYOND PERMANENT EASEMENTS.





KEY MAP
SCALE: 1" = 1000'

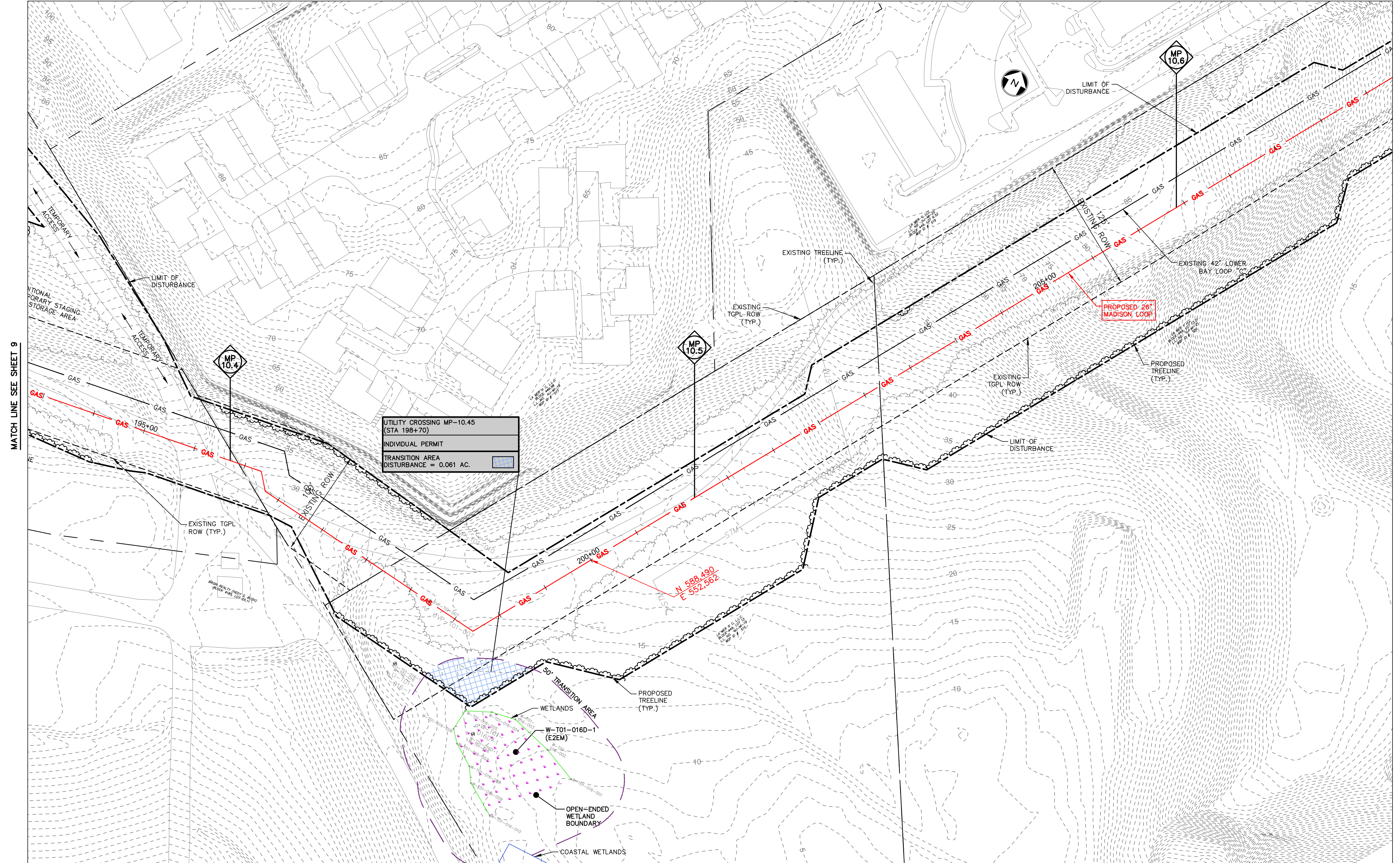
WETLAND LEGEND

| | |
|----------|---|
| [Symbol] | PALUSTRINE EMERGENT (PEM) |
| [Symbol] | PALUSTRINE EMERGENT DISTURBED |
| [Symbol] | PALUSTRINE FORESTED (PFO) |
| [Symbol] | PALUSTRINE FORESTED DISTURBED |
| [Symbol] | PALUSTRINE SCRUB-SHRUB (PSS) |
| [Symbol] | PALUSTRINE SCRUB-SHRUB DISTURBED |
| [Symbol] | EMERGENT/INTERTIDAL/ESTUARINE (E2EM) |
| [Symbol] | EMERGENT/INTERTIDAL/ESTUARINE DISTURBED |
| [Symbol] | STATE OPEN WATER |
| [Symbol] | TRANSITION AREA DISTURBANCE |
| [Symbol] | TEMPORARY DISTURBANCE |
| [Symbol] | PERMANENT DISTURBANCE |
| [Symbol] | COASTAL WETLAND |

| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |

LEGEND

| | |
|----------|--|
| [Symbol] | PROPERTY LINE |
| [Symbol] | EXISTING CONTOURS |
| [Symbol] | EXISTING SPOT ELEVATION |
| [Symbol] | EXISTING STORM SEWER |
| [Symbol] | EXISTING WATER MAIN |
| [Symbol] | EXISTING GAS MAIN |
| [Symbol] | PROPOSED GAS MAIN |
| [Symbol] | EXISTING SIGN |
| [Symbol] | EXISTING UTILITY POLE |
| [Symbol] | PROPOSED GAS VALVE |
| [Symbol] | EXISTING TREE |
| [Symbol] | PROPOSED TREELINE |
| [Symbol] | EXISTING FENCE |
| [Symbol] | EXISTING RETAINING WALL |
| [Symbol] | EXISTING PERMANENT EASEMENT/TGPL R.O.W. EASEMENT |
| [Symbol] | PROPOSED PERMANENT EASEMENT |
| [Symbol] | PROPOSED LIMIT OF DISTURBANCE |
| [Symbol] | PROPOSED HDD LIMIT OF DISTURBANCE |
| [Symbol] | STREAM LINE |
| [Symbol] | WETLANDS BOUNDARY |
| [Symbol] | COASTAL WETLANDS BOUNDARY |
| [Symbol] | TOP OF BANK |
| [Symbol] | 50' WETLAND TRANSITION AREA |
| [Symbol] | RIPIARIAN BUFFER |
| [Symbol] | MEAN HIGH WATER LINE |
| [Symbol] | SPRING HIGH WATER LINE |
| [Symbol] | MEAN HIGH WATER LINE 500' BUFFER |
| [Symbol] | TIDELANDS |
| [Symbol] | PHOTO LOCATION (SEE REPORT) |
| [Symbol] | WETLAND FLAGS |
| [Symbol] | STATE OPEN WATERS FLAGS |
| [Symbol] | FRESHWATER WETLAND/STATE OPEN WATER DATA POINTS |



MATCH LINE SEE SHEET 9

MATCH LINE SEE SHEET 11

UTILITY CROSSING MP-10.45
(STA 198+70)
INDIVIDUAL PERMIT
TRANSITION AREA
DISTURBANCE = 0.061 AC.

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

THOMAS J. MURPHY, PLS
DW SMITH ASSOCIATES, LLC
1450 STATE ROUTE 34, WALL, NJ 07753
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 37207 COA NO. 24GA28122400

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
PS&S, LLC
1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
PROFESSIONAL ENGINEER
N.J. LIC. NO. 41319 COA NO. 24GA28032700

PS&S
1433 ROUTE 34
SUITE A4
WALL, NJ 07727
PHONE: (848) 206-2626

CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. DRAWINGS DO NOT SCALE. THE DRAWINGS TO DETERMINE DIMENSIONS.

THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT.

THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI AND SARTOR, LLC IS PROHIBITED.

UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

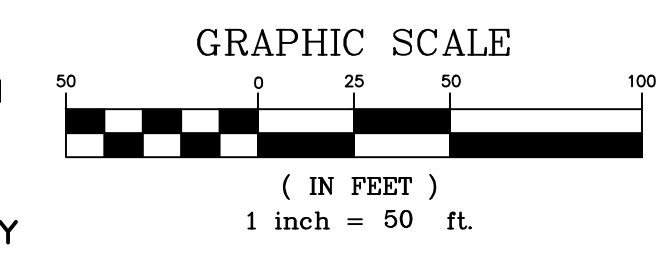
COPYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC - ALL RIGHTS RESERVED.

PROJECT
NORTHEAST SUPPLY
ENHANCEMENT PROJECT
PROPOSED
26" MADISON LOOP
OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH
MIDDLESEX COUNTY, NEW JERSEY

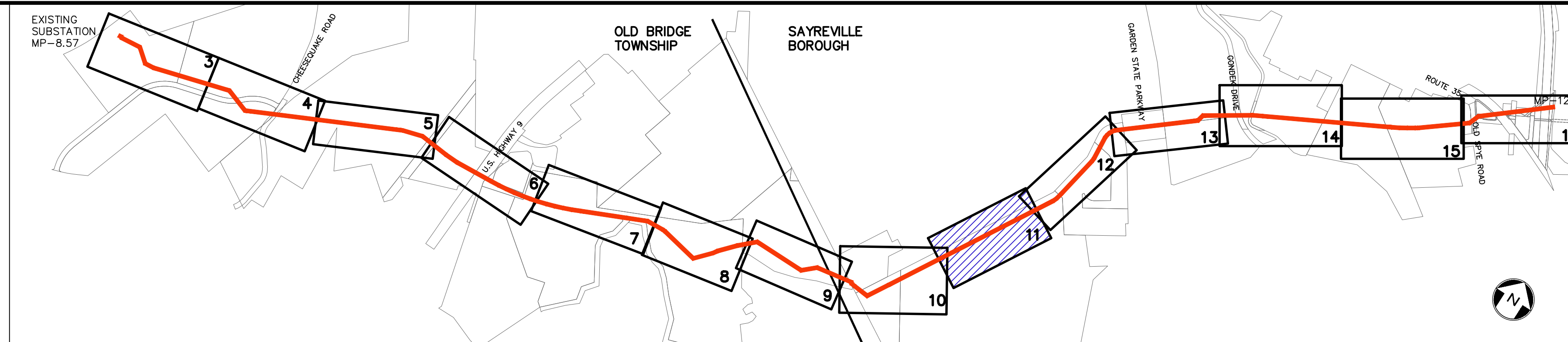
SHEET TITLE
WETLAND
PERMIT PLAN
MP 10.4 - MP 10.6

NOTES:

- SEE DETAIL SHEETS 17-19 FOR METHODS OF STREAM CROSSING AND STREAM DIVERSION.
- SEE SHEET 9 FOR WETLAND UTILITY CROSSING TABULATION.
- FRESHWATER WETLANDS TRANSITION AREA TEMPORARY DISTURBANCE WITH RESTORATION SHALL BE PROVIDED FOR ALL DISTURBANCE BEYOND PERMANENT EASEMENTS.



PROJECT NO.: 05731.0002 | DRAWN BY: JPS
SCALE: 1" = 50' | CHECKED BY: WS
DATE: 06/08/18 | SHEET 10 OF 20
SHEET NO.

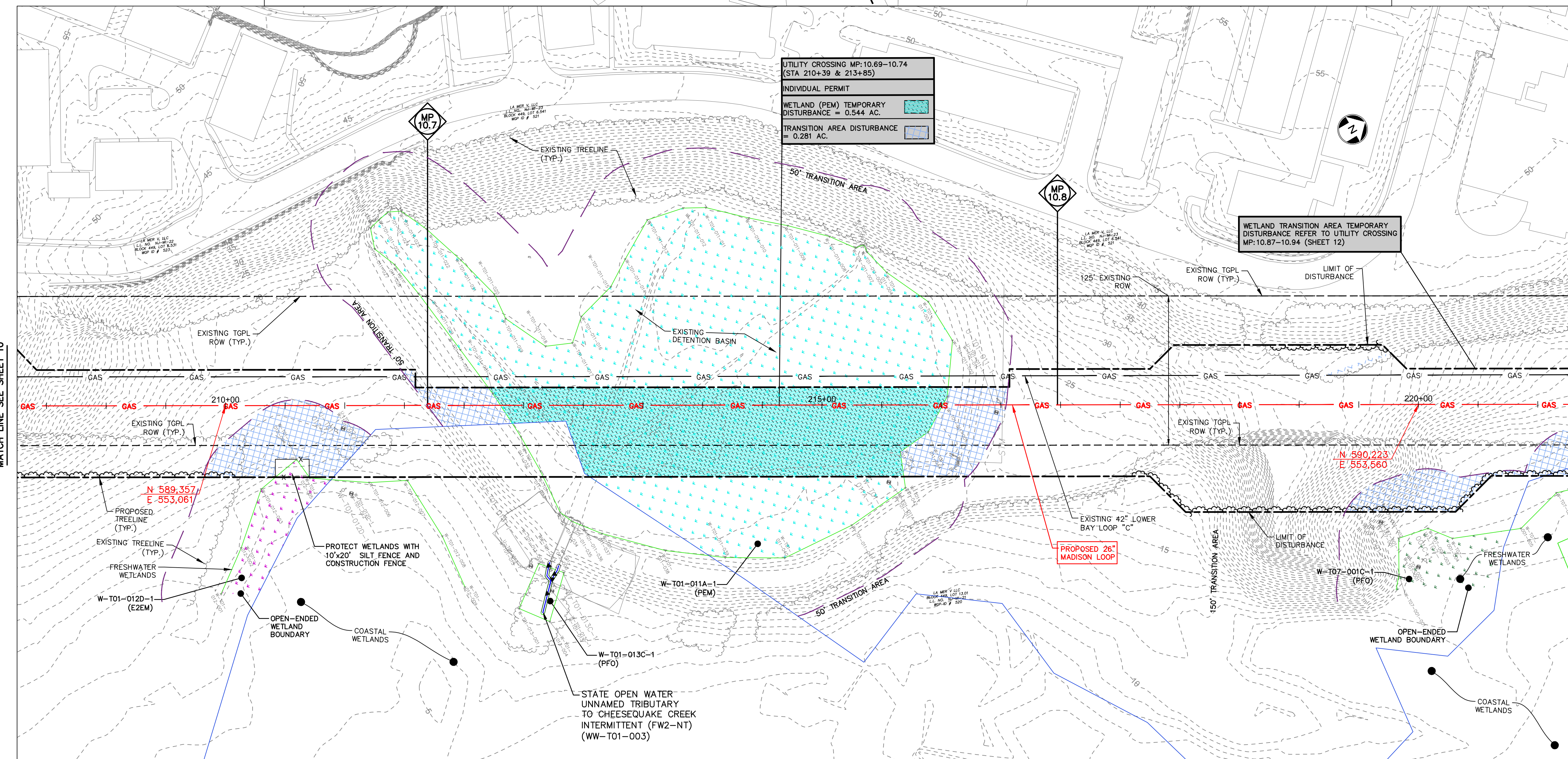


KEY MAP
SCALE: 1" = 1000'

| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |

LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- EXISTING SPOT ELEVATION
- EXISTING STORM SEWER
- EXISTING WATER MAIN
- EXISTING GAS MAIN
- PROPOSED GAS MAIN
- EXISTING SIGN
- EXISTING UTILITY POLE
- PROPOSED GAS VALVE
- EXISTING TREE/ CANOPY
- EXISTING TREE
- PROPOSED TREELINE
- EXISTING FENCE
- EXISTING RETAINING WALL
- EXISTING PERMANENT EASEMENT/ TGPL R.O.W. EASEMENT
- PROPOSED PERMANENT EASEMENT
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED HDD LIMIT OF DISTURBANCE
- STREAM LINE
- WETLANDS BOUNDARY
- COASTAL WETLANDS BOUNDARY
- TOP OF BANK
- 50' WETLAND TRANSITION AREA
- RIPARIAN BUFFER
- MEAN HIGH WATER LINE
- SPRING HIGH WATER LINE
- MEAN HIGH WATER LINE 500' BUFFER
- IDEALANDS
- W-T01-005A-1 PHOTO LOCATION (SEE REPORT)
- WETLAND FLAGS
- STATE OPEN WATERS FLAGS
- FRESHWATER WETLAND/ STATE OPEN WATER DATA POINTS



UTILITY CROSSING MP-10.69-10.74 (STA 210+39 & 213+85)
INDIVIDUAL PERMIT
WETLAND (PEM) TEMPORARY DISTURBANCE = 0.544 AC.
TRANSITION AREA DISTURBANCE = 0.281 AC.

