

# PUBLIC NOTICE

US Army Corps  
of Engineers  
New York District  
Jacob K. Javits Federal Building  
New York, N.Y. 10278-0090  
ATTN: Regulatory Branch

**In replying refer to:**

Public Notice Number: NAN-2018-01029-WOR

Issue Date: February 8, 2019

Expiration Date: March 11, 2019

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**To Whom It May Concern:**

The New York District, Corps of Engineers has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344).

**APPLICANT:** Merlin Entertainments Group US Holdings, Inc.  
3201 Lionshead Avenue  
Carlsbad, California 92010

**ACTIVITY:** The discharge of fill material into approximately 1.972 acres of waters of the United States, including wetlands, for the relocation of Exit 125 of New York State Route 17, including improvements to Harriman Drive and the intersection of South Street and Route 17M. Approximately 4.017 acres of wetlands would be established as mitigation.

**WATERWAY:** Otter Kill (Hudson River Watershed)

**LOCATION:** Town of Goshen, Orange County, New York.

A detailed description and plans of the applicant's activity are enclosed to assist in your review.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

ALL COMMENTS REGARDING THE PERMIT APPLICATION MUST BE PREPARED IN WRITING AND MAILED TO REACH THIS OFFICE BEFORE THE EXPIRATION DATE OF THIS NOTICE, otherwise, it will be presumed that there are no objections to the activity.

**CENAN-OP-RW**  
**PUBLIC NOTICE NO. NAN-2018-01029-WOR**

Comments submitted in response to this notice will be fully considered during the public interest review for this permit application. Comments provided will become part of the public record for this permit application. All written comments, including contact information, will be made a part of the administrative record, available to the public under the Freedom of Information Act. The Administrative Record, or portions thereof, may also be posted on a Corps of Engineers internet web site. Due to resource limitations, this office will normally not acknowledge the receipt of comments or respond to individual letters of comment.

Any person may request, in writing, before this public notice expires, that a public hearing be held to collect information necessary to consider this application. Requests for public hearings shall state, with particularity, the reasons why a public hearing should be held. It should be noted that information submitted by mail is considered just as carefully in the permit decision process and bears the same weight as that furnished at a public hearing.

Our preliminary determination is that the activity for which authorization is sought herein is not likely to adversely affect any Federally endangered or threatened species or their critical habitat. However, pursuant to Section 7 of the Endangered Species Act (16 U.S.C. 1531), the District Engineer is consulting with the appropriate Federal agency to determine the presence of and potential impacts to listed species in the project area or their critical habitat.

Based upon a review of the latest published version of the National Register of Historic Places, there are no known sites eligible for, or included in, the Register within the permit area. Presently unknown archeological, scientific, prehistoric, or historical data may be lost by work accomplished under the required permit.

Reviews of activities pursuant to Section 404 of the Clean Water Act will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 (b) of the Clean Water Act and the applicant will obtain a water quality certificate or waiver from the appropriate state agency in accordance with Section 401 of the Clean Water Act prior to a permit decision.

It is requested that you communicate the foregoing information concerning the activity to any persons known by you to be interested and who did not receive a copy of this notice. If you have any questions concerning this application, you may contact this office at (917) 790-8413 or [Brian.A.Orzel@usace.army.mil](mailto:Brian.A.Orzel@usace.army.mil).

In order for us to better serve you, please complete our Customer Service Survey located at <http://www.nan.usace.army.mil/Missions/Regulatory/CustomerSurvey.aspx>.

For more information on New York District Corps of Engineers programs, visit our website at <http://www.nan.usace.army.mil>.

  
for: Stephan A. Ryba  
Chief, Regulatory Branch

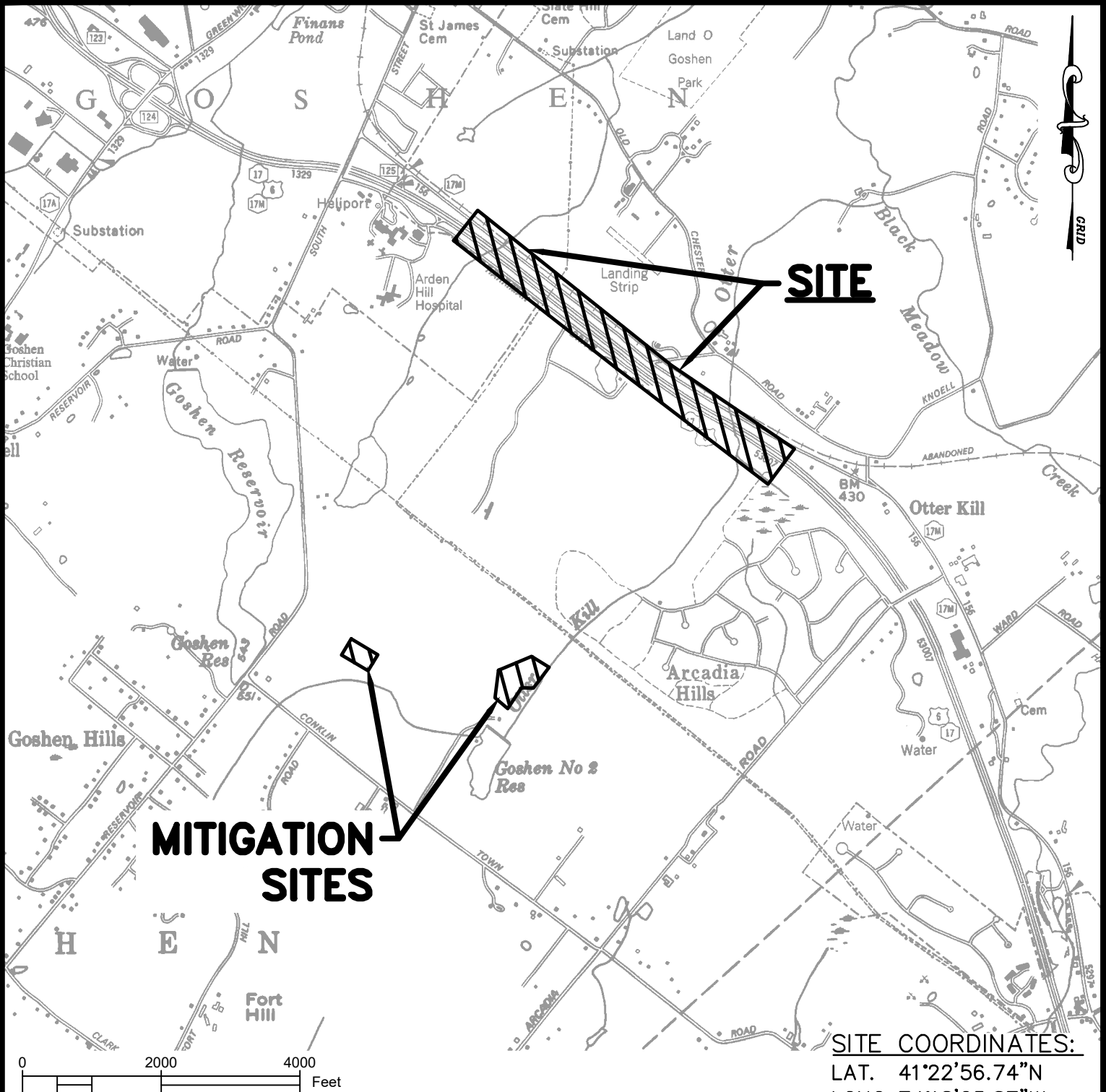
Enclosures

**WORK DESCRIPTION**

The applicant, Merlin Entertainments Group US Holdings, Inc., has requested Department of the Army authorization for the discharge of fill material into approximately 1.972 acres of waters of the United States, including wetlands, for the relocation of Exit 125 of New York State Route 17, including improvements to Harriman Drive and the intersection of South Street and Route 17M. Approximately 4.017 acres of wetlands would be established as mitigation. The project site is located within the Otter Kill, in the Town of Goshen, Orange County, New York.

The work would eliminate the substandard features of the existing Exit 125 and provide the required separation distance of approximately one mile between Exits 124 and 125. The work would also provide standard acceleration and deceleration lanes and allow for future potential widening of Route 17 to three lanes in each direction. The relocated Exit 125 would serve the area along Harriman Drive including the new Legoland NY amusement park.

The stated purpose of this project is to improve traffic flow and safety in the vicinity of Exit 125, and to accommodate the increased traffic that will likely result from the construction of the new Legoland NY amusement park.



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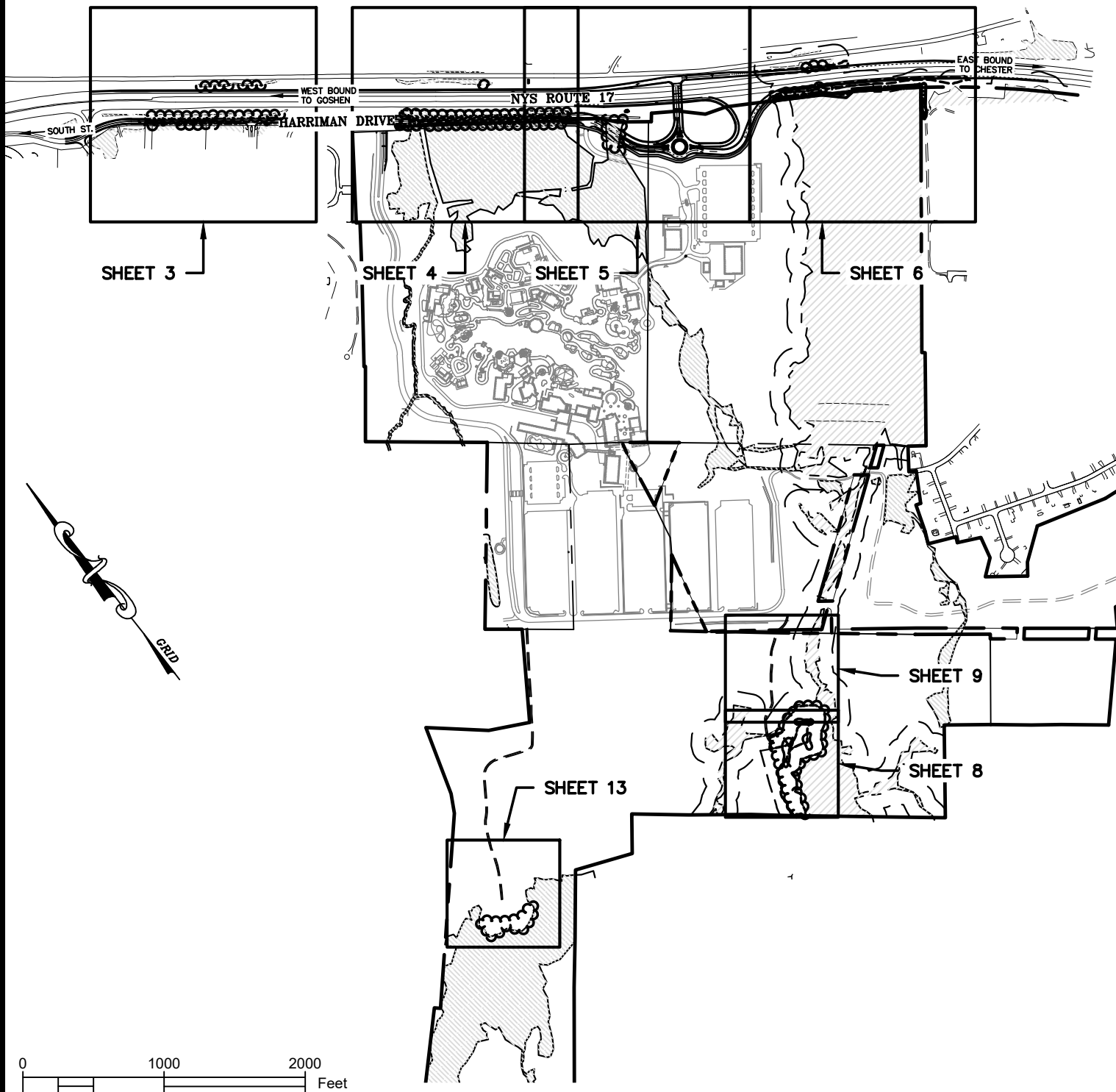
LOCATION MAP

