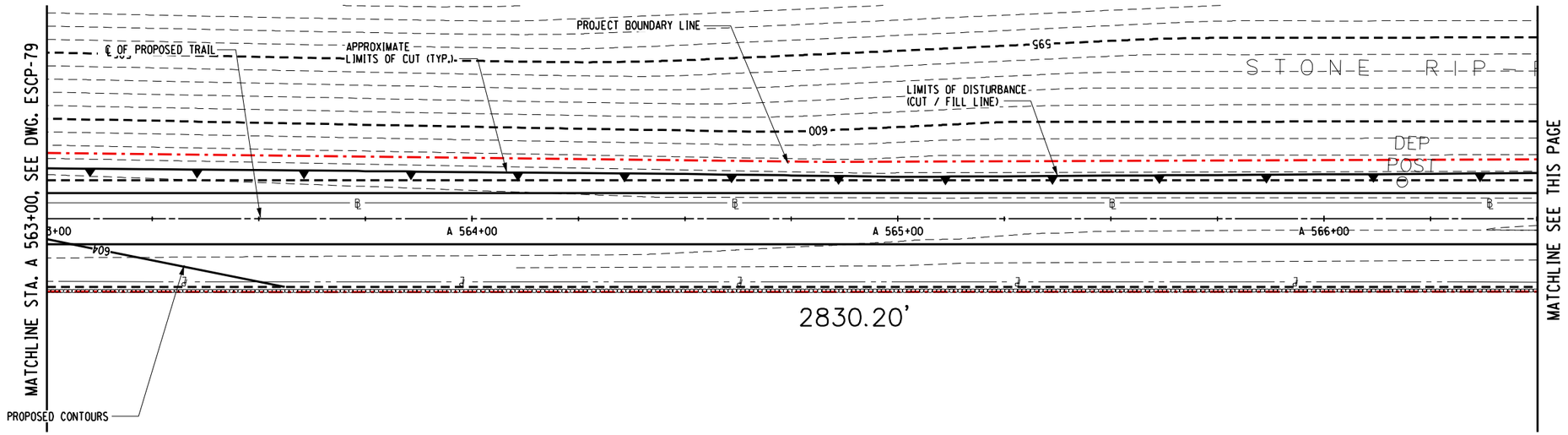
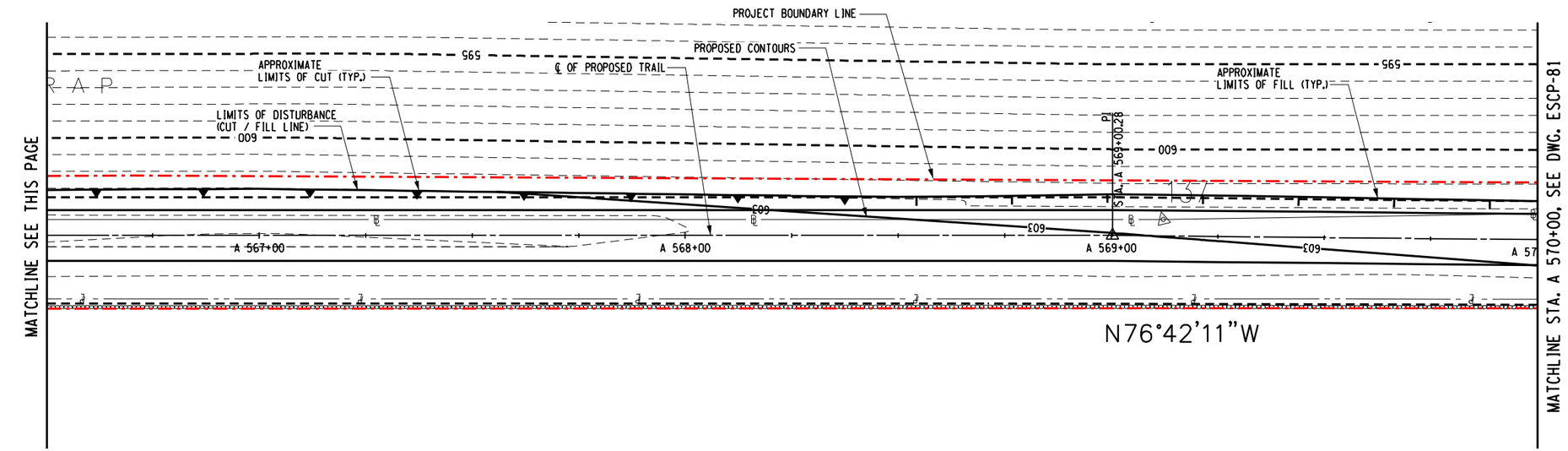
Attachment C –SWPPP

Part 5 of 6





0 15 30
SCALE 1" = 30 FEET

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

PLAN NOTES:

1. REMOVE EXISTING WOODY DEBRIS FROM EXISTING SWALES. EXCAVATION OR FILL PLACEMENT SHALL NOT EXTEND PAST SLOPE LIMITS DISPLAYED ON RESPECTIVE ESCP DRAWINGS UNLESS NECESSARY TO PROMOTE DRAINAGE FLOW IN DIRECTION SHOWN. EXCAVATION IN DRAINAGE SWALES SHALL BE LIMITED TO SPOT LOCATIONS AND SHALL BE AS MINIMAL AS POSSIBLE TO RESTORE POSITIVE DRAINAGE FLOW WITHIN THE SWALE.

EROSION AND SEDIMENT CONTROL PLAN - STA. A 563+00 TO STA. A 570+00

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

EROSION AND SEDIMENT CONTROL PLAN-80
SCALE: 1:30
DATE ISSUED: 2/2018
DRAWING
ESCP-80

DESIGNED BY
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IN CHARGE OF

cmh
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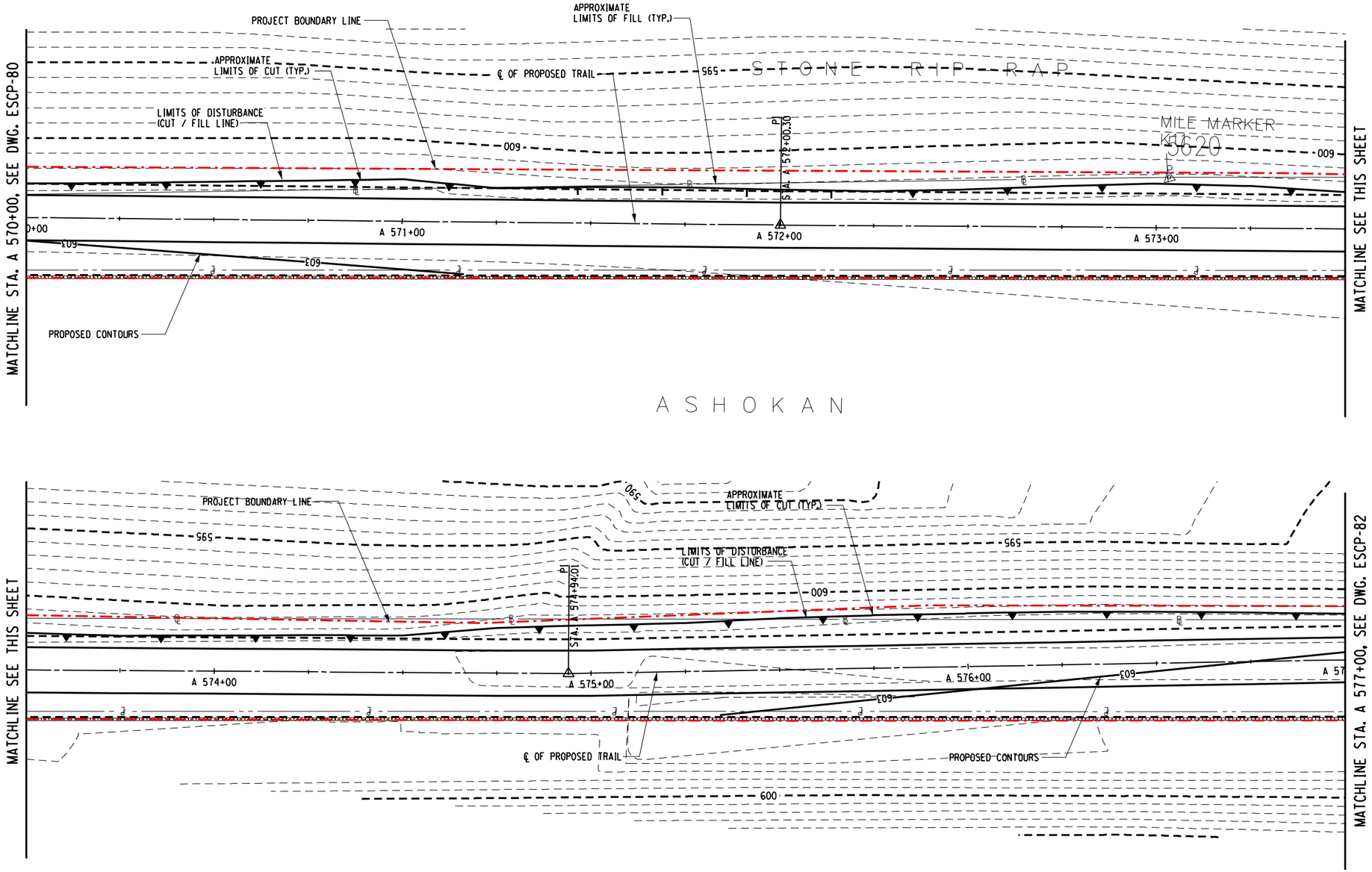

0 15 30
SCALE 1" = 30 FEET

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

PLAN NOTES:

1. REMOVE EXISTING WOODY DEBRIS FROM EXISTING SWALES. EXCAVATION OR FILL PLACEMENT SHALL NOT EXTEND PAST SLOPE LIMITS DISPLAYED ON RESPECTIVE ESCP DRAWINGS UNLESS NECESSARY TO PROMOTE DRAINAGE FLOW IN DIRECTION SHOWN. EXCAVATION IN DRAINAGE SWALES SHALL BE LIMITED TO SPOT LOCATIONS AND SHALL BE AS MINIMAL AS POSSIBLE TO RESTORE POSITIVE DRAINAGE FLOW WITHIN THE SWALE.

EROSION AND SEDIMENT CONTROL PLAN - STA. A 570+00 TO STA. A 577+00

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

NO.	DATE	BY	REVISION

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Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

EROSION AND SEDIMENT CONTROL PLAN-81
SCALE: 1 : 30
DATE ISSUED: 2/2018
DRAWING
ESCP-81

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IN CHARGE OF

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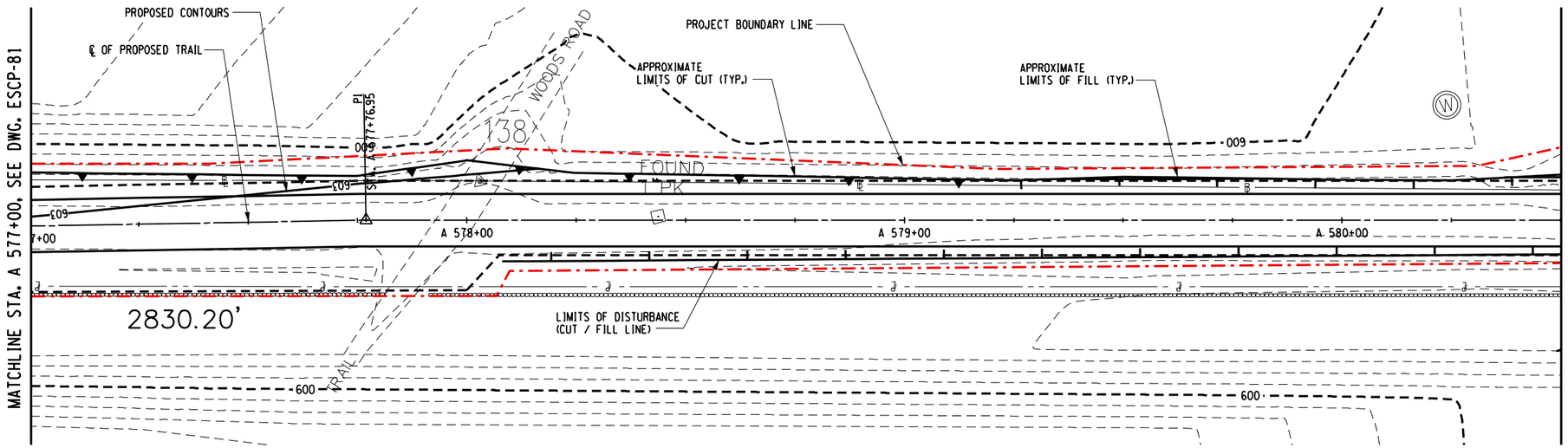

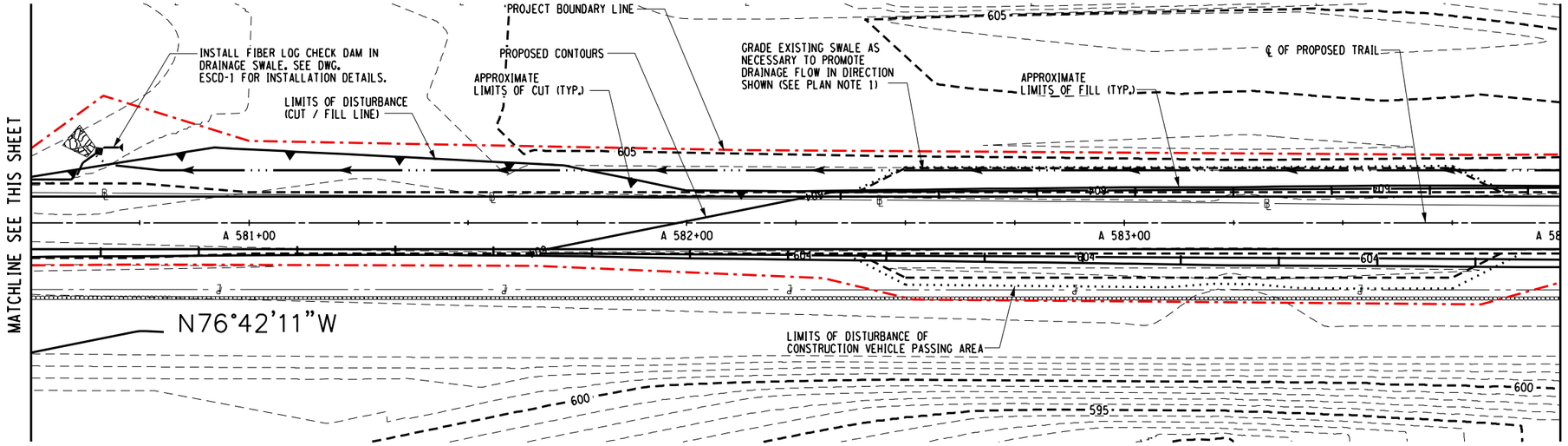

0 15 30
SCALE 1" = 30 FEET

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

PLAN NOTES:

1. REMOVE EXISTING WOODY DEBRIS FROM EXISTING SWALES. EXCAVATION OR FILL PLACEMENT SHALL NOT EXTEND PAST SLOPE LIMITS DISPLAYED ON RESPECTIVE ESCP DRAWINGS UNLESS NECESSARY TO PROMOTE DRAINAGE FLOW IN DIRECTION SHOWN. EXCAVATION IN DRAINAGE SWALES SHALL BE LIMITED TO SPOT LOCATIONS AND SHALL BE AS MINIMAL AS POSSIBLE TO RESTORE POSITIVE DRAINAGE FLOW WITHIN THE SWALE.

EROSION AND SEDIMENT CONTROL PLAN - STA. A 577+00 TO STA. A 584+00

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

EROSION AND SEDIMENT CONTROL PLAN-82
SCALE: 1:30
DATE ISSUED: 2/2018
DRAWING
ESCP-82

DESIGNED BY
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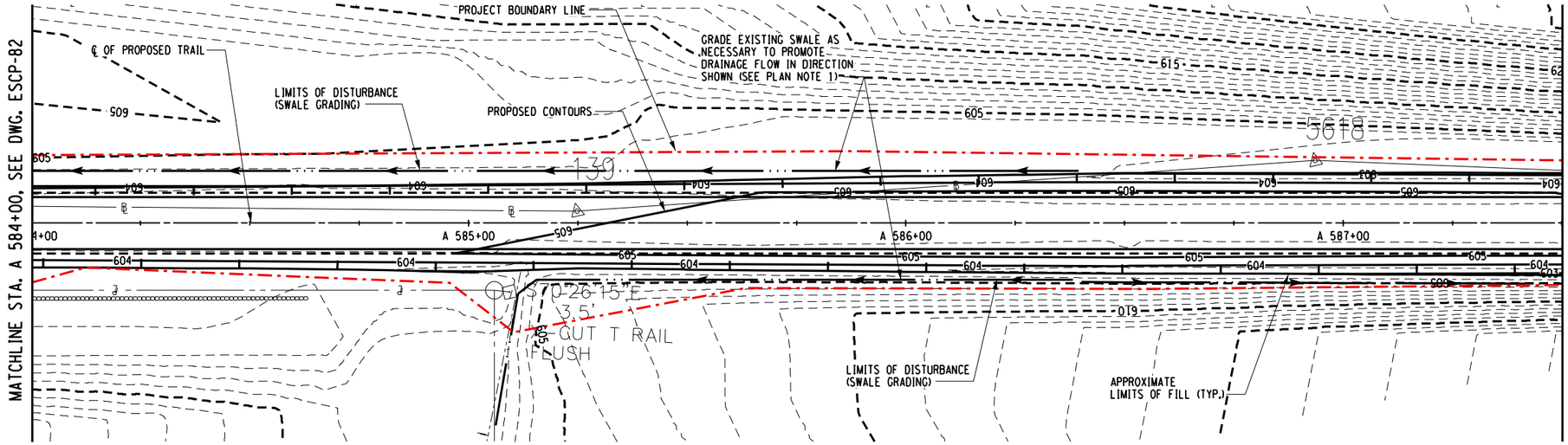

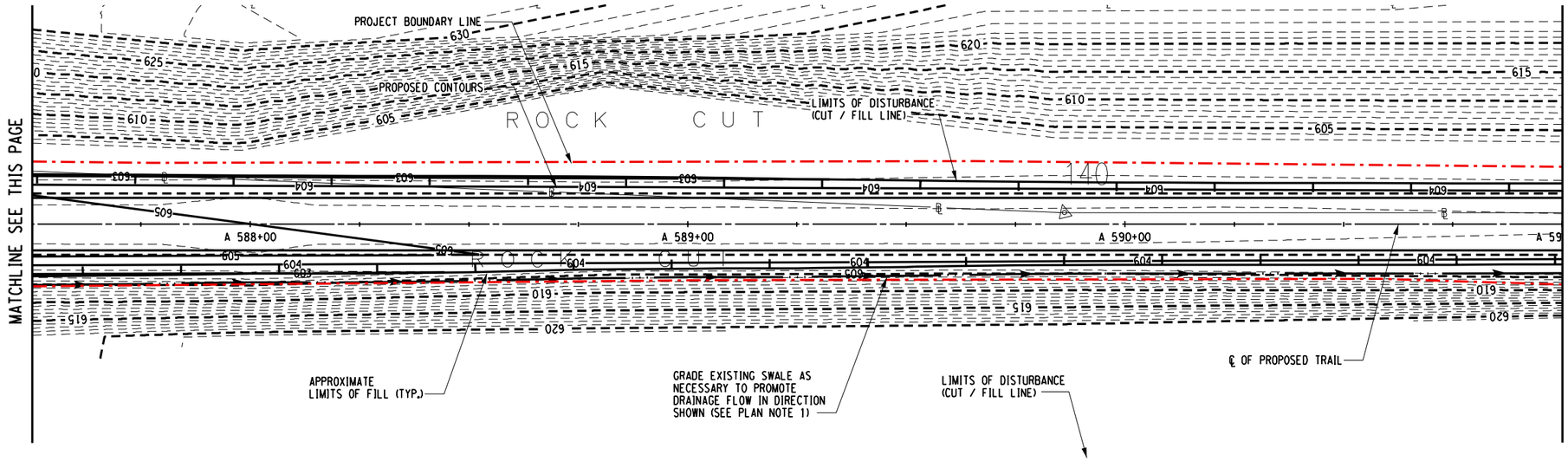

0 15 30
SCALE 1" = 30 FEET

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

PLAN NOTES:

1. REMOVE EXISTING WOODY DEBRIS FROM EXISTING SWALES. EXCAVATION OR FILL PLACEMENT SHALL NOT EXTEND PAST SLOPE LIMITS DISPLAYED ON RESPECTIVE ESCP DRAWINGS UNLESS NECESSARY TO PROMOTE DRAINAGE FLOW IN DIRECTION SHOWN. EXCAVATION IN DRAINAGE SWALES SHALL BE LIMITED TO SPOT LOCATIONS AND SHALL BE AS MINIMAL AS POSSIBLE TO RESTORE POSITIVE DRAINAGE FLOW WITHIN THE SWALE.

EROSION AND SEDIMENT CONTROL PLAN - STA. A 584+00 TO STA. A 591+00

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

EROSION AND SEDIMENT CONTROL PLAN-83

SCALE: 1 : 30
DATE ISSUED: 2/2018
DRAWING
ESCP-83

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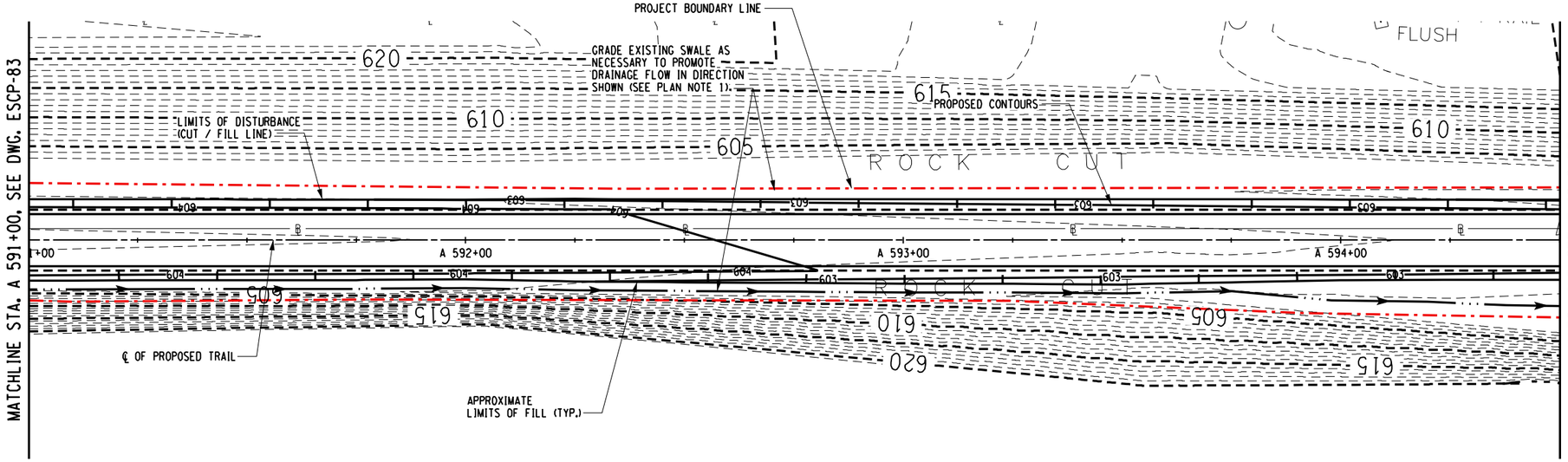

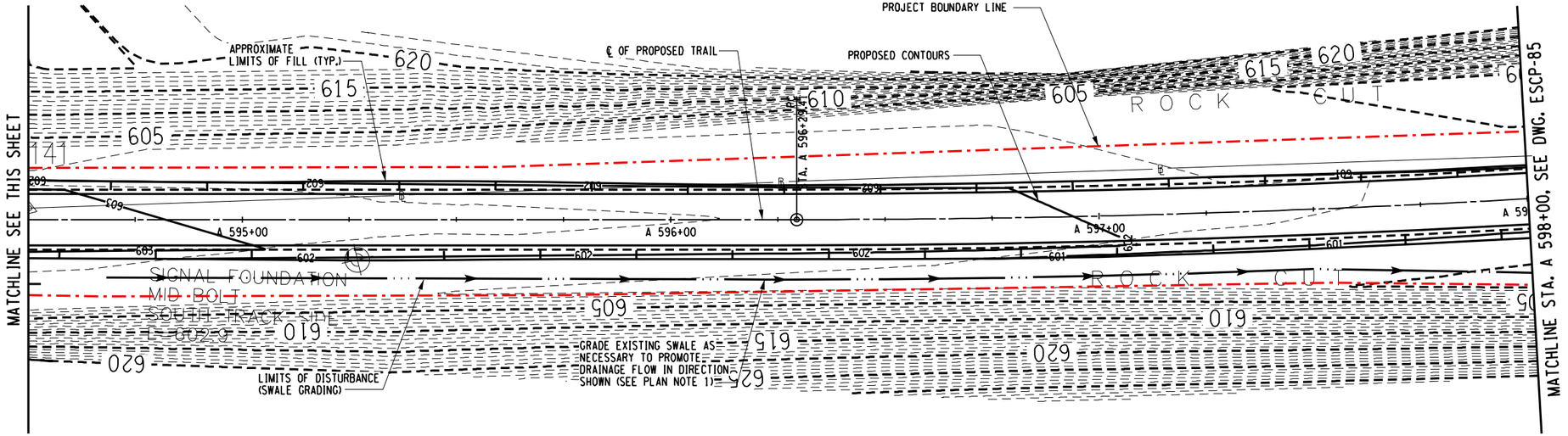

0 15 30
SCALE 1" = 30 FEET

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

PLAN NOTES:

1. REMOVE EXISTING WOODY DEBRIS FROM EXISTING SWALES. EXCAVATION OR FILL PLACEMENT SHALL NOT EXTEND PAST SLOPE LIMITS DISPLAYED ON RESPECTIVE ESCP DRAWINGS UNLESS NECESSARY TO PROMOTE DRAINAGE FLOW IN DIRECTION SHOWN. EXCAVATION IN DRAINAGE SWALES SHALL BE LIMITED TO SPOT LOCATIONS AND SHALL BE AS MINIMAL AS POSSIBLE TO RESTORE POSITIVE DRAINAGE FLOW WITHIN THE SWALE.

EROSION AND SEDIMENT CONTROL PLAN - STA. A 591+00 TO STA. A 598+00

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

EROSION AND SEDIMENT CONTROL PLAN-84
SCALE: 1:30
DATE ISSUED: 2/2018
DRAWING
ESCP-84

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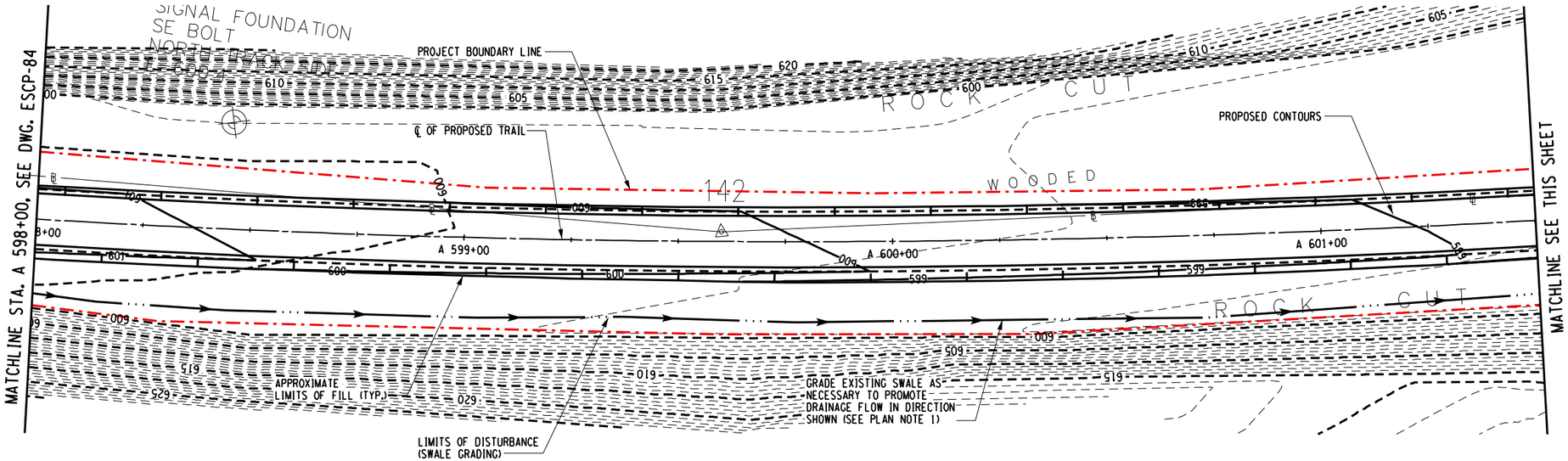

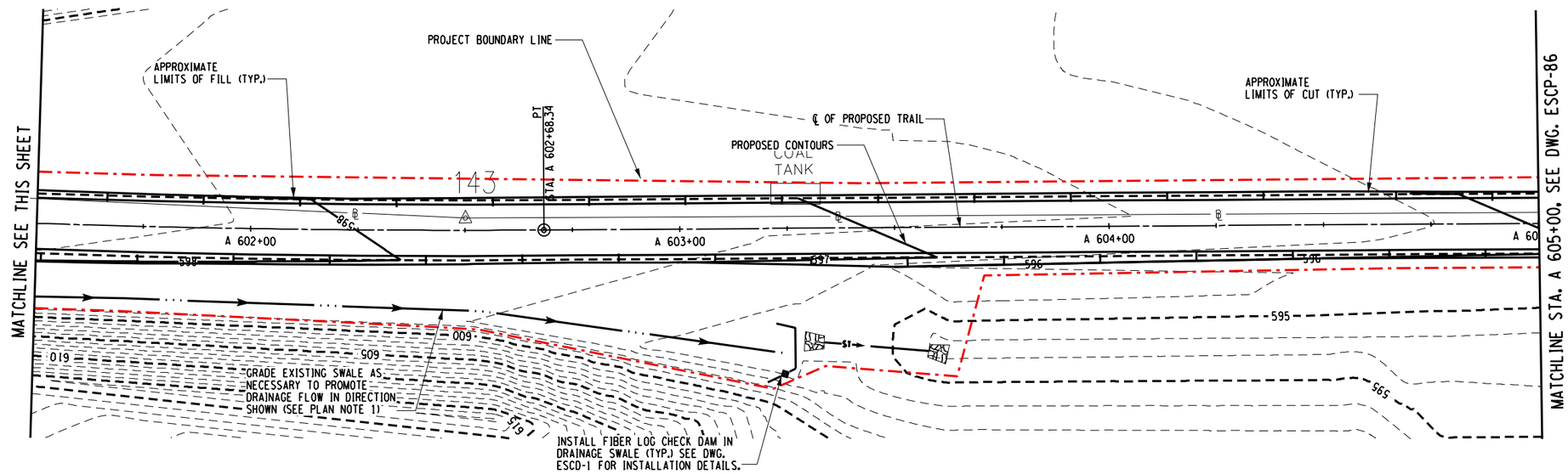

0 15 30
SCALE 1" = 30 FEET

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

PLAN NOTES:

1. REMOVE EXISTING WOODY DEBRIS FROM EXISTING SWALES. EXCAVATION OR FILL PLACEMENT SHALL NOT EXTEND PAST SLOPE LIMITS DISPLAYED ON RESPECTIVE ESCP DRAWINGS UNLESS NECESSARY TO PROMOTE DRAINAGE FLOW IN DIRECTION SHOWN. EXCAVATION IN DRAINAGE SWALES SHALL BE LIMITED TO SPOT LOCATIONS AND SHALL BE AS MINIMAL AS POSSIBLE TO RESTORE POSITIVE DRAINAGE FLOW WITHIN THE SWALE.

EROSION AND SEDIMENT CONTROL PLAN - STA. A 598+00 TO STA. A 605+00

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

EROSION AND SEDIMENT CONTROL PLAN-85

SCALE: 1 : 30
DATE ISSUED: 2/2018
DRAWING
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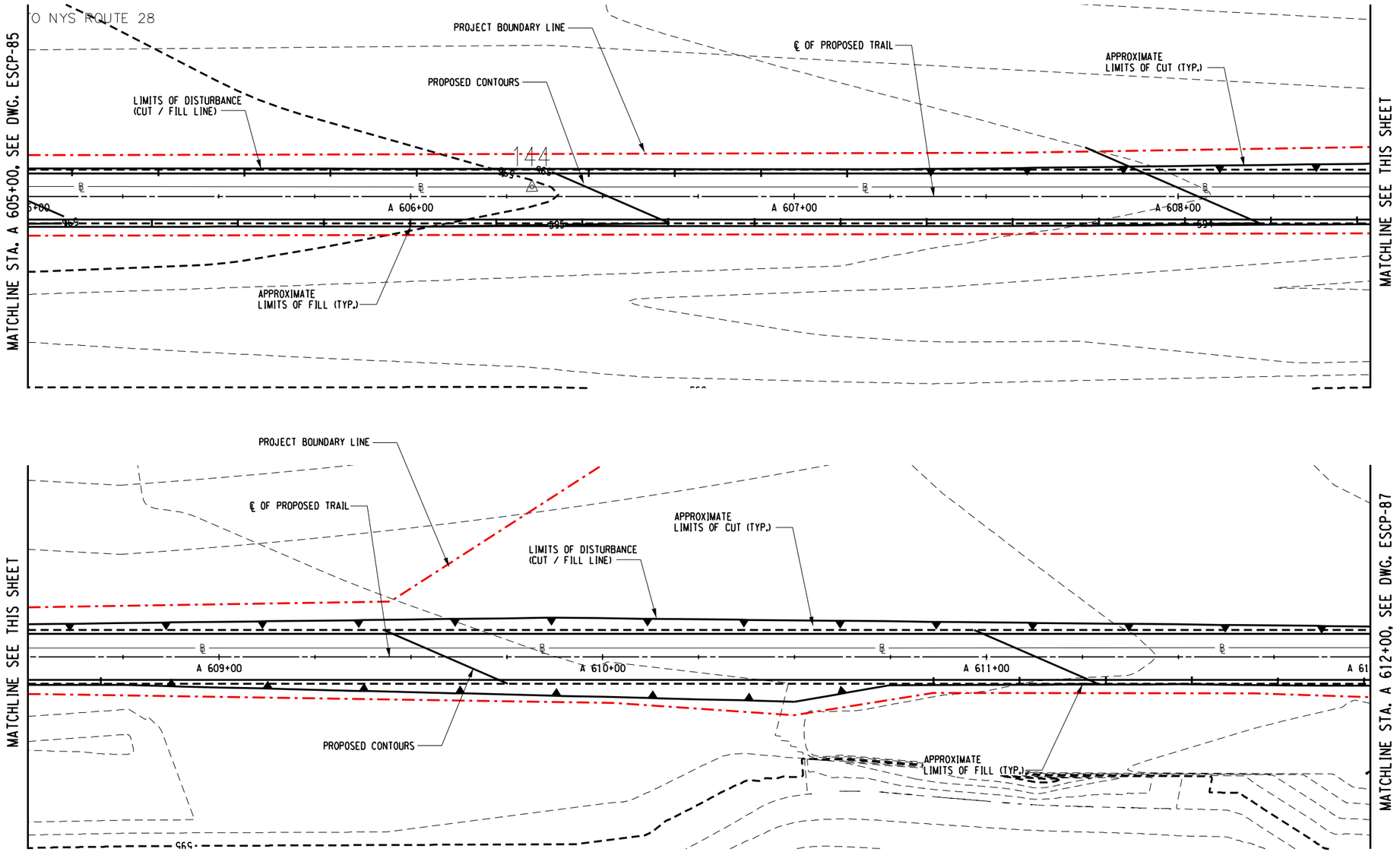

0 15 30
SCALE 1" = 30 FEET

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

PLAN NOTES:

1. REMOVE EXISTING WOODY DEBRIS FROM EXISTING SWALES. EXCAVATION OR FILL PLACEMENT SHALL NOT EXTEND PAST SLOPE LIMITS DISPLAYED ON RESPECTIVE ESCP DRAWINGS UNLESS NECESSARY TO PROMOTE DRAINAGE FLOW IN DIRECTION SHOWN. EXCAVATION IN DRAINAGE SWALES SHALL BE LIMITED TO SPOT LOCATIONS AND SHALL BE AS MINIMAL AS POSSIBLE TO RESTORE POSITIVE DRAINAGE FLOW WITHIN THE SWALE.

EROSION AND SEDIMENT CONTROL PLAN - STA. A 605+00 TO STA. A 612+00

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

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Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

EROSION AND SEDIMENT CONTROL PLAN-86
SCALE: 1 : 30
DATE ISSUED: 2/2018
DRAWING
ESCP-86

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DESIGNED BY
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DRAFTED BY
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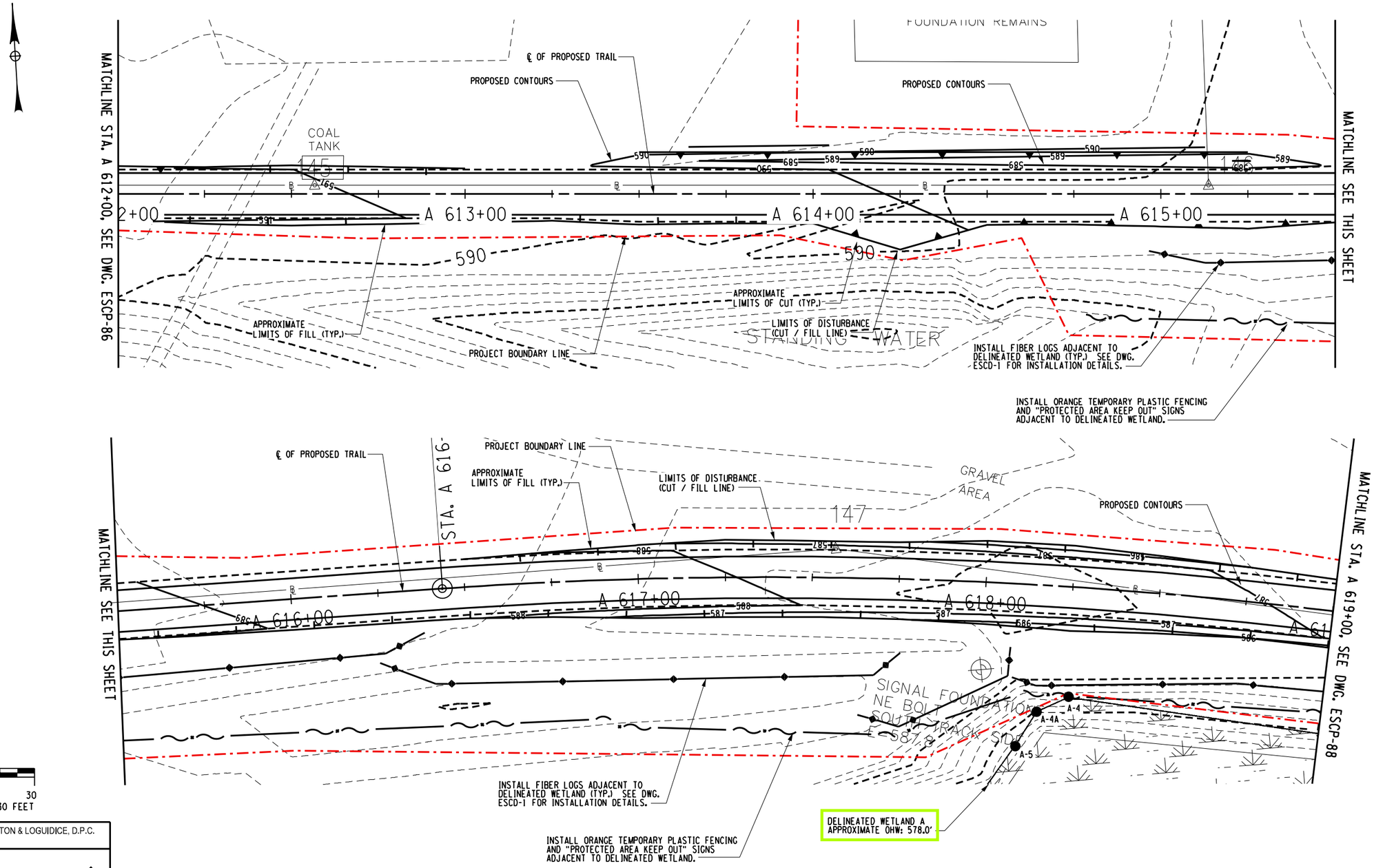

0 15 30
SCALE 1" = 30 FEET

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

PLAN NOTES:

1. REMOVE EXISTING WOODY DEBRIS FROM EXISTING SWALES. EXCAVATION OR FILL PLACEMENT SHALL NOT EXTEND PAST SLOPE LIMITS DISPLAYED ON RESPECTIVE ESCP DRAWINGS UNLESS NECESSARY TO PROMOTE DRAINAGE FLOW IN DIRECTION SHOWN. EXCAVATION IN DRAINAGE SWALES SHALL BE LIMITED TO SPOT LOCATIONS AND SHALL BE AS MINIMAL AS POSSIBLE TO RESTORE POSITIVE DRAINAGE FLOW WITHIN THE SWALE.

EROSION AND SEDIMENT CONTROL PLAN - STA. A 612+00 TO STA. A 619+00

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

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ASHOKAN RAIL TRAIL
ULSTER COUNTY

EROSION AND SEDIMENT CONTROL PLAN-87
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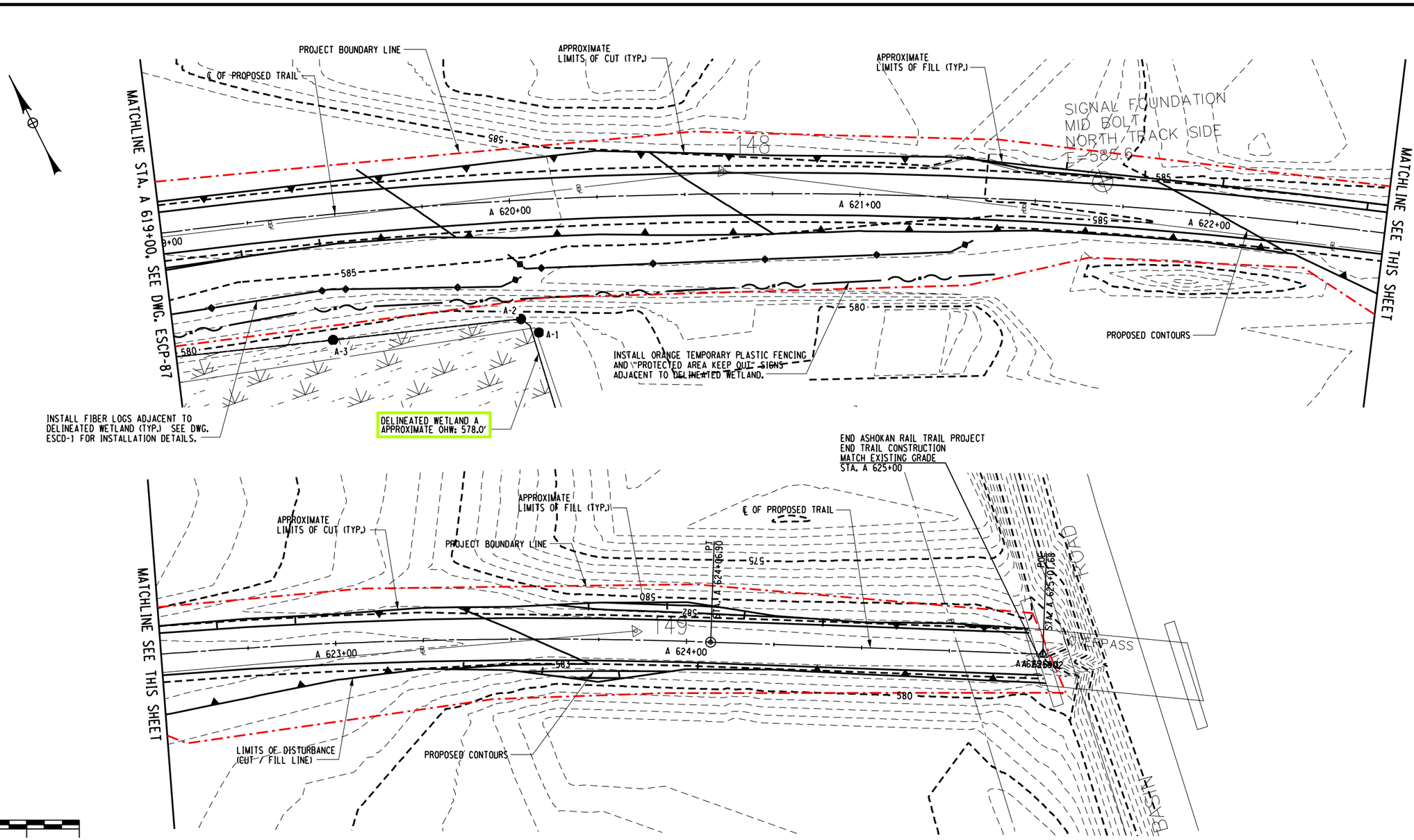
DRAWING
ESCP-87



0 15 30
SCALE 1" = 30 FEET

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

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PLAN NOTES:

1. REMOVE EXISTING WOODY DEBRIS FROM EXISTING SWALES. EXCAVATION OR FILL PLACEMENT SHALL NOT EXTEND PAST SLOPE LIMITS DISPLAYED ON RESPECTIVE ESCP DRAWINGS UNLESS NECESSARY TO PROMOTE DRAINAGE FLOW IN DIRECTION SHOWN. EXCAVATION IN DRAINAGE SWALES SHALL BE LIMITED TO SPOT LOCATIONS AND SHALL BE AS MINIMAL AS POSSIBLE TO RESTORE POSITIVE DRAINAGE FLOW WITHIN THE SWALE.

EROSION AND SEDIMENT CONTROL PLAN - STA. A 619+00 TO STA. A 625+02

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ASHOKAN RAIL TRAIL
ULSTER COUNTY

EROSION AND SEDIMENT CONTROL PLAN-88
SCALE: 1:30
DATE ISSUED: 2/2018
DRAWING
ESCP-88

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GATE W-12 ACCESS ROAD AND LAYDOWN AREA PLAN

MATERIAL STORAGE, LAYDOWN, OR STOCKPILING IN SHADED AREAS ONLY. STONE AND GEOTEXTILE FABRIC SHALL BE REMOVED IN THESE AREAS POST CONSTRUCTION OF TRAIL TO EXPOSE UNDERLYING SOILS BELOW GEOTEXTILE FABRIC.

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

IN CHARGE OF _____ DESIGNED BY _____ CHECKED BY _____ DRAFTED BY _____ CHECKED BY _____

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TIME = 4:29:33 PM

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Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 1A

SCALE: 1:40
DATE ISSUED: 2/2018
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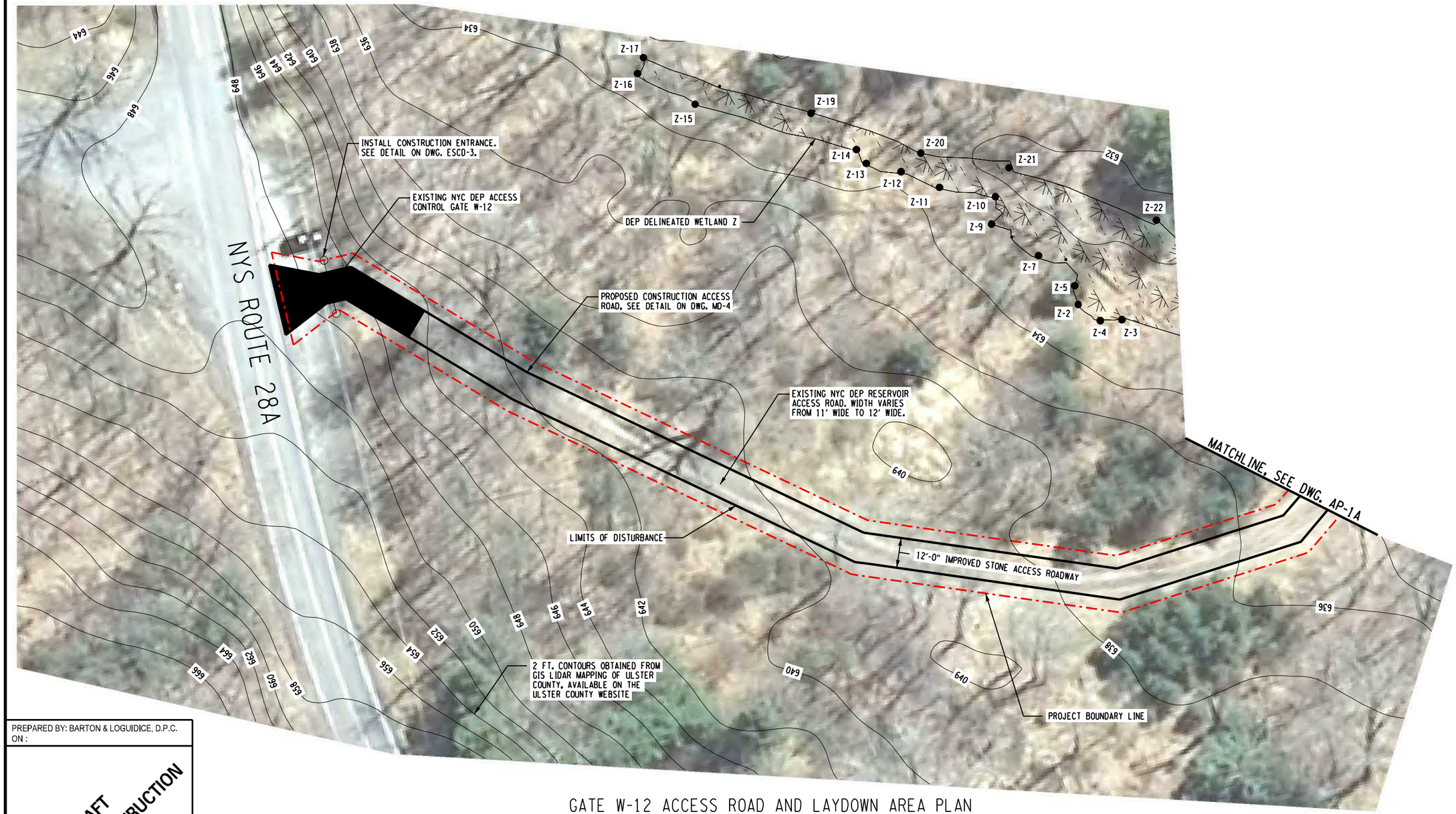

GATE W-12 ACCESS ROAD AND LAYDOWN AREA PLAN

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

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NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

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Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 1B

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING AP-1B

DESIGNED BY
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CHECKED BY
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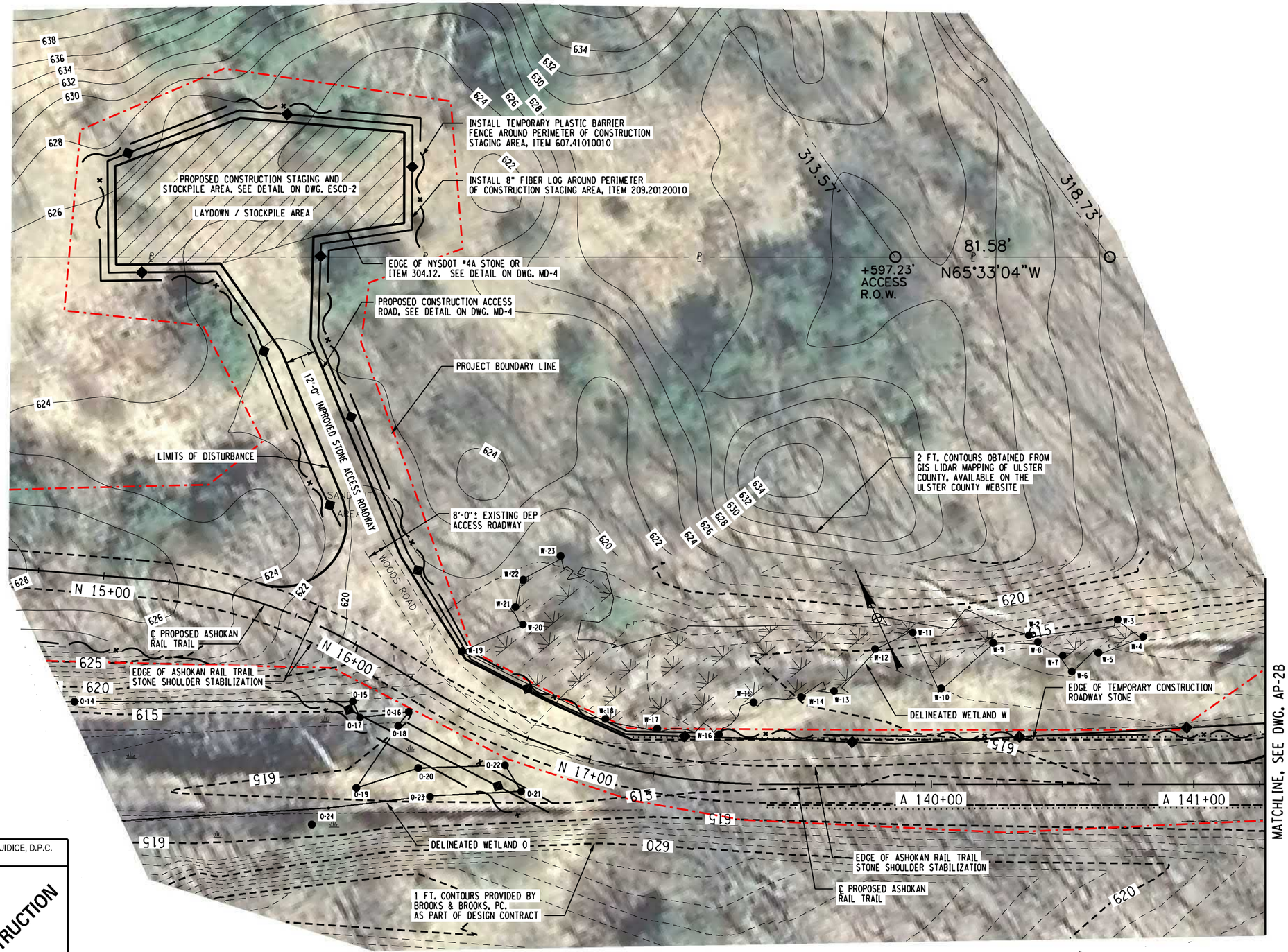

GATE W-7 ACCESS ROAD AND LAYDOWN AREA PLAN

MATERIAL STORAGE, LAYDOWN, OR STOCKPILING IN SHADED AREAS ONLY. STONE AND GEOTEXTILE FABRIC SHALL BE REMOVED IN THESE AREAS POST CONSTRUCTION OF TRAIL TO EXPOSE UNDERLYING SOILS BELOW GEOTEXTILE FABRIC.

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

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NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 2A

SCALE: 1:40
DATE ISSUED: 2/2018
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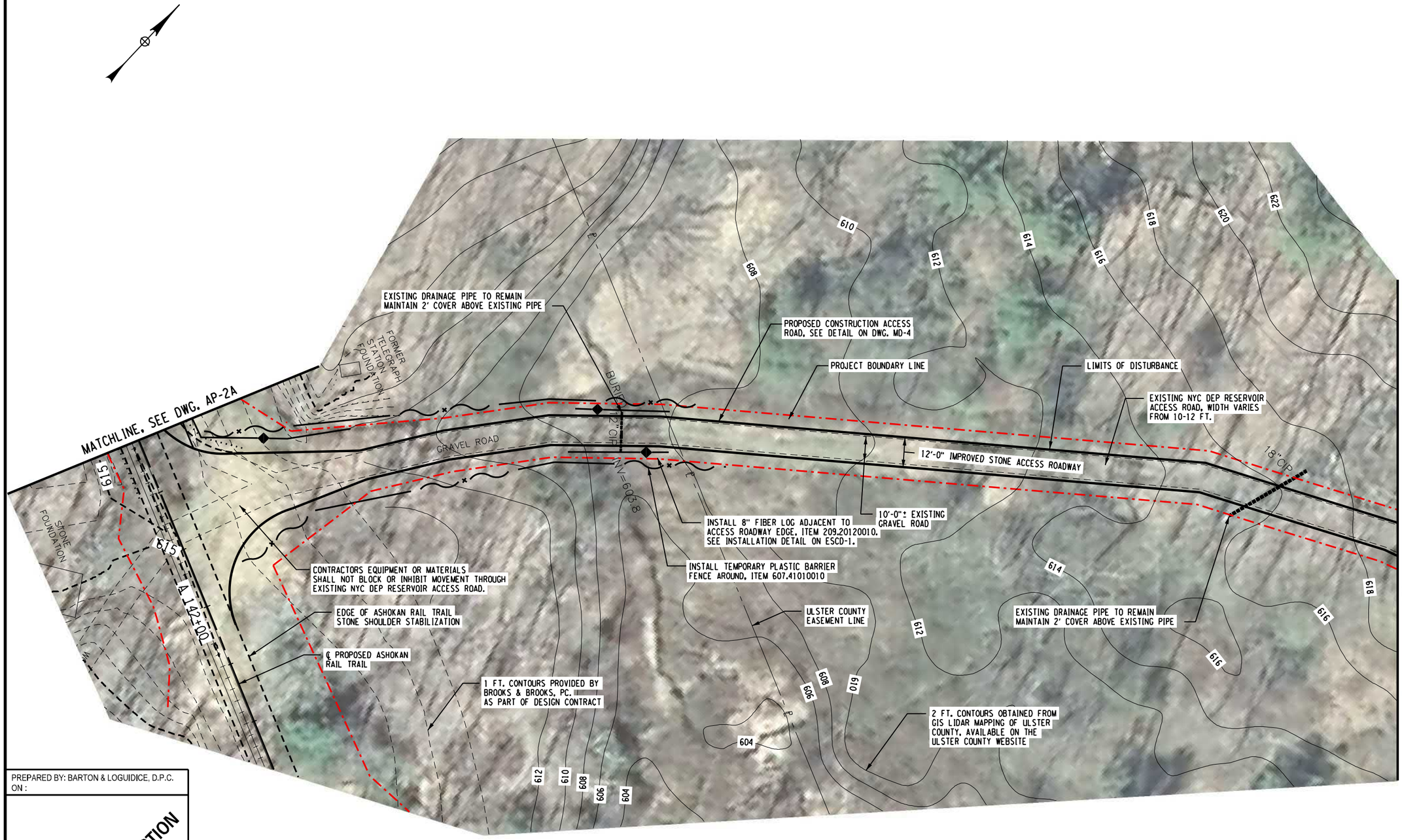

GATE W-7 ACCESS ROAD AND LAYDOWN AREA PLAN

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

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Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 2B

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING AP-2B

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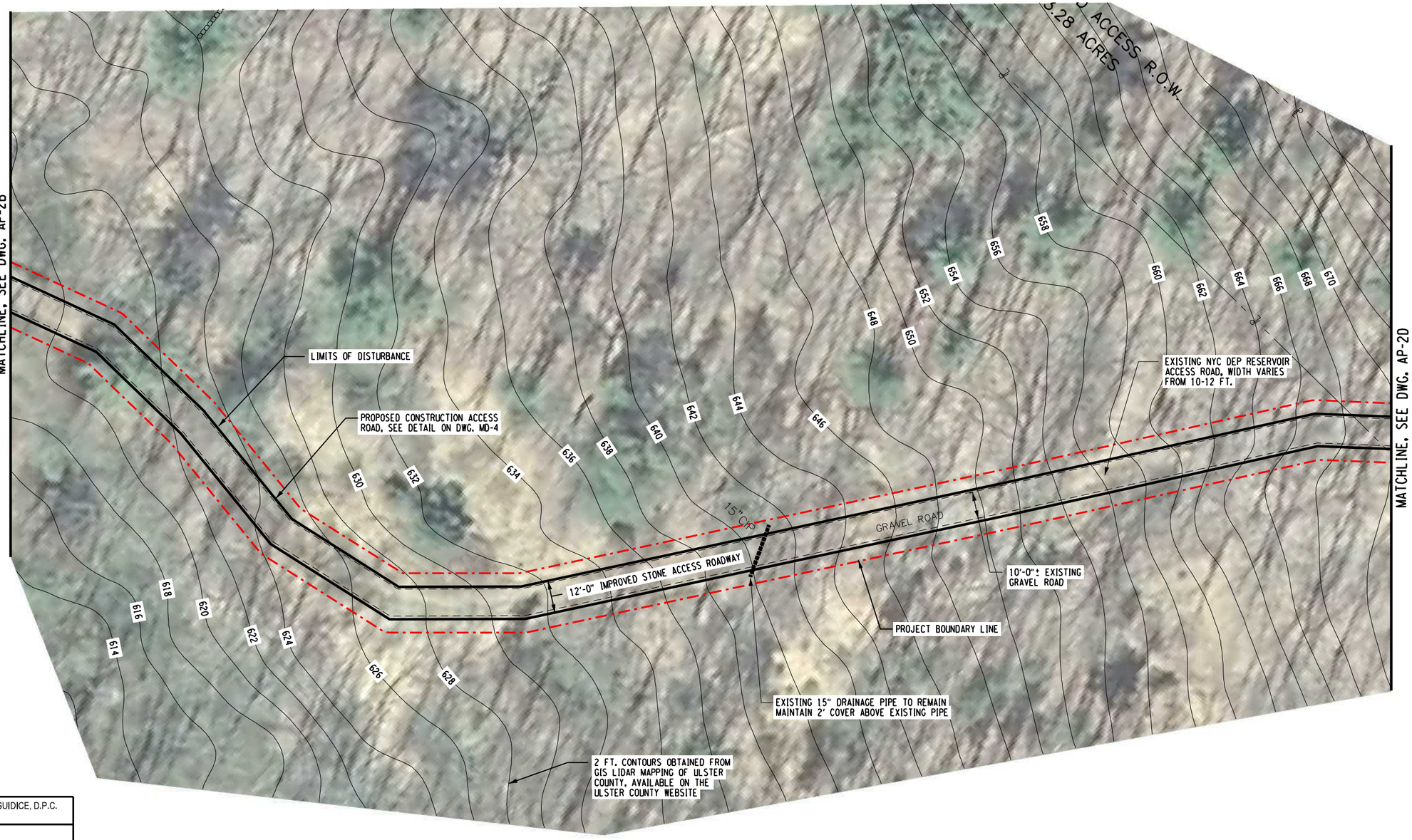

GATE W-7 ACCESS ROAD AND LAYDOWN AREA PLAN

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 2C

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING AP-2C

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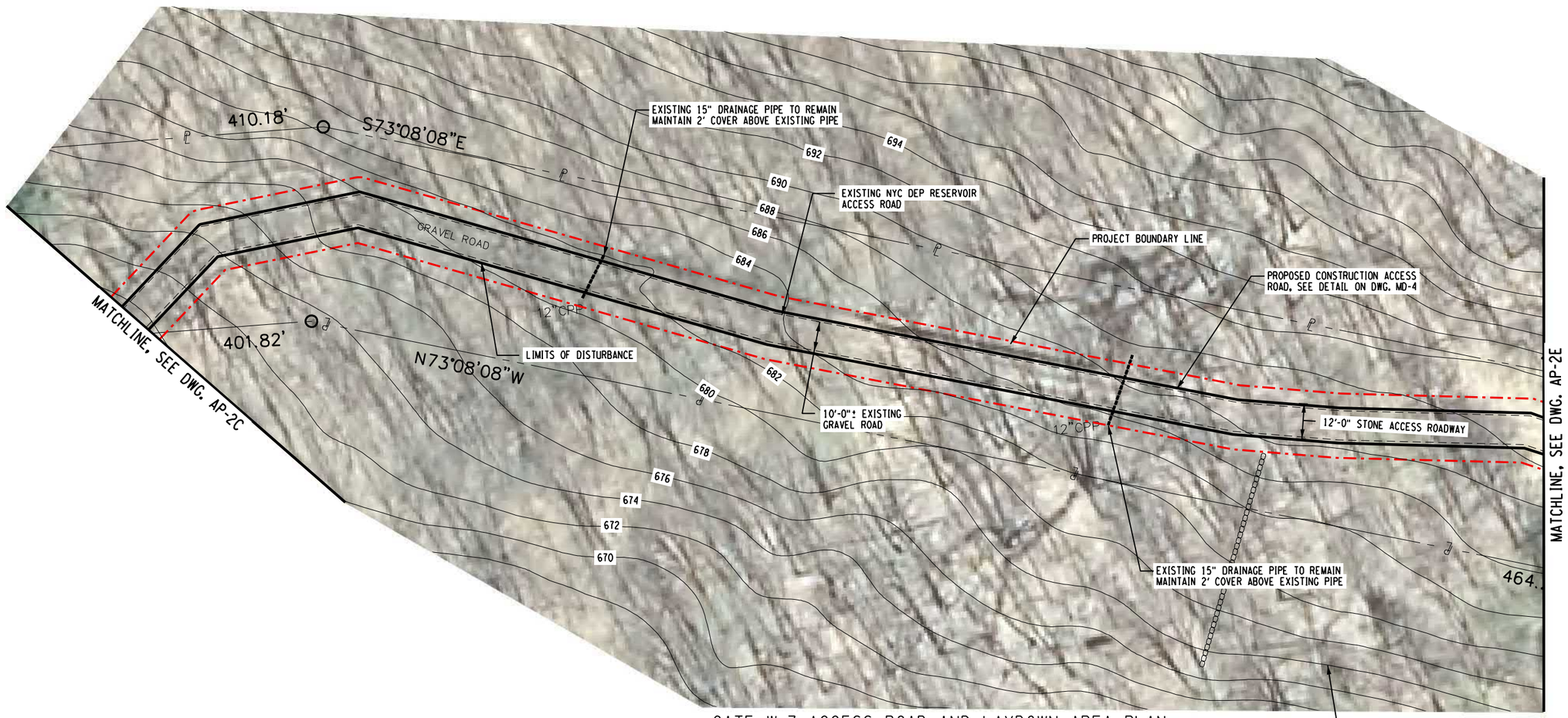
DESIGNED BY _____ CHECKED BY _____
IN CHARGE OF _____



GATE W-7 ACCESS ROAD AND LAYDOWN AREA PLAN

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

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NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

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Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD
PLAN - 2D

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING
AP-2D

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DESIGNED BY
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IN CHARGE OF

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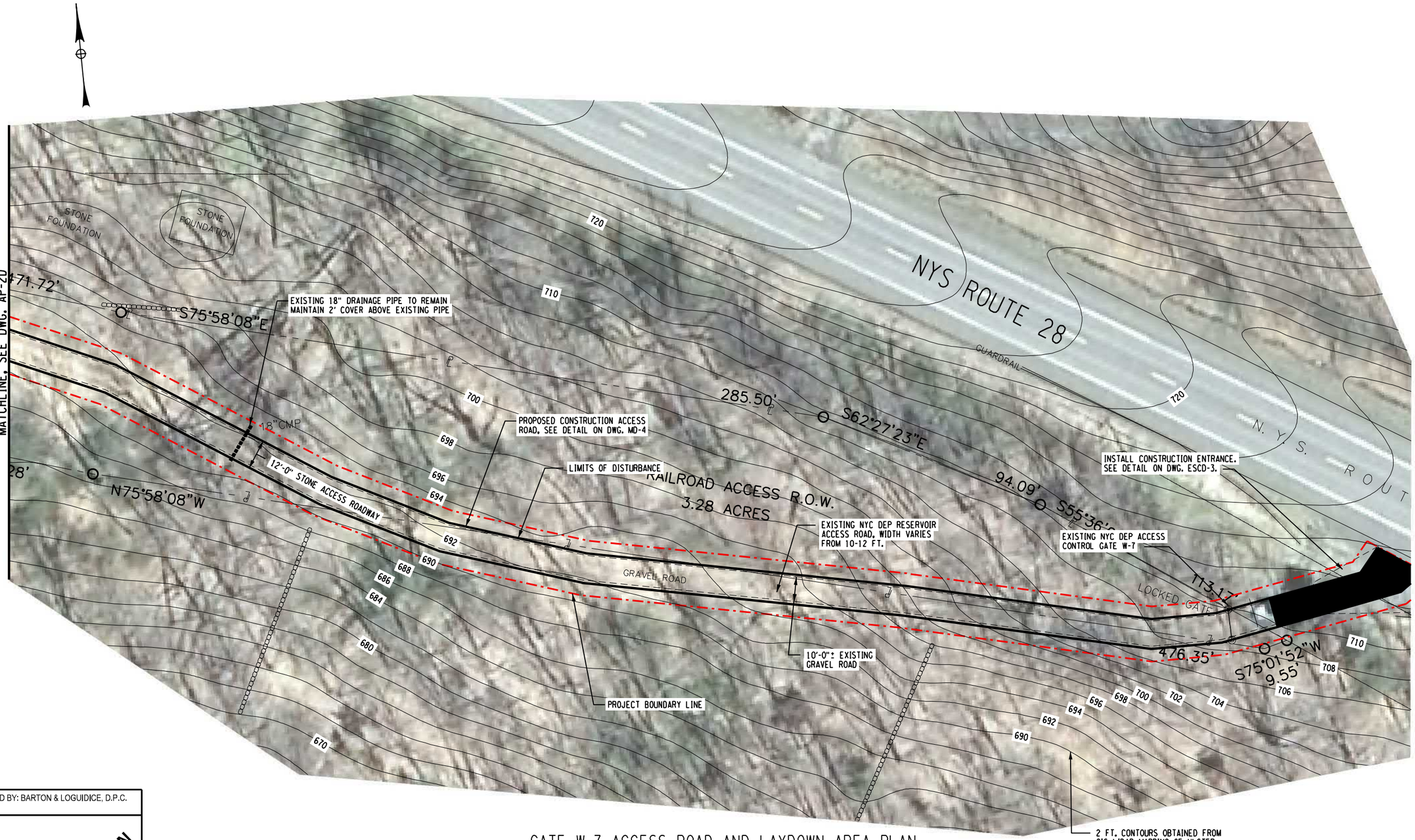

GATE W-7 ACCESS ROAD AND LAYDOWN AREA PLAN

2 FT. CONTOURS OBTAINED FROM GIS LIDAR MAPPING OF ULSTER COUNTY, AVAILABLE ON THE ULSTER COUNTY WEBSITE

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

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NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

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Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 2E

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING
AP-2E

IN CHARGE OF
DESIGNED BY
CHECKED BY
DRAFTED BY
CHECKED BY

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MATCHLINE, SEE DWG. AP-3B

EXISTING NYC DEP RESERVOIR ACCESS ROAD

12'-0" IMPROVED STONE ACCESS ROADWAY

2 FT. CONTOURS OBTAINED FROM GIS LIDAR MAPPING OF ULSTER COUNTY, AVAILABLE ON THE ULSTER COUNTY WEBSITE

PROPOSED CONSTRUCTION ACCESS ROAD, SEE DETAIL ON DWG. MD-4

PROJECT BOUNDARY LINE

LIMITS OF DISTURBANCE

COUNTY PROPERTY EASEMENT

1 FT. CONTOURS PROVIDED BY BROOKS & BROOKS, PC. AS PART OF DESIGN CONTRACT

12'-0"± EXISTING GRAVEL ROAD

CONTRACTORS EQUIPMENT OR MATERIALS SHALL NOT BLOCK OR INHIBIT MOVEMENT THROUGH EXISTING NYC DEP RESERVOIR ACCESS ROAD.

END ACCESS ROAD AT PROPOSED TRAIL

℄ PROPOSED ASHOKAN RAIL TRAIL

EDGE OF ASHOKAN RAIL TRAIL STONE SHOULDER STABILIZATION

WOODS ROAD

18"CMP INV=628.7

INV=628.5

INV=628.5

INV=629.1

A 189+00 A 190+00 A 191+00 A 192+00 A 193+00

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

GATE W-5 ACCESS ROAD AND LAYDOWN AREA PLAN

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 3A

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING AP-3A

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DESIGNED BY _____ CHECKED BY _____
IN CHARGE OF _____

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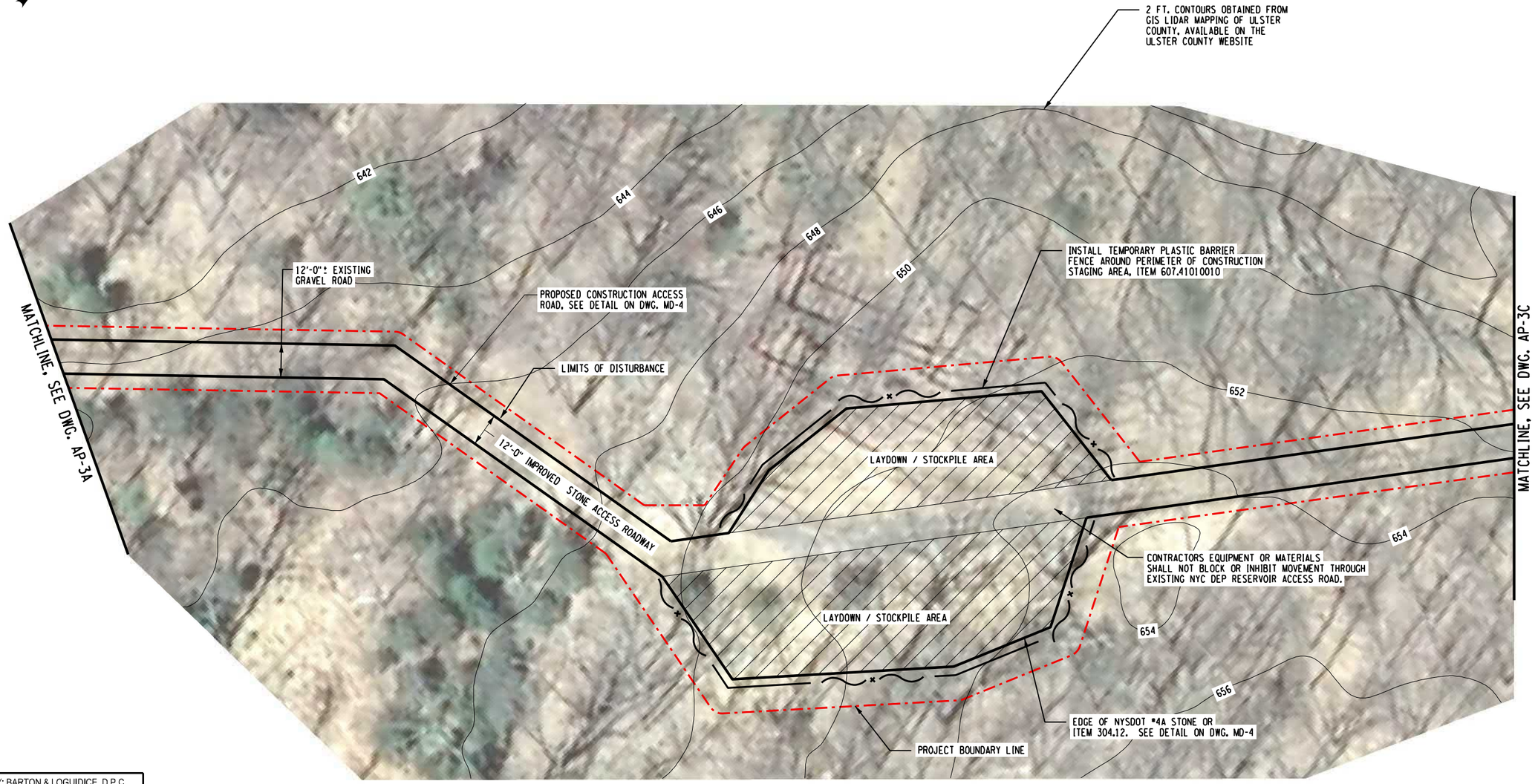

GATE W-5 ACCESS ROAD AND LAYDOWN AREA PLAN

MATERIAL STORAGE, LAYDOWN, OR STOCKPILING IN SHADED AREAS ONLY. STONE AND GEOTEXTILE FABRIC SHALL BE REMOVED IN THESE AREAS POST CONSTRUCTION OF TRAIL TO EXPOSE UNDERLYING SOILS BELOW GEOTEXTILE FABRIC.

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 3B

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING
AP-3B

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TIME = 4:30:32 PM

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DESIGNED BY
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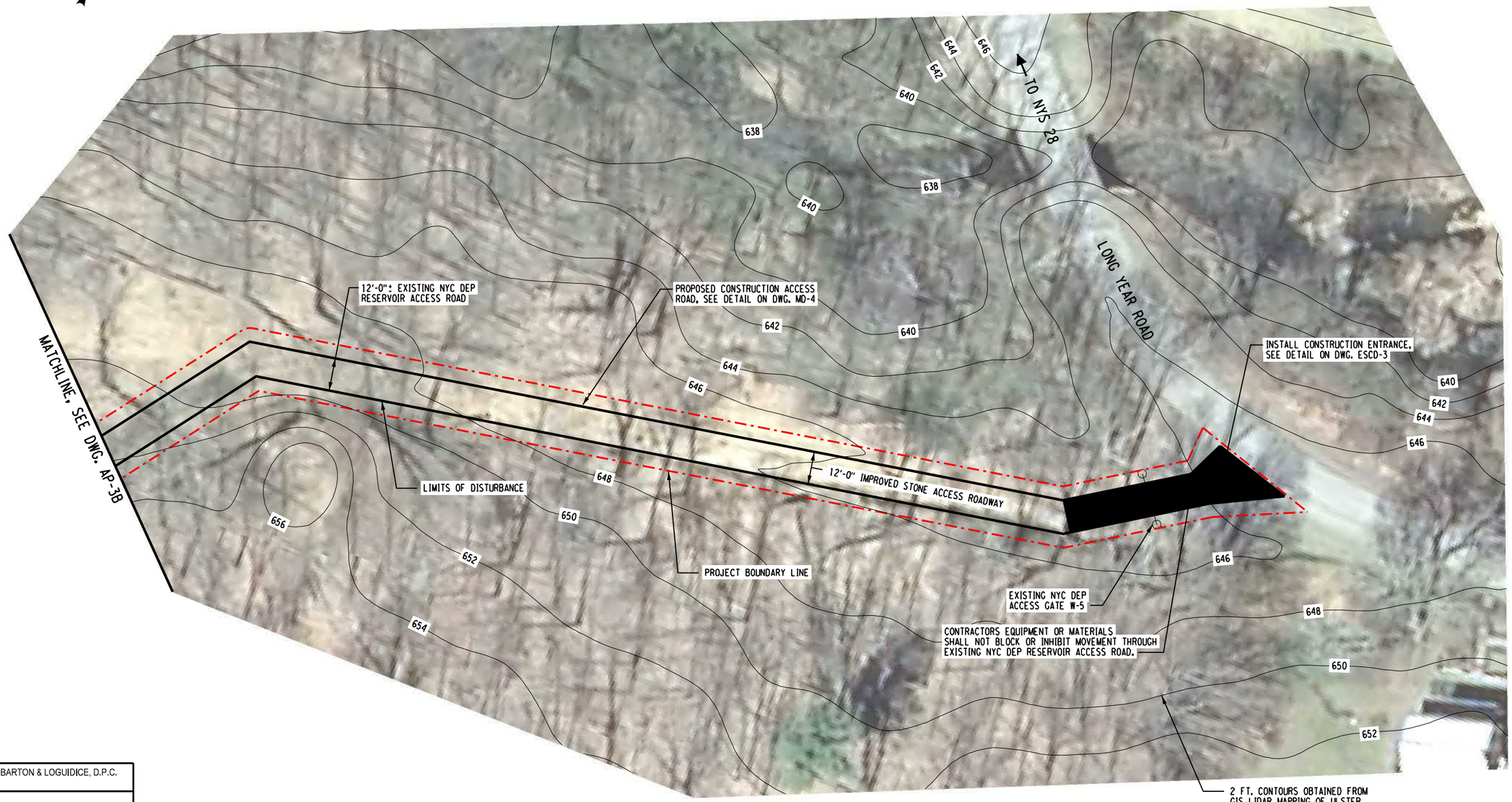
DRAFTED BY
CHECKED BY



GATE W-5 ACCESS ROAD AND LAYDOWN AREA PLAN

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____

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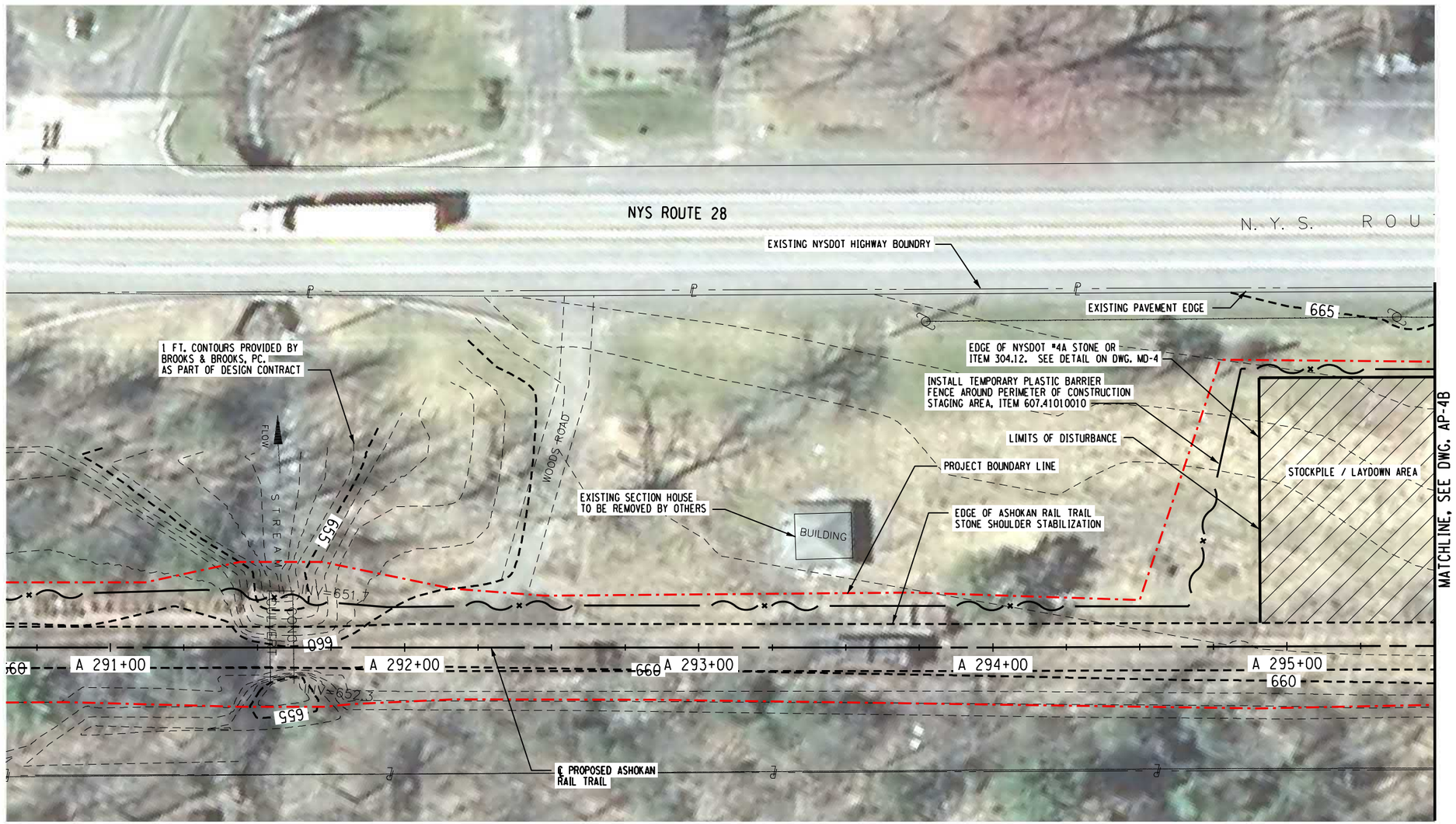
Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 3C

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING AP-3C



SHOKAN STAITON ACCESS ROAD AND LAYDOWN AREA PLAN

MATERIAL STORAGE, LAYDOWN, OR STOCKPILING IN SHADED AREAS ONLY. STONE AND GEOTEXTILE FABRIC SHALL BE REMOVED IN THESE AREAS POST CONSTRUCTION OF TRAIL TO EXPOSE UNDERLYING SOILS BELOW GEOTEXTILE FABRIC.

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 4A

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING AP-4A

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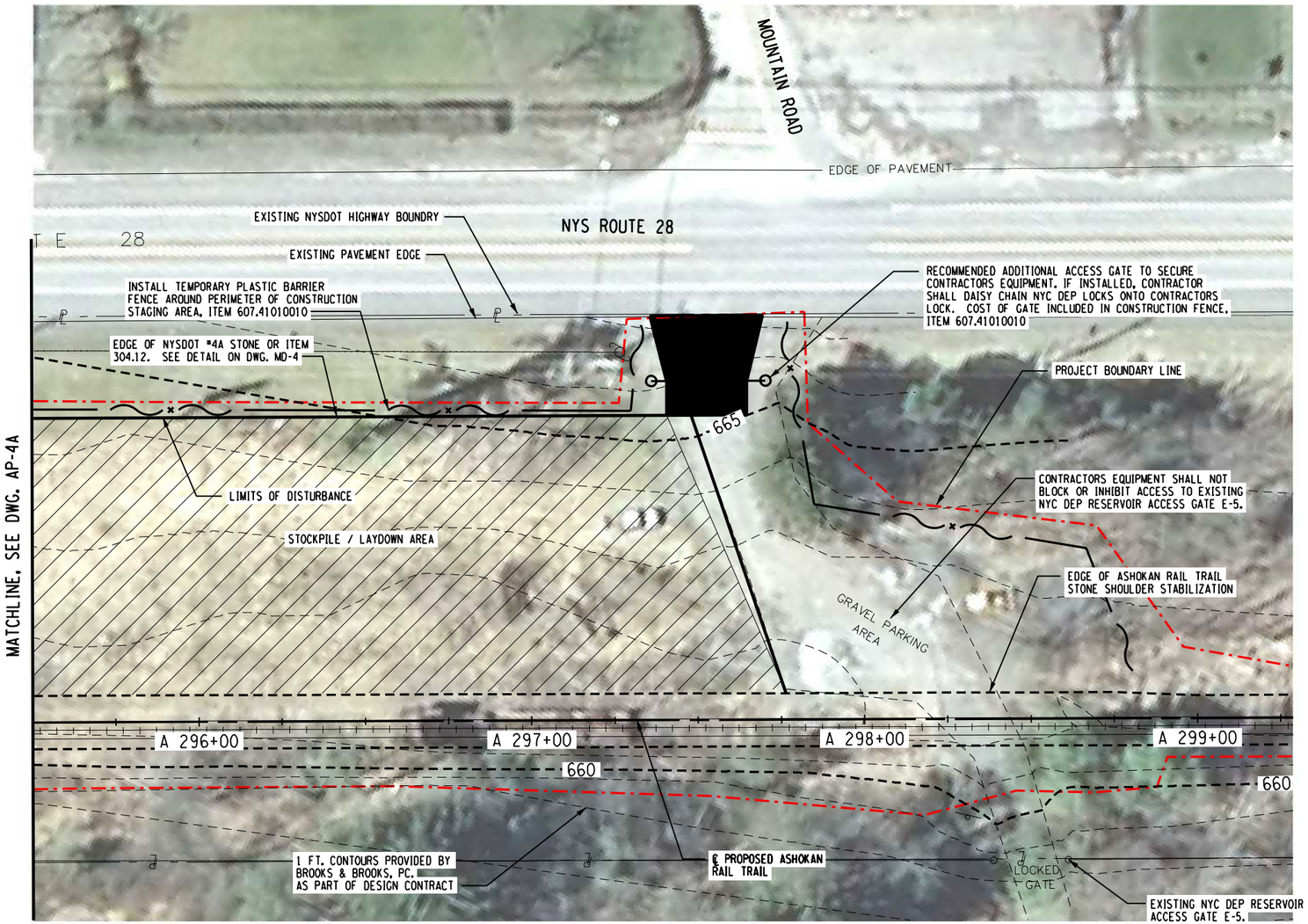

SHOKAN STATION ACCESS ROAD AND LAYDOWN AREA PLAN

MATERIAL STORAGE, LAYDOWN, OR STOCKPILING IN SHADED AREAS ONLY. STONE AND GEOTEXTILE FABRIC SHALL BE REMOVED IN THESE AREAS POST CONSTRUCTION OF TRAIL TO EXPOSE UNDERLYING SOILS BELOW GEOTEXTILE FABRIC.

