DANBURY OF HUDSON

Discussion on Continued Care Retirement Community (CCRC)

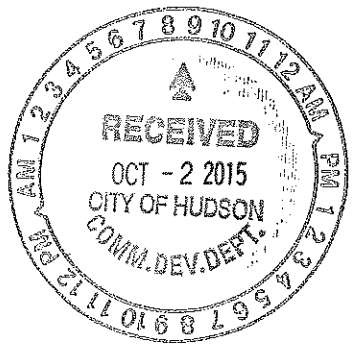
1) The Danbury of Hudson will consist of two buildings, both of which will be age restricted for senior living. Both buildings will be managed by Brookwood Management Company which currently manages eight other age restricted senior properties in Ohio.

2) The 150 unit building will provide housing for congregate care, assisted living and memory care, and all units will be licensed by the Ohio Department of Health as a Residential Care Facility (RCF) which is the state's terminology for what others call assisted living. This building will have a full range of health and social services including nurses, resident aides, activity leaders, dining services, and housekeeping services. The level of service for each resident will be based on an assessment of their needs, and can be customized to the needs of each resident. This building is staffed twenty-four hours an day, seven days a week.

3) The 62 unit building will be age restricted and provide independent living. These residents will have access to all services of the first building on an a la carte basis. These options would include housekeeping, transportation, dining options, and social programs and activities. They will also have a community room and fitness area in their building. The market for this building is to provide age restricted housing for those not requiring health care, but wanting to be adjacent to a facility that does provide full services when the need arises.

4) Mr. Lemmon is an owner of an age restricted campus in Westerville, Ohio which has two buildings very similar to those proposed for Hudson. Both buildings maintain nearly 100% occupancy and there is interaction of the residents and staff between the two buildings.

5) Based on the above comments, we believe our proposed development meets the definition of a Continued Care Retirement Community. It is anticipated that the average age of resident in the 150 unit building will be 85± years, while that in the 62 unit building will be 75± years of age.



September 1, 2015

City of Hudson
Attention: Mr. Greg Hannan
115 Executive Parkway, Suite 400
Hudson, OH 44236

Dear Mr. Hannan:

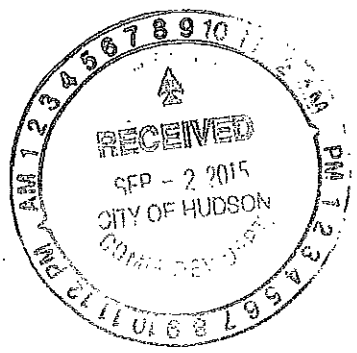
Subject: **Danbury of Hudson Senior Living**
Springwood of Hudson Senior Apartments
Hudson Wetland Variance
GBC Project No. 47254
CEC Project 150-709

Below is a section of your zoning code that refers to setbacks from wetland areas.

"All buildings, accessory structures, parking areas or lots, and other paved areas shall be setback a minimum distance of 100 feet from the delineated edge of any Category II or III wetlands. Such 100 foot setback shall remain undisturbed except that in order to accommodate exceptional site conditions, the Planning Commission may permit limited grading, on a case-by-case basis, to within a distance of 50 feet from the delineated edge of any wetlands. All disturbed areas shall be restored with native plantings and landscaping. A setback is not required from Category I wetland."

We are asking for relief from this setback requirement, as indicated on the attached plan to allow the placement of the Senior Apartment building, parking, fire access drives and required grading. We have worked with the Project Engineer through numerous site plan revisions to arrive at the presented plan.

A. *The Planning Commission may modify wetland setback regulation upon finding all of the following, as applicable:*



1. *Parcel existing at the time of the effective date of this ordinance is made unbuildable or cannot be put to reasonable use without the modification.*

Response:
We believe that the parcel, given the unique shape, topography, location of wetlands could not be put to a reasonable use without the modification. A non-preferred alternative would be to fill additional wetland areas to shift the setbacks.

2. *The request modification does not impair the flood control, soil erosion control, sediment control, water quality protection, or other functions of the wetland area, through the use of best management practices. This determination shall be based on technical and scientific data.*

   Response:
   All best management practices will be designed and implemented per the Ohio EPA General Storm Water Permit requirements. During the construction phase, a Storm Water Pollution Prevention Plan (SWPPP) will be implemented to ensure that erosion and sediment control structures will be properly installed and maintained to address these concerns.

   The Storm Water Management Basin will provide Post Construction Storm Water Quality and Storm Water Management. All of the building and parking runoff will be treated by the basin before being discharged to the stream and wetland areas.

3. *Practical alternatives to the proposed activity are not available.*

   Response:
   Different options were evaluated to avoid and minimize impacts to the wetland setback area while trying to maintain required parking and garage space for the proposed apartment complex and, most importantly, facilitate the required emergency exit and fire department access, no other feasible options were available that avoided impacts to the riparian setback zone.

4. *No decrease in storm water infiltration into the soil or wetland area will occur.*

   Response:
   Stormwater will be directed and retained into storm water management basin.

5. *The modification will not increase the likelihood for flood or erosion damage to either the applicant's property or to other properties.*

   Response:
   During the construction phase stormwater management and erosion control structures will be designed to minimize erosion and flooding issues. After construction is complete, post construction storm water management systems will be in place. Both of these measures will lower the likelihood of flooding or erosion issues.

6. *Culverting of watercourses is avoided.*

Response:
The intermittent stream is not located within the apartment complex footprint; thus, it will not be culverted as a result of this project.

If you need any additional information, please contact me.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

Jamie VanDusen
Project Manager

Bill Acton
Vice President

October 1, 2015

Mr. Mark Scalabrino
U.S. Army Corps of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207

Dear Mark:

Subject: Request for Nationwide Permit 29 Authorization/Pre-Construction Notice
Danbury of Hudson
Hudson, Summit County, Ohio
USACE ID: 2000-00809
CEC Project 150-709

1.0 INTRODUCTION

Omni Property Companies (Omni), has retained Civil & Environmental Consultants, Inc. (CEC) to provide permitting services for the proposed Danbury of Hudson senior living development located northeast of West Boston Mills Road in Hudson, Summit County, Ohio (the Site).

On behalf of Omni, CEC requests authorization under Nationwide Permit (NWP) No. 29 to permanently impact 0.46 acre of jurisdictional wetland for the construction of the proposed Danbury of Hudson senior living development. The proposed development includes a 3-story, 62 unit senior apartment building, a 3-story, 112 unit assisted living building, a 1-story, 38 unit memory care center, access roads, parking areas and a stormwater control basin. The Site design and proposed impacts map are presented in Appendix A. A U.S. Army Corps of Engineer (USACE) permit application form is presented in Appendix B. Representative Site photographs are available in the Preliminary Jurisdictional Waters Determination Report presented in Appendix C.

2.0 SITE DESCRIPTION

Land use on the approximately 15.9-acre Site consists of forested areas. Surrounding land uses include residential properties, commercial properties, the Lake Forest Country Club and forested areas.

According to U.S. Geological Survey (USGS) 7.5-minute series Twinsburg, Ohio topographic quadrangle map covering the Site (Appendix C, Figure 1), land surface elevations on the Site range from approximately 1,050 feet above mean sea level (amsl) in the northwestern portion of the Site to approximately 1,005 feet amsl in the southeastern portion of the Site.

3.0 REGULATORY DOCUMENTATION

CEC conducted a Preliminary Jurisdictional Waters Determination (PJWD) and submitted a PJWD Report, dated May 18, 2015, to the USACE, requesting a jurisdictional determination for the water features identified within the Site. A copy of the PJWD Report is included in Appendix C. On June 18, 2015, Jamie VanDusen of CEC accompanied Peter Krakowiak and Keith Sendziak of the USACE on a site visit as part of the jurisdictional verification process. CEC submitted an addendum letter to the PJWD Report, dated June 22, 2015, to the USACE. A copy of this letter is included in Appendix D. In a letter (USACE ID 2000-00809), dated August 18, 2015, the USACE issued an Approved Jurisdictional Determination for the Site, indicating that seven wetlands, one open water feature and one stream are jurisdictional waters of the United States (i.e., "jurisdictional"), and one wetland and four swales are not jurisdictional waters of the United States (i.e., "non-jurisdictional"). A copy of the USACE verification letter is presented in Appendix E. The on-site water features that have been verified by the USACE are summarized in Table 1.

TABLE 1
SUMMARY OF PRELIMINARY ON-SITE JURISDICTIONAL, ISOLATED AND NON-JURISDICTIONAL WATERS

ID	Classification	Significant Nexus	Jurisdictional Water	Approximate Length (LF)	Approximate Area (Acres)
Wetlands					
Wetland A	PEM	Yes	Yes	N/A	1.07
Wetland B	PEM/PSS	Yes	Yes	N/A	0.06
Wetland C	PEM/PFO	Yes	Yes	N/A	0.77
Wetland D	PEM	Yes	Yes	N/A	0.07
Wetland E	PSS	Yes	Yes	N/A	0.11
Wetland F	PEM/PFO	Yes	Yes	N/A	0.20
Wetland G	PEM	No	No	N/A	0.09
Wetland H	PEM	Yes	Yes	N/A	0.01

TABLE 1
SUMMARY OF PRELIMINARY ON-SITE JURISDICTIONAL, ISOLATED AND NON-JURISDICTIONAL WATERS

ID	Classification	Significant Nexus	Jurisdictional Water	Approximate Length (LF)	Approximate Area (Acres)
Open Water					
Open Water 1	Open Water	Yes	Yes	N/A	0.56
Streams					
Stream 1	RPW	Yes	Yes	380	N/A
Swales					
Swale 1	Non-RPW	No	No	50	N/A
Swale 2	Non-RPW	No	No	214	N/A
Swale 3	Non-RPW	No	No	201	N/A
Swale 4	Non-RPW	No	No	64	N/A
Approximate Extent of Jurisdictional Wetlands (Acres)					**2.29**
Approximate Extent of Isolated Wetlands (Acres)					**0.09**
Approximate Extent of Jurisdictional Open Water (Acres)					**0.56**
Approximate Extent of Jurisdictional Streams (Linear Feet)					**380**
Approximate Extent of Non-Jurisdictional Swales (Linear Feet)					**529**

4.0 WETLAND QUALITY ASSESSMENT

Prior to initiating a discharge of dredge or fill material into jurisdictional or isolated wetlands, Ohio Wetland Water Quality Standards (Ohio Administrative Code 3745-1-50 through 3745-1-54) require assessment of wetland quality and designation of a wetland quality category (Category 1, 2, or 3). Category 1 wetlands are typically highly disturbed, have low ecological value, and have the least stringent criteria governing their use or replacement. In contrast, Category 3 wetlands are typically rare or highly valuable wetlands and can only be disturbed when there is a demonstrated public need for the project.