WETLAND TRANSITION AREA TEMPORARY DISTURBANCE REFER TO UTILITY CROSSING MP:10.87-10.94 (SHEET 12)

MATCH LINE SEE SHEET 10

MATCH LINE SEE SHEET 12

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

THOMAS J. MURPHY, PLS
DW SMITH ASSOCIATES, LLC
1450 STATE ROUTE 34, WALL, NJ 07753
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 37207 COA NO. 24GA28124400

SIGNATURE _____ DATE _____

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
PS&S, LLC
1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
PROFESSIONAL ENGINEER
N.J. LIC. NO. 41319 COA NO. 24GA28032700

SIGNATURE *W. Salmon* DATE 04/24/19

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
1433 ROUTE 34 SUITE A4 WALL, NJ 07727 PHONE: (848) 206-2626
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT.

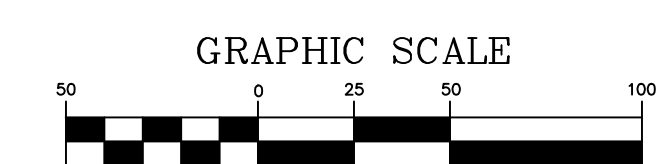
UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION SET", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

COPYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC - ALL RIGHTS RESERVED.

| WETLAND ID | MILE POST | STATION | PALUSTRINE EMERGENT (PEM) (ACRES) | | | PALUSTRINE FORESTED (PFO) (ACRES) | | | PALUSTRINE SCRUB-SHRUB (PSS) (ACRES) | | | EMERGENT/INTERTIDAL/ESTUARINE WETLANDS | | | TRANSITION AREA | | | STATE OPEN WATER |
|------------------|---------------|---------|-----------------------------------|------------------|----------------------------------|-----------------------------------|------------------|----------------------------------|--------------------------------------|------------------|----------------------------------|--|------------------|----------------------------------|------------------|------------------|----------------------------------|------------------|
| | | | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | |
| W-T01-008A-1 | 8.61 | 101+61 | 0.005 | | | | | | | | | | | 0.052 | 0.058 | | 0.022 | |
| STATE OPEN WATER | | 101+61 | | | | | | | | | | | | | | | | |
| W-T01-005A-1 | | 106+89 | 0.007 | | | | | | | | | | | | | | | |
| W-T01-007A-1 | | 106+80 | | | | | | | | | | | | | | | | |
| W-T01-003A-1 | 8.69 - 8.77 | 107+94 | 0.074 | | | | | | | | | | | 0.231 | 0.304 | | | |
| W-T01-005C-1 | | 108+35 | | | | | | | | | | | | | | | | |
| STATE OPEN WATER | | 109+15 | | | | | | | | | | | | | | | 0.015 | |
| W-T01-007C-1 | | 108+59 | | | | | | | | | | | | | | | | |
| W-T01-003C-1 | 8.80A | 108+35 | | | | | | | | | | | | | | 0.063 | | |
| STATE OPEN WATER | | 108+99 | | | | | | | | | | | | | | | 0.009 | |
| W-T15-005A-1 | 8.80B | 107+42 | 0.022 | | | | | | | | | | | | | | 0.228 | |
| STATE OPEN WATER | | 109+05 | | | | | | | | | | | | | | | 0.017 | |
| W-T01-009A-1 | 8.90 | 116+65 | 0.060 | | | | | | | | | | | 0.119 | 0.179 | 0.006 | | |
| W-T01-005C-1 | 8.96 | 120+08 | | | | | | | | | | | | | 0.035 | | | |
| W-T15-002A-1 | | 138+58 | 0.012 | | | | | | | | | | | | | | | |
| W-T15-003A-1 | | 132+54 | 0.072 | | | | | | | | | | | 0.141 | 0.183 | 0.142 | | |
| W-T15-003C-1 | 9.20 - 9.32 | 134+07 | | | | | | | | | | | | | | | 0.035 | |
| STATE OPEN WATER | | 134+29 | | | | | | | | | | | | | | | | |
| W-T15-004C-1 | | 178+17 | | | | | | | | | | | | | | | | |
| W-T01-014A-1 | | 178+96 | 0.454 | | | | | | | | | | | | | | | |
| W-T01-014C-1 | 10.05 - 10.19 | 181+88 | | | | | | | | | | | | 1.093 | 0.136 | 0.549 | | |
| W-T01-015B-1 | | 184+08 | | | | | | | | | | | | | | | | |
| STATE OPEN WATER | | 177+44 | | | | | | | | | | | | | | | 0.058 | |
| W-T01-015D-1 | 10.45 | 158+70 | | | | | | | | | | | | | | 0.021 | 0.040 | |
| W-T01-011A-1 | | 213+85 | 0.544 | | | | | | | | | | | 0.263 | 0.002 | 0.016 | | |
| W-T01-012A-1 | 10.69 - 10.74 | 210+39 | | | | | | | | | | | | | | | | |
| W-T07-002A-1 | | 224+34 | 0.001 | | | | | | | | | | | | | | | |
| W-T07-001D-1 | 10.87-10.94 | 223+23 | | | | | | | | | | | | 0.079 | 0.013 | 0.168 | | |
| W-T07-001C-1 | | 220+70 | | | | | | | | | | | | | | | | |
| W-T07-005A-1 | | 246+98 | 0.681 | | | | | | | | | | | 0.448 | 0.036 | 0.177 | | |
| W-T07-003B-1 | 11.36 - 11.42 | 248+08 | | | | | | | | | | | | | | | | |
| W-T07-004D-1 | 11.43 - 11.50 | 250+31 | | | | | | | | | | | | | | 0.002 | 0.038 | |
| W-T01-017A-1 | | 268+16 | 0.004 | | | | | | | | | | | 0.021 | 0.101 | 0.238 | | |
| W-T01-017B-1 | 11.77 - 11.94 | 270+67 | | | | | | | | | | | | | | | | |
| TOTAL | | | 1.975 | 0.000 | 0.000 | 0.000 | 0.327 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.000 | 2.447 | 1.143 | 1.592 | 0.157 | |

WETLAND LEGEND

- PALUSTRINE EMERGENT (PEM)
- PALUSTRINE EMERGENT DISTURBED
- PALUSTRINE FORESTED (PFO)
- PALUSTRINE FORESTED DISTURBED
- PALUSTRINE SCRUB-SHRUB (PSS)
- PALUSTRINE SCRUB-SHRUB DISTURBED
- EMERGENT/INTERTIDAL/ESTUARINE (E2EM)
- EMERGENT/INTERTIDAL/ESTUARINE DISTURBED
- STATE OPEN WATER
- TRANSITION AREA DISTURBANCE
- TEMPORARY DISTURBANCE
- PERMANENT DISTURBANCE
- COASTAL WETLAND



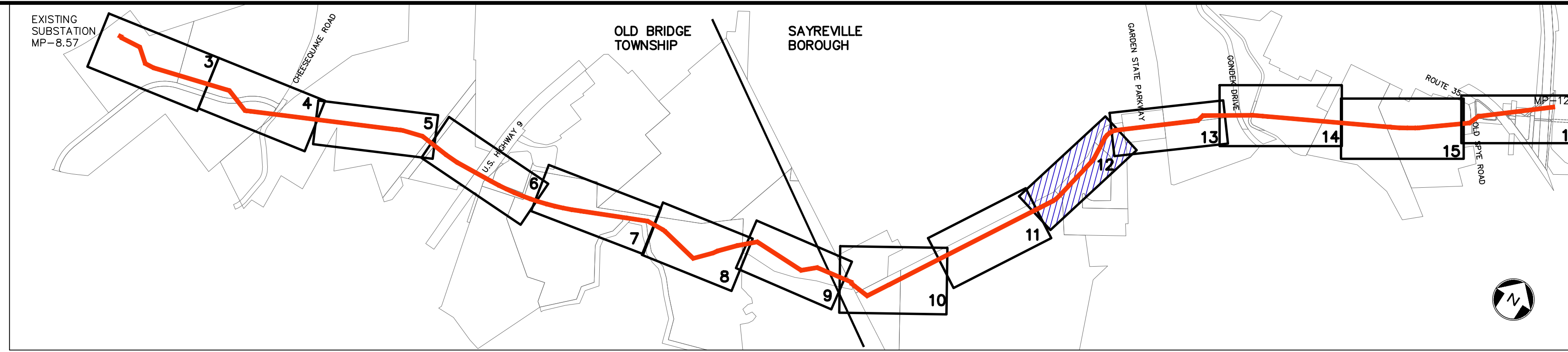
NOTES:

- SEE DETAIL SHEETS 17-19 FOR METHODS OF STREAM CROSSING AND STREAM DIVERSION.
- FRESHWATER WETLANDS TRANSITION AREA TEMPORARY DISTURBANCE WITH RESTORATION SHALL BE PROVIDED FOR ALL DISTURBANCE BEYOND PERMANENT EASEMENT.

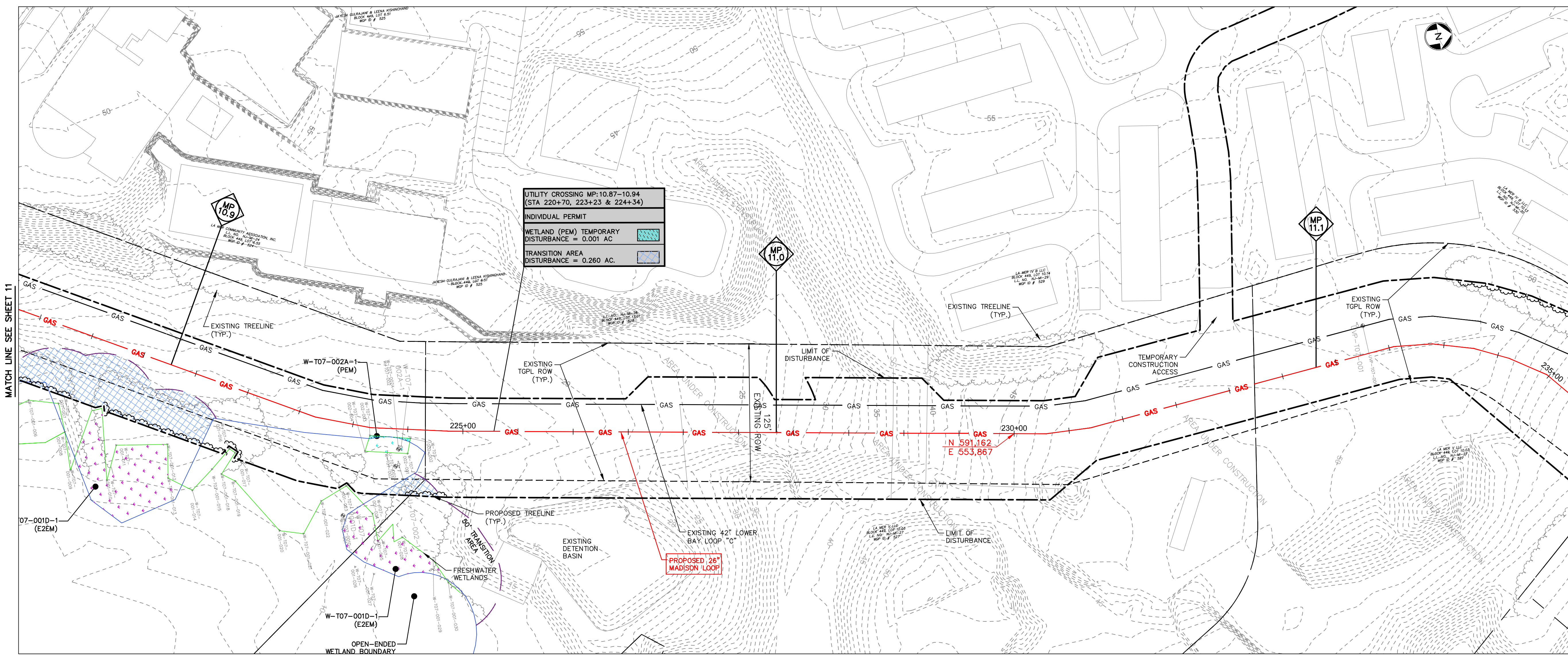
PROJECT
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED
26" MADISON LOOP
OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH
MIDDLESEX COUNTY, NEW JERSEY

SHEET TITLE
WETLAND PERMIT PLAN
MP 10.6 - MP 10.9

PROJECT NO.: 05731.0002 DRAWN BY: JPS
SCALE: 1" = 50' CHECKED BY: WS
DATE: 06/08/18 SHEET 11 OF 20
SHEET NO. **11**



KEY MAP
SCALE: 1" = 1000'



UTILITY CROSSING MP: 10.87-10.94
(STA 220+70, 223+23 & 224+34)
INDIVIDUAL PERMIT
WETLAND (PEM) TEMPORARY
DISTURBANCE = 0.001 AC.
TRANSITION AREA
DISTURBANCE = 0.260 AC.

LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- EXISTING SPOT ELEVATION
- EXISTING STORM SEWER
- EXISTING WATER MAIN
- EXISTING GAS MAIN
- PROPOSED GAS MAIN
- EXISTING SIGN
- EXISTING UTILITY POLE
- PROPOSED GAS VALVE
- EXISTING TREELINE/CANOPY
- EXISTING TREE
- PROPOSED TREELINE
- EXISTING FENCE
- EXISTING RETAINING WALL
- EXISTING PERMANENT EASEMENT/TGPL R.O.W. EASEMENT
- PROPOSED PERMANENT EASEMENT
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED HDD LIMIT OF DISTURBANCE
- STREAM LINE
- WETLANDS BOUNDARY
- COASTAL WETLANDS BOUNDARY
- TOP OF BANK
- 50' WETLAND TRANSITION AREA
- RIPARIAN BUFFER
- MEAN HIGH WATER LINE
- SPRING HIGH WATER LINE
- MEAN HIGH WATER LINE 500' BUFFER
- TIDELANDS
- PHOTO LOCATION (SEE REPORT)
- WETLAND FLAGS
- STATE OPEN WATERS FLAGS
- FRESHWATER WETLAND/STATE OPEN WATER DATA POINTS

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

THOMAS J. MURPHY, PLS
DW SMITH ASSOCIATES, LLC
1450 STATE ROUTE 34, WALL, NJ 07753
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 37207 COA NO. 24GA28124400

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
PS&S, LLC
1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
PROFESSIONAL ENGINEER
N.J. LIC. NO. 41319 COA NO. 24GA28032700

04/24/19

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
1433 ROUTE 34
SUITE A4
WALL, NJ 07727
PHONE: (848) 206-2626

CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS. THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT. THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI AND SARTOR, LLC IS PROHIBITED. UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

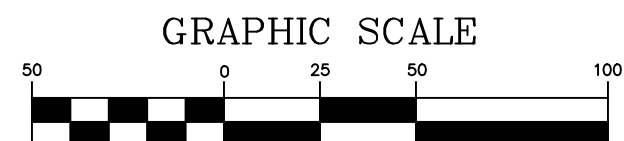
COPYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC - ALL RIGHTS RESERVED.

