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August 9, 2016

VIA HAND-DELIVERY AND ELECTRONIC MAIL

Mr. Robert Stein, Chairman
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: Petition No. _____ - Iroquois Gas Transmission System, L.P. Petition Regarding the Addition of a Launcher and a Mainline Valve Along the Iroquois Pipeline off of Canterbury Lane in Newtown, Connecticut, and an Above Ground Receiver Along the Iroquois Pipeline, Located on the Stonebridge Trail in Newtown, Connecticut

Dear Chairman Stein:

As discussed below, Iroquois Gas Transmission System, L.P. ("Iroquois") submits this petition with the Connecticut Siting Council (the "Council") to consult and cooperate with the Council regarding Iroquois' planned addition of a launcher and a mainline valve along the Iroquois Pipeline off of Canterbury Lane in Newtown, Connecticut ("Site 1"), and an above ground receiver along the Iroquois Pipeline, located on the Stonebridge Trail in Newtown, Connecticut ("Site 2"), (collectively, the "Project").

The Project is described in detail in the attached document entitled Proposed Launcher, Receiver and Mainline Valve Installation Newtown, CT (Attachment A) and the accompanying site plans (Attachment B). In brief, installing a launcher and receiver will allow Iroquois to inspect its gas pipe internally and enhance the safety of the pipeline. The Project will take place entirely on Iroquois' existing right-of-way. The Project will involve excavating, grading, filling with gravel or concrete at both locations, and the addition of above ground structures. Tree clearing, removal, and replacement will be necessary at Site 1. Also, a small (500 watt) solid oxide fuel cell generator will be installed at the Newtown receiver site to power the cathodic protection system.

The receiver installation at Site 2 will be within an upland review area under the Inland Wetland and Watercourses Regulations of the Town and Borough of Newtown, Connecticut and within Newtown Inland Wetland Commission jurisdiction. Therefore, Iroquois has sought and received approval for the receiver installation from the Newtown Inland Wetlands Commission. See approval in Attachment C. The attached report of James M. McManus, Certified Professional Soil Scientist, concludes that the proposed activities associated with the Project will not result in any direct or indirect, short or long-term impacts to the wetlands. See report in Attachment D. In addition to the wetlands approval, Iroquois is hereby providing a copy of this filing to the Newtown First Selectman.



The Project will strictly follow the erosion and sedimentation control measures in accordance with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*.

As the Council has previously acknowledged, the Federal Energy Regulatory Commission (“FERC”) has exclusive jurisdiction over the Iroquois Pipeline (and any additions thereto) under the Natural Gas Act, 15 U.S.C. § 717 *et. seq.* See *e.g.*, Petition Nos. 540 and 555, *Opinion and Decision and Order* (Sept. 25, 2002); Petition No. 755, *Declaratory Ruling* (Feb. 22, 2006); Petition No. 755A, *Opinion and Recommendations* (June 28, 2006); Petition No. 1168, *Decision Letter* (Sept. 3, 2015). Similarly, Iroquois’ addition of the launcher, receiver and mainline valve to the Iroquois Pipeline is subject to FERC’s exclusive jurisdiction.

Notwithstanding this exclusive federal jurisdiction, FERC policy “encourage[s] applicants to cooperate with state and local agencies with regard to the siting of pipeline facilities, environmental mitigation measures, and construction procedures.” *Maritimes & Northeast Pipeline, LLC*, 81 FERC ¶ 61,166, at 61,729 (1997) (“*Maritimes*”). Such cooperation allows opportunities for state and local authorities to provide recommendations to an applicant and FERC regarding its proposed pipeline route and construction plan. *Id.* at 61,730. As the Council is aware, Iroquois adheres to this policy. See *e.g.*, Petition No. 947A, *Declaratory Ruling* (April 28, 2011); Petition No. 947 *Declaratory Ruling* (June 17, 2010); Petition No. 815, *Opinion and Recommendations* (Nov. 29, 2007).

Under FERC’s regulations, the addition of the launcher, receiver and mainline valve is an “auxiliary installation” that, when installed on an existing natural gas transmission facility such as the Iroquois Pipeline, does not require any additional approvals from or notice to FERC. See 18 C.F.R. § 2.55(a)(2)(i). Nevertheless, while the Project is not the subject of a FERC application, in the spirit of FERC’s *Maritimes* policy, Iroquois submits this petition to consult and cooperate with the Council regarding the addition of the Project.

Enclosed is a check for the \$625 filing fee. Thank you for your attention to this matter. If you have any questions, please contact me.

Very truly yours,

BROWN RUDNICK LLP

By: 

Philip M. Small

PMS/zb
Enclosures
cc: E. Patricia Llodra, Newtown First Selectman

Iroquois Pipeline Operating Company
 One Corporate Drive, Suite 600
 Shelton, Connecticut 06484
 Attn: Environmental Health & Safety Department