Delineated on-site wetland areas were evaluated using the *Ohio Rapid Assessment Method for Wetlands v. 5.0* (ORAM) published by John Mack (2001) of the Ohio Environmental Protection Agency (Ohio EPA). A preliminary wetland score was determined for each wetland based on interpretation of ORAM results in accordance with narrative criteria in OAC 3745-1-54(C) and guidance in *ORAM v. 5.0 Quantitative Score Calibration* (Mack 2000). Preliminary ORAM

scores are summarized in Table 2 and the 10-page forms are presented in the PJWD Report (Appendix C) and the Addendum Letter to the PJWD Report (Appendix D).

TABLE 2
PRELIMINARY ORAM SCORES

Wetland ID	Habitat Type	Preliminary ORAM Score	Preliminary ORAM Category
Wetland A	Emergent	28	Category 1
Wetland B	Emergent/Shrub-Scrub	34	Category 1/2 Grey Zone
Wetland C	Emergent/Forested	41	Category 2
Wetland D	Emergent	29	Category 1
Wetland E	Shrub-Scrub	29	Category 1
Wetland F	Emergent/Forested	23.5	Category 1
Wetland G	Emergent	34	Category 1/2 Grey Zone
Wetland H	Emergent	28	Category 1

5.0 THREATENED AND ENDANGERED SPECIES DOCUMENTATION

Coordination with the United States Fish and Wildlife Service

CEC submitted a written request, dated May 4, 2015, the United States Fish & Wildlife Service (USFWS) to determine whether there were any known occurrences on the Site for federally listed endangered, threatened, or candidate species.

CEC received an electronic response message from the USFWS, sent May 6, 2015, stating that the proposed project lies within the range of the Indiana bat (*Myotis sodalis*), a federally listed endangered species. The USFWS further stated that during the winter the Indiana bats hibernate in caves and abandoned mines. While summer habitat is not well defined, the following habitat requirements are considered important:

- dead or live trees and snags with peeling or exfoliating bark, split tree trunks and/or branches, or cavities, which may be used as maternity roost areas;
- live trees (such as shagbark hickory and oaks) which have exfoliating bark; and,
- stream corridors, riparian areas, and upland woodlots which provide forage sites.

The USFWS recommended that should habitat exhibiting the characteristics described above be present at the Site, they as well as surrounding trees, be saved whenever possible. However, if these trees cannot be avoided, they should only be cut between October 1 and March 31. If implementation of the seasonal tree cutting restriction is not possible, summer surveys and subsequent USFWS concurrence would be required prior to cutting the potential habitat trees to document the likely absence of the Indiana bat during the summer.

The USFWS also stated that the proposed project lies within the range of the northern long-eared bat (*Myotis septentrionalis*), a federally listed threatened species. The USFWS indicated that during the winter the northern long-eared bats hibernate in caves and abandoned mines. While summer habitat is not well defined, the following habitat requirements are considered important:

- roosting habitat in dead or live trees and snags with cavities, peeling or exfoliating bark, split tree trunks and/or branches, which may be used as maternity roost areas;
- foraging habitat in upland and lowland woodlots and tree lined corridors; and,
- occasionally they may roost in structures like barns and sheds.

The USFWS stated that the proposed project is in the vicinity of one or more confirmed records of northern long-eared bats. Therefore, the USFWS recommended that should habitat exhibiting the characteristics described above be present at the Site as well as any wooded areas or tree lined corridors, be saved whenever possible. If tree removal cannot be avoided, the USFWS recommended that any tree removal occur between October 1 and March 31 to avoid impacts to northern long-eared bats. The USFWS indicated that if there is a Federal nexus for the project, no tree clearing on any portion of the Site should occur until consultation under Section 7 of the Endangered Species Act between the USFWS and the Federal action agency is completed.

The USFWS further stated that due to the project type, size, and location, they do not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. A copy of the letter to the USFWS and this response email are included in Appendix F.

Coordination with the Ohio Department of Natural Resources

CEC submitted a written request, dated May 4, 2015, to Mr. John Kessler of the Ohio Department of Natural Resources (ODNR) for an ODNR Environmental Review.

CEC received a response from the ODNR, dated June 4, 2015, stating that the Natural Heritage Database has the following data at or within a one mile radius of the Site:

- Brownish sedge (*Carex brunnescens*), state endangered;
- Straw sedge (*Carex straminea*), state potentially threatened;
- Early coral-root (*Corallorhiza trifida*), state endangered;
- Fringed gentian (*Gentianopsis crinita*), state potentially threatened;
- Great Plains ladies'-tresses (*Spiranthes magnicamporum*), state potentially threatened;
- Bald eagle (Haliaeetus leucocephalus), federal species of concern;
- Great blue heron rookery; and,
- Maple Grove Metropark, Metropark Serving Summit Co.

Furthermore, the ODNR were unaware of any known occurrences of geologic features, scenic rivers, state wildlife areas, state nature preserves, state or national parks, state or national forest, national wildlife refuges, or other protected natural areas within the Site. A copy of the correspondence is presented in Appendix G.

On September 21, 2015, CEC botanists conducted a survey for both the brownish sedge and the early coral-root. It was concluded that the Site has been subject to chronic disturbance in the past and contained no areas of critical habitat. The brownish sedge and early coral-root were not found nor were any other species of concern. Thus, it was determined that both the brownish sedge and the early coral-root are likely absent from the Site. CEC is currently preparing a summary report of the findings and will submit a copy to the USACE once it is completed.

6.0 CULTURAL RESOURCES

Weller & Associates, Inc. (Weller) completed a Cultural Resource Management Literature Review for the Site, dated May 1, 2015. A copy of the literature review is presented in Appendix H.

7.0 PROPOSED IMPACTS

On behalf of Omni, CEC requests authorization under NWP No. 29 to place fill into 0.46 acre of jurisdictional Wetlands A, E, F and H. Specifically, the impact to Wetland A is proposed in order to grade for the construction of parking areas and stormwater control structure. Impacts to Wetlands E and F are proposed in order to grade for the construction of the proposed buildings.

Impact to Wetland H is proposed in order to grade for the construction of a parking area. No impacts are proposed for the stream or Wetland B, C and D.

CEC is currently preparing a request to excavate approximately 0.93 acres of Wetland A under Tulloch for the purpose of expanding the existing open water feature. The open water feature will serve as the stormwater control and water quality management basin for the proposed development.

CEC is also currently preparing a request to the Ohio EPA for authorization under the Ohio EPA Ohio General Isolated Wetland Level 1 Permit to place fill into 0.09 acre of isolated wetland (Wetland G) for the construction of the proposed senior living development. Table 3 summarizes the proposed impacts to on-site wetlands.

TABLE 3
SUMMARY OF PROPOSED WETLAND IMPACTS

ID	Delineated Size (Acre)	Avoidance (Acre)	Proposed Impact (Acreage)	Required Mitigation Ratio	Required Mitigation (Acreage)
Wetland A	1.07	0	0.14[1]	1.5:1	0.21
Wetland B	0.06	0.06	0	N/A	N/A
Wetland C	0.77	0.77	0	N/A	N/A
Wetland D	0.07	0.07	0	N/A	N/A
Wetland E	0.11	0	0.11	1.5:1	0.17
Wetland F	0.20	0	0.20	1.5:1	0.30
Wetland G[2]	0.09	0	0.09	2:1	0.18
Wetland H	0.01	0	0.01	1.5:1	0.02
Total for Jurisdictional Wetlands	**2.29**	**0.90**	**0.46[1]**		**0.70**
Total for Isolated Wetlands	**0.09**	**0**	**0.09**		**0.18**
Total for All Wetlands	**2.38**	**0.90**	**0.55**		**0.90[3]**

[1]Approximatly 0.93 acre of Wetland A is proposed to be excavated via Tulloch.

[2] Wetland G has been determined to be isolated.

[3]Total required mitigation amount is rounded to the nearest tenth acre.

8.0 AVOIDANCE AND MINIMIZATION

As indicated in the Site Design and Proposed Impacts Map (Appendix A), avoidance of Wetlands A, E, F, and H are not possible due to their close proximity to the limits of the proposed building.

Approximately 380 linear feet of intermittent stream (Stream 1) and 0.90 acre of jurisdictional wetland (Wetlands B, C and D) will be avoided.