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 4B

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING AP-4B

DESIGNED BY
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CHECKED BY
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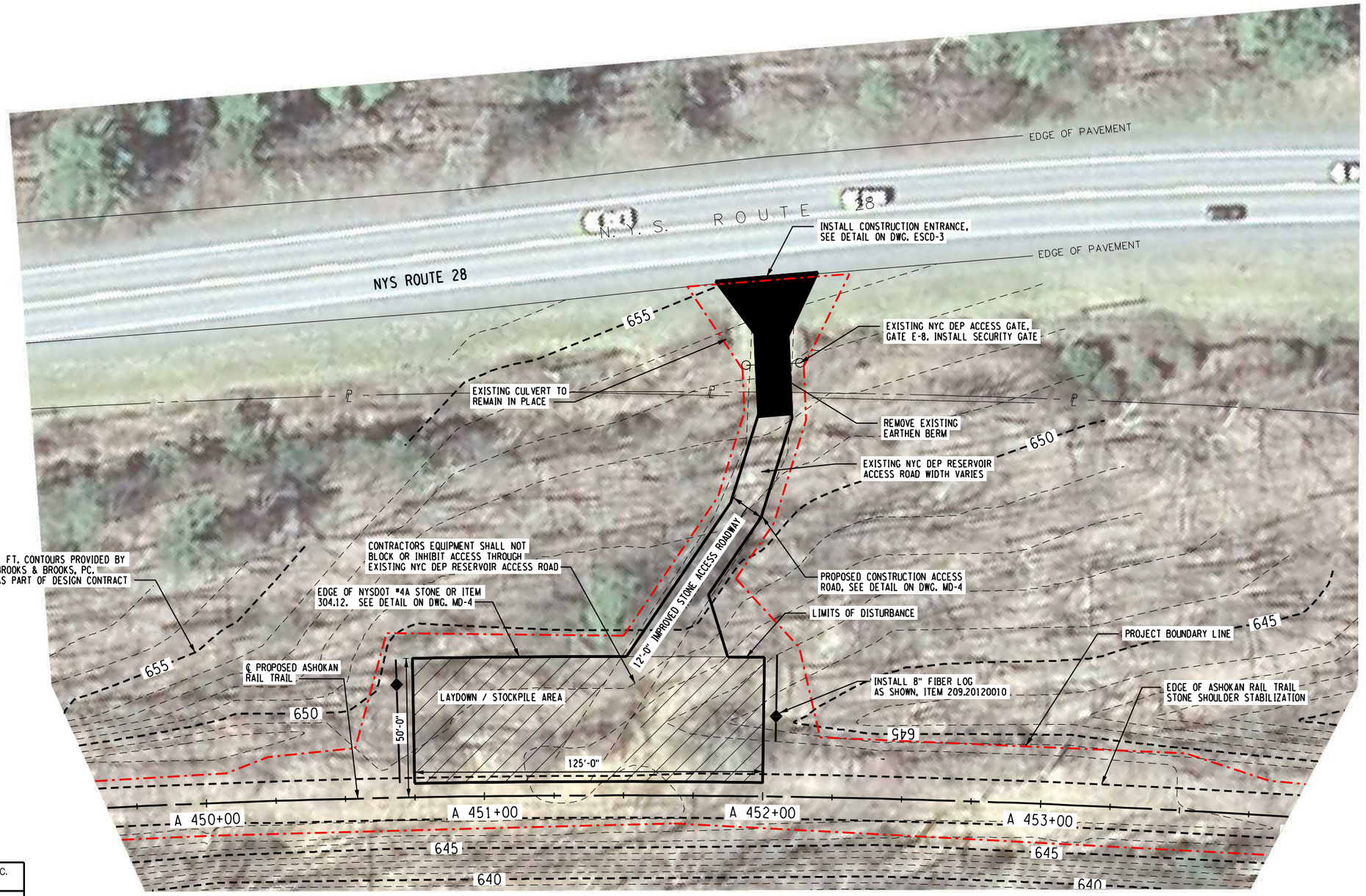

GATE E-8 ACCESS ROAD AND LAYDOWN AREA PLAN

MATERIAL STORAGE, LAYDOWN, OR STOCKPILING IN SHADED AREAS ONLY

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 5

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING AP-5

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CHECKED BY
IN CHARGE OF

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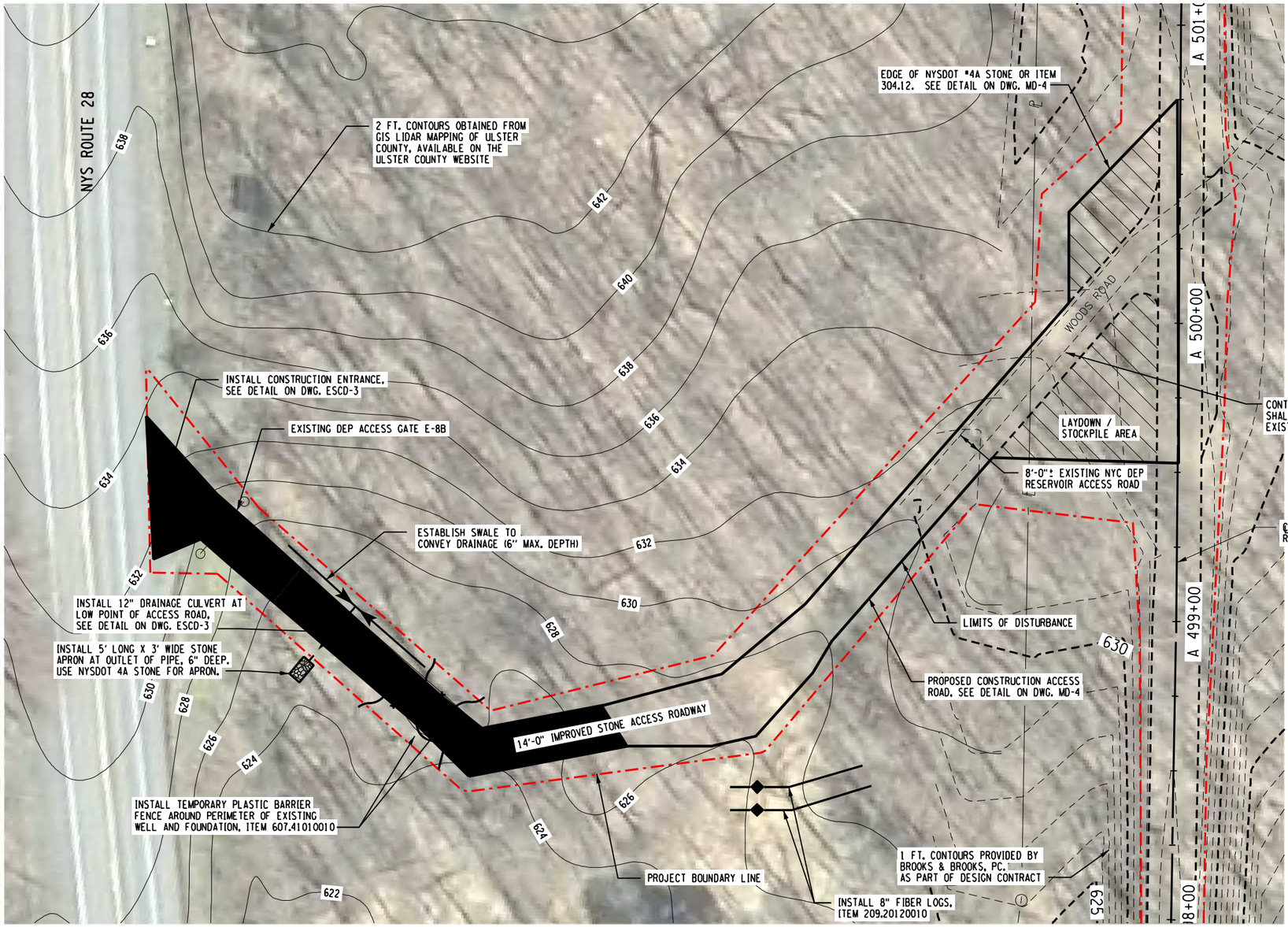

GATE E-8B ACCESS ROAD AND LAYDOWN AREA PLAN

MATERIAL STORAGE, LAYDOWN, OR STOCKPILING IN SHADED AREAS ONLY. STONE AND GEOTEXTILE FABRIC SHALL BE REMOVED IN THESE AREAS POST CONSTRUCTION OF TRAIL TO EXPOSE UNDERLYING SOILS BELOW GEOTEXTILE FABRIC.

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 6

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING
AP-6

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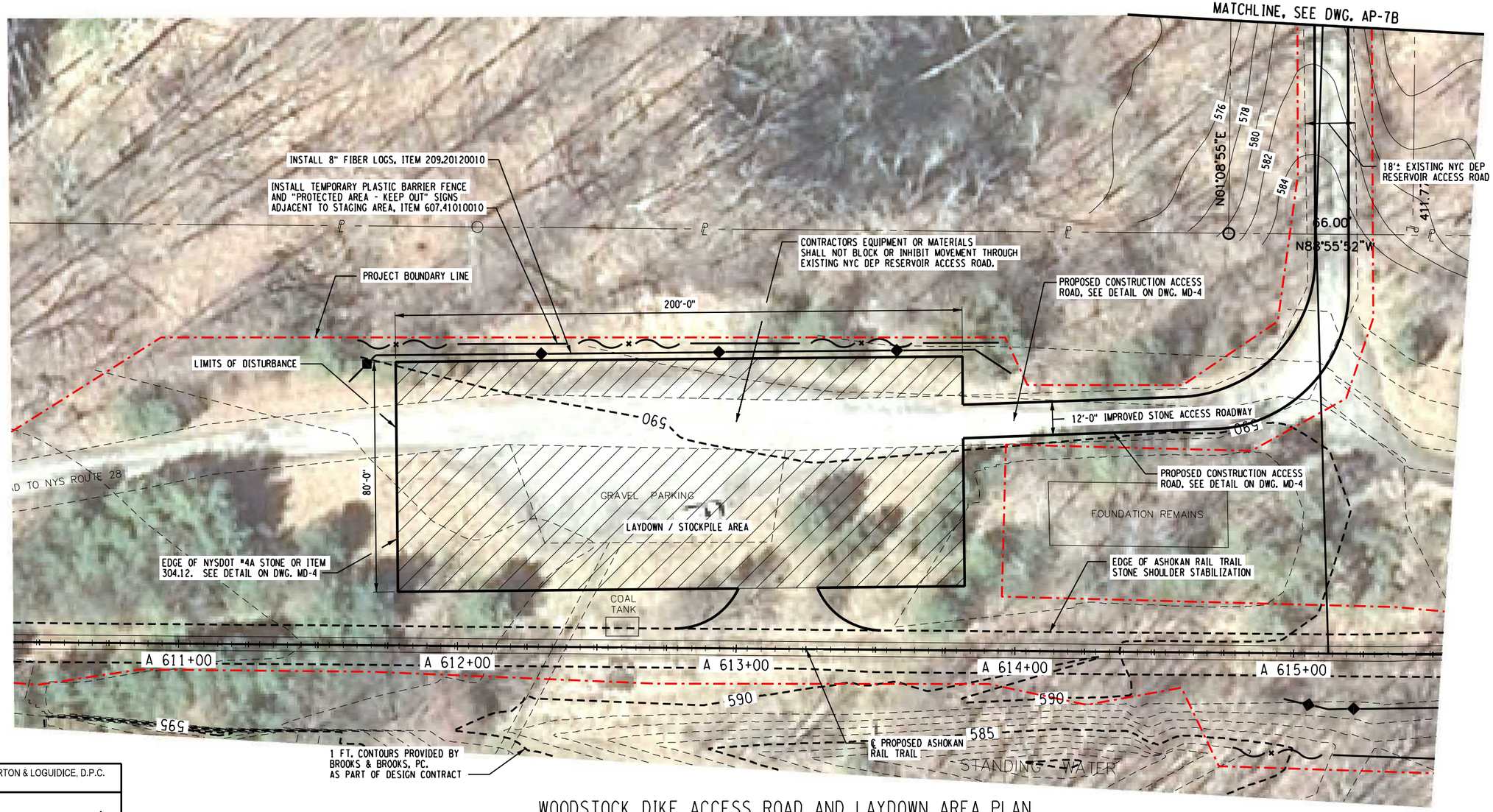

WOODSTOCK DIKE ACCESS ROAD AND LAYDOWN AREA PLAN

MATERIAL STORAGE, LAYDOWN, OR STOCKPILING IN SHADED AREAS ONLY. STONE AND GEOTEXTILE FABRIC SHALL BE REMOVED IN THESE AREAS POST CONSTRUCTION OF TRAIL TO EXPOSE UNDERLYING SOILS BELOW GEOTEXTILE FABRIC.

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

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Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 7A

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING
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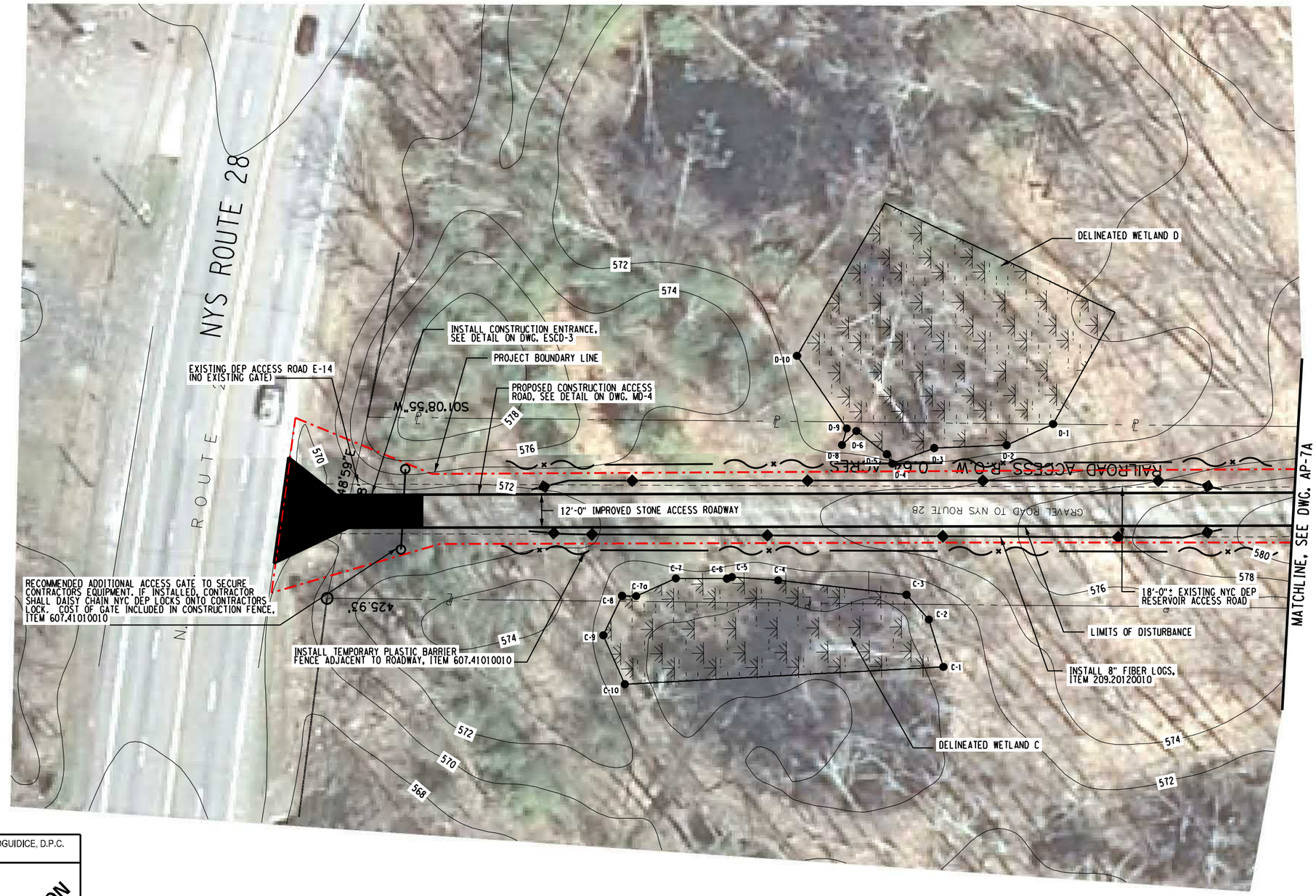

WOODSTOCK DIKE ACCESS ROAD AND LAYDOWN AREA PLAN

MATERIAL STORAGE, LAYDOWN, OR STOCKPILING IN SHADED AREAS ONLY. STONE AND GEOTEXTILE FABRIC SHALL BE REMOVED IN THESE AREAS POST CONSTRUCTION OF TRAIL TO EXPOSE UNDERLYING SOILS BELOW GEOTEXTILE FABRIC.

0 25 50
1" = 40 FEET

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

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TIME = 4:31:31 PM

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Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

ACCESS ROAD PLAN - 7B

SCALE: 1:40
DATE ISSUED: 2/2018
DRAWING
PL-7B

BRIDGE NOTES:

DESIGN SPECIFICATIONS: NEW YORK STATE DEPARTMENT OF TRANSPORTATION LRFD BRIDGE DESIGN SPECIFICATIONS WITH ALL PROVISIONS IN EFFECT AS OF FEBRUARY 2017. (FOR DESIGN PURPOSES, COMPRESSIVE STRENGTH OF CONCRETE FOR SUBSTRUCTURES AND DECK SLABS AT 28 DAYS: 3 ksi)

LIVE LOAD: 90PSF PEDESTRIAN LOAD, H-20 SERVICE VEHICLE
CONSTRUCTION LIVE LOAD: SINGLE 32.5 TON VEHICLE

CONSTRUCTION AND MATERIALS SPECIFICATIONS: STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, OFFICE OF ENGINEERING, DATED JANUARY 1, 2018 WITH CURRENT ADDITIONS AND MODIFICATIONS.

WATER USED FOR COMPACTION OF SELECT FILL ITEMS SHALL COMPLY WITH THE SPECIFICATIONS FOR ITEM 203.21. THE COST OF WATER USED FOR COMPACTION OF SELECT FILL ITEMS SHALL BE INCLUDED IN THE LUMP SUM BID PRICE.

THE COST OF ALL JOINT MATERIAL SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR THE VARIOUS ITEMS OF THE CONTRACT, UNLESS OTHERWISE SPECIFIED ON THE PLANS.

ALL SHOP DRAWINGS FOR THIS PROJECT SHALL BE IN US CUSTOMARY UNITS.

DETAILS ON THE DRAWINGS LABELED "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY. ALL OTHER DETAILS FOR WHICH NO SCALE IS SHOWN ARE DRAWN PROPORTIONAL AND ARE FULLY DIMENSIONED.

WORK TO BE PERFORMED UNDER THIS CONTRACT DOES NOT REQUIRE THE DISTURBING, DESTRUCTION OR REMOVAL OF ANY KNOWN MATERIALS CONTAINING ASBESTOS. UNLESS OTHERWISE INDICATED ON THE PLANS, IT IS THE EXPRESS INTENT OF THIS CONTRACT THAT THESE MATERIALS NOT BE DISTURBED IN ANY WAY. SHOULD THE CONTRACTOR BE FORCED TO DISTURB IN ANY WAY ANY SUCH MATERIALS, THE CONTRACTOR SHALL FIRST BE FAMILIAR WITH INDUSTRIAL CODE RULE 56 OF THE N.Y.S. DEPARTMENT OF LABOR. THE CONTRACTOR SHALL ALSO OBTAIN WRITTEN PERMISSION OF THE ENGINEER BEFORE PROCEEDING.

THE LOAD RATINGS ARE IN ACCORDANCE WITH THE AASHTO MANUAL FOR BRIDGE EVALUATION.

DIMENSIONS FOR THICKNESSES OF STEEL ROLLED ANGLE SHAPES AND STRUCTURAL TUBING ARE SHOWN ACCORDING TO THE CURRENT AISC MANUAL.

REMOVAL NOTES:

EXISTING SUPERSTRUCTURE SHALL BE REMOVED UNDER ITEM 202.120001.

EXISTING SUBSTRUCTURES SHALL BE REMOVED WITHIN THE LIMITS SHOWN ON THE CONTRACT PLANS UNDER ITEM 202.19
THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE REQUIREMENTS OF SUBSECTION 202-03.01 GENERAL SAFETY REQUIREMENTS. A REMOVAL PLAN SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW YORK SHALL BE SUBMITTED TO THE ENGINEER THIRTY (30) DAYS PRIOR TO BEGINNING THE DEMOLITION.

THE FOLLOWING ITEMS SHALL BE USED TO IMPLEMENT AND MAINTAIN EFFECTIVE HEALTH AND SAFETY CONTROLS:

- ENVIRONMENTAL GROUND PROTECTION (ITEM 570.090001)
- ENVIRONMENTAL WATERWAY PROTECTION (ITEM 570.100001)

REFER TO SUBSECTION 107-05 OF THE STANDARD SPECIFICATIONS FOR SAFETY AND HEALTH REQUIREMENTS.

SUBSTRUCTURE NOTES:

ALL PLACEMENTS OF SELECT STRUCTURE FILL, ITEM 203.21, SHALL BE COMPACTED TO 95 PERCENT OF STANDARD PROCTOR MAXIMUM DENSITY.

TRAILWAY EMBANKMENT MATERIAL AND SELECT STRUCTURE FILL, ITEM 203.21, SHALL BE PLACED SIMULTANEOUSLY, IN CONTACT, ON BOTH SIDES OF THE VERTICAL DIFFERENTIATION LINE BETWEEN ITEMS.

THE CONTRACTOR, WITH THE PERMISSION OF THE ENGINEER, MAY ELECT TO INTRODUCE CONSTRUCTION JOINTS IN THE ABUTMENTS AT LOCATIONS NOT SHOWN ON THE PLANS. THESE CONSTRUCTION JOINTS SHALL BE PROVIDED WITH SHEAR KEYS AND WATERSTOPS. VERTICAL CONSTRUCTION JOINTS INTRODUCED IN THE BACKWALL SHOULD PREFERABLY BE PLACED MIDWAY BETWEEN THE PEDESTALS.

BRIDGE RAILING NOTES:

THE CONTRACTOR SHALL SUBMIT FABRICATION SHOP DRAWINGS FOR THE PROPOSED BRIDGE RAILING TO THE DESIGN ENGINEER FOR APPROVAL. THE CONTRACTOR SHOULD BE AWARE OF THE CUSTOM AESTHETIC ASPECTS OF THE RAILING SHOWN ON THE CONTRACT DRAWINGS AND SHALL ADJUST THEIR LUMP SUM BID PRICE ACCORDINGLY.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

SUPERSTRUCTURE NOTES:

NO DEVIATIONS FROM THE HAUNCH DETAILS SHOWN ON THESE PLANS MAY BE MADE WITHOUT THE PERMISSION OF THE ENGINEER.

THE STRUCTURAL STEEL SHALL BE AS FOLLOWS:

ASTM A 709, GRADE 50W (BOICEVILLE)

ASTM A 709, GRADE 50 (GALVANIZED) (BUTTERNUT COVE)

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE PROVISIONS OF THE CURRENT SPECIFICATIONS FOR SUPERSTRUCTURE SLABS, WHICH ALLOW THE OPTION OF 3 FORMING SYSTEMS FOR THE UNDERSIDE OF THE SLABS. HOWEVER, ON THIS BRIDGE, ONLY THE FOLLOWING OPTION(S) WILL BE PERMITTED: PERMANENT CORRUGATED METAL AND REMOVABLE WOODEN FORMS.

FOR THE VARIOUS LUMP SUM STRUCTURAL STEEL ITEMS IN THE CONTRACT, THE "TOTAL WEIGHT FOR PROGRESS PAYMENT" IS AS FOLLOWS:

ITEM 564.0501 - 230,000 POUNDS (BOICEVILLE)

THIS WEIGHTS SHALL BE USED IN DETERMINING PARTIAL PAYMENTS AND PROGRESS. UNDER NO CIRCUMSTANCES SHALL THE "TOTAL WEIGHT FOR PROGRESS PAYMENT" BE USED FOR FINAL PAYMENT PURPOSES. THE CONTRACTOR IS ADVISED NOT TO USE THE "TOTAL WEIGHT FOR PROGRESS PAYMENT" AS A BIDDING TOOL. DISCREPANCIES WHICH MAY OCCUR BETWEEN THE TOTAL WEIGHT SHIPPED AND "TOTAL WEIGHT FOR PROGRESS PAYMENT" SHALL NOT BE A BASIS FOR ADDITIONAL COMPENSATION.

THE COST OF CLEANING THE STEEL IN THE FABRICATION SHOP AND THE FIELD SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE VARIOUS ITEMS IN THE CONTRACT.

THE STRUCTURAL STEEL FOR THE BOICEVILLE BRIDGE SHALL BE PARTIALLY PAINTED. FINISH COAT COLOR SHALL MATCH FEDERAL COLOR STANDARD 595, #20059. VIEWING SHALL BE DONE UNDER NORTH STANDARD DAYLIGHT. THE FOLLOWING PORTIONS OF THE STEEL SHALL BE PAINTED: ALL EXPOSED SURFACES OF THE GIRDERS THAT ARE WITHIN A DISTANCE OF 1.5 TIMES THE DEPTH OF THE GIRDER FROM THE BRIDGE JOINTS INCLUDING ANY STIFFENERS OR CONNECTION PLATES.

STEEL ERECTION NOTES:

THE CONTRACTOR SHALL PROVIDE FOR THE STABILITY OF STRUCTURAL STEEL DURING ALL PHASES OF ERECTION AND CONSTRUCTION, AS PROVIDED IN SUBSECTION 204 OF THE NEW YORK STATE STEEL CONSTRUCTION MANUAL (SCM). THE GIRDERS ON THIS BRIDGE SHALL BE STABILIZED DURING ERECTION BY USE OF FALSEWORK, TEMPORARY BRACING, COMPRESSION FLANGE STIFFENING TRUSSES, CHOOSING ALTERNATE PICKING POINTS, OR BY USE OF A HOLDING CRANE UNTIL SUFFICIENT NUMBER OF GIRDERS HAVE BEEN ERECTED AND CROSS FRAMES INSTALLED. THE METHODS USED BY THE CONTRACTOR SHALL BE DOCUMENTED ON THE ERECTION DRAWINGS WITH ALL SUPPORTING STABILITY CALCULATIONS SUBMITTED AND STAMPED BY A LICENSED NEW YORK STATE PROFESSIONAL ENGINEER AND SUBMITTED TO THE ENGINEER IN ACCORDANCE WITH THE SCM.

THE DESIGN OF THIS STRUCTURE ASSUMES THAT THE STRUCTURAL STEEL IS COMPLETELY ERECTED BEFORE IT IS ALLOWED TO DEFLECT UNDER ITS OWN DEAD LOAD. DEFLECTIONS INCURRED DURING THE VARIOUS STAGES OF THE ERECTION METHOD ARE NOT CONSIDERED. THEREFORE, THE ACTUAL ERECTION METHODS AND SEQUENCES EMPLOYED BY THE CONTRACTOR MAY HAVE A SUBSTANTIAL EFFECT ON THE FINAL STEEL PROFILE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ALL NECESSARY COMPENSATORY ACTION TO ENSURE THAT THE FINAL ALIGNMENT AND PROFILE OF ERECTED STEEL CONFORMS TO SUBSECTION 1213, 1214, AND 1215 OF THE SCM. ANY CORRECTIVE WORK NECESSARY TO RE-POSITION ERECTED STEEL TO ACHIEVE ACCEPTABLE ALIGNMENT AND PROFILE MUST BE APPROVED BY THE ENGINEER, AND SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.

IF THE CONTRACTOR ELECTS TO MOVE THE SPLICE LOCATION SHOWN OF THE PLANS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER REDESIGN THE SPLICE. COST OF REDESIGN TO BE INCLUDED IN LUMP SUM BID PRICE FOR THE PROJECT.

DECK PLACEMENT NOTES:

CONCRETE PLACEMENT AND FINISHING OPERATIONS SHALL BE PERFORMED AS RAPIDLY AS POSSIBLE. THE ENGINEER MAY ORDER THE CONTRACTOR TO STOP PLACEMENT OPERATIONS AT ANY TIME IF, IN THE ENGINEER'S OPINION, CONCRETE PLACED DURING THE PLACEMENT HAS STARTED TO SET, OR IS ABOUT TO SET, AND FURTHER PLACEMENT OF CONCRETE WILL CAUSE DEFLECTION CRACKING.

TOP SURFACES OF NEW BRIDGE DECKS AND APPROACH SLABS SHALL BE SEALED ACCORDING TO ITEM 559.18960118 - PROTECTIVE SEALING OF STRUCTURAL CONCRETE ON NEW BRIDGE DECKS AND BRIDGE DECK OVERLAYS.

PLACEMENT OF THE BRIDGE DECK SLAB SHALL NOT OCCUR WHEN THE AMBIENT TEMPERATURE FALLS BELOW 45 DEGREES FAHRENHEIT.

FINISHING MACHINE(S) SHALL OPERATE AS CLOSE TO THE SKEW ANGLE AS PRACTICAL FOR SKEWS BETWEEN 0° AND 50°. WHEN SKEW ANGLE IS GREATER THAN 50° THE FINISHING MACHINE(S) SHALL OPERATE AT AN ANGLE OF 50°.

WET BURLAP CURING BLANKETS ARE REQUIRED TO BE PLACED ON THE CONCRETE DECK WITHIN 30 MINUTES OF THE CONCRETE BEING DEPOSITED INTO THE FORMS OR 5 MINUTES AFTER FINISHING, WHICHEVER COMES FIRST. THE PLACEMENT OF THE TURF DRAG TEXTURE SHALL NOT INTERFERE WITH THESE REQUIREMENTS.

IN THE EVENT THE CONTRACTOR'S DECK PLACEMENT OPERATION IS STOPPED PRIOR TO COMPLETION, WHETHER BY THE CONTRACTOR'S OWN DECISION OR BY ORDER OF THE ENGINEER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A FINISHED DECK GRADE WHICH MATCHES THE PLANNED PROFILE. ANY SUBSEQUENT REVISIONS TO DECK FORMS MADE NECESSARY BY SUCH ACTION SHALL BE AT THE CONTRACTOR'S EXPENSE.

DECK PLACEMENT NOTES:

THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER THE PROPOSED SET RETARDING ADMIXTURE (ASTM C494, TYPE D, SRWR) AND A COPY OF THE MANUFACTURER'S LITERATURE SPECIFYING THE RECOMMENDED RANGE TO PROVIDE SUFFICIENT RETARDATION. THIS SRWR DOSAGE SHALL NOT BE REDUCED AS THE PLACEMENT PROGRESSES. THE ENGINEER WILL REJECT ANY CONCRETE TRUCK THAT CALLS FOR AN ADMIXTURE DOSAGE RATE BEYOND THE MANUFACTURER'S RECOMMENDED RANGE. ANY SUPPLIER CODES DENOTING SRWR SHALL BE GIVEN TO THE ENGINEER FOR MONITORING PURPOSES.

DECK PLACEMENT NOTES (CONT.):

THE CONTRACTOR SHALL ENSURE THAT NO CONCRETE PLACED DURING ANY RESPECTIVE POURING SEQUENCE DOES NOT BEGIN TO SET UNTIL ALL CONCRETE TO BE PLACED IN THAT CORRESPONDING POUR HAS BEEN PLACED.

THE CONCRETE DECK SLAB FOR THIS STRUCTURE SHALL BE PLACED ACCORDING TO THE POURING SEQUENCE SHOWN ON THE CONTRACT PLANS. REQUESTS FOR ANY ALTERNATE DECK POURING SEQUENCE SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL. IF AN ALTERNATE SEQUENCE IS PROPOSED, NO RELATED WORK MAY BE PROGRESSED BY THE CONTRACTOR UNTIL THE WRITTEN APPROVAL OF THE DESIGN ENGINEER IS OBTAINED.

CONSTRUCTION JOINTS SHALL BE PLACED PARALLEL TO THE SKEW ANGLE. DECK CONCRETE SHALL BE PLACED SO THAT THE LEADING EDGE PARALLELS THE SKEW. FINISHING MACHINE(S) SHALL BE OPERATED AS CLOSE TO THE SKEW ANGLE AS PRACTICABLE. TEXTURING MAY BE DONE LONGITUDINAL, TRANSVERSE OR PARALLEL TO THE ALIGNMENT OF THE FINISHING MACHINE.

ALL AREAS SHOWN ON THE PLANS AS "PLACEMENT 1" MUST BE PLACED DURING THE INITIAL CONTINUOUS WORK PERIOD. SUBSEQUENT PLACEMENTS (CONTINUOUS PLACEMENTS) WILL NOT BE PERMITTED UNTIL 72 HOURS OF ACCEPTABLE CURING AFTER COMPLETION OF THE PREVIOUS PLACEMENT.

THE CONTRACTOR MAY DIVIDE PLACEMENT 2 INTO SEPERATE SEGMENTS PROVIDED THE 72 HOUR WAITING PERIOD BETWEEN PLACEMENTS IS OBSERVED. PLACEMENT 1 SHALL BE ACCOMPLISHED BY THE SIMULTANEOUS OPERATION OF TWO FINISHING MACHINES AND CREWS. A MINIMUM RATE OF 30 CUBIC YARDS PER HOUR SHALL BE MAINTAINED BY EACH MACHINE.

A CONCRETE PENETRATING STAIN SHALL BE APPLIED IN THE FIELD AFTER CASTING OF THE ENTIRE BRIDGE DECK. THE FINAL COLORATION OF CONCRETE AFTER STAINING SHALL BE DARK GRAY OR BLUESTONE. THE COLOR SHALL BE EQUIVALENT TO THE COLOR OF THE STAIN USED ON THE SUBSTRUCTURES. SEE THE SUBSTRUCTURE ARCHITECTURAL TREATMENT NOTES FOR ALL REQUIREMENTS PERTAINING TO CONCRETE STAINING. THE CONCRETE STAIN SHALL BE APPLIED PRIOR TO THE APPLICATION OF ITEM 559.18960118 - PROTECTIVE SEALING OF STRUCTURAL CONCRETE ON NEW BRIDGE DECKS AND OVERLAYS.

RECONSTRUCTION NOTES:

THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, OR WHICH ARE TO REMAIN THE PROPERTY OF THE OWNER, OR ADJACENT PROPERTY OWNERS WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, OR WHICH ARE TO REMAIN THE PROPERTY OF THE OWNER, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE OWNER AT THE EXPENSE OF THE CONTRACTOR.

WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE LUMP DUM BID PRICE FOR THE PROJECT.

DURING REMOVAL OPERATIONS, THE CONTRACTOR SHALL NOT BE ALLOWED TO DROP WASTE CONCRETE, DEBRIS AND OTHER MATERIAL TO THE AREA BELOW THE BRIDGE EXCEPT WHERE THE PLANS SPECIFICALLY PERMIT THE DROPPING OF MATERIAL. PLATFORMS, NETS, SCREENS OR OTHER PROTECTIVE DEVICES SHALL BE USED TO CATCH THE MATERIAL. IF THE ENGINEER DETERMINES THAT ADEQUATE PROTECTIVE DEVICES ARE NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.

ALL MATERIAL FALLING ON THE AREA BELOW AND ADJACENT TO THE BRIDGE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO COST TO THE OWNER.

THE COST OF FURNISHING, INSTALLING, MAINTAINING, REMOVING AND DISPOSING OF ALL PLATFORMS, NETS, SCREENS OR OTHER PROTECTIVE DEVICES SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR THE CONTRACT.

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT, DUE TO THE NATURE OF RECONSTRUCTION PROJECTS, THE EXACT EXTENT OF RECONSTRUCTION WORK CANNOT ALWAYS BE ACCURATELY DETERMINED PRIOR TO THE COMMENCEMENT OF WORK. THESE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON FIELD INSPECTION AND OTHER INFORMATION AVAILABLE AT THE TIME. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO THE CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL PERFORM WORK IN ACCORDANCE WITH FIELD CONDITIONS.

CONTRACTOR SHALL VERIFY DIMENSIONS NECESSARY FOR THE PROPER FIT OF STEEL PIECES PRIOR TO THE FABRICATION OF THE STEEL. THE COST OF FIELD VERIFYING DIMENSIONS SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR THE PROJECT.

IF THE STRUCTURE HAS A BRIDGE IDENTIFICATION NUMBER (B.I.N.) PLATE ATTACHED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT IT DURING CONSTRUCTION OR REMOVE AND REMOUNT IT OR A NEW PLATE (NO DIRECT PAYMENT) AFTER CONSTRUCTION IS COMPLETED.

IT SHALL BE THE CONTRACTORS'S RESPONSIBILITY TO CONFIRM THE FOLLOWING DIMENSIONS IN THE FIELD PRIOR TO THE FABRICATION OF NEW SUPERSTRUCTURE COMPONENTS: EXISTING SPAN LENGTHS (CHECK AT MULTIPLE APPROPRIATE POINTS IF SUBSTRUCTURES ARE NONPARALLEL)

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE TOP OF ABUTMENT AND PIER ELEVATIONS PRIOR TO CASTING THE NEW PEDESTALS AND/OR INSTALLING THE NEW BEARINGS.

STREAM PROTECTION NOTES:

DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL CONDUCT OPERATIONS IN SUCH A MANNER AS TO PREVENT OR REDUCE TO A MINIMUM ANY DAMAGE TO ANY STREAM FROM POLLUTION BY DEBRIS, SEDIMENT, OR OTHER FOREIGN MATERIAL, OR FROM MANIPULATION OF EQUIPMENT AND/OR MATERIALS IN OR NEAR SUCH STREAMS. THE CONTRACTOR SHALL NOT RETURN DIRECTLY TO A STREAM ANY WATER, WHICH HAS BEEN USED FOR WASH PURPOSES OR OTHER SIMILAR OPERATIONS, WHICH CAUSE THIS WATER TO BECOME POLLUTED WITH SAND, SILT, CEMENT, OIL, OR OTHER IMPURITIES. IF THE CONTRACTOR USES WATER FROM A STREAM, THE CONTRACTOR SHALL CONSTRUCT AN INTAKE OR TEMPORARY DAM REQUIRED TO PROTECT AND MAINTAIN WATER RIGHTS AND TO SUSTAIN FISH LIFE DOWNSTREAM.

ALL IN-STREAM ACTIVITIES ARE PROHIBITED DURING THE ESTABLISHED NYSDEC TROUT SPAWNING AND HATCHING PERIOD COMMENCING OCTOBER 1 AND ENDING APRIL 30.

COFFERDAM NOTES:

SHOULD THE CONTRACTOR ELECT TO LAY BACK A PORTION OF THE EXISTING EARTH ADJACENT TO AN EXCAVATION REQUIRING A COFFERDAM, ANY REQUIRED EXTENSIONS OF THE COFFERDAM NECESSARY TO KEEP WATER FROM ENTERING THE EXCAVATION SHALL BE FURNISHED AND PLACED AT NO COST TO THE COUNTY.

COFFERDAM NOTES (CONT.):

WHERE A COFFERDAM IS USED, THE COST OF DEWATERING THE ENTIRE EXCAVATION, REGARDLESS OF SOURCE OF WATER, SHALL BE INCLUDED IN THE COFFERDAM ITEM.

SHOULD FIELD CONDITIONS REQUIRE A CHANGE IN THE TYPE OF COFFERDAM SYSTEM CALLED FOR ON THE PLANS, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR COORDINATION WITH THE APPROPRIATE AGENCIES TO APPROVE THE CHANGE.

IF MULTIPLE COFFERDAMS ARE REPLACED BY A SINGLE SYSTEM, AS PERMITTED BY THE ENGINEER, PAYMENT SHALL BE BASED ON ALL OF THE APPLICABLE COFFERDAM ITEMS INDICATED ON THE PLANS.

DEWATERING OF THE COFFERDAM SHALL BE ACCOMPLISHED BY PUMPING THE WATER TO AN APPROVED UPLAND VEGETATED AREA OUTSIDE OF THE STREAMBED AS APPROVED BY THE ENGINEER. TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL, SUCH AS STRAW BALES, OR APPROVED EQUAL, MAY BE REQUIRED AS DETERMINED BY THE ENGINEER. NO SETTLEMENT BASIN SHALL BE CONSTRUCTED.

ANY WATER, EITHER DIVERTED OR PUMPED FROM THE STRUCTURE EXCAVATION, THAT IS TO BE RETURNED TO THE WATERWAY SHALL NOT BE MORE TURBID THAN THE WATER UPSTREAM OF THE PROJECT.

WATER THAT IS MORE TURBID SHALL BE TREATED BY MEANS OF A SETTLEMENT TRAP OF ADEQUATE SIZE TO RETURN WATER QUALITY TO ACCEPTABLE LEVELS, COST TO BE INCLUDED IN THE COFFERDAM ITEMS.

REMOVAL - THE CONTRACTOR SHALL REMOVE THE COFFERDAMS AND WATER DIVERSION STRUCTURES, AFTER SUCH TIME THAT IT IS DETERMINED BY THE ENGINEER THAT IT IS NOT NECESSARY. THE REMOVAL SHALL BE SEQUENCED TO MINIMIZE TURBIDITY AND THE DISCHARGE OF MATERIALS INTO THE WATERWAY.

ORDINARY HIGH WATER:

ORDINARY HIGH WATER ELEVATION IS ESTIMATED TO BE 605.73. THIS IS DEFINED AS THE WATER SURFACE ELEVATION FOR THE MEAN ANNUAL FLOOD WHICH IS THE FLOOD THAT HAS A RECURRENCE INTERVAL OF 2.33 YEARS.

ORDINARY WATER:

ORDINARY WATER ELEVATION IS ESTIMATED TO BE 603.73. THIS IS DEFINED AS THE HIGHEST SURFACE WATER ELEVATION LIKELY TO BE ENCOUNTERED DURING ONE CONSTRUCTION SEASON (OTHER THAN MAJOR FLOODS). IT IS ALWAYS LESS THAN THE ORDINARY HIGH WATER ELEVATION AND IT IS USUALLY AN OBSERVED ELEVATION RATHER THAN A COMPUTED ONE.

LOW WATER:

LOW WATER ELEVATION IS ESTIMATED TO BE 601.73. THIS WATER ELEVATION IS THE NORMAL LOW WATER ELEVATION PREVALENT DURING ONE CONSTRUCTION SEASON FOR MORE THAN 25% OF THE TIME. IT IS AN OBSERVED ELEVATION RATHER THAN A COMPUTED ONE.

SUBSTRUCTURE ARCHITECTURAL TREATMENT NOTES:

ARCHITECTURAL TREATMENT SHALL BE ADDED TO THE EXPOSED FACES OF THE ABUTMENTS, PIERS, AND WINGWALLS (AS SHOWN IN THE CONTRACT PLANS) WITH THE USE OF CONCRETE FORM LINERS. PAYMENT FOR ALL ARCHITECTURAL TREATMENT SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR THE PROJECT.

30 DAYS PRIOR TO THE FIRST CONCRETE PLACEMENT THAT REQUIRES ARCHITECTURAL TREATMENT, THE CONTRACTOR SHALL PRODUCE A SAMPLE PANEL FOR APPROVAL BY THE ENGINEER. THE PANEL SHALL BE CAST VERTICALLY APPROXIMATELY 4.0 FT X 4.0 FT X 1.0 FT. THE TEST PANEL SHALL BE CONSTRUCTED OF THE SAME MATERIALS TO BE USED DURING CONSTRUCTION TO DEMONSTRATE THE EXPECTED FINISH, COLOR AND TEXTURE. THE CONTRACTOR MAY BE REQUIRED TO PRODUCE UP TO THREE DIFFERENT TEST PANELS TO OBTAIN APPROVAL. WHEN APPROVED, THIS SAMPLE SHALL BE USED AS THE STANDARD FOR ALL ARCHITECTURALLY TREATED SUBSTRUCTURE CONCRETE WORK AND THE STAIN CHARACTERISTICS SHALL BE USED AS THE STANDARD FOR DECK STAIN. ARCHITECTURAL PATTERNS SHALL NOT BE USED ON THE DECK.

THE FORM LINER SHALL BE:
- COMPANY: CUSTOMROCK FORMLINER
- #1208 DRYSTACK
- OR AN APPROVED EQUAL

A CONCRETE PENETRATING STAIN SHALL BE APPLIED IN THE FIELD AFTER CASTING OF ALL ARCHITECTURALLY TREATED CONCRETE (SUBSTRUCTURES AND BRIDGE DECK). THE COLOR SHALL BE THE SAME FOR BOTH THE SUBSTRUCTURES AND THE BRIDGE DECK. THE FINAL COLORATION OF CONCRETE AFTER STAINING SHALL BE DARK GRAY OR BLUESTONE. THE COLOR STAIN SHALL BE APPLIED TO THE TEST PANEL FOR APPROVAL BY THE ENGINEER.

THE CONTRACTOR SHALL OBTAIN EACH COLOR, SIZE, TYPE, AND VARIETY OF AESTHETIC CONCRETE FINISHING MATERIALS FROM ONE MANUFACTURER WITH RESOURCES TO PROVIDE A CAST-IN-PLACE ARCHITECTURAL CONCRETE FINISH OF CONSISTENT QUALITY IN APPEARANCE AND PHYSICAL PROPERTIES.

FORMS AND ADJACENT SURFACES TO RECEIVE CONCRETE SHALL BE CLEANED. CHIPS, WOOD, SAWDUST, DIRT, AND OTHER DEBRIS SHALL BE REMOVED FROM THE FORMS JUST BEFORE PLACING CONCRETE.

FORM LINERS SHALL BE PLACED ACCURATELY TO PROVIDE THE FINISHED SURFACE TEXTURE INDICATED. SOLID BACKING SHALL BE PROVIDED AND ATTACHED SECURELY TO PREVENT DEFLECTION AND MAINTAIN STABILITY OF LINERS DURING CONCRETING. FORM LINERS SHALL BE PREVENTED FROM SAGGING AND STRETCHING IN HOT WEATHER. JOINTS OF FORM LINERS AND FORM LINER ACCESSORIES SHALL BE SEALED TO PREVENT MORTAR LEAKS. FORM LINER SHALL BE COATED WITH FORM-RELEASE AGENT PRIOR TO THE PLACING OF REINFORCEMENT. CONTACT SURFACES OF FORMS SHALL BE COATED WITH SURFACE RETARDER, ACCORDING TO THE MANUFACTURER'S WRITTEN INSTRUCTIONS PRIOR TO THE PLACING OF REINFORCEMENT.

ALL COURSING SHALL LINE UP CONTINUOUSLY FROM LEFT TO RIGHT OF FORM WITH NO VERTICAL SEAM OFFSET. PATTERN SHALL BE CONTINUOUS ACROSS JOINTS AND AROUND CORNERS. NO FORM LINER SEAMS SHALL BE VISIBLE IN THE FINAL FORMED CONCRETE. FOLLOW THE MANUFACTURER'S DIRECTIONS TO HIDE SEAMS (CAULKING, PATTERN INTERLOCK, ETC.). THE FORM LINER SEAM ELIMINATION TECHNIQUE SHALL BE APPROVED IN WRITING BY THE ENGINEER.

THE CONTRACTOR SHALL PROTECT CAST-IN-PLACE ARCHITECTURAL CONCRETE FROM STAINING, LAITANCE, AND CONTAMINATION DURING THE REMAINDER OF THE CONSTRUCTION PERIOD.

THE CONTRACTOR SHALL CLEAN CAST-IN-PLACE ARCHITECTURAL CONCRETE SURFACES AFTER FINISH TREATMENT TO REMOVE STAINS, MARKINGS, DUST, AND DEBRIS.

WASH AND RINSE SURFACES ACCORDING TO THE CONCRETE FINISH APPLICATOR;S WRITTEN RECOMMENDATIONS. PROTECT OTHER WORK FROM STAINING OR DAMAGE DUE TO CLEANING OPERATIONS. DO NOT USE CLEANING MATERIALS OR PROCESSES THAT COULD CHANGE THE APPEARANCE OF CAST-IN-PLACE ARCHITECTURAL CONCRETE FINISHES.

THE CONTRACTOR SHALL MAINTAIN THE STREAM PROTECTION NOTES DURING ALL STAINING AND WASHING OPERATIONS. NO CONTAMINANTS FROM CONCRETING, STAINING, OR WASHING CONCRETE SHALL BE ALLOWED TO ENTER THE STREAM AT ANY POINT.

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL

BOICEVILLE BRIDGE OVER ESOPUS CREEK

ULSTER COUNTY

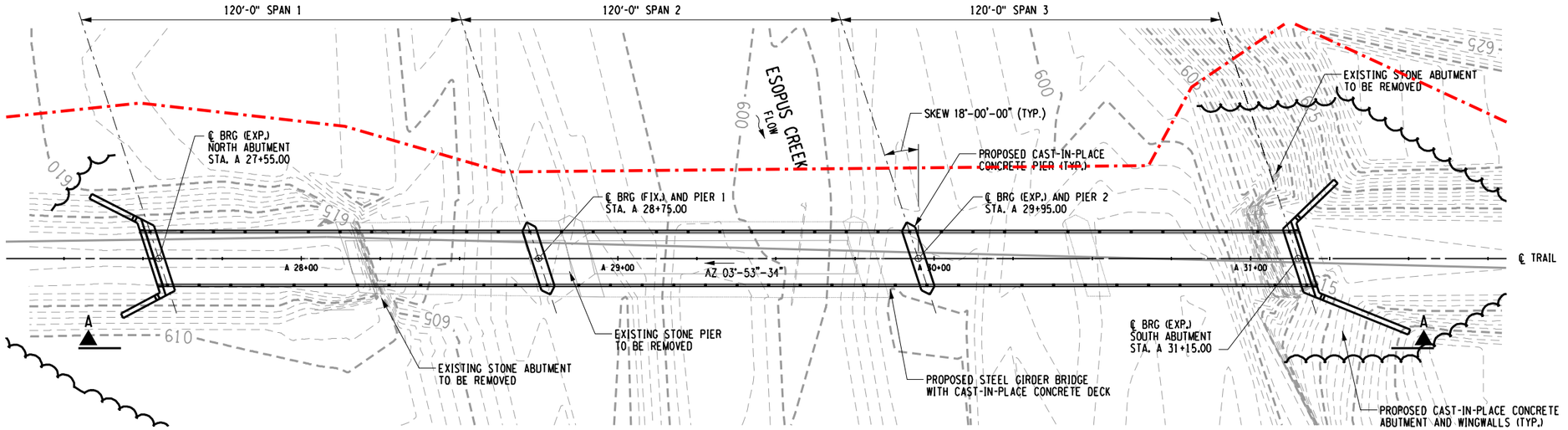
GENERAL BRIDGE NOTES

SCALE: NONE

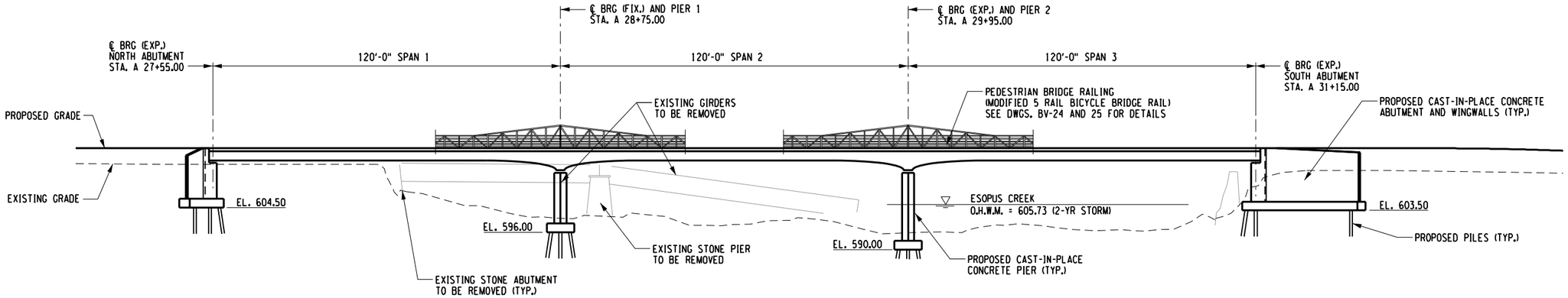
DATE ISSUED: 1/2018

DRAWING
GBN-1

IN CHARGE OF _____ DESIGNED BY _____ CHECKED BY _____ DRAFTED BY _____ CHECKED BY _____



PROPOSED BRIDGE PLAN
SCALE: 1" = 40'-0"



PROPOSED BRIDGE ELEVATION A-A
SCALE: 1" = 40'-0"

NOTES:

1. SEE DWGS. PL-3 AND PL-4 FOR PROFILE INFORMATION.
2. SEE DWGS. ESCP-3 AND ESCP-4 FOR GRADING PLAN.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION
1	8/7/18	CMH	STREAM IMPACT REVISIONS

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

BRIDGE PLAN AND ELEVATION

SCALE: AS SHOWN
DATE ISSUED: 3/7/2018
DRAWING BV-1

BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

DESIGNED BY
DRAFTED BY
CHECKED BY
IN CHARGE OF

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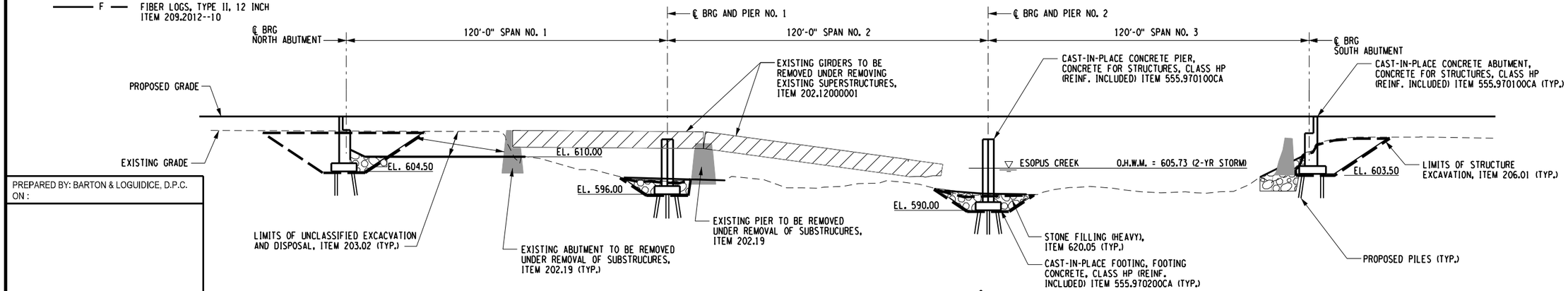
PROPOSED EXCAVATION PLAN
SCALE: 1" = 40'-0"



PROPOSED EXCAVATION SECTION
SCALE: 1" = 40'-0"

NOTES:

1. SEE DWGS. PL-3 AND PL-4 FOR PROFILE INFORMATION.
2. SEE DWGS. ESCP-3 AND ESCP-4 FOR GRADING PLAN.

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

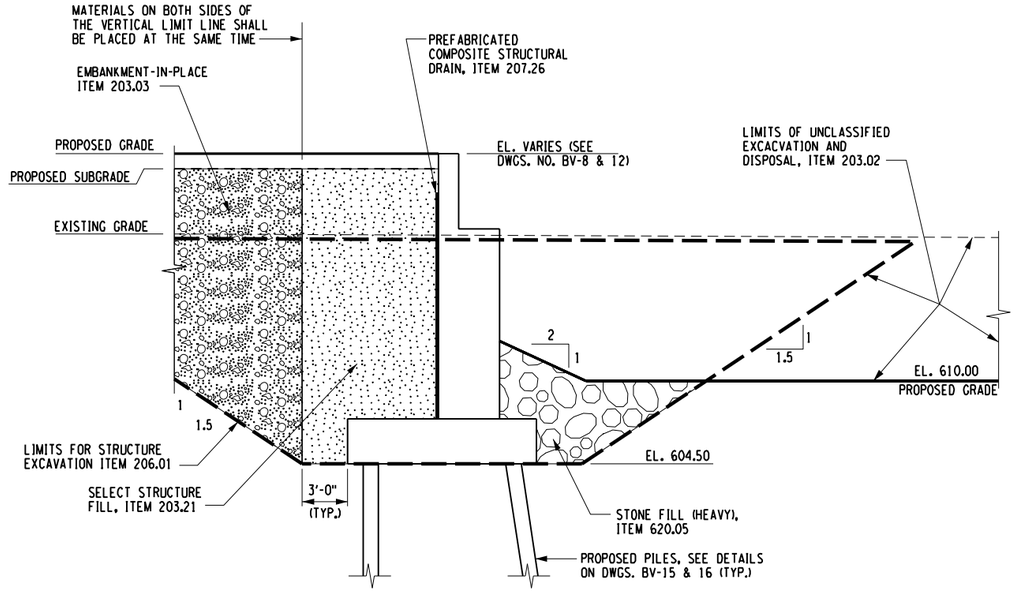
DRAFTED BY
CHECKED BY
DESIGNED BY
CHECKED BY
IN CHARGE OF

NO. DATE BY REVISION

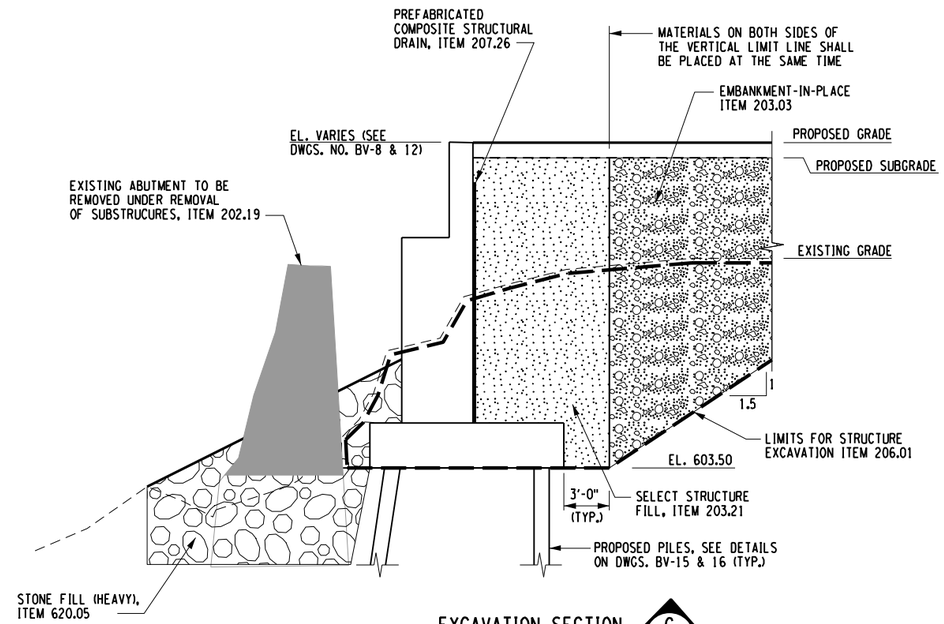
Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

BRIDGE EXCAVATION PLAN AND SECTION
SCALE: AS SHOWN
DATE ISSUED: 3/7/2018
DRAWING
BV-2



EXCAVATION SECTION B
SCALE: 1" = 10'-0"
(NORTH ABUTMENT)
BV-2



EXCAVATION SECTION C
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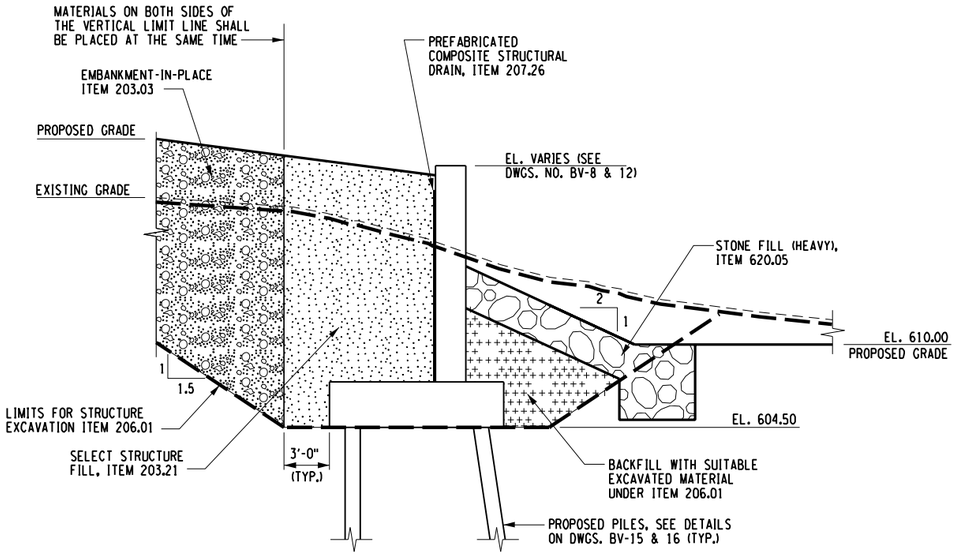
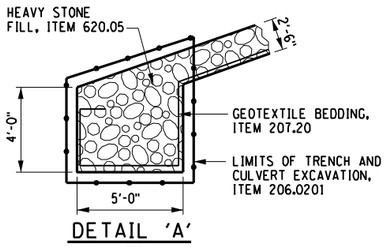
(SOUTH ABUTMENT)
BV-2



EXCAVATION SECTION D
SCALE: 1" = 10'-0"
(N.E. WINGWALL SHOWN, REMAINING WINGWALLS SIMILAR)
BV-2



DETAIL 'A'
N.T.S.

LEGEND

- REMOVAL OF SUBSTRUCTURE ITEM 202.19
- STONE FILL (HEAVY), ITEM 620.05
- SELECT STRUCTURE FILL ITEM 203.21
- EMBANKMENT-IN-PLACE ITEM 203.03
- BACKFILL WITH SUITABLE EXCAVATED MATERIAL UNDER ITEM 206.01
- LIMITS OF STRUCTURE EXCAVATION, ITEM 206.01

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

EXCAVATION SECTIONS AND DETAILS

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BV-3

DESIGNED BY
DRAFTED BY
CHECKED BY
CHECKED BY
IN CHARGE OF

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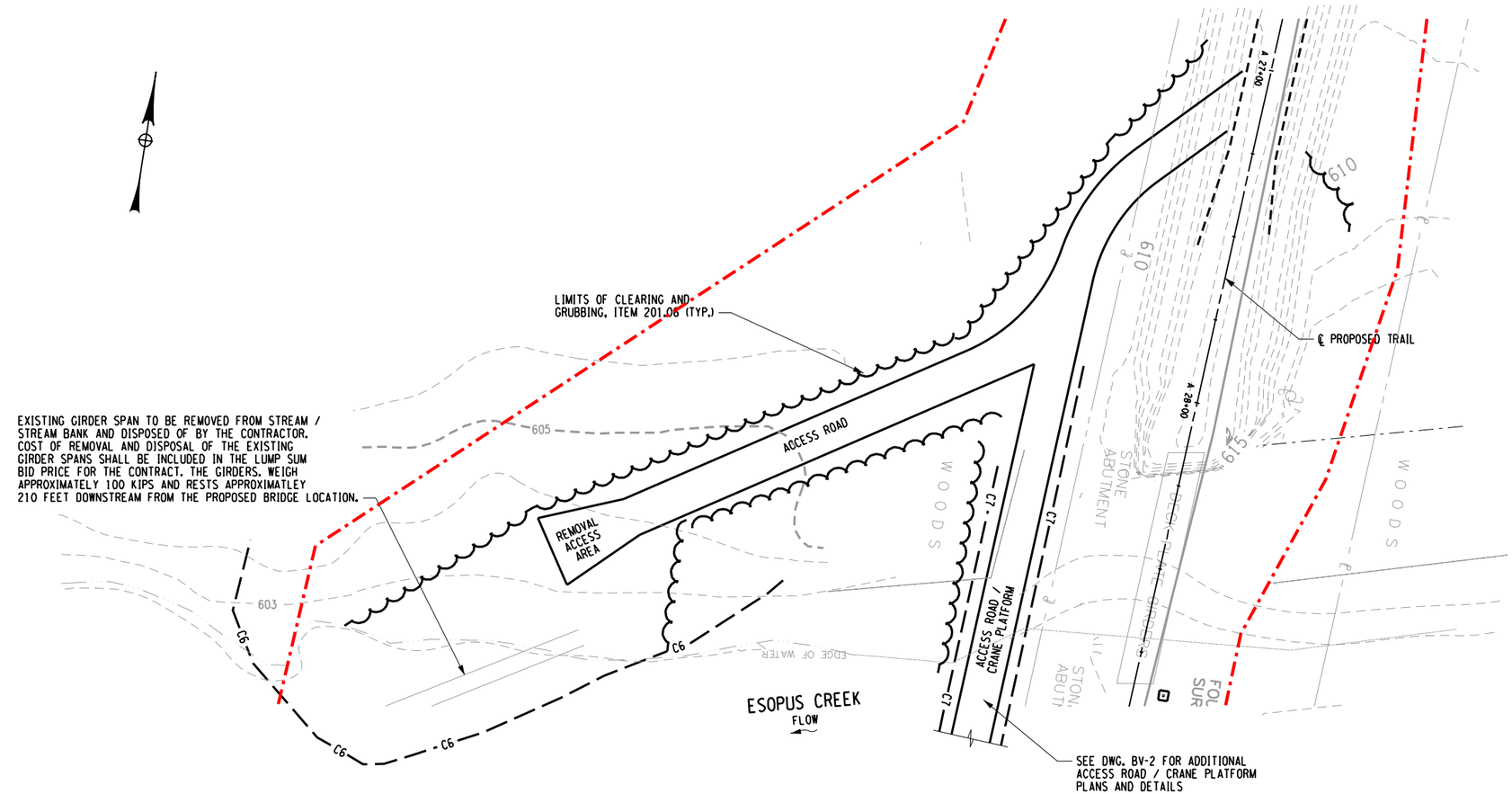
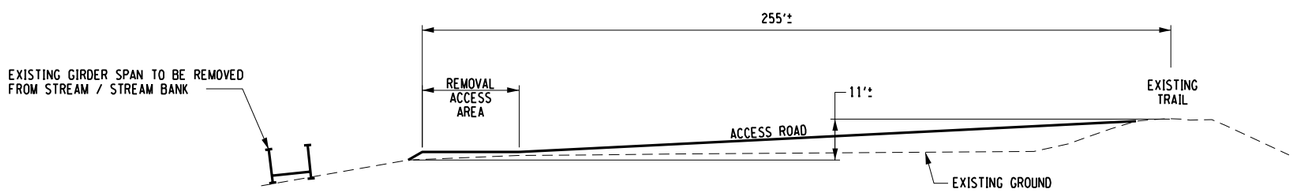


PROPOSED NORTH BANK GIRDER SPAN REMOVAL PLAN

SCALE: 1" = 40'-0"



PROPOSED NORTH BANK GIRDER SPAN REMOVAL ACCESS RD. PROFILE

N.T.S.

DOWNSTREAM GIRDER REMOVAL NOTES:

1. THE CONTRACTOR MAY ELECT TO USE AN ALTERNATE GIRDER ACCESS AND REMOVAL PLAN THAN SHOWN WITH PRIOR APPROVAL BY THE ENGINEER.
2. ALL REMOVAL WORK SHALL BE PERFORMED IN THE DRY AFTER INSTALLATION OF COFFERDAMS.
3. CONTRACTOR MAY CUT THE GIRDER INTO SMALLER SECTIONS IF NEEDED TO IMPROVE REMOVAL PROCESS, HANDLING, AND TRANSPORT.
4. GRADES ON TEMPORARY ACCESS ROADS SHALL NOT EXCEED 10% GRADE.
5. TEMPORARY ACCESS ROADS SHALL BE APPROXIMATELY 15 FEET IN WIDTH.
6. TEMPORARY ACCESS ROADS SHALL BE CONSTRUCTED OF STONE FILL AND SHALL BE COMPACTED SUCH THAT CONSTRUCTION VEHICLES CAN TRAVEL TO AND FROM THE GIRDER REMOVAL LOCATIONS SAFELY.
7. TEMPORARY ACCESS ROADS SHALL BE REMOVED UPON COMPLETION OF GIRDER REMOVALS AND IMPACTED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
8. COSTS ASSOCIATED WITH THE CONSTRUCTION AND REMOVAL OF TEMPORARY ACCESS ROADS SHALL BE INCLUDED IN ITEM 202.120001.

SURVEY AND MAPPING PROVIDED BY:

BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

IN CHARGE OF _____ DESIGNED BY _____ CHECKED BY _____ DRAFTED BY _____ CHECKED BY _____

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NO.	DATE	BY	REVISION

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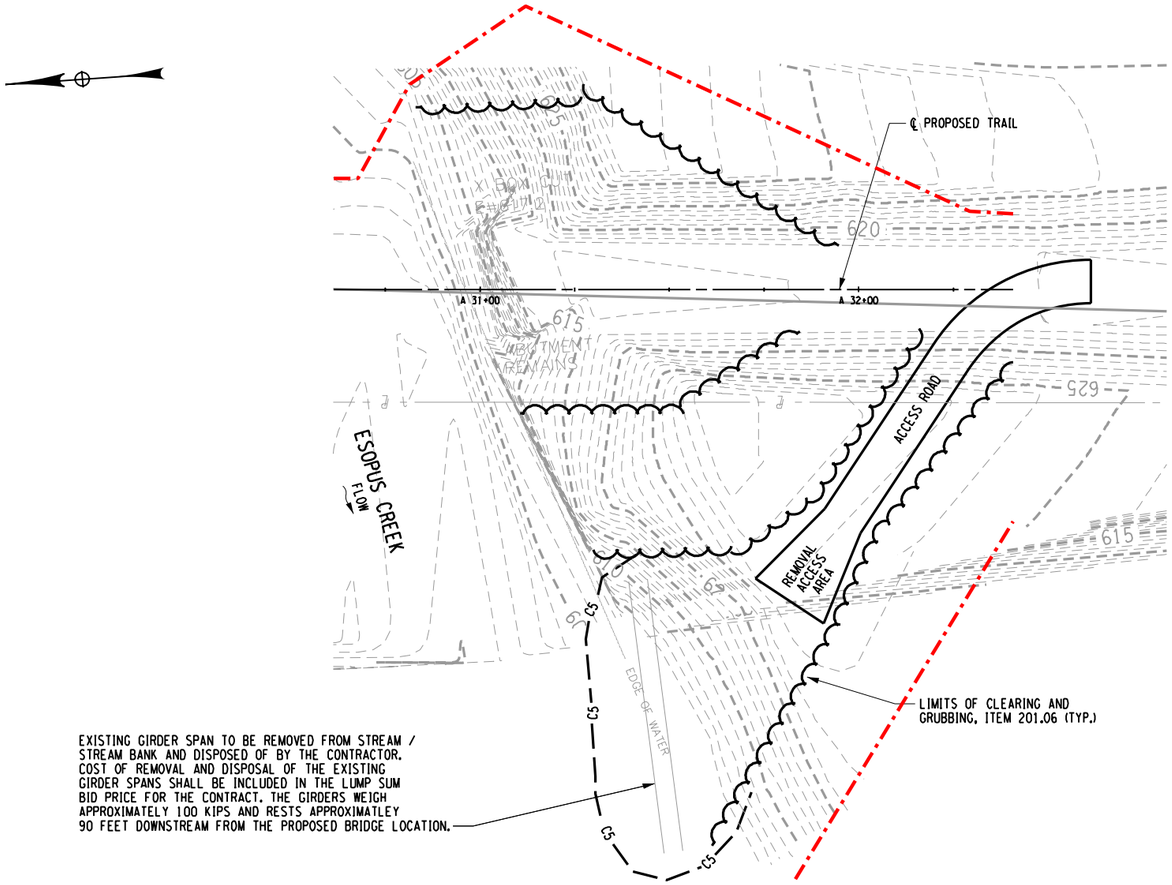
Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

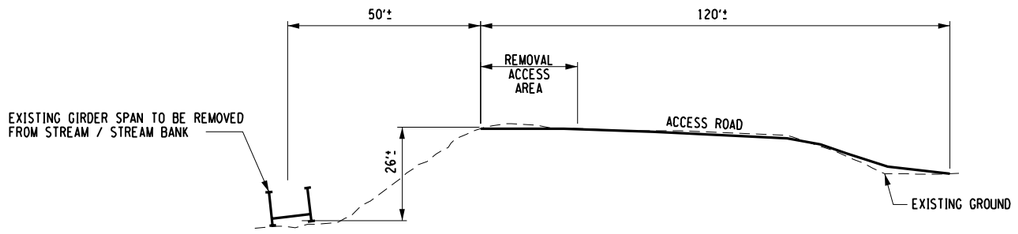
NORTH BANK GIRDER REMOVAL DETAILS

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BV-4



PROPOSED SOUTH BANK GIRDER SPAN REMOVAL PLAN

SCALE: 1" = 40'-0"



PROPOSED SOUTH BANK GIRDER SPAN REMOVAL ACCESS RD. PROFILE

N.T.S.

DOWNSTREAM GIRDER REMOVAL NOTES:

1. THE CONTRACTOR MAY ELECT TO USE AN ALTERNATE GIRDER ACCESS AND REMOVAL PLAN THAN SHOWN WITH PRIOR APPROVAL BY THE ENGINEER.
2. ALL REMOVAL WORK SHALL BE PERFORMED IN THE DRY AFTER INSTALLATION OF COFFERDAMS.
3. CONTRACTOR MAY CUT THE GIRDER INTO SMALLER SECTIONS IF NEEDED TO IMPROVE REMOVAL PROCESS, HANDLING, AND TRANSPORT.
4. GRADES ON TEMPORARY ACCESS ROADS SHALL NOT EXCEED 10% GRADE.
5. TEMPORARY ACCESS ROADS SHALL BE APPROXIMATELY 15 FEET IN WIDTH.
6. TEMPORARY ACCESS ROADS SHALL BE CONSTRUCTED OF STONE FILL AND SHALL BE COMPACTED SUCH THAT CONSTRUCTION VEHICLES CAN TRAVEL TO AND FROM THE GIRDER REMOVAL LOCATIONS SAFELY.
7. TEMPORARY ACCESS ROADS SHALL BE REMOVED UPON COMPLETION OF GIRDER REMOVALS AND IMPACTED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
8. COSTS ASSOCIATED WITH THE CONSTRUCTION AND REMOVAL OF TEMPORARY ACCESS ROADS SHALL BE INCLUDED IN ITEM 202.120001.

SURVEY AND MAPPING PROVIDED BY:

BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

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ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

SOUTH BANK GIRDER REMOVAL DETAILS

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BV-5

DESIGNED BY ____ DRAFTED BY ____
CHECKED BY ____ CHECKED BY ____
IN CHARGE OF ____

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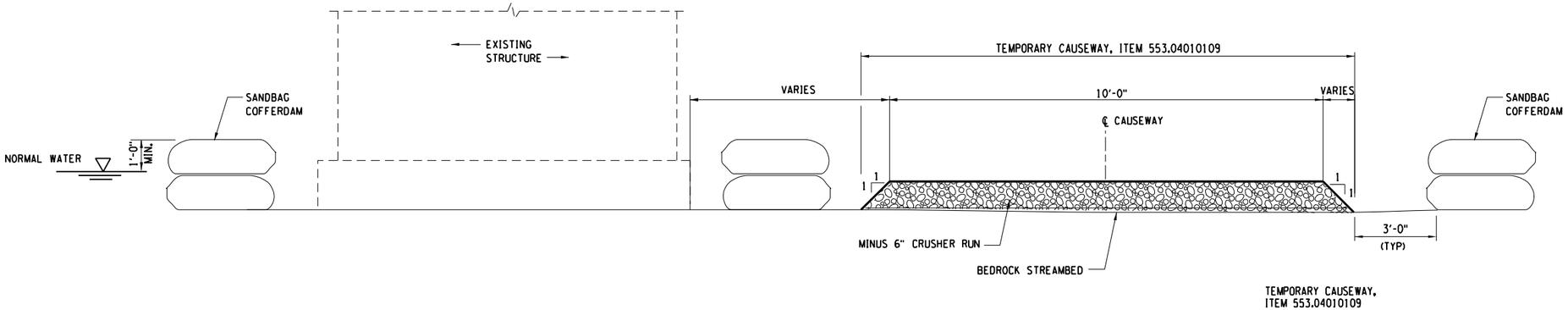

ACCESS ROAD / CRANE PLATFORM TYPICAL SECTION

NTS

NO.	DATE	BY	REVISION

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Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL

BOICEVILLE BRIDGE OVER ESOPUS CREEK

ULSTER COUNTY

ACCESS ROAD / CRANE PLATFORM SECTION

SCALE: AS SHOWN

DATE ISSUED: 1/2018

DRAWING BV-6

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

IN CHARGE OF _____ DESIGNED BY _____ CHECKED BY _____ DRAFTED BY _____ CHECKED BY _____

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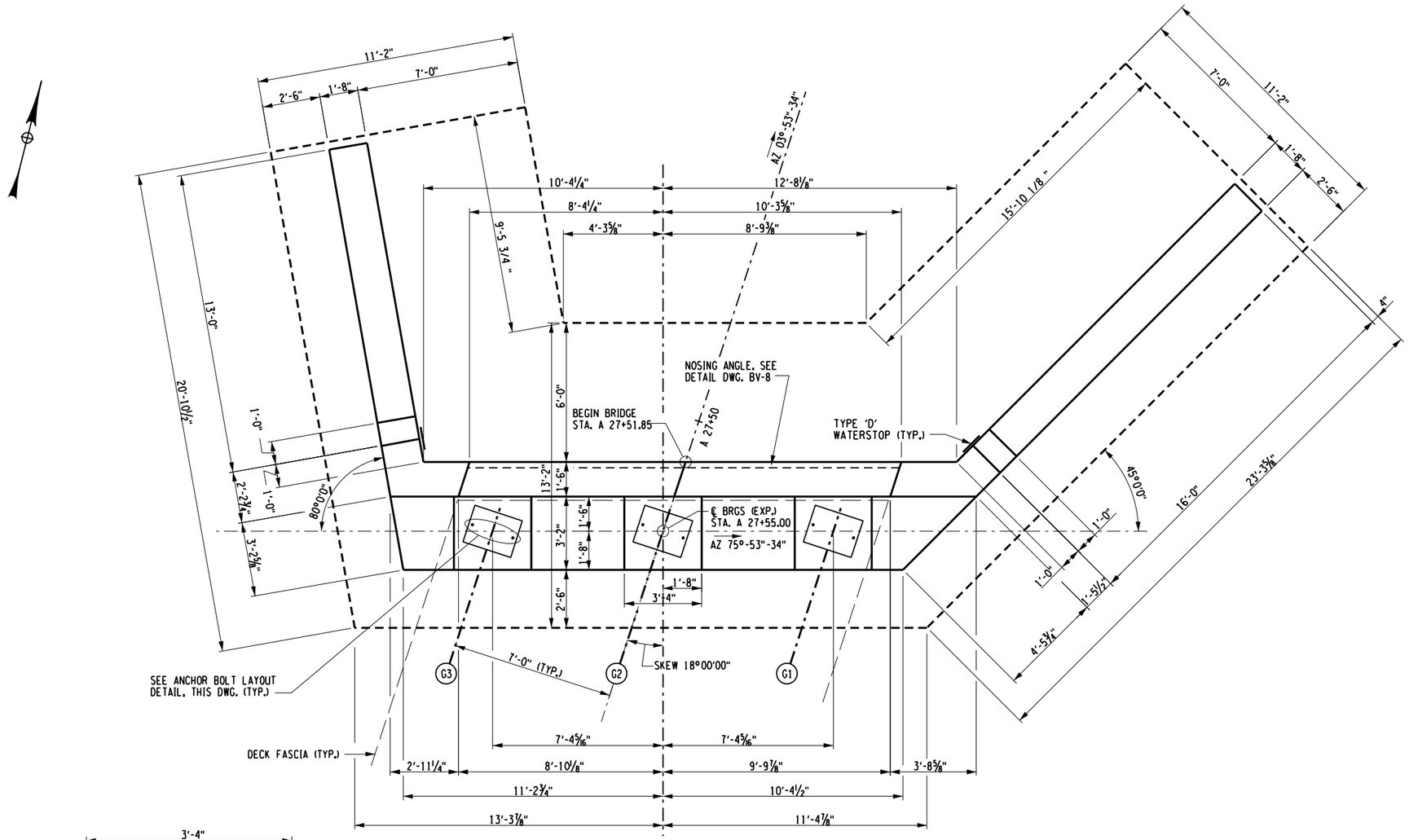
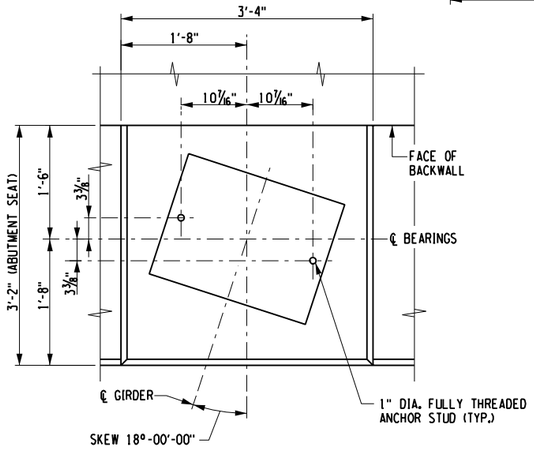


NORTH ABUTMENT PLAN
SCALE: ⅜" = 1'-0"



TYPICAL ABUTMENT ANCHOR BOLT LAYOUT
SCALE: 1/2" = 1'-0"

NOTES:

1. FOR KEYWAY AND WATERSTOP DETAILS, SEE SHEET BV-13.
2. FOR ADDITIONAL WINGWALL AND FOOTING DETAILS , SEE DWGS. BV-8, BV-13 AND BV-14.
3. FOR PEDESTAL DETAILS, SEE DWG. BV-13
4. ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED 1", UNLESS NOTED OTHERWISE.
5. FOR PILE LAYOUT AND DETAILS, SEE DWG. BV-15.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

IN CHARGE OF _____ DESIGNED BY _____ CHECKED BY _____ DRAFTED BY _____ CHECKED BY _____

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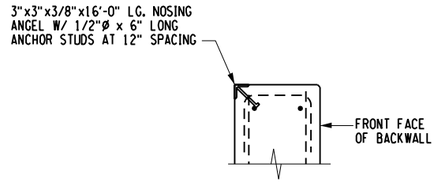
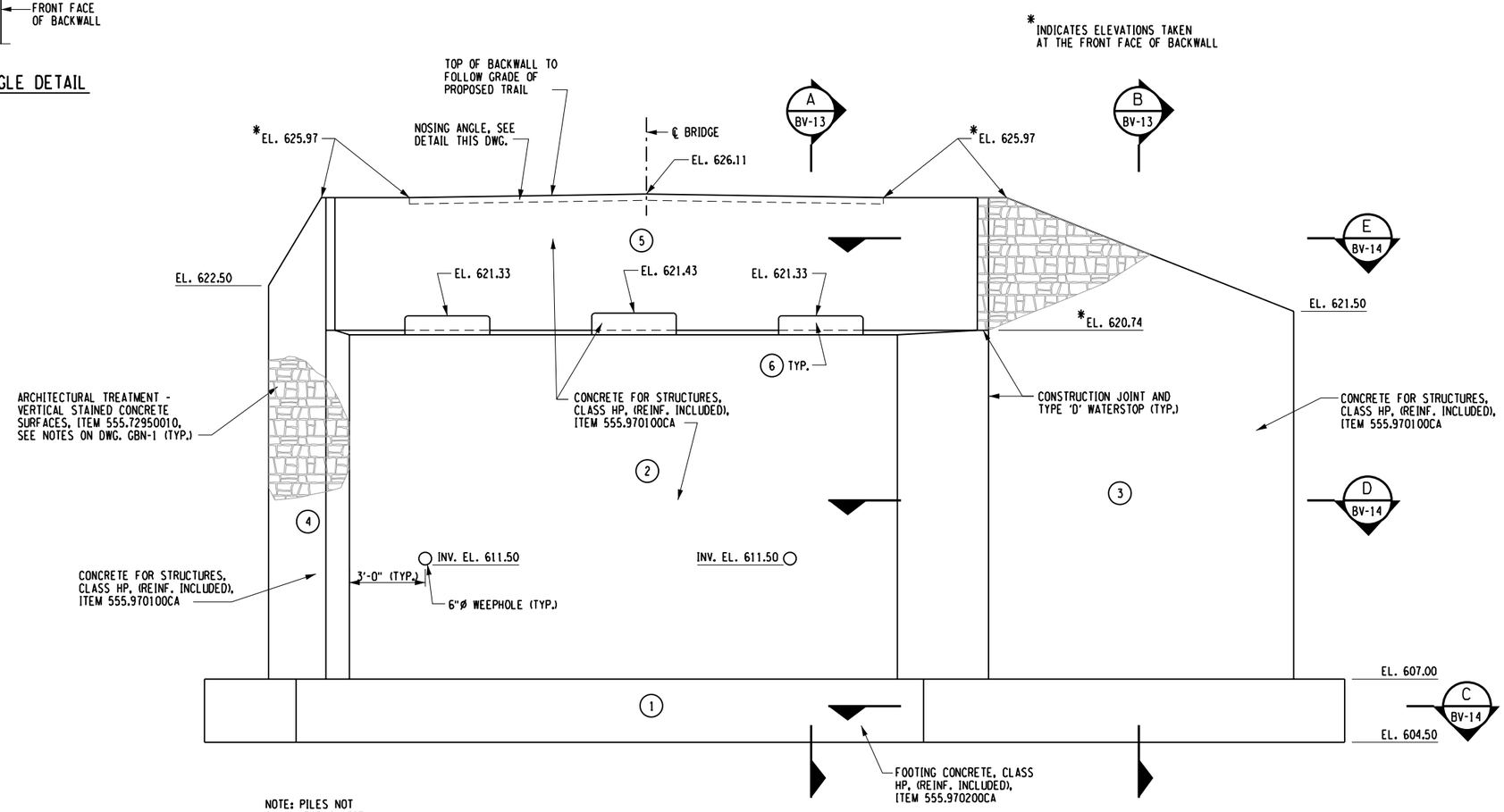
Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

NORTH ABUTMENT PLAN
SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BV-7



BACKWALL NOSING ANGLE DETAIL
N.T.S.