Proposed Launcher, Receiver and Mainline Valve Installation
Newtown, CT

Proposed Project Review Form	
Proposed Project Location:	
Town: Newtown	County: Fairfield State: CT
USGS 7.5 Minute Quadrangle Map:	
Title: Southbury, CT	Portion of map: Lower left corner
Coordinates:	
Site #1	Site #2
Canterbury Lane	Stone Bridge Trail
Launcher and MLV: 41.410701, -73.218274	Receiver: 41.392201, -73.20433
Proposed Project Description:	
<p><u>Brief Description:</u> Iroquois proposes to install above ground facilities at two locations. A launcher and a mainline valve will be installed off of Canterbury Lane. A receiver will be installed off of Stonebridge Trail. Both of these sites will include adding to existing valve sites on the Newtown Loop and within the Iroquois' right-of-way. The existing permanent valve facilities will be extended and will include additional gravel, concrete supports for the launcher and receiver and an addition of a mainline valve facility.</p> <p>The project will involve excavating, grading, filling with gravel or concrete at both locations and adding the above ground structures.</p> <p>Tree clearing will be necessary at the proposed Launcher Site.</p> <p><u>Ground Disturbance:</u></p> <p><u>Site 1: Launcher and MLV Site - Canterbury Lane:</u> The work space for the launcher site will be approximately 20,328 ft². Excavation area is expected to be approximately 2,200 ft².</p> <p><u>Existing permanent graveled area = 3,750 ft²</u></p> <p><u>Proposed permanent graveled area = 6,279 ft²</u></p> <p><u>Wetland Disturbance and Stream Disturbance:</u> A wetland delineation confirmed that there will be no disturbance of any wetland, stream or buffers at this location.</p> <p><u>Tree Clearing:</u> Launcher and MLV: Tree clearing will be necessary only at the launcher/ MLV site. Approximately 40 trees originally planted as visual screening for the existing facility will be removed for the project. These trees will be replaced.</p>	

Iroquois Pipeline Operating Company
One Corporate Drive, Suite 600
Shelton, Connecticut 06484
Attn: Environmental Health & Safety Department

Proposed Launcher, Receiver and Mainline Valve Installation
Newtown, CT

Proposed Project Description Continued:

Site 2: Receiver Site - Stonebridge Trail:

The work space for the receiver site will be approximately 18,274 ft². Excavation area is expected to be approximately 3,900 ft².

Existing permanent graveled area = 3,691 ft²

Proposed permanent graveled area = 5,986 ft²

Wetland Disturbance: A wetland delineation was performed by JMM Wetland Consulting Services on October 30, 2015 and confirmed boundaries of a known wetland at this location. Most of the work will occur within the 100 foot Upland Review Area. There will be no impact to the wetland.

Stream Disturbance: There will be no stream disturbance for this project.

Tree Clearing: No tree clearing is necessary at the Receiver Site.

Equipment: Iroquois will use an excavator, dump truck, front end loader crane, 3 separate flatbeds, a small work trailer and post hole digger.

Time span: This project is expected to take approximately 8 weeks to complete.

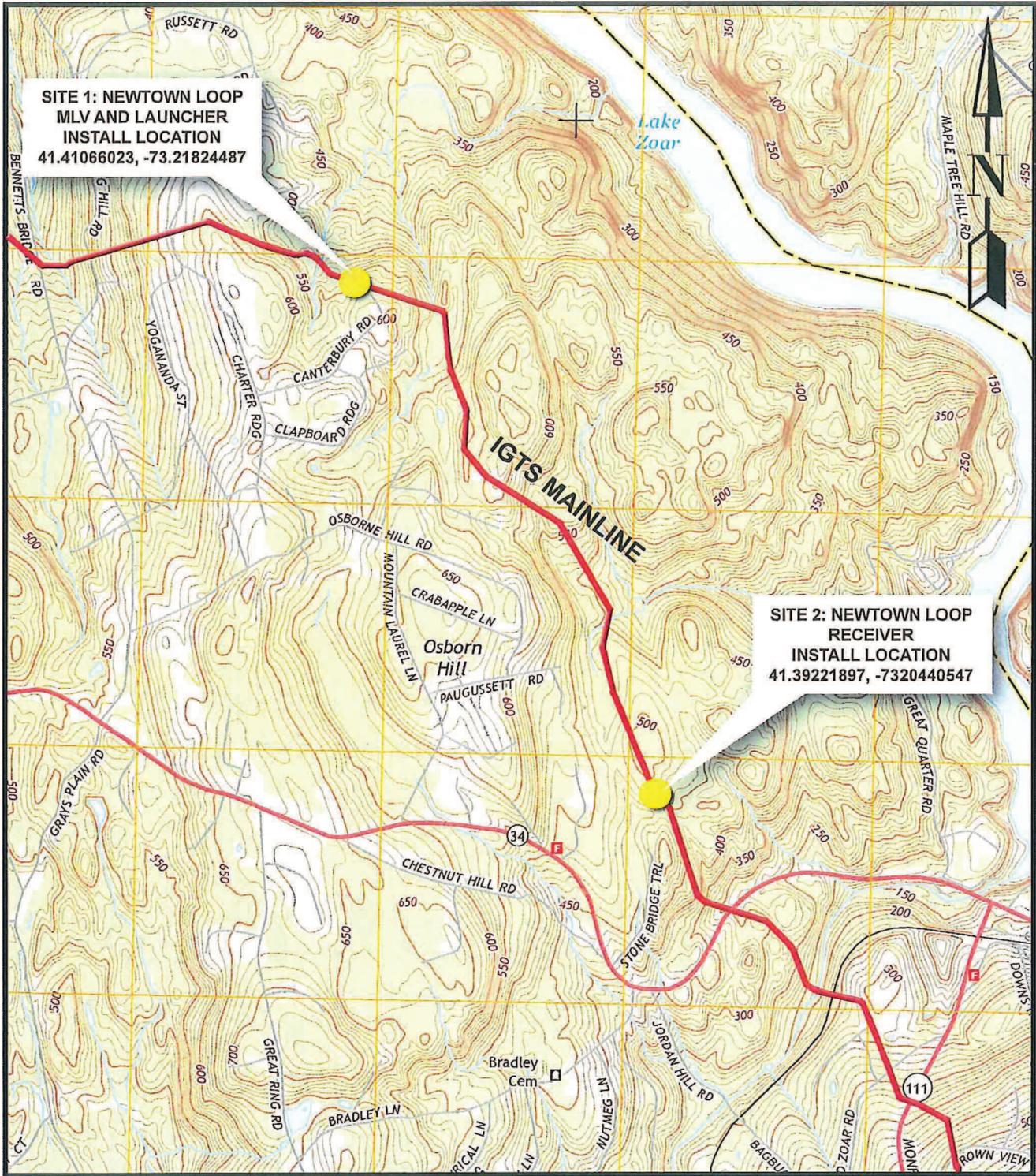
Proposed Start Date:

Spring 2016

Project Leader's Signature:

 22MARCH2016

Note: No work will commence until all clearances or permits are received.