9.0 PROPOSED MITIGATION

To mitigate for 0.46 acre of jurisdictional wetland impact and 0.09 acre of isolated wetland impact, Omni has agreed to purchase 0.90 acre of wetland mitigation credit from the Stream + Wetlands Foundation's Trumbull Creek Wetland Mitigation Bank. A 10 percent deposit will be paid to Ohio Wetlands Foundation in accordance with their wetland mitigation purchase agreement. A copy of the purchase agreement is attached as Appendix I for your review.

10.0 CONCLUSION

On behalf of Omni, CEC requests authorization under NWP No. 29 to place fill into 0.46 acre of jurisdictional Wetlands A, E, F and H for the construction of the proposed Danbury of Hudson senior living development. Omni has agreed to purchase 0.90 acre of wetland mitigation credit from the Stream + Wetland Foundation's Trumbull Creek Wetland Mitigation bank to mitigate for proposed impacts to 0.46 acre of jurisdictional wetlands and 0.90 acre of isolated wetland.

If you have any questions or need additional information please contact Ms. Jamie VanDusen by phone at 614-310-0175 or by email at jvandusen@cecinc.com.

Respectfully submitted,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

Jamie VanDusen
Project Manager

Jonathan Demarest
Project Manager

cc: Mr. Tom Finley, Omni Property Companies (email)

DEPARTMENT OF THE ARMY
BUFFALO DISTRICT, CORPS OF ENGINEERS
1776 NIAGARA STREET
BUFFALO, NEW YORK 14207-3199

REPLY TO
ATTENTION OF:

August 18, 2015

Regulatory Branch

SUBJECT: Department of the Army Application No. 2000-00809

Omni Property Companies
Attn: Mr. Tom Finley
26110 Emery Road, Suite 250
Cleveland, OH 44128

Dear Mr. Finley:

I am writing to you in regard to your delineation provided for a15.9-acre parcel located northeast of West Boston Mills Road and west of the Lake Forest Country Club in Hudson, Summit County, Ohio .

Section 404 of the Clean Water Act (CWA) establishes Corps of Engineers jurisdiction over the discharge of dredged or fill material into waters of the United States, including wetlands, as defined in 33 CFR Part 328.3.

I am hereby verifying the Federal wetland boundary as shown on the attached wetland delineation map dated June 19. 2015. This verification was confirmed on June 18, 2015 and will remain valid for a period of five (5) years from the date of this correspondence unless new information warrants revision of the delineation before the expiration. At the end of this period, a new wetland delineation will be required if a project has not been completed on this property and additional impacts are proposed for waters of the United States. Further, this delineation/determination has been conducted to identify the limits of the Corps CWA jurisdiction for the particular site identified in this request. This delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are United States Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resource Conservation Service prior to starting work.

Based upon my review of the submitted delineation and on-site observations, I have determined that Wetland A (1.07 acres), Wetland B (0.06 acre), Wetland C (0.77 acre),Wetland D (0.07 acre), Wetland E (0.11 acre), Wetland F (0.20 acre), Wetland H (0.01 acre), Open Water (0.56 acre), and Stream 1 (380 linear feet) on the subject parcel are part of a surface water tributary system to a navigable water of the United States as noted on the attached Jurisdictional Determination (JD) forms. Therefore, the wetlands, pond, and stream are regulated under Section 404 of the CWA. DA authorization is required if you propose a discharge of dredged or fill material in these areas.

Regulatory Branch

SUBJECT: Department of the Army Application No. 2000-00809

In addition, I have determined that there is no clear surface water connection or ecological continuum between Wetland G on the parcel and a surface tributary system to a navigable water of the United States. Therefore, these waters are considered isolated, non-navigable, intrastate waters and not regulated under Section 404 of the CWA. Accordingly, you do not need DA authorization to commence work in these areas.

I encourage you to contact the appropriate state and local governmental officials to ensure that the proposed work complies with their requirements.

Finally, this letter contains an approved JD for the subject parcel. If you object to this JD, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal the above JD, you must submit a completed RFA form within 60 days of the date on this letter to the Great Lakes/Ohio River Division Office at the following address:

Attn: Jason Siegrist
Great Lakes and Ohio River Division
CELRD-PDS-O
550 Main Street, Room 10524
Cincinnati, OH 45202-3222
Phone: 513-684-2699; FAX 513-684-2460

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 C.F.R. part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **October 16, 2015**.

It is not necessary to submit an RFA to the Division office if you do not object to the determination in this letter.

Questions pertaining to this matter should be directed to me by calling 716-879-4363, by writing to the following address: U.S. Army Corps of Engineers, 1776 Niagara Street, Buffalo, New York 14207, or by e-mail at: Peter.j.krakowiak@usace.army.mil

Sincerely,

- SIGNED-

Peter J. Krakowiak
Biologist

Enclosures

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Omni Property Companies	File Number: 2000-00809	Date: October 16, 2015
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

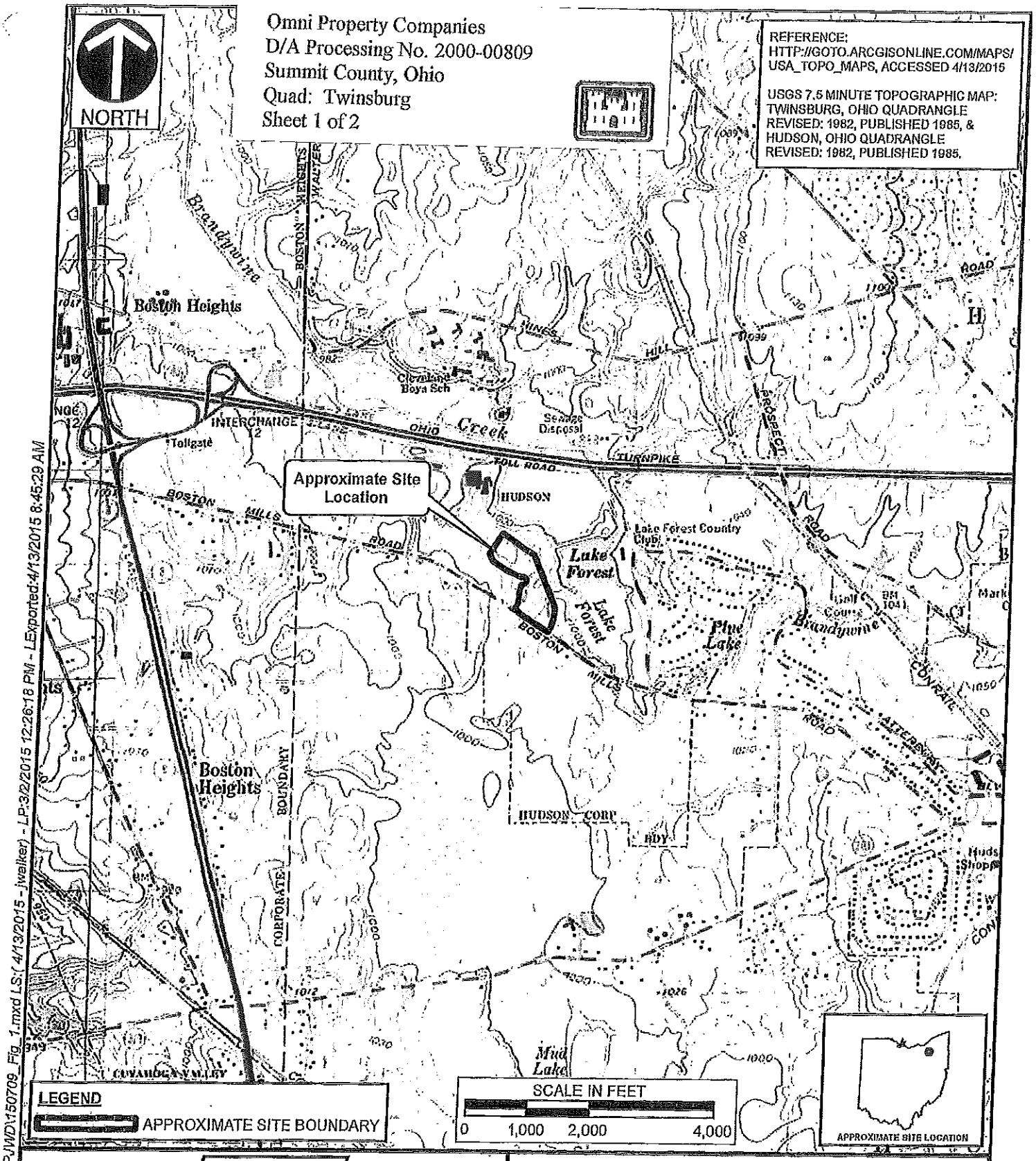
ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact: Peter Krakowiak U.S. Army Corps of Engineers 1776 Niagara Street Buffalo, New York 14207 716-879-4363 Peter.j.krakowiak@usace.army.mil	If you only have questions regarding the appeal process you may also contact: Attn: Jacob Siegrist Great Lakes and Ohio River Division CELRD-PD-REG 550 Main Street, Room 10524 Cincinnati, OH 45202-3222 513-684-2699; FAX 513-684-2460

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:



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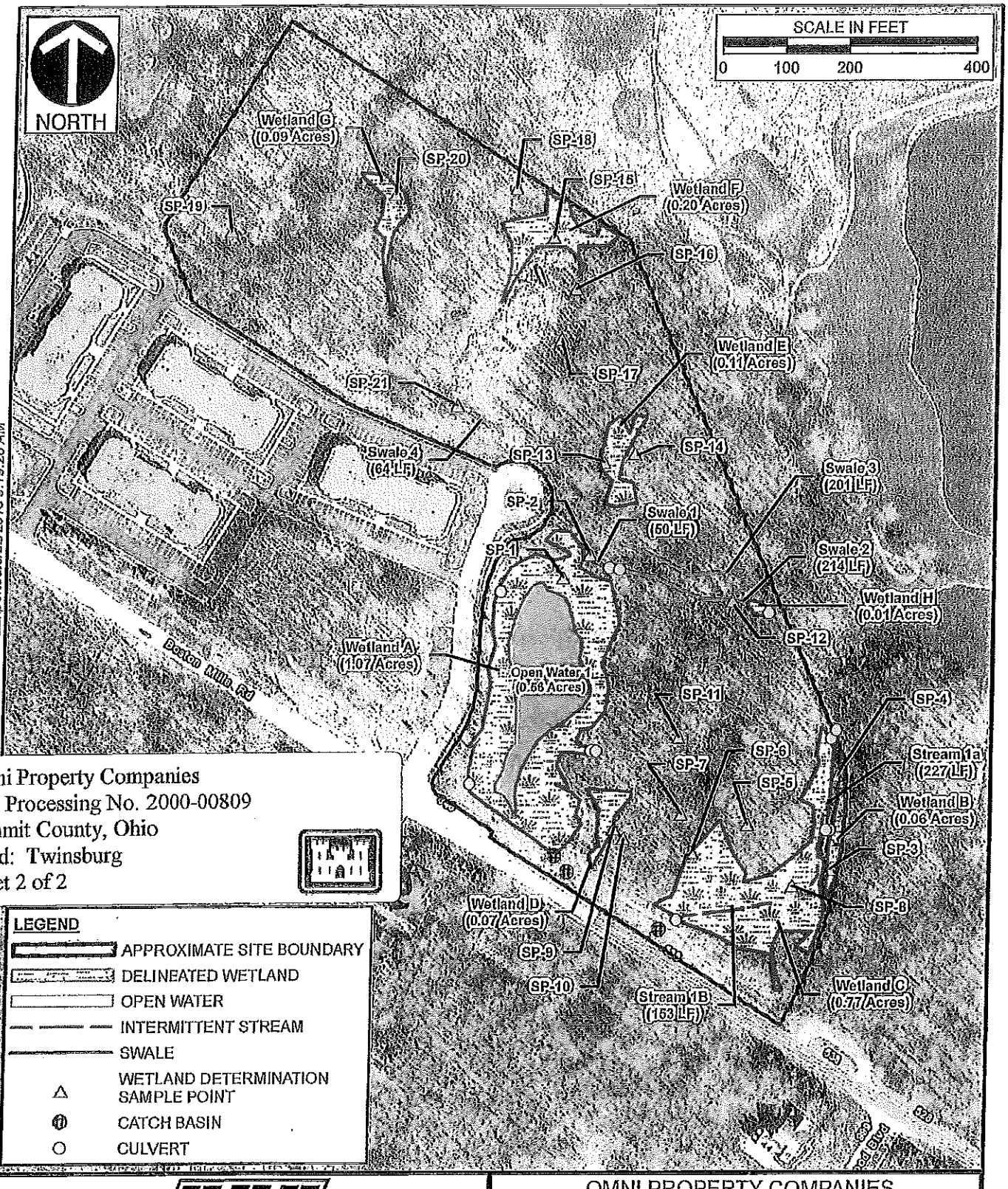
Civil & Environmental Consultants, Inc.
250 Old Wilson Bridge Road, Suite 250 - Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

OMNI PROPERTY COMPANIES
DANBURY OF HUDSON
HUDSON
SUMMIT COUNTY, OHIO

SITE LOCATION MAP

DRAWN BY:	JRW	CHECKED BY:	JMV	APPROVED BY:	*JCD	FIGURE:	1
DATE:	4/13/2015	MAP SCALE:	1 " = 2,000 '	PROJECT NO:	150-709		

*Hand signature on file



Omni Property Companies
D/A Processing No. 2000-00809
Summit County, Ohio
Quad: Twinsburg
Sheet 2 of 2

LEGEND

- APPROXIMATE SITE BOUNDARY
- DELINEATED WETLAND
- OPEN WATER
- INTERMITTENT STREAM
- SWALE
- △ WETLAND DETERMINATION SAMPLE POINT
- CATCH BASIN
- ○ CULVERT

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REVISED PRELIMINARY JURISDICTIONAL WATERS DETERMINATION MAP

DRAWN BY:	MAD/JRW	CHECKED BY:	JMV	APPROVED BY:	JCD*	FIGURE:	3
DATE:	6/19/2015	MAP SCALE:	1 " = 200 '	PROJECT NO:	150-709		

*Hard signature on file

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May 18, 2015

Mr. Mark Scalabrino
United States Army Corps of Engineers
1776 Niagara Street
Buffalo, NY 14207

Dear Mark:

Subject: Jurisdictional Determination Request
Danbury of Hudson
Hudson, Summit County, Ohio
CEC Project 150-709

Civil & Environmental Consultants, Inc. (CEC) is pleased to provide you with two copies of our Preliminary Jurisdictional Waters Determination (PJWD) Report for the Danbury of Hudson site (the Site), located northeast of West Boston Mills Road and west of the Lake Forest Country Club in Hudson, Cuyahoga County, Ohio.

As assessed during the April 6, 2015, PJWD site visit and as discussed in the attached report, CEC determined that three emergent wetlands, two emergent/forested wetlands, one emergent/shrub-scrub wetland, one shrub-scrub wetland, one open water pond and one intermittent stream are present within the Site.

Based upon field observations and a review of available data, CEC concluded that four of the wetlands, the pond and the stream appear to qualify as jurisdictional waters of the U.S. while three wetlands appeared to be isolated. CEC also identified four non-jurisdictional swales. These preliminary conclusions and supporting documentation are presented in the enclosed report for your review and approval.

CEC is requesting that you review this information and provide us with an approved jurisdictional determination for the wetlands and streams identified within the Site as well as concurrence with our wetland and stream delineation and classification. Please contact Jamie VanDusen at 614-310-0175 or by email at jvandusen@cecinc.com to schedule a field visit.

Respectfully submitted,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

Jamie VanDusen
Project Manager

Bill Acton
Vice President

Attachments: 2 Copies of the Preliminary Jurisdictional Waters Determination Report
1 Electronic Copy of Jurisdictional Waters Delineation Report

cc: Mr. Tom Finley – Omni Property Companies (email)

PRELIMINARY JURISDICTIONAL WATERS DETERMINATION REPORT

DANBURY OF HUDSON
HUDSON, SUMMIT COUNTY, OHIO

PREPARED FOR:

MR. TOM FINLEY
OMNI PROPERTY COMPANIES
26110 EMERY ROAD, SUITE 250
CLEVELAND, OHIO 44128

PREPARED BY:

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
WORTHINGTON, OHIO

CEC PROJECT 150-709

May 18, 2015

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(within text)

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APPENDICES

1.0 INTRODUCTION

This report presents the findings of a Preliminary Jurisdictional Waters Determination (PJWD) conducted for Omni Property Companies (Omni) at the proposed Danbury of Hudson site (herein and after referred to as the "Site") located northeast of West Boston Mills Road and west of the Lake Forest Country Club in Hudson, Summit County, Ohio. The location of the Site relative to roads and principal surface features is indicated on Figure 1.

The PJWD study was conducted on the approximately 15.9-acre site by Civil & Environmental Consultants, Inc. (CEC) on April 6, 2015. This report describes wetlands, streams and other water features identified during the PJWD.

CEC's services were completed in accordance with the proposal for professional services dated March 24, 2015. CEC's services were authorized by Mr. Tom Finley of Omni via electronic mail approval on April 1, 2015.

1.1 PURPOSE

The purpose of the PJWD was to identify the location and delineate potentially jurisdictional wetlands, streams, and other water features within the Site.

1.2 SITE CHARACTERISTICS

The majority of the 15.9-acre Site consists of forested areas. Surrounding land uses include residential properties, commercial properties, the Lake Forest Country Club and forested areas.

According to U.S. Geological Survey (USGS) 7.5-minute series Twinsburg, Ohio topographic quadrangle map covering the Site (Figure 1), land surface elevations on the Site range from approximately 1050 feet above mean sea level (amsl) in the northwestern portion of the Site to approximately 1005 feet amsl in the southeastern portion of the Site.

The Site is located in the Cuyahoga River Watershed (Hydrologic Unit Code [HUC] -8: 04110002). Lake Forest, which flows into Brandywine Creek, is located just to the east of the Site (Figure 2).

2.0 METHODOLOGY

On April 6, 2015, CEC biologists traversed the Site to identify and delineate potentially jurisdictional wetlands, ponds, and streams. The methodologies for conducting the wetland and stream delineation are presented below.

2.1 OFFICE DATA REVIEW

CEC personnel first reviewed the background sources listed below to establish the Site characteristics that could aid in the identification of possible wetlands or streams. Data from these sources is presented in Figure 2.

- U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI);
- U.S. Department of Agriculture, National Resource Conservation Service (USDA, NRCS) *Soil Survey Geographic (SSURGO) Databases for Summit County, Ohio* (USDA, NRCS, 2014a);
- USDA National List of Hydric Soils (USDA, NRCS, 2014b);
- USGS National Hydrography Dataset (NHD) streams;
- Ohio Administrative Code (OAC) 3745-1 Beneficial Use Designations; and,
- Federal Emergency Management Agency (FEMA) Digital Flood Insurance Rate (D-Firm) Maps (2012).