<b>Date:</b>	MAY 29, 2018
<b>Revised:</b>	AUGUST 23, 2018
<b>Scale:</b>	1"=2000'
<b>Dwg. No.</b>	160042
<b>CAD File:</b>	MITIGATION-OFFSITE
<b>Layout:</b>	LOCATION
<b>Sheet:</b>	1 OF 19



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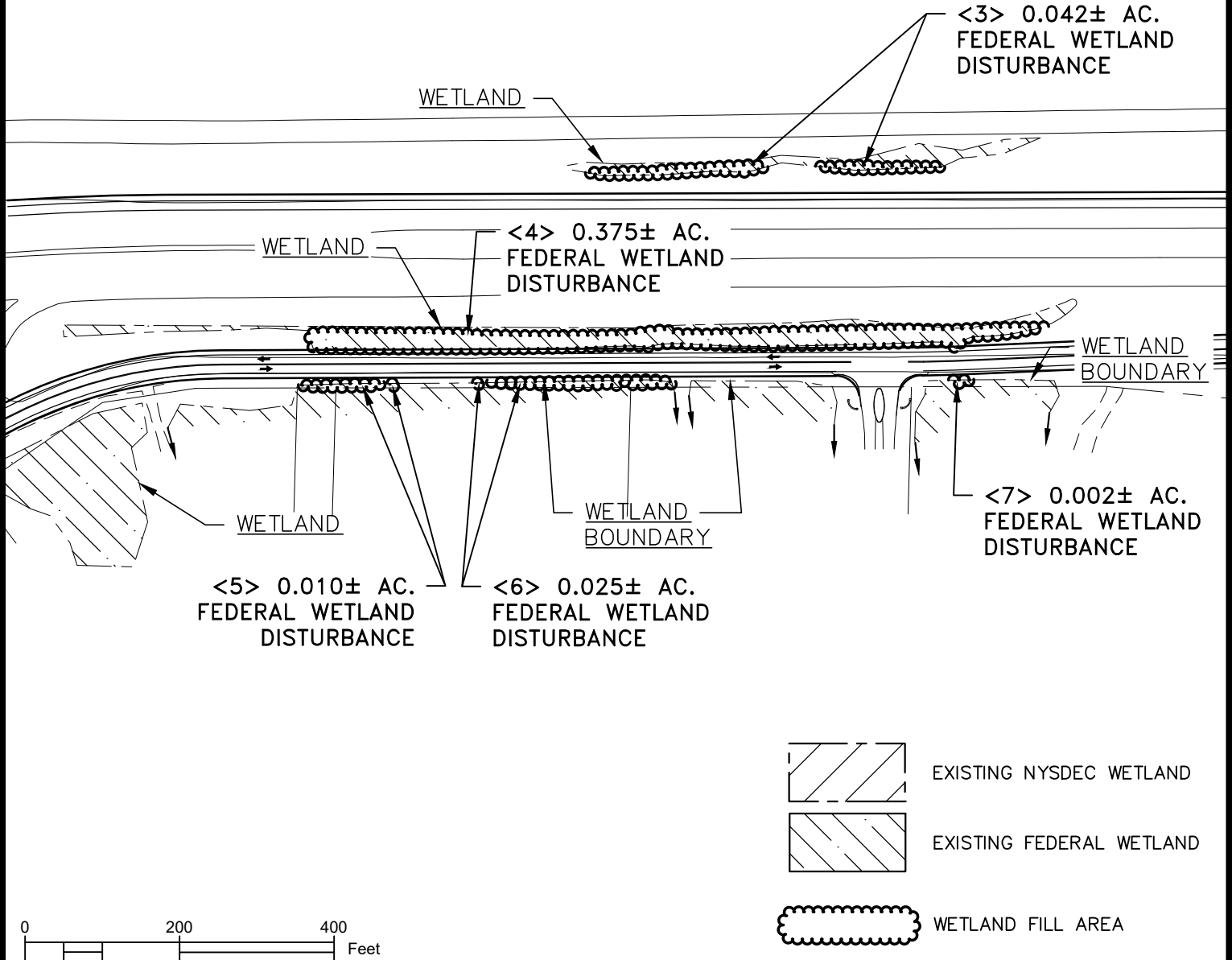
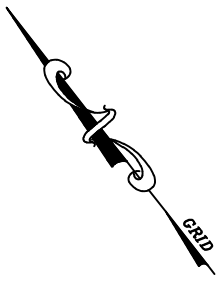
WETLAND DISTURBANCE AND MITIGATION PLAN  
OVERALL MAP

Date:	MAY 29, 2018
Revised:	AUGUST 23, 2018
Scale:	1"=1000'
Dwg. No.	160042
CAD File:	MITIGATION-OFFSITE
Layout:	OVERALL
Sheet:	2 OF 19



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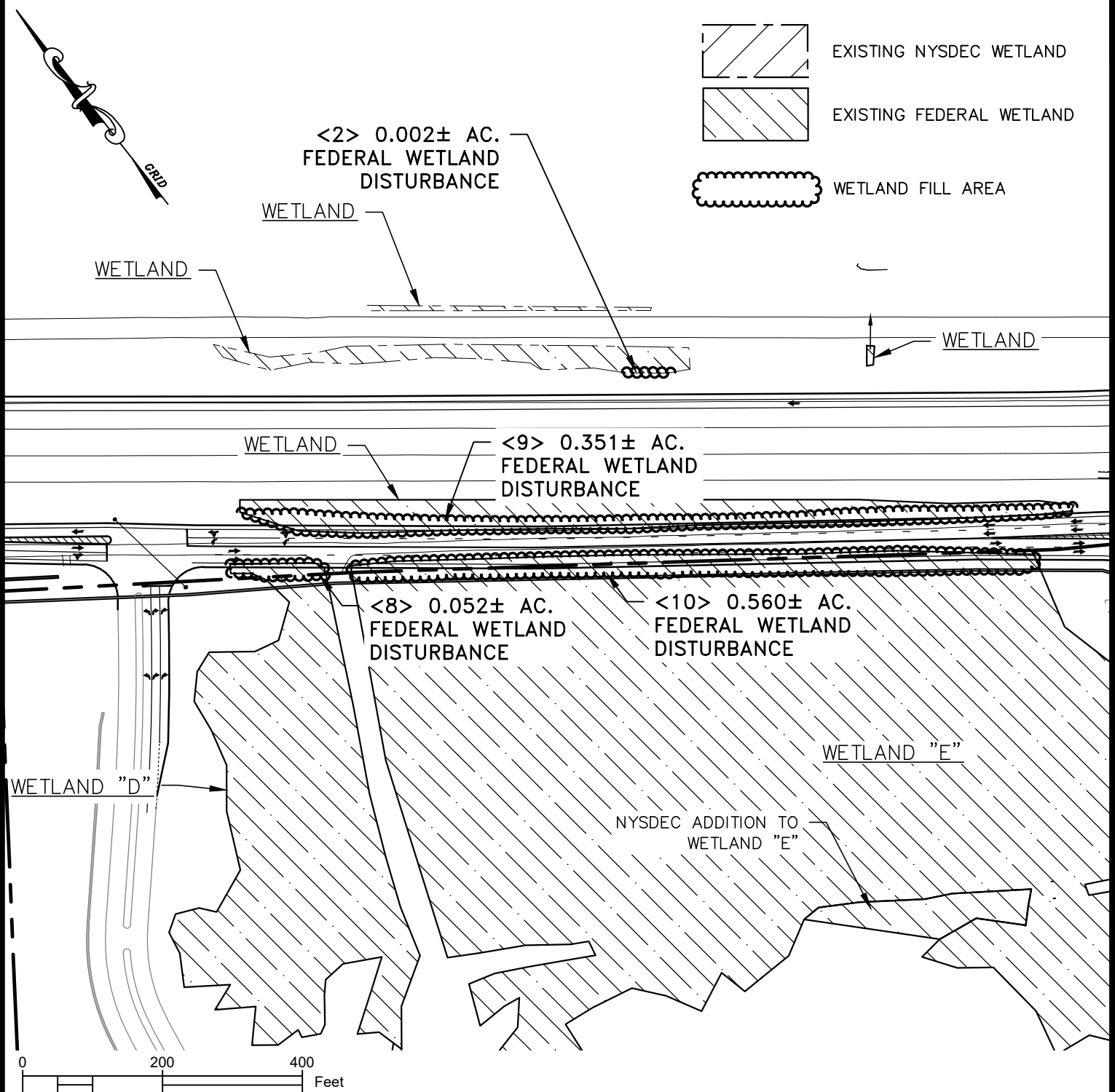
WETLAND DISTURBANCE AND MITIGATION PLAN  
DISTURBANCES SHEET 1 OF 4

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Revised:	AUGUST 23, 2018
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Dwg. No.	160042
CAD File:	MITIGATION-OFFSITE
Layout:	DIST 1
Sheet:	3 OF 19