NORTH ABUTMENT ELEVATION
SCALE: 3/8" = 1'-0"

CONCRETE TABLE - NORTH ABUT.		
PLACEMENT	QUANTITY (CY)	ITEM NO.
1	61.0	555.970200CA
2	58.5	555.970100CA
3	26.6	555.970100CA
4	21.0	555.970100CA
5	8.0	555.970100CA
6	0.8	555.970100CA

NOTES:

1. FOR KEYWAY AND WATERSTOP DETAILS, SEE SHEET BV-13.
2. FOR ADDITIONAL WINGWALL AND FOOTING DETAILS , SEE DWGS. BV-7, BV-13 AND BV-14.
3. FOR PEDESTAL DETAILS, SEE DWG. BV-13
4. ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED 1", UNLESS NOTED OTHERWISE.
5. FOR PILE LAYOUT AND DETAILS, SEE DWG. BV-15.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

IN CHARGE OF ____ DESIGNED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

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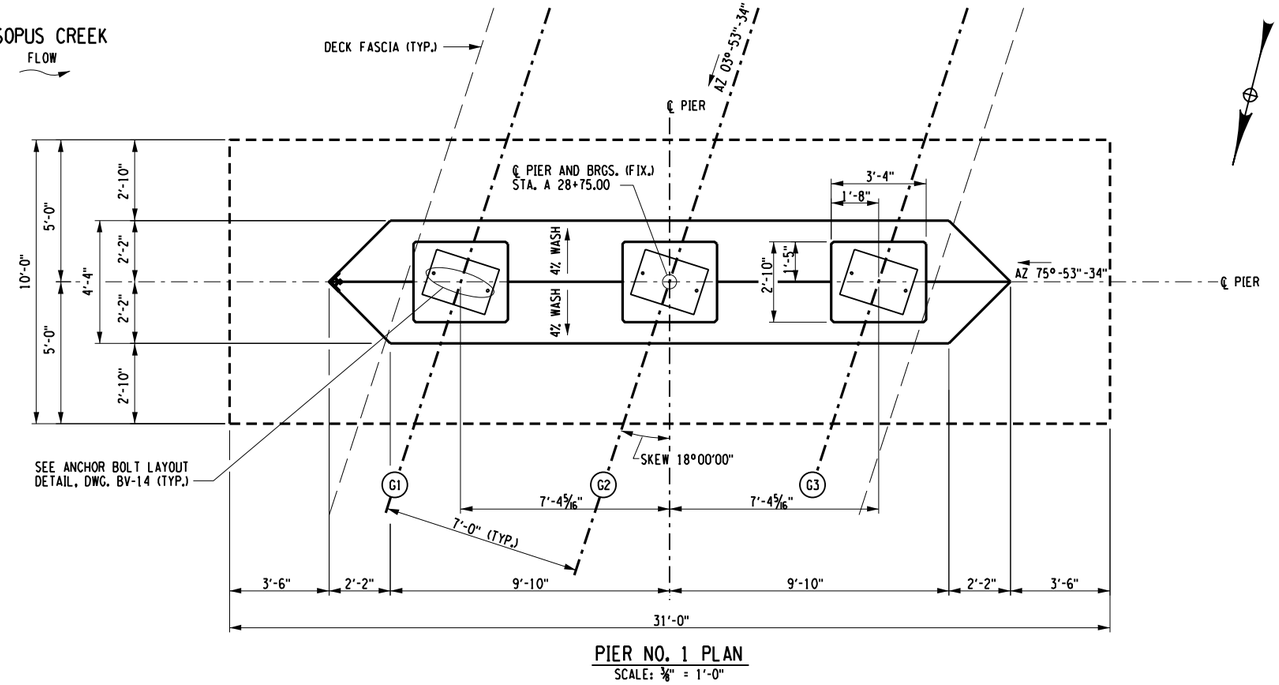
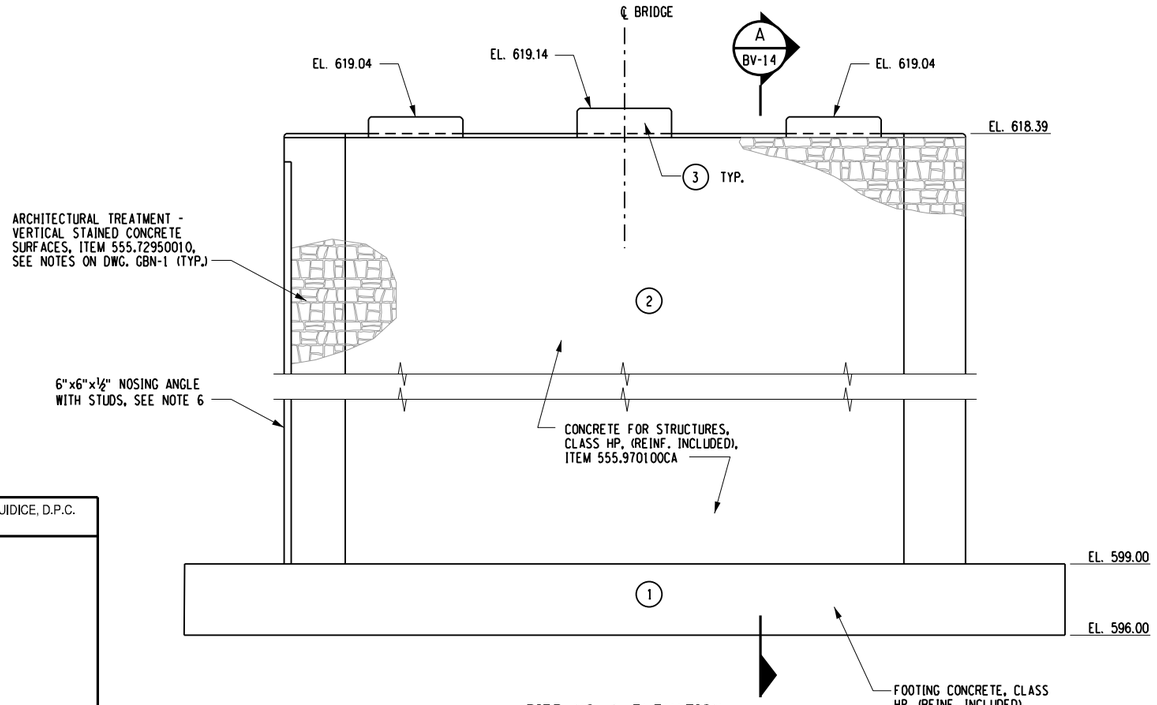
ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

NORTH ABUTMENT ELEVATION

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BV-8

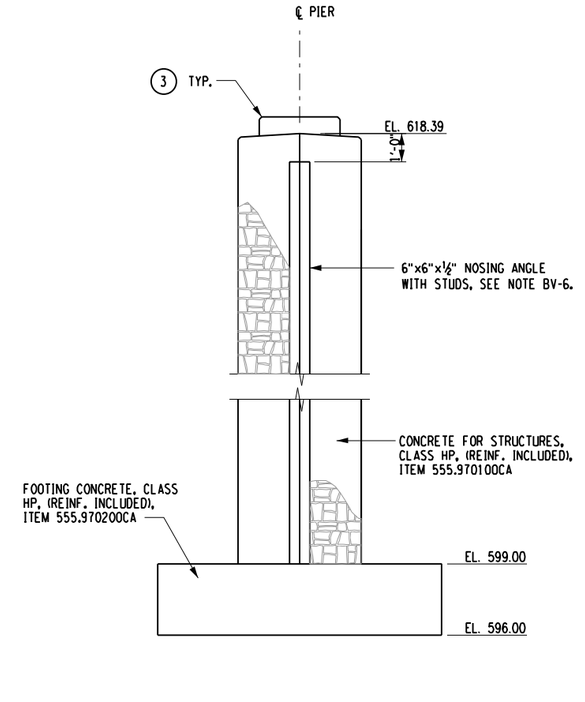


PIER NO. 1 PLAN
SCALE: ⅜" = 1'-0"



PIER NO. 1 ELEVATION
SCALE: ⅜" = 1'-0"

NOTE: PILES NOT
SHOWN FOR CLARITY



PIER NO. 1 UPSTREAM ELEVATION
SCALE: ⅜" = 1'-0"

NOTE: PILES NOT
SHOWN FOR CLARITY

NOTES:

1. FOR KEYWAY AND WATERSTOP DETAILS, SEE SHEET BV-13.
2. FOR ADDITIONAL PIER AND FOOTING DETAILS , SEE DWGS. BV-14.
3. FOR PEDESTAL DETAILS, SEE DWG. BV-13.
4. ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED 1", UNLESS NOTED OTHERWISE.
5. FOR PILE LAYOUT AND DETAILS, SEE DWGS. BV-15 AND BV-16.
6. ALL CONCRETE ANCHOR STUDS WHICH ARE ATTACHED TO THE PIER NOSING SHALL MEET THE REQUIREMENTS LISTED MATERIAL SUBSECTION 709-05, STUD SHEAR CONNECTORS. PAYMENT FOR FURNISHING AND PLACING THE CONCRETE ANCHORS AND ANGLE WILL BE INCLUDED IN THE PRICE BID FOR THE CONCRETE ITEM TO WHICH THE ANCHORS ARE ATTACHED.

CONCRETE TABLE - PIER 1		
PLACEMENT	QUANTITY (CY)	ITEM NO.
1	34.44	555.970200CA
2	67.94	555.970100CA
3	0.75	555.970100CA

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Barton & Loguidice, D.P.C.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DRAWING IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW ARTICLE 145 SECTION 7209

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE
OVER ESOPUS CREEK
ULSTER COUNTY

PIER NO. 1
PLAN AND
ELEVATION

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BV-9

DESIGNED BY
DRAFTED BY
CHECKED BY
CHECKED BY
IN CHARGE OF

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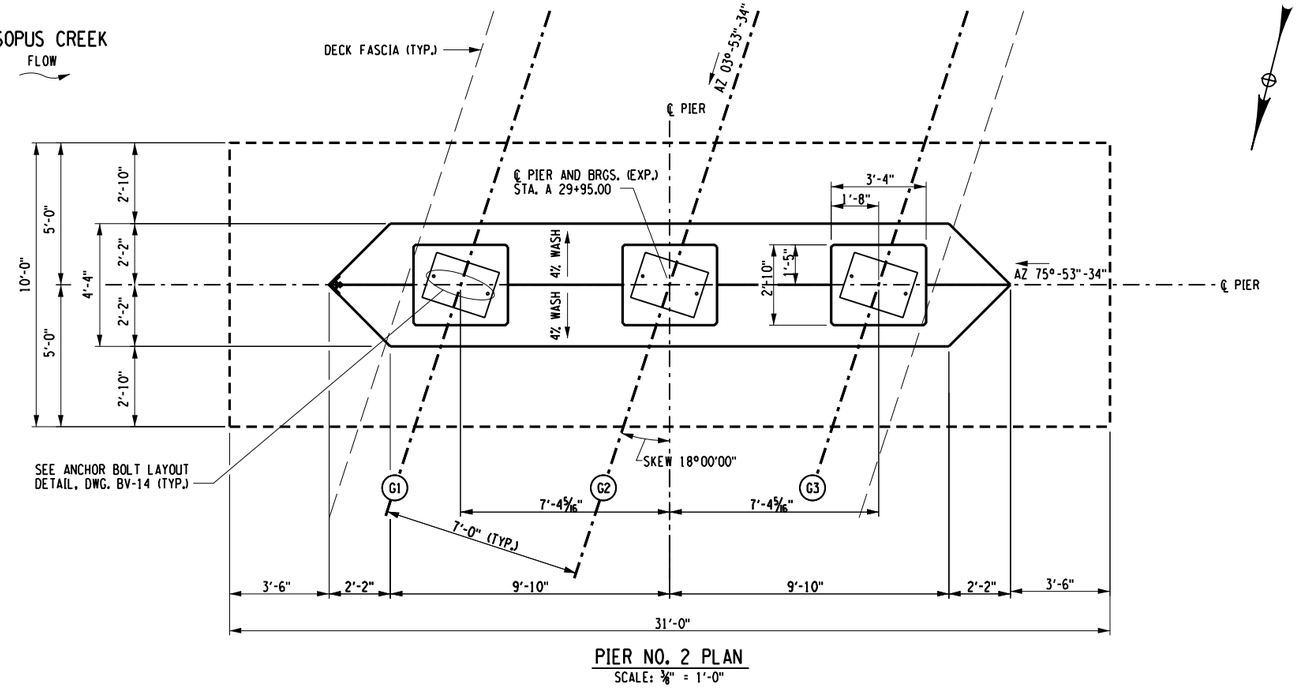
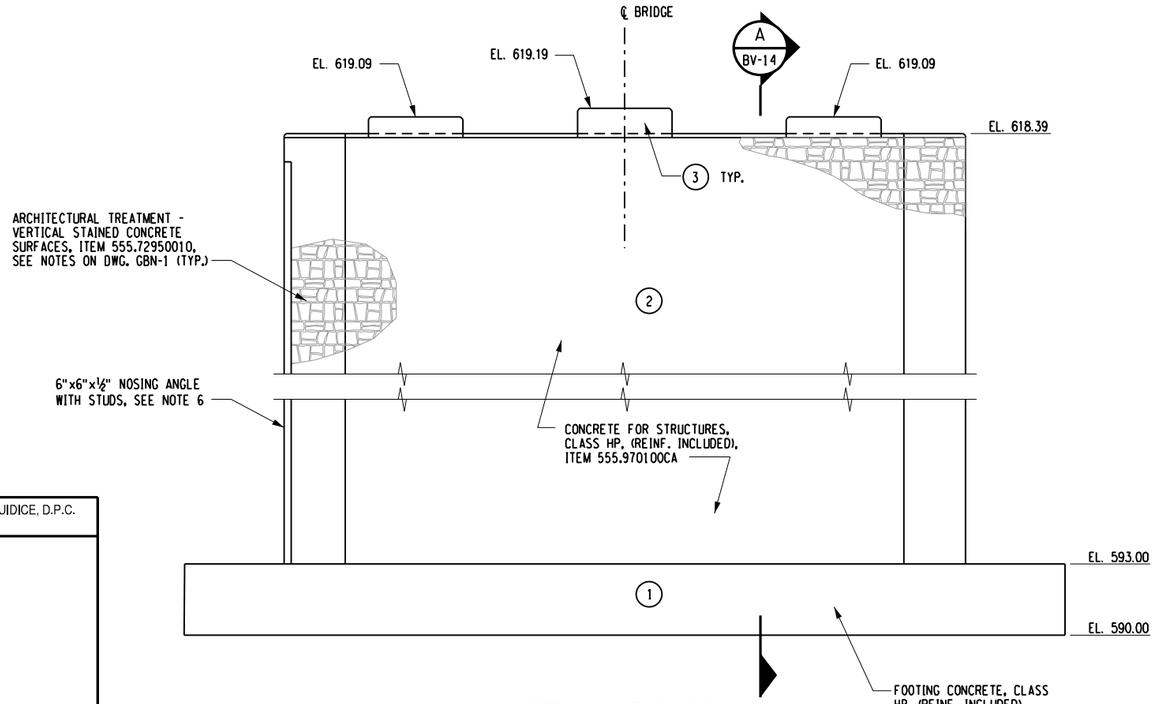


PIER NO. 2 PLAN
SCALE: ⅜" = 1'-0"

NOTES:

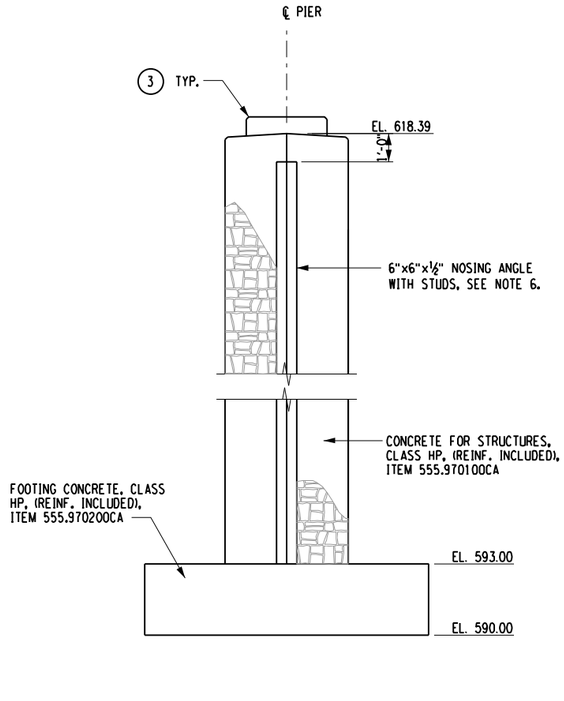
1. FOR KEYWAY AND WATERSTOP DETAILS, SEE SHEET BV-13.
2. FOR ADDITIONAL PIER AND FOOTING DETAILS , SEE DWGS. BV-14.
3. FOR PEDESTAL DETAILS, SEE DWG. BV-13.
4. ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED 1", UNLESS NOTED OTHERWISE.
5. FOR PILE LAYOUT AND DETAILS, SEE DWGS. BV-15 AND BV-16.
6. ALL CONCRETE ANCHOR STUDS WHICH ARE ATTACHED TO THE PIER NOSING SHALL MEET THE REQUIREMENTS LISTED MATERIAL SUBSECTION 709-05, STUD SHEAR CONNECTORS. PAYMENT FOR FURNISHING AND PLACING THE CONCRETE ANCHORS AND ANGLE WILL BE INCLUDED IN THE PRICE BID FOR THE CONCRETE ITEM TO WHICH THE ANCHORS ARE ATTACHED.

CONCRETE TABLE - PIER 2		
PLACEMENT	QUANTITY (CY)	ITEM NO.
1	34.40	555.970200CA
2	88.97	555.970100CA
3	0.75	555.970100CA



PIER NO. 2 ELEVATION
SCALE: ⅜" = 1'-0"

NOTE: PILES NOT SHOWN FOR CLARITY



PIER NO. 2 UPSTREAM ELEVATION
SCALE: ⅜" = 1'-0"

NOTE: PILES NOT SHOWN FOR CLARITY

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

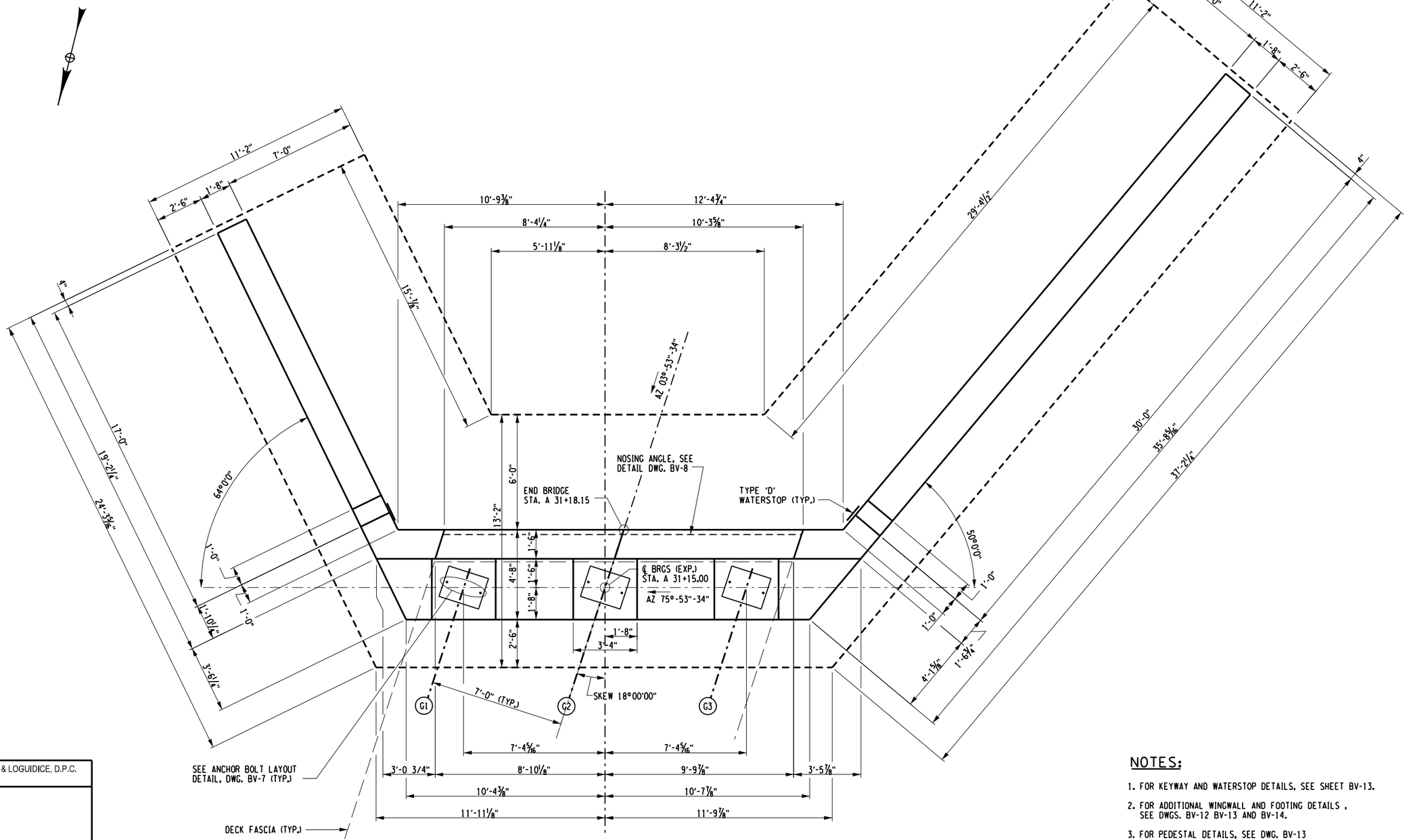
NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

PIER NO. 2
PLAN AND
ELEVATION

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BV-10



SOUTH ABUTMENT PLAN
SCALE: ⅜" = 1'-0"

NOTES:

1. FOR KEYWAY AND WATERSTOP DETAILS, SEE SHEET BV-13.
2. FOR ADDITIONAL WINGWALL AND FOOTING DETAILS , SEE DWGS. BV-12 BV-13 AND BV-14.
3. FOR PEDESTAL DETAILS, SEE DWG. BV-13
4. ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED 1", UNLESS NOTED OTHERWISE.
5. FOR PILE LAYOUT AND DETAILS, SEE DWGS. BV-15 AND BV-16.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____

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NO.	DATE	BY	REVISION

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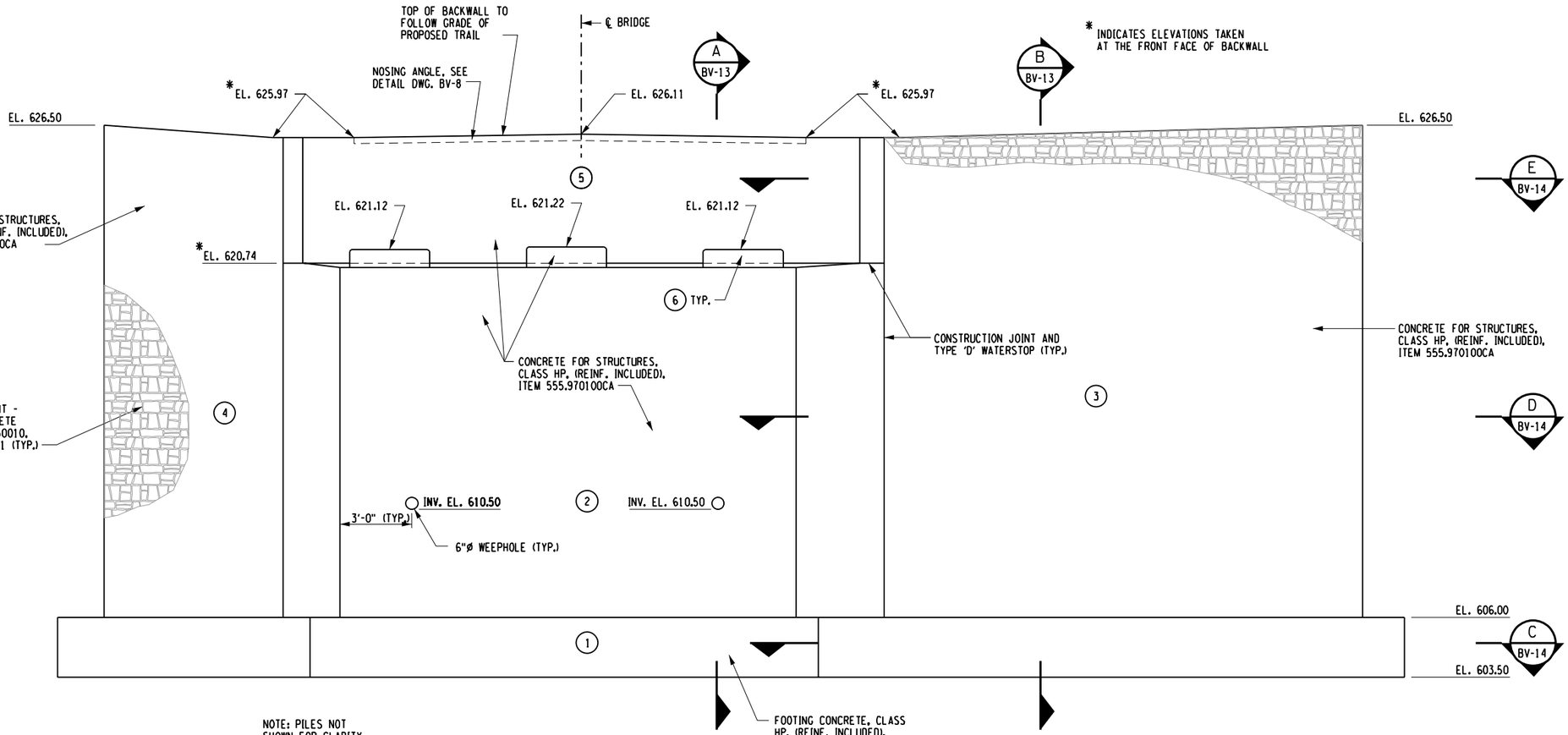
Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

SOUTH ABUTMENT PLAN

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BV-11



SOUTH ABUTMENT ELEVATION

SCALE: 3/8" = 1'-0"

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

CONCRETE TABLE - SOUTH ABUT.

PLACEMENT	QUANTITY (CY)	ITEM NO.
1	81.3	555.970200CA
2	61.9	555.970100CA
3	58.1	555.970100CA
4	31.8	555.970100CA
5	7.9	555.970100CA
6	0.5	555.970100CA

NOTES:

1. FOR KEYWAY AND WATERSTOP DETAILS, SEE SHEET BV-13.
2. FOR ADDITIONAL WINGWALL AND FOOTING DETAILS , SEE DWGS. BV-11 BV-13 AND BV-14.
3. FOR PEDESTAL DETAILS, SEE DWG. BV-13
4. ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED 1", UNLESS NOTED OTHERWISE.
5. FOR PILE LAYOUT AND DETAILS, SEE DWGS. BV-15 AND BV-16.

NO.	DATE	BY	REVISION

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Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

SOUTH ABUTMENT ELEVATION

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING BV-12

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CHECKED BY
DESIGNED BY
CHECKED BY
IN CHARGE OF

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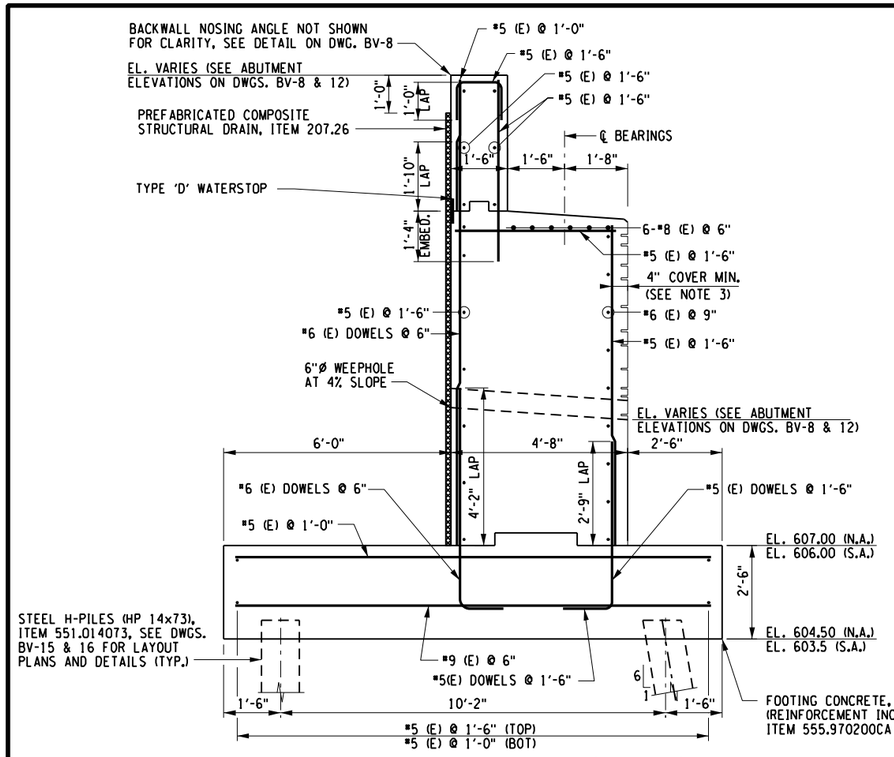
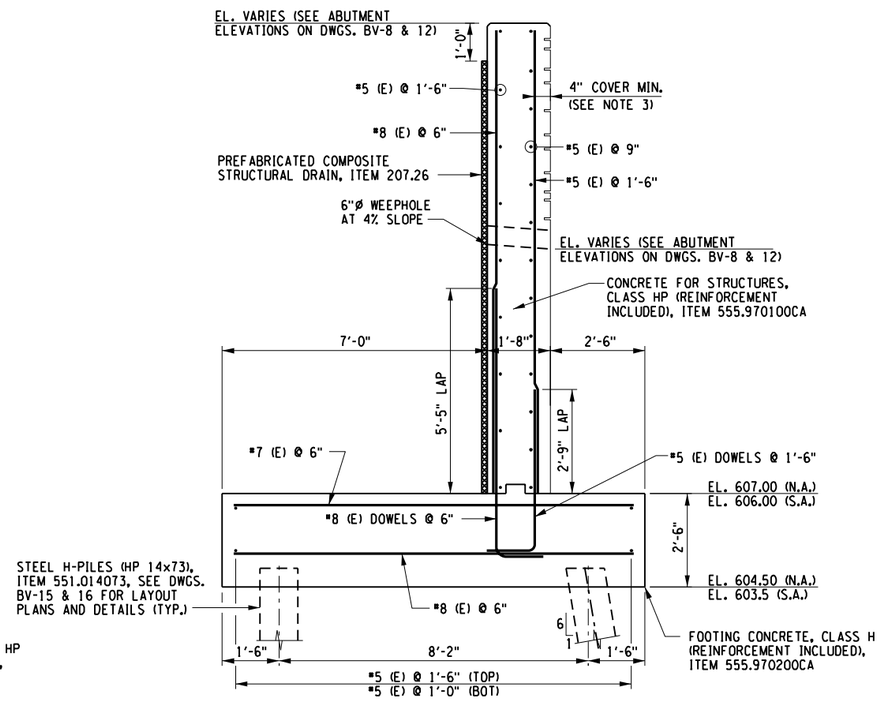


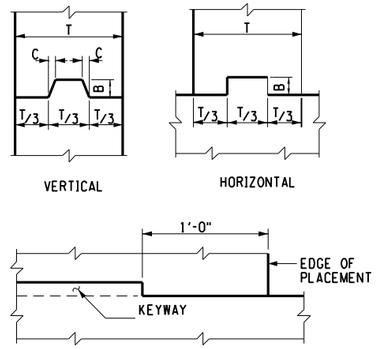
TYPICAL ABUTMENT SECTION — A / BV-8, A / BV-12

SCALE: 1/4" = 1'-0"



TYPICAL WINGWALL SECTION — B / BV-8, B / BV-12

SCALE: 1/4" = 1'-0"



HORIZONTAL KEYWAY LOCATION

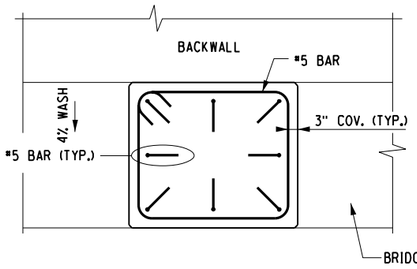
EXPANSION JOINTS		
C	B	T/3
3/8"	3 1/2"	0 TO 10"
3/4"	5 1/2"	10" AND OVER

CONSTRUCTION & CONTRACTION JOINTS		
C	B	T/3
3/16"	1 1/2"	0 TO 6"
3/8"	3 1/2"	6" TO 10"
3/4"	5 1/2"	10" AND OVER

KEYWAY DETAILS

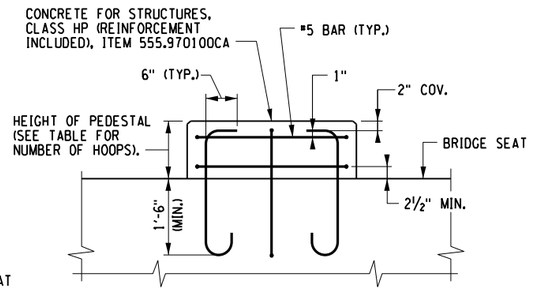
NTS

NOTE:
REINFORCEMENT AND WATERSTOPS NOT SHOWN FOR CLARITY.



PEDESTAL PLAN

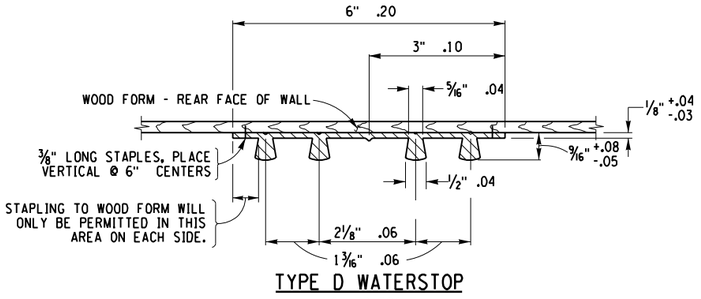
NOT TO SCALE



PEDESTAL ELEVATION

NOT TO SCALE

PEDESTAL HEIGHT	NUMBER OF HOOPS
6" TO 8"	1
8" TO 11"	2
11" TO 14"	3
14" TO 17"	4
17" TO 20"	5



TYPE D WATERSTOP

NOT TO SCALE

NOTES:

HOLES MUST NOT BE MADE IN WATERSTOP FOR ANY PURPOSE EXCEPT AS REQUIRED FOR STAPLING TO FORMS.

TYPE D WATERSTOP SHALL BE LIGHT GRAY IN COLOR.

THE COST OF FURNISHING AND PLACING WATERSTOPS SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE CONCRETE ITEMS.

FIELD SPLICES SHOULD BE AVOIDED IF POSSIBLE. HOWEVER, HEAT WELDED BUTT SPLICES WILL BE PERMITTED ON LONG STRAIGHT RUNS (GENERALLY IN EXCESS OF 50 FEET) AT POINTS APPROVED BY THE ENGINEER.

WATERSTOP SHALL BE SHIPPED IN STRAIGHT SECTIONS HAVING A MINIMUM LENGTH OF 10 FEET UNLESS SHORTER LENGTHS ARE REQUIRED.

PREMOULDED RESILIENT JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF N.Y.S. STANDARD SPECIFICATION SUBSECTION 705-07.

PVC USED IN WATERSTOPS SHALL CONFORM TO THE REQUIREMENTS OF N.Y.S. STANDARD SPECIFICATIONS SUBSECTION 705-11.

NOTES:

1. ALL STEEL REINFORCING BARS SHALL BE ASTM A615, GRADE 60, UNLESS OTHERWISE NOTED.
2. COVER FOR STEEL REINFORCEMENT IN FOOTING SHALL BE 3 INCHES UNLESS OTHERWISE NOTED. ALL OTHER COVER SHALL BE 2 INCHES UNLESS OTHERWISE NOTED.
3. 4" REINFORCEMENT COVER BASED ON A 2" REVEAL OF THE FORMLINER PATTERN. IF THE ACTUAL FORMLINER USED HAS A MAXIMUM REVEAL GREATER THAN 2", THE CONTRACTOR SHALL ADJUST THE WALL THICKNESS ACCORDINGLY TO MAINTAIN A MINIMUM REINFORCEMENT COVER OF 2" TO THE FORMLINER REVEAL. SEE DWG. GBN-1 FOR ADDITIONAL FORM LINER NOTES.
4. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1 INCH UNLESS OTHERWISE NOTED.
5. (E) DENOTES EPOXY COATED BARS.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

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ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

TYPICAL REINFORCEMENT DETAILS - 1

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BV-13

DESIGNED BY
DRAFTED BY
CHECKED BY
IN CHARGE OF

cmh
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DATE = 2/19/2018
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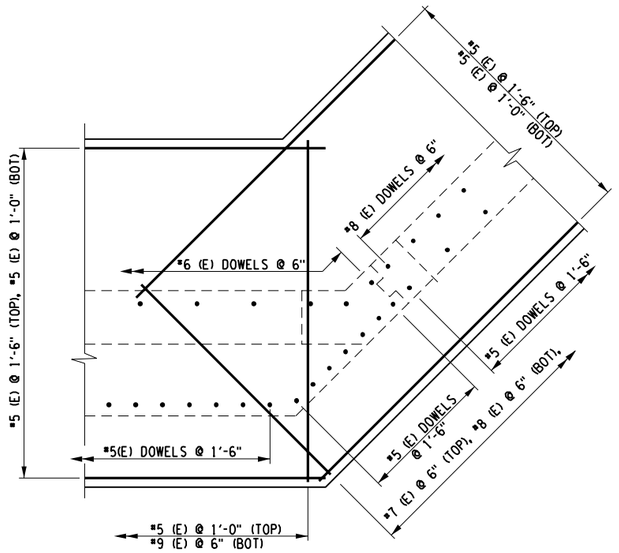
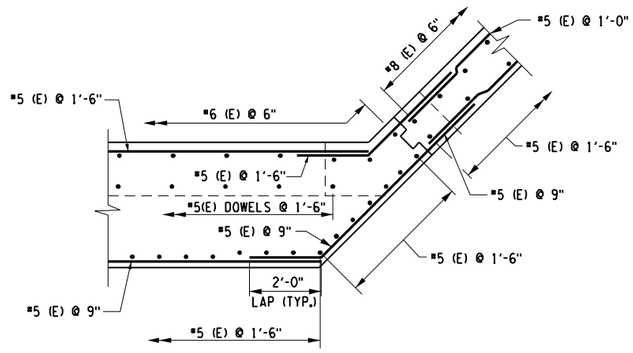
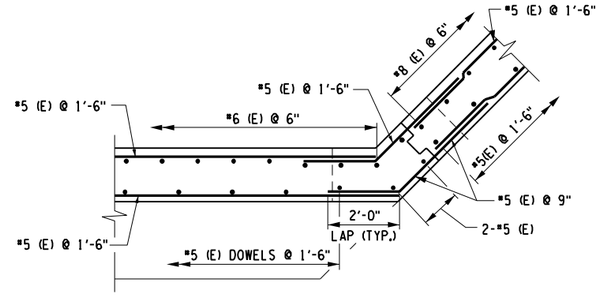


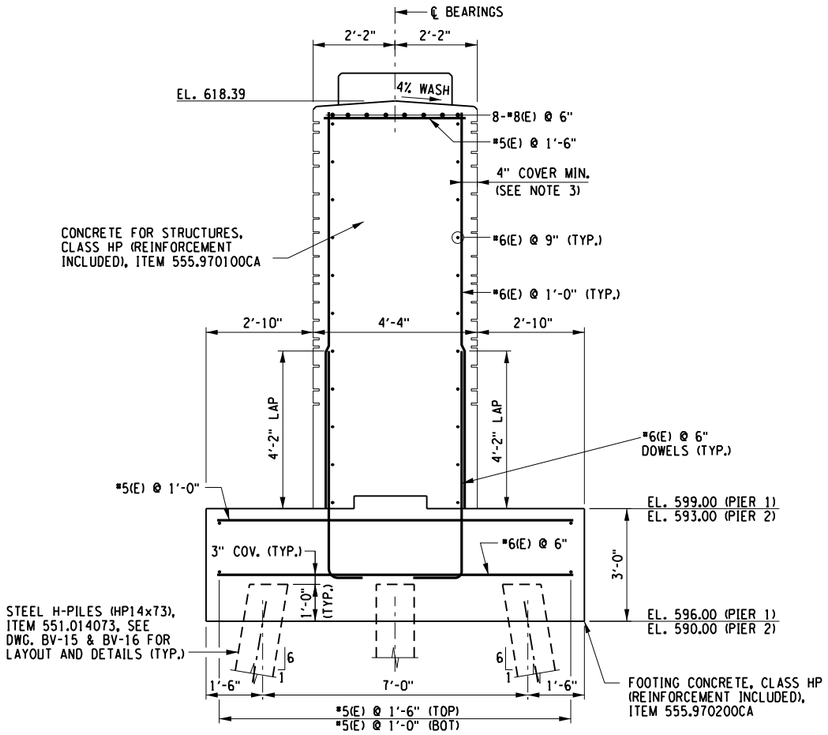
TYPICAL CORNER SECTION (C / BV-8, C / BV-12)
(N.E. CORNER SHOWN, OTHERS SIMILAR)
N.T.S.



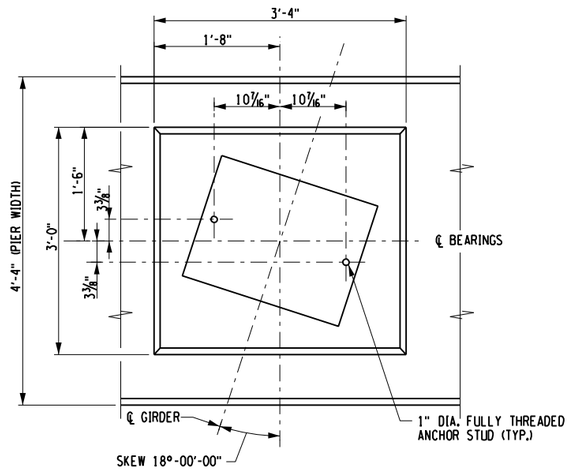
TYPICAL CORNER SECTION (D / BV-8, D / BV-12)
(N.E. CORNER SHOWN, OTHERS SIMILAR)
N.T.S.



TYPICAL CORNER SECTION (E / BV-8, E / BV-12)
(N.E. CORNER SHOWN, OTHERS SIMILAR)
N.T.S.



TYPICAL PIER SECTION (A / BV-9, A / BV-10)
SCALE: 1/4" = 1'-0"



TYPICAL PIER ANCHOR BOLT LAYOUT
SCALE: 1/2" = 1'-0"

NOTES:

1. ALL STEEL REINFORCING BARS SHALL BE ASTM A615, GRADE 60, UNLESS OTHERWISE NOTED.
2. COVER FOR STEEL REINFORCEMENT IN FOOTING SHALL BE 3 INCHES UNLESS OTHERWISE NOTED. ALL OTHER COVER SHALL BE 2 INCHES UNLESS OTHERWISE NOTED.
3. 4" REINFORCEMENT COVER BASED ON A 2" REVEAL OF THE FORMLINER PATTERN. IF THE ACTUAL FORMLINER USED HAS A MAXIMUM REVEAL GREATER THAN 2", THE CONTRACTOR SHALL ADJUST THE WALL THICKNESS ACCORDINGLY TO MAINTAIN A MINIMUM REINFORCEMENT COVER OF 2" TO THE FORMLINER REVEAL. SEE DWG. GBN-1 FOR ADDITIONAL FORM LINER NOTES.
4. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1 INCH UNLESS OTHERWISE NOTED.
5. (E) DENOTES EPOXY COATED BARS.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

TYPICAL REINFORCEMENT DETAILS - 2

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING BV-14

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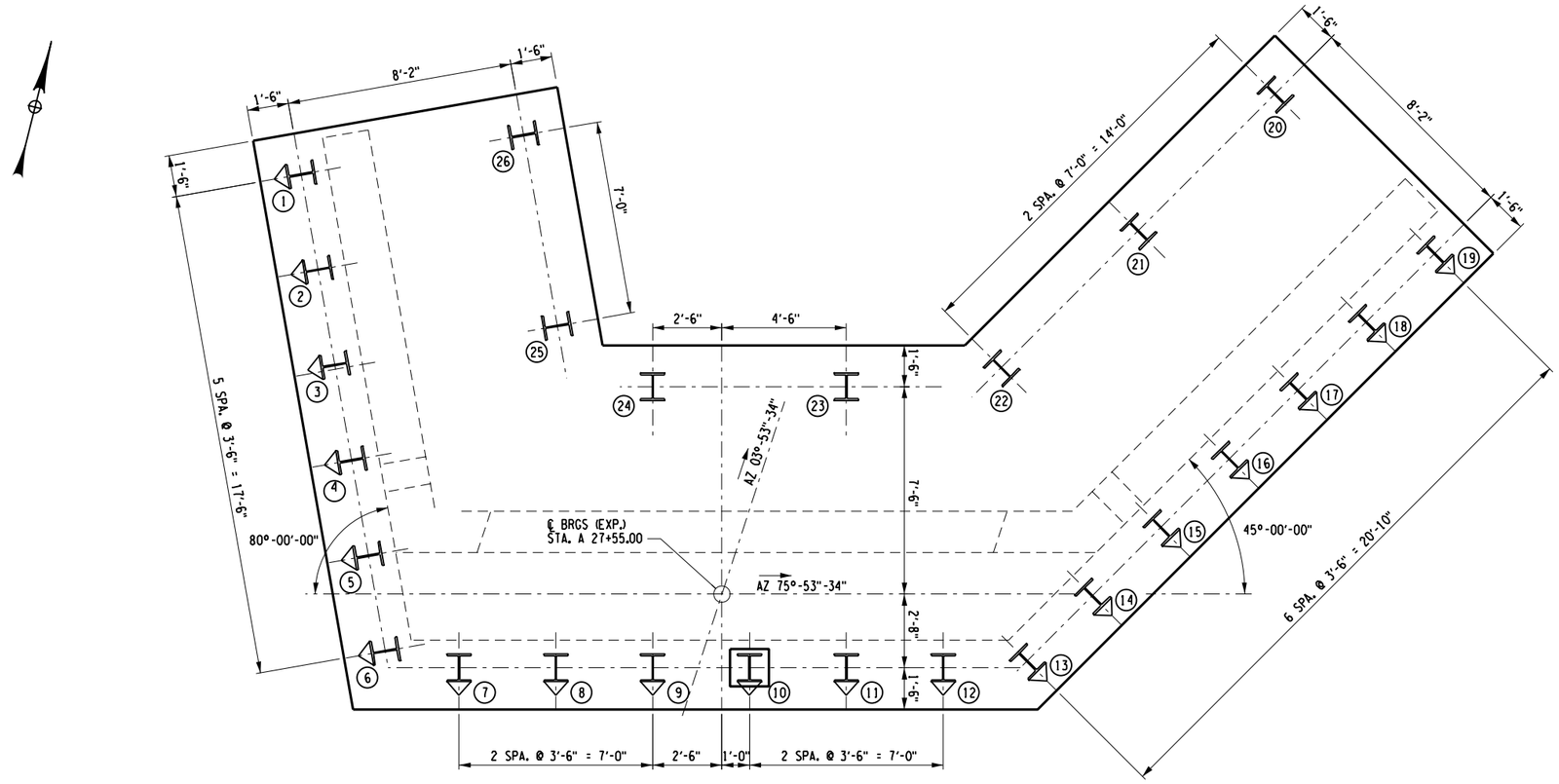
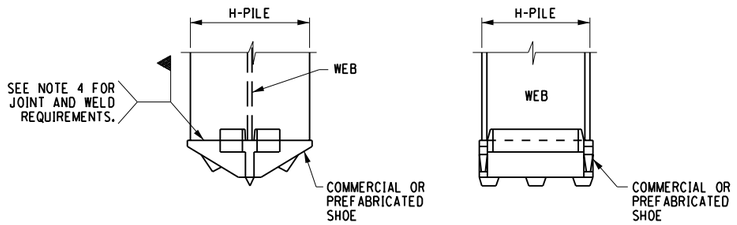


NORTH ABUTMENT PILE LAYOUT
SCALE: 3/16" = 1'-0"

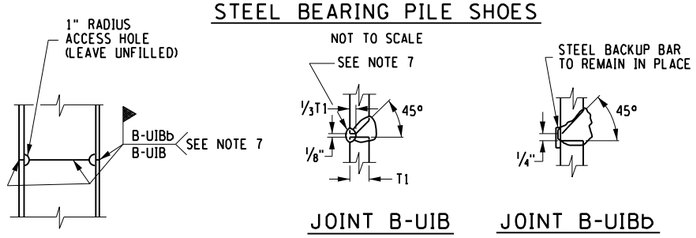
PILE LEGEND:

- INDICATES HP14x73 STEEL BEARING PILE, ITEM 551.014073
- INDICATES 1:6 BATTERED HP14x73 STEEL BEARING PILE, ITEM 551.014073
- DYNAMIC PILE LOAD TESTING, ITEM 551.14
- (3) - INDICATES PILE NUMBER

PILE TABLE	
NORTH ABUTMENT	
PILE NO.	LENGTH BELOW CUT-OFF (FT.)
1	33'-0"
2	33'-0"
3	33'-0"
4	33'-0"
5	33'-0"
6	33'-0"
7	33'-0"
8	33'-0"
9	33'-0"
10	33'-0"
11	33'-0"
12	33'-0"
13	33'-0"
14	33'-0"
15	33'-0"
16	33'-0"
17	33'-0"
18	33'-0"
19	33'-0"
20	33'-0"
21	33'-0"
22	33'-0"
23	33'-0"
24	33'-0"
25	33'-0"
26	33'-0"



STEEL BEARING PILE SHOES



JOINT B-UIB JOINT B-UIBb

SPLICE FOR STEEL BEARING PILE
NOT TO SCALE

PILE SHOE AND SPLICE NOTES:

1. COMMERCIAL OR PREFABRICATED SHOES ARE SUBJECT TO THE APPROVAL OF THE ENGINEER.
2. THE SHOE SHALL BE ATTACHED BY A NYSDOT CERTIFIED WELDER.
3. A "WELDING PROCEDURE SPECIFICATION" (WPS) APPROVED BY THE ENGINEER IS REQUIRED.
4. THE SHOE WELD JOINT DESIGN SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION, AND AS SHOWN ON THE APPROVED WPS.
5. IF SHOES ARE WELDED AT A LOCATION OTHER THAN THE PROJECT SITE, ALL OF THE ABOVE PROVISIONS SHALL APPLY TO THE OFFSITE FABRICATOR. THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR OF THE ACTUAL LOCATION WHERE THE WELDING WILL BE PERFORMED A MINIMUM OF 5 WORKING DAYS BEFORE WORK COMMENCES.
6. ALL WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER IN CONFORMANCE WITH REQUIREMENTS FOR WELDING SPECIFIED IN THE N.Y.S. STEEL CONSTRUCTION MANUAL.
7. EITHER JOINT MAY BE USED AT CONTRACTOR'S OPTION.
8. B-UIB: AIR CARBON ARC GOUGE TO SOUND WELD METAL PRIOR TO WELDING THE SECOND SIDE. THE GOUGE SHALL HAVE A ¼" MINIMUM RADIUS AT THE ROOT WITH THE TOP SLOPED BACK AT 45n MINIMUM.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO. | DATE | BY | REVISION

Barton & Loguidice, D.P.C.

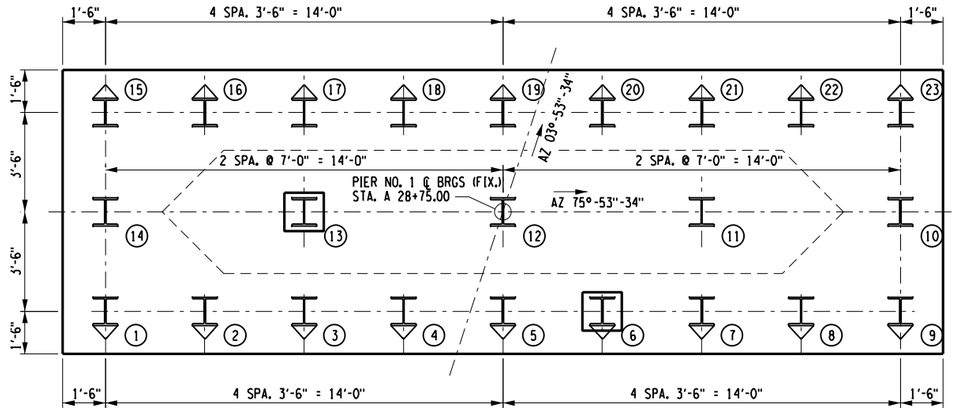
ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

NORTH ABUTMENT PILE PLAN AND DETAILS

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING BV-15

PILE TABLE

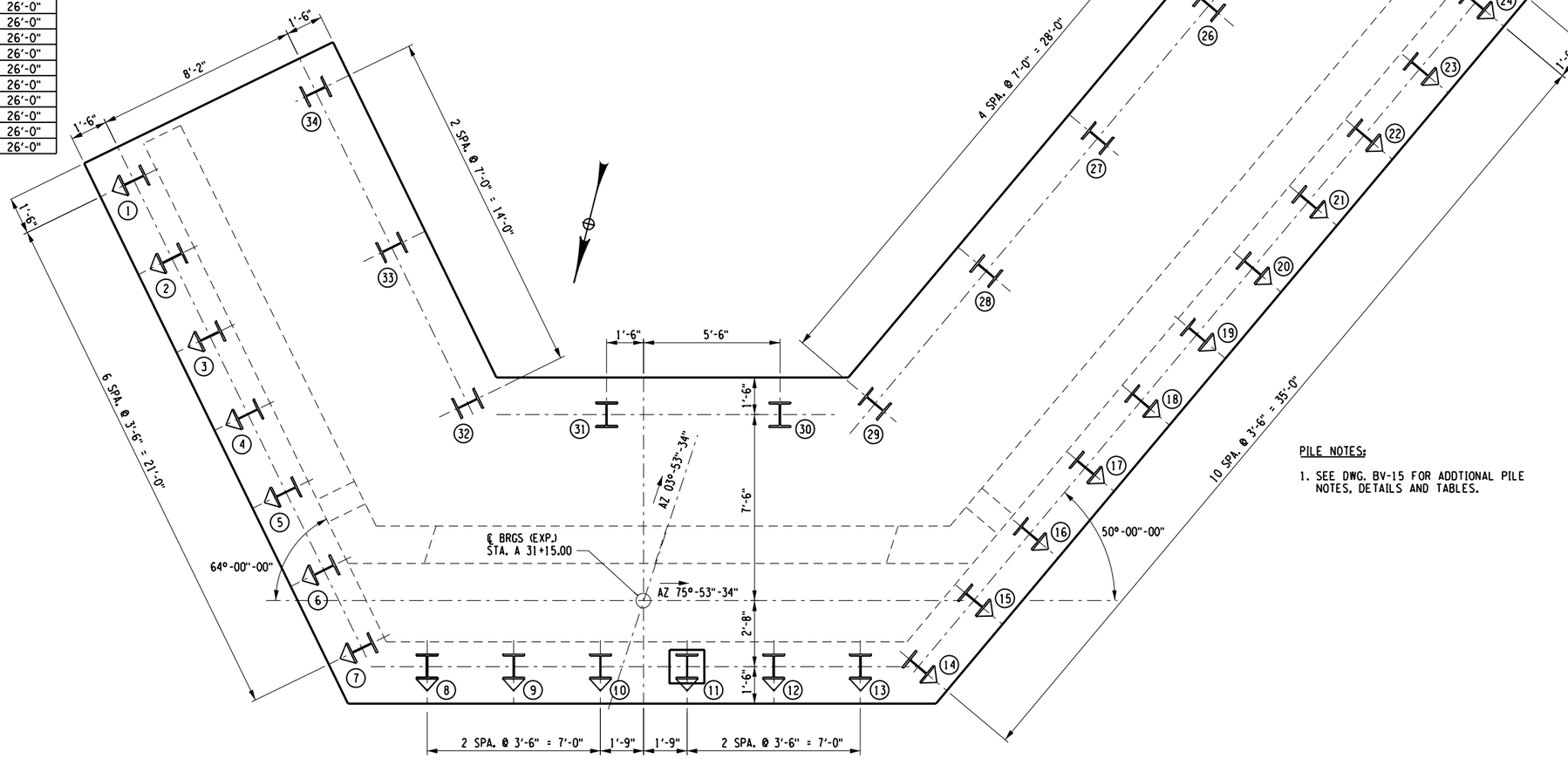
PIER NO. 1		PIER NO. 2		SOUTH ABUTMENT	
PILE NO.	LENGTH BELOW CUT-OFF (FT.)	PILE NO.	LENGTH BELOW CUT-OFF (FT.)	PILE NO.	LENGTH BELOW CUT-OFF (FT.)
1	32'-0"	1	27'-0"	1	26'-0"
2	32'-0"	2	27'-0"	2	26'-0"
3	32'-0"	3	27'-0"	3	26'-0"
4	32'-0"	4	27'-0"	4	26'-0"
5	32'-0"	5	27'-0"	5	26'-0"
6	32'-0"	6	27'-0"	6	26'-0"
7	32'-0"	7	27'-0"	7	26'-0"
8	32'-0"	8	27'-0"	8	26'-0"
9	32'-0"	9	27'-0"	9	26'-0"
10	32'-0"	10	27'-0"	10	26'-0"
11	32'-0"	11	27'-0"	11	26'-0"
12	32'-0"	12	27'-0"	12	26'-0"
13	32'-0"	13	27'-0"	13	26'-0"
14	32'-0"	14	27'-0"	14	26'-0"
15	32'-0"	15	27'-0"	15	26'-0"
16	32'-0"	16	27'-0"	16	**26'-0"**
17	32'-0"	17	27'-0"	17	**26'-0"**
18	32'-0"	18	27'-0"	18	**26'-0"**
19	32'-0"	19	27'-0"	19	26'-0"
20	32'-0"	20	27'-0"	20	26'-0"
21	32'-0"	21	27'-0"	21	26'-0"
22	32'-0"	22	27'-0"	22	26'-0"
23	32'-0"	23	27'-0"	23	26'-0"
-		-		24	26'-0"
-		-		25	26'-0"
-		-		26	26'-0"
-		-		27	26'-0"
-		-		28	26'-0"
-		-		29	26'-0"
-		-		30	26'-0"
-		-		31	26'-0"
-		-		32	26'-0"
-		-		33	26'-0"
-		-		34	26'-0"



PIER NO. 1 PILE LAYOUT

SCALE: 3/16" = 1'-0"

(PIER NO. 1 SHOWN, PIER NO. 2 SAME LAYOUT)



SOUTH ABUTMENT PILE LAYOUT

SCALE: 3/16" = 1'-0"

PILE LEGEND:

- I - INDICATES HP14x73 STEEL BEARING PILE, ITEM 551.014043
- I - INDICATES 1:6 BATTERED HP14x73 STEEL BEARING PILE, ITEM 551.014073
- I - DYNAMIC PILE LOAD TESTING, ITEM 551.14
- (3) - INDICATES PILE NUMBER

PILE NOTES:

1. SEE DWG. BV-15 FOR ADDTIONAL PILE NOTES, DETAILS AND TABLES.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL

BOICEVILLE BRIDGE OVER ESOPUS CREEK

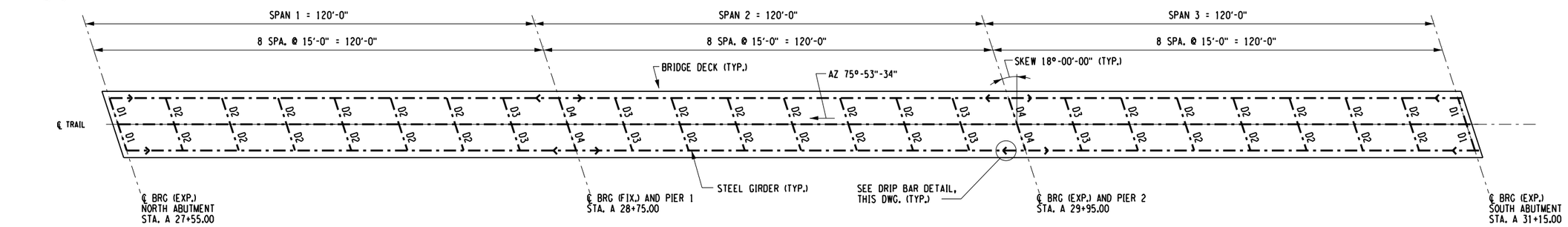
ULSTER COUNTY

SOUTH ABUTMENT AND PIER PLANS AND DETAILS

SCALE: AS SHOWN

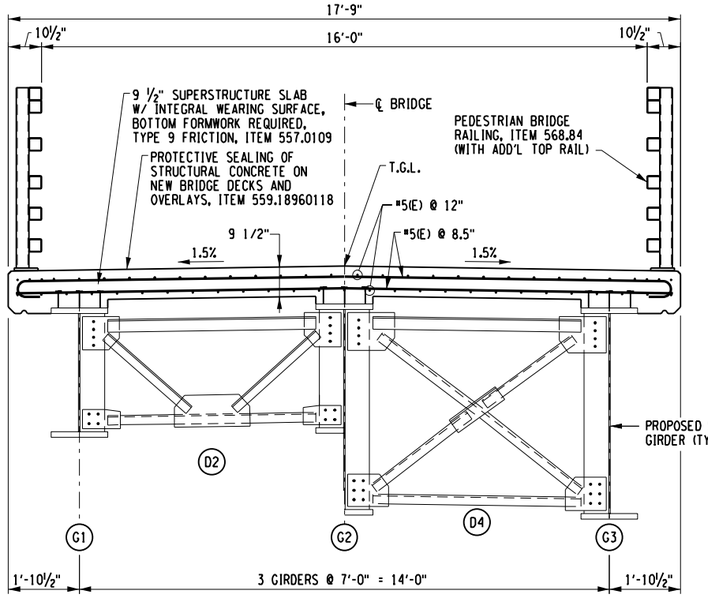
DATE ISSUED: 1/2018

DRAWING BV-16



FRAMING PLAN

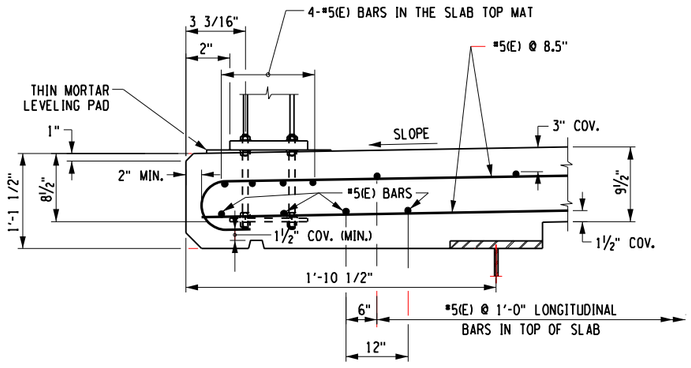
SCALE: 1" = 30'-0"



TRANSVERSE BRIDGE SECTION

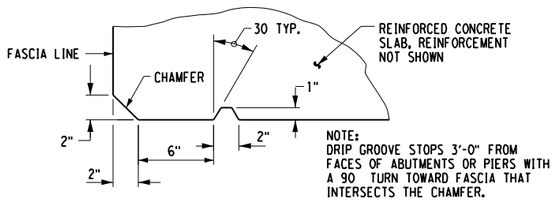
SCALE: ¼" = 1'-0"

(FOR ADDTIONAL DIAPHRAGM DETAILS, SEE DWG. BV-19)



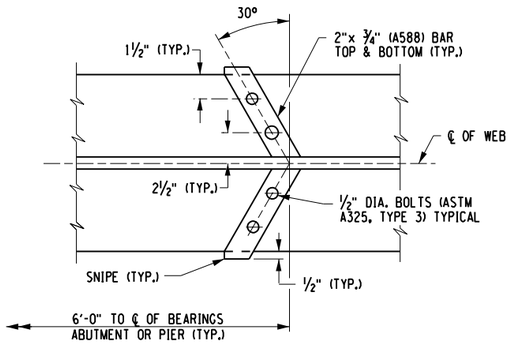
FASCIA DETAIL

N.T.S.



DRIP GROOVE DETAIL

N.T.S.



DRIP BAR DETAIL

N.T.S.

NOTES:

1. CONNECTIONS SHALL BE MADE ACCORDING TO THE NEW YORK STATE STEEL CONSTRUCTION MANUAL.
2. UNLESS OTHERWISE INDICATED, BOLTED CONNECTIONS SHALL BE MADE WITH 7/8" DIA., A325, TYPE 3 HIGH-STRENGTH BOLTS.
3. THE CONTRACTOR MAY PLACE DIAPHRAGMS ON EITHER SIDE OF THE BEARING STIFFENERS OR CONNECTION PLATES AS NECESSARY TO CORRECT ALIGNMENT PROVIDED THERE WILL BE NO INTERFERENCE WITH OTHER STRUCTURAL DETAILS.
4. ALL BOLT HEADS SHALL BE PLACED ON THE TOP SIDE OF CONNECTIONS UNLESS OTHERWISE NOTED.
5. THE ENDS OF ALL GIRDERS AND BEARING STIFFENERS SHALL BE VERTICAL. THE CONNECTION PLATES SHALL BE PERPENDICULAR TO THE TOP FLANGES.
6. TAPERED OR FLAT SHIM PLATES MAY BE USED IN THE CONNECTION BETWEEN SKEWED DIAPHRAGMS AND THE BEARING STIFFENERS, STIFFENER CONNECTION PLATES OR GUSSET PLATES. VARIABLE THICKNESSES OF SHIM PLATES MAY BE USED. THE MINIMUM THICKNESS OF SHIM PLATE SHALL BE 1/8 " WITH A MAXIMUM NUMBER OF THREE SHIM PLATES PERMITTED AT ANY CONNECTION. THE TOTAL THICKNESS OF ALL SHIM PLATES USED AT ANY CONNECTION SHALL NOT EXCEED 1". SHIM PLATES SHALL HAVE THE DIMENSIONS OF THE FAYING SURFACE. SHIM PLATES SHALL CONFORM TO ASTM DESIGNATION A709 FOR STEEL APLLICATIONS. NO ADDITIONAL PAYMENT WILL BE MADE FOR FURNISHING AND PLACING THE SHIM PLATES.
7. DIAPHRAGM MEMBERS SHALL BE BLOCKED AS SHOWN, WITH THEIR FLANGE CUT BACK ON ONE SIDE, AND CHIPPED OR GROUND FLUSH. IN LIEU OF BLOCKING THE DIAPHRAGM MEMBER, THE FABRICATOR SHALL HAVE THE OPTION OF COPING THE FLANGE.
8. THE CONTRACTOR SHALL PROVIDE FOR THE STABILITY OF STRUCTURAL STEEL DURING ALL PHASES OF ERECTION AND CONSTRUCTION, AS PROVIDED IN SUBSECTION 204 OF THE NEW YORK STATE STEEL CONSTRUCTION MANUAL (SCM). THE GIRDERS ON THIS BRIDGE SHALL BE STABILIZED DURING ERECTION BY USE OF FALSEWORK, TEMPORARY BRACING, COMPRESSION FLANGE STIFFENING TRUSSES, CHOOSING ALTERNATE PICKING POINTS, OR BY USE OF A HOLDING CRANE UNTIL A SUFFICIENT NUMBER OF GIRDERS HAVE BEEN ERECTED AND CROSS FRAMES INSTALLED. THE METHODS USED BY THE CONTRACTOR SHALL BE DOCUMENTED ON THE ERECTION DRAWINGS WITH ALL SUPPORTING STABILITY CALCULATIONS SUBMITTED AND STAMPED BY A LICENSED NEW YORK STATE PROFESSIONAL ENGINEER
9. SEE DWG. BV-19 FOR DIAPHRAGM DETAILS. MAKE NOTE THAT INTERMEDIATE DIAPHRAGMS ARE ATTACHED TO CONNECTION PLATES AND ARE PLACED PERPENDICULAR TO THE CENTERLINE OF THE ROAD WHILE END DIAPHRAGMS ARE CONNECTED TO BEARING SIFFENERS AND ARE PLACED PARALLEL TO THE CENTERLINE OF BEARINGS.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL

BOICEVILLE BRIDGE OVER ESOPUS CREEK

ULSTER COUNTY

TRANSVERSE BRIDGE SECTION AND FRAMING PLAN

SCALE: AS SHOWN

DATE ISSUED: 1/2018

DRAWING BV-17

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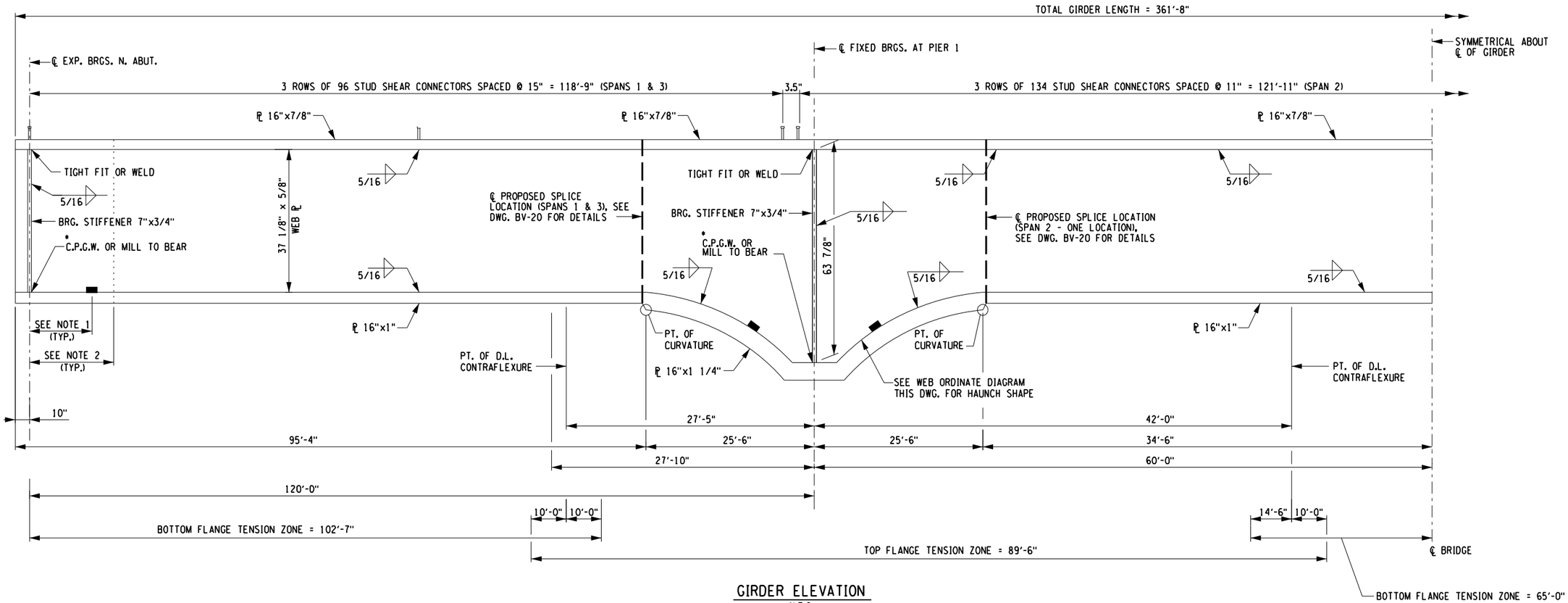
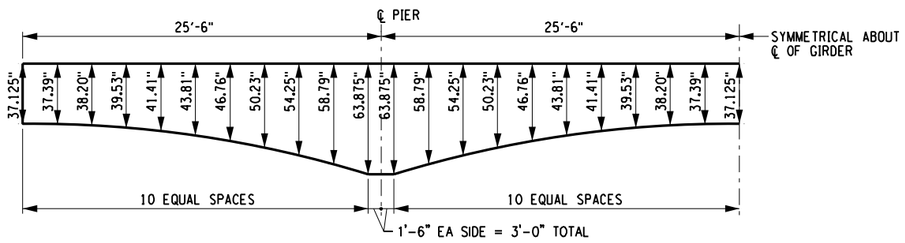
DESIGNED BY
DRAFTED BY
CHECKED BY
CHECKED BY
IN CHARGE OF



GIRDER ELEVATION
N.T.S.

* C.P.G.W.-COMPLETE PENETRATION GROOVE WELD



WEB ORDINATE DIAGRAM (TYP. BOTH HAUNCHES)
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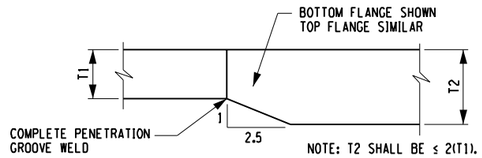

FLANGE THICKNESS TAPER
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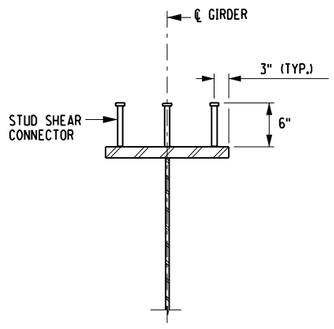
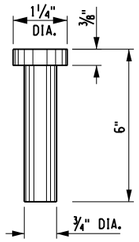


STUD SHEAR CONNECTOR DETAIL
NOT TO SCALE



STUD DETAIL
NOT TO SCALE

GIRDER NOTES:

1. DRIP BAR LOCATE 6' FROM ℄ BEARINGS AT ABUTMENTS AND PIERS, SEE DETAIL ON DWG. BV-17.
2. PAINTING LIMITS FROM ℄ OF BEAINGS IS 7'-0" AT ABUMENTS AND 9'-0" AT PIERS. SEE PAINTING NOTES ON DWG. GBN-1.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DESIGNED BY
DRAFTED BY
CHECKED BY
CHECKED BY
IN CHARGE OF

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

GIRDER DETAILS - 1

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING BV-18

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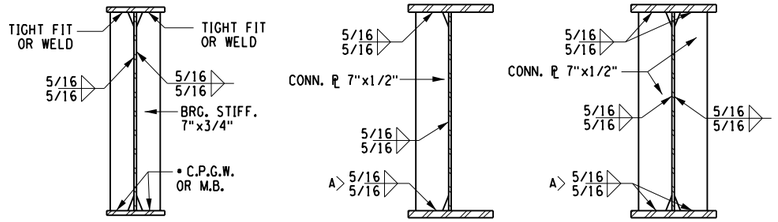
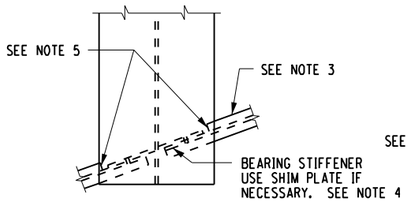


BEARING STIFFENER AT ABUTMENTS AND PIERS

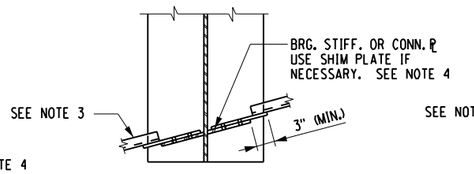
FASCIA GIRDER CONNECTION ℄

INTERIOR GIRDER CONNECTION ℄

GIRDER SECTIONS
N.T.S.



SECTION A-A
N.T.S.



SECTION B-B
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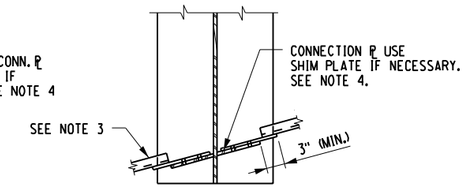

SECTION C-C
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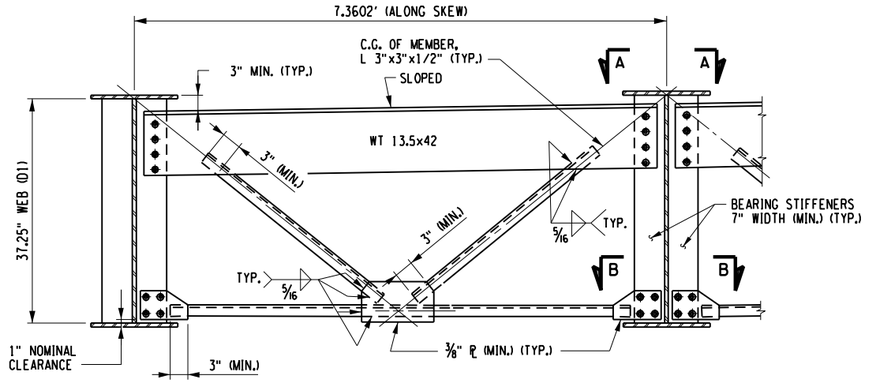
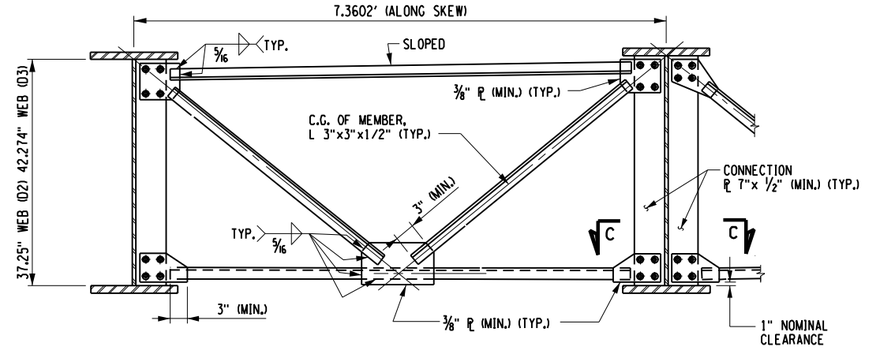
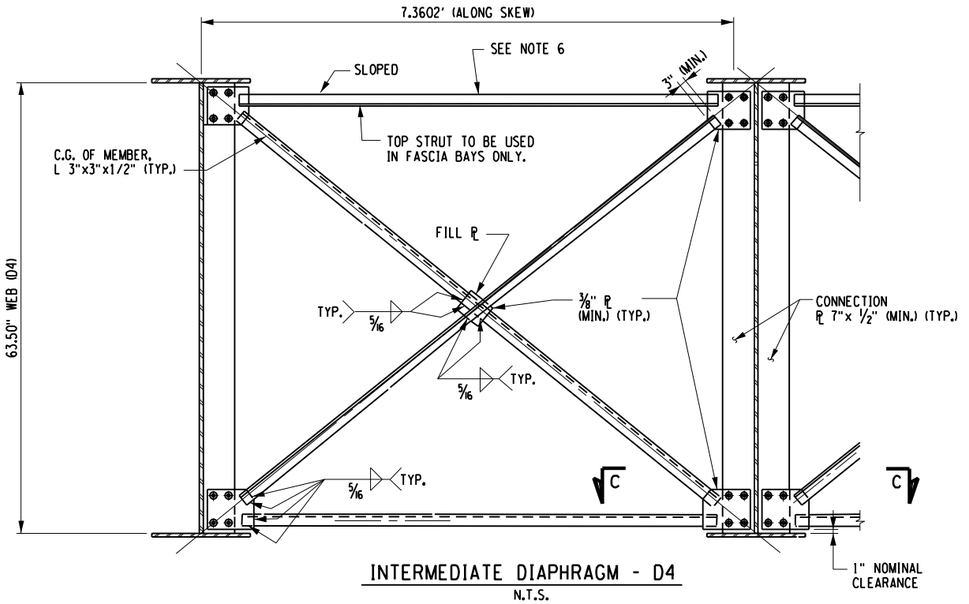


END DIAPHRAGM - D1
N.T.S.



INTERMEDIATE DIAPHRAGMS D2 AND D3
N.T.S.



INTERMEDIATE DIAPHRAGM - D4
N.T.S.

NOTES:

• C.P.G.W. = COMPLETE PENETRATION GROOVE WELD

• M.B. = MILL TO BEAR

NO WELDING SHALL BE ALLOWED WITHIN THE TENSION ZONES SHOWN UNLESS SPECIFICALLY NOTED. THE ATTACHMENT OF FORMING DEVICES OR OTHER CONSTRUCTION AIDS BY WELDING WITHIN THE TENSION AREA SHOWN IS PROHIBITED.

THE ENDS OF ALL GIRDERS AND THE BEARING STIFFENERS SHALL BE VERTICAL. ALL CONNECTION PLATES AND INTERMEDIATE STIFFENERS MAY BE PERPENDICULAR TO THE TOP FLANGES.

NOTES:

1. CONNECTIONS SHALL BE MADE ACCORDING TO THE NEW YORK STATE STEEL CONSTRUCTION MANUAL.
2. UNLESS OTHERWISE INDICATED, BOLTED CONNECTIONS SHALL BE MADE WITH 7/8" DIA. A325 HIGH-STRENGTH BOLTS.
3. THE CONTRACTOR MAY PLACE DIAPHRAGMS ON EITHER SIDE OF THE BEARING STIFFENERS OR CONNECTION PLATES AS NECESSARY TO CORRECT ALIGNMENT PROVIDED THERE WILL BE NO INTERFERENCE WITH OTHER STRUCTURAL DETAILS.
4. TAPERED OR FLAT SHIM PLATES MAY BE USED IN THE CONNECTION BETWEEN SKEWED DIAPHRAGMS AND THE BEARING STIFFENERS, STIFFENER CONNECTION PLATES OR GUSSET PLATES. VARIABLE THICKNESSES OF SHIM PLATES MAY BE USED. THE MINIMUM THICKNESS OF SHIM PLATE SHALL BE 1/8" WITH A MAXIMUM NUMBER OF THREE SHIM PLATES PERMITTED AT ANY CONNECTION. THE TOTAL THICKNESS OF ALL SHIM PLATES USED AT ANY CONNECTION SHALL NOT EXCEED 1". SHIM PLATES SHALL HAVE THE DIMENSIONS OF THE FAYING SURFACE. THE SHIM MATERIAL SHALL CONFORM TO ASTM DESIGNATION A588 FOR WEATHERING STEEL APPLICATIONS. NO ADDITIONAL PAYMENT WILL BE MADE FOR FURNISHING AND PLACING THE SHIM PLATES.
5. DIAPHRAGM MEMBERS SHALL BE BLOCKED AS SHOWN, WITH THEIR FLANGE CUT BACK ON ONE SIDE, AND CHIPPED OR GROUND FLUSH. IN LIEU OF BLOCKING THE DIAPHRAGM MEMBER, THE FABRICATOR SHALL HAVE THE OPTION OF COPING THE FLANGE.
6. IN ORDER TO MAXIMIZE THE DISTANCE BETWEEN THE OUTSTANDING LEG OF THE TOP STRUT AND THE BOTTOM OF THE STRUCTURAL SLAB, THIS STRUT SHALL BE ORIENTED AS SHOWN. IN ADDITION, ON STRUCTURES WITH STRAIGHT BEAMS OR GIRDERS, THE POSITION OF THIS STRUT SHALL BE LOWERED (TO THE EXTENT THAT IT DOES NOT INTERFERE WITH THE ALIGNMENT OF THE DIAGONAL STRUTS AS SHOWN).
7. FOR LONGITUDINAL JOINTS IN THE SLAB, E. G. CLOSURE POURS, ONLY ONE SIDE OF THE INTERMEDIATE DIAPHRAGMS UNDER THE JOINT SHALL BE CONNECTED WHEN ERECTED. AFTER ALL PORTIONS OF THE SLAB HAVE BEEN POURED AND SET TO THE SATISFACTION OF THE ENGINEER, THE OTHER SIDE OF THE DIAPHRAGMS SHALL BE CONNECTED.
8. ALL BOLT HEADS SHALL BE PLACED ON THE TOP SIDE OF CONNECTIONS UNLESS OTHERWISE NOTED.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DESIGNED BY
DRAFTED BY
CHECKED BY
CHECKED BY
IN CHARGE OF

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL

BOICEVILLE BRIDGE
OVER ESOPUS CREEK

ULSTER COUNTY

GIRDER DETAILS - 2

SCALE: AS SHOWN

DATE ISSUED: 1/2018

DRAWING
BV-19

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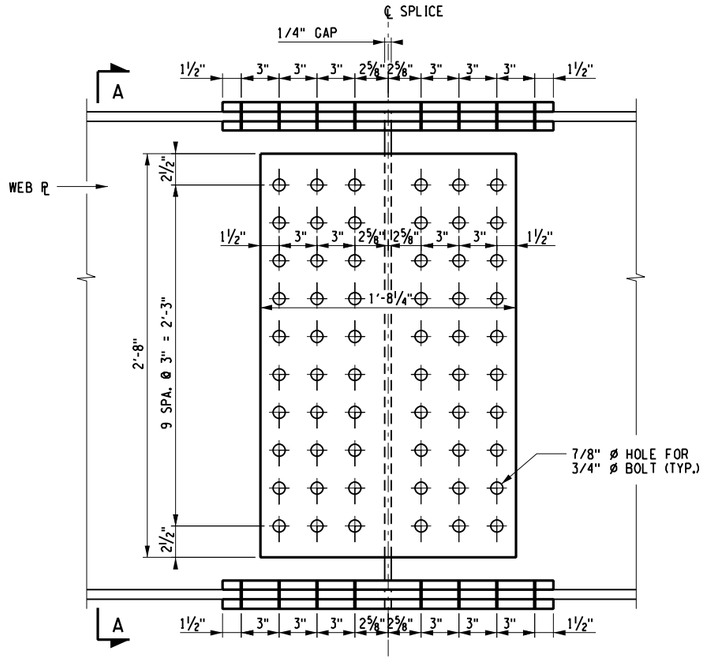
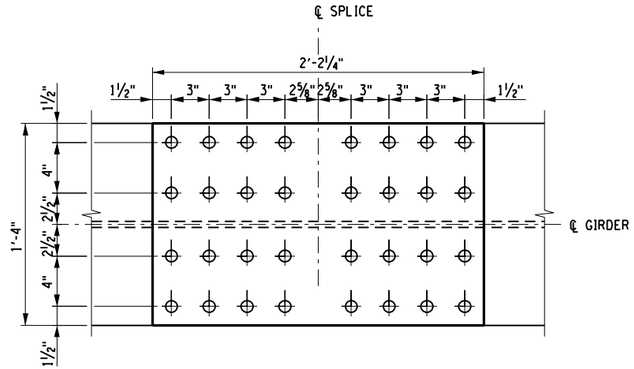


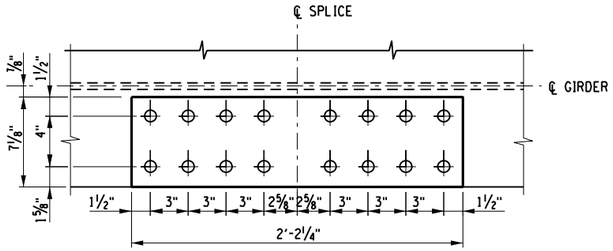
WEB SPLICE DETAIL

SCALE: 1" = 1'-0"



TOP & BOTTOM FLANGE - EXTERIOR SPLICE DETAIL

SCALE: 1" = 1'-0"



TOP & BOTTOM FLANGE - INTERIOR SPLICE DETAIL

SCALE: 1" = 1'-0"

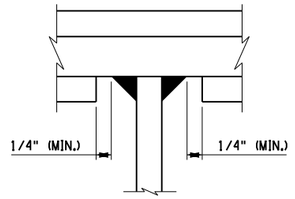
	TOP FLANGE SPLICE	BOTTOM FLANGE SPLICE	WEB SPLICE
SPLICE PLATE	1-℄ 16"x0.75"x26.25" 2- ℄ 7.125"x0.75"x26.5"	1-℄ 16"x1.00"x26.25" 2- ℄ 7.5"x1.00"x26.25"	2-℄ 32"x0.5"x20.25"
NO. OF BOLTS	16 EACH SIDE	16 EACH SIDE	48 EACH SIDE

TOP FLANGE

BOTTOM FLANGE

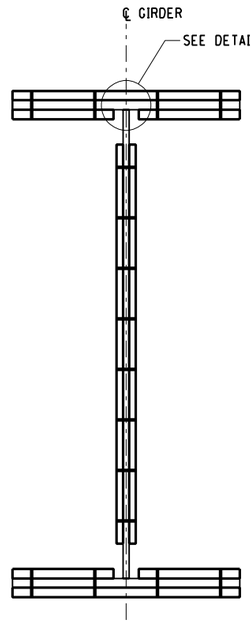
BOLT CLEARANCE DETAIL

N.T.S.



DETAIL "A"

N.T.S.



SECTION A-A

SCALE: 1" = 1'-0"

GIRDER SPLICE NOTES:

ALL COSTS FOR BOLTS, NUTS, AND WASHERS SHALL BE INCLUDED IN THE PRICE BID FOR STRUCTURAL STEEL.

SPLICE DESIGNS ARE BASED ON THE LOCATIONS INDICATED. THE CONTRACTOR HAS THE OPTION OF USING ALTERNATE SPLICE LOCATIONS. HOWEVER, RELOCATION REQUESTS MUST BE SUBMITTED TO THE D.C.E.S. FOR APPROVAL. NO ADDITIONAL COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR RELOCATING THE SPLICE. FABRICATION SHALL CONFORM TO THE CURRENT NEW YORK STATE STEEL CONSTRUCTION MANUAL.