WETLAND UTILITY CROSSING TABULATION

| WETLAND ID | MILE POST | STATION | PALUSTRINE EMERGENT (PEM) (ACRES) | | | PALUSTRINE FORESTED (PFO) (ACRES) | | | PALUSTRINE SCRUB-SHRUB (PSS) (ACRES) | | | EMERGENT/INTERTIDAL/ESTUARINE WETLANDS | | | TRANSITION AREA | | | STATE OPEN WATER |
|------------------|---------------|---------|-----------------------------------|------------------|----------------------------------|-----------------------------------|------------------|----------------------------------|--------------------------------------|------------------|----------------------------------|--|------------------|----------------------------------|------------------|------------------|----------------------------------|------------------|
| | | | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT |
| W-101-008A-1 | | 101+61 | 0.005 | | | | | | | | | | | | | | | |
| STATE OPEN WATER | 8.61 | 101+61 | | | | | | | | | | | | 0.052 | 0.068 | | | 0.022 |
| W-101-006A-1 | | 105+89 | 0.007 | | | | | | | | | | | | | | | |
| W-101-007A-1 | | 106+80 | 0.074 | | | | | | | | | | | | | | | |
| W-101-008A-1 | 8.69 - 8.77 | 107+94 | | | | | | | | | | | | 0.231 | 0.304 | | | |
| W-101-003C-1 | | 108+35 | | | | 0.338 | | | | | | | | | | | | |
| STATE OPEN WATER | | 109+15 | | | | | | | | | | | | | | | | 0.016 |
| W-101-007C-1 | | 108+59 | | | | | | | | | | | | | | | | |
| W-101-003C-1 | 8.80A | 108+35 | | | | | | | | | | | | | | | | |
| STATE OPEN WATER | | 108+99 | | | | | | | | | | | | | | | | 0.009 |
| W-115-001A-1 | 8.80B | 107+42 | 0.022 | | | | | | | | | | | | | | | |
| STATE OPEN WATER | | 109+05 | | | | | | | | | | | | | | | | 0.017 |
| W-101-009A-1 | 8.90 | 115+65 | 0.060 | | | | | | | | | | | 0.119 | 0.179 | 0.006 | | |
| W-101-010C-1 | 8.95 | 120+08 | | | | | | | | | | | | | 0.035 | | | |
| W-115-002A-1 | | 138+68 | 0.012 | | | | | | | | | | | | | | | |
| W-115-003A-1 | | 132+54 | 0.072 | | | | | | | | | | | 0.141 | 0.183 | 0.142 | | |
| W-115-003C-1 | 9.20 - 9.32 | 134+02 | | | | 0.045 | | | | | | | | | | | | |
| STATE OPEN WATER | | 134+29 | | | | | | | | | | | | | | | | 0.035 |
| W-115-004C-1 | | 178+17 | | | | 0.010 | | | | | | | | | | | | |
| W-101-014A-1 | | 178+96 | 0.496 | | | | | | | | | | | | | | | |
| W-101-014C-1 | 10.05 - 10.19 | 183+48 | | | | 0.034 | | | | | | | | 1.093 | 0.136 | 0.549 | | |
| W-101-014B-1 | | 184+08 | | | | | | 0.007 | | | | | | | | | | |
| STATE OPEN WATER | | 177+44 | | | | | | | | | | | | | | | | 0.058 |
| W-101-015D-1 | 10.45 | 198+70 | | | | | | | | | | | | | | | | |
| W-101-015A-1 | | 211+89 | 0.546 | | | | | | | | | | | | | | | |
| W-101-012D-1 | 10.69 - 10.74 | 210+30 | | | | | | | | | | | | 0.263 | 0.002 | 0.016 | | |
| W-107-002A-1 | | 224+34 | 0.001 | | | | | | | | | | | | | | | |
| W-107-001D-1 | 10.87-10.94 | 223+23 | | | | | | | | | | | | 0.079 | 0.013 | 0.168 | | |
| W-107-001C-1 | | 220+70 | | | | | | | | | | | | | | | | |
| W-107-003A-1 | | 244+98 | 0.681 | | | | | | | | | | | | | | | |
| W-107-003B-1 | 11.36 - 11.42 | 248+08 | | | | | | | | | | | | 0.448 | 0.036 | 0.177 | | |
| W-107-004D-1 | 11.45 - 11.60 | 250+31 | | | | | | | 0.004 | | | | | | | | | 0.038 |
| W-101-017A-1 | | 268+16 | 0.004 | | | | | | | | | | | | | | | |
| W-101-017D-1 | | 270+67 | | | | | | | | | | | | 0.021 | 0.101 | 0.238 | | |
| TOTAL | | | 1.975 | 0.000 | 0.000 | 0.000 | 0.327 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.000 | 2.447 | 1.143 | 1.592 | 0.157 | |

WETLAND LEGEND

- PALUSTRINE EMERGENT (PEM)
- PALUSTRINE EMERGENT DISTURBED
- PALUSTRINE FORESTED (PFO)
- PALUSTRINE FORESTED DISTURBED
- PALUSTRINE SCRUB-SHRUB (PSS)
- PALUSTRINE SCRUB-SHRUB DISTURBED
- EMERGENT/INTERTIDAL/ESTUARINE (E2EM)
- EMERGENT/INTERTIDAL/ESTUARINE DISTURBED
- STATE OPEN WATER
- TRANSITION AREA DISTURBANCE
- TEMPORARY DISTURBANCE
- PERMANENT DISTURBANCE
- COASTAL WETLAND

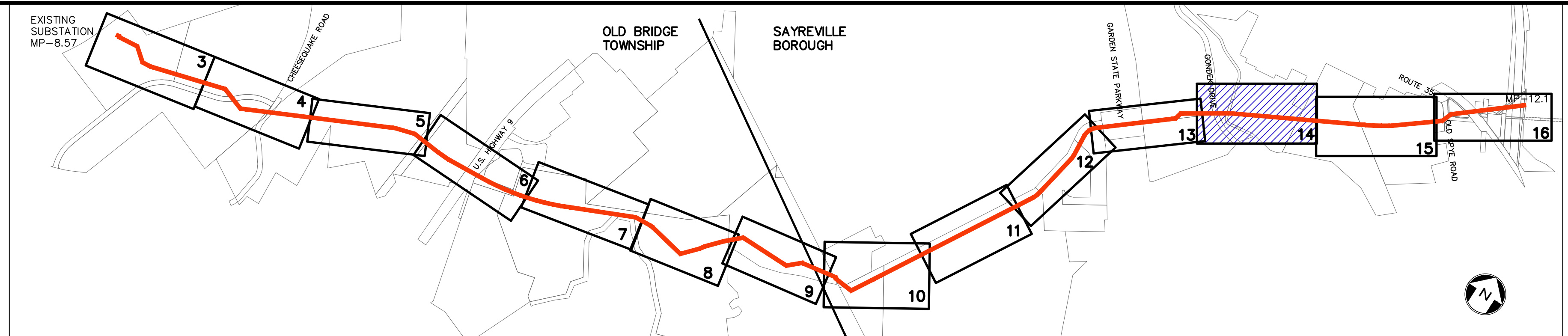


NOTES:
1. SEE DETAIL SHEETS 17-19 FOR METHODS OF STREAM CROSSING AND STREAM DIVERSION.
2. FRESHWATER WETLANDS TRANSITION AREA TEMPORARY DISTURBANCE WITH RESTORATION SHALL BE PROVIDED FOR ALL DISTURBANCE BEYOND PERMANENT EASEMENTS.

PROJECT
**NORTHEAST SUPPLY
ENHANCEMENT PROJECT
PROPOSED
26" MADISON LOOP**
OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH
MIDDLESEX COUNTY, NEW JERSEY

SHEET TITLE
**WETLAND
PERMIT PLAN
MP 10.9 - MP 11.1**

PROJECT NO.: 05731.0002 DRAWN BY: JPS
SCALE: 1" = 50' CHECKED BY: WS
DATE: 06/08/18 SHEET 12 OF 20
SHEET NO. **12**

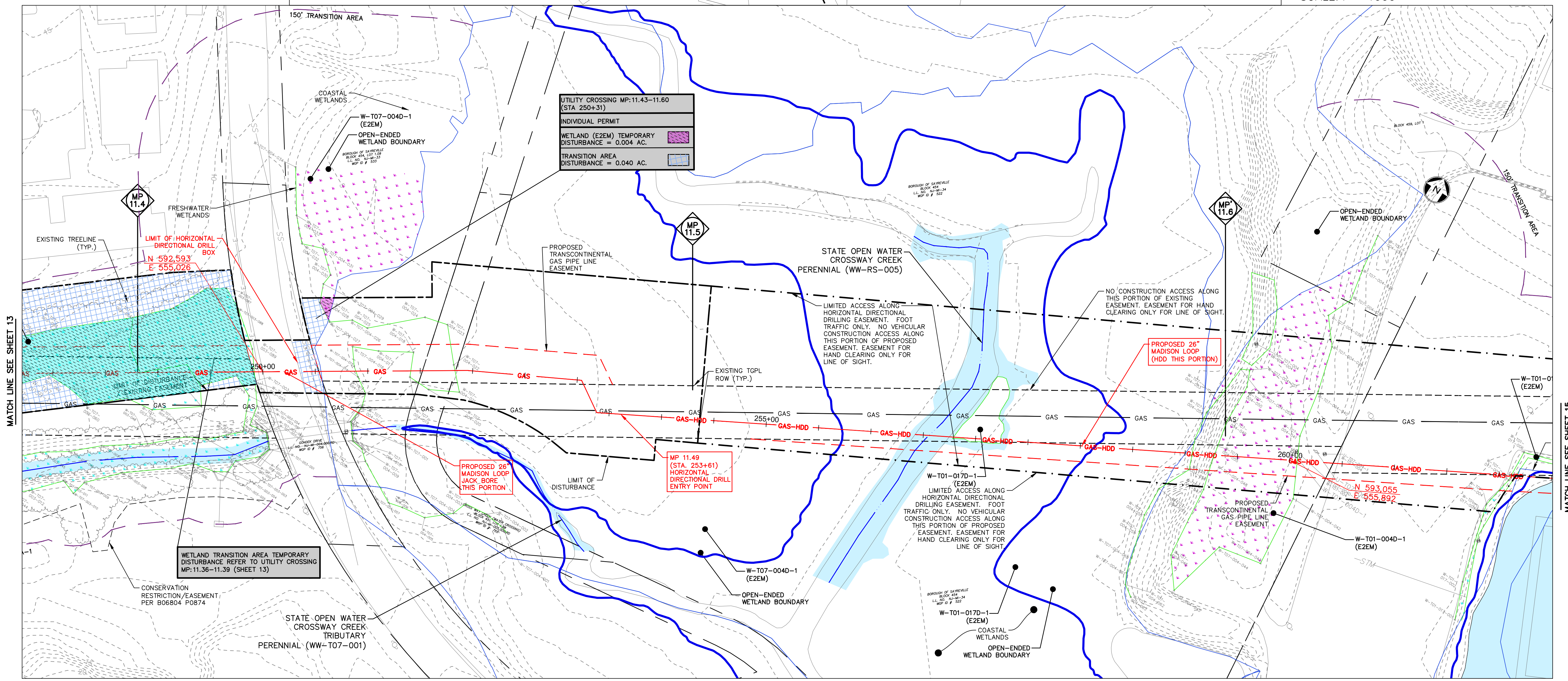


KEY MAP
SCALE: 1" = 1000'

| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |

LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- EXISTING SPOT ELEVATION
- EXISTING STORM SEWER
- EXISTING WATER MAIN
- EXISTING GAS MAIN
- PROPOSED GAS MAIN
- EXISTING SIGN
- EXISTING UTILITY POLE
- PROPOSED GAS VALVE
- EXISTING TREE
- EXISTING TREE
- PROPOSED TREELINE
- EXISTING FENCE
- EXISTING RETAINING WALL
- EXISTING PERMANENT EASEMENT/TGPL R.O.W.
- EXISTING TREE
- PROPOSED PERMANENT EASEMENT
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED HDD LIMIT OF DISTURBANCE
- STREAM LINE
- WETLANDS BOUNDARY
- COASTAL WETLANDS BOUNDARY
- TOP OF BANK
- 50' WETLAND TRANSITION AREA
- RIPARIAN BUFFER
- MEAN HIGH WATER LINE
- SPRING HIGH WATER LINE
- MEAN HIGH WATER LINE 500' BUFFER
- TIDELANDS
- W-T01-005A-1 PHOTO LOCATION (SEE REPORT)
- WETLAND FLAGS
- STATE OPEN WATERS FLAG
- FRESHWATER WETLAND/STATE OPEN WATER DATA POINTS



I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

THOMAS J. MURPHY, PLS
DW SMITH ASSOCIATES, LLC
1450 STATE ROUTE 34, WALL, NJ 07753
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 37207 COA NO. 24GA28124400

SIGNATURE _____ DATE _____

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
PS&S, LLC
1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
PROFESSIONAL ENGINEER
N.J. LIC. NO. 41319 COA NO. 24GA28032700

SIGNATURE *W. Salmon* DATE 04/24/19

PS&S
1433 ROUTE 34
SUITE A4
WALL, NJ 07727
PHONE: (848) 206-2626

CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

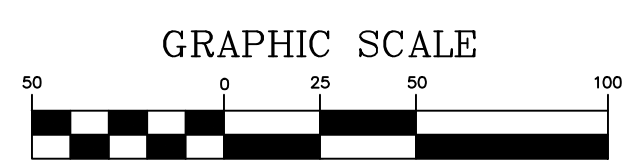
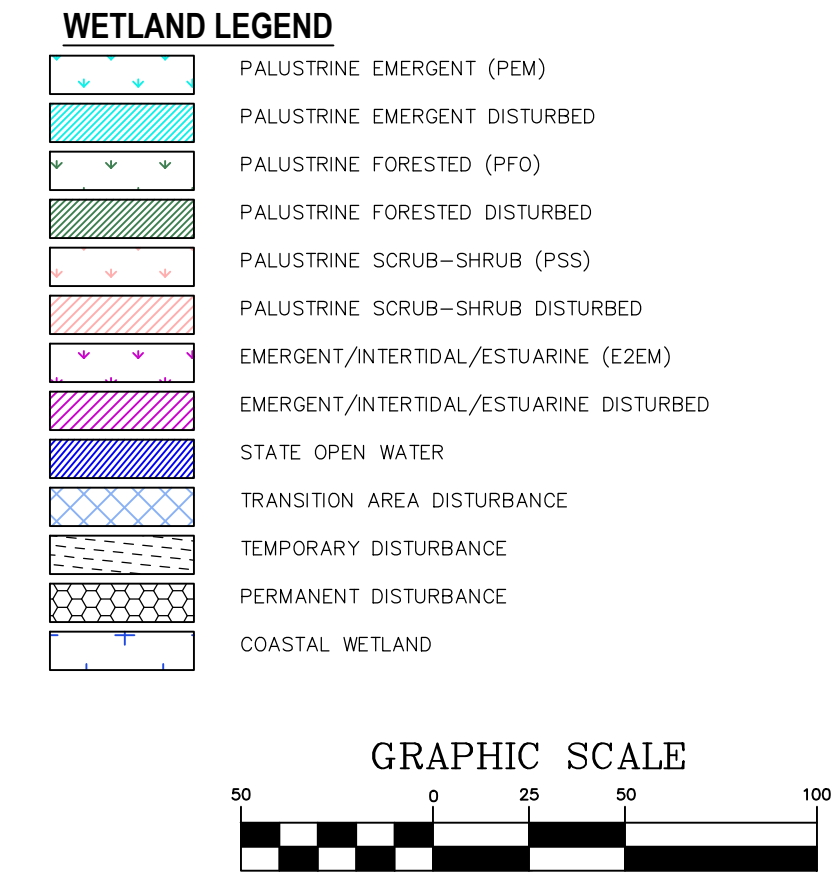
ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS.

THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT.

UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

COPYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC - ALL RIGHTS RESERVED.

| WETLAND ID | MILE POST | STATION | PALUSTRINE EMERGENT (PEM) (ACRES) | | | PALUSTRINE FORESTED (PFO) (ACRES) | | | PALUSTRINE SCRUB-SHRUB (PSS) (ACRES) | | | EMERGENT/INTERTIDAL/ESTUARINE (E2EM) WETLANDS | | | TRANSITION AREA | | STATE OPEN WATER | |
|------------------|---------------|---------|-----------------------------------|------------------|----------------------------------|-----------------------------------|------------------|----------------------------------|--------------------------------------|------------------|----------------------------------|---|------------------|----------------------------------|------------------|------------------|----------------------------------|-------|
| | | | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | |
| W-T01-008A-1 | | 301+61 | | | | | | | | | | | | | | | | |
| STATE OPEN WATER | 8.61 | 301+61 | | | 0.005 | | | | | | | | | | 0.062 | 0.068 | 0.022 | |
| W-T01-009A-1 | | 305+89 | | | 0.007 | | | | | | | | | | | | | |
| W-T01-007A-1 | | 305+80 | | | 0.074 | | | | | | | | | | 0.231 | 0.304 | | |
| W-T01-009A-1 | 8.69 - 8.77 | 307+84 | | | | | | | | | | | | | | | | |
| W-T01-003C-1 | | 308+35 | | | | | | | 0.238 | | | | | | | | | |
| STATE OPEN WATER | | 309+15 | | | | | | | | | | | | | | | 0.016 | |
| W-T01-005C-1 | | 308+59 | | | | | | | | | | | | | | | | |
| W-T01-003C-1 | 8.80A | 308+35 | | | | | | | | | | | | | 0.063 | | | |
| STATE OPEN WATER | | 308+99 | | | | | | | | | | | | | | | 0.009 | |
| W-T15-001A-1 | 8.80B | 307+42 | | | 0.022 | | | | | | | | | | | | 0.228 | |
| STATE OPEN WATER | | 309+25 | | | | | | | | | | | | | 0.119 | 0.179 | 0.006 | |
| W-T01-009A-1 | 8.90 | 316+65 | | | 0.060 | | | | | | | | | | 0.035 | | | |
| W-T01-010C-1 | 8.96 | 320+08 | | | | | | | | | | | | | | | | |
| W-T15-003A-1 | | 338+68 | | | 0.012 | | | | | | | | | | | | | |
| W-T15-003A-1 | | 332+54 | | | 0.072 | | | | | | | | | | 0.141 | 0.188 | 0.142 | |
| W-T15-003C-1 | 9.20 - 9.82 | 334+02 | | | | | | | 0.045 | | | | | | | | 0.035 | |
| STATE OPEN WATER | | 334+29 | | | | | | | | | | | | | | | | |
| W-T15-004C-1 | | 378+17 | | | 0.050 | | | | | | | | | | | | 0.035 | |
| W-T01-014A-1 | | 378+96 | | | 0.494 | | | | | | | | | | | | | |
| W-T01-014C-1 | | 381+88 | | | | | | | 0.034 | | | | | | 1.099 | 0.136 | 0.549 | |
| W-T01-014B-1 | 10.05 - 10.19 | 383+28 | | | | | | | | 0.007 | | | | | | | 0.058 | |
| STATE OPEN WATER | | 377+44 | | | | | | | | | | | | | | | | |
| W-T01-014D-1 | 10.45 | 388+70 | | | | | | | | | | | | | 0.021 | 0.040 | | |
| W-T01-015A-1 | | 213+85 | | | 0.541 | | | | | | | | | | 0.263 | 0.002 | 0.016 | |
| W-T01-015D-1 | 10.69 - 10.74 | 220+99 | | | | | | | | | | | | | 0.079 | 0.013 | 0.168 | |
| W-T07-002A-1 | | 224+34 | | | 0.001 | | | | | | | | | | | | | |
| W-T07-001D-1 | 10.87 - 10.94 | 223+23 | | | | | | | | | | | | | | | | |
| W-T07-001C-1 | | 225+70 | | | | | | | | | | | | | | | | |
| W-T07-003A-1 | | 244+98 | | | 0.681 | | | | | | | | | | 0.448 | 0.036 | 0.177 | |
| W-T07-003B-1 | 11.36 - 11.42 | 248+08 | | | | | | | | | | | | | 0.448 | 0.036 | 0.177 | |
| W-T07-004D-1 | 11.43 - 11.60 | 250+31 | | | | | | | | 0.004 | | | | | 0.002 | 0.008 | | |
| W-T01-012A-1 | | 268+35 | | | 0.004 | | | | | | | | | | 0.001 | 0.101 | 0.238 | |
| W-T01-012D-1 | 11.77 - 11.94 | 270+57 | | | | | | | | | | | | | 0.001 | 0.101 | 0.238 | |
| TOTAL | | | 1.976 | 0.000 | 0.000 | 0.000 | 0.327 | 0.000 | 0.007 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 2.447 | 1.143 | 1.192 | 0.157 |



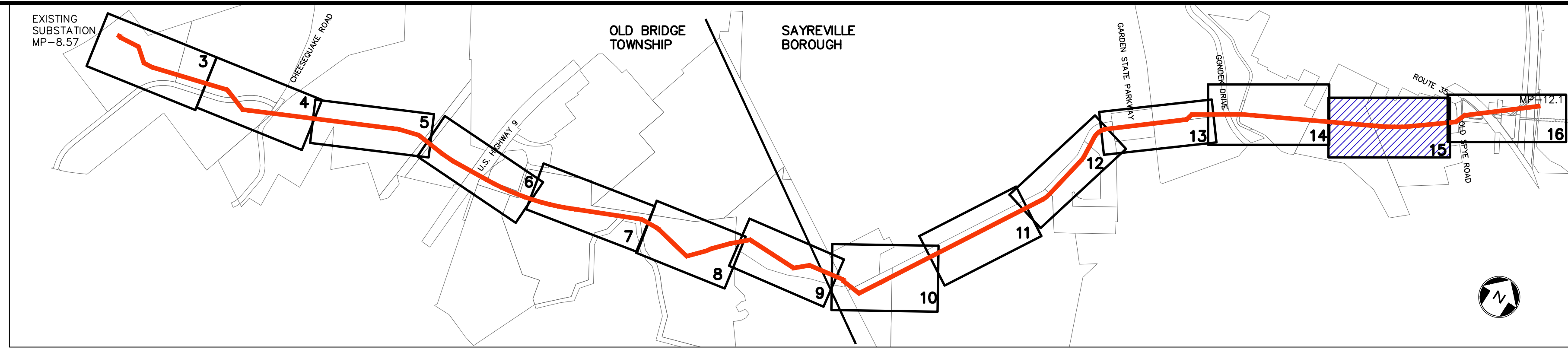
NOTES:

- SEE DETAIL SHEETS 17-19 FOR METHODS OF STREAM CROSSING AND STREAM DIVERSION.
- FRESHWATER WETLANDS TRANSITION AREA TEMPORARY DISTURBANCE WITH RESTORATION SHALL BE PROVIDED FOR ALL DISTURBANCE BEYOND PERMANENT EASEMENTS.

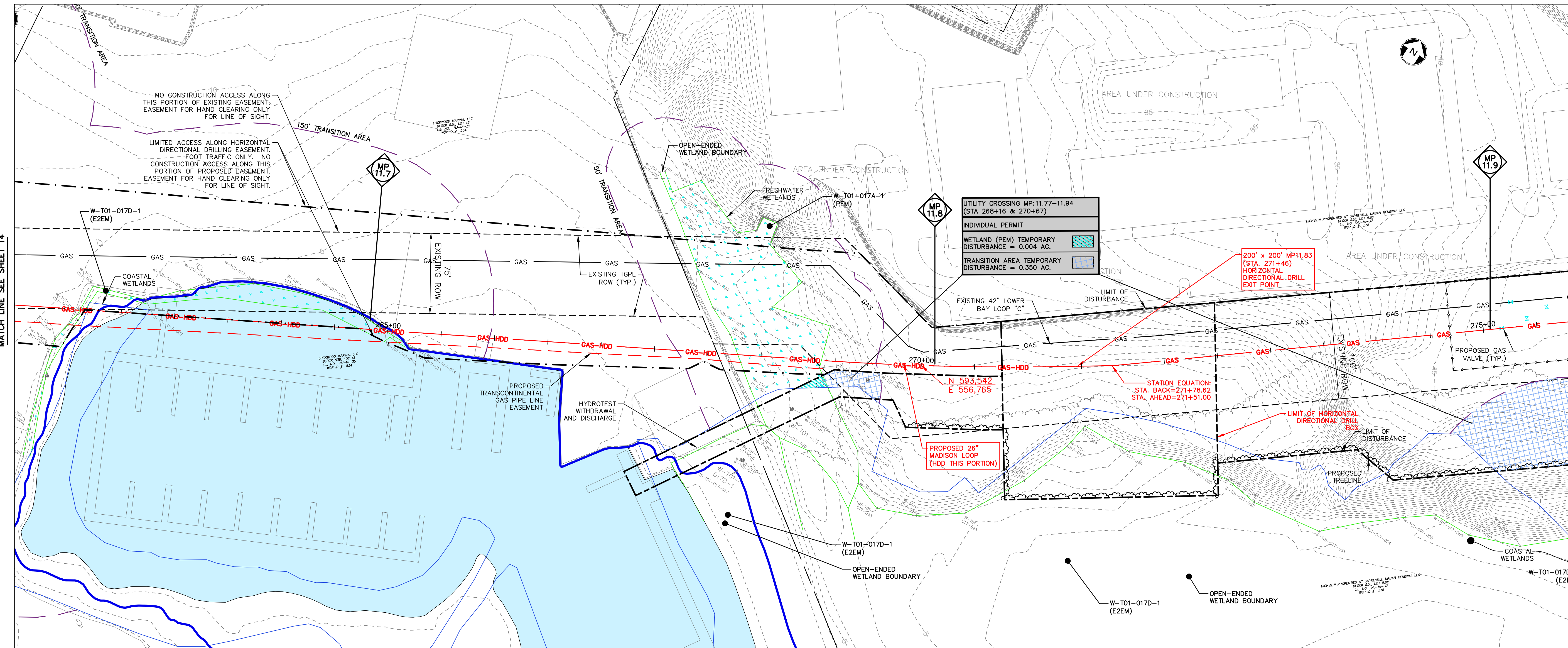
PROJECT
NORTHEAST SUPPLY
ENHANCEMENT PROJECT
PROPOSED
26" MADISON LOOP
OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH
MIDDLESEX COUNTY, NEW JERSEY

SHEET TITLE
WETLAND
PERMIT PLAN
MP 11.4 - MP 11.6

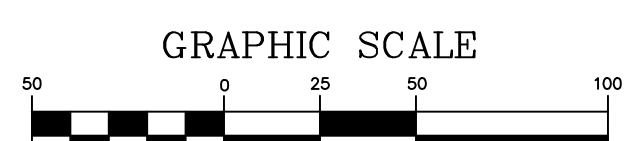
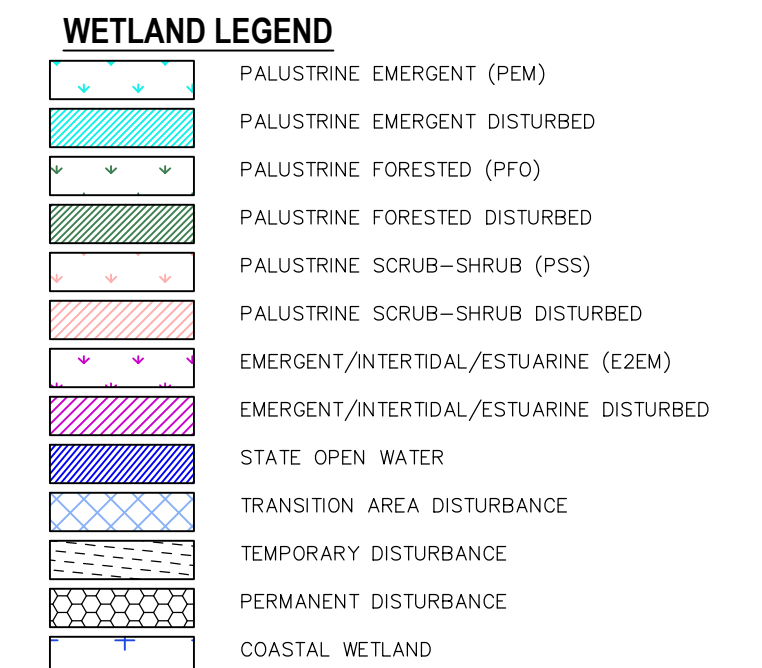
PROJECT NO.: 05731.0002 | DRAWN BY: JPS
SCALE: 1" = 50' | CHECKED BY: WS
DATE: 06/08/18 | SHEET 14 OF 20
SHEET NO. **14**



KEY MAP
SCALE: 1" = 1000'



| WETLAND ID | MILE POST | STATION | WETLAND UTILITY CROSSING TABULATION | | | | | | | | | | | | | | | | |
|------------------|---------------|---------|-------------------------------------|------------------|-------------|-----------------------------------|------------------|-------------|--------------------------------------|------------------|-------------|--|------------------|-------------|------------------|------------------|-------------|------------------|-------|
| | | | PALUSTRINE EMERGENT (PEM) (ACRES) | | | PALUSTRINE FORESTED (PFO) (ACRES) | | | PALUSTRINE SCRUB-SHRUB (PSS) (ACRES) | | | EMERGENT/INTERTIDAL/ESTUARINE WETLANDS | | | TRANSITION AREA | | | STATE OPEN WATER | |
| | | | TEMPORARY IMPACT | PERMANENT IMPACT | RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | RESTORATION | TEMPORARY IMPACT | |
| W-T01-008A-1 | 8.61 | 301+61 | 0.005 | | | | | | | | | | | | | | 0.022 | | |
| W-T01-008A-2 | | 305+89 | 0.007 | | | | | | | | | | | | | | | | |
| W-T01-007A-1 | | 306+80 | 0.074 | | | | | | | | | | | | | | | | |
| W-T01-008A-1 | 8.69 - 8.77 | 307+84 | | | | 0.238 | | | | | | | | | | | 0.304 | | |
| W-T01-003C-1 | | 308+35 | | | | | | | | | | | | | | | | | |
| STATE OPEN WATER | | 309+15 | | | | | | | | | | | | | | | 0.056 | | |
| W-T01-007C-1 | | 308+59 | | | | | | | | | | | | | | | | | |
| W-T01-003C-1 | 8.80A | 308+35 | | | | | | | | | | | | | | | 0.063 | | |
| STATE OPEN WATER | | 308+99 | | | | | | | | | | | | | | | 0.009 | | |
| W-T15-007A-1 | 8.80B | 307+42 | 0.022 | | | | | | | | | | | | | | 0.228 | | |
| STATE OPEN WATER | | 309+05 | | | | | | | | | | | | | | | 0.017 | | |
| W-T01-008A-1 | 8.90 | 316+65 | 0.060 | | | | | | | | | | | | | | 0.119 | | |
| W-T01-010C-1 | 8.96 | 320+08 | | | | | | | | | | | | | | | 0.179 | | |
| STATE OPEN WATER | | 320+08 | | | | | | | | | | | | | | | 0.006 | | |
| W-T15-007A-1 | | 318+68 | 0.072 | | | | | | | | | | | | | | 0.119 | | |
| W-T15-003A-1 | 9.20 - 9.32 | 332+64 | 0.072 | | | | | | | | | | | | | | 0.179 | | |
| W-T15-003C-1 | | 334+02 | | | | 0.045 | | | | | | | | | | | 0.006 | | |
| STATE OPEN WATER | | 334+29 | | | | | | | | | | | | | | | 0.142 | | |
| W-T15-003C-1 | | 334+29 | | | | 0.020 | | | | | | | | | | | 0.035 | | |
| W-T15-003C-1 | | 378+17 | | | | 0.494 | | | | | | | | | | | 0.142 | | |
| W-T01-014A-1 | | 378+96 | | | | 0.334 | | | | | | | | | | | 0.142 | | |
| W-T01-014C | 10.05 - 10.19 | 381+88 | | | | 0.334 | | | | | | | | | | | 0.549 | | |
| W-T01-014B-1 | | 384+08 | | | | | | | | | | | | | | | 0.136 | | |
| STATE OPEN WATER | | 377+44 | | | | | | | | | | | | | | | 0.549 | | |
| W-T01-016D-1 | 10.45 | 386+70 | | | | | | | | | | | | | | | 0.068 | | |
| W-T01-011A-1 | 10.69 - 10.74 | 393+85 | 0.544 | | | | | | | | | | | | | | 0.021 | | |
| W-T01-012B-1 | | 395+09 | | | | | | | | | | | | | | | 0.040 | | |
| W-T01-002A-1 | | 224+35 | 0.005 | | | | | | | | | | | | | | 0.016 | | |
| W-T01-001D-1 | 10.87 - 10.94 | 223+23 | | | | | | | | | | | | | | | 0.168 | | |
| W-T01-001C-1 | | 220+70 | | | | | | | | | | | | | | | 0.013 | | |
| W-T01-003A-1 | | 244+98 | 0.683 | | | | | | | | | | | | | | 0.036 | | |
| W-T01-008B-1 | 11.36 - 11.42 | 248+08 | | | | | | | | | | | | | | | 0.177 | | |
| W-T01-004D-1 | 11.43 - 11.60 | 250+31 | | | | | | | | | | | | | | | 0.038 | | |
| W-T01-017A-1 | | 264+16 | 0.004 | | | | | | | | | | | | | | 0.228 | | |
| W-T01-017D-1 | 11.77 - 11.94 | 270+67 | | | | | | | | | | | | | | | 0.228 | | |
| TOTAL | | | 1.976 | 0.000 | 0.000 | 0.000 | 0.327 | 0.000 | 0.007 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | 2.447 | 1.143 | 1.592 | 0.157 |