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WETLAND DISTURBANCE AND MITIGATION PLAN  
DISTURBANCES SHEET 2 OF 4

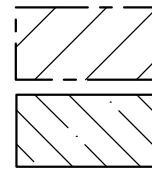
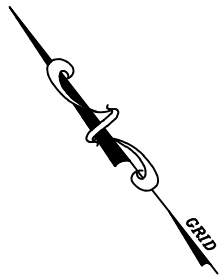
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Revised:	AUGUST 23, 2018
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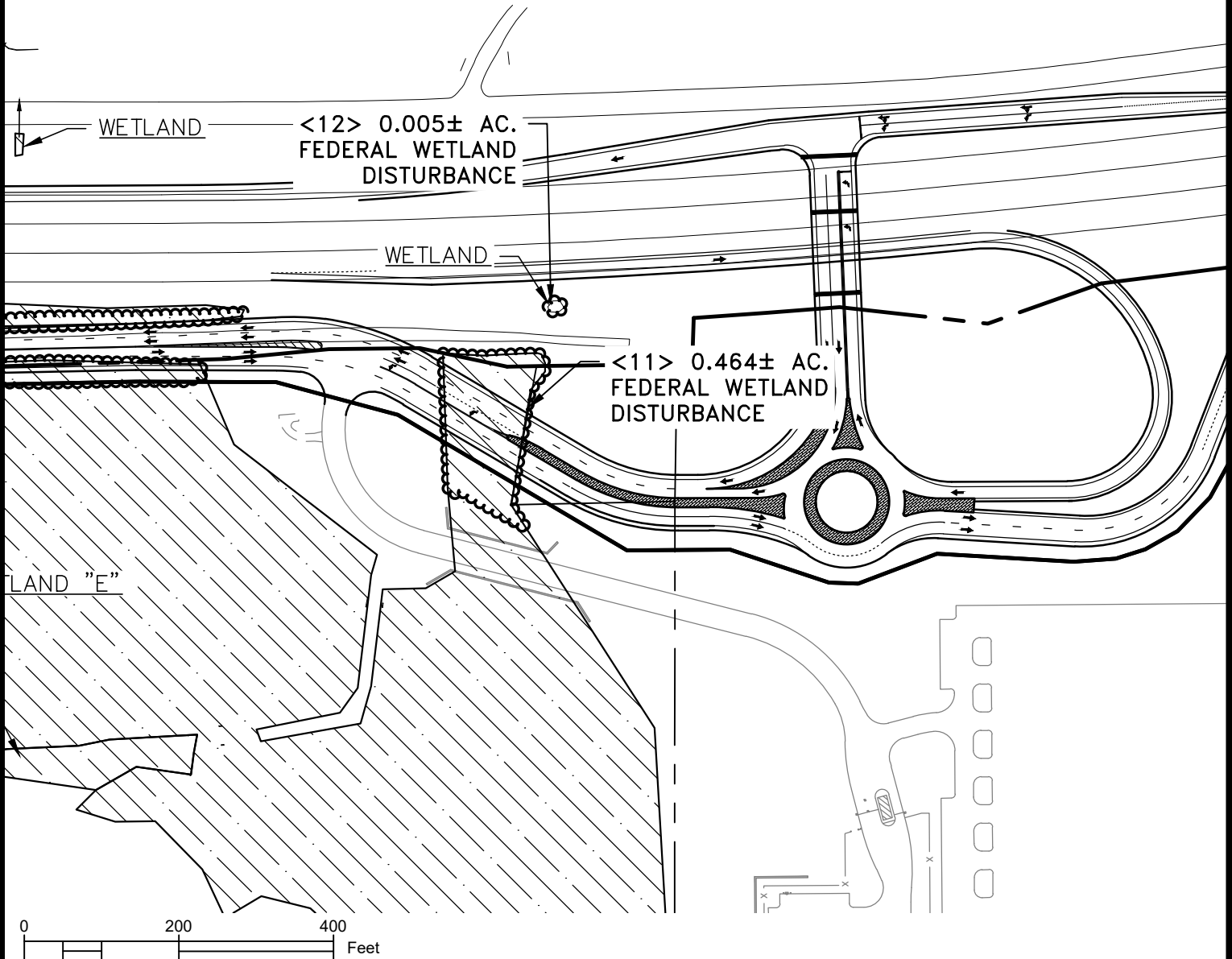


EXISTING NYSDEC WETLAND

EXISTING FEDERAL WETLAND



WETLAND FILL AREA



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DISTURBANCES SHEET 3 OF 4

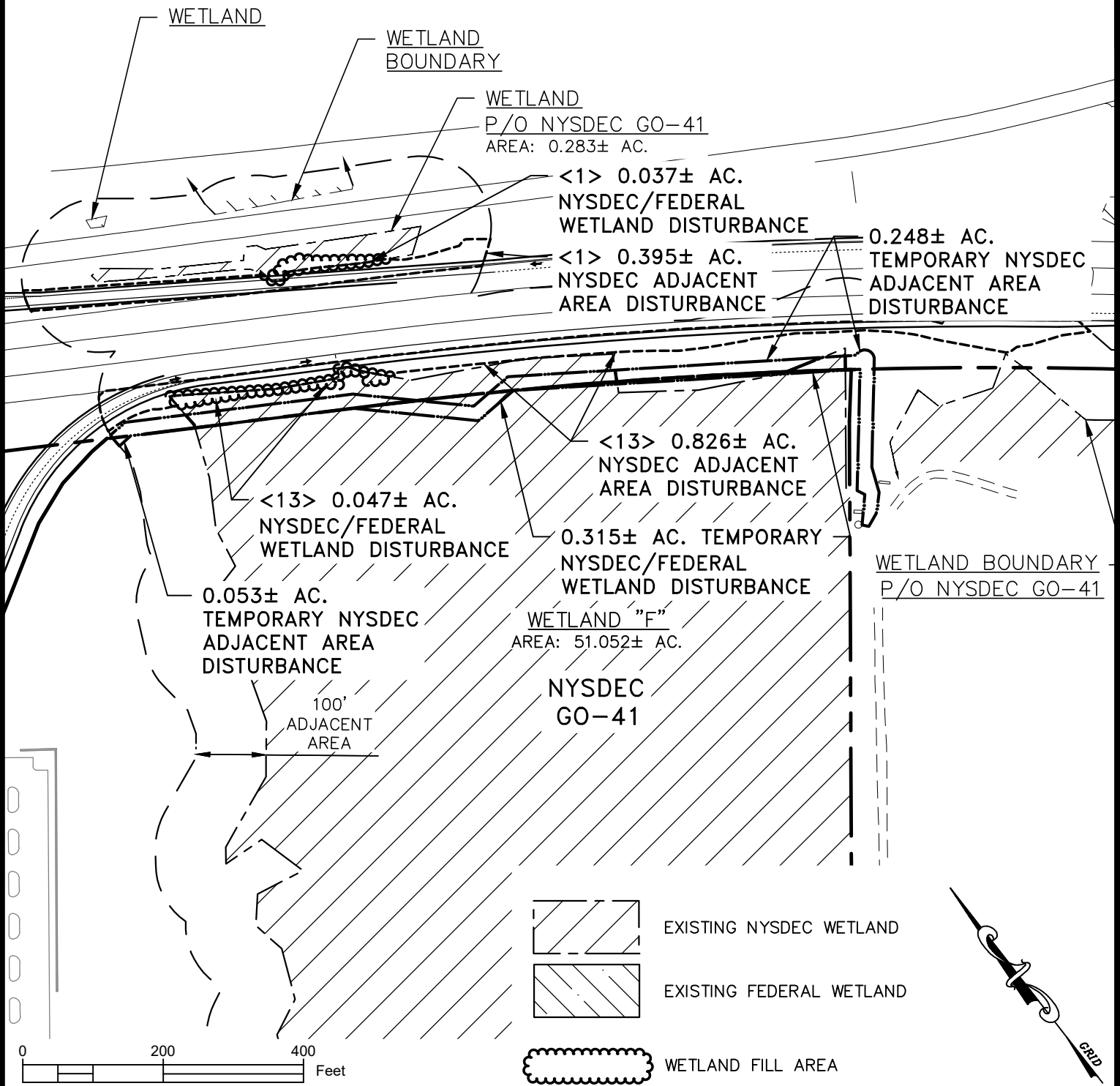
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Sheet:	5 OF 19



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WETLAND DISTURBANCE AND MITIGATION PLAN  
DISTURBANCES SHEET 4 OF 4

Date: MAY 29, 2018  
Revised: AUGUST 23, 2018  
Scale: 1"=200'  
Dwg. No. 160042  
CAD File: MITIGATION-OFFSITE  
Layout: DIST 4  
Sheet: 6 OF 19



**LEGOLAND NEW YORK**  
OFFSITE TRAFFIC IMPROVEMENTS

TOWN OF GOSHEN  
ORANGE COUNTY, NEW YORK

## OFFSITE WETLAND DISTURBANCE AREAS FOR HIGHWAY IMPROVEMENTS

Location	Wetland ID	ACOE	NYSDEC	NYSDEC ADJACENT AREA
<1> NYS RT 17 New West Bound Off-Ramp	NYSDEC Wetland (GO-41)	0.037 ± AC.	0.037 ± AC.	0.395 ± AC.
<2> NYS RT 17 West Bound	ACOE Wetland	0.002 ± AC.		
<3> NYS RT 17 West Bound	ACOE Wetland	0.042 ± AC.		
<4> Harriman Drive North Side	ACOE Wetland	0.375 ± AC.		
<5> Harriman Drive South Side	ACOE Wetland	0.010 ± AC.		
<6> Harriman Drive South Side	ACOE Wetland	0.025 ± AC.		
<7> Harriman Drive South Side	ACOE Wetland	0.002 ± AC.		
<8> Harriman Drive South Side	ACOE Wetland "E" (NYSDEC Eligible "A")	0.052 ± AC.		
<9> Harriman Drive North Side	ACOE Wetland	0.351 ± AC.		
<10> Harriman Drive South Side	ACOE Wetland "E" (NYSDEC Eligible "A")	0.560 ± AC.		
<11> Harriman Drive Extension, near Back of House Entrance & Traffic Circle	ACOE Wetland "E" (NYSDEC Eligible "A")	0.464 ± AC.		
<12> Harriman Drive Extension North Side, Near Traffic Circle	ACOE Wetland	0.005 ± AC.		
<13> NYS RT 17 New East Bound On-Ramp	NYSDEC (GO-41), ACOE Wetland "F"	0.047 ± AC.	0.047 ± AC.	0.826 ± AC.
Mitigation Area 1	NYSDEC (GO-41) Adjacent Area			3.016 ± AC.
Total Disturbances		1.972 ± AC.	0.084 ± AC.	4.237 ± AC.