BOLTS NUTS & WASHERS:

WEATHERING STEEL APPLICATIONS:
ALL BOLTS SHALL BE ⅞" DIA. HIGH STRENGTH ASTM A325 (TYPE 3). NUTS AND WASHERS SHALL BE A563 AND F436 RESPECTIVELY.

WEATHERING STEEL APPLICATIONS:
ALL SPLICE PLATES SHALL BE SAME GRADE STEEL AS THE GIRDERS.

SPLICE PLATES SHALL HAVE OXYGEN CUT EDGES, AS PER SECTION 609 OF THE NYS STEEL CONSTRUCTION MANUAL.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____

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NO.	DATE	BY	REVISION
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Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL

BOICEVILLE BRIDGE OVER ESOPUS CREEK

ULSTER COUNTY

GIRDER DETAILS - 3

SCALE: AS SHOWN

DATE ISSUED: 1/2018

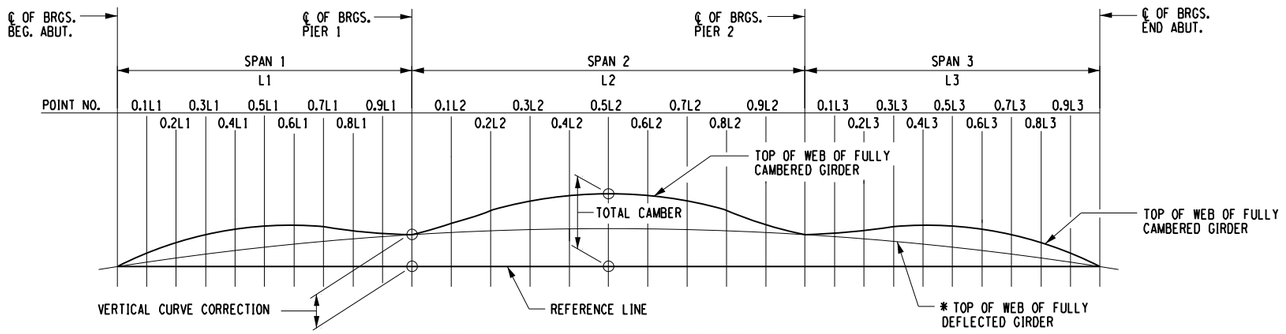
DRAWING
BV-20

HAUNCH TABLE		CL OF BRGS. SOUTH ABUT.	0.1 L1	0.2 L1	0.3 L1	0.4 L1	0.5 L1	0.6 L1	0.7 L1	0.8 L1	0.9 L1	CL OF BRGS. PIER 1	0.1 L2	0.2 L2	0.3 L2	0.4 L2	0.5 L2	0.6 L2	0.7 L2	0.8 L2	0.9 L2	CL OF BRGS. PIER 2	0.1 L3	0.2 L3	0.3 L3	0.4 L3	0.5 L3	0.6 L3	0.7 L3	0.8 L3	0.9 L3	CL OF BRGS. NORTH ABUT.
GIRDER 1	(A) REQ'D BOTTOM OF SLAB ELEVATION	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208
	(B) TOP OF STEEL EL. (FIELD MEASURE)																															
	(C) = (A) - (B)																															
	(D) CONCRETE + S.D.L. DEFLECTION (ft)	0.000	-0.147	-0.273	-0.362	-0.406	-0.402	-0.353	-0.269	-0.168	-0.072	0.000	0.049	0.070	0.072	0.068	0.066	0.068	0.073	0.071	0.050	0.000	-0.073	-0.169	-0.270	-0.353	-0.402	-0.406	-0.363	-0.274	-0.148	0.000
	(E) DEPTH OF HAUNCH REQ'D = (C) + (D) (ft)																															
GIRDER 2	(A) REQ'D BOTTOM OF SLAB ELEVATION	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313	625.313
	(B) TOP OF STEEL EL. (FIELD MEASURE)																															
	(C) = (A) - (B)																															
	(D) CONCRETE + S.D.L. DEFLECTION (ft)	0.000	-0.177	-0.329	-0.436	-0.488	-0.483	-0.425	-0.325	-0.203	-0.087	0.000	0.060	0.086	0.088	0.084	0.082	0.084	0.089	0.086	0.060	0.000	-0.088	-0.204	-0.325	-0.426	-0.484	-0.488	-0.436	-0.329	-0.177	0.000
	(E) DEPTH OF HAUNCH REQ'D = (C) + (D) (ft)																															
GIRDER 3	(A) REQ'D BOTTOM OF SLAB ELEVATION	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208	625.208
	(B) TOP OF STEEL EL. (FIELD MEASURE)																															
	(C) = (A) - (B)																															
	(D) CONCRETE + S.D.L. DEFLECTION (ft)	0.000	-0.147	-0.273	-0.362	-0.406	-0.402	-0.353	-0.269	-0.168	-0.072	0.000	0.049	0.070	0.072	0.068	0.066	0.068	0.073	0.071	0.050	0.000	-0.073	-0.169	-0.270	-0.353	-0.402	-0.406	-0.363	-0.274	-0.148	0.000
	(E) DEPTH OF HAUNCH REQ'D = (C) + (D) (ft)																															

CAMBER TABLE		CL OF BRGS. SOUTH ABUT.	0.1 L1	0.2 L1	0.3 L1	0.4 L1	0.5 L1	0.6 L1	0.7 L1	0.8 L1	0.9 L1	CL OF BRGS. PIER 1	0.1 L2	0.2 L2	0.3 L2	0.4 L2	0.5 L2	0.6 L2	0.7 L2	0.8 L2	0.9 L2	CL OF BRGS. PIER 2	0.1 L3	0.2 L3	0.3 L3	0.4 L3	0.5 L3	0.6 L3	0.7 L3	0.8 L3	0.9 L3	CL OF BRGS. NORTH ABUT.
GIRDERS 1 & 3	I STEEL D.L. (ft.)	0.000	-0.031	-0.057	-0.076	-0.085	-0.083	-0.073	-0.055	-0.034	-0.015	0.000	0.010	0.014	0.013	0.012	0.011	0.012	0.014	0.014	0.010	0.000	-0.015	-0.035	-0.055	-0.073	-0.083	-0.085	-0.076	-0.057	-0.031	0.000
	II CONCRETE D.L. (ft.)	0.000	-0.024	-0.044	-0.058	-0.065	-0.064	-0.056	-0.043	-0.027	-0.011	0.000	0.008	0.011	0.011	0.009	0.009	0.009	0.011	0.011	0.008	0.000	-0.012	-0.027	-0.043	-0.056	-0.064	-0.065	-0.058	-0.044	-0.024	0.000
	III SUPERIMPOSED D.L. (ft.)	0.000	-0.124	-0.229	-0.304	-0.341	-0.337	-0.297	-0.227	-0.142	-0.061	0.000	0.042	0.060	0.062	0.059	0.057	0.059	0.062	0.060	0.042	0.000	-0.062	-0.142	-0.227	-0.297	-0.338	-0.341	-0.304	-0.230	-0.124	0.000
	IV VERTICAL CURVE (ft.)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	TOTAL = I + II + III + IV (ft.)	0.000	-0.178	-0.331	-0.438	-0.490	-0.485	-0.426	-0.325	-0.202	-0.087	0.000	0.059	0.084	0.086	0.080	0.077	0.080	0.086	0.085	0.060	0.000	-0.088	-0.203	-0.325	-0.426	-0.485	-0.491	-0.439	-0.331	-0.179	0.000
GIRDER 2	I STEEL D.L. (ft.)	0.000	-0.031	-0.057	-0.076	-0.085	-0.083	-0.073	-0.055	-0.034	-0.015	0.000	0.010	0.014	0.013	0.012	0.011	0.012	0.014	0.014	0.010	0.000	-0.015	-0.035	-0.055	-0.073	-0.083	-0.085	-0.076	-0.057	-0.031	0.000
	II CONCRETE D.L. (ft.)	0.000	-0.020	-0.037	-0.049	-0.054	-0.054	-0.047	-0.036	-0.022	-0.009	0.000	0.006	0.009	0.009	0.008	0.007	0.008	0.009	0.009	0.006	0.000	-0.010	-0.022	-0.036	-0.047	-0.054	-0.054	-0.049	-0.037	-0.020	0.000
	III SUPERIMPOSED D.L. (ft.)	0.000	-0.158	-0.292	-0.387	-0.434	-0.430	-0.378	-0.289	-0.181	-0.078	0.000	0.053	0.077	0.080	0.076	0.074	0.077	0.080	0.077	0.054	0.000	-0.079	-0.182	-0.290	-0.379	-0.430	-0.434	-0.387	-0.292	-0.158	0.000
	IV VERTICAL CURVE (ft.)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	TOTAL = I + II + III + IV (ft.)	0.000	-0.208	-0.386	-0.511	-0.573	-0.567	-0.498	-0.380	-0.237	-0.102	0.000	0.069	0.099	0.102	0.096	0.093	0.096	0.102	0.100	0.070	0.000	-0.103	-0.238	-0.381	-0.499	-0.567	-0.573	-0.512	-0.386	-0.208	0.000

MOMENT & SHEAR TABLE			CL OF BRGS. SOUTH ABUT.	0.1 L1	0.2 L1	0.3 L1	0.4 L1	0.5 L1	0.6 L1	0.7 L1	0.8 L1	0.9 L1	CL OF BRGS. PIER 1	0.1 L2	0.2 L2	0.3 L2	0.4 L2	0.5 L2	0.6 L2	0.7 L2	0.8 L2	0.9 L2	CL OF BRGS. PIER 2	0.1 L3	0.2 L3	0.3 L3	0.4 L3	0.5 L3	0.6 L3	0.7 L3	0.8 L3	0.9 L3	CL OF BRGS. NORTH ABUT.
GIRDERS 1 & 3	D.L.	MOMENT	0.0	452.3	770.2	953.8	1003.0	917.8	698.2	344.3	-144.1	-768.2	-1530.8	-919.7	-448.1	-112.2	89.2	156.2	88.8	-112.9	-449.1	-921.0	-1531.4	-767.2	-143.1	345.4	699.3	918.9	1004.1	954.9	771.3	453.4	0.0
		SHEAR	43.3	32.1	20.9	9.7	-1.5	-12.7	-23.9	-35.1	-46.3	-57.7	-69.4/56.8	45.0	33.6	22.4	11.2	0.0	-11.2	-22.4	-33.6	-45.0	-56.7/69.5	57.7	46.3	35.1	23.9	12.7	1.5	-9.7	-20.9	-32.1	-43.3
	S.D.L	MOMENT	0.0	36.4	62.0	76.8	80.7	73.9	56.3	27.9	-11.3	-61.3	-122.1	-73.5	-35.8	-8.8	7.4	12.8	7.4	-8.8	-35.8	-73.8	-122.2	-61.3	-11.3	27.9	56.3	73.9	80.7	76.8	62.0	36.4	0.0
		SHEAR	3.5	2.6	1.7	0.8	-0.1	-1.0	-1.9	-2.8	-3.7	-4.6	-5.5/4.5	3.6	2.7	1.8	0.9	0.0	-0.9	-1.8	-2.7	-3.6	-4.5/5.5	4.6	3.7	2.8	1.9	1.0	0.1	-0.8	-1.7	-2.6	-3.5
	PEDESTRIAN (+)	MOMENT	0.0	688.9	1173.2	1465.0	1585.4	1545.2	1356.1	1029.7	592.9	169.9	350.6	249.5	416.9	587.5	1146.6	1216.7	1146.2	868.8	578.5	168.4	351.2	316.1	485.5	1031.2	1357.3	1545.1	1584.4	1465.1	1172.7	688.1	0.0
		SHEAR	91.5	72.5	59.4	47.3	36.5	27.0	18.8	12.1	6.8	2.8	3.7/103.2	86.9	75.4	63.6	51.9	40.9	30.7	21.7	17.4	16.7	16.5/106.3	91.7	81.7	71.2	60.3	49.2	38.1	27.3	16.9	9.6	9.2
	PEDESTRIAN (-)	MOMENT	0.0	-86.3	-172.5	-258.8	-345.0	-431.3	-517.6	-603.8	-690.1	-776.4	-1592.9	-1126.6	-729.5	-449.9	-705.9	-622.1	-704.4	-735.4	-890.5	-1045.6	-1592.3	-966.3	-582.5	-605.1	-518.6	-432.0	-345.4	-258.8	-172.5	-86.8	0.0
		SHEAR	-9.2	-9.6	-16.9	-27.3	-38.1	-49.2	-60.3	-71.2	-81.7	-91.7	-106.3/-16.4	-16.4	-17.1	-21.7	-30.7	-40.9	-52.0	-63.6	-75.4	-86.9	-103.2/-3.7	-2.8	-6.9	-12.1	-18.8	-27.0	-36.5	-47.3	-59.4	-72.5	-91.5
GIRDER 2	D.L.	MOMENT	0.0	535.4	911.7	1129.0	1187.2	1086.4	826.5	407.5	-170.7	-909.2	-1810.8	-1088.4	-530.2	-132.4	106.2	185.8	106.3	-132.2	-529.9	-1088.0	-1810.2	-908.2	-169.9	408.1	826.9	1086.7	1187.4	1129.0	911.6	535.1	0.0
		SHEAR	51.2	38.0	24.7	11.5	-1.8	-15.0	-28.3	-41.5	-54.8	-68.3	-82/67.1	53.2	39.8	26.5	13.3	0.0	-13.3	-26.5	-39.8	-53.2	-67/82.1	68.3	54.8	41.5	28.3	15.0	1.8	-11.5	-24.7	-38.0	-51.3
	S.D.L	MOMENT	0.0	36.4	62.0	76.7	80.7	73.9	56.3	27.9	-11.3	-61.4	-122.2	-73.6	-35.8	-8.7	7.5	12.9	7.5	-8.7	-35.7	-73.5	-122.2	-61.3	-11.3	27.9	56.3	73.9	80.7	76.7	62.0	36.4	0.0
		SHEAR	3.5	2.6	1.7	0.8	-0.1	-1.0	-1.9	-2.8	-3.7	-4.6	-5.5/4.5	3.6	2.7	1.8	0.9	0.0	-0.9	-1.8	-2.7	-3.6	-4.5/5.5	4.6	3.7	2.8	1.9	1.0	0.1	-0.8	-1.7	-2.6	-3.5
	PEDESTRIAN (+)	MOMENT	0.0	497.8	853.0	1072.2	1166.8	1142.7	1006.3	763.8	452.7	103.3	277.1	187.0	260.3	356.0	821.9	876.2	821.5	637.3	421.2	106.2	277.5	249.7	345.3	765.4	1007.6	1144.0	1168.1	1073.3	854.1	498.7	0.3
		SHEAR	91.5	72.5	59.3	47.3	36.5	27.0	18.8	12.1	6.8	2.8	3.7/103.2	86.9	75.4	63.6	52.0	40.9	30.7	21.8	17.4	16.7	16.5/106.3	91.7	81.7	71.2	60.3	49.2	38.1	27.3	16.9	9.6	9.2
	PEDESTRIAN (-)	MOMENT	0.0	-64.7	-129.4	-194.0	-258.7	-323.4	-388.1	-452.7	-541.7	-609.4	-1339.7	-906.0	-541.4	-293.6	-563.1	-517.8	-563.0	-580.7	-703.3	-825.8	-1339.4	-799.7	-434.3	-453.9	-389.0	-324.1	-259.3	-194.4	-129.5	-64.8	-0.4
		SHEAR	-9.2	-9.6	-16.9	-27.3	-38.2	-49.2	-60.3	-71.2	-81.7	-91.7	-106.3/-16.5	-16.5	-17.2	-21.8	-30.8	-40.9	-52.0	-63.6	-75.4	-87.0	-103.2/-3.7	-2.8	-6.8	-12.1	-18.9	-27.0	-36.5	-47.3	-59.3	-72.5	-91.5

MOMENTS AND SHEARS ARE UNFACTORED
MOMENTS ARE EXPRESSED AS KIP-FEET
SHEARS ARE EXPRESSED AS KIPS



CAMBER DIAGRAM - CONTINUOUS SPANS

NOT TO SCALE

DESIGN LOAD TABLE			
		UNIT	LOAD (k/ft)
GIRDERS 1 & 3	D.L.	SLAB	0.64
		HAUNCH	0.04
		S.I.P. FORMS	0.02
		DIAPHRAGMS	0.01
		GIRDER	0.18
		TOTAL	0.90
	S.D.L.	RAILING	0.08
		FUTURE W.S.	0.00
		TOTAL	0.08
GIRDER 2	D.L.	SLAB	0.83
		HAUNCH	0.04
		S.I.P. FORMS	0.03
		DIAPHRAGMS	0.03
		GIRDER	0.18
		TOTAL	1.11
	S.D.L.	RAILING	0.08
		FUTURE W.S.	0.00
		TOTAL	0.08

ASSUMED LIVE LOAD = 90 PSF PEDESTRIAN LOAD
32.5 TON CONSTRUCTION VEHICLE
H-20 TRUCK

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL

BOICEVILLE BRIDGE OVER ESOPUS CREEK

ULSTER COUNTY

GIRDER TABLES AND DETAILS

SCALE: AS SHOWN

DATE ISSUED: 1/2018

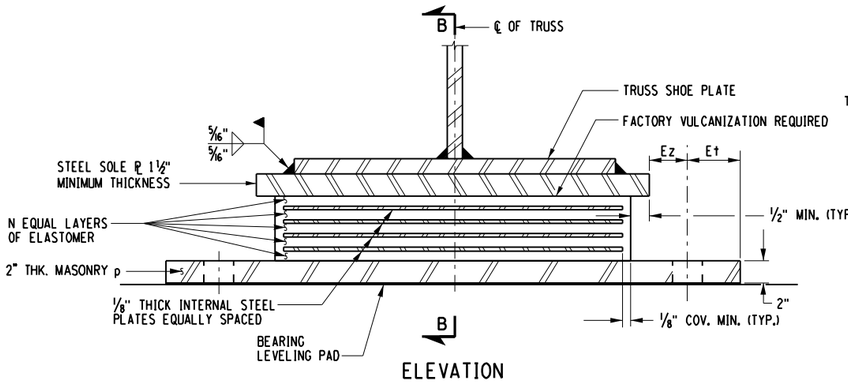
DRAWING
BV-21

EXPANSION ELASTOMERIC BEARING (TYPE E.B.) TABLE

LOCATION	ITEM NO.	QUANTITY REQUIRED	DL + SDL (Kips)	LL W/O IMP. (Kips)	TOTAL DESIGN REACTION (Kips)	SHAPE FACTOR	ELASTOMER LAYERS					hrt	COMP. AREA (sq. in)	SHEAR AREA (sq. in)	MASONRY PLATE								ANCHOR BOLTS		WELD SIZE	WASHER PLATE		SOLE PLATE				BRG. H
							THK/LAYER	N LAYERS	L	W	D				Wm	Lm	Tm	Et	EI	Ez	Am	Bm	DIA.	STUDS/ BRG.		AWp	BWp	Ws	Ls	T1	T2	
NO. ABUT.	565.2033	3	54.60	86.34	140.94	7.88	0.5	4	14	18	2.375	2	244.06	252	26	20	2	2	10	1.5	2.50	1.375	1	2	0.3125	3.5	2.375	19	19	1.5	1.5	5.875
PIER 2	565.2035	3	159.20	95.98	255.18	9.00	0.5	4	18	18	2.375	2	315.06	324	28	20	2	2.875	10	1.625	2.75	1.625	1.25	2	0.3125	3.75	3.75	19	19	1.5	1.5	5.875
SO. ABUT.	565.2033	3	54.60	86.34	140.94	8.47	0.5	8	16	18	4.875	4	279.56	288	26	20	2	2	10	1.5	2.50	1.375	1	2	0.3125	3.5	3.375	19	19	1.5	1.5	8.375

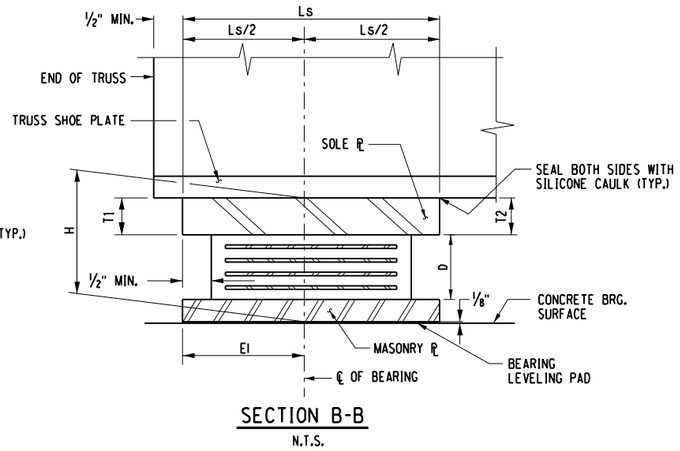
TABLE DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

T2 IS UPSTATION OF T1



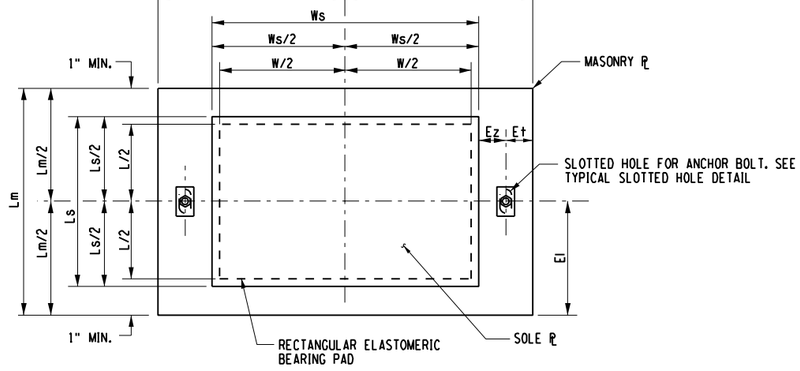
ELEVATION
TYPICAL EXPANSION BEARING

N.T.S.



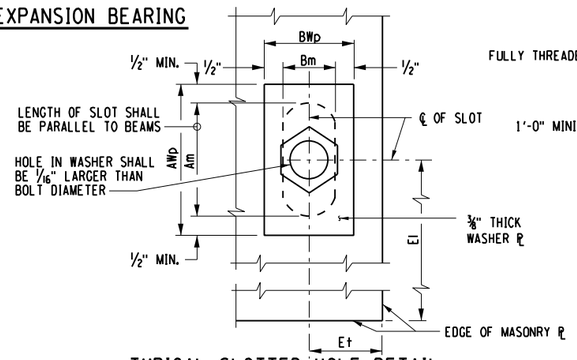
SECTION B-B

N.T.S.



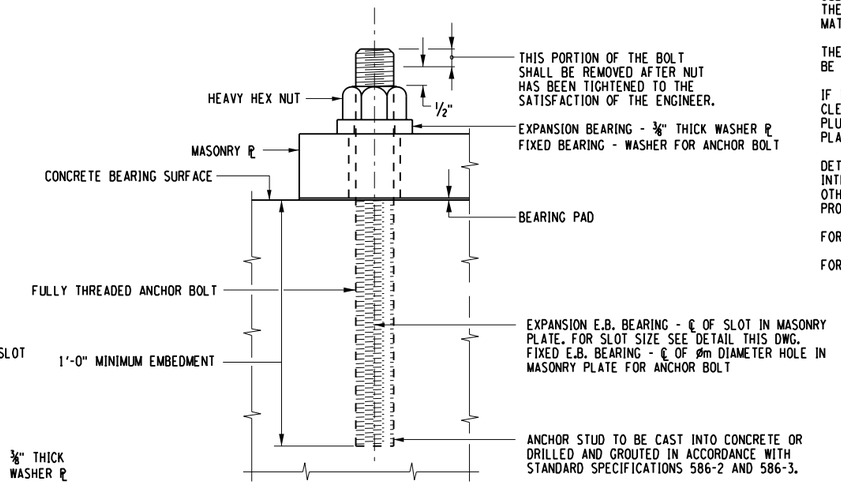
PLAN
TYPICAL RECTANGULAR EXPANSION BEARING

N.T.S.



TYPICAL SLOTTED HOLE DETAIL
MASONRY PLATE

N.T.S.



ANCHOR BOLT

ANCHOR STUDS, WASHERS, WASHER PLATES, ANCHOR PLATES AND NUTS SHALL MEET THE REQUIREMENTS OF SUBSECTION 723-60. THEY SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF MATERIAL SUBSECTION 719-01, "GALVANIZED COATINGS AND REPAIR METHODS." THEIR COST (INCLUDING GALVANIZING) SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARING ITEM.

** BEARING SOLE PLATE IS SIZED BASED ON THE BEARING DIMENSIONS SHOWN AND ASSUMED TRUSS SHOE PLATE DIMENSIONS (LENGTH & WIDTH) OF 14" (MIN) AND 16" (MAX). IF THE ACTUAL TRUSS SHOE PLATE PROVIDED EXCEEDS THE ASSUMED MAXIMUM DIMENSION; THE BEARING SOLE PLATE AND BEARING MASONRY PLATE MAY NEED TO BE RESIZED. ADDITIONALLY, ADJUSTMENTS MAY NEED TO BE MADE TO THE BRIDGE SEAT TO ACCOMMODATE THE LARGER MASONRY PLATE.

BEARING NOTES:

THE BEARINGS SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 565 UNLESS OTHERWISE NOTED.

ALL ELASTOMER SHALL BE 50 DUROMETER HARDNESS ON THE SHORE A SCALE.

ALL STEEL EXCEPT THE INTERNAL STEEL PLATES SHALL CONFORM TO ASTM A709, GR. 50, UNLESS OTHERWISE NOTED. STEEL SOLE PLATES AND STEEL MASONRY PLATES SHALL BE GALVANIZED IN ACCORDANCE WITH SUBSECTION 719-01.

FIELD GALVANIZING REPAIRS SHALL BE PERFORMED IN AREAS DAMAGED FROM WELDING THE TRUSS SHOE PLATE TO THE BEARING SOLE PLATE. FIELD GALVANIZING REPAIRS SHALL BE MADE IN ACCORDANCE WITH SUBSECTION 719-01, "GALVANIZED COATINGS AND REPAIR METHODS".

BEARING PADS SHALL CONFORM TO ONE OF THE FOLLOWING MATERIAL SPECIFICATIONS: 728-01, 728-02 OR 728-03.

INSTALLATION ALIGNMENT:
THE MAXIMUM VARIATION FROM PERFECT ALIGNMENT UNDER FULL DEAD LOAD SHALL NOT EXCEED 3/16". THIS VARIATION SHALL BE MEASURED AS THE HORIZONTAL DISTANCE BETWEEN THE CENTERLINE OF THE HIGHEST ELASTOMER SURFACE AND THE CENTERLINE OF THE LOWEST ELASTOMER SURFACE.

CONCRETE SURFACES UNDER THE BEARINGS SHALL CONFORM TO SUBSECTION 565.3.02 "CONCRETE BEARING SURFACE PREPARATION" OF THE NEW YORK STATE STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS.

THE BEARING PAD, ANCHOR STUDS, WASHER PLATES AND NUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARING ITEM.

IF THE ANCHOR STUDS ARE SET UNDER THE SOLE PLATE, A MINIMUM CLEARANCE EQUAL TO TWO TIMES THE THICKNESS OF ANCHOR NUT PLUS 1" SHALL BE MAINTAINED BETWEEN THE TOP OF MASONRY PLATE AND BOTTOM OF THE SOLE PLATE.

DETAILS ON THE DRAWINGS LABELED AS "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY. ALL OTHER DETAILS, FOR WHICH NO SCALE IS SHOWN, ARE DRAWN PROPORTIONAL AND ARE FULLY DIMENSIONED.

FOR ABUTMENT BEARING LAYOUT, SEE DWG. BV-7.

FOR PIER BEARING LAYOUT, SEE DWG. BV-14.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

IN CHARGE OF
DESIGNED BY
CHECKED BY
DRAFTED BY
CHECKED BY

cmh
L:\MicroStation\Workspace\Plot\NYSDOT\SITE_NYSDOT_SIZE_B.tbl
L:\MicroStation\Workspace\Plot\NYSDOT\NYSDOT_LJ5000_B_04_08.plt

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TIME = 11:10:48 AM

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

EXPANSION ELASTOMERIC BEARING DETAILS

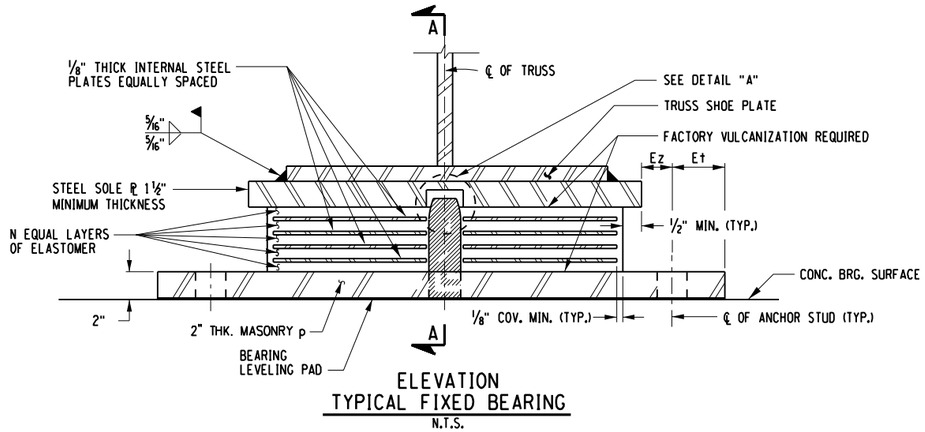
SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BV-22

FIXED ELASTOMERIC BEARING (TYPE E.B.) TABLE

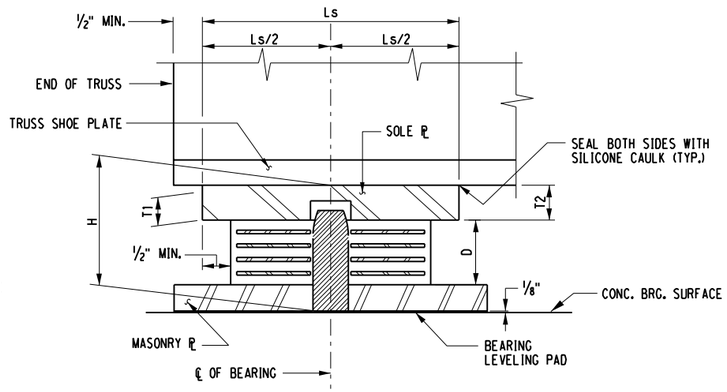
LOCATION	ITEM NO.	QUANTITY REQUIRED	DL + SDL (Kips)	LL W/O IMP. (Kips)	TOTAL DESIGN REACTION (Kips)	SHAPE FACTOR	ELASTOMER LAYERS					hrt	COMP. AREA (sq. in)	SHEAR AREA (sq. in)	MASONRY PLATE							ANCHOR STUDS		WELD SIZE	SOLE PLATE				BRG. H	ø sp (PIN DIA.)
							THK/LAYER	N LAYERS	L	W	D				Wm	Lm	Tm	Et	El	Ez	ø m	DIA.	STUDS/ BRG.		Ws	Ls	T1	T2		
PIER 1	565.2025	3	159.20	95.98	255.18	9	0.5	4	18	18	2.375	2	312.99	322.23	28	20	2	2.4	10	1.625	1.625	1.25	2	0.3125	19	19	1.5	1.5	5.875	2.625

TABLE DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

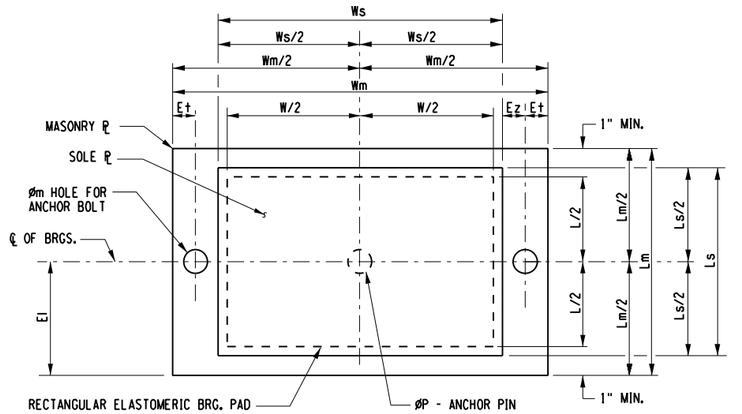
* T2 IS UPSTATION OF T1
* TM1 SHALL BE OREINTATED TOWARD CL OF THE BRIDGE



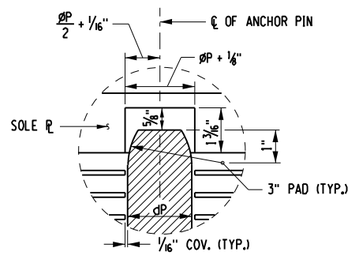
ELEVATION
TYPICAL FIXED BEARING
N.T.S.



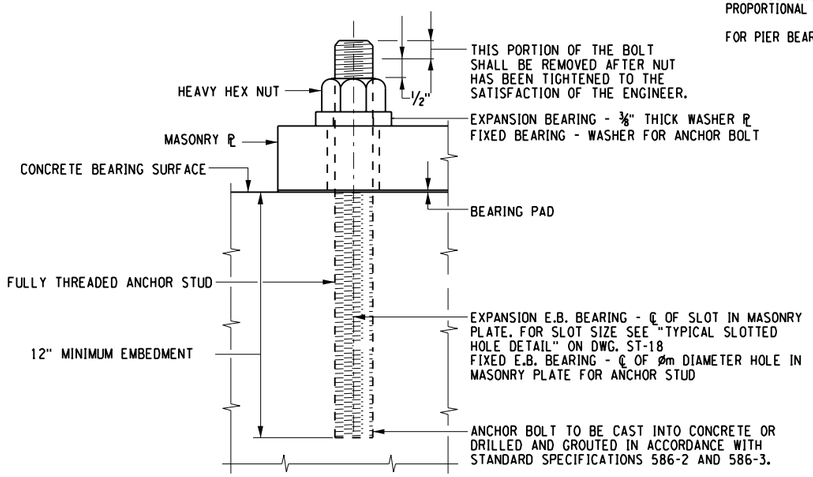
SECTION A-A
N.T.S.



PLAN
TYPICAL RECTANGULAR FIXED BEARING
N.T.S.



DETAIL "A"
FIXED BEARING ANCHOR PIN



ANCHOR BOLT DETAIL

ANCHOR STUDS, WASHERS, WASHER PLATES, ANCHOR PLATES AND NUTS SHALL MEET THE REQUIREMENTS OF SUBSECTION 723-60. THEY SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF MATERIAL SUBSECTION 719-01, "GALVANIZED COATINGS AND REPAIR METHODS." THEIR COST (INCLUDING GALVANIZING) SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARING ITEM.

BEARING NOTES:

THE BEARINGS SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 565 UNLESS OTHERWISE NOTED.

ALL ELASTOMER SHALL BE 50 DUROMETER HARDNESS ON THE SHORE A SCALE.

ALL STEEL EXCEPT THE INTERNAL STEEL PLATES SHALL CONFORM TO ASTM A709, GR. 50, UNLESS OTHERWISE NOTED. STEEL SOLE PLATES AND STEEL MASONRY PLATES SHALL BE GALVANIZED IN ACCORDANCE WITH SUBSECTION 719-01.

FIELD GALVANIZING REPAIRS SHALL BE PERFORMED IN AREAS DAMAGED FROM WELDING THE TRUSS SHOE PLATE TO THE BEARING SOLE PLATE. FIELD GALVANIZING REPAIRS SHALL BE MADE IN ACCORDANCE WITH SUBSECTION 719-01, "GALVANIZED COATINGS AND REPAIR METHODS".

BEARING PADS SHALL CONFORM TO ONE OF THE FOLLOWING MATERIAL SPECIFICATIONS: 728-01, 728-02 OR 728-03.

INSTALLATION ALIGNMENT:
THE MAXIMUM VARIATION FROM PERFECT ALIGNMENT UNDER FULL DEAD LOAD SHALL NOT EXCEED 3/16". THIS VARIATION SHALL BE MEASURED AS THE HORIZONTAL DISTANCE BETWEEN THE CENTERLINE OF THE HIGHEST ELASTOMER SURFACE AND THE CENTERLINE OF THE LOWEST ELASTOMER SURFACE.

CONCRETE SURFACES UNDER THE BEARINGS SHALL CONFORM TO SUBSECTION 565.3.02 "CONCRETE BEARING SURFACE PREPARATION" OF THE NEW YORK STATE STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS.

THE BEARING PAD, ANCHOR STUDS, WASHER PLATES AND NUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARING ITEM.

IF THE ANCHOR STUDS ARE SET UNDER THE SOLE PLATE, A MINIMUM CLEARANCE EQUAL TO TWO TIMES THE THICKNESS OF ANCHOR NUT PLUS 1" SHALL BE MAINTAINED BETWEEN THE TOP OF MASONRY PLATE AND BOTTOM OF THE SOLE PLATE.

DETAILS ON THE DRAWINGS LABELED AS "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY. ALL OTHER DETAILS, FOR WHICH NO SCALE IS SHOWN, ARE DRAWN PROPORTIONAL AND ARE FULLY DIMENSIONED.

FOR PIER BEARING LAYOUT, SEE DWG. BV-14.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

FIXED ELASTOMERIC BEARING DETAILS

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING BV-23

DESIGNED BY
DRAFTED BY
CHECKED BY
CHECKED BY
IN CHARGE OF

cmh
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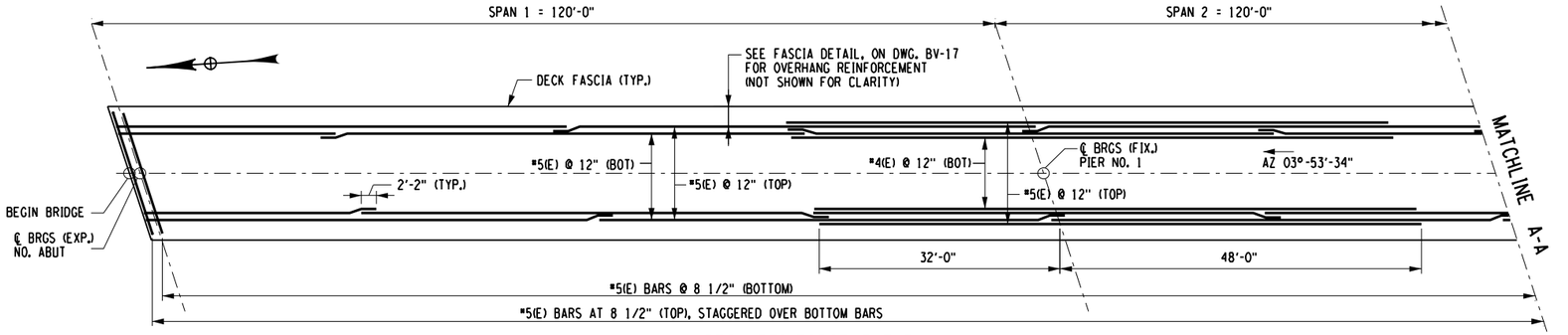
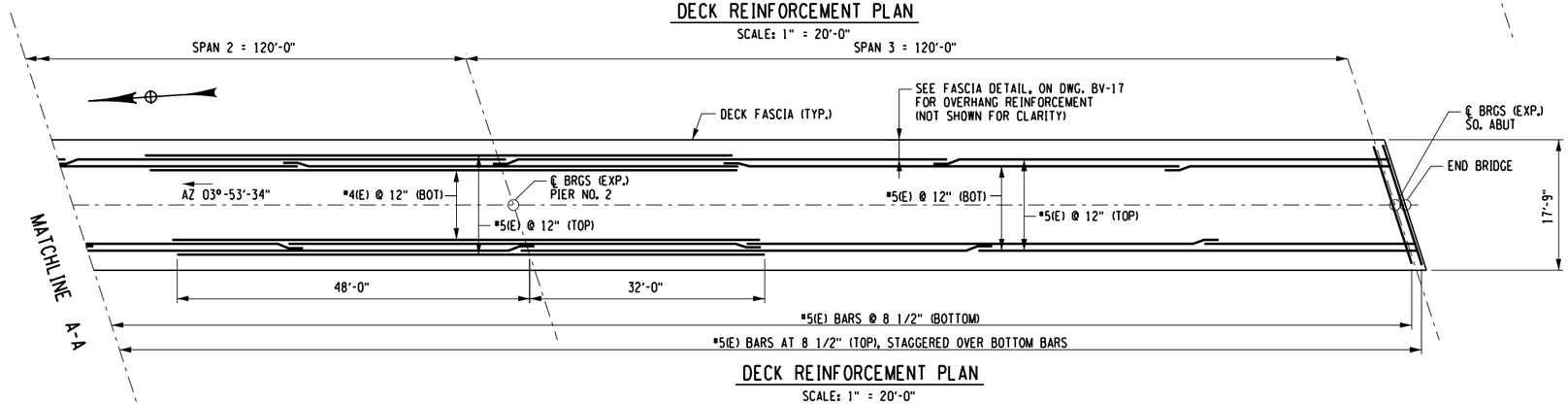


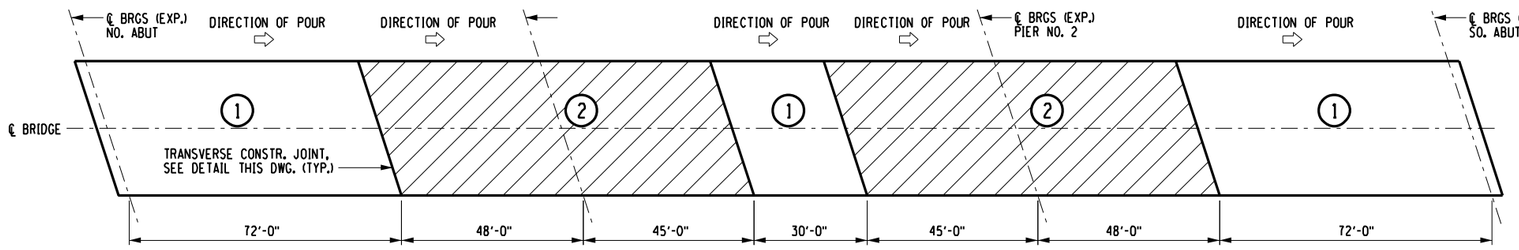
DECK REINFORCEMENT PLAN

SCALE: 1" = 20'-0"



DECK REINFORCEMENT PLAN

SCALE: 1" = 20'-0"



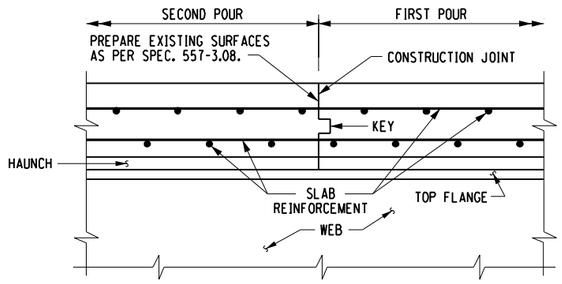
DECK CONCRETE PLACEMENT SEQUENCE PLAN

N.T.S.

DECK POUR SEQUENCE NOTES:

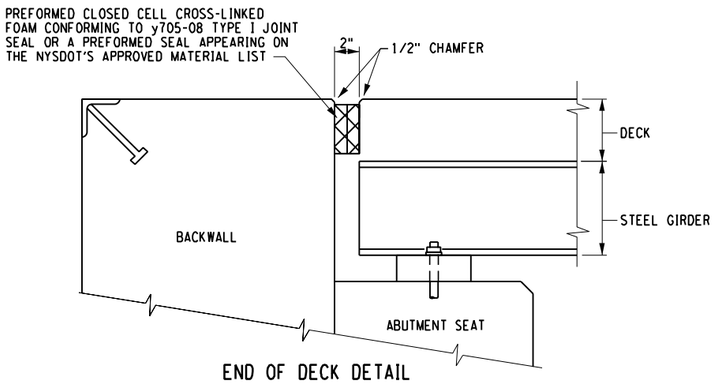
1. ALL PLACEMENTS FOR EACH RESPECTIVE SHALL BE POURED SIMULTANEOUSLY.

(1) - INDICATES POUR NUMBER



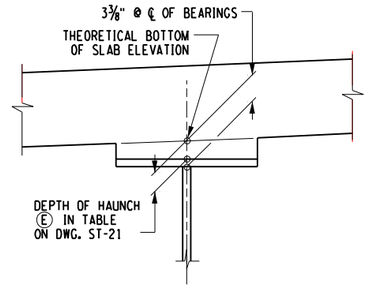
TRANSVERSE CONSTRUCTION JOINT IN SLAB

NOT TO SCALE



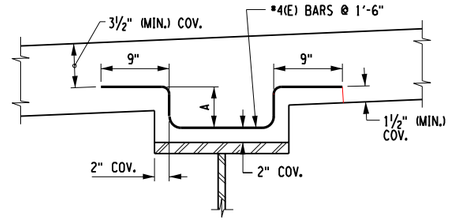
END OF DECK DETAIL

N.T.S.



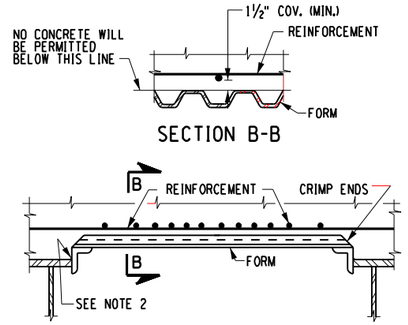
GIRDER HAUNCH DETAIL

NOT TO SCALE



REINFORCED GIRDER HAUNCH DETAIL

NOT TO SCALE



PERMANENT CORRUGATED METAL FORM DETAIL

NOT TO SCALE

FORM UNIT NOTES:

1. THE COST OF THE FORMING SYSTEM SHOWN ON THIS DRAWING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR SUPERSTRUCTURE SLAB CONCRETE ITEM.
2. TACK WELDS SHALL BE ALLOWED IN THE COMPRESSION AREA OF THE STRINGER'S TOP FLANGE ONLY. FOR CONTINUOUS STRUCTURES, SEE STRINGER DETAILS FOR LIMITS OF TENSION ZONES FOR THE TOP FLANGE. WELDING SHALL CONFORM TO SECTION 7 OF THE N.Y.S. STEEL CONSTRUCTION MANUAL. (3/16" DIA. E7018 OR E8018-C3 ELECTRODES, PROPERLY CONDITIONED, SHALL BE USED.)
3. THE SUPPORT ANGLES AND/OR ZEES SHALL BE GALVANIZED IN ACCORDANCE WITH MATERIAL SPECIFICATION 719-01.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL

BOICEVILLE BRIDGE OVER ESOPUS CREEK

ULSTER COUNTY

DECK REINFORCEMENT PLAN AND DETAILS

SCALE: AS SHOWN

DATE ISSUED: 1/2018

DRAWING BV-24

DESIGNED BY
DRAFTED BY
CHECKED BY
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IN CHARGE OF

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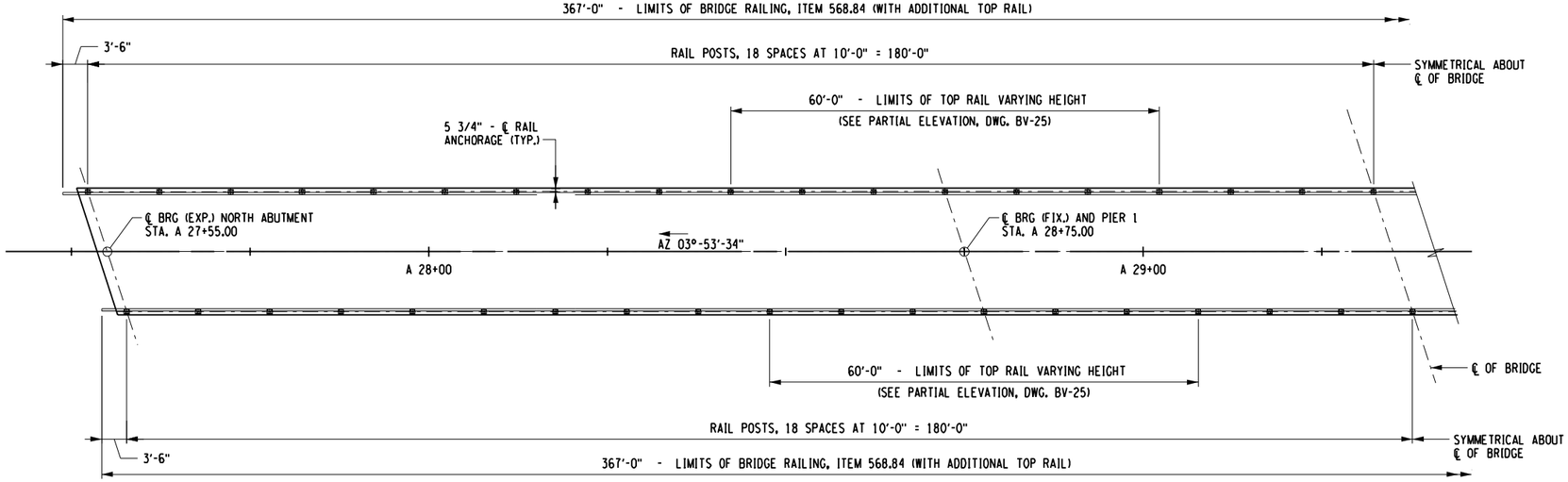
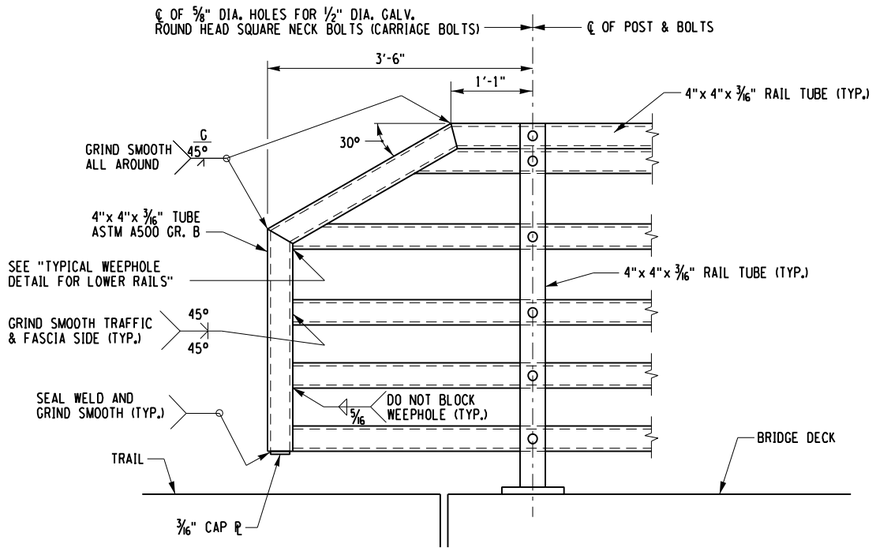


BRIDGE RAIL PLAN
SCALE: 1" = 20'-0"



TYPICAL END ELEVATION
N.T.S.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____

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NO.	DATE	BY	REVISION

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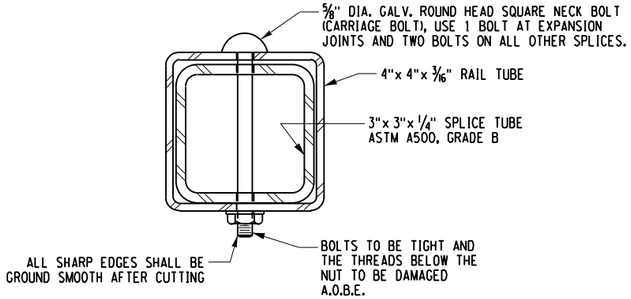
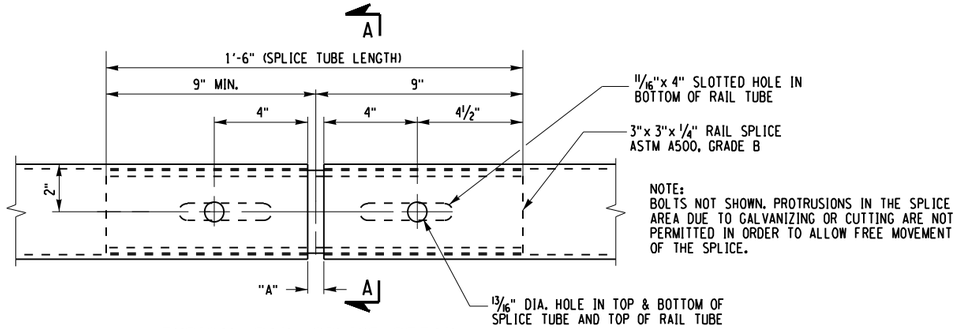
ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

BRIDGE RAIL LAYOUT PLAN AND DETAILS

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BV-25

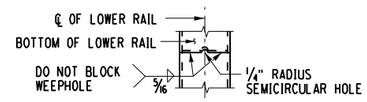


SECTION A-A
NOT TO SCALE

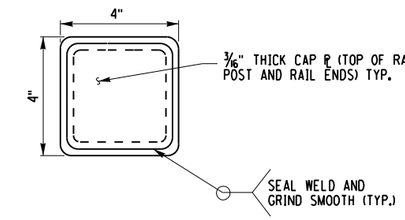


TYPICAL RAIL SPLICE DETAIL
NOT TO SCALE

NOTE "A"
FOR SPLICE JOINTS "A" = 1"
FOR EXPANSION JOINTS "A" = MAXIMUM BRIDGE THERMAL EXPANSION DIMENSION + 1/4" (1" MIN.) AND SPLICE LENGTH = 1'-5" + "A"

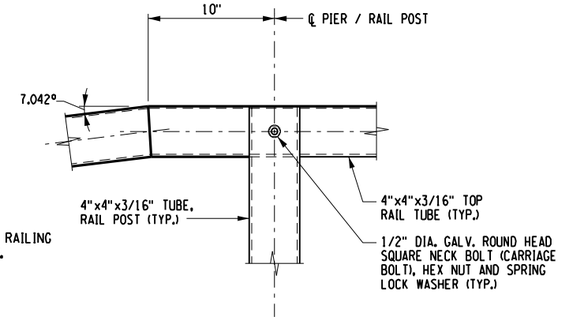


TYPICAL WEEP HOLE FOR LOWER RAILS
N.T.S.

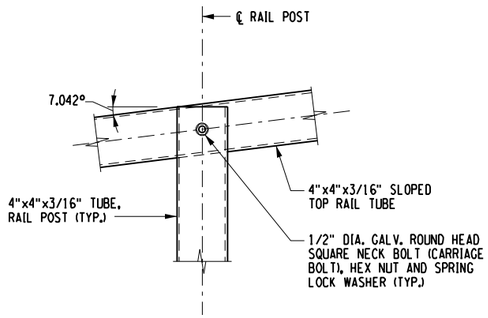


CAP PLATE DETAIL
(TYPICAL FOR TOP OF RAILING POSTS AND RAIL ENDS)
NOT TO SCALE

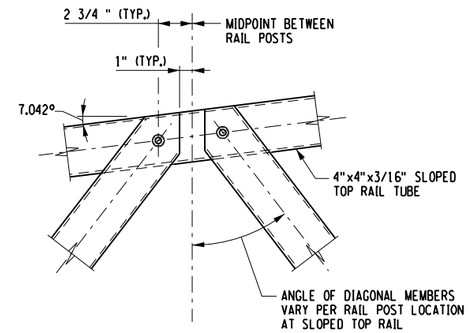
NOTE:
END CAPS FOR RAILINGS ARE TO BE USED ONLY WHERE THE RAIL TERMINATES AND AT THE TOPS OF ALL RAILING POSTS.



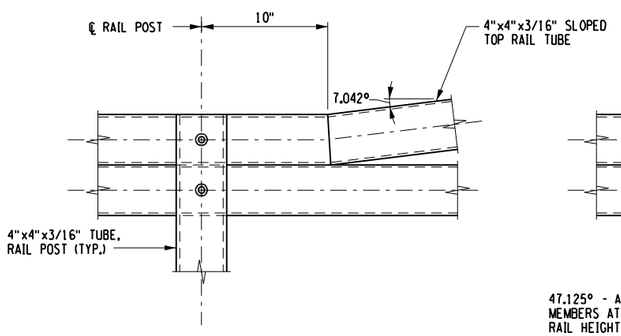
RAIL CONNECTION DETAIL 'A'
AT CENTERLINE PIER
SCALE: 1" = 1'-0"



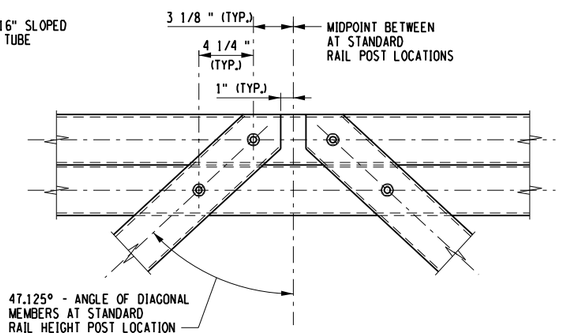
RAIL CONNECTION DETAIL 'B'
AT SLOPED TOP RAIL
SCALE: 1" = 1'-0"



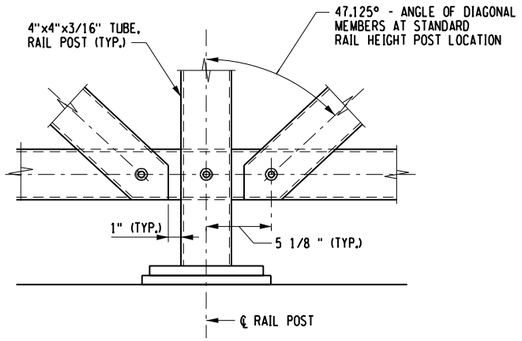
RAIL CONNECTION DETAIL 'C'
AT SLOPED TOP RAIL
SCALE: 1" = 1'-0"



RAIL CONNECTION DETAIL 'D'
AT TOP RAIL BREAK POINT
SCALE: 1" = 1'-0"



RAIL CONNECTION DETAIL 'E'
AT STANDARD TOP RAIL
SCALE: 1" = 1'-0"



RAIL CONNECTION DETAIL 'F'
AT STANDARD BOTTOM RAIL
SCALE: 1" = 1'-0"

NOTE:

FOR ADDITIONAL TYPICAL RAIL DETAILS AND NOTES, NOT SHOWN, SEE CURRENT N.Y.S.D.O.T. BD SHEETS.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DESIGNED BY
DRAFTED BY
CHECKED BY
CHECKED BY
IN CHARGE OF

NO. | DATE | BY | REVISION
XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BOICEVILLE BRIDGE OVER ESOPUS CREEK
ULSTER COUNTY

RAILING DETAILS - 2

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BV-27

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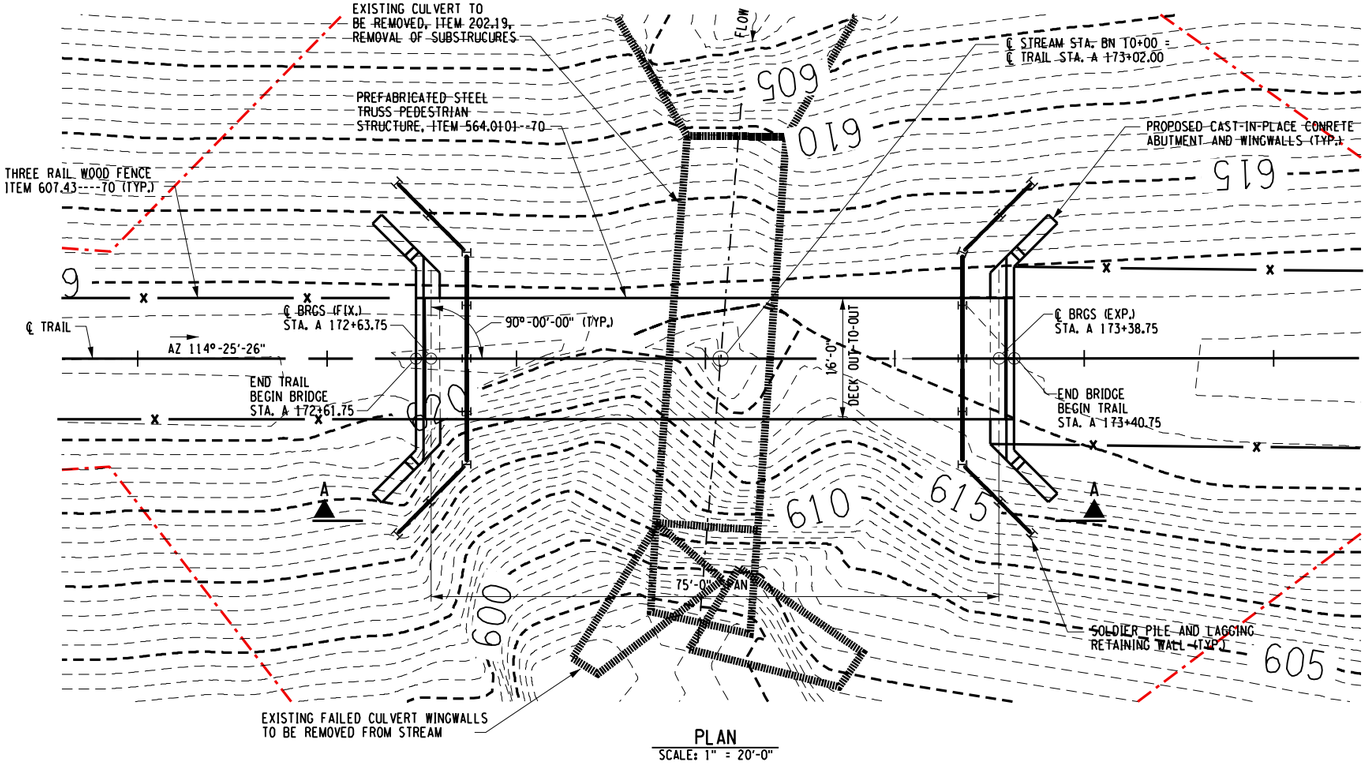
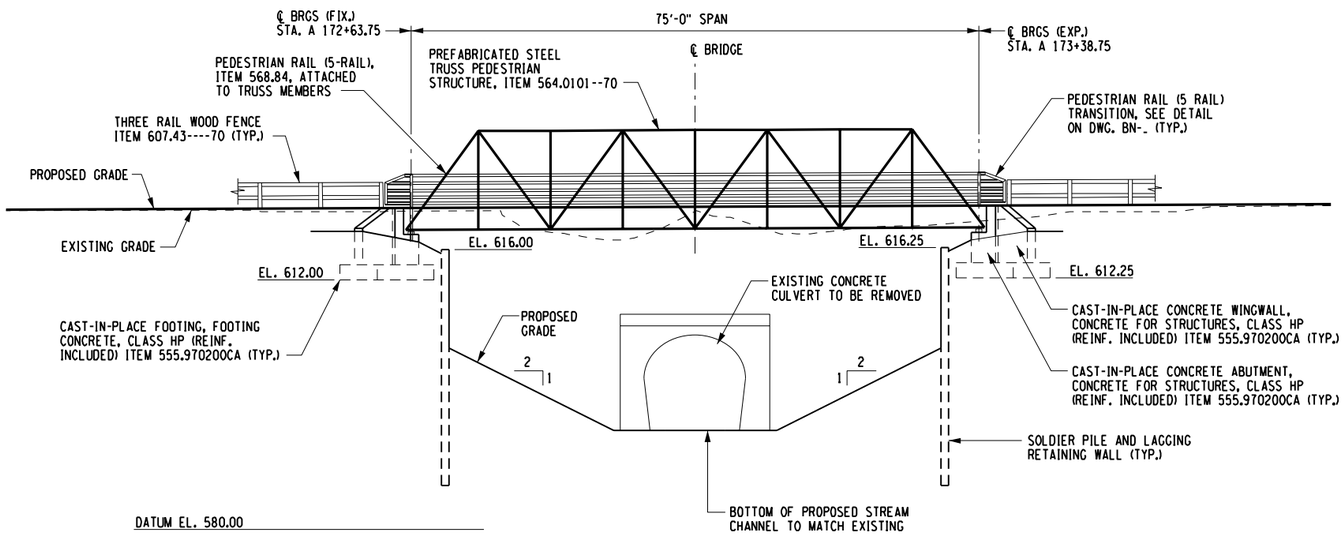


PLAN
SCALE: 1" = 20'-0"

PROPOSED SEQUENCE OF WORK:

1. INSTALL PERMANENT SOLIDER PILE AND LAGGING WALL, ITEMS 552.2201 AND 552.230301 ON BOTH SIDES OF THE EXISTING CULVERT
2. INSTALL COFFERDAM C1 AT NORTHEAST WINGWALL
3. REMOVE NORTHEAST WINGWALL AND EXCAVATE FOR INSTALLATION OF TEMPORARY CULVERT PIPE.
4. INSTALL 4 FT. DIAMETER TEMPORARY CULVERT PIPE. TEMPORARY MEDIUM STONE FILL, ITEM 620.04, SHALL BE PLACED AT THE END OF THE CULVERT PIPE AND SHALL BE TAPERED FROM THE DOWNSTREAM PIPE INVERT TO THE BASE OF THE STREAM
5. INSTALL COFFERDAM C2.
6. REMOVE COFFERDAM C1
7. INSTALL COFFERDAM C3 TO DIVERT ALL FLOWS THROUGH TEMPORARY CULVERT PIPE.
8. EXCAVATE AT 2H:1V SLOPE TO BASE OF LAGGING WALL.
9. REMOVE EXISTING CULVERT, TO INCLUDE FAILED DOWNSTREAM WINGWALLS CURRENTLY IN THE STREAM.
10. PLACE HEAVY STONE FILL, ITEM 620.05, ALONG STREAM BANKS AT BOTTOM OF STREAM ELEVATION TO 1' ABOVE ORDINARY HIGH WATER MARK.
11. INSTALL COFFERDAM C4 AND REMOVE TEMPORARY CULVERT PIPE. PLACE STONE FILL AS NECESSARY IN AREA OF TEMPORARY PIPE.
12. REMOVE COFFERDAM C4 AND RESTORE SITE DISTURBANCE.

LOAD RATING (LRFD)		
INVENTORY		
OPERATING		



ELEVATION A-A
SCALE: 1" = 20'-0"

NOTES:

1. SEE DWG. PL-24 FOR PROFILE INFORMATION.
2. SEE DWG. ESCP-24 FOR GRADING PLAN.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BUTTERNUT COVE
STRUCTURE REPLACEMENT
ULSTER COUNTY

BRIDGE PLAN AND ELEVATION

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BN-1

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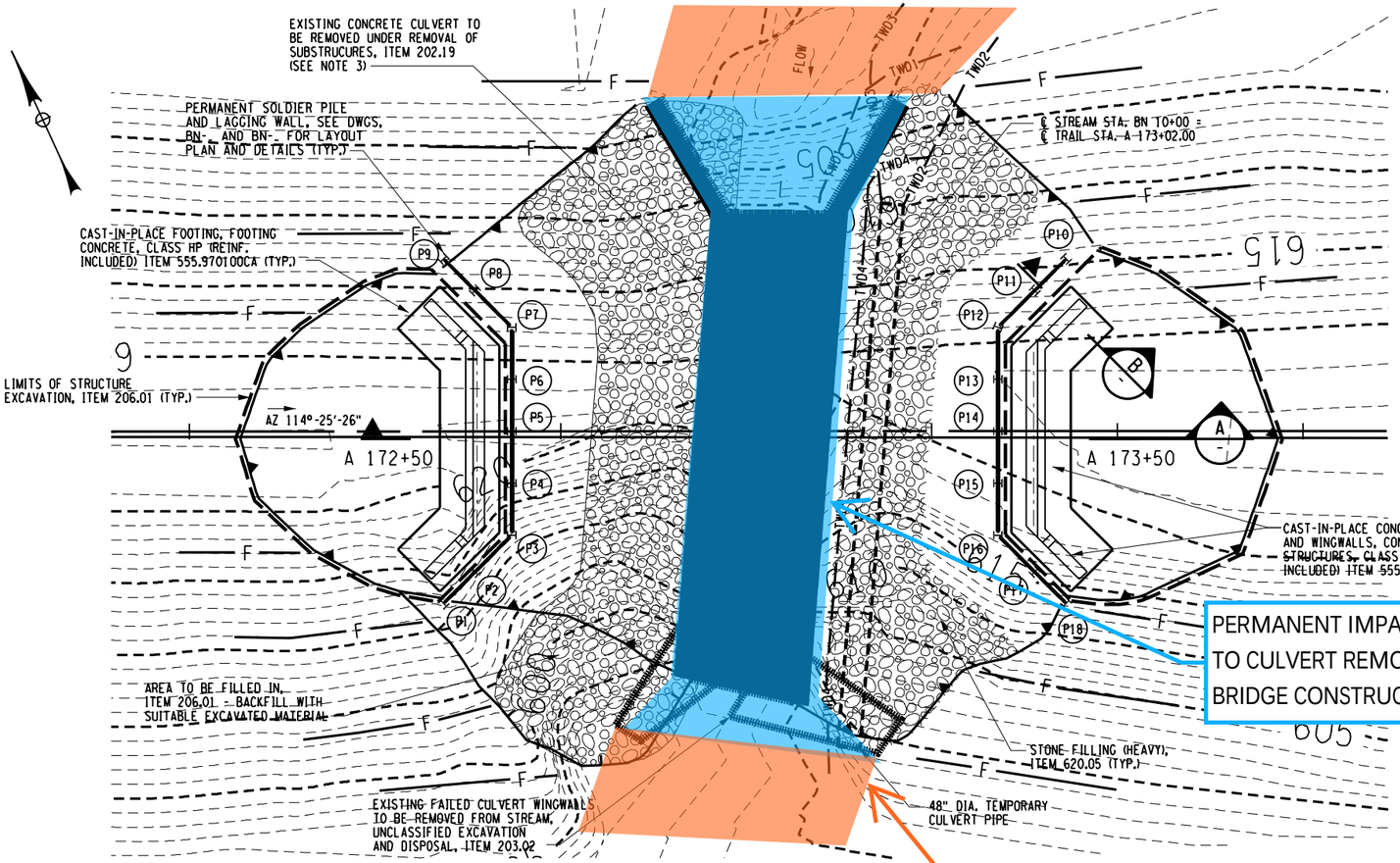
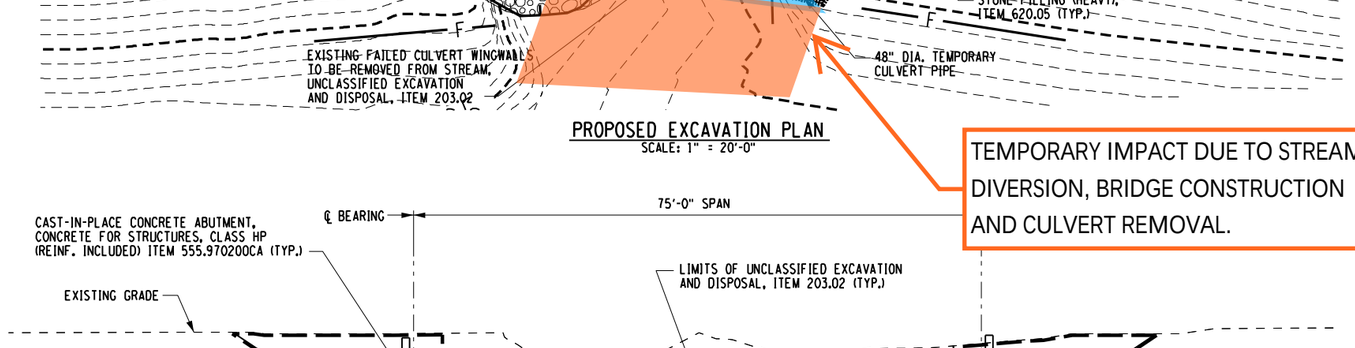


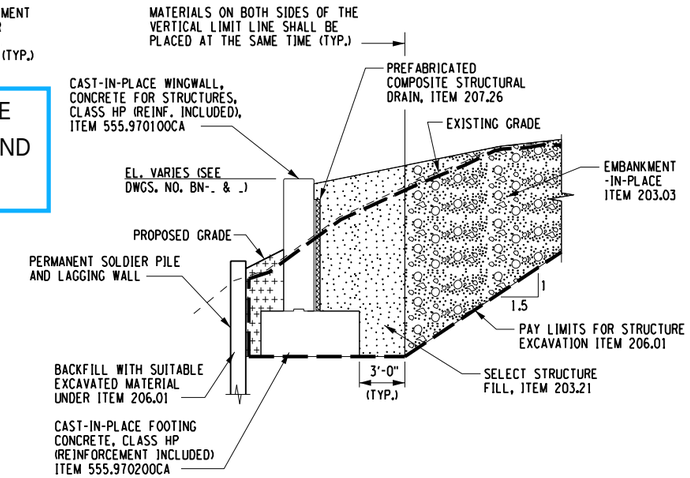
PROPOSED EXCAVATION PLAN
SCALE: 1" = 20'-0"

LEGEND

- REMOVAL OF SUBSTRUCTURE, ITEM 202.19
- STONE FILL (MEDIUM), ITEM 620.04
- SELECT STRUCTURE FILL, ITEM 203.21
- EMBANKMENT-IN-PLACE, ITEM 203.03
- BACKFILL WITH SUITABLE EXCAVATED MATERIAL UNDER ITEM 206.01
- LIMITS OF STRUCTURE EXCAVATION, ITEM 206.01
- TWD1 — TEMPORARY WATER DIVERSION STRUCTURE, ITEM 553.030001
- TWD2 — TEMPORARY WATER DIVERSION STRUCTURE, ITEM 553.030002
- F — FIBER LOGS, TYPE II, 12 INCH ITEM 209.2012--10
- P13 P14 — PERMANENT SOLDIER PILE AND LAGGING WALL, ITEMS 552.2103, 552.2203, AND 552.230301



PROPOSED EXCAVATION SECTION A-A
SCALE: 1" = 20'-0"



EXCAVATION SECTION B
N.T.S.
(N.E. WINGWALL SHOWN, REMAINING WINGWALLS SIMILAR)

NOTES:

1. SEE DWG. PL-24 FOR PROFILE INFORMATION.
2. SEE DWG. ESCP-24 FOR GRADING PLAN.
3. THE AREAS SURROUNDING THE CULVERT SHALL BE PROTECTED DURING CONCRETE REMOVALS BY THE INSTALLATION OF A CLASS B CONTAINMENT SYSTEM, ITEM 570.160001. DEBRIS FROM REMOVALS SHALL NOT BE ALLOWED TO ENTER THE AIR, WATER OR REMAIN ON SITE POST DEMOLITION OF THE CULVERT.

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BUTTERNUT COVE
STRUCTURE REPLACEMENT
ULSTER COUNTY

BRIDGE EXCAVATION PLAN AND SECTION

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING BN-2

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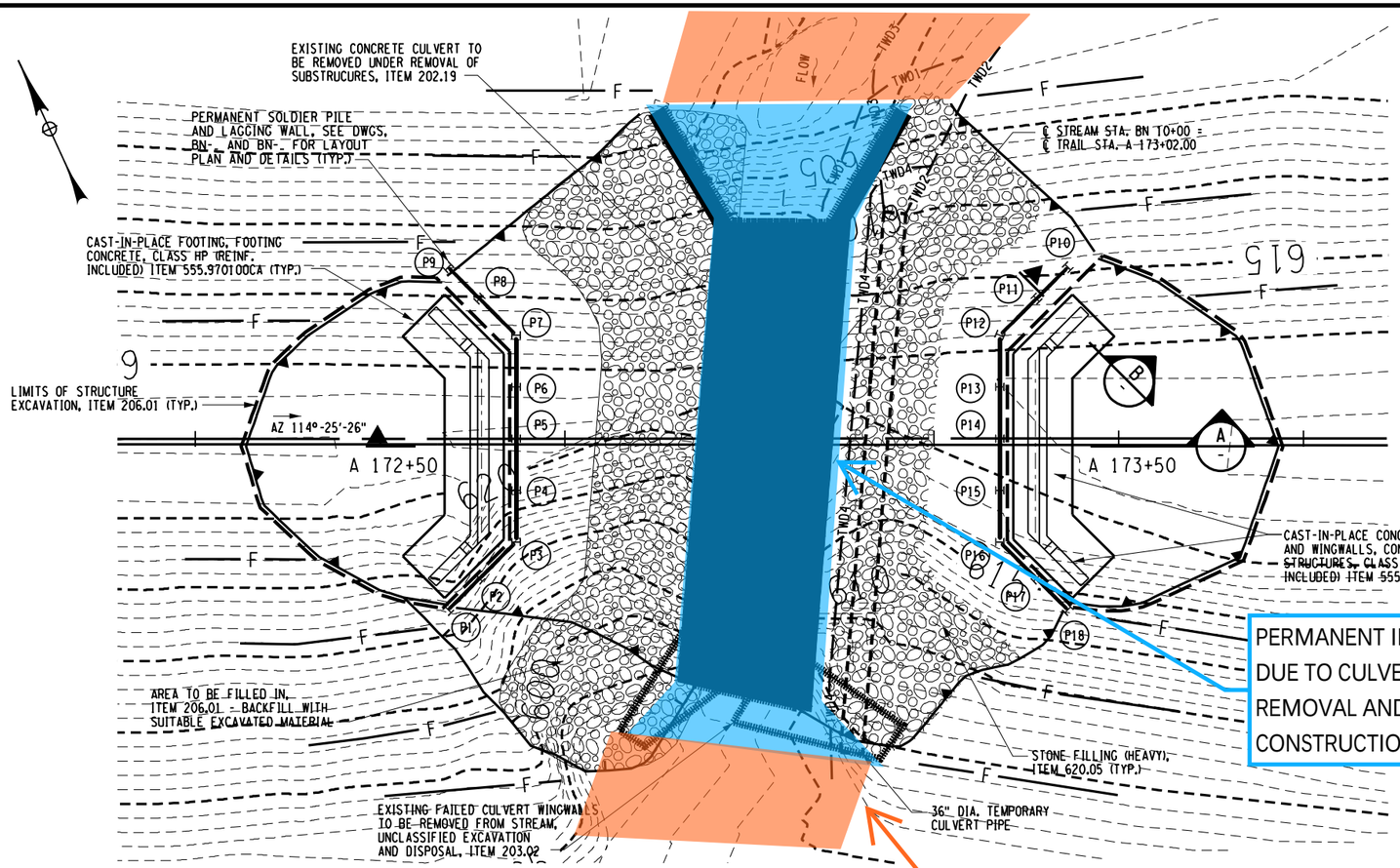
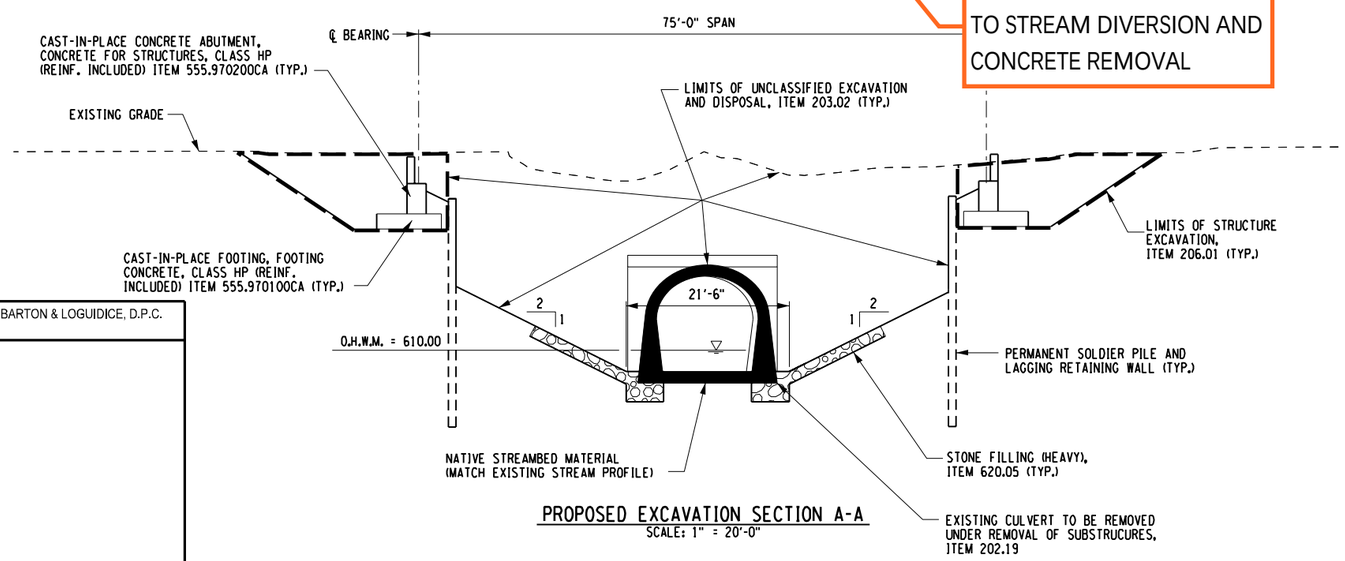


PROPOSED EXCAVATION PLAN
SCALE: 1" = 20'-0"

TEMPORARY IMPACT DUE TO STREAM DIVERSION AND CONCRETE REMOVAL



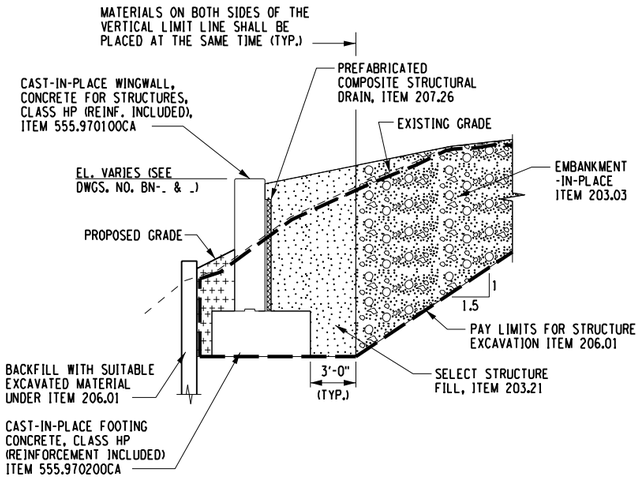
PROPOSED EXCAVATION SECTION A-A
SCALE: 1" = 20'-0"

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

LEGEND

- REMOVAL OF SUBSTRUCTURE, ITEM 202.19
- STONE FILL (MEDIUM), ITEM 620.04
- SELECT STRUCTURE FILL ITEM 203.21
- EMBANKMENT-IN-PLACE ITEM 203.03
- BACKFILL WITH SUITABLE EXCAVATED MATERIAL UNDER ITEM 206.01
- LIMITS OF STRUCTURE EXCAVATION, ITEM 206.01
- TWD1 — TEMPORARY WATER DIVERSION STRUCTURE, ITEM 553.030001
- TWD2 — TEMPORARY WATER DIVERSION STRUCTURE, ITEM 553.030002
- F — FIBER LOGS, TYPE II, 12 INCH ITEM 209.2012--10
- P13 P14 — PERMANENT SOLDIER PILE AND LAGGING WALL, ITEMS 552.2103, 552.2203, AND 552.230301

MATERIALS ON BOTH SIDES OF THE VERTICAL LIMIT LINE SHALL BE PLACED AT THE SAME TIME (TYP.)



EXCAVATION SECTION B
N.T.S.
(N.E. WINGWALL SHOWN, REMAINING WINGWALLS SIMILAR)

NOTES:

1. SEE DWG. PL-24 FOR PROFILE INFORMATION.
2. SEE DWG. ESCP-24 FOR GRADING PLAN.

SURVEY AND MAPPING PROVIDED BY:
BROOKS & BROOKS, PC
SURVEYING, PLANNING, GIS

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BUTTERNUT COVE
STRUCTURE REPLACEMENT
ULSTER COUNTY

BRIDGE EXCAVATION PLAN AND SECTION

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING BN-2

DESIGNED BY
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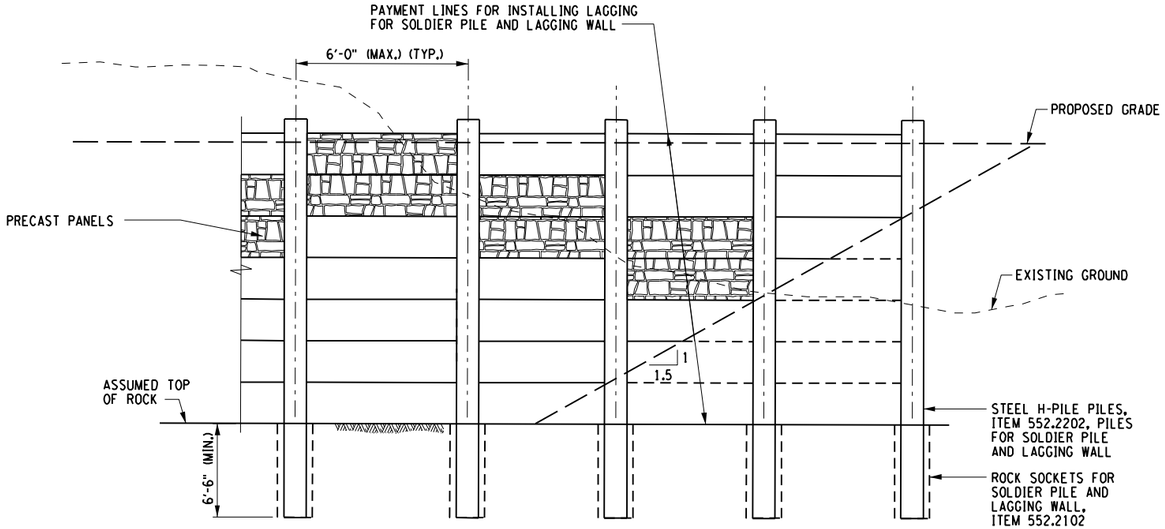
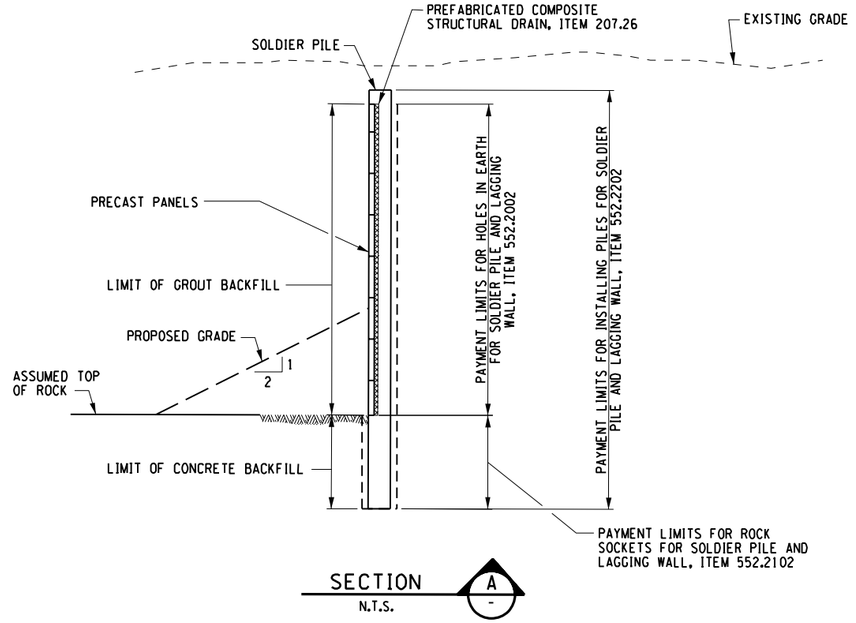


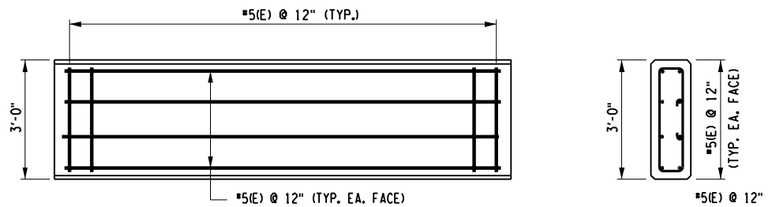
PARTIAL ELEVATION - SOLDIER PILE AND LAGGING WALL

N.T.S.