2.2 WETLANDS

The wetland delineation was based on CEC's professional judgment and interpretation of the technical criteria presented in the following documents:

- *Corps of Engineers Wetlands Delineation Manual* (Corps Manual) (USACE, 1987);
- *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0* (Supplement) (USACE, 2012);
- *The National Wetland Plant List: 2014 Update of Wetland Ratings,* (Lichvar et al., 2014);
- *Field Indicators of Hydric Soils of the United States* (USDA, NRCS, 2010); and,
- *USACE Jurisdictional Determination Form Instructional Guidebook* (USACE, 2007).

Wetland boundaries were delineated using the methods described in the Corps Manual and Supplement. First, plant communities present within the Site were identified. The dominant plant species within each community were identified and a determination was made on whether

the plant community was dominated by hydrophytic (wetland) plants based on the five plant indicator categories (OBL, FACW, FAC, FACU, and UPL) defined by the USACE (Lichvar et al., 2014). Next, a representative sample point (SP) was located within the plant community and soils were sampled using a shovel to determine whether hydric soil indicators were present. Lastly, the sample point was inspected to determine if indicators of wetland hydrology (ponding, soil saturation, etc.) were present. This information was evaluated to determine if the sample point was located in a wetland or a non-wetland area. The boundaries of areas meeting the three wetland criteria, if present, were marked in the field with ribbon flagging and subsequently located with a Trimble GeoXT™ Global Positioning System (GPS) unit. The locations of each sample point and delineated wetland area are located on the PJWD map (Figure 3) and representative photographs of each sample point and wetland area are presented in Appendix A. Wetland determination data forms for the routine on-site determination method were completed for each sample point and are included in Appendix B. The data forms document the vegetation, soils, and hydrology observations used in making the wetland determinations.

Delineated on-site wetland areas were evaluated using the *Ohio Rapid Assessment Method for Wetlands v. 5.0* (ORAM) published by John Mack (2001) of the Ohio Environmental Protection Agency (Ohio EPA). A preliminary wetland score was determined for the wetland based on interpretation of ORAM results in accordance with narrative criteria in OAC 3745-1-54(C) and guidance in *ORAM v. 5.0 Quantitative Score Calibration* (Mack 2000). The ORAM forms are included in Appendix C.

2.3 STREAMS

CEC also looked for streams and other watercourses within the Site that would likely be considered jurisdictional by state and federal regulatory agencies. Professional judgment and evidence concerning physical and biological indicators of stream hydrology were used to determine stream classification. CEC used indicators such as the existence of defined "bed and banks," channel dimensions, evidence of groundwater, sustained high water levels in the channel, water depth and velocity and general observations of benthic macroinvertebrates and fish. Once a stream was identified CEC classified the onsite stream reaches into one of three stream types: ephemeral, intermittent and perennial, as defined by the USACE (2007). The following descriptions are provided to clarify the different stream classifications.

Ephemeral Stream – An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located

above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Intermittent Stream – An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Perennial Stream – A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

The uppermost limit of an ephemeral stream is determined at the point where the stream loses its defined "bed and bank" or ordinary high water mark (OHWM) and a predominance of upland vegetation occurs in the channel. Under natural, undisturbed conditions, streams generally originate as headwater ephemeral drainages along the tops of ridges, transition into intermittent stream systems, and eventually transition into perennial stream systems.

The approximate limit of stream segments and other waters (e.g. swales. Ditches, erosional features, ponds, etc.), were located in the field using a GeoXT GPS unit, and the resulting data was plotted on the Figure 3. Representative photographs of streams and other waters are presented in Appendix A.

3.0 RESULTS

3.1 OFFICE DATA REVIEW

3.1.1 National Wetlands Inventory Data

NWI maps have been prepared by the USFWS based on high altitude infrared aerial photography and limited ground verification. Wetlands and deep-water habitats are identified on these maps and classified according to the system developed by Cowardin et al. (1979). According to NWI mapping, one mapped freshwater pond was mapped within the Site (Figure 2). As discussed in Section 3.6, an open water pond corresponding to the NWI mapped feature was observed during the April 6, 2015 delineation visit.

3.1.2 Site Soils Surveys

A review of the *SSURGO Database for Summit County, Ohio* shows four (4) soil mapping units within the Site (USDA, NRCS 2014a); these soil map units are identified in Table 1 and depicted in Figure 2. Two of these soil map units are classified by the USDA as hydric, indicating potential for encountering wetlands within portions of the Site covered by these units (USDA, NRCS 2014b). Data forms included in Appendix B note the mapped soil type present at each sample point.

TABLE 1
SOILS INFORMATION

Soil Mapping Unit Symbol	Soil Mapping Unit Name	Drainage Class	Hydric Soil List Designation
BhB	Bogart-Haskins loams, 2 to 6 percent slopes	Moderately well drained	Non-hydric
Ca	Canadice silty clay loam	Poorly drained	Hydric
CcB	Caneadea silt loam, 2 to 6 percent slopes	Somewhat poorly drained	Hydric
GbC2	Glenford silt loam, 6 to 12 percent slopes	Well drained	Non-hydric

3.1.3 NHD Streams and Ohio EPA Stream Beneficial Use Designations

The USGS, in cooperation with the U.S. Environmental Protection Agency (USEPA), has developed the NHD, a digital spatial model that encodes information about naturally occurring and constructed bodies of water, paths through which water flows, and related entities. CEC

reviewed NHD data with coverage of the Site and determined that no mapped streams were located within the Site.

The state of Ohio has designated specific beneficial water body uses to all surface waters in the state under OAC Chapter 3745-1 (OAC 3745-1). Under OAC 3745-1, water body use designations are to be protected and are used in the development of the state's Water Quality Standards. CEC reviewed available OAC 3745-1 data with coverage of the Site and determined that water bodies on the Site do not have a beneficial use designation.

3.1.4 Floodplain Considerations

D-Firm Maps have been prepared by FEMA to identify flood hazards and assess flood risks within communities. Fills within the 100-year floodplain must comply with applicable FEMA-approved state or local floodplain management requirements. D-Firm data dated October 16, 2012 indicates the southeast portion of the Site is located within a mapped 100-year floodplain (Figure 2).

3.2 HYDROLOGY

The Site is located in the Cuyahoga River watershed (HUC 04110002). Hydrologic features within the Site consist of seven wetlands, four swales, one open water feature and one stream. According to the USGS map, Lake Forest, located just to the east of the Site, flows into Brandywine Creek, a Relatively Permanent Water (RPW). Brandywine Creek flows into to Cuyahoga River, a Traditional Navigable Water (TNW). Features connected to Brandywine Creek will be preliminarily determined to have a significant nexus. Features not connected to Brandywine Creek will be preliminary determined to be isolated. The approximate locations of the wetlands, swales, pond and stream are shown on the attached Preliminary Jurisdictional Waters Determination Map (Figure 3).

3.3 WETLANDS

On April 6, 2015, CEC biologists traversed the Site by foot to identify and delineate potentially jurisdictional wetland, pond, and stream areas within the Site using the methods described in Section 2. CEC observed a variety of vegetative communities within the Site including fallow fields, wooded areas and emergent wetland areas.

Data were collected from twenty-one (21) sample points to characterize the representative vegetative communities within the Site. Seven (7) wetlands were identified within the Site based on the findings at each of these points. The locations of the twenty-one sample points are presented in Figure 3, representative photographs of each sample point are provided in Appendix A, and wetland determination data forms for each point are provided in Appendix B.

3.3.1 Wetland Summaries

Three palustrine emergent (PEM), two PEM/palustrine forested (PFO), one palustrine shrub-scrub (PSS) and one PEM/PSS wetlands were identified by CEC in the Site. Additional detail regarding each of these wetlands is provided below and is summarized in Table 2.

Wetland A: Wetland A (approximately 1.07 acres) was a PEM wetland identified within the southwestern portion of the Site along Open Water 1. The plant community of Wetland A was dominated by arrow-leaf tearthumb (*Persicaria sagittata*), hybrid cattail (*Typha* X *glauca*), reed canary grass (*Phalaris arundinacea*) and lamp rush (*Juncus effusus*). American elm (*Ulmus americana*) and green ash (*Fraxinus pennsylvanica*) was also present in small amounts. Indicators of wetland hydrology included surface water, high water table, saturation and geomorphic position. The indicator of hydric soil was a depleted matrix.

Wetland B: Wetland B (approximately 0.06 acre) was a PEM/PSS wetland identified within the southeastern portion of the Site. The plant community of Wetland B was dominated by American elm saplings (*Ulmus americana*) and rice cut grass (*Leersia* oryzoides). Indicators of wetland hydrology included surface water, high water table, saturation and water stained leaves. The indicator of hydric soil was a depleted matrix.

Wetland C: Wetland C (approximately 0.77 acre) was a PEM/PFO wetland identified within the southeastern portion of the Site. The plant community of Wetland C was dominated by American elm (*Ulmus americana*), green ash (*Fraxinus pennsylvanica*) and rice cut grass (*Leersia* oryzoides). Indicators of wetland hydrology included surface water, high water table and saturation. The indicator of hydric soil was a depleted matrix.

Wetland D: Wetland D (approximately 0.07 acre) was a PEM wetland identified within the southern portion of the Site. The plant community of Wetland D was dominated by arrow-leaf tearthumb (*Persicaria sagittata*) and wool grass (*Scripus* cyperinus). Green ash (*Fraxinus pennsylvanica*) was also present in small amounts. Indicators of wetland hydrology included high water table and saturation. The indicator of hydric soil was a depleted matrix.

Wetland E: Wetland E (approximately 0.11 acre) was a PSS wetland identified within the central portion of the Site. The plant community of Wetland E was dominated by silver maple saplings (*Acer saccharium*). Indicators of wetland hydrology included surface water, high water table and saturation. The indicator of hydric soil was a depleted matrix.