## MITIGATION AREA FOR OFFSITE HIGHWAY IMPROVEMENT WETLAND DISTURBANCES

Location	Wetland ID	ACOE	NYSDEC	NYSDEC ADJACENT AREA
Area 1: South End of the Site Below Goshen Reservoir Dam	NYSDEC Wetland "I" (GO-41)	3.306 ± AC.	3.306 ± AC.	0.901 ± AC.
Area 2: Southwest End of the Site	ACOE Wetland "A" (NYSDEC Eligible "B")	0.711 ± AC.		
TOTAL WETLAND MITIGATION PROVIDED		4.017 ± AC.		0.901 ± AC.

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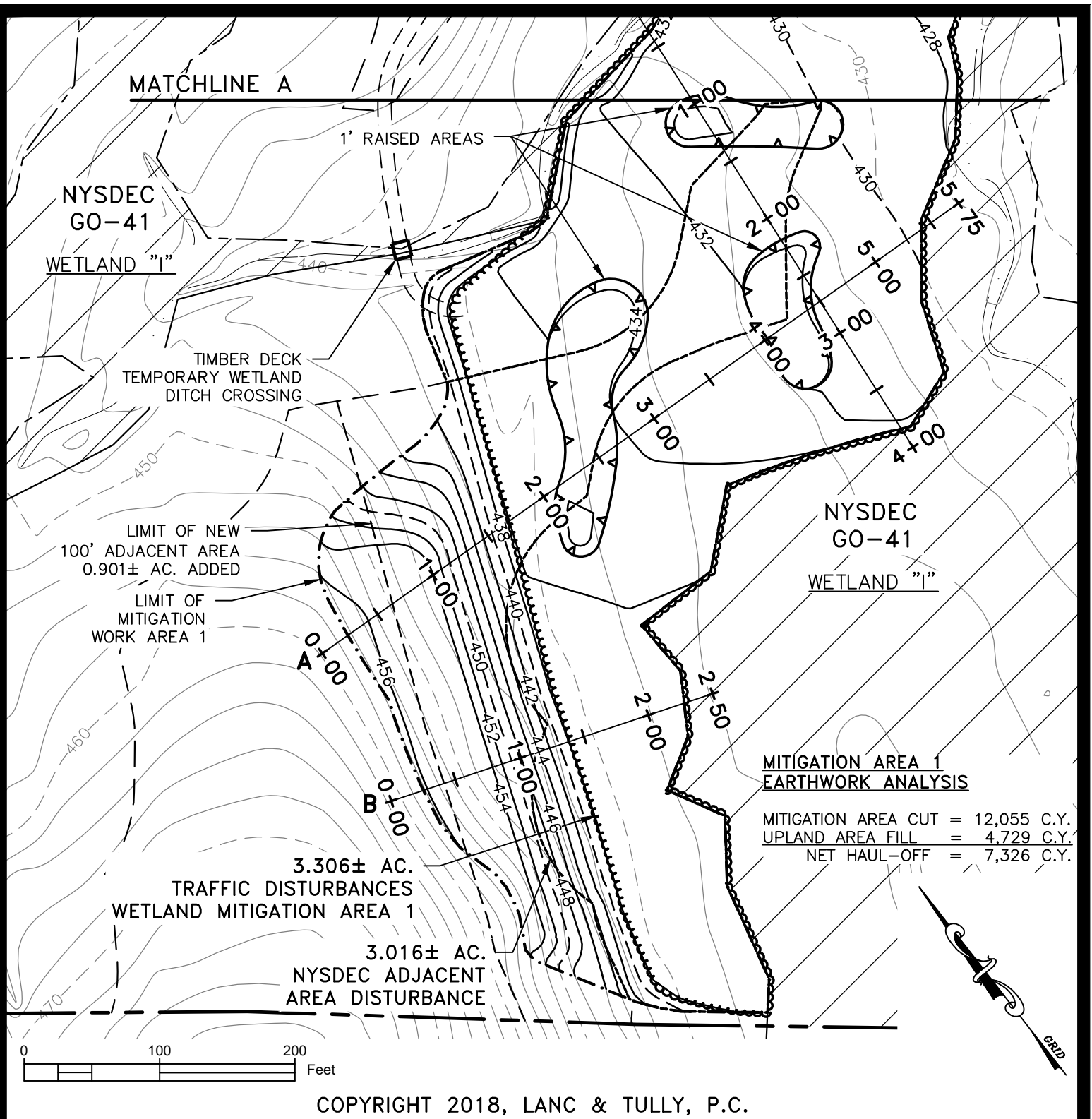
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**Revised:** AUGUST 23, 2018  
**Scale:** N/A  
**Dwg. No.** 160042  
**CAD File:** MITIGATION-OFFSITE  
**Layout:** CALC TABLE  
**Sheet:** 7 OF 19

WETLAND DISTURBANCE AND MITIGATION PLAN  
CALCULATIONS TABLE



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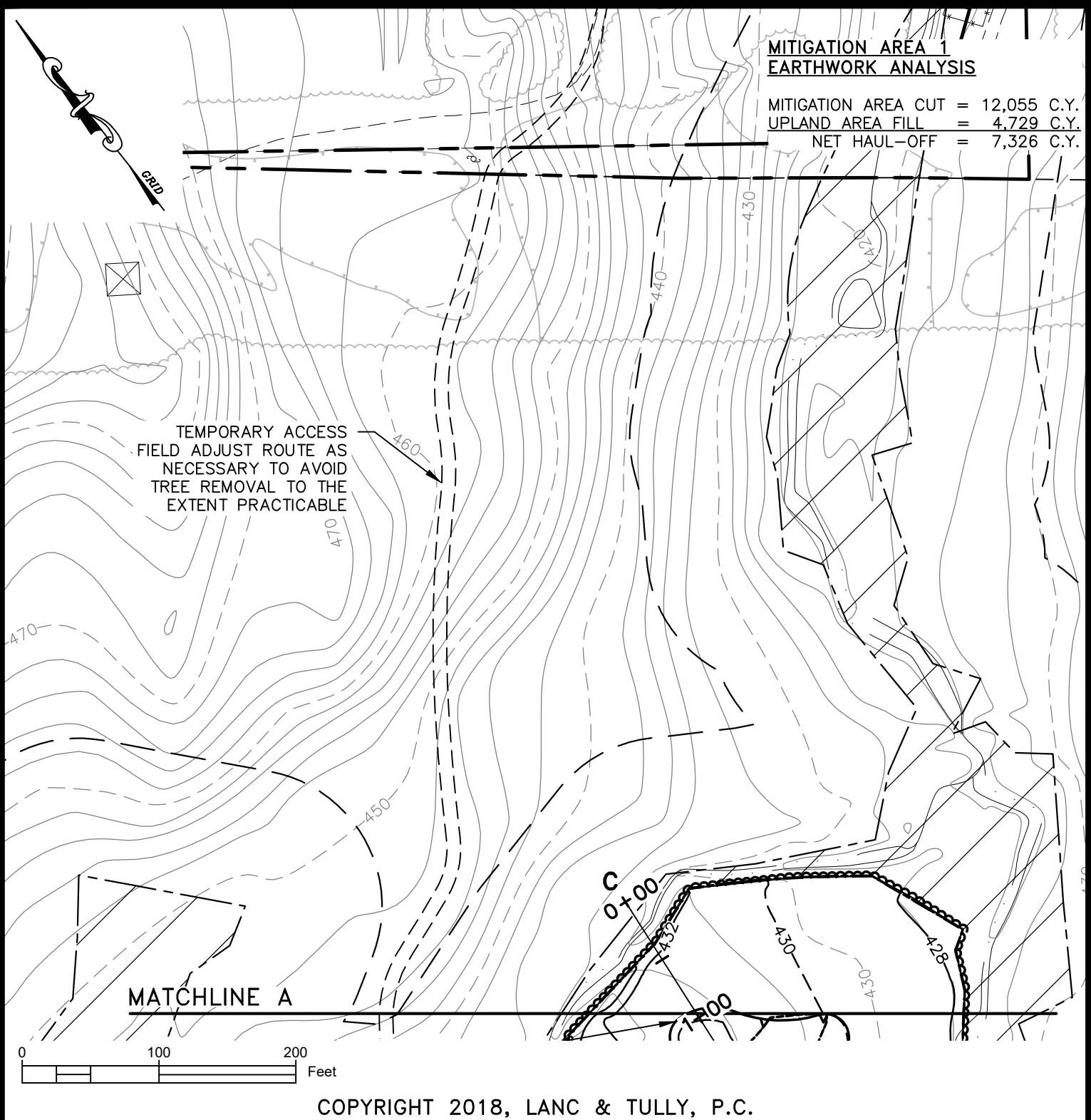
WETLAND DISTURBANCE AND MITIGATION PLAN  
 MITIGATION AREA 1