SECTION A

N.T.S.



ELEVATION

SECTION

PRECAST CONCRETE LAGGING DETAILS

N.T.S.

PRECAST PANEL NOTES:

1. CONTRACTOR SHALL VERIFY ALL FIELD ELEVATIONS AND DIMENSIONS PRIOR TO MANUFACTURING THE PRECAST PANELS.

2. CONTRACTOR MAY ADJUST THE HEIGHT OF THE PRECAST PANELS, WITH APPROVAL BY THE ENGINEER.

3. A WEDGE SHALL BE INSTALLED BEHIND EACH PANEL TO ENSURE THE PANEL IS TIGHT TO THE PILE FLANGE PRIOR TO SETTING THE NEXT PANEL.

NOTES:

1. THE SOLDIER PILE AND LAGGING WALL SHOWN WILL BE LEFT IN PLACE. USED MATERIAL IS NOT PERMITTED FOR ITEM 552.2203, INSTALLING SOLDIER PILES FOR SOLDIER PILE AND LAGGING WALL

2. PROVIDE SOLDIER PILE SECTIONS MEETING THE REQUIREMENTS OF ASTM 572, GRADE 50 STEEL.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING PILE TOP ELEVATIONS.

4. SEE DWG. BN-2 FOR SOLDIER PILE LOCATIONS.

PILE NUMBER	STATION	OFFSET (FEET)	PILE TOP ELEVATIONS (FEET)	ESTIMATED PILE TIP ELEV. (FEET)	ESTIMATED PILE LENGTH (FEET)	MINIMUM PILE SECTION	AS-BUILT PILE LENGTH (FEET)
P1	172+59.23	24.44'; LT.					
P2	172+63.47	18.96'; LT.					
P3	172+68.42	12.00'; LT.					
P4	172+68.42	6.00';LT.					
P5	172+68.42	0.00'					
P6	172+68.42	6.00';RT.					
P7	172+68.42	12.00'; RT.					
P8	172+63.47	18.96'; RT.					
P9	172+59.23	24.44'; RT.					
P10	A 173+43.10	24.44'; LT.					
P11	A 173+38.86	18.96'; LT.					
P12	A 173+33.92	12.00'; LT.					
P13	A 173+33.92	6.00';LT.					
P14	A 173+33.92	0.00'					
P15	A 173+33.92	6.00';RT.					
P16	A 173+33.92	12.00'; RT.					
P17	A 173+38.86	18.96'; RT.					
P18	A 173+43.10	24.44'; RT.					

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BUTTERNUT COVE
STRUCTURE REPLACEMENT
ULSTER COUNTY

SOLDIER PILE AND LAGGING WALL DETAILS

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BN-3

IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____

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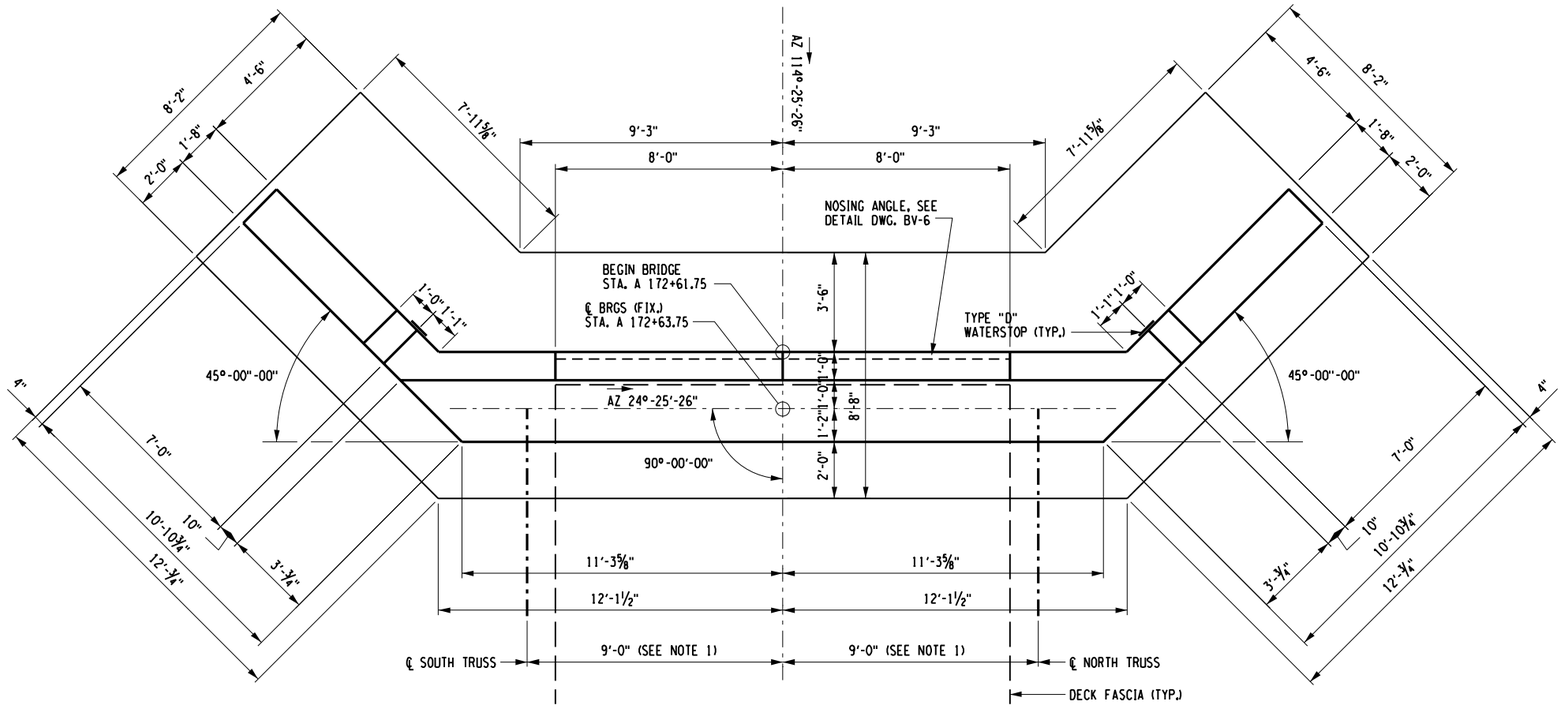
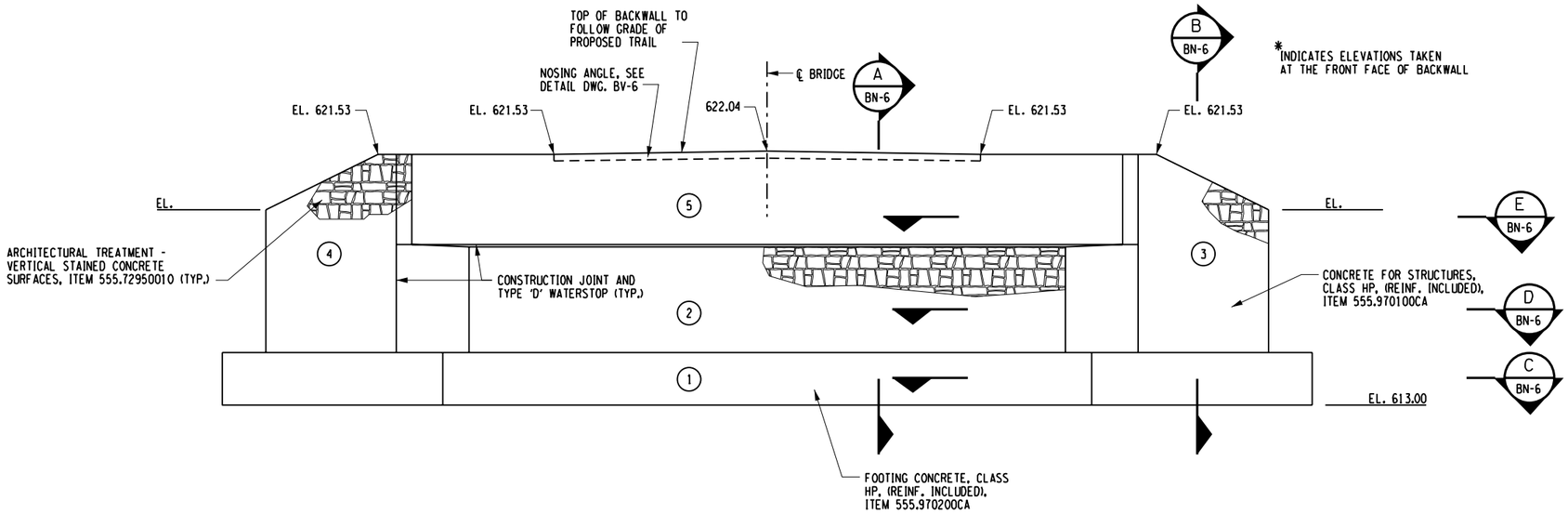
NOTES:

1. THE DISTANCE BETWEEN THE ℄ OF TRUSS BEARINGS SHALL BE ADJUSTED AS NECESSARY BASED UPON THE ACTUAL TRUSS SUPPLIED BY THE FABRICATOR. IF SUPPLIED TRUSS DISTANCE BETWEEN ℄ BEARINGS IS GREATER THAN SHOWN, THESE DIMENSIONS SHALL BE ADJUSTED ACCORDINGLY.
2. FOR KEYWAY AND WATERSTOP DETAILS, SEE DRAWING BN-7.
3. ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED 1", UNLESS NOTED OTHERWISE.
4. ELEVATIONS ARE BASED ON THE ASSUMED TOP OF FLOORBEAM ELEVATION AND THE ASSUMED DIMENSION OF ----- MEASURED FROM THE TOP OF THE FLOORBEAM TO THE BOTTOM OF THE TRUSS SHOE AT ℄ BEARINGS. ELEVATIONS SHALL BE MODIFIED AS NECESSARY, WITH APPROVAL BY THE ENGINEER, BASED UPON THE ACTUAL TRUSS PROVIDED BY THE TRUSS MANUFACTURER.

CONCRETE TABLE - WEST ABUT.		
PLACEMENT	QUANTITY (CY)	ITEM NO.
1	X	555.970200CA
2	X	555.970100CA
3	X	555.970100CA
4	X	555.970100CA
5	X	555.970100CA



WEST ABUTMENT PLAN
SCALE: ⅜" = 1'-0"



WEST ABUTMENT ELEVATION
SCALE: ⅜" = 1'-0"

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

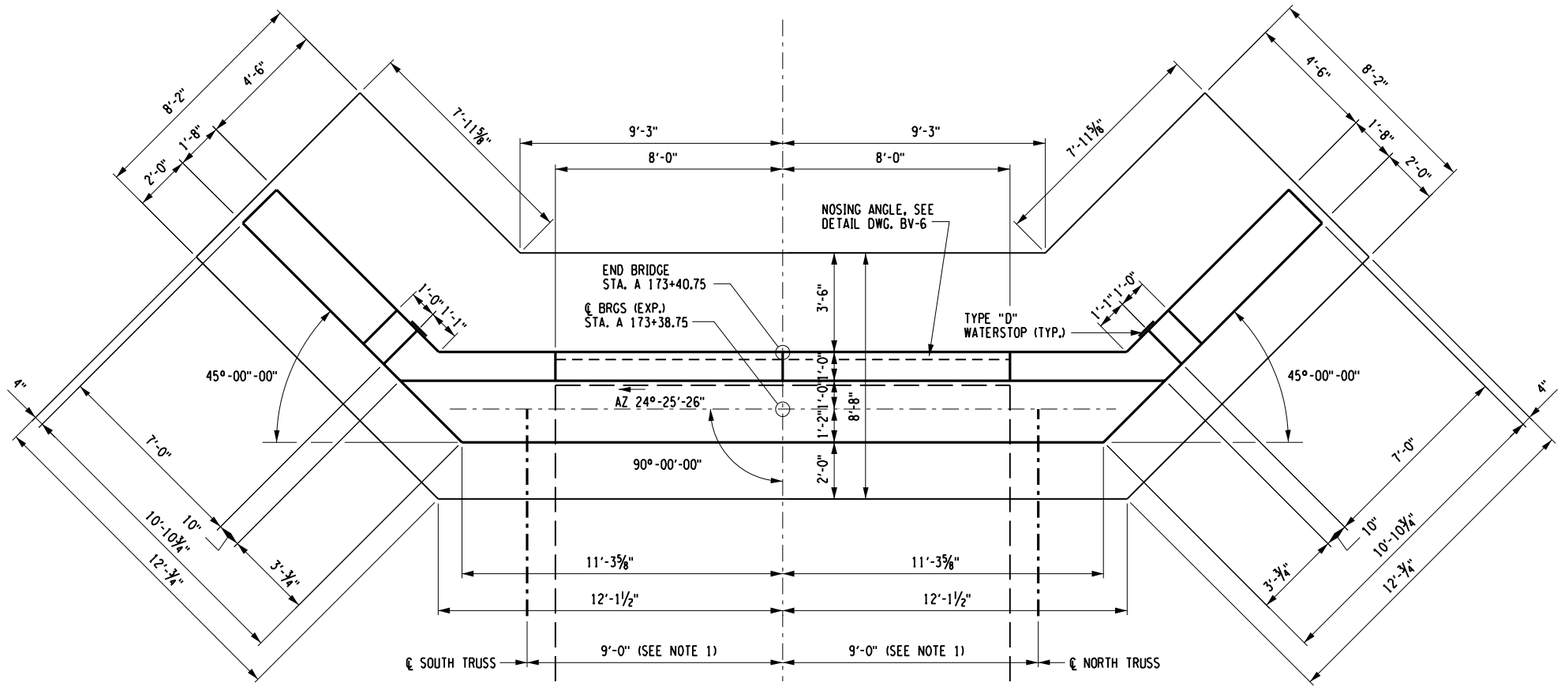
ASHOKAN RAIL TRAIL
BUTTERNUT COVE
STRUCTURE REPLACEMENT
ULSTER COUNTY

WEST ABUTMENT PLAN AND ELEVATION

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING BN-4

NOTES:

1. THE DISTANCE BETWEEN THE ℄ OF TRUSS BEARINGS SHALL BE ADJUSTED AS NECESSARY BASED UPON THE ACTUAL TRUSS SUPPLIED BY THE FABRICATOR. IF SUPPLIED TRUSS DISTANCE BETWEEN ℄ BEARINGS IS GREATER THAN SHOWN, THESE DIMENSIONS SHALL BE ADJUSTED ACCORDINGLY.
2. FOR KEYWAY AND WATERSTOP DETAILS, SEE DRAWING BN-7.
3. ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED 1", UNLESS NOTED OTHERWISE.
4. ELEVATIONS ARE BASED ON THE ASSUMED TOP OF FLOORBEAM ELEVATION AND THE ASSUMED DIMENSION OF _____ MEASURED FROM THE TOP OF THE FLOORBEAM TO THE BOTTOM OF THE TRUSS SHOE AT ℄ BEARINGS. ELEVATIONS SHALL BE MODIFIED AS NECESSARY, WITH APPROVAL BY THE ENGINEER, BASED UPON THE ACTUAL TRUSS PROVIDED BY THE TRUSS MANUFACTURER.



EAST ABUTMENT PLAN
SCALE: ⅜" = 1'-0"

CONCRETE TABLE - EAST ABUT.		
PLACEMENT	QUANTITY (CY)	ITEM NO.
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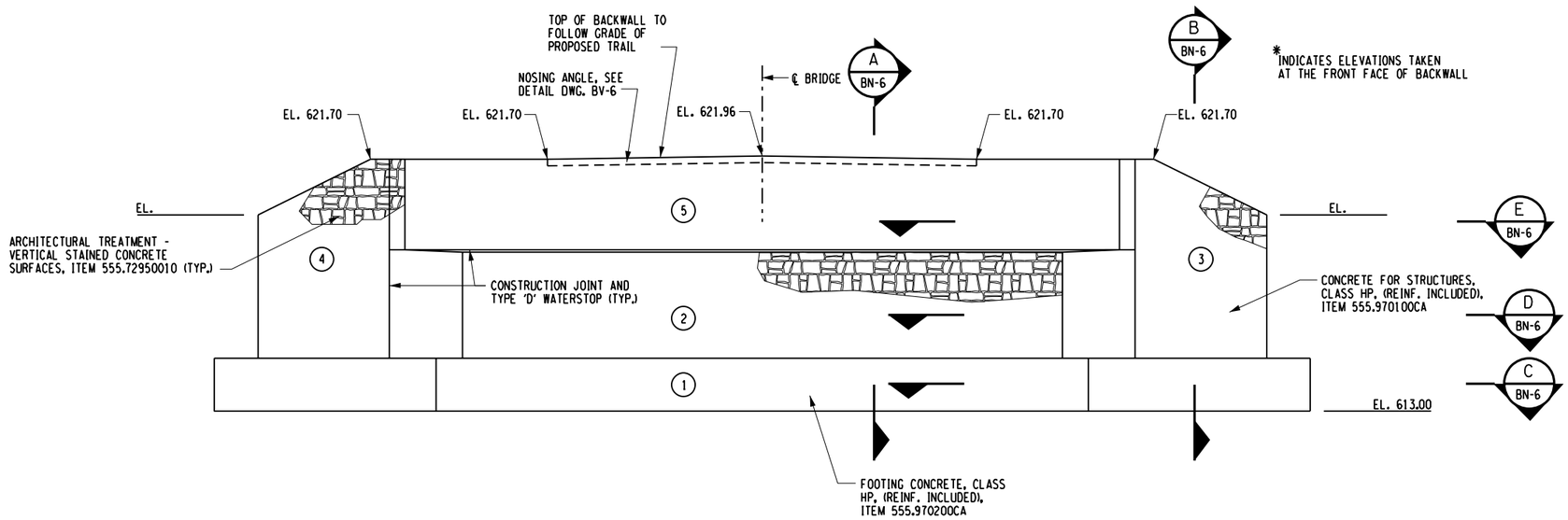
2	X	555.970100CA
3	X	555.970100CA
4	X	555.970100CA
5	X	555.970100CA



EAST ABUTMENT ELEVATION
SCALE: ⅜" = 1'-0"

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

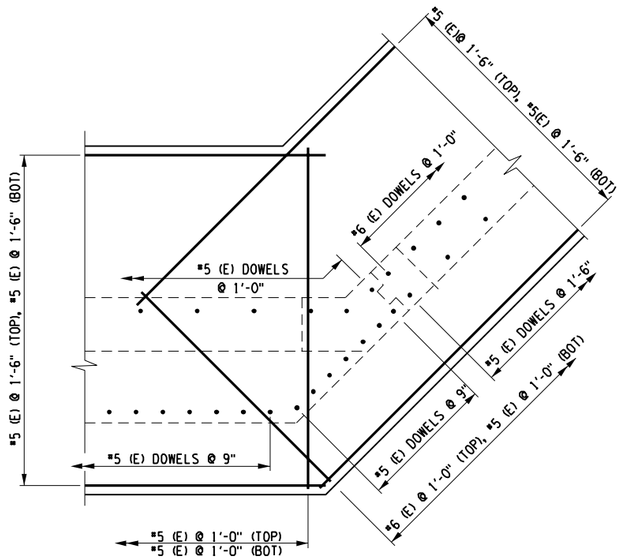
Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BUTTERNUT COVE
STRUCTURE REPLACEMENT
ULSTER COUNTY

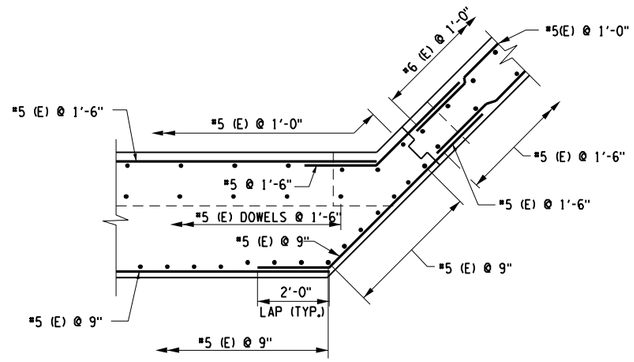
EAST ABUTMENT PLAN AND ELEVATION

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BN-5

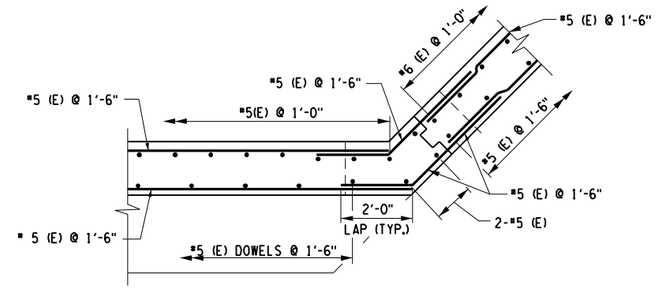
DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____
IN CHARGE OF ____ CHECKED BY ____ DRAFTED BY ____



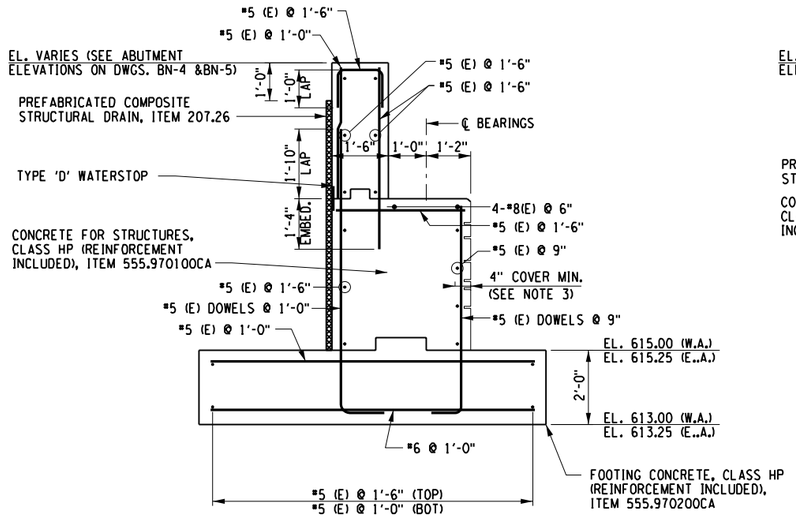
TYPICAL CORNER SECTION (C / BN-4, C / BN-5)
(N.W. CORNER SHOWN, S.W. SIMILAR)
N.T.S.



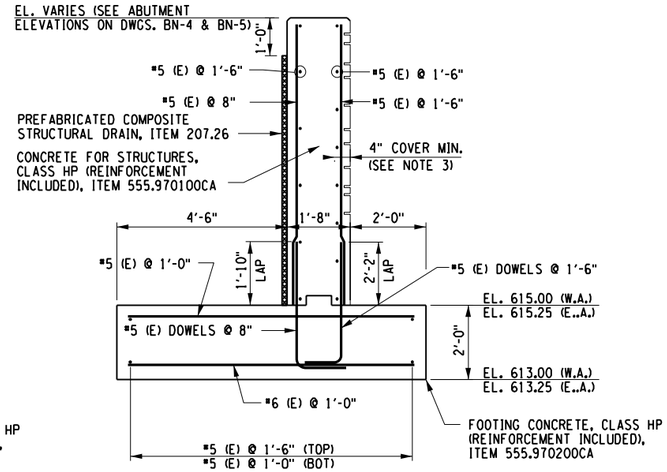
TYPICAL CORNER SECTION (D / BN-4, D / BN-5)
(N.W. CORNER SHOWN, S.W. SIMILAR)
N.T.S.



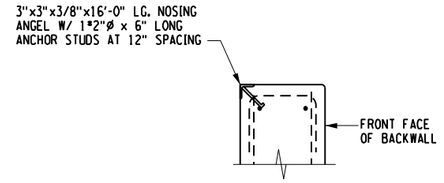
TYPICAL CORNER SECTION (E / BN-4, E / BN-5)
(N.W. CORNER SHOWN, S.W. SIMILAR)
N.T.S.



TYPICAL ABUTMENT SECTION (A / BN-4, A / BN-5)
SCALE: 1/4" = 1'-0"



TYPICAL WINGWALL SECTION (B / BN-4, B / BN-5)
SCALE: 1/4" = 1'-0"



BACKWALL NOSING ANGLE DETAIL
N.T.S.

NOTES:

1. ALL STEEL REINFORCING BARS SHALL BE ASTM A615, GRADE 60, UNLESS OTHERWISE NOTED.
2. COVER FOR STEEL REINFORCEMENT IN FOOTING SHALL BE 3 INCHES UNLESS OTHERWISE NOTED. ALL OTHER COVER SHALL BE 2 INCHES UNLESS OTHERWISE NOTED.
3. 4" REINFORCEMENT COVER BASED ON A 2" REVEAL OF THE FORMLINER PATTERN. IF THE ACTUAL FORMLINER USED HAS A MAXIMUM REVEAL GREATER THAN 2", THE CONTRACTOR SHALL ADJUST THE WALL THICKNESS ACCORDINGLY TO MAINTAIN A MINIMUM REINFORCEMENT COVER OF 2" TO THE FORMLINER REVEAL.
4. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1 INCH UNLESS OTHERWISE NOTED.
5. (E) DENOTES EPOXY COATED BARS.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BUTTERNUT COVE
STRUCTURE REPLACEMENT
ULSTER COUNTY

TYPICAL REINFORCEMENT DETAILS - 1

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BN-6

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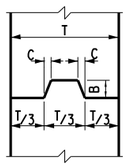
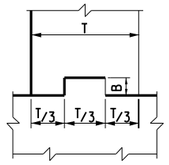
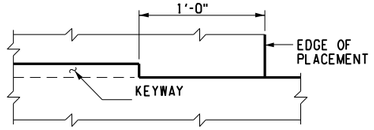
IN CHARGE OF | DESIGNED BY | DRAFTED BY | CHECKED BY | CHECKED BY



VERTICAL



HORIZONTAL



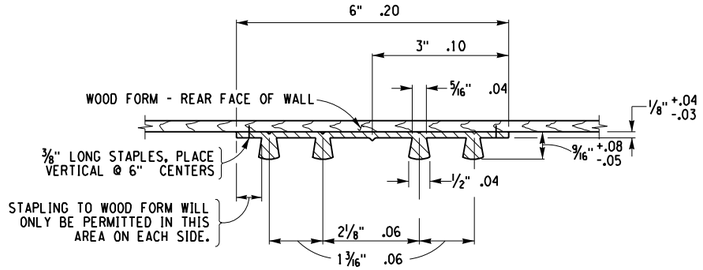
HORIZONTAL KEYWAY LOCATION

CONSTRUCTION & CONTRACTION JOINTS		
C	B	T/3
3/16"	1 1/2"	0 TO 6"
3/8"	3 1/2"	6" TO 10"
3/4"	5 1/2"	10" AND OVER

EXPANSION JOINTS		
C	B	T/3
3/8"	3 1/2"	0 TO 10"
3/4"	5 1/2"	10" AND OVER

KEYWAY DETAILS
NTS

NOTE:
REINFORCEMENT AND WATERSTOPS
NOT SHOWN FOR CLARITY.



TYPE D WATERSTOP
NOT TO SCALE

NOTES:

HOLES MUST NOT BE MADE IN WATERSTOP FOR ANY PURPOSE EXCEPT AS REQUIRED FOR STAPLING TO FORMS.

TYPE D WATERSTOP SHALL BE LIGHT GRAY IN COLOR.

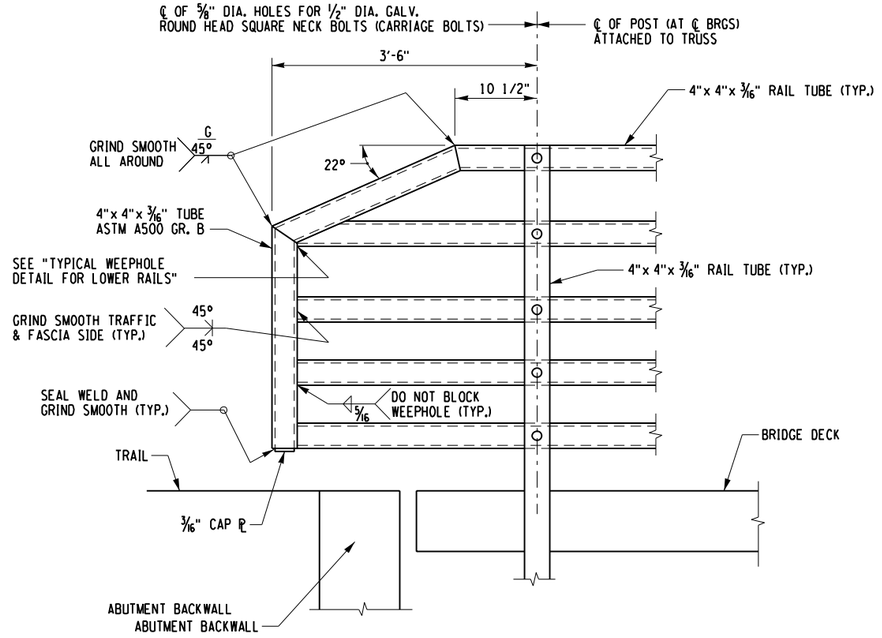
THE COST OF FURNISHING AND PLACING WATERSTOPS SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE CONCRETE ITEMS.

FIELD SPLICES SHOULD BE AVOIDED IF POSSIBLE, HOWEVER, HEAT WELDED BUTT SPLICES WILL BE PERMITTED ON LONG STRAIGHT RUNS (GENERALLY IN EXCESS OF 50 FEET) AT POINTS APPROVED BY THE ENGINEER.

WATERSTOP SHALL BE SHIPPED IN STRAIGHT SECTIONS HAVING A MINIMUM LENGTH OF 10 FEET UNLESS SHORTER LENGTHS ARE REQUIRED.

PREMOULDED RESILIENT JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF N.Y.S. STANDARD SPECIFICATION SUBSECTION 705-07.

PVC USED IN WATERSTOPS SHALL CONFORM TO THE REQUIREMENTS OF N.Y.S. STANDARD SPECIFICATIONS SUBSECTION 705-11.



TYPICAL RAIL END ELEVATION
N.T.S.

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BUTTERNUT COVE
STRUCTURE REPLACEMENT
ULSTER COUNTY

MICELLANEOUS DETAILS

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BN-7

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____

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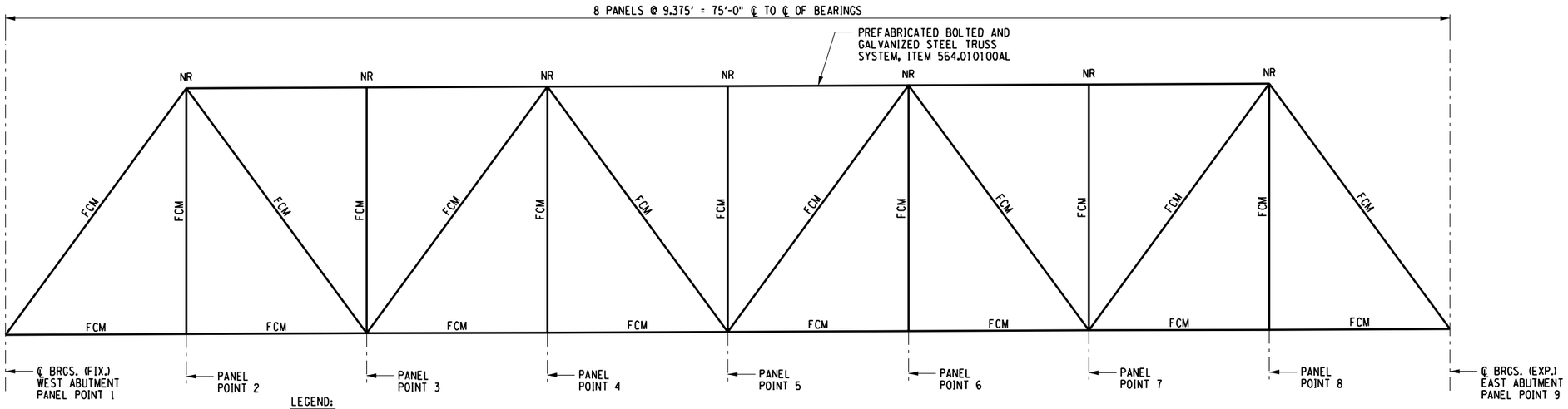


LEGEND:

FCM - INDICATES FRACTURE CRITICAL MEMBER

NR - INDICATES NON-REDUNDANT MEMBER

TRUSS ELEVATION TYPICAL

N.T.S.

HAUNCH TABLE		CL OF BRGS. SOUTH ABUT.	PANEL POINT 2	PANEL POINT 3	PANEL POINT 4	PANEL POINT 5	PANEL POINT 6	PANEL POINT 7	PANEL POINT 8	PANEL POINT 9	CL OF BRGS. NORTH ABUT.
STRINGER 1	(A) REQ'D BOTTOM OF SLAB ELEVATION										
	(B) TOP OF STEEL EL. (FIELD MEASURE)										
	(C) = (A) - (B)										
	(D) CONCRETE + S.D.L. DEFLECTION (ft)										
	(E) DEPTH OF HAUNCH REQ'D = (C) + (D) (ft)										
STRINGER 2	(A) REQ'D BOTTOM OF SLAB ELEVATION										
	(B) TOP OF STEEL EL. (FIELD MEASURE)										
	(C) = (A) - (B)										
	(D) CONCRETE + S.D.L. DEFLECTION (ft)										
	(E) DEPTH OF HAUNCH REQ'D = (C) + (D) (ft)										
STRINGER 3	(A) REQ'D BOTTOM OF SLAB ELEVATION										
	(B) TOP OF STEEL EL. (FIELD MEASURE)										
	(C) = (A) - (B)										
	(D) CONCRETE + S.D.L. DEFLECTION (ft)										
	(E) DEPTH OF HAUNCH REQ'D = (C) + (D) (ft)										
STRINGER 4	(A) REQ'D BOTTOM OF SLAB ELEVATION										
	(B) TOP OF STEEL EL. (FIELD MEASURE)										
	(C) = (A) - (B)										
	(D) CONCRETE + S.D.L. DEFLECTION (ft)										
	(E) DEPTH OF HAUNCH REQ'D = (C) + (D) (ft)										

TRUSS DESIGN LOADS (PER TRUSS):

THE TRUSS FABRICATOR SHALL PROVIDE A STEEL SUPERSTRUCTURE CAPABLE OF SUPPORTING THE FOLLOWING UNFACTORED LOADS:

LIVE LOAD = 90 PSF AND H-20
DEAD LOAD - DECK = ----- LBS/LF
TRUSS = -----LBS/LF (ASSUMED)

SUPERIMPOSED DEAD LOAD = ---- LBS/LF
FUTURE WEARING SURFACE = ---- LBS/LF

HORIZONTAL WIND LOADING SHALL BE DETERMINED BY THE TRUSS MANUFACTURER BASED ON ACTUAL TRUSS DIMENSIONS AND SHALL BE IN ACCORDANCE WITH THE LRFD CODE.

TRUSS NOTES:

TRUSSES SHALL BE FABRICATED USING A709 GR50 STEEL WITH A GALVANIZING COATING CONFORMING TO STANDARD SPECIFICATION 719-01. COST FOR GALVANIZING SHALL BE INCLUDED IN THE PRICE BID FOR STRUCTURAL STEEL, ITEM 564.0101001AL.

TRUSS PANEL SPACING SHALL BE LESS THAN 12'-0".

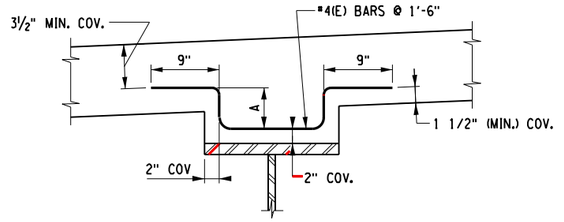
THE BRIDGE GEOMETRY IS BASED UPON A 1'-10" DIMENSION MEASURED FROM THE TOP FLOORBEAM TO THE BOTTOM OF TRUSS SHOE.

THE VALUES FOR "D" (CONCRETE + S.D.L. DEFLECTION) IN THE HAUNCH TABLE SHALL BE PROVIDED BY THE TRUSS FABRICATOR.

TRUSS FABRICATION SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF SECTION 9 OF THE CURRENT EDITION OF THE NYS STEEL CONSTRUCTION MANUAL.

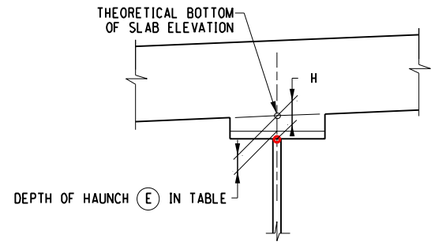
STEEL TRUSS SUPERSTRUCTURE CAMBER SHALL BE LIMITED TO 2" MAXIMUM AT MID-SPAN.

SHOULD THE FABRICATOR ELECT TO USE A TRUSS WITH DIFFERENT STRINGER SPACING THAN SHOWN ON BN-9, THE VALUES FOR "A" IN THE HAUNCH TABLE SHOWN ABOVE, MAY NEED TO RECALULATED.



REINFORCED GIRDER HAUNCH DETAIL

NOT TO SCALE



GIRDER HAUNCH DETAIL

NOT TO SCALE

HAUNCH NOTES:

1. HAUNCH REINFORCEMENT SHALL BE USED WHERE HAUNCH EXCEEDS 4".
2. THE DIMENSION NOTED AS "A" SHALL BE SUCH THAT THE SAME BAR CAN BE USED WHEN THE HAUNCH DEPTH VARIES.
3. PAYMENT FOR ANY HAUNCH REINFORCEMENT SHALL BE INCLUDED IN ITEM 557.0103.
4. FOR HAUNCH REINFORCEMENT ESTIMATING PURPOSES, THE DESIGN HAUNCH HEIGHTS ARE GIVEN IN THE TABLE BELOW.

DESIGN HAUNCH HEIGHT	
STRINGER	DESIGN HEIGHT (H)
S1	X
S2	X
S3	X
S4	X

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

IN CHARGE OF ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____

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NO.	DATE	BY	REVISION

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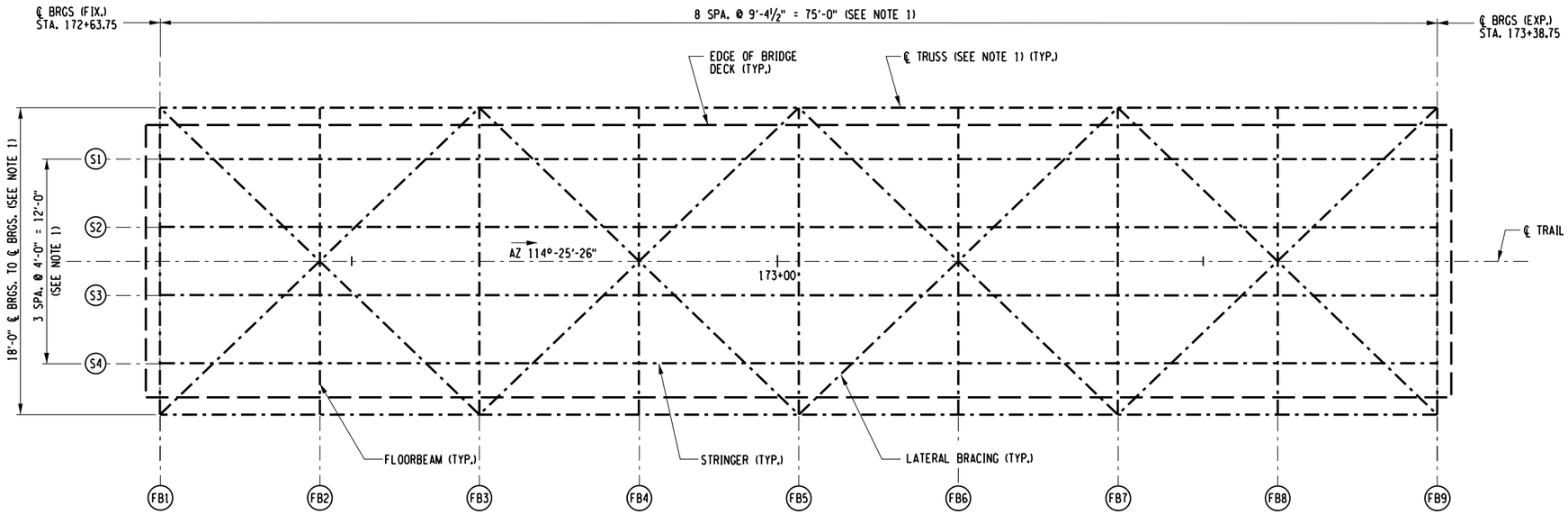
Barton & Loguidice, D.P.C.

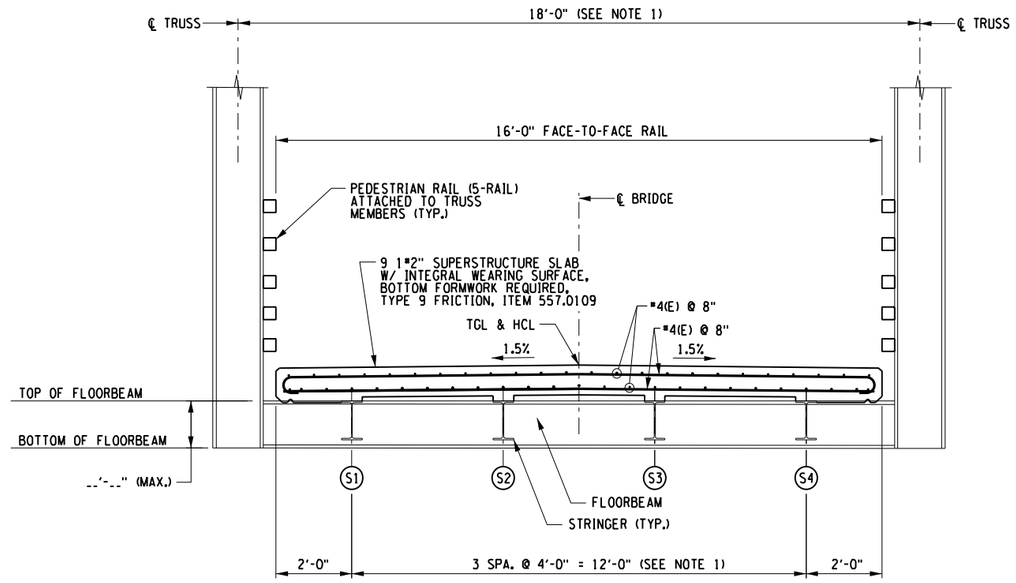
ASHOKAN RAIL TRAIL
BUTTERNUT COVE
STRUCTURE REPLACEMENT
ULSTER COUNTY

TRUSS DETAILS

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BN-8



FRAMING PLAN
SCALE: 1/8" = 1'-0"



TRANSVERSE BRIDGE SECTION
SCALE: 1/4" = 1'-0"

NOTES:

1. THESE DIMENSIONS SHALL BE ADJUSTED AS NECESSARY BASED UPON THE ACTUAL TRUSS SUPPLIED BY THE FABRICATOR.
2. SEE ADDITONAL TRUSS NOTES ON DWG. BN-8 AND ADDITIONAL SUPERSTUCTURE NOTES ON DWG. BGN-1.
3. DECK REINFORCEMENT DESIGN IS BASED ON THE TRUSS SYSTEM CONFIGURATION SHOWN. ALTERATIONS TO THE TRUSS CONFIGURATION, INCLUDING, BUT NOT LIMITED TO, STRINGER SPACING AND OVERHANG WIDTH, MAY RESULT IN THE NEED FOR THE DECK REINFORCEMENT TO BE RE-DESIGNED. IF NECESSARY, THE DECK RE-DESIGN SHALL BE COMPLETED AND STAMPED BY A NYS PROFESSIONAL ENGINEER AT THE EXPENSE OF THE CONTRACTOR.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DESIGNED BY
DRAFTED BY
CHECKED BY
CHECKED BY
IN CHARGE OF

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NO.	DATE	BY	REVISION

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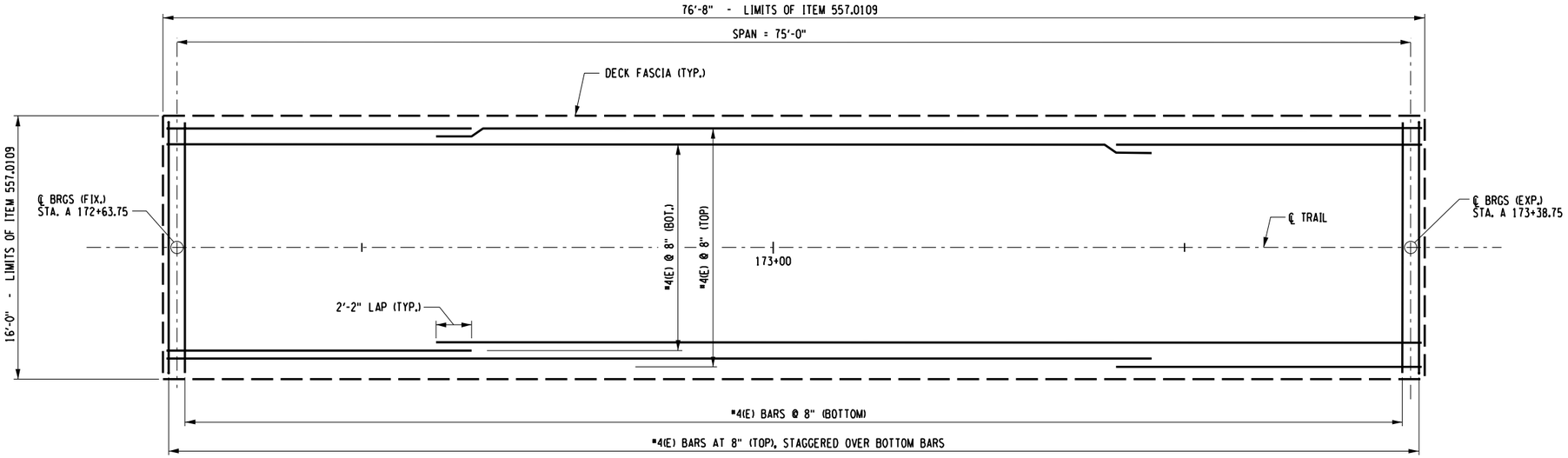
Barton & Loguidice, D.P.C.

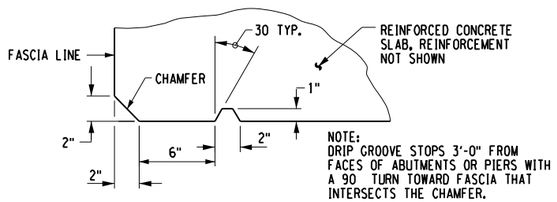
ASHOKAN RAIL TRAIL
BUTTERNUT COVE
STRUCTURE REPLACEMENT
ULSTER COUNTY

FRAMING PLAN AND TRANSVERSE SECTION

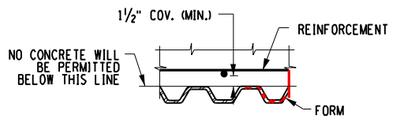
SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BN-9



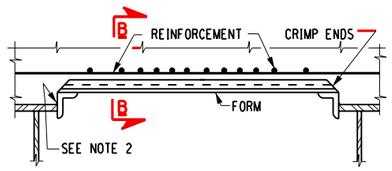
DECK REINFORCEMENT PLAN
SCALE: 1/8" = 1'-0"



DRIP GROOVE DETAIL
N.T.S.



SECTION B-B

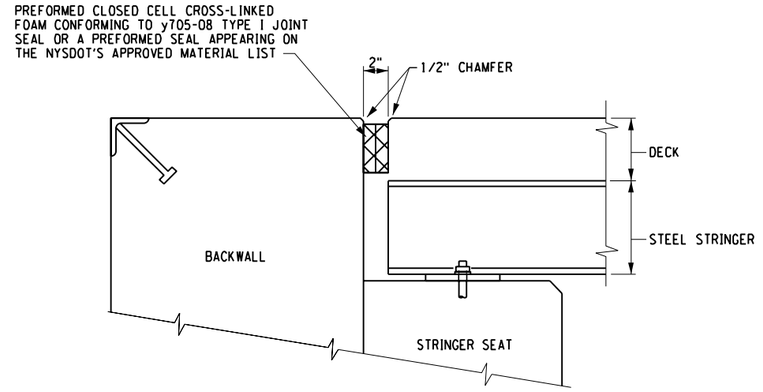


PERMANENT CORRUGATED METAL FORM DETAIL
NOT TO SCALE

NOTES:

FORM UNIT NOTES:

1. THE COST OF THE FORMING SYSTEM SHOWN ON THIS DRAWING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR SUPERSTRUCTURE SLAB CONCRETE ITEM.
2. TACK WELDS SHALL BE ALLOWED IN THE COMPRESSION AREA OF THE STRINGER'S TOP FLANGE ONLY. FOR CONTINUOUS STRUCTURES, SEE STRINGER DETAILS FOR LIMITS OF TENSION ZONES FOR THE TOP FLANGE. WELDING SHALL CONFORM TO SECTION 7 OF THE N.Y.S. STEEL CONSTRUCTION MANUAL. (3/16" DIA. E7018 OR E8018-C3 ELECTRODES, PROPERLY CONDITIONED, SHALL BE USED.)
3. THE SUPPORT ANGLES AND/OR ZEES SHALL BE GALVANIZED IN ACCORDANCE WITH MATERIAL SPECIFICATION 719-01.



END OF DECK DETAIL
N.T.S.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BUTTERNUT COVE
STRUCTURE REPLACEMENT
ULSTER COUNTY

DECK REINFORCEMENT PLAN AND DETAILS

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BN-10

DESIGNED BY
DRAFTED BY
CHECKED BY
CHECKED BY
IN CHARGE OF

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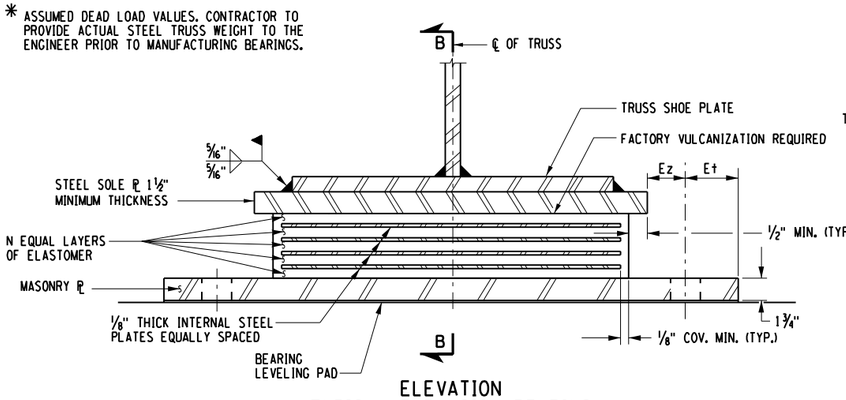
EXPANSION ELASTOMERIC BEARING (TYPE E.B.) TABLE

LOCATION	ITEM NO.	QUANTITY REQUIRED	DL + SDL (Kips)	LL W/O IMP. (Kips)	TOTAL DESIGN REACTION (Kips)	SHAPE FACTOR	ELASTOMER LAYERS					hrt	COMP. AREA (sq. in)	SHEAR AREA (sq. in)	MASONRY PLATE								ANCHOR BOLTS		WELD SIZE	WASHER PLATE		SOLE PLATE				BRG. H
							THK/LAYER	N LAYERS	L	W	D				Wm	Lm	Tm	Et	El	Ez	Am	Bm	DIA.	STUDS/ BRG.		AWp	BWp	Ws	Ls	T1	T2	
E. ABUT.																																

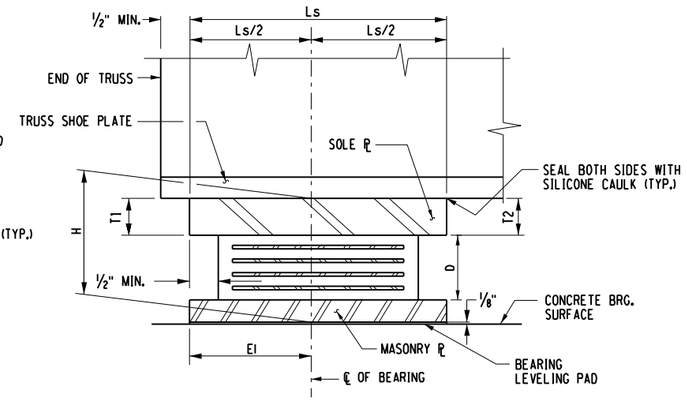
TABLE DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

T2 IS UPSTATION OF T1

* ASSUMED DEAD LOAD VALUES. CONTRACTOR TO PROVIDE ACTUAL STEEL TRUSS WEIGHT TO THE ENGINEER PRIOR TO MANUFACTURING BEARINGS.



ELEVATION
TYPICAL EXPANSION BEARING
N.T.S.



SECTION B-B
N.T.S.

** BEARING SOLE PLATE IS SIZED BASED ON THE BEARING DIMENSIONS SHOWN AND ASSUMED TRUSS SHOE PLATE DIMENSIONS (LENGTH & WIDTH) OF 14" (MIN) AND 16" (MAX). IF THE ACTUAL TRUSS SHOE PLATE PROVIDED EXCEEDS THE ASSUMED MAXIMUM DIMENSION; THE BEARING SOLE PLATE AND BEARING MASONRY PLATE MAY NEED TO BE RESIZED. ADDITIONALLY, ADJUSTMENTS MAY NEED TO BE MADE TO THE BRIDGE SEAT TO ACCOMMODATE THE LARGER MASONRY PLATE.

BEARING NOTES:

THE BEARINGS SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 565 UNLESS OTHERWISE NOTED.

ALL ELASTOMER SHALL BE 50 DUROMETER HARDNESS ON THE SHORE A SCALE.

ALL STEEL EXCEPT THE INTERNAL STEEL PLATES SHALL CONFORM TO ASTM A709, GR. 50, UNLESS OTHERWISE NOTED. STEEL SOLE PLATES AND STEEL MASONRY PLATES SHALL BE GALVANIZED IN ACCORDANCE WITH SUBSECTION 719-01.

FIELD GALVANIZING REPAIRS SHALL BE PERFORMED IN AREAS DAMAGED FROM WELDING THE TRUSS SHOE PLATE TO THE BEARING SOLE PLATE. FIELD GALVANIZING REPAIRS SHALL BE MADE IN ACCORDANCE WITH SUBSECTION 719-01, "GALVANIZED COATINGS AND REPAIR METHODS".

BEARING PADS SHALL CONFORM TO ONE OF THE FOLLOWING MATERIAL SPECIFICATIONS: 728-01, 728-02 OR 728-03.

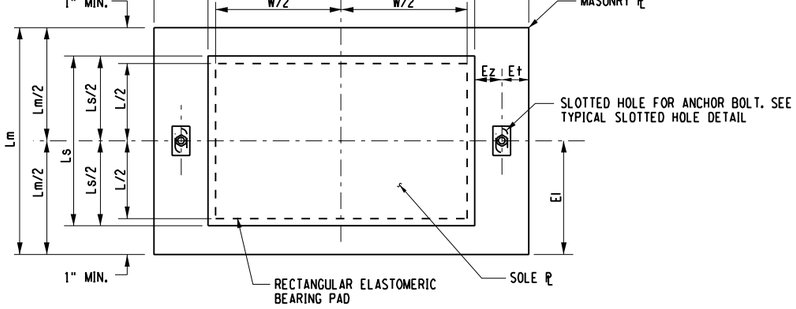
INSTALLATION ALIGNMENT:
THE MAXIMUM VARIATION FROM PERFECT ALIGNMENT UNDER FULL DEAD LOAD SHALL NOT EXCEED 3/16". THIS VARIATION SHALL BE MEASURED AS THE HORIZONTAL DISTANCE BETWEEN THE CENTERLINE OF THE HIGHEST ELASTOMER SURFACE AND THE CENTERLINE OF THE LOWEST ELASTOMER SURFACE.

CONCRETE SURFACES UNDER THE BEARINGS SHALL CONFORM TO SUBSECTION 565.3.02 "CONCRETE BEARING SURFACE PREPARATION" OF THE NEW YORK STATE STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS.

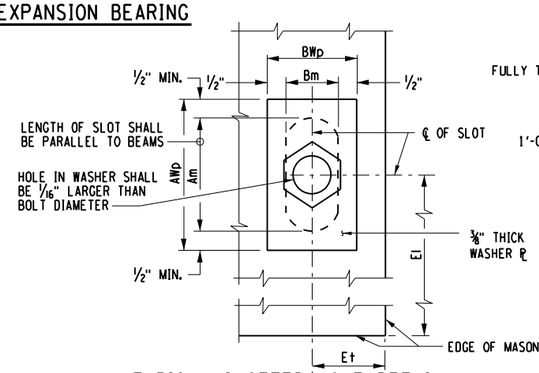
THE BEARING PAD, ANCHOR STUDS, WASHER PLATES AND NUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARING ITEM.

IF THE ANCHOR STUDS ARE SET UNDER THE SOLE PLATE, A MINIMUM CLEARANCE EQUAL TO TWO TIMES THE THICKNESS OF ANCHOR NUT PLUS 1" SHALL BE MAINTAINED BETWEEN THE TOP OF MASONRY PLATE AND BOTTOM OF THE SOLE PLATE.

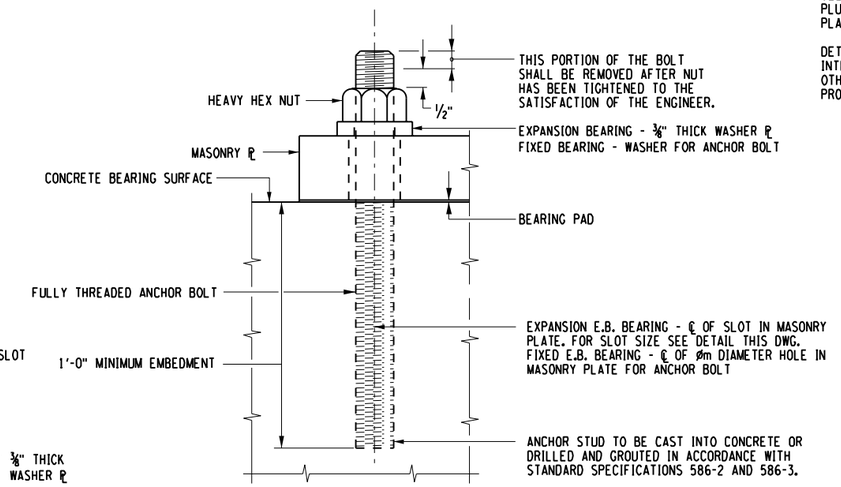
DETAILS ON THE DRAWINGS LABELED AS "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY. ALL OTHER DETAILS, FOR WHICH NO SCALE IS SHOWN, ARE DRAWN PROPORTIONAL AND ARE FULLY DIMENSIONED.



PLAN
TYPICAL RECTANGULAR EXPANSION BEARING
N.T.S.



TYPICAL SLOTTED HOLE DETAIL
MASONRY PLATE
N.T.S.



ANCHOR BOLT

ANCHOR STUDS, WASHERS, WASHER PLATES, ANCHOR PLATES AND NUTS SHALL MEET THE REQUIREMENTS OF SUBSECTION 723-60. THEY SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF MATERIAL SUBSECTION 719-01, "GALVANIZED COATINGS AND REPAIR METHODS." THEIR COST (INCLUDING GALVANIZING) SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARING ITEM.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BUTTERNUT COVE
STRUCTURE REPLACEMENT
ULSTER COUNTY

EXPANSION ELASTOMERIC BEARING DETAILS

SCALE: AS SHOWN
DATE ISSUED: 1/2018
DRAWING
BN-11

DESIGNED BY
DRAFTED BY
CHECKED BY
CHECKED BY
IN CHARGE OF

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FIXED ELASTOMERIC BEARING (TYPE E.B.) TABLE																															
LOCATION	ITEM NO.	QUANTITY REQUIRED	DL + SDL (Kips)	LL W/O IMP. (Kips)	TOTAL DESIGN REACTION (Kips)	SHAPE FACTOR	ELASTOMER LAYERS					hrt	COMP. AREA (sq. in)	SHEAR AREA (sq. in)	MASONRY PLATE							ANCHOR STUDS		WELD SIZE	SOLE PLATE				BRG. H	℄p (PIN DIA.)
							THK/LAYER	N LAYERS	L	W	D				Wm	Lm	Tm	Et	El	Ez	℄m	DIA.	STUDS/ BRG.		Ws	Ls	T1	T2		
W. ABUT.																															

TABLE DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

* ASSUMED DEAD LOAD VALUES. CONTRACTOR TO PROVIDE ACTUAL STEEL TRUSS WEIGHT TO THE ENGINEER PRIOR TO MANUFACTURING BEARINGS.

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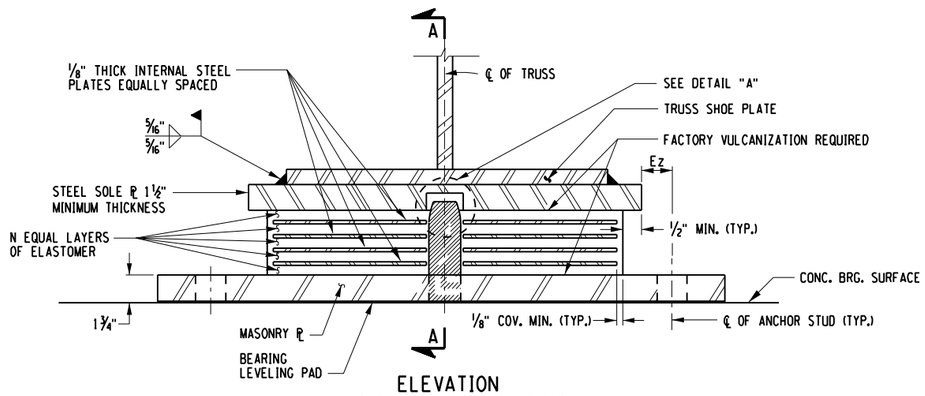
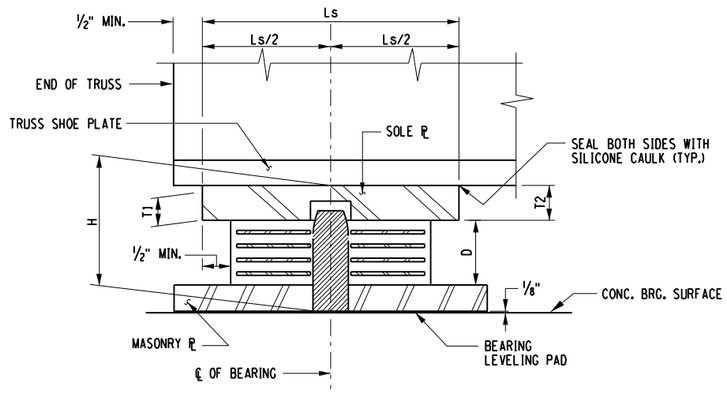
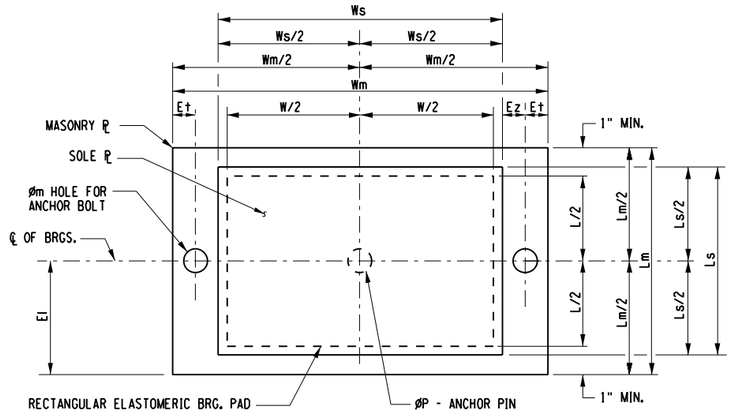
* T2 IS UPSTATION OF T1
* TM1 SHALL BE OREINTATED TOWARD CL OF THE BRIDGE



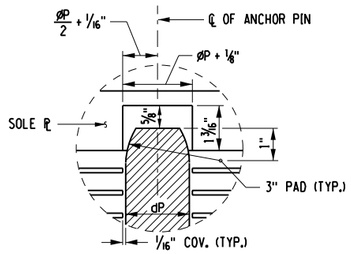
ELEVATION
TYPICAL FIXED BEARING
N.T.S.



SECTION A-A
N.T.S.



PLAN
TYPICAL RECTANGULAR FIXED BEARING
N.T.S.



DETAIL "A"
FIXED BEARING ANCHOR PIN

BEARING NOTES:

THE BEARINGS SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 565 UNLESS OTHERWISE NOTED.

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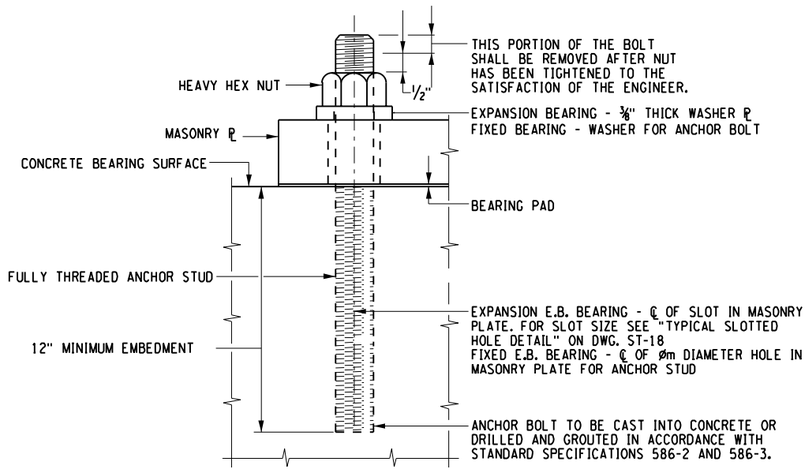

ANCHOR BOLT DETAIL

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PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION
XX			

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
BUTTERNUT COVE
STRUCTURE REPLACEMENT
ULSTER COUNTY

FIXED ELASTOMERIC BEARING DETAILS

SCALE: AS SHOWN
DATE ISSUED: 1/2018
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BN-12

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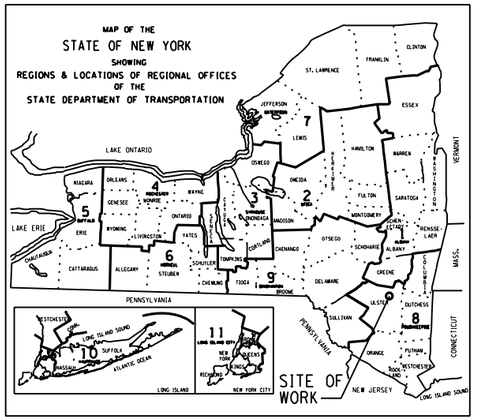
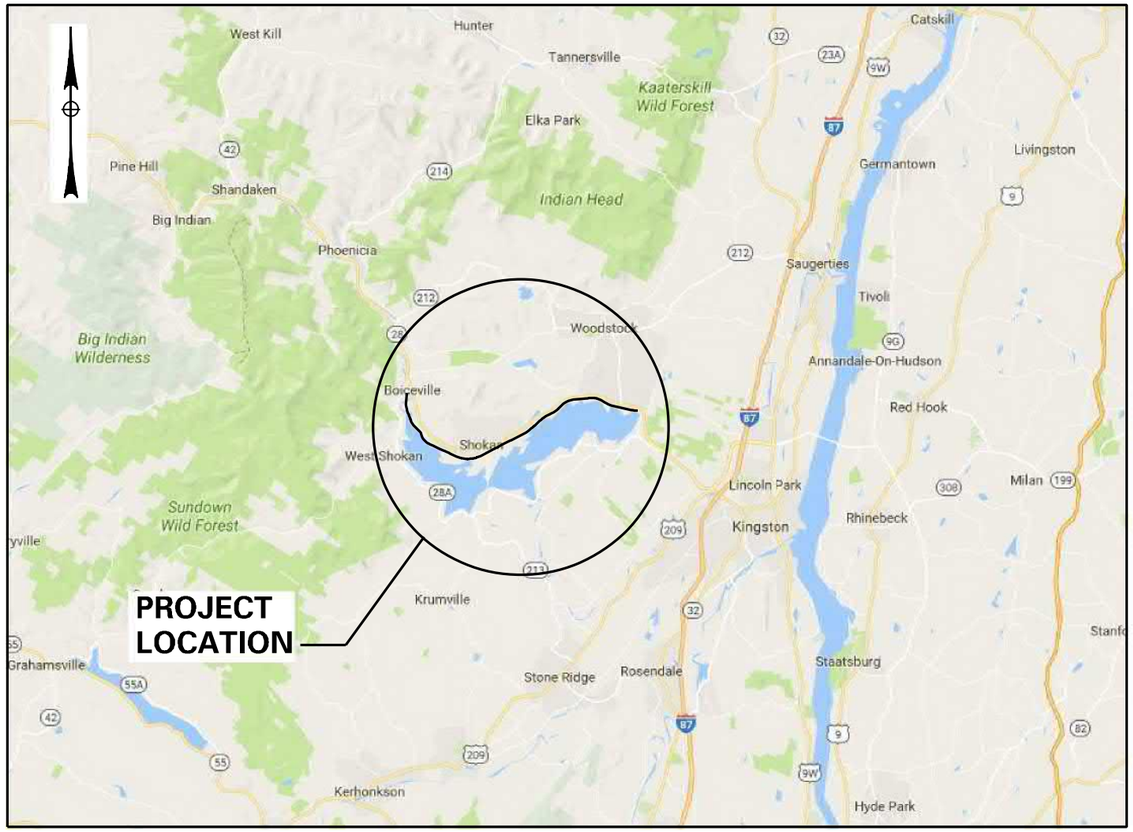


ASHOKAN RAIL TRAIL
ULSTER COUNTY

TREE REMOVAL CONTRACT DRAWINGS
SEPTEMBER 15, 2017



PROJECT LOCATION

Barton & Loguidice, D.P.C.

PREPARED AND RECOMMENDED BY

THOMAS C. BAIRD, P.E. DATE
NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO. 074590

CONTRACTOR'S NAME _____

AWARD DATE _____

COMPLETION DATE _____

FINAL ACCEPTANCE DATE _____

ENGINEER IN CHARGE _____

FINAL COST TOTAL _____

FISCAL SHARE COST(S)

IN CHARGE OF _____ DESIGNED BY _____ CHECKED BY _____ ESTIMATED BY _____

CHECKED BY _____ DRAFTED BY _____ CHECKED BY _____

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DATE = 9/14/2017
TIME = 5:14:09 PM

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 3,333 feet

Ulster County
Ashokan Rail Trail
Tree Removals Plan Sheet Key
Ulster County 9/14/2017 New York

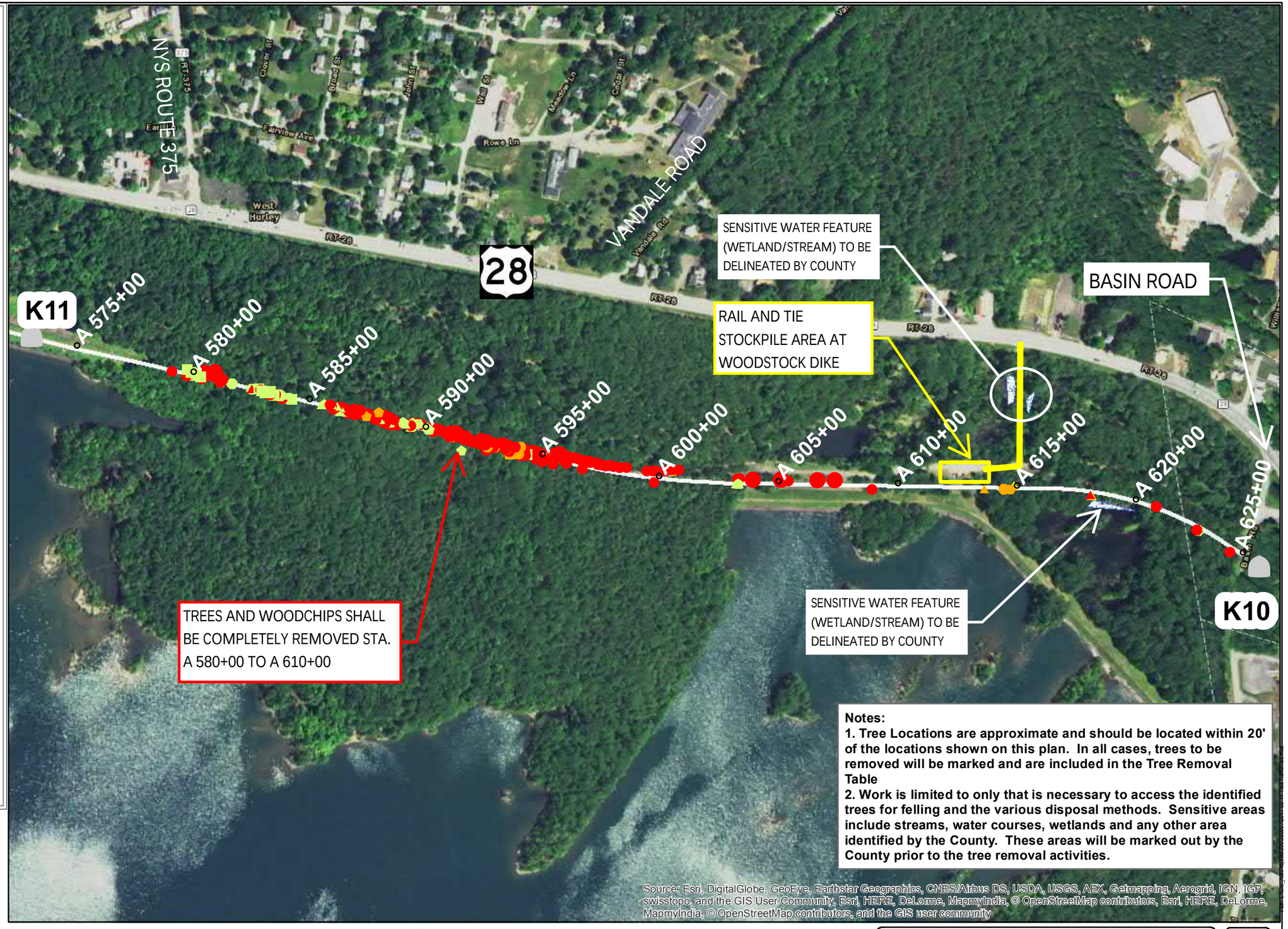
Figure 1
Project RFB 17-151C

Legend

Trees K10_K11

Status, DBH_range, Species (Segment Quantity)

- alive, 4-14, Birch (20)
- alive, 4-14, Maple (20)
- alive, 4-14, Oak (2)
- alive, 4-14, Other (3)
- alive, 4-14, Pine (9)
- dead standing, 15-24, Ash (11)
- dead standing, 4-14, Ash (157)
- dead standing, 4-14, Birch (1)
- dead standing, 4-14, Other (3)
- dead standing, 4-14, Pine (3)
- down, 4-14, Ash (7)
- down, 4-14, Birch (3)
- down, 4-14, Maple (1)
- down, 4-14, Oak (1)
- down, 4-14, Other (3)
- down, 4-14, Pine (1)
- stressed, 4-14, Oak (1)
- stressed, 4-14, Pine (2)
- Milepost
- Access and Staging
- Streams
- Wetlands



Notes:

1. Tree Locations are approximate and should be located within 20' of the locations shown on this plan. In all cases, trees to be removed will be marked and are included in the Tree Removal Table

2. Work is limited to only that is necessary to access the identified trees for felling and the various disposal methods. Sensitive areas include streams, water courses, wetlands and any other area identified by the County. These areas will be marked out by the County prior to the tree removal activities.

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 400 feet

Ulster County

Ashokan Rail Trail
Tree Removals K10-K11

Ulster County 9/14/2017 New York

Figure 2

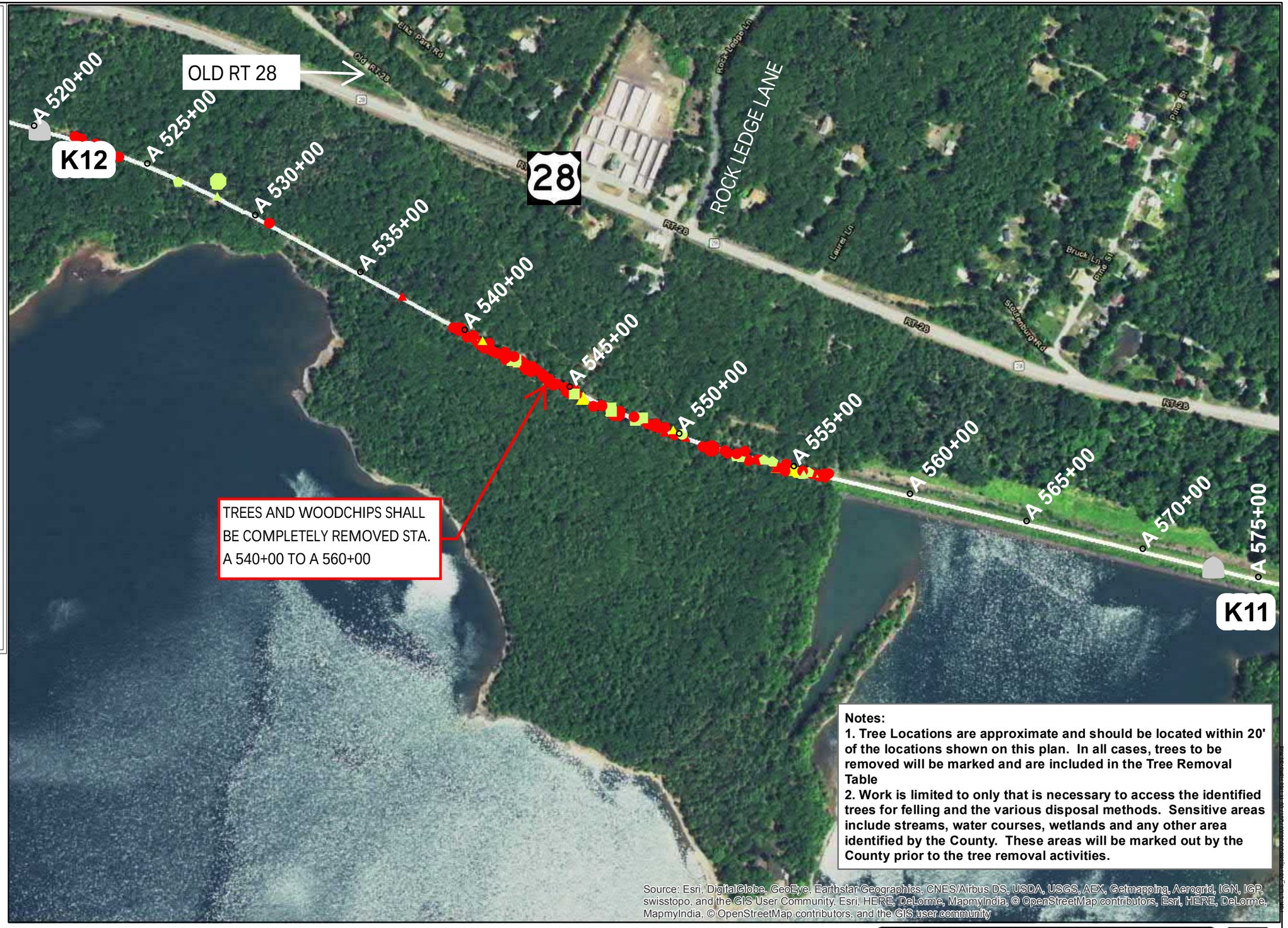
Project RFB 17-151C

Legend

Trees K11_K12

Status, DBH_range, Species (Segment Quantity)

- alive, 15-24, Other (1)
- alive, 4-14, Ash (1)
- alive, 4-14, Birch (15)
- alive, 4-14, Maple (11)
- alive, 4-14, Pine (5)
- dead standing, 15-24, Ash (1)
- dead standing, 4-14, Ash (105)
- dead standing, 4-14, Pine (5)
- down, 4-14, Pine (1)
- stressed, 15-24, Pine (1)
- stressed, 4-14, Birch (1)
- stressed, 4-14, Other (2)
- stressed, 4-14, Pine (9)
- Milepost
- Access and Staging
- Streams
- Wetlands



Notes:

1. Tree Locations are approximate and should be located within 20' of the locations shown on this plan. In all cases, trees to be removed will be marked and are included in the Tree Removal Table

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Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Tree Removals K11-K12
Ulster County 9/14/2017 New York

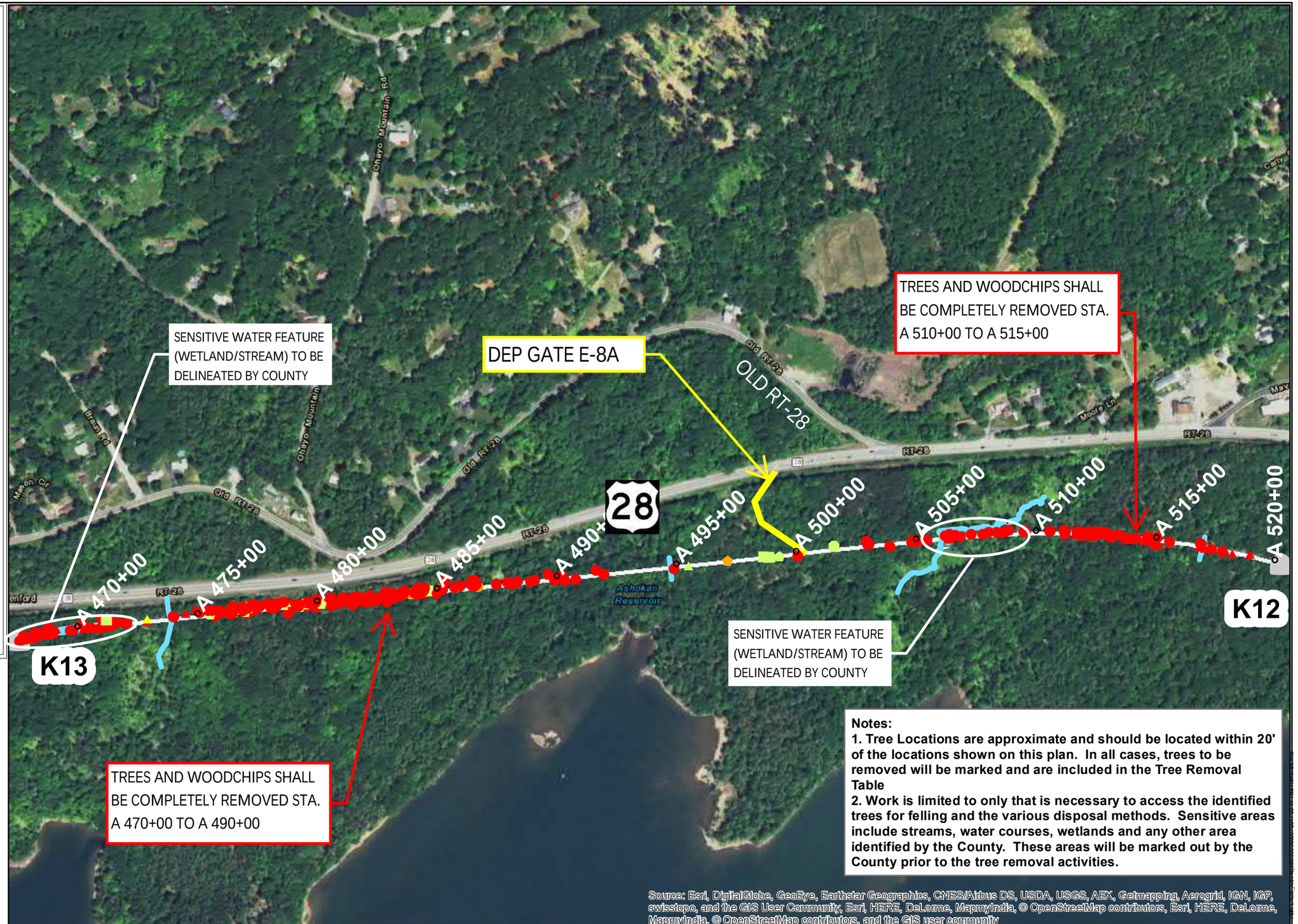
Figure 3
Project RFB 17-151C

Legend

Trees K12_K13

Status, DBH_range, Species (Segment Quantity)

- alive, 4-14, Birch (6)
- alive, 4-14, Maple (9)
- alive, 4-14, Other (1)
- alive, 4-14, Pine (2)
- dead standing, 15-24, Ash (1)
- dead standing, 15-24, Pine (1)
- dead standing, 4-14, Ash (275)
- dead standing, 4-14, Birch (1)
- dead standing, 4-14, Pine (25)
- down, 4-14, Ash (2)
- down, 4-14, Birch (1)
- stressed, 4-14, Ash (1)
- stressed, 4-14, Pine (3)
- Milepost
- Access and Staging
- Streams
- Wetlands



Notes:

1. Tree Locations are approximate and should be located within 20' of the locations shown on this plan. In all cases, trees to be removed will be marked and are included in the Tree Removal Table

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Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

N W E S

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Tree Removals K12-K13
Ulster County 9/14/2017 New York

Figure 4
Project RFB 17-151C

Legend

Trees K13_K14

Status, DBH_range, Species (Segment Quantity)

- alive, 15-24, Maple (1)
- alive, 15-24, Other (1)
- alive, 4-14, Ash (1)
- alive, 4-14, Birch (15)
- alive, 4-14, Maple (23)
- alive, 4-14, Oak (2)
- alive, 4-14, Other (3)
- alive, 4-14, Pine (12)
- dead standing, 15-24, Ash (4)
- dead standing, 4-14, Ash (207)
- dead standing, 4-14, Oak (1)
- dead standing, 4-14, Pine (17)
- down, 4-14, Ash (3)
- down, 4-14, Maple (1)
- stressed, 4-14, Ash (2)
- stressed, 4-14, Birch (2)
- stressed, 4-14, Other (4)
- stressed, 4-14, Pine (5)
- Milepost
- Access and Staging
- Streams
- Wetlands

TREES AND WOODCHIPS SHALL BE COMPLETELY REMOVED STA. A 462+00 TO A 470+00

DEP GATE E-8B

K13

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

BOULEVARD ROAD

TREES AND WOODCHIPS SHALL BE COMPLETELY REMOVED STA. A 415+00 TO A 450+00

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

K14

Notes:
1. Tree Locations are approximate and should be located within 20' of the locations shown on this plan. In all cases, trees to be removed will be marked and are included in the Tree Removal Table
2. Work is limited to only that is necessary to access the identified trees for felling and the various disposal methods. Sensitive areas include streams, water courses, wetlands and any other area identified by the County. These areas will be marked out by the County prior to the tree removal activities.