USGS 7.5 MINUTE QUADRANGLE TITLE: SOUTHBURY, CONNECTICUT
SCALE: 1" = 2000'



DRAWN BY:	JMK	DATE:	12/07/2015
ENVIRO. REP:	C.Y.F.	DATE:	12/07/2015
PROJECT LEADER:		DATE:	

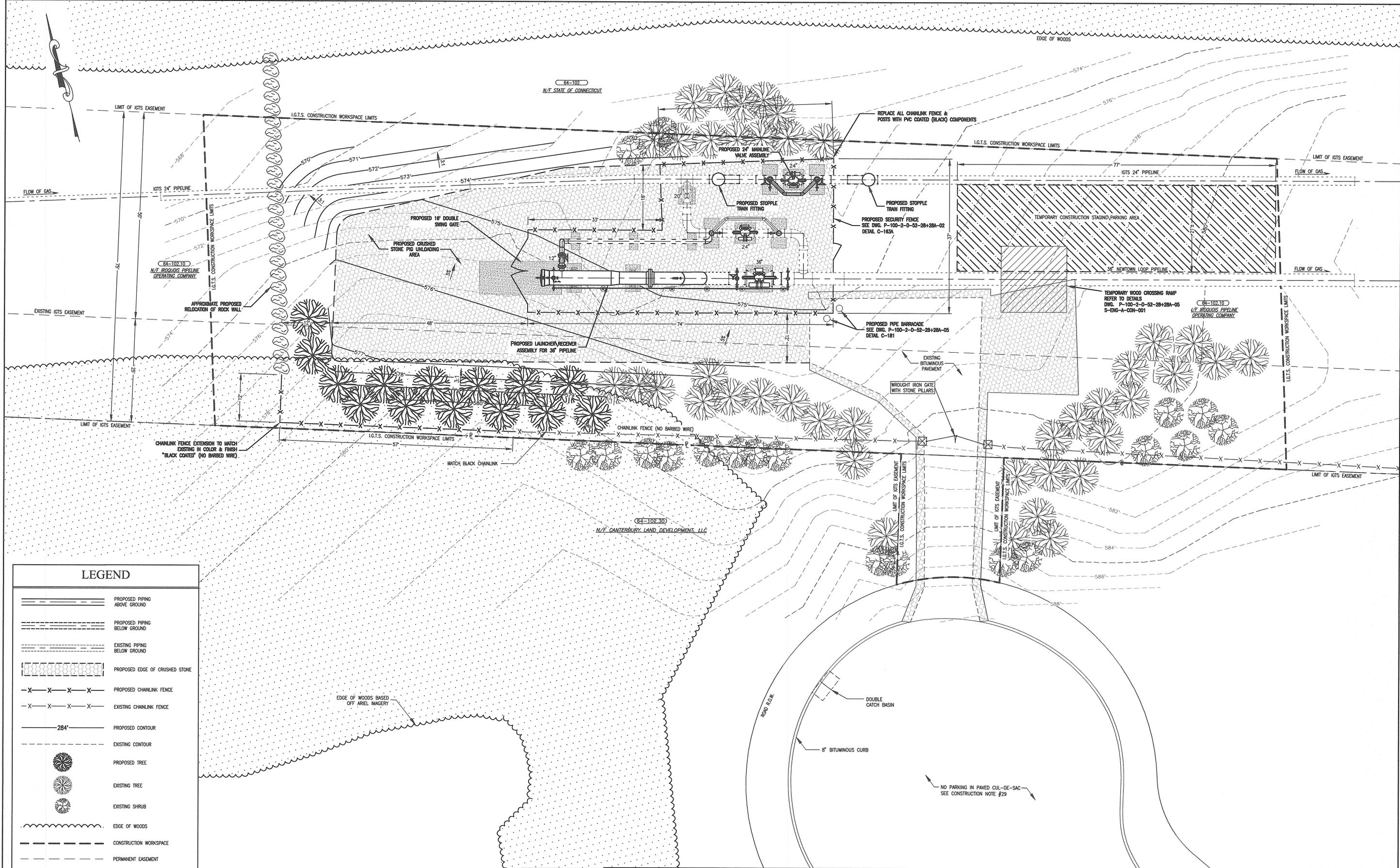


**NEWTOWN LOOP MLV,
LAUNCHER AND RECEIVER
INSTALLATION LOCATIONS**

TOWN OF NEWTOWN, FAIRFIELD COUNTY, CT

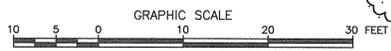
DRAWING NO.:
SK-ENV-A-15-021

REVISION NO.:
1



LEGEND

- PROPOSED PIPING ABOVE GROUND
- PROPOSED PIPING BELOW GROUND
- EXISTING PIPING BELOW GROUND
- PROPOSED EDGE OF CRUSHED STONE
- PROPOSED CHAINLINK FENCE
- EXISTING CHAINLINK FENCE
- PROPOSED CONTOUR
- EXISTING CONTOUR
- PROPOSED TREE
- EXISTING TREE
- EXISTING SHRUB
- EDGE OF WOODS
- CONSTRUCTION WORKSPACE
- PERMANENT EASEMENT
- EXISTING PROPERTY LINE
- EXISTING TREES PER AERIAL IMAGERY
- STAGING AREA



NOTE: THIS DRAWING SHOWS CONCEPT INFORMATION RELATED TO PROPOSED DESIGN AND CONSTRUCTION FACILITIES AND IS SUBJECT TO MODIFICATION.