- NOTES:**
- SEE DETAIL SHEETS 17-19 FOR METHODS OF STREAM CROSSING AND STREAM DIVERSION.
 - FRESHWATER WETLANDS TRANSITION AREA TEMPORARY DISTURBANCE WITH RESTORATION SHALL BE PROVIDED FOR ALL DISTURBANCE BEYOND PERMANENT EASEMENTS.

| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |

LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- EXISTING SPOT ELEVATION
- EXISTING STORM SEWER
- EXISTING WATER MAIN
- EXISTING GAS MAIN
- PROPOSED GAS MAIN
- EXISTING SIGN
- EXISTING UTILITY POLE
- PROPOSED GAS VALVE
- EXISTING TREE
- PROPOSED TREELINE
- EXISTING FENCE
- EXISTING RETAINING WALL
- EXISTING PERMANENT EASEMENT/TGPL R.O.W.
- PROPOSED PERMANENT EASEMENT
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED HDD LIMIT OF DISTURBANCE
- STREAM LINE
- WETLANDS BOUNDARY
- COASTAL WETLANDS BOUNDARY
- TOP OF BANK
- 50' WETLAND TRANSITION AREA
- RIPIARIAN BUFFER
- MEAN HIGH WATER LINE
- SPRING HIGH WATER LINE
- MEAN HIGH WATER LINE 500' BUFFER
- TIDELANDS
- W-T01-005A-1 PHOTO LOCATION (SEE REPORT)
- WETLAND FLAGS
- STATE OPEN WATERS FLAGS
- FRESHWATER WETLAND/STATE OPEN WATER DATA POINTS

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN WERE FIELD LOCATED AND PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

THOMAS J. MURPHY, PLS
DW SMITH ASSOCIATES, LLC
1450 STATE ROUTE 34, WALL, NJ 07753
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 37207 COA NO. 24GA28122400

SIGNATURE: _____ DATE: _____

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
PS&S, LLC
1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
PROFESSIONAL ENGINEER
N.J. LIC. NO. 41319 COA NO. 24GA28032700

SIGNATURE: *W. Salmon* DATE: 04/24/19

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
1433 ROUTE 34 SUITE A4 WALL, NJ 07727 PHONE: (848) 206-2626
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

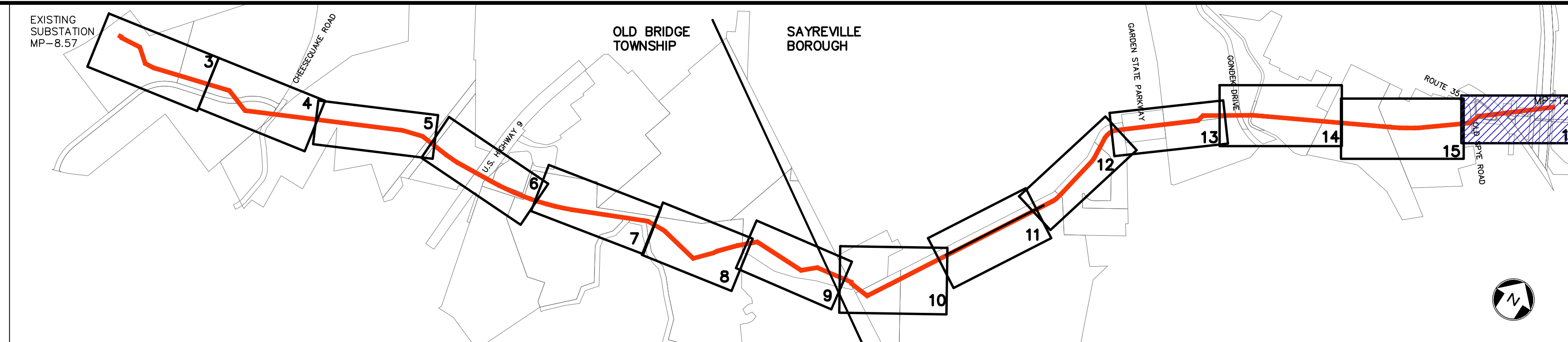
ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS. THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT. THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI AND SARTOR, LLC IS PROHIBITED. UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DERIVED THEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

COPYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC - ALL RIGHTS RESERVED.

PROJECT
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH MIDDLESEX COUNTY, NEW JERSEY

SHEET TITLE
WETLAND PERMIT PLAN
MP 11.6 - MP 11.9

PROJECT NO.: 05731.0002 DRAWN BY: JPS
SCALE: 1" = 50' CHECKED BY: WS
DATE: 06/08/18 SHEET 15 OF 20
SHEET NO. **15**

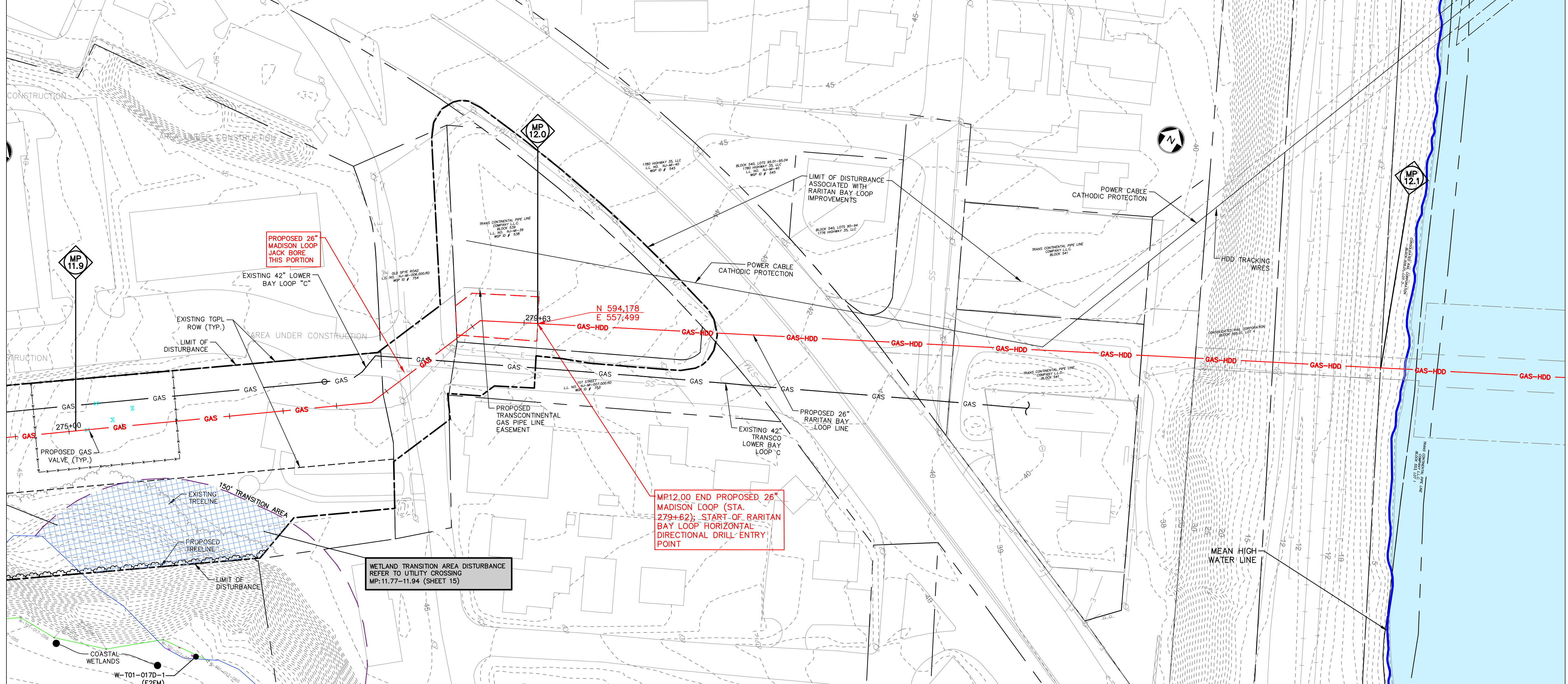


KEY MAP
SCALE: 1" = 1000'

| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |

LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- EXISTING SPOT ELEVATION
- EXISTING STORM SEWER
- EXISTING GAS MAIN
- EXISTING GAS MAIN
- PROPOSED GAS MAIN
- EXISTING SIGN
- EXISTING UTILITY POLE
- PROPOSED GAS VALVE
- EXISTING TREE/ CANOPY
- EXISTING TREE
- PROPOSED TREELINE
- EXISTING FENCE
- EXISTING RETAINING WALL
- EXISTING PERMANENT EASEMENT/ TGPL R.O.W.
- PROPOSED PERMANENT EASEMENT
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED HDD LIMIT OF DISTURBANCE
- STREAM LINE
- WETLANDS BOUNDARY
- COASTAL WETLANDS BOUNDARY
- TOP OF BANK
- 50' WETLAND TRANSITION AREA
- RIPARIAN BUFFER
- MEAN HIGH WATER LINE
- SPRING HIGH WATER LINE
- MEAN HIGH WATER LINE 500' BUFFER
- TIDELANDS
- W-101-005A-1 PHOTO LOCATION (SEE REPORT)
- WETLAND FLAGS
- STATE OPEN WATERS FLAGS
- FRESHWATER WETLAND/ STATE OPEN WATER DATA POINTS



I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

THOMAS J. MURPHY, PLS
DW SMITH ASSOCIATES, LLC
1450 STATE ROUTE 34, WALL, NJ 07753
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 37207 COA NO. 24GA28124400

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

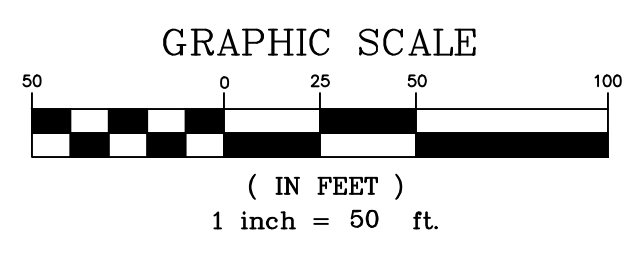
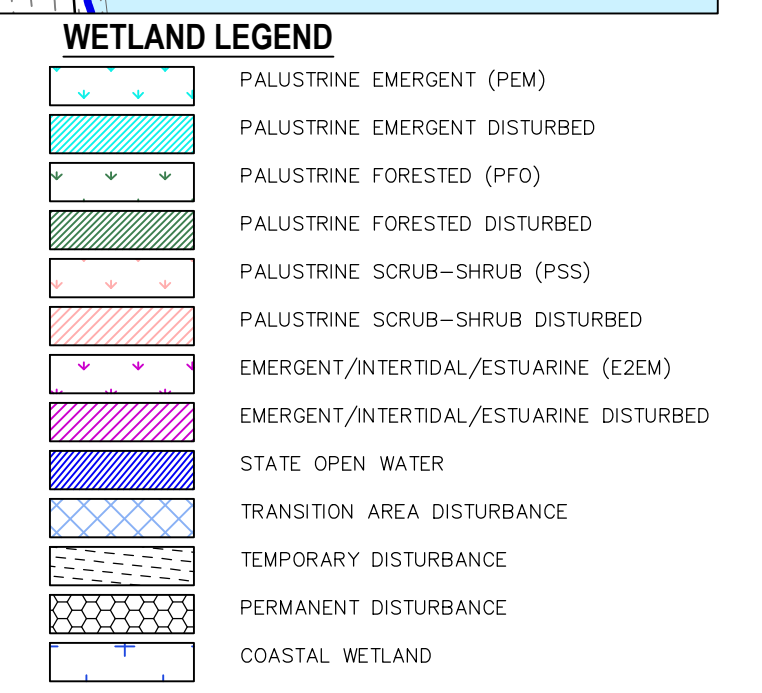
WILLIAM SALMON, P.E.
PS&S, LLC
1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
PROFESSIONAL ENGINEER
N.J. LIC. NO. 41319 COA NO. 24GA28032700