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 359 feet

Ulster County
Ashokan Rail Trail
Tree Removals K13-K14
Ulster County 9/14/2017 New York

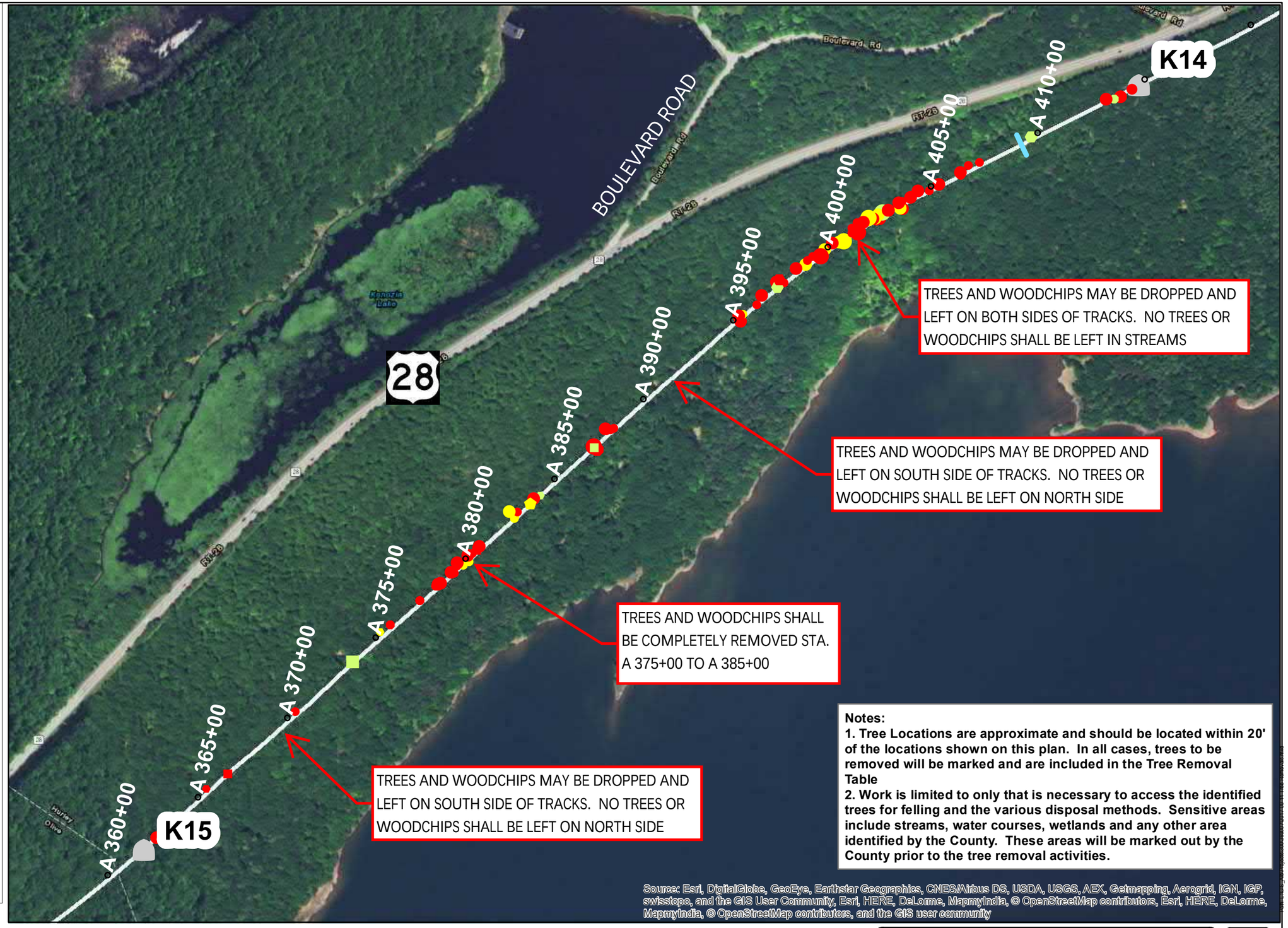
Figure 5
Project RFB 17-151C

Legend

Trees K14_K15

Status, DBH_range, Species (Segment Quantity)

- alive, 15-24, Ash (1)
- alive, 4-8, Birch (1)
- alive, 4-8, Maple (1)
- alive, 4-8, Oak (1)
- alive, 4-8, Other (1)
- alive, 9-14, Maple (1)
- alive, 9-14, Oak (3)
- dead standing, 15-24, Ash (3)
- dead standing, 4-14, Ash (1)
- dead standing, 4-8, Ash (34)
- dead standing, 4-8, Maple (2)
- dead standing, 4-8, Oak (1)
- dead standing, 4-8, Other (1)
- dead standing, 9-14, Ash (32)
- dead standing, 9-14, Oak (2)
- dead standing, 9-14, Other (1)
- stressed, 15-24, Ash (2)
- stressed, 4-8, Ash (5)
- stressed, 4-8, Oak (1)
- stressed, 9-14, Ash (7)
- stressed, 9-14, Birch (1)
- Milepost
- Access and Staging
- Streams
- Wetlands



Notes:

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2. Work is limited to only that is necessary to access the identified trees for felling and the various disposal methods. Sensitive areas include streams, water courses, wetlands and any other area identified by the County. These areas will be marked out by the County prior to the tree removal activities.

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Tree Removals K14-K15
Ulster County 9/14/2017 New York

Figure 6

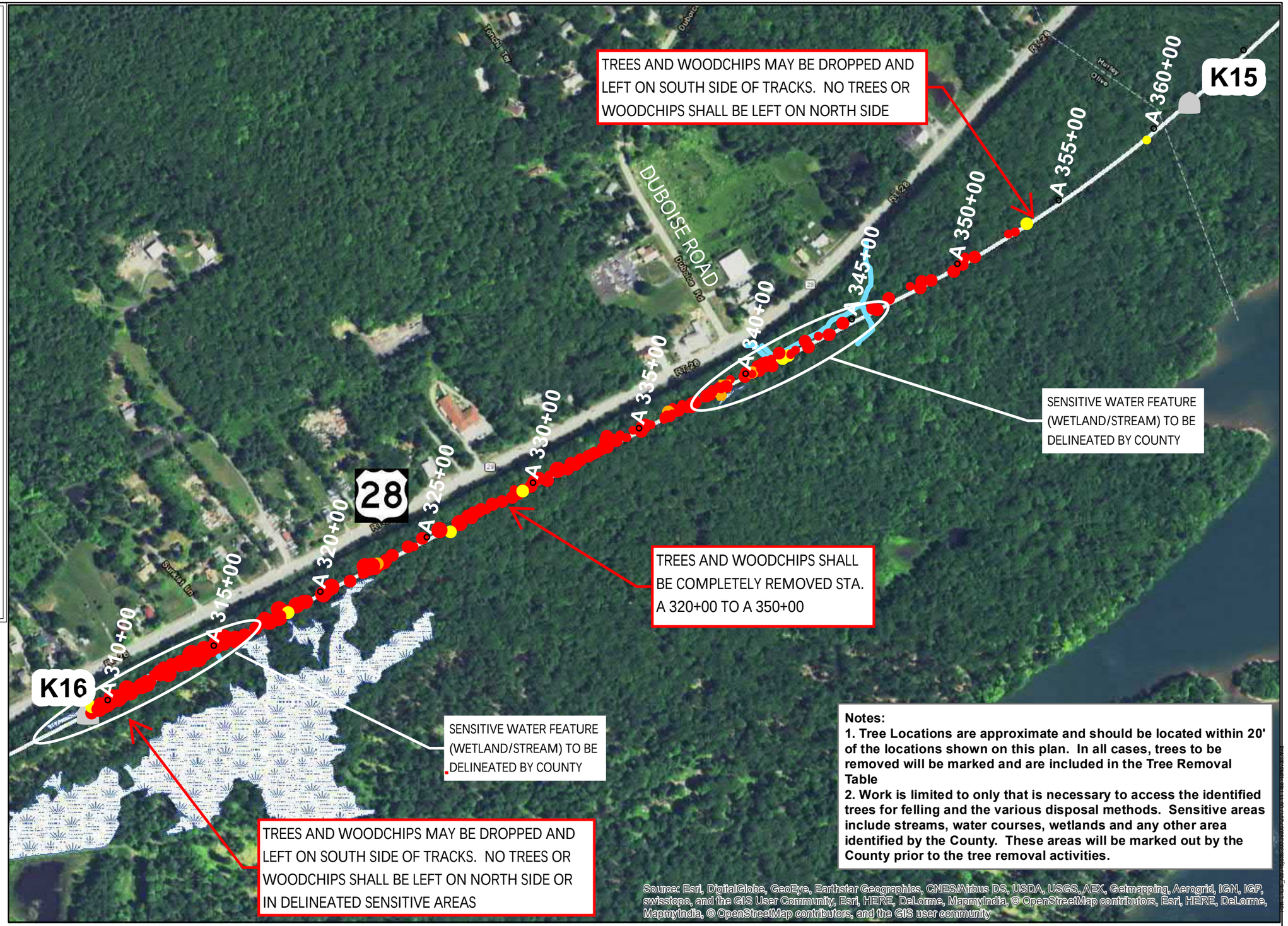
Project RFB 17-151C

Legend

Trees K15_K16

Status, DBH_range, Species (Segment Quantity)

- dead standing, 15-24, Ash (36)
- dead standing, 25-34, Ash (3)
- dead standing, 4-8, Ash (163)
- dead standing, 4-8, Birch (1)
- dead standing, 4-8, Maple (1)
- dead standing, 4-8, Other (2)
- dead standing, 9-14, Ash (144)
- down, 9-14, Ash (3)
- down, 9-14, Maple (1)
- down, 9-14, Oak (1)
- stressed, 4-8, Ash (4)
- stressed, 9-14, Ash (9)
- Milepost
- Access and Staging
- Streams
- Wetlands



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Ulster County
Ashokan Rail Trail
Tree Removals K15-K16
Ulster County 9/14/2017 New York

Figure 7
Project RFB 17-151C

Legend

Trees K16_K17

Status, DBH_range, Species (Segment Quantity)

- dead standing, 15-24, Ash (14)
- dead standing, 15-24, Pine (1)
- dead standing, 4-8, Ash (40)
- dead standing, 4-8, Other (1)
- dead standing, 4-8, Pine (1)
- dead standing, 9-14, Ash (101)
- dead standing, 9-14, Other (2)
- down, 15-24, Ash (1)
- stressed, 15-24, Ash (5)
- stressed, 4-8, Ash (1)
- stressed, 9-14, Ash (7)
- Milepost
- Access and Staging
- Streams
- Wetlands

TREES AND WOODCHIPS MAY BE DROPPED AND LEFT ON SOUTH SIDE OF TRACKS. NO TREES OR WOODCHIPS SHALL BE LEFT ON NORTH SIDE

RAIL AND TIE STOCKPILE AREA AT SHOKAN STATION

TREES AND WOODCHIPS SHALL BE COMPLETELY REMOVED STA. A 255+00 TO A 275+00

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

MOUNTAIN ROAD

RESERVOIR ROAD

28

K16

K17

A 255+00 A 260+00 A 265+00 A 270+00 A 275+00 A 280+00 A 285+00 A 290+00 A 295+00 A 300+00 A 305+00 A 310+00

Notes:
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Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Tree Removals K16-K17
Ulster County 9/14/2017 New York

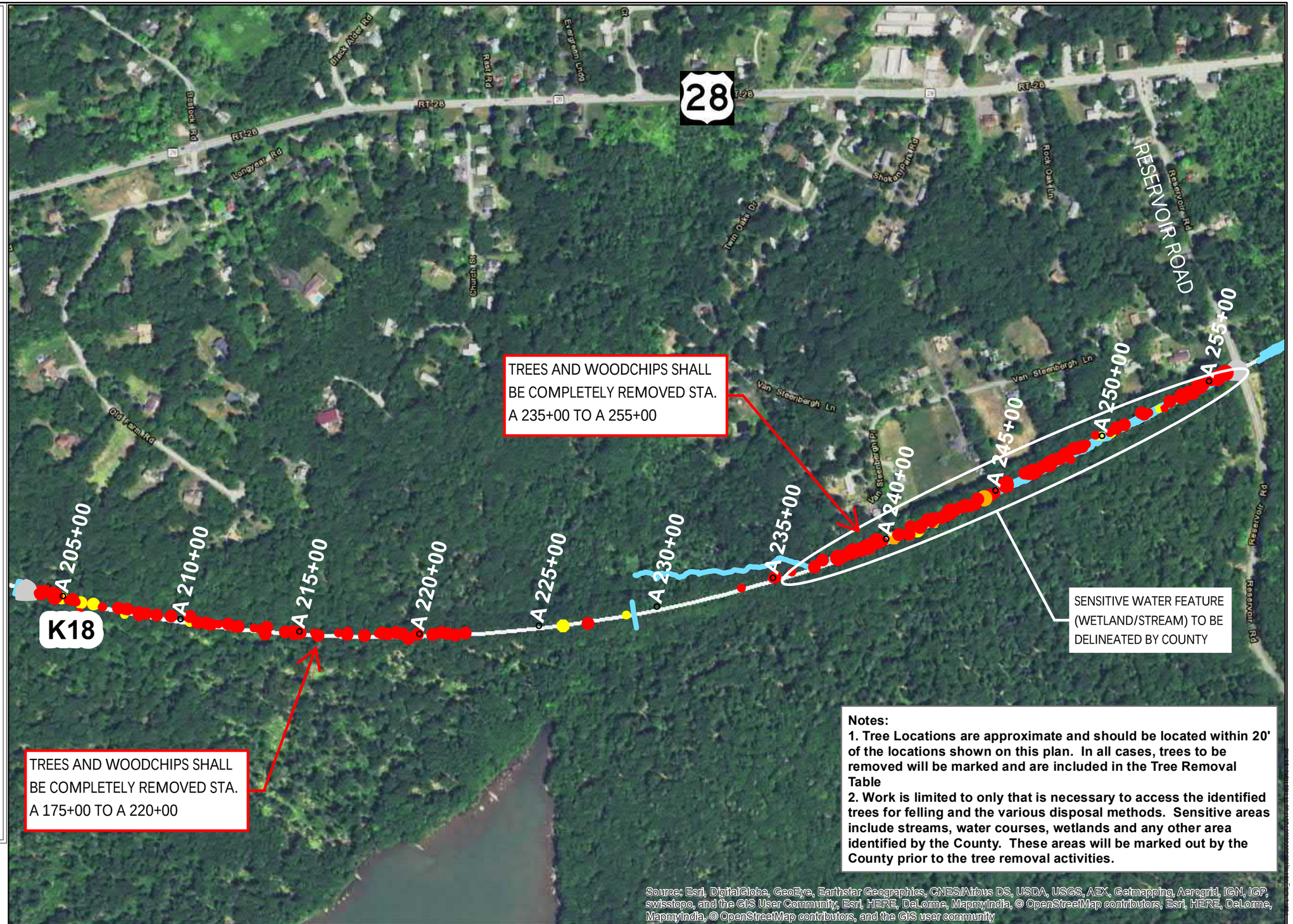
Figure 8
Project RFB 17-151C

Legend

Trees K17_K18

Status, DBH_range, Species (Segment Quantity)

- alive, 4-8, Maple (1)
- dead standing, 15-24, Ash (12)
- dead standing, 4-8, Ash (90)
- dead standing, 4-8, Birch (2)
- dead standing, 4-8, Maple (1)
- dead standing, 4-8, Other (2)
- dead standing, 4-8, Pine (1)
- dead standing, 9-14, Ash (118)
- dead standing, 9-14, Birch (2)
- dead standing, 9-14, Maple (1)
- dead standing, 9-14, Oak (1)
- dead standing, 9-14, Other (5)
- down, 15-24, Ash (1)
- down, 9-14, Birch (1)
- down, 9-14, Other (1)
- stressed, 4-8, Ash (4)
- stressed, 4-8, Birch (2)
- stressed, 9-14, Ash (4)
- stressed, 9-14, Other (1)
- Milepost
- Access and Staging
- Streams
- Wetlands



Notes:

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Barton & Loguidice, D.P.C.

Engineers • Environmental Scientists • Planners • Landscape Architects

N W E S

1 inch = 400 feet

Ulster County

Ashokan Rail Trail

Tree Removals K17-K18

Ulster County 9/14/2017 New York

Figure 9

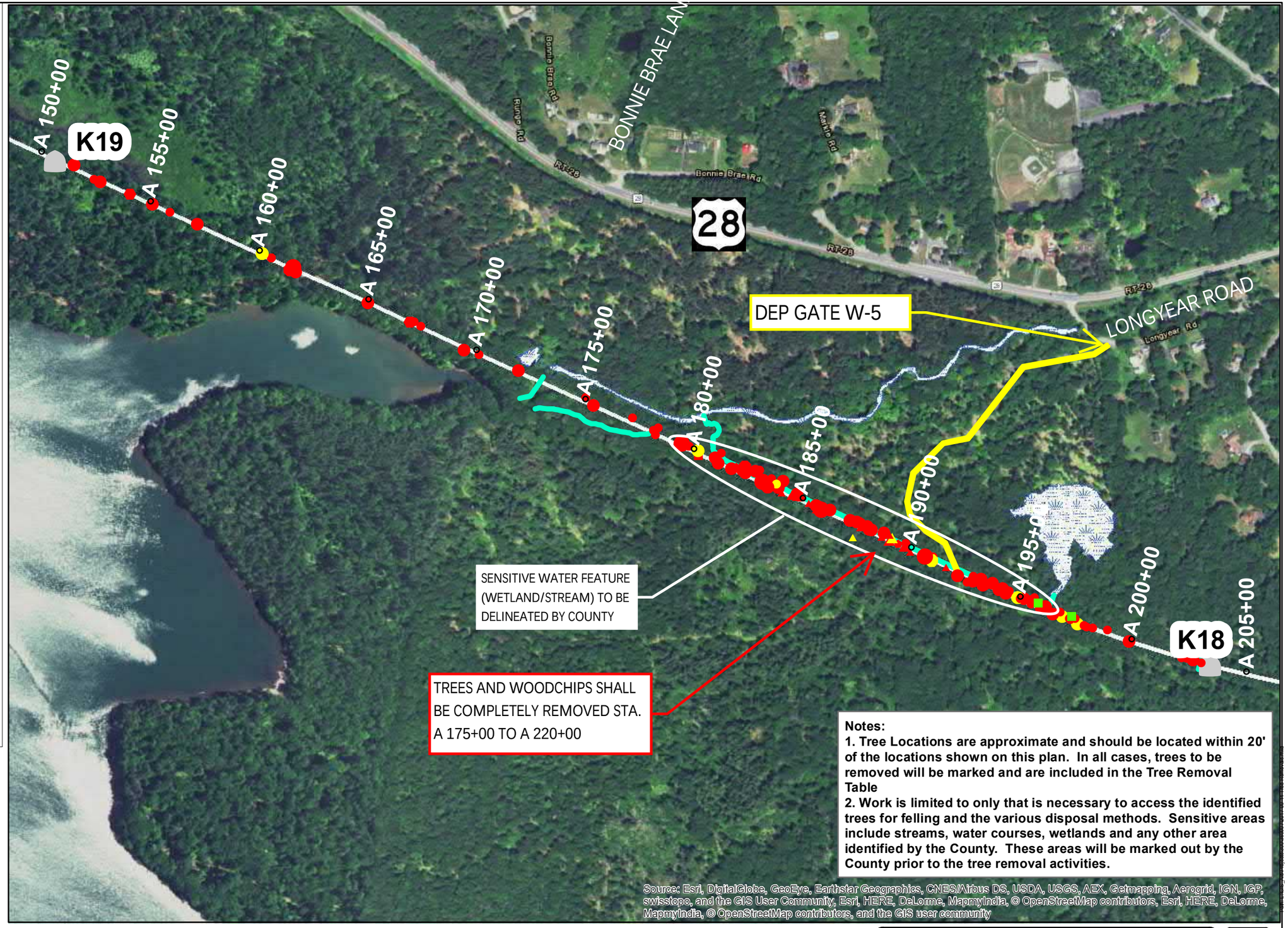
Project RFB 17-151C

Legend

Trees K18_K19

Status, DBH_range, Species (Segment Quantity)

- alive, 4-8, Maple (4)
- dead standing, 15-24, Ash (5)
- dead standing, 4-8, Ash (78)
- dead standing, 4-8, Birch (2)
- dead standing, 4-8, Maple (1)
- dead standing, 4-8, Other (2)
- dead standing, 4-8, Pine (23)
- dead standing, 9-14, Ash (61)
- dead standing, 9-14, Oak (2)
- dead standing, 9-14, Other (2)
- dead standing, 9-14, Pine (5)
- stressed, 4-8, Ash (2)
- stressed, 4-8, Pine (2)
- stressed, 9-14, Ash (10)
- stressed, 9-14, Other (1)
- stressed, 9-14, Pine (1)
- Milepost
- Access and Staging
- Streams
- Wetlands



Notes:

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Engineers • Environmental Scientists • Planners • Landscape Architects

N W E S

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Tree Removals K18 - K19
Ulster County 9/14/2017 New York

Figure 10

Project RFB 17-151C

Legend

Trees K19_K20

Status, DBH_range, Species (Segment Quantity)

- alive, 4-8, Birch (2)
- alive, 4-8, Maple (1)
- alive, 4-8, Other (2)
- alive, 9-14, Maple (1)
- dead standing, 15-24, Ash (13)
- dead standing, 15-24, Other (2)
- dead standing, 25-34, Ash (2)
- dead standing, 4-8, Ash (17)
- dead standing, 4-8, Birch (1)
- dead standing, 4-8, Pine (1)
- dead standing, 9-14, Ash (32)
- dead standing, 9-14, Birch (3)
- dead standing, 9-14, Other (3)
- Milepost
- Access and Staging
- Streams
- Wetlands

K20

A 100+00

A 105+00

A 110+00

A 115+00

A 120+00

A 125+00

A 130+00

A 135+00

A 140+00

A 145+00

A 150+00

155+00

K19

DANCING ROCK ROAD

Dancing Rock Rd

Crosswell Manor Dr

RT-28

28

DEP GATE W-7

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

TREES AND WOODCHIPS SHALL NOT BE DEPOSITED ON RESERVOIR SIDE OF TRACKS

TREES AND WOODCHIPS SHALL BE COMPLETELY REMOVED STA. A 130+00 TO A 145+00

CONTRACTOR MAY ELECT TO USE THIS AREA FOR STAGING AND STOCKPILING. CONTRACTOR SHALL SUBMIT PLAN TO COUNTY FOR APPROVAL PRIOR TO USE

Notes:

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Barton & Loguidice, D.P.C.

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N W E S

1 inch = 400 feet

Ulster County

Ashokan Rail Trail

Tree Removals K19-K20

Ulster County 9/14/2017 New York

Figure 11

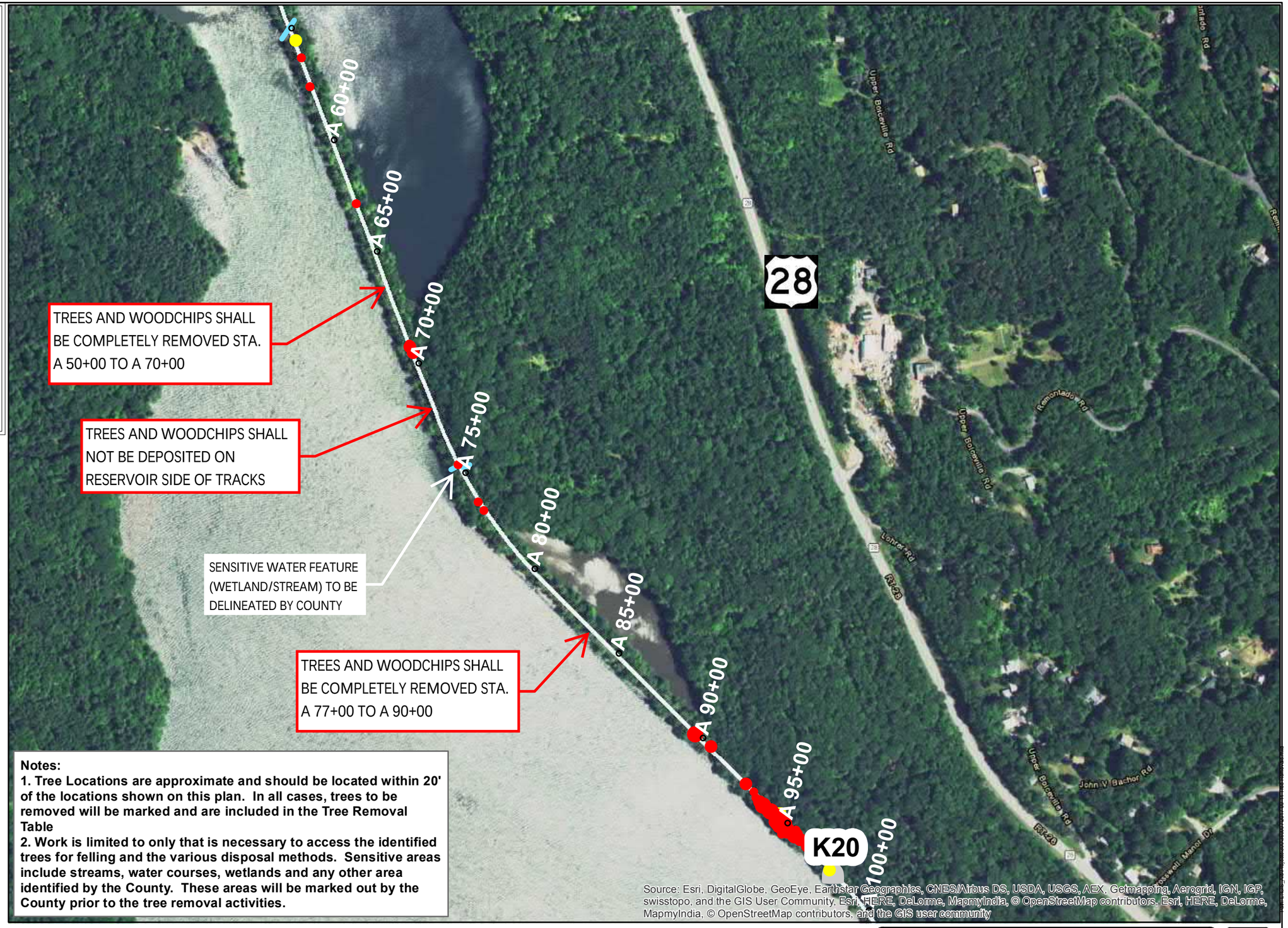
Project RFB 17-151C

Legend

Trees K20_K21

Status, DBH_range, Species (Segment Quantity)

- dead standing, 15-24, Ash (11)
- dead standing, 4-8, Ash (24)
- dead standing, 9-14, Ash (25)
- dead standing, 9-14, Other (1)
- stressed, 9-14, Ash (2)
- stressed, 9-14, Other (1)
- Milepost
- Access and Staging
- Streams
- Wetlands



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Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Tree Removals K20-K21
Ulster County 9/14/2017 New York

Figure 12
Project RFB 17-151C

Legend

Trees K20_K21

Status, DBH_range, Species (Segment Quantity)

- alive, 9-14, Ash (2)

Trees K21_K21.5

Status, DBH_range, Species (Segment Quantity)

- alive, 4-8, Birch (1)
- dead standing, 15-24, Ash (1)
- dead standing, 4-8, Ash (1)
- dead standing, 4-8, Other (1)
- dead standing, 4-8, Pine (2)
- dead standing, 9-14, Pine (1)
- stressed, 15-24, Ash (1)
- stressed, 35-44, Ash (1)
- stressed, 4-8, Ash (1)
- stressed, 9-14, Ash (4)
- Milepost
- Access and Staging
- Streams
- Wetlands

COLD BROOK ROAD

DEP GATE W-12

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

TREES AND WOODCHIPS SHALL BE COMPLETELY REMOVED STA. A 31+00 TO A 50+00

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

A 15+00

A 20+00

A 25+00

A 30+00

A 35+00

A 40+00

A 45+00

K21

RT-28A

28

Barceville

Esopus Creek

Brunel Dr

Destiva Rd

Oak Mountain Farm Rd

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

Notes:

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Barton & Loguidice, D.P.C.

Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 400 feet

Ulster County

Ashokan Rail Trail

Tree Removals K21-K21.5

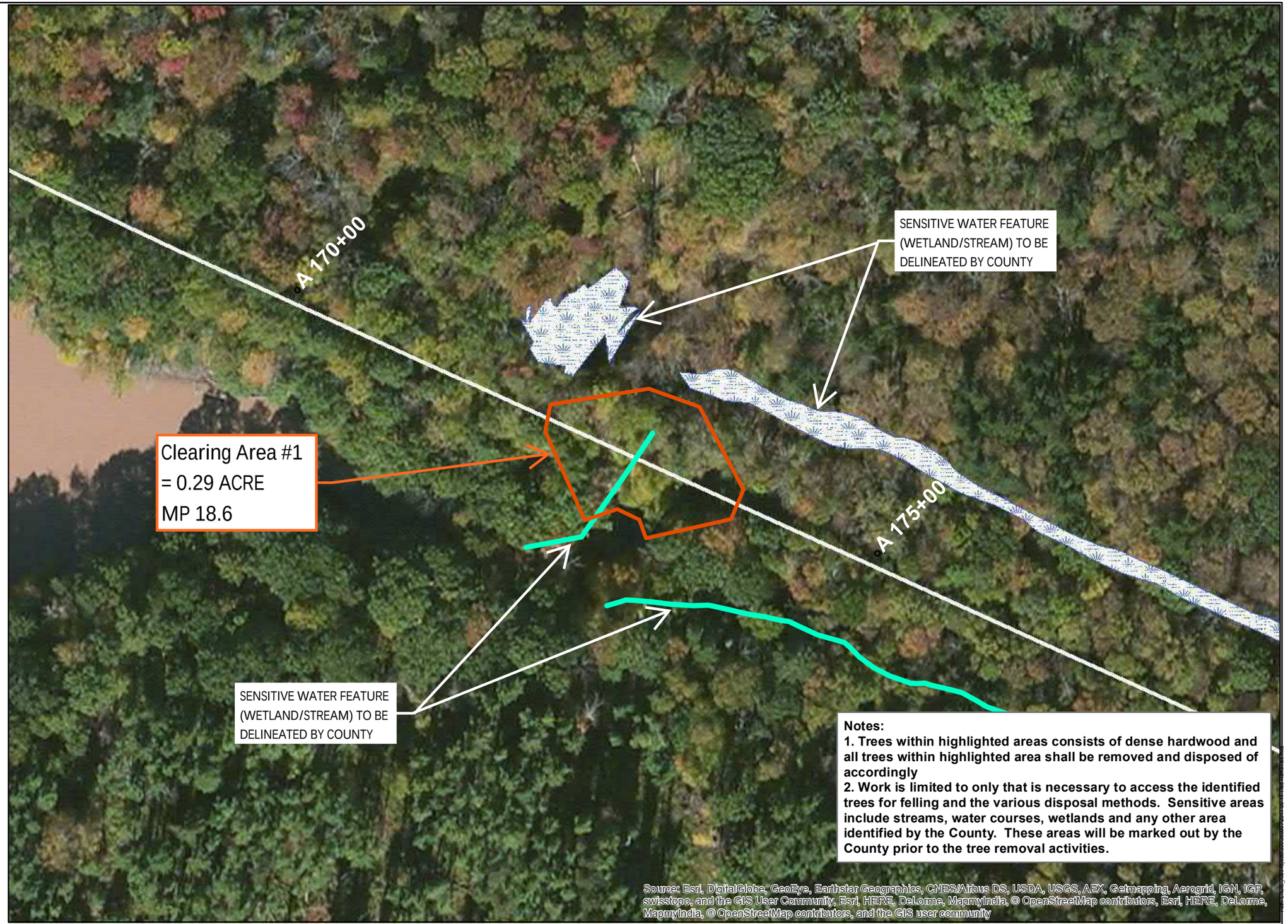
Ulster County 9/14/2017 New York

Figure 13

Project RFB 17-151C

Legend

- Clearing Areas (1)
- Milepost
- Access and Staging
- Streams
- Wetlands



Notes:

1. Trees within highlighted areas consists of dense hardwood and all trees within highlighted area shall be removed and disposed of accordingly

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N W E S

1 inch = 75 feet

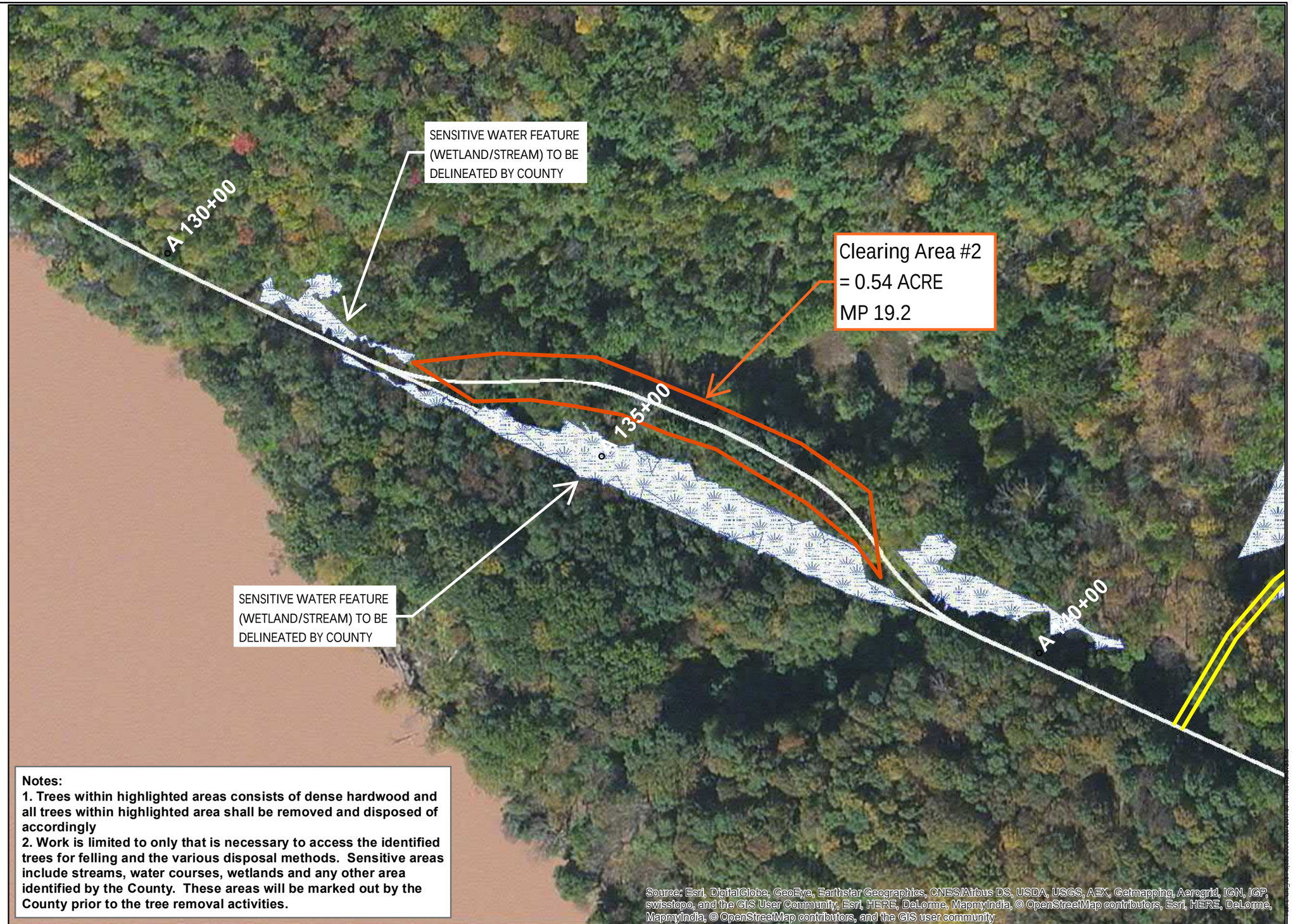
Ulster County
Ashokan Rail Trail
Tree Removal Areas
Ulster County 9/14/2017 New York

Figure 14

Project RFB 17-151C

Legend

- Clearing Areas (1)
- Milepost
- Access and Staging
- Streams
- Wetlands



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N W E S

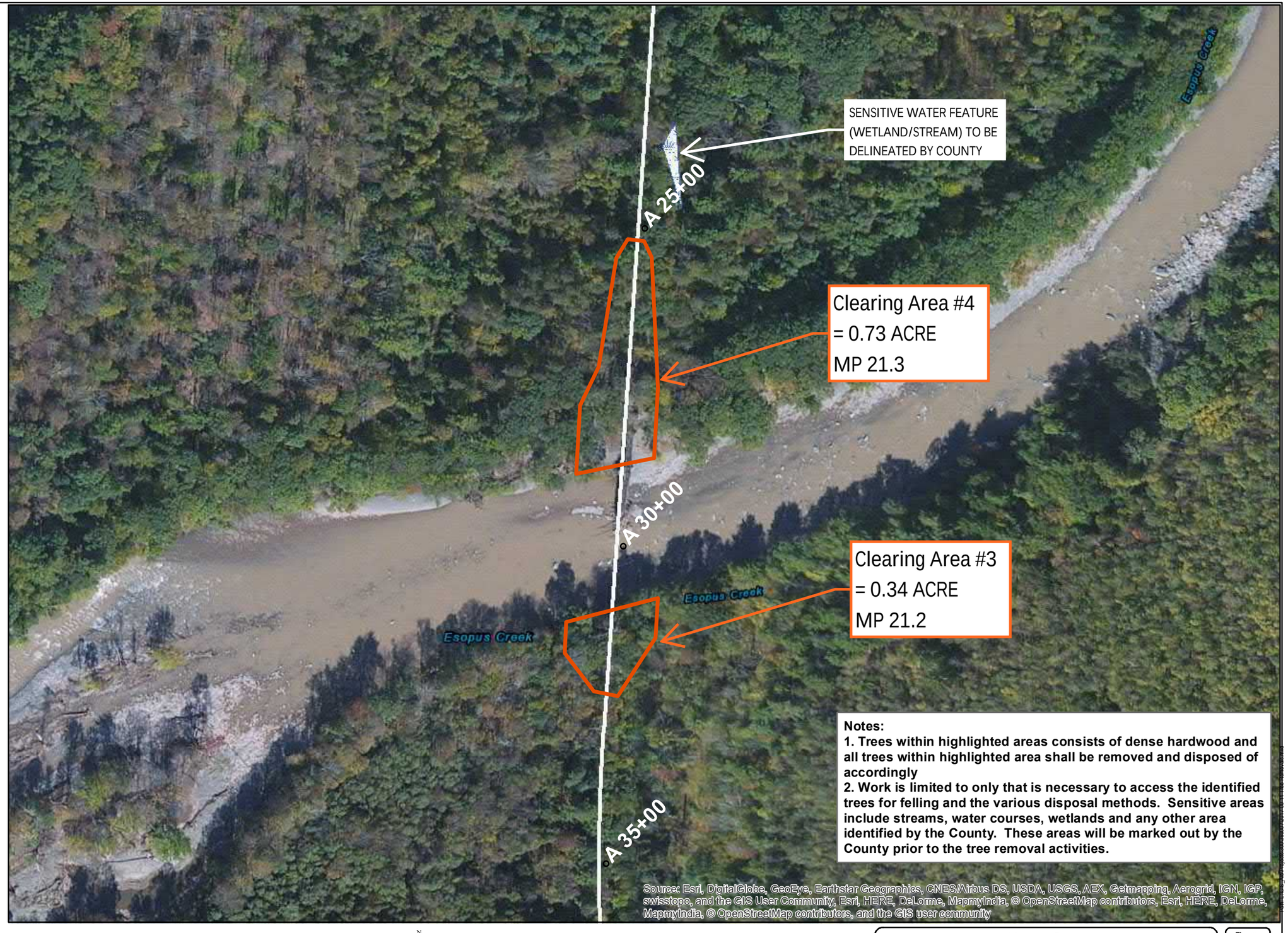
1 inch = 100 feet

Ulster County
Ashokan Rail Trail
Tree Removal Areas
Ulster County 9/14/2017 New York

Figure 15
Project RFB 17-151C

Legend

- Clearing Areas (2)
- Milepost
- Access and Staging
- Streams
- Wetlands



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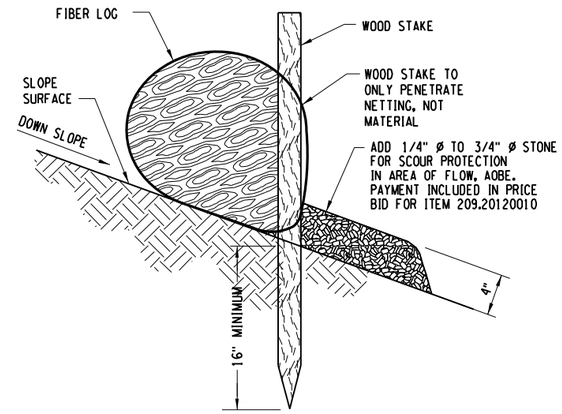
1 inch = 150 feet

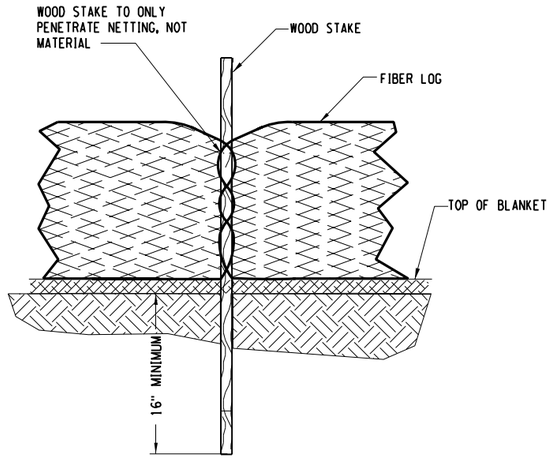
Ulster County
Ashokan Rail Trail
Tree Removal Areas
Ulster County 9/14/2017 New York

Figure 16
Project RFB 17-151C



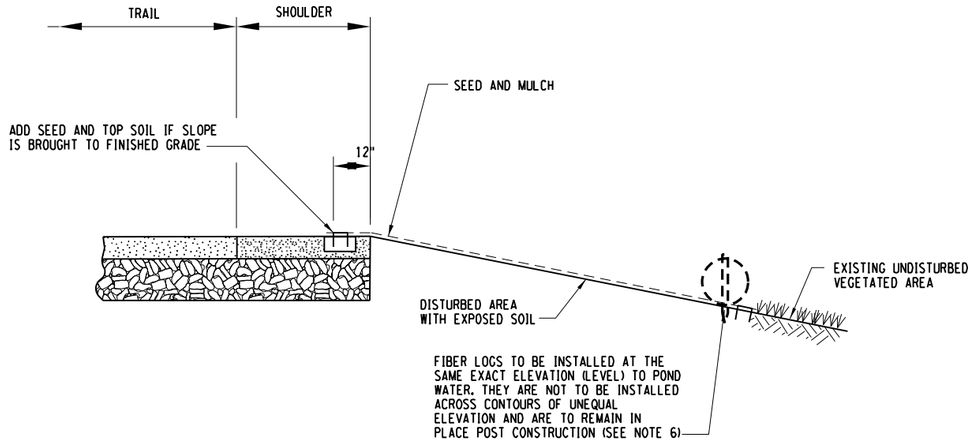
FIBER LOG STAKE DETAIL (ON BARE SOIL)

N.T.S.



FIBER LOG STAKE DETAIL (FRONT VIEW)

N.T.S.



EROSION AND SEDIMENT CONTROL FOR ALL DISTURBED AREAS TEMPORARY OR PERMANENT

N.T.S.

FIBER LOG CHECK DAM APPLICATION NOTES:

A. THE PRIMARY PURPOSE OF A CHECK DAM IS TO REDUCE EROSION IN A CHANNEL BY REDUCING FLOW VELOCITY IN THE CHANNEL.

B. CHECK DAMS WILL CAPTURE SEDIMENT THAT FALLS OUT OF SUSPENSION BEHIND THE CHECK DAM DUE TO DECREASED VELOCITY.

C. CHECK DAMS ARE NOT INTENDED TO, AND WILL NOT FILTER SEDIMENT FROM TURBID WATER.

NOTES:

1. DRAINAGE AREAS:
MAXIMUM DRAINAGE AREA TRIBUTARY TO FIBER LOG CHECK DAM SHALL BE 1 ACRE. MAXIMUM DRAINAGE AREA TRIBUTARY TO PREFABRICATED CHECK DAM SHALL BE ½ ACRE.

2. POSTS MAY BE 1¼" x 1¼" (MIN.) HARDWOOD, 1½" x 3½" (MIN.) SOFTWOOD. ADDITIONAL POSTS ARE REQUIRED AT THE OUTER EDGES OF DITCH WIDTH.

3. THE FIBER LOG SHALL BE INSTALLED WITH THE POSTS ON THE DOWNSTREAM SIDE OF THE FABRIC AS SHOWN.

4. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE MEASURE HEIGHT OF THE FIBER LOG. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.

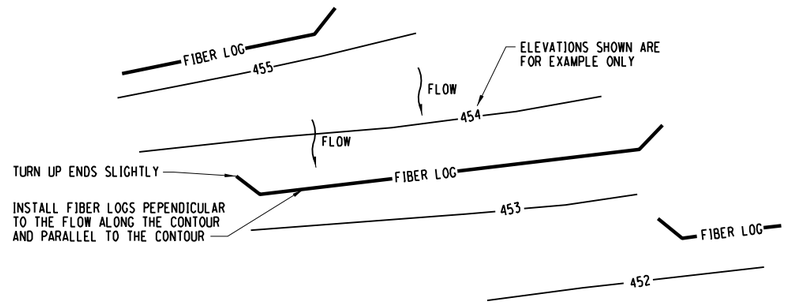
NOTES:

1. ITEMS IN THIS DETAIL MAY APPEAR EXAGGERATED TO SHOW DETAIL.

2. IF SLOPE IS BROUGHT TO FINISHED GRADE, PERMANENT TOP SOIL AND SEEDING SHALL BE INSTALLED PRIOR TO INSTALLING ITEM 209.2103 - SOIL STABILIZERS, CLASS IV TYPE C. IF SLOPES ARE NOT BROUGHT TO FINISH GRADE THEY ARE TO BE TREATED WITH ITEM 209.1003 - TEMPORARY SEED AND MULCH.

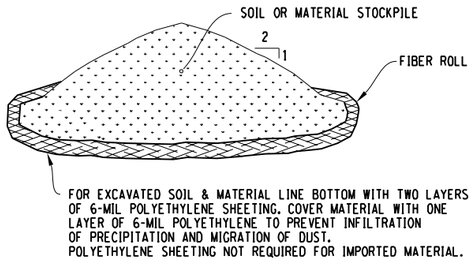
3. AS PART OF FINAL STABILIZATION, WOODEN STAKES TO BE REMOVED AND FIBER LOG MULCH NETTING CUT OPEN ALONG ENTIRE LENGTH.

4. USE STRAW MULCH FOR EROSION PREVENTION



FIBER LOG PLAN EXAMPLE

N.T.S.

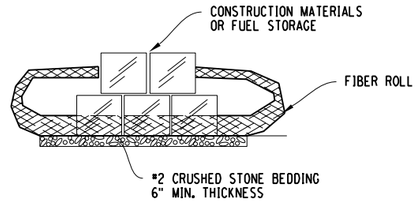


EXCAVATED AND IMPORTED SOIL AND MATERIAL STOCKPILE

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE. THE AREA SHALL NOT BE WITHIN THE DRIPLINE OR CANOPY OF EXISTING TREES. THE LOCATION SHALL BE AS NOTED ON THE DRAWINGS. DREDGED OR EXCAVATED MATERIALS SHALL BE PLACED UPON SILT FENCE FABRIC.

2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2(H) TO 1(V).

3. FIBER LOGS SHALL BE PLACED FIVE (5)-FEET DOWNSLOPE OF EACH PILE. UPON COMPLETION OF SOIL STOCKPILING. TOPSOIL SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH IF NOT TO BE DISTURBED/UTILIZED WITHIN FOURTEEN (14) DAYS.



FUEL, EQUIPMENT, OR MATERIAL STORAGE AREA

1. AREA CHOSEN FOR STORAGE OPERATIONS SHALL BE DRY AND STABLE. THE AREA SHALL NOT BE WITHIN THE DRIPLINE OR CANOPY OF TREES. THE LOCATION SHALL BE AS NOTED ON THE DRAWINGS.

2. NO STOCKPILE AREA SHALL BE LOCATED WITHIN FIFTY (50) FEET OF SURFACE WATER, FLOODPLAIN, SLOPE, DRAINAGE FACILITY OR ROADWAY.

3. IF STABLE SURFACE NOT AVAILABLE, THE TOP SIX (6) INCHES OF NATIVE MATERIAL SHALL BE EXCAVATED FROM THE MATERIAL/FUEL STORAGE AREA AND STOCKPILED TO REUSE FOR RESTORATION OF THIS AREA. IN THE AREA EXCAVATED, PLACE SEPARATION FABRIC AND SIX (6) INCHES OF #2 CRUSHED STONE BEDDING, SEE SPECIFICATIONS. IF APPROVED BY THE ENGINEER, USE OF EXISTING GRAVEL AREAS MAY BE USED IN LIEU OF EXCAVATION, STONE, AND FABRIC.

4. FIBER LOGS SHALL BE PLACED FIVE (5) FEET DOWN SLOPE OF STORAGE AREA.

5. REMOVE ALL MATERIALS INCLUDING STONE AND FABRIC WHEN NEED FOR STORAGE IS OVER. RESTORE TO ORIGINAL GRADE WITH STOCKPILED EXCAVATED SOIL (NO FOREIGN DEBRIS).

CONSTRUCTION STOCKPILE/STORAGE AREA DETAIL

N.T.S.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL

ULSTER COUNTY

EROSION AND SEDIMENT CONTROL DETAILS - 1

SCALE: AS SHOWN

DATE ISSUED: 5/2017

DRAWING
ESCD-1

DESIGNED BY
DRAFTED BY
CHECKED BY
CHECKED BY
IN CHARGE OF

cmh
L:\MicroStation\Bentley V8i\WorkSpace\PLOT/SITE_NYSDOT_SIZE_B.TBL
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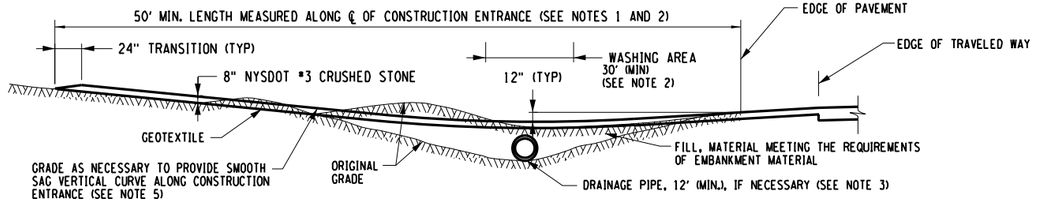
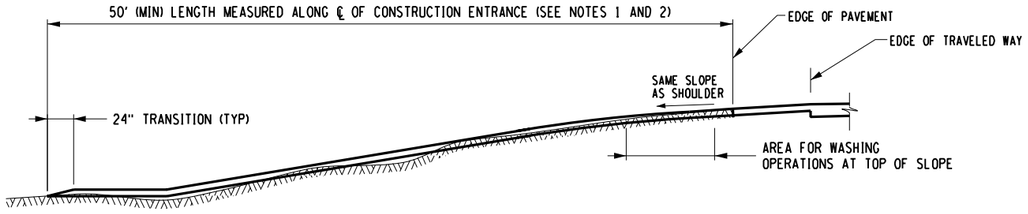
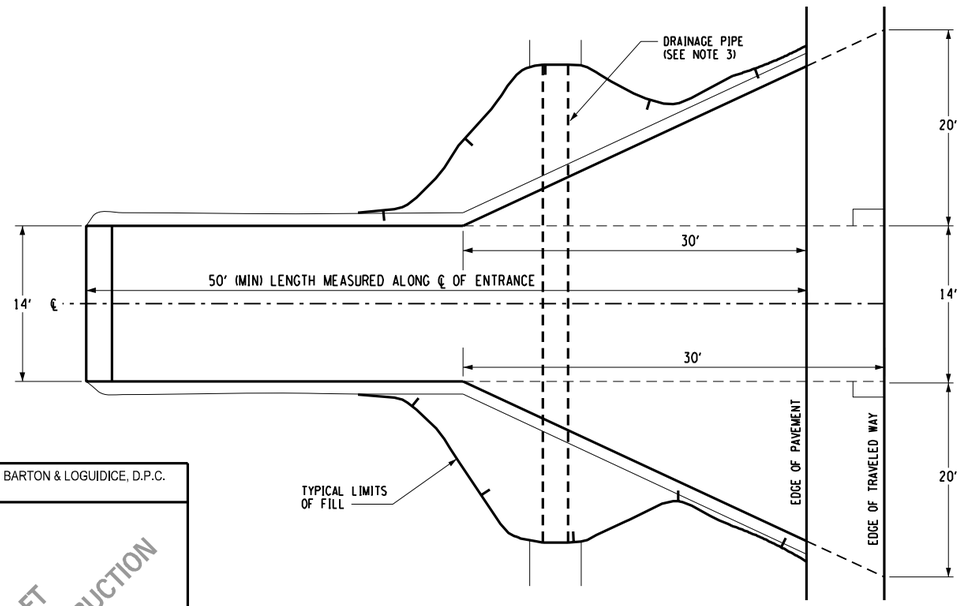


TYPICAL CONSTRUCTION ENTRANCE PROFILE
(CUT AND DITCH SECTIONS)



TYPICAL CONSTRUCTION ENTRANCE PROFILE
(FILL SECTIONS)



TYPICAL CONSTRUCTION ENTRANCE PLAN
(CUT/DITCH AND FILL SECTIONS)

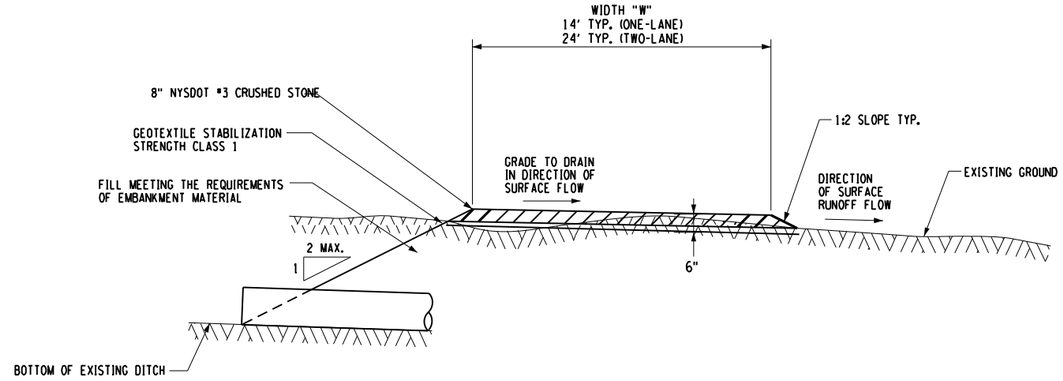
CONSTRUCTION ENTRANCES:

APPLICATION NOTES:

A. THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY OR STREETS.

NOTES:

1. MODIFICATIONS MAY BE REQUIRED TO MATCH FIELD CONDITIONS.
2. A 30' WASH AREA SHALL BE PROVIDED. ADDITIONAL GRADING MAY BE REQUIRED TO PROVIDE WASHING AREAS.
3. PROPOSED DRAINAGE PIPES SHALL BE SIZED WITH SUFFICIENT CAPACITY TO CARRY DITCH FLOWS. ALTERNATE WAYS OF TRANSPORTING DITCH DRAINAGE ACROSS CONSTRUCTION ENTRANCES MAY BE PROPOSED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER.
4. THE CONTRACTOR SHALL GRADE TO PREPARE AND SMOOTH ORIGINAL GROUND FOR PLACEMENT OF 8" OF #3 CRUSHED STONE ENTRANCE MATERIAL UP TO THE EDGE OF PAVEMENT.
5. ALL WORK TO CONSTRUCT THE STABILIZED ENTRANCE, INCLUDING GRADING, DRAINAGE PIPE, EXCAVATION, FILL, GEOTEXTILE AND CRUSHED STONE OR GRAVEL SHALL BE INCLUDED IN THE UNIT PRICE BID.
6. 100% CRUSHED STONE MEETING THE NYSDOT #3 STONE GRADATION SHALL BE UTILIZED FOR CONSTRUCTION ENTRANCES



TYPICAL CONSTRUCTION ENTRANCE SECTION

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

DRAFT
NOT FOR CONSTRUCTION

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

EROSION AND SEDIMENT CONTROL DETAILS - 2

SCALE: NONE
DATE ISSUED: 3/2017
DRAWING
ESCD-2

DESIGNED BY
DRAFTED BY
CHECKED BY
IN CHARGE OF

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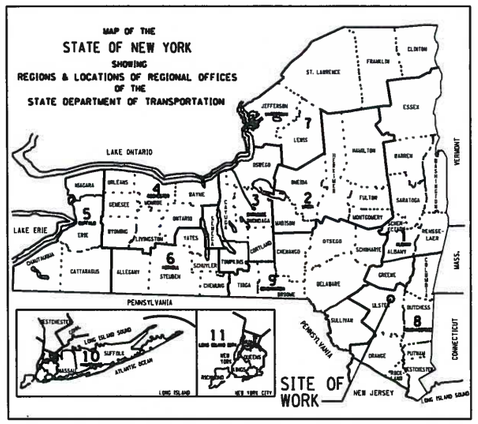
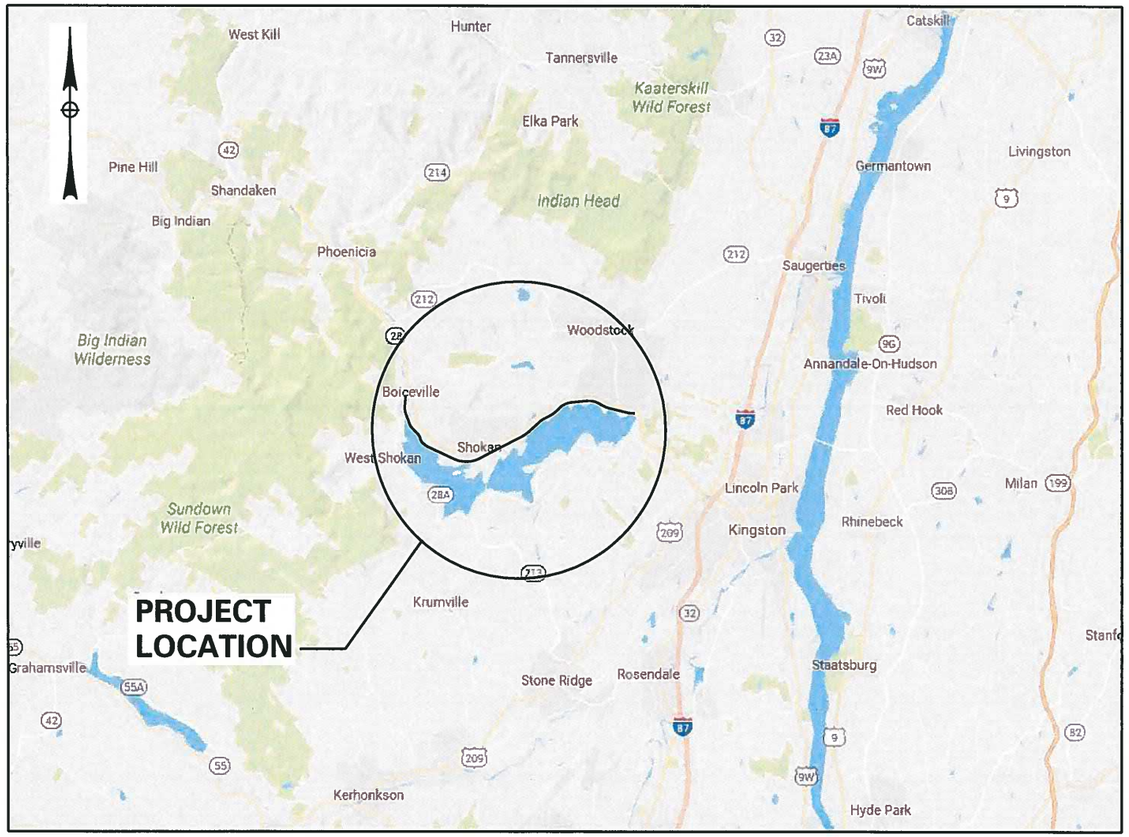


ASHOKAN RAIL TRAIL
ULSTER COUNTY

TRACK REMOVAL CONTRACT DRAWINGS
SEPTEMBER 15, 2017



PROJECT LOCATION

CONTRACTOR'S NAME	
AWARD DATE	
COMPLETION DATE	
FINAL ACCEPTANCE DATE	
ENGINEER IN CHARGE	
FINAL COST TOTAL	
FISCAL SHARE	COST(S)

Barton & Loguidice, D.P.C.

PREPARED AND RECOMMENDED BY

STATE OF NEW YORK · THOMAS C. BAIRD IV · LICENSED · 074590 · PROFESSIONAL ENGINEER

9/18/2017

THOMAS C. BAIRD, P.E. — DATE
NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO. 074590

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 3,333 feet

Ulster County
Ashokan Rail Trail
Track Removals Plan Sheet Key
Ulster County 9/14/2017 New York

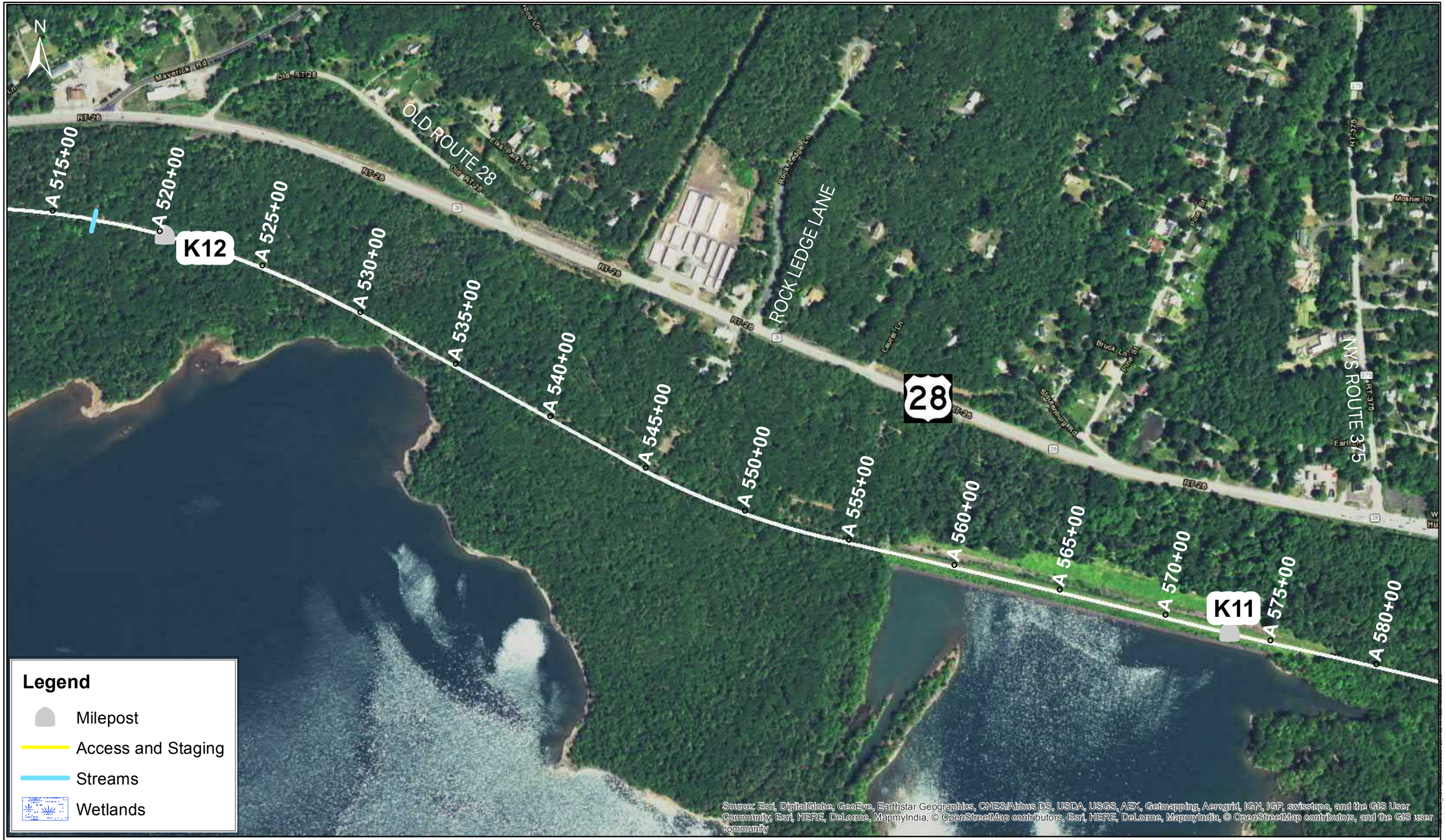
Figure 1
Project RFB 17-152C

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Track Removals K10-K11
Ulster County 9/14/2017 New York

Figure 2
Project RFB 17-152C



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N W E S

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Track Removals K11-K12
Ulster County 9/14/2017 New York

Figure 3
Project RFB 17-152C

N

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

DEP GATE E-8A

OLD ROUTE 28

MAVERICK ROAD

Maverick Rd

Old Rt 28

Rt-28

Rt-28E

Ohayo Mountain Rd

Wittenberg Rd

Hickory Ln

Braun Rd

Mason Cir

Moore Ln

Early Rd

A 465+00

A 470+00

A 475+00

A 480+00

A 485+00

A 490+00

A 495+00

A 500+00

A 505+00

A 510+00

A 515+00

A 520+00

A 525+00

K13

K12

28

Ashokan Reservoir

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

Legend

- Milepost
- Access and Staging
- Streams
- Wetlands

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Track Removals K12-K13
Ulster County 9/14/2017 New York

Figure 4
Project RFB 17-152C

N

DEP GATE E-8B

OLD RT-28

BRISTOL HILL ROAD

BOULEVARD ROAD

28

K13

K14

A 410+00
A 415+00
A 420+00
A 425+00
A 430+00
A 435+00
A 440+00
A 445+00
A 450+00
A 455+00
A 460+00
A 465+00
A 470+00

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

Legend

- Milepost
- Access and Staging
- Streams
- Wetlands

Barton & Loguidice, D.P.C.
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1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Track Removals K13-K14
Ulster County 9/14/2017 New York

Figure 5
Project RFB 17-152C

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

N W E S

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Track Removals K14-K15
Ulster County 9/14/2017 New York

Figure 6
Project RFB 17-152C

N

DUBIOSE RAOD

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

A 365+00
A 360+00
A 355+00
A 350+00
A 345+00
A 340+00
A 335+00
A 330+00
A 325+00
A 320+00
A 315+00
A 310+00

K15

K16

28

Dubolce Rd

Rt 28

Hurley

Olive

Forest Trl

Swan Ln

Legend

- Milepost
- Access and Staging
- Streams
- Wetlands

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

N
W E
S

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Track Removals K15-K16
Ulster County 9/14/2017 New York

Figure 7
Project RFB 17-152C

N

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

RAIL AND TIE STOCKPILE AREA AT SHOKAN STATION

MOUNTAIN ROAD

RESERVOIR ROAD

A 310+00

A 305+00

A 300+00

A 295+00

A 290+00

A 285+00

A 280+00

A 275+00

A 270+00

A 265+00

A 260+00

A 255+00

K16

K17

28

RT-28

Ridge Rd

Private Rd #1

Ralls Private Rd

Parker Ln

Fern Ln

Ashokan

Mountain Rd

Sunset Ln

Rock Oak Ln

Reservoir Rd

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

Legend

- Milepost
- Access and Staging
- Streams
- Wetlands

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

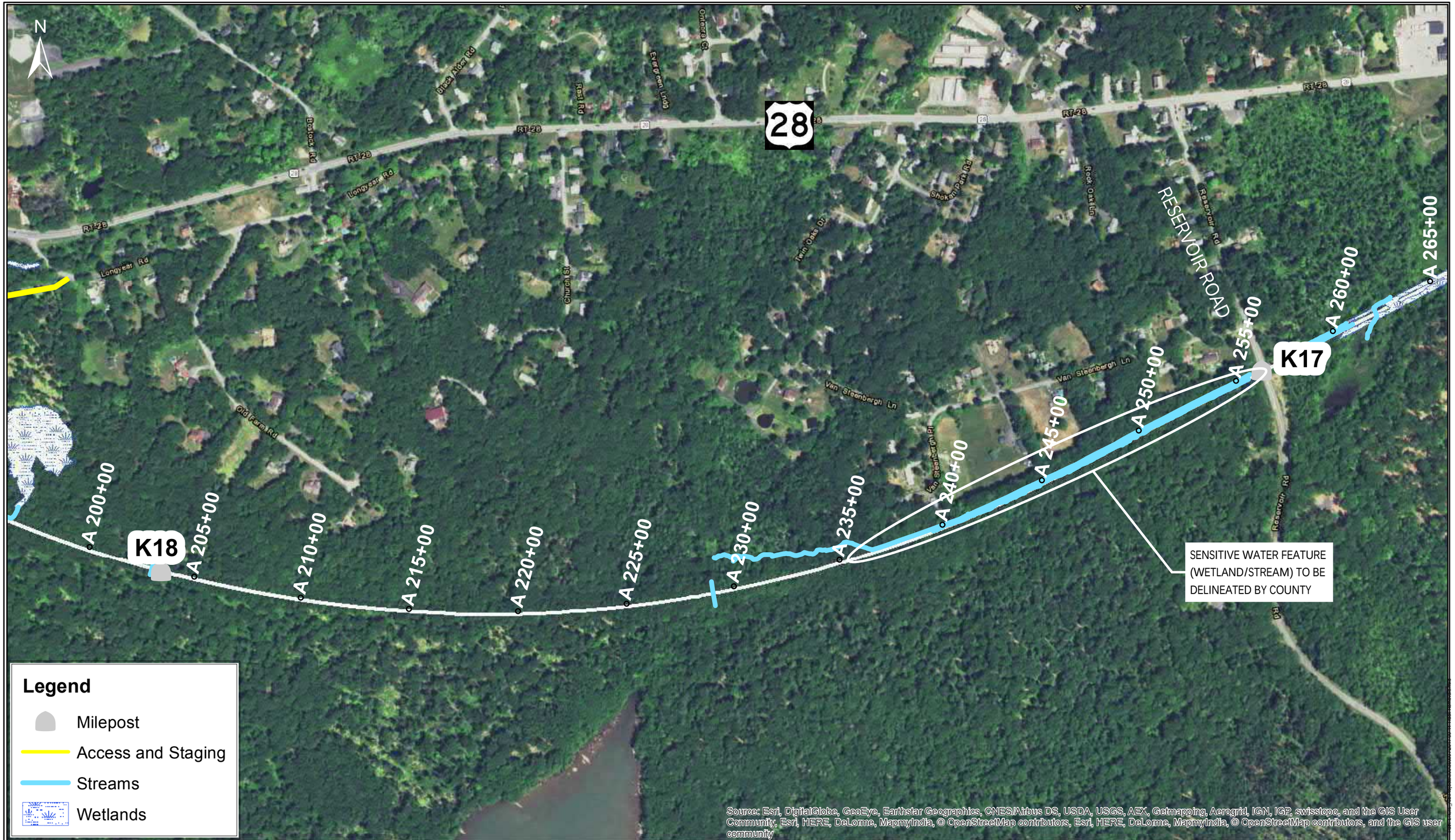
N W E S

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Track Removals K16-K17
Ulster County 9/14/2017 New York

Figure 8

Project RFB 17-152C



Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

N W E S

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Track Removals K17-K18
Ulster County 9/14/2017 New York

Figure 9

Project RFB 17-152C

N

RUNGE ROAD

DEP GATE W-7

28

BONNIE BRAE LANE

DEP GATE W-5

LONGYEAR ROAD

A 145+00

A 150+00

A 155+00

A 160+00

A 165+00

A 170+00

A 175+00

A 180+00

A 185+00

A 190+00

A 195+00

A 200+00

A 205+00

A 210+00

K19

K18

SENSITIVE WATER FEATURE (WETLAND/STREAM) TO BE DELINEATED BY COUNTY

Legend

- Milepost
- Access and Staging
- Streams
- Wetlands

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

N W E S

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Track Removals K18-K19
Ulster County 9/14/2017 New York

Figure 10

Project RFB 17-152C

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Track Removals K19-K20
Ulster County 9/14/2017 New York

Figure 11

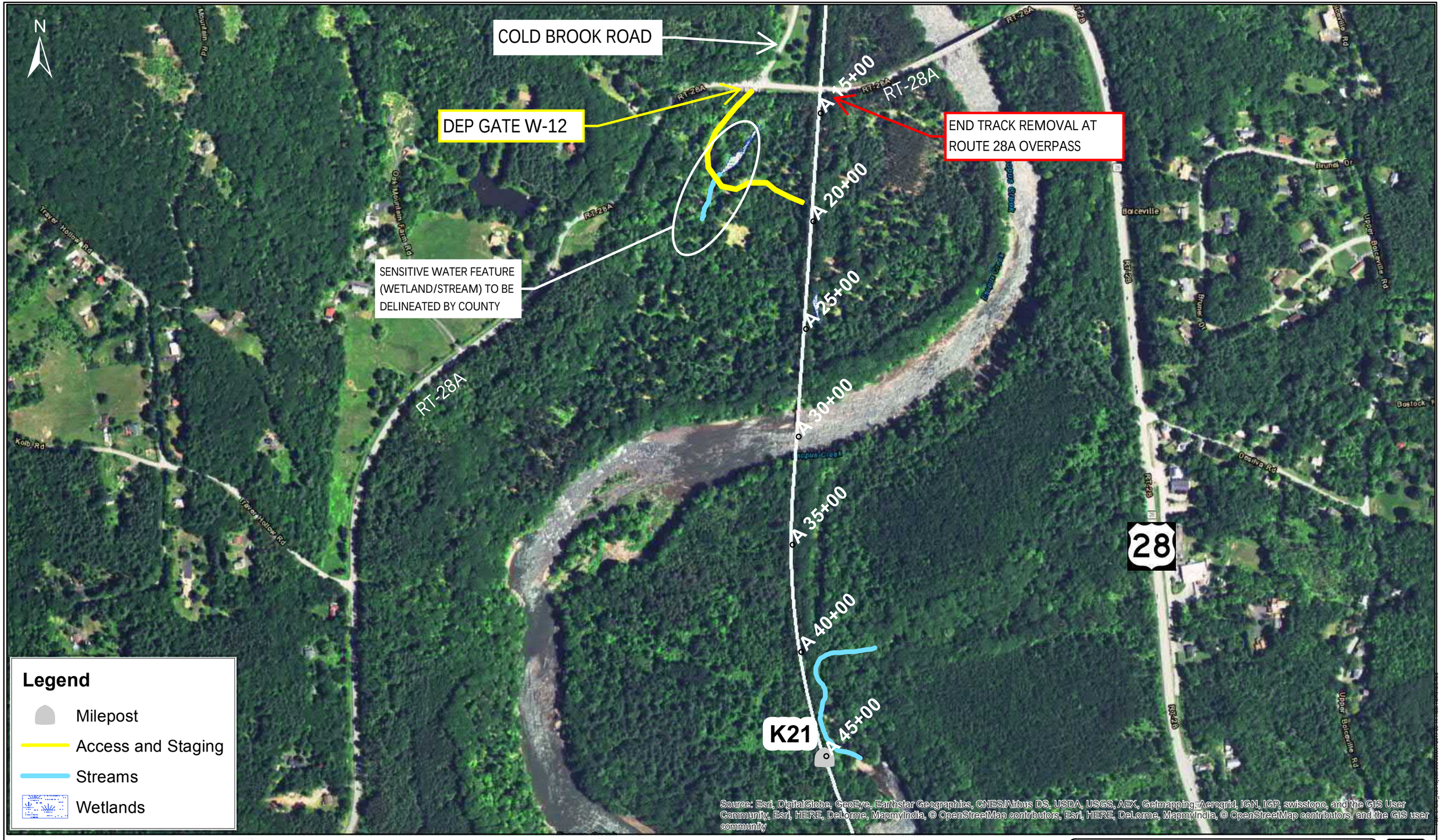
Project RFB 17-152C

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Track Removals K20-K21
Ulster County 9/14/2017 New York

Figure 12
Project RFB 17-152C



Barton & Loguidice, D.P.C.
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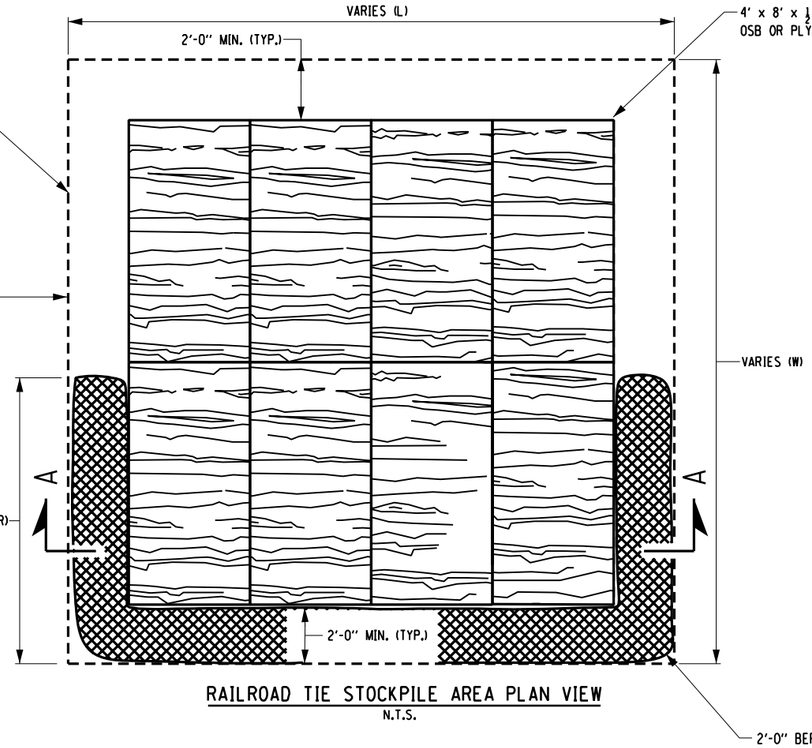
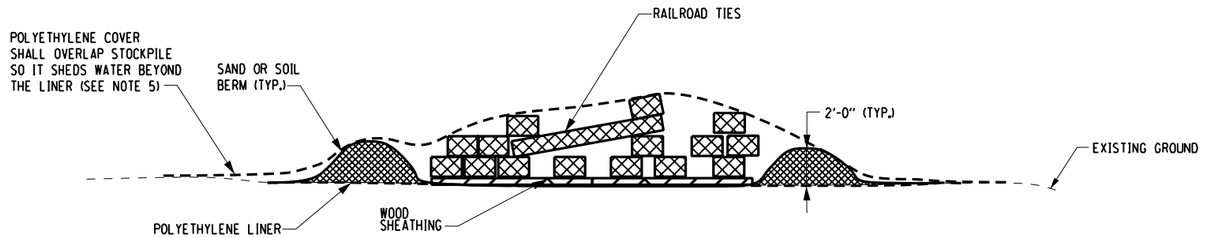
1 inch = 400 feet

Ulster County
Ashokan Rail Trail
Track Removals K21-K21.5
Ulster County 9/14/2017 New York

Figure 13
Project RFB 17-152C



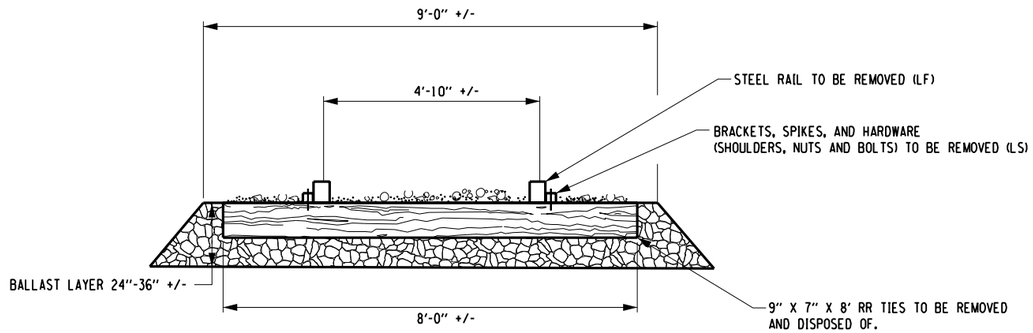
RAILROAD TIE STOCKPILE AREA PLAN VIEW
N.T.S.



DETAIL A-A
N.T.S.

RAILROAD TIE STOCKPILE SECTION NOTES:

1. IT IS STRONGLY ENCOURAGED THAT THE CONTRACTOR UTILIZES A SYSTEM THAT DOES NOT REQUIRE THE RAILROAD TIES TO BE STOCKPILED PRIOR TO TRANSPORT OFF-SITE. HOWEVER, IF STOCKPILING ON-SITE IS REQUIRED THE CONTRACTOR SHALL USE THIS DETAIL IN AREAS WHERE THE RAILROAD TIES WILL BE LAID DOWN.
2. RAILROAD TIES REMOVED FROM THEIR EXISTING LOCATION SHALL ONLY BE ALLOWED TO BE TEMPORARILY STORED IN DESIGNATED STOCKPILE AREAS PRIOR TO REMOVAL FROM THE PROJECT SITE. TIES SHALL NOT BE STORED IN ANY OTHER LOCATION WITHIN OR ADJACENT TO THE PROJECT CORRIDOR.
3. THE AREAS CHOSEN FOR RAILROAD TIE STOCKPILING SHALL BE DRY, STABLE, AND LEVEL AND NOT WITHIN THE DRIPLINE OR CANOPY OF TREES. THE LOCATIONS SHALL BE AS NOTED IN THE TRACK REMOVAL CONTRACT DRAWINGS.
4. NO STOCKPILE AREA SHALL BE LOCATED WITHIN FIFTY (50) FEET OF A SURFACE WATER, FLOODPLAIN, SLOPE, DRAINAGE FACILITY, OR ROADWAY.
5. COVER STOCKPILE AREA WITH 15 MIL OR THICKER POLYETHYLENE AND ANCHOR.



STEEL TRACK HARDWARE AND TIE REMOVAL DETAIL

1. REMOVAL PROCEDURE:

   REMOVE STEEL TRACK AND HARDWARE

   REMOVE TIE.

   GRADE REMAINING BALLAST INPLACE SMOOTH

2. AFTER ALL RAILROAD HARDWARE AND TIES HAVE BEEN REMOVED, THE REMAINING BALLAST SHALL BE GRADED SMOOTH TO REMOVE RUTS AND VOIDS FROM WHERE THE TIES WERE REMOVED.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

TRACK REMOVAL DETAILS - 1

SCALE: AS SHOWN
DATE ISSUED: 9/2017
DRAWING TR-1

IN CHARGE OF | DESIGNED BY | CHECKED BY | DRAFTED BY | CHECKED BY

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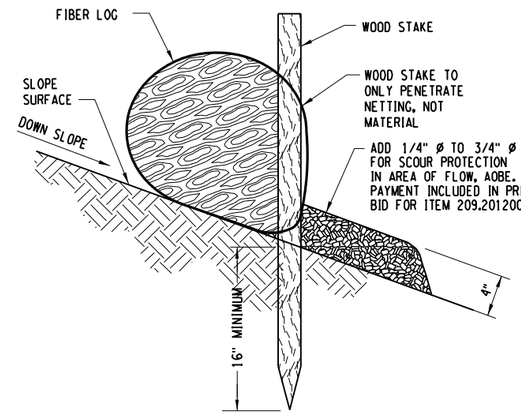
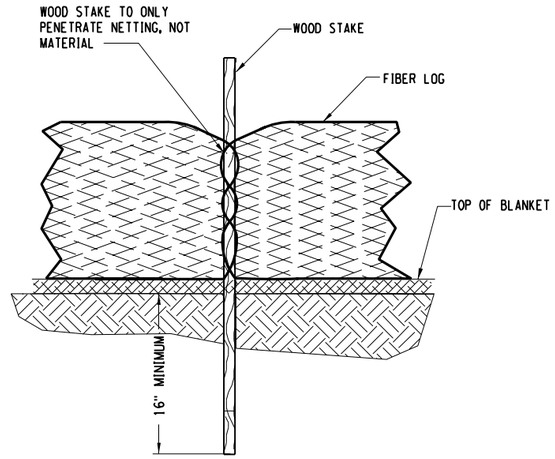


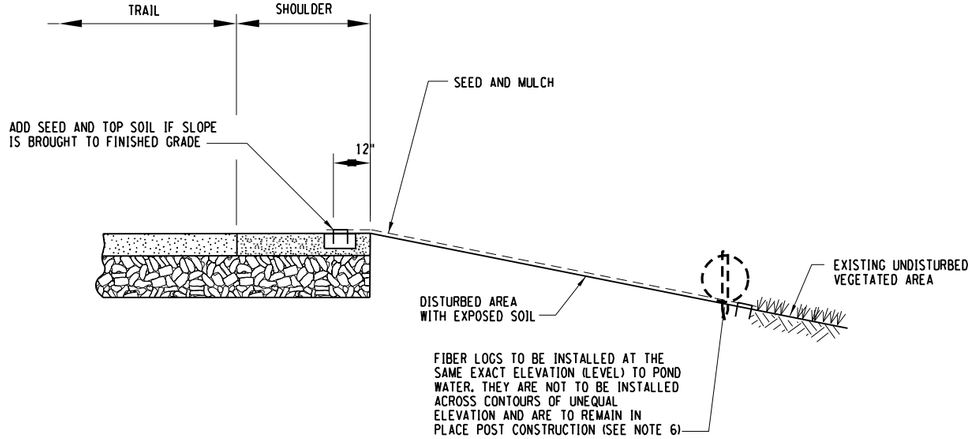
FIBER LOG STAKE DETAIL (ON BARE SOIL)

N.T.S.



FIBER LOG STAKE DETAIL (FRONT VIEW)

N.T.S.



EROSION AND SEDIMENT CONTROL FOR ALL DISTURBED AREAS TEMPORARY OR PERMANENT

N.T.S.

FIBER LOG CHECK DAM APPLICATION NOTES:

A. THE PRIMARY PURPOSE OF A CHECK DAM IS TO REDUCE EROSION IN A CHANNEL BY REDUCING FLOW VELOCITY IN THE CHANNEL.

B. CHECK DAMS WILL CAPTURE SEDIMENT THAT FALLS OUT OF SUSPENSION BEHIND THE CHECK DAM DUE TO DECREASED VELOCITY.

C. CHECK DAMS ARE NOT INTENDED TO, AND WILL NOT FILTER SEDIMENT FROM TURBID WATER.

NOTES:

1. DRAINAGE AREAS:
MAXIMUM DRAINAGE AREA TRIBUTARY TO FIBER LOG CHECK DAM SHALL BE 1 ACRE. MAXIMUM DRAINAGE AREA TRIBUTARY TO PREFABRICATED CHECK DAM SHALL BE ½ ACRE.

2. POSTS MAY BE 1¼" x 1¼" (MIN.) HARDWOOD, 1½" x 3½" (MIN.) SOFTWOOD. ADDITIONAL POSTS ARE REQUIRED AT THE OUTER EDGES OF DITCH WIDTH.

3. THE FIBER LOG SHALL BE INSTALLED WITH THE POSTS ON THE DOWNSTREAM SIDE OF THE FABRIC AS SHOWN.

4. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE MEASURE HEIGHT OF THE FIBER LOG. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.

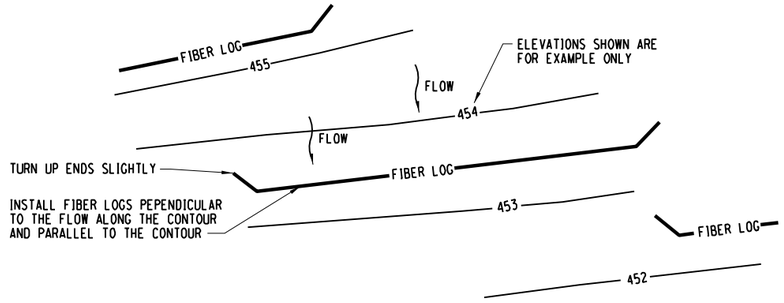
NOTES:

1. ITEMS IN THIS DETAIL MAY APPEAR EXAGGERATED TO SHOW DETAIL.

2. IF SLOPE IS BROUGHT TO FINISHED GRADE, PERMANENT TOP SOIL AND SEEDING SHALL BE INSTALLED PRIOR TO INSTALLING ITEM 209.2103 - SOIL STABILIZERS, CLASS IV TYPE C. IF SLOPES ARE NOT BROUGHT TO FINISH GRADE THEY ARE TO BE TREATED WITH ITEM 209.1003 - TEMPORARY SEED AND MULCH.