REFERENCE DRAWINGS

DWG NO.	DESCRIPTION	REV.	DATE
P-100-2-D-52-28-1A	CANTERBURY PROPOSED LAUNCHER ENLARGED PLAN	1	10/09/15
P-100-2-D-52-28-02	STANDARD DETAILS - SHEET 1		
P-100-2-D-52-28-03	STANDARD DETAILS - SHEET 2		
P-100-2-D-52-28-05	STANDARD DETAILS - SHEET 4		

REVISIONS

DESCRIPTION	BY	CHK'D	ENG	APP
	HMM	HMM	HMM	IGTS

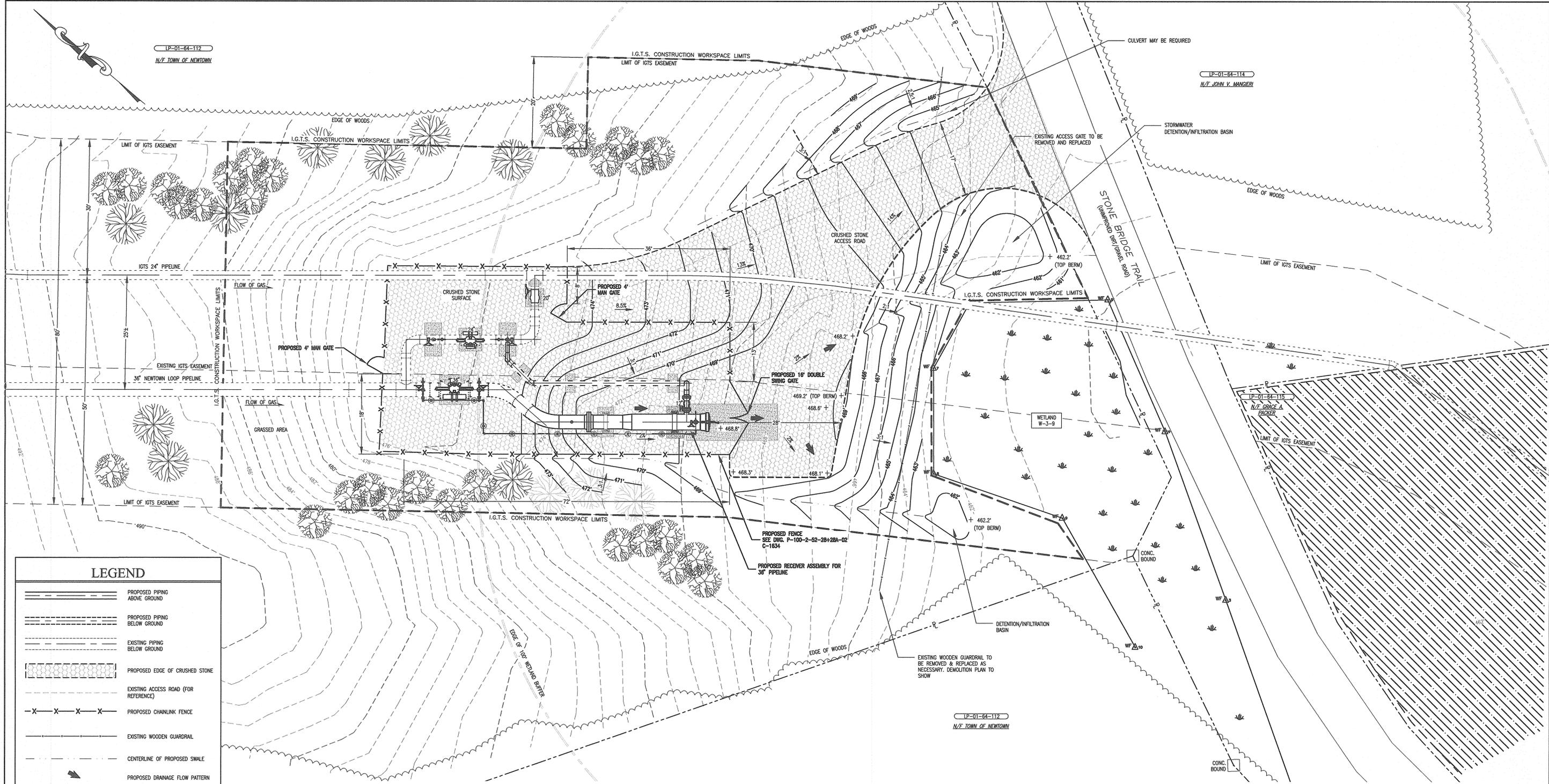
Irroquois
GAS TRANSMISSION SYSTEM
IROQUOIS PIPELINE OPERATING COMPANY, OPERATOR

APPROVED BY: _____
ENGINEERING MANAGER

DRAWN BY	DATE
HMM	10/07/2015
CHECKED BY	DATE
DRAFT. SUP.	DATE
ENGR.	DATE
FILE NO.	SCALE
	1"=10'

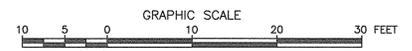
NEWTOWN LOOP LAUNCHER & RECEIVER PROJECT
36" NEWTOWN, CT LOOP LINE
CANTERBURY PROPOSED LAUNCHER SITE PLAN
TOWN OF NEWTOWN FAIRFIELD COUNTY, CONNECTICUT