Wetland F: Wetland F (approximately 0.20 acre) was a PEM/PFO wetland identified within the northern portion of the Site. The plant community of Wetland F was dominated by silver maple (*Acer saccharium*), pin oak (*Quercus palustris*), lamp rush (*Juncus effusus*), lesser poverty rush (*Juncus tenuis*) and sweet wood-reed (*Cinna arundinacea*). Indicators of wetland hydrology included surface water, high water table and saturation. The indicator of hydric soil was a depleted matrix.

It should be noted that the area immediately adjacent to Wetland F contained old construction debris. Some portions of this area exhibited wetland vegetation and hydrology, however hydric soils were not observed in these areas.

Wetland G: Wetland G (approximately 0.09 acre) was a PEM wetland identified within the northern portion of the Site. The plant community of Wetland G was dominated by arrow-leaf tearthumb (*Persicaria sagittata*) and common fox sedge (*Carex vulpinoidea*). Common reed (*Phragmites australis)* hop sedge (*Carex lupulina*) and deer-tongue (*Dichanthelium clandestinum*) Indicators of wetland hydrology included high water table and saturation. The indicator of hydric soil was a depleted matrix.

TABLE 2
WETLAND FEATURES SUMMARY

Wetland ID	Classification	Wetland Determination Sample Point ID	Photograph Number(s)	Delineated On-Site Area (Acres)
Wetland A	PEM	SP-1	1-7 and 10-14	1.07
Wetland B	PEM/PSS	SP-3	17-22	0.06
Wetland C	PEM/PFO	SP-6 & SP-8	18-19, 24-25, 27, 29, 33	0.77
Wetland D	PEM	SP-9	37, 39-40	0.07
Wetland E	PSS	SP-13	47-49	0.11
Wetland F	PEM/PFO	SP-15	52, 57-59	0.20
Wetland G	PEM	SP-20	65-67	0.09
Total (acres) within the Site				**2.37**

3.3.2 Wetland Quality Assessment

The preliminary ORAM scores and designations are summarized in Table 3 and ORAM forms are presented in Appendix C.

TABLE 3
PRELIMINARY ORAM SCORES

Wetland ID	Habitat Type	Preliminary ORAM Score	Preliminary ORAM Category
Wetland A	Emergent	28	1
Wetland B	Emergent/Shrub-Scrub	34	1/2 Grey Zone
Wetland C	Emergent/Forested	41	2
Wetland D	Emergent	29	1
Wetland E	Shrub-Scrub	29	1
Wetland F	Emergent/Forested	23.5	1
Wetland G	Emergent	34	1/2 Grey Zone

3.4 STREAMS

CEC identified one intermittent stream within the Site. The location of the identified stream is indicated in Figure 3. Photographs of the stream are included in Appendix A. Additional details regarding the stream are provided below and are summarized in Table 4.

3.4.1 Stream Summary

Stream 1: Approximately 466 LF total of an intermittent stream was identified within the southeast portion of the Site. Stream 1 originates offsite from the northeast, flows south through Wetland C and loses definition. Stream 1 regains definition within the central portion of Wetland C and continues southwest where it flows into a culvert then a catch basin, just northeast of West Boston Mills Road. The average OHWM measurements of stream were approximately 2.5 feet wide and 4 inches deep. The substrate consisted of silt. At the time of the field visit, the maximum pool depth was approximately 6 inches deep.

TABLE 4
STREAM FEATURE SUMMARY

Stream ID	Classification	Photograph Number (s)	Average OHWM Width (Linear Feet)	Delineated Length (Linear Feet)
Stream 1	Intermittent	17-18, 30-32, 34-36	2.5	466
Total Length (Linear Feet)				**466**

3.5 SWALES

CEC identified four swales within the Site. The locations of the identified swales are indicated in Figure 3. Photographs of the swales are included in Appendix B. Additional detail regarding the swales is summarized in Table 5.

TABLE 5
SWALE FEATURE SUMMARY

Swale ID	Photograph Numbers	Delineated Length (Linear Feet)
Swale 1	15	41
Swale 2	43-44	192
Swale 3	46	131
Swale 4	69	64
Total Length (Linear Feet)		**428**

3.6 OPEN WATER

CEC identified one open water feature within the southwestern portion of the Site. This open water feature coincides with the mapped NWI open water feature (Figure 2). The location of the identified open water is indicated in Figure 3. Photographs of the open water are included in Appendix A. Additional details are summarized in Table 6.

TABLE 6
OPEN WATER FEATURE SUMMARY

Open Water ID	Photograph Number (s)	Delineated On-Site Area (Acres)
Open Water 1	6; 10-12	0.56
Total Area (Acres)		**0.56**

3.7 PRELIMINARY JURISDICTIONAL DETERMINATIONS

The USACE and the USEPA have issued guidance on conducting jurisdictional determinations in response to the U.S. Supreme Court decision in *Rapanos vs. United States* concerning the extent of jurisdictional waters under Section 404 of the Clean Water Act (USACE, 2007). The guidance manual indicates that rivers and streams that are navigable or navigable-in-fact and those that are a Relatively Permanent Waterways (RPW) (e.g., exhibit perennial or intermittent flow) are jurisdictional waters. Similarly, wetlands that are adjacent to or directly abut a Traditionally Navigable Water (TNW), and wetlands that directly abut RPWs are considered jurisdictional waters.

Wetlands that are adjacent to, but not directly abutting, RPWs and streams that are considered non-RPWs (e.g., exhibit ephemeral flow) require a significant nexus determination to establish if the water has more than a speculative or insubstantial effect on the chemical, physical, and/or biological integrity of a TNW. Wetlands that do not have a significant nexus to a TNW are considered isolated.

Wetlands adjacent to non-RPWs that flow indirectly into a TNW

Wetland A

Wetland A (1.07 acres) was located in the southwestern portion of the Site. Based on field observations, Wetland A flows into a catch basin which presumably flows into Brandywine Creek, which flows into the Cuyahoga River.

Due to the indirect surface water connection to the Cuyahoga River, Wetland A has been preliminarily determined to have a nexus to a TNW; therefore, the wetland was preliminarily determined to be jurisdictional.

Wetland D

Wetland D (0.07 acres) was located in the southern portion of the Site. Based on field observations, Wetland D overland flows into Wetland A. Wetland A then flows into a catch basin which presumably flows into Brandywine Creek, which flows into the Cuyahoga River.

Due to the indirect surface water connection to the Cuyahoga River, Wetland D has been preliminarily determined to have a nexus to a TNW; therefore, the wetland was preliminarily determined to be jurisdictional.

Wetlands abutting RPWs that flow indirectly into a TNW

Wetland B

Wetland B (0.06 acres on-site) was identified within the southeastern portion of the Site. Based on field observations, the offsite portion of Wetland B abuts Stream 1, which flows to the southwest into a catch basin. The catch basin presumably flows into Brandywine Creek, which flows into the Cuyahoga River.

Due to the indirect surface water connection to the Cuyahoga River, Wetland B has been preliminarily determined to have a significant nexus to a TNW; therefore, the wetland was preliminarily determined to be jurisdictional.

Wetland C

Wetland C (0.77 acres on-site) was identified within the southeastern portion of the Site. Based on field observations, Wetland C abuts Stream 1, which flows to the southwest into a

catch basin. The catch basin presumably flows into Brandywine Creek, which flows into the Cuyahoga River.

Due to the indirect surface water connection to the Cuyahoga River, Wetland C has been preliminarily determined to have a significant nexus to a TNW; therefore, the wetland was preliminarily determined to be jurisdictional.

RPWs that flow indirectly into a TNW

Open Water 1

Open Water 1 (0.56 acre) was identified within the southwestern portion of the Site. Based on field observations, Open Water 1 flows into flows into a catch basin which presumably flows into Brandywine Creek, which flows into the Cuyahoga River.

Due to the indirect surface water connection to the Cuyahoga River, Open Water 1 has been preliminarily determined to have a nexus to a TNW; therefore, the open water feature was preliminarily determined to be jurisdictional.

Stream 1

Based on field observations, Stream 1 (an RPW) originates offsite from the northeast, flows south through Wetland C and loses definition. Stream 1 picks up definition within the central portion of Wetland C and continues southwest where it flows into a culvert then into a catch basin, just northeast of West Boston Mills Road. The catch basin presumably flows into Brandywine Creek, which flows into the Cuyahoga River.

Due to the indirect surface water connection to the Cuyahoga River, Stream 1 has been preliminarily determined to have a nexus to a TNW; therefore, the stream was preliminarily determined to be jurisdictional.

TABLE 7
SUMMARY OF ON-SITE PRELIMINARY JURISDICTIONAL WATERS

ID	Classification	Latitude/ Longitude	Significant Nexus	Jurisdictional Water	Delineated Length (Linear Feet)	Delineated Area (Acres)
Wetland A	PEM	41.2501/ -81.4760	Yes	Yes	N/A	1.07
Wetland B	PEM/PSS	41.2488/ -81.4745	Yes	Yes	N/A	0.06
Wetland C	PEM/PFO	41.2488/ -81.4747	Yes	Yes	N/A	0.77

TABLE 7
SUMMARY OF ON-SITE PRELIMINARY JURISDICTIONAL WATERS

ID	Classification	Latitude/ Longitude	Significant Nexus	Jurisdictional Water	Delineated Length (Linear Feet)	Delineated Area (Acres)
Wetland D	PEM	41.2490/ -81.4757	Yes	Yes	N/A	0.07
Open Water 1	Open Water	41.2497/ -81.4761	Yes	Yes	N/A	0.56
Stream 1	Intermittent	41.2487/ -81.4750	Yes	Yes	466	N/A
Approximate Extent of Jurisdictional Wetlands On-site (Acres)						**1.97**
Approximate Extent of Jurisdictional Open Water On-site (Acres)						**0.56**
Approximate Extent of Streams On-site (Linear Feet)					**466**	

3.8 PRELIMINARY NON-JURISDICTIONAL WATERS

Isolated Wetlands

According to USACE *Jurisdictional Determination Form Instructional Guidebook,* isolated waters that lack links to interstate commerce generally are not jurisdictional.