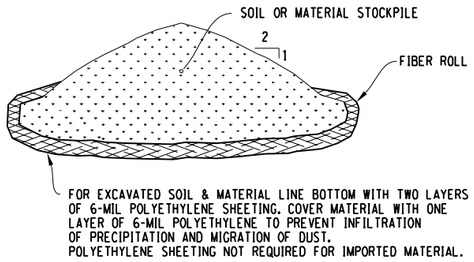
3. AS PART OF FINAL STABILIZATION, WOODEN STAKES TO BE REMOVED AND FIBER LOG MULCH NETTING CUT OPEN ALONG ENTIRE LENGTH.

4. USE STRAW MULCH FOR EROSION PREVENTION



FIBER LOG PLAN EXAMPLE

N.T.S.

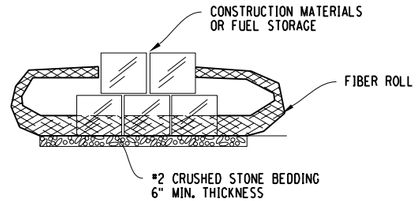


EXCAVATED AND IMPORTED SOIL AND MATERIAL STOCKPILE

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE. THE AREA SHALL NOT BE WITHIN THE DRIPLINE OR CANOPY OF EXISTING TREES. THE LOCATION SHALL BE AS NOTED ON THE DRAWINGS. DREDGED OR EXCAVATED MATERIALS SHALL BE PLACED UPON SILT FENCE FABRIC.

2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2(H) TO 1(V).

3. FIBER LOGS SHALL BE PLACED FIVE (5)-FEET DOWNSLOPE OF EACH PILE. UPON COMPLETION OF SOIL STOCKPILING, TOPSOIL SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH IF NOT TO BE DISTURBED/UTILIZED WITHIN FOURTEEN (14) DAYS.



FUEL, EQUIPMENT, OR MATERIAL STORAGE AREA

1. AREA CHOSEN FOR STORAGE OPERATIONS SHALL BE DRY AND STABLE. THE AREA SHALL NOT BE WITHIN THE DRIPLINE OR CANOPY OF TREES. THE LOCATION SHALL BE AS NOTED ON THE DRAWINGS.

2. NO STOCKPILE AREA SHALL BE LOCATED WITHIN FIFTY (50) FEET OF SURFACE WATER, FLOODPLAIN, SLOPE, DRAINAGE FACILITY OR ROADWAY.

3. IF STABLE SURFACE NOT AVAILABLE, THE TOP SIX (6) INCHES OF NATIVE MATERIAL SHALL BE EXCAVATED FROM THE MATERIAL/FUEL STORAGE AREA AND STOCKPILED TO REUSE FOR RESTORATION OF THIS AREA. IN THE AREA EXCAVATED, PLACE SEPARATION FABRIC AND SIX (6) INCHES OF #2 CRUSHED STONE BEDDING, SEE SPECIFICATIONS. IF APPROVED BY THE ENGINEER, USE OF EXISTING GRAVEL AREAS MAY BE USED IN LIEU OF EXCAVATION, STONE, AND FABRIC.

4. FIBER LOGS SHALL BE PLACED FIVE (5) FEET DOWN SLOPE OF STORAGE AREA.

5. REMOVE ALL MATERIALS INCLUDING STONE AND FABRIC WHEN NEED FOR STORAGE IS OVER. RESTORE TO ORIGINAL GRADE WITH STOCKPILED EXCAVATED SOIL (NO FOREIGN DEBRIS).

CONSTRUCTION STOCKPILE/STORAGE AREA DETAIL

N.T.S.

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL

ULSTER COUNTY

EROSION AND SEDIMENT CONTROL DETAILS - 1

SCALE: AS SHOWN

DATE ISSUED: 9/2017

DRAWING ESCD-1

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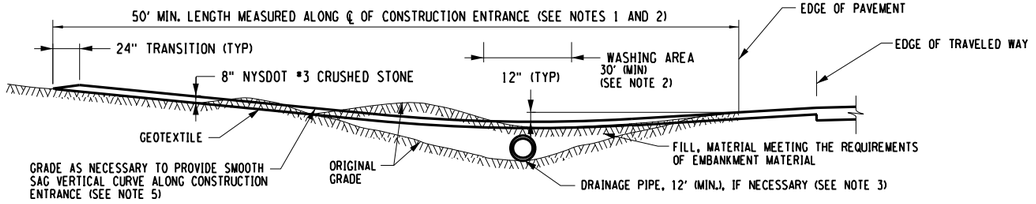
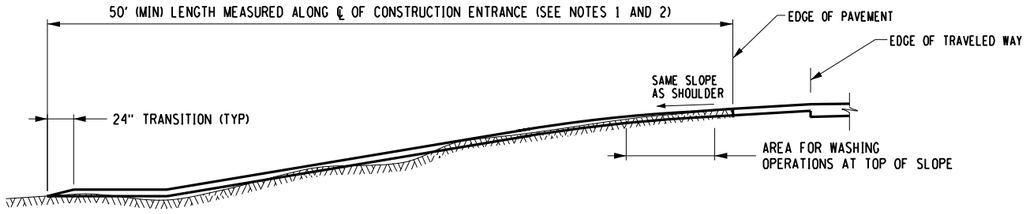
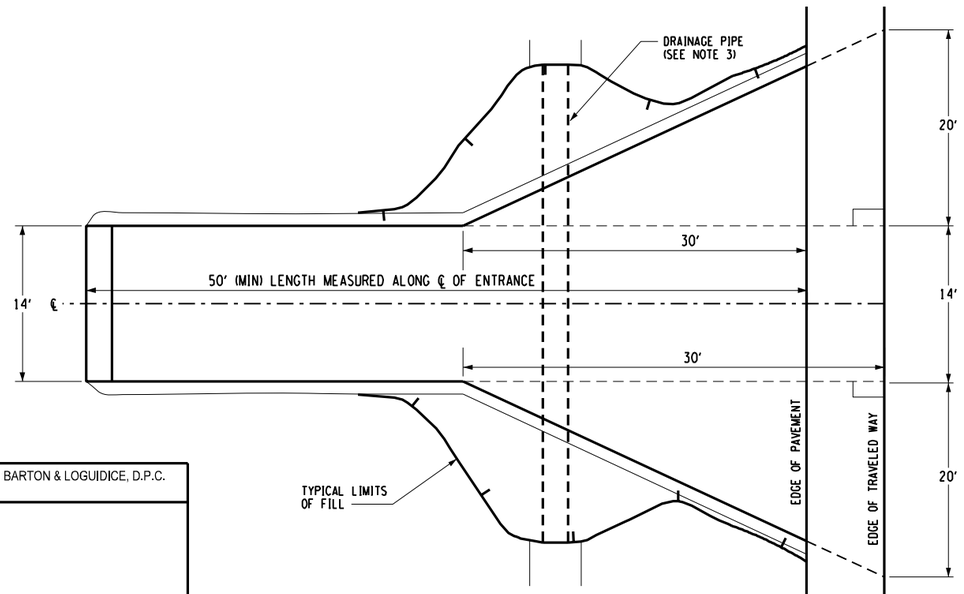
IN CHARGE OF _____ DESIGNED BY _____ DRAFTED BY _____ CHECKED BY _____ CHECKED BY _____



TYPICAL CONSTRUCTION ENTRANCE PROFILE
(CUT AND DITCH SECTIONS)



TYPICAL CONSTRUCTION ENTRANCE PROFILE
(FILL SECTIONS)



TYPICAL CONSTRUCTION ENTRANCE PLAN
(CUT/DITCH AND FILL SECTIONS)

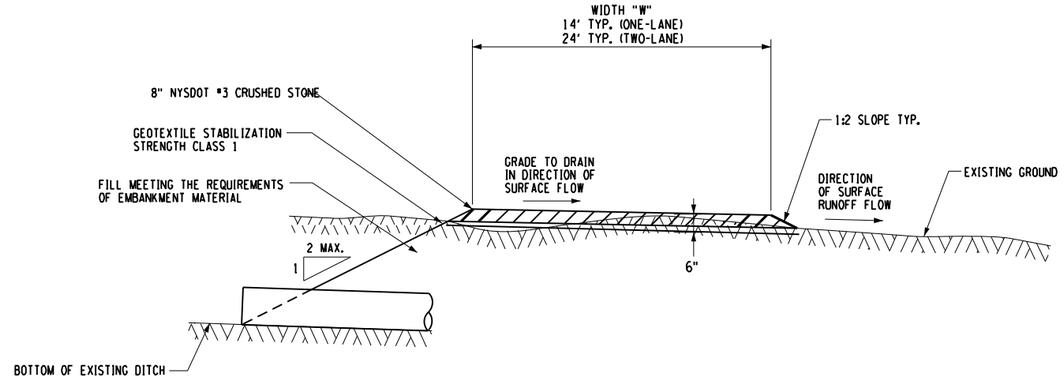
CONSTRUCTION ENTRANCES:

APPLICATION NOTES:

A. THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY OR STREETS.

NOTES:

1. MODIFICATIONS MAY BE REQUIRED TO MATCH FIELD CONDITIONS.
2. A 30' WASH AREA SHALL BE PROVIDED. ADDITIONAL GRADING MAY BE REQUIRED TO PROVIDE WASHING AREAS.
3. PROPOSED DRAINAGE PIPES SHALL BE SIZED WITH SUFFICIENT CAPACITY TO CARRY DITCH FLOWS. ALTERNATE WAYS OF TRANSPORTING DITCH DRAINAGE ACROSS CONSTRUCTION ENTRANCES MAY BE PROPOSED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER.
4. THE CONTRACTOR SHALL GRADE TO PREPARE AND SMOOTH ORIGINAL GROUND FOR PLACEMENT OF 8" OF #3 CRUSHED STONE ENTRANCE MATERIAL UP TO THE EDGE OF PAVEMENT.
5. ALL WORK TO CONSTRUCT THE STABILIZED ENTRANCE, INCLUDING GRADING, DRAINAGE PIPE, EXCAVATION, FILL, GEOTEXTILE AND CRUSHED STONE OR GRAVEL SHALL BE INCLUDED IN THE UNIT PRICE BID.
6. 100% CRUSHED STONE MEETING THE NYSDOT #3 STONE GRADATION SHALL BE UTILIZED FOR CONSTRUCTION ENTRANCES



TYPICAL CONSTRUCTION ENTRANCE SECTION

PREPARED BY: BARTON & LOGUIDICE, D.P.C.
ON :

NO.	DATE	BY	REVISION

XX

Barton & Loguidice, D.P.C.

ASHOKAN RAIL TRAIL
ULSTER COUNTY

EROSION AND SEDIMENT CONTROL DETAILS - 2

SCALE: NONE
DATE ISSUED: 9/2017
DRAWING
ESCD-2

DESIGNED BY
DRAFTED BY
CHECKED BY
IN CHARGE OF

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DATE = 9/13/2017
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Exhibit 6: SEQRA Documentation

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Sponsor Information.

Name of Action or Project: Ashokan Rail Trail		
Project Location (describe, and attach a general location map): Towns of Hurley and Olive, Ulster County		
Brief Description of Proposed Action (include purpose or need): Ulster County is proposing construction of an 11.5-mile pedestrian and bicycle trail from Basin Road in the Town of Hurley to Route 28A in the Town of Olive, as shown on the enclosed Project area map. The Project will establish a non-motorized recreational trail on the County-owned Ulster & Delaware Railroad corridor along the northern shore of the Ashokan Reservoir. The Project includes repurposing of the existing railroad bed and ballast, removal of rail ties and tracks, construction of multiple trailheads, reconstruction of a failed major culvert, repair to existing drainage structures, and replacement of the bridge structure over the Esopus Creek near Boiceville, which was destroyed during Hurricane Irene in 2011. The Project goals are to improve recreational opportunities, enhance quality of life, and boost economic development and tourism in Ulster County while also protecting the quality of the Ashokan Reservoir water supply.		
Name of Applicant/Sponsor: Ulster County, C/O Mr. Michael Hein, County Executive	Telephone: (845) 340-3800 E-Mail: exec@co.ulster.ny.us	
Address: 244 Fair Street, PO Box 1800		
City/PO: Kingston	State: NY	Zip Code: 12402
Project Contact (if not same as sponsor; give name and title/role): Mr. Christopher White, Ulster County Planning Dept., Deputy Director/Project Manager	Telephone: (845) 340-3338 E-Mail: cwhi@co.ulster.ny.us	
Address: 244 Fair Street, PO Box 1800		
City/PO: Kingston	State: NY	Zip Code: 12402
Property Owner (if not same as sponsor): New York City Department of Environmental Protection (County owns railroad easement)	Telephone: (845) 340-7218 E-Mail: CLaing@dep.nyc.gov	
Address: 71 Smith Avenue		
City/PO: Kingston	State: NY	Zip Code: 12401

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, or Village Board of Trustees ☐Yes☑No		
b. City, Town or Village Planning Board or Commission ☐Yes☑No		
c. City Council, Town or Village Zoning Board of Appeals ☐Yes☑No		
d. Other local agencies ☐Yes☑No		
e. County agencies ☑Yes☐No	Ulster County Legislature (SEQRA/ Funding)	
f. Regional agencies ☑Yes☐No	NYCDEP (SWPPP - Design Approval)	
g. State agencies ☑Yes☐No	NYSDEC (Wetland, Habitat, Endangered Species, Protect Water), NYSHPO (Arch & Historic)	
h. Federal agencies ☑Yes☐No	US Army Corps of Engineers (Wetland jurisdiction)	

i. Coastal Resources.
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☑Yes☐No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes☐No

If Yes, identify the plan(s):

New York City Watershed Boundary - subject to NYC Watershed Rules and Regulations

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☑Yes☐No

If Yes, identify the plan(s):

Ulster County Open Space Plan

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
Conservation Residential and very low density residential

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Onteora Central School District, Kingston City Schools

b. What police or other public protection forces serve the project site?
Olive Police Department, Ulster County Sheriff, NYS Police, NYC DEP Police

c. Which fire protection and emergency medical services serve the project site?
Olive Fire Department, Olive First Aid, Inc., Hurley Fire Department

d. What parks serve the project site?
None

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Recreational

b. a. Total acreage of the site of the proposed action? 56 acres
b. Total acreage to be physically disturbed? 42 acres ← Calculated by length (11.5 miles) multiplied by 30 feet average width
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 56 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will proposed action be constructed in multiple phases? ☑ Yes ☐ No
i. If No, anticipated period of construction: _____ months
ii. If Yes:
- Total number of phases anticipated 2
- Anticipated commencement date of phase 1 (including demolition) 7 month 2017 year
- Anticipated completion date of final phase 11 month 2018 year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:
Phasing of the project relates to constraints on access to the site and the difficulty of construction during winter months primarily due to access

f. Does the project include new residential uses? ☐Yes ☑No
If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				
At completion of all phases				

g. Does the proposed action include new non-residential construction (including expansions)? ☐Yes ☑No
If Yes,
i. Total number of structures _____
ii. Dimensions (in feet) of largest proposed structure: _____height; _____width; and _____ length
iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐Yes ☑No
If Yes,
i. Purpose of the impoundment: _____
ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐Other specify: _____
iii. If other than water, identify the type of impounded/contained liquids and their source. _____
iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres
v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length
vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐Yes ☑No
If Yes:
i. What is the purpose of the excavation or dredging? _____
ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____
iv. Will there be onsite dewatering or processing of excavated materials? ☐Yes ☐No
If yes, describe. _____
v. What is the total area to be dredged or excavated? _____ acres
vi. What is the maximum area to be worked at any one time? _____ acres
vii. What would be the maximum depth of excavation or dredging? _____ feet
viii. Will the excavation require blasting? ☐Yes ☐No
ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☑Yes ☐No
If Yes:
i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): NYSDEC Freshwater Wetland AS- 19 and AS-20 as well as H-171-P 848-12, H-171-P 848-11, H-171-P 848-10, H-171-P 848-9 and unmapped stream resources

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:
Wetland AS-20 and 1 unmapped wetland would have a minor linear impact as well as some adjacent area impacts. Culvert repair and proposed bridge work will require entry into waterways and temporary bank impacts. Note: The proposed trail alignment follows the existing built railroad corridor

iii. Will proposed action cause or result in disturbance to bottom sediments? ☑ Yes ☐ No
If Yes, describe: Major culvert repair and/or bridge reconstruction may cause temporary disturbance

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☑ No
If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance:
The wetland will be restored to pre-construction conditions and losses mitigated. Enhancement and restoration will occur.

c. Will the proposed action use, or create a new demand for water? ☐ Yes ☑ No
If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐ Yes ☐ No
If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No
- Do existing lines serve the project site? ☐ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project? ☐ Yes ☐ No
If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☐ No
If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☐ Yes ☑ No
If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐ Yes ☑ No
If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No

- Do existing sewer lines serve the project site? ☐Yes ☐No
- Will line extension within an existing district be necessary to serve the project? ☐Yes ☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☑No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☑Yes ☐No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

500 Square feet or 0.01 acres (impervious surface)

2.4M Square feet or 56 acres (parcel size)

ii. Describe types of new point sources. the occasional swale will collect runoff in isolated locations and parking lots where it will be directed to sheet flow and infiltration locations

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

on-site infiltration practices

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☐Yes ☑No

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☑Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☑Yes ☐No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

Heavy equipment during construction phase only

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

N/A

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

N/A

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☑No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☐No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐Morning ☐Evening ☐Weekend ☐Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐Yes ☑No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

iii. Will the proposed action require a new, or an upgrade to, an existing substation? ☐Yes ☐No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7am-5pm
- Saturday: _____
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: Dawn to Dusk
- Saturday: Dawn to Dusk
- Sunday: Dawn to Dusk
- Holidays: Dawn to Dusk

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

Heavy equipment usage during hours of construction, M-F 7am-5pm.

ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? ☑ Yes ☐ No

Describe: Some limited tree removal will be required to achieve appropriate trail width. However, the entire area is forested and will still have substantial natural barriers.

n.. Will the proposed action have outdoor lighting? ☐ Yes ☑ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe:

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally describe proposed storage facilities:

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☑ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☑ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction:
- Operation:

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction:
- Operation:

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☑ Commercial ☑ Residential (suburban) ☐ Rural (non-farm)
☑ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Drinking Water Supply; Recreational- Fishing and Hunting

ii. If mix of uses, generally describe:

Open space/ forested area with linear railroad corridor adjoining a NYC DEP reservoir and running parallel to State Route 28

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0	0	0
• Forested	37	37	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0	0	0
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	2	2	0
• Wetlands (freshwater or tidal)	1	0.5+	<0.5
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: Rail Corridor ballast area	16	16	0

c. Is the project site presently used by members of the community for public recreation? ☑Yes ☐No

i. If Yes: explain: Hunting and Fishing - Requires NYCDEP Access Permit

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑Yes ☐No

If Yes,

i. Identify Facilities:

DD's Daycare- 36 Bonnie Brae Lane, Shokan

e. Does the project site contain an existing dam? ☐Yes ☑No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐Yes ☑No

If Yes:

i. Has the facility been formally closed? ☐Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☑Yes ☐No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

Note: Former railroad corridor. There is potential for coal ash and slag and uncharacterized fill on site. Testing will be completed to determine the extent, if any, is on site. It is not expected to a hazard. Existing railroad ties will removed from the corridor and disposed of properly

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☑Yes ☐ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐Yes ☐No

☑ Yes – Spills Incidents database — Provide DEC ID number(s): Multiple, Hazardous Waste Report TBD

☐ Yes – Environmental Site Remediation database — Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐Yes ☑No

If yes, provide DEC ID number(s): _____

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? 6.5 feet

b. Are there bedrock outcroppings on the project site? ☑ Yes ☐ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? 10 %

c. Predominant soil type(s) present on project site:

Oquaga-Arnot-Rock outcrop	29 %
Tunkhannock gravelly loam	17 %
Lackawanna and Swartswood	6 %

d. What is the average depth to the water table on the project site? Average: 6.5 feet

e. Drainage status of project site soils:

☑ Well Drained:	82 % of site
☑ Moderately Well Drained:	10.4 % of site
☑ Poorly Drained	7.6 % of site

f. Approximate proportion of proposed action site with slopes:

☑ 0-10%:	30 % of site
☑ 10-15%:	40 % of site
☑ 15% or greater:	30 % of site

Note: Trail Gradient <= 5 %

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☑ Yes ☐ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name 862: 555, 549, 551, 543, 523 Classification A(TS), A(T), AA(T), C(TS)
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal and State Approximate Size 100+
- Wetland No. (if regulated by DEC) AS-19. AS-20

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☑ Yes ☐ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____
Ashokan Reservoir, Esopus Creek - Metals (silt/sediment),

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100 year Floodplain? ☑ Yes ☐ No

k. Is the project site in the 500 year Floodplain? ☑ Yes ☐ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☑ Yes ☐ No
If Yes:

i. Name of aquifer: Principal Aquifer

m. Identify the predominant wildlife species that occupy or use the project site:
white tailed deer | turkey | black bear
eastern chipmunk | eastern gray squirrel | coyote

n. Does the project site contain a designated significant natural community? ☑ Yes ☐ No
If Yes:
i. Describe the habitat/community (composition, function, and basis for designation): Vernal pool
ii. Source(s) of description or evaluation: Site Investigations, NYC DEP
iii. Extent of community/habitat:
- Currently: .75 acres
- Following completion of project as proposed: .75 acres
- Gain or loss (indicate + or -): 0 acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☑ Yes ☐ No

Indiana bat (endangered), Northern long-eared bat (threatened), bog turtle (threatened), bald eagle (NYS threatened),

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☑ Yes ☐ No

Sharp-shinned hawk, osprey, red-shouldered hawk, American bittern, whip-poor-will, common nighthawk

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☑ Yes ☐ No
If yes, give a brief description of how the proposed action may affect that use:
Access to designated fishing and hunting areas will be improved and marked with signage to ensure only continued use by special permit.

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No
If Yes, provide county plus district name/number:

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No
i. If Yes: acreage(s) on project site?
ii. Source(s) of soil rating(s):

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No
If Yes:
i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No
If Yes:
i. CEA name:
ii. Basis for designation:
iii. Designating agency and date:

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places? ☐ Yes ☑ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☐ Historic Building or District

ii. Name: _____

iii. Brief description of attributes on which listing is based:

_____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: NYS Route 28 Scenic Byway, Ashokan Reservoir

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Rt. 28 Scenic byway - Ashokan Reservoir overlooks and trail

iii. Distance between project and resource: <0.5 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

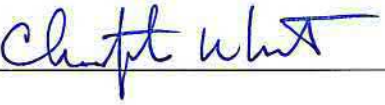
Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name County of Ulster Date August 31, 2016

Signature  Title Deputy Director of Planning/ Project Manager

PRINT FORM

Resolution No. 480 December 15, 2015

Establishing Capital Project No. 459 To Provide for Design and Engineering Work for the Ulster County Rail Trail Project along the Ashokan Reservoir ("Ashokan Rail Trail")

Referred to: The Economic Development, Tourism, Housing, Planning and Transit Committee (Chairman Briggs and Legislators Allen, Archer, Bartels, Litts, Maio and Maloney), The Public Works and Capital Projects Committee (Chairman Fabiano and Legislators Archer, Greene, Loughran and Roberts), and The Ways and Means Committee (Chairman Gerentine and Legislators Allen, Belfiglio, Briggs, Gregorius, Maio, Maloney and R. Parete)

Chairman of the Ways and Means Committee, Richard A. Gerentine, and Deputy Chairman Donald Gregorius offer the following:

WHEREAS, this resolution has been submitted by the County Executive on behalf of the Department of Planning; and

WHEREAS, the County of Ulster (hereinafter the "County") is the owner of 38.6 miles of the Ulster & Delaware (hereinafter "U&D") Railroad corridor running from the City of Kingston to Highmount in the Town of Shandaken, including approximately 11.5 miles of easement through lands adjacent to the Ashokan Reservoir owned by the City of New York (hereinafter the "Watershed Property") and managed by the New York City Department of Environmental Protection (hereinafter "NYCDEP"); and

WHEREAS, in December 2013, the Ulster County Executive and the then NYCDEP Commissioner announced an historic Agreement in Principle to facilitate and provide significant funding support for the conversion of 11.5 miles of the U&D corridor along the Watershed Property into a public, multi-use recreational trail (hereinafter the "Ashokan Rail Trail") in order to provide a major economic development boost to Ulster County and Route 28 businesses, expand recreational opportunities for local residents and visitors, improve public health and quality of life, and further develop Ulster County's rail trail network into a world-class tourism destination; and

WHEREAS, the Ashokan Rail Trail will open the northern shore of the Ashokan Reservoir to the public, without permit or fee, for the first time in more than a century and will ensure year-round public access for walking, running, bicycling, cross country skiing, snowshoeing and other non-motorized uses between Basin Road in West Hurley and Boiceville in the Town of Olive; and

WHEREAS, in August 2014, the Ulster County Legislature adopted Resolution No. 275, which established a policy to convert sections of the U&D corridor into rail trail only, including the 11.5 miles along the Watershed Property identified in the Agreement in Principle; and

Resolution No. 480 December 15, 2015

Establishing Capital Project No. 459 To Provide for Design and Engineering Work for the Ulster County Rail Trail Project along the Ashokan Reservoir ("Ashokan Rail Trail")

WHEREAS, in May 2015, the Ulster County Legislature adopted Resolution No. 187 authorizing the County Executive and Chairman of the Ulster County Legislature to execute a final agreement based on the Agreement in Principle with the City of New York to facilitate and provide significant funding and other support for a public rail trail along the Ashokan Reservoir (the "Agreement"); and

WHEREAS, the Agreement was fully executed on June 16, 2015 and included $2,500,000.00 million in direct grant assistance from NYCDEP for trail planning and construction; and

WHEREAS, on October 1, 2015 the first $1,000,000.00 in funding was released to the County in accordance with the Agreement; and

WHEREAS, the County is interested in moving forward design and engineering work for the Ashokan Rail Trail using a portion of the NYCDEP funding, which will be transferred into the Ashokan Rail Trail Capital Project for planning purposes only; and

WHEREAS, the proposed project being considered includes the construction of the Ashokan Reservoir Rail Trail and associated access facilities constitutes an action as defined under NYCRR Part 617.4(b)(6) [SEQRA]; and

WHEREAS, the County is desirous of establishing itself as a lead agency and conducting a coordinated review as provided for in NYCRR Part 617.6; now, therefore, be it

RESOLVED, this resolution authorizes expenditures exclusively for design and engineering work necessary to effectuate the design of the Ashokan Rail Trail; and, be it further

RESOLVED, that pursuant to 6 NYCRR Part 617.6(b) (3) of the Regulations pertaining to Article 8 of the Environmental Conservation Law of New York State (SEQRA), the Ulster County Legislature hereby declares its intent to serve as Lead Agency for the above recited project; and, be it further

RESOLVED, that the Ulster County Legislature has determined, after review of the criteria contained in 6 NYCRR Parts 617.4 (b)(6), that the project is a Type I Action; and, be it further

Resolution No. 480 December 15, 2015

Establishing Capital Project No. 459 To Provide for Design and Engineering Work for the Ulster County Rail Trail Project along the Ashokan Reservoir ("Ashokan Rail Trail")

RESOLVED, that the Ulster County Legislature will conduct a coordinated review and circulate its Notice of Intent to serve as Lead Agency, together with the EAF and accompanying documentation to all interested and involved agencies pursuant to 6 NYCRR Part 617.6(b) (2) (i) and 6 NYCRR Part 617.6(b) (3); and, be it further

RESOLVED, that pursuant to 6 NYCRR Part 617.6(b) (3), at the conclusion of an otherwise unchallenged thirty (30) day period following the date of transmittal of the Notice of Intent, the EAF and documentation aforesaid to the interested agencies, the Legislature shall become the Lead Agency under SEQRA for this project; and, be it further

RESOLVED, that Capital Project No. 459 Ashokan Rail Trail is hereby established as follows:

	CREATE	
Capital Project No. 459	Ashokan Rail Trail	$1,000,000.00

and, be it further

RESOLVED, that Capital Project No. 459- "Ashokan Rail Trail" is hereby established and that the 2015-2020 Capital Fund Budget is amended as follows:

	INCREASE	**AMOUNT**
HH 7197-0459-4300-4355 (App #)	Engineering Services	$550,000.00
HH 7197-0459-3200-2397 (Rev #)	Intergovernmental Charges Capital Projects, Other Gov't (NYC DEP Grant)	$550,000.00

and move its adoption.

ADOPTED BY THE FOLLOWING VOTE:

AYES: 23 NOES: 0

Resolution No. 480 December 15, 2015

Establishing Capital Project No. 459 To Provide for Design and Engineering Work for the Ulster County Rail Trail Project along the Ashokan Reservoir ("Ashokan Rail Trail")

Passed Committee: Economic Development, Tourism, Housing, Planning, and Transit on December 1, 2015

Passed Committee: Public Works and Capital Projects on December 3, 2015

Passed Committee: Ways and Means on December 15, 2015

FINANCIAL IMPACT:
NONE

STATE OF NEW YORK
ss:
COUNTY OF ULSTER

I, the undersigned Clerk of the Legislature of the County of Ulster, hereby certify that the foregoing resolution is the original resolution adopted by the Ulster County Legislature on the 15th Day of December in the year Two Thousand and Fifteen, and said resolution shall remain on file in the office of said clerk.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of the County of Ulster this 16th Day of December in the year Two Thousand and Fifteen.

Victoria A. Fabella, Clerk
Ulster County Legislature

Submitted to the County Executive this
16th Day of December, 2015.

Victoria A. Fabella, Clerk
Ulster County Legislature

Approved by the County Executive this
22 Day of December, 2015.

Michael P. Hein, County Executive

Easement Only

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Sponsor Information.

Name of Action or Project: Ashokan Rail Trail - Easement Only - Segmented Review		
Project Location (describe, and attach a general location map): Towns of Hurley, Olive, and Woodstock Ulster County - See Attached Map		
Brief Description of Proposed Action (include purpose or need): This action is the execution of the Ashokan Trail Easement between Ulster County and New York City as part of the Ashokan Rail Trail (ART). The Easement is being considered as lawful segmentation under SEQRA and is part of a larger 11.5-mile pedestrian and bicycle trail from Basin Road in the Town of Hurley to Route 28A in the Town of Olive, as shown on the enclosed Project area map. The Easement covers the lands associated with this project and consists of approximate 230 acres that follows the boundaries of the existing easement for railroad easement held by the County on these lands. The Easement specifically provides the County with the necessary property rights to construct the ART while maintaining all of the underlying rights associated with the railroad easement. No construction is authorized by the Easement and the County will continue to progress the SEQRA environmental review for the ART itself as a Type I Action .		
Name of Applicant/Sponsor: Ulster County, C/O Mr. Michael Hein, County Executive	Telephone: (845) 340-3800 E-Mail: exec@co.ulster.ny.us	
Address: 244 Fair Street PO Box 1800		
City/PO: Kingston	State: NY	Zip Code: 12402
Project Contact (if not same as sponsor; give name and title/role): Mr. Christopher White, Ulster County Planning Dept., Deputy Director/Project Manager	Telephone: (845) 340-3338 E-Mail: cwhi@co.ulster.ny.us	
Address: 244 Fair Street PO Box 1800		
City/PO: Kingston	State: NY	Zip Code: 12402
Property Owner (if not same as sponsor): New York City Department of Environmental Protection (County owns railroad easement)	Telephone: (845) 340-7218 E-Mail: cLaing@dep.nyc.gov	
Address: 71 Smith Avenue		
City/PO: Kingston	State: NY	Zip Code: 12401

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, or Village Board of Trustees ☐Yes ☑No		
b. City, Town or Village Planning Board or Commission ☐Yes ☑No		
c. City Council, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☐Yes ☑No		
e. County agencies ☑Yes ☐No	Ulster County Legislature (Easement Approval)	
f. Regional agencies ☑Yes ☐No	NYCDEP (Approval of the Easement)	7/19/2017
g. State agencies ☐Yes ☑No		
h. Federal agencies ☐Yes ☑No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes ☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☑Yes ☐No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes ☐No

If Yes, identify the plan(s):

New York City Watershed Boundary - subject to NYC Watershed Rules and Regulations

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☑Yes ☐No

If Yes, identify the plan(s):

Ulster County Open Space Plan

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
Conservation Residential and very low density residential

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Onteora Central School District, Kingston City Schools

b. What police or other public protection forces serve the project site?
Olive Police Department, Ulster County Sheriff, NYS Police, NYC DEP Police

c. Which fire protection and emergency medical services serve the project site?
Olive Fire Department, Olive First Aid, Inc., Hurley Fire Department

d. What parks serve the project site?
None

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Legal - Recreational - allow trail use via easement

b. a. Total acreage of the site of the proposed action? 230 acres
b. Total acreage to be physically disturbed? 0 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 230 acres

Trail easement & existing rail easement

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: _____ months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:

This action - approval of the easement is being considered as a lawful segmentation and only includes 1 phase Project has a whole as three phases - easement approval, demolition, and construction

f. Does the project include new residential uses? ☐Yes ☑No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase	_____	_____	_____	_____
At completion of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? ☐Yes ☑No

If Yes,

i. Total number of structures _____

ii. Dimensions (in feet) of largest proposed structure: _____height; _____width; and _____ length

iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐Yes ☑No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐Yes ☑No

If Yes:

i .What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

i*v.* Will there be onsite dewatering or processing of excavated materials? ☐Yes ☐No

If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐Yes ☐No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐Yes ☑No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

_____

_____

_____

_____

iii. Will proposed action cause or result in disturbance to bottom sediments? ☐ Yes ☑ No

If Yes, describe: _____

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☑ No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

_____

- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

_____

c. Will the proposed action use, or create a new demand for water? ☐ Yes ☑ No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐ Yes ☐ No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No
- Do existing lines serve the project site? ☐ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project? ☐ Yes ☐ No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☐ No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

_____

vi. If water supply will be from wells (public or private), maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☐ Yes ☑ No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

_____

_____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐ Yes ☑ No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No

- Do existing sewer lines serve the project site? ☐Yes ☐No
- Will line extension within an existing district be necessary to serve the project? ☐Yes ☐No

  If Yes:
  - Describe extensions or capacity expansions proposed to serve this project: _____

_____

_____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☑No

If Yes:
- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

_____

_____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

_____

_____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☐Yes ☑No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

_____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

_____

_____

- If to surface waters, identify receiving water bodies or wetlands: _____

_____

_____

- Will stormwater runoff flow to adjacent properties? ☐Yes ☐No

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐Yes ☑No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

_____

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

_____

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

_____

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☑No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☑No

ii. In addition to emissions as calculated in the application, the project will generate:
- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

_____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

_____

_____

_____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐Yes ☐No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

_____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

_____

iii. Will the proposed action require a new, or an upgrade to, an existing substation? ☐Yes ☐No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: Not Applicable
- Saturday: _____
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: Not Applicable
- Saturday: _____
- Sunday: _____
- Holidays: _____

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☐ Yes ☑ No

If yes:

i. Provide details including sources, time of day and duration:

_____

_____

ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe: _____

_____

n.. Will the proposed action have outdoor lighting? ☐ Yes ☑ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

_____

_____

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe: _____

_____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

_____

_____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally describe proposed storage facilities: _____

_____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

_____

_____

_____

_____

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☑ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☑ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____

  _____
- Operation: _____

  _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____

  _____
- Operation: _____

  _____

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☑ Commercial ☑ Residential (suburban) ☐ Rural (non-farm)
☑ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Drinking Water Supply; Recreational- Fishing and Hunting

ii. If mix of uses, generally describe:

Open space/ forested area with linear railroad corridor adjoining a NYC DEP reservoir and running parallel to State Route 28

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0	0	
• Forested	161	161	
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0	0	
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	
• Surface water features (lakes, ponds, streams, rivers, etc.)	14	14	
• Wetlands (freshwater or tidal)	18	18	
• Non-vegetated (bare rock, earth or fill)	0	0	
• Other Describe: Rail Corridor ballast area	37	37	

c. Is the project site presently used by members of the community for public recreation? ☑ Yes ☐ No

i. If Yes: explain: Hunting and Fishing - Requires NYCDEP Access Permit

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No

If Yes,

i. Identify Facilities:

DD's Daycare- 36 Bonnie Brae Lane, Shokan

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

_____

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

_____

iii. Describe any development constraints due to the prior solid waste activities: _____

_____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____

_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☑ Yes ☐ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☑ Yes ☐ No

☑ Yes – Spills Incidents database — Provide DEC ID number(s): Multiple, Hazardous Waste Reports

☐ Yes – Environmental Site Remediation database — Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

_____

_____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☑ No

If yes, provide DEC ID number(s): _____

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

_____

_____

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? 6.5 feet

b. Are there bedrock outcroppings on the project site? ☑ Yes ☐ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? 10 %

c. Predominant soil type(s) present on project site:

Oquaga-Arnot-Rock outcrop	29 %
Tunkhannock gravelly loam	17 %
Lackawanna and Swartswood	6 %

d. What is the average depth to the water table on the project site? Average: 6.5 feet

e. Drainage status of project site soils:

☑ Well Drained:	82 % of site
☑ Moderately Well Drained:	10.4 % of site
☑ Poorly Drained	7.6 % of site

f. Approximate proportion of proposed action site with slopes:

☑ 0-10%:	30 % of site
☑ 10-15%:	40 % of site
☑ 15% or greater:	30 % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☑ Yes ☐ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name 862: 555, 549, 551, 543, 523 Classification A(TS), A(T), AA(T), C(TS)
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal and State Approximate Size 100+
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☐ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____
Ashokan Reservoir, Esopus Creek - Metals (silt/sediment),

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100 year Floodplain? ☑ Yes ☐ No

k. Is the project site in the 500 year Floodplain? ☑ Yes ☐ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☑ Yes ☐ No
If Yes:

i. Name of aquifer: Principal Aquifer - no known name

m. Identify the predominant wildlife species that occupy or use the project site:

white tailed deer	turkey	black bear
eastern chipmunk	eastern gray squirrel	coyote

n. Does the project site contain a designated significant natural community? ☑ Yes ☐ No

If Yes:

i. Describe the habitat/community (composition, function, and basis for designation): Vernal pool

ii. Source(s) of description or evaluation: Site Investigations, NYC DEP

iii. Extent of community/habitat:

- Currently: .75 acres
- Following completion of project as proposed: .75 acres
- Gain or loss (indicate + or -): 0 acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☑ Yes ☐ No

Indiana bat (endangered), Northern long-eared bat (threatened), bog turtle (threatened), bald eagle (NYS threatened),

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☑ Yes ☐ No

Sharp-shinned hawk, osprey, red-shouldered hawk, American bittern, whip-poor-will, common nighthawk

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☑ Yes ☐ No

If yes, give a brief description of how the proposed action may affect that use: Access to designated fishing and hunting areas will not be impacted by the approval of the easement

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No

If Yes, provide county plus district name/number:

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No

i. If Yes: acreage(s) on project site?

ii. Source(s) of soil rating(s):

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No

If Yes:

i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature

ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No

If Yes:

i. CEA name:

ii. Basis for designation:

iii. Designating agency and date:

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places? ☐ Yes ☑ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☐ Historic Building or District

ii. Name: _____

iii. Brief description of attributes on which listing is based:

_____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: NY State Rt 28 Scenic Byway, Ashokan Reservoir

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): NY State Designation Rt. 28 Scenic Byway Ashokan Reservoir overlooks and trial

iii. Distance between project and resource: <0.5 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name County Of Ulster Date July 25, 2017

Signature Christopher White -Signature on File Title Deputy Director of Planning Project Manager

PRINT FORM

Easement Only

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Agency Use Only [If applicable]
Project :
Date :

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "**Yes"** to a numbered question, please complete all the questions that follow in that section.
- If you answer "**No"** to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land
Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)
If "Yes", answer questions a - j. If "No", move on to Section 2.

☑ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	☐	☐
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	☐	☐
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	☐	☐
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	☐	☐
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	☐	☐
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	☐	☐
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	☐	☐
h. Other impacts: _____ _____		☐	☐

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g)

☑ NO ☐ YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____ _____	E2g	☐	☐
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	☐	☐
c. Other impacts: _____ _____		☐	☐

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h)

☑ NO ☐ YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	☐	☐
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	☐	☐
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	☐	☐
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	☐	☐
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	☐	☐
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	☐	☐
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	☐	☐
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	☐	☐
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	☐	☐
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	☐	☐
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	☐	☐

l. Other impacts: _____ _____		□	□

4. Impact on groundwater

The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t) ☑ NO ☐ YES

If "Yes", answer questions a - h. If "No", move on to Section 5.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	□	□
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	□	□
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	□	□
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	□	□
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	□	□
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	□	□
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	□	□
h. Other impacts: _____ _____		□	□

5. Impact on Flooding

The proposed action may result in development on lands subject to flooding. (See Part 1. E.2) ☑ NO ☐ YES

If "Yes", answer questions a - g. If "No", move on to Section 6.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	□	□
b. The proposed action may result in development within a 100 year floodplain.	E2j	□	□
c. The proposed action may result in development within a 500 year floodplain.	E2k	□	□
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	□	□
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	□	□
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	□	□

g. Other impacts: _____ _____		☐	☐

6. Impacts on Air

The proposed action may include a state regulated air emission source. ☑ NO ☐ YES
(See Part 1. D.2.f., D,2,h, D.2.g)
If "Yes", answer questions a - f. If "No", move on to Section 7.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. More than 1000 tons/year of carbon dioxide (CO_2)	D2g	☐	☐
ii. More than 3.5 tons/year of nitrous oxide (N_2O)	D2g	☐	☐
iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D2g	☐	☐
iv. More than .045 tons/year of sulfur hexafluoride (SF_6)	D2g	☐	☐
v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions	D2g	☐	☐
vi. 43 tons/year or more of methane	D2h	☐	☐
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	☐	☐
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	☐	☐
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	☐	☐
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	☐	☐
f. Other impacts: _____ _____		☐	☐

7. Impact on Plants and Animals

The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) ☑ NO ☐ YES
If "Yes", answer questions a - j. If "No", move on to Section 8.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	☐	☐
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	☐	☐
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	☐	☐
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	☐	☐

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	□	□
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	□	□
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	□	□
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ _____	E1b	□	□
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	□	□
j. Other impacts: _____ _____		□	□

8. Impact on Agricultural Resources

The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) ☑ NO ☐ YES

If "Yes", answer questions a - h. If "No", move on to Section 9.

	Relevant Part I Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	□	□
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, Elb	□	□
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	□	□
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	□	□
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	El a, E1b	□	□
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	□	□
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	□	□
h. Other impacts: _____		□	□

9. Impact on Aesthetic Resources

The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.)

☑ NO ☐ YES

If "Yes", answer questions a - g. If "No", go to Section 10.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	☐	☐
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	☐	☐
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	 ☐ ☐	 ☐ ☐
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	 ☐ ☐	 ☐ ☐
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	☐	☐
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile ½ -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	☐	☐
g. Other impacts: _____ _____		☐	☐

10. Impact on Historic and Archeological Resources

The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.)

☑ NO ☐ YES

If "Yes", answer questions a - e. If "No", go to Section 11.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places.	E3e	☐	☐
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	☐	☐
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	☐	☐

d. Other impacts: _____ _____		□	□
e. If any of the above (a-d) are answered "Moderate to large impact may occur", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	□	□
ii. The proposed action may result in the alteration of the property's setting or integrity.	E3e, E3f, E3g, E1a, E1b	□	□
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	□	□

11. Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan.
(See Part 1. C.2.c, E.1.c., E.2.q.)
If "Yes", answer questions a - e. If "No", go to Section 12.

☑ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	□	□
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	□	□
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	□	□
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	□	□
e. Other impacts: _____ _____		□	□

12. Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d)
If "Yes", answer questions a - c. If "No", go to Section 13.

☑ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	□	□
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	□	□
c. Other impacts: _____ _____		□	□

13. Impact on Transportation

The proposed action may result in a change to existing transportation systems. ☑ NO ☐ YES
(See Part 1. D.2.j)
If "Yes", answer questions a - f. If "No", go to Section 14.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	☐	☐
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	☐	☐
c. The proposed action will degrade existing transit access.	D2j	☐	☐
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	☐	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	☐	☐
f. Other impacts: _____ _____		☐	☐

14. Impact on Energy

The proposed action may cause an increase in the use of any form of energy. ☑ NO ☐ YES
(See Part 1. D.2.k)
If "Yes", answer questions a - e. If "No", go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	☐	☐
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	☐	☐
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	☐	☐
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	☐	☐
e. Other Impacts: _____ _____			

15. Impact on Noise, Odor, and Light

The proposed action may result in an increase in noise, odors, or outdoor lighting. ☑ NO ☐ YES
(See Part 1. D.2.m., n., and o.)
If "Yes", answer questions a - f. If "No", go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	☐	☐
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	☐	☐
c. The proposed action may result in routine odors for more than one hour per day.	D2o	☐	☐

d. The proposed action may result in light shining onto adjoining properties.	D2n	☐	☐
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	☐	☐
f. Other impacts: _____ _____		☐	☐

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.) ☑ NO ☐ YES

If "Yes", answer questions a - m. If "No", go to Section 17.

	Relevant Part I Question(s)	No,or small impact may cccur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	☐	☐
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	☐	☐
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	☐	☐
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	☐	☐
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	☐	☐
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	☐	☐
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	☐	☐
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	☐	☐
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	☐	☐
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	☐	☐
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	☐	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	☐	☐
m. Other impacts: _____ _____			

17. Consistency with Community Plans

The proposed action is not consistent with adopted land use plans. ☑ NO ☐ YES

(See Part 1. C.1, C.2. and C.3.)

If "Yes", answer questions a - h. If "No", go to Section 18.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	☐	☐
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	☐	☐
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	☐	☐
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	☐	☐
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, Elb	☐	☐
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	☐	☐
h. Other: _____ _____		☐	☐

18. Consistency with Community Character

The proposed project is inconsistent with the existing community character. ☑ NO ☐ YES

(See Part 1. C.2, C.3, D.2, E.3)

If "Yes", answer questions a - g. If "No", proceed to Part 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	☐	☐
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	☐	☐
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	☐	☐
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	☐	☐
g. Other impacts: _____ _____		☐	☐

PRINT FULL FORM

Agency Use Only [IfApplicable]

Project :

Date :

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

See Attached

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: ☐ Type 1 ☑ Unlisted

Identify portions of EAF completed for this Project: ☑ Part 1 ☑ Part 2 ☑ Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the Ulster County Legislature pursuant to Resolution No. 327 of August 15, 2017 as lead agency that:

☑ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.d).

☐ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: Ashokan Rail Trail Easement

Name of Lead Agency: Ulster County Legislature

Name of Responsible Officer in Lead Agency: Kenneth J. Ronk, Jr.

Title of Responsible Officer: Chairman

Signature of Responsible Officer in Lead Agency: Date: 8/18/2017

Signature of Preparer (if different from Responsible Officer) Date: 8/18/2017

For Further Information:

Contact Person: Dennis Doyle

Address: 244 Fair Street Box 1800 Kingston, NY 12402

Telephone Number: 845-340-3340

E-mail: ddoy@co.ulster.ny.us

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html

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ULSTER COUNTY LEGISLATURE DETERMINATION
SEQRA LAWFUL SEGEMENTATION AND NEGATIVE DECLARATION

In the Matter of Approving the Execution of the Ashokan Trail Easement by Ulster County: Ulster County Legislature

The Ulster County Legislature (the "County") is proposing construction of an 11.6 mile pedestrian and bicycle trail on lands owned by the City of New York (the "City") and managed by the New York City Department of Environment Protection ("DEP")in the Towns of Olive, Hurley, and Woodstock ("Project"). The Project will establish a non-motorized recreational trail on the County's Ulster and Delaware Railroad corridor along the northern shore of the Ashokan Reservoir. The Project includes repurposing of the existing railroad bed and ballast, removal of rail ties and track, repair and reconstruction of failed drainage structures and replacement of a bridge structure over the Esopus Creek near Boiceville which was destroyed during Hurricane Irene in 2011.

The County pursuant to Resolution No. 480 of December 15, 2015 declared its intent to act as Lead Agency as provided for in 6NYCRR Part 617.6(b)(2)(i) of the Regulations pertaining to Article 8 of the Environmental Conservation Law of New York State ("SEQRA") and categorized the Action as Type I. The County circulated the necessary notifications on August 31, 2016 and receiving no objections became Lead Agency 30 days after this date.

The County originally sought a land use permit from DEP that would allow it to construct the trail. Subsequent concerns by the County about the need for a more permanent property interest led to the negotiation and development of the Ashokan

Trail Easement (the “Trail Easement”). The Trail Easement is permanent property interest for the benefit of the County that allows construction, maintenance and operation of the Ashokan Rail Trail (“ART”) while preserving the County’s perpetual easement for railroad purposes (“Railroad Easement”) and protects all of the rights associated with the existing Railroad Easement. The Ashokan Trail Easement is attached as Exhibit A. A summary map of the location of the Trail Easement is attached as Exhibit B.

Although the construction of the ART has been classified as a Type I Action under SEQRA, the County, as Lead Agency, has examined the execution of the Trail Easement in accordance with SEQRA and finds under 6 NYCRR 617.4, approval of the Trail Easement is an Unlisted Action. However, the County will examine the potential adverse environmental effects of executing the Trail Easement under procedures for a Type I Action.

In accordance with the above, the County will conduct a lawful segmentation of the SEQRA environmental review for the approval of the Trail Easement pursuant to 6 NYCRR Part 617.3(g(1)

In this manner, the approval of the Trail Easement would be permitted while the phase of the Project, consisting of the construction of the trail itself and other associated repairs and replacements associated with said construction, undergoes continuing SEQRA reviews and permitting.

Legal Address of Lawful Segmentation in the Instant Action

The SEQRA regulations generally disfavor what is called “segmentation,” which is defined as “the division of the

environmental review of an action such that various activities or stages are addressed under SEQRA as though they were independent, unrelated activities, needing individual determinations of significance." [6 NYCRR Part 617.2 (ag)].

6 NYCRR Part 617.3(g) provides that actions commonly consist of a set of activities or steps and that the entire set of activities or steps must be considered the action, whether the agency decision-making relates to the action as a whole or to only a part of it.

In making a determination of environmental significance for any Unlisted Action or Type I Action, the Lead Agency must consider the action as the entire set of activities or steps involved [6 NYCRR Part 617.7(b)(1)] and, for the purpose of determining whether such action may cause a significant effect on the environment, the Lead Agency must consider reasonably related long-term, short-term, direct, indirect and cumulative impacts, including other simultaneous or subsequent actions which are:

(1) included in any long-range plan of which the action under consideration is a part, or

(2) likely to be undertaken as a result thereof, or

(3) dependent thereon.

However, segmentation is not prohibited by the law and if a Lead Agency believes that circumstances warrant a segmented review, it may permit the same provided it clearly states in its determination of significance and any subsequent determination of significance the supporting reasons and demonstrates that such review is clearly no less protective of the environment.

There have been numerous cases dealing with the issue of segmentation since SEQRA went into effect and interpreting the above regulations. Most of the reported cases involve whether or not a particular action amounts to segmentation, and not

whether or not segmentation is or would be permissible under the circumstances.

In the controlling case of In the Matter of Concerned Citizens for the Environment v. Zagata, 243 AD2d 20 (3rd Dept. 1998), the Appellate Division for the Third Department permitted the segmentation of a proposed solid waste disposal facility when it reviewed the application to construct a solid waste transfer station separately from the application to construct an incinerator and materials recovery facility that were part of the same project.

The court held that segmented review is permissible where the Lead Agency believes that it is warranted under the circumstances, provided the agency clearly states its reasons for permitting segmentation and demonstrates that such review is no less protective of the environment, and that any related actions be identified and discussed to the fullest extent possible.

In its analysis of the issue of segmentation, the court stated that the reasons for disfavoring segmentation of environmental review are twofold.

The first reason given by the court is the danger that in considering related actions separately, a decision by the agency involving review of an earlier action may be "practically determinative" of a subsequent action. In other words, by approval of an earlier action an administrative board would, in effect, commit the board to a definite course of future conduct so that the board could not, as a practical matter, disapprove any subsequent action involving the combined action.

A common example of improper segmentation involves issuance of a Negative Declaration for the change in the zoning classification of a specific parcel of land for the express purpose of authorizing its subsequent development for an

identified and currently proposed project which may or will cause a significant adverse impact. See Matter of New York Canal Improvement Association v. Town of Kingsbury, 240 AD2d 930 (3rd Dept. 1997).

The second reason given by the court is that when a project that would have a significant adverse effect on the environment is broken up or divided into two or more component parts which, individually, would not have as significant an environmental impact as the entire project. Or, instances where one or more aspects of the project might fall below the threshold requiring any environmental review.

In other words, by not considering the entire project at one time, the environmental review of the project would be lessened, or perhaps eliminated, altogether.

Applying the above two-pronged test to the facts and circumstances of this particular action, the approval of the Trail Easement, the County finds that the issuance of a Negative Declaration does not constitute impermissible segmentation for the following reasons:

1. **The Action Is Not Practically Determinative:** An approval by the Ulster County Legislature of the Trail Easement does not commit the County to approve any subsequent action associated with the construction of the Ashokan Rail Trail.

This action is capable of standing by itself as a discrete approval and does not impair, compromise or prejudice the exercise of discretion vested in the County of Ulster Legislature to conduct a full environmental review of the Project, nor does the same commit said Legislature to a "definite course of future conduct" thereby forcing the approval of Project construction.

It is important to note that the language in the Trail Easement states:

> *"The grant of this Trail Easement is specifically conditioned upon the construction of the ART in accordance with the design of the trail approved by the City. Any modifications to the design shall be approved by the City, the same of which shall not be withheld unreasonably."*

This language places the Easement subordinate to the approval of the construction of the Trail itself. The County remains free to decide whether or not to proceed with construction subsequent to the necessary environmental scrutiny.

2. **The Action Is No Less Protective of the Environment:** As to the second prong of the Concerned Citizens v. Zagata test, the identified environmental impacts or effects that are reasonably likely to result from this action are, by themselves, negligible and do not require the preparation of an Environmental Impact Statement ("EIS"). As noted above, the Trail Easement does not commit the County to any future course of action. In addition, approval of the Trail Easement does not authorize physical alteration or construction activities associated with the building of the ART, itself.

The future demolition and construction phases which comprise the Project will require, at a minimum, approval by the County for funding and construction authorization, final design and other approvals by DEP, and approvals from the Town of Hurley, the New York State Department of Environmental Conservation ("DEC"), and the New York State Department of Transportation ("NYSDOT"). These discretionary approvals are also actions under SEQRA and trigger a de novo environmental

review [6 NYCRR Part 617.2(a)(1)]. These activities are being progressed by the County as a Type I Action.

In this regard, the environmental impacts associated with the construction and operation of the ART will continue to be evaluated under a coordinated SEQRA review as a Type 1 Action by the County of Ulster and the other involved and interested agencies as noted above. Parts 1 and 2 of the SEQRA Full Environmental Assessment Form for the Project, as circulated with the request for lead agency, is attached as Exhibit C and describes the Project in its entirety. A list of the involved and interested agencies is provided as Appendix D.

Accordingly, this subsequent environmental review will analyze the proposed Project and appurtenances in light of a completed Detailed Design and Storm Water Pollution Prevention Plan ("SWPPP"), with the County Legislature and other involved agencies retaining extensive discretionary approval authority. As such, the comprehensive environmental review associated therewith is no less protective of the environment.

Conclusion: As a result, where all discretionary approvals from the Lead Agency and the involved agencies remain, it cannot be reasonably posited that the execution of the Ashokan Trail Easement will be "practicably determinative" of the Ashokan Rail Trail Project as a whole. In addition, where the Lead Agency is conducting a coordinated review of the Project as a Type I Action, the approval of the Trail Easement that does not include any physical alteration of lands, considered as a separate action will neither impair nor reduce the effectiveness of subsequent environmental review.

The Ulster County Legislature, having considered the factors associated with a segmented review under SEQRA and the environmental impacts associated with approval of the Ashokan Rail Trail Easement hereby determines that:

1. Approval of the Ashokan Trail Easement may be carried out as a lawful segmented review; and
2. A review of record supports the conclusion that no adverse environmental effects will occur from approval of the Ashokan Trail Easement, and that a Negative Declaration pursuant to 6 NYCRR Part 617.3(g)(1) is applicable and hereby issued; and
3. Such SEQRA segmentation and determination pertaining to the Trail Easement shall be noted and referenced in all future environmental actions and determinations for the Ashokan Rail Trail Project.

Resolution No. 327 August 15, 2017

Authorizing The Chairman Of The Ulster County Legislature To Execute The Ashokan Trail Easement With The City Of New York

Referred to: The Economic Development, Tourism, Housing, Planning and Transit Committee (Chairman Maloney and Legislators Berky, Delaune, Lapp, Litts, Maio and Rodriguez)

Chairman of the Economic Development, Tourism, Housing, Planning, and Transit Committee, James F. Maloney, and Deputy Chairman Hector Rodriguez offer the following:

WHEREAS, this Resolution has been submitted by the County Executive on behalf of the Department of Planning; and

WHEREAS, the County of Ulster is the owner of 38.6 miles of the Ulster & Delaware Railroad Corridor ("U&D Corridor) running from the City of Kingston to Highmount in the Town of Shandaken, including approximately 11.6 miles of easement for railroad purposes ("Railroad Easement") through lands adjacent to the Ashokan Reservoir owned by the City of New York ("Watershed Property") and managed by the New York City Department of Environmental Protection ("DEP"); and

WHEREAS, in December 2013, the Ulster County Executive and DEP announced an historic Agreement in Principle to facilitate and provide significant funding support for the conversion of the Railroad Easement along the Watershed Property into a public, multi-use recreational trail ("Ashokan Rail Trail") in order to provide economic development to Ulster County and Route 28 businesses, expand recreational opportunities for local residents and visitors, improve public health and quality of life, and further develop Ulster County's rail trail network into a world-class tourism destination; and

WHEREAS, the Ashokan Rail Trail along Watershed Property will open the northern shore of the Ashokan Reservoir to the public, without permit or fee, for the first time in more than a century and will ensure year-round public access for walking, running, bicycling, cross country skiing, snowshoeing and other non-motorized uses between Basin Road in West Hurley and Route 28A in Boiceville on a recreational trail that is fully accessible for persons with disabilities and limited mobility; and

WHEREAS, in May 2015, the Ulster County Legislature authorized the County Executive and Chairman of the Legislature to execute an Agreement with the City of New York to accept $2.5 million in grant fund for and facilitate the creation of the Ashokan Rail Trail ("MOA"); and

Resolution No. 327 August 15, 2017

Authorizing The Chairman Of The Ulster County Legislature To Execute The Ashokan Trail Easement With The City Of New York

WHEREAS, in December 2015, the Ulster County Legislature adopted a compromise rail and trail policy for the U&D Corridor that delineated the segment along the Watershed Lands for conversion into a public recreational trail and also established and funded Capital Project No. 459—the Ashokan Rail Trail—for engineering design; and

WHEREAS, under the MOA, the County would construct and operate the Ashokan Rail Trail under a Land-Use Permit and eventually, a Modified Ashokan Railroad Easement, but based on concerns expressed by the Ulster County Legislature and others about the protection of the County's perpetual Railroad Easement, the DEP and County have agreed instead to establish a new, separate permanent easement for trail ("Ashokan Trail Easement"), which ensures that the County can construct and operate a trail without modifying, altering, or extinguishing the County's Railroad Easement or its rights to reactivate railroad uses on the Railroad Easement, which cannot be revoked or cancelled by DEP, as it could with a Land-Use Permit; and

WHEREAS, the County has been awarded approximately $6.3 million in grant funding for the Ashokan Rail Trail by DEP, the New York State Department of Conservation, and New York State Parks, Recreation and Historic Preservation and has requested an additional $2.3 million from the Federal Emergency Management Agency for replacement of the Boiceville Bridge; and

WHEREAS, pursuant to Resolution No. 480 of December 15, 2015 Ulster County declared it intent to act as lead agency as provided for in 6NYCRR Part 617.6(b)(2)(i) of the Regulations pertaining to Article 8 of the Environmental Conservation Law of New York State (SEQRA); and

WHEREAS, Ulster County circulated the necessary notifications on August 31, 2016 and receiving no objections became lead agency 30 days after this date; and

WHEREAS, Ulster County has examined the proposed action consisting of the approval of Ashokan Trail Easement in consideration of this action being a lawful segmented review pursuant to the SEQRA Regulations at 6 NYCRR Part 617.3(g)(1); and

WHEREAS, the Ulster County Legislature has reviewed the Environmental Record prepared for this action and the Ashokan Trail Easement as now on file with the Clerk of the Legislature; now, therefore, be it

Resolution No. 327 August 15, 2017

Authorizing The Chairman Of The Ulster County Legislature To Execute The Ashokan Trail Easement With The City Of New York

RESOLVED, that the Ulster County Legislature based on the review of the Environmental Record, the Ashokan Trail Easement itself, and the requirements under 6 NYCRR Part 617 determines that approval of the Ashokan Trail Easement is a discrete action that can be considered separate and apart from any trail construction and that as such a segmented review is warranted and will be no less protective of the environment nor will it commit the Legislature to any future course of action; and, be it further

RESOLVED, that the Ulster County Legislature based on the review of the Environmental Record finds that the Ashokan Trail Easement constitutes an unlisted action and its approval will not have an adverse impact on the environment and hereby authorizes the issuance of a negative declaration as provided in 6NYCRR 617.7; and, be it further

RESOLVED, the Chairman of the Ulster County Legislature is hereby authorized to execute the Ashokan Trail Easement with the City of New York in the form as filed with the Clerk of the Ulster County Legislature; and, be it further

RESOLVED, all notices, requests and/or approvals required by the Ashokan Trail Easement that are sent by, or delivered to the Ulster County Executive and/or the Ulster County Attorney pursuant to Section 21 of the Easement shall be forwarded promptly to the Clerk of the Ulster County Legislature,

and moves its adoption.

ADOPTED BY THE FOLLOWING VOTE:

AYES: 23 NOES: 0

Passed Committee: Economic Development, Tourism, Housing, Planning and Transit with Paragraph 21 of the Deed of Easement amended to include notice to the Legislature on August 1, 2017

FINANCIAL IMPACT:
NONE

Resolution No. 327 August 15, 2017

Authorizing The Chairman Of The Ulster County Legislature To Execute The Ashokan Trail Easement With The City Of New York

Legislator Greene motioned, seconded by Legislator Donaldson, to insert an additional WHEREAS (placed as 6th WHEREAS) and RESOLVED (placed as 3rd RESOLVED) to read as follows:

"WHEREAS, maximizing the public benefits of the Ulster County-owned U&D Railroad Corridor includes the highest and best combination of rail and trail; and

RESOLVED, that the final design of the Ashokan Rail Trail include leaving the existing railroad tracks operable within the U&D Corridor from MP 10 to MP 11.1, and be it further"

MOTION DEFEATED BY THE FOLLOWING VOTE:

AYES: 5 NOES: 18
(AYES: Legislators Donaldson, Greene, J. Parete, R. Parete, and Wawro)

STATE OF NEW YORK
ss:
COUNTY OF ULSTER

I, the undersigned Clerk of the Legislature of the County of Ulster, hereby certify that the foregoing resolution is the original resolution adopted by the Ulster County Legislature on the 15th Day of August in the year Two Thousand and Seventeen, and said resolution shall remain on file in the office of said clerk.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of the County of Ulster this 17th Day of August in the year Two Thousand and Seventeen.

|s| Victoria A. Fabella
Victoria A. Fabella, Clerk
Ulster County Legislature

Submitted to the County Executive this
17th Day of August, 2017.

|s| Victoria A. Fabella
Victoria A. Fabella, Clerk
Ulster County Legislature

Approved by the County Executive this
21st Day of August, 2017.

|s| Michael P. Hein
Michael P. Hein, County Executive

Exhibit 7: Cultural Resources Review

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

October 3, 2016

Ms. Corinne Steinmuller
Environmental Scientist II
Barton and Loguidice
10 Airline Drive
Albany, NY 12203

Re: DEC
Ashokan Rail Trail
16PR06122

Dear Ms. Steinmuller:

Thank you for requesting the comments of the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources. They do not include potential impacts that must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6NYCRR Part 617).

We note that the proposed project is located partially within the National Register eligible Ulster and Delaware Railroad Corridor. The historic section of the railway, extending from Shokan to Phoenicia, is listed under National Register Criterion A for its association with historical development of the towns of Shandaken and Olive from the period 1897-1942. We understand that the proposed project will include construction of a pedestrian and bicycle pathway along the existing rail bed extending approximately 11.5 miles from West Hurley to Olive. The proposed rail trail will affect approximately six miles of the historic railway, and will include removal of the rail and ties, repairs to existing culverts, and construction of multiple trailheads within the twenty foot wide easement.

We are pleased that this adaptive reuse project will retain the rail corridor along with its historic feeling, association, and use as a transportation route. Based on this review, it is the opinion of the SHPO that the proposed project will have No Adverse Impact upon the historic Ulster and Delaware Railroad Corridor provided the following conditions are incorporated into the project:

1. A Preservation Plan is developed for the historic rail corridor. At minimum the Plan will identify all historic structures and engineering features that will be impacted by the project.
2. Historic interpretation of the railway will be integrated into development of the rail trail. Interpretive materials should include interpretive signage along the rail trail. A qualified professional should be retained to develop the preservation and interpretive plans.

3. Materials related to documentation and interpretation of historic features should be submitted to our office for review in the preliminary and pre-final stages.

Any additional measures that would further ensure the preservation and understanding of the historic railway are encouraged. Towards this goal, we suggest the following:

- Small sections of track (roughly 50') may be retained at the beginning and end of the proposed rail trail. One or both ends of this could display the existing heavy gauge rails along with a sample of the previous iteration of light rail as part of an interpretive exhibit.
- Additional historic features including buildings, structures, and engineering features that are identified along the eligible route will be protected and interpreted in accordance with the Preservation Plan.

Consultation with our office should continue as the preservation and interpretation measures suggested above are developed. Plans, specifications, and other documentation requested in this letter should be provided via our Cultural Resource Information System (CRIS) at www.nysparks.com/shpo/online-tools/. Once on the CRIS site, you can log in as a guest and choose "submit" at the very top menu. Next choose "submit new information for an existing project". You will need this project number and your e-mail address.

If you have any questions, I can be reached at (518) 268-2164.

Sincerely,

Weston Davey
Historic Site Restoration Coordinator
weston.davey@parks.ny.gov

via e-mail only

CC: Scott Ballard (DEC)
Charles Laing (NYCDEP)
Christopher White (Ulster County)

Exhibit 8: Threatened and Endangered Species Assessment

Barton & Loguidice, D.P.C.

Memo To: Project File **Date:** September 22, 2017

From: Thomas Baird, P.E. and Corinne I. Steinmuller, Environmental Scientist II **Project No.:** 369.007.001

Subject: Threatened and Endangered Species Habitat Assessment
Ashokan Rail Trail

Project Area and Description

Barton & Loguidice, D.P.C. (B&L), has been retained by Ulster County to provide preliminary and final design services for the proposed Ashokan recreational trail located along the County-owned 11.5 mile abandoned railroad corridor on the northern shore of the Ashokan Reservoir spanning from Milepost K10 (Basin Road in West Hurley) to Milepost K21.5 (Route 28A overpass in Boiceville).

The project includes repurposing of the existing ballast, removal of rail, rail hardware, and deteriorated creosote rail ties, construction of two pedestrian bridges, and maintenance to existing culvert structures. The location of the project area is shown on the enclosed Figures 1 and 2, aerial and topographic mapping respectively. The project corridor can also be found on the USGS 7 ½-minute Kingston West, Ashokan, West Shokan, Bearsville, and Phoenicia quadrangles between 42° 0'20.87"N, 74°16'16.63"W and 41°59'5.60"N, 74° 5'13.93"W (NAD 83).

Areas adjacent to the project corridor consist of residential and commercial property to the north associated with NYS Route 28. To the south of the corridor, the Ashokan Reservoir serves as a drinking water source for New York City and is recreationally limited to fishing and non-motorized boat usage. The railway itself travels through mature mid-successional forest and will cross the Esopus Creek on a new bridge on the western end of the proposed trail.

Federally Protected Species

The U.S. Fish and Wildlife Service (USFWS) New York Field Office's website was reviewed to determine whether any federally listed endangered, threatened, or candidate species are known to inhabit the proposed project area. The USFWS' Information for Planning and Consulation (IPaC) System reported three federally protected species that could potentially inhabit the project corridor: the Indiana bat (*Myotis sodalis* – Endangered), the northern long-eared bat (*Myotis septentrionalis* – Threatened), and the bog turtle (*Clemmys muhlenbergii* – Threatened). A printout of the IPaC results is included as Attachment A.

Critical Habitat

A review of designated critical habitat areas within New York State was completed. No such areas exist within or adjacent to the project area.

New York State Protected Species

The Natural Heritage Program (NHP) was contacted for information regarding the reported presence of any endangered species, threatened species, species of special concern, or significant natural communities within or adjacent to the project corridor. A response was received from the NHP on July 26, 2016, which indicated three records of rare or state-listed animals or plants and significant natural communities at the site or in its immediate vicinity. The bald eagle (*Haliaeetus leucocephalus*- Threatened) was identified to have nested within 400 feet of the project corridor. An Indiana bat maternity colony was identified within 250 feet of the project corridor. Additionally, a high quality occurrence of an uncommon community type, a bluestone vernal pool, was identified .5 miles east of the corridor. The NHP's response letter is included for review as Attachment B.

Availability of Suitable Habitat

A habitat assessment of the project corridor was completed by staff of B&L's Ecology Group on June 28-29 and July 7, 2016. Proposed access road sites were assessed on May 17, 2017. The main objective of this habitat assessment was to identify the presence of any state or federally protected species within or adjacent to the project corridor, or the presence of suitable habitat for any of the reported species.

Northern long-eared and Indiana bats

These bat species select roosting trees based on the tree's location, position within the landscape, bark characteristics, and ability to provide cavities or crevices. Suitable roosting and foraging habitat for the bats includes mixed age stands of trees greater than 3" diameter at breast height (DBH), with foraging habitat containing areas of open water. These habitat requirements were observed within and adjacent to the proposed project corridor. In accordance with the 2016 Range-wide Indiana Bat Summer Survey Guidelines (this document applies to both Indiana bat and northern long-eared bats), most trees greater than 3" DBH are considered potential habitat for the northern long-eared bats, and greater than 4" DBH for the Indiana bat. The dominant tree species observed within the project corridor include: red maple (*Acer rubrum*), striped maple (*Acer pensylvanicum*), shagbark hickory (*Carya ovata*), silver maple (*Acer saccharinum*), northern red oak (*Quercus rubra*), eastern white pine (*Pinus strobus*), and American beech (*Fagus grandifolia*). Approximately 9.2 acres of woody vegetation, including shrubs <3" intermixed with larger DBH trees, are proposed for clearing. In accordance with the aforementioned USFWS resources, trees greater than 3" DBH requiring removal are to be cut between October 1st and March 31st during the conservation cutting window timelines. Project photographs showing the characteristics of the Ashokan Rail Trail project corridor are included as Attachment C.

Bald Eagle Review

The bald eagle was removed from the federal Endangered Species list in 2007, but is still afforded federal protection under the Bald and Golden Eagle Protection Act (BGEPA) and state protection under the Environmental Conservation Law. Accordingly, the project areas were assessed to determine whether potential impacts to this species may occur. During coordination with the NHP, breeding bald eagles were reported within 400 feet of the project corridor. A review of the 2000-2005 New York State Breeding Bird Atlas Survey (BBA) was also completed. Historical sightings of bald eagles were reported for the project corridor. A pair holding territory were reported for block 5664B, a singing male present in block 5664A, and nest with young in 5564B. Results of this record review are included as Attachment D. See Discussion and Effect Determination for further information.

Breeding Bird Atlas

During the review of Survey Blocks 5764A, 5664B, 5665D, 5664A, and 5564B of the 2000-2005 BBA, one NYS Threatened species and six NYS Species of Special Concern were identified as being observed near the project corridor. Table 1, below, lists bird species identified by the BBA Survey Blocks mentioned above to potentially inhabit the project corridor. Results of the Breeding Bird Atlas query are included as Attachment D.

NYSDEC Nature Explorer

Review of the NYSDEC Nature Explorer query resulted in restricted species. It is presumed these species are those reported by the NYNHP. Results of the Nature Explorer query are included as Attachment E.

Table 1: 2000-2005 New York State Breeding Bird Atlas Results- Ashokan Rail Trail

Species Name	Survey Block	Behavior Code*	NYS Legal Status	Suitable Habitat	Suitable Habitat Within proposed areas of disturbance?
Osprey (*Pandeon haliaetus*)	5764A, 5664B	X1	Special Concern	Fish dependent; located near Adirondack lakes, rivers, and wetlands. Nest at the top of dead trees or artificial nesting platforms. While these characteristics are abundant surrounding these project areas, only limited impacts are expected to these habitats due to noise during construction.	Yes
Bald eagle (*Haliaeetus leucocephalus*)	5664B, 5664A, 5564B	T2, S2, NY	Threatened	Bald eagles require large, undisturbed open-water areas such as rivers or lakes. Nests are typically built along the edge of these large waterbodies, in conifer or deciduous trees with large branches and open crowns. Observed within 400' of proposed disturbed area.	Yes
Red-shouldered hawk (*Buteo lineatus)*	5764A, 5664B, 5665D, 5564B	T2, D2, FY, X1	Special Concern	Forest birds that prefer an open sub-canopy for hunting. Can be found in suburban areas with mixed forest and housing.	Yes
American bittern (*Botaurus lentiginosus)*	5664B	P2	Special Concern	Shallow, freshwater marshes. Tend to stay hidden among dense vegetation. Freshwater wetland / marshes avoided by re-alignment of trail	No
Sharp-shinned hawk (*Accipiter striatus)*	5664B, 5564B	T2, X1	Special Concern	Birds of the forest and forest edge and are not found in areas where trees are scarce, except during migration. During the breeding season this hawk can be found in dense protected, forested stands which often contain conifers.	Yes
Whip-poor-will (*Caprimulgus vociferos*)	5664B, 5664A	D2, S2	Special Concern	Forests with open understory. Found in both deciduous and deciduous pine mix. Nest on forest floor and are strictly nocturnal.	No
Common nighthawk (*Chordeiles minor*)	5664B	X1	Special Concern	Nest on bare soil and/or rock in forest clearings, but have also been known to nest on gravel rooftops.	No

* X1= Species observed in possible nesting habitat, but no other indication of breeding noted; singing male(s) present (or breeding calls heard) in breeding season. T2= Pair apparently holding territory. In addition to territorial singing, chasing of other individuals of same species often marks a territory. S2= Singing male present (or breeding calls heard). NY= Nest with young. FY= Adults with food for young. D2= Courtship and display, agitated behavior or anxiety calls suggesting probable presence of nearby nest or young.

Discussion and Effect Determinations

Based on the site observations documented during the habitat assessment for the proposed Ashokan Rail Trail, potential effects to suitable habitats for the state or federal protected species listed for the project corridor are anticipated as discussed below.

Indiana and northern long-eared bats

Suitable bat roosting habitat was identified adjacent to the project corridor. Tree removal will be required in certain overgrown sections of trail, to remove dead and stressed Ash trees, and several areas where trees inhibit drainage or pose a threat to trail users. Tree removal required as part of this project will be completed during the Time of Year Conservation Cutting Window: October 1st to March 31st. To assist with USFWS' coordination, Phase 1 Summer Habitat Assessment forms are included in Attachment F. By adhering to the Conservation Cutting Window timelines as a protective measure, the proposed project is recommended to have a determination of May Affect, Not Likely to Adversely Affect the Indiana or northern long-eared bats. Additional Best Management Practices (BMPs) will be utilized during the duration of the project to limit impacts to freshwater resources adjacent to the project areas.

Bog turtle

The bog turtle, the smallest of the emydid turtles, spends much of the time buried in the mud and therefore has a reputation for being secretive. While they prefer fens, highly acidic wetlands and areas of soft, deep mud are considered suitable habitat. Several wetland complexes are adjacent to, but not within, the proposed areas of disturbance for the project. Two wetland complexes will be directly impacted as a result of the project. Field delineated Wetlands K and L, identified as correspondent to NYSDEC Mapped wetland AS-20, were emergent in nature but did not contain the deep mucky soils required by this species or microtopographic relief for basking. Additionally, a large patch of common reed (*Phragmites australis*) was noted as dominant which due to plant density prohibits basking. The other field delineated wetland to be impacted, identified as Wetland O, was also emergent but shaded over by the upland tree canopy, lacking the necessary sunlight and microtopographic relief for basking. Additionally, the soils were restricted at 12 inches with the presence of ballast. No impacts are expected to other wetlands delineated within the corridor. Therefore, a determination of No Effect is recommended for this threatened species.

Bald Eagle

Bald eagles prefer habitat along large bodies of water and shoreline area. The project corridor is located within close proximity to the Ashokan Reservoir. Additionally, a confirmed nest with young was reported by the BBA as well as the New York City Department of Environmental Protection and the NYNHP. It is understood that impacts may occur to this species as a result of construction noises during the nesting season. Therefore, a determination of May Affect, Not Likely to Adversely Affect is recommended for this threatened species. To avoid impact and

necessity for a BGEPA permit, it is recommended that construction that will occur within sight or 660 feet of a nest occur during the non-breeding season, from mid-September to December.

Breeding Bird Atlas Species

As described in Table 1, suitable habitat was identified for all species identified by the BBA within the corridor except for the whip poor will and common nighthawk. Both species rely on an open understory and/or clearings for nesting habitat. The corridor was largely grown up with a shrubby understory and a determination of No Effect is recommended for these species due to lack of suitable habitat.

The remaining species may be impacted by construction noise and disturbance. However, this will be temporary in nature and will not affect the habitat quality long term. A May Affect, Not Likely to Adversely Affect determination is recommended for these species.

In addition, no observations of other protected species, unique plant assemblages, or significant natural communities were noted within or adjacent to the project limits. A Species Conclusion Table is included as Attachment G to summarize the results and determinations of this assessment.

CIS/
Attachments

Figure 1

Aerial Project Corridor Map

COLDBROOK RD
YERRY HILL RD
PARK DR
WITCHTREE RD
NISSEN RD
PINEY POINT RD
OHAYO MOUNTAIN RD
STATE ROUTE 375
RYAN DR
VAN DALE RD
SHOP RD
THE RDG
BOYCE RD
MAVERICK RD
PINE ST
BOSTOCK RD
DESEO DR
PECK RD
CHASE RD
PITCAIRN RD
BOULEVARD RD
PATRICK DR
BEAR RUN
WIEDY LN
BLACK RD
BASIN RD
RUNGE RD
LONGYEAR RD
RIDGE RD
STATE ROUTE 28
B W S RD
RESERVOIR RD
SKEA RD
SPILLWAY RD
MORGAN HILL RD
SHULTIS LN
STATE ROUTE 28A
BAKERS RD
STONE LN
FRONERS RD
INGRID LN
WHISPELL RD
MCMILLAN RD
BRODHEAD RD
B W S RD
STATE HWY 28A
CHRIS LN
STONE RD
CROFTS RD
BEAVERKILL RD
REICHEL RD
DUG HILL RD
UPLAND RD
LAPLA RD
ASHOKAN RD
QUARRY RD
HIGH POINT RD
CROSS RD
MILL RD
STATE ROUTE 213
ATWOOD RD
STILLWATER RD
GERWIN RD

Legend

- Project Corridor
- Roads

Sources:----------

Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

Barton & Loguidice, D.P.C.

Engineers • Environmental Scientists • Planners • Landscape Architects

N W E S

1 inch = 4,250 feet

Ulster County

Ashokan Rail Trail Aerial Imagery

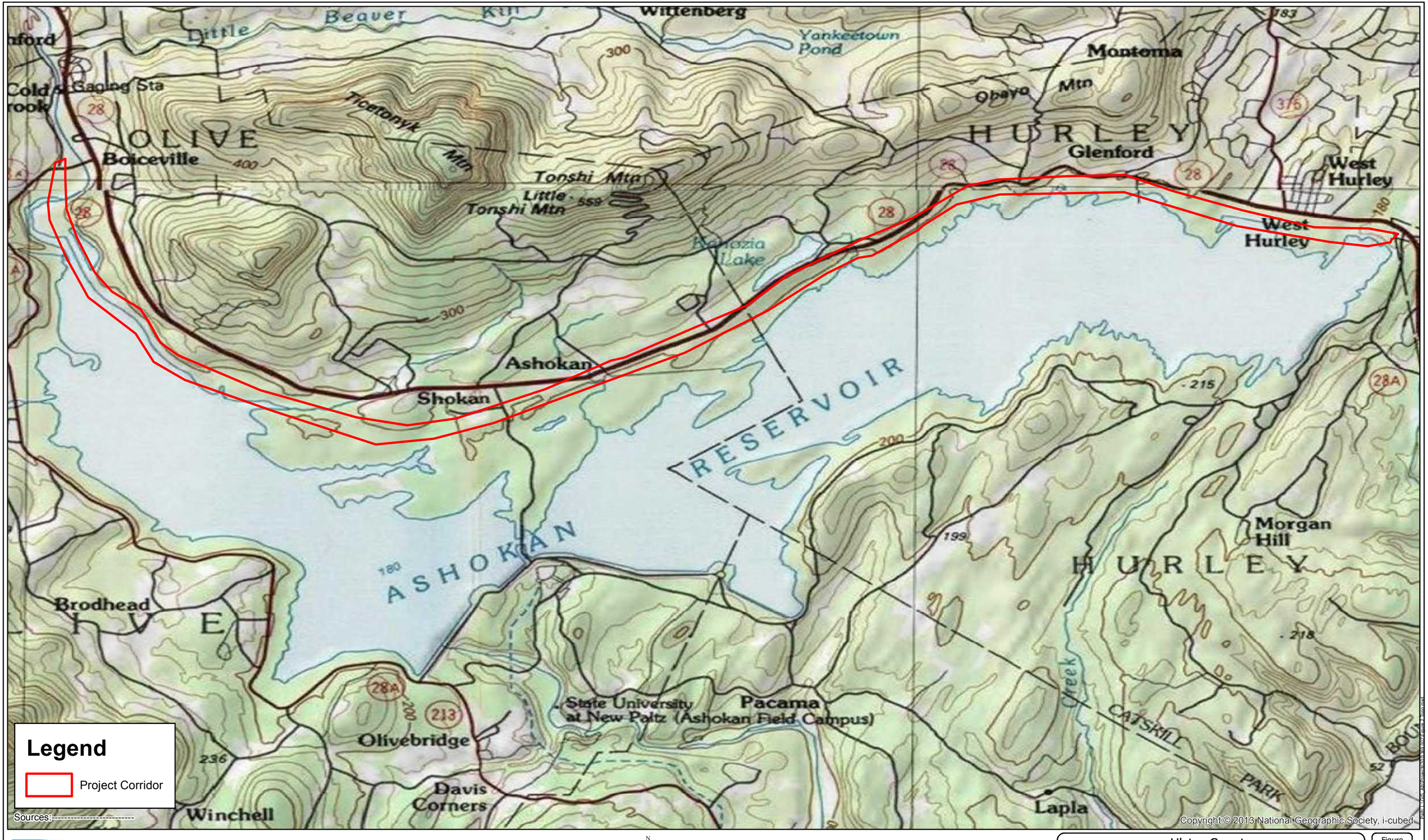
Ulster County 6/16/2016 New York

Figure -

Project No. 000.000

Figure 2

Topographic Project Corridor Map



Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects

1 inch = 4,250 feet

Ulster County

Ashokan Rail Trail Topographic Imagery

Ulster County 6/16/2016 New York

Figure 2

Project No. 369.007

Attachment A

U.S. Fish and Wildlife Service
Information for Planning and Consultation (IPaC)
System Results

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9349
Phone: (607) 753-9334 Fax: (607) 753-9699
http://www.fws.gov/northeast/nyfo/es/section7.htm

In Reply Refer To: April 25, 2017
Consultation Code: 05E1NY00-2016-SLI-1925
Event Code: 05E1NY00-2017-E-05302
Project Name: Ashokan Rail Trail

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: http://www.fws.gov/northeast/nyfo/es/section7.htm

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (

http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Services wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9349
(607) 753-9334

Project Summary

Consultation Code: 05E1NY00-2016-SLI-1925

Event Code: 05E1NY00-2017-E-05302

Project Name: Ashokan Rail Trail

Project Type: TRANSPORTATION

Project Description: Barton & Loguidice, D.P.C. (B&L) has been retained by Ulster County for engineering design services for the proposed Ashokan Rail Trail. The proposed action includes the creation of an 11.5 mile recreational trail corridor on a former rail line north of the Ashokan Reservoir. The project includes repurposing the existing ballast, removal of rail ties, creation of trailheads, and maintenance to existing culvert structures.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/41.983830714078586N74.26007196592603W

Counties: Ulster, NY

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area. Please contact the designated FWS office if you have questions.

Mammals

NAME	STATUS
Indiana Bat *(Myotis sodalis)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *(Myotis septentrionalis)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Reptiles

NAME	STATUS
Bog Turtle *(Clemmys muhlenbergii)* Population: Wherever found, except GA, NC, SC, TN, VA No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6962	Threatened

Critical habitats

There are no critical habitats within your project area.

Attachment B

Natural Heritage Program (NHP) Response

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov

July 26, 2016

Corinne I. Steinmuller
Barton & Loguidice, D.P.C.
10 Airline Drive, Suite 200
Albany, NY 12205

Re: Ashokan Rail Trail (File: 369.007.001)
Town/City: Hurley, Olive. County: Ulster.

Dear Corinne Steinmuller:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur, or may occur, on your site or in the immediate vicinity of your site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

Our database is continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

Andrea Chaloux

Andrea Chaloux
Environmental Review Specialist
New York Natural Heritage Program

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The following state-listed animals have been documented at your project site, or in its vicinity.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed or are candidates for federal listing.

For information about any permit considerations for your project, please contact the Permits staff at the NYSDEC Region 3 Office at dep.r3@dec.ny.gov, (845) 256-3054. For information about potential impacts of your project on these species, and how to avoid, minimize, or mitigate any impacts, contact the Region 3 Wildlife staff at Wildlife.R3@dec.ny.gov, (845) 256-3098.

The following species have been documented at your project site, or within 1 mile of the project site. Individual animals may travel 1 mile from documented locations.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Birds				
Bald Eagle	*Haliaeetus leucocephalus*	Threatened		1715, 14038, 10989
Breeding -- Breeding Bald Eagles are using an area through which the project site is proposed, and several Bald Eagle nests have been documented near the proposed project site, including one nest within 400 feet of the proposed project site.				

The following species have been documented within 250 feet of the project site. Individual animals may travel 2.5 miles from documented locations.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Mammals				
Indiana Bat	*Myotis sodalis*	Endangered	Endangered	11652
Maternity colony				

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at www.dec.ny.gov/animals/7494.html.

The following rare plants, rare animals, and significant natural communities have been documented in the vicinity of your project site.

We recommend that potential onsite and offsite impacts of the proposed project on these species or communities be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may still contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

The following significant natural communities are considered significant from a statewide perspective by the NY Natural Heritage Program. They are either occurrences of a community type that is rare in the state, or a high-quality example of a more common community type. By meeting specific, documented criteria, the NY Natural Heritage Program considers these community occurrences to have high ecological and conservation value.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*HERITAGE CONSERVATION STATUS*
Wetland/Aquatic Communities			
Vernal Pool			High-quality Occurrence of Uncommon Community Type

Bluestone, 0.5 mi east of the project site: This is a moderate-size vernal pool complex in good condtion within a large natural landscape in very good condition. 13052

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, from NatureServe Explorer at www.natureserve.org/explorer, and from USDA's Plants Database at http://plants.usda.gov/index.html (for plants).

Information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org. For descriptions of all community types, go to www.dec.ny.gov/animals/97703.html for Ecological Communities of New York State.

Attachment C

Project Corridor Photographs

Photo 1. Typical forested section adjacent to corridor.