DWG. NO.: P-100-2-D-52-28-X1
REVISION: 1



LEGEND

- PROPOSED PIPING ABOVE GROUND
- PROPOSED PIPING BELOW GROUND
- EXISTING PIPING BELOW GROUND
- PROPOSED EDGE OF CRUSHED STONE
- EXISTING ACCESS ROAD (FOR REFERENCE)
- PROPOSED CHAINLINK FENCE
- EXISTING WOODEN GUARDRAIL
- CENTERLINE OF PROPOSED SWALE
- PROPOSED DRAINAGE FLOW PATTERN
- PROPOSED CONTOUR
- EXISTING CONTOUR
- EXISTING TREE
- EXISTING SHRUB
- EDGE OF WOODS
- PERMANENT EASEMENT
- CONSTRUCTION WORKSPACE
- EXISTING PROPERTY LINE
- MONUMENT
- DELINEATED WETLAND W/ FLAG
- EDGE OF WETLAND BUFFER ZONE
- STAGING AREA



Hatch Mott MacDonald
 150 Lower Westfield Road
 Holyoke, Massachusetts 01040

NOTE:
 THIS DRAWING SHOWS CONCEPT INFORMATION RELATED TO PROPOSED DESIGN AND CONSTRUCTION FACILITIES AND IS SUBJECT TO MODIFICATION.

REFERENCE DRAWINGS		REVISIONS						
DWG NO.	DESCRIPTION	REV.	DATE	DESCRIPTION	BY	CHK'D	ENG	APP
P-100-2-D-52-28A-01A	PROPOSED RECEIVER ENLARGED PLAN	1	10/09/15	ISSUE FOR BID	HMM	HMM	HMM	IGTS
P-100-2-D-52-28A-02	STANDARD DETAILS - SHEET 1							
P-100-2-D-52-28A-03	STANDARD DETAILS - SHEET 2							
P-100-2-D-52-28A-04	STANDARD DETAILS - SHEET 4							

Iroquois
 GAS TRANSMISSION SYSTEM
 IROQUOIS PIPELINE OPERATING COMPANY
 OPERATOR

APPROVED BY:

 ENGINEERING MANAGER

DRAWN BY	HMM	DATE	10/07/2015
CHECKED BY		DATE	
DRAFT. SUP.		DATE	
ENGR.		DATE	
AFE#		VALVE SECTION	
FILE NO.		SCALE	1"=10'

NEWTOWN LOOP LAUNCHER & RECEIVER PROJECT
36" NEWTOWN, CT LOOP LINE
STONE BRIDGE PROPOSED RECEIVER SITE PLAN
 TOWN OF NEWTOWN FAIRFIELD COUNTY, CONNECTICUT

DWG. NO.: **P-100-2-D-52-28A-X1** REVISION **1**

Town Municipal Center
3 Primrose Street
Newtown, CT 06470
203-270-4250
203-270-4278 Fax



TOWN OF NEWTOWN

INLAND WETLANDS COMMISSION

May 3, 2016

James D. Ransom
Iroquois Gas Transmission System
One Corporate Drive, Suite 600
Shelton, CT 06484

Re: **Application IW #16-08 by Iroquois Pipeline Operating Company**, property located on Stonebridge Trail to install a launcher, a mainline valve and an above ground receiver at existing mainline valve stations.

At the regular meeting of April 27, 2016 of the Inland Wetlands Commission, your application for a license to conduct regulated activities on the above-referenced property was **APPROVED** unanimously in accordance with Section 11.1 of the Inland Wetland Regulations of the Town of Newtown. The regulated activities, for which a license has been granted, are only those indicated on the application and plans approved with your application.

The license was **granted** with the following standard conditions:

- A. Erosion and sediment controls as illustrated on the plan and where deemed necessary by the Wetland Agent will be installed prior to construction and maintained until directed by the Wetland Agent.
- B. The Wetland Agent must be notified in writing one week prior to commencement of the permitted activity and again upon completion of the activity.
- C. A copy of the approved plans will be on site at all times.
- D. The Wetland Agent must inspect and approve the marked limits of disturbance on the site prior to any site activity.
- E. No alterations of the site plans are allowed for this permit, unless a modification is requested and granted by the commission or its agent.
- F. No site activities shall occur beyond the proposed site location of the erosion and sedimentation controls as depicted on the approved site plans.
- O. A quarterly status report on forms provided on the Town of Newtown website or in the Land Use office and will be submitted to the commission until the project is complete.
- P. Please note any violations of this permit can result in required mitigation via an Inland Wetlands Permit Application (long form or short form), fines and /or penalties as the law allows.

The approved plans are: Proposed Newtown Loop Receiver Installation Project Site Plan dated revised 4/27/16 and all supporting documents.

If any changes are made which differ from the information filed in support of this license, new information must be filed with this Commission accompanied by a letter detailing all changes, including but not limited to, changes in lot lines, changes to proposed locations of streets, drainage and easements; changes to location of proposed dwellings and septic systems, changes in proposed cuts and fills, and/or changes to licensed activities.

Changes in proposed licensed activities or new activities requiring licensing will require reapplication to this Commission. The Commission reserves the right to determine what effect, if any, such changes will have on wetlands, watercourses and/or regulated activities. If it comes to the attention of the Commission at the start of construction that the Commission records do not reflect the most recent revised plans, THIS LICENSE IS AUTOMATICALLY REVOKED.

Sincerely,

Kristen Hammar D.F.

Kristen Hammar, Chairperson
Inland Wetlands Commission

JMM WETLAND CONSULTING SERVICES, LLC

**23 Horseshoe Ridge Road
Newtown, CT 06482**

Phone: 203-364-0345
Mobile: 203-994-3428
james@jmmwetland.com
jmmwetland.com

November 10, 2015

Mr. David Fontaine
Iroquois Gas Transmission Systems
1 Corporate Drive, Suite 600
Shelton, CT 06484-6211

Re: *Wetland Delineations, Description and Assessment*
Newtown Loop: Pig Launcher/Receiver Site
Main Line Value (MV) 28A & 28B, Newtown, CT

JMM Job #: 15-1893-NWT-10

Dear Mr. Fontaine:

As per your request, **JMM WETLAND CONSULTING SERVICES, LLC** (JMM) conducted site investigations at the above-referenced sites to review and delineate any regulated wetland resource areas in pursuant to the provisions of the Inland Wetlands and Watercourses Act, Connecticut General Statutes (CGS Sections 22a-36 to 22a-45), as amended.