Wetland E

Wetland E (0.11 acre) was identified in the central portion of the Site. Based on field observations, hydrology in Wetland E appears to be driven by precipitation. The wetland did not appear to have a significant nexus to a TNW; therefore, Wetland E was preliminarily determined to be isolated.

Wetland F

Wetland F (0.20 acre) was identified in the northern portion of the Site. Based on field observations, hydrology in Wetland F appears to be driven by precipitation. The wetland did not appear to have a significant nexus to a TNW; therefore, Wetland F was preliminarily determined to be isolated.

Wetland G

Wetland G (0.09 acre) was identified in the northern portion of the Site. Based on field observations, hydrology in Wetland G appears to be driven by precipitation. The wetland did not appear to have a significant nexus to a TNW; therefore, Wetland G was preliminarily determined to be isolated.

Swales

According to USACE *Jurisdictional Determination Form Instructional Guidebook,* swales are generally not waters of the U.S. because they are not tributaries or they do not have a significant nexus to TNWs. However, swales may still contribute to a surface hydrologic connection between an adjacent wetland and a TNW.

Swale 1

This non-jurisdictional, non-RPW swale (41 LF) originates in the central portion of the Site in an upland area just west of a foot path and terminates in within Wetland A. The swale did not exhibit a defined bed, bank, and had no defined OHWM as defined in USACE Regulatory Guidance Letter (RGL) 05-05.

Swale 2

This non-jurisdictional, non-RPW swale (192 LF) originates in the central portion of the Site in an upland area, just east of a foot path. Swale 2 continues southeast and terminates just west of foot path. The swale did not exhibit a defined bed, bank, and had no defined OHWM as defined in USACE Regulatory Guidance Letter (RGL) 05-05.

Swale 3

This non-jurisdictional, non-RPW swale (131 LF) originates in the central portion of the Site in an upland wooded area and terminates just west of a foot path. The swale did not exhibit a defined bed, bank, and had no defined OHWM as defined in USACE Regulatory Guidance Letter (RGL) 05-05.

Swale 4

This non-jurisdictional, non-RPW swale (64 LF) originates in the south central portion of the Site in an upland area and terminates in a disturbed upland area. The swale did not exhibit a defined bed, bank, and had no defined OHWM as defined in USACE Regulatory Guidance Letter (RGL) 05-05.

TABLE 6
SUMMARY OF ON-SITE PRELIMINARY ISOLATED AND NON-JURISDICTIONAL WATERS

ID	Classification	Latitude/ Longitude	Significant Nexus	Jurisdictional Water	Delineated Length (Linear Feet)	Delineated Area (Acres)
Wetland E	PSS	41.2505/ -81.4758	No	No	N/A	0.11
Wetland F	PEM/PFO	41.2515/ -81.4761	No	No	N/A	0.20
Wetland G	PEM	41.2517/ -81.4770	No	No	N/A	0.09
Swale 1	Non-RPW	41.2501/ -81.4759	No	No	41	N/A
Swale 2	Non-RPW	41.2500/ -81.4754	No	No	192	N/A
Swale 3	Non-RPW	41.2501/ -81.4751	No	No	131	N/A
Swale 4	Non-RPW	41.2507/ -81.4764	No	No	64	N/A
Approximate Extent of Isolated Wetlands On-site (Acres)						**0.40**
Approximate Extent of Swales On-site (Linear Feet)					**428**	

4.0 REGULATORY CONSIDERATIONS

4.1 MEETINGS WITH REGULATORY AGENCIES

No regulatory meetings have been scheduled as of the date of this report. This report will be submitted to the USACE for verification and an official Preliminary Jurisdictional Determination, as requested.

4.2 REGULATORY ISSUES

The USACE and Ohio EPA regulate impacts to jurisdictional waters in the state of Ohio. A permit must be obtained from the USACE under the provisions of Section 404 of the Clean Water Act and from the Ohio EPA under the provisions of Section 401 of the Clean Water Act prior to discharging dredged or fill material into waters of the United States. Isolated wetlands in Ohio that do not have a surface water connection to navigable waterways are regulated by the Ohio EPA.

Four wetlands, one open water feature and one stream identified within the Site have preliminarily been determined to have a significant nexus to waters of the U.S., and, therefore, are preliminarily determined to be jurisdictional. Three wetlands identified within the Site have been preliminarily determined not to have a significant nexus to waters of the U.S. and, therefore, are preliminarily determined to be isolated. The four swales identified within the Site have been preliminarily determined to be non-jurisdictional.

If Clean Water Act Section 404/401 authorization and/or other federal permits are required for the proposed project, consultation with the USFWS relative to potential affects to the Indiana bat and northern long-eared bat will likely be required pursuant to Section 7 of the Endangered Species Act.

It is the responsibility of any party that intends to discharge dredge or fill material into jurisdictional waters of the U.S. and/or isolated wetlands to comply with all applicable regulations.

5.0 CONCLUSIONS

CEC identified four potentially jurisdictional wetlands (approximately 1.97 acres total), one potentially jurisdictional open water feature (approximately 0.56 acre), one potentially jurisdictional stream (approximately 466 LF total), three potentially isolated wetlands (approximately 0.40 acre total) and four potentially non-jurisdictional swales (approximately 428 LF total) within the Site. Since the USACE has authority to determine and/or verify the geographical boundaries of waters of the U.S. this investigation was termed "preliminary" to this point. As requested, CEC will submit a copy of this report to the Buffalo District of the USACE for written verification of the findings.

6.0 LEVEL OF CARE

The PJWD services performed by CEC were conducted in a manner consistent with the criteria contained in the Corps Manual and Supplement and with the level of care and skill ordinarily exercised by members of the environmental consulting profession practicing contemporaneously under similar conditions in the locality of the project. It must be recognized that the jurisdictional waters determination was based on field observations and CEC's professional interpretation of the criteria in the Corps Manual at the time of our field work. PJWD reports may change subsequent to CEC's determination based on changes in the regulatory criteria, seasonal variations in hydrology, alterations to drainage patterns and other human activities and/or land disturbances.

7.0 REFERENCES

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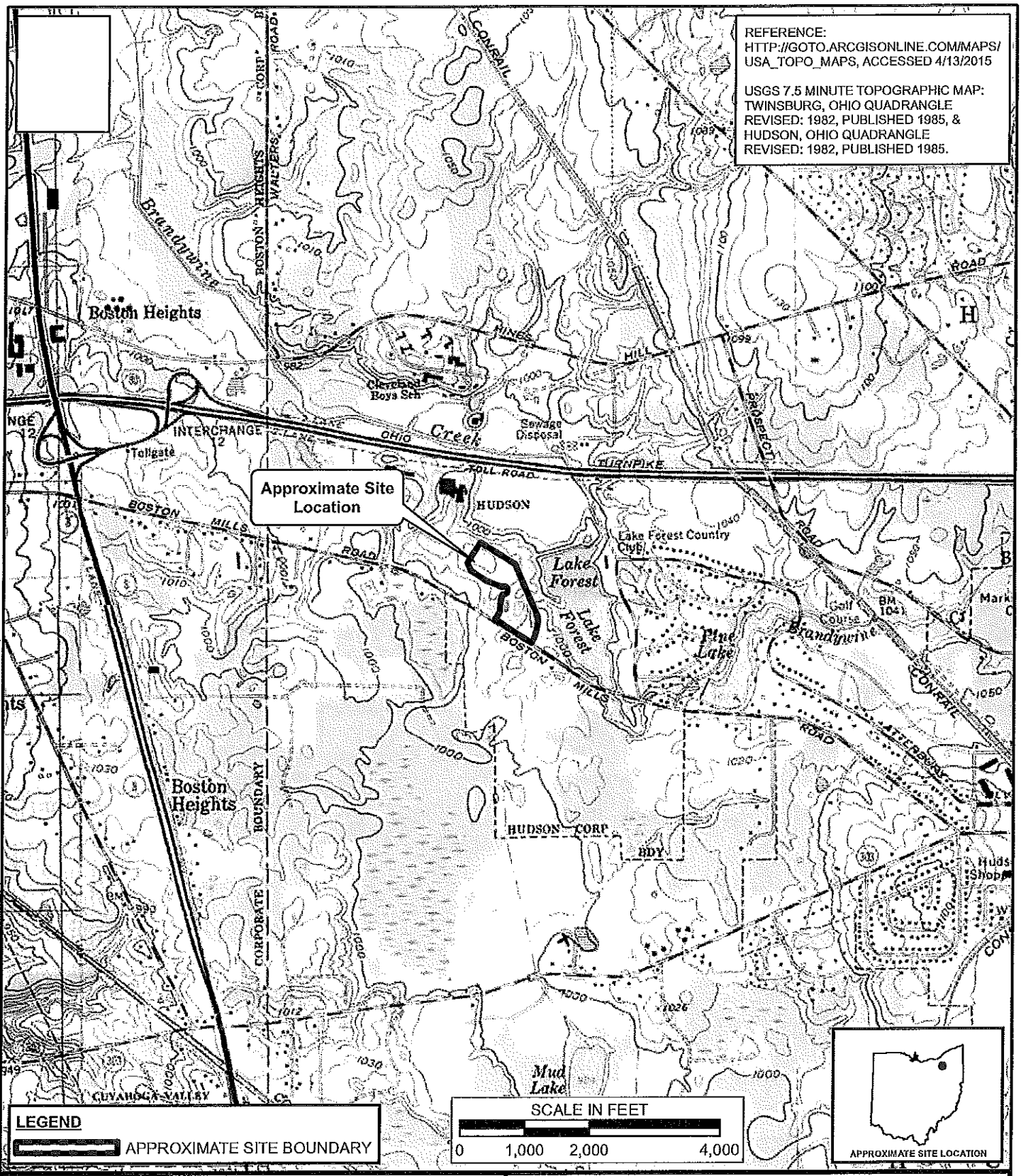
FIGURES