Photo 2. Corridor looking west.

Photo 3. Corridor looking south.

Photo 4. Ashokan Reservoir, looking south.

Photo 5. Bank of Reservoir immediately south of corridor.

Photo 6. Corridor looking north to causeway.

Photo 7. Various tracks in mud at causeway; toe of slope from corridor.

Photo 8. View downslope looking north of corridor.

Photo 9. View looking west at proposed Espopus crossing. “Boiceville Trestle” destroyed by Tropical Storms Irene and Lee.

Photo 10. Wetland resource north of corridor, just east of Espopus crossing. Outside of ROW/proposed work.

Photo 11. Looking southeast from corridor at Reservoir.

Photo 12. Wetland K/L (NYSDEC AS-20), to be impacted.

Photo 13. Wetland K/L to be impacted. Corridor continues straight through (see people). Note large Phragmites patch on right hand side.

Photo 14. Wetland O, to be impacted. Note heavy canopy.

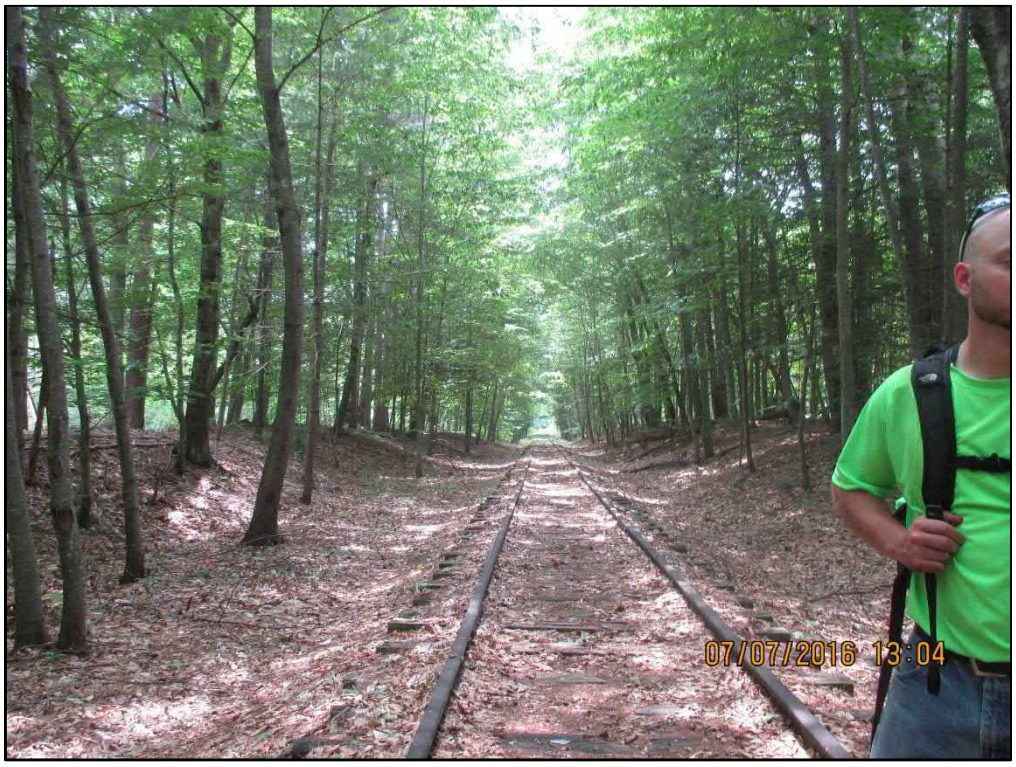

Photo 15. Corridor on western side of Espopus, looking east.

Photo 16. Patch of knotweed on western bank of Esopus at crossing.

Photo 17. Existing access road, to receive a layer of stone dust.

Photo 18. Existing access road, to receive a layer of stone dust.

Photo 19. Potential access site, looking toward NYS Route 28.

Photo 20. Potential access site, looking toward rail.

Photo 21. Former access road to be improved.

Photo 22. Former access road to be improved.

Photo 23. Potential business access site (Hotel Dylan).

Photo 24. Potential business access site (Hotel Dylan).

Photo 25. Potential business access site (Hotel Dylan).

Attachment D

2000-2005 New York State Breeding Bird Atlas Survey Results

List of Species Breeding in Atlas Block 5764A				
Common Name	Scientific Name	Behavior Code	Date	NY Legal Status
Canada Goose	*Branta canadensis*	FL	6/30/2003	Game Species
Wood Duck	*Aix sponsa*	FL	7/12/2003	Game Species
Mallard	*Anas platyrhynchos*	FL	6/17/2004	Game Species
Ruffed Grouse	*Bonasa umbellus*	X1	7/12/2003	Game Species
Wild Turkey	*Meleagris gallopavo*	FL	8/9/2002	Game Species
Great Blue Heron	*Ardea herodias*	NY	7/7/2002	Protected
Green Heron	*Butorides virescens*	NY	6/17/2004	Protected
Turkey Vulture	*Cathartes aura*	NY	6/30/2004	Protected
Osprey	*Pandion haliaetus*	X1	//2004	Protected-Special Concern
Red-shouldered Hawk	*Buteo lineatus*	X1	7/5/2002	Protected-Special Concern
Broad-winged Hawk	*Buteo platypterus*	X1	6/30/2003	Protected
Red-tailed Hawk	*Buteo jamaicensis*	FL	6/17/2004	Protected
Killdeer	*Charadrius vociferus*	NE	6/3/2003	Protected
Spotted Sandpiper	*Actitis macularius*	X1	6/30/2003	Protected
American Woodcock	*Scolopax minor*	D2	4/28/2003	Game Species
Mourning Dove	*Zenaida macroura*	FL	6/30/2003	Protected
Yellow-billed Cuckoo	*Coccyzus americanus*	S2	//2004	Protected
Black-billed Cuckoo	*Coccyzus erythropthalmus*	T2	8/15/2003	Protected
Great Horned Owl	*Bubo virginianus*	X1	6/26/2003	Protected
Chimney Swift	*Chaetura pelagica*	P2	6/30/2003	Protected
Ruby-throated Hummingbird	*Archilochus colubris*	P2	6/17/2004	Protected
Belted Kingfisher	*Megaceryle alcyon*	P2	7/5/2002	Protected
Red-bellied Woodpecker	*Melanerpes carolinus*	FL	6/17/2004	Protected
Downy Woodpecker	*Picoides pubescens*	B2	6/17/2004	Protected

Hairy Woodpecker	*Picoides villosus*	X1	7/5/2002	Protected
Northern Flicker	*Colaptes auratus*	FY	7/3/2002	Protected
Pileated Woodpecker	*Dryocopus pileatus*	B2	4/28/2003	Protected
Eastern Wood-Pewee	*Contopus virens*	D2	8/9/2002	Protected
Acadian Flycatcher	*Empidonax virescens*	P2	6/3/2003	Protected
Alder Flycatcher	*Empidonax alnorum*	X1	8/9/2002	Protected
Willow Flycatcher	*Empidonax traillii*	X1	8/15/2003	Protected
Least Flycatcher	*Empidonax minimus*	ON	6/30/2003	Protected
Eastern Phoebe	*Sayornis phoebe*	D2	8/9/2002	Protected
Great Crested Flycatcher	*Myiarchus crinitus*	D2	6/17/2004	Protected
Eastern Kingbird	*Tyrannus tyrannus*	FY	6/30/2003	Protected
Yellow-throated Vireo	*Vireo flavifrons*	S2	//2004	Protected
Blue-headed Vireo	*Vireo solitarius*	X1	7/5/2002	Protected
Warbling Vireo	*Vireo gilvus*	T2	6/30/2003	Protected
Red-eyed Vireo	*Vireo olivaceus*	T2	6/3/2003	Protected
Blue Jay	*Cyanocitta cristata*	FL	7/8/2003	Protected
American Crow	*Corvus brachyrhynchos*	FL	7/12/2003	Game Species
Tree Swallow	*Tachycineta bicolor*	P2	6/17/2004	Protected
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	FL	7/12/2003	Protected
Bank Swallow	*Riparia riparia*	NY	7/12/2003	Protected
Black-capped Chickadee	*Poecile atricapillus*	FY	7/12/2003	Protected
Tufted Titmouse	*Baeolophus bicolor*	FY	6/3/2003	Protected
White-breasted Nuthatch	*Sitta carolinensis*	S2	7/7/2002	Protected
Carolina Wren	*Thryothorus ludovicianus*	S2	6/17/2004	Protected
House Wren	*Troglodytes aedon*	NY	6/17/2004	Protected
Winter Wren	*Troglodytes troglodytes*	X1	6/26/2003	Protected

Blue-gray Gnatcatcher	*Polioptila caerulea*	FL	8/15/2003	Protected
Hermit Thrush	*Catharus guttatus*	X1	7/12/2003	Protected
Wood Thrush	*Hylocichla mustelina*	D2	7/3/2002	Protected
American Robin	*Turdus migratorius*	FY	6/26/2003	Protected
Gray Catbird	*Dumetella carolinensis*	FY	7/3/2002	Protected
Northern Mockingbird	*Mimus polyglottos*	B2	6/17/2004	Protected
Brown Thrasher	*Toxostoma rufum*	X1	7/12/2003	Protected
European Starling	*Sturnus vulgaris*	FL	6/17/2004	Unprotected
Cedar Waxwing	*Bombycilla cedrorum*	FL	7/3/2002	Protected
Yellow Warbler	*Dendroica petechia*	T2	6/17/2004	Protected
Black-throated Green Warbler	*Dendroica virens*	S2	6/26/2003	Protected
Pine Warbler	*Dendroica pinus*	S2	//2004	Protected
Prairie Warbler	*Dendroica discolor*	FL	7/8/2003	Protected
Black-and-white Warbler	*Mniotilta varia*	S2	7/7/2002	Protected
American Redstart	*Setophaga ruticilla*	P2	6/3/2003	Protected
Worm-eating Warbler	*Helmitheros vermivorum*	FL	7/5/2002	Protected
Ovenbird	*Seiurus aurocapilla*	FL	6/26/2003	Protected
Louisiana Waterthrush	*Seiurus motacilla*	X1	6/3/2003	Protected
Common Yellowthroat	*Geothlypis trichas*	FY	7/3/2002	Protected
Eastern Towhee	*Pipilo erythrophthalmus*	FL	8/15/2003	Protected
Chipping Sparrow	*Spizella passerina*	FY	7/12/2003	Protected
Clay-colored Sparrow	*Spizella pallida*	FL	7/12/2003	Protected
Song Sparrow	*Melospiza melodia*	FY	6/17/2004	Protected
Scarlet Tanager	*Piranga olivacea*	T2	7/8/2003	Protected
Northern Cardinal	*Cardinalis cardinalis*	FL	7/12/2003	Protected
Rose-breasted Grosbeak	*Pheucticus ludovicianus*	T2	7/3/2002	Protected

Indigo Bunting	*Passerina cyanea*	FY	7/12/2003	Protected
Red-winged Blackbird	*Agelaius phoeniceus*	FL	7/12/2003	Protected
Common Grackle	*Quiscalus quiscula*	FL	6/17/2004	Protected
Brown-headed Cowbird	*Molothrus ater*	D2	6/26/2003	Protected
Baltimore Oriole	*Icterus galbula*	FL	7/5/2002	Protected
Purple Finch	*Carpodacus purpureus*	X1	6/30/2003	Protected
House Finch	*Carpodacus mexicanus*	FL	7/12/2003	Protected
American Goldfinch	*Spinus tristis*	ON	7/31/2003	Protected
House Sparrow	*Passer domesticus*	ON	7/8/2003	Unprotected

Current Date: 6/22/2016

List of Species Breeding in Atlas Block 5664B

Common Name	Scientific Name	Behavior Code	Date	NY Legal Status
Canada Goose	*Branta canadensis*	FL	6/20/2002	Game Species
Wood Duck	*Aix sponsa*	FL	//2003	Game Species
American Black Duck	*Anas rubripes*	X1	6/20/2002	Game Species
Mallard	*Anas platyrhynchos*	FL	7/10/2002	Game Species
Common Merganser	*Mergus merganser*	P2	//2003	Game Species
Ruffed Grouse	*Bonasa umbellus*	FL	6/10/2002	Game Species
Wild Turkey	*Meleagris gallopavo*	FL	7/22/2002	Game Species
American Bittern	*Botaurus lentiginosus*	P2	8/15/2003	Protected-Special Concern
Great Blue Heron	*Ardea herodias*	T2	5/15/2004	Protected
Green Heron	*Butorides virescens*	S2	//2003	Protected
Turkey Vulture	*Cathartes aura*	X1	6/10/2002	Protected
Osprey	*Pandion haliaetus*	X1	6/7/2003	Protected-Special Concern
Bald Eagle	*Haliaeetus*	T2	7/21/2003	Threatened

	leucocephalus			
Sharp-shinned Hawk	*Accipiter striatus*	T2	7/16/2003	Protected-Special Concern
Red-shouldered Hawk	*Buteo lineatus*	D2	3/24/2002	Protected-Special Concern
Broad-winged Hawk	*Buteo platypterus*	P2	4/11/2002	Protected
Red-tailed Hawk	*Buteo jamaicensis*	D2	5/15/2003	Protected
American Kestrel	*Falco sparverius*	X1	5/31/2003	Protected
Virginia Rail	*Rallus limicola*	FL	7/13/2003	Game Species
Killdeer	*Charadrius vociferus*	T2	4/27/2002	Protected
Spotted Sandpiper	*Actitis macularius*	S2	//2003	Protected
American Woodcock	*Scolopax minor*	D2	3/17/2003	Game Species
Mourning Dove	*Zenaida macroura*	B2	4/26/2004	Protected
Yellow-billed Cuckoo	*Coccyzus americanus*	S2	6/10/2002	Protected
Eastern Screech-Owl	*Megascops asio*	X1	4/2/2003	Protected
Great Horned Owl	*Bubo virginianus*	S2	1/20/2002	Protected
Barred Owl	*Strix varia*	FL	8/9/2004	Protected
Common Nighthawk	*Chordeiles minor*	X1	5/23/2003	Protected-Special Concern
Whip-poor-will	*Caprimulgus vociferus*	D2	5/4/2002	Protected-Special Concern
Chimney Swift	*Chaetura pelagica*	B2	5/24/2003	Protected
Ruby-throated Hummingbird	*Archilochus colubris*	ON	//2002	Protected
Belted Kingfisher	*Megaceryle alcyon*	P2	//2002	Protected
Red-bellied Woodpecker	*Melanerpes carolinus*	B2	4/27/2002	Protected
Yellow-bellied Sapsucker	*Sphyrapicus varius*	X1	6/8/2001	Protected
Downy Woodpecker	*Picoides pubescens*	P2	//2003	Protected
Hairy Woodpecker	*Picoides villosus*	ON	4/26/2004	Protected
Northern Flicker	*Colaptes auratus*	T2	5/10/2003	Protected
Pileated Woodpecker	*Dryocopus pileatus*	N2	4/29/2002	Protected

Eastern Wood-Pewee	*Contopus virens*	T2	5/24/2003	Protected
Least Flycatcher	*Empidonax minimus*	X1	6/20/2002	Protected
Eastern Phoebe	*Sayornis phoebe*	NY	6/10/2002	Protected
Great Crested Flycatcher	*Myiarchus crinitus*	P2	5/1/2002	Protected
Eastern Kingbird	*Tyrannus tyrannus*	P2	6/10/2002	Protected
Yellow-throated Vireo	*Vireo flavifrons*	X1	6/8/2001	Protected
Blue-headed Vireo	*Vireo solitarius*	X1	6/8/2001	Protected
Warbling Vireo	*Vireo gilvus*	X1	//2003	Protected
Red-eyed Vireo	*Vireo olivaceus*	S2	//2003	Protected
Blue Jay	*Cyanocitta cristata*	FL	6/30/2004	Protected
American Crow	*Corvus brachyrhynchos*	N2	4/29/2002	Game Species
Fish Crow	*Corvus ossifragus*	X1	//2003	Protected
Common Raven	*Corvus corax*	FL	6/20/2002	Protected
Tree Swallow	*Tachycineta bicolor*	NE	6/10/2002	Protected
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	X1	//2003	Protected
Cliff Swallow	*Petrochelidon pyrrhonota*	X1	//2003	Protected
Barn Swallow	*Hirundo rustica*	P2	6/10/2002	Protected
Black-capped Chickadee	*Poecile atricapillus*	ON	//2002	Protected
Tufted Titmouse	*Baeolophus bicolor*	T2	3/24/2002	Protected
Red-breasted Nuthatch	*Sitta canadensis*	P2	5/15/2003	Protected
White-breasted Nuthatch	*Sitta carolinensis*	P2	4/26/2004	Protected
Brown Creeper	*Certhia americana*	B2	5/1/2002	Protected
Carolina Wren	*Thryothorus ludovicianus*	ON	7/27/2004	Protected
House Wren	*Troglodytes aedon*	ON	//2002	Protected
Winter Wren	*Troglodytes troglodytes*	S2	5/1/2002	Protected

Blue-gray Gnatcatcher	*Polioptila caerulea*	FY	7/20/2002	Protected
Eastern Bluebird	*Sialia sialis*	FL	7/9/2004	Protected
Veery	*Catharus fuscescens*	S2	//2002	Protected
Hermit Thrush	*Catharus guttatus*	S2	4/29/2002	Protected
Wood Thrush	*Hylocichla mustelina*	T2	5/1/2002	Protected
American Robin	*Turdus migratorius*	FY	6/10/2002	Protected
Gray Catbird	*Dumetella carolinensis*	ON	//2002	Protected
Northern Mockingbird	*Mimus polyglottos*	T2	4/29/2002	Protected
European Starling	*Sturnus vulgaris*	NY	5/15/2003	Unprotected
Cedar Waxwing	*Bombycilla cedrorum*	S2	//2003	Protected
Yellow-rumped Warbler	*Dendroica coronata*	X1	6/8/2001	Protected
Pine Warbler	*Dendroica pinus*	T2	7/28/2001	Protected
Black-and-white Warbler	*Mniotilta varia*	X1	6/8/2001	Protected
American Redstart	*Setophaga ruticilla*	T2	5/1/2002	Protected
Worm-eating Warbler	*Helmitheros vermivorum*	P2	6/10/2002	Protected
Ovenbird	*Seiurus aurocapilla*	B2	5/15/2004	Protected
Louisiana Waterthrush	*Seiurus motacilla*	X1	//2003	Protected
Kentucky Warbler	*Oporornis formosus*	B2	7/12/2003	Protected
Common Yellowthroat	*Geothlypis trichas*	ON	6/10/2002	Protected
Canada Warbler	*Wilsonia canadensis*	X1	6/8/2001	Protected
Eastern Towhee	*Pipilo erythrophthalmus*	T2	7/10/2002	Protected
Chipping Sparrow	*Spizella passerina*	FY	6/10/2002	Protected
Field Sparrow	*Spizella pusilla*	ON	6/10/2002	Protected
Song Sparrow	*Melospiza melodia*	S2	3/24/2002	Protected
White-throated Sparrow	*Zonotrichia albicollis*	X1	//2003	Protected
Scarlet Tanager	*Piranga olivacea*	ON	7/10/2002	Protected

Northern Cardinal	*Cardinalis cardinalis*	B2	5/30/2003	Protected
Rose-breasted Grosbeak	*Pheucticus ludovicianus*	T2	6/19/2004	Protected
Indigo Bunting	*Passerina cyanea*	D2	7/14/2002	Protected
Red-winged Blackbird	*Agelaius phoeniceus*	ON	5/15/2004	Protected
Common Grackle	*Quiscalus quiscula*	X1	5/25/2003	Protected
Brown-headed Cowbird	*Molothrus ater*	D2	5/1/2002	Protected
Orchard Oriole	*Icterus spurius*	T2	5/27/2004	Protected
Baltimore Oriole	*Icterus galbula*	FS	6/10/2002	Protected
Purple Finch	*Carpodacus purpureus*	S2	4/29/2002	Protected
House Finch	*Carpodacus mexicanus*	D2	6/16/2003	Protected
American Goldfinch	*Spinus tristis*	FL	6/22/2003	Protected
House Sparrow	*Passer domesticus*	ON	5/24/2003	Unprotected

Current Date: 6/22/2016

List of Species Breeding in Atlas Block 5665D

Common Name	Scientific Name	Behavior Code	Date	NY Legal Status
Canada Goose	*Branta canadensis*	FL	6/3/2001	Game Species
Mallard	*Anas platyrhynchos*	FL	6/5/2001	Game Species
Wild Turkey	*Meleagris gallopavo*	FL	7/19/2001	Game Species
Great Blue Heron	*Ardea herodias*	FY	6/13/2001	Protected
Red-shouldered Hawk	*Buteo lineatus*	FY	7/3/2001	Protected-Special Concern
Red-tailed Hawk	*Buteo jamaicensis*	N2	7/15/2001	Protected
American Kestrel	*Falco sparverius*	X1	6/25/2001	Protected
Rock Pigeon	*Columba livia*	ON	7/2/2001	Unprotected
Mourning Dove	*Zenaida macroura*	P2	7/19/2001	Protected
Eastern Screech-	*Megascops asio*	X1	5/20/2001	Protected

Owl				
Great Horned Owl	*Bubo virginianus*	S2	5/30/2001	Protected
Barred Owl	*Strix varia*	X1	5/20/2001	Protected
Chimney Swift	*Chaetura pelagica*	FL	6/25/2001	Protected
Ruby-throated Hummingbird	*Archilochus colubris*	FY	7/22/2001	Protected
Red-bellied Woodpecker	*Melanerpes carolinus*	FY	7/22/2001	Protected
Yellow-bellied Sapsucker	*Sphyrapicus varius*	FY	6/5/2001	Protected
Downy Woodpecker	*Picoides pubescens*	FL	6/12/2001	Protected
Hairy Woodpecker	*Picoides villosus*	FL	7/20/2001	Protected
Northern Flicker	*Colaptes auratus*	N2	6/25/2001	Protected
Pileated Woodpecker	*Dryocopus pileatus*	S2	7/2/2001	Protected
Eastern Wood-Pewee	*Contopus virens*	X1	6/25/2001	Protected
Eastern Phoebe	*Sayornis phoebe*	NE	7/3/2001	Protected
Great Crested Flycatcher	*Myiarchus crinitus*	NY	7/3/2001	Protected
Eastern Kingbird	*Tyrannus tyrannus*	S2	6/25/2001	Protected
Red-eyed Vireo	*Vireo olivaceus*	FL	7/15/2001	Protected
Blue Jay	*Cyanocitta cristata*	FY	7/15/2001	Protected
American Crow	*Corvus brachyrhynchos*	FL	7/28/2001	Game Species
Tree Swallow	*Tachycineta bicolor*	FY	6/5/2001	Protected
Cliff Swallow	*Petrochelidon pyrrhonota*	FY	7/2/2001	Protected
Barn Swallow	*Hirundo rustica*	FL	7/2/2001	Protected
Black-capped Chickadee	*Poecile atricapillus*	FY	7/20/2001	Protected
Tufted Titmouse	*Baeolophus bicolor*	NY	6/5/2001	Protected
Red-breasted Nuthatch	*Sitta canadensis*	ON	6/21/2001	Protected

White-breasted Nuthatch	*Sitta carolinensis*	FY	6/25/2001	Protected
Carolina Wren	*Thryothorus ludovicianus*	FY	6/21/2001	Protected
House Wren	*Troglodytes aedon*	NE	6/18/2001	Protected
Eastern Bluebird	*Sialia sialis*	FL	6/5/2001	Protected
Veery	*Catharus fuscescens*	X1	6/25/2001	Protected
Wood Thrush	*Hylocichla mustelina*	NY	6/25/2001	Protected
American Robin	*Turdus migratorius*	FL	5/30/2001	Protected
Gray Catbird	*Dumetella carolinensis*	ON	6/16/2001	Protected
Northern Mockingbird	*Mimus polyglottos*	S2	5/30/2001	Protected
Brown Thrasher	*Toxostoma rufum*	FL	7/19/2001	Protected
European Starling	*Sturnus vulgaris*	FL	6/10/2001	Unprotected
Yellow Warbler	*Dendroica petechia*	N2	6/25/2001	Protected
American Redstart	*Setophaga ruticilla*	S2	6/28/2001	Protected
Ovenbird	*Seiurus aurocapilla*	S2	6/25/2001	Protected
Common Yellowthroat	*Geothlypis trichas*	FY	6/25/2001	Protected
Eastern Towhee	*Pipilo erythrophthalmus*	S2	6/28/2001	Protected
Chipping Sparrow	*Spizella passerina*	NE	7/15/2001	Protected
Field Sparrow	*Spizella pusilla*	FY	6/28/2001	Protected
Song Sparrow	*Melospiza melodia*	ON	6/28/2001	Protected
Dark-eyed Junco	*Junco hyemalis*	NE	6/28/2001	Protected
Scarlet Tanager	*Piranga olivacea*	S2	6/28/2001	Protected
Northern Cardinal	*Cardinalis cardinalis*	FL	7/19/2001	Protected
Rose-breasted Grosbeak	*Pheucticus ludovicianus*	P2	7/22/2001	Protected
Red-winged Blackbird	*Agelaius phoeniceus*	FY	7/19/2001	Protected
Common Grackle	*Quiscalus quiscula*	FL	7/15/2001	Protected
Brown-headed	*Molothrus ater*	FL	7/15/2001	Protected

Cowbird				
Baltimore Oriole	*Icterus galbula*	S2	6/15/2001	Protected
Purple Finch	*Carpodacus purpureus*	X1	6/5/2001	Protected
House Finch	*Carpodacus mexicanus*	FY	7/19/2001	Protected
American Goldfinch	*Spinus tristis*	FY	8/25/2001	Protected
House Sparrow	*Passer domesticus*	ON	7/19/2001	Unprotected

Current Date: 6/22/2016

List of Species Breeding in Atlas Block 5664A

Common Name	Scientific Name	Behavior Code	Date	NY Legal Status
Canada Goose	*Branta canadensis*	FL	6/2/2000	Game Species
Wood Duck	*Aix sponsa*	FL	6/2/2000	Game Species
American Black Duck	*Anas rubripes*	X1	//2002	Game Species
Mallard	*Anas platyrhynchos*	FL	6/2/2000	Game Species
Common Merganser	*Mergus merganser*	FL	6/2/2000	Game Species
Wild Turkey	*Meleagris gallopavo*	X1	6/2/2000	Game Species
Great Blue Heron	*Ardea herodias*	X1	6/2/2000	Protected
Green Heron	*Butorides virescens*	FL	6/2/2000	Protected
Bald Eagle	*Haliaeetus leucocephalus*	S2	//2002	Threatened
Spotted Sandpiper	*Actitis macularius*	X1	//2002	Protected
Mourning Dove	*Zenaida macroura*	S2	//2002	Protected
Barred Owl	*Strix varia*	X1	//2004	Protected
Whip-poor-will	*Caprimulgus vociferus*	S2	//2004	Protected-Special Concern
Chimney Swift	*Chaetura pelagica*	X1	//2004	Protected
Ruby-throated Hummingbird	*Archilochus colubris*	X1	//2002	Protected
Belted Kingfisher	*Megaceryle alcyon*	X1	6/2/2000	Protected

Red-bellied Woodpecker	*Melanerpes carolinus*	S2	//2002	Protected
Yellow-bellied Sapsucker	*Sphyrapicus varius*	X1	6/2/2000	Protected
Downy Woodpecker	*Picoides pubescens*	S2	//2004	Protected
Hairy Woodpecker	*Picoides villosus*	X1	5/29/2001	Protected
Northern Flicker	*Colaptes auratus*	P2	6/2/2000	Protected
Pileated Woodpecker	*Dryocopus pileatus*	S2	//2002	Protected
Eastern Wood-Pewee	*Contopus virens*	S2	//2002	Protected
Least Flycatcher	*Empidonax minimus*	S2	//2004	Protected
Eastern Phoebe	*Sayornis phoebe*	X1	5/29/2001	Protected
Great Crested Flycatcher	*Myiarchus crinitus*	S2	//2002	Protected
Eastern Kingbird	*Tyrannus tyrannus*	X1	//2004	Protected
Blue-headed Vireo	*Vireo solitarius*	X1	5/29/2001	Protected
Warbling Vireo	*Vireo gilvus*	S2	//2004	Protected
Red-eyed Vireo	*Vireo olivaceus*	S2	//2002	Protected
Blue Jay	*Cyanocitta cristata*	X1	6/2/2000	Protected
American Crow	*Corvus brachyrhynchos*	X1	6/2/2000	Game Species
Fish Crow	*Corvus ossifragus*	X1	//2004	Protected
Tree Swallow	*Tachycineta bicolor*	FL	6/27/2003	Protected
Cliff Swallow	*Petrochelidon pyrrhonota*	X1	//2002	Protected
Black-capped Chickadee	*Poecile atricapillus*	S2	//2002	Protected
Tufted Titmouse	*Baeolophus bicolor*	S2	//2002	Protected
White-breasted Nuthatch	*Sitta carolinensis*	S2	//2002	Protected
Brown Creeper	*Certhia americana*	S2	//2002	Protected
House Wren	*Troglodytes aedon*	X1	6/2/2000	Protected
Blue-gray Gnatcatcher	*Polioptila caerulea*	X1	//2004	Protected
Veery	*Catharus*	S2	//2002	Protected

	fuscescens			
Wood Thrush	*Hylocichla mustelina*	S2	//2002	Protected
American Robin	*Turdus migratorius*	FY	//2004	Protected
Gray Catbird	*Dumetella carolinensis*	X1	6/2/2000	Protected
Cedar Waxwing	*Bombycilla cedrorum*	S2	//2002	Protected
Yellow Warbler	*Dendroica petechia*	X1	6/2/2000	Protected
Yellow-rumped Warbler	*Dendroica coronata*	X1	6/2/2000	Protected
Black-throated Green Warbler	*Dendroica virens*	X1	//2002	Protected
Blackburnian Warbler	*Dendroica fusca*	X1	//2002	Protected
Black-and-white Warbler	*Mniotilta varia*	X1	//2004	Protected
American Redstart	*Setophaga ruticilla*	S2	//2004	Protected
Worm-eating Warbler	*Helmitheros vermivorum*	S2	//2002	Protected
Ovenbird	*Seiurus aurocapilla*	S2	//2002	Protected
Louisiana Waterthrush	*Seiurus motacilla*	X1	6/27/2003	Protected
Common Yellowthroat	*Geothlypis trichas*	X1	6/2/2000	Protected
Chipping Sparrow	*Spizella passerina*	X1	//2002	Protected
Song Sparrow	*Melospiza melodia*	NE	6/2/2000	Protected
Scarlet Tanager	*Piranga olivacea*	S2	//2002	Protected
Northern Cardinal	*Cardinalis cardinalis*	X1	//2002	Protected
Rose-breasted Grosbeak	*Pheucticus ludovicianus*	X1	6/2/2000	Protected
Red-winged Blackbird	*Agelaius phoeniceus*	P2	6/2/2000	Protected
Common Grackle	*Quiscalus quiscula*	FY	//2004	Protected
Brown-headed Cowbird	*Molothrus ater*	X1	6/2/2000	Protected
Baltimore Oriole	*Icterus galbula*	S2	//2004	Protected

American Goldfinch	*Spinus tristis*	X1	//2002	Protected

Current Date: 6/22/2016

List of Species Breeding in Atlas Block 5564B

Common Name	Scientific Name	Behavior Code	Date	NY Legal Status
Canada Goose	*Branta canadensis*	FL	//2004	Game Species
Mallard	*Anas platyrhynchos*	X1	6/15/2004	Game Species
Common Merganser	*Mergus merganser*	FL	6/15/2001	Game Species
Wild Turkey	*Meleagris gallopavo*	FL	6/15/2004	Game Species
Great Blue Heron	*Ardea herodias*	X1	5/6/2000	Protected
Green Heron	*Butorides virescens*	X1	6/24/2004	Protected
Turkey Vulture	*Cathartes aura*	X1	6/24/2004	Protected
Bald Eagle	*Haliaeetus leucocephalus*	NY	//2002	Threatened
Sharp-shinned Hawk	*Accipiter striatus*	X1	//2004	Protected-Special Concern
Red-shouldered Hawk	*Buteo lineatus*	X1	6/15/2004	Protected-Special Concern
Broad-winged Hawk	*Buteo platypterus*	FL	7/3/2005	Protected
Red-tailed Hawk	*Buteo jamaicensis*	FL	7/2/2004	Protected
American Kestrel	*Falco sparverius*	X1	5/6/2000	Protected
Killdeer	*Charadrius vociferus*	X1	6/21/2005	Protected
Spotted Sandpiper	*Actitis macularius*	X1	7/5/2002	Protected
Rock Pigeon	*Columba livia*	X1	7/5/2002	Unprotected
Mourning Dove	*Zenaida macroura*	FL	6/21/2005	Protected
Yellow-billed Cuckoo	*Coccyzus americanus*	X1	7/3/2005	Protected
Black-billed Cuckoo	*Coccyzus erythropthalmus*	X1	6/15/2004	Protected
Ruby-throated Hummingbird	*Archilochus colubris*	X1	6/24/2004	Protected

Belted Kingfisher	*Megaceryle alcyon*	X1	//2004	Protected
Red-bellied Woodpecker	*Melanerpes carolinus*	FY	6/15/2001	Protected
Yellow-bellied Sapsucker	*Sphyrapicus varius*	NY	7/3/2005	Protected
Downy Woodpecker	*Picoides pubescens*	X1	5/6/2000	Protected
Hairy Woodpecker	*Picoides villosus*	FL	6/24/2004	Protected
Northern Flicker	*Colaptes auratus*	FL	7/18/2004	Protected
Pileated Woodpecker	*Dryocopus pileatus*	X1	5/6/2000	Protected
Eastern Wood-Pewee	*Contopus virens*	S2	7/2/2004	Protected
Least Flycatcher	*Empidonax minimus*	S2	6/21/2005	Protected
Eastern Phoebe	*Sayornis phoebe*	UN	6/15/2004	Protected
Great Crested Flycatcher	*Myiarchus crinitus*	T2	7/18/2004	Protected
Eastern Kingbird	*Tyrannus tyrannus*	DD	6/24/2004	Protected
Yellow-throated Vireo	*Vireo flavifrons*	X1	5/6/2000	Protected
Blue-headed Vireo	*Vireo solitarius*	P2	5/6/2000	Protected
Warbling Vireo	*Vireo gilvus*	DD	6/21/2005	Protected
Red-eyed Vireo	*Vireo olivaceus*	FL	7/3/2005	Protected
Blue Jay	*Cyanocitta cristata*	FY	6/20/2004	Protected
American Crow	*Corvus brachyrhynchos*	FL	6/15/2004	Game Species
Common Raven	*Corvus corax*	X1	5/6/2000	Protected
Tree Swallow	*Tachycineta bicolor*	FL	6/15/2004	Protected
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	X1	6/21/2005	Protected
Cliff Swallow	*Petrochelidon pyrrhonota*	ON	6/21/2005	Protected
Barn Swallow	*Hirundo rustica*	NY	6/15/2004	Protected
Black-capped Chickadee	*Poecile atricapillus*	FL	6/24/2004	Protected
Tufted Titmouse	*Baeolophus bicolor*	FL	6/15/2004	Protected
Red-breasted Nuthatch	*Sitta canadensis*	X1	5/6/2000	Protected

White-breasted Nuthatch	*Sitta carolinensis*	FL	6/20/2004	Protected
Brown Creeper	*Certhia americana*	S2	//2004	Protected
Carolina Wren	*Thryothorus ludovicianus*	D2	7/12/2004	Protected
House Wren	*Troglodytes aedon*	DD	6/21/2005	Protected
Blue-gray Gnatcatcher	*Polioptila caerulea*	X1	7/12/2004	Protected
Eastern Bluebird	*Sialia sialis*	FL	7/18/2004	Protected
Veery	*Catharus fuscescens*	S2	//2004	Protected
Hermit Thrush	*Catharus guttatus*	S2	7/12/2004	Protected
Wood Thrush	*Hylocichla mustelina*	FY	6/21/2005	Protected
American Robin	*Turdus migratorius*	FL	6/15/2004	Protected
Gray Catbird	*Dumetella carolinensis*	FY	6/15/2004	Protected
Brown Thrasher	*Toxostoma rufum*	X1	6/15/2004	Protected
European Starling	*Sturnus vulgaris*	FL	6/15/2004	Unprotected
Cedar Waxwing	*Bombycilla cedrorum*	B2	6/15/2004	Protected
Blue-winged Warbler	*Vermivora pinus*	X1	5/6/2000	Protected
Yellow Warbler	*Dendroica petechia*	S2	6/20/2004	Protected
Chestnut-sided Warbler	*Dendroica pensylvanica*	X1	7/12/2004	Protected
Black-throated Blue Warbler	*Dendroica caerulescens*	X1	7/5/2002	Protected
Yellow-rumped Warbler	*Dendroica coronata*	FY	7/3/2005	Protected
Black-throated Green Warbler	*Dendroica virens*	FY	7/2/2004	Protected
Blackburnian Warbler	*Dendroica fusca*	S2	7/12/2004	Protected
Pine Warbler	*Dendroica pinus*	X1	6/15/2001	Protected
Black-and-white Warbler	*Mniotilta varia*	S2	//2004	Protected
American Redstart	*Setophaga ruticilla*	S2	6/24/2004	Protected
Ovenbird	*Seiurus aurocapilla*	T2	7/2/2004	Protected

Northern Waterthrush	*Seiurus noveboracensis*	X1	6/15/2001	Protected
Louisiana Waterthrush	*Seiurus motacilla*	FY	7/3/2005	Protected
Common Yellowthroat	*Geothlypis trichas*	FL	7/18/2004	Protected
Eastern Towhee	*Pipilo erythrophthalmus*	P2	7/18/2004	Protected
Chipping Sparrow	*Spizella passerina*	FL	6/15/2004	Protected
Song Sparrow	*Melospiza melodia*	DD	7/12/2004	Protected
White-throated Sparrow	*Zonotrichia albicollis*	X1	5/6/2000	Protected
Dark-eyed Junco	*Junco hyemalis*	X1	5/6/2000	Protected
Scarlet Tanager	*Piranga olivacea*	S2	6/24/2004	Protected
Northern Cardinal	*Cardinalis cardinalis*	S2	6/24/2004	Protected
Rose-breasted Grosbeak	*Pheucticus ludovicianus*	P2	7/18/2004	Protected
Indigo Bunting	*Passerina cyanea*	DD	7/3/2005	Protected
Red-winged Blackbird	*Agelaius phoeniceus*	FL	6/15/2004	Protected
Common Grackle	*Quiscalus quiscula*	FY	6/15/2004	Protected
Brown-headed Cowbird	*Molothrus ater*	FL	7/3/2005	Protected
Baltimore Oriole	*Icterus galbula*	FY	6/21/2005	Protected
Purple Finch	*Carpodacus purpureus*	X1	7/12/2004	Protected
House Finch	*Carpodacus mexicanus*	FL	6/21/2005	Protected
American Goldfinch	*Spinus tristis*	P2	7/12/2004	Protected
House Sparrow	*Passer domesticus*	ON	6/15/2004	Unprotected

Current Date: 6/22/2016

Attachment E

NYS Department of Environmental Conservation (NYSDEC) Nature Explorer Results

USER DEFINED SEARCH RESULTS

Map | Filter | Print Report

Legend

- Major Cities
- Interstates
- Streets
- Natural Communities
- Rare Plants and Animals (Generalized)
- Counties
- Streams and Rivers
  - Stream, River
- Waterbodies - Small

Criteria: Selected Map Area

Refine Search | Export Results | Create PDF Report

Common Name / *Scientific Name*	Subgroup	Town Distribution Status	Town Year Last Documented	Protection Status		Conservation Rank	
				State	Federal	State	Global
No Records Found							

Note: Restricted plants and animals have also been documented in one or more of the Towns or Cities in which your user-defined area is located, **but are not listed in these results.** This application does **not** provide information at the level of Town or City on state-listed animals and on other sensitive animals and plants. See a list of the restricted animals and plants documented from the following counties: Ulster. **Any individual plant or animal on this county's restricted list may or may not occur in this particular user-defined area.**

This list only includes records of rare species and significant natural communities from the databases of the NY Natural Heritage Program. This list is not a definitive statement about the presence or absence of all plants and animals, including rare or state-listed species, or of all significant natural communities. For most areas, comprehensive field surveys have not been conducted, and this list should not be considered a substitute for on-site surveys.

Attachment F

Bat Habitat Assessment Form

APPENDIX A
PHASE 1 SUMMER HABITAT ASSESSMENTS

INDIANA BAT HABITAT ASSESSMENT DATASHEET

Project Name: Ashokan Rail Trail

Date: 6/28-6/29/16, 7/7/16, 5/17/17

Township/Range/Section: Hurley and Olive

Lat Long/UTM/ Zone: Between 42° 0'20.87"N, 74°16'16.63"W and 41°59'5.60"N, 74° 5'13.93"W (NAD 83).

Surveyor: Johanna Duffy, CWB
Corinne Steinmuller

Brief Project Description

Ulster County is proposing the construction of an 11.5-mile pedestrian and bicycle trail which will run from Basin Road in the Town of Hurley to NYS Route 28A in the Town of Olive. The proposed action includes the creation of a recreational trail corridor on a former rail line north of the Ashokan Reservoir.

Project Area

	Total Acres	Forest Acres	Open Acres
Project	56	40	16

	Completely cleared	Partially cleared (will leave trees)	Preserve acres- no clearing
Proposed Tree Removal (ac)		9.2	

Vegetation Cover Types

Pre-Project	Post-Project
Forested	Forested

Landscape within 5 mile radius

Flight corridors to other forested areas?

Yes

Describe Adjacent Properties (e.g. forested, grassland, commercial or residencial development, water sources)

Ashokan Reservoir, commercial and residential development

Proximity to Public Land

What is the distance (mi.) from the project area to forested public lands (e.g., national or state forests, national or state parks, conservation areas, wildlife management areas)?

Project is on forested public land

APPENDIX A
PHASE 1 SUMMER HABITAT ASSESSMENTS

Use additional sheets to assess discrete habitat types at multiple sites in a project area
Include a map depicting locations of sample sites if assessing discrete habitats at multiple sites in a project area
A single sheet can be used for multiple sample sites if habitat is the same

Sample Site Description
Sample Site No.(s): 1

Water Resources at Sample Site				
Stream Type (# and length)	Ephemeral: Multiple	Intermittent: Multiple	Perennial: Multiple	Describe existing condition of water sources: Water is high quality and is used for public drinking
Pools/Ponds (# and size)	Reservoir >8,000 acres	Open and accessible to bats? Yes		
Wetlands (approx. ac.)	Permanent: Multiple	Seasonal: Multiple		

Forest Resources at Sample Site				
Closure/Density	Canopy (> 50 '): 0	Midstory (20-50'): 5	Understory (<20'): 5	1=1-10%, 2=11-20%, 3=21-40%, 4=41-60%, 5=61-80%, 6=81=100%
Dominant Species of Mature Trees	red maple, striped maple, shagbark hickory, silver maple, northern red oak, eastern white pine, and American beech			
% Trees w/ Exfoliating Bark		30		
Size Composition of Live Trees (%)	Small (3-8 in): 50	Med (9-15 in): 30	Large (>15 in): 20	
No. of Suitable Snags				

Standing dead trees with exfoliating bark, cracks, crevices, or hollows. Snags without these characteristics are not considered suitable.

IS THE HABITAT SUITABLE FOR INDIANA BATS? Yes

Additional Comments:
Size of trees qualifies them for potential use as roost trees.

Attach aerial photo of project site with all forested areas labeled and a general description of the habitat

Photographic Documentation: habitat shots at edge and interior from multiple locations; understory/midstory/canopy; examples of potential suitable snags and live trees; water sources

Attachment G

Species Conclusion Table

Species Conclusions Table Project Name: Ashokan Rail Trail Date: 7/14/16				
Species Name	Potential Habitat Present?	Critical Habitat Present?	ESA/Eagle Act Determination	Notes / Documentation Summary (include full rationale in your report)
Northern long-eared bat *(Myotis septentrionalis) and* Indiana Bat (*Myotis sodalis*)	Yes	No	May effect, not likely to Adversely Affect	Although a small portion of the project area will require removal of trees (2 total) greater than 3 inches DBH, the habitat impact will be minimal. Changes in lighting will also occur as a result of the project, due to increases in mast lighting the proposed project is recommended to have a "May Effect not Likely to Adversely Affect" on these protected bat species.
Bog turtle *(Clemmys muhlenbergii*)	No	No	No Effect	The delineated wetlands to be impacted lacked deep mucky soils, contained common reed, were shaded by upland overstory, and lacked the microtopographic features important to this species.
Bald eagle (*Haliaeetus leucocephalus)*	Yes	No	May Affect, Not Likely to Adversely Affect. No BGEPA permit required.	Suitable habitat and nest with young identified by BBA and NYSDEP. To avoid impact and necessity for a BGEPA permit, it is recommended that construction that will occur within sight or 660 feet of a nest occur during the non-breeding season, from mid-September to December.
Sharp-Shinned Hawk (*Accipiter striatus*)	Yes	No	No Effect	Birds breed in deep forests. In winter, will utilize forest edge and open habitat for hunting.
Osprey (*Pandion haliaetus*)	Yes	No	No Effect	Common around shorelines and waterways. Habitat includes rivers, lakes, reservoirs, lagoons, swamps, and marshes. Nests are usually elevated and within a short distance (12 miles) of an adequate supply of fish.
Red-shouldered hawk (*Buteo lineatus)*	Yes	No	No Effect	Forest birds that prefer an open sub-canopy for hunting. Can be found in suburban areas with mixed forest and housing. Suitable foraging habitat was identified within the corridor. However, impacts will be temporary and limited to noise during construction.
American bittern (*Botaurus lentiginosus)*	Yes	No	No Effect	Shallow, freshwater marshes. Tend to stay hidden among dense vegetation. Suitable habitat was identified immediately adjacent the corridor. However, impacts will be temporary and limited to noise during construction. No direct impacts will occur to suitable wetlands for this species.
Whip-poor-will (*Caprimulgus vociferos*)	No	No	No Effect	Forests with open understory. Found in both deciduous and deciduous pine mix. Nest on forest floor and are strictly nocturnal. No open understory was identified within the project corridor.
Common nighthawk (*Chordeiles minor*)	No	No	No Effect	Nest on bare soil and/or rock in forest clearings, but have also been known to nest on gravel rooftops. No bare soil and/or rock clearings were identified within the project corridor.

Exhibit 9: Supplemental New York City Department of Environmental Protection Watercourse Delineation

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1 inch = 100 feet

Ulster County
Ashokan Rail Trail
B&L / DEP Delineated Resources
Ulster County 8/2/2017 New York

Figure 1
Project No. 369.007

N

DEP STREAM #20

A 20+00

B&L WETLAND P

A 25+00

Legend

- Trail Centerline
- DEP Stream
- DEP Wetland
- B&L Stream
- B&L Wetland

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N W E S

1 inch = 100 feet

Ulster County

Ashokan Rail Trail

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Figure 2

Project No. 369.007

N

A 40+00

DEP STREAM #19

A 45+00

Legend

- Trail Centerline
- DEP Stream
- DEP Wetland
- B&L Stream
- B&L Wetland

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1 inch = 100 feet

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Figure 3

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Ulster County 8/2/2017 New York

Figure 4
Project No. 369.007

N

A 70+00

DEP STREAM #18

A 75+00

A 80+00

Legend

- Trail Centerline
- DEP Stream
- DEP Wetland
- B&L Stream
- B&L Wetland

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Figure 5

Project No. 369.007

N

A 110+00

B&L STREAM #16

A 115+00

Legend

- Trail Centerline
- DEP Stream
- DEP Wetland
- B&L Stream
- B&L Wetland

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1 inch = 100 feet

Ulster County

Ashokan Rail Trail

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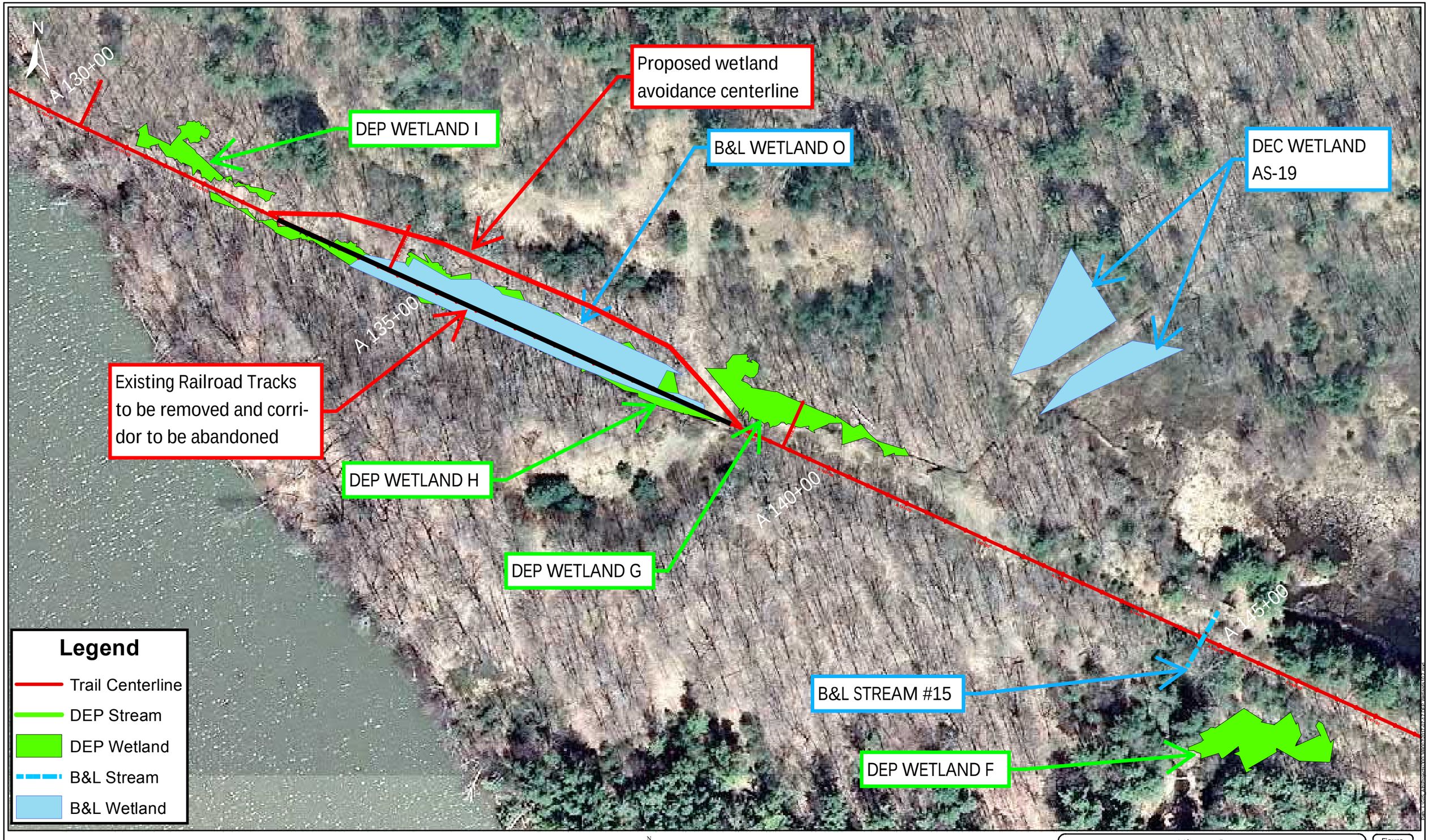
Figure 6

Project No. 369.007



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1 inch = 100 feet

Ulster County
Ashokan Rail Trail
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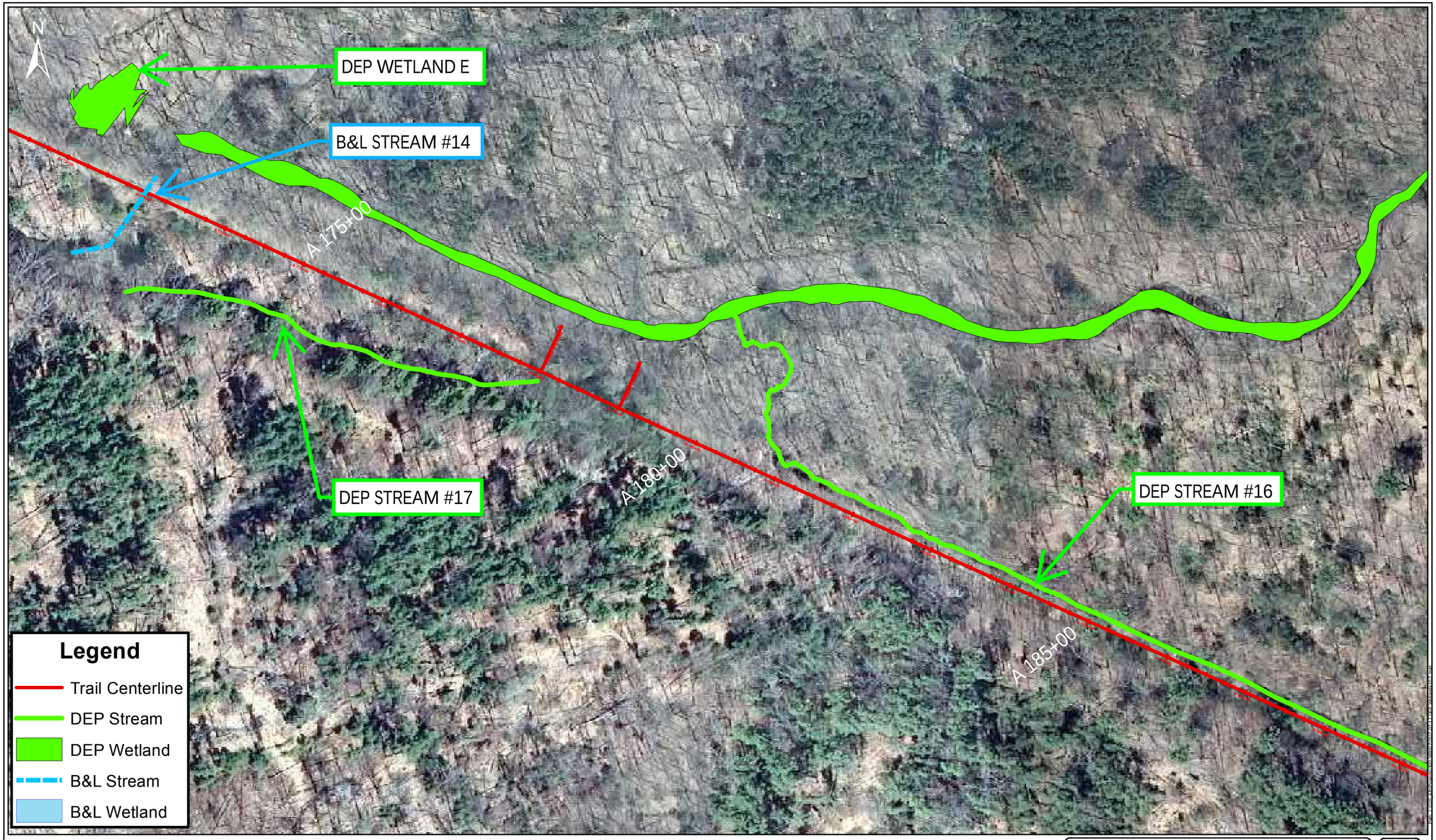
Ulster County 8/2/2017 New York

Figure 7
Project No. 369.007



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1 inch = 100 feet

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Ashokan Rail Trail
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Figure 8
Project No. 369.007

N

DEP STREAM #17

DEP WETLAND D

DEP STREAM #16

A 185+00

A 190+00

A 195+00

Legend

- Trail Centerline
- DEP Stream
- DEP Wetland
- B&L Stream
- B&L Wetland

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1 inch = 100 feet

Ulster County

Ashokan Rail Trail

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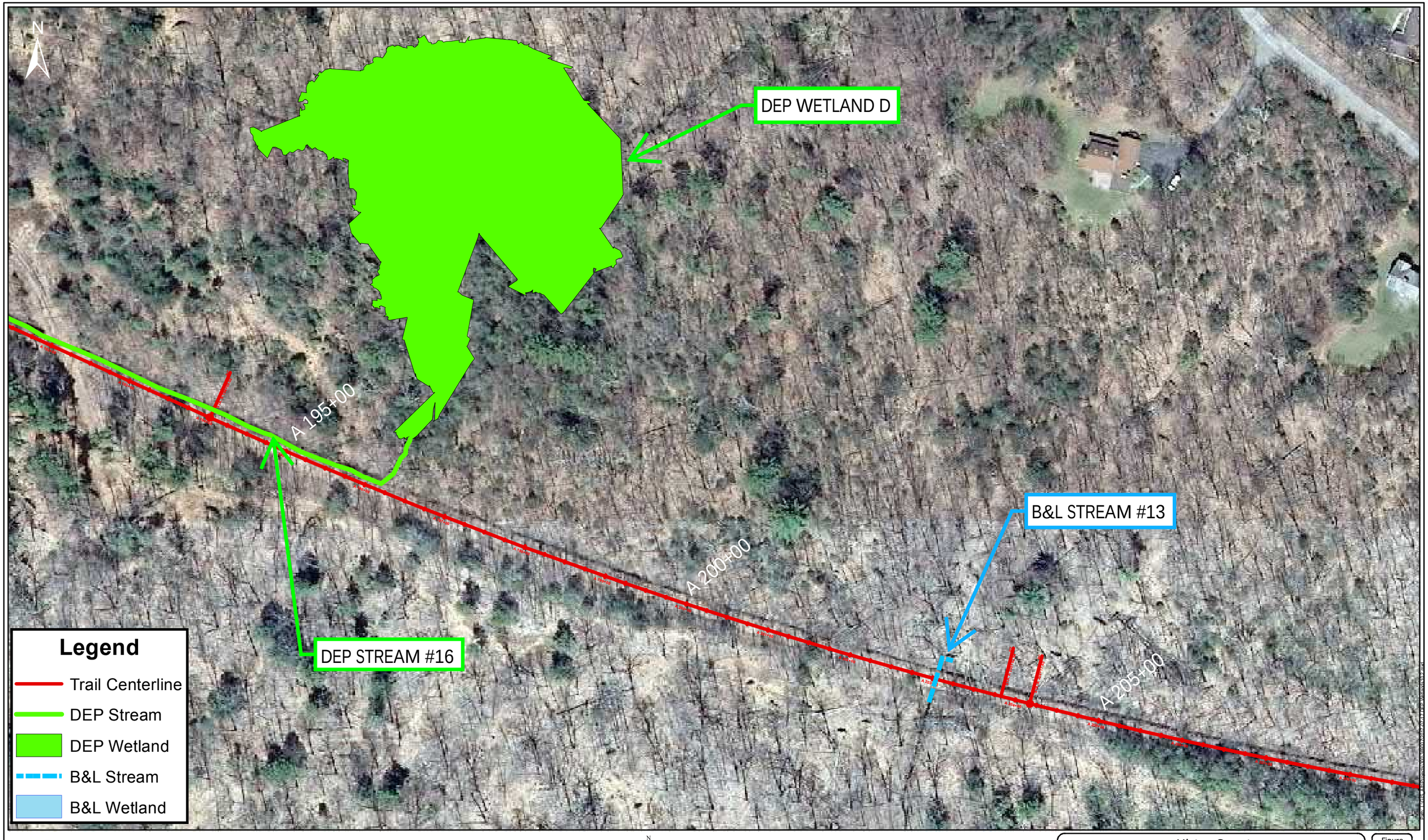
Figure 9

Project No. 369.007



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1 inch = 100 feet

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Figure 10
Project No. 369.007

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1 inch = 100 feet

Ulster County
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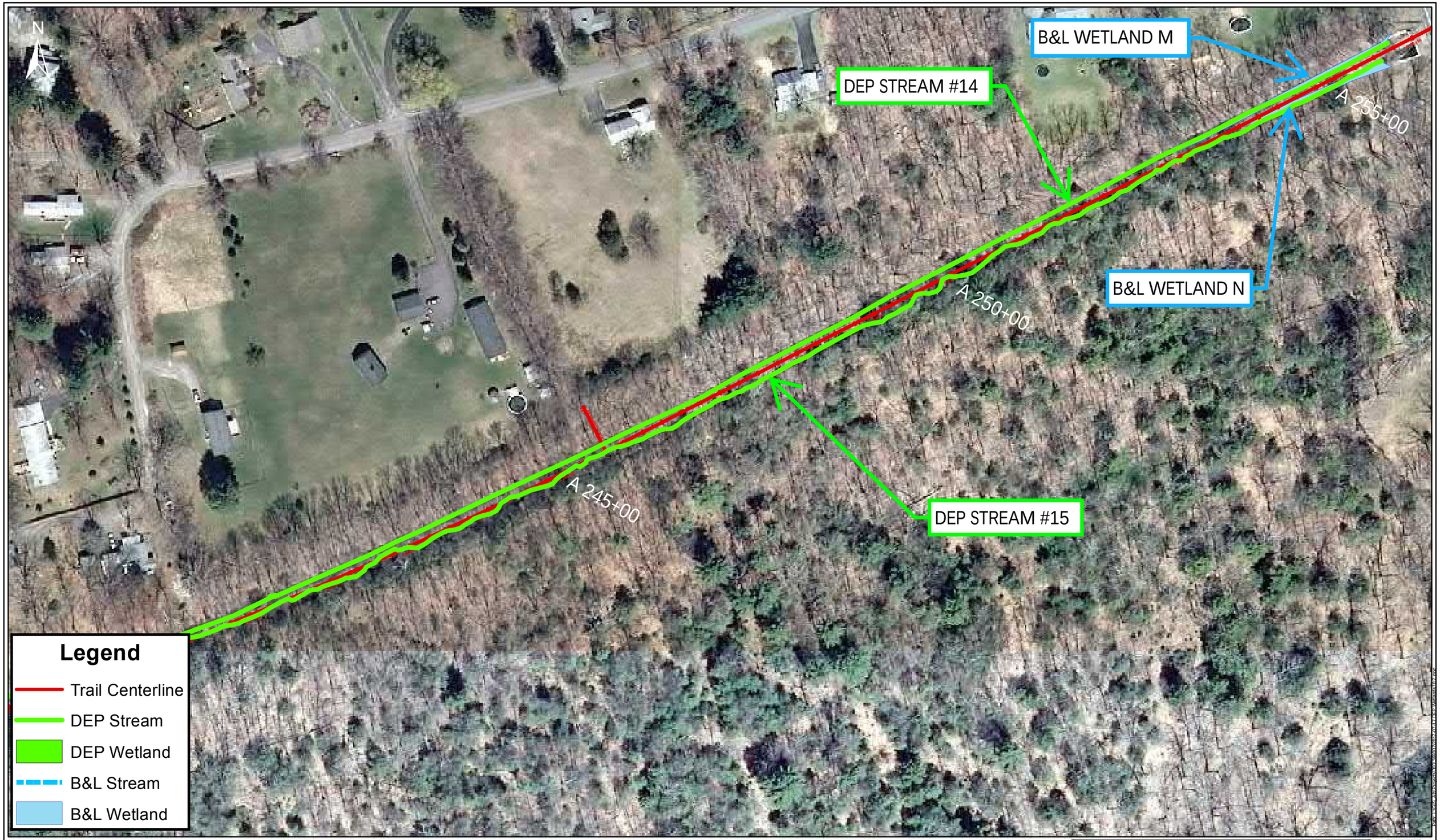
Figure 11
Project No. 369.007



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1 inch = 100 feet

Ulster County
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Figure 12
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1 inch = 100 feet

Ulster County
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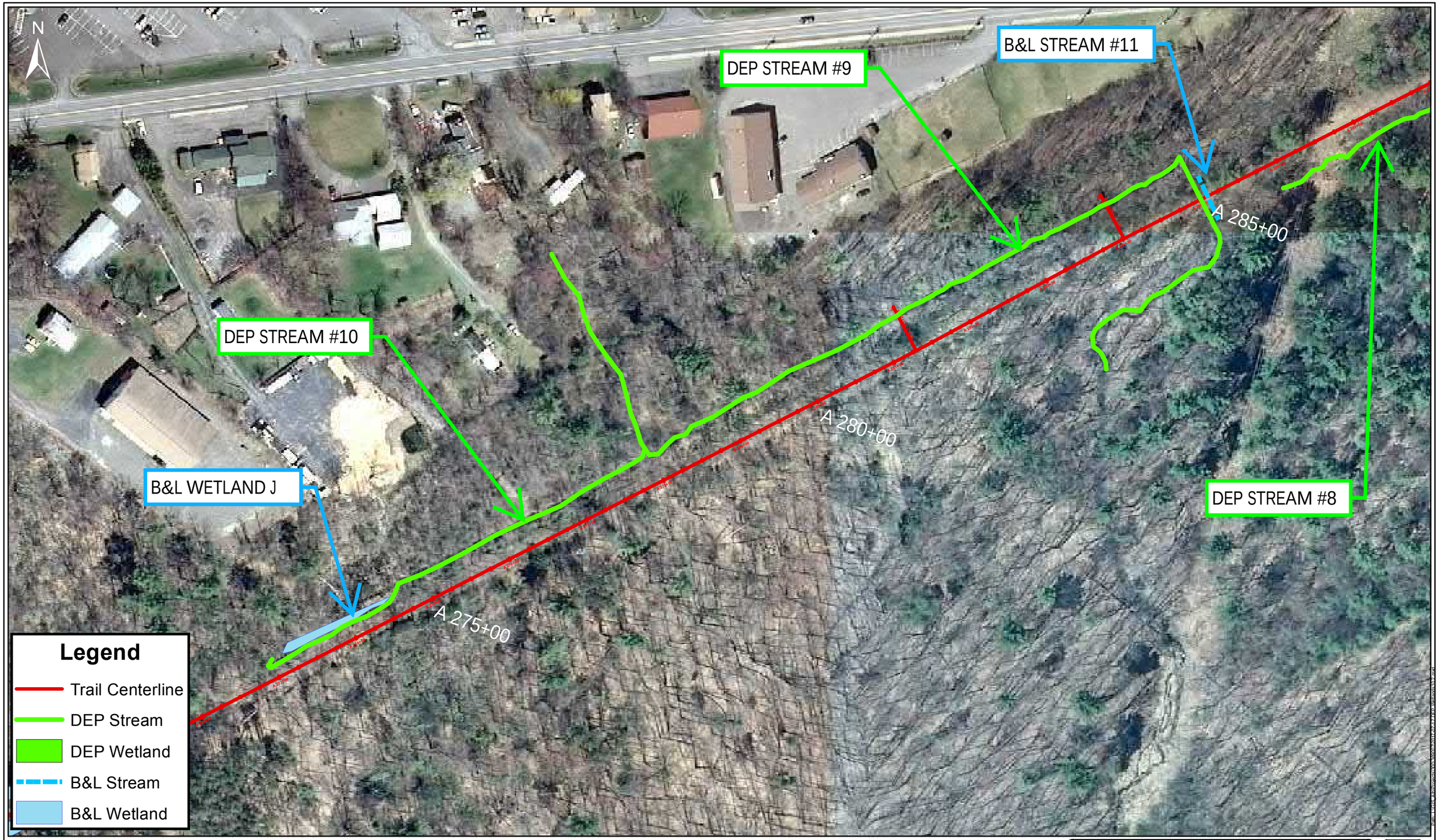
Figure 13
Project No. 369.007



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1 inch = 100 feet

Ulster County
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Figure 14

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1 inch = 100 feet

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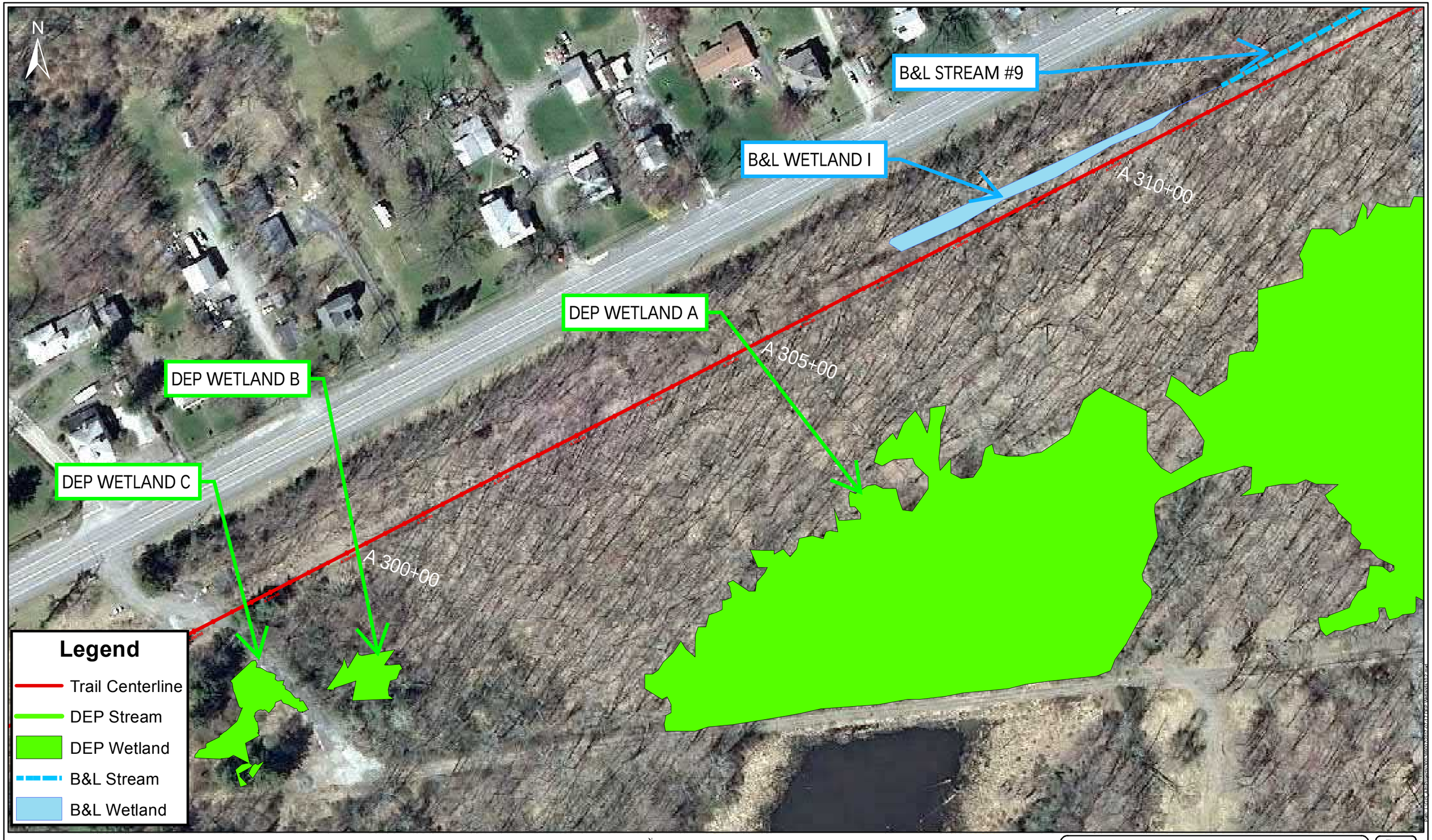
Figure 15
Project No. 369.007



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1 inch = 100 feet

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Figure 16
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1 inch = 100 feet

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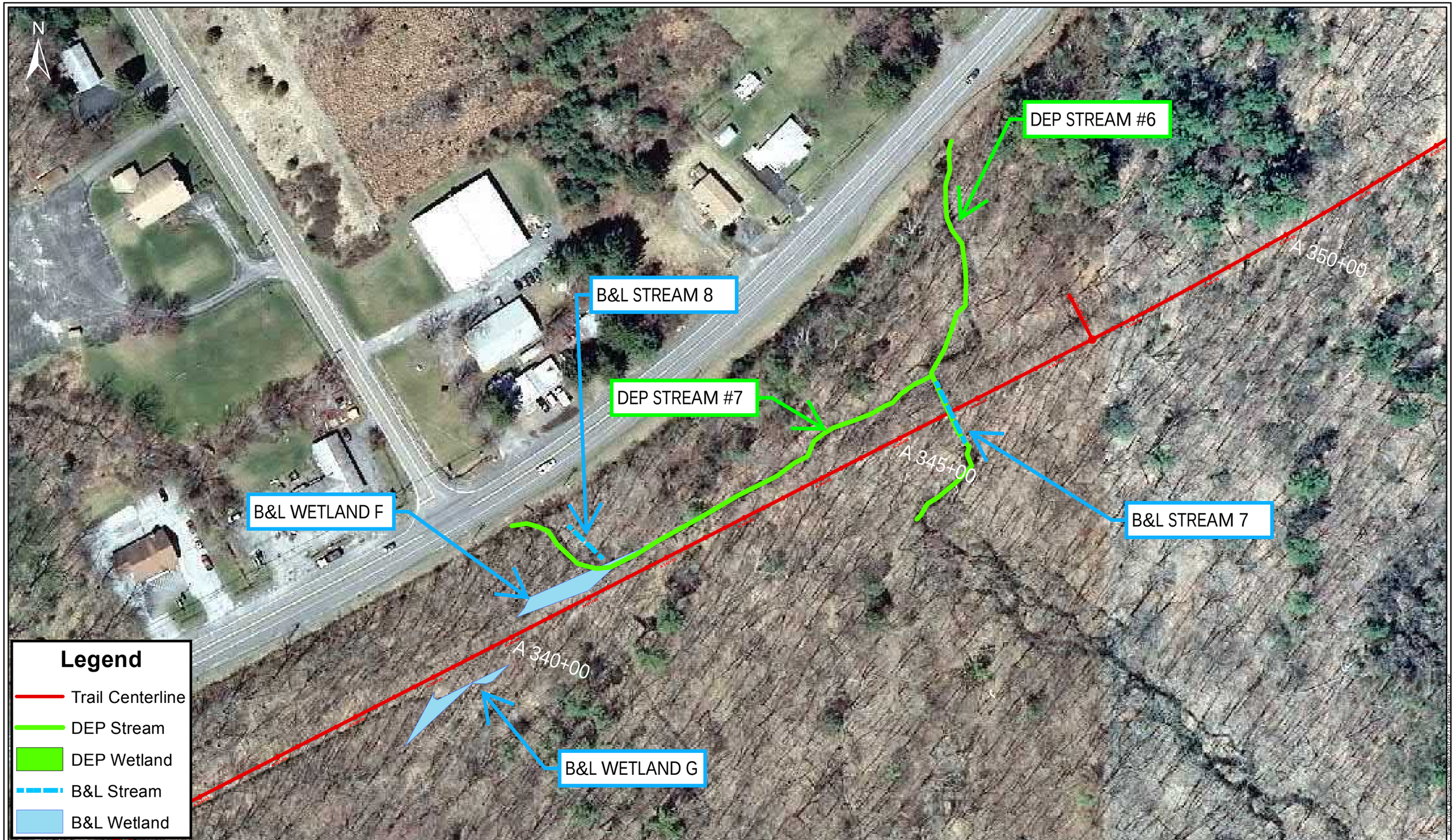
Figure 17

Project No. 369.007



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N W E S

1 inch = 100 feet

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Figure 18

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1 inch = 100 feet

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Ulster County 8/2/2017 New York

Figure 19

Project No. 369.007

N

A 425+00

A 430+00

A 420+00

DEP STREAM #5

Legend

- Trail Centerline
- DEP Stream
- DEP Wetland
- B&L Stream
- B&L Wetland

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1 inch = 100 feet

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Figure 20

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1 inch = 100 feet

Ulster County
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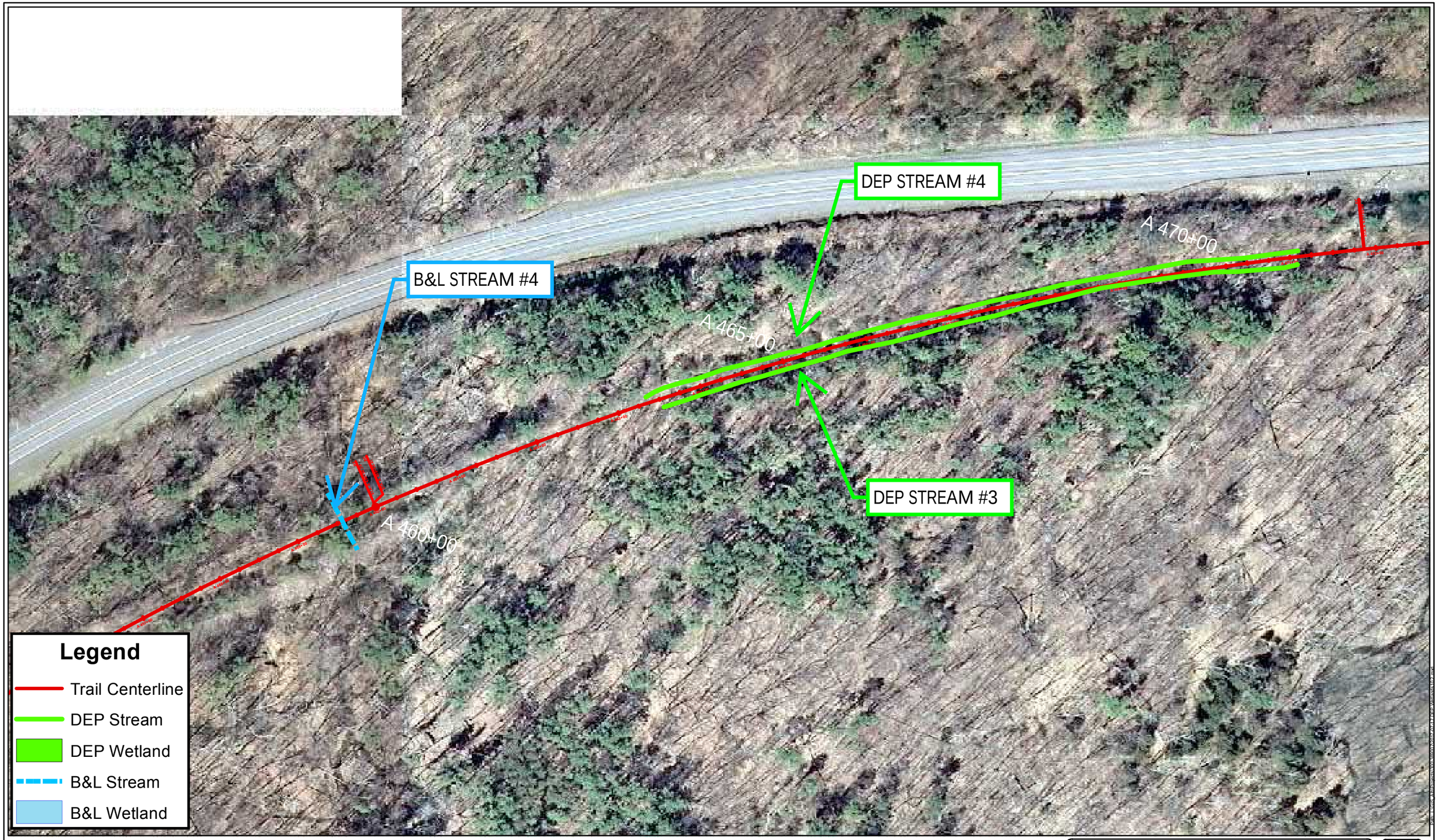
Ulster County 8/2/2017 New York

Figure 21

Project No. 369.007



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1 inch = 100 feet

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Ulster County 8/2/2017 New York

Figure 22
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1 inch = 100 feet

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Figure 23

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1 inch = 100 feet

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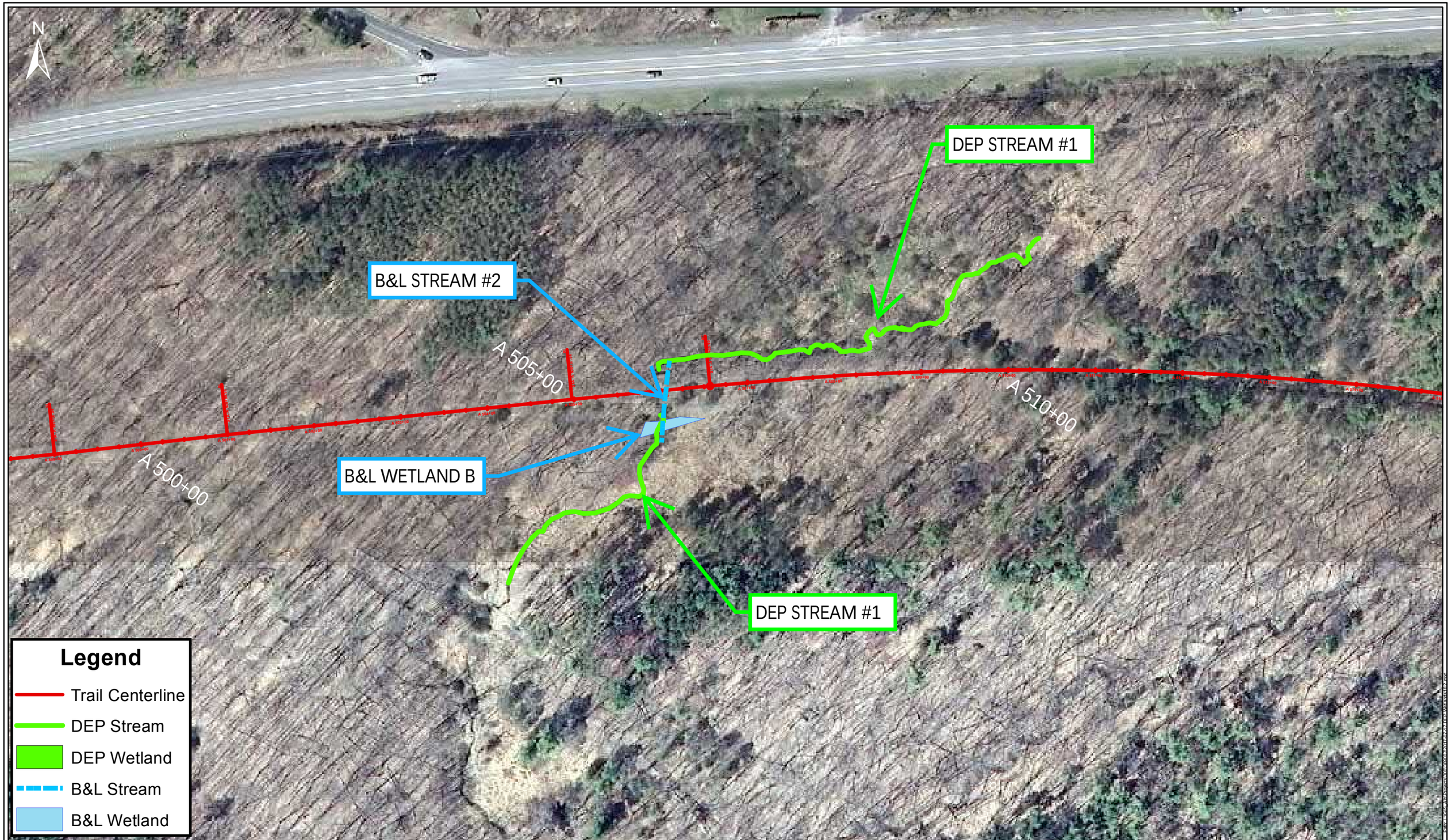
Figure 24

Project No. 369.007



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1 inch = 100 feet

Ulster County
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Figure 25

Project No. 369.007

N

DEP STREAM #1

A 510+00

A 515+00

A 520+00

A 525+00

B&L STREAM #1

Legend

- Trail Centerline
- DEP Stream
- DEP Wetland
- B&L Stream
- B&L Wetland

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1 inch = 100 feet

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Figure 26

Project No. 369.007

N

A 610+00

A 615+00

A 620+00

A 625+00

Legend

- Trail Centerline
- DEP Stream
- DEP Wetland
- B&L Stream
- B&L Wetland

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1 inch = 100 feet

Ulster County

Ashokan Rail Trail

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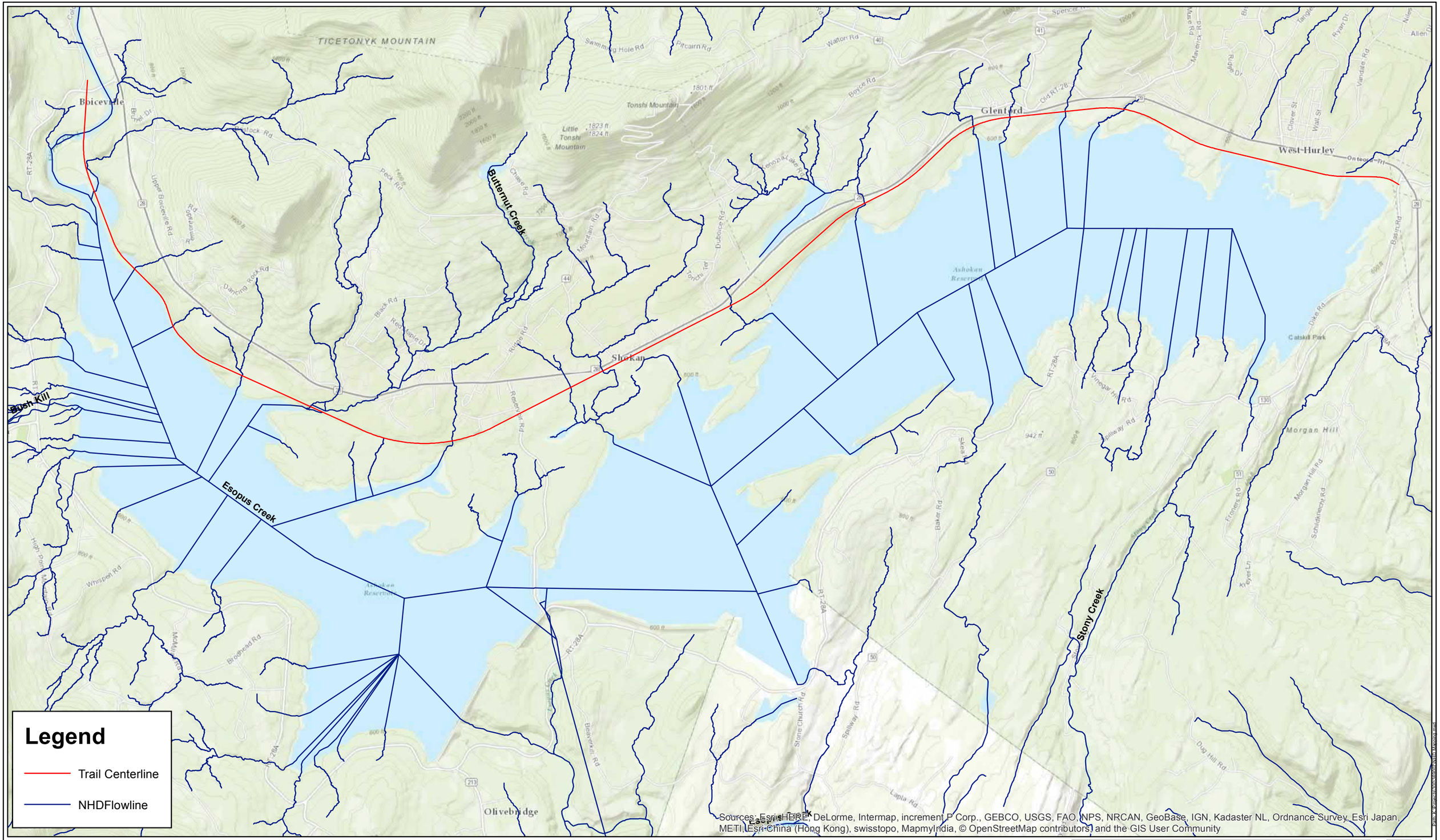
Ulster County 8/2/2017 New York

Figure 27

Project No. 369.007



Legend

- Trail Centerline
- NHDFlowline

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N W E S

1 inch = 3,250 feet

Ashokan Rail Trail
United States Geological Survey (USGS) National Hydrography Dataset (NHD)
Ulster County October 2017 New York

Figure 28

Project No. 369.007