The proposed project is located within the Newtown Loop portion of the pipe associated with the construction of a pig launcher and receiver sites at Mainline Valve (MV) 28A and 28B. It should be noted that regulated areas were only observed at MV 28B, which is we concentrated our review (i.e. JMM Study Area). JMM conducted site visits on August 21st, and November 15th, 2013 and on October 30th, 2015.

1.0 Existing Conditions

One “regulated area” was observed within the JMM study area (i.e. at MV 28B). This very stony seasonally saturated to flooded wooded swamp is located north of Stonebridge Trail

Mr. David Fontaine
Main Line Value (MV) 28A & 28B, Newtown, CT
November 10, 2015
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JMM

and west of the gravel access road to MV 28B. JMM Wetland Boundary Markers JMM-1 to JMM-10 demarcate the portion of a more extensive regulated area which falls outside of the JMM study area.

Typical vegetation observed within the regulated wetland included such species as red maple, black birch, yellow birch, spicebush, willows, highbush blueberry, fringed sedge, cinnamon fern, lurid sedge, sensitive fern, jewelweed, golden rods, a few cattails and poison ivy, to name a few.

The soils observed within the JMM study area were noted to be both undisturbed and disturbed. The disturbed soils were observed mainly within the existing pipeline R.O.W. and adjacent to MV 28B. The undisturbed soils are derived from glacial till (i.e. unstratified sand, silt and rock) deposits. The undisturbed “upland type” soils are identified as the well-drained Canton-Charlton (62) soil series complex and the moderately well drained Sutton (50) soil series.

Canton stony fine sandy loam (62). This series consists of deep, well drained soils formed in a coarse-loamy mantle underlain by sandy glacial till on uplands. They are nearly level to very steep soils on till plains and hills. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a surface layer of very dark grayish brown fine sandy loam 2 inches thick. The subsoil from 2 to 23 inches is yellowish brown fine sandy loam, gravelly fine sandy loam and gravelly sandy loam. The substratum from 23 to 60 inches is pale brown gravelly loamy sand.

Charlton very stony fine sandy loam (62). This series consists of very deep, well drained coarse-loamy soils formed in friable, glacial till on uplands. They are nearly level to very steep soils on till plains and hills. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. In tilled areas, these soils have a surface layer of dark brown fine sandy loam 8 inches thick. The subsoil from 8 to 26 inches is yellowish brown fine sandy loam and sandy loam. The substratum from 26 to 60 inches or more is grayish brown gravelly fine sandy loam.

Sutton fine sandy loam (50). This series consists of deep, moderately well drained loamy soils formed in friable, glacial till on uplands. They are nearly level to steeply sloping soils on till plains, low ridges and hills, being typically located on lower slopes and in slight depressions. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a surface layer of dark brown fine sandy loam 8 inches thick. The subsoil from 8 to 28 inches is yellowish brown, mottled fine sandy loam and sandy loam. The substratum from 28 to 60 inches or more is light olive brown fine sandy loam.

Mr. David Fontaine
Main Line Value (MV) 28A & 28B, Newtown, CT
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The disturbed upland soils were mapped as the Udorthents (308) soil mapping unit.

Udorthents (308). This soil mapping unit consists of well drained to moderately well drained soils that have been altered by cutting, filling, or grading. The areas either have had two feet or more of the upper part of the original soil removed or have more than two feet of fill material on top of the original soil. *Udorthents* or Made Land soils can be found on any soil parent material but are typically fluvial on glacial till plains and outwash plains and stream terraces.

The undisturbed “wetland-type” soils were identified as the poorly to very poorly drained Ridgebury, Leicester, and Whitman (3) soil series mapping complex.

Ridgebury fine sandy loam (2). This soil series consists of deep, poorly and somewhat poorly drained soils formed in a coarse-loamy mantle underlain by firm, compact glacial till on uplands. They are nearly level to moderately steep soils on till plains, low ridges and drumloidal landforms. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically these soils have a black sandy loam surface layer 6 inches thick. The mottled subsoil from 6 to 16 inches is olive gray sandy loam. The mottled substratum from 16 to 60 inches is a light olive brown and olive, very firm and brittle gravelly sandy loam

Leicester fine sandy loam (4). This series, which is some Connecticut counties is found only in complex with the Ridgebury and Whitman series, consists of deep, poorly drained loamy soils formed in friable glacial till on uplands. They are nearly level to gently sloping soils in drainage ways and low-lying positions on till covered uplands. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a surface layer of black fine sandy loam 6 inches thick. The subsoil from 6 to 23 inches is grayish brown, mottled fine sandy loam. The substratum from 26 to 60 inches or more is dark yellowish brown, mottled, friable, gravelly fine sandy loam.

Whitman fine sandy loam (3). This series, which is some Connecticut counties is only mapped in complex with the Ridgebury and Leicester series, consists of deep, very poorly drained soils formed in a coarse-loamy mantle underlain by firm, compact glacial till on uplands. They are nearly level and gently sloping soils on till plains, low ridges and drumloidal landforms. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically these soils have a black fine sandy loam surface layer 8 inches thick. The mottled subsoil from 8 to 15 inches is gray sandy loam. The mottled substratum from 15 to 60 inches is firm, olive gray to gray dense glacial till.

Any disturbed wetland soils were identified as the Aquents (308) soil mapping unit.