04/24/19

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
1433 ROUTE 34 SUITE A4 WALL, NJ 07727 PHONE: (848) 206-2626
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS. THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT. THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI AND SARTOR, LLC IS PROHIBITED. UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

| WETLAND ID | MILE POST | STATION | WETLAND UTILITY CROSSING TABULATION | | | | | | | | | | | | | | | |
|------------------|-------------|---------|-------------------------------------|------------------|----------------------------------|------------------|------------------|----------------------------------|------------------|------------------|----------------------------------|------------------|------------------|----------------------------------|------------------|------------------|----------------------------------|-------|
| | | | WETLANDS | | | WETLANDS | | | WETLANDS | | | WETLANDS | | | TRANSITION AREA | | STATE OPEN WATER | |
| | | | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | TEMPORARY IMPACT | PERMANENT IMPACT | TEMPORARY IMPACT AND RESTORATION | |
| W-101-005A-1 | 8.61 | 101+61 | 0.005 | | | | | | | | | | | | 0.062 | 0.068 | 0.022 | |
| STATE OPEN WATER | | 101+61 | | | | | | | | | | | | | | | | |
| W-101-006A-1 | | 105+89 | 0.007 | | | | | | | | | | | | | | | |
| W-101-007A-1 | | 106+80 | 0.074 | | | | | | | | | | | | | | | |
| W-101-003A-1 | 8.69-8.77 | 107+94 | | | | | | | | | | | | | 0.231 | 0.304 | | |
| W-101-002C-1 | | 108+25 | | | | 0.238 | | | | | | | | | | | | |
| STATE OPEN WATER | | 109+15 | | | | | | | | | | | | | | | 0.016 | |
| W-101-007C-1 | | 108+59 | | | | | | | | | | | | | | 0.063 | | |
| W-101-008C-1 | 8.80A | 108+95 | | | | | | | | | | | | | | | 0.009 | |
| STATE OPEN WATER | | 108+99 | | | | | | | | | | | | | | | 0.017 | |
| W-115-001A-1 | 8.80B | 107+42 | 0.022 | | | | | | | | | | | | 0.119 | 0.179 | 0.006 | |
| STATE OPEN WATER | | 109+05 | | | | 0.060 | | | | | | | | | | 0.035 | | |
| W-101-009C-1 | 8.90 | 110+65 | | | | | | | | | | | | | 0.141 | 0.183 | 0.142 | |
| W-115-002A-1 | | 130+68 | 0.012 | | | | | | | | | | | | | | 0.035 | |
| W-115-004A-1 | | 133+54 | 0.072 | | | | | | | | | | | | | | | |
| W-115-003C-1 | 9.20-9.32 | 134+02 | | | | 0.045 | | | | | | | | | 1.093 | 0.136 | 0.549 | |
| STATE OPEN WATER | | 134+29 | | | | | | | | | | | | | | | 0.058 | |
| W-115-004C-1 | | 178+17 | | | | 0.010 | | | | | | | | | | | | |
| W-101-014A-1 | | 178+96 | 0.494 | | | | | | | | | | | | | | | |
| W-101-014C | 10.05-10.19 | 181+88 | | | | 0.034 | | | | | | | | | | | | |
| STATE OPEN WATER | | 184+08 | | | | | | | 0.007 | | | | | | | | | |
| W-101-015D-1 | 10.45 | 177+64 | | | | | | | | | | | | | | | | |
| W-101-011A-1 | 10.45 | 198+70 | | | | | | | | | | | | | | | | |
| W-101-011A-1 | 10.69-10.74 | 213+85 | 0.544 | | | | | | | | | | | | 0.268 | 0.021 | 0.016 | |
| W-101-012D-1 | | 210+39 | | | | | | | | | | | | | | | | |
| W-101-002A-1 | | 220+94 | 0.001 | | | | | | | | | | | | 0.079 | 0.013 | 0.168 | |
| W-101-001D-1 | 10.87-10.94 | 223+23 | | | | | | | | | | | | | | | | |
| W-101-003C-1 | | 220+70 | | | | | | | | | | | | | | | | |
| STATE OPEN WATER | | 244+98 | | | | | | | | | | | | | | | | |
| W-101-003A-1 | 11.36-11.42 | 248+08 | 0.685 | | | | | | | | | | | | 0.448 | 0.035 | 0.177 | |
| W-101-003B-1 | | 248+08 | | | | | | | | | | | | | | | | |
| STATE OPEN WATER | | 250+31 | | | | | | | | | | | | | | | | |
| W-101-017A-1 | 11.43-11.60 | 269+15 | 0.004 | | | | | | | | | | | | 0.021 | 0.101 | 0.228 | |
| STATE OPEN WATER | | 270+67 | | | | | | | | | | | | | | | | |
| TOTAL | | | 1.976 | 0.000 | 0.000 | 0.000 | 0.327 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | 2.447 | 1.543 | 1.592 | 0.157 |

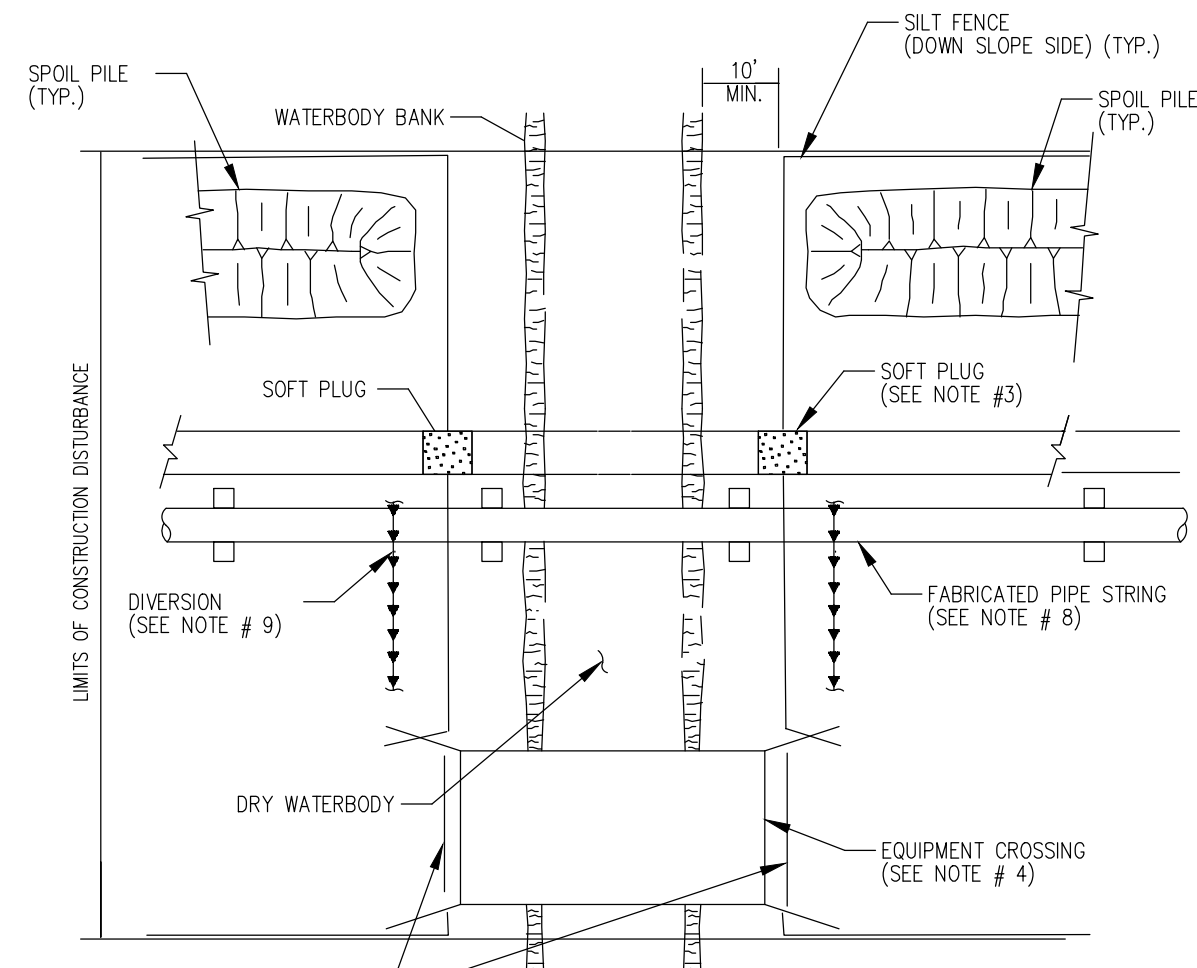


- NOTES:**
- FRESHWATER WETLANDS TRANSITION AREA TEMPORARY DISTURBANCE WITH RESTORATION SHALL BE PROVIDED FOR ALL DISTURBANCE BEYOND PERMANENT EASEMENTS.

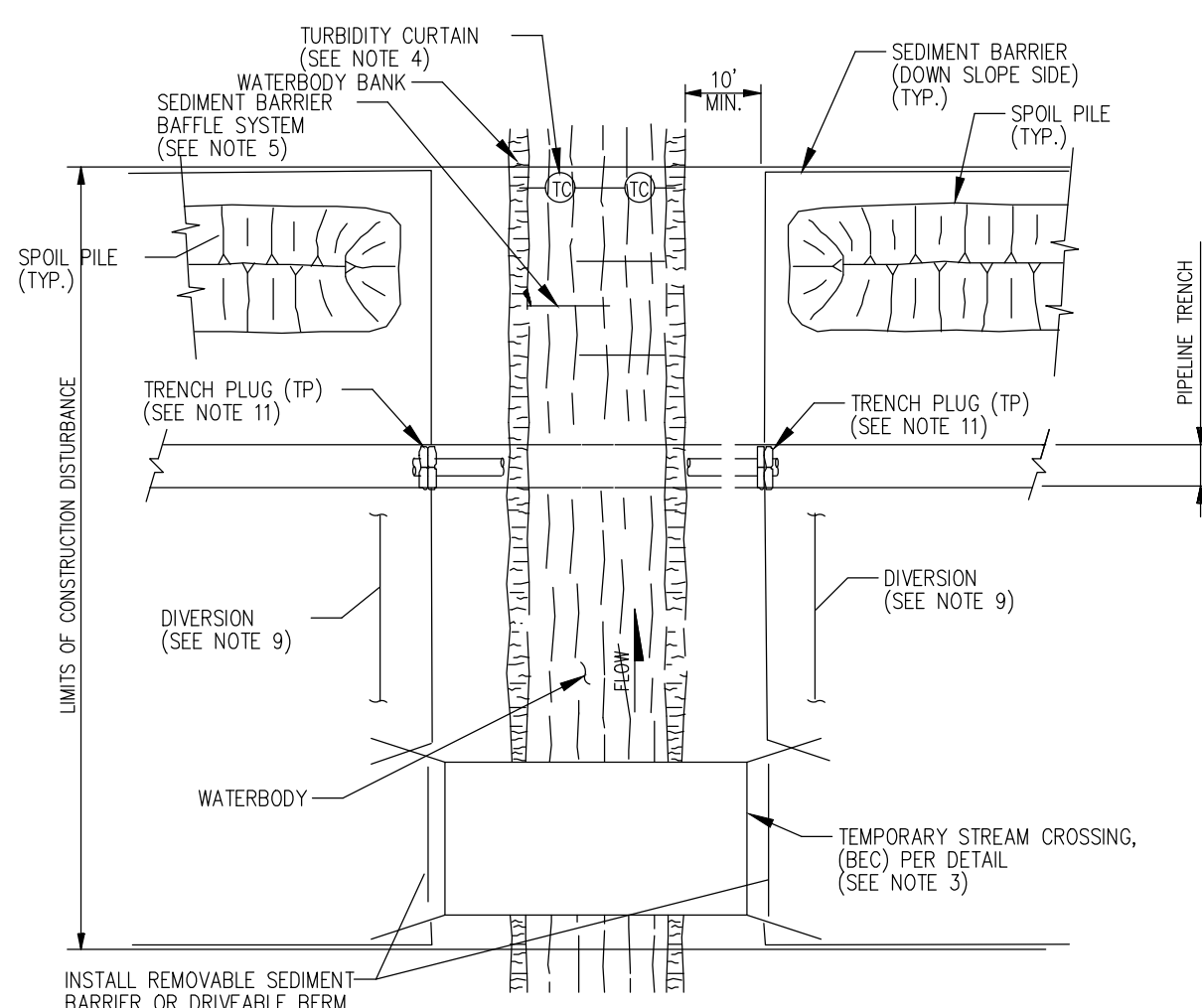
PROJECT
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED
26" MADISON LOOP
OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH
MIDDLESEX COUNTY, NEW JERSEY

SHEET TITLE
WETLAND PERMIT PLAN
MP 11.9 - MP 12.1

PROJECT NO.: 05731.0002 DRAWN BY: JPS
SCALE: 1" = 50' CHECKED BY: WS
DATE: 06/08/18 SHEET 16 OF 20
SHEET NO. 16

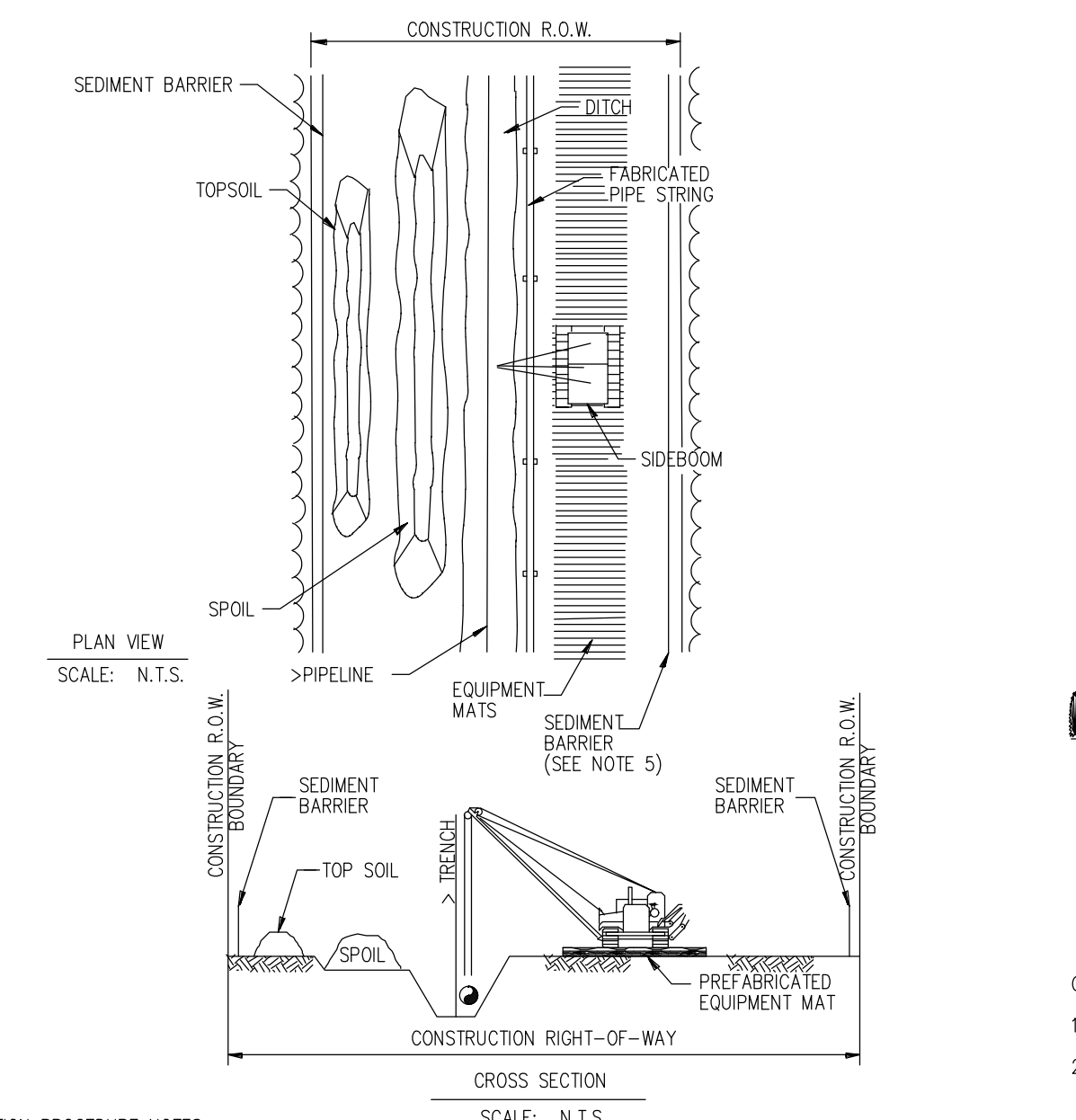


NOTES:
1. THIS METHOD APPLIES TO WATERBODIES THAT ARE DRY AT THE TIME OF CROSSING.
2. SILT FENCES SHALL BE INSTALLED AS DEPICTED AND ALONG DOWN GRADIENT SIDES OF WORK AREAS SUCH THAT NO HEAVILY SILT LADEN WATER ENTERS THE WATERBODY OR LEAVES THE CONSTRUCTION RIGHT OF WAY.