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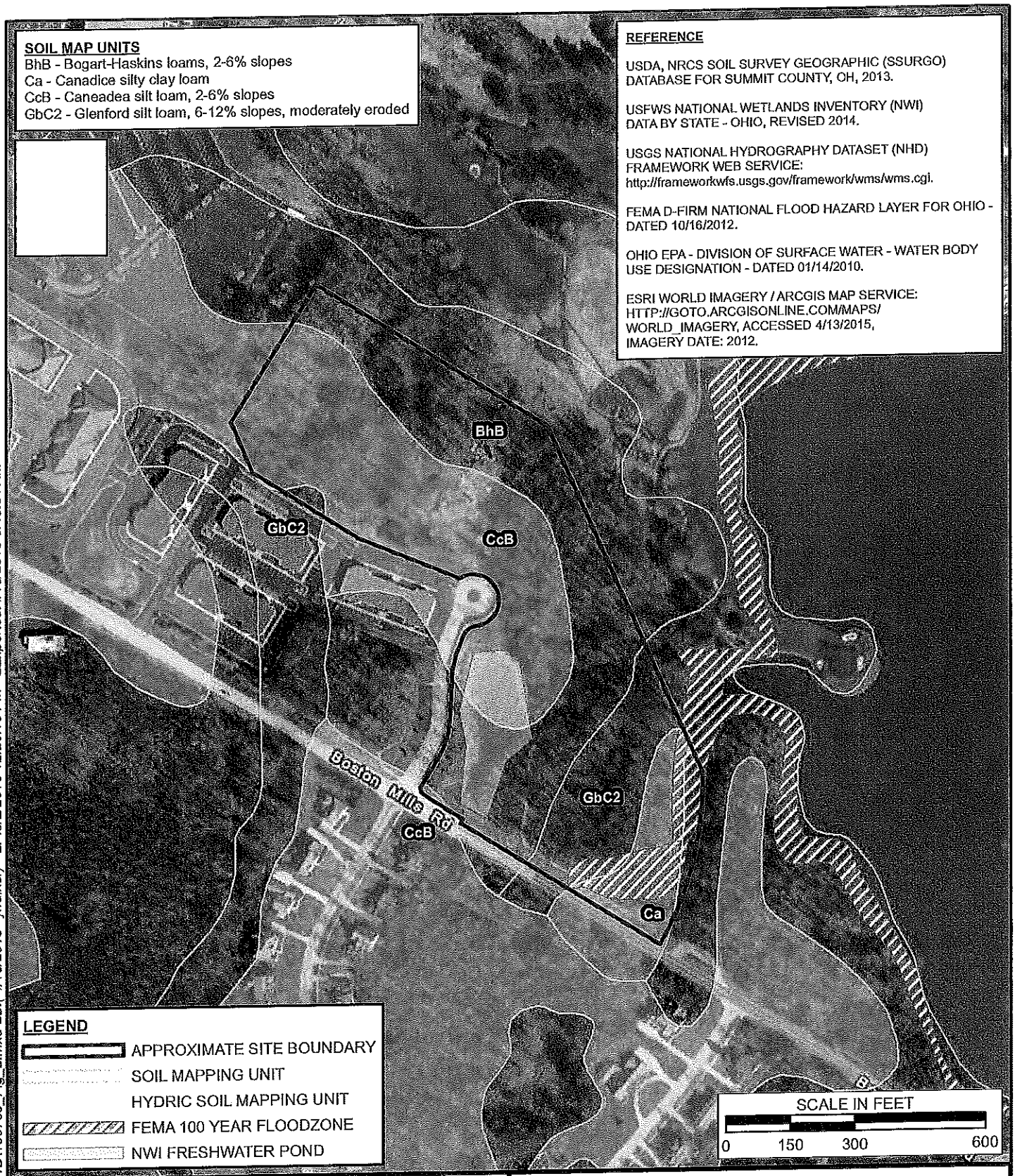
SITE LOCATION MAP

DRAWN BY:	JRW	CHECKED BY:	JMV	APPROVED BY:	*JCD	FIGURE:	1
DATE:	4/13/2015	MAP SCALE:	1 " = 2,000 '	PROJECT NO:	150-709		

*Hand signature on file



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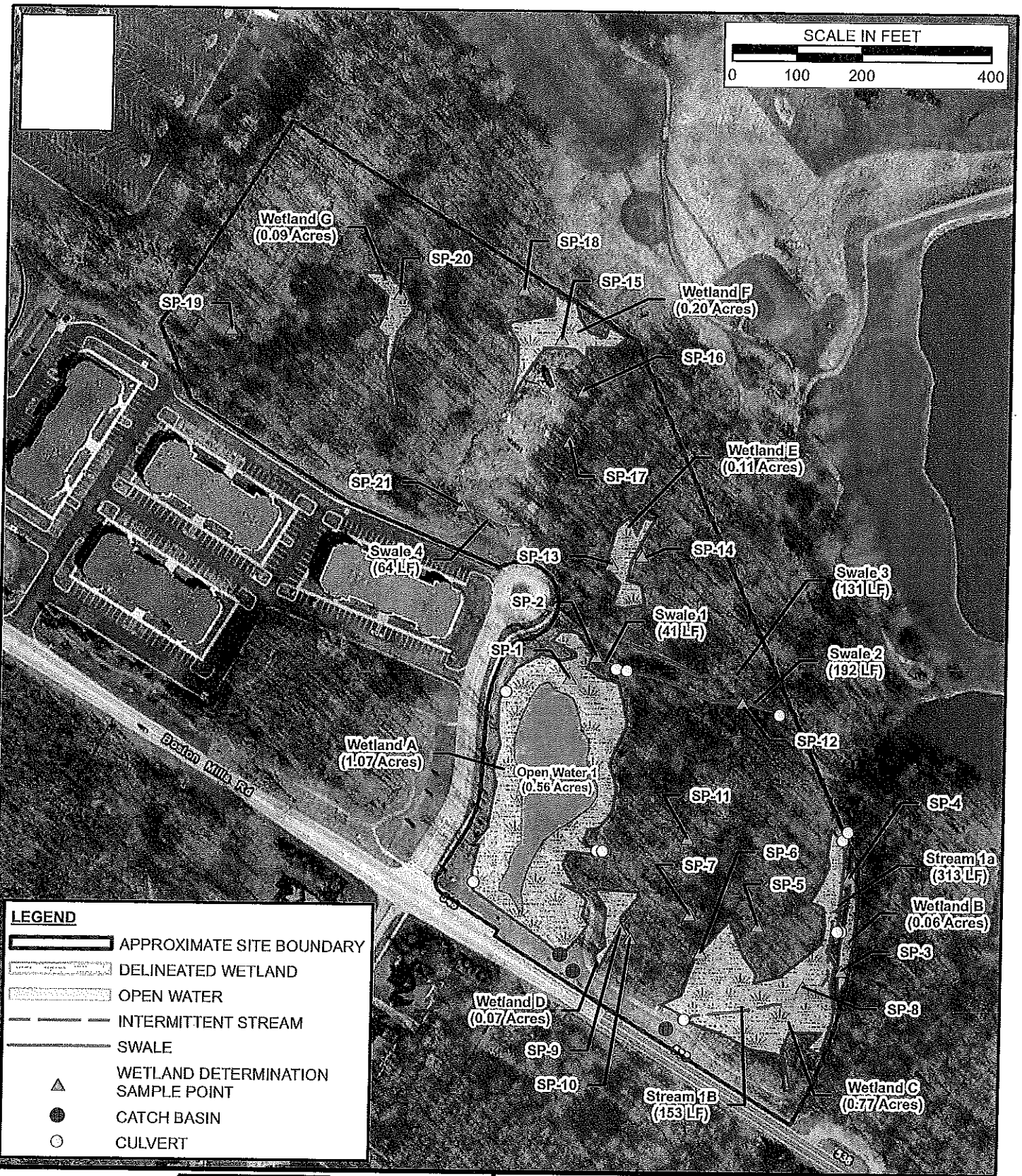
BACKGROUND ENVIRONMENTAL DATA MAP

DRAWN BY:	JRW	CHECKED BY:	JMV	APPROVED BY:	*JCD	FIGURE:	2
DATE:	4/13/2015	MAP SCALE:	1 " = 300 '	PROJECT NO:	150-709		

*Hand signature on file



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PRELIMINARY JURISDICTIONAL WATERS DETERMINATION MAP

DRAWN BY:	JRW	CHECKED BY:	JMV	APPROVED BY:	*JCD	FIGURE:	3
DATE:	4/13/2015	MAP SCALE:	1 " = 200 '	PROJECT NO:	150-709		

*Hand signature on file