Aquents (308). This soil map unit consists of poorly drained and very poorly drained disturbed land areas. They are most often found on landscapes, which have been subject to

Mr. David Fontaine
Main Line Value (MV) 28A & 28B, Newtown, CT
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prior filling and/or excavation activities. In general, this soil map unit occurs where two or more feet of the original soil surface has been filled over, graded or excavated. The *Aquents* are characterized by a seasonal to prolonged high ground water table and either support or are capable of supporting wetland vegetation. *Aquents* are recently formed soils, which have an aquic moisture regime. An aquic moisture regime is associated with a reducing soil environment that is virtually free of dissolved oxygen because the soil is saturated by groundwater or by water of the capillary fringe. The key feature is the presence of a ground

2.0 Proposed Conditions

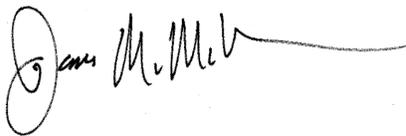
The proposal includes the construction of a pig launcher and receiver site located within the MV 28A and 28B. No direct or indirect impacts to regulated wetlands or watercourses are expected from the proposed project. It is worth noting that standard best management practices during the construction period will be strictly followed when soils are exposed, which entail the judicious use and maintenance of erosion and sedimentation controls, until such time as the exposed soils areas are stabilized with a vegetative cover, particularly at MV 28B where a regulated area was identified.

In conclusion, it is JMM's opinion that the proposed activities associated with the construction of a pig launcher and receiver will not result in any direct or indirect, short-term or long-term impacts to regulated wetlands, or the functions and values they provide.

Please call us if you have any questions on the above or need further assistance.

Respectfully submitted,

JMM WETLAND CONSULTING SERVICES, LLC



James M. McManus, MS, CPSS
Certified Professional Soil Scientist (No. 15226)

Attachments: Figure 1, Photos (1-6), USDA-NRCS Web Soil Survey Map, ACOE Wetland Determination Data Forms

FIGURE 1: Site Locust, Mainline Valve 28B, Newtown, CT

73°13.000' W

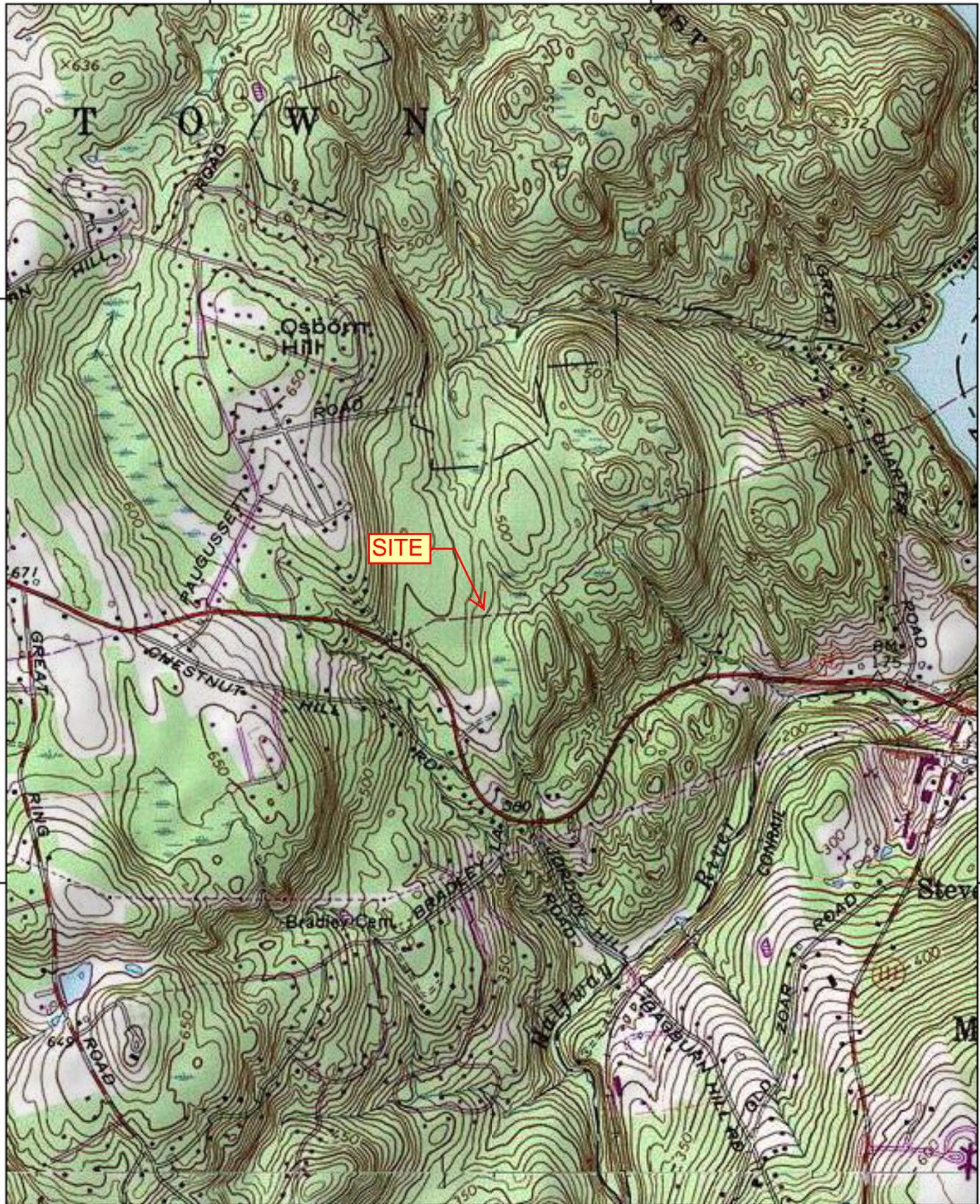
WGS84 73°12.000' W

41°24.000' N

41°24.000' N

41°23.000' N

41°23.000' N



73°13.000' W

WGS84 73°12.000' W

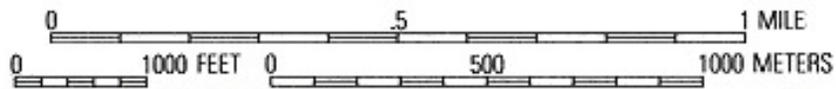
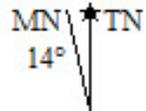