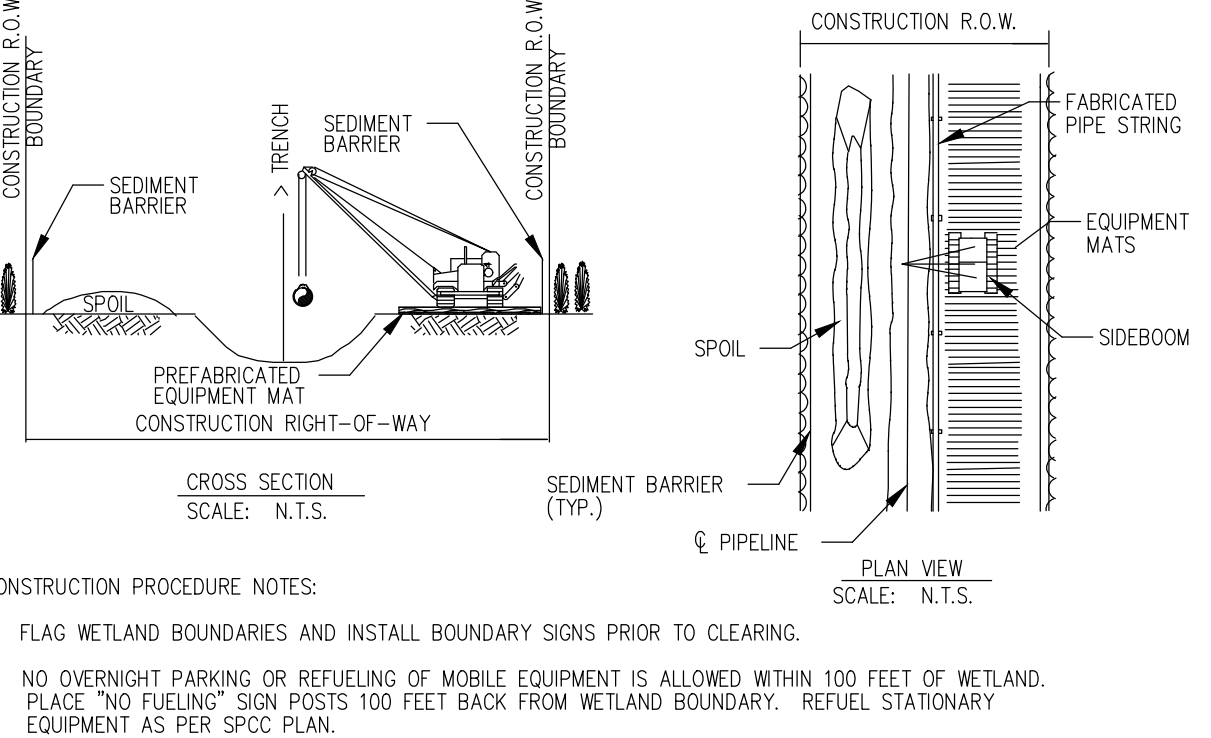
NOTES:
1. THIS METHOD APPLIES TO MINOR WATERBODY CROSSINGS THAT ARE DEFINED AS WATERBODIES THAT ARE LESS THAN OR EQUAL TO 10 FEET AT WATERS EDGE AT THE TIME OF CROSSING.
2. SEDIMENT BARRIERS SHALL BE INSTALLED AS DEPICTED AND ALONG DOWN GRADIENT SIDES OF WORK AREAS AND STAGING AREAS SUCH THAT NO HEAVILY SILT LADEN WATER ENTERS THE WATERBODY OR LEAVES THE CONSTRUCTION RIGHT OF WAY.

DRY WATERBODY CROSSING
TEMPORARY EROSION CONTROL MEASURE
(APPLIES TO WATERBODIES DRY AT TIME OF CROSSING)

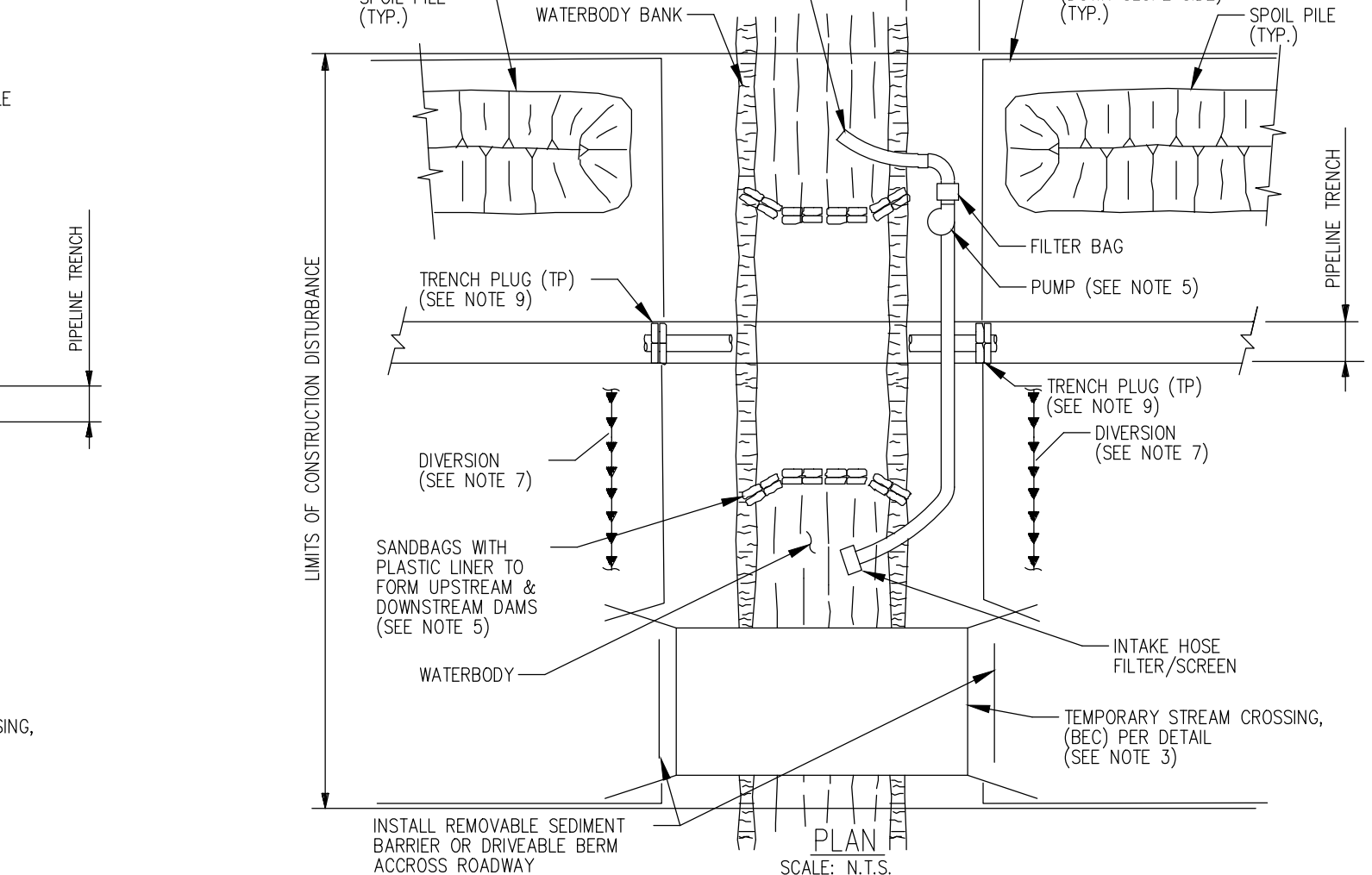


CONSTRUCTION PROCEDURE NOTES:
1. FLAG WETLAND BOUNDARIES AND INSTALL BOUNDARY SIGNS PRIOR TO CLEARING.
2. NO OVERNIGHT PARKING OR REFUELING OF MOBILE EQUIPMENT IS ALLOWED WITHIN 100 FEET OF WETLAND.

WET MINOR WATERBODY CROSSING
TEMPORARY EROSION CONTROL MEASURE
(APPLIES TO WATERBODIES 10' WIDE OR LESS
AT WATERS EDGE AT TIME OF CROSSING)

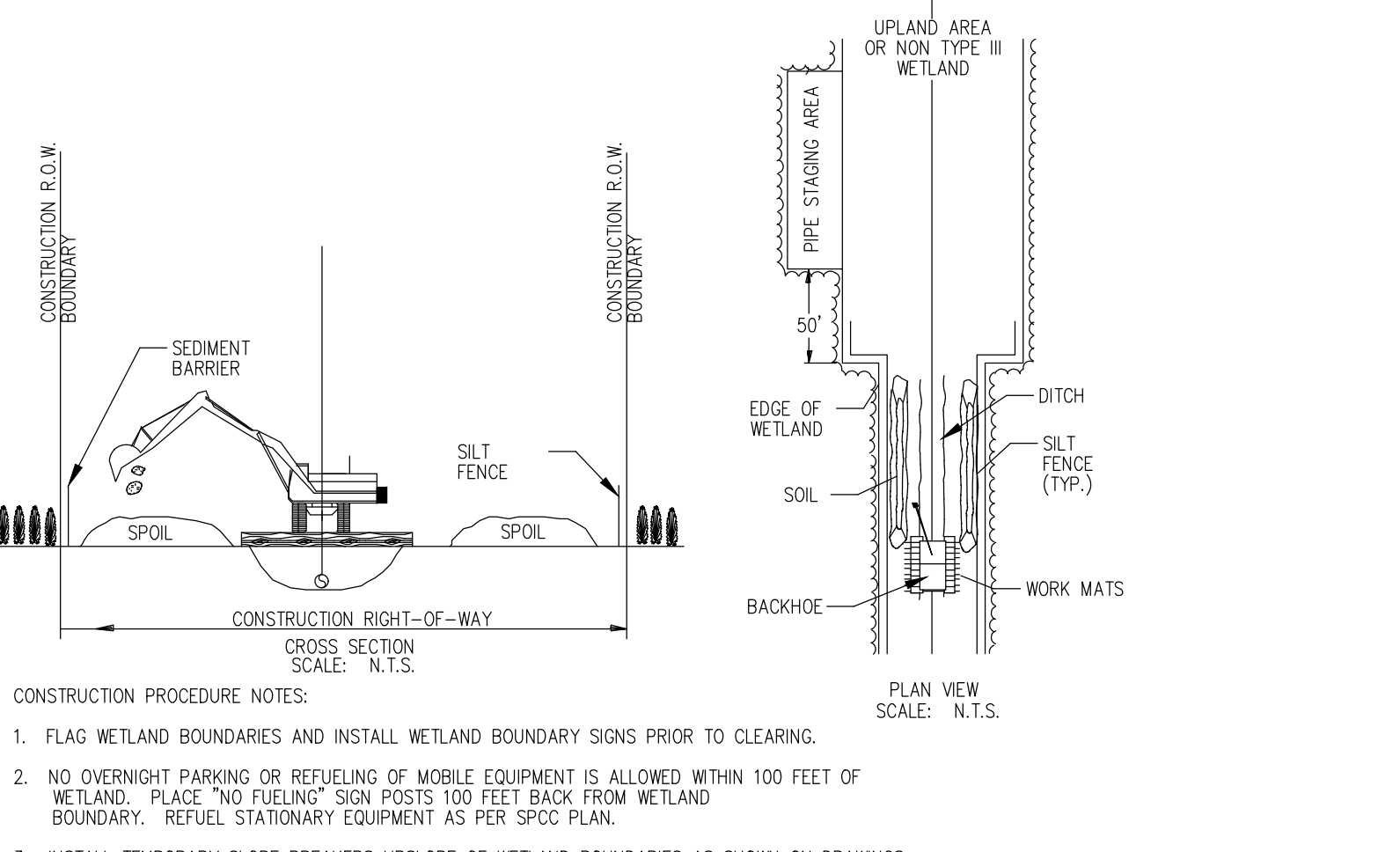


CONSTRUCTION PROCEDURE NOTES:
1. FLAG WETLAND BOUNDARIES AND INSTALL BOUNDARY SIGNS PRIOR TO CLEARING.
2. NO OVERNIGHT PARKING OR REFUELING OF MOBILE EQUIPMENT IS ALLOWED WITHIN 100 FEET OF WETLAND.

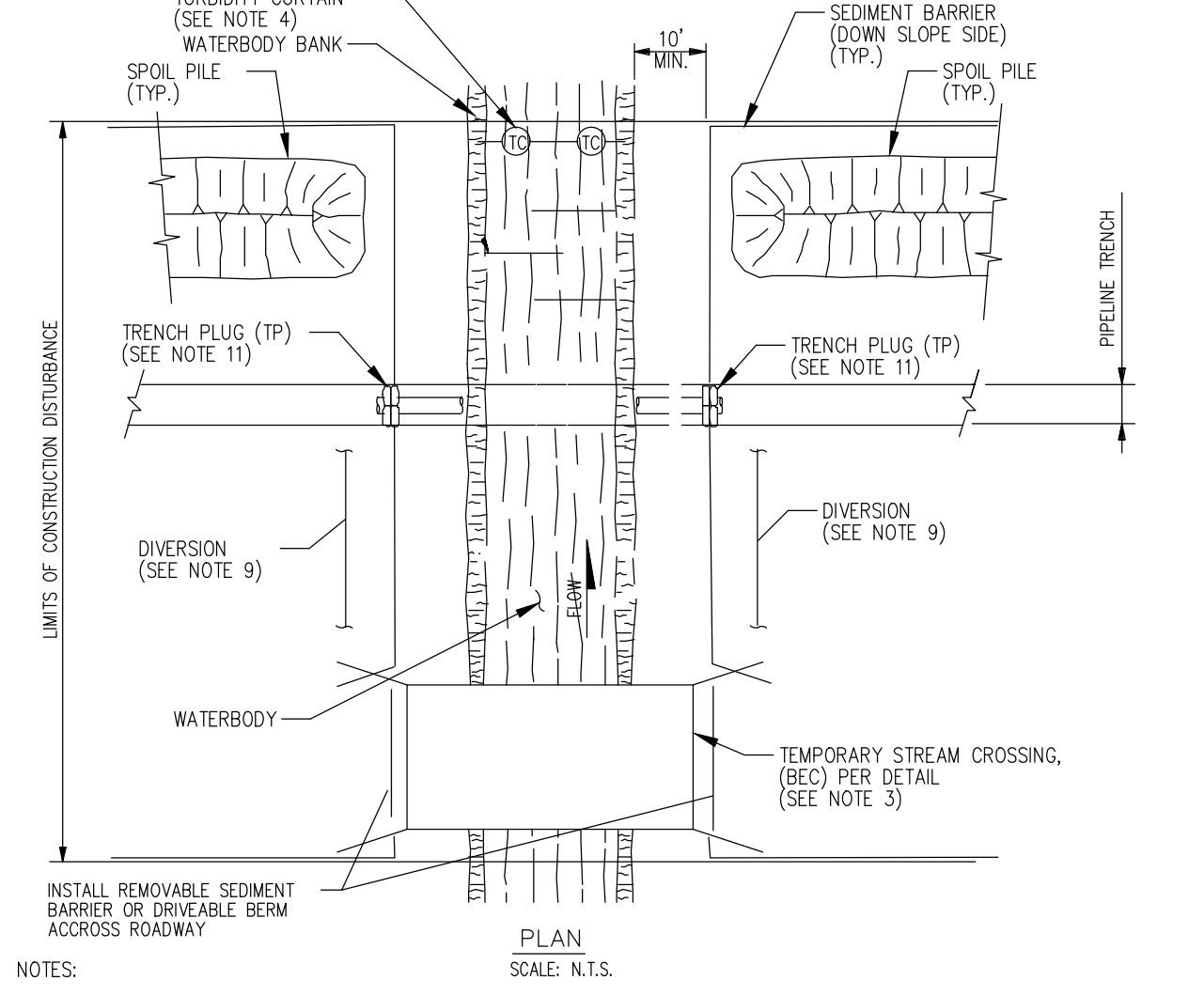


NOTES:
1. SEDIMENT BARRIERS SHALL BE INSTALLED AS DEPICTED AND ALONG DOWN GRADIENT SIDES OF WORK AREAS AND STAGING AREAS SUCH THAT NO HEAVILY SILT LADEN WATER ENTERS THE WATERBODY OR LEAVES THE CONSTRUCTION RIGHT-OF-WAY.

DAM AND PUMP CROSSING
TEMPORARY EROSION CONTROL MEASURE

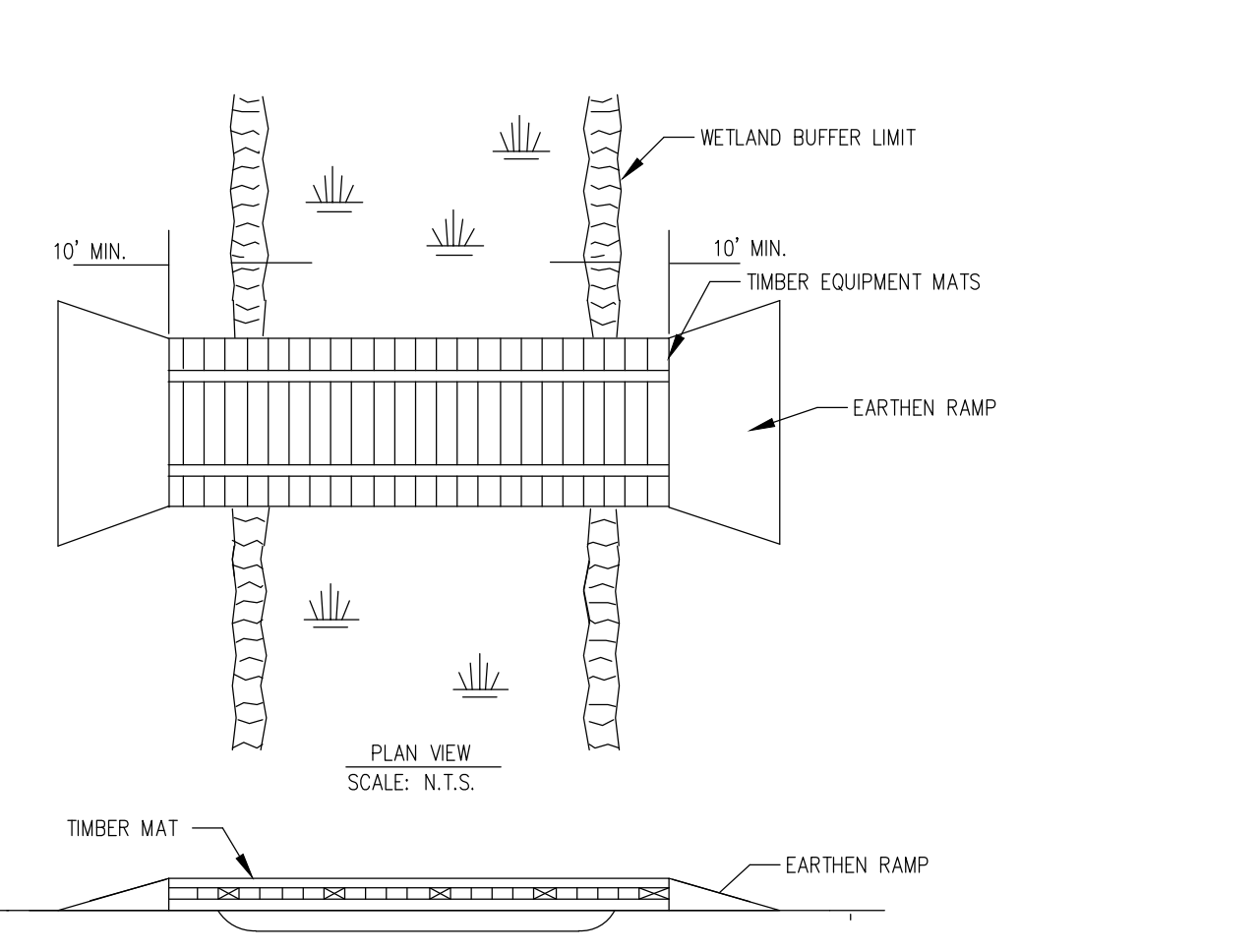


CONSTRUCTION PROCEDURE NOTES:
1. FLAG WETLAND BOUNDARIES AND INSTALL WETLAND BOUNDARY SIGNS PRIOR TO CLEARING.
2. NO OVERNIGHT PARKING OR REFUELING OF MOBILE EQUIPMENT IS ALLOWED WITHIN 100 FEET OF WETLAND.



NOTES:
1. THIS METHOD APPLIES TO INTERMEDIATE WATERBODY CROSSINGS THAT ARE DEFINED AS WATERBODIES THAT ARE GREATER THAN 10 FEET WIDE BUT LESS THAN OR EQUAL TO 100 FEET WIDE AT THE WATERS EDGE AT THE TIME OF CONSTRUCTION.

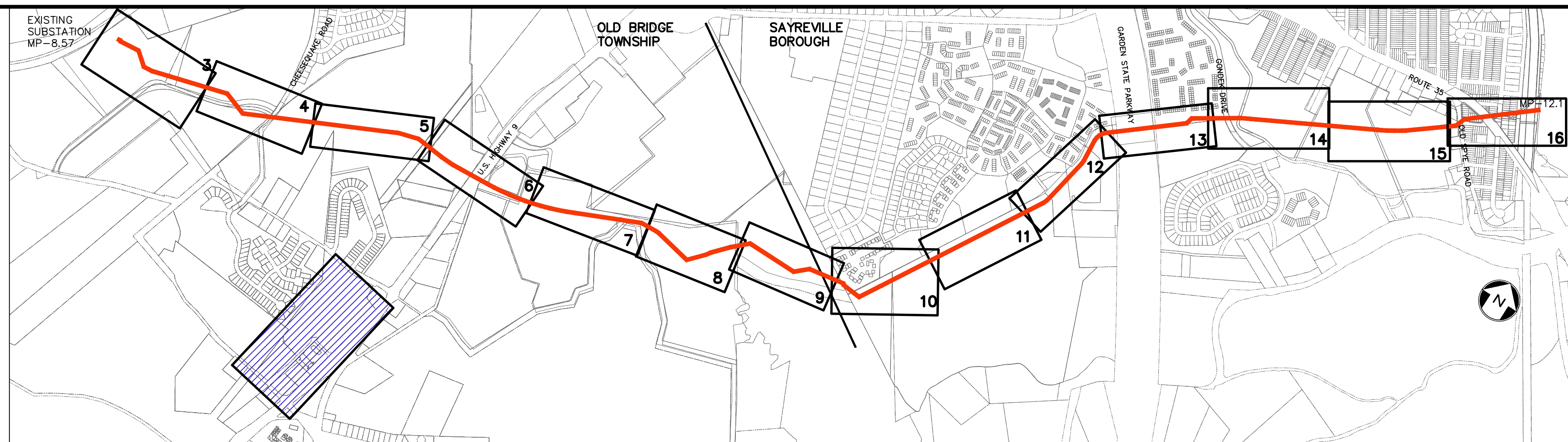
WET INTERMEDIATE WATERBODY CROSSING
TEMPORARY EROSION CONTROL MEASURE
(APPLIES TO WATERBODIES GREATER THAN 10' WIDE BUT LESS
THAN 100' WIDE AT WATERS EDGE AT TIME OF CROSSING)



NOTES:
1. PERIODICALLY CHECK INSTALLATION AND REMOVE BUILD-UP OF SEDIMENT OR DEBRIS.
2. MATERIALS PLACED IN WETLANDS SHALL BE COMPLETELY REMOVED DURING FINAL CLEAN-UP.

Table with columns: REV./ISSUE, DATE, DESCRIPTION. Contains project information for Northeast Supply Enhancement Project, 26th Madison Loop, and contact information for Thomas J. Murphy, PLS and William Salmon, P.E.

Vertical text on the left margin: PROJECT NO. 05731.0002, SCALE: AS SHOWN, DATE: 06/08/18, SHEET NO. 17 OF 20. PROJECT: NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26th MADISON LOOP OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH MIDDLESEX COUNTY, NEW JERSEY.



KEY MAP
SCALE: 1" = 1000'

NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE LIMITS OF OFF-SITE CONTRACTOR YARD ASSOCIATED WITH THE NORTHEAST SUPPLY ENHANCEMENT PROJECT - 26" MADISON LOOP. REFER TO THE PLANS ENTITLED "NORTHEAST SUPPLY ENHANCEMENT PROJECT - PROPOSED 26" MADISON LOOP," LAST REVISED APRIL 22, 2019, PREPARED BY PAULUS, SOKOLOWSKI AND SARTOR, LLC.
2. AERIAL INFORMATION TAKEN FROM NEW JERSEY GEOGRAPHIC INFORMATION NETWORK - NJ 2015 ORTHOPHOTOGRAPHY MG4, PREPARED BY NJ OFFICE OF INFORMATION TECHNOLOGY, OFFICE OF GIS.
3. TAX MAP INFORMATION TAKEN FROM "TAX MAP - TOWNSHIP OF OLD BRIDGE (SHEET 6.11)", DATED JULY 2008, PREPARED BY CME ASSOCIATES.
4. THERE ARE NO IMPACTS TO REGULATED FEATURES WITHIN THE LIMITS OF CONTRACTOR YARDS.

| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |



I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
PS&S, LLC
1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
PROFESSIONAL ENGINEER
N.J. LIC. NO. 41319 COA NO. 246A28032700

William Salmon
SIGNATURE DATE 04/24/19

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
PS&S
1433 ROUTE 34
SUITE A4
WALL, NJ 07727
PHONE: (848) 206-2626
CERTIFICATE OF AUTHORIZATION NO. 246A28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS. THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT. THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI AND SARTOR, LLC IS PROHIBITED. UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

COPYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC. - ALL RIGHTS RESERVED.

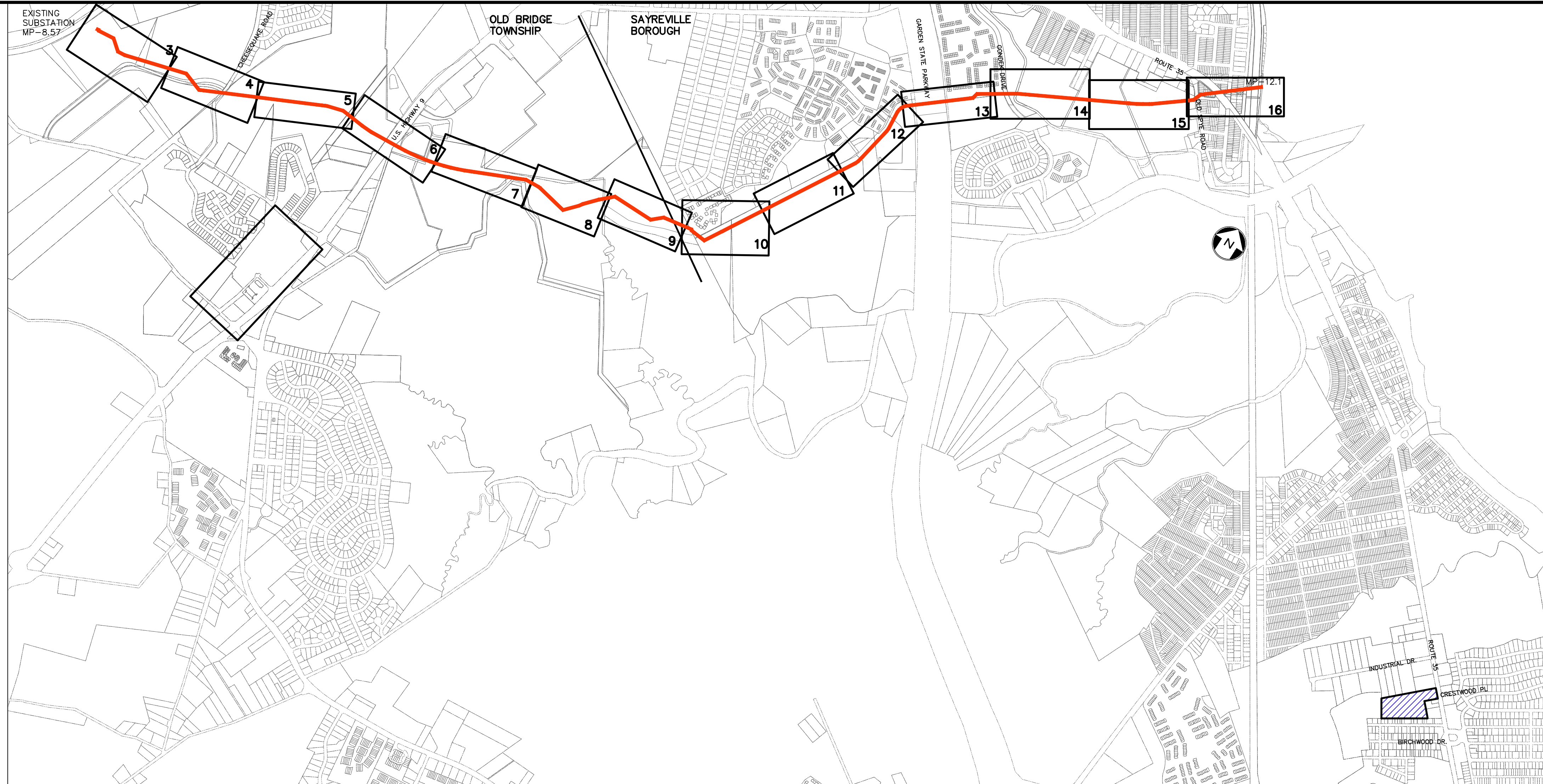
PROJECT
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH
MIDDLESEX COUNTY, NEW JERSEY

SHEET TITLE
PERMIT PLAN
BLOCK 6302, LOT CO210
OLD BRIDGE TOWNSHIP STAGING AREA

PROJECT NO.: 05731.0002 DRAWN BY: JPS
SCALE: 1" = 60' CHECKED BY: WS
DATE: 6/08/18 SHEET 1 OF 1
SHEET NO. 1

NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE LIMITS OF OFF-SITE CONTRACTOR YARD ASSOCIATED WITH THE NORTHEAST SUPPLY ENHANCEMENT PROJECT - 26" MADISON LOOP. REFER TO THE PLANS ENTITLED "NORTHEAST SUPPLY ENHANCEMENT PROJECT - PROPOSED 26" MADISON LOOP," DATED APRIL 22, 2019, PREPARED BY PAULUS, SOKOLOWSKI AND SARTOR, LLC.
2. AERIAL INFORMATION TAKEN FROM NEW JERSEY GEOGRAPHIC INFORMATION NETWORK - NJ 2015 ORTHOPHOTOGRAPHY MG4, PREPARED BY NJ OFFICE OF INFORMATION TECHNOLOGY, OFFICE OF GIS.
3. TAX MAP INFORMATION TAKEN FROM "TAX MAP - TOWNSHIP OF OLD BRIDGE (SHEETS 1.22 AND 1.31)", DATED JULY 2008, PREPARED BY CME ASSOCIATES.
4. THERE ARE NO IMPACTS TO REGULATED FEATURES WITHIN THE LIMITS OF CONTRACTOR YARDS.



KEY MAP
SCALE: 1" = 1000'

| REV. / ISSUE | DATE | DESCRIPTION |
|--------------|---------|-------------------------------------|
| 1 | 4/22/19 | REV TRANSITION AREA WIDTH PER NJDEP |



I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

WILLIAM SALMON, P.E.
PS&S, LLC
1433 HIGHWAY 34, SUITE A-4, WALL, NJ 07727
PROFESSIONAL ENGINEER
N.J. LIC. NO. 41319 COA NO. 24GA28032700

William Salmon 04/24/19
SIGNATURE DATE

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
PS&S
1433 ROUTE 34
SUITE A4
WALL, NJ 07727
PHONE: (848) 206-2626
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS. THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT. THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI AND SARTOR, LLC IS PROHIBITED. UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

COPYRIGHT 2017 PAULUS, SOKOLOWSKI AND SARTOR, LLC. - ALL RIGHTS RESERVED.

PROJECT
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
OLD BRIDGE TOWNSHIP & SAYREVILLE BOROUGH
MIDDLESEX COUNTY, NEW JERSEY

SHEET TITLE
PERMIT PLAN
BLOCK 1051, LOT 4
OLD BRIDGE TOWNSHIP
STAGING AREA

PROJECT NO.: 05731.0002 DRAWN BY: JPS
SCALE: 1" = 60' CHECKED BY: WS
DATE: 06/08/18 SHEET 1 OF 1
SHEET NO. 1