**Date:** MAY 29, 2018  
**Revised:** AUGUST 23, 2018  
**Scale:** 1"=100'  
**Dwg. No.** 160042  
**CAD File:** MITIGATION-OFFSITE  
**Layout:** MITIGATION 1.1  
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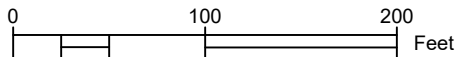
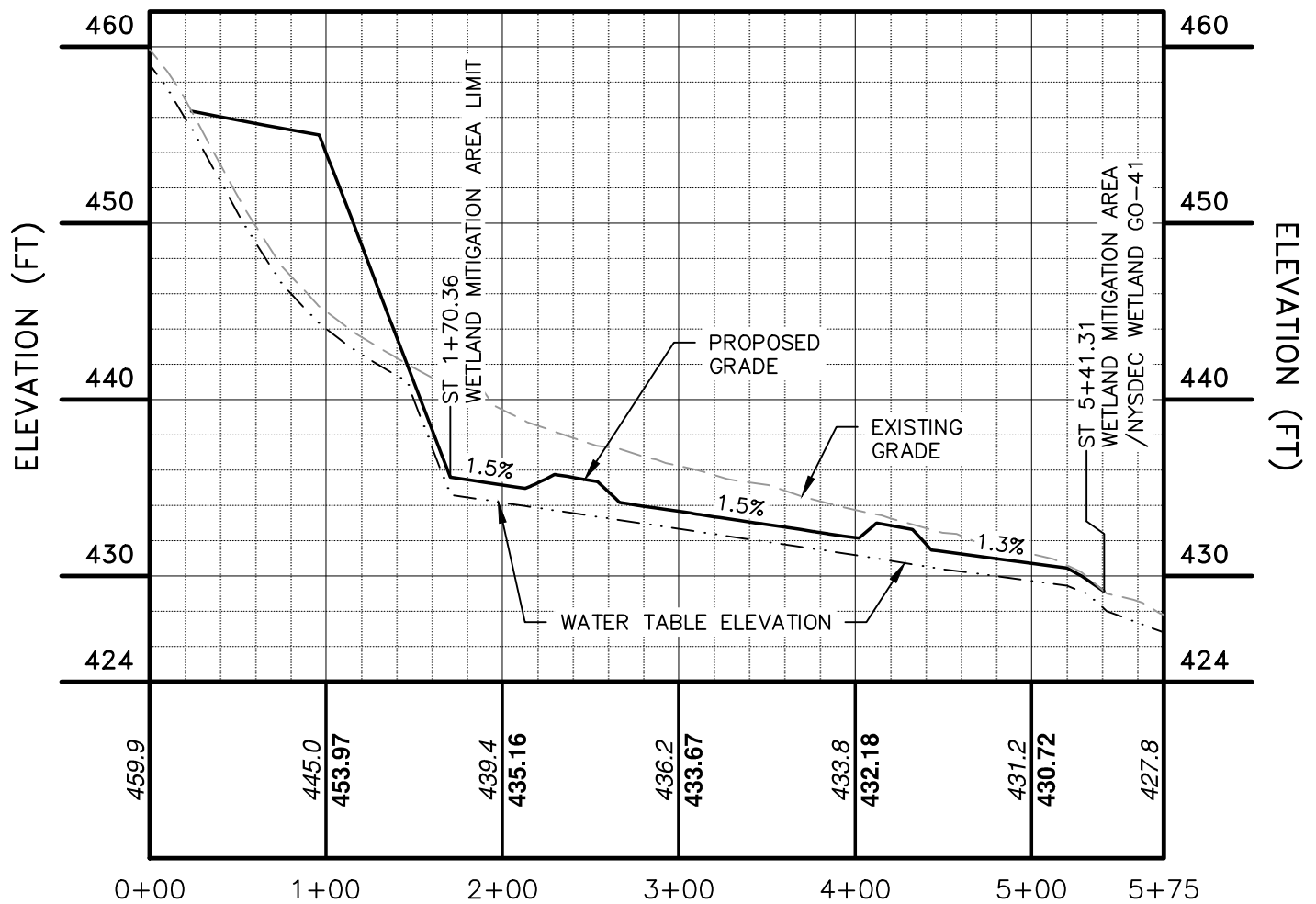
WETLAND DISTURBANCE AND MITIGATION PLAN  
 MITIGATION AREA 1

Date: MAY 29, 2018  
 Revised: AUGUST 23, 2018  
 Scale: 1"=100'  
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 CAD File: MITIGATION-OFFSITE  
 Layout: MITIGATION 1.2  
 Sheet: 9 OF 19



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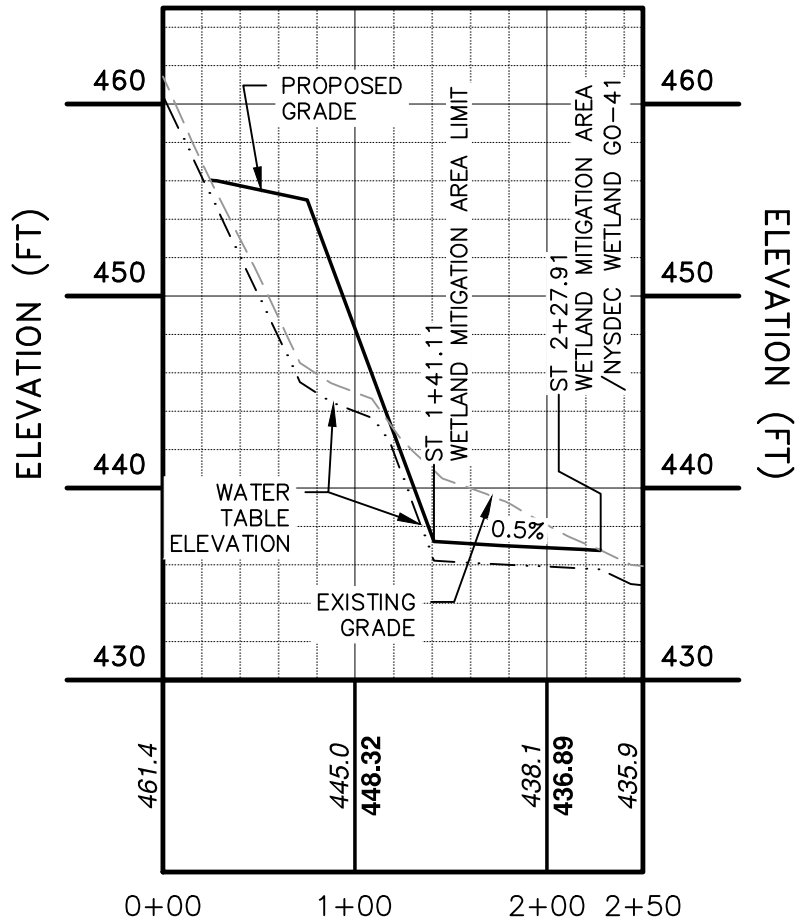
WETLAND DISTURBANCE AND MITIGATION PLAN  
 MITIGATION AREA 1 SECTION A

<b>Date:</b>	MAY 29, 2018
<b>Revised:</b>	AUGUST 23, 2018
<b>Scale:</b>	1"=100'
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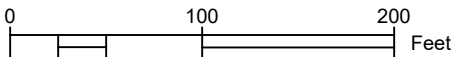


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TOWN OF GOSHEN  
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**WETLAND MITIGATION AREA 1 SECTION B**  
**ST 0+00 THRU ST 2+50**  
**SCALE: HORIZONTAL 1"=100'**  
**VERTICAL 1"=10'**



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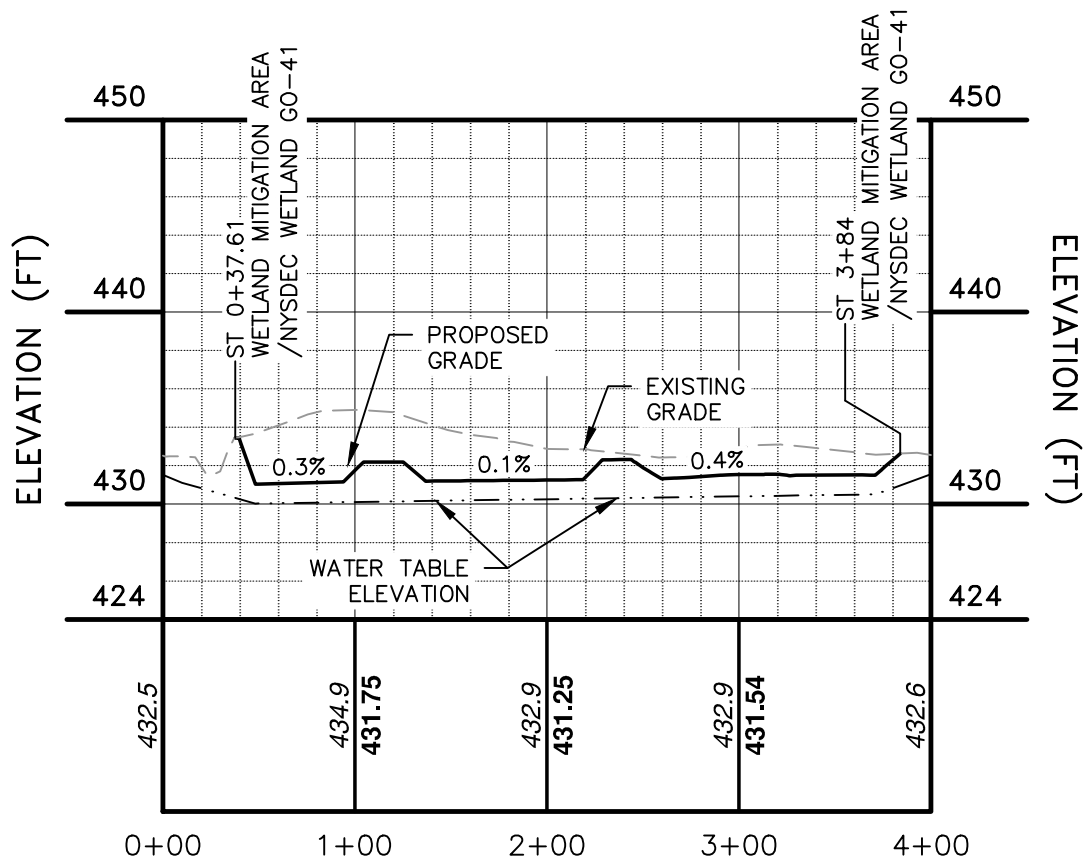
WETLAND DISTURBANCE AND MITIGATION PLAN  
MITIGATION AREA 1 SECTION B

<b>Date:</b>	MAY 29, 2018
<b>Revised:</b>	AUGUST 23, 2018
<b>Scale:</b>	1"=100'
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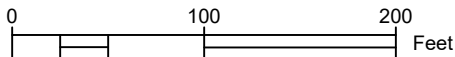


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**WETLAND MITIGATION AREA 1 SECTION C**  
**ST 0+00 THRU ST 4+00**  
**SCALE: HORIZONTAL 1"=100'**  
**VERTICAL 1"=10'**



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WETLAND DISTURBANCE AND MITIGATION PLAN  
 MITIGATION AREA 1 SECTION C

<b>Date:</b>	MAY 29, 2018
<b>Revised:</b>	AUGUST 23, 2018
<b>Scale:</b>	1"=100'
<b>Dwg. No.</b>	160042
<b>CAD File:</b>	MITIGATION-OFFSITE
<b>Layout:</b>	XSEC1C
<b>Sheet:</b>	12 OF 19



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TOWN OF GOSHEN  
 ORANGE COUNTY, NEW YORK



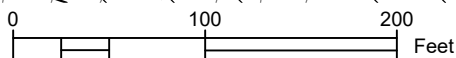
# **MITIGATION AREA 2** **EARTHWORK ANALYSIS**

MITIGATION AREA CUT = 3,816 C.Y.  
 UPLAND AREA FILL = 3,820 C.Y.  
 NET FILL = 4 C.Y.\*  
 \* (BALANCED SITE)

TEMPORARY ACCESS  
 FIELD ADJUST ROUTE AS  
 NECESSARY TO AVOID  
 TREE REMOVAL TO THE  
 EXTENT PRACTICABLE

0.711± AC.  
 TRAFFIC DISTURBANCES  
 WETLAND MITIGATION AREA 2

LIMIT OF  
 MITIGATION  
 WORK AREA 2



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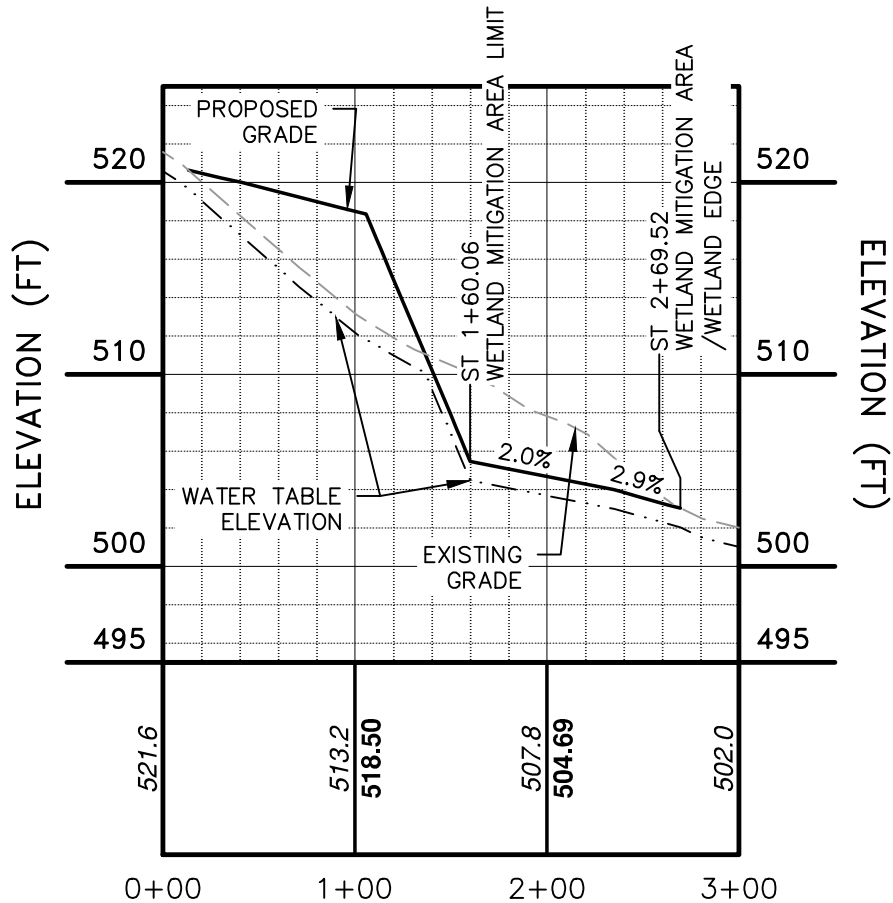
WETLAND DISTURBANCE AND MITIGATION PLAN  
 MITIGATION AREA 2

Date:	MAY 29, 2018
Revised:	AUGUST 23, 2018
Scale:	1"=100'
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Layout:	MITIGATION 2
Sheet:	13 OF 19

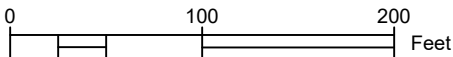


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TOWN OF GOSHEN  
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**WETLAND MITIGATION AREA 2 SECTION A**  
**ST 0+00 THRU ST 3+00**  
**SCALE: HORIZONTAL 1"=100'**  
**VERTICAL 1"=10'**



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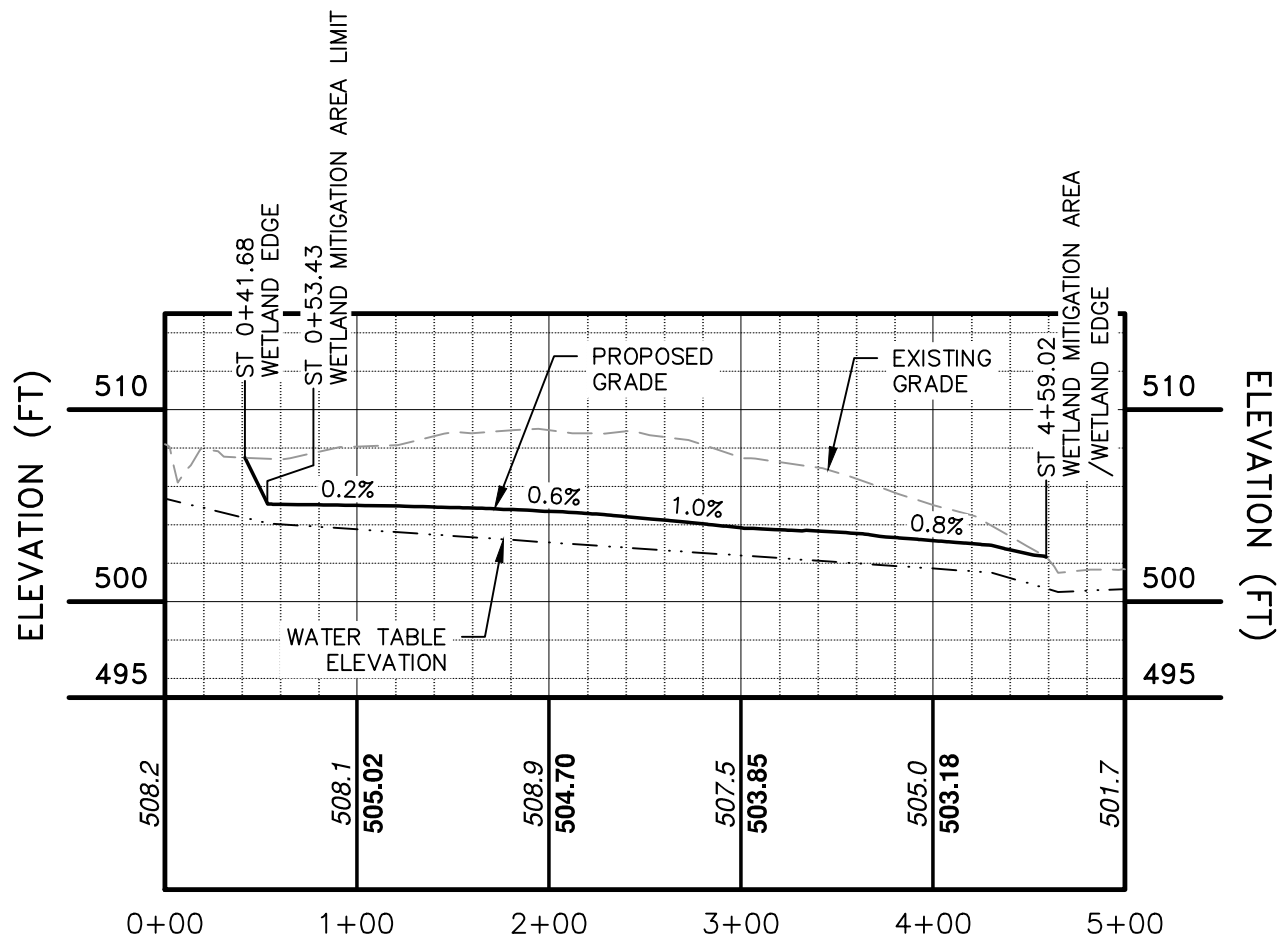
WETLAND DISTURBANCE AND MITIGATION PLAN  
 MITIGATION AREA 2 SECTION A

Date:	MAY 29, 2018
Revised:	AUGUST 23, 2018
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Dwg. No.	160042
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Layout:	XSEC2A
Sheet:	14 OF 19

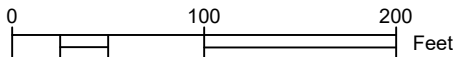


**LEGOLAND NEW YORK**  
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TOWN OF GOSHEN  
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**WETLAND MITIGATION AREA 2 SECTION B**  
**ST 0+00 THRU ST 5+00**  
**SCALE: HORIZONTAL 1"=100'**  
**VERTICAL 1"=10'**



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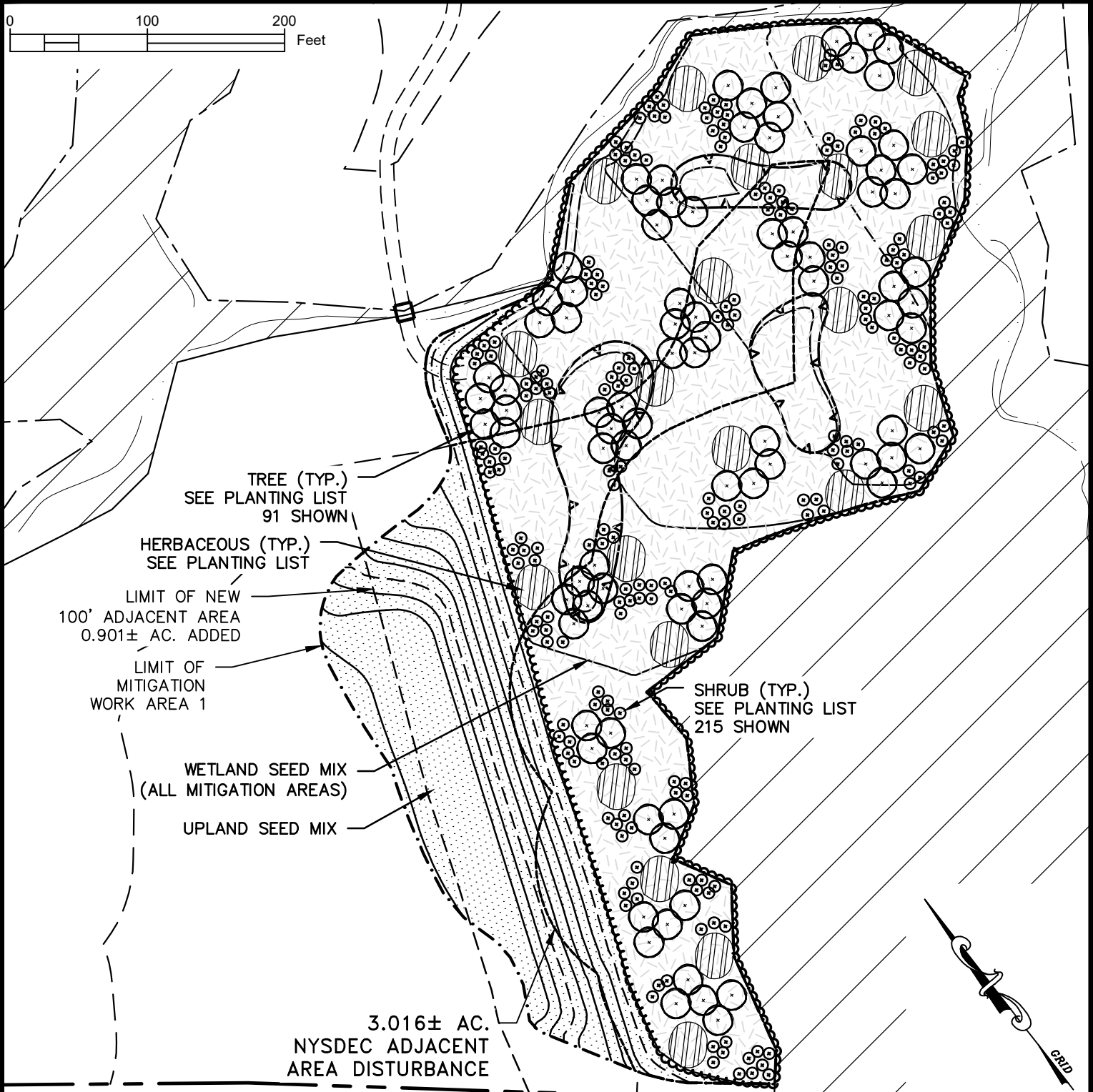
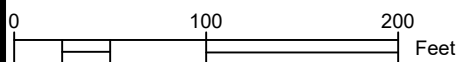
WETLAND DISTURBANCE AND MITIGATION PLAN  
MITIGATION AREA 2 SECTION B

<b>Date:</b>	MAY 29, 2018
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<b>CAD File:</b>	MITIGATION-OFFSITE
<b>Layout:</b>	XSEC2B
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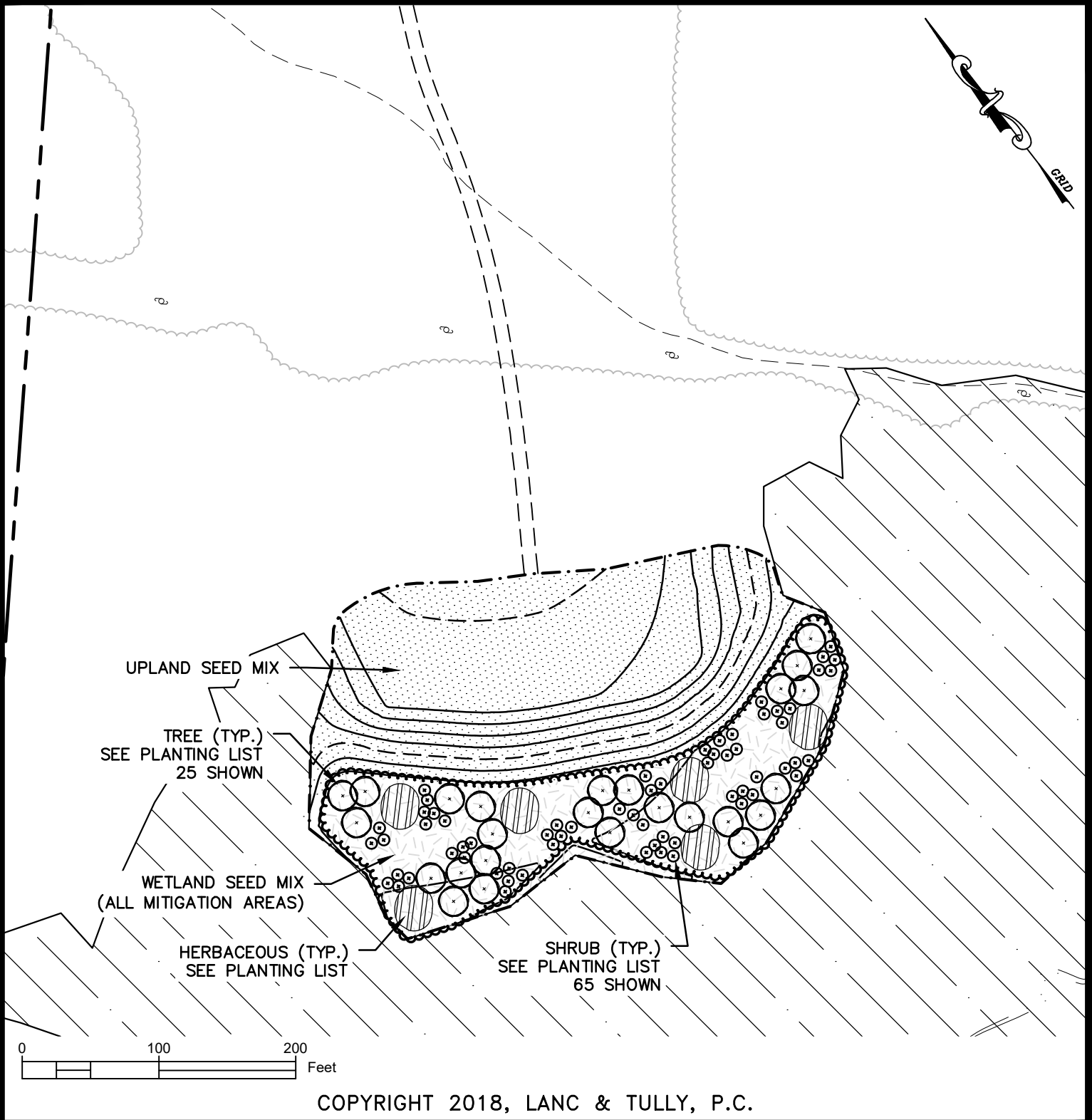
WETLAND DISTURBANCE AND MITIGATION PLAN  
MITIGATION AREA 1 PLANTING

Date:	MAY 29, 2018
Revised:	AUGUST 23, 2018
Scale:	1"=100'
Dwg. No.	160042
CAD File:	MITIGATION-OFFSITE
Layout:	AREA 1 PLANT
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**LEGOLAND NEW YORK**  
**OFFSITE TRAFFIC IMPROVEMENTS**

TOWN OF GOSHEN  
ORANGE COUNTY, NEW YORK



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WETLAND DISTURBANCE AND MITIGATION PLAN  
MITIGATION AREA 2 PLANTING

Date:	MAY 29, 2018
Revised:	AUGUST 23, 2018
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Dwg. No.	160042
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## LANDSCAPING NOTES:

### 1. QUALITY ASSURANCE

1.A.NOMENCLATURE: PLANT NAMES SHALL CONFORM TO THE LATEST EDITION OF "STANDARDIZED PLANT NAMES" AS ADOPTED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE.

1.B.SIZE AND GRADING: PLANT SIZES AND GRADING SHALL CONFORM TO THE LATEST EDITION OF "AMERICAN STANDARD FOR NURSERY STOCK" AS SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. (AAN), UNLESS OTHERWISE SPECIFIED.

1.C.NURSERY SOURCE: OBTAIN FRESHLY DUG, HEALTHY, VIGOROUS, PLANTS NURSERY GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR A MINIMUM OF 2 YEARS. PLANTS SHALL HAVE BEEN LINED OUT IN ROWS, ANNUALLY CULTIVATED, SPRAYED, PRUNED, AND FERTILIZED IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE. ALL PLANTS SHALL HAVE BEEN TRANS- PLANTED OR ROOT PRUNED AT LEAST ONCE IN THE PAST 3 YEARS. BALLED AND BURLAPPED PLANTS MUST COME FROM SOIL WHICH WILL HOLD A FIRM ROOT BALL. HEELED IN PLANTS AND PLANTS FROM COLD STORAGE ARE NOT ACCEPTABLE.

1.D.SUBSTITUTIONS: DO NOT MAKE SUBSTITUTIONS OF TREES AND/OR SHRUB MATERIALS. IF REQUIRED LANDSCAPE MATERIAL IS NOT OBTAIN- ABLE, SUBMIT PROOF OF NON-AVAILABILITY AND PROPOSAL FOR USE OF EQUIVALENT MATERIAL. WHEN AUTHORIZED, ADJUSTMENTS OF CON- TRACT AMOUNT (IF ANY) WILL BE MADE BY CHANGE ORDER.

### 2. SEEDING & PLANTING SEASONS AND TIMING CONDITIONS:

2.A.UNLESS OTHERWISE DIRECTED IN WRITING, SEED FROM MARCH 15 TO MAY 15, AND FROM AUGUST 15 TO OCTOBER 15.

2.B.UNLESS OTHERWISE DIRECTED IN WRITING THE PLANTING OF TREES AND SHRUBS SHALL BE FROM MARCH 15 TO JUNE 1, AND FROM SEPTEMBER 1 TO NOVEMBER 15.

2.C.PROCEED WITH AND COMPLETE SEEDING WORK AS RAPIDLY AS PORTIONS OF THE SITE BECOME AVAILABLE, WORKING WITHIN THE SEASONAL LIMITATIONS FOR EACH KIND OF LANDSCAPE WORK REQUIRED.

2.D.PROVIDE TEMPORARY ANNUAL RYEGRASS COVER FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.

### 3. PRODUCTS:

3.A.TOPSOIL : THE TOP 6" - 12" OF ROOTSTOCK MATERIAL WILL BE TAKEN FROM WETLAND DISTURBANCE AREAS AND PLACED AS BEDDING MATERIAL IN THE PROPOSED WETLAND MITIGATION AREA. IF ADDITIONAL TOPSOIL IS NEEDED USE IMPORTED TOPSOIL AS NOTED BELOW.

3.B.IMPORTED TOPSOIL: PLACE TOPSOIL 6" TO 8" THICK CONFORMING TO THE FOLLOWING:

3.B.1. ORIGINAL LOAM TOPSOIL, WELL DRAINED HOMOGENOUS TEXTURE AND OF UNIFORM GRADE, WITHOUT THE ADMIXTURE OF SUBSOIL MATERIAL AND FREE OF DENSE MATERIAL, HARDPAN, CLAY, STONES, SOD OR OTHER OBJECTIONABLE FOREIGN MATERIAL.

3.B.2. CONTAINING NOT LESS THAN 5% NOR MORE THAN 20% ORGANIC MATTER IN THAT PORTION OF A SAMPLE PASSING A 1/4" SIEVE WHEN DETERMINED BY THE WET COMBUSTION METHOD ON A SAMPLE DRIED AT 105° C.

3.B.3. CONTAINING A pH VALUE WITHIN THE RANGE OF 6.5 TO 7.5 ON THAT PORTION OF THE SAMPLE WHICH PASSES A 1/4" SIEVE.

3.B.4. CONTAINING THE FOLLOWING WASHED GRADATIONS:

SIEVE DESIGNATION	% PASSING
1'	100
1/4"	97 - 100
NO. 200	20 - 65 (OF THE 1/4" SIEVE)

3.C.SEED MIXTURE: SUPPLEMENTAL WETLAND SEED MIX IS TO BE APPLIED TO ALL MITIGATION AREA AT 4 POUNDS OF SEED PER ACRE AND CONSIST OF THE FOLLOWING:  
NORTHEAST WETLAND DIVERSITY SEED MIX

% BY WT.	SPECIES	VARIETY
26.66%	EUPATORIUM PERFOLIATUM	BONESET
20.80%	VERBENA HASTATA	BLUE Vervain
19.75%	PANICUM DICHOTOMIFLORUM	SMOOTH PANIC-GRASS
8.89%	SOLIDAGO RUGOSA	WRINKLED GOLDENROD
8.74%	EUPATORIUM MACULATUM	JOE PYE WEEED
6.65%	EUTHAMIA GRAMINIFOLIA	GRASS LEAF GOLDENROD
4.59%	POLYGONUM PENNSYLVANICUM	PENNSYLVANIA SMARTHEED
2.80%	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER
0.79%	BIDENS CERNUA	NODDING BEGGAR'S TICK
0.21%	ASCLEPIAS INCARNATA	SHAMP MILKWEED
0.12%	IRIS VERSICOLOR	BLUE FLAG

3.D.UPLAND SEED MIX: ERNST SEED MIX ERNMX-123 "NATIVE UPLAND WILDLIFE FORAGE AND COVER MEADOW MIX" APPLIED AT 15 POUNDS OF SEED PER ACRE.

3.E.LIME: NATURAL LIMESTONE CONTAINING AT LEAST 85% OF TOTAL CARBONATES, GROUND TO SUCH FINENESS THAT AT LEAST 90% PASSES A 10-MESH SIEVE AND AT LEAST 50% PASSES A 100- MESH SIEVE.

### 3.F.FERTILIZER:

3.F.1. FOR SPRING SEEDING: COMMERCIAL STARTER FERTILIZER, GRANULAR, NONBURNING PRODUCT CONTAINING 10% NITROGEN, 6% AVAILABLE PHOSPHORUS, AND 4% WATER SOLUBLE POTASH (10-6-4).

3.F.2. FOR FALL SEEDING: COMMERCIAL STARTER FERTILIZER, GRANULAR, NONBURNING PRODUCT, CONTAINING 5% NITROGEN, 10% AVAILABLE PHOSPHORUS, AND 5% WATER SOLUBLE POTASH (5-10-5).

3.F.3. FOR FINAL FERTILIZING: IF APPLIED IN SPRING SEASON, SHALL BE A SLOW RELEASE COMMERCIAL FERTILIZER, GRANULAR, WITH HIGH NITROGEN, 38% URAMITE OR APPROVED EQUAL. IF APPLIED IN FALL SEASON, SHALL BE AS SPECIFIED IN (3.D.2) ABOVE.

### 3.G.TREES AND SHRUBS:

3.G.1. PLANTING SOIL MIXTURE: SHALL BE PREMIXED IN BULK, AND CONTAIN THE FOLLOWING BY VOLUME:

20 PARTS TOPSOIL
10 PARTS PEAT MOSS
1 PART BONE MEAL

3.G.2. PEAT MOSS: BROWN TO BLACK IN COLOR, WEED AND SEED FREE, DRIED SPHAGNUM PEAT MOSS, CONTAINING NOT MORE THAN 9% MINERAL ON A DRY BASIS AND CONFORMING TO NYSDOT 713-20.

3.G.3. BONE MEAL: FINELY GROUND, RAW, MINIMUM 4% NITROGEN AND 20% PHOSPHORIC ACID. IT SHALL BE DELIVERED IN SEALED BAGS SHOWING THE MANUFACTURER'S GUARANTEED ANALYSIS.

3.G.4. STAKES: 8 FT LONG, 2 IN WIDE WOOD STAKES.

3.G.5. HOSE: NEW, 2-PLY GARDEN HOSE NOT LESS THAN 1/2 INCH IN DIAMETER.

3.G.6. MULCH: GROUND OR SHREDDED BARK, MEDIUM SIZE FROM HARD- WOOD TREES. NO PIECES OVER 2 INCHES GREATEST DIMENSION. FREE FROM SAWDUST, STONES, DEBRIS, AND DELETERIOUS MAT- ERIALS. STANDARD OF QUALITY SHALL BE MANUFACTURED BY HYDE PARK PRODUCTS CO., OF NEW ROCHELLE, NEW YORK. OR APPROVED EQUAL.

3.G.7. PROVIDE COMPLETE COMMERCIAL FERTILIZER, OF NEUTRAL CHARACTER, WITH SOME ELEMENTS DERIVED FROM ORGANIC SOURCES, CONTAINING AT LEAST 10% AVAILABLE PHOSPHORIC ACID, 3% TO 5% TOTAL NITROGEN, AND 3% TO 5% SOLUBLE POTASH.

## CONSTRUCTION NOTES:

1. COMPENSATORY WETLANDS SHALL BE PLANTED WITH HYDROPHYTIC PLANTS (THOSE WHICH ARE LISTED ON THE MOST UP TO DATE ACOE NATIONAL WETLAND PLANT LIST, NORTHEAST (REGION 1) WITH PREFERENCE GIVEN TO THOSE SPECIES WHICH CURRENTLY OCCUPY THE ONSITE WETLANDS SUCH AS RED MAPLE, PIN OAK, WINTERBERRY, SPICEBUSH, HIGHBUSH BLUEBERRY, WOOL GRASS, AND FOX SEDGE. NO INVASIVE SPECIES WILL BE PLANTED (REGARDLESS OF THEIR LISTING). A MONITORING PROGRAM WILL BE IMPLEMENTED FOR THE FIRST FIVE YEARS AFTER CONSTRUCTION TO MONITOR WATER LEVELS IN THE NEW WETLAND AREAS AND TO ENSURE PLANTING SURVIVAL. ANNUAL REPORTS WILL BE SUBMITTED TO THE ACOE AND NYSDEC WITH COPY TO THE TOWN OF GOSHEN BUILDING DEPARTMENT.

2. ALL DISTURBED AREAS ARE TO BE REPAIRED INCLUDING BRINGING GRADES BACK TO ORIGINAL CONDITION BY IMPORTING TOPSOIL AND SUPPLYING NECESSARY SOIL AMENDMENTS PRIOR TO SEEDING AND WATERING. DISTURBED AREAS SHALL BE RE-SEEDDED WITH UPLAND SEED MIX.

3. MONITORING WELLS TO BE INSTALLED THROUGHOUT THE MITIGATION AREA AS DIRECTED BY THE WETLAND SPECIALIST.

## HYDROLOGY OF THE MITIGATION AREA

- THE MITIGATION AREAS WERE EXAMINED TO PREDICT THE WATER LEVELS AVAILABLE FOR THE PROPOSED WETLAND PLANTINGS.
- THE WETLAND MITIGATION AREAS ARE ADJACENT TO EXISTING WETLANDS ON THE SITE.
- THE PROPOSED MITIGATION EFFORT IS TO REMOVE EARTHEN MATERIALS FROM UPSLOPE AREAS DIRECTLY ADJACENT TO EXISTING WETLANDS TO PRODUCE A LOWER SLOPE THAT WILL RETAIN WATER. IT IS EXPECTED THAT SOME AREAS WILL RECEIVE SEEPAGE FROM NEARBY SLOPES AND SURFACE AND GROUNDWATER WILL ADDITIONALLY COLLECT IN THE MITIGATION AREAS IN SUFFICIENT AMOUNTS TO SUPPORT WETLAND VEGETATION.
- THE EXISTING WETLANDS AND INTER-CONNECTING STREAM(S) WILL SERVE AS A "REGENERATION NUCLEUS" FROM WHICH VEGETATIVE COVER CAN EXPAND RADIALLY BY VEGETATIVE REPRODUCTION INTO THE PROPOSED MITIGATION AREA. SINCE DIFFERENT PLANT SPECIES WITHIN THE SAME WETLAND MAY OFTEN EXHIBIT A WIDE RANGE OF MOISTURE REQUIREMENTS AND FLOODING TOLERANCES, THE PROPOSED ELEVATIONAL RANGES WILL PROVIDE A MICRO-TOPOGRAPHIC MOISTURE GRADIENT CONDUCTIVE TO A HIGH SPECIES DIVERSITY.

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## WETLAND DISTURBANCE AND MITIGATION PLAN NOTES

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Revised:	AUGUST 23, 2018
Scale:	N/A
Dwg. No.	160042
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## WETLAND MITIGATION PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	CONDITION	SIZE	SPACING
TREES: TOTAL 116 PROPOSED					
Ar	<i>ACER RUBRUM</i>	RED SUNSET RED MAPLE	B&B	6'-8' HT	AS SHOWN
Qb	<i>QUERCUS BICOLOR</i>	SWAMP WHITE OAK	#5 CONTAINER	3'-4' HT	AS SHOWN
Qp	<i>QUERCUS PALUSTRIS</i>	PIN OAK	#5 CONTAINER	3'-4' HT	AS SHOWN
SHRUBS: TOTAL 280 PROPOSED					
Iv	<i>ILEX VERTICILLATA</i>	WINTERBERRY	#5 CONTAINER	3'-4' HT	10' O.C.
Lb	<i>LINDERA BENZOIN</i>	SPICEBUSH	#5 CONTAINER	3'-4' HT	10' O.C.
Vc	<i>VACCINIUM CORYMBOSUM</i>	HIGHBUSH BLUEBERRY	#5 CONTAINER	3'-4' HT	10' O.C.
HERBACEOUS					
Cv	<i>CAREX VULPINOIDEA</i>	FOX SEDGE	#2 CONTAINER	NA	1' O.C.
Sc	<i>SCIRPUS CYPERINUS</i>	WOOL GRASS	#2 CONTAINER	NA	1' O.C.

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CAD File:	MITIGATION-OFFSITE
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WETLAND DISTURBANCE AND MITIGATION PLAN  
WETLAND PLANTING LIST



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