Photo 1: View of JMM #-series wetland SE of MV 28B (JMM photo taken 8/21/13); facing southwesterly



Photo 2: View of JMM #-series wetland in foreground and MV 28B in the background (JMM photo taken 8/21/13); facing westerly

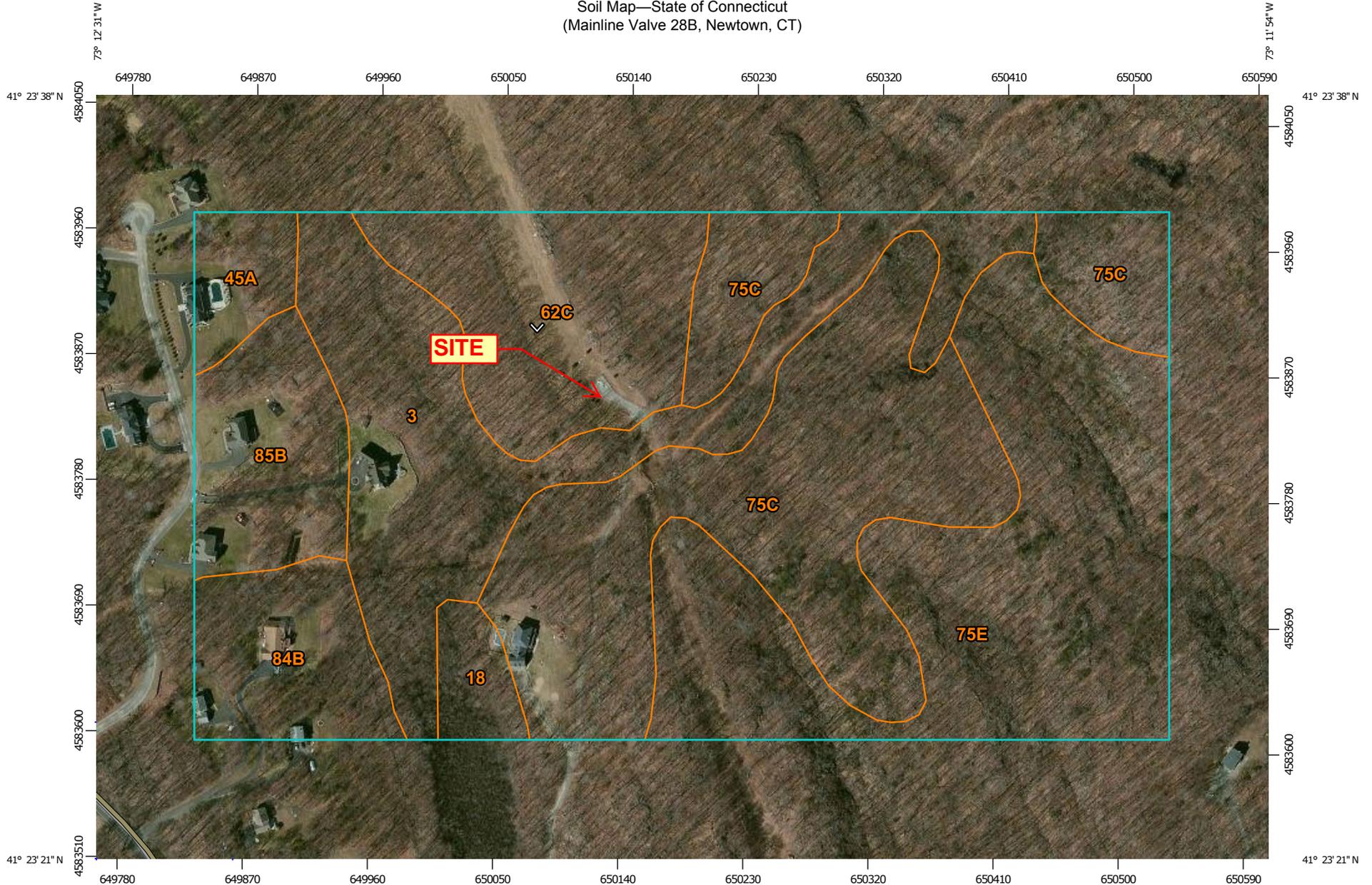


Photo 3: View of JMM #-series wetland SE of MV 28B (JMM photo taken 11/15/13); facing southwesterly



Photo 4: View of gravel access road to MV 28B (Note: JMM #-series wetland to the west) (JMM photo taken 11/15/13); facing southerly

Soil Map—State of Connecticut
(Mainline Valve 28B, Newtown, CT)



Map Scale: 1:3,850 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 150 300 600 900 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84



Soil Map—State of Connecticut
(Mainline Valve 28B, Newtown, CT)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 14, Sep 22, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 28, 2011—Apr 18, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	11.7	17.7%
18	Catden and Freetown soils, 0 to 2 percent slopes	1.3	1.9%
45A	Woodbridge fine sandy loam, 0 to 3 percent slopes	1.7	2.5%
62C	Canton and Charlton soils, 3 to 15 percent slopes, extremely stony	7.4	11.2%
75C	Hollis-Chatfield-Rock outcrop complex, 3 to 15 percent slopes	18.8	28.7%
75E	Hollis-Chatfield-Rock outcrop complex, 15 to 45 percent slopes	16.6	25.2%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	4.0	6.1%
85B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes, very stony	4.3	6.6%
Totals for Area of Interest		65.7	